DELAWARE RIVER
REACH A
MAIN CHANNEL DEEPENING PROJECT

NATIONAL PARK CONFINED DISPOSAL FACILITY

WATER QUALITY MONITORING

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EXECUTIVE SUMMARY

Dredging for the third reach of the Delaware River Main Channel Deepening Project was conducted from September 9, 2012 to February 3, 2013. The third construction contract was for the portion of Reach A of the channel that extends approximately 11 miles from the Walt Whitman Bridge to southwest of the Philadelphia International Airport. Approximately 1,356,613 cubic yards of material were dredged and placed in the Federally-owned National Park confined disposal facility (CDF). In conjunction with the dredging, monitoring for potential water quality impacts was conducted at the National Park CDF.

Two cutterhead suction dredges and a hopper dredge were used to deepen Reach A. Cutterhead suction dredges work by pumping a mixture of dredged material and water (called a slurry) from the channel bottom through a pipeline to the CDF. The cutterhead, located on the suction end of the pipe, has rotating blades or teeth to break up and loosen the bottom material so that it can be pumped through the pipeline. The cutterhead is buried in the bottom sediment during operation. Hopper dredges work by pumping the slurry into hoppers in the dredge until the hoppers are filled with the sediment/water slurry, and then they are moved near to a CDF where the slurry is then pumped out of the hopper.

Contaminants associated with the sediment can be released to the water column if sediment is suspended in the water column rather than being drawn into the intake pipe. Discharge of excess water and associated suspended sediment from a CDF is one location where water quality impacts can occur.

For this construction contract, dredged material was pumped into the National Park CDF, which is located at the confluence of the Delaware River and Woodbury Creek. At the CDF, dredged material is pumped into a diked cell, which contains the mixture of dredged material and water for a sufficient time to allow suspended sediment to settle, and the effluent water to return to the river. As the water moves through the cell, it slows, allowing sediment particles to settle out. Finally, water reaches the weir and is discharged from the site back to the Delaware River. Some suspended sediment is released back to the river at this discharge point. Contaminants dissolved in the water and contaminants associated with suspended sediment

also will be released. Water quality was monitored at the National Park CDF discharge point during Reach A channel deepening.

Water quality was monitored at the National Park discharge points over the 138-day period of effluent discharge during the dredging project. The environmental monitoring program included material flowing into the containment cell (influent), water and associated suspended solids discharging from the cell back to the Delaware River (effluent), and water samples collected in the Delaware River at a location that provided ambient water quality data (background). Samples were analyzed in the laboratory for inorganics (total and dissolved metals and total cyanide), organochlorine pesticides, PCB Aroclors, organophosphorus pesticides, and semivolatile organic compounds (SVOCs) including polycyclic aromatic hydrocarbons (PAHs). Some of the influent, effluent, and background samples were also analyzed by High Resolution Gas Chromatography/High Resolution Mass Spectrometry (HRGC/HRMS) for PCB Congeners and Dioxins/Furans.

CDF weir effluent results were compared to Delaware River Basin Commission (DRBC) water quality criteria (Appendix B), after proper consideration of near-field and far-field dilution, as well as background concentrations. Comparisons indicated that almost all of the concentrations of parameters met water quality criteria at the discharge point, and when near-field and far-field dilution and background concentrations were considered, there were no impacts to Delaware River water quality as a result of the placement of deepening sediments into the National Park CDF.

A mass balance evaluation of the contaminant load entering and leaving the National Park CDF indicated that for all contaminants combined including PCBs, pesticides, and PAHs, 75.79 percent of the contaminant load was retained by the National Park CDF and not released back to the Delaware River. The mass balance evaluation identified that lower sequestering (removal) efficiencies were produced at the National Park CDF than were produced during the previous Delaware River deepening projects.

Mitigating factors that contributed to the lower calculated removal efficiencies include the following:

- Larger dredges were used to dredge this portion of the deepening project, which deposited the sediment and water slurry at a comparatively faster rate than during previous projects;
- National Park is a substantially smaller CDF than Killcohook and Pedricktown South, which were previously monitored for deepening construction. Therefore, the CDF had less capacity than the other CDFs to store the dredged sediment and water (and it was essentially full of solids by the end of the project). This did not allow for similar retention and deposition of the solids, water evaporation, water uptake by plants, or infiltration of the water into the ground surface prior to discharge of the effluent through the weir;
- Hurricane Sandy and other rainstorms that occurred during the time of the effluent discharge period dumped an estimated 14.41 inches of water into the National Park CDF (in addition to the amount of dredged water that was placed in the CDF), which added to the total amount of water that discharged from the National Park CDF;
- For a number of inlet (sediment) analytes, the mean concentrations were lower than previous Delaware River sediment results, suggesting that lower amounts of contaminants were removed from the river during this dredging project and placed into the CDF; and
- Higher Total Suspended Solids (TSS) levels than previously observed at the CDF discharge point seemed to result in generally higher contaminant concentrations at the weir than previous projects, especially for total metals which were particle-bound in the solids that caused the higher TSS values. The relatively higher effluent volume multiplied by the higher effluent concentrations of contaminants yielded generally higher total kilograms of discharge from the weir.

The following conclusions are made based on monitoring data collected over the entire dredging project:

- Weir discharges from the National Park CDF did not adversely impact water quality; and
- A mass balance evaluation of the contaminant loads entering and leaving the National Park facility indicates a net removal of contaminants from the Delaware River during main channel deepening of Reach A.

In summary, the deepening of the Delaware River navigation channel in Reach A to 45 feet resulted in no adverse water quality impacts with respect to toxics, and in fact removed more contaminants from the river than it liberated, thus providing for an overall net benefit to water quality in the river. These conclusions are consistent with the earlier monitoring programs conducted during the 2010 deepening of Reach C and the 2011 deepening of lower Reach B.

1.0 INTRODUCTION

Water quality was monitored at the National Park CDF discharge point during deepening of Reach A, the third construction contract for the Delaware River Main Channel Deepening Project. The project calls for deepening the existing Delaware River Federal Navigation Channel from 40 to 45 feet from Philadelphia Harbor, Pennsylvania, and Beckett Street Terminal, Camden, New Jersey, to the mouth of the Delaware Bay, appropriate bend widening, and partial deepening of the Marcus Hook anchorage and relocation of and addition of aids to navigation. To date, dredged material has been removed by hydraulic and hopper dredges and placed in confined upland containment areas in the Delaware River portion of the project (Reaches A, B, and C).

On September 9, 2012 the dredge *Illinois*, owned and operated by Great Lakes Dredge & Dock Co., began dredging in Reach A of the Delaware River Federal navigation channel (Figure 1-1). Dredging for deepening in Reach A extended from the vicinity of the Walt Whitman Bridge to southwest of the Philadelphia Airport. The *Illinois* is a 34-inch hydraulic cutterhead suction dredge. Dredged material was pumped via pipeline from the *Illinois* to the Federally-owned National Park upland dredged material confined disposal facility (CDF) (Figure 1-1). The *Illinois* was operated by Great Lakes Dredge & Dock Co. until it went off contract on October 11, 2012, at which time the *Illinois* and related equipment were towed from the site and the dredge *Florida* replaced the *Illinois*. The *Florida,* a 37-inch hydraulic cutterhead suction dredge, began dredging on October 12, 2012 and continued dredging until November 21, 2012 when it was moved to work on the Schuylkill River Federal navigation project. The *Florida* returned and resumed operations on December 19, 2012 and completed dredging on February 3, 2013. In addition, the hopper dredge *Terrapin Island,* with a hopper capacity of 6,400 cubic yards, operated from November 7, 2012 to November 23, 2012.

This study represents the third Delaware Deepening environmental monitoring effort; the first study was conducted during March to September 2010 for Reach C deepening (Burton and Pasquale 2011) and the second study was conducted during November to December 2011 for lower Reach B deepening (Versar 2012).

Water quality was monitored at the National Park dredged material CDF. Sampling included material flowing into the containment cell (influent), water and associated suspended solids that were discharged from the cell back to the Delaware River (effluent), and at a location near the Philadelphia International Airport that provided ambient water quality data (background).

Figure 1-1. Main channel Reach A dredging area and the location of National Park CDF.

1.1 DREDGED MATERIAL DISPOSAL

For this construction contract, dredged material was pumped into the Federally-owned National Park CDF. In CDFs, dredged material is placed behind dikes, which contain and isolate it from the surrounding environment. The National Park facility includes one disposal area, called a cell. A mixture of dredged material and water is pumped into a cell and the flow of water is controlled by placement of training dikes to lengthen the path water must take to reach a weir discharge location, where water is discharged back to the river (Figure 1-2). Water pumped with the dredged material is contained in the disposal site until the solids settle out. It is then discharged back into the waterway. Heavier, coarser-grained sands and gravels drop out of the water column close to where material enters the cell. As the water moves through the cell, it slows, allowing finer-grained sediment particles to settle out. Finally, water reaches the weir and is discharged from the site. The purpose of the weir structure is to regulate the release of ponded water from the cell. Proper weir design and operation can control resuspension and release of settled solids. As the height of the weir is increased, the depth of the pond increases and only the cleaner surface waters of the pond are released.

A pipeline dredge pumps dredged material through one end, the intake pipe, and then pushes it out the discharge pipeline directly into the CDF. Because pipeline dredges pump directly to CDFs, they operate continuously and can be very cost efficient. Most pipeline dredges have a cutterhead on the suction end. A cutterhead is a mechanical device that has rotating blades or teeth to break up or loosen the bottom material so that it can be pumped through the dredge. The cutterhead is buried in the bottom sediment during operation.

Hopper dredges are self-propelled ships equipped with propulsion machinery, hoppers for dredged material storage, and dredge pumps. Dredged material is hydraulically raised through trailing dragarms in contact with the channel bottom and is discharged into the hoppers. The material is then held in the hoppers until it is placed at the disposal site.

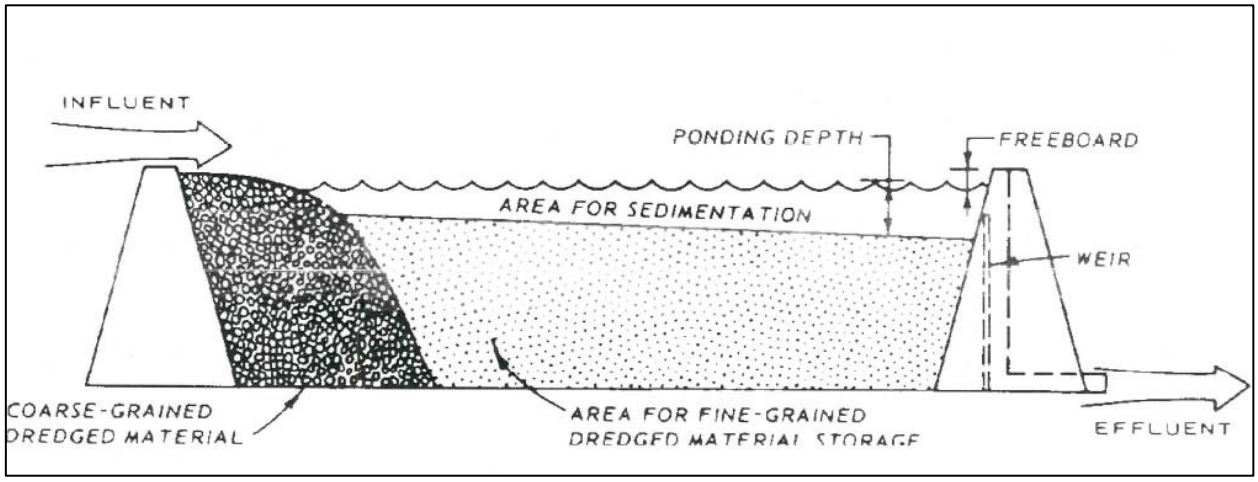

Figure 1-2. Generic Confined Disposal Facility Design

1.2 CONTAMINANTS IN THE AQUATIC ENVIRONMENT

Contaminants move within the aquatic environment in a variety of ways. Contaminants generally enter the aquatic environment in dissolved or suspended form in runoff, in dissolved form in groundwater, and in wet and dry deposition from the atmosphere. Once in the aquatic environment, dissolved contaminants are usually rapidly taken up through adsorption to suspended sediment particles or organic matter. Contaminants bound to particles are most likely to settle to the bottom. Dissolved contaminants will stay within the water column. The largest reservoir of contaminants in the aquatic environment is in the bottom sediment. Bottom sediments in the aquatic environment are not static but are continuously in flux. Bottom sediments can become resuspended in the water column by natural processes such as winds, waves, currents, tidal action and episodic events such as storms. In the Delaware River, bottom sediments also are resuspended through human activities such as ship traffic and dredging. Contaminants associated with suspended sediment are affected by a variety of chemical factors within the water column, which control the rate of adsorption or desorption of dissolved contaminants to either sediment particles or organic matter. Once contaminants are resuspended in the water column with sediment, they may resettle to the bottom, be swept away by currents, or become dissolved in the water column. A complex set of processes continuously in flux define the concentrations of contaminants in the water column of the aquatic environment.

Because of contaminant concerns in the waters of the Delaware Estuary, the states of Delaware, New Jersey, and Pennsylvania have issued fish consumption advisories that indicate by species

the safe number of meals an individual can eat over a period of time. Fish can absorb contaminants from the water and the food they eat and chemicals may build up over time in fish tissues even with extremely small amounts of chemicals in the water. The amount of contaminants in fish depends on the species, size, age, sex, and feeding area of the fish. Chemicals, such as polychlorinated biphenyls (PCBs), mercury, and dioxin in fish are a health risk for people who regularly consume their catch.

1.3 ENVIRONMENTAL MONITORING APPROACH

There are two potential pathways resulting from the dredging process that can increase exposure of contaminants associated with the bottom sediments to aquatic life. The first route of possible exposure occurs when the cutterhead (or in the case of a hopper dredge, a dragarm) disturbs the sediment in the area being dredged. Sediment resuspended into the water column may result in the release of sediment contaminants, which can then be available for uptake by aquatic organisms. A second possible exposure pathway is the release of contaminants associated with water and suspended sediment discharged from the CDF. In addition to resuspension of sediment and contaminants associated with the dredging process, it also is important to consider the overall contaminant load within the aquatic system. The dredging process removes contaminants associated with dredged sediments from the aquatic environment by permanently sequestering them in the CDF. From a mass balance perspective, it is important to consider how sediment and contaminant mass are added to the water column (mobilization at the cutterhead/dragarm and discharges from the CDF) versus how sediment and contaminant mass are removed from the water column (resettling of suspended sediments mobilized at the cutterhead/dragarm, drawn into the pipeline, and retained within the CDF).

During previous Delaware River channel deepening project construction contracts, water quality was monitored near the point of active dredging. Water samples were also collected at background locations in the Delaware River for comparison to dredge plume data. In addition to the water samples, turbidity measurements were collected at 0.5-, 6- and 11-meter depth increments during active dredging 200 feet down current from the cutterhead. Total Suspended Solids (TSS) concentrations at the point of dredging were similar to background levels. Samples

were also analyzed for inorganics, pesticides, PCBs, and semivolatile organic compounds (SVOCs), including polycyclic aromatic hydrocarbons (PAHs). Sample data indicated that for the point of dredging, contaminants were either non-detect, or at similar concentrations detected in the background samples in both studies. Point of dredge monitoring was not repeated for this construction contract.

Water quality was monitored at the National Park dredged material CDF. The scope of work for this effort is titled: FY-2013 Delaware River Deepening Project National Park CDF Water Quality Monitoring (see Appendix A). Sampling included material flowing into the containment cell (influent), water and associated suspended solids discharging from the cell back to the Delaware River (effluent), and water samples collected in the Delaware River at a location that can provide ambient water quality data (background).

2.0 CONFINED DISPOSAL FACILITY (CDF) MONITORING

2.1 CDF MONITORING FIELD METHODS

The weir discharge (effluent) from the National Park CDF was sampled using ISCO® automatic samplers to obtain daily Total Suspended Solids (TSS) samples throughout the discharge period. The sampler consists of a peristaltic pump, controlled by a computer, which allows for collecting fixed amounts of water into sample containers over a period of time. The samples were collected through tubing that was suspended into the weir at the mouth of the outfall pipe or at the weir structure in the CDF. The sample routine for this project was designed to collect aliquots of water at 6-hour intervals and composite them for daily TSS samples. Sample jars for daily TSS were filled in the sampler over the course of 24 hours for each day and then collected for submittal to the laboratory along with the effluent grab samples that were collected twice per week. Daily samples of TSS were analyzed separately from the effluent TSS grab samples. All effluent contaminant parameters were taken as grab samples by running the automatic sampler on manual and filling each parameter's respective collection jar.

Background samples were collected with a Kemmerer sampler (i.e., grab samples). Samples were collected during three different sampling events. At each event, samples were collected at peak ebb velocity, mid-time between peak ebb velocity and slack water, and at slack water. The background samples were taken approximately 1 mile south of National Park near the Philadelphia International Airport. A boat was used to collect background samples from near the center of the river at a depth of approximately 20 feet. This site was approximate to the discharge plume site and free from direct chemical influence from any known source of pollutants and the dredging operation.

Given the high-pressure flow out of the influent pipe, a grab sample of the sediment slurry (inlet or influent) was taken using a swing-arm sampler with individual sample containers fixed onto one end. The sample container was lowered into the influent flow, at the point where the dredged material was falling into the accumulated dredged material in the CDF. This is an area of rapid mixing, which allowed for sampling the influent as close to the hydraulic pipeline

discharge point as possible. In the laboratory the influent sample was allowed to settle and only the sediment portion was extracted for chemical testing. Table 2-1 summarizes the sampling dates and number of samples collected at each site during the monitoring period.

Table 2-1. Summary of Sampling Dates by Location for the National Park CDF Monitoring

Sample Site	Sample Dates	N
Effluent (Weir)	09/25 09/27 10/01 10/04 10/08 10/11 10/15 10/18 10/22 10/26 10/31 11/02 11/05 11/08 11/12 11/20 11/26 12/07 12/26 01/02 01/09 01/17	22
Influent (Inlet)	09/27 10/08 10/22 10/31 11/05	5
Background (Delaware River)	10/10 10/24 11/19 (3 time periods during each sampling event corresponding to specific tidal conditions)	9

2.2 CDF MONITORING LABORATORY METHODS

Samples were packed with ice in coolers and shipped the same day via over-night mail to the TestAmerica environmental analytical laboratory in Pittsburgh, Pennsylvania. This laboratory is accredited by the National Environmental Laboratory Accreditation Conference (NELAC) for analysis of non-potable water and solids. NELAC is a cooperative association of States and Federal agencies, formed to establish and promote mutually acceptable national performance standards for the operation of environmental laboratories. The standards cover both analytical testing of environmental samples and the laboratory accreditation process. The goal of NELAC is to foster the generation of environmental laboratory data of known and acceptable quality on which to base public health and environmental management decisions. TestAmerica's NELAC accreditation documents that the laboratory adheres to all NELAC quality assurance requirements. Specific requirements vary between analytical methods, but in general include the analysis of method blanks, laboratory control samples (LCS), matrix spikes (MS) and matrix spike duplicates (MSD). Specific criteria for each analytical method are documented in method-specific standard operating procedures (SOPs) maintained by each laboratory, and may include calibration linearity requirements, initial and continuing calibration verifications,

calibration blanks, and instrument tuning requirements. Details on the quality assurance/quality control (QA/QC) results are included in the certificates of analyses presented in Appendix C.

Table 2-2 summarizes the analytical methods used for each parameter category. Bulk sediment results were all reported on a dry weight basis. All samples were appropriately labeled upon collection, shipped and stored at 4 degrees Celsius (ºC) until analysis. All samples were processed within required hold times unless flagged in the certificate of analysis. Contaminant data were submitted in Microsoft Excel-compatible spreadsheets for data analysis and reporting purposes. Copies of the laboratory certificates are included in Appendix C.

Table 2-2. List of Parameter Specific Laboratory Methods Used for the Monitoring Program

Parameter	Analytical Method	Preparation Method
Inorganics		
Inorganics by ICP-MS (Total and Dissolved)	SW846 6020/6020A	SW846 3005A/3010A/3050B
Mercury, Low Level Mercury, CVA Fluorescence	CFR136A 1631E	EPA 1631E
Cyanide, Total	SW846 9012A	SW846 9012A
Organics		
Organochlorine Pesticides Low Level	SW846 8081A Low	SW846 3510C/3541
Organophosphorus Pesticides	SW846 8141A/8141B	SW846 3510C/3541
Polychlorinated Biphenyls (PCBs)	SW846 8082/8082A	SW846 3510C/3541
Semivolatile Organic Compounds (SVOCs), including Polycyclic Aromatic Hydrocarbons (PAHs), Low Level	SW846 8270C/8270D	SW846 3520C/3541
PCB Congeners, HRGC/HRMS	EPA-22 1668A	Liquid/Liquid, Separatory Funnel, and Soxhlet Extraction (Nominal)
Dioxins/Furans, HRGC/HRMS	EPA-5 1613B	EPA-5 1613

Table 2-2. List of Parameter Specific Laboratory Methods Used for the Monitoring Program		
Parameter	**Analytical Method**	**Preparation Method**
Miscellaneous		
Total Suspended Solids	SM 2540D	
Total Organic Carbon	Lloyd Kahn Method	
Grain Size/Particle Size	ASTM D 422	
Soil Classification	ASTM D 2487	
Liquid Limit, Plastic Limit, Plasticity	ASTM D4318	

2.3 CDF MONITORING DATA ASSESSMENT METHODS

Potential environmental impacts of the dredging operations were evaluated using a number of different approaches including comparisons to Delaware River Basin Commission (DRBC) protection of aquatic life and human health water quality criteria (Appendix B) after proper consideration of instream mixing and fate processes, estimating the mass balance of contaminants removed by the dredging to loadings released at the discharge weir, and statistical analyses to determine if concentrations were increased at the weir relative to background levels. Several of the DRBC water quality criteria are hardness-based and as such, a hardness value of 74 milligrams per liter (mg/L) as calcium carbonate ($CaCO_3$) was used to calculate criteria for those parameters in accordance with the DRBC's regulations for the Delaware River Estuary. Freshwater aquatic life criteria were used, as measured salinity over the dredging period was consistently below 5 parts per thousand (ppt).

The DRBC acute and chronic criteria for the protection of aquatic life and human health criteria for systematic toxicants and human carcinogens were evaluated after proper consideration of mixing, fate processes, and other factors (e.g., salinity). With regard to mixing, current regulations and standard practice by DRBC allow for near-field mixing of discharges and receiving waters prior to acute criteria compliance. Specifically, Section 4.20.5 A.1 of the DRBC's Water Quality Regulations (DRBC 2010) allows for near-field mixing zones where acute aquatic life criteria can be exceeded. These criteria apply at specific locations in the river,

not at the weir discharge. Fresh water acute aquatic life criteria apply at the edge of the zone of initial dilution (ZID). The DRBC's chronic aquatic life criteria and human health water quality criteria apply under complete mix conditions as specified in Section 4.20.5.A.4 of the DRBC Water Quality Regulations (far-field mixing). In applying the complete mix assumption, different estuary net advective 'design flow statistics' are used for chronic aquatic life criteria and human health criteria, including the 7Q10 flow (the lowest 7-consecutive day average flow that occurs on average once every 10 years), the harmonic mean flow (the long-term mean daily flow), and the 30Q5 flow (the lowest 30-consecutive day average flow that occurs on average every 5 years). For chronic aquatic life criteria, a combination of 7Q10 for all tributaries plus 2,500 cubic feet per second (cfs) at the Delaware River at Trenton is used (Section 4.30.7.B.2). Similarly, the harmonic mean flow is used for human health criteria for carcinogens and a 30Q5 flow is used for human health criteria for systemic toxicants (Section 4.30.7.B.2). Both the near-field and far-field analyses factored in mean background concentrations measured during the monitoring program. Statistical data analyses for this assessment are provided in Appendix D.

3.0 CONFINED DISPOSAL FACILITY (CDF) MONITORING RESULTS

3.1 CDF EFFLUENT CHARACTERIZATION

Tables 3-1 through 3-5 summarize the average concentrations observed for detected organochlorine pesticides and PCB Aroclors; total inorganics (metals and cyanide); dissolved metals; SVOCs including PAHs; and dioxins/furans and total PCB Congeners, respectively. The tables present mean concentrations for background and effluent samples compared to acute and chronic criteria from the DRBC. Full summary statistics including mean, minimum, and maximum observed concentrations for background samples and effluent samples are included in Appendix D. High resolution PCB congeners and dioxins/furans analyses also were conducted on five of the effluent samples and two of the background samples (Table 3-5). The sum of PCB Congeners ranged from 2.38 to 135 nanograms per liter (ng/L) for all samples. Dioxins/furans that were reported by the laboratory were converted to dioxin (as 2,3,7,8-TCDD) using USEPA's Toxicity Equivalence Factors (TEFs). Total Toxic Equivalents (TEQs) ranged from 0.0325 to 10.3 picograms per liter (pg/L) for all samples (Appendix D). Mean effluent concentrations that exceeded acute criteria would be evaluated in the near-field Cormix evaluation presented in Section 3.2 (there were no exceedances of acute criteria at the discharge point). Mean effluent concentrations that exceeded background concentrations and chronic aquatic life criteria or human health criteria were used in the far-field evaluation presented in Section 3.3.

3.2 NEAR-FIELD CORMIX EVALUATION OF CDF MONITORING RESULTS

Mean concentrations of total aluminum in the background and effluent samples all exceeded the DRBC acute criterion of 750 micrograms per liter (µg/L). According to Dr. R. Greene from the Delaware Department of Natural Resources and Environmental Control (DNREC) (Greene 2010), the aluminum criterion is dated and fails to properly account for the effect of pH on solubility and toxicity. Greene conducted geochemical speciation modeling that indicated for the range of pH values observed in the Delaware Estuary, the majority of the

TABLE 3-1
MEAN CONCENTRATIONS OF PESTICIDES
2012 BACKGROUND AND EFFLUENT SAMPLES
NATIONAL PARK CDF MONITORING PROJECT

Analyte	Units	Background Mean	Effluent Mean	DRBC Aquatic Life Acute	DRBC Aquatic Life Chronic	DRBC Human Systemic Fish	DRBC Human Carcinogen Fish
4,4'-DDD	µg/L	ND	**0.00106**	1.1	0.001	0.037	0.00031
4,4'-DDE	µg/L	**0.00127**	**0.0149**	1.1	0.001	0.037	0.00022
4,4'-DDT	µg/L	ND	**0.00185**	1.1	0.001	0.037	0.00022
DDT and Metabolites	µg/L	**0.00127**	**0.0179**	1.1	0.001	0.037	---
Alpha-BHC	µg/L	ND	0.0000345	---	---	---	0.0049
Beta-BHC	µg/L	ND	0.000566	---	---	---	0.017
Delta-BHC	µg/L	ND	0.000100	---	---	---	---
Endosulfan II	µg/L	ND	0.000109	0.22	0.056	89	---
Endrin Ketone	µg/L	ND	0.000418	0.086	0.036	0.060	---
gamma-BHC	µg/L	ND	0.0000500	0.95	---	1.8	---
gamma-Chlordane	µg/L	0.00183	0.000532	2.4	0.0043	0.14	0.00081
Methoxychlor	µg/L	ND	0.0000682	---	---	---	---
Toxaphene	µg/L	ND	**0.00327**	0.73	0.0002	---	0.00028

Notes:
ND -- Not Detected.
Shaded cells indicate that the value exceeds the DRBC Freshwater Aquatic Life acute criterion.
Bolded cells indicate that the value exceeds the DRBC Freshwater Aquatic Life chronic criterion.
Large italics cells indicate that the value exceeds the DRBC Human Health Systemic Freshwater Fish Ingestion criterion.
Patterned cells indicate that the value exceeds the DRBC Human Health Carcinogenic Freshwater Fish Ingestion criterion.
--- Indicates no water quality criterion is available.

DRBC - Administrative Manual - Part III, Water Quality Regulations, with Amendments Through December 8, 2010 (DRBC, 2010)
Where values were not clearly identified for a specific analyte, the following were used as surrogates, as appropriate:
DDT and Metabolites, Chlordane, Total PCBs, Endosulfan, and Endrin

TABLE 3-2
MEAN CONCENTRATIONS OF TOTAL INORGANICS
2012 BACKGROUND AND EFFLUENT SAMPLES
NATIONAL PARK CDF MONITORING PROJECT

Analyte	Units	Background Mean	Effluent Mean	DRBC Aquatic Life Acute	DRBC Aquatic Life Chronic	DRBC Human Systemic Fish	DRBC Human Carcinogen Fish
Aluminum	µg/L	**562**	**49449**	750	87	---	---
Antimony	µg/L	0.319	1.35	---	---	640	---
Arsenic	µg/L	2.28	26.4	---	---	---	---
Barium	µg/L	27.4	420	---	---	---	---
Beryllium	µg/L	0.0573	2.94	---	---	420	---
Cadmium	µg/L	ND	1.81	---	---	16	---
Chromium	µg/L	ND	162	---	---	380000	---
Cobalt	µg/L	ND	27.4	---	---	---	---
Copper	µg/L	5.79	75.2	---	---	---	---
Iron	µg/L	1153	75495	---	---	---	---
Lead	µg/L	2.41	102	---	---	---	---
Manganese	µg/L	59.6	1760	---	---	---	---
Mercury	**ng/L**	5.96	*159*	1400	770	51	---
Nickel	µg/L	2.48	61.7	---	---	1700	---
Selenium	µg/L	0.450	2.73	20	5.0	4200	---
Silver	µg/L	0.0176	0.936	---	---	40000	---
Thallium	µg/L	0.0459	*0.696*	---	---	0.47	---
Vanadium	µg/L	3.96	115	---	---	---	---
Zinc	µg/L	20.4	433	---	---	26000	---
Cyanide	µg/L	ND	2.42	22	5.2	140	---

Notes:
ND -- Not Detected.
Shaded cells indicate that the value exceeds the DRBC Freshwater Aquatic Life acute criterion.
Bolded cells indicate that the value exceeds the DRBC Freshwater Aquatic Life chronic criterion.
Large italics cells indicate that the value exceeds the DRBC Human Health Systemic Freshwater Fish Ingestion criterion.
Patterned cells indicate that the value exceeds the DRBC Human Health Carcinogenic Freshwater Fish Ingestion criterion.
--- Indicates no water quality criterion is available.
DRBC - Administrative Manual - Part III, Water Quality Regulations, with Amendments Through December 8, 2010 (DRBC, 2010)

TABLE 3-3
MEAN CONCENTRATIONS OF DISSOLVED INORGANICS
2012 BACKGROUND AND EFFLUENT SAMPLES
NATIONAL PARK CDF MONITORING PROJECT

Analyte	Units	Background Mean	Effluent Mean	DRBC Aquatic Life Acute	DRBC Aquatic Life Chronic	DRBC Human Systemic Fish	DRBC Human Carcinogen Fish
Aluminum	µg/L	29.2	1413	---	---	---	---
Antimony	µg/L	0.496	1.42	---	---	640	---
Arsenic	µg/L	0.369	4.41	340	150	---	---
Barium	µg/L	23.0	63.1	---	---	---	---
Beryllium	µg/L	0.00433	ND	---	---	420	---
Cadmium(1)	µg/L	ND	0.0177	1.0	0.14	16	---
Chromium(1)	µg/L	ND	14.2	390	19	380000	---
Cobalt	µg/L	ND	1.56	---	---	---	---
Copper(1)	µg/L	**47.9**	ND	9.6	6.5	---	---
Iron	µg/L	77.3	ND	---	---	---	---
Lead	µg/L	0.247	1.69	38	5.4	---	---
Manganese	µg/L	10.9	ND	---	---	---	---
Nickel(1)	µg/L	2.84	5.03	307	34	1700	---
Selenium	µg/L	10.6	6.04	---	---	4200	---
Silver(1)	µg/L	ND	ND	1.92	---	40000	---
Thallium	µg/L	0.167	0.399	---	---	0.47	---
Vanadium	µg/L	5.04	8.55	---	---	---	---
Zinc(1)	µg/L	20.3	31.6	88	88	26000	---

Notes:
ND -- Not Detected.
Shaded cells indicate that the value exceeds the DRBC Freshwater Aquatic Life acute criterion.
Bolded cells indicate that the value exceeds the DRBC Freshwater Aquatic Life chronic criterion.
Large italics cells indicate that the value exceeds the DRBC Human Health Systemic Freshwater Fish Ingestion criterion.
Patterned cells indicate that the value exceeds the DRBC Human Health Carcinogenic Freshwater Fish Ingestion criterion.
--- Indicates no water quality criterion is available.
1. In accordance with DRBC regulations for the Delaware River Estuary, hardness-based criteria use a median hardness value of 74 mg/L as $CaCO_3$.
DRBC - Administrative Manual - Part III, Water Quality Regulations, with Amendments Through December 8, 2010 (DRBC, 2010)

TABLE 3-4
MEAN CONCENTRATIONS OF SEMIVOLATILE ORGANIC COMPOUNDS
2012 BACKGROUND AND EFFLUENT SAMPLES
NATIONAL PARK CDF MONITORING PROJECT

Analyte	Units	Background Mean	Effluent Mean	FCV Chronic	DRBC Human Systemic Fish	DRBC Human Carcinogen Fish
1,1-Biphenyl	µg/L	ND	0.00741	---	---	---
2-Methylnaphthalene	µg/L	0.00133	0.0608	121.03	---	---
Acenaphthene	µg/L	0.00678	0.0407	95.09	990	---
Acenaphthylene	µg/L	ND	0.00350	527.73	---	---
Acetophenone	µg/L	ND	0.00636	---	---	---
Anthracene	µg/L	ND	0.00927	35.56	40000	---
Benzaldehyde	µg/L	0.226	0.0809	---	---	---
Benzo(a)anthracene	µg/L	ND	0.0239	3.79	---	0.18
Benzo(a)pyrene	µg/L	ND	0.0185	1.59	---	0.018
Benzo(b)fluoranthene	µg/L	ND	0.0176	1.13	---	0.18
Benzo(g,h,i)perylene	µg/L	ND	0.0207	---	---	---
Benzo(k)fluoranthene	µg/L	ND	0.0205	---	---	1.8
Bis(2-ethylhexyl)phthalate	µg/L	ND	0.368	---	620	2.2
Butyl Benzyl Phthalate	µg/L	*0.0156*	0.0536	---	1900	---
Carbazole	µg/L	ND	0.00255	---	---	---
Chrysene	µg/L	ND	0.0276	3.46	---	18
Dibenz(a,h)anthracene	µg/L	ND	0.0186	0.48	---	0.018
Dibenzofuran	µg/L	ND	0.0103	---	---	---
Diethyl Phthalate	µg/L	0.240	0.235	---	44000	---
Di-n-butyl Phthalate	µg/L	0.0133	ND	---	---	---
Fluoranthene	µg/L	ND	0.0457	12.19	140	---
Fluorene	µg/L	ND	0.0479	66.17	5300	---
Indeno(1,2,3-cd)pyrene	µg/L	ND	0.0185	---	---	0.18
Methylphenol, 3- & 4-	µg/L	ND	0.162	---	---	---
Naphthalene	µg/L	0.111	0.140	322.0	---	---
Phenanthrene	µg/L	ND	0.0898	32.43	---	---
Pyrene	µg/L	ND	0.0526	17.22	4000	---

ND -- Not Detected.
Shaded cells indicate that the value exceeds the DRBC Freshwater Aquatic Life acute criterion.
Bolded cells indicate that the value exceeds the DRBC Freshwater Aquatic Life chronic criterion.
Large italics cells indicate that the value exceeds the DRBC Human Health Systemic Freshwater Fish Ingestion criterion.
Patterned cells indicate that the value exceeds the DRBC Human Health Carcinogenic Freshwater Fish Ingestion criterion.
--- Indicates no water quality criterion is available.
DRBC - Administrative Manual - Part III, Water Quality Regulations, with Amendments Through December 8, 2010 (DRBC, 2010)
FCV - Final Chronic Values (DiToro et. al., 2000)

TABLE 3-5
CONCENTRATIONS OF TOTAL DIOXINS/FURANS AND PCB CONGENERS
BACKGROUND AND EFFLUENT SAMPLES
2012 NATIONAL PARK CDF MONITORING

Analyte	TEF	Units	Background Mean	Effluent Mean	DRBC Aquatic Life Acute	DRBC Aquatic Life Chronic	DRBC Human Systemic Fish	DRBC Human Carcinogen Fish
DIOXINS/FURANS								
1,2,3,4,6,7,8-HpCDD	0.01	pg/L	13.0	94.2	---	---	---	---
1,2,3,4,6,7,8-HpCDF	0.01	pg/L	4.40	11.9	---	---	---	---
1,2,3,4,7,8,9-HpCDF	0.01	pg/L	0	0.560	---	---	---	---
1,2,3,4,7,8-HxCDD	0.1	pg/L	0	2.24	---	---	---	---
1,2,3,4,7,8-HxCDF	0.1	pg/L	0	1.84	---	---	---	---
1,2,3,6,7,8-HxCDD	0.1	pg/L	0.340	4.06	---	---	---	---
1,2,3,6,7,8-HxCDF	0.1	pg/L	0	1.60	---	---	---	---
1,2,3,7,8,9-HxCDD	0.1	pg/L	0	6.14	---	---	---	---
1,2,3,7,8,9-HxCDF	0.1	pg/L	0	0	---	---	---	---
1,2,3,7,8-PeCDD	1	pg/L	0	0.520	---	---	---	---
1,2,3,7,8-PeCDF	0.03	pg/L	0	0	---	---	---	---
2,3,4,6,7,8-HxCDF	0.1	pg/L	0	0.816	---	---	---	---
2,3,4,7,8-PeCDF	0.3	pg/L	0	0.240	---	---	---	---
2,3,7,8-TCDD	1	pg/L	0	0	---	---	---	---
2,3,7,8-TCDF	0.1	pg/L	0	0.948	---	---	---	---
OCDD	0.0003	pg/L	220	1479	---	---	---	---
OCDF	0.0003	pg/L	6.35	16.38	---	---	---	---
Dioxins/Furans TEQ (Positive results)	---	pg/L	0.276	3.87	---	---	---	0.0051
PCB CONGENERS								
PCB-77	0.0001	ng/L	0.0110	0.121	---	---	---	---
PCB-81	0.0003	ng/L	0	0.00130	---	---	---	---
PCB-105	0.00003	ng/L	0.0790	0.841	---	---	---	---
PCB-114	0.00003	ng/L	0.00480	0.0464	---	---	---	---
PCB-118	0.00003	ng/L	0.245	2.63	---	---	---	---
PCB-123	0.00003	ng/L	0.00810	0.0331	---	---	---	---
PCB-126	0.1	ng/L	0	0.00308	---	---	---	---
PCB-156	0.00003	ng/L	0.0375	0.361	---	---	---	---
PCB-157	0.00003	ng/L	0.0375	0.361	---	---	---	---
PCB-167	0.00003	ng/L	0.0120	0.117	---	---	---	---
PCB-169	0.03	ng/L	0	0.0056	---	---	---	---
PCB-189	0.00003	ng/L	0.00435	0.0331	---	---	---	---
PCB Congeners TEQ (Positive results)	**---**	**pg/L**	0.0139	0.62	---	---	---	0.0051
TEQ (D/F and PCBs combined)	**---**	pg/L	0.290	4.49	---	---	---	0.0051
Total PCBs (as Aroclors)	**---**	ng/L	0	0	1000	14	8.49	0.0448
Total Sum of PCB Congeners	---	ng/L	7.35	***60.5***	1000	14	8.49	0.0448

Notes:
ND -- Not Detected. Zeros are used in this table instead of NDs to support the calculations of sums and TEQs.
Shaded cells indicate that the value exceeds the DRBC Freshwater Aquatic Life acute criterion
Bolded cells indicate that the value exceeds the DRBC Freshwater Aquatic Life chronic criterion.
Large italics cells indicate that the value exceeds the DRBC Human Health Systemic Freshwater Fish Ingestion criterion.
Patterned cells indicate that the value exceeds the DRBC Human Health Carcinogenic Freshwater Fish Ingestion criterion
--- Indicates no water quality criterion is available.
DRBC - Administrative Manual - Part III, Water Quality Regulations, with Amendments Through December 8, 2010 (DRBC, 2010)

aluminum exists in the solid, non-toxic form. Greene's analysis suggested that only 4 percent of the total aluminum observed in the estuary exists in the toxic form of the metal. As such, the detected concentrations of total aluminum discharged from the National Park CDF are not considered detrimental to aquatic life in the Delaware River system and near-field and far-field evaluations were not conducted for aluminum. Evidence that existing aluminum concentrations are not detrimental to aquatic life comes from the results of ambient chronic bioassays performed on surface water samples by the DRBC and others over the period 2005 to 2009 (MacGillivray et. al. 2011). That work revealed no chronic toxicity to multiple test species in the tidal Delaware River despite concentrations of total aluminum consistently above the aquatic life criterion.

No effluent sample concentrations of total metals, dissolved metals, pesticides, SVOCs including PAHs, dioxin/furans, or PCB congener parameters were above the DRBC acute criteria. The mixing model known as Cormix (CORnell MIXing Zone Expert System) is used to evaluate near-field and far-field mixing zones, as necessary. Near-field Cormix evaluation was not required since effluent meets the acute criteria prior to the edge of the ZID.

From a regulatory perspective, acute water quality criteria for the protection of aquatic life must be met at the edge of the ZID. Based on DRBC's mixing zone guidelines, the ZID distance is defined as five times the local water depth or 50 times the discharge length scale, whichever is smaller. In this part of the Delaware Estuary the tidal range is six feet. For the deepening of Reach A, the National Park discharge pipes were configured to extend out from the river bank to deeper sub-tidal water to improve mixing and avoid shore hugging plumes. If a near field evaluation was needed (i.e., any contaminant concentration was over acute criteria), an average water depth of 20 feet would be selected, making the edge of the ZID 100 feet. For informational purposes, the expected amount of dilution of the discharge at the edge of the ZID Cormix mixing zone model results from a similar CDF study at Chesapeake City (Schreiner et. al. 2000) are provided in Table 3-6. These analyses were performed for a CDF with a similar discharge configuration into a deep tidal area and represent a reasonable estimate of initial mixing that would be expected to occur at the National Park CDF. Results of that study predicted that at 100 feet from the discharge point, the dilution factor would be about 20 percent during tidal flow.

Table 3-6. Dilution of National Park Effluent Concentrations Exceeding Acute Criteria										
	DRBC Acute	**Background**								
Analyte 1										
Analyte 2										
Analyte 3										
Flood Tide										
Distance from effluent discharge (feet)			0	2	4.2	5	10	25	50	100
% Original Concentration			100	39.50	36.56	31.62	24.72	20.16	18.31	17.64
Analyte 1		µg/L								
Analyte 2		µg/L								
Analyte 3		µg/L								
Ebb Tide										
Distance from effluent discharge (feet)			0	2	4.2	5	10	25	50	100
% Original Concentration			100	50.76	51.27	39.97	31.42	22.56	22.90	22.82
Analyte 1		µg/L								
Analyte 2		µg/L								
Analyte 3		µg/L								

Red cells indicate exceedances of DRBC Acute Criteria.

Chesapeake City Dilution Factors were used as appropriate CORMix values for National Park CDF, as described in the report.
Since there were no exceedances of DRBC Acute Criteria, this table is presented for informational purposes only.

3.3 FAR-FIELD EVALUATION OF CDF MONITORING RESULTS

In accordance with DRBC surface water quality standards, chronic water quality criteria for the protection of aquatic life apply after consideration of complete mixing in the water body. Chronic criteria were evaluated with a far-field assessment. Sample mean concentrations of several parameters were above their respective chronic criteria in effluent and background samples. Effluent discharge occurred over a period of 138 days during this dredging project. For these parameters, the mass balance loadings (see Section 3.8) were mixed with a river flow volume equivalent to 138 days of the net 7Q10 discharge flows for a section of the Delaware River near the National Park CDF. The 7Q10 is the 7-day, 10-year low flow past a particular location across a body of water. In the present case it's the 7-day low flow with a 10-year recurrence interval based on 90+ years of flow monitoring in the Delaware River (Zone 4, 85.18 m^3/sec or 51,516,864 m^3 for 1 week). Using the average background concentrations observed during the National Park CDF monitoring period, the discharge loads for approximately five months from the CDF weir were added to the 7Q10 flow over a 138-day period to estimate worst-case far-field concentrations. CDF loadings essentially did not change background concentrations of any parameter due to the high amount of far-field dilution and relatively low loadings discharging from the weir (Table 3-7).

The effluent concentrations of six analytes – 4,4'-DDD, 4,4'-DDE, 4,4'-DDT, DDT and Metabolites, Toxaphene, and Total PCB Congeners – exceeded the chronic criteria. However, the background concentrations of 4,4'-DDE, DDT and Metabolites, and total PCB Congeners exceeded the chronic criteria. As such, chronic water quality criteria for the protection of aquatic life were met during the monitoring period for all analytes except for those three parameters listed above that exceeded the chronic criteria based on the background mean results alone.

Consideration of DRBC human health criteria also requires a far-field evaluation. Human health criteria include systemic toxicants and human carcinogens. DRBC defines a systemic toxicant as a substance having a threshold exposure which must be exceeded before deleterious effects (other than cancer) are observed in organ systems. DRBC defines a carcinogen as a substance

Table 3-7. Results of Far-Field Analysis using 7Q10 and Mean Harmonic Flow for Effluent Parameters Over Chronic or Human Health Criteria

Analyte	Unit	Mean Effluent Concentration	Total Kg Discharged from Cell Weir in 5 Months	Mean Background Concentration	Concentration Resulting from Weir Discharge Using 7Q10 Flow for 138 Days	Concentration Resulting from Weir Discharge Using Mean Harmonic Flow for 138 Days	DRBC Freshwater Chronic Aquatic Life Criteria	DRBC Human Health Criteria (Fish Ingestion / Carcinogens)
4,4'-DDD	µg/L	**0.00106**	0.0138	0	0.0000136	0.00000477	0.001	0.00031
4,4'-DDE	µg/L	**0.0149**	0.194	**0.00127**	**0.00146**	**0.00134**	0.001	0.00022
4,4'-DDT	µg/L	**0.00185**	0.0241	0	0.0000237	0.00000832	0.001	0.00022
DDT and Metabolites (Sum)	µg/L	**0.0179**	0.232	**0.00127**	**0.00150**	**0.00135**	0.001	0.037
Toxaphene	µg/L	**0.00327**	0.0431	0	0.0000424	0.0000149	0.0002	0.00028
Mercury (total)	µg/L	*0.159*	2.07	0.00596	0.0080	0.0067	0.77	0.051
Thallium (total)	µg/L	0.696	9.05	0.0459	0.0548	0.0490	None	0.47
Benzo(a)pyrene	µg/L	0.0185	0.240	0	0.000236	0.0000829	None	0.018
Dibenzo(a,h)anthracene	µg/L	0.0186	0.242	0	0.000238	0.0000836	None	0.018
Dioxins/Furans TEQ (Pos)	pg/L	3.87	0.0000504	0.276	0.276	0.276	None	0.0051
PCB Congeners TEQ (Pos)	pg/L	0.620	0.00000807	0.0139	0.0139	0.0139	None	0.0051
D/F and PCB Congeners TEQ (Pos)	pg/L	4.49	0.0000584	0.290	0.290	0.290	None	0.0051
Total PCB Congeners	ng/L	***60.5***	0.787	7.35	7.35	7.35	14	0.0448

Notes:

Bolded cells indicate that the value exceeds the DRBC Freshwater Chronic Aquatic Life Criterion.

Large italics cells indicate that the value exceeds the DRBC Human Health Fish Ingestion Criterion.

Patterned cells indicate that the value exceeds the DRBC Human Health Criterion for Carcinogens.

Total liters discharged (from flow meters)	13,009,758,378
Net advective 7Q10 through Reach A (m^3/sec, from DNREC 2010)	85.18
Net mean harmonic flow through Reach A (m^3/sec, from DNREC 2010)	242.81

for which there is no level of exposure that does not pose a small, finite probability of inducing benign or malignant tumors (DRBC 2010). The National Park CDF discharges into Zone 4 of the Delaware River. In accordance with DRBC Section 3.30, the Delaware River is not State designated as a Public Water Supply Source downstream from Tidal Interstate Stream Zone 3 and Zone 4 is downstream, so it is not designated as a public water supply source. Therefore, only the "Fish Ingestion" criteria in Tables 6 and 7 of DRBC Section 3.30 apply. The "Fish and Water Ingestion" criteria do not apply.

Human health criteria also apply after consideration of complete mixing in the water body. Sample mean concentrations of several parameters were above their respective human health criteria in effluent and background samples. For these parameters, the mass balance loadings (see Section 3.8) were mixed with a river flow volume equivalent to 138 days of the net mean harmonic discharge flows for a section of the Delaware River near the National Park CDF, based on 90+ years of flow monitoring in the Delaware River (Zone 4, 242.81 m^3/sec or 146,851,488 m^3 for 1 week). Using the background concentrations observed during the National Park CDF monitoring period, the discharge loads for approximately five months from the CDF weir discharge were added to the net mean harmonic flow over a 138-day period to estimate worst-case far-field concentrations. CDF loadings essentially did not change background concentrations of any parameter due to the high amount of far-field dilution and relatively low loadings discharging from the weir (Table 3-7).

The effluent concentrations of 11 analytes – 4,4'-DDD, 4,4'-DDE, 4,4'-DDT, DDT and Metabolites, toxaphene, total mercury, total thallium, benzo(a)pyrene, dibenzo(a,h)anthracene, Dioxin TEQ (which includes the sum of the dioxins/furans TEQ and PCB Congeners TEQ), and total PCB Congeners exceeded the lowest human health systemic toxicant or carcinogenic fish ingestion criteria. However, the background concentrations of 4,4'-DDE, DDT and Metabolites, Dioxin TEQ (which includes the sum of dioxins/furans TEQ and PCB Congeners TEQ), and total PCB Congeners exceeded the lowest human health criteria. As such, the effluent discharge did not cause any human health water quality criteria to be exceeded after complete mixing for all analytes except for those four parameters listed above that exceeded the human health criteria based on the background mean results alone.

3.4 ORGANOCHLORINE DDT AND METABOLITES

The organochlorine pesticide 4,4'-DDT and its metabolites 4,4'-DDD and 4,4'-DDE (collectively called DDX) were evaluated separately since DDX contributes to fish advisories in the riverine portion of the Delaware River. DDX is particle reactive tending to sorb to sediments and is therefore a contaminant of concern particularly during dredging operations which can mobilize suspended sediments in CDF weir discharges. DDX is simply the sum of 4,4'-DDT, 4,4'-DDD, and 4,4'-DDE concentrations in a given sample which can be compared to the DRBC freshwater chronic criterion of 0.001 µg/L, as well as the DRBC carcinogenic human health criterion of 0.00022 µg/L. Figure 3-1 displays DDX concentrations observed at the National Park CDF weir and background sites. All weir and background DDX concentrations were less than 0.07 ug/L, but most of the samples were above the chronic criteria for aquatic life and/or human health criteria. Chronic aquatic life and human health criteria are a far-field analysis. As is shown in Table 3-7, using appropriate river flows, dilution of DDX levels discharged from the weirs with background levels essentially did not change the background concentrations of DDX in this portion of the river. Since the mean background concentrations of 4,4'-DDE and DDT and Metabolites exceeded the chronic aquatic life and/or human health criteria, the conclusion of the far-field analysis indicated that 4,4'-DDE and DDT and Metabolites exceeded the criteria on background concentrations alone; for 4,4'-DDD, and 4,4'-DDT, since the mean background concentration met the criteria, the far-field analysis indicated that the criteria for 4,4'-DDD, and 4,4'-DDT was met when accounting for mixing. Mass balance calculations (see Section 3.8) indicate that over 99 percent of the DDX pumped into the CDF stayed in the CDF.

3.5 POLYCYCLIC AROMATIC HYDROCARBON TOXICITY

PAHs were detected in the effluent and background samples. PAHs are of interest in the Delaware Estuary due to the large presence of petrochemical refineries, heavy industry, and past oil spills. Studies in the estuary have routinely detected PAHs in channel sediments. Although DRBC does not have aquatic life criteria for PAHs, criteria are available in the peer reviewed literature (DiToro et al. 2000). None of the detected concentrations exceed those criteria (Table 3-4).

The effluent concentrations of benzo(a)pyrene and dibenzo(a,h)anthracene exceeded the lowest human health carcinogenic criteria. However, the effluent discharge did not cause any human health water quality criteria to be exceeded after complete mixing (Table 3-7). Mass balance calculations (see Section 3.8) indicate that over 98% of the benzo(a)pyrene and over 82% of the dibenzo(a,h)anthracene were retained in the CDF. Removal of PAHs from the aquatic system is an environmental benefit.

3.6 STATISTICAL ANALYSIS

Two data sets were generated for surface water at the National Park CDF: one for the Background, represented by nine Delaware River surface water samples, and one for the Site, represented by 22 National Park CDF effluent samples. A data evaluation was performed to determine if the background target analyte concentrations in representative Delaware River surface water are statistically similar to those in the National Park CDF effluent, or statistically different. This evaluation can be used to assist in determining whether detected concentrations of target analytes in effluent are attributable to site-related activities or are from natural/ anthropogenic sources.

Background evaluation studies should be estimated based upon defensible background data sets. The use of appropriate statistical methods and limits for site versus background comparisons is based upon various factors, including quantity and quality of the available data, as well as sampling distributions (parametric or nonparametric) of the concentration data sets collected from the site and background areas under investigation. If enough site and background data are available, two-sample hypotheses testing approaches are used to compare site concentrations with background concentrations levels.

USEPA's statistical package ProUCL Version 4.1 was used to conduct the statistical evaluations. Statistical methods for background comparison adhered to the published USEPA guidance included with ProUCL Version 4.1. ProUCL 4.1 has parametric and nonparametric two-sample hypotheses testing approaches required to perform site versus background comparisons. These

hypotheses testing methods can handle both full (uncensored data sets without nondetects) and left-censored (with nondetects) data sets. Specifically, two-sample tests such as t-test, Wilcoxon-Mann-Whitney (WMW) test, and Gehan's test are used to compare concentrations of two populations.

An appropriate background data set of a reasonable size is needed to compare site and background data sets using hypotheses testing approaches. A defensible data set from a site population should be representative of the site area under investigation. The site data collection requirements depend upon the objective of the study. Specifically, in background versus site comparisons, site data are needed to perform two-sample hypotheses testing to compare site data distribution with background data distribution to determine if the site concentrations are comparable to background concentrations. An adequate amount of data needs to be made available from the site as well as the background populations. Statistical methods used to compare the site contaminant concentration data distribution with the background data distribution can be computed based upon small site and background data sets (e.g., of sizes 3, 4, 5, or 6). It is preferable to collect at least 8–10 detected observations from each population under comparison. For better and more accurate results with higher statistical power, the availability of more observations (e.g., exceeding 10–15) from each of the two populations is desirable.

For this reason, the statistical analysis was limited to those target analytical groups and target analytes that were detected in most or all of the samples in both data sets (total metals and dissolved metals). Calcium, magnesium, potassium, and sodium data were excluded from the statistical analysis due to their non-toxic nature. While there are background and effluent samples with detected concentrations for one or more SVOCs and pesticides, the frequencies of detection (FODs) for all target analytes in these analytical groups were too low in both data sets to statistically compare them with reasonable confidence. No statistical analysis was performed with the PCB Aroclor data because there were no detected concentrations of PCB Aroclors in any of the background or effluent samples. Also, too few background and effluent samples (2 and 5, respectively) were analyzed for PCB Congeners and Dioxins/Furans, so quantitative statistics for these analytical groups are not appropriate. Summary statistics for the PCB Congeners and Dioxins/Furans data sets are provided in Appendix D.

Nondetect observations (or less than obvious values) are inevitable in most environmental data sets. The authors of ProUCL 4.1 studied the performances (in terms of coverages) of the various statistical computation methods including the simple substitution methods (such as the detection limit [DL]/2 and DL methods) for data sets with nondetect observations. They concluded that the results obtained using the substitution methods, including the replacement of nondetects by respective DL/2 do not perform well even when the percentage of nondetect observations is low, such as 5–10 percent. They recommended avoiding the use of substitution methods to compute values based upon data sets with nondetect observations. The DL/2 method is included in ProUCL 4.1 only for historical reasons as it had been the most commonly used and recommended method until recently (USEPA 2006). If there were few detects, then qualitative comparisons were used.

Because nondetects can bias the outcome of some statistical tests to an unpredictable extent, certain tests were avoided whenever there were nondetects. Distributional shape tests involving nondetects were not used since parametric tests were not used in such cases. Only nonparametric two-sample statistical tests were employed if there were nondetects present among either the effluent (site) data or the background data for a particular target analyte. When there were nondetects with multiple DLs, Gehan's test was used instead of the WMW test.

The two-sample hypotheses approach is used when the site parameters (e.g., mean/median, shape, distribution) are being compared with the background parameters (e.g., mean/median, shape, and distribution). The two-sample hypotheses testing approaches used herein are listed as follows:

1. Student's t-test - Parametric test for sample populations with normal distribution shapes and equal variances;

2. Satterthwaite t-test - Parametric test for sample populations with normal distribution shapes and unequal variances;

3. Wilcoxon-Mann-Whitney (WMW) test – Nonparametric test for sample populations that do not appear to have normal distribution shapes or have nondetects; and

4. Gehan's test – Nonparametric test for sample populations that have nondetects with multiple detection limits.

Before conducting any statistical tests, the laboratory-reported positive results with estimated values and blank-qualified values were included without any qualifiers for use in the quantitative statistical tests. The summary statistics associated with the effluent and background data sets are provided in Appendix D.

The method of calculation for site versus background hypothesis tests depends on an assessment of the distributional shape of the effluent data and the background data – either normal, gamma, or an indiscernible distributional shape. The t-test was applied if the effluent (site) data and background data match the shape of a normal distribution, with the distributional shape evaluation performed using the Shapiro-Wilk test at a significance level of 0.05. For the t-test, if effluent (site) and background data sets exhibited equal standard deviations based upon Bartlett's test for equal variances, then the student's t-test was applied; otherwise, Satterthwaite's t-test was performed.

The WMW test and Gehan's test were used when effluent (site) data and background data did not appear to match the shape of a normal distribution, or when there were one or more nondetects in either data set, to determine whether effluent (site) data and background data belong to populations with identical medians and rank distributions.

The two-sample t-test, WMW test, and Gehan's test were used to determine if the background data are statistically different from the effluent data. A five percent significance level ($\rho = 0.05$) was used for all hypothesis tests. The following null and alternative hypotheses were used for each hypothesis test:

H_o: Effluent concentration $\leq$ Background Concentration

H_A: Effluent concentration $>$ Background Concentration

These tests start with an initial assumption (null hypothesis) that effluent (site) concentrations are not greater than background. Several statistical tests were performed that attempt to refute the null hypothesis and determine cases where concentrations exceed background. For each applicable statistical test, the chance of making an incorrect decision that site exceeds background (i.e., false positive result) was set equal to a probability level (alpha) of 0.05. This is interpreted as a 5 percent chance of a test outcome wrongly concluding that effluent (site) exceeds background when in fact the effluent (site) and background sample data belong to a common underlying population. The results of these statistical tests are provided in Appendix D.

The two-sample t-test test was used to identify a significant difference between the means of two populations when it could be assumed that the data are approximately normally distributed or when sample sizes are large enough (m and n are at least 30) and the data are all detected. If the variances of the two data sets are not equal, then the two-sample t-test with unequal variance was computed. The WMW nonparametric test is used to test for a difference between median concentrations between two independent populations. The WMW test was used when the data were not normally distributed and nondetected concentrations all had the same DL. The Gehan nonparametric test is used to test for a difference between median concentrations between two independent populations. Gehan's test was used when the nondetects were present with multiple DLs.

For statistical comparisons using two-sample tests, an approach was used to declare a substance above background if the valid quantitative tests (t-test, WMW test, or Gehan's test) found concentrations were elevated above background. The opposite conclusion (that site concentrations do not exceed background) was drawn if the statistical comparisons were negative. If very few detected results occurred in site or background data sets, then an evaluation was made of the range of detects and nondetects to determine whether a "no" conclusion should be interpreted as meaning there was sufficient evidence to demonstrate that site concentrations cannot possibly be above background levels, versus a not applicable (NA) decision. In the latter case, qualitative comparisons were done.

The statistical hypothesis test conclusions for total metals data are presented in Table 3-8 and the statistical hypothesis test conclusions for dissolved metals data are presented in Table 3-9. Tables 3-8 and 3-9 also present the range of DLs and range of detected target analytes in both the background and effluent surface water data sets for total metals and dissolved metals, respectively. None of the identified target analytes in either table exhibited normal distributions for both the effluent and background data sets; therefore, only nonparametric hypothesis tests were used.

It is always desirable to supplement the test statistics and test conclusions with graphical displays. The graphical methods include side-by-side box plots, histograms, and double quantile-quantile (Q-Q) plots. The visual displays often provide useful information about a data set, which cannot be revealed by simple test statistics such as t-test, Shapiro-Wilk test, and WMW test.

The analyses of data categorized by a group ID variable such as Site vs. Background are quite common in many environmental applications. ProUCL 4.1 offers this option for data sets with and without nondetects. The Group Option was used to perform various statistical tests and methods (including graphical displays). The graphical displays (e.g., box plots, histograms, and Q-Q plots) and statistics (computations of background statistics and hypotheses testing approaches) of interest were computed separately for each group by using this option.

Qualitative background comparisons were presented graphically to demonstrate obvious differences between the range of effluent (site) and background surface water concentrations. Qualitative comparisons augment, but do not supersede, the information obtained from valid quantitative statistical comparisons. In the event that certain analyte data sets are not robust enough (for example, too few detects) to allow a valid quantitative statistical comparison, then qualitative analysis may be the principal tool used to determine if effluent (site) surface water concentrations are greater than background.

TABLE 3-8
HYPOTHESIS TEST CONCLUSIONS
TOTAL METALS
2012 NATIONAL PARK CDF MONITORING
NATIONAL PARK, NEW JERSEY

Parameter	BACKGROUND				EFFLUENT				N?(2)	E?(3)	Hypothesis Test	p-Value	Conclusion(4)
	FOD	Mean(1)	Range of Detections	Range of Non-detects	FOD	Mean(1)	Range of Detections	Range of Non-detects					
Metals (ug/L)													
ALUMINUM	9/9	562	210 - 1200	-	22/22	49449	350 - 240000	-	Y N	NA	Wilcoxon-Mann-Whitney	0.0000992	**Site > Background**
ANTIMONY	9/9	0.319	0.24 - 0.39	-	22/22	1.34	0.3 - 4.2	-	Y N	NA	Wilcoxon-Mann-Whitney	0.00007	**Site > Background**
ARSENIC	8/9	2.56	0.61 - 7.5	0.29 -	22/22	26.4	1.3 - 100	-	---	NA	Wilcoxon-Mann-Whitney	0.000343	**Site > Background**
BARIUM	9/9	27.4	25 - 30	-	22/22	420	40 - 1700	-	Y N	NA	Wilcoxon-Mann-Whitney	0.00000907	**Site > Background**
BERYLLIUM	7/9	0.0737	0.053 - 0.098	0.037 -	22/22	2.94	0.061 - 11	-	---	NA	Wilcoxon-Mann-Whitney	0.0000284	**Site > Background**
CADMIUM	0/9	NA	-	0.11 -	17/22	2.35	0.12 - 7.4	0.11 - 1.1	---	NA	NA	NA	**Site > Background**
CHROMIUM	9/9	6.38	3 - 14	-	22/22	162	2.2 - 610	-	N N	NA	Wilcoxon-Mann-Whitney	0.00116	**Site > Background**
COBALT	9/9	0.554	0.35 - 0.77	-	22/22	27.4	0.82 - 110	-	Y N	NA	Wilcoxon-Mann-Whitney	0.00000907	**Site > Background**
COPPER	9/9	5.79	4.1 - 8.5	-	22/22	75.2	2.3 - 260	-	Y N	NA	Wilcoxon-Mann-Whitney	0.00093	**Site > Background**
IRON	9/9	1153	500 - 2100	-	22/22	75495	980 - 350000	-	Y N	NA	Wilcoxon-Mann-Whitney	0.0000342	**Site > Background**
LEAD	9/9	2.41	1.1 - 3.8	-	22/22	102	1.1 - 380	-	Y N	NA	Wilcoxon-Mann-Whitney	0.00108	**Site > Background**
MANGANESE	9/9	59.6	30 - 86	-	22/22	1760	120 - 5900	-	Y N	NA	Wilcoxon-Mann-Whitney	0.00000907	**Site > Background**
MERCURY (ng/L)	9/9	5.96	3.2 - 8.8	-	22/22	159	2.3 - 730	-	Y N	NA	Wilcoxon-Mann-Whitney	0.0025	**Site > Background**
NICKEL	9/9	2.48	1.9 - 3	-	22/22	61.7	2.5 - 250	-	Y N	NA	Wilcoxon-Mann-Whitney	0.0000537	**Site > Background**
SELENIUM	4/9	1.01	0.58 - 1.3	0.42 -	11/22	5.46	0.58 - 13	0.42 - 4.2	---	NA	Gehan's	0.113	Not Statistically Different
SILVER	2/9	0.079	0.038 - 0.12	0.036 -	19/22	1.08	0.073 - 3.4	0.036 -	---	NA	Wilcoxon-Mann-Whitney	0.000399	**Site > Background**
THALLIUM	9/9	0.0459	0.02 - 0.068	-	22/22	0.696	0.092 - 3	-	Y N	NA	Wilcoxon-Mann-Whitney	0.00000907	**Site > Background**
VANADIUM	8/9	4.45	2.5 - 6.6	0.082 -	22/22	115	4.5 - 450	-	---	NA	Wilcoxon-Mann-Whitney	0.0000342	**Site > Background**
ZINC	9/9	20.4	15 - 27	-	22/22	433	17 - 1700	-	Y N	NA	Wilcoxon-Mann-Whitney	0.0000701	**Site > Background**

Null Hypothesis, H_o, for all parameters: Effluent (Site) mean is less than or equal to the Background mean (Test Form I).

FOD = Frequency of Detection
NA = Not applicable

(1) Mean - As reported in the ProUCL statistical outputs, this is the mean of the positive detections; where there are nondetects, the true mean will be lower.
(2) N? - Normality test: Are the distributions of the data for this analyte normal for the background and effluent data sets, respectively? (Y = Yes; N = No)
--- Nondetects preclude the use of parametric tests.
(3) E? - Equal variances test: If the data sets for this analyte are normal for both the background and effluent, do they have equal variances? (Y = Yes; N = No)
(4) A five percent significance level (p = 0.05) was used for all hypothesis tests.

Yellow highlights: Nondetect values are included for this parameter; therefore, nonparametric tests must be used.
Orange bold highlights: Conclusions were quantitatively determined since there were no nondetects and both data sets appeared to be normally distributed.
Blue bold highlights: Effluent (Site) mean is greater than the Background mean.
All other hypothesis conclusions were qualitatively determined and supporting graphical presentations of the data sets supplemented these conclusions.

TABLE 3-9
HYPOTHESIS TEST CONCLUSIONS
DISSOLVED METALS
2012 NATIONAL PARK CDF MONITORING
NATIONAL PARK, NEW JERSEY

Parameter	BACKGROUND				EFFLUENT				N?(2)	E?(3)	Hypothesis Test	p-Value	Conclusion(4)
	FOD	Mean(1)	Range of Detections	Range of Non-detects	FOD	Mean(1)	Range of Detections	Range of Non-detects					
Metals (ug/L)													
ALUMINUM	9/9	29.2	6.2 - 80	-	22/22	1413	6 - 27000	-	N N	NA	Wilcoxon-Mann-Whitney	0.00786	**Site > Background**
ANTIMONY	9/9	0.496	0.23 - 1.2	-	22/22	1.42	0.28 - 7.3	-	N N	NA	Wilcoxon-Mann-Whitney	0.00165	**Site > Background**
ARSENIC	3/9	1.11	0.69 - 1.8	0.29 - 2.9	21/22	4.62	0.54 - 18	2.9 -	---	NA	Gehan's	0.000217	**Site > Background**
BARIUM	9/9	23	20 - 30	-	22/22	63.1	32 - 290	-	N N	NA	Wilcoxon-Mann-Whitney	0.00000907	**Site > Background**
BERYLLIUM	1/9	0.039	0.039 -	0.037 - 0.37	2/22	0.723	0.046 - 1.4	0.037 - 0.37	---	NA	NA	NA	Insufficient Data
CADMIUM	0/9	NA	-	0.11 - 1.1	1/22	0.39	0.39 -	0.11 - 1.1	---	NA	NA	NA	Insufficient Data
CHROMIUM	9/9	13.9	1.1 - 38	-	21/22	14.9	0.91 - 68	0.54 -	---	NA	Wilcoxon-Mann-Whitney	0.535	Not Statistically Different
COBALT	8/9	0.165	0.083 - 0.32	0.26 -	22/22	1.56	0.4 - 12	-	---	NA	Wilcoxon-Mann-Whitney	0.00000907	**Site > Background**
COPPER	9/9	47.9	3.2 - 140	-	22/22	24.0	2.3 - 120	-	N N	NA	Wilcoxon-Mann-Whitney	0.862	Not Statistically Different
IRON	9/9	77.3	19 - 190	-	21/22	2348	19 - 37000	6.1 -	---	NA	Wilcoxon-Mann-Whitney	0.0194	**Site > Background**
LEAD	9/9	0.247	0.077 - 0.7	-	22/22	1.69	0.056 - 28	-	N N	NA	Wilcoxon-Mann-Whitney	0.308	Not Statistically Different
MANGANESE	9/9	10.9	1.4 - 32	-	22/22	406	110 - 1500	-	Y N	NA	Wilcoxon-Mann-Whitney	0.00000907	**Site > Background**
NICKEL	9/9	2.84	1.4 - 4.4	-	22/22	5.03	1.6 - 29	-	N N	NA	Wilcoxon-Mann-Whitney	0.0586	Not Statistically Different
SELENIUM	5/9	19	1 - 33	0.42 -	14/22	9.49	0.5 - 41	0.42 - 4.2	---	NA	Gehan's	0.463	Not Statistically Different
SILVER	0/9	NA	-	0.036 - 0.36	2/22	0.16	0.039 - 0.28	0.036 - 0.36	---	NA	NA	NA	Insufficient Data
THALLIUM	7/9	0.215	0.023 - 0.44	0.015 -	21/22	0.418	0.028 - 1.7	0.015 -	---	NA	Wilcoxon-Mann-Whitney	0.0996	Not Statistically Different
VANADIUM	8/9	5.68	1.6 - 11	0.082 -	16/22	11.8	0.8 - 57	0.082 - 0.82	---	NA	Gehan's	0.708	Not Statistically Different
ZINC	9/9	20.3	6.9 - 38	-	22/22	31.6	4.4 - 230	-	Y N	NA	Wilcoxon-Mann-Whitney	0.586	Not Statistically Different

Null Hypothesis, H_o, for all parameters: Effluent (Site) mean is less than or equal to the Background mean (Test Form I).

FOD = Frequency of Detection
NA = Not applicable

(1) Mean - As reported in the ProUCL statistical outputs, this is the mean of the positive detections; where there are nondetects, the true mean will be lower.
(2) N? - Normality test: Are the distributions of the data for this analyte normal for the background and effluent data sets, respectively? (Y = Yes; N = No)
--- Nondetects preclude the use of parametric tests.
(3) E? - Equal variances test: If the data sets for this analyte are normal for both the background and effluent, do they have equal variances? (Y = Yes; N = No)
(4) A five percent significance level (p = 0.05) was used for all hypothesis tests.

Yellow highlights: Nondetect values are included for this parameter; therefore, nonparametric tests must be used.
Orange bold highlights: Conclusions were quantitatively determined since there were no nondetects and both data sets appeared to be normally distributed.
Blue bold highlights: Effluent (Site) mean is greater than the Background mean.
All other hypothesis conclusions were qualitatively determined and supporting graphical presentations of the data sets supplemented these conclusions.

The graphical displays are provided in Figures 3-2 through 3-19. In addition, effluent (site) and background surface water concentrations were compared by means of descriptive statistics, showing the frequencies of detection, mean, median, minimum detected concentration, maximum detected concentration, and range of detection limits. The summary statistics for the two data sets are provided in Appendix D.

The histograms show a visual impression of the relative distributions of the two data sets. Histograms for the same analyte were plotted on the same graph. The histograms were visually inspected to see which data sets look similar and which ones look different.

Q-Q plots are useful for visually comparing two data sets in a single graph. If the background and effluent data set distributions were exactly identical, the plotted values would lie on a straight line with similar concentration ranges and slopes. Deviations from this line show the differences between the two distributions. If the background and effluent data set distributions are similar, then the scattering of the two data sets will be mixed. If there is grouping of the two data sets, then data sets are most likely different.

Histograms and Q-Q plot graphical displays for visually comparing the total metals and dissolved metals data sets are presented in alphabetical order in Figures 3-2 through 3-19 for 18 of the metals that were analyzed. Cadmium data was not presented because all of the background samples were nondetected; mercury was only analyzed for total metals; and beryllium and silver dissolved metals data were not presented due to an insufficient number of detected data points.

Conclusions

As identified in Table 3-8, the total metals were detected in at least one sample in both the effluent (site) and background data sets for all 23 metals that were analyzed, except cadmium. Based on the hypothesis test conclusions, concentrations of aluminum, antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, iron, manganese, mercury, nickel, silver,

thallium, vanadium, and zinc in the effluent data set are statistically different (greater than the background data set) at the five percent significance level ($\rho = 0.05$). The effluent data set for selenium is not statistically different from the background data set.

As identified in Table 3-9, dissolved metals were detected in at least one sample in both the effluent (site) and background data sets for all 23 metals that were analyzed, except cadmium and silver. Based on the hypothesis test conclusions, concentrations of aluminum, antimony, arsenic, barium, cobalt, iron, and manganese in the effluent data set are statistically different (greater than the background data set) at the five percent significance level ($\rho = 0.05$). The effluent data set for chromium, copper, lead, nickel, selenium, thallium, vanadium, and zinc are not statistically different from the background data set. For the target analytes of beryllium, cadmium, and silver, generally greater than 90 percent of the background and effluent sample results were nondetected, so there is insufficient data to make statistical conclusions for these target analytes. Although statistical hypothesis tests are not able to conclude if they are similar data sets, they are clearly similar data sets with respect to the DL (e.g., the concentrations of these target analytes for both data sets are generally below the DL).

3.7 TOTAL SUSPENDED SOLIDS

Figure 3-20 presents the TSS data for the daily samples, the effluent samples collected for contaminant analysis, and background samples. During the beginning of the monitoring period, TSS levels were generally below 250 mg/L. However, between mid-October to late-November, and again in late December to mid-January, effluent TSS levels were greater than 250 mg/L. The dredged material containment cell was efficient at retaining sediment (TSS levels below 250 mg/L) during periods when the volume of material pumped into the cell was relatively low, and effluent contaminant measurements were similar to background measurements part of the time. However, when dredging volumes increased significantly, there were several days in the time series where TSS was above 250 mg/L for the effluent TSS samples. TSS levels were above 1,000 mg/L in 9 of the 22 effluent samples. However, the contaminant concentrations were below acute criteria for all effluent samples.

The National Park cell that was used for this work is approximately 100 acres in size. This is substantially smaller than previous cells used at Killcohook (cell 2: 400 acres and cell 3: 300 acres) and Pedricktown South (500 acres). The higher TSS levels than previously observed during other CDF monitoring studies in some of the weir samples indicate that the National Park CDF was not as efficient as the larger CDFs since the heavy sediment loads seen at the inlet were not removed from the water column to the same degree by the time water reached the weir for discharge back into the Delaware River (Table 3-10). For the Reach A deepening, the discharge pipes were extended out into the tidal river beyond the low tide line to avoid the weir discharge water entering directly on to exposed mud flats and to improve mixing. The CDF was calculated to be 75.79 percent efficient at removing contaminants from the aquatic environment (see Section 3.8 and Table 3-11).

The observed difference between National Park and the larger Killcohook and Pedricktown South CDFs was most likely due to the large volume of sediment and water that was rapidly placed in the National Park CDF; the relatively small capacity of the National Park CDF to retain the amount of water and sediment that was added over short time periods (it was essentially full of solids by the end of the dredging project); and the additional rainwater that fell into the National Park CDF during the project and ultimately contributed to the effluent volume totals.

3.8 MASS BALANCE EVALUATION

The act of hydraulic dredging removes Delaware River sediments and associated contaminants and places them in a CDF where the pumped slurry is dewatered. Most of the contaminants in the sediment settle out and remain in the upland disposal site while a small fraction stays in suspension and is ultimately discharged back into the river through the weir. Previous studies funded by the Philadelphia District evaluating maintenance dredging operations in the Marcus Hook area indicated that over 95 percent of the contaminants are sequestered in the CDF (Burton and Farrar 2003), a net benefit from an aquatic toxicology perspective. CDF sequestering (retention) efficiencies can be calculated by multiplying the mean contaminant concentration in

TABLE 3-10
COMPARISONS OF DATA AND REMOVAL EFFICIENCIES
FOR DREDGING PROJECTS CONDUCTED BETWEEN 2010 AND 2013
DELAWARE RIVER DEEPENING CDF MONITORING

Project		Killcohook	Pedricktown South	Pedricktown South*	National Park
Dredge Start Date		03/01/10	11/09/11	10/21/12	09/09/12
Dredge End Date		09/18/10	12/29/11	11/19/12	02/03/13
Monitoring Report Date		November 2011	October 2012	Draft May 2013	Draft August 2013
	Units				
Size of CDF (Estimate)	acres	400	500	500	100
Sediment Mass (Dry Weight)	kg	1,002,474,000	256,327,963	272,757,924	627,961,018
Effluent Volume	L	6,020,990,988	3,164,604,000	2,306,752,230	13,009,758,378
Water-to-Sediment Ratio	L/kg	6.01	12.35	8.46	20.72
Mean Background TSS	mg/L	78.8	NR	90.7	19.9
Maximum Background TSS	mg/L	182	NR	110	36
Mean Effluent TSS	mg/L	60 est.	154 est.	16.0	1,513
Maximum Effluent TSS	mg/L	880 est.	960 est.	28	8,000
Representative Contaminants - Mean Influent (Sediment) Concentrations					
Aluminum, total	mg/kg	12,446	19,750	15,250	2,040
Iron, total	mg/kg	2.32	36,750	30,500	8,720
Manganese, total	mg/kg	NR	NR	1,700	103
Total PCBs	ug/kg	10.4	33.8	472	0.800
Sum of PCB Congeners	ug/kg	61.4	81.8	209	1.75
Sum of D/F TEQ	ng/kg	NR	NR	4.00	0.0621
DDT and Metabolites	ug/kg	354	0	21.225	565
Benzo(a)pyrene	ug/kg	85.8	61	175	19.8
Representative Contaminants - Mean Effluent (Discharge Water) Concentrations					
Aluminum, total	ug/L	5,344	11,308	497	49,449
Iron, total	ug/L	1.37	11,238	1,260	75,495
Manganese, total	ug/L	NR	NR	7,176	1,760
Total PCBs	ug/L	0.00190	0.0104	0.550	0
Sum of PCB Congeners	ng/L	49.5	69.6	11.5	60.5
Sum of D/F TEQ	pg/L	NR	NR	1.31	3.87
DDT and Metabolites	ug/L	0.00200	0	0.000724	0.0179
Benzo(a)pyrene	ug/L	0.0417	0.0108	0	0.0185
Total Sediment Mass of Representative Contaminants					
Aluminum, total	kg	12,473,861	5,062,477	9,576,406	1,281,040
Iron, total	kg	2,325	9,420,053	19,152,811	5,475,820
Manganese, total	kg	NR	NR	1,067,534	64,554
Total PCBs	kg	10.4	8.65	296	0.502
Sum of PCB Congeners	kg	61.5	21.0	131	1.10
Sum of D/F TEQ	kg	NR	NR	0.00251	3.90E-05
DDT and Metabolites	kg	355	0	13.33	355
Benzo(a)pyrene	kg	85.9	15.6	110	12.42
Total Effluent Mass of Representative Contaminants					
Aluminum, total	kg	32,177	35,784	6,462	643,321
Iron, total	kg	8.25	35,565	16,392	982,166
Manganese, total	kg	NR	NR	93,352	22,891
Total PCBs	kg	0.0114	0.0329	7.16	0
Sum of PCB Congeners	kg	0.298	0.220	0.149	0.787
Sum of D/F TEQ	kg	NR	NR	1.70E-05	5.04E-05
DDT and Metabolites	kg	0.0120	0	0.00942	0.232
Benzo(a)pyrene	kg	0.251	0.0341	0	0.240
Representative Contaminants - Removal Efficiencies					
Aluminum, total	%	99.74	99.29	99.93	49.78
Iron, total	%	99.65	99.62	99.91	82.06
Manganese, total	%	NR	NR	91.26	64.54
Total PCBs	%	99.89	99.62	97.58	100.00
Sum of PCB Congeners	%	99.52	98.95	99.89	28.38
Sum of D/F TEQ	%	NR	NR	99.32	-29.18
DDT and Metabolites	%	100.00	NA	99.93	99.93
Benzo(a)pyrene	%	99.71	99.78	100.00	98.07

NR - Not Reported est. - Estimate NA - Not Applicable

* The Pedricktown South dredging project in 2012 was a channel maintenance project, not a river deepening project.

TABLE 3-11
MASS BALANCE CALCULATIONS
EFFLUENT DISCHARGES AND INLET INPUTS
2012 NATIONAL PARK CDF MONITORING

Total CM Pumped into CDF (from dredging logs)	Total liters discharged (from flow meters)
1,037,266	13,009,758,378
Kg Dry	
627,961,018	

Analyte	Weir Ave Weir Concentrations	Unit	Total kg Discharged from Weir	Ave Inlet Concentration	Unit	Total Kg pumped into CDF	Percent (%) Sequestered in CDF
Organochlorine Pesticides							
4,4'-DDD	0.001064	ug/L	0.0138	400	ug/kg	251	99.99
4,4'-DDE	0.0149	ug/L	0.194	84.5	ug/kg	53.0	99.63
4,4'-DDT	0.00185	ug/L	0.0241	80.0	ug/kg	50.3	99.95
Alpha-BHC	0.0000345	ug/L	0.000449	1.04	ug/kg	0.653	99.93
Delta-BHC	0.000100	ug/L	0.00130	0.680	ug/kg	0.427	99.70
Endosulfan II	0.000109	ug/L	0.00142	0.00380	ug/kg	0.00239	40.52
Endrin Ketone	0.000418	ug/L	0.00544	0.0184	ug/kg	0.01155	52.91
Gamma-Chlordane	0.000532	ug/L	0.00692	30.0	ug/kg	18.9	99.96
Methoxychlor	0.0000682	ug/L	0.000887	0.0140	ug/kg	0.00879	89.91
Total Metals and Cyanide							
Aluminum	49449	ug/L	643321	2040	mg/kg	1281040	49.78
Antimony	1.35	ug/L	17.5	0.0950	mg/kg	59.7	70.66
Arsenic	26.4	ug/L	343	2.00	mg/kg	1256	72.70
Barium	420	ug/L	5459	13.9	mg/kg	8741	37.55
Beryllium	2.94	ug/L	38.3	0.202	mg/kg	126.8	69.80
Cadmium	1.81	ug/L	23.6	0.298	mg/kg	187	87.39
Chromium	162	ug/L	2114	12.2	mg/kg	7686	72.50
Cobalt	27.4	ug/L	356	2.34	mg/kg	1471	75.76
Copper	75.2	ug/L	978	6.98	mg/kg	4383	77.69
Iron	75495	ug/L	982166	8720	mg/kg	5475820	82.06
Lead	102	ug/L	1333	5.98	mg/kg	3755	64.51
Manganese	1760	ug/L	22891	103	mg/kg	64554	64.54
Mercury	159	**ng/L**	2.07	17.9	**ug/kg**	11.23	81.55
Nickel	61.7	ug/L	803	4.50	mg/kg	2826	71.60
Selenium	2.73	ug/L	35.5	0.657	mg/kg	413	91.40
Silver	0.936	ug/L	12.2	0.0250	mg/kg	15.7	22.47
Thallium	0.696	ug/L	9.05	0.0420	mg/kg	26.4	65.69
Vanadium	115	ug/L	1501	15.4	mg/kg	9683	84.50
Zinc	433	ug/L	5632	39.3	mg/kg	24679	77.18
Cyanide, Total	2.42	ug/L	31.5	0.0356	mg/kg	22.4	-40.99
Semivolatile Organic Compounds							
1,1-Biphenyl	0.00741	ug/L	0.096	0.360	ug/kg	0.226	57.36
2-Methylnaphthalene	0.0608	ug/L	0.791	2.32	ug/kg	1.46	45.73
Acenaphthene	0.0407	ug/L	0.529	2.40	ug/kg	1.51	64.88
Acenaphthylene	0.0035	ug/L	0.046	1.87	ug/kg	1.177	96.13
Acetophenone	0.0064	ug/L	0.083	0.520	ug/kg	0.327	74.65
Anthracene	0.0093	ug/L	0.121	6.90	ug/kg	4.33	97.22
Benzaldehyde	0.0809	ug/L	1.05	6.28	ug/kg	3.94	73.31
Benzo[a]anthracene	0.0239	ug/L	0.310	25.2	ug/kg	15.8	98.04
Benzo[a]pyrene	0.0185	ug/L	0.240	19.8	ug/kg	12.42	98.07

TABLE 3-11
MASS BALANCE CALCULATIONS
EFFLUENT DISCHARGES AND INLET INPUTS
2012 NATIONAL PARK CDF MONITORING

Total CM Pumped into CDF (from dredging logs)	Total liters discharged (from flow meters)
1,037,266	13,009,758,378

Analyte	Weir Ave Weir Concentrations	Unit	Total kg Discharged from Weir	Ave Inlet Concentration	Unit	Total Kg pumped into CDF	Percent (%) Sequestered in CDF
Benzo[b]fluoranthene	0.0176	ug/L	0.229	18.6	ug/kg	11.65	98.04
Benzo[g,h,i]perylene	0.0207	ug/L	0.269	8.74	ug/kg	5.49	95.10
Benzo[k]fluoranthene	0.0205	ug/L	0.266	10.9	ug/kg	6.87	96.13
Bis(2-ethylhexyl)phthalate	0.368	ug/L	4.79	9.30	ug/kg	5.84	17.98
Butyl benzyl phthalate	0.0536	ug/L	0.698	2.90	ug/kg	1.82	61.68
Carbazole	0.00255	ug/L	0.0331	0.564	ug/kg	0.354	90.65
Chrysene	0.0276	ug/L	0.359	22.6	ug/kg	14.2	97.47
Dibenz(a,h)anthracene	0.0186	ug/L	0.242	2.22	ug/kg	1.394	82.61
Dibenzofuran	0.0103	ug/L	0.134	1.12	ug/kg	0.703	81.00
Diethyl phthalate	0.235	ug/L	3.05	1.10	ug/kg	0.691	-341.74
Fluoranthene	0.0457	ug/L	0.595	25.3	ug/kg	15.9	96.26
Fluorene	0.0479	ug/L	0.623	3.29	ug/kg	2.06	69.82
Indeno[1,2,3-cd]pyrene	0.0185	ug/L	0.241	7.96	ug/kg	5.00	95.19
Methylphenol, 3- & 4-	0.162	ug/L	2.11	1.94	ug/kg	1.218	-72.81
Naphthalene	0.140	ug/L	1.82	6.14	ug/kg	3.86	52.70
Phenanthrene	0.0898	ug/L	1.17	18.0	ug/kg	11.29	89.66
Pyrene	0.0526	ug/L	0.685	31.6	ug/kg	19.9	96.55

High Resolution PCBs and Dioxins/Furans

Sum of Dioxins/Furans TEQs	3.87	pg/L	0.0000504	0.0621	pg/g	0.0000390	-29.18
Sum of PCB Congeners	60.5	ng/L	0.787	1.75	ng/g	1.10	28.57
Sum of PCB Congeners TEQs	0.620	pg/L	0.00000807	0.00516	pg/g	0.00000324	-148.93
Sum of PCB and D/F TEQs	4.49	pg/L	0.0000584	0.0673	pg/g	0.0000422	-38.37

For analytes that were detected in the sediment, but not in the weir, the removal efficiency (% sequestered) is 100%.

As a group, these are the summed totals for pesticides/PCBs, total inorganics, and SVOCs:

Pesticides			0.2487			374.5121	99.93
Total Inorganics			1667066			6886757	75.79
SVOCs			20.580			149.384	86.22
(PAHs - a subset of the SVOCs)			8.666			134.841	93.57
	Total:		1667086			6887281	75.79

the inlet samples by an estimate of the total kilograms of material pumped into the CDF and comparing that to similar estimates of total kilograms of contaminants discharged at the weir over a prescribed period of time.

To evaluate the CDF sequestering efficiencies for the Reach A deepening work, dredging logs from the *Illinois*, the *Florida*, and the *Terrapin Island* were obtained and the accumulative cubic yards pumped into the National Park CDF (1,356,613 cubic yards) was entered into a mass balance spreadsheet. Total cubic yards of dredged material were converted to total cubic meters, and then to total kilograms of dry sediment by multiplying cubic meters by 605.4, in accordance with a sediment mean dry bulk density analysis for this portion of the Delaware River (Greene 2011). All inlet sample data were used to calculate average inlet contaminant concentrations. Using the weir discharge flow data recorded by ISCO ultrasonic flow meters installed in the discharge pipes, the total liters discharged for the monitoring time period was calculated (Appendix D). Multiplying the total discharge (13,009,758,378 liters) by the mean weir concentrations measured among all weir samples provides an estimate of the total kilograms of contaminants that were released back into the Delaware River. Only parameters detected in both the inlet and weir samples were included in the analysis, and non-detections were assumed to be zero. Total inorganic data, which includes dissolved metals, was used for this analysis.

The estimated pesticide sequestering efficiencies for the National Park CDF were generally above 90 percent (Table 3-11). For pesticides, endosulfan II had the lowest retention efficiency at 40.52 percent, while endrin ketone had a retention efficiency of 52.91 percent and methoxychlor had a retention efficiency of 89.91 percent. All other pesticides had retention efficiencies that were greater than 99 percent. Inorganic retention efficiencies ranged from a low of -40.99 percent for total cyanide and 22.47 percent for silver, to as high as 91.40 percent for selenium. SVOCs, including PAHs, had retention efficiencies that ranged from -341.74 percent for diethyl phthalate, -72.81 percent for 3- & 4-methylphenol, and 17.98 percent for bis(2-ethylhexylphthalate), to as high as 98.07 percent for benzo(a)pyrene. Negative sequestering efficiencies are theoretically impossible; therefore, the mean concentrations of certain analytes that were reported in the effluent are suspected to be higher than the true amount of those analytes that were discharged from the weir and/or the mean concentrations of those analytes that

were reported in the inlet (sediment) are suspected to be lower than the true amount. Part of the reason for this discrepancy could be due to the elevated TSS levels in several of the effluent samples, and part of the reason could be due to laboratory contaminants (i.e., phthalates).

Of particular note was the calculated retention efficiency of the sum of PCB Congeners (measured using a smaller subset of samples with high resolution laboratory methods). The mass balance analysis indicates that 1.10 kilograms of PCB Congeners were pumped into the CDF and 0.787 kilograms was released back into the Delaware River through the weir discharge. The retention of PCB Congeners in the National Park CDF was calculated to be 28.57 percent. However, the mean concentration of PCB Congeners in the inlet (sediment) samples for this project was significantly lower than previous Delaware River deepening project results (1.75 nanograms per gram [ng/g] for National Park, 61.38 ng/g for Killcohook, and 79.75 ng/g for Pedricktown South), thus yielding a lower retention of PCB Congeners during this phase of the deepening project. This is also true for the dioxins/furans TEQ and PCB Congeners TEQ.

Lower removal efficiencies than previously calculated that were identified during the mass balance evaluation include dioxins/furans TEQ, PCB Congeners TEQ, total PCB Congeners, and several total metals, pesticides, and SVOCs, including PAHs. Potential reasons for the lower than previous removal efficiencies that were obtained during the National Park CDF monitoring include the following:

- Larger dredges were used to dredge this portion of the deepening project, which deposited the sediment and water slurry at a comparatively faster rate than during previous projects;
- National Park is a substantially smaller CDF than Killcohook and Pedricktown South which were previously monitored for deepening construction so the CDF had less capacity than the other CDFs to store the dredged sediment and water (and it was essentially full of solids by the end of the project). This did not allow for similar retention and deposition of the solids, water evaporation, water uptake by plants, or infiltration of the water into the ground surface prior to discharge of the effluent through the weir;

- Hurricane Sandy and other rainstorms that occurred during the time of the effluent discharge period dumped an estimated 14.41 inches of water into the National Park CDF (in addition to the amount of dredged water that was placed in the CDF), which added to the total amount of water that discharged from the National Park CDF;
- For a number of inlet (sediment) analytes, the mean concentrations were lower than previous Delaware River sediment results, suggesting that lower amounts of contaminants were removed from the river during this dredging project and placed into the CDF; and
- Higher TSS levels than previously observed at the CDF discharge point seemed to result in generally higher contaminant concentrations at the weir than previous projects, especially for total metals which were particle-bound in the solids that caused the higher TSS values. The relatively higher effluent volume multiplied by the higher effluent concentrations of contaminants yielded generally higher total kilograms of discharge from the weir.

4.0 CONFINED DISPOSAL FACILITY MONITORING DISCUSSION

4.1 INORGANICS

Among the inorganics discharged from the National Park CDF, no sample concentrations were over the DRBC freshwater acute criteria for protection of aquatic life during the approximately five month monitoring period, except for aluminum. Aluminum concentrations were over the DRBC acute criterion in most effluent samples and some background samples, but the criterion is dated and does not properly account for the effect of pH on solubility and toxicity according to Greene (2010). Of the 22 weir samples collected over the Reach A monitoring period, no other inorganics were over their respective DRBC freshwater acute criteria. No near-field assessment was needed.

While some inorganic parameters had observed effluent concentrations above DRBC chronic freshwater criteria for the protection of aquatic life, mean concentrations were all below these criteria. No inorganic parameters had observed effluent concentrations above the DRBC human health carcinogen criteria, but mean concentrations of total mercury and total thallium were above the DRBC human health fish ingestion criteria. For these parameters, a far-field assessment was conducted to determine the contaminant concentration after complete mixing for this location in the Delaware Estuary. The 138 days of contaminant load discharged from the National Park CDF was added to observed background concentrations and diluted by the appropriate low flow measurements for both the 7Q10 and the mean harmonic. The result was that these parameters did not increase background concentrations significantly, and the resulting concentrations were below the human health fish ingestion criterion. As such, all DRBC human health criteria were met during the approximately five month monitoring period. Furthermore, mass balance calculations using inlet concentrations and CDF discharge loadings demonstrated that 75.79 percent of dredged inorganics stayed in the National Park CDF. This included a removal efficiency of 81.55 percent for total mercury and 65.69 percent for total thallium.

Higher percent retention results were reported for previous projects, specifically the Reach C and lower Reach B monitoring programs, for two significant reasons: lower TSS values and lower

mean contaminant concentrations in the effluent; and generally higher mean contaminant concentrations in the sediment as compared to the National Park CDF data set.

4.2 PESTICIDES

No pesticide had an observed sample concentration at the discharge over the DRBC freshwater acute criteria for protection of aquatic life during the approximately five month monitoring period. Mean effluent sample concentrations of 4,4'-DDD, 4,4'-DDE, 4,4'-DDT, and toxaphene and mean background sample concentrations of 4,4'-DDE and gamma-chlordane were above DRBC chronic criteria for protection of aquatic life and/or human health criteria. The far-field assessment as conducted for inorganics indicated again that when 138 days of contaminant load discharged from the National Park CDF was added to observed background concentrations and diluted by the low flows for 138 days, there was no significant increase in background concentrations. As such, DRBC chronic freshwater criteria for the protection of aquatic life and DRBC human health criteria for pesticides were met during the approximately five month monitoring period, except for 4,4'-DDE, which was present in the background above the criteria alone. The mass balance analysis showed that 40.52 percent to greater than 99 percent of the pesticides entering the National Park CDF were retained within the National Park CDF. Reach C and Reach B monitoring data supported a similar conclusion.

4.3 PCBS

The DRBC acute freshwater criterion for protection of aquatic life for PCBs is 1,000 ng/L. None of the effluent or background samples had a PCB concentration that exceeded this criterion. Four of five effluent samples and none of the two background samples analyzed for PCB Congeners had PCB concentrations above the DRBC chronic criterion for protection of aquatic life (14 ng/L); and all five effluent and two background sample results were above the DRBC human health carcinogen criterion (0.0448 ng/L). However, the far-field assessment indicated that background concentrations of PCBs were essentially not increased when the approximately five months of PCB load discharged from the National Park CDF was added to observed background concentrations and diluted by the low flows for 138 days. Mass balance calculations indicated that 1.10 kilograms of PCB congeners were removed from the Reach A

navigation channel and pumped into the National Park CDF, while 0.787 kilograms were released back into the Delaware River through the weir discharge.

4.4 PAHS

There are no DRBC acute or chronic freshwater criteria for protection of aquatic life for PAHs; however, criteria are available in the peer reviewed literature (DiToro et al. 2000). None of the detected concentrations exceed those criteria. There are DRBC human health systemic and carcinogen criteria for several PAHs. No PAH parameters were present in a sample at a concentration above the DRBC human health systemic criteria. Five PAH parameters had 1 to 3 sample concentrations (out of the 22 weir samples) that exceeded the DRBC human health carcinogen criteria. The mean effluent concentrations of benzo(a)anthracene, benzo(b)fluoranthene, and indeno(1,2,3-cd)pyrene did not exceed any DRBC human health criteria. The mean effluent concentrations of benzo(a)pyrene (0.0185 µg/L) and dibenzo(a,h)anthracene (0.0186 µg/L) slightly exceeded the DRBC human health carcinogen criteria (0.018 µg/L for both). The far-field assessment indicated that when approximately five months of contaminant load discharged from the National Park CDF was added to observed background concentrations and diluted by 138 days with low flows, these parameters did not increase background concentrations to any appreciable extent. As such, DRBC human health criteria for PAHs were met during the approximately five month monitoring period. The mass balance analysis showed that 93.57 percent of the PAHs entering the National Park CDF were retained within the National Park CDF. This included a removal efficiency of 98.07 percent for benzo(a)pyrene and 82.61 percent for dibenzo(a,h)anthracene. In addition, statistical analysis of the PAH data indicated that there were no significant differences between the weir and background concentrations.

4.5 DIOXINS/FURANS AND PCB CONGENERS

The mean effluent and background concentrations for dioxin TEQ (as 2,3,7,8-TCDD) (as well as both the dioxins/furans TEQ and PCB Congeners TEQ, individually) were above the carcinogenic criterion for human health fish ingestion of 0.0051 pg/L for dioxin. The far-field assessment indicated that the background concentrations of dioxin TEQ (and the dioxins/furans

TEQ and PCB Congeners TEQ, individually) were not increased when approximately five months of the dioxins/furans and PCB Congeners load discharged from the CDF were added to observed background concentrations and diluted by the low flows for 138 days; however, the background concentrations already exceeded the criterion. The mass balance calculations indicated that -29.18 percent of dioxins/furans (as TEQ) and -148.93 percent of PCB Congeners (as TEQ) removed from the Reach A navigation channel were retained in the CDF.

As indicated previously, negative sequestering (removal) efficiencies are theoretically impossible; therefore, the mean concentrations of the dioxins/furans (as dioxin TEQ) and the PCB Congeners (as dioxin TEQ) that were reported in the effluent are suspected to be higher than the true amounts that were discharged from the weir, and/or the mean concentrations of the dioxins/furans (as dioxin TEQ) and the PCB Congeners (as dioxin TEQ) that were reported in the inlet (sediment) are suspected to be lower than the true amount.

The mean effluent concentration for total PCB Congeners (60.5 ng/L) was above the chronic aquatic life criterion (14 ng/L), human health fish ingestion criterion (8.49 ng/L) and the human health carcinogenic criterion (0.0448 ng/L) for total PCBs; and the mean background concentration for total PCB Congeners (7.35 ng/L) was above the human health carcinogenic criterion. The far-field assessment indicated that the background concentration of total PCB Congeners was not increased when approximately five months of the total PCB Congeners load discharged from the CDF was added to observed background concentrations and diluted by the low flows for 138 days; however, the background concentration already exceeded the human health carcinogen criterion. The mass balance calculations indicated that 28.64 percent of total PCB Congeners removed from the Reach A navigation channel were retained in the CDF.

5.0 CONCLUSIONS

Dredging for the Delaware River Main Stem Channel Deepening Project began on March 1, 2010. The third construction contract was for most of Reach A of the channel, which extends from the Walt Whitman Bridge to southwest of the Philadelphia Airport. Environmental monitoring for potential water quality impacts was intensively monitored at the Federally-owned National Park CDF. The following conclusions are made based on monitoring data collected over the entire dredging project:

- A near-field assessment of contaminant concentrations within the zone of initial dilution for the National Park CDF discharge points was not necessary because all DRBC acute water quality criteria for the protection of aquatic life were met in the effluent samples during the dredging period for all parameters except aluminum, which is excluded from consideration for the reasons that are provided in this report;

- A far-field assessment of contaminant loads discharged from the National Park CDF indicates that no parameter increased background concentrations by any significant amount, as such DRBC chronic freshwater criteria for the protection of aquatic life, and DRBC human health criteria were met during the dredging period; and

- A mass balance evaluation of the contaminant loads entering and leaving the National Park CDF indicates a net removal of contaminants from the Delaware River.

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FIGURES

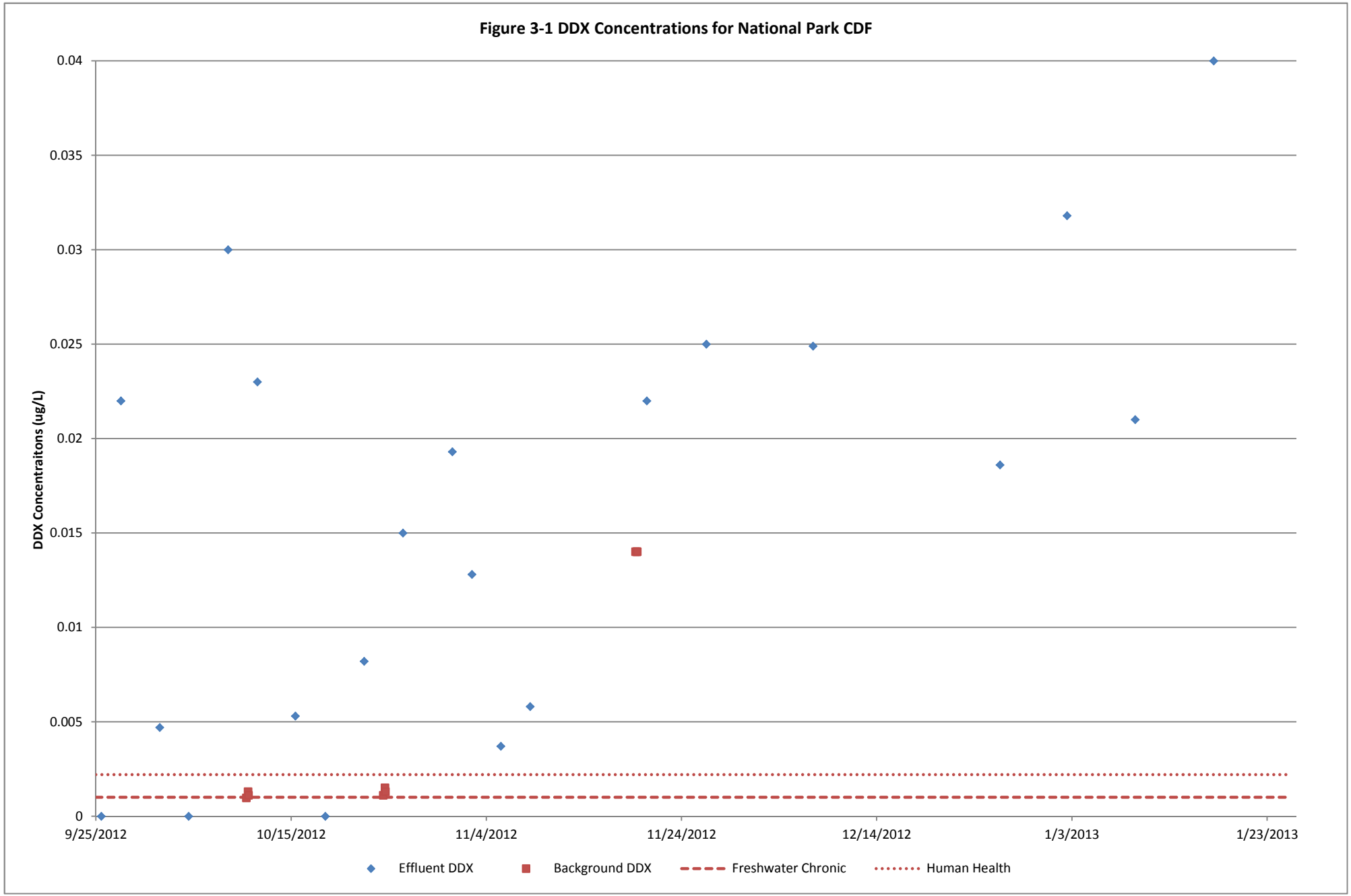
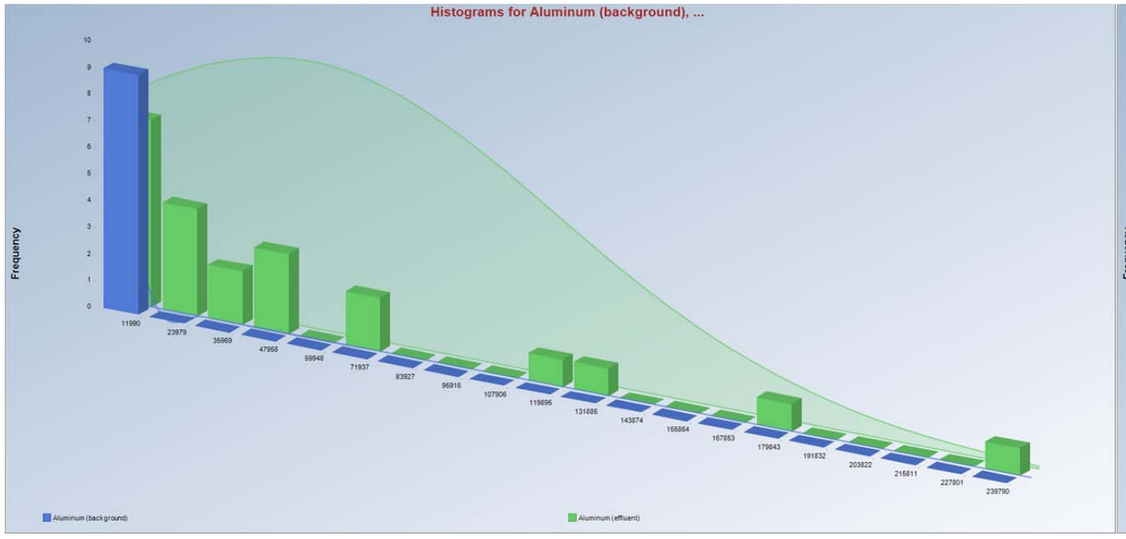
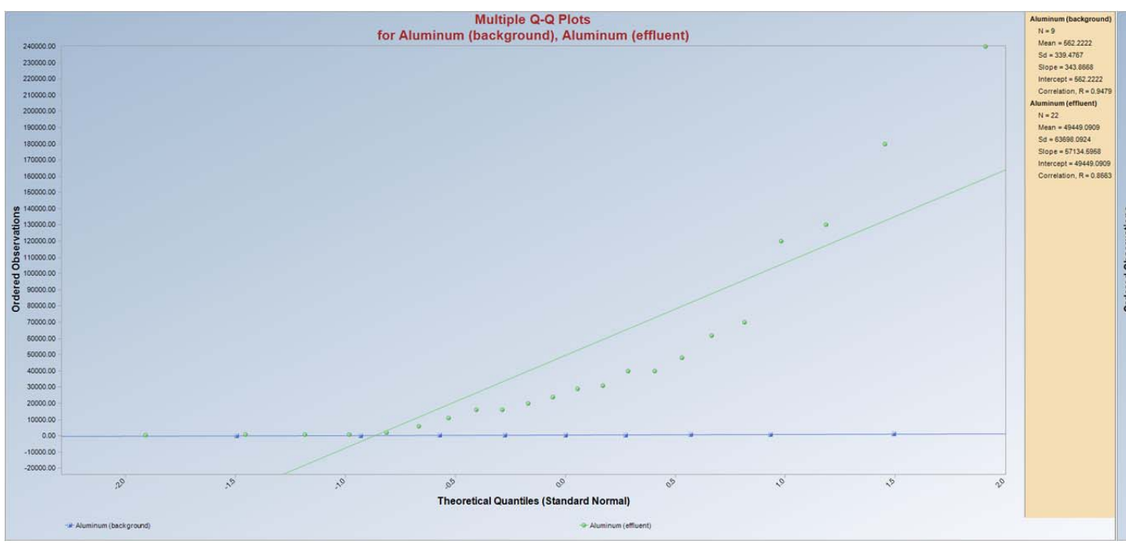


Figure 3-1 DDX Concentrations for National Park CDF
DDX Concentraitons (ug/L)
0.04
0.035
0.03
0.025
0.02
0.015
0.01
0.005
0
9/25/2012
10/15/2012
11/4/2012
11/24/2012
12/14/2012
1/3/2013
1/23/2013
Effluent DDX
Background DDX
Freshwater Chronic
Human Health

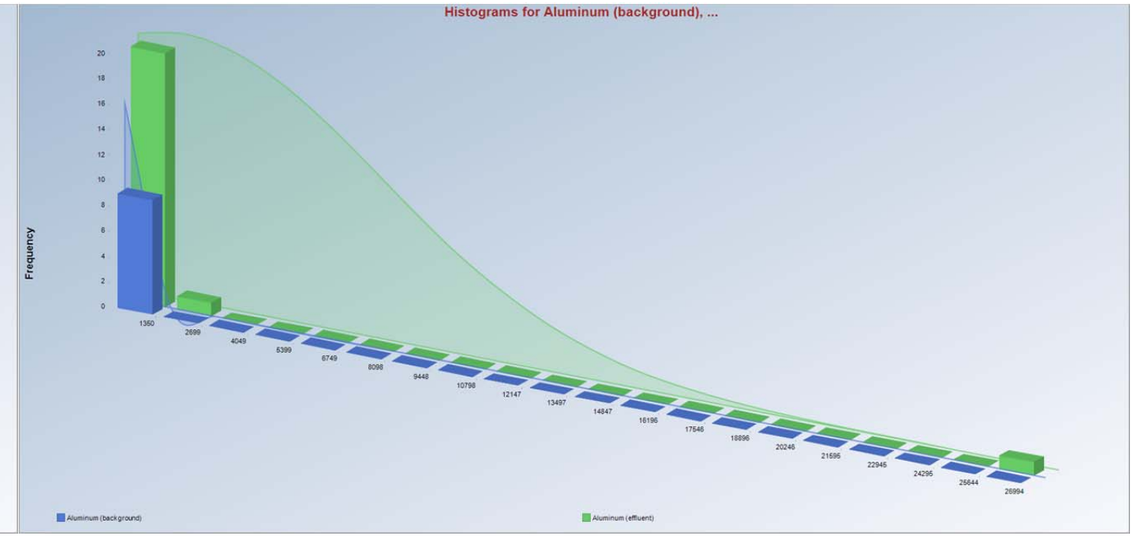
Figure 3-2
Graphical Displays – Aluminum
2012 National Park CDF Monitoring
National Park, New Jersey

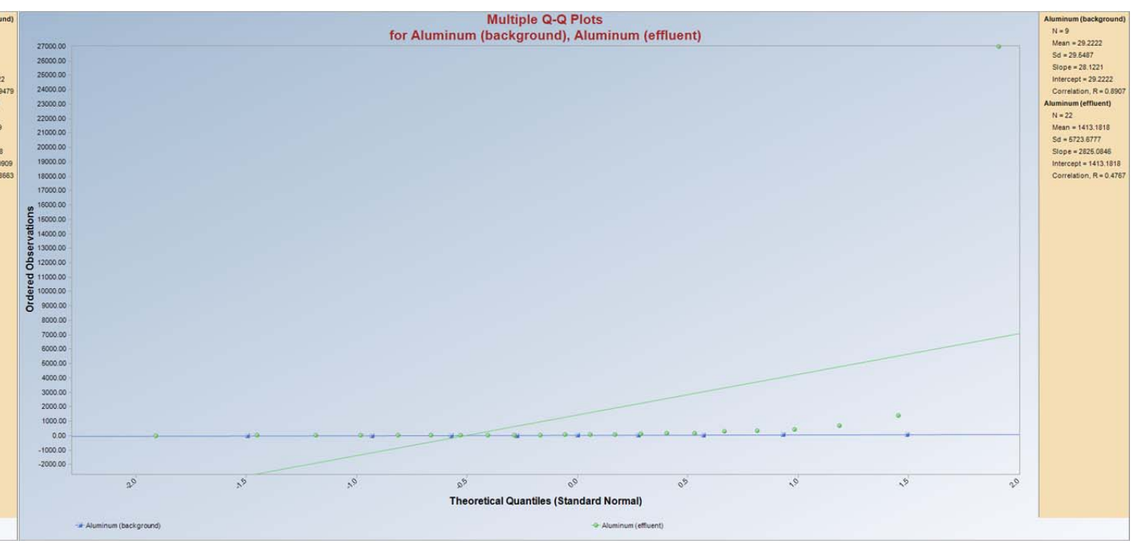
Total Aluminum Histogram and Q-Q Plot





Dissolved Aluminum Histogram and Q-Q Plot

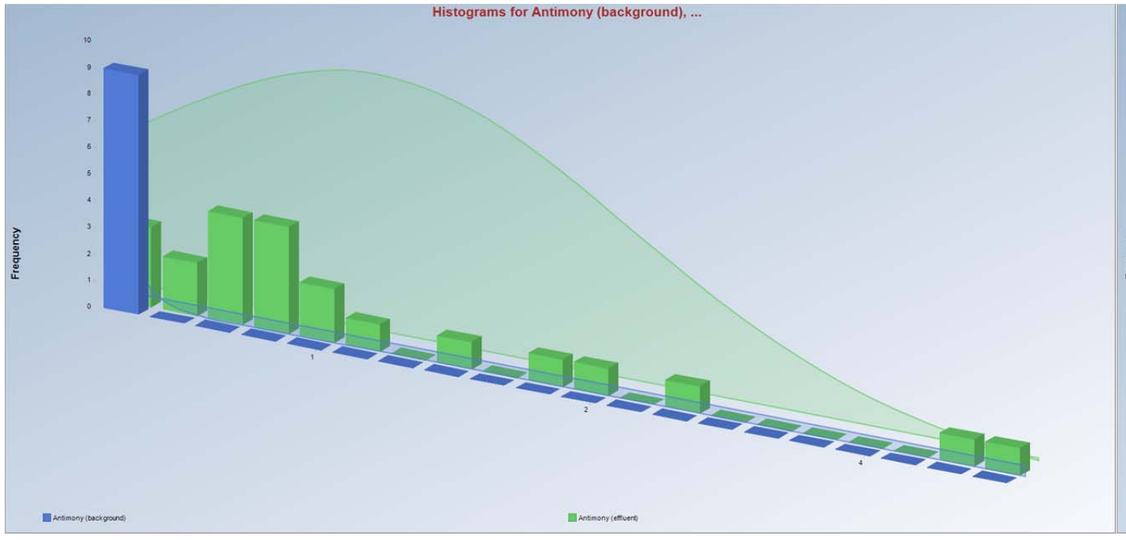


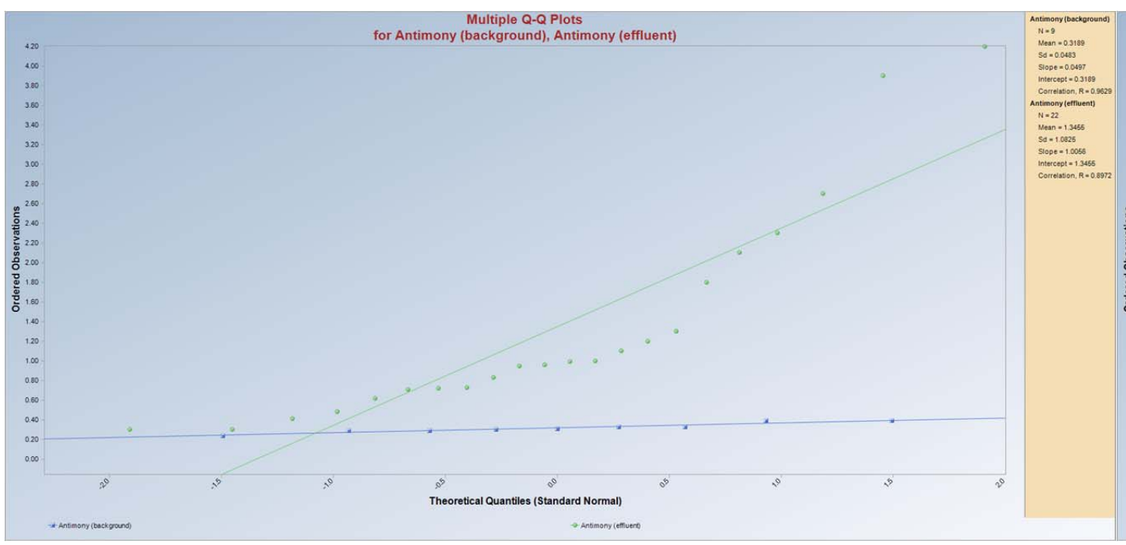


Effluent data are presented in green and Background data are presented in blue.

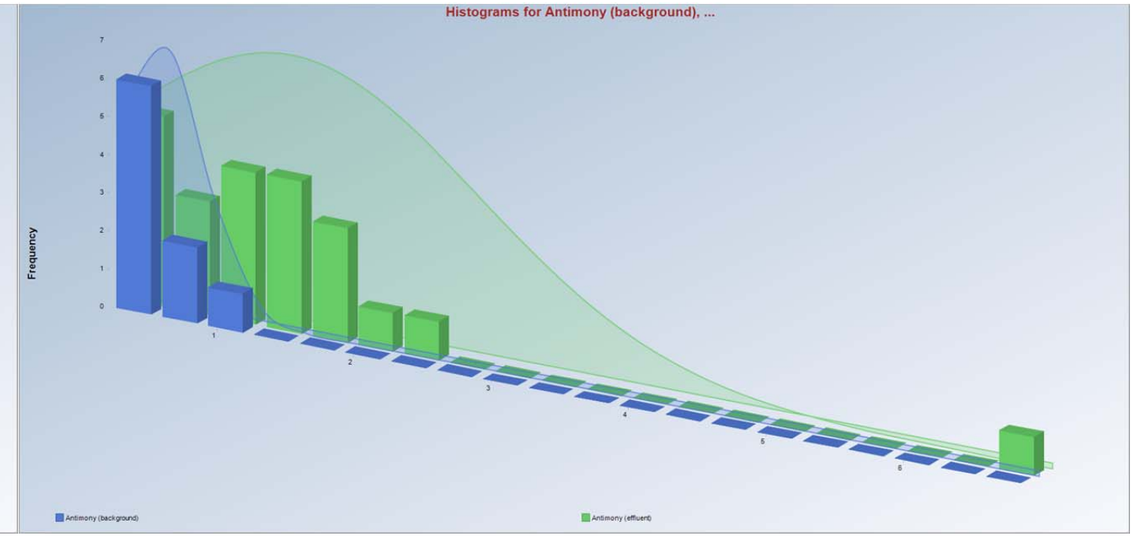
Figure 3-3
Graphical Displays – Antimony
2012 National Park CDF Monitoring
National Park, New Jersey

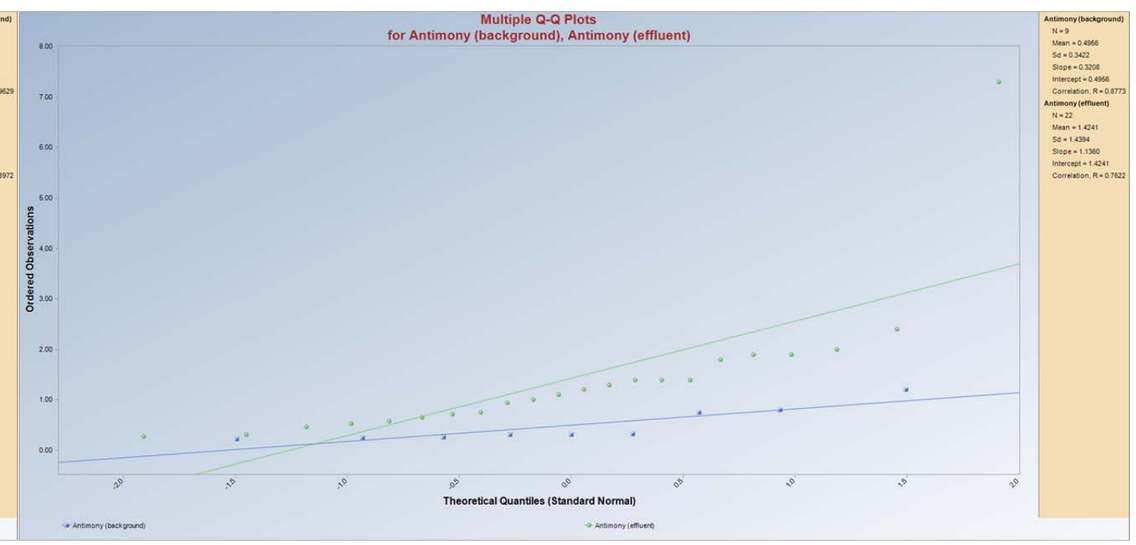
Total Antimony Histogram and Q-Q Plot





Dissolved Antimony Histogram and Q-Q Plot

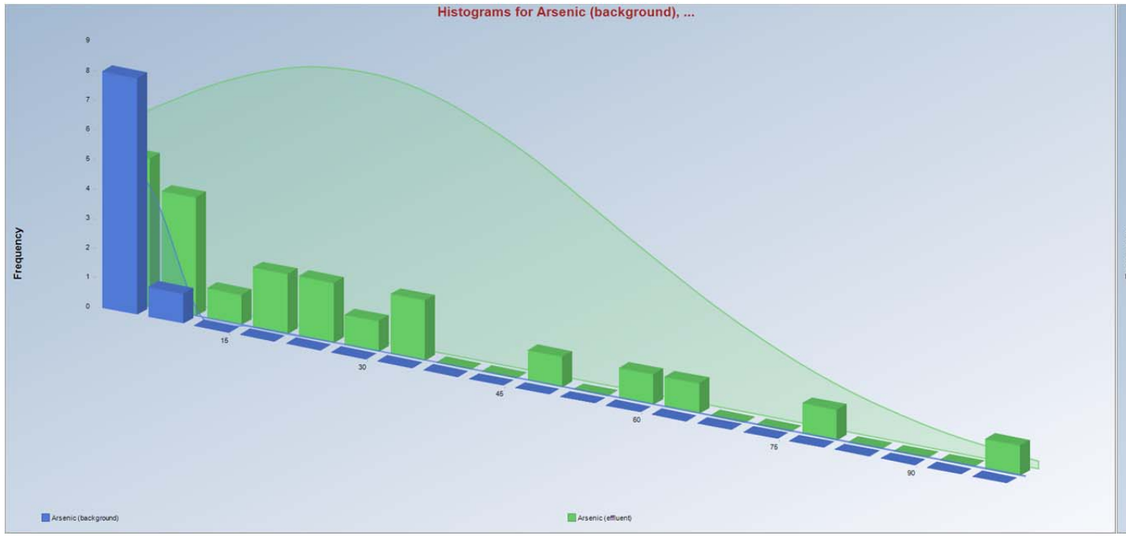


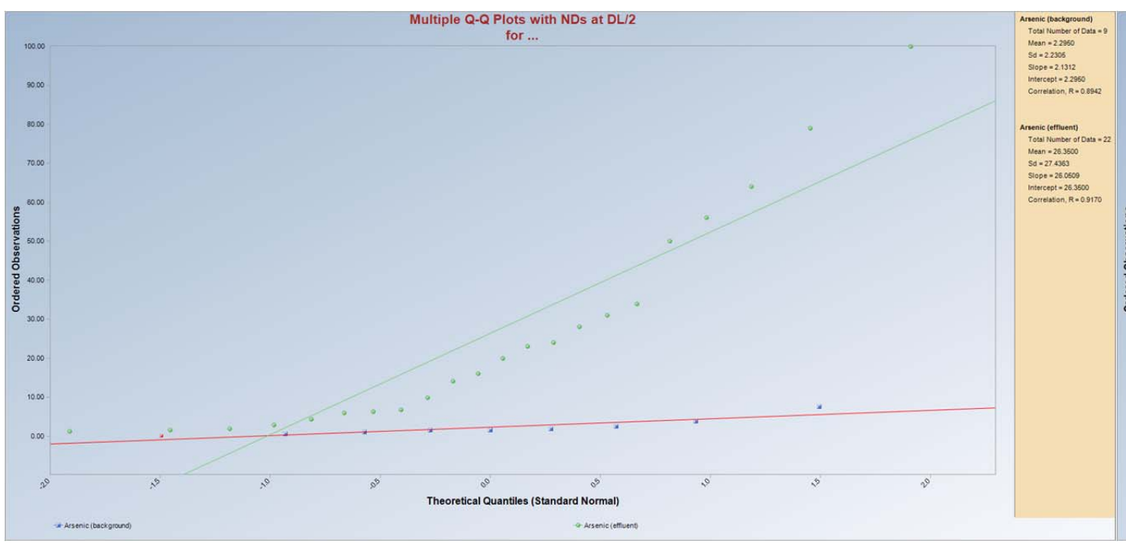


Effluent data are presented in green and Background data are presented in blue.

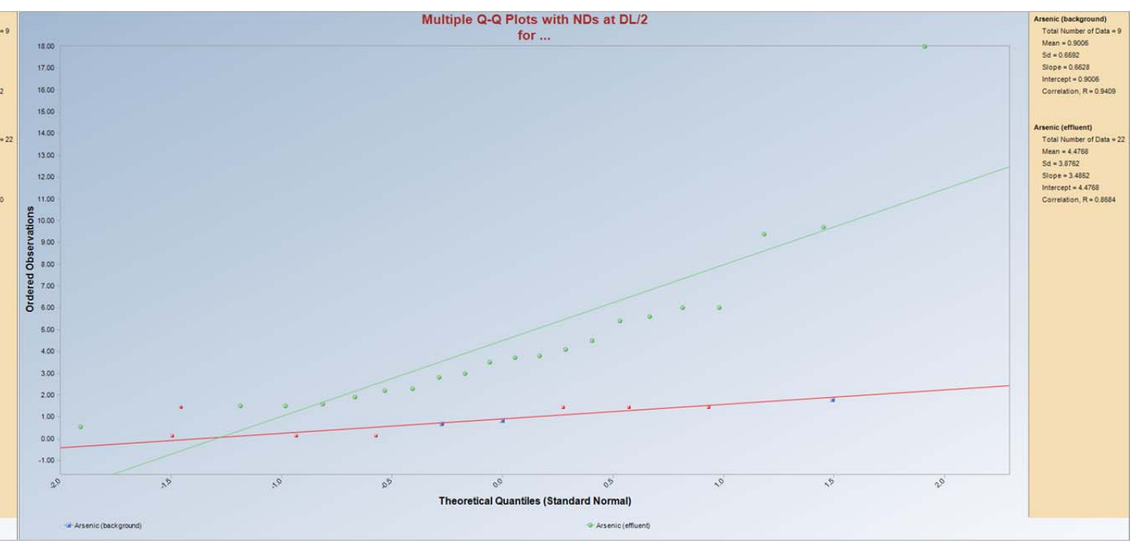
Figure 3-4
Graphical Displays – Arsenic
2012 National Park CDF Monitoring
National Park, New Jersey

Total Arsenic Histogram and Q-Q Plot





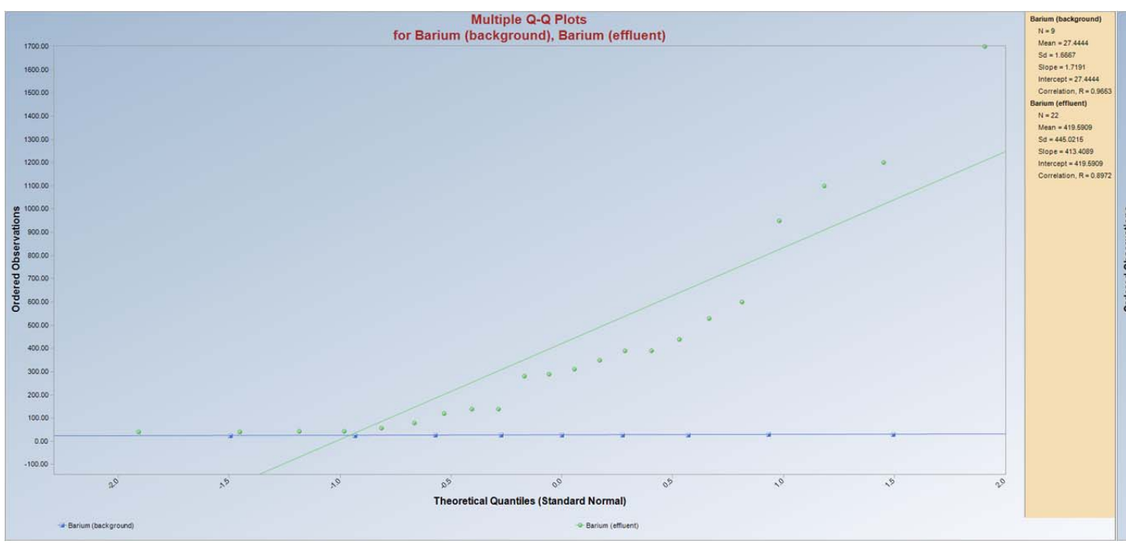
Dissolved Arsenic Histogram and Q-Q Plot



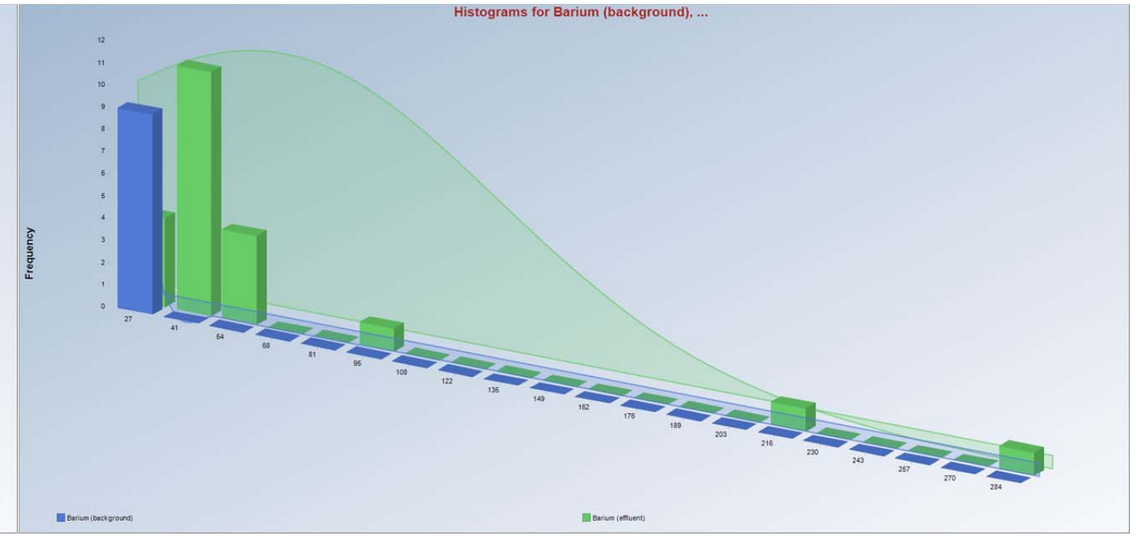
Effluent data are presented in green and Background data are presented in blue.

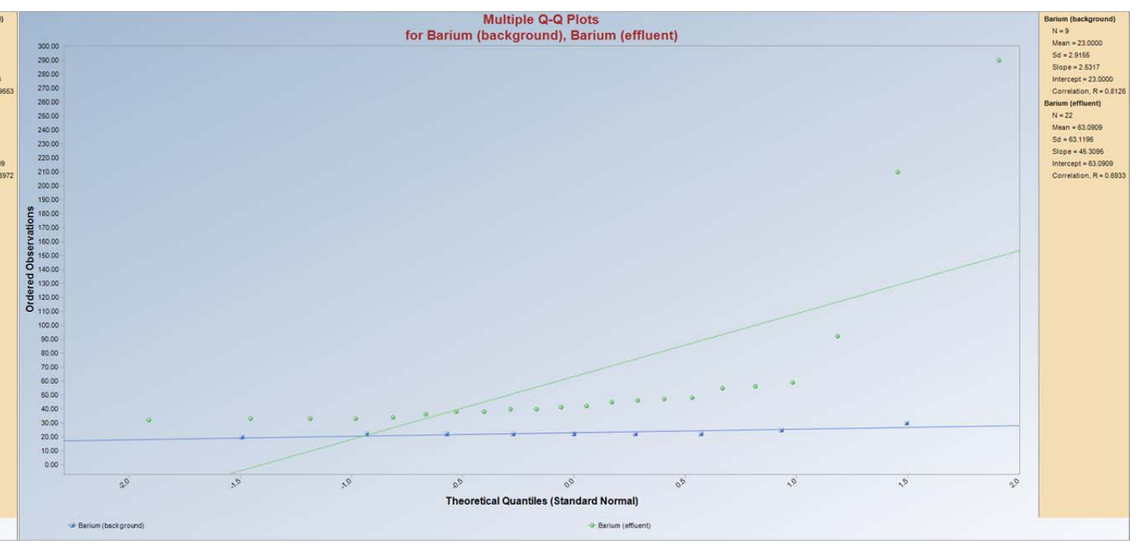
Figure 3-5
Graphical Displays – Barium
2012 National Park CDF Monitoring
National Park, New Jersey

Total Barium Histogram and Q-Q Plot



Dissolved Barium Histogram and Q-Q Plot

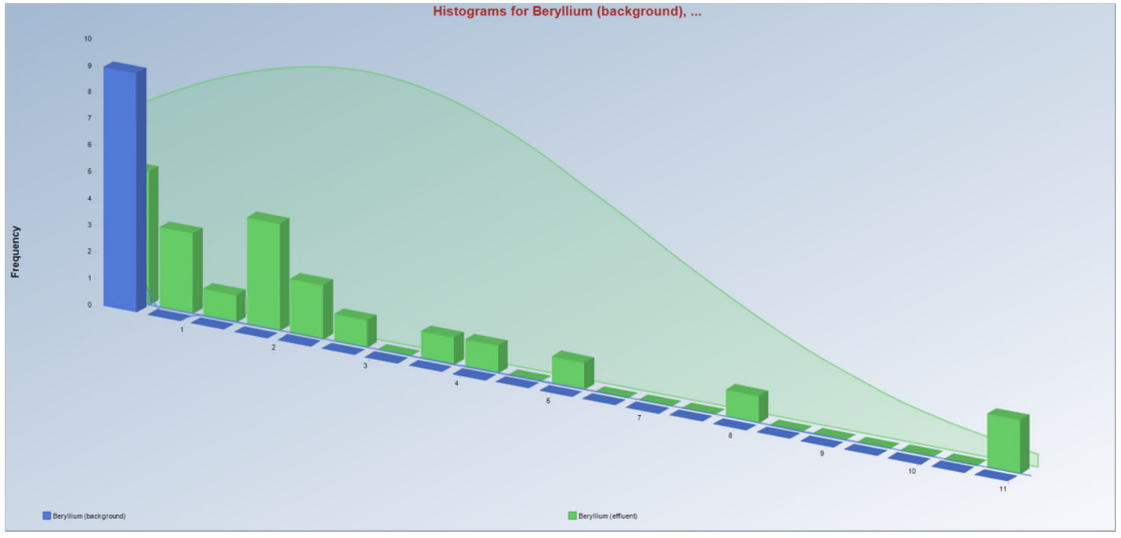


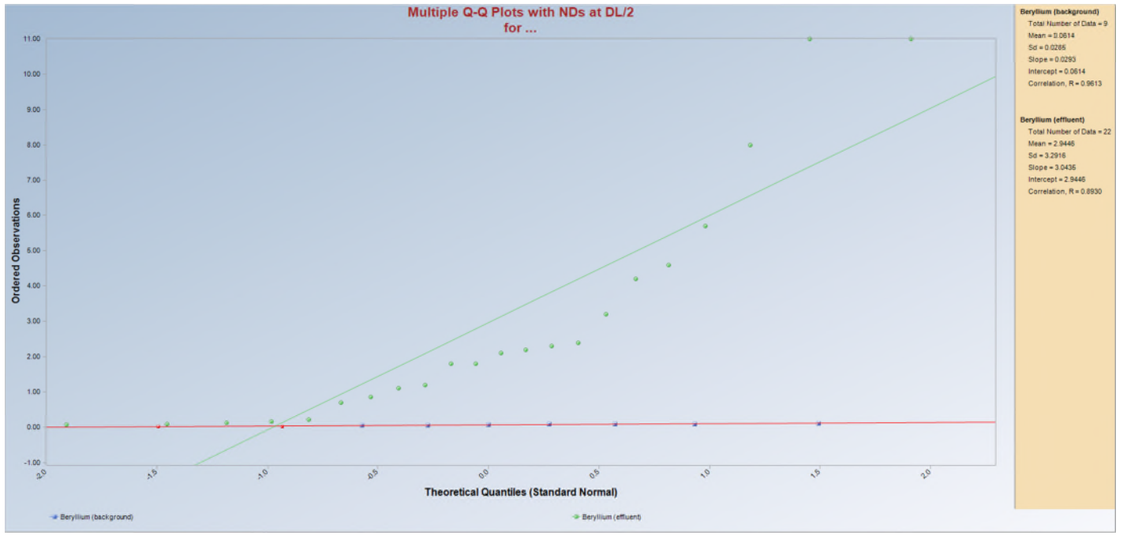


Effluent data are presented in green and Background data are presented in blue.

Figure 3-6
Graphical Displays – Beryllium
2012 National Park CDF Monitoring
National Park, New Jersey

Total Beryllium Histogram and Q-Q Plot



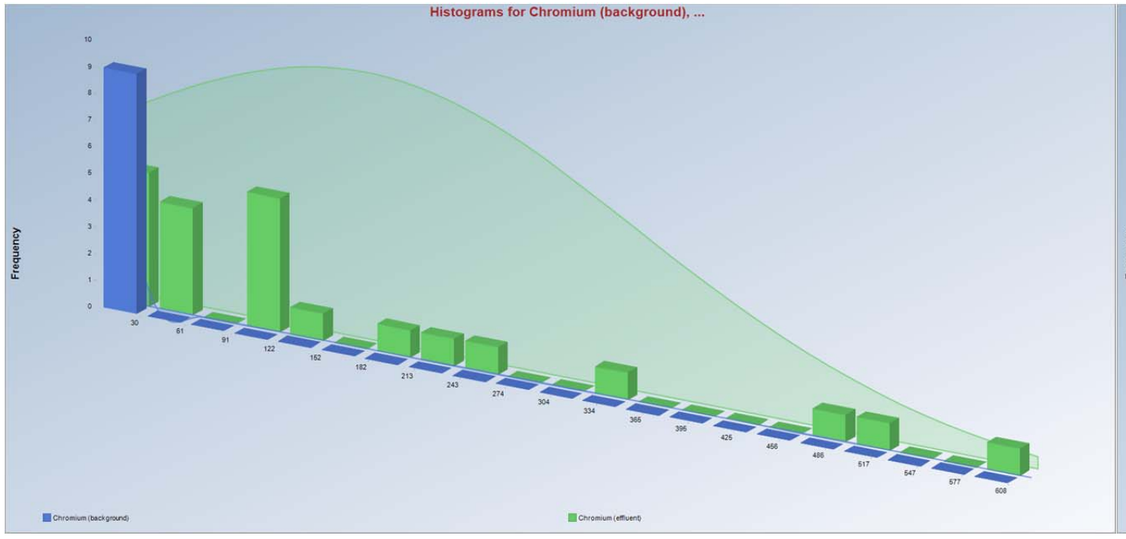


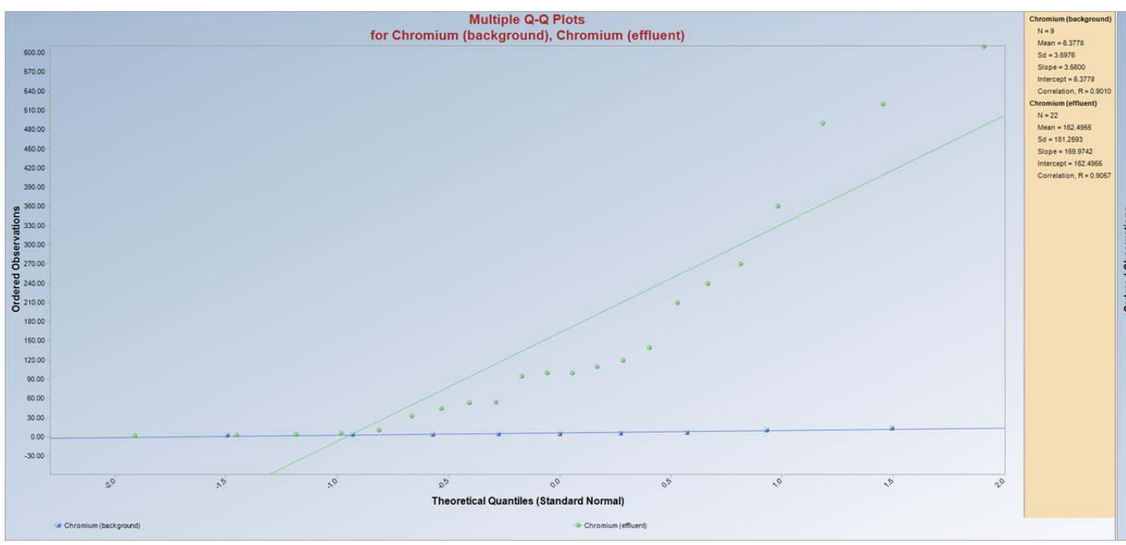
Dissolved Beryllium Histogram and Q-Q Plot (Insufficient Data)

Effluent data are presented in green and Background data are presented in blue.

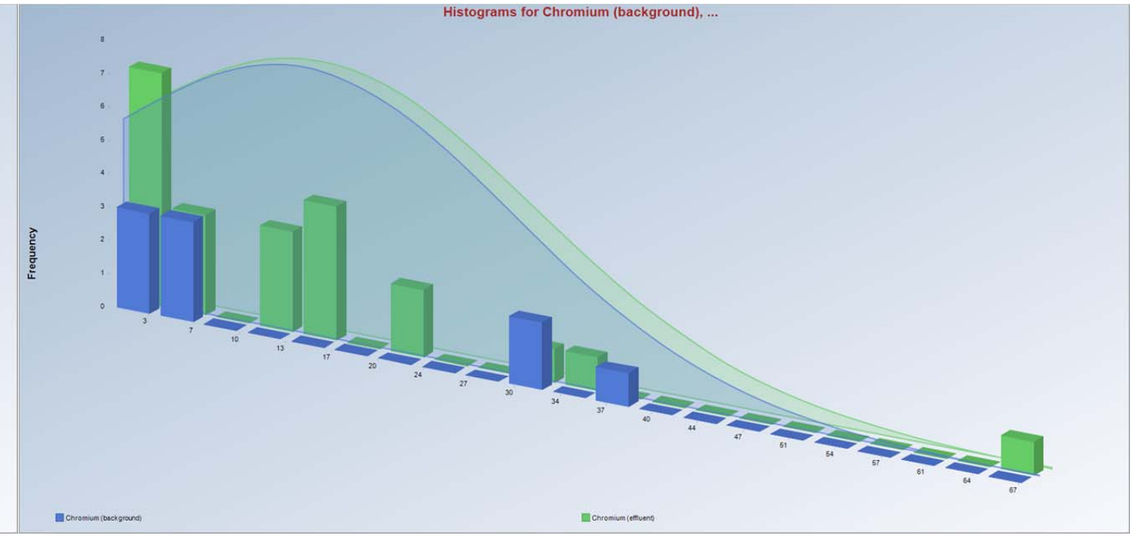
Figure 3-7
Graphical Displays – Chromium
2012 National Park CDF Monitoring
National Park, New Jersey

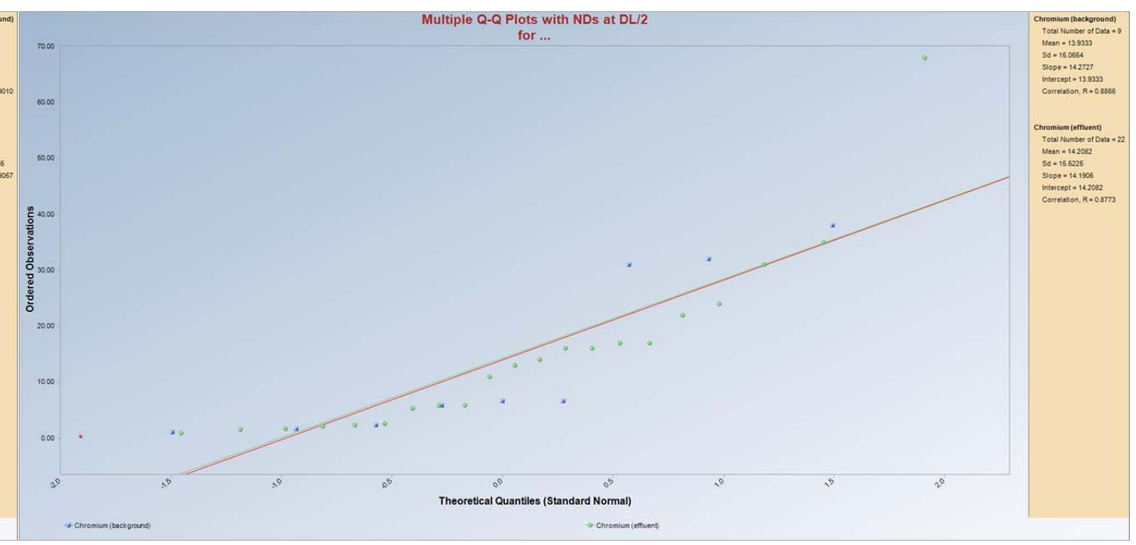
Total Chromium Histogram and Q-Q Plot





Dissolved Chromium Histogram and Q-Q Plot

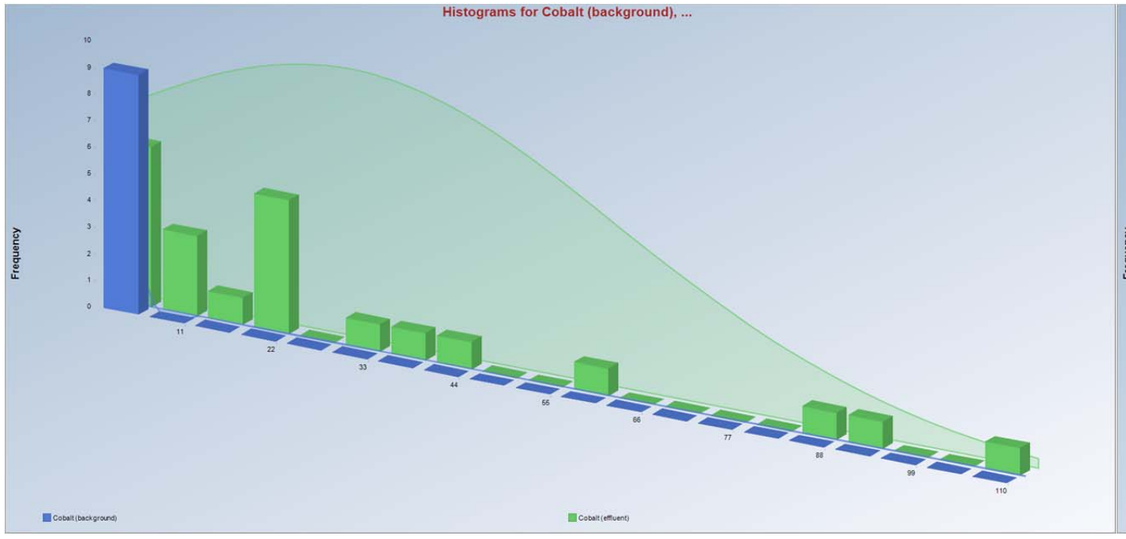


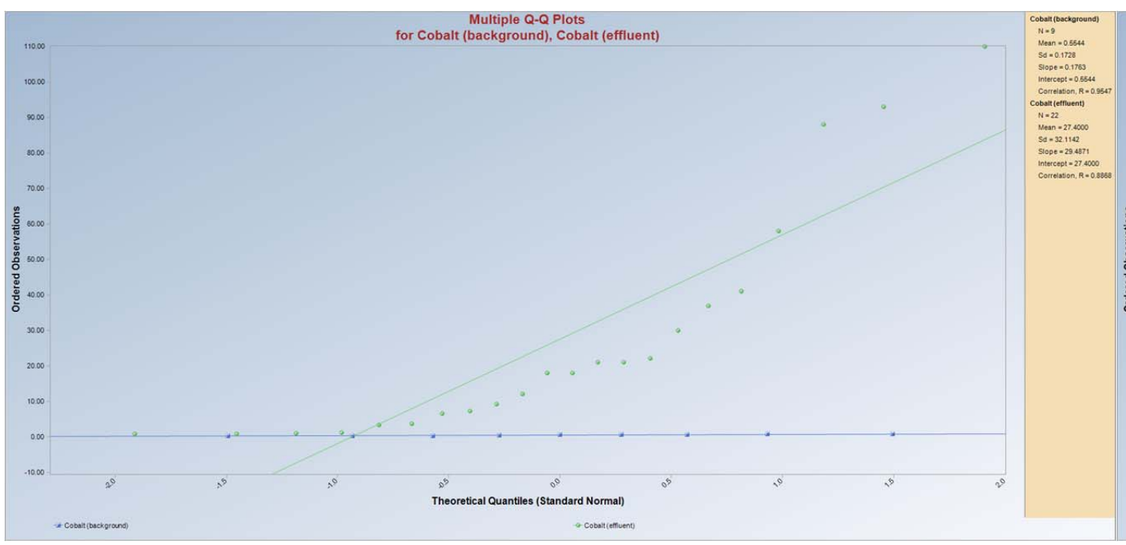


Effluent data are presented in green and Background data are presented in blue.

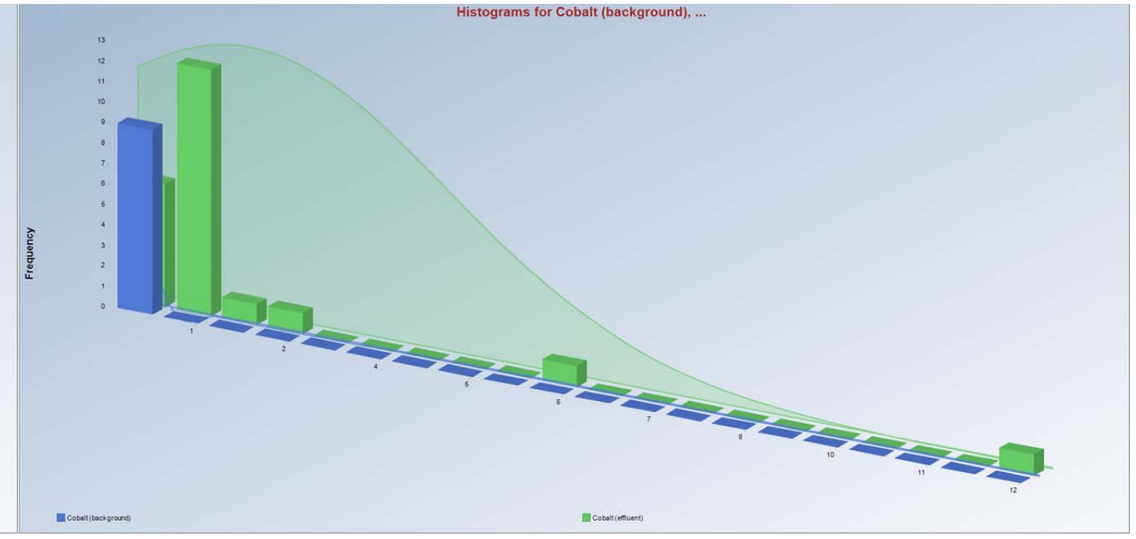
Figure 3-8
Graphical Displays – Cobalt
2012 National Park CDF Monitoring
National Park, New Jersey

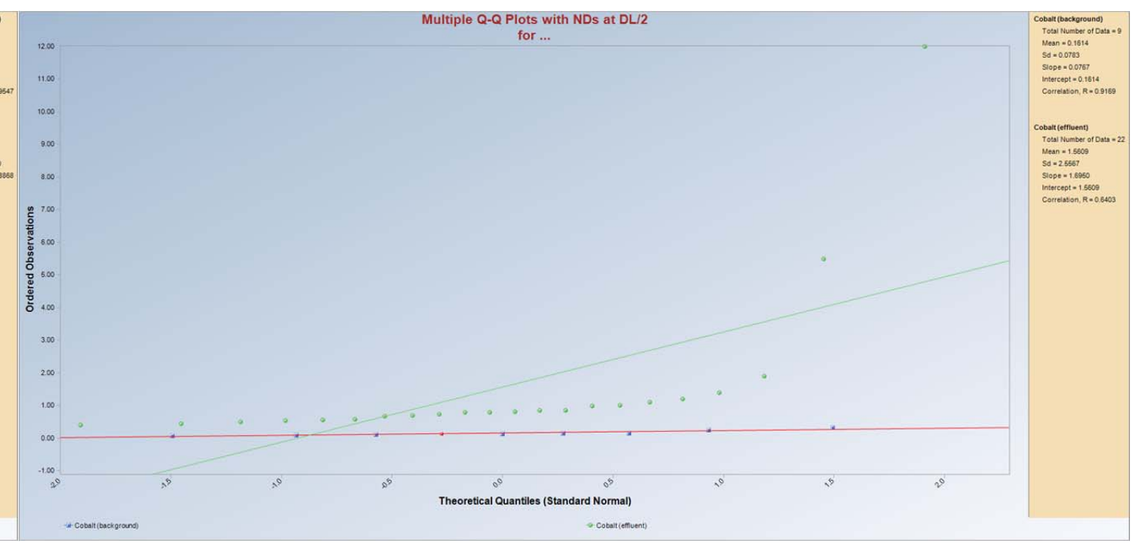
Total Cobalt Histogram and Q-Q Plot





Dissolved Cobalt Histogram and Q-Q Plot

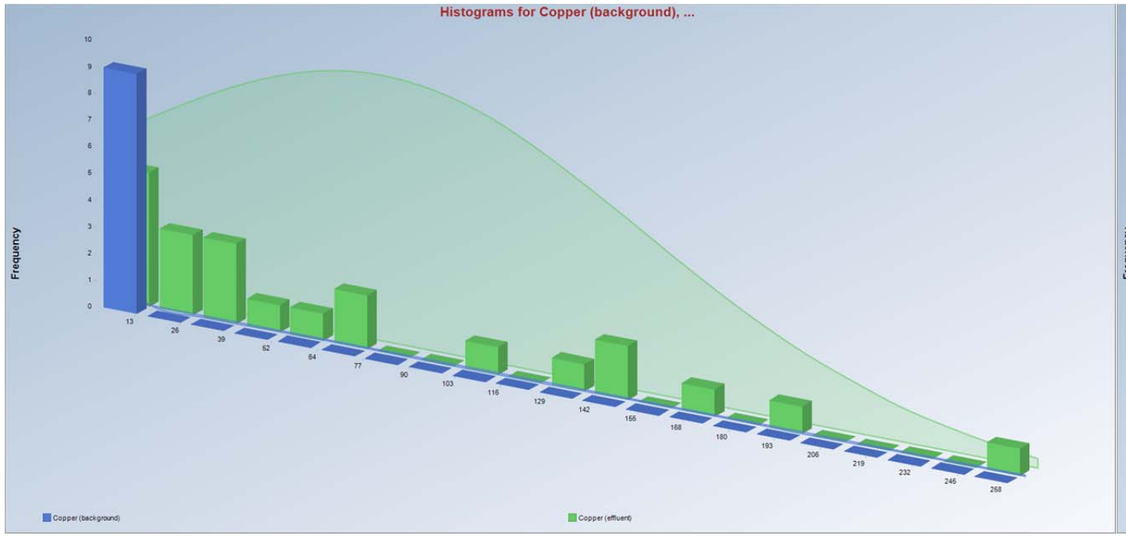


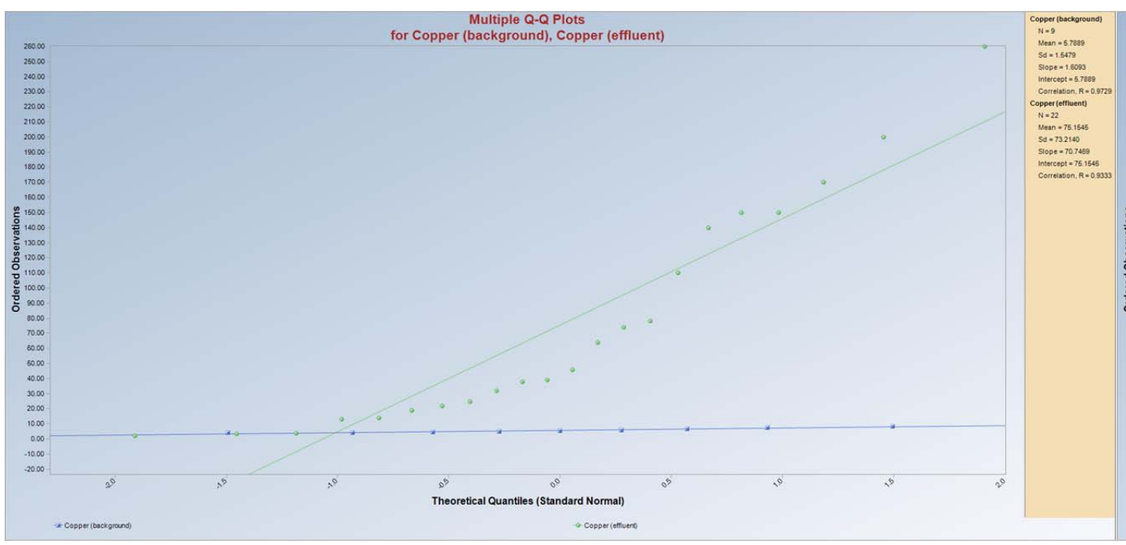


Effluent data are presented in green and Background data are presented in blue.

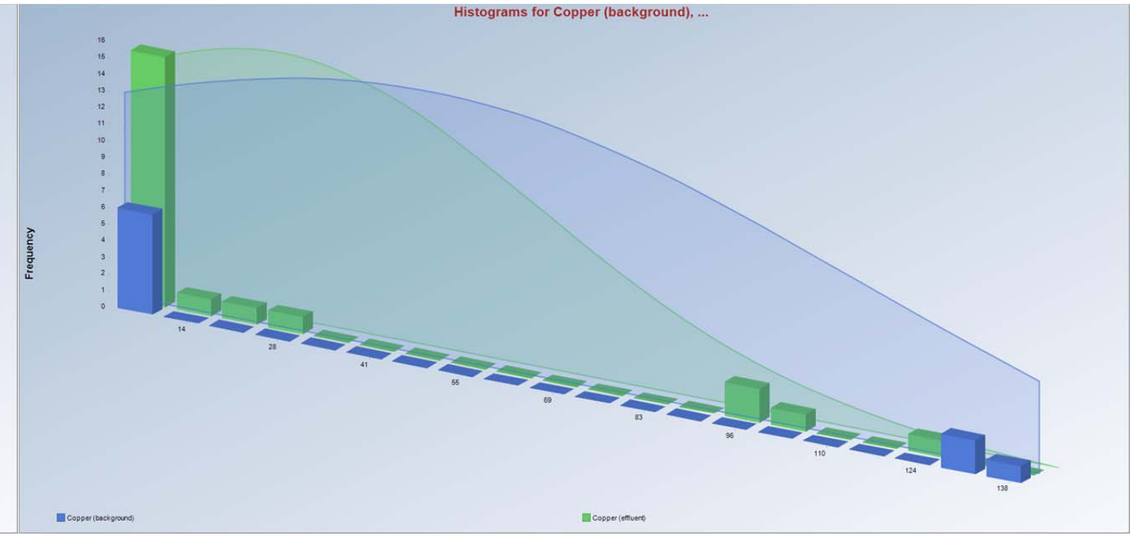
Figure 3-9
Graphical Displays – Copper
2012 National Park CDF Monitoring
National Park, New Jersey

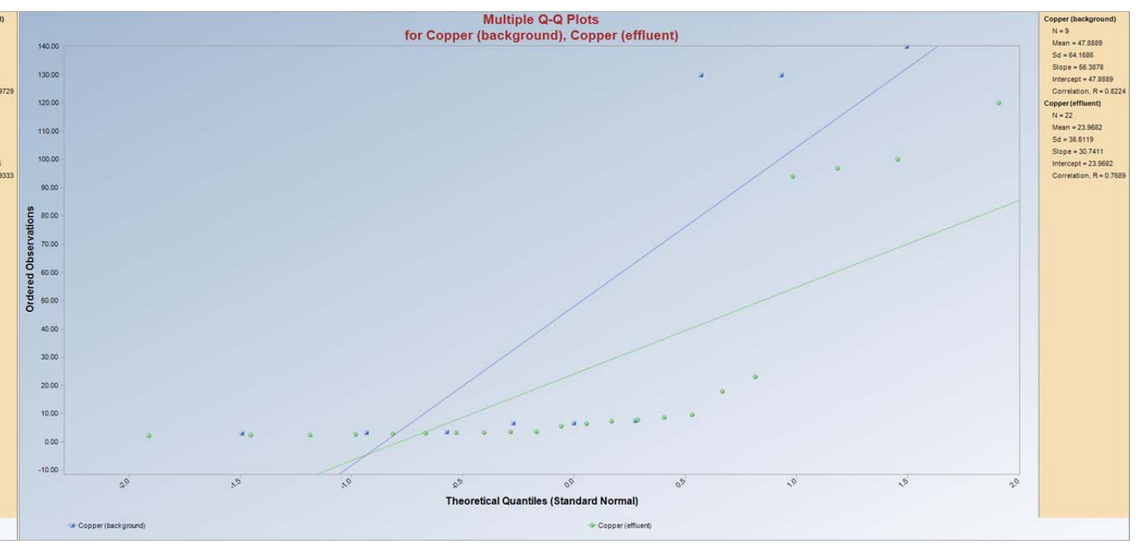
Total Copper Histogram and Q-Q Plot





Dissolved Copper Histogram and Q-Q Plot

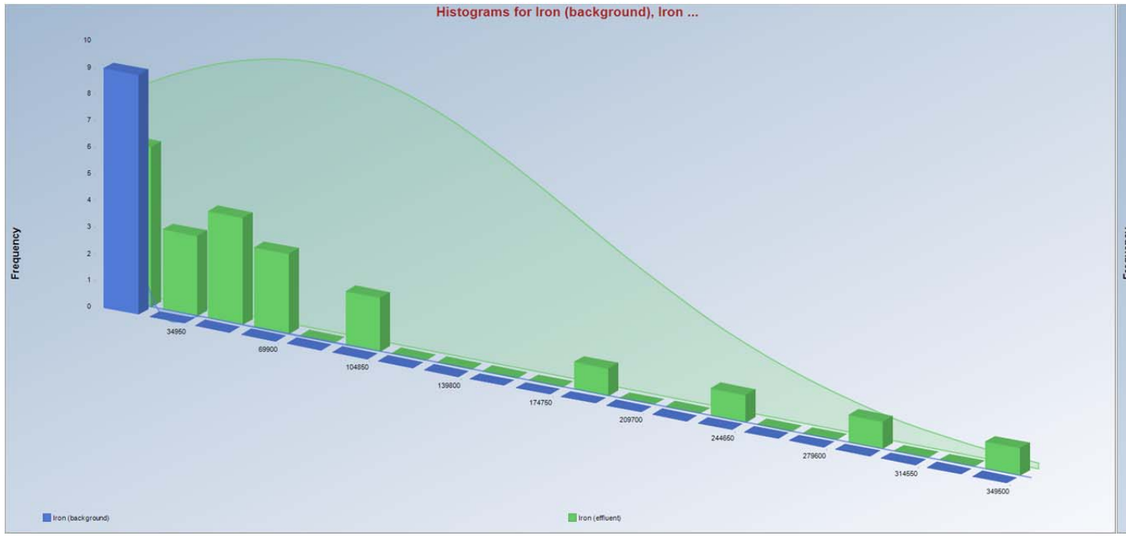


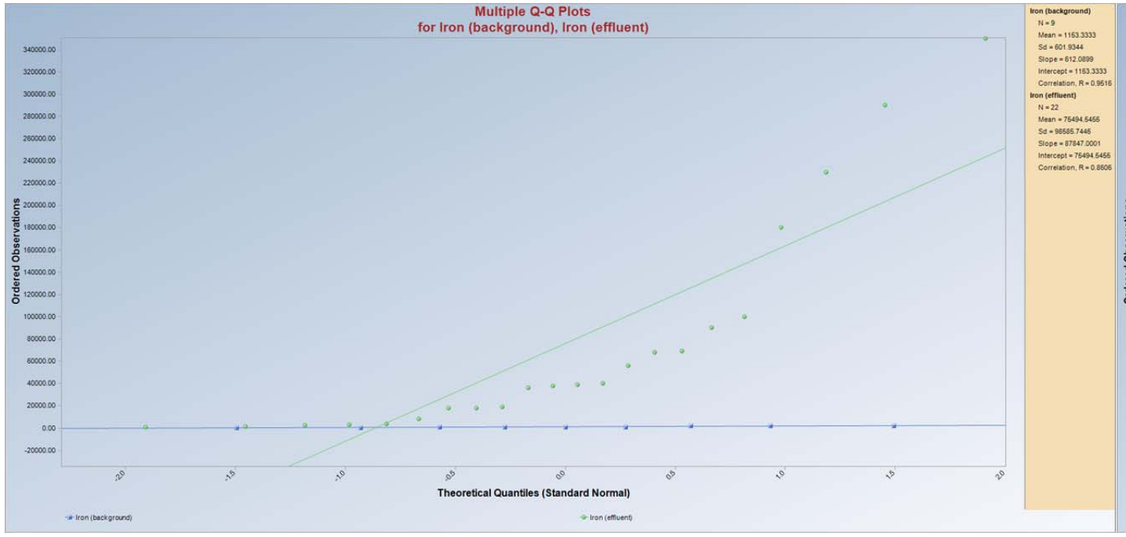


Effluent data are presented in green and Background data are presented in blue.

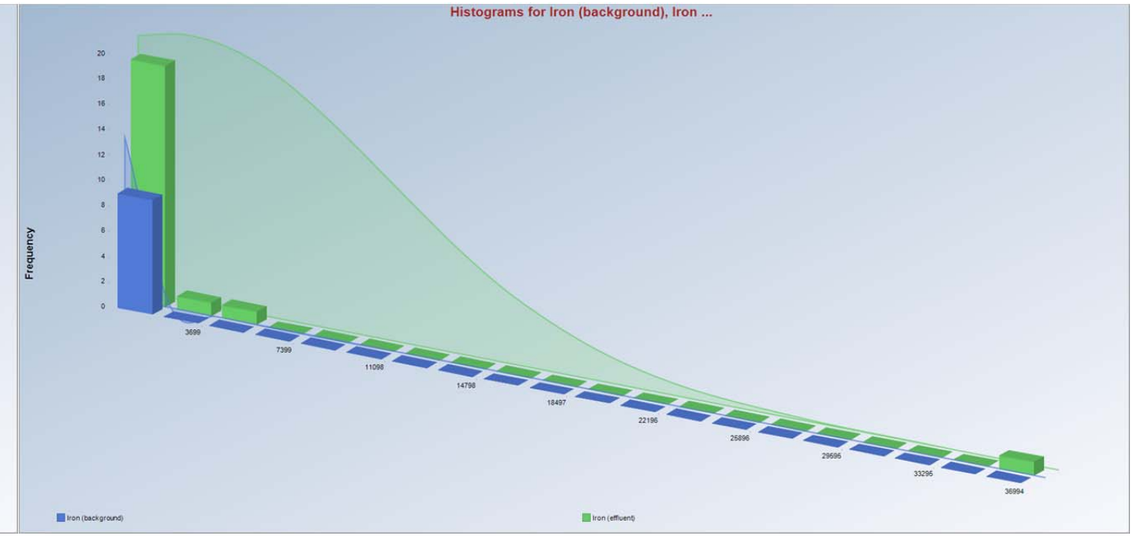
Figure 3-10
Graphical Displays – Iron
2012 National Park CDF Monitoring
National Park, New Jersey

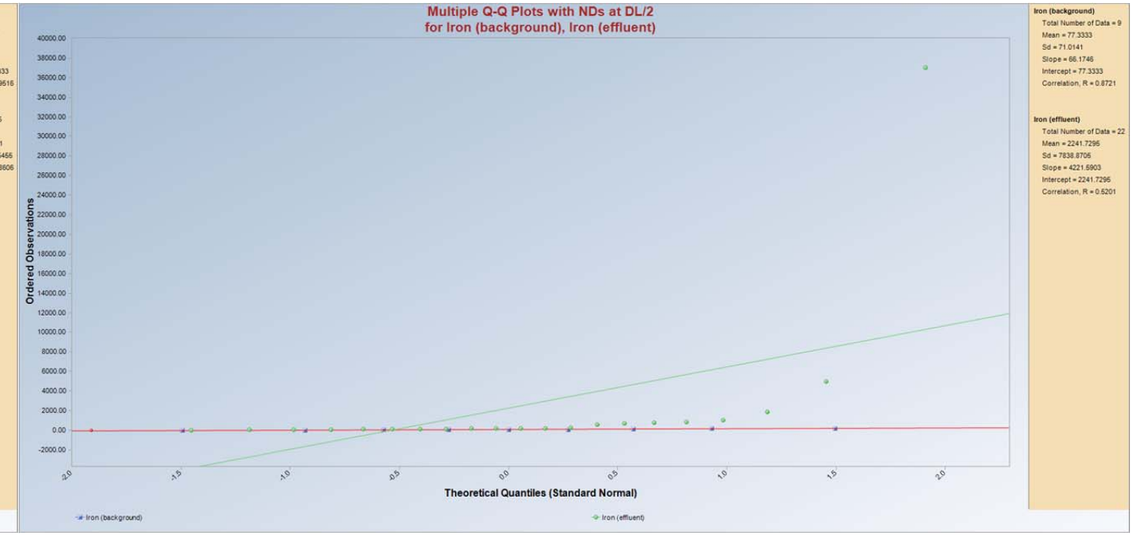
Total Iron Histogram and Q-Q Plot





Dissolved Iron Histogram and Q-Q Plot

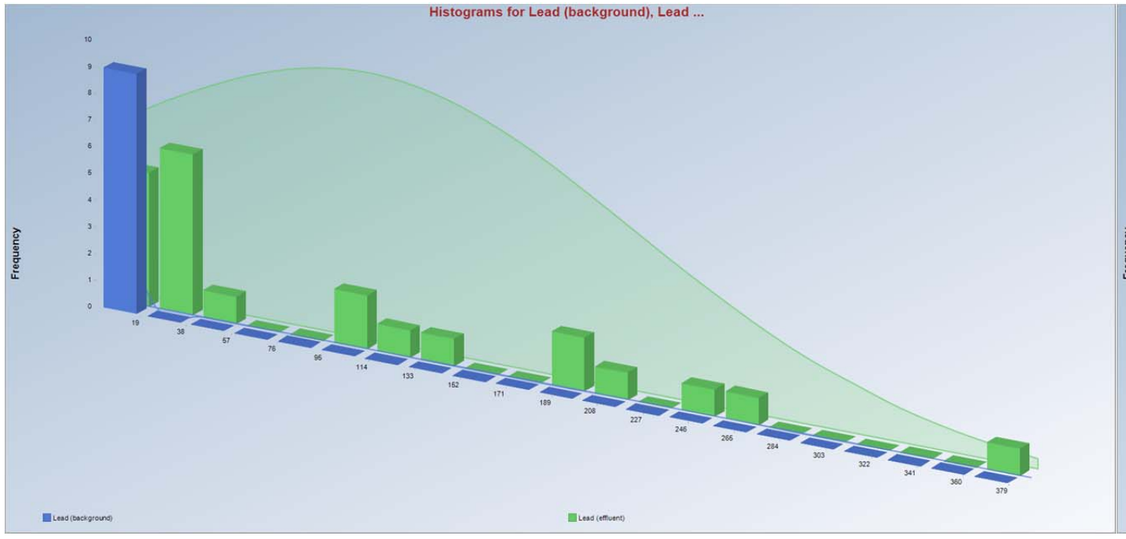


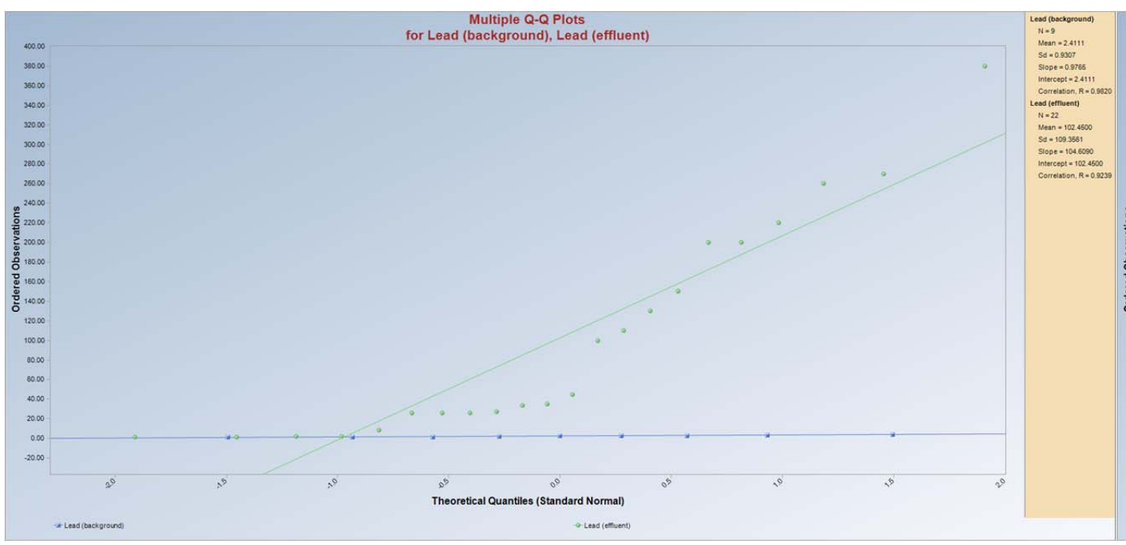


Effluent data are presented in green and Background data are presented in blue.

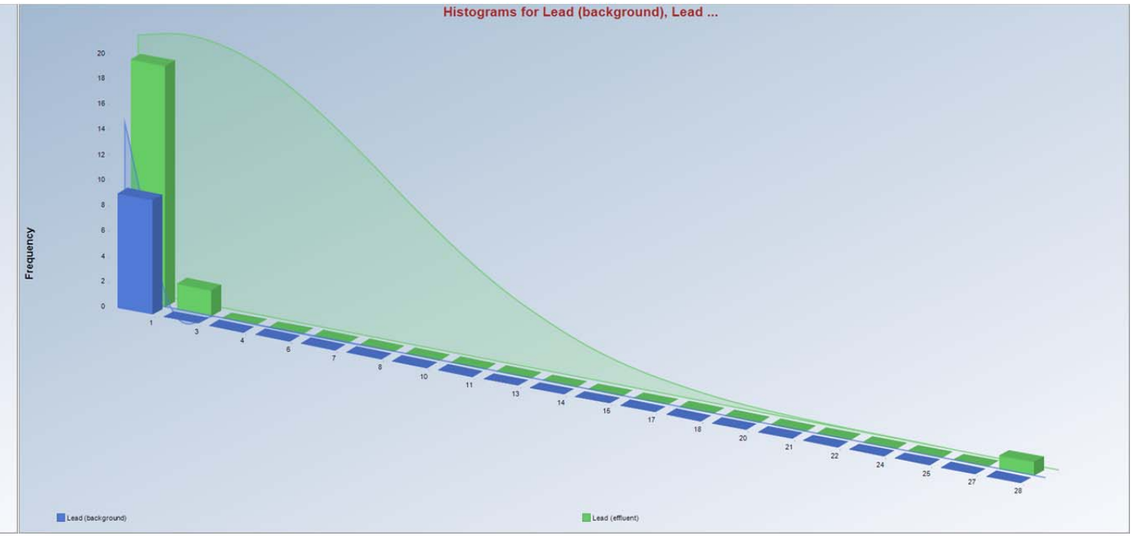
Figure 3-11
Graphical Displays – Lead
2012 National Park CDF Monitoring
National Park, New Jersey

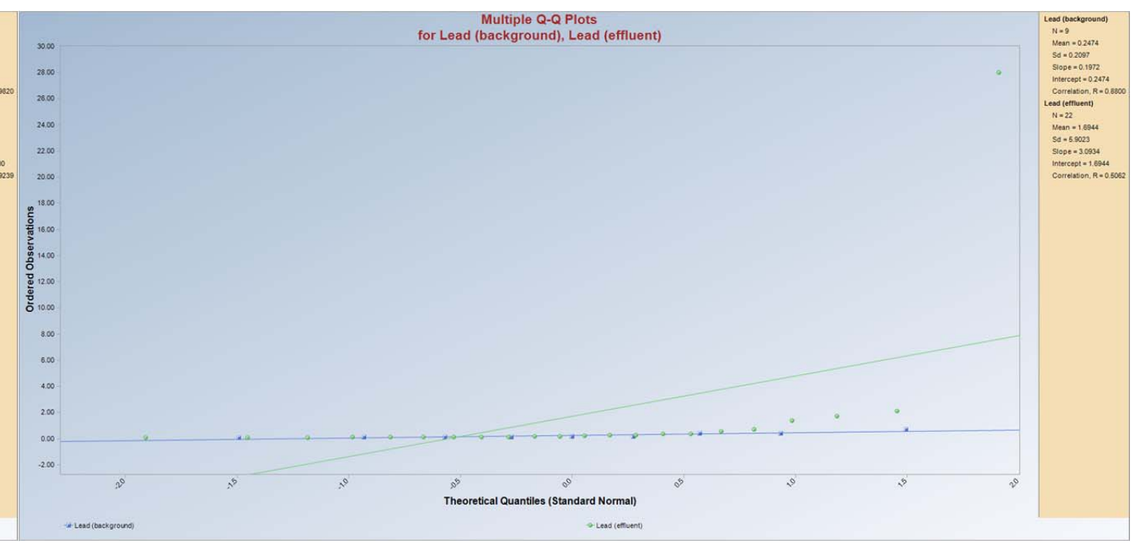
Total Lead Histogram and Q-Q Plot





Dissolved Lead Histogram and Q-Q Plot

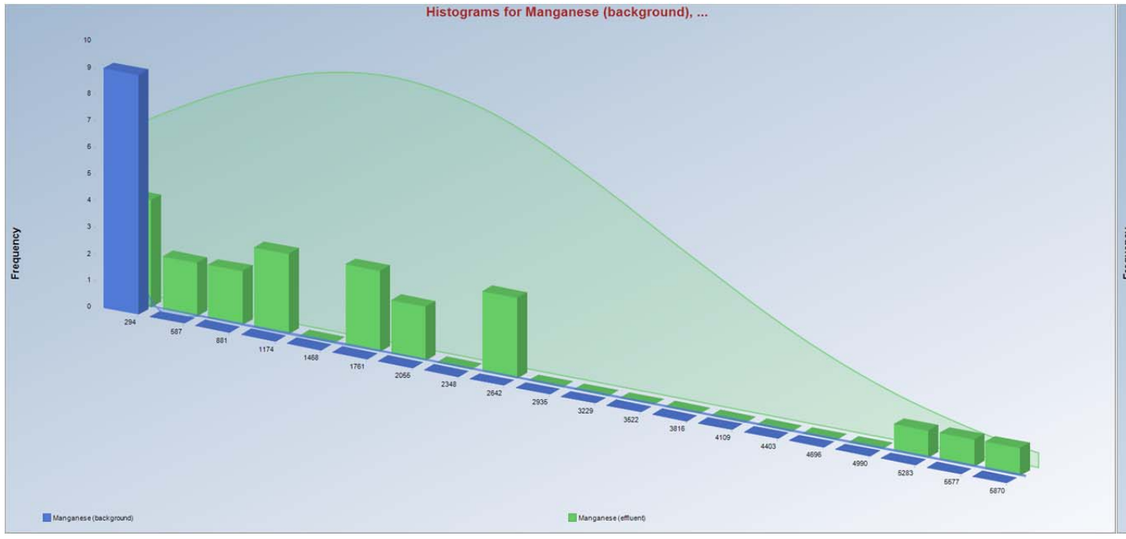


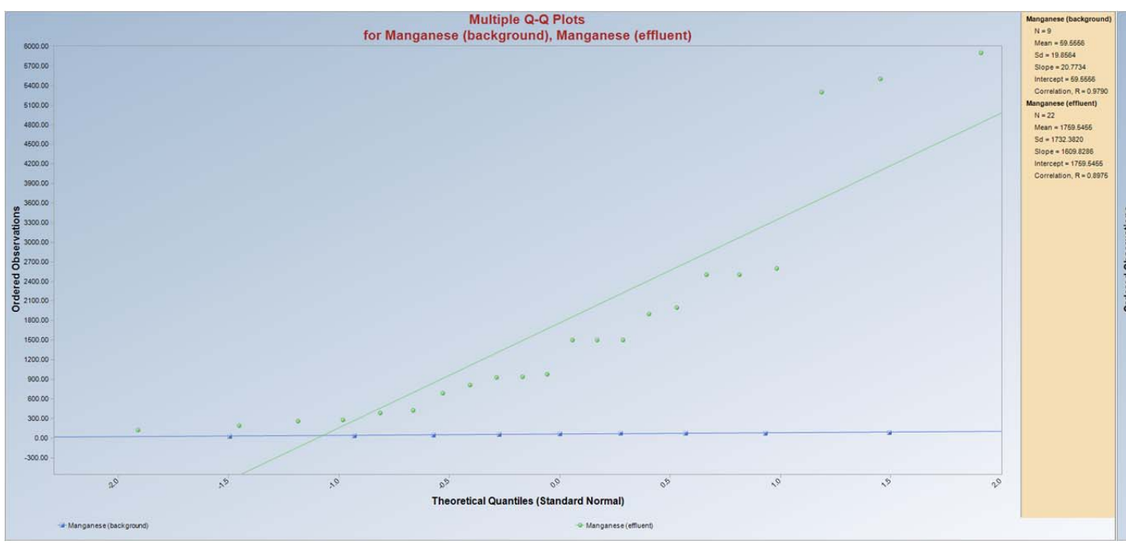


Effluent data are presented in green and Background data are presented in blue.

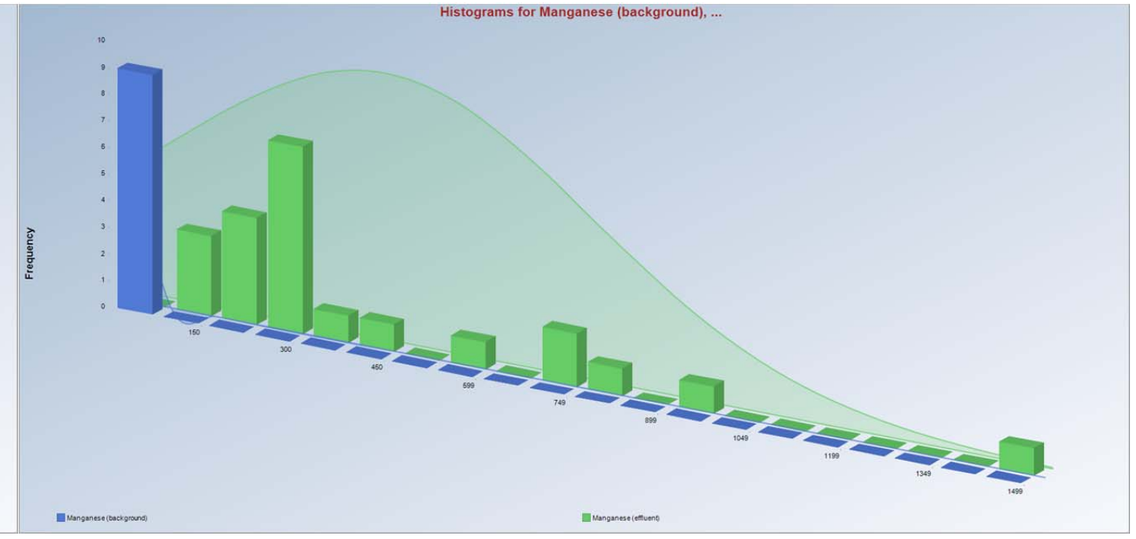
Figure 3-12
Graphical Displays – Manganese
2012 National Park CDF Monitoring
National Park, New Jersey

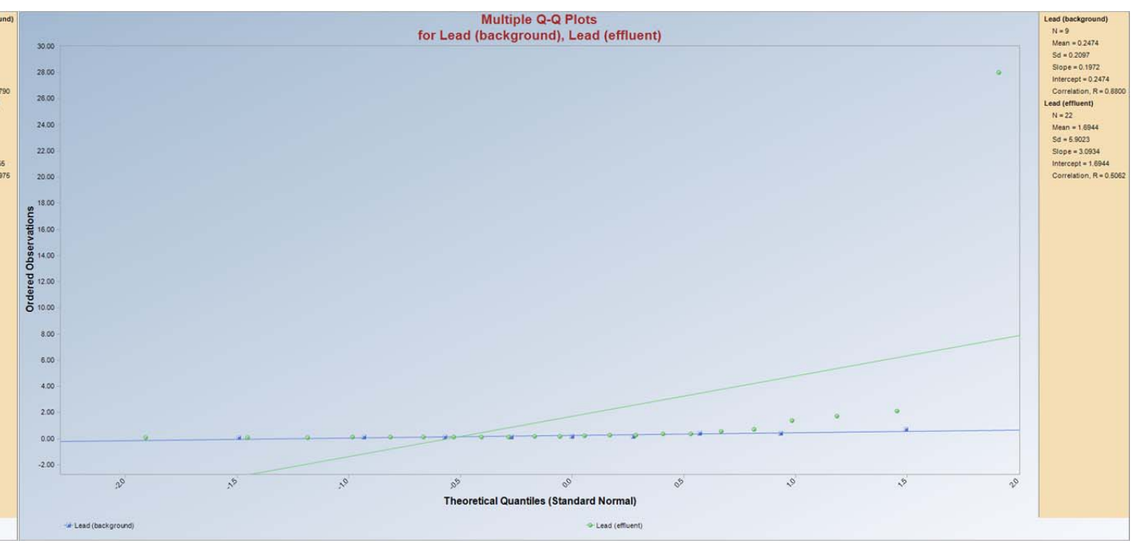
Total Manganese Histogram and Q-Q Plot





Dissolved Manganese Histogram and Q-Q Plot

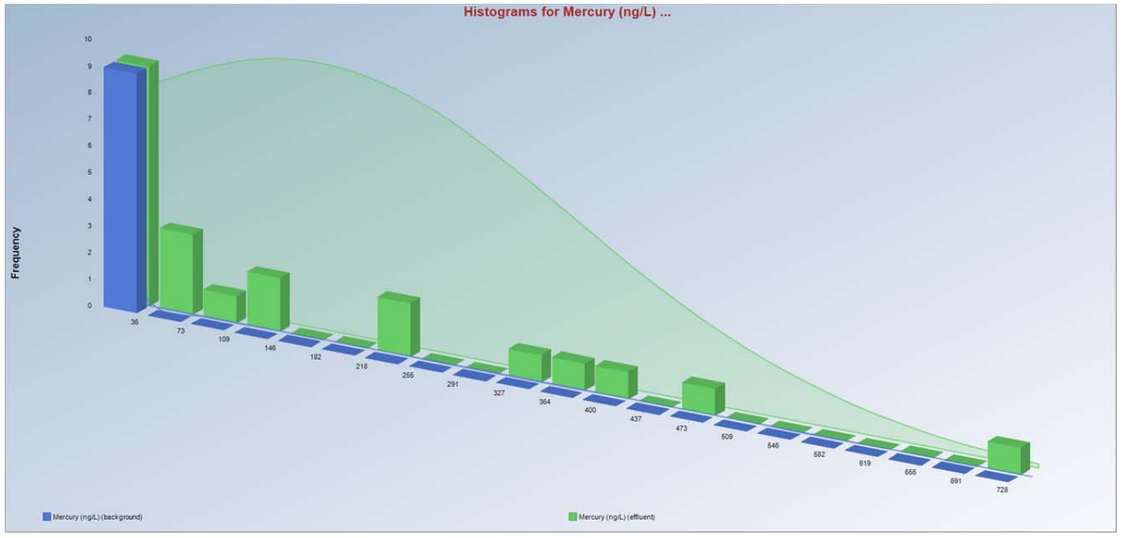


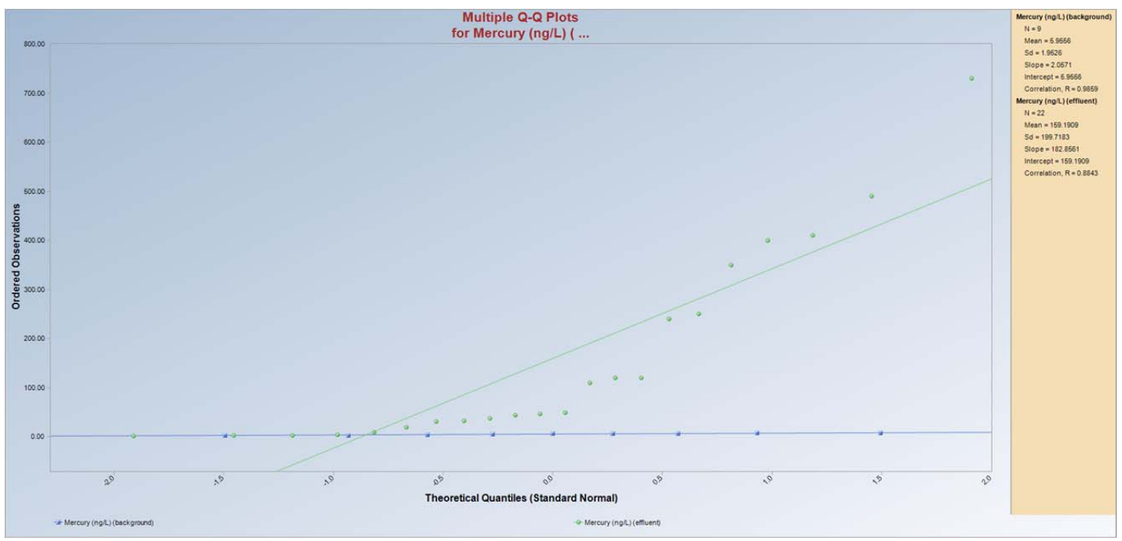


Effluent data are presented in green and Background data are presented in blue.

Figure 3-13
Graphical Displays – Mercury
2012 National Park CDF Monitoring
National Park, New Jersey

Total Mercury Histogram and Q-Q Plot



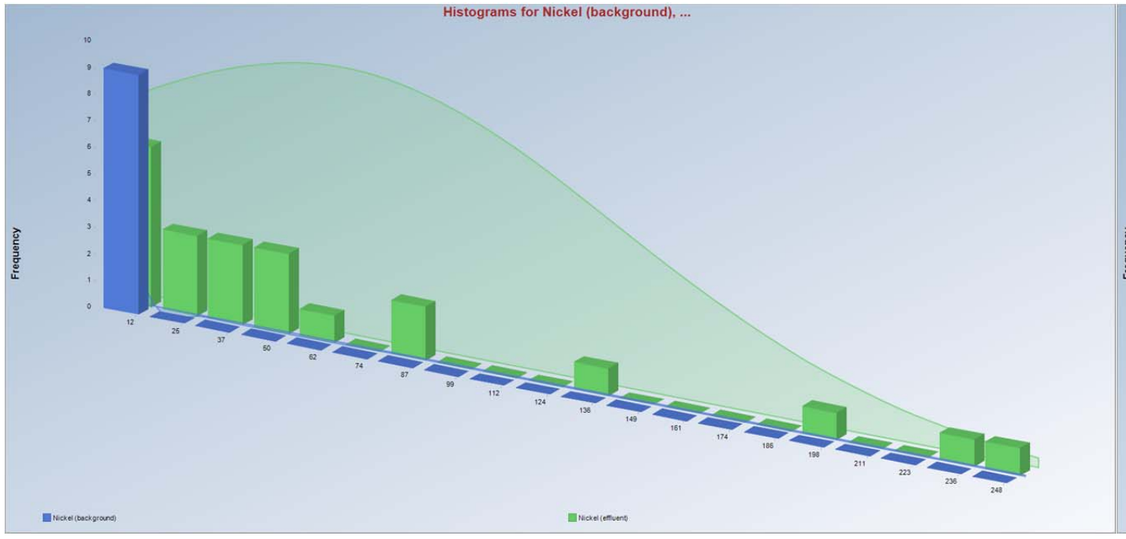


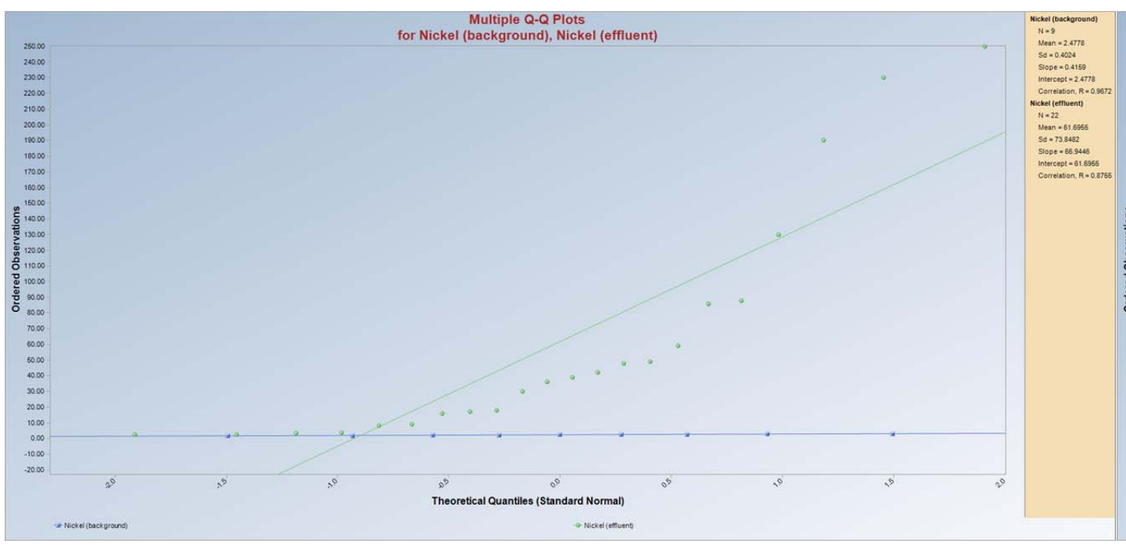
Effluent data are presented in green and Background data are presented in blue.

Dissolved Mercury Histogram and Q-Q Plot (No Data)

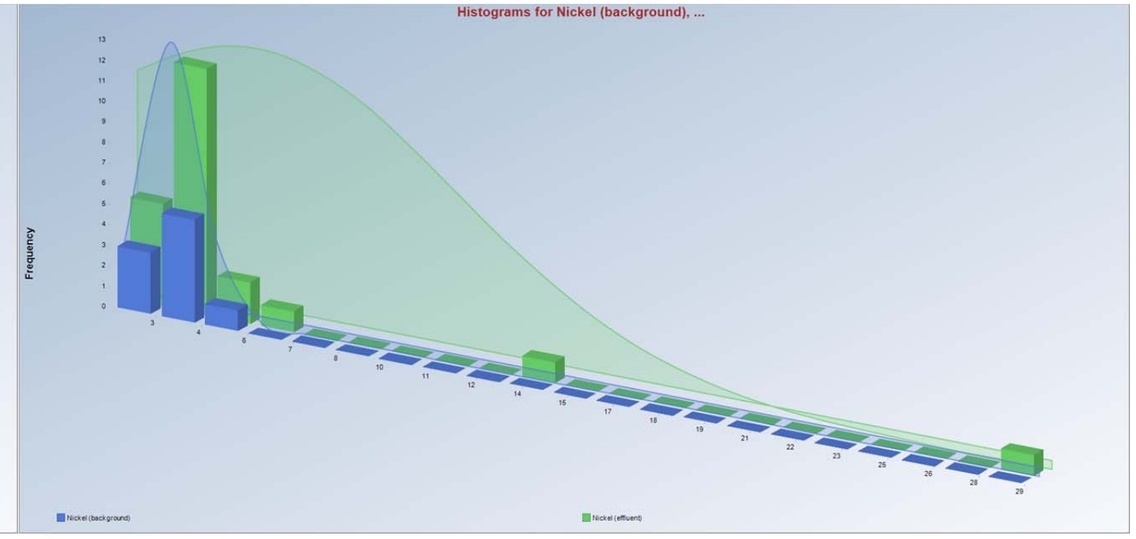
Figure 3-14
Graphical Displays – Nickel
2012 National Park CDF Monitoring
National Park, New Jersey

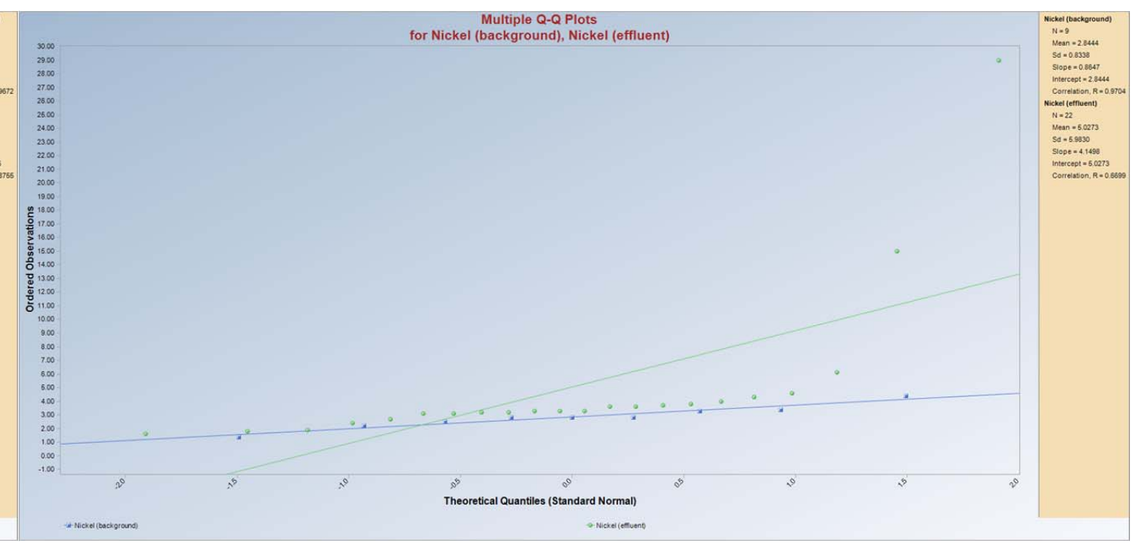
Total Nickel Histogram and Q-Q Plot





Dissolved Nickel Histogram and Q-Q Plot

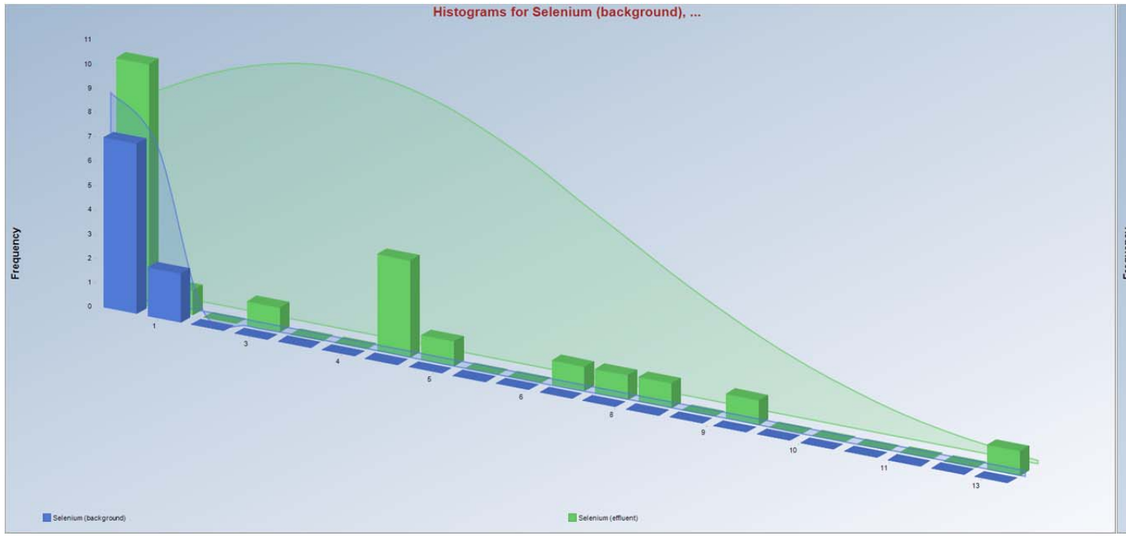


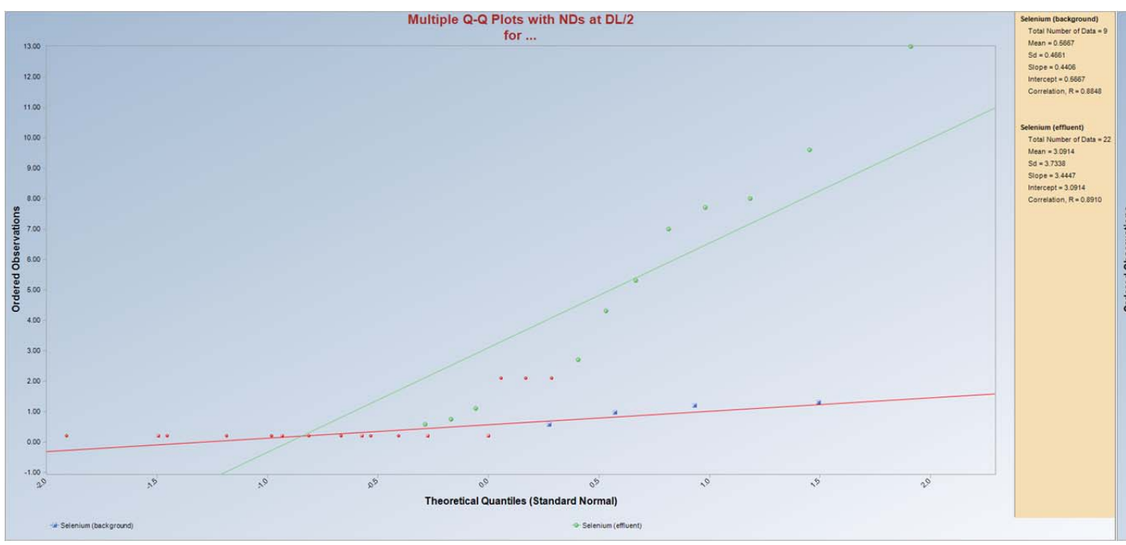


Effluent data are presented in green and Background data are presented in blue.

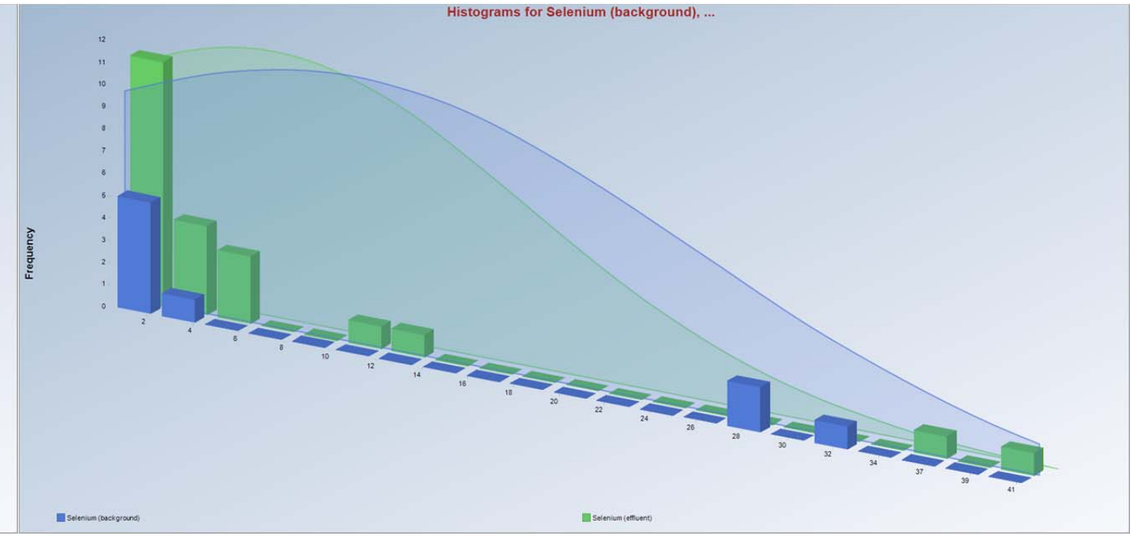
Figure 3-15
Graphical Displays – Selenium
2012 National Park CDF Monitoring
National Park, New Jersey

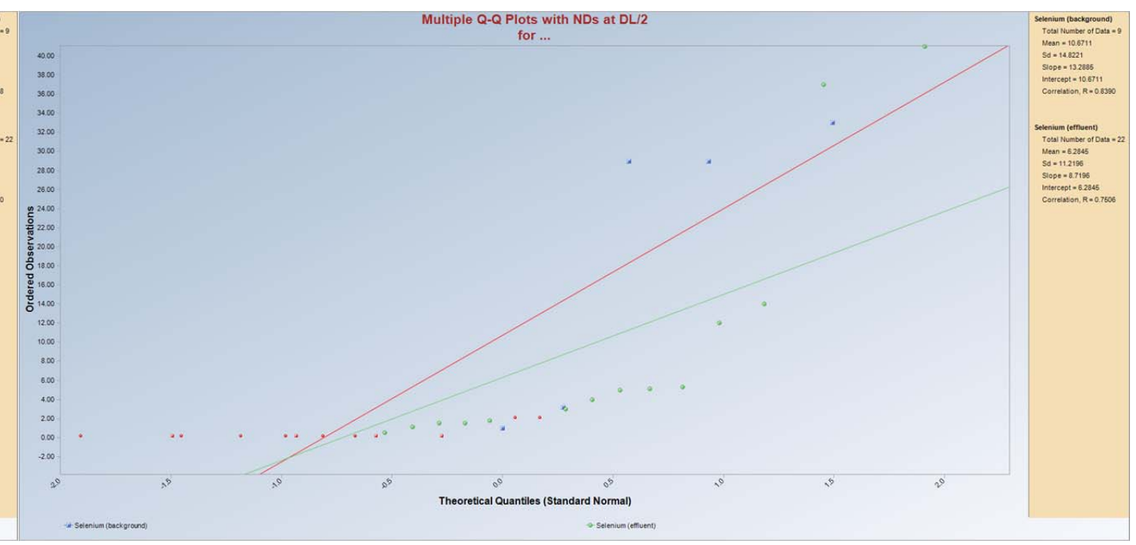
Total Selenium Histogram and Q-Q Plot





Dissolved Selenium Histogram and Q-Q Plot

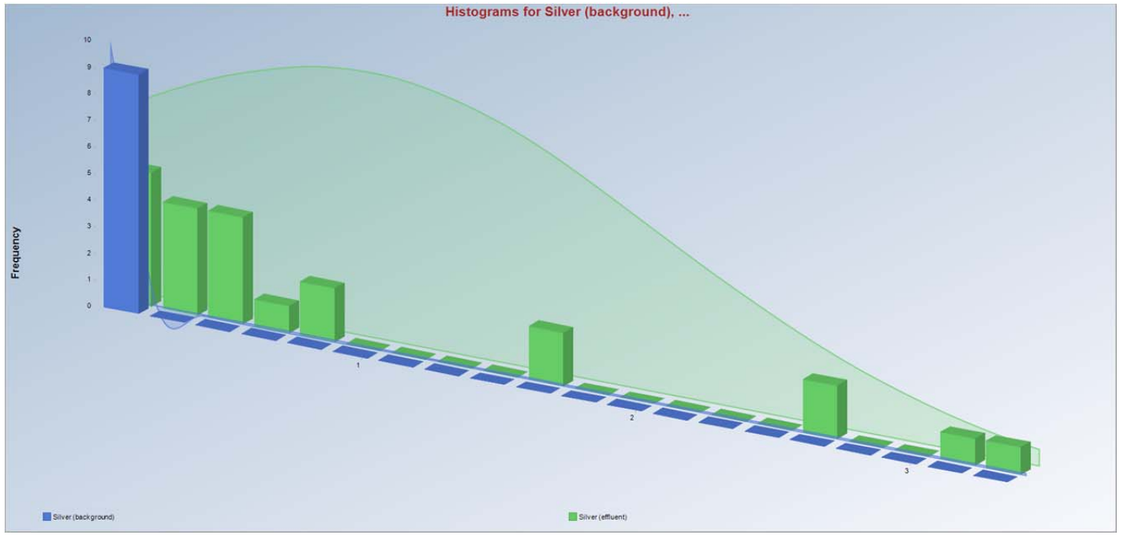


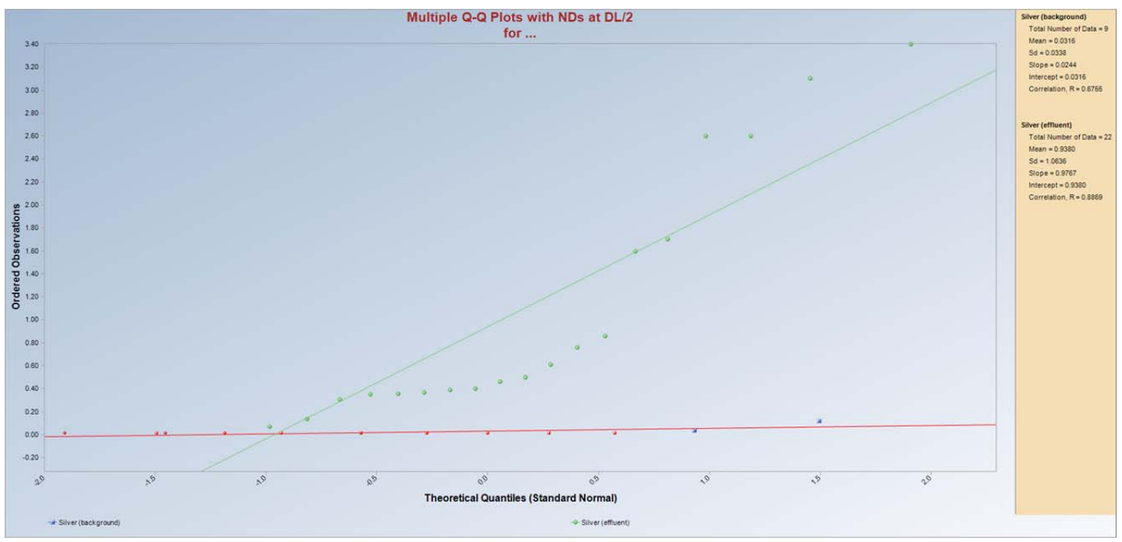


Effluent data are presented in green and Background data are presented in blue.

Figure 3-16
Graphical Displays – Silver
2012 National Park CDF Monitoring
National Park, New Jersey

Total Silver Histogram and Q-Q Plot



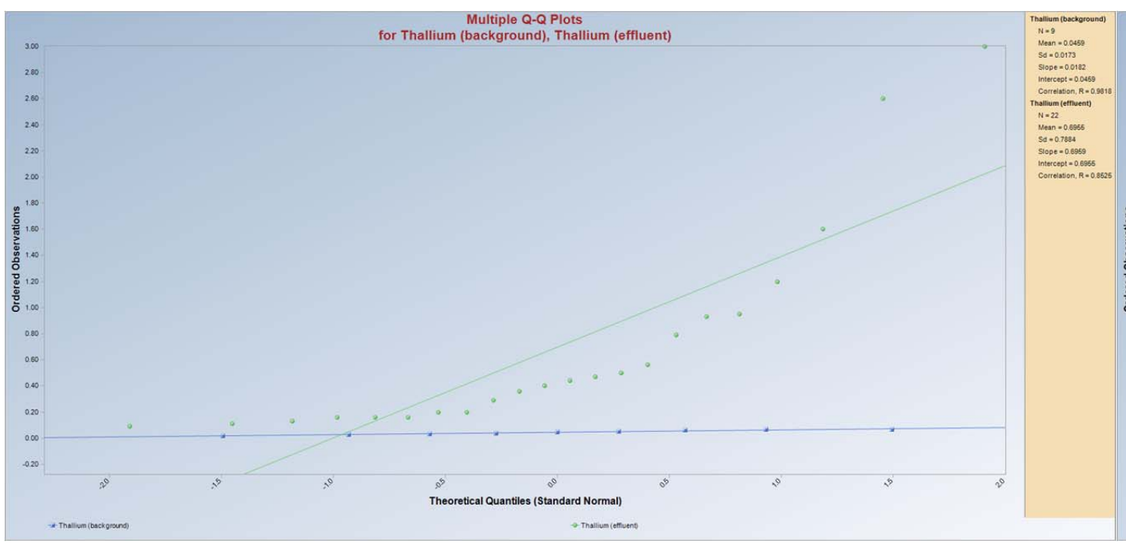


Dissolved Silver Histogram and Q-Q Plot (Insufficient Data)

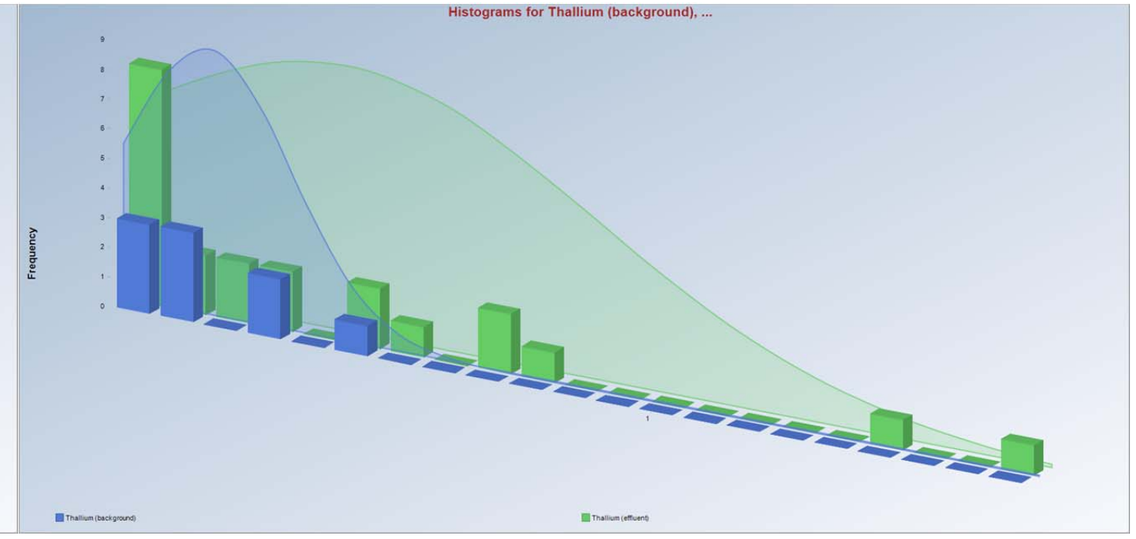
Effluent data are presented in green and Background data are presented in blue.

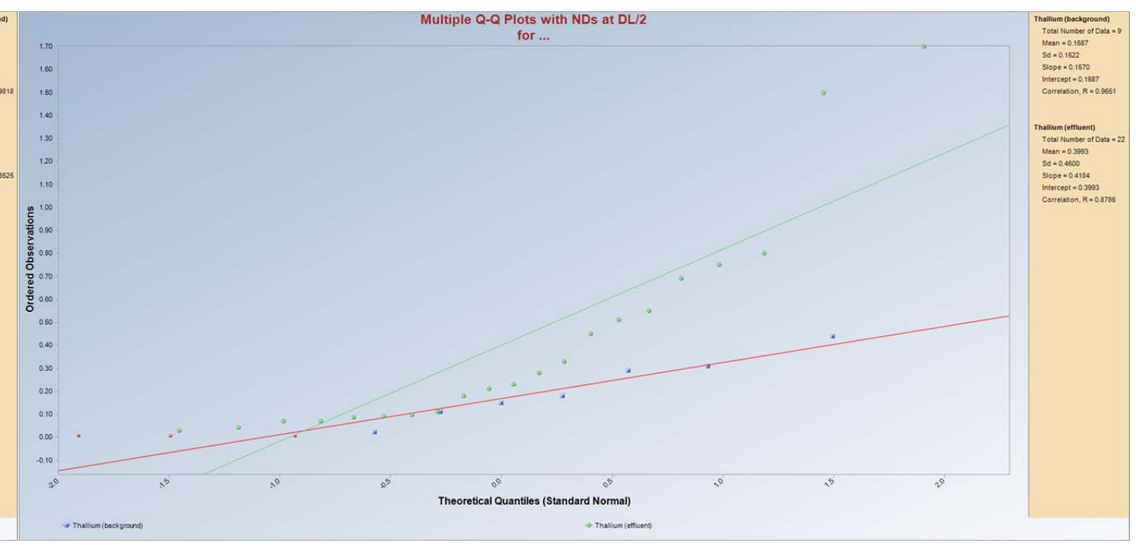
Figure 3-17
Graphical Displays – Thallium
2012 National Park CDF Monitoring
National Park, New Jersey

Total Thallium Histogram and Q-Q Plot



Dissolved Thallium Histogram and Q-Q Plot

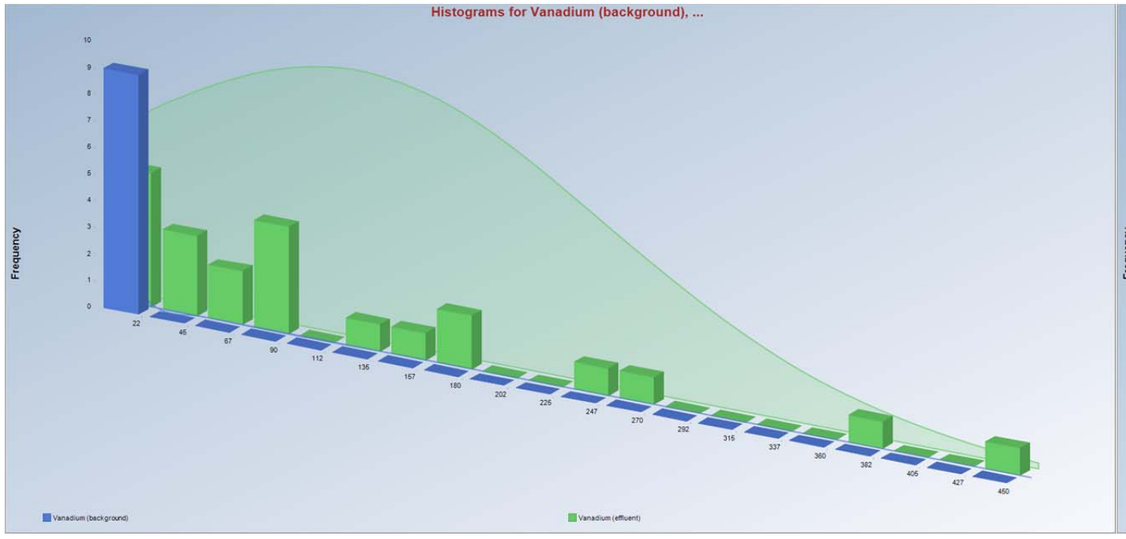


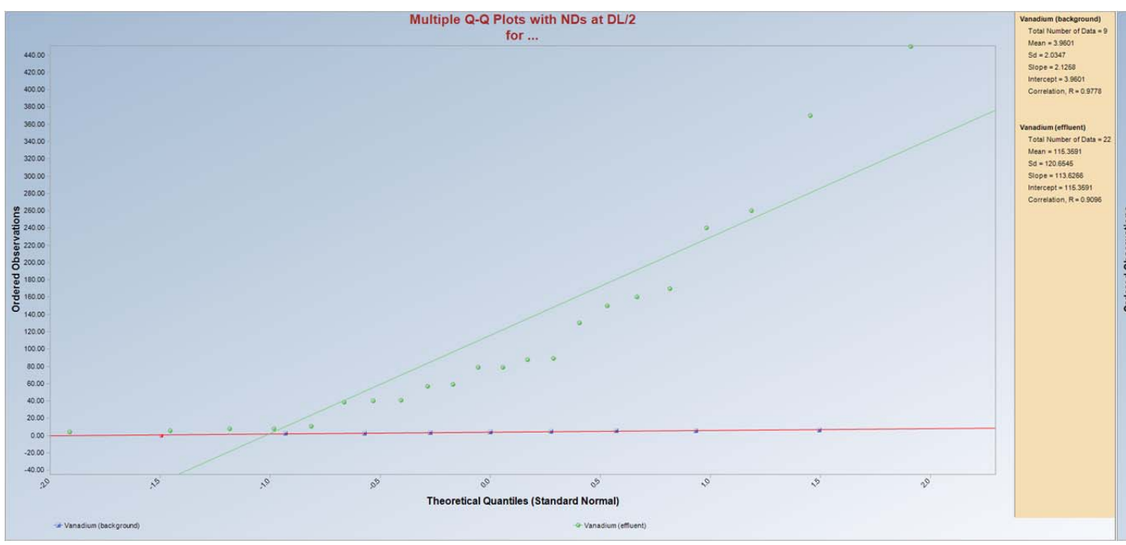


Effluent data are presented in green and Background data are presented in blue.

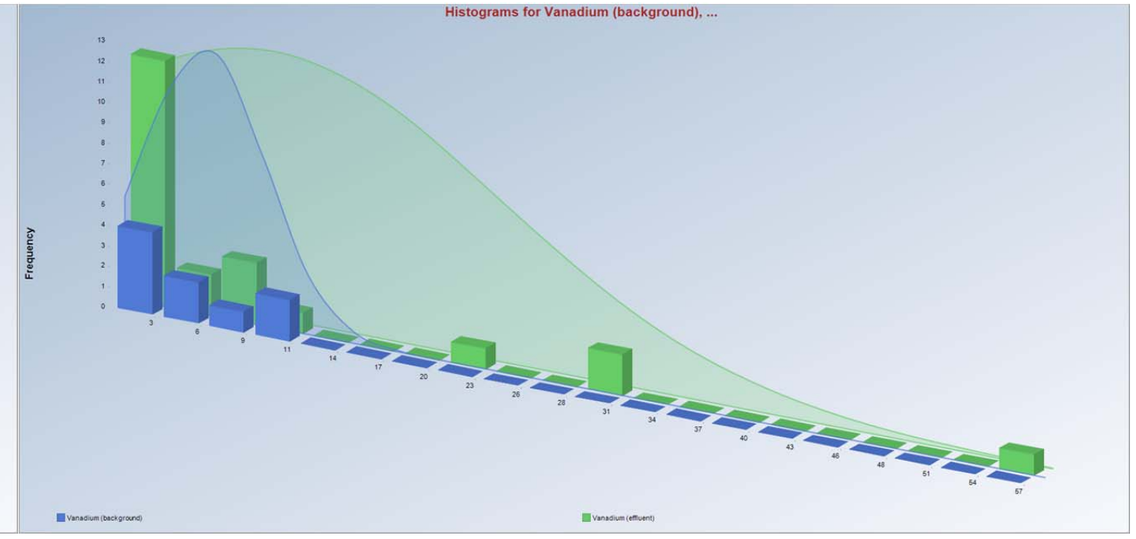
Figure 3-18
Graphical Displays – Vanadium
2012 National Park CDF Monitoring
National Park, New Jersey

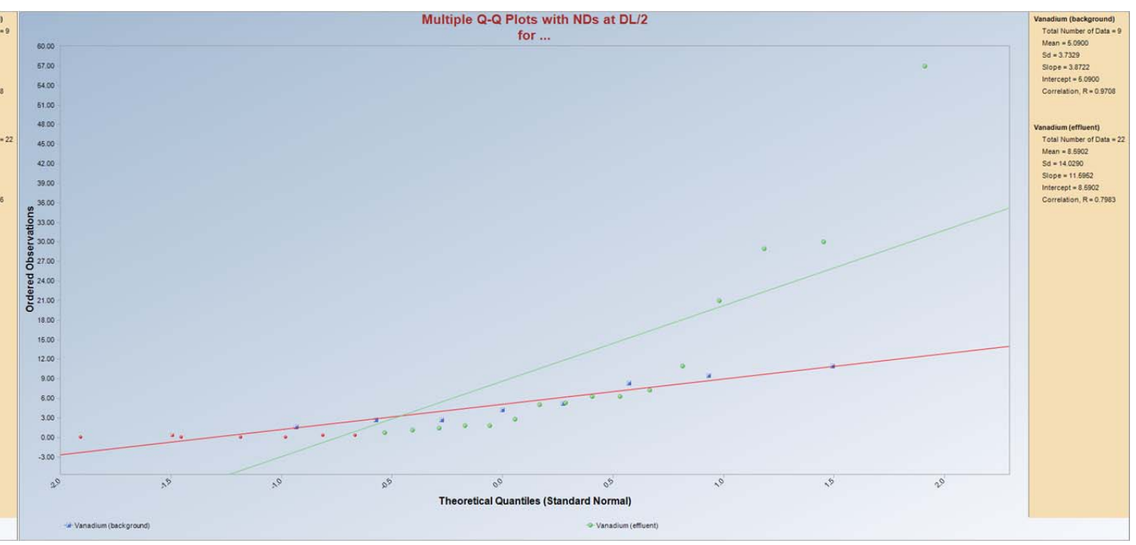
Total Vanadium Histogram and Q-Q Plot





Dissolved Vanadium Histogram and Q-Q Plot

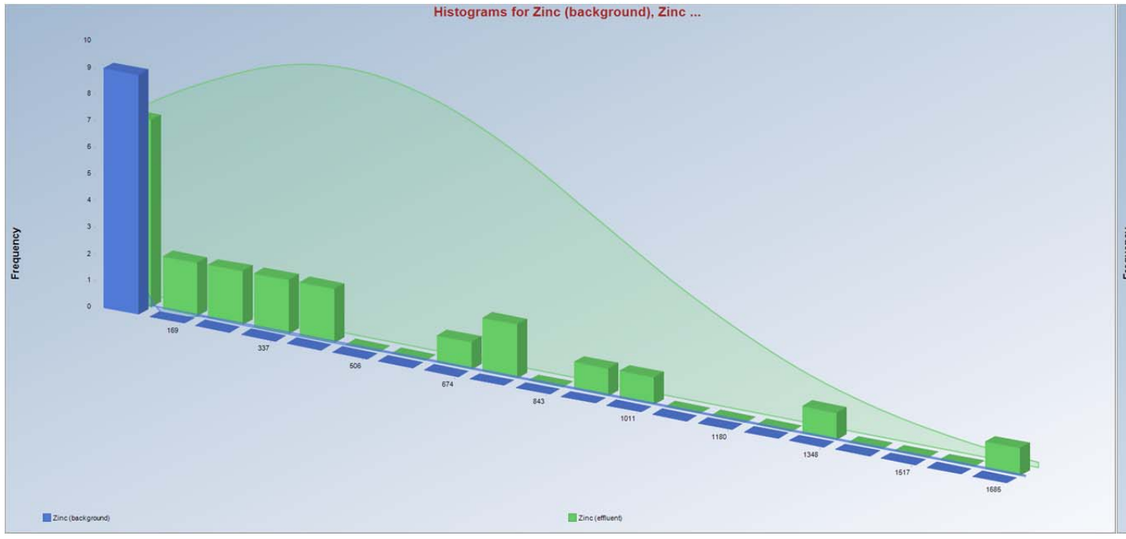


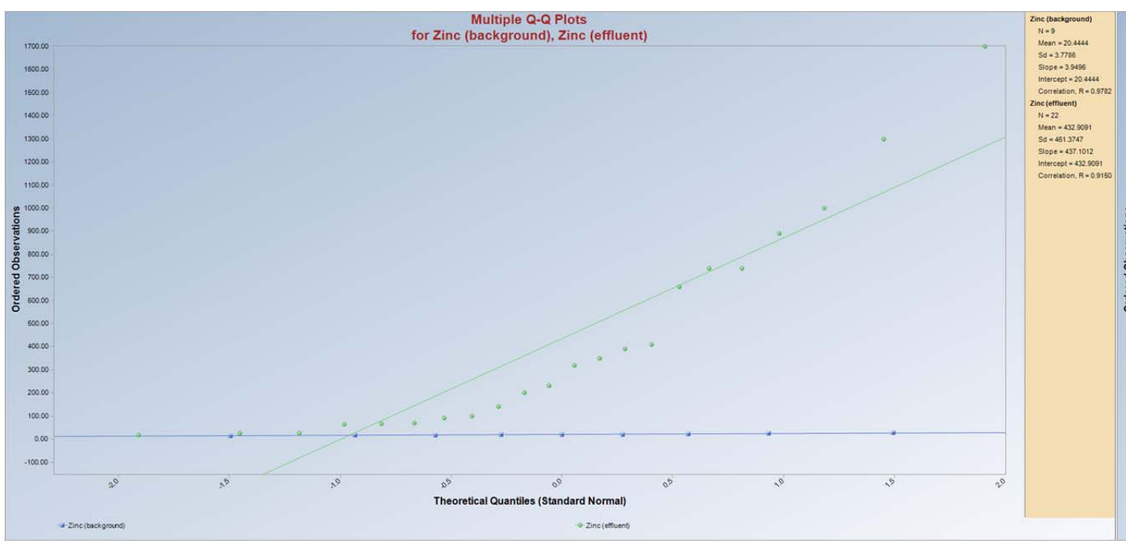


Effluent data are presented in green and Background data are presented in blue.

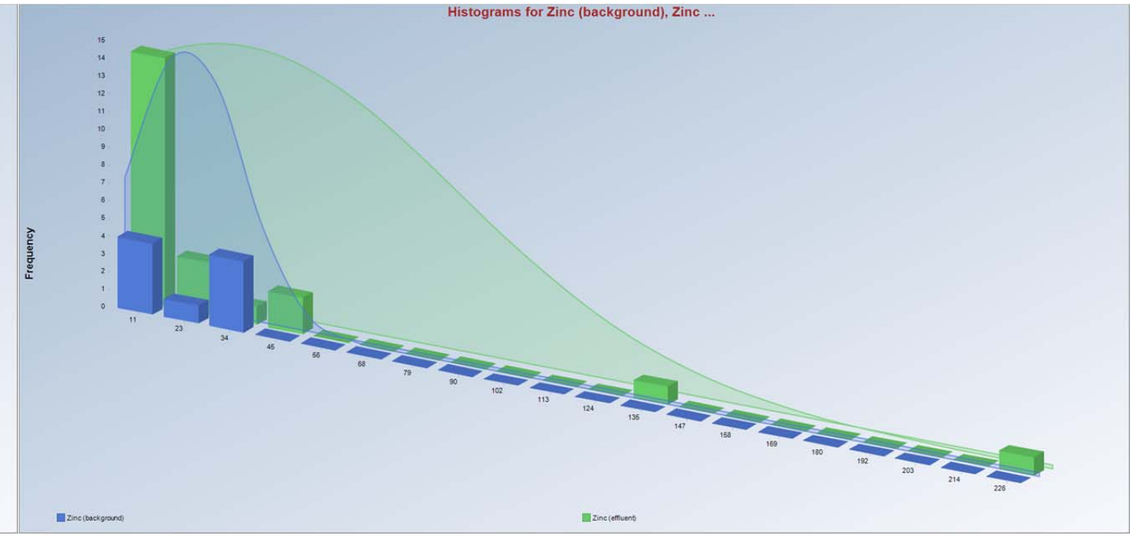
Figure 3-19
Graphical Displays – Zinc
2012 National Park CDF Monitoring
National Park, New Jersey

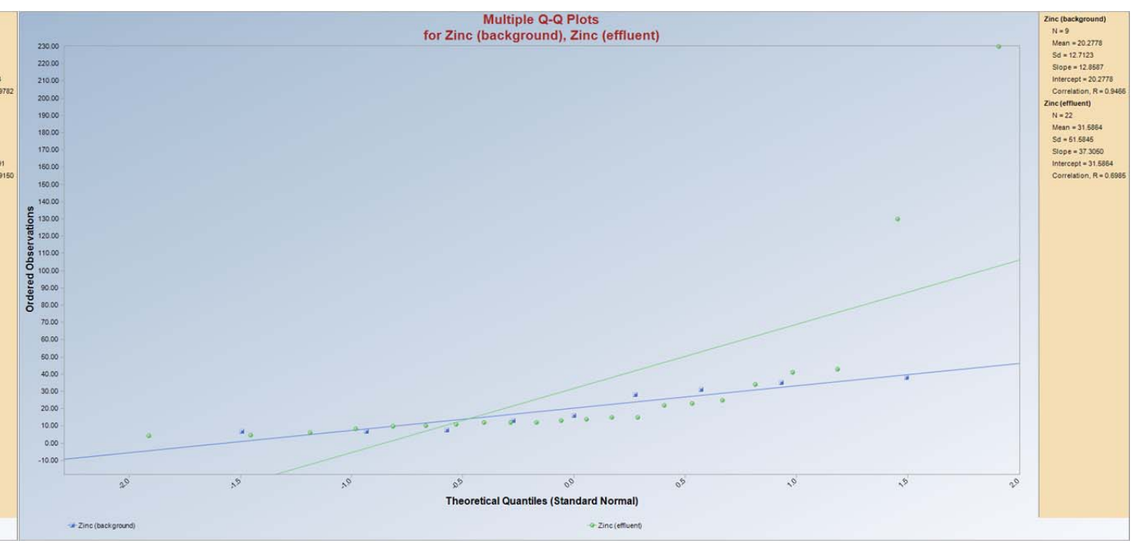
Total Zinc Histogram and Q-Q Plot





Dissolved Zinc Histogram and Q-Q Plot





Effluent data are presented in green and Background data are presented in blue.

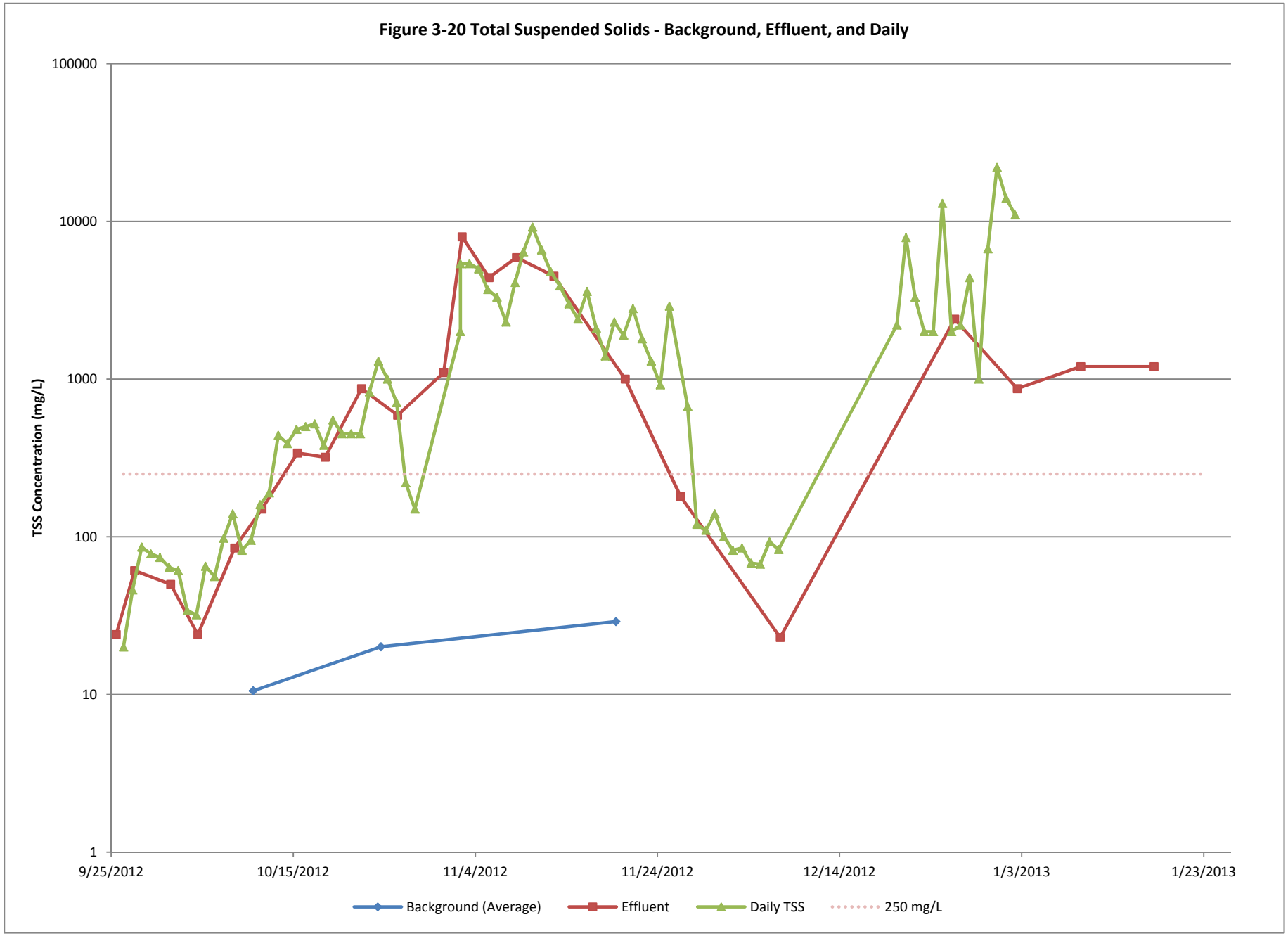


Figure 3-20 Total Suspended Solids - Background, Effluent, and Daily
TSS Concentration (mg/L)
100000
10000
1000
100
10
1
9/25/2012
10/15/2012
11/4/2012
11/24/2012
12/14/2012
1/3/2013
1/23/2013
Background (Average)
Effluent
Daily TSS
250 mg/L

APPENDIX A

SCOPE OF WORK

FY-2013
Delaware River Deepening Project
National Park CDF Water Quality Monitoring

I. Scope of Work

The work under this contract is for the evaluation of dredging activities within Reach A of the Delaware River Channel Deepening Project. The task is an evaluation of the chemical quality of dredged material and water flowing into and out of a Delaware River confined dredged material disposal facility (CDF). The site to be evaluated is the National Park CDF. Samples will be collected concurrent with dredging operations for deepening Philadelphia Harbor to the Tinicum Range of the Philadelphia to the Sea project from 40 to 45 feet mean low water. Dredging will begin in August or September of 2012, and will last approximately two months (60 days) with a potential 30 day extension. The work under this contract will cover 60 days of monitoring. Sampling will include material flowing into the CDF (influent) and water and associated suspended solids discharging from the site (effluent). Background water quality data will be collected in the Delaware River adjacent to the channel on three days spread over the monitoring period. Samples will be collected and appropriately preserved in the field, and delivered to a laboratory for various chemical and geotechnical analyses. All samples will be analyzed for TAL inorganics, mercury, TCL semi-volatiles, PCB Aroclors, TCL pesticides and organophosphorus pesticides and cyanide. A few influent and effluent samples will be analyzed for PCB congeners and dioxins and furans. Influent samples will also be analyzed for grain size and total organic carbon. In addition, the volume of water being discharged from the CDF will be measured. Daily water samples will also be collected to determine the concentration of total suspended solids associated with discharges. Table 1 provides a list of the number and type of samples to be analyzed for each contaminant group. The contractor will prepare a report that documents the sampling procedures, sample preparation techniques, laboratory methods, QA/QC, and test results including data analysis. The report will follow the format presented in: *Versar 2012. Delaware River Lower Reach B Main Channel Deepening Project Pedricktown South Confined Disposal Facility Monitoring and Water Quality Monitoring at the Point of Dredging*.

II. Sample Collection

It is recognized that the time required to complete the dredging contract is an estimate and that the number of samples discussed below is also an estimate. Coordination with the Philadelphia District over the course of the work effort will be necessary to determine if sufficient sampling is in place to monitor the full period of dredging/disposal activities. It may be necessary to adjust the number of samples towards the end of the job.

Influent: Five influent samples (a mixture of water and dredged sediment) shall be collected over the course of the dredging operation, which is estimated to last approximately 60 days. Approximately one sample will be collected every other week depending on when dredging for the deepening occurs. Storage and preservation

procedures for influent samples are provided as Appendix A. These procedures are from *The Management and Regulation of Dredging Activities and Dredged Material in New Jersey's Tidal Waters* (New Jersey Department of Environmental Protection, 1997). The specified holding times must be adhered to. These samples will be analyzed for total TAL inorganics, total mercury, total cyanide, PCB Aroclors, TCL pesticides, organphosphorus pesticides, TCL semi-volatiles including PAHs, total organic carbon, and grain size. Three of the five samples (the first, third and fifth samples) will be analyzed for PCB congeners and dioxins and furans. Samples to be analyzed for metals should not come in contact with metal sampling equipment, and samples to be analyzed for organic compounds should not come into contact with plastics. All sample containers should be appropriately cleaned: acid-rinsed (10% nitric acid) for metal analysis, and solvent-rinsed (acetone is preferred; however, other approved solvents such as methanol and hexane can be used as well) for organic analysis. When equipment will be used to take samples for both metal and organic compound analysis, the acid rinse must be conducted first, and the solvent rinse second. Samples should completely fill the storage container, leaving no head space, except for expansion volume needed for potential freezing. Samples should be refrigerated or frozen with ice immediately after sample collection.

Effluent: A total of 18 effluent samples will be collected over the discharge period. Grab effluent samples will be collected on individual sample days (two samples per week). Samples will be collected at the National Park weir during the period of discharge. These grab samples will be analyzed for TAL inorganics (both total and dissolved), total mercury, TCL pesticides, organophosphorus pesticides, PCB Aroclors, TCL semi-volatiles including PAHs, total cyanide, and total suspended solids (TSS). In addition five of the 18 samples (approximately every fourth sample) will be analyzed for PCB congeners and dioxins and furans. Sample collection will be based on an up to date estimate of the length of time dredging will occur. Effluent samples will be collected from water that has overflowed the disposal area into the sluice box. Storage and preservation procedures for water samples are provided in Appendix A. These procedures are from *The Management and Regulation of Dredging Activities and Dredged Material in New Jersey's Tidal Waters* (New Jersey Department of Environmental Protection, 1997). The specified holding times for water samples must be adhered to. All water sample containers should be acid-rinsed (10% nitric acid) for metal analysis, and solvent-rinsed (acetone is preferred; however, other approved solvents such as methanol and hexane can be used as well) for organic analysis. When equipment will be used to take samples for both metal and organic compound analysis, the acid rinse must be conducted first, and the solvent rinse second.

Background: Three background water samples will be collected on each of three boat trips spaced over the period of dredging for a total of nine background samples. Background water samples will be collected approximately on the edge of the Delaware River navigation channel in the vicinity of the National Park CDF. Background samples will be collected at locations that are free from the immediate influence of the dredging activity, the CDF discharge and any other known sources of pollution. Background water samples will be collected at 60 percent of water depth or approximately 25 feet for a 40-

foot channel. The time that all samples are collected will be recorded and used to determine the phase of the tidal cycle when samples are collected. The contractor will record the location of all sample sites with GPS. Background samples will be collected at peak ebb velocity, at slack water following peak ebb, and at the mid-time between peak ebb and slack water to observe the range of background concentrations over the tidal cycle. Background samples will be analyzed for TAL inorganics (both total and dissolved), total mercury, TCL pesticides, organophosphorus pesticides, TCL semi-volatiles including PAHs, PCB Aroclors, total cyanide, and total suspended solids (TSS). In addition three of the nine samples (one during each sample trip to represent the three points in the tidal cycle) will be analyzed for PCB congeners and dioxins and furans. Sample storage requirements, holding times and sample container preparation requirements are the same as specified for effluent samples.

Field Blank: One laboratory water sample will be transported to the monitoring site and handled the same as the effluent samples. This field blank will be analyzed for TAL inorganics (total and dissolved), total mercury, total cyanide, PCB Aroclors, TCL pesticides, organophosphorus pesticides, TCL semi-volatiles and PCB congeners and dioxins and furans.

Weir Discharge: The volume of water discharging from the National Park CDF weir will be measured over the entire discharge period. The National Park CDF weir has three pipes discharging water to the Delaware River below the low water line. Automatic flow monitoring equipment will be provided to the contractor for installation, operation and maintenance (an Isco 2110 Ultrasonic Flow Meter and a 2103 ci cellular phone modem). The 2103 ci (Internet ready) cell modem requires Flowlink version 5.10.412 software in order for the equipment to communicate. The 2103 ci connects to the field instruments via the Internet, eliminating the need for computer telephone modems. The contractor will be required to maintain this equipment on-site (calibration, batteries, data down loads).

An automatic sampler will be used to collect daily composite samples (60 samples) of water discharging from the weir for determining total suspended solids concentrations. The sampler will be programmed to collect water at six-hour intervals, over a 24-hour period.

III. Sample Analysis

Sediment and water samples will be analyzed for contaminant parameters as discussed above. Laboratory methods for the contaminant groups are as follows: TAL inorganics (both total and dissolved) (SW846-6020), total mercury (USEPA Method 1631E), total cyanide (SW846-9012A), PCB Aroclors (Low Level SW846-8082), TCL pesticides (Low Level SW846-8081A), organophosphorus pesticides (SW846-8141A) and TCL semi-volatile organic compounds including PAHs (Low Level SW846-8270C). Samples analyzed for PCB congeners will use USEPA Method 1668A and the dioxin/furan analysis will use USEPA Method 1613.

Table 1 provides a list of the number and type of samples to be analyzed for each contaminant group.

The five influent samples will be analyzed for grain size and total organic carbon. The grain size analyses will follow ASTM D2487 to standard sieve no. 200, and the total organic carbon analyses will follow the procedure labeled as Attachment 4 to Appendix B. Water samples will be analyzed for total suspended solids using USEPA method 160.2.

Data packages including data in excel spreadsheets will be provided to the Corps upon receipt from the laboratory.

IV. Data Analysis

Data will be analyzed using near-field and far-field assessments using Delaware River Basin freshwater surface water quality standards for protection of human health and aquatic life to determine if the disposal operation meets applicable criteria. Background water samples collected in the river will provide an evaluation of ambient conditions.

Hardness values will be calculated for the nine background water samples using the following equation:

$$\text{Hardness, mg equivalent } CACO3/L = 2.497\ [\text{Ca, mg/L}] + 4.118\ [\text{Mg, mg/L}]$$

The nine background hardness values will be used to calculate the average hardness during the discharge period. This average hardness value will be used to calculate the applicable aquatic life criteria for several of the divalent metals.

Analysis of PCB congener, dioxin and furan data will employ WHO 2005 Toxicity Equivalency Factors (TEF) provided in Appendix B.

Data analysis will be the same as that presented in Versar (2012) *Delaware River Lower Reach B Main Channel Deepening Project Pedricktown South Confined Disposal Facility Monitoring and Water Quality Monitoring at the Point of Dredging.*

V. Report Format and Content

Draft and final copies of the report of investigation will reflect and report the analysis outlined in this scope of work. Draft and final reports will follow the format used in Versar (2012).

VI. Period of Performance

One electronic copy of the draft report will be submitted to the Corps for review. The draft report must be a polished product and an accurate representation of the content of the final report. The draft must be clean-typed, complete with all figures, tables and

sections. All graphics will appear in the same format and general location in the draft report as they will in the final report.

The Corps will provide the contractor with comments on the draft report. The contractor will then have an additional two weeks to revise and submit a second draft report. The second draft report will then be circulated to others for their review. Any final comments will be incorporated into the final report. The contractor shall submit one electronic copy of the final report with appendices. When the Corps accepts the final report the contract will be complete.

The draft report for the CDF water quality monitoring study will be due six weeks after completion of the monitoring effort. The final report will be due two weeks after the Corps submits final comments on the second draft report.

VII. Inspection

The work will be conducted under the general discretion of the Contracting Officer and shall be subject to inspection by his appointed inspectors to insure strict compliance with the terms of the contract. The presence of the inspector shall not relieve the contractor of responsibility for the proper execution of the work in accordance with the above specifications.

APPENDIX B

DRBC WATER QUALITY STANDARDS

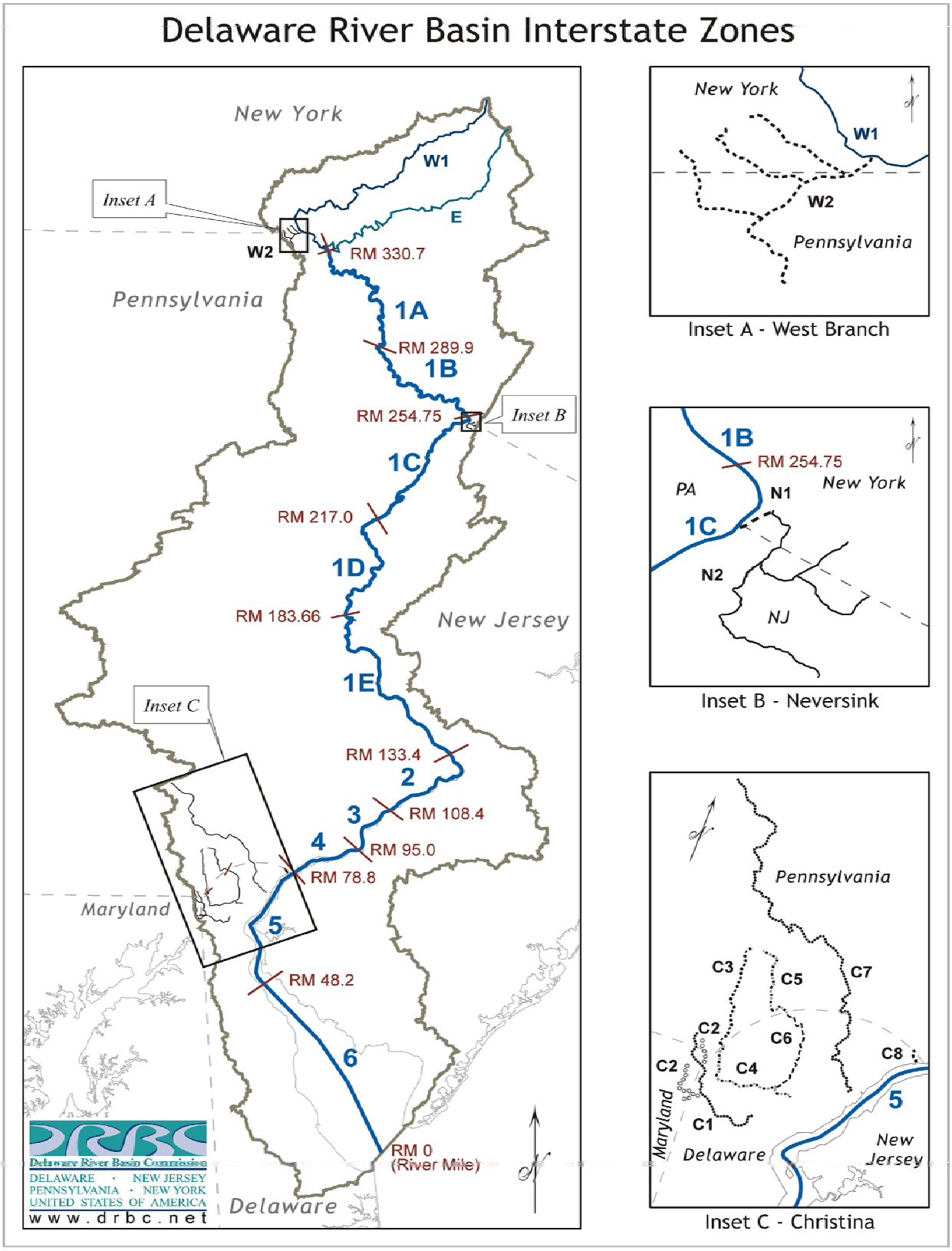
Administrative Manual – Part III
WATER QUALITY REGULATIONS

WITH AMENDMENTS THROUGH
DECEMBER 8, 2010

18 CFR PART 410

Delaware River Basin Commission
DELAWARE · NEW JERSEY
PENNSYLVANIA · NEW YORK
UNITED STATES OF AMERICA

DELAWARE RIVER BASIN COMMISSION
P.O. BOX 7360, WEST TRENTON, NEW JERSEY 08628
(609) 883-9500 ● www.drbc.net


Delaware River Basin Interstate Zones
New York
W1
E
Inset A
W2
RM 330.7
Pennsylvania
1A
RM 289.9
1B
RM 254.75
Inset B
1C
RM 217.0
1D
RM 183.66
New Jersey
1E
Inset C
RM 133.4
2
3
RM 108.4
4
RM 95.0
RM 78.8
Maryland
5
RM 48.2
6
RM 0
(River Mile)
Delaware
Delaware River Basin Commission
DELAWARE · NEW JERSEY
PENNSYLVANIA · NEW YORK
UNITED STATES OF AMERICA
www.drbc.net
New York
W1
W2
Pennsylvania
Inset A - West Branch
1B
RM 254.75
PA
N1
New York
1C
N2
NJ
Inset B - Neversink
Pennsylvania
C3
C5
C7
C2
C6
C8
C2
C4
5
C1
Maryland
Delaware
New Jersey
Inset C - Christina

PREFACE

For reference purposes, following is a summary of Commission actions on water quality standards and regulations to date

Resolution	Date	Comments
1962-14	July 25, 1962	INCODEL Standards added to Comprehensive Plan.
1965-03	February 24, 1965	Primary treatment required as a minimum, Basinwide.
1967-02	March 2, 1967	Water quality standards for tidal waters.
1967-07	April 26, 1967	Water quality standards for non-tidal interstate streams; Resolution 67-2 recodified and incorporated; Resolution 65-3 repealed; Secondary treatment required as a minimum; Allocation of assimilative capacity policy; INCODEL Standards repealed to the extent inconsistent with this resolution.
1968-02	March 7, 1968	Water quality regulations; Allocation of assimilative capacity procedures; Abatement schedule procedures; Resolution 67-7 incorporated and recodified.
1968-06	July 31, 1968	Regional policy for wastewater management.
1968-08	September 25, 1968	Minor change in regulations on allocation procedure.
1970-03	March 26, 1970	Nondegradation policy; Addition to water quality criteria; Minor changes in definition of secondary treatment.
1970-24	November 24, 1970	Changes in dissolved oxygen and temperature criteria for trout waters.
1972-01	January 26, 1972	Interpretive Guideline No. 1.
1972-14	December 12, 1972	Groundwater quality standards.
1973-04	January 24, 1973	Groundwater quality regulations.
1973-11	October 31, 1973	Abatement schedules transferred to appropriate signatory agencies.
1974-01	February 27, 1974	Amendments primarily to be consistent with Federal Law (P.L. 92-500); Recodification, reflecting all above amendments, including the INCODEL Standards saved from repeal by Resolution 67-7, and also including Resolution 72-1.
1978-07	May 24, 1978	Intermittent stream policy; Changes in total dissolved solids standards; Changes in effluent color regulation; Policy for dilute industrial process wastewater.
1978-08	May 24, 1978	Confirmation of groundwater standards and policies in Comprehensive Plan.
1980-02	March 10, 1980	Suspended solids effluent requirement; INCODEL Standards for Zones 1 and 2 repealed.
1983-11	June 29, 1983	Changes in chloride criteria and addition of sodium criteria for tidal waters.
1985-03	January 30, 1985	Effluent requirements for oil and grease.
1986-08	May 28, 1986	Disinfection requirements for intrastate streams deleted.
1986-18	July 30, 1986	Temporary suspension of disinfection requirements for discharges to Zones 2, 3 and 4, from October 1, 1987 to April 30, 1988.
1991-06	May 22, 1991	Recreational stream criteria and uses for tidal waters based on Use Attainability Assessment recommendations.
1992-21	December 9, 1992	Special Protection Waters policies.
1994-02	February 23, 1994	Control of Nonpoint Sources of Pollution in Special Protection Waters.
1996-12	October 23, 1996	Control of Toxic Pollutants from Point Source Discharges to the Delaware River Estuary.
2005-02	January 19, 2005	Temporary Designation of the Lower Delaware River as Special Protection Waters.
2005-09	May 18, 2005	Pollutant Minimization Plan Requirements for Discharges of Toxic Pollutants.
2005-15	September 26, 2005	Extending SPW designation for the Lower Delaware through September 30, 2006.
2006-22	September 27, 2006	Extending SPW designation for the Lower Delaware through September 30, 2007.
2007-13	September 26, 2007	Extending SPW designation for the Lower Delaware through May 15, 2008.
2008-09	July 16, 2008	Permanent Designation of the Lower Delaware River as Special Protection Waters.

Administrative Manual – Part III
WATER QUALITY REGULATIONS
With Amendments through December 8, 2010

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DELAWARE RIVER BASIN COMMISSION
BASIN REGULATIONS - WATER QUALITY

ARTICLE 1

GENERAL; DEFINITIONS

Section 1.10 General

1.10.1 **Effect of the Comprehensive Plan**. The Comprehensive Plan prescribes standards which govern the review of proposed new projects and action by the Commission to control and abate pollution with respect to existing facilities. Section X of the Comprehensive Plan, *Water Quality Standards for the Delaware River Basin* (as reproduced in Article 3 herein), sets forth these water quality standards.

1.10.2 **Project Review**. The process by which the Commission will include projects in the Comprehensive Plan and review and screen proposed projects to determine their compatibility with the Plan is set forth in the Commission's Administrative Manual (Part II) - *Rules of Practice and Procedure.*

1.10.3 **Control and Abatement**

A. These Regulations are adopted pursuant to Article 5 and Section 14.2 of the Compact, to implement the cited Water Quality Standards.

B. Where applicable state standards require higher quality water than these Standards and Regulations, state standards will be controlling.

Section 1.20 Definitions. For the purpose of these Regulations and for interpretation and application of the Comprehensive Plan, unless the context otherwise requires:

1.20.1 "Standards" means Section X of the Comprehensive Plan (as reproduced in Article 3 herein).

1.20.2 "Pollution" means the introduction into waters of the Basin of substances or properties which impair the uses specified in the Comprehensive Plan.

1.20.3 "Effluent quality requirements" mean the requirements relating to effluents which are prescribed by the Standards or by these Regulations.

1.20.4 "Waste assimilation" means the chemical, physical, and biological process resulting when waste substances or properties are introduced into Basin waters.

1.20.5 "Waste assimilative capacity" means the measure of a stream's capacity for waste assimilation without impairment of the uses designated by the Standards.

1.20.6 "Water uses" means the protected uses prescribed by the Standards, and without limitation thereto:

A. "Agricultural use" includes water used for livestock and for irrigation;

B. "Industrial use" includes water for processing and cooling;

C. "Public water supplies" include water suitable for drinking purposes and for other domestic, industrial, municipal or institutional uses;

D. "Wildlife" includes all undomesticated animals and fowl;

E. "Fish and other aquatic life" includes all species of resident, anadromous, and catadromous fish, shellfish, and other aquatic biota;

F. "Recreation" includes all water-contact sports.

G. "Recreation - secondary contact" restricts activities to where the probability of significant contact or water ingestion is minimal, encompassing but not limited to:

1. boating,

2. fishing,

3. those other activities involving limited contact with surface waters incident to shoreline recreation.

1.20.7 "Unregulated streams" means streams where the quantity of flow, including its distribution in time or place, are not significantly altered by the activities or works of man.

1.20.8 "Regulated streams" are streams where the quantity of flow, including its distribution in time or place, are altered by the activities or works of man.

1.20.9 "Special Protection Waters" are waters classified as either Outstanding Basin Waters or Significant Resource Waters by the Commission (see 3.10.3 of Article 3).

1.20.10 Additional definitions. See 3.10.6 of Article 3 and Article 4 of these Regulations and Section 1.2 of the Compact.

ARTICLE 2

INTERSTATE COOPERATION

Section 2.10 Administrative Agreements. To avoid unnecessary duplication and achieve maximum efficiency, signatory agencies to the Delaware River Basin Compact concerned with pollution control will be utilized to the maximum practical extent in enforcing these Regulations. To that end, the Executive Director is authorized to enter into cooperative administrative agreements with these agencies.

Section 2.20 Additional Requirements. Any of the signatory parties may impose standards, including water quality criteria and effluent quality requirements, with respect to waste discharges within its jurisdiction more stringent than those provided by the Comprehensive Plan and these Regulations.

Section 2.30 Regional Requirements. It shall be the policy of the Commission to promote and encourage planning for regional solutions to water pollution problems including problems derived from both point and non-point sources of pollution. The Commission may recognize that the most efficient and environmentally acceptable regional solution may be small multiple facilities spread throughout a watershed. The use of regional water pollution control facilities and/or institutional arrangements providing optimum combinations of efficiency, reliability and service area will be required throughout the Delaware River Basin to the maximum extent feasible. The Commission will cooperate with industries and state, county and municipal agencies seeking a regional solution to water pollution problems. The Commission may provide planning, and when necessary, constructing, financing and operating services required for regional solutions to water pollution problems where other appropriate agencies do not provide such services.

ARTICLE 3

WATER QUALITY STANDARDS FOR THE DELAWARE RIVER BASIN [COMPREHENSIVE PLAN, SECTION X]

Section 3.10 Basinwide Surface Water Quality Standards.

3.10.1 **Application**. This Article shall apply to all surface waters of the Delaware River Basin.

3.10.2 **Water Uses.**

A. **Uses Paramount**. Water uses shall be paramount in determining stream quality objectives which, in turn, shall be the basis for determining effluent quality requirements.

B. **Uses to be Protected**. The quality of Basin waters, except intermittent streams, shall be maintained in a safe and satisfactory condition for the following uses:

1. agricultural, industrial, and public water supplies after reasonable treatment, except where natural salinity precludes such uses;

2. wildlife, fish and other aquatic life;

3. recreation;

4. navigation;

5. controlled and regulated waste assimilation to the extent that such use is compatible with other uses;

6. such other uses as may be provided by the Comprehensive Plan.

C. **Other Uses**

1. Current uses of intermittent streams may, at the discretion of the Commission, be maintained.

3.10.3 **Stream Quality Objectives.**

A. **Antidegradation of Waters.**

1. **Interstate Waters.**

It is the policy of the Commission to maintain the quality of interstate waters, where existing quality is better than the established stream quality objectives, unless it can be affirmatively demonstrated to the Commission that such change is justifiable as a result of necessary economic or social development or to improve significantly

another body of water. In implementing this policy, the Commission will require the highest degree of waste treatment determined to be practicable. No change will be considered which would be injurious to any designated present or future use.

2. **Special Protection Waters**.

It is the policy of the Commission that there be no measurable change in existing water quality except towards natural conditions in waters considered by the Commission to have exceptionally high scenic, recreational, ecological, and/or water supply values. Waters with exceptional values may be classified by the Commission as either Outstanding Basin Waters or Significant Resource Waters.

In determining waters suitable for classification as Special Protection Waters, the Commission will consider nomination petitions from local, state and federal agencies and governing bodies, and the public for waters potentially meeting the definition of Outstanding Basin Waters and Significant Resource Waters as described in 3.10.3A.2.a.

The following policies shall apply to waters classified by the Commission as Outstanding Basin Waters or Significant Resource Waters and their drainage areas:

a. Definitions

1) "Outstanding Basin Waters" are interstate and contiguous intrastate waters that are contained within the established boundaries of national parks; national wild, scenic and recreational rivers systems; and/or national wildlife refuges that are classified by the Commission under Subsection 2.g.1) hereof as having exceptionally high scenic, recreational, and ecological values that require special protection.

2) "Significant Resource Waters" are interstate waters classified by the Commission under Subsection 2.g.2) hereof as having exceptionally high scenic, recreational, ecological, and/or water supply uses that require special protection.

3) "Existing Water Quality" for purposes of the Special Protection Waters program is defined for a limited set of parameters, consisting of those listed in Tables 1 and 2. Existing water quality is defined in Table 1 for stream reaches between Hancock, New York and the Delaware Water Gap and in Table 2 for stream reaches between the Delaware Water Gap and Trenton, New Jersey. Where existing water quality is not defined in Tables 1 and 2, existing water quality may be defined by extrapolation from the nearest upstream or downstream Interstate Control Point, from data obtained from sites within the same ecoregion, or on the basis of best scientific judgment.

4) "Measurable Change to Existing Water Quality" is defined as an actual or estimated change in a seasonal or non-seasonal mean (for SPW waters upstream of and including River Mile 209.5[*]) or median (for SPW waters downstream of River Mile 209.5) in-stream pollutant concentration that is outside the range of the two-tailed upper and lower 95 percent confidence intervals that define existing water quality.

5) "Public Interest" is a determination of all the positive and negative social, economic and water resource impacts associated with a project affecting a Significant Resource Water. A project that is in the public interest is one that, at a minimum, provides housing, employment, and/or public facilities needed to accommodate the adopted future population, land use, and other goals of a community and region without causing deleterious impacts on the local and regional environment and economy. In general, such a project would be one that conforms to a locally-adopted growth management plan which is undergoing active implementation by local officials, is supported by the larger community as a whole, and is compatible with national, state and regional objectives as well. For a project not fully meeting the above criteria, the Commission will weigh the positive and negative impacts to determine public interest.

6) "Regional Resources Management Plan" is a management plan developed and adopted by the government agency that is assigned primary responsibilities for the overall management of a National park, scenic and recreational river and/or wildlife refuge which contains waters that have been classified by the Commission as Outstanding Basin Waters. A regional resources management plan is one that addresses, among other subjects, the location and general size of allowable wastewater treatment facilities. A regional resources management plan, or applicable portions thereof, may be incorporated into the Commission's Comprehensive Plan.

7) "Natural Condition" is the ecological state of a water body that represents conditions without human influence.

8) "Non-discharging/Load Reduction Options" are options whereby the amount of wastewater discharged to a surface stream is reduced by (a) instituting load reduction measures involving reductions in pollutants at the source, possibly accompanied by water conservation practices to reduce the amount of flow received at a wastewater treatment plant; and/or (b) using land-based wastewater disposal whereby treated wastewater effluent is further treated by percolation and other soil-based processes instead of in-stream processes.

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[*] River Mile 209.5 is the downstream boundary of the Delaware Water Gap National Recreation Area. SPW waters upstream of and including this point received SPW designation in 1992 and SPW waters below this point received SPW designation in 2005. The water quality strategy used to support the later designation differed from that employed a decade earlier.

9) “Natural Wastewater Treatment Systems” are soil-based, vegetative and/or aquatic wastewater treatment systems characterized by the use of low energy treatment processes that use and simulate "natural" environmental processes such as primary and secondary productivity, crop production, wetlands, ponds and others.

10) "Non-Point Sources" are sources of pollutants carried by surface and sub-surface runoff that are derived from human activities and land use.

11) "Cumulative Impact" is the net sum of all individual impacts including all point and non-point source impacts.

12) "Boundary Control Points" are locations where monitoring and other activities occur to determine existing water quality, no measurable change, and related pollution control requirements as applicable. Boundary Control Points for Outstanding Basin Waters will generally correspond to federally-established boundaries for National parks, etc. while those for Significant Resource Waters will generally correspond to the confluence of an intrastate tributary with the classified interstate water. The locations of Boundary and Interstate Control Points are described in Part C of Table 1 for the reach between Hancock, N.Y. and the Delaware Water Gap and in Tables 2A and 2B for the reach between the Delaware Water Gap and Trenton, N.J.).

13) "Interstate Control Points" are general locations used to assess water quality for purposes of defining and protecting Existing Water Quality. The locations of Boundary and Interstate Control Points are described in Part C of Table 1 for the reach between Hancock, N.Y. and the Delaware Water Gap and in Tables 2A and 2B for the reach between the Delaware Water Gap and Trenton, N.J.).

14) "Growth Management Plans" are locally developed and adopted plans expressing the social, economic, and environmental goals and objectives of the local community. A growth management plan in this context can be one plan, a series of plans, local ordinances, and other official documents of a municipality. Growth management plans outline the community's desired growth patterns and related infrastructure. To be considered in the Commission's determination of public interest, growth management plans must be undergoing active implementation and forming the basis for local governmental decisions.

15) An "Expanding Wastewater Treatment Project" is a project involving either (a) alterations or additions to an existing wastewater treatment facility that result in a reviewable project in accordance with the Commission's *Rules of Practice and Procedure*; or (b) a new load or increased flow or loading from an existing facility that was not included in a NPDES permit or docket effective on the date of SPW designation.

16) “Substantial Alterations or Additions” are those additions and alterations resulting in: (a) a complete upgrade or modernization of an existing wastewater treatment plant, including substantial replacement or rehabilitation of the existing wastewater treatment process or major physical structures such as headworks, settling tanks, and biological/chemical treatment and filtration tanks, whether conducted as a single phase or a multi-phased project or related projects; or (b) a new load or increased flow or loading from an existing facility that was not included in a NPDES permit or docket effective on the date of SPW designation. Among other projects, modifications made solely to address wet weather flows; and alterations that are limited to changes in the method of disinfection and/or the addition of treatment works for nutrient removal are not deemed to be “Substantial Alterations or Additions.”

17) “Load” and “loading” are used interchangeably in these regulations and refer to the amount of a substance or material, expressed as a weight per unit time (pounds per day, for example), that is discharged from a facility.

18) “Incremental load” and “incremental loading” are used interchangeably in these regulations and refer to the load that is greater than the actual load discharged by a facility at the time of SPW designation.

19) "Best Management Practices" are any structural or non-structural measure designed to reduce stormwater runoff and resulting non-point source loads.

20) “Watershed Non-Point Source Management Plan” is a plan prepared for a watershed that describes the basis for, and overall control strategy of, a plan for controlling, limiting, and abating all relevant non-point source loadings within the watershed. The plan will identify and assess important natural and anthropogenic features and influences on water quality; existing local, state and other non-point source control programs; potential non-point source loads on Special Protection Waters; watershed-specific protection requirements; and the institutional needs and arrangements required to implement the plan.

21) "Non-Point Source Pollution Control Plan" is a plan describing the Best Management Practices to be used at the project site and in the project service area to control increases in non-point source pollutant loadings resulting from the project.

22) "Priority Watershed" is a watershed that has been evaluated in conjunction with other watersheds draining to Special Protection Waters and designated by the Commission as having a substantial potential pollution impact on the water quality of Special Protection Waters in comparison with other watersheds.

b. No Measurable Change to Existing Water Quality

1) Outstanding Basin Waters shall be maintained at their existing water quality. Point and non-point sources of pollutants originating from outside the boundaries of stream reaches classified as Outstanding Basin Waters shall be treated as required and then dispersed in the receiving water so that no measurable change occurs at Boundary and Interstate Control Points. Point sources of pollutants discharged to Outstanding Basin Waters shall be treated as required and then dispersed in such a manner that complete mixing of effluent with the receiving stream is, for all practical intents and purposes, instantaneous.

2) Significant Resource Waters shall not be degraded below existing water quality as defined in these regulations, although localized degradation of water quality may be allowed for initial dilution if the Commission**,** after consultation with the state NPDES permitting agency, finds that the public interest warrants these changes. Point and non-point sources of pollutants originating from outside the boundaries of stream reaches classified as Significant Resource Waters shall be treated as required and then dispersed in the receiving water so that no measurable change occurs at Boundary and Interstate Control Points, unless a mixing zone is allowed in Significant Resource Waters, and then to the extent of the mixing zone designated as set forth in this section. If degradation of water quality is allowed for initial dilution purposes, the Commission**,** after consultation with the state NPDES permitting agency, will designate mixing zones for each point source and require the highest possible point source treatment levels necessary to limit the size and extent of the mixing zones. The dimensions of the mixing zone will be determined by the Commission after consultation with the state NPDES permitting agency based upon an evaluation of (a) site-specific conditions, including channel characteristics; (b) the cost and feasibility of treatment technologies; and (c) the design of the discharge structure. Mixing zones will be developed using the wastewater treatment facility design conditions and low ambient flow conditions unless site-specific characteristics indicate otherwise. Non-point sources shall be subject to the requirements of Section 3.10.3 A.2.e. for the implementation of non-point source control plans.

c. Allowable Discharges

1) Direct discharges of wastewater to Special Protection Waters are discouraged. The following categories of projects discharging directly to Special Protection Waters may be approved only after the applicant demonstrates that it has fully evaluated all non-discharge/load reduction alternatives and is unable to implement these alternatives because of technical and/or financial infeasibility: new wastewater treatment facilities and substantial alterations or additions to existing wastewater treatment facilities. When evaluating non-discharge/load reduction alternatives, the applicant shall consider alternatives to any and all loadings – both existing and proposed – in excess of actual loadings at the time of SPW designation.

2) The following categories of projects within the drainage area of Special Protection Waters may be approved only after the applicant demonstrates that it has fully evaluated all natural wastewater treatment system alternatives and is unable to implement these alternatives because of technical and/or financial infeasibility: new wastewater treatment facilities and substantial alterations or additions to existing wastewater treatment facilities. When evaluating natural treatment alternatives, the applicant shall consider alternatives to any and all loadings – both existing and proposed – in excess of actual loadings at the time of SPW designation.

3) The following categories of projects discharging directly to Significant Resource Waters may be approved only following a determination that the project is in the public interest as that term is defined in Section 3.10.3.A.2.a.5): new wastewater treatment facilities and substantial alterations or additions to existing wastewater treatment facilities.

4) The general number, location and size of future wastewater treatment facilities discharging to Outstanding Basin Waters (if any) shall be developed taking into consideration any adopted regional resource management plan as defined in Section 3.10.3 A.2.a.6) and, on an individual project basis, considering the feasibility of non-discharge/load reduction alternatives.

d. Wastewater Treatment Facilities

1) All wastewater treatment facilities discharging to waters classified as Special Protection Waters shall have available standby power facilities unless it can be shown that a proposed discharge can be interrupted for an extended period with no threat to the water quality of Special Protection Waters. Existing facilities must comply with this requirement upon their next permit renewal under the delegated national pollutant discharge elimination system (NPDES) permit program.

2) All wastewater treatment facilities discharging to Special Protection Waters that are not staffed 24 hours every day shall have a remote alarm that will continuously monitor plant operations whenever the plant is not staffed. The alarm system will be designed to alert someone available with authority and knowledge to take appropriate action. Existing facilities must comply with this requirement upon their next permit renewal under the delegated NPDES program.

3) All new wastewater treatment facilities discharging to Outstanding Basin Waters shall not have visual discharge plumes. Existing facilities must comply with this requirement upon their next permit renewal under the delegated NPDES program.

4) All new wastewater treatment facilities discharging to Special Protection Waters shall prepare and implement an emergency management plan following the guidance provided in the Water Pollution Control Federation's *Manual of Practice SM-8, Emergency Planning for Municipal Wastewater Facilities*, the U.S. EPA's *Design Criteria for Mechanical, Electric and Fluid System and Component Reliability* or other suitable manuals. Emergency management plans shall include an emergency notification procedure covering all affected downstream users. Existing facilities must comply with this requirement upon their next permit renewal under the delegated NPDES program.

5) The minimum level of wastewater treatment for the following categories of projects will be "Best Demonstrable Technology" as defined below: all new wastewater treatment facilities and all projects involving substantial alterations or additions to existing wastewater treatment facilities when the new or expanding facility discharges directly to Outstanding Basin Waters or Significant Resource Waters. Equivalent effluent criteria for industrial facilities and seasonal limits, if any, will be developed on a case-by-case basis. The following 30-day average effluent criteria define Best Demonstrable Technology*:

5-day CBOD:	10 mg/l or less
Dissolved oxygen:	6.0 mg/l or greater
Total suspended solids:	10 mg/l or less
Ammonia-nitrogen:	1.5 mg/l or less
Total nitrogen:	10.0 mg/l or less
Total phosphorus:	2.0 mg/l or less
Fecal coliform:	50/100 ml or less

* The effluent criteria that define Best Demonstrable Technology (BDT) were established by these Regulations in 1992 when DRBC originally promulgated the Special Protection Waters regulations for point source discharges. Although treatment technologies have advanced since that year,

these "BDT" criteria have been retained for the limited purposes of the SPW program. BDT as defined herein may be superseded, however, by applicable federal, state or DRBC criteria that are more stringent.

6) Best demonstrable technology for disinfection shall be ultraviolet light disinfection or an equivalent disinfection process that results in no harm to aquatic life, does not produce toxic chemical residuals, and results in effective bacterial and viral destruction.

7) For wastewater treatment facility discharge projects that satisfy applicable requirements of Sections 3.10.3 A.2.b. through d. above, the Commission may approve effluent trading on a voluntary basis between point sources within the same watershed or between the same Interstate or Boundary Control Points to achieve no measurable change to existing water quality. Applicants seeking the Commission's approval for a trade must demonstrate equivalent load and pollutant reductions and the ability (through contracts, docket conditions, NPDES effluent limits or other legal instruments) to ensure continuous achievement of the required reductions for a term of not less than five (5) years or the time required for the point source(s) to install the treatment needed to demonstrate no measurable change to Existing Water Quality, whichever term is longer. States will be encouraged to incorporate appropriate conditions in the next NPDES permits issued to the trading dischargers.

8) For wastewater treatment facilities within the drainage area to Special Protection Waters, the actual loads and design flows included in a NPDES permit or docket effective at the time of Special Protection Waters designation ("SPW designation") may continue without triggering the additional treatment requirements and alternatives analyses required by these regulations. However, when Substantial Alterations or Additions as defined herein are proposed, although the actual discharge at the time of SPW designation remains exempt from additional requirements, the proposed expansion cannot be approved until (a) the applicant demonstrates that it has evaluated all non-discharge load reduction alternatives for all or a portion of the incremental load and is unable to implement these alternatives because of technical or financial infeasibility (for discharges directly to Outstanding Basin Waters (OBW) and Significant Resource Waters (SRW)); (b) the applicant demonstrates that it has evaluated all natural wastewater treatment system alternatives for all or a portion of the incremental load and is unable to implement these alternatives because of technical or financial infeasibility (for discharges directly to OBW and SRW and for tributary discharges); (c) the Commission has determined that the project is demonstrably in the public interest as defined herein (for discharges directly to SRW); (d) the minimum level of treatment to be provided for the incremental discharge is Best Demonstrable Technology as defined herein (for discharges directly to OBW and SRW); and (e) the applicant demonstrates that the project will cause no measurable change to Existing Water Quality as defined herein (for discharges directly to OBW and SRW and for tributary discharges).

9) For wastewater treatment facility projects subject to the no measurable change requirement, the demonstration of no measurable change to existing water quality shall be satisfied if the applicant demonstrates that the new or incremental increase in the facility's flow or load will cause no measurable change at the relevant water quality control point for the parameters denoted by asterisks in Tables 1 and 2 of this section: ammonia (NH_3 N); dissolved oxygen (DO); fecal coliform (FC); nitrate (NO_3 N) or nitrite + nitrate (NO_2 N + NO_3 N); total nitrogen (TN) or total Kjeldahl nitrogen (TKN); total phosphorus (TP); total suspended solids (TSS); and biological oxygen demand (BOD) (Table 1 only). In making the demonstration required in the preceding sentence the applicant shall use a DRBC-approved model of the tributary or main stem watershed if available. Where a DRBC-approved model is not available, the applicant shall use other methodologies submitted to and approved in advance by the Commission to estimate cumulative effect at the applicable control point.

e. Control of Non-Point Sources

1) Projects subject to review under Section 3.8 of the Compact that are located in the drainage area of Special Protection Waters must submit for approval a Non-Point Source Pollution Control Plan that controls the new or increased non-point source loads generated within the portion of the project's service area which is also located within the drainage area of Special Protection Waters.

The plan will document which Best Management Practices described in handbooks, manuals and other documents prepared by the applicable state environmental agency that the project sponsor will use to control, to the extent possible, the non-point source loads from the project.

In approving the plan, the Commission may consider, but not require, tradeoffs, that the project sponsor might propose, between the reduction of potential new non-point source loads and (a) equivalent reductions in existing non-point source loads; (b) equivalent point source loads; and c) equivalent non-point source loads from outside the affected service area. Applicants desiring Commission approval of tradeoff strategies must provide information concerning the amount of non-point source loads to be reduced through an equivalent tradeoff process and, where necessary, the enforceable mechanisms and/or agreements required to implement the tradeoffs. Where tradeoffs have been approved, control measures for existing non-point sources must be substantially in-place prior to project operation.

The Executive Director may, upon agreement with the state, delegate review and approval responsibilities under this section to the appropriate state environmental agency.

Exceptions to this policy are:

(a) Public authorities, other special purpose districts, and private corporations that do not have the legal authority to implement non-point source controls in their new or expanded service areas. Such entities are subject, however, to the requirement set forth in paragraph 3.10.3 A.2.e.2) below, that no new connection may be approved unless the area(s) served is (are) regulated by a non-point source pollution control plan approved by the Commission.

(b) The requirement for service area non-point source control plans is automatically satisfied if the project service area is part of a watershed non-point source management plan that has been adopted into the Commission's Comprehensive Plan and is being implemented.

(c) Projects located above major surface water impoundments listed in Section 3.10.3.A.2.g.5) where time of travel and relevant hydraulic and limnological factors preclude a direct impact on Special Protection Waters.

(d) Projects located in municipalities that have adopted and are actively implementing non-point source/stormwater control ordinances that have been reviewed and approved by the Commission.

(e) Projects located in watersheds where the applicable state environmental agency, county government, and local municipalities are participating in the development of a watershed plan being prepared under the auspices of these regulations, the federal Clean Water Act, or state initiatives.

2) Approval of a new or expanded water withdrawal and/or wastewater discharge project will be subject to the condition that any new connection to the project system only serve an area(s) regulated by a non-point source pollution control plan which has been approved by the Commission.

3) Within two years after the adoption of Special Protection Waters non-point source control regulations, the Commission shall, after substantial consultation with local, county, state and federal agencies and the general public, publish a report presenting its methodology for prioritizing watersheds in the Special Protection Waters drainage area including alternatives, if any; a preliminary listing of priority watersheds in the drainage area; and a recommended plan of study for the development of watershed-specific management plans. For waters classified as Special Protection Waters after December 1992, the watershed prioritization process will be completed within two years after the Special Protection Waters are classified.

Watershed priorities will be determined from a comparative analysis of each watershed's location and potential, future impact on existing water quality at designated Boundary and Interstate Control Points. In determining priorities, the Commission will consider:

(a) the physical characteristics of the watershed including slopes, soils, existing land use and land cover, drainage characteristics, and others;

(b) the status of existing water quality and trends, if any, of the watershed as measured at its Boundary Control Point;

(c) the anticipated mass loadings of new non-point sources;

(d) the watershed management and planning priorities of applicable local,

(e) the current status of local land use/non-point source controls in the watershed;

(f) the stormwater permitting activity in the NPDES permitting program; and

(g) other natural and anthropogenic factors.

4) Once the public has been given an opportunity to comment, the Commission will adopt a list of priority watersheds. This listing will be reviewed and modified as necessary on a two year basis after adoption.

5) Within five years after adopting a list of priority watersheds draining to Special Protection Waters, the Commission shall develop, or encourage the development of, watershed non-point source management plans for each priority watershed unless new circumstances result in deferring plan completion. Watershed non-point source management plans will focus on non-point source loadings, but will consider total loads including both point and non-point sources and their interrelationship where necessary.

During plan development, the Commission will seek technical assistance from the applicable state environmental agency and all other applicable federal, state, county, and local governmental units; and will consider direct delegation of plan development (with concurrence of the state environmental agency) to any county or other applicable governmental entity desiring to perform the watershed planning activities on behalf of, or instead of, the Commission. Where more than one political unit shares a watershed, joint plan development arrangements between the Commission and delegated agencies will be developed.

6) Watershed management plans developed by the Commission, or approved by the Commission will be incorporated into the Commission's Comprehensive Plan in accordance with the *Rules of Practice and Procedure*.

7) The Commission shall encourage the voluntary development of watershed management plans for tributary watersheds entering Special Protection Waters and local non-point source regulatory programs that conform to the goals and objectives of the Special Protection Waters regulations as promulgated in Sections 3.10.3A.2. Within the limits of its resources, the Commission will provide technical assistance, a clearinghouse for non-point sources information, regulatory authority, inter-agency coordination, and other services to local and other governmental units desiring to develop and implement stormwater and non-point source watershed plans and local regulatory programs.

8) The Commission shall encourage the submission of watershed management plans prepared voluntarily and independently from these regulations for consideration of inclusion into the Commission's Comprehensive Plan.

f. Policies Regarding Inter-Government Responsibilities

1) Inter-relationship of State and Commission Responsibilities.

The applicable state environmental agency shall assure to the extent possible that existing water quality in Special Protection Waters is not measurably changed by pollution discharged into the intrastate tributary watersheds within its jurisdiction. For water quality management purposes, the state environmental agency and the Commission will jointly establish Boundary Control Points as described in Section 3.10.3.A.2a.12) and g.4).

In performing this responsibility, the state environmental agency shall require that all new or expanding wastewater treatment facilities and existing wastewater treatment plants applying for a discharge permit or permit renewal under the delegated NPDES program to comply with the policies as prescribed in Section 3.10.3.A.2.d. unless it can be demonstrated, after consultation with the Commission, that these requirements are not necessary for the protection of existing water quality in the Special Protection Waters due to distance from Special Protection Waters, time of travel, the existence of water storage impoundments, the waste assimilation characteristics of the receiving stream, and other relevant hydrological and limnological factors.

The Commission shall, to the extent practicable and necessary, coordinate and oversee all Special Protection Waters activities and assist the efforts of each state environmental agency to control pollutants originating from intrastate tributary watersheds. The Commission shall determine pollution control requirements for discharges to Special Protection Waters; for non-point sources draining directly into Special Protection Waters; and total non-

point source loads emanating from intrastate tributary watersheds as measured at Boundary Control Points.

g. Classified Special Protection Waters

1) The following stream reaches are classified as Outstanding Basin Waters:

(a) The Upper Delaware Scenic and Recreational River (Delaware River between River Mile 330.7 and 258.4);

(b) Those portions of intrastate tributaries located within the established boundary of the Upper Delaware Scenic and Recreational River Corridor;

(c) The Middle Delaware Scenic and Recreational River (Delaware River between River Miles 250.1 and 209.5);

(d) Those portions of tributaries located within the established boundary of the Delaware Water Gap National Recreation Area.

2) The following stream reaches are classified as Significant Resource Waters:

(a) The Delaware River between River Miles 258.4 (the downstream boundary of the Upper Delaware Scenic and Recreational River) and 250.1 (the upstream boundary of the Delaware Water Gap National Recreation Area);

(b) The Lower Delaware River between River Miles 209.5 (the downstream boundary of the Delaware Water Gap National Recreation Area) and 134.34 (the Calhoun Street Bridge near the Head of Tide at Trenton, NJ).

3) Definitions of Existing Water Quality for waters classified in paragraphs 1) and 2) above are presented in Part A of Table 1 for the Upper Delaware Scenic & Recreational River and Part B of Table 1 for the reach from Millrift, Pa. to the Delaware Water Gap, including the Middle Delaware Scenic and Recreational River; and in Table 2 for the reach between the Delaware Water Gap and Trenton, N.J.

4) The location**s** of Boundary and Interstate Control Points are described in Part C of Table 1 for the reach between Hancock, N.Y. and the Delaware Water Gap and in Table 2 for the reach between the Delaware Water Gap and Trenton, N.J.

5) Major surface water impoundments referenced in Section 3.10.3A.2.e.1)c.) are the following:

(a) Cannonsville Reservoir (New York State)

(b) Pepacton Reservoir (New York State)

(c) Neversink Reservoir (New York State)

(d) Lake Wallenpaupack (Pennsylvania)

(e) Mongaup System (New York State).

TABLE 1. DEFINITION OF EXISTING WATER QUALITY IN THE DELAWARE RIVER BETWEEN HANCOCK, NEW YORK AND THE DELAWARE WATER GAP[1]

PART A: UPPER DELAWARE SCENIC & RECREATIONAL RIVER[2]

PARAMETER	MEAN	95 PERCENT CONFIDENCE LIMITS OF MEAN	10TH AND 90TH PERCENTILES	ADDITIONAL
Dissolved oxygen* (mg/l)	9.0	8.9 to 9.2	7.5 and 11.0	Never below 6.0 mg/l (night time); May-Sept; reachwide
BOD_5* (mg/l)	0.67	0.6 to 0.8	0.3 and 1.9	May-Sept; reachwide
Conductivity (umhos/cm)	68	66.6 to 69.3	52 and 88	non-seasonal; reachwide
Fecal coliform* (colonies/100 ml)	24	21 to 28	4 and 200	May-Sept; reachwide
Total suspended* solids (mg/l)	4.0	2.9 to 5.6	2.0 and 16	non-seasonal; reachwide
Total phosphorus* (ug/l)	29	27 to 31	18 and 50	non-seasonal; reachwide
Ammonia + ammonium* (ug/l)	15	13 to 18	10 and 50	as nitrogen; May-Sept; reachwide
Ammonia + ammonium* (ug/l)	22	20 to 25	10 and 60	as nitrogen; non-seasonal; reachwide
Total kjeldahl nitrogen* (ug/l)	202	172 to 237	100 and 530	May-Sept; reachwide
Nitrite + nitrate nitrogen* (ug/l)	293	256 to 336	123 and 492	May-Sept; reachwide
Hardness (mg/l as $CaCo_3$)	21	19.9 to 22.2	17.0 and 27.0	non-seasonal; reachwide
Biocriteria: Shannon-Wiener	3.6	3.4 to 3.8	2.7 and 4.3	May-Sept; reachwide
Biocriteria: Equitability	0.8	0.7 to 0.9	0.5 and 1.1	May-Sept; reachwide
Biocriteria: EPT	15.5	13.8 to 17.2	8.0 and 24.0	May-Sept; reachwide

* Wastewater treatment facility projects subject to the no measurable change requirement must demonstrate no measurable change to EWQ for this parameter. Implementation guidance should be consulted.

[1] The numeric values for Existing Water Quality set forth in Parts A, B and C of Table 1 were developed through field measurements and laboratory analysis of data collected over a time period determined by the Commission to adequately reflect the natural range of the hydraulic and climatologic factors that affect water quality. Existing water quality is defined in terms of (a) an annual or seasonal mean of the available water quality data, (b) two-tailed upper and lower 95 percent confidence limits around the mean, and (c) the 10th and 90th percentiles of the data set from which the mean was calculated.

PART B: DELAWARE RIVER FROM MILLRIFT THROUGH THE DELAWARE WATER GAP INCLUDING THE MIDDLE DELAWARE SCENIC AND RECREATIONAL RIVER[2]				
PARAMETER	MEAN	95 PERCENT CONFIDENCE LIMITS OF MEAN	10TH AND 90TH PERCENTILES	ADDITIONAL
Dissolved oxygen* (mg/l)	9.2	9.1 to 9.4	7.5 and 12.8	Never below 6.0 mg/l (night time); non-seasonal; reachwide
BOD_5* (mg/l)	0.63	0.6 to 0.7	0.3 and 1.6	May-Sept; reachwide
Conductivity (umhos/cm)	76	75 to 77	60 and 95	non-seasonal; reachwide
Fecal coliform* (colonies/100 ml)	47	42 to 53	9 and 272	May-Sept; reachwide
Total suspended solids* (mg/l)	3.4	3.0 to 3.8	1.0 and 12.0	non-seasonal; reachwide
Total phosphorus* (ug/l)	27	25 to 29	14 and 40	May-Sept; reachwide
Ammonia + ammonium* (ug/l)	23	21 to 26	10 and 50	May-Sept; reachwide
Ammonia + ammonium* (ug/l)	41	37 to 44	10 and 187	non-seasonal; reachwide
Total kjeldahl nitrogen* (ug/l)	293	276 to 312	101 and 860	non-seasonal; reachwide
Total kjeldahl nitrogen* (ug/l)	206	189 to 225	100 and 490	May-Sept; reachwide
Nitrite + nitrate nitrogen* (ug/l)	246	233 to 260	100 and 490	non-seasonal; reachwide
Nitrite + nitrate nitrogen* (ug/l)	206	191 to 223	92 and 392	May-Sept; reachwide
Hardness (mg/l as $CaCo_3$)	24	24 to 25	20 and 30	non-seasonal; reachwide
Biocriteria: Shannon-Wiener	3.6	3.4 to 3.7	3.2 and 4.1	May-Sept; reachwide
Biocriteria: Equitability	0.8	0.7 to 0.9	0.5 and 1.1	May-Sept; reachwide
Biocriteria: EPT	13.9	12.8 to 15.1	8.0 and 20.0	May-Sept; reachwide

* Wastewater treatment facility projects subject to the no measurable change requirement must demonstrate no measurable change to EWQ for this parameter. Implementation guidance should be consulted.

[2] The definitions of Existing Water Quality presented in Parts A and B of this table were developed by performing parametric statistical analyses using logarithmic transformation of available water quality data to derive normality. The numbers represent the anti-log of the statistical results and, thus, will differ from numbers generated by using non-transformed data. Means derived from log transformations, for example, will be lower than means derived from non-transformed data. The 95 percent confidence limits were derived from a two-tailed distribution. Biocriteria were not developed using log-transformed data. The three indices used to develop the biocriteria were derived from specialized transformations of the original data, resulting in values that are normally distributed.

PART C: BOUNDARY AND INTERSTATE CONTROL POINTS FOR THE DELAWARE RIVER BETWEEN HANCOCK, N.Y. AND THE DELAWARE WATER GAP		
BOUNDARY	CONTROL POINTS	MAP REFERENCE
Northern Boundary-UDSRR	Delaware River Mile 330.7	DRBC River Mile maps & UDSRR River Management Plan
Eastern Boundary-UDSRR	New York streams in Delaware & Sullivan Counties: Blue Mill; Humphries; Abe Lord; Bouchoux; Pea; Hoolihan; Basket; Hankins; Callicoon; Mitchell Pond; Tenmile; Grassy Swamp; Narrow Falls; York Lake; Beaver Brook; Halfway; Mill; Fish Cabin; Mongaup; Shingle Kill	UDSRR River Management PLAN
Western Boundary-UDSRR	Pennsylvania streams in Wayne & Pike Counties: Shingle Hollow; Stockport; Factory; Equinunk; Weston; Little Equinunk; Cooley; Hollister; Schoolhouse; Beaverdam; Calkins; Peggy Run; Masthope; Westcolang; Lackawaxen; Verga Pond; Panther; Shohola; Twin Lakes; Pond Eddy; Bush Kill	UDSRR River Management PLAN
Northern Boundary-Eight mile reach between UDSRR and MDSRR	Delaware River Mile 258.4 (railroad crossing at Millrift, Pennsylvania)	DRBC River Mile maps; UDSRR River Management Plan
Eastern & Western Boundaries-Eight mile reach between UDSRR & MDSRR	Confluence of New York streams (Orange County); Pennsylvania streams (Pike County); and New Jersey streams (Sussex County) with the Delaware River: Sparrowbush; Neversink; Cummins	U.S.G.S. Port Jervis South & North topographic maps
Northern Boundary-DWGNRA	Delaware River Mile 250.1 near the confluence of Cummins Creek	DRBC River Mile map & DWGNRA Tract Map
Eastern Boundary-DWGNRA	New Jersey streams in Sussex County: Shimers; White; Big Flatbrook; Little Flatbrook	DWGNRA Tract Maps
Western Boundary-DWGNRA	Pennsylvania streams in Pike & Monroe Counties: Crawford Branch; Vandermark; Sawkill; Raymondskill; Conashaugh; Dry; Adams; Dingmans; Hornbeck; Deckers; Alicias; Brodhead-Hellers; Hellers; Toms; Denmark; Little Bushkill; Bushkill; Shawnee; Brodhead; Cherry; Caledonia; Slateford	DWGNRA Tract Maps
INTERSTATE	CONTROL POINTS (General Locations)	RIVER MILE
Upper Delaware Scenic & Recreational River	Buckingham Access Area Lordville Bridge Kellams Bridge Callicoon Access Areas Damacus/Cochecton Skinners Falls Narrowsburg area Ten Mile River Access Area Lackawaxen Access Area Barryville/Shohola Bridge Pond Eddy Bridge	325 322 313 303 298 295 290 284 277 273 266
Delaware River between the UDSRR & the DWGNRA	Millrift Matamoras/Port Jervis Northern boundary-DWGNRA	258 254 250

INTERSTATE	CONTROL POINTS (General Locations)	RIVER MILE
Delaware Water Gap National Recreation Area	Milford Beach	247
	Dingmans Access Area	239
	Eshback Access Area	232
	Bushkill Access Area	228
	Depew Access Area	221
	Smithfield Beach	218
	Worthington S.F. Access	215
	Kittatinny Visitor Center	211
	Upstream end of Arrow Island	210

TABLE 2A. INDEX to Lower Delaware River CONTROL POINTS, by River Mile Location.

EWQ Table	Tributary or Delaware River Site	Latitude	Longitude	River Mile	Control Point (ICP = Interstate CP BCP = Boundary CP)	Drainage Area (square miles)
Table 2C	Portland ICP	40.784722	-75.184722	207.50	Portland ICP	4,165
	Jacoby Creek (PA)			207.48	Belvidere ICP	6.45
Table 2D	Paulins Kill (NJ)	40.920833	-75.088333	207.16-0.07	Paulins Kill BCP	177.0
	Delawanna Creek (NJ)			205.20	Belvidere ICP	4.49
	Allegheny Creek (PA)			199.76	Belvidere ICP	9.06
Table 2E	Belvidere ICP	40.828889	-75.085000	197.84	Belvidere ICP	4,378
Table 2F	Pequest River (NJ)	40.834167	-75.061111	197.80-1.48	Pequest River BCP	157.0
	Pophandusing Brook (NJ)			197.66	Easton ICP	5.62
	Oughoughton Creek (PA)			194.32	Easton ICP	11.9
	Buckhorn Creek (NJ)			192.90	Easton ICP	11.8
Table 2G	Martins Creek (PA)	40.784722	-75.184722	190.65-0.96	Martins Creek BCP	44.5
	Mud Run (PA)			189.10	Easton BCP	6.00
Table 2H	Bushkill Creek (PA)	40.695278	-75.206111	184.10-0.05	Bushkill Creek BCP	80.0
Table 2I	Easton ICP	40.691111	-75.204167	183.82	Easton ICP	4,717
Table 2J	Lehigh River (PA)	40.691111	-75.204722	183.66-0.27	Lehigh River BCP	1,368
	Lopatcong Creek (NJ)			182.00	Riegelsville ICP	14.7
Table 2K	Pohatcong Creek (NJ)	40.624722	-75.186111	177.36-0.35	Pohatcong Creek BCP	57.1
	Fry's Run (PA)			176.60	Riegelsville ICP	6.14
Table 2L	Riegelsville ICP	40.593889	-75.191111	174.80	Riegelsville ICP	6,172
Table 2M	Musconetcong River (NJ)	40.592500	-75.186667	174.60-0.15	Musconetcong BCP	156.0
Table 2N	Cooks Creek (PA)	40.586667	-75.211944	173.70-1.06	Cooks Creek BCP	29.5
	Gallows Run (PA)			171.80	Milford ICP	8.72
Table 2O	Milford ICP	40.566389	-75.098889	167.70	Milford ICP	6,381
	Hakihokake Creek (NJ)			167.20	Bulls Island ICP	17.5
	Harihokake Creek (NJ)			165.70	Bulls Island ICP	9.85
Table 2P	Nishisakawick Creek (NJ)	40.526389	-75.060278	164.10-0.35	Nishisakawick BCP	11.1
	Little Nishisakawick Creek (NJ)			164.00	Bulls Island ICP	3.51
	Copper Creek (NJ)			162.90	Bulls Island ICP	3.27
Table 2Q	Tinicum Creek (PA)	40.485278	-75.072500	161.60-0.24	Tinicum Creek BCP	24.0
	Warford Creek (NJ)			160.50	Bulls Island ICP	1.43
	Smithtown Creek (PA)			159.90	Bulls Island ICP	1.38
	Warsaw Creek (NJ)			159.50	Bulls Island ICP	1.60

EWQ Table	Tributary or Delaware River Site	Latitude	Longitude	River Mile	Control Point (ICP = Interstate CP BCP = Boundary CP)	Drainage Area (square miles)
Table 2R	Tohickon Creek (PA)	40.423056	-75.066667	157.00-0.19	Tohickon Creek BCP	112.0
	Hickory Creek (PA)			156.98	Bulls Island ICP	1.50
Table 2S	Paunacussing Creek (PA)	40.407500	-75.041667	155.90-0.12	Paunacussing BCP	7.87
Table 2T	Bulls Island ICP	40.407500	-75.037778	155.40	Bulls Island ICP	6,598
	Cuttalossa Creek (PA)			154.50	Lambertville ICP	3.00
Table 2U	Lockatong Creek (NJ)	40.415833	-75.018056	154.00-0.75	Lockatong Creek BCP	23.2
Table 2V	Wickecheoke Creek (NJ)	40.411667	-74.986944	152.51-0.21	Wickecheoke BCP	26.6
	Primrose Creek (PA)			150.50	Lambertville ICP	3.00
	Alexauken Creek (NJ)			149.50	Lambertville ICP	15.0
	Rabbit Run (PA)			149.45	Lambertville ICP	0.42
Table 2W	Lambertville ICP	40.365833	-74.949167	148.70	Lambertville ICP	6,680
	Swan Creek (NJ)			148.60	Wash. Crossing ICP	3.28
	Aquetong Creek (PA)			148.50	Wash. Crossing ICP	8.01
	Dark Hollow Run (PA)			148.20	Wash. Crossing ICP	0.71
Table 2X	Pidcock Creek (PA)	40.32907	-74.94566	146.30-0.90	Pidcock Creek BCP	12.7
	Moore Creek (NJ)			145.20	Wash. Crossing ICP	10.2
	Jericho Creek (PA)			144.20	Wash. Crossing ICP	9.63
	Fiddlers Creek (NJ)			143.20	Wash. Crossing ICP	2.02
Table 2Y	Washington Crossing ICP	40.295278	-74.868889	141.80	Wash. Crossing ICP	6,735
	Houghs Creek (PA)			140.60	Trenton ICP	5.19
	Jacobs Creek (NJ)			140.46	Trenton ICP	13.3
	Dyers Creek (PA)			139.80	Trenton ICP	1.20
	Reeds Run (NJ)			138.50	Trenton ICP	1.50
	Buck Creek (PA)			138.00	Trenton ICP	6.99
	Gold Run (NJ)			137.25	Trenton ICP	1.66
Table 2Z	Trenton ICP	40.219722	-74.778333	134.34	Trenton ICP	6,780

TABLE 2B. Alphabetical INDEX to Lower Delaware River CONTROL POINTS.

EWQ Table	Tributary or Delaware River Site	Latitude	Longitude	River Mile	Control Point (ICP = Interstate CP BCP = Boundary CP)	Drainage Area (square miles)
	Alexauken Creek (NJ)			149.50	Lambertville ICP	15.0
	Allegheny Creek (PA)			199.76	Belvidere ICP	9.06
	Aquetong Creek (PA)			148.50	Wash. Crossing ICP	8.01
Table 2E	Belvidere ICP	40.828889	-75.085000	197.84	Belvidere ICP	4,378
	Buck Creek (PA)			138.00	Trenton ICP	6.99
	Buckhorn Creek (NJ)			192.90	Easton ICP	11.8
Table 2T	Bulls Island ICP	40.407500	-75.037778	155.40	Bulls Island ICP	6,598
Table 2H	Bushkill Creek (PA)	40.695278	-75.206111	184.10-0.05	Bushkill Creek BCP	80.0
Table 2N	Cooks Creek (PA)	40.586667	-75.211944	173.70-1.06	Cooks Creek BCP	29.5
	Copper Creek (NJ)			162.90	Bulls Island ICP	3.27
	Cuttalossa Creek (PA)			154.50	Lambertville ICP	3.00
	Dark Hollow Run (PA)			148.20	Wash. Crossing ICP	0.71
	Delawanna Creek (NJ)			205.20	Belvidere ICP	4.49
	Dyers Creek (PA)			139.80	Trenton ICP	1.20
Table 2I	Easton ICP	40.691111	-75.204167	183.82	Easton ICP	4,717
	Fiddlers Creek (NJ)			143.20	Wash. Crossing ICP	2.02
	Fry's Run (PA)			176.60	Riegelsville ICP	6.14
	Gallows Run (PA)			171.80	Milford ICP	8.72
	Gold Run (NJ)			137.25	Trenton ICP	1.66
	Hakihokake Creek (NJ)			167.20	Bulls Island ICP	17.5
	Harihokake Creek (NJ)			165.70	Bulls Island ICP	9.85
	Hickory Creek (PA)			156.98	Bulls Island ICP	1.50
	Houghs Creek (PA)			140.60	Trenton ICP	5.19
	Jacobs Creek (NJ)			140.46	Trenton ICP	13.3
	Jacoby Creek (PA)			207.48	Belvidere ICP	6.45
	Jericho Creek (PA)			144.20	Wash. Crossing ICP	9.63
Table 2W	Lambertville ICP	40.365833	-74.949167	148.70	Lambertville ICP	6,680
Table 2J	Lehigh River (PA)	40.691111	-75.204722	183.66-0.27	Lehigh River BCP	1,368
	Little Nishisakawick Creek (NJ)			164.00	Bulls Island ICP	3.51
Table 2U	Lockatong Creek (NJ)	40.415833	-75.018056	154.00-0.75	Lockatong Creek BCP	23.2
	Lopatcong Creek (NJ)			182.00	Riegelsville ICP	14.7
Table 2G	Martins Creek (PA)	40.784722	-75.184722	190.65-0.96	Martins Creek BCP	44.5
Table 2O	Milford ICP	40.566389	-75.098889	167.70	Milford ICP	6,381

EWQ Table	Tributary or Delaware River Site	Latitude	Longitude	River Mile	Control Point (ICP = Interstate CP BCP = Boundary CP)	Drainage Area (square miles)
	Moore Creek (NJ)			145.20	Wash. Crossing ICP	10.2
	Mud Run (PA)			189.10	Easton BCP	6.00
Table 2M	Musconetcong River (NJ)	40.592500	-75.186667	174.60-0.15	Musconetcong BCP	156.0
Table 2P	Nishisakawick Creek (NJ)	40.526389	-75.060278	164.10-0.35	Nishisakawick BCP	11.1
	Oughoughton Creek (PA)			194.32	Easton ICP	11.9
Table 2D	Paulins Kill (NJ)	40.920833	-75.088333	207.16-0.07	Paulins Kill BCP	177.0
Table 2S	Paunacussing Creek (PA)	40.407500	-75.041667	155.90-0.12	Paunacussing BCP	7.87
Table 2F	Pequest River (NJ)	40.834167	-75.061111	197.80-1.48	Pequest River BCP	157.0
Table 2X	Pidcock Creek (PA)	40.32907	-74.94566	146.30-0.90	Pidcock Creek BCP	12.7
Table 2K	Pohatcong Creek (NJ)	40.624722	-75.186111	177.36-0.35	Pohatcong Creek BCP	57.1
	Pophandusing Brook (NJ)			197.66	Easton ICP	5.62
Table 2C	Portland ICP	40.784722	-75.184722	207.50	Portland ICP	4,165
	Primrose Creek (PA)			150.50	Lambertville ICP	3.00
	Rabbit Run (PA)			149.45	Lambertville ICP	0.42
	Reeds Run (NJ)			138.50	Trenton ICP	1.50
Table 2L	Riegelsville ICP	40.593889	-75.191111	174.80	Riegelsville ICP	6,172
	Smithtown Creek (PA)			159.90	Bulls Island ICP	1.38
	Swan Creek (NJ)			148.60	Wash. Crossing ICP	3.28
Table 2Q	Tinicum Creek (PA)	40.485278	-75.072500	161.60-0.24	Tinicum Creek BCP	24.0
Table 2R	Tohickon Creek (PA)	40.423056	-75.066667	157.00-0.19	Tohickon Creek BCP	112.0
Table 2Z	Trenton ICP	40.219722	-74.778333	134.34	Trenton ICP	6,780
	Warford Creek (NJ)			160.50	Bulls Island ICP	1.43
	Warsaw Creek (NJ)			159.50	Bulls Island ICP	1.60
Table 2Y	Washington Crossing ICP	40.295278	-74.868889	141.80	Wash. Crossing ICP	6,735
Table 2V	Wickecheoke Creek (NJ)	40.411667	-74.986944	152.51-0.21	Wickecheoke BCP	26.6

TABLE 2C. Definition of Existing Water Quality: Portland ICP

Delaware River at Portland-Columbia Pedestrian Bridge, Pennsylvania/New Jersey, River Mile 207.50

Parameter (Y)	Definition of Existing Water Quality			
	Median	Lower 95%CI	Upper 95%CI	Flow Relationships Site specific regression equation.
Ammonia NH3-N (mg/l) *	<0.05	<0.05	<0.05	
Chloride (mg/l)	12	11	13	Y = -0.00019515 Q + 13.325
Chlorophyll a (mg/m^3)	2.13	1.30	2.70	
Dissolved Oxygen (mg/l) mid-day*	8.70	8.38	9.06	
Dissolved Oxygen Saturation (%)	97%	95%	99%	
E. coli (colonies/100 ml)	16	8	25	Y = antilog (0.00007074 Q + 0.6659)
Enterococcus (colonies/100 ml)	20	12	60	
Fecal coliform (colonies/100 ml) *	20	12	36	Y = antilog (0.00006854 Q + 0.955)
Nitrate NO3-N (mg/l) *	0.68	0.48	0.74	
Orthophosphate (mg/l)	0.01	0.005	0.01	
pH	7.40	7.29	7.58	
Specific Conductance (umhos/cm)	97	88	104	Y = -0.00151181 Q + 106.6
Total Dissolved Solids (mg/l)	83	74	91	
Total Kjeldahl Nitrogen (mg/l)	0.29	0.19	0.40	
Total Nitrogen (mg/l) *	0.86	0.74	1.05	
Total Phosphorus (mg/l) *	0.04	0.03	0.05	
Total Suspended Solids (mg/l) *	3.0	2.0	4.0	Y = 0.00122363 Q - 2.8618
Turbidity (NTU)	1.6	1.1	2.8	Y = antilog (0.00005157 Q – 0.1356)
Alkalinity (mg/l)	20	16	22	Y = -0.00046984 Q + 23.547
Hardness (mg/l)	30	28	31	

EWQ values represent data collected twice per month from May through September 2000-2004. Total number of samples varied by parameter, however, due to design and sampling constraints.

* Wastewater treatment facility projects subject to the no measurable change requirement must demonstrate no measurable change to EWQ for this parameter. Implementation guidance should be consulted.

** EWQ value does not meet DRBC water quality criterion, state water quality criterion or both.

TABLE 2D. Definition of Existing Water Quality: Paulins Kill BCP

Paulins Kill, New Jersey, River Mile 207.16 – 0.07
Boundary Control Point is located at Route 46 bridge.

Parameter (Y)	Definition of Existing Water Quality			
	Median	Lower 95%CI	Upper 95%CI	Flow Relationships Site specific regression equation.
Ammonia NH3-N (mg/l) *	0.06	0.04	0.08	
Chloride (mg/l)	41.9	36	48	Y = -17.4858 (log Q) + 79.5946
Chlorophyll a (mg/m^3)	3.3	2.7	5.3	
Dissolved Oxygen (mg/l) mid-day *	7.95	7.31	8.39	
Dissolved Oxygen Saturation (%)	88%	83%	91%	
E. coli (colonies/100 ml)	75	40	140	Y = antilog (0.7993 (log Q) + 0.157)
Enterococcus (colonies/100 ml)	120 **	84 **	180 **	
Fecal coliform (colonies/100 ml) *	110	84	190	Y = antilog (0.967 (log Q) – 0.0255)
Nitrate NO3-N (mg/l) *	0.75	0.70	0.86	
Orthophosphate (mg/l)	0.02	0.01	0.02	
Ph	7.79	7.70	7.87	
Specific Conductance (umhos/cm)	416	380	453	Y = -141.2449 (log Q) + 715.5098
Total Dissolved Solids (mg/l)	280	250	300	Y = -75.186 (log Q) + 426.1389
Total Kjeldahl Nitrogen (mg/l)	0.39	0.29	0.53	
Total Nitrogen (mg/l) *	1.13	0.99	1.28	
Total Phosphorus (mg/l) *	0.05	0.05	0.06	
Total Suspended Solids (mg/l) *	7.0	5.0	8.0	
Turbidity (NTU)	4.0	3.0	4.8	Y = antilog (0.4057 (log Q) – 0.269)
Alkalinity (mg/l)	125	110	140	Y = -49.5 (log Q) + 229.2
Hardness (mg/l)	158	140	176	Y = -56.8657 (log Q) + 280.7477

EWQ values represent data collected twice per month from May through September 2000-2004. Total number of samples varied by parameter, however, due to design and sampling constraints.

* Wastewater treatment facility projects subject to the no measurable change requirement must demonstrate no measurable change to EWQ for this parameter. Implementation guidance should be consulted.

** EWQ value does not meet DRBC water quality criterion, state water quality criterion or both.

TABLE 2E. Definition of Existing Water Quality: Belvidere ICP

Delaware River at Belvidere-Riverton Bridge, NJ/PA, River Mile 197.84

Parameter (Y)	Definition of Existing Water Quality			
	Median	Lower 95%CI	Upper 95%CI	Flow Relationships Site specific regression equation.
Ammonia NH3-N (mg/l) *	<0.05	<0.05	<0.05	
Chloride (mg/l)	14	12	15	Y = -0.00020113 Q + 14.872
Chlorophyll a (mg/m^3)	1.9	1.3	2.7	
Dissolved Oxygen (mg/l) mid-day*	8.52	8.00	8.95	
Dissolved Oxygen Saturation (%)	94%	92%	96%	
E. coli (colonies/100 ml)	20	5	30	Y = antilog (0.00005716 Q + 0.8244)
Enterococcus (colonies/100 ml)	50	35	68	
Fecal coliform (colonies/100 ml) *	30	20	50	Y = antilog (0.00006282 Q + 1.0055)
Nitrate NO3-N (mg/l) *	0.53	0.47	0.71	
Orthophosphate (mg/l)	0.01	0.01	0.02	
Ph	7.49	7.25	7.60	
Specific Conductance (umhos/cm)	111.5	105.0	125.0	Y = -0.00185194 Q + 125.8
Total Dissolved Solids (mg/l)	98	86	100	
Total Kjeldahl Nitrogen (mg/l)	0.33	0.24	0.40	
Total Nitrogen (mg/l) *	0.89	0.82	1.11	
Total Phosphorus (mg/l) *	0.04	0.04	0.05	
Total Suspended Solids (mg/l) *	3.0	2.0	4.0	Y = 0.00120841 Q – 3.003
Turbidity (NTU)	1.7	1.2	2.5	Y = antilog (0.00003844 Q + 0.0483)
Alkalinity (mg/l)	26	24	28	Y = -0.00046346 Q + 29.199
Hardness (mg/l)	35	33	36	

EWQ values represent data collected twice per month from May through September 2000-2004. Total number of samples varied by parameter, however, due to design and sampling constraints

* Wastewater treatment facility projects subject to the no measurable change requirement must demonstrate no measurable change to EWQ for this parameter. Implementation guidance should be consulted.

** EWQ does not meet DRBC water quality criterion, state water quality criterion or both.

TABLE 2F. Definition of Existing Water Quality: Pequest River BCP

Pequest River, New Jersey, River Mile 197.80 – 1.48
Boundary Control Point is located at Orchard Street Bridge, Belvidere

Parameter (Y)	Definition of Existing Water Quality			
	Median	Lower 95%CI	Upper 95%CI	Flow Relationships Site specific regression equation.
Ammonia NH3-N (mg/l) *	<0.05	<0.05	0.05	
Chloride (mg/l)	35.9	34.0	38.0	Y = -12.7769 (log Q) + 62.875
Chlorophyll a (mg/m^3)	2.14	2.00	2.70	
Dissolved Oxygen (mg/l) mid-day *	9.89	9.37	10.37	
Dissolved Oxygen Saturation (%)	103%	99%	107%	
E. coli (colonies/100 ml)	130	110	160	
Enterococcus (colonies/100 ml)	250 **	140 **	460 **	
Fecal coliform (colonies/100 ml) *	180	150	230 **	
Nitrate NO3-N (mg/l) *	1.29	1.13	1.45	
Orthophosphate (mg/l)	0.05	0.05	0.07	
pH	8.20	8.10	8.30	
Specific Conductance (umhos/cm)	491	472	511	Y = -0.18929204 Q + 517.8326
Total Dissolved Solids (mg/l)	330	310	340	Y = -75.8279 (log Q) + 479.4783
Total Kjeldahl Nitrogen (mg/l)	0.47	0.32	0.55	
Total Nitrogen (mg/l) *	1.69	1.54	2.00	
Total Phosphorus (mg/l) *	0.10	0.08	0.11 **	
Total Suspended Solids (mg/l) *	6.5	4.0	11.0	
Turbidity (NTU)	3.4	2.1	5.8	Y = antilog (1.0964 (log Q) - 1.87)
Alkalinity (mg/l)	189	180	200	Y = -64.33 (log Q) + 319.85
Hardness (mg/l)	228	220	230	Y = -50.0952 (log Q) + 329.8323

EWQ values represent data collected twice per month from May through September 2000-2004. Total number of samples varied by parameter, however, due to design and sampling constraints.

* Wastewater treatment facility projects subject to the no measurable change requirement must demonstrate no measurable change to EWQ for this parameter. Implementation guidance should be consulted.

** EWQ does not meet DRBC water quality criterion, state water quality criterion or both.

TABLE 2G. Definition of Existing Water Quality: Martins Creek BCP

Martins Creek, Pennsylvania, River Mile 190.65 – 0.96
Boundary Control Point is located at Little Creek Road bridge in Martins Creek Village.

Parameter (Y)	Definition of Existing Water Quality			
	Median	Lower 95%CI	Upper 95%CI	Flow Relationships Site specific regression equation.
Ammonia NH3-N (mg/l) *	<0.05	0.02***	0.05	
Chloride (mg/l)	21	19	24.3	Y = -11.0817 (log Q) + 39.9172
Chlorophyll a (mg/m^3)	1.80	0.50	2.70	
Dissolved Oxygen (mg/l) mid-day *	9.55	9.23	9.62	
Dissolved Oxygen Saturation (%)	98%	96%	99%	
E. coli (colonies/100 ml)	150	48	350	
Enterococcus (colonies/100 ml)	380	260	620	
Fecal coliform (colonies/100 ml) *	355 **	190	640 **	
Nitrate NO3-N (mg/l) *	2.38	2.04	2.80	
Orthophosphate (mg/l)	0.11	0.07	0.13	
pH	7.73	7.6	7.78	
Specific Conductance (umhos/cm)	322	283	338	Y = -114.3186 (log Q) + 506.634
Total Dissolved Solids (mg/l)	229	210	250	Y = -89.8812 (log Q) + 373.2748
Total Kjeldahl Nitrogen (mg/l)	0.34	0.28	0.50	
Total Nitrogen (mg/l) *	2.95	2.65	3.32	
Total Phosphorus (mg/l) *	0.13	0.10	0.20	
Total Suspended Solids (mg/l) *	4.0	2.0	5.0	
Turbidity (NTU)	2.4	1.6	4.0	Y = antilog (0.642 (log Q) - 0.684)
Alkalinity (mg/l)	50	43	52	Y = -19.48 (log Q) + 81.48
Hardness (mg/l)	120	112	130	Y = -46.9931 (log Q) + 201.407

EWQ values represent data collected twice per month from May through September 2000-2004. Total number of samples varied by parameter, however, due to design and sampling constraints.

* Wastewater treatment facility projects subject to the no measurable change requirement must demonstrate no measurable change to EWQ for this parameter. Implementation guidance should be consulted.

** EWQ does not meet DRBC water quality criterion, state water quality criterion or both.

*** Based on laboratory ‘J’ values reported below the 0.05 lower reporting limit.

TABLE 2H. Definition of Existing Water Quality: Bushkill Creek BCP

Bushkill Creek, Northampton County, Pennsylvania, River Mile 184.10 – 0.05
Boundary Control Point is located at Route 611 bridge, Easton.

Parameter (Y)	Definition of Existing Water Quality			
	Median	Lower 95%CI	Upper 95%CI	Flow Relationships Site specific regression equation.
Ammonia NH3-N (mg/l) *	0.10	0.07	0.13	
Chloride (mg/l)	27	25	28.4	Y = -13.4942 (log Q) + 54.7837
Chlorophyll a (mg/m^3)	n/a	n/a	n/a	
Dissolved Oxygen (mg/l) mid-day *	10.10	9.69	10.30	
Dissolved Oxygen Saturation (%)	102%	100%	104%	
E. coli (colonies/100 ml)	330	220	620	
Enterococcus (colonies/100 ml)	350	280	540	
Fecal coliform (colonies/100 ml) *	540 **	370 **	880 **	
Nitrate NO3-N (mg/l) *	3.90	3.63	4.26	
Orthophosphate (mg/l)	0.02	0.02	0.03	
pH	8.00	7.99	8.08	
Specific Conductance (umhos/cm)	578	542	615	Y = -1.32108663 Q + 751.3559
Total Dissolved Solids (mg/l)	410	360	440	Y = -394.9208 (log Q) + 1231.0249
Total Kjeldahl Nitrogen (mg/l)	0.40	0.29	0.50	
Total Nitrogen (mg/l) *	4.41	4.11	4.73	
Total Phosphorus (mg/l) *	0.05	0.04	0.06	
Total Suspended Solids (mg/l) *	5.0	3.0	8.0	
Turbidity (NTU)	3.0	2.5	5.1	
Alkalinity (mg/l)	140	130	155	Y = -152.34 (log Q) + 459
Hardness (mg/l)	218	210	225	Y = -159.4372 (log Q) + 549.8009

EWQ values represent data collected twice per month from May through September 2000-2004. Total number of samples varied by parameter, however, due to design and sampling constraints.

* Wastewater treatment facility projects subject to the no measurable change requirement must demonstrate no measurable change to EWQ for this parameter. Implementation guidance should be consulted.

** EWQ does not meet DRBC water quality criterion, state water quality criterion or both.

TABLE 2I. Definition of Existing Water Quality: Easton ICP

Delaware River at Northampton Street Bridge, Easton-Phillipsburg, PA/NJ, River Mile 183.82

Parameter (Y)	Definition of Existing Water Quality			
	Median	Lower 95%CI	Upper 95%CI	Flow Relationships Site specific regression equation.
Ammonia NH3-N (mg/l) *	<.05	<.05	<0.05	
Chloride (mg/l)	16	14	17	Y = -0.00022184 Q + 16.751
Chlorophyll a (mg/m^3)	1.45	1.07	2.14	
Dissolved Oxygen (mg/l) mid-day*	8.10	7.90	8.58	
Dissolved Oxygen Saturation (%)	95%	92%	96%	
E. coli (colonies/100 ml)	31	24	64	Y = antilog (0.00004425 Q + 1.273)
Enterococcus (colonies/100 ml)	145	80	250	
Fecal coliform (colonies/100 ml) *	100	64	130	
Nitrate NO3-N (mg/l) *	0.85	0.70	0.90	
Orthophosphate (mg/l)	0.02	0.01	0.02	
pH	7.55	7.41	7.70	
Specific Conductance (umhos/cm)	142	127	155	Y = -0.0024666 Q + 158.76
Total Dissolved Solids (mg/l)	110	103	120	
Total Kjeldahl Nitrogen (mg/l)	0.35	0.26	0.46	
Total Nitrogen (mg/l) *	1.19	1.01	1.35	
Total Phosphorus (mg/l) *	0.05	0.04	0.06	
Total Suspended Solids (mg/l) *	4.0	3.0	5.0	Y = 0.00177536 Q – 4.8027
Turbidity (NTU)	2.6	1.8	4.0	Y = antilog (0.00003836 Q + 0.1845)
Alkalinity (mg/l)	34	30	39	Y = -0.00073929 Q + 39.867
Hardness (mg/l)	48	45	52	

EWQ values represent data collected twice per month from May through September 2000-2004. Total number of samples varied by parameter, however, due to design and sampling constraints.

* Wastewater treatment facility projects subject to the no measurable change requirement must demonstrate no measurable change to EWQ for this parameter. Implementation guidance should be consulted.

** EWQ does not meet DRBC water quality criterion, state water quality criterion or both.

TABLE 2J. Definition of Existing Water Quality: Lehigh River BCP

Lehigh River, Pennsylvania, River Mile 183.66 – 0.27
Boundary Control Point is located at Route 611 bridge, Easton.

Parameter (Y)	Definition of Existing Water Quality			
	Median	Lower 95%CI	Upper 95%CI	Flow Relationships Site specific regression equation.
Ammonia NH3-N (mg/l) *	0.08	0.06	0.09	
Chloride (mg/l)	21	19	24	Y = -16.5077 (log Q) + 76.7534
Chlorophyll a (mg/m^3)	2.70	1.80	3.60	
Dissolved Oxygen (mg/l) mid-day *	8.85	8.39	9.20	
Dissolved Oxygen Saturation (%)	97%	94%	98%	
E. coli (colonies/100 ml)	49	36	120	Y = antilog (1.5045 (log Q) – 3.0132)
Enterococcus (colonies/100 ml)	110	56	210	
Fecal coliform (colonies/100 ml) *	120	70	200	Y = antilog (1.4387 (log Q) – 2.5712)
Nitrate NO3-N (mg/l) *	1.80	1.70	2.00	
Orthophosphate (mg/l)	0.11	0.09	0.15	
pH	7.61	7.50	7.70	
Specific Conductance (umhos/cm)	264	218	292	Y = -186.4602 (log Q) + 870.6296
Total Dissolved Solids (mg/l)	180	158	195	Y = -93.4568 (log Q) + 482.4929
Total Kjeldahl Nitrogen (mg/l)	0.50	0.41	0.58	
Total Nitrogen (mg/l) *	2.43	2.13	2.74	
Total Phosphorus (mg/l) *	0.17	0.15	0.24	
Total Suspended Solids (mg/l) *	4.0	3.0	6.0	
Turbidity (NTU)	3.1	2.2	6.0	Y = antilog (0.901 (log Q) – 2.335)
Alkalinity (mg/l)	55	49	69	Y = -51.44 (log Q) + 227.86
Hardness (mg/l)	94	77	105	Y = -58.1224 (log Q) + 285.2788

EWQ values represent data collected twice per month from May through September 2000-2004. Total number of samples varied by parameter, however, due to design and sampling constraints.

* Wastewater treatment facility projects subject to the no measurable change requirement must demonstrate no measurable change to EWQ for this parameter. Implementation guidance should be consulted.

** EWQ does not meet DRBC water quality criterion, state water quality criterion or both.

TABLE 2K. Definition of Existing Water Quality: Pohatcong Creek BCP

Pohatcong Creek, New Jersey, River Mile 177.36 – 0.35
Boundary Control Point is located at River Road bridge.

Parameter (Y)	Definition of Existing Water Quality			
	Median	Lower 95%CI	Upper 95%CI	Flow Relationships Site specific regression equation.
Ammonia NH3-N (mg/l) *	<.05	<.05	<0.05	
Chloride (mg/l)	20	19	21	
Chlorophyll a (mg/m^3)	n/a	n/a	n/a	
Dissolved Oxygen (mg/l) mid-day *	9.50	9.20	9.90	
Dissolved Oxygen Saturation (%)	97%	96%	100%	
E. coli (colonies/100 ml)	305	190	550	Y = antilog (1.0503 (log Q) + 0.976)
Enterococcus (colonies/100 ml)	610 **	380 **	820 **	
Fecal coliform (colonies/100 ml) *	580 **	420 **	810 **	
Nitrate NO3-N (mg/l) *	2.61	2.30	2.88	
Orthophosphate (mg/l)	0.05	0.05	0.07	
pH	7.90	7.88	7.95	
Specific Conductance (umhos/cm)	340	316	352	Y = -0.84542072 Q + 365.5539
Total Dissolved Solids (mg/l)	220	211	260	Y = -99.9173 (log Q) + 381.5349
Total Kjeldahl Nitrogen (mg/l)	0.33	0.19	0.36	
Total Nitrogen (mg/l) *	3.14	2.87	3.26	
Total Phosphorus (mg/l) *	0.10	0.08	0.11 **	
Total Suspended Solids (mg/l) *	6.5	5.0	8.0	
Turbidity (NTU)	4.6	2.1	5.1	Y = antilog (0.867 (log Q) – 0.69)
Alkalinity (mg/l)	116	104	120	Y = -81.8 (log Q) + 238.83
Hardness (mg/l)	140	135	160	Y = -76.5277 (log Q) + 261.5315

EWQ values represent data collected twice per month from May through September 2000-2004. Total number of samples varied by parameter, however, due to design and sampling constraints.

* Wastewater treatment facility projects subject to the no measurable change requirement must demonstrate no measurable change to EWQ for this parameter. Implementation guidance should be consulted.

** EWQ does not meet DRBC water quality criterion, state water quality criterion or both.

TABLE 2L. Definition of Existing Water Quality: Riegelsville ICP

Delaware River at Riegelsville Bridge, PA/NJ, River Mile 174.80

Parameter (Y)	Definition of Existing Water Quality			
	Median	Lower 95%CI	Upper 95%CI	Flow Relationships Site specific regression equation.
Ammonia NH3-N (mg/l) *	<0.05	<0.05	0.05	
Chloride (mg/l)	17	15	19	Y = -0.00026948 Q + 19.644
Chlorophyll a (mg/m^3)	2.42	1.80	3.60	
Dissolved Oxygen (mg/l) mid-day *	8.80	8.20	9.05	
Dissolved Oxygen Saturation (%)	97%	95%	98%	
E. coli (colonies/100 ml)	40	20	80	Y = antilog (0.0000513 Q + 0.9973)
Enterococcus (colonies/100 ml)	80	52	110	
Fecal coliform (colonies/100 ml) *	84	54	160	Y = antilog (0.00003636 Q + 1.5438)
Nitrate NO3-N (mg/l) *	1.17	1.02	1.23	
Orthophosphate (mg/l)	0.04	0.04	0.07	
pH	7.60	7.48	7.80	
Specific Conductance (umhos/cm)	183	155	197	Y = -0.00298102 Q + 207.26
Total Dissolved Solids (mg/l)	140	130	150	Y = -0.00168753 Q + 152.78
Total Kjeldahl Nitrogen (mg/l)	0.31	0.22	0.46	
Total Nitrogen (mg/l) *	1.44	1.31	1.62	
Total Phosphorus (mg/l) *	0.09	0.07	0.12	
Total Suspended Solids (mg/l) *	4.5	3.5	6.5	Y = 0.00061523 Q + 0.2725
Turbidity (NTU)	2.7	2.1	3.5	Y = antilog (0.00002645 Q + 0.2252)
Alkalinity (mg/l)	42	36	48	Y = -0.0008322 Q + 50.44
Hardness (mg/l)	65	54	70	Y = -0.00121951 Q + 73.708

EWQ values represent data collected twice per month from May through September 2000-2004. Total number of samples varied by parameter, however, due to design and sampling constraints.

* Wastewater treatment facility projects subject to the no measurable change requirement must demonstrate no measurable change to EWQ for this parameter. Implementation guidance should be consulted.

** EWQ does not meet DRBC water quality criterion, state water quality criterion or both.

TABLE 2M. Definition of Existing Water Quality: Musconetcong River BCP

Musconetcong River, New Jersey, River Mile 174.60 – 0.15
Boundary Control Point is located at River Road (Rt. 627) bridge

Parameter (Y)	Definition of Existing Water Quality			
	Median	Lower 95%CI	Upper 95%CI	Flow Relationships Site specific regression equation.
Ammonia NH3-N (mg/l) *	0.06	0.05	0.08	
Chloride (mg/l)	43	42	45	
Chlorophyll a (mg/m^3)	3.20	2.56	3.71	
Dissolved Oxygen (mg/l) mid-day *	9.10	8.90	9.60	
Dissolved Oxygen Saturation (%)	99%	97%	100%	
E. coli (colonies/100 ml)	125	70	240	
Enterococcus (colonies/100 ml)	210 **	150 **	360 **	
Fecal coliform (colonies/100 ml) *	270 **	190	400 **	
Nitrate NO3-N (mg/l) *	2.09	1.85	2.30	
Orthophosphate (mg/l)	0.02	0.02	0.03	
pH	7.90	7.90	8.00	
Specific Conductance (umhos/cm)	396	375	426	Y = -0.23045946 Q + 440.1906
Total Dissolved Solids (mg/l)	255	240	270	Y = -0.0954 Q + 272.5773
Total Kjeldahl Nitrogen (mg/l)	0.49	0.37	0.87	
Total Nitrogen (mg/l) *	2.56	2.36	2.91	
Total Phosphorus (mg/l) *	0.07	0.05	0.09	
Total Suspended Solids (mg/l) *	7.0	5.5	11.0	
Turbidity (NTU)	3.5	2.3	5.4	Y = antilog (0.86 (log Q) – 1.294)
Alkalinity (mg/l)	103	97	118	Y = -79.84 (log Q) + 298.41
Hardness (mg/l)	149	130	160	Y = -67.6003 (log Q) + 297.8314

EWQ values represent data collected twice per month from May through September 2000-2004. Total number of samples varied by parameter, however, due to design and sampling constraints.

* Wastewater treatment facility projects subject to the no measurable change requirement must demonstrate no measurable change to EWQ for this parameter. Implementation guidance should be consulted.

** EWQ does not meet DRBC water quality criterion, state water quality criterion or both.

TABLE 2N. Definition of Existing Water Quality: Cooks Creek BCP

Cooks Creek, Pennsylvania, River Mile 173.70 – 1.06
Boundary Control Point is located at Red Bridge Road bridge.

Parameter (Y)	Definition of Existing Water Quality			
	Median	Lower 95%CI	Upper 95%CI	Flow Relationships Site specific regression equation.
Ammonia NH3-N (mg/l) *	<0.05	<0.05	<0.05	
Chloride (mg/l)	9.7	8.9	10.9	
Chlorophyll a (mg/m^3)	n/a	n/a	n/a	
Dissolved Oxygen (mg/l) mid-day *	9.93	9.70	10.30	
Dissolved Oxygen Saturation (%)	102%	98%	108%	
E. coli (colonies/100 ml)	110	80	200	Y = antilog (1.1307 (log Q) + 0.6483)
Enterococcus (colonies/100 ml)	380	250	520	
Fecal coliform (colonies/100 ml) *	210 **	140	360 **	
Nitrate NO3-N (mg/l) *	1.80	1.70	1.90	
Orthophosphate (mg/l)	0.01	0.01	0.02	
pH	8.04	7.94	8.19	
Specific Conductance (umhos/cm)	258	244	278	Y = -0.94618228 Q + 290.6508
Total Dissolved Solids (mg/l)	180	161	194	Y = -0.7015 Q + 197.6165
Total Kjeldahl Nitrogen (mg/l)	0.21	0.13	0.34	
Total Nitrogen (mg/l) *	2.01	1.95	2.32	
Total Phosphorus (mg/l) *	0.04	0.03	0.06	
Total Suspended Solids (mg/l) *	2.5	2.0	4.0	
Turbidity (NTU)	1.5	1.1	2.3	Y = antilog (0.888 (log Q) – 0.981)
Alkalinity (mg/l)	98	89	104	Y = -50.25 (log Q) + 168.52
Hardness (mg/l)	120	110	125	Y = -40.8625 (log Q) + 175.8628

EWQ values represent data collected twice per month from May through September 2000-2004. Total number of samples varied by parameter, however, due to design and sampling constraints.

* Wastewater treatment facility projects subject to the no measurable change requirement must demonstrate no measurable change to EWQ for this parameter. Implementation guidance should be consulted.

** EWQ does not meet DRBC water quality criterion, state water quality criterion or both.

TABLE 2O. Definition of Existing Water Quality: Milford ICP

Delaware River at Milford-U. Black Eddy Bridge, NJ/PA, River Mile 167.70

Parameter (Y)	Definition of Existing Water Quality			
	Median	Lower 95%CI	Upper 95%CI	Flow Relationships Site specific regression equation.
Ammonia NH3-N (mg/l) *	<0.05	<0.05	0.05	
Chloride (mg/l)	17	15	20	Y = -0.00027835 Q + 20.221
Chlorophyll a (mg/m^3)	1.80	0.90	2.70	
Dissolved Oxygen (mg/l) mid-day *	8.74	8.20	8.96	
Dissolved Oxygen Saturation (%)	96%	95%	97%	
E. coli (colonies/100 ml)	28	15	60	Y = antilog (0.00004814 Q + 0.905)
Enterococcus (colonies/100 ml)	45	28	98	
Fecal coliform (colonies/100 ml) *	60	40	120	Y = antilog (0.00004177 Q + 1.2688)
Nitrate NO3-N (mg/l) *	1.09	0.96	1.25	
Orthophosphate (mg/l)	0.04	0.04	0.07	
pH	7.58	7.44	7.80	
Specific Conductance (umhos/cm)	189	159	203	Y = -0.00313416 Q + 212.42
Total Dissolved Solids (mg/l)	149	130	160	Y = -0.00270722 Q + 173.806
Total Kjeldahl Nitrogen (mg/l)	0.34	0.26	0.46	
Total Nitrogen (mg/l) *	1.48	1.23	1.68	
Total Phosphorus (mg/l) *	0.09	0.07	0.12	
Total Suspended Solids (mg/l) *	6.0	4.5	7.0	Y = 0.0006379 Q + 0.3729
Turbidity (NTU)	2.9	2.2	3.8	Y = antilog (0.00002693 Q + 0.1674)
Alkalinity (mg/l)	44	37	49	Y = -0.00087657 Q + 51.613
Hardness (mg/l)	67	55	73	Y = -0.0011369 Q + 74.63

EWQ values represent data collected twice per month from May through September 2000-2004. Total number of samples varied by parameter, however, due to design and sampling constraints.

* Wastewater treatment facility projects subject to the no measurable change requirement must demonstrate no measurable change to EWQ for this parameter. Implementation guidance should be consulted.

** EWQ does not meet DRBC water quality criterion, state water quality criterion or both.

TABLE 2P. Definition of Existing Water Quality: Nishisakawick Creek BCP

Nishisakawick Creek, New Jersey, River Mile 164.10 – 0.35
Boundary Control Point is located at Route 12 bridge, Frenchtown.

Parameter (Y)	Definition of Existing Water Quality			
	Median	Lower 95%CI	Upper 95%CI	Flow Relationships Site specific regression equation.
Ammonia NH3-N (mg/l) *	<0.05	<0.05	0.06	
Chloride (mg/l)	15	14	16	
Chlorophyll a (mg/m^3)	n/a	n/a	n/a	
Dissolved Oxygen (mg/l) mid-day *	9.65	9.11	10.10	
Dissolved Oxygen Saturation (%)	101%	99%	105%	
E. coli (colonies/100 ml)	48	20	96	Y = antilog (0.5217 (log Q) + 1.5665)
Enterococcus (colonies/100 ml)	240 **	170 **	790 **	
Fecal coliform (colonies/100 ml) *	85	50	120	
Nitrate NO3-N (mg/l) *	1.62	1.52	1.83	
Orthophosphate (mg/l)	0.04	0.03	0.05	
pH	7.89	7.56	8.00	
Specific Conductance (umhos/cm)	181	176	190	Y = -24.8604 (log Q) + 189.4554
Total Dissolved Solids (mg/l)	130	120	144	Y = -0.9989 Q + 139.9081
Total Kjeldahl Nitrogen (mg/l)	0.35	0.21	0.59	
Total Nitrogen (mg/l) *	2.09	1.70	2.39	
Total Phosphorus (mg/l) *	0.06	0.05	0.07	
Total Suspended Solids (mg/l) *	1.5	1.0	2.0	
Turbidity (NTU)	1.3	0.9	2.0	Y = antilog (0.0315 Q – 0.1328)
Alkalinity (mg/l)	45	40	51	Y = -16.39 (log Q) + 55.14
Hardness (mg/l)	60	59	65	Y = -12.5184 (log Q) + 66.8341

EWQ values represent data collected twice per month from May through September 2000-2004. Total number of samples varied by parameter, however, due to design and sampling constraints.

* Wastewater treatment facility projects subject to the no measurable change requirement must demonstrate no measurable change to EWQ for this parameter. Implementation guidance should be consulted.

** EWQ does not meet DRBC water quality criterion, state water quality criterion or both.

TABLE 2Q. Definition of Existing Water Quality: Tinicum Creek BCP

Tinicum Creek, Pennsylvania, River Mile 161.60 – 0.24
Boundary Control Point is located on private property by Tinicum Creek Road, just below confluence of first unnamed tributary.

Parameter (Y)	Definition of Existing Water Quality			
	Median	Lower 95%CI	Upper 95%CI	Flow Relationships Site specific regression equation.
Ammonia NH3-N (mg/l) *	<0.05	<0.05	<0.05	
Chloride (mg/l)	14	12	16	
Chlorophyll a (mg/m^3)	n/a	n/a	n/a	
Dissolved Oxygen (mg/l) mid-day *	9.80	8.90	10.10	
Dissolved Oxygen Saturation (%)	104%	101%	107%	
E. coli (colonies/100 ml)	80	55	180	
Enterococcus (colonies/100 ml)	200	96	340	
Fecal coliform (colonies/100 ml) *	155	124	280 **	
Nitrate NO3-N (mg/l) *	0.79	0.64	1.00	
Orthophosphate (mg/l)	0.01	0.01	0.02	
pH	8.00	7.70	8.30	
Specific Conductance (umhos/cm)	247	219	262	Y = -69.3482 (log Q) + 285.899
Total Dissolved Solids (mg/l)	180	170	190	Y = -39.2799 (log Q) + 204.5375
Total Kjeldahl Nitrogen (mg/l)	0.30	0.13	0.41	
Total Nitrogen (mg/l) *	1.14	0.79	1.23	
Total Phosphorus (mg/l) *	0.04	0.03	0.04	
Total Suspended Solids (mg/l) *	2.0	1.0	3.0	
Turbidity (NTU)	1.1	0.9	1.8	Y = antilog (0.4453 (log Q) – 0.2226)
Alkalinity (mg/l)	61	52	72	Y = -19.56 (log Q) + 75.97
Hardness (mg/l)	91	75	101	Y = -29.6089 (log Q) + 113.3701

EWQ values represent data collected twice per month from May through September 2000-2004. Total number of samples varied by parameter, however, due to design and sampling constraints.

* Wastewater treatment facility projects subject to the no measurable change requirement must demonstrate no measurable change to EWQ for this parameter. Implementation guidance should be consulted.

** EWQ does not meet DRBC water quality criterion, state water quality criterion or both.

TABLE 2R. Definition of Existing Water Quality: Tohickon Creek BCP

Tohickon Creek, Pennsylvania, River Mile 157.00 – 0.19
Boundary Control Point is located at the Delaware Canal Aqueduct crossing in Point Pleasant.

Parameter (Y)	Definition of Existing Water Quality			
	Median	Lower 95%CI	Upper 95%CI	Flow Relationships Site specific regression equation.
Ammonia NH3-N (mg/l) *	<0.05	<0.05	<0.05	
Chloride (mg/l)	27	25	29	Y = -4.6046 (log Q) + 34.3562
Chlorophyll a (mg/m^3)	2.14	1.07	3.20	
Dissolved Oxygen (mg/l) mid-day *	9.06	8.60	9.20	
Dissolved Oxygen Saturation (%)	100%	98%	103%	
E. coli (colonies/100 ml)	38	20	60	Y = antilog (0.8609 (log Q) + 0.2319)
Enterococcus (colonies/100 ml)	540	250	980	
Fecal coliform (colonies/100 ml) *	90	60	170	Y = antilog (0.6939 (log Q) + 0.9399)
Nitrate NO3-N (mg/l) *	0.63	0.52	0.72	
Orthophosphate (mg/l)	0.015	0.01	0.02	
pH	8.00	7.80	8.20	
Specific Conductance (umhos/cm)	218	212	226	Y = -27.1873 (log Q) + 261.345
Total Dissolved Solids (mg/l)	162	150	170	Y = -27.494 (log Q) + 204.9618
Total Kjeldahl Nitrogen (mg/l)	0.37	0.34	0.49	
Total Nitrogen (mg/l) *	1.03	0.87	1.16	
Total Phosphorus (mg/l) *	0.04	0.04	0.05	
Total Suspended Solids (mg/l) *	2.0	1.0	2.5	
Turbidity (NTU)	1.3	0.9	2.0	Y = antilog (0.5292 (log Q) – 0.6216)
Alkalinity (mg/l)	46	40	49	Y = -8.96 (log Q) + 60
Hardness (mg/l)	64	62	68	Y = -10.6687 (log Q) + 81.5734

EWQ values represent data collected twice per month from May through September 2000-2004. Total number of samples varied by parameter, however, due to design and sampling constraints.

* Wastewater treatment facility projects subject to the no measurable change requirement must demonstrate no measurable change to EWQ for this parameter. Implementation guidance should be consulted.

** EWQ does not meet DRBC water quality criterion, state water quality criterion or both.

TABLE 2S. Definition of Existing Water Quality: Paunacussing Creek BCP

Paunacussing Creek, Pennsylvania, River Mile 155.90 – 0.12
Boundary Control Point is located at Route 32 bridge, Lumberville.

Parameter (Y)	Definition of Existing Water Quality			
	Median	Lower 95%CI	Upper 95%CI	Flow Relationships Site specific regression equation.
Ammonia NH3-N (mg/l) *	<0.05	<0.05	<0.05	
Chloride (mg/l)	24	23	25	
Chlorophyll a (mg/m^3)	n/a	n/a	n/a	
Dissolved Oxygen (mg/l) mid-day *	9.42	8.90	9.81	
Dissolved Oxygen Saturation (%)	98%	96%	101%	
E. coli (colonies/100 ml)	28	15	84	Y = antilog (0.742 (log Q) + 1.3102)
Enterococcus (colonies/100 ml)	320	160	520	
Fecal coliform (colonies/100 ml) *	80	60	130	Y = antilog (0.5676 (log Q) + 1.7382)
Nitrate NO3-N (mg/l) *	2.58	2.15	2.75	
Orthophosphate (mg/l)	0.05	0.04	0.05	
pH	7.60	7.47	7.72	
Specific Conductance (umhos/cm)	229	218	242	Y = -18.8373 (log Q) + 238.7433
Total Dissolved Solids (mg/l)	130	120	144	Y = -24.3907 (log Q) + 154.9198
Total Kjeldahl Nitrogen (mg/l)	0.30	0.17	0.36	
Total Nitrogen (mg/l) *	2.96	2.83	3.15	
Total Phosphorus (mg/l) *	0.07	0.06	0.08	
Total Suspended Solids (mg/l) *	1.0	1.0	2.0	
Turbidity (NTU)	0.8	0.5	1.6	
Alkalinity (mg/l)	47	42	55	Y = -13.64 (log Q) + 52.88
Hardness (mg/l)	80	75	85	Y = -12.1905 (log Q) + 84.3707

EWQ values represent data collected twice per month from May through September 2000-2004. Total number of samples varied by parameter, however, due to design and sampling constraints.

* Wastewater treatment facility projects subject to the no measurable change requirement must demonstrate no measurable change to EWQ for this parameter. Implementation guidance should be consulted.

** EWQ does not meet DRBC water quality criterion, state water quality criterion or both.

TABLE 2T. Definition of Existing Water Quality: Bulls Island ICP

Delaware River at Bulls Island (Lumberville-Raven Rock) Foot Bridge, PA/NJ, River Mile 155.40

Parameter (Y)	Definition of Existing Water Quality			
	Median	Lower 95%CI	Upper 95%CI	Flow Relationships Site specific regression equation.
Ammonia NH3-N (mg/l) *	<0.05	<0.05	<0.05	
Chloride (mg/l)	17	15	20	Y = -0.00044266 Q + 21.906
Chlorophyll a (mg/m^3)	2.70	1.07	3.20	
Dissolved Oxygen (mg/l) mid-day *	8.80	8.40	9.30	
Dissolved Oxygen Saturation (%)	98%	95%	100%	
E. coli (colonies/100 ml)	40	23	80	
Enterococcus (colonies/100 ml)	49	32	100	
Fecal coliform (colonies/100 ml) *	71	36	90	Y = antilog (0.00003537 Q + 1.3646)
Nitrate NO3-N (mg/l) *	1.00	0.88	1.23	
Orthophosphate (mg/l)	0.04	0.04	0.06	
pH	7.60	7.50	7.74	
Specific Conductance (umhos/cm)	186	170	202	Y = -0.00482529 Q + 229.19
Total Dissolved Solids (mg/l)	140	130	160	Y = -0.00277475 Q + 169.368
Total Kjeldahl Nitrogen (mg/l)	0.32	0.27	0.55	
Total Nitrogen (mg/l) *	1.48	1.26	1.59	
Total Phosphorus (mg/l) *	0.10	0.07	0.12	
Total Suspended Solids (mg/l) *	5.0	4.0	7.0	Y = 0.0007482 Q - 0.48
Turbidity (NTU)	3.8	2.2	6.0	
Alkalinity (mg/l)	45	38	51	Y = -0.00129755 Q + 56.978
Hardness (mg/l)	68	60	72	Y = -0.00134498 Q + 78.78

EWQ values represent data collected twice per month from May through September 2000-2004. Total number of samples varied by parameter, however, due to design and sampling constraints.

* Wastewater treatment facility projects subject to the no measurable change requirement must demonstrate no measurable change to EWQ for this parameter. Implementation guidance should be consulted..

** EWQ does not meet DRBC water quality criterion, state water quality criterion or both.

TABLE 2U. Definition of Existing Water Quality: Lockatong Creek BCP

Lockatong Creek, New Jersey, River Mile 154.00 – 0.75
Boundary Control Point is located at Rosemont-Raven Rock Road bridge.

Parameter (Y)	Definition of Existing Water Quality			
	Median	Lower 95%CI	Upper 95%CI	Flow Relationships Site specific regression equation.
Ammonia NH3-N (mg/l) *	<0.05	<0.05	<0.05	
Chloride (mg/l)	13	11	14	Y = -3.0659 (log Q) + 14.6262
Chlorophyll a (mg/m^3)	n/a	n/a	n/a	
Dissolved Oxygen (mg/l) mid-day *	8.70	8.30	9.10	
Dissolved Oxygen Saturation (%)	94%	90%	96%	
E. coli (colonies/100 ml)	33	20	50	Y = antilog (0.6703 (log Q) + 1.1906)
Enterococcus (colonies/100 ml)	260 **	98 **	480 **	
Fecal coliform (colonies/100 ml) *	32	20	76	Y = antilog (1.0321 (log Q) + 1.1157)
Nitrate NO3-N (mg/l) *	1.13	0.92	1.40	
Orthophosphate (mg/l)	0.03	0.02	0.04	
pH	7.30	7.20	7.50	
Specific Conductance (umhos/cm)	180	165	191	Y = -35.3137 (log Q) + 193.0827
Total Dissolved Solids (mg/l)	140	130	142	Y = -24.7785 (log Q) + 150.0884
Total Kjeldahl Nitrogen (mg/l)	0.39	0.23	0.58	
Total Nitrogen (mg/l) *	1.56	1.26	1.81	
Total Phosphorus (mg/l) *	0.05	0.05	0.06	
Total Suspended Solids (mg/l) *	1.0	0.5	2.0	
Turbidity (NTU)	1.2	0.8	3.0	Y = antilog(0.6517 (log Q) - 0.2066)
Alkalinity (mg/l)	43	35	46	Y = -11.425 (log Q) + 48.85
Hardness (mg/l)	60	56	63	

EWQ values represent data collected twice per month from May through September 2000-2004. Total number of samples varied by parameter, however, due to design and sampling constraints.

* Wastewater treatment facility projects subject to the no measurable change requirement must demonstrate no measurable change to EWQ for this parameter. Implementation guidance should be consulted.

** EWQ does not meet DRBC water quality criterion, state water quality criterion or both.

TABLE 2V. Definition of Existing Water Quality: Wickecheoke Creek BCP

Wickecheoke Creek, New Jersey, River Mile 152.51 – 0.21
Boundary Control Point is located at Route 29 bridge, Stockton.

Parameter (Y)	Definition of Existing Water Quality			
	Median	Lower 95%CI	Upper 95%CI	Flow Relationships Site specific regression equation.
Ammonia NH3-N (mg/l) *	<0.05	<0.05	<0.05	
Chloride (mg/l)	17	15	18	
Chlorophyll a (mg/m^3)	n/a	n/a	n/a	
Dissolved Oxygen (mg/l) mid-day *	9.45	8.95	9.90	
Dissolved Oxygen Saturation (%)	101%	96%	104%	
E. coli (colonies/100 ml)	52	40	76	
Enterococcus (colonies/100 ml)	170 **	84 **	300 **	
Fecal coliform (colonies/100 ml) *	92	65	190	
Nitrate NO3-N (mg/l) *	1.83	1.69	2.20	
Orthophosphate (mg/l)	0.03	0.03	0.04	
pH	7.53	7.40	7.70	
Specific Conductance (umhos/cm)	183	175	200	Y = -28.7787 (log Q) + 199.7338
Total Dissolved Solids (mg/l)	130	120	134	Y = -30.5576 (log Q) + 148.5061
Total Kjeldahl Nitrogen (mg/l)	0.44	0.30	0.70	
Total Nitrogen (mg/l) *	2.12	1.99	2.65	
Total Phosphorus (mg/l) *	0.06	0.05	0.07	
Total Suspended Solids (mg/l) *	1.0	0.5	1.5	
Turbidity (NTU)	1.2	0.7	2.0	Y = antilog(0.5729 (log Q) - 0.2123)
Alkalinity (mg/l)	40	33	43	Y = -9.35 (log Q) + 45.46
Hardness (mg/l)	58	51	62	

EWQ values represent data collected twice per month from May through September 2000-2004. Total number of samples varied by parameter, however, due to design and sampling constraints.

* Wastewater treatment facility projects subject to the no measurable change requirement must demonstrate no measurable change to EWQ for this parameter. Implementation guidance should be consulted.

** EWQ does not meet DRBC water quality criterion, state water quality criterion or both.

TABLE 2W. Definition of Existing Water Quality: Lambertville ICP

Delaware River at Lambertville-New Hope Bridge, NJ/PA, River Mile 148.70

Parameter (Y) Note: only the parameters marked (*) are currently used in NMC analysis for new and expanding discharges	Definition of Existing Water Quality			
	Median	Lower 95%CI	Upper 95%CI	Flow Relationships Site specific regression equation.
Ammonia NH3-N (mg/l) *	<0.05	<0.05	0.05	
Chloride (mg/l)	18	16	20	Y = -0.00046965 Q + 22.449
Chlorophyll a (mg/m^3)	2.95	2.00	4.70	
Dissolved Oxygen (mg/l) mid-day *	8.50	7.90	8.63	
Dissolved Oxygen Saturation (%)	94%	93%	95%	
E. coli (colonies/100 ml)	40	16	62	Y = antilog (0.00004662 Q + 1.0027)
Enterococcus (colonies/100 ml)	60	38	80	
Fecal coliform (colonies/100 ml) *	55	32	120	Y = antilog (0.00003689 Q + 1.3656)
Nitrate NO3-N (mg/l) *	1.11	0.90	1.28	
Orthophosphate (mg/l)	0.04	0.04	0.07	
pH	7.55	7.40	7.60	
Specific Conductance (umhos/cm)	191	156	207	Y = -0.00448812 Q + 229.4
Total Dissolved Solids (mg/l)	140	127	160	Y = -0.0020763 (log Q) + 159.338
Total Kjeldahl Nitrogen (mg/l)	0.46	0.34	0.66	
Total Nitrogen (mg/l) *	1.56	1.36	1.84	
Total Phosphorus (mg/l) *	0.10	0.08	0.12	
Total Suspended Solids (mg/l) *	6.5	3.5	9.0	Y = 0.00075399 Q – 0.3458
Turbidity (NTU)	2.5	1.8	6.0	Y = antilog (0.00003256 Q + 0.0989)
Alkalinity (mg/l)	46	36	52	Y = -0.00162641 Q + 60.322
Hardness (mg/l)	68	56	77	Y = -0.00146091 Q + 80.092

EWQ values represent data collected twice per month from May through September 2000-2004. Total number of samples varied by parameter, however, due to design and sampling constraints.

* Wastewater treatment facility projects subject to the no measurable change requirement must demonstrate no measurable change to EWQ for this parameter. Implementation guidance should be consulted.

** EWQ does not meet DRBC water quality criterion, state water quality criterion or both.

TABLE 2X. Definition of Existing Water Quality: Pidcock Creek BCP

Pidcock Creek, Pennsylvania, River Mile 146.30 – 0.90
Boundary Control Point is located at stone foot bridge within Bowman's Hill Wildflower Preserve.

Parameter (Y)	Definition of Existing Water Quality			
	Median	Lower 95%CI	Upper 95%CI	Flow Relationships Site specific regression equation.
Ammonia NH3-N (mg/l) *	0.05	<0.05	0.06	
Chloride (mg/l)	19	17	21	
Chlorophyll a (mg/m^3)	n/a	n/a	n/a	
Dissolved Oxygen (mg/l) mid-day *	7.45	7.20	8.50	
Dissolved Oxygen Saturation (%)	81%	78%	86%	
E. coli (colonies/100 ml)	91	64	170	Y = antilog (0.6675 (log Q) + 1.5652)
Enterococcus (colonies/100 ml)	485	170	720	
Fecal coliform (colonies/100 ml) *	195	130	310 **	Y = antilog (0.6669 (log Q) + 1.8192)
Nitrate NO3-N (mg/l) *	0.99	0.90	1.28	
Orthophosphate (mg/l)	0.07	0.05	0.08	
pH	7.39	7.20	7.44	
Specific Conductance (umhos/cm)	255	243	276	Y = -45.1671 (log Q) + 281.0884
Total Dissolved Solids (mg/l)	185	170	190	
Total Kjeldahl Nitrogen (mg/l)	0.50	0.28	0.72	
Total Nitrogen (mg/l) *	1.63	1.46	2.09	
Total Phosphorus (mg/l) *	0.10	0.08	0.12	
Total Suspended Solids (mg/l) *	3.0	2.0	4.0	
Turbidity (NTU)	3.7	2.5	5.3	Y = antilog (0.6463 (log Q) + 0.163)
Alkalinity (mg/l)	77	64	87	Y = -27.32 (log Q) + 92.67
Hardness (mg/l)	108	97	110	Y = -15.6248 (log Q) + 112.7103

EWQ values represent data collected twice per month from May through September 2000-2004. Total number of samples varied by parameter, however, due to design and sampling constraints.

* Wastewater treatment facility projects subject to the no measurable change requirement must demonstrate no measurable change to EWQ for this parameter. Implementation guidance should be consulted.

** EWQ does not meet DRBC water quality criterion, state water quality criterion or both.

TABLE 2Y. Definition of Existing Water Quality: Washington Crossing ICP

Delaware River at Washington Crossing Bridge, PA/NJ, River Mile 141.80

Parameter (Y)	Definition of Existing Water Quality			
	Median	Lower 95%CI	Upper 95%CI	Flow Relationships Site specific regression equation.
Ammonia NH3-N (mg/l) *	0.05	<0.05	0.09	
Chloride (mg/l)	18	16	20	Y = -0.00032977 Q + 21.336
Chlorophyll a (mg/m^3)	2.30	1.30	4.27	
Dissolved Oxygen (mg/l) mid-day *	8.69	8.46	9.00	
Dissolved Oxygen Saturation (%)	96%	95%	99%	
E. coli (colonies/100 ml)	33	20	60	
Enterococcus (colonies/100 ml)	55	23	90	
Fecal coliform (colonies/100 ml) *	70	48	110	
Nitrate NO3-N (mg/l) *	0.99	0.86	1.20	
Orthophosphate (mg/l)	0.04	0.03	0.06	
pH	7.69	7.52	7.90	
Specific Conductance (umhos/cm)	187	158	206	Y = -0.00579709 Q + 239.8
Total Dissolved Solids (mg/l)	138	130	160	Y = -0.00317926 Q + 175.218
Total Kjeldahl Nitrogen (mg/l)	0.37	0.30	0.64	
Total Nitrogen (mg/l) *	1.47	1.24	1.69	
Total Phosphorus (mg/l) *	0.10	0.07	0.12	
Total Suspended Solids (mg/l) *	6.0	5.0	8.0	Y = 0.0007895 Q + 0.7126
Turbidity (NTU)	4.0	2.4	5.3	
Alkalinity (mg/l)	45	36	50	Y = -0.00128607 Q + 56.134
Hardness (mg/l)	67	53	75	Y = -0.0019019 Q + 82.144

EWQ values represent data collected twice per month from May through September 2000-2004. Total number of samples varied by parameter, however, due to design and sampling constraints.

* Wastewater treatment facility projects subject to the no measurable change requirement must demonstrate no measurable change to EWQ for this parameter. Implementation guidance should be consulted.

** EWQ does not meet DRBC water quality criterion, state water quality criterion or both.

TABLE 2Z. Definition of Existing Water Quality: Trenton ICP

Delaware River at Calhoun Street Bridge, Trenton-Morrisville, NJ/PA, River Mile 134.34

Parameter (Y)	Definition of Existing Water Quality			
	Median	Lower 95%CI	Upper 95%CI	Flow Relationships Site specific regression equation.
Ammonia NH3-N (mg/l) *	<0.05	<0.05	<0.05	
Chloride (mg/l)	17	16	21	Y = -0.00046454 Q + 22.687
Chlorophyll a (mg/m^3)	2.70	1.60	4.81	
Dissolved Oxygen (mg/l) mid-day *	8.74	8.40	9.20	
Dissolved Oxygen Saturation (%)	97%	94%	101%	
E. coli (colonies/100 ml)	40	24	65	
Enterococcus (colonies/100 ml)	45	20	80	
Fecal coliform (colonies/100 ml) *	88	60	140	
Nitrate NO3-N (mg/l) *	1.05	0.85	1.21	
Orthophosphate (mg/l)	0.04	0.03	0.06	
pH	7.78	7.56	8.00	
Specific Conductance (umhos/cm)	185	163	202	Y = -0.00563728 Q + 240.35
Total Dissolved Solids (mg/l)	140	130	156	Y = -0.00300322 Q + 169.514
Total Kjeldahl Nitrogen (mg/l)	0.48	0.36	0.58	
Total Nitrogen (mg/l) *	1.45	1.22	1.71	
Total Phosphorus (mg/l) *	0.10	0.07	0.12	
Total Suspended Solids (mg/l) *	6.3	5.0	8.5	Y = 0.00085809 Q – 0.2021
Turbidity (NTU)	2.9	2.2	5.8	
Alkalinity (mg/l)	45	36	50	Y = -0.00160669 Q + 58.973
Hardness (mg/l)	69	60	73	Y = -0.00141561 Q + 79.891

EWQ values represent data collected twice per month from May through September 2000-2004. Total number of samples varied by parameter, however, due to design and sampling constraints.

* Wastewater treatment facility projects subject to the no measurable change requirement must demonstrate no measurable change to EWQ for this parameter. Implementation guidance should be consulted.

** EWQ does not meet DRBC water quality criterion, state water quality criterion or both.

B. Limits.

1. The waters of the Basin shall not contain substances attributable to municipal, industrial, or other discharges in concentrations or amounts sufficient to preclude the specified water uses to be protected. Within this requirement:

   a. the waters shall be substantially free from unsightly or malodorous nuisances due to floating solids, sludge deposits, debris, oil, scum, substances in concentrations or combinations which are toxic or harmful to human, animal, plant, or aquatic life, or that produce color, taste, odor of the water, or taint fish or shellfish flesh;

   b. the concentration of total dissolved solids, except intermittent streams, shall not exceed 133 percent of background.

2. In no case shall concentrations of substances exceed those values given for rejection of water supplies in the United States Public Health Service Drinking Water Standards.

C. **Aquatic Life Objectives for Toxic Pollutants.** It is the policy of the Commission to designate numerical stream quality objectives for the protection of aquatic life for the Delaware River Estuary and Bay (Zones 2 through 6) which correspond to the designated uses of each zone. Aquatic life objectives for the protection from both acute and chronic effects are herein established on a pollutant-specific basis for:

   pollutants listed as toxic under Section 307(a)(1) of the Clean Water Act for which the U.S. Environmental Protection Agency (EPA) has published final criteria,

   other chemicals for which EPA has published final criteria under Section 304(a) of the Act, and

   pollutants and other chemicals in combinations.

   Other toxic substances for which any of the three Estuary states have adopted criteria or standards may also be considered for the development of stream quality objectives.

1. For the purpose of determining compliance with stream quality objectives for the protection of aquatic life, the duration of exposure of aquatic organisms shall be 1 hour for acute objectives and 4 days for chronic objectives.

2. Stream quality objectives for cadmium, chromium, copper, lead, nickel, silver and zinc shall be expressed as the dissolved form of the metal. Adjustment factors established by the Commission based upon the best available scientific information shall be used to convert total recoverable criteria published by the U.S. Environmental Protection Agency to dissolved stream quality objectives. In the absence of data to develop a factor for any of the metals, an adjustment factor of 1.0

shall be utilized. Stream quality objectives for other metals shall be expressed as the concentration of the total recoverable form of the metal.

D. **Human Health Objectives for Toxic Pollutants**. It is the policy of the Commission to designate numerical stream quality objectives for the protection of human health for the Delaware River Estuary and Bay (Zones 2 through 6) which correspond to the designated uses of each zone. Stream quality objectives for protection from both carcinogenic and systemic effects are herein established on a pollutant-specific basis for:

pollutants listed as toxic under Section 307(a)(1) and other toxic pollutants, and

other chemicals for which EPA has published final criteria under Section 304(a) of the Act.

Other toxic substances for which any of the three Estuary states have adopted criteria or standards may also be considered for the development of stream quality objectives.

1. An objective to protect against carcinogenic effects shall only be established if the pollutant is classified A, B or C under the U.S. EPA classification system for carcinogens, and if a cancer potency factor (CPF) exists in IRIS.

2. An objective to protect against systemic effects shall only be established for a pollutant if a reference dose (RfD) exists in IRIS. An additional safety factor of 10 shall be utilized in establishing the stream quality objectives to protect against systemic effects for pollutants classified as carcinogens if a CPF is not available in IRIS.

3. In the absence of toxicological data for an RfD or CPF in IRIS, data published in the 1980 U.S. EPA water quality criteria documents will be considered.

4. In establishing stream quality objectives for carcinogens, the level of risk is established at 10^{-6} or one additional cancer in every 1,000,000 humans exposed for a lifetime (70 years).

5. For the purpose of determining compliance with human health stream quality objectives, the duration of exposure shall be 70 years for carcinogens and 30 days for systemic toxicants.

6. A rate of ingestion of water of 2.0 liters per day is assumed in calculating objectives for river zones where the designated uses include public water supplies after reasonable treatment. A rate of ingestion of fish of 17.5 grams per day (equivalent to consuming a ½ pound portion every 13 days) is assumed in calculating freshwater and marine stream quality objectives for the protection of human health.

7. Maximum Contaminant Levels (MCLs) shall be applied as stream quality objectives in Zones 2 and 3 which are designated for use as public water supplies for those toxic

pollutants where the MCL value is more stringent than the calculated human health objectives for carcinogens or systemic toxicants.

8. Numerical criteria for toxic pollutants to protect the taste and odor of ingested water and fish shall be applied as stream quality objectives in Zones 2 – 6 if these criteria are more stringent than the calculated human health objectives for carcinogens or systemic toxicants.

3.10.4 **Effluent Quality Requirements.**

A. **Minimum Treatment**. All wastes shall receive a minimum of secondary treatment, regardless of the stated stream quality objective.

B. **Disinfection**. Wastes (exclusive of stormwater bypass) containing human excreta or disease producing organisms shall be effectively disinfected before being discharged into surface bodies of water as needed to meet applicable Commission or State water quality standards.

C. **Public Safety**. Effluents shall not create a menace to public health or safety at the point of discharge.

D. **Limits**.

1. Discharges shall not contain more than negligible amounts of debris, oil, scum, or other floating materials, suspended matter which will settle to form sludge, toxic substances, or substances or organisms that produce color, taste, odor of the water, or taint fish or shellfish flesh.

a. **Suspended Solids**.

1) For wastewater treatment facilities, not to exceed:

(i) 30 mg/l as a 30-day average

(ii) 45 mg/l as a 7-day average.

2) For industrial wastewater treatment facilities' discharges with a concentration greater than 1(i) or 1(ii):

(i) up to 100 mg/l as a 30-day average may be permitted; and

(ii) at least 85 percent reduction as a 30-day average is achieved as may be modified by Section 3.10.6D3.

(iii) The limit in 2(I) may be waived upon application, if it is determined that there is an established USEPA best conventional pollutant

control technology (BCT) effluent limitation and that the treatment level meets the applicable BCT limitation.

b. **Oil and Grease.**

1) **Oil Storage Terminal Runoff.**

(a) Oil storage terminal runoff shall not exhibit readily visible oil.

(b) Control facilities shall be designed and operated such that the concentration of oil and grease in the effluent shall not exceed 15 mg/l as the average of samples taken during any single storm event during which:

(i) precipitation is not greater than two inches per hour or four and one-half inches in 24 hours; or

(ii) a maximum runoff of 80 gallons per minute per acre over a 24 hour period occurs.

(c) In implementing this standard, signatory parties may adopt and apply either effluent and monitoring standards, or best management practices for design, operation and maintenance of control facilities, provided that the Commission reserves the power to monitor discharges and enforce the 15 mg/l oil and grease standard in section 1)(b) above as an effluent limit.

(d) The average oil and grease concentration for any storm discharge event shall be determined from samples collected in such manner and such location as to be representative of the actual discharge.

2) **Industrial Wastewater Discharges**. Shall not exceed the limits as prescribed in the U.S. Environmental Protection Agency's promulgated effluent standards for the industrial category in question.

2. Total dissolved solids shall not exceed 1000 mg/l, or a concentration established by the Commission which is compatible with designated water uses and stream quality objectives, and recognizes the need for reserve capacity to serve future dischargers.

E. **Allocation of Capacity**. Where necessary to meet the stream quality objectives, the waste assimilative capacity of the receiving waters shall be allocated in accordance with the doctrine of equitable apportionment.

F. **Intermittent Streams**.

1. Discharges to intermittent streams may be permitted by the Commission only if the applicant can demonstrate that there is no reasonable economical alternative, the project is environmentally acceptable, and would not violate the stream quality objectives set forth in Section 3.10.3B.1.a.

2. Discharges to intermittent streams shall be adequately treated to protect stream uses, public health and ground water quality, and prevent nuisance conditions.

3.10.5 **Other Considerations.**

A. **Combined Sewers**. Any new facility or project combining sanitary or industrial waste with storm-water drainage which would have a substantial effect on the quality of waters of the Basin shall not be permitted, whether or not any such project or facility discharges into an existing combined system.

B. **Access and Reports.**

1. The Commission, or its duly authorized representatives, shall have access, at reasonable hours, to observe and inspect waste treatment facilities and to collect samples for analyses.

2. Upon written request, waste treatment facility operation reports shall be submitted to the Commission.

C. **Zones**. The Delaware River and Bay and their tributaries may be divided into zones which will facilitate the management of surface and underground water quality.

D. **Streamflow**. Numerical stream quality objectives are based on a minimum consecutive 7-day flow with a 10-year recurrence interval unless otherwise specified.

E. **Requests for Modification of Stream Quality Objectives**. The Commission will consider requests to modify the stream quality objectives for toxic pollutants based upon site-specific factors. Such requests shall provide a demonstration of the site-specific differences in the physical, chemical or biological characteristics of the area in question, through the submission of substantial scientific data and analysis. The demonstration shall also include the proposed alternate stream quality objectives. The methodology and form of the demonstration shall be approved by the Commission.

3.10.6 **Definitions.**

A. **Biochemical Oxygen Demand**. Biochemical oxygen demand as determined under standard laboratory procedures for 5 days at 20°C.

B. **Carbonaceous Oxygen Demand**. That part of the ultimate oxygen demand associated with biochemical oxidation of carbonaceous, as distinct from nitrogenous, material.

C. **Effective Disinfection**. The destruction of pathogenic organisms in such manner and under such controls as shall be prescribed by Commission regulations.

D. **Secondary Treatment**.

1. The removal of practically all suspended solids at all times;

2. The reduction of the biochemical oxygen demand by at least 85 percent; the 85 percent reduction may be modified, upon application, for dilute industrial process wastewater;

3. May include the in-plant control of industrial wastes as prescribed by the Commission.

E. **River Mile**. The distance, in statute miles, of a location or item measured from "mile zero."

1. **Delaware Bay and River.**

a. Mile Zero is located at the intersection of the centerline of the navigation channel and a line between the Cape May Light and the tip of Cape Henlopen.

b. Distances from mile zero are measured essentially along the centerline of the navigation channel up to the Trenton-Morrisville Toll Bridge (R.M. 133.4) and above that point along the State boundary line as shown on published quadrangle maps of the United States Geological Survey.

2. **Tributaries.**

a. Mile zero is located at the intersection of the centerline of the tributary and a line joining the opposite banks at its mouth.

b. Distances from mile zero are measured along the centerline of the tributary.

F. **Intermittent Streams**. A stream is intermittent when it meets either of the following conditions:

1. A stream with less than a 0.1 cfs minimum consecutive seven-day natural flow with a ten-year recurrence interval; or,

2. A ditch, canal or natural water course which serves only to convey runoff during and after a storm.

G. **Background, Total Dissolved Solids**. The observed concentration of total dissolved solids during low flow conditions or, in the absence thereof, an estimate acceptable to the Commission.

H. **IRIS**. The Integrated Risk Information System established and maintained by the U.S. Environmental Protection Agency. An electronic data base containing information on the toxicity and carcinogenicity of individual substances which can be accessed by regulatory agencies and the public.

I. **Carcinogen**. A substance for which there is no level of exposure that does not pose a small, finite probability of inducing benign or malignant tumors.

J. **Systemic Toxicant**. A substance having a threshold exposure which must be exceeded before deleterious effects (other than cancer) are observed in organ systems.

K. **Acute Effects**. Effects (including but not limited to lethality) due to exposure to a toxicant over a short time period.

L. **Chronic Effects**. Effects (including but not limited to reduced reproduction, reduced growth and lethality) due to exposure to a toxicant over a relatively long period of time relative to the life span of the exposed organism.

M. **Cancer Potency Factor (CPF)**. The slope of the dose response curve in the low dose region expressed as the risk per milligram of a toxic substance per kilogram of body weight per day $(mg/KG/day)^{-1}$.

N. **Reference Dose (RfD)**. The daily exposure to a substance that is likely to be without an appreciable risk of deleterious effects during a lifetime expressed as milligram of the substance per kilogram of body weight per day (mg/KG/day).

O. **Maximum Contaminant Level (MCL)**. The maximum permissible level of a contaminant in water which is delivered to any user of a public water system.

P. **Stream Quality Objectives**. Numeric values for specific pollutants and narrative descriptions of the quality of a waterbody that will assure that the designated uses of the waterbody, including the protection of aquatic life and human health, are achieved.

Section 3.20 Interstate Streams - Nontidal.

3.20.1 **Application**. This article shall apply to the interstate nontidal streams of the Delaware River Basin. The interstate nontidal streams of the Delaware River Basin are those rivers, lakes, and other waters that flow across or form a part of state boundaries.

3.20.2 **Zone 1A.**

A. **Description**. Zone 1A is that part of the Delaware River extending from the confluence of the East and West Branches of the Delaware River at Hancock, New York, R.M. (River Mile) 330.7, to the Route 652 Bridge at Narrowsburg, New York, R.M. 289.9.

B. **Water Uses to be Protected**. The quality of Zone 1A waters shall be maintained in a safe and satisfactory condition for the following uses:

1. a. public water supplies after reasonable treatment,
   b. industrial water supplies after reasonable treatment,
   c. agricultural water supplies;

2. a. maintenance and propagation of resident game fish and other aquatic life,
   b. maintenance and propagation of trout,
   c. spawning and nursery habitat for anadromous fish,
   d. wildlife;

3. a. recreation.

C. **Stream Quality Objectives.**

1. **Dissolved Oxygen**.
   a. not less than 5.0 mg/l at any time;
   b. minimum 24-hour average of 6.0 mg/l;
   c. not less than 7.0 mg/l in spawning areas whenever temperatures are suitable for trout spawning.

2. **Temperature**. Except in designated heat dissipation areas, [See 4.30.6.F.1.]
   a. not to exceed 5°F (2.8°C) rise above ambient temperature until stream temperature reaches 50°F (10.0°C),
   b. not to exceed 2°F (1.1°C) rise above ambient temperature when stream temperature is between 50°F (10.0°C) and 58°F (14.4°C),
   c. natural temperature will prevail above 58°F (14.4°C).

3. **pH**. Between 6.0 and 8.5.

4. **Phenols**. Not to exceed 0.005 mg/l unless due to natural conditions.

5. **Threshold Odor Number**. Not to exceed 24 at 60°C.

6. **Synthetic Detergents** (M.B.A.S.). Not to exceed 0.5 mg/l.

7. **Radioactivity**.
   a. alpha emitters - not to exceed 3 pc/l (picocuries per liter);
   b. beta emitters - not to exceed 1,000 pc/l.

8. **Fecal Coliform**. Not to exceed 200 per 100 milliliters as a geometric average; samples shall be taken at such frequency and location as to permit valid interpretation.

9. **Total Dissolved Solids**. Not to exceed
   a. 133 percent of background, or
   b. 500 mg/l, whichever is less.

10. **Turbidity**. Unless exceeded due to natural conditions
    a. maximum 30-day average 10 units,
    b. maximum 150 units.

D. **Effluent Quality Requirements**.

1. All discharges shall meet the effluent quality requirements of Section 3.10.

2. The carbonaceous oxygen demand from an outfall (exclusive of stormwater bypass) shall not exceed that assigned by the Commission to maintain stream quality objectives.

3.20.3 **Zone 1B.**

A. **Description**. Zone 1B is that part of the Delaware River extending from the Route 652 bridge at Narrowsburg, New York, R.M. 289.9, to the U.S. Routes 6 and 209 bridge at Port Jervis, New York, R.M. 254.75.

B. **Water Uses to be Protected**. The quality of Zone 1B waters shall be maintained in a safe and satisfactory condition for the following uses:

1. a. public water supplies after reasonable treatment,
   b. industrial water supplies after reasonable treatment,
   c. agricultural water supplies;

2. a. maintenance and propagation of resident game fish and other aquatic life,
   b. spawning and nursery habitat for anadromous fish,
   c. passage of anadromous fish,
   d. wildlife;

3. a. recreation.

C. **Stream Quality Objectives.**

1. **Dissolved Oxygen**.
   a. not less than 4.0 mg/l at any time;
   b. minimum 24-hour average of 5.0 mg/l.

2. **Temperature**. Except in designated heat dissipation areas [See 4.30.6.F.1.]
   a. not to exceed 5°F (2.8°C) rise above ambient temperature until stream temperature reaches 87°F (30.6°C),
   b. natural temperature will prevail above 87°F (30.6°C).

3. **pH**. Between 6.0 and 8.5.

4. **Phenols**. Not to exceed 0.005 mg/l unless due to natural conditions.

5. **Threshold Odor Number**. Not to exceed 24 at 60°C.

6. **Synthetic Detergents** (M.B.A.S.). Not to exceed 0.5 mg/l.

7. **Radioactivity**.
   a. alpha emitters - not to exceed 3 pc/l (picocuries per liter);
   b. beta emitters - not to exceed 1,000 pc/l.

8. **Fecal Coliform**. Not to exceed 200 per 100 milliliters as a geometric average; samples shall be taken at such frequency and location as to permit valid interpretation.

9. **Total Dissolved Solids**. Not to exceed
   a. 133 percent of background, or
   b. 500 mg/l, whichever is less.

10. **Turbidity**. Unless exceeded due to natural conditions
   a. maximum 30-day average 10 units,
   b. maximum 150 units.

D. **Effluent Quality Requirements**.

1. All discharges shall meet the effluent quality requirements of Section 3.10.

2. The carbonaceous oxygen demand from an outfall (exclusive of stormwater bypass) shall not exceed that assigned by the Commission to maintain stream quality objectives.

3.20.4 **Zone 1C.**

A. **Description**. Zone 1C is that part of the Delaware River extending from the U.S. Routes 6 and 209 bridge at Port Jervis, New York, R.M. 254.75, to Tocks Island Dam, 217.0 (proposed axis of dam).

B. **Water Uses to be Protected**. The quality of Zone 1C waters shall be maintained in a safe and satisfactory condition for the following uses:

1. a. public water supplies after reasonable treatment,
   b. industrial water supplies after reasonable treatment,
   c. agricultural water supplies;

2. a. maintenance and propagation of resident game fish and other aquatic life,
   b. spawning and nursery habitat for anadromous fish,

c. passage of anadromous fish,
d. wildlife;

3. a. recreation.

C. **Stream Quality Objectives.**

1. **Dissolved Oxygen**.
   a. not less than 4.0 mg/l at any time;
   b. minimum 24-hour average of 5.0 mg/l.

2. **Temperature**. Except in designated heat dissipation areas [See 4.30.6.F.1.]
   a. not to exceed 5°F (2.8°C) rise above ambient temperature until stream temperature reaches 87°F (30.6°C),
   b. natural temperature will prevail above 87°F (30.6°C).

3. **pH**. Between 6.0 and 8.5.

4. **Phenols**. Not to exceed 0.005 mg/l unless due to natural conditions.

5. **Threshold Odor Number**. Not to exceed 24 at 60°C.

6. **Synthetic Detergents** (M.B.A.S.). Not to exceed 0.5 mg/l.

7. **Radioactivity**.
   a. alpha emitters - not to exceed 3 pc/l (picocuries per liter);
   b. beta emitters - not to exceed 1,000 pc/l.

8. **Fecal Coliform**. Not to exceed 200 per 100 milliliters as a geometric average; samples shall be taken at such frequency and location as to permit valid interpretation.

9. **Total Dissolved Solids**. Not to exceed
   a. 133 percent of background, or
   b. 500 mg/l, whichever is less.

10. **Turbidity**. Unless exceeded due to natural conditions.
    a. maximum 30-day average 20 units,
    b. maximum 150 units.

D. **Effluent Quality Requirements**.

1. All discharges shall meet the effluent quality requirements of Section 3.10.

2. The carbonaceous oxygen demand from an outfall (exclusive of stormwater bypass) shall not exceed that assigned by the Commission to maintain stream quality objectives.

3.20.5 **Zone 1D**.

A. **Description**. Zone 1D is that part of the Delaware River extending from Tocks Island Dam, R.M. 217.0 (proposed axis of dam), to the mouth of the Lehigh River at Easton, Pennsylvania, R.M. 183.66.

B. **Water Uses to be Protected**. The quality of Zone 1D waters shall be maintained in a safe and satisfactory condition for the following uses:

1. a. public water supplies after reasonable treatment,
   b. industrial water supplies after reasonable treatment,
   c. agricultural water supplies;

2. a. maintenance and propagation of resident game fish and other aquatic life,
   b. spawning and nursery habitat for anadromous fish,
   c. passage of anadromous fish,
   d. wildlife;

3. a. recreation.

C. **Stream Quality Objectives.**

1. **Dissolved Oxygen**.
   a. not less than 4.0 mg/l at any time;
   b. minimum 24-hour average of 5.0 mg/l.

2. **Temperature**. Except in designated heat dissipation areas [See 4.30.6.F.2.]
   a. not to exceed 5°F (2.8°C) rise above ambient temperature until stream temperature reaches 87°F (30.6°C),
   b. natural temperature will prevail above 87°F (30.6°C).

3. **pH**.Between 6.0 and 8.5.

4. **Phenols**. Not to exceed 0.005 mg/l unless due to natural conditions.

5. **Threshold Odor Number**. Not to exceed 24 at 60°C.

6. **Synthetic Detergents** (M.B.A.S.). Not to exceed 0.5 mg/l.

7. **Radioactivity**.
   a. alpha emitters - not to exceed 3 pc/l (picocuries per liter);
   b. beta emitters - not to exceed 1,000 pc/l.

8. **Fecal Coliform**. Not to exceed 200 per 100 milliliters as a geometric average; samples shall be taken at such frequency and location as to permit valid interpretation.

9. **Total Dissolved Solids**. Not to exceed
   a. 133 percent of background, or
   b. 500 mg/l, whichever is less.

10. **Turbidity**. Unless exceeded due to natural conditions
   a. maximum 30-day average 20 units,
   b. maximum 150 units.

D. **Effluent Quality Requirements**.

1. All discharges shall meet the effluent quality requirements of Section 3.10.

2. The carbonaceous oxygen demand from an outfall (exclusive of stormwater bypass) shall not exceed that assigned by the Commission to maintain stream quality objectives.

3.20.6 **Zone 1E.**

A. **Description**. Zone 1E is that part of the Delaware River extending from the mouth of the Lehigh River at Easton, Pennsylvania, R.M. 183.66, to the head of tidewater at Trenton, New Jersey, R.M. 133.4 (Trenton-Morrisville Toll Bridge).

B. **Water Uses to be Protected**. The quality of Zone 1E waters shall be maintained in a safe and satisfactory condition for the following uses:

1. a. public water supplies after reasonable treatment,
   b. industrial water supplies after reasonable treatment,
   c. agricultural water supplies;

2. a. maintenance and propagation of resident game fish and other aquatic life,
   b. spawning and nursery habitat for anadromous fish,
   c. passage of anadromous fish,
   d. wildlife;

3. a. recreation.

C. **Stream Quality Objectives.**

1. **Dissolved Oxygen**.
   a. not less than 4.0 mg/l at any time;
   b. minimum 24-hour average of 5.0 mg/l.

2. **Temperature**. Except in designated heat dissipation areas [See 4.30.6.F.2.]
   a. not to exceed 5°F (2.8°C) rise above ambient temperature until stream temperature reaches 87°F (30.6°C),
   b. natural temperature will prevail above 87°F (30.6°C).

3. **pH**. Between 6.0 and 8.5.

4. **Phenols**. Not to exceed 0.005 mg/l unless due to natural conditions.

5. **Threshold Odor Number**. Not to exceed 24 at 60°C.

6. **Synthetic Detergents** (M.B.A.S.). Not to exceed 0.5 mg/l.

7. **Radioactivity**.
   a. alpha emitters - not to exceed 3 pc/l (picocuries per liter);
   b. beta emitters - not to exceed 1,000 pc/l.

8. **Fecal Coliform**. Not to exceed 200 per 100 milliliters as a geometric average; samples shall be taken at such frequency and location as to permit valid interpretation.

9. **Total Dissolved Solids**. Not to exceed
   a. 133 percent of background, or
   b. 500 mg/l, whichever is less.

10. **Turbidity**. Unless exceeded due to natural conditions
    a. maximum 30-day average 30 units,
    b. maximum 150 units.

11. **Alkalinity**. Not less than 20 mg/l.

D. **Effluent Quality Requirements**.

1. All discharges shall meet the effluent quality requirements of Section 3.10.

2. The carbonaceous oxygen demand from an outfall (exclusive of stormwater bypass) shall not exceed that assigned by the Commission to maintain stream quality objectives.

3.20.7 **Zone E.**

A. **Description**. Zone E is East Branch Delaware River extending from its source in the town of Roxbury, Delaware County, New York to its mouth at Hancock, New York, at R.M. 330.7 on the Delaware River.

B. **Water Uses to be Protected**. The quality of Zone E waters shall be maintained in a safe and satisfactory condition for the following uses:

1. a. public water supplies after reasonable treatment,
   b. industrial water supplies after reasonable treatment,
   c. agricultural water supplies;

2. a. maintenance and propagation of resident game fish and other aquatic life,
   b. maintenance and propagation of trout,
   c. wildlife;

3. a. recreation.

C. **Stream Quality Objectives.**

1. **Dissolved Oxygen**.
   a. not less than 5.0 mg/l at any time;
   b. minimum 24-hour average of 6.0 mg/l;
   c. not less than 7.0 mg/l in spawning areas whenever temperatures are suitable for trout spawning.

2. **Temperature**. Except in designated heat dissipation areas, [See 4.30.6.F.5.]
   a. not to exceed 5°F (2.8°C) rise above ambient temperature until stream temperature reaches 50°F (10.0°C);
   b. not to exceed 2°F (1.1°C) rise above ambient temperature when stream temperature is between 50°F (10.0°C) and 58°F (14.4°C);
   c. natural temperature will prevail above 58°F (14.4°C).

3. **pH**. Between 6.0 and 8.5.

4. **Phenols**. Not to exceed 0.005 mg/l unless due to natural conditions.

5. **Threshold Odor Number**. Not to exceed 24 at 60°C.

6. **Synthetic Detergents** (M.B.A.S.). Not to exceed 0.5 mg/l.

7. **Radioactivity**.
   a. alpha emitters - not to exceed 3 pc/l (picocuries per liter);
   b. beta emitters - not to exceed 1,000 pc/l.

8. **Fecal Coliform**. Not to exceed 200 per 100 milliliters as a geometric average; samples shall be taken at such frequency and location as to permit valid interpretation.

9. **Total Dissolved Solids**. Not to exceed
   a. 133 percent of background, or
   b. 500 mg/l, whichever is less.

D. **Effluent Quality Requirements**.

1. All discharges shall meet the effluent quality requirements of Section 3.10.

2. The carbonaceous oxygen demand from an outfall (exclusive of stormwater bypass) shall not exceed that assigned by the Commission to maintain stream quality objectives.

3.20.8 **Zone W1.**

A. **Description**. Zone W1 is West Branch Delaware River extending from its source in the town of Jefferson, Schoharie County, New York, to its mouth at Hancock, New York, at R.M. 330.71 on the Delaware River.

B. **Water Uses to be Protected**. The quality of Zone W1 waters shall be maintained in a safe and satisfactory condition for the following uses:

1. a. public water supplies after reasonable treatment,
   b. industrial water supplies after reasonable treatment,
   c. agricultural water supplies;

2. a. maintenance and propagation of resident game fish and other aquatic life,
   b. maintenance and propagation of trout,
   c. wildlife;

3. a. recreation.

C. **Stream Quality Objectives.**

1. **Dissolved Oxygen**.
   a. not less than 5.0 mg/l at any time;
   b. minimum 24-hour average of 6.0 mg/l;
   c. not less than 7.0 mg/l in spawning areas whenever temperatures are suitable for trout spawning.

2. **Temperature**. Except in designated heat dissipation areas [See 4.30.6.F.5.]
   a. not to exceed 5°F (2.8°C) rise above ambient temperature until stream temperature reaches 50°F (10.0°C),
   b. not to exceed 2°F (1.1°C) rise above ambient temperature when stream temperature is between 50°F (10.0°C) and 58°F (14.4°C),
   c. natural temperature will prevail above 58°F (14.4°C).

3. **pH**. Between 6.0 and 8.5.

4. **Phenols**. Not to exceed 0.005 mg/l, unless due to natural conditions.

5. **Threshold Odor Number**. Not to exceed 24 at 60°C.

6. **Synthetic Detergents** (M.B.A.S.). Not to exceed 0.5 mg/l.

7. **Radioactivity**.
   a. alpha emitters - not to exceed 3 pc/l (picocuries per liter);
   b. beta emitters - not to exceed 1,000 pc/l.

8. **Fecal Coliform**. Not to exceed 200 per 100 milliliters as a geometric average; samples shall be taken at such frequency and location as to permit valid interpretation.

9. **Total Dissolved Solids**. Not to exceed
   a. 133 percent of background, or
   b. 500 mg/l, whichever is less.

D. **Effluent Quality Requirements**.

1. All discharges shall meet the effluent quality requirements of Section 3.10.

2. The carbonaceous oxygen demand from an outfall (exclusive of stormwater bypass) shall not exceed that assigned by the Commission to maintain stream quality objectives.

3.20.9 **Zone W2.**

A. **Description**. Zone W2 is:

1. Sand Pond Creek extending from R.M. 1.8 at the confluence of Sherman Creek and Starboard Creek in Pennsylvania to its mouth in New York at R.M. 10.1 on the West Branch Delaware River;

2. Cat Hollow Brook extending from its source in New York to its mouth in Pennsylvania at R.M. 1.05 on Sand Pond Creek;

3. Sherman Creek in Pennsylvania extending from its source to its mouth at R.M. 1.8 on Sand Pond Creek;

4. an unnamed tributary of Sherman Creek extending from its source in New York to its mouth in Pennsylvania at R.M. 1.6 on Sherman Creek;

5. Starboard Creek extending from its source in Lake Oquaga in New York to its mouth in Pennsylvania at R.M. 1.81 on Sand Pond Creek.

B. **Water Uses to be Protected**. The quality of Zone W2 waters shall be maintained in a safe and satisfactory condition for the following uses:

1. a. public water supplies after reasonable treatment,
   b. industrial water supplies after reasonable treatment,
   c. agricultural water supplies;

2. a. maintenance and propagation of resident game fish and other aquatic life,
   b. maintenance and propagation of trout,
   c. wildlife;

3. a. recreation.

C. **Stream Quality Objectives.**

1. **Dissolved Oxygen**.
   a. not less than 5.0 mg/l at any time;
   b. minimum 24-hour average of 6.0 mg/l;
   c. not less than 7.0 mg/l in spawning areas whenever temperatures are suitable for trout spawning.

2. **Temperature**. Except in designated heat dissipation areas [See 4.30.6.F.5.]
   a. not to exceed 5°F (2.8°C) rise above ambient temperature until stream temperature reaches 50°F (10.0°C);
   b. not to exceed 2°F (1.1°C) rise above ambient temperature when stream temperature is between 50°F (10.0°C) and 58°F (14.4°C);
   c. natural temperature will prevail above 58°F (14.4°C).

3. **pH**. Between 6.0 and 8.5.

4. **Phenols**. Not to exceed 0.005 mg/l, unless due to natural conditions.

5. **Threshold Odor Number**. Not to exceed 24 at 60°C.

6. **Synthetic Detergents** (M.B.A.S.). Not to exceed 0.5 mg/l.

7. **Radioactivity**.
   a. alpha emitters - not to exceed 3 pc/l (picocuries per liter);
   b. beta emitters - not to exceed 1,000 pc/l.

8. **Fecal Coliform**. Not to exceed 200 per 100 milliliters as a geometric average; samples shall be taken at such frequency and location as to permit valid interpretation.

9. **Total Dissolved Solids**. Not to exceed
   a. 133 percent of background, or
   b. 500 mg/l, whichever is less.

D. **Effluent Quality Requirements**.

1. All discharges shall meet the effluent quality requirements of Section 3.10.

2. The carbonaceous oxygen demand from an outfall (exclusive of stormwater bypass) shall not exceed that assigned by the Commission to maintain stream quality objectives.

3.20.10 **Zone N1.**

A. **Description**. Zone N1 is that part of the Neversink River extending from R.M. 0.5 at its confluence with Clove Brook to its mouth on the Delaware River at R.M. 253.64.

B. **Water Uses to be Protected**. The quality of Zone N1 waters shall be maintained in a safe and satisfactory condition for the following uses:

1. a. public water supplies after reasonable treatment,
   b. industrial water supplies after reasonable treatment,
   c. agricultural water supplies;

2. a. maintenance and propagation of resident game fish and other aquatic life,
   b. wildlife;

3. a. recreation.

C. **Stream Quality Objectives.**

1. **Dissolved Oxygen**.
   a. not less than 4.0 mg/l at any time;
   b. minimum 24-hour average of 5.0 mg/l.

2. **Temperature**. Except in designated heat dissipation areas [See 4.30.6.F.5.]
   a. not to exceed 5°F (2.8°C) rise above ambient temperature until stream temperature reaches 87°F (30.6°C),
   b. natural temperature will prevail above 87°F (30.6°C).

3. **pH**.Between 6.5 and 8.5.

4. **Phenols**. Not to exceed 0.005 mg/l, unless due to natural conditions.

5. **Threshold Odor Number**. Not to exceed 24 at 60°C.

6. **Synthetic Detergents** (M.B.A.S.). Not to exceed 0.5 mg/l.

7. **Radioactivity**.
   a. alpha emitters - not to exceed 3 pc/l (picocuries per liter);
   b. beta emitters - not to exceed 1,000 pc/l.

8. **Fecal Coliform**. Not to exceed 200 per 100 milliliters as a geometric average; samples shall be taken at such frequency and location as to permit valid interpretation.

9. **Total Dissolved Solids**. Not to exceed
   a. 133 percent of background, or
   b. 500 mg/l, whichever is less.

D. **Effluent Quality Requirements**.

1. All discharges shall meet the effluent quality requirements of Section 3.10.

2. The carbonaceous oxygen demand from an outfall (exclusive of stormwater bypass) shall not exceed that assigned by the Commission to maintain stream quality objectives.

3.20.11 **Zone N2.**

A. **Description**. Zone N2 is:

1. Clove Brook extending from its source in Steeny Kill Lake in New Jersey to its mouth in New York at R.M. 0.5 on the Neversink River;

2. an unnamed tributary of Clove Brook extending from its source in New York to its mouth in New Jersey at R.M. 1.0 on Clove Brook;

3. an unnamed tributary to the above unnamed tributary of Clove Brook extending from its source in New York to its mouth in New Jersey at R.M. 0.7 on the unnamed tributary of Clove Brook.

B. **Water Uses to be Protected**. The quality of Zone N2 waters shall be maintained in a safe and satisfactory condition for the following uses:

1. a. public water supplies after reasonable treatment,
   b. industrial water supplies after reasonable treatment,
   c. agricultural water supplies;

2. a. maintenance and propagation of resident game fish and other aquatic life,
   b. maintenance and propagation of trout,
   c. wildlife;

3. a. recreation.

C. **Stream Quality Objectives.**

1. **Dissolved Oxygen**.
   a. not less than 5.0 mg/l at any time;
   b. minimum 24-hour average of 6.0 mg/l;
   c. not less than 7.0 mg/l in spawning areas whenever temperatures are suitable for trout spawning.

2. **Temperature** Except in designated heat dissipation areas [See 4.30.6.F.5.]
   a. not to exceed 5°F (2.8°C) rise above ambient temperature until stream temperature reaches 50°F (10.0°C);
   b. not to exceed 2°F (1.1°C) rise above ambient temperature when stream temperature is between 50°F (10.0°C) and 58°F (14.4°C);
   c. natural temperature will prevail above 58°F (14.4°C).

3. **pH**.Between 6.5 and 8.5.

4. **Phenols**. Not to exceed 0.005 mg/l unless due to natural conditions.

5. **Threshold Odor Number**. Not to exceed 24 at 60°C.

6. **Synthetic Detergents** (M.B.A.S.). Not to exceed 0.5 mg/l.

7. **Radioactivity**.
   a. alpha emitters - not to exceed 3 pc/l (picocuries per liter);
   b. beta emitters - not to exceed 1,000 pc/l.

8. **Fecal Coliform**. Not to exceed 200 per 100 milliliters as a geometric average; samples shall be taken at such frequency and location as to permit valid interpretation.

9. **Total Dissolved Solids**. Not to exceed
   a. 133 percent of background, or
   b. 500 mg/l, whichever is less.

D. **Effluent Quality Requirements**.

1. All discharges shall meet the effluent quality requirements of Section 3.10.

2. The carbonaceous oxygen demand from an outfall (exclusive of stormwater bypass) shall not exceed that assigned by the Commission to maintain stream quality objectives.

3.20.12 **Zone C1.**

A. **Description**. Zone C1 is that part of the Christina River extending from its source in Pennsylvania to the head of tide water at R.M. 16.3 at the outlet of Smalley's Pond in Delaware.

B. **Water Uses to be Protected**. The quality of Zone C1 waters shall be maintained in a safe and satisfactory condition for the following uses:

1. a. public water supplies after reasonable treatment,
   b. industrial water supplies after reasonable treatment,
   c. agricultural water supplies;

2. a. maintenance and propagation of resident game fish and other aquatic life,
   b. wildlife;

3. a. recreation.

C. **Stream Quality Objectives.**

1. **Dissolved Oxygen**.
   a. not less than 4.0 mg/l at any time,
   b. minimum 24-hour average of 5.0 mg/l.

2. **Temperature**. Except in designated heat dissipation areas [See 4.30.6.F.5.]
   a. not to exceed 5°F (2.8°C) rise above ambient temperature until stream temperature reaches 87°F (30.6°C),
   b. natural temperature will prevail above 87°F (30.6°C).

3. **pH**.Between 6.0 and 8.5.

4. **Phenols**. Not to exceed 0.005 mg/l unless due to natural conditions.

5. **Threshold Odor Number**. Not to exceed 24 at 60°C.

6. **Synthetic Detergents** (M.B.A.S.). Not to exceed 0.5 mg/l.

7. **Radioactivity**.
   a. alpha emitters - not to exceed 3 pc/l (picocuries per liter);
   b. beta emitters - not to exceed 1,000 pc/l.

8. **Fecal Coliform**. Not to exceed 200 per 100 milliliters as a geometric average; samples shall be taken at such frequency and location as to permit valid interpretation.

9. **Total Dissolved Solids**. Not to exceed
   a. 133 percent of background, or
   b. 500 mg/l, whichever is less.

10. **Turbidity**.
   a. not to exceed
      1) the natural background by 10 units, or
      2) a maximum of 25 units, whichever is less.
   b. Increases not to be attributable to industrial waste discharges.

D. **Effluent Quality Requirements**.

1. All discharges shall meet the effluent quality requirements of Section 3.10.

2. The carbonaceous oxygen demand from an outfall (exclusive of stormwater bypass) shall not exceed that assigned by the Commission to maintain stream quality objectives.

3.20.13 **Zone C2.**

A. **Description**. Zone C2 is:

1. West Branch Christina River extending from its source in Maryland to its mouth on the Christina River in Delaware at R.M. 25.7;

2. Persimmon Run extending from its source in Maryland to its mouth on the West Branch Christina River in Delaware at R.M. 0.8;

3. East Branch Christina River extending from its source in Pennsylvania to its mouth on the Christina River at R.M. 30.2.

B. **Water Uses to be Protected**. The quality of Zone C2 waters shall be maintained in a safe and satisfactory condition for the following uses:

1. a. public water supplies after reasonable treatment,
   b. industrial water supplies after reasonable treatment,
   c. agricultural water supplies;

2. a. maintenance and propagation of resident game fish and other aquatic life,
   b. wildlife;

3. a. recreation.

C. **Stream Quality Objectives.**

1. **Dissolved Oxygen**.
   a. not less than 4.0 mg/l at any time;
   b. minimum 24-hour average of 5.0 mg/l.

2. **Temperature**. Except in designated heat dissipation areas [See 4.30.6.F.5.]
   a. not to exceed 5°F (2.8°C) rise above ambient temperature until stream temperature reaches 87°F (30.6°C),
   b. natural temperature will prevail above 87°F (30.6°C).

3. **pH** Between 6.0 and 8.5.

4. **Phenols**. Not to exceed 0.005 mg/l, unless due to natural conditions.

5. **Threshold Odor Number**. Not to exceed 24 at 60°C.

6. **Synthetic Detergents** (M.B.A.S.). Not to exceed 0.5 mg/l.

7. **Radioactivity**.
   a. alpha emitters - not to exceed 3 pc/l (picocuries per liter);
   b. beta emitters - not to exceed 1,000 pc/l.

8. **Fecal Coliform**. Not to exceed 200 per 100 milliliters as a geometric average; samples shall be taken at such frequency and location as to permit valid interpretation.

9. **Total Dissolved Solids**. Not to exceed
   a. 133 percent of background, or
   b. 500 mg/l, whichever is less.

10. **Turbidity**.
    a. not to exceed
       1) the natural background by 10 units, or
       2) a maximum of 25 units, whichever is less.
    b. increases not to be attributable to industrial waste discharges.

D. **Effluent Quality Requirements**.

1. All discharges shall meet the effluent quality requirements of Section 3.10.

2. The carbonaceous oxygen demand from an outfall (exclusive of stormwater bypass) shall not exceed that assigned by the Commission to maintain stream quality objectives.

3.20.14 **Zone C3.**

A. **Description**. Zone C3 is that part of White Clay Creek extending from its source in Pennsylvania to R.M. 14.7 at the Pennsylvania-Delaware State line.

B. **Water Uses to be Protected**. The quality of Zone C3 waters shall be maintained in a safe and satisfactory condition for the following uses:

1. a. public water supplies after reasonable treatment,
   b. industrial water supplies after reasonable treatment,
   c. agricultural water supplies;

2. a. maintenance and propagation of resident game fish and other aquatic life,
   b. maintenance and propagation of trout,
   c. wildlife;

3. a. recreation.

C. **Stream Quality Objectives.**

1. **Dissolved Oxygen**.
   a. not less than 5.0 mg/l at any time;
   b. minimum 24-hour average of 6.0 mg/l;
   c. not less than 7.0 mg/l in spawning areas whenever temperatures are suitable for trout spawning.

2. **Temperature**. Except in designated heat dissipation areas [See 4.30.6.F.5.]
   a. not to exceed 5°F (2.8°C) rise above ambient temperature until stream temperature reaches 50°F (10.0°C);
   b. not to exceed 2°F (1.1°C) rise above ambient temperature when stream temperature is between 50°F (10.0°C) and 58°F (14.4°C);
   c. natural temperature will prevail above 58°F (14.4°C).

3. **pH**.Between 6.0 and 8.5.

4. **Phenols**. Not to exceed 0.005 mg/l, unless due to natural conditions.

5. **Threshold Odor Number**. Not to exceed 24 at 60°C.

6. **Synthetic Detergents** (M.B.A.S.). Not to exceed 0.5 mg/l.

7. **Radioactivity**.
   a. alpha emitters - not to exceed 3 pc/l (picocuries per liter);
   b. beta emitters - not to exceed 1,000 pc/l.

8. **Fecal Coliform**. Not to exceed 200 per 100 milliliters as a geometric average; samples shall be taken at such frequency and location as to permit valid interpretation.

9. **Total Dissolved Solids**. Not to exceed
   a. 133 percent of background, or
   b. 500 mg/l, whichever is less.

10. **Turbidity**.
    a. not to exceed
       1) the natural background by 10 units, or
       2) a maximum of 25 units, whichever is less.
    b. increases not to be attributable to industrial waste discharges.

D. **Effluent Quality Requirements**.

1. All discharges shall meet the effluent quality requirements of Section 3.10.

2. The carbonaceous oxygen demand from an outfall (exclusive of stormwater bypass) shall not exceed that assigned by the Commission to maintain stream quality objectives.

3.20.15 **Zone C4.**

A. **Description**. Zone C4 is that part of White Clay Creek extending from R.M. 14.7 at the Pennsylvania-Delaware State line to its mouth on the Christina River in Delaware at R.M. 10.0.

B. **Water Uses to be Protected**. The quality of Zone C4 waters shall be maintained in a safe and satisfactory condition for the following uses:

1. a. public water supplies after reasonable treatment,
   b. industrial water supplies after reasonable treatment,
   c. agricultural water supplies;

2. a. maintenance and propagation of resident game fish and other aquatic life,
   b. wildlife;

3. a. recreation.

C. **Stream Quality Objectives.**

1. **Dissolved Oxygen**.
   a. not less than 4.0 mg/l at any time;
   b. minimum 24-hour average of 5.0 mg/l.

2. **Temperature**. Except in designated heat dissipation areas [See 4.30.6.F.5.]
   a. not to exceed 5°F (2.8°C) rise above ambient temperature until stream temperature reaches 87°F (30.6°C);
   b. natural temperature will prevail above 87°F (30.6°C).

3. **pH**.Between 6.0 and 8.5.

4. **Phenols**. Not to exceed 0.005 mg/l, unless due to natural conditions.

5. **Threshold Odor Number**. Not to exceed 24 at 60°C.

6. **Synthetic Detergents** (M.B.A.S.). Not to exceed 0.5 mg/l.

7. **Radioactivity**.
   a. alpha emitters - not to exceed 3 pc/l (picocuries per liter);
   b. beta emitters - not to exceed 1,000 pc/l.

8. **Fecal Coliform**. Not to exceed 200 per 100 milliliters as a geometric average; samples shall be taken at such frequency and location as to permit valid interpretation.

9. **Total Dissolved Solids**. Not to exceed
   a. 133 percent of background, or
   b. 500 mg/l, whichever is less.

10. **Turbidity**.
    a. not to exceed
       1) the natural background by 10 units, or
       2) a maximum of 25 units, whichever is less.
    b. increases not to be attributable to industrial waste discharges.

D. **Effluent Quality Requirements**.

1. All discharges shall meet the effluent quality requirements of Section 3.10.

2. The carbonaceous oxygen demand from an outfall (exclusive of stormwater bypass) shall not exceed that assigned by the Commission to maintain stream quality objectives.

3.20.16 **Zone C5.**

A. **Description**. Zone C5 is:

1. that part of Red Clay Creek extending from the confluence of East and West branches of Red Clay Creek in Pennsylvania at R.M. 13.4 to R.M. 12.6, at the Pennsylvania- Delaware State Line;

2. West Branch Red Clay Creek extending from its source to its mouth on Red Clay Creek at R.M. 13.4.

B. **Water Uses to be Protected**. The quality of Zone C5 waters shall be maintained in a safe and satisfactory condition for the following uses:

1. a. public water supplies after reasonable treatment,
   b. industrial water supplies after reasonable treatment,
   c. agricultural water supplies;

2. a. maintenance and propagation of resident game fish and other aquatic life,
   b. maintenance and propagation of trout,
   c. wildlife;

3. a. recreation.

C. **Stream Quality Objectives.**

1. **Dissolved Oxygen**.
   a. not less than 5.0 mg/l at any time,
   b. minimum 24-hour average of 6.0 mg/l,
   c. not less than 7.0 mg/l in spawning areas whenever temperatures are suitable for trout spawning.

2. **Temperature**. Except in designated heat dissipation areas [See 4.30.6.F.5.]
   a. not to exceed 5°F (2.8°C) rise above ambient temperature until stream temperature reaches 50°F (10.0°C),
   b. not to exceed 2°F (1.1°C) rise above ambient temperature when stream temperature is between 50°F (10.0°C) and 58°F (14.4°C),
   c. natural temperature will prevail above 58°F (14.4°C).

3. **pH**.Between 6.0 and 8.5.

4. **Phenols**. Not to exceed 0.005 mg/l, unless due to natural conditions.

5. **Threshold Odor Number** Not to exceed 24 at 60°C.

6. **Synthetic Detergents** (M.B.A.S.). Not to exceed 0.5 mg/l.

7. **Radioactivity**.
   a. alpha emitters - not to exceed 3 pc/l (picocuries per liter);
   b. beta emitters - not to exceed 1,000 pc/l.

8. **Fecal Coliform**. Not to exceed 200 per 100 milliliters as a geometric average; samples shall be taken at such frequency and location as to permit valid interpretation.

9. **Total Dissolved Solids**. Not to exceed
   a. 133 percent of background, or
   b. 500 mg/l, whichever is less.

10. **Turbidity**.
    a. not to exceed
       1) the natural background by 10 units, or
       2) a maximum of 25 units, whichever is less.
    b. increases not to be attributable to industrial waste discharges.

D. **Effluent Quality Requirements**.

1. All discharges shall meet the effluent quality requirements of Section 3.10.

2. The carbonaceous oxygen demand from an outfall (exclusive of stormwater bypass) shall not exceed that assigned by the Commission to maintain stream quality objectives.

3.20.17 **Zone C6.**

A. **Description**. Zone C6 is that part of Red Clay Creek extending from R.M. 12.6 at the Pennsylvania-Delaware State line to its mouth on White Clay Creek in Delaware at R.M. 2.6.

B. **Water Uses to be Protected**. The quality of Zone C6 waters shall be maintained in a safe and satisfactory condition for the following uses:

1. a. public water supplies after reasonable treatment,
   b. industrial water supplies after reasonable treatment,
   c. agricultural water supplies;

2. a. maintenance and propagation of resident game fish and other aquatic life,
   b. wildlife;

3. a. recreation.

C. **Stream Quality Objectives.**

1. **Dissolved Oxygen**.
   a. not less than 4.0 mg/l at any time;
   b. minimum 24-hour average of 5.0 mg/l.

2. **Temperature**. Except in designated heat dissipation areas [See 4.30.6.F.5.]
   a. not to exceed 5°F (2.8°C) rise above ambient temperature until stream temperature reaches 87°F (30.6°C),
   b. natural temperature will prevail above 87°F (30.6°C).

3. **pH**.Between 6.0 and 8.5.

4. **Phenols**. Not to exceed 0.005 mg/l, unless due to natural conditions.

5. **Threshold Odor Number**. Not to exceed 24 at 60°C.

6. **Synthetic Detergents** (M.B.A.S.). Not to exceed 0.5 mg/l.

7. **Radioactivity**.
   a. alpha emitters - not to exceed 3 pc/l (picocuries per liter);
   b. beta emitters - not to exceed 1,000 pc/l.

8. **Fecal Coliform**. Not to exceed 200 per 100 milliliters as a geometric average; samples shall be taken at such frequency and location as to permit valid interpretation.

9. **Total Dissolved Solids**. Not to exceed
   a. 133 percent of background, or
   b. 500 mg/l, whichever is less.

10. **Turbidity**.
    a. not to exceed
       1) the natural background by 10 units, or
       2) a maximum of 25 units, whichever is less.
    b. increases not to be attributable to industrial waste discharges.

D. **Effluent Quality Requirements**.

1. All discharges shall meet the effluent quality requirements of Section 3.10.

2. The carbonaceous oxygen demand from an outfall (exclusive of stormwater bypass) shall not exceed that assigned by the Commission to maintain stream quality objectives.

3.20.18 **Zone C7.**

A. **Description**. Zone C7 is:

1. Brandywine Creek extending from the confluence of the East and West Branches of Brandywine Creek in Pennsylvania at R.M. 20.0 to the head of tidewater at R.M. 2.0 at the Market Street Bridge in Wilmington, Delaware;

2. West Branch Brandywine Creek extending from its source to its mouth on Brandywine Creek at R.M. 20.0.

B. **Water Uses to be Protected**. The quality of Zone C7 waters shall be maintained in a safe and satisfactory condition for the following uses:

1. a. public water supplies after reasonable treatment,
   b. industrial water supplies after reasonable treatment,
   c. agricultural water supplies;

2. a. maintenance and propagation of resident game fish and other aquatic life,
   b. spawning and nursery habitat for anadromous fish,
   c. passage of anadromous fish,
   d. wildlife;

3. a. recreation.

C. **Stream Quality Objectives.**

1. **Dissolved Oxygen**.
   a. not less than 4.0 mg/l at any time;
   b. minimum 24-hour average of 5.0 mg/l.

2. **Temperature**. Except in designated heat dissipation areas [See 4.30.6.F.5.]
   a. not to exceed 5°F (2.8°C) rise above ambient temperature until stream temperature reaches 87°F (30.6°C),
   b. natural temperature will prevail above 87°F (30.6°C).

3. **pH**.Between 6.5 and 8.5.

4. **Phenols**. Not to exceed 0.005 mg/l, unless due to natural conditions.

5. **Threshold Odor Number**. Not to exceed 24 at 60°C.

6. **Synthetic Detergents** (M.B.A.S.). Not to exceed 0.5 mg/l.

7. **Radioactivity**.
   a. alpha emitters - not to exceed 3 pc/l (picocuries per liter);
   b. beta emitters - not to exceed 1,000 pc/l.

8. **Fecal Coliform**. Not to exceed 200 per 100 milliliters as a geometric average; samples shall be taken at such frequency and location as to permit valid interpretation.

9. **Total Dissolved Solids**. Not to exceed
   a. 133 percent of background, or
   b. 500 mg/l, whichever is less.

10. **Turbidity**.
   a. not to exceed
      1) the natural background by 10 units, or
      2) a maximum of 25 units, whichever is less.
   b. increases not to be attributable to industrial waste discharges.

11. **Fluorides**. Not to exceed 1.0 mg/l.

D. **Effluent Quality Requirements**.

1. All discharges shall meet the effluent quality requirements of Section 3.10.

2. The carbonaceous oxygen demand from an outfall (exclusive of stormwater bypass) shall not exceed that assigned by the Commission to maintain stream quality objectives.

3.20.19 **Zone C8.**

A. **Description**. Zone C8 is Naaman Creek extending from its source in Pennsylvania to the head of tidewater in Delaware.

B. **Water Uses to be Protected**. The quality of Zone C8 waters shall be maintained in a safe and satisfactory condition for the following uses:

1. a. public water supplies after reasonable treatment,
   b. industrial water supplies after reasonable treatment,
   c. agricultural water supplies;

2. a. maintenance and propagation of resident game fish and other aquatic life,
   b. wildlife;

3. a. recreation.

C. **Stream Quality Objectives.**

1. **Dissolved Oxygen**.
   a. not less than 4.0 mg/l at any time;
   b. minimum 24-hour average of 5.0 mg/l.

2. **Temperature**. Except in designated heat dissipation areas [See 4.30.6.F.5.]
   a. not to exceed 5°F (2.8°C) rise above ambient temperature until stream temperature reaches 87°F (30.6°C);
   b. natural temperature will prevail above 87°F (30.6°C).

3. **pH**. Between 6.0 and 8.5.

4. **Phenols**. Not to exceed 0.005 mg/l, unless due to natural conditions.

5. **Threshold Odor Number**. Not to exceed 24 at 60°C.

6. **Synthetic Detergents** (M.B.A.S.). Not to exceed 0.5 mg/l.

7. **Radioactivity**.
   a. alpha emitters - not to exceed 3 pc/l (picocuries per liter);
   b. beta emitters - not to exceed 1,000 pc/l.

8. **Fecal Coliform**. Not to exceed 200 per 100 milliliters as a geometric average; samples shall be taken at such frequency and location as to permit valid interpretation.

9. **Total Dissolved Solids**. Not to exceed
   a. 133 percent of background, or
   b. 500 mg/l, whichever is less.

D. **Effluent Quality Requirements**.

1. All discharges shall meet the effluent quality requirements of Section 3.10.

2. The carbonaceous oxygen demand from an outfall (exclusive of stormwater bypass) shall not exceed that assigned by the Commission to maintain stream quality objectives.

Section 3.30 Interstate Streams – Tidal.

3.30.1 **Application**. This Article shall apply to the Delaware River Estuary and Bay, including the tidal portions of the tributaries thereof.

3.30.2 **Zone 2.**

A. **Description**. Zone 2 is that part of the Delaware River extending from the head of tidewater at Trenton, New Jersey, R.M. (River Mile) 133.4 (Trenton-Morrisville Toll Bridge) to R.M. 108.4 below the mouth of Pennypack Creek, including the tidal portions of the tributaries thereof.

B. **Water Uses to be Protected**. The quality of Zone 2 waters shall be maintained in a safe and satisfactory condition for the following uses:

1. a. public water supplies after reasonable treatment,
   b. industrial water supplies after reasonable treatment,
   c. agricultural water supplies;

2. a. maintenance and propagation of resident fish and other aquatic life,
   b. passage of anadromous fish,
   c. wildlife;

3. a. recreation;

4. a. navigation.

C. **Stream Quality Objectives.**

1. **Dissolved Oxygen**.
   a. 24-hour average concentration shall not be less than 5.0 mg/l.
   b. During the periods from April 1 to June 15, and September 16 to December 31, the dissolved oxygen shall not have a seasonal average less than 6.5 mg/l.

2. **Temperature**. Shall not exceed
   a. 5°F (2.8°C) above the average 24-hour temperature gradient displayed during the 1961-66 period, or
   b. a maximum of 86°F (30.0°C), whichever is less. [See 4.30.6.F.3.]

3. **pH**.Between 6.5 and 8.5.

4. **Phenols**. Maximum 0.005 mg/l unless exceeded due to natural conditions.

5. **Threshold Odor Number**. Not to exceed 24 at 60°C.

6. **Synthetic Detergents** (M.B.A.S.). Maximum 30-day average 0.5 mg/l.

7. **Radioactivity**.
   a. alpha emitters - maximum 3 pc/l (picocuries per liter);
   b. beta emitters - maximum 1,000 pc/l.

8. **Bacteria**.
   a. **Fecal Coliform**. Maximum geometric average 200 per 100 milliliters.
   b. **Enterococcus**. Maximum geometric average 33 per 100 milliliters.

9. **Total Dissolved Solids**. Not to exceed
   a. 133 percent of background, or
   b. 500 mg/l, whichever is less.

10. **Turbidity**. Unless exceeded due to natural conditions
    a. maximum 30-day average 40 units;
    b. maximum 150 units;
    c. except above R.M. 117.81 during the period May 30 to September 15 when the turbidity shall not exceed 30 units.

11. **Alkalinity**. Between 20 and 100 mg/l.

12. **Chlorides**. Maximum 15-day average 50 mg/l.

13. **Hardness**. Maximum 30-day average 95 mg/l.

14. **Toxic Pollutants**.

    a. Applicable MCLs and criteria to protect the taste and odor of ingested water and fish are presented in Tables 3 and 4.

    b. Applicable freshwater stream quality objectives for the protection of aquatic life are presented in Table 5.

    c. Applicable freshwater stream quality objectives for the protection of human health are presented in Tables 6 and 7.

D. **Effluent Quality Requirements**.

1. All discharges shall meet the effluent quality requirements of Section 3.10.

2. The carbonaceous oxygen demand from all outfalls in the zone (exclusive of stormwater bypass) shall not exceed that assigned by Commission regulations.

TABLE 3: MAXIMUM CONTAMINANT LEVELS TO BE APPLIED AS HUMAN HEALTH STREAM QUALITY OBJECTIVES IN ZONES 2 AND 3 OF THE DELAWARE RIVER ESTUARY.

Parameter	Maximum Contaminant Level (µg/l)
Metals	
Arsenic	10
Barium	2000
Beryllium	4
Chromium (trivalent)	100
Copper	1300
Lead	15
Selenium	50
Pesticides/PCBs	
alpha-BHC	0.2
beta-BHC	0.2
gamma - BHC (Lindane)	2
2,4-Dichloro-phenoxyacetic acid (2,4-D)	70
Methoxychlor	40
Toxaphene	3
Dioxin (2,3,7,8-TCDD)	0.00003
2,4,5 Trichloro-phenoxypropionic acid (2,4,5-TP-Silvex)	50
Volatile Organic Compounds (VOCs)	
Benzene	5
Carbon Tetrachloride	5
1,2-Dichloroethane	5
1,1-Dichloroethylene	7
[1,2 - trans – Dichloroethene] 1,2 - trans - Dichloroethylene	100
Dichloromethane (methylene chloride)	5
Tetrachloroethylene (PCE)	5
Toluene	1000
Total Trihalomethanes	80
1,1,1-Trichloroethane	200
1,1,2-Trichloroethane	5

Parameter	Maximum Contaminant Level (µg/l)
Trichloroethylene	5
Vinyl Chloride	2
Polycyclic Aromatic Hydrocarbons (PAHs)	
Benzo(a)Pyrene	0.2
Other Compounds	
Asbestos	7 million fibers/L
Bis(2-Ethylhexyl) Phthalate	6
Fluoride	4,000
Nitrate	10,000
Pentachlorophenol	1
Dioxin (2,3,7,8-TCDD)	0.00003

TABLE 4: CRITERIA TO PROTECT THE TASTE AND ODOR OF INGESTED WATER AND FISH TO BE APPLIED AS HUMAN HEALTH STREAM QUALITY OBJECTIVES IN ALL ZONES OF THE DELAWARE RIVER ESTUARY.

Parameter	**Stream Quality Objective (µg/l)**
Phenol	300
2 - Chlorophenol	0.1
2,4 - Dichlorophenol	0.3
2,4 - Dimethylphenol	400
4 - Chloro - 3 - methylphenol	3.0 mg/l
Pentachlorophenol	30
Acenaphthene	20
Chlorobenzene	20
Hexachlorocyclopentadiene	1.0
Nitrobenzene	30

TABLE 5: STREAM QUALITY OBJECTIVES FOR TOXIC POLLUTANTS FOR THE PROTECTION OF AQUATIC LIFE IN THE DELAWARE RIVER ESTUARY AND BAY.

Parameter	**Freshwater Objectives (µg/l)**		**Marine Objectives (µg/l)**	
	Acute	**Chronic**	**Acute**	**Chronic**
Metals				
Aluminum[a,b]	750	87	NA	NA
Arsenic (trivalent)[c]	340	150	69	36
Cadmium[c]	0.651*EXP(1.0166* LN(hardness)-3.924)	0.651*EXP(0.7409* LN(hardness)-4.719)	40	8.8
Chromium (trivalent)[c]	0.277*EXP(0.819* LN(hardness)+3.7256)	0.277*EXP(0.819* LN(hardness)+0.6848)	NA	NA
Chromium (hexavalent)[c]	16	11	1,100	50
Copper[c]	0.908*EXP(0.9422* LN(hardness)-1.7)	0.908*EXP(0.8545* LN(hardness)-1.702)	4.8	3.1
Lead[c]	38	5.4	210	8.1
Mercury[c]	1.4	0.77	1.8	0.94
Nickel[c]	0.846*EXP(0.846* LN(hardness)+2.255)	0.846*EXP(0.846* LN(hardness)+0.0584)	64	22
Selenium[a]	20	5.0	290	71
Silver[c]	0.85*EXP(1.72* LN(hardness)-6.59)	NA	1.9	NA
Zinc[c]	0.95*EXP(0.8473* LN(hardness)+0.884)	0.95*EXP(0.8473* LN(hardness)+0.884)	90	81
Pesticides/PCBs				
Aldrin	3	NA	1.3	NA
gamma - BHC (Lindane)	0.95	NA	0.16	NA
Chlordane	2.4	0.0043	0.09	0.004
Chlorpyrifos (Dursban)	0.083	0.041	0.011	0.0056
DDT and metabolites (DDE & DDD)[d]	1.1	0.001	0.13	0.001
Dieldrin	0.24	0.056	0.71	0.0019
Endosulfan[e]	0.22	0.056	0.034	0.0087
Endrin	0.086	0.036	0.037	0.0023
Heptachlor	0.52	0.0038	0.053	0.0036
Heptachlor Epoxide	0.52	0.0038	0.053	0.0036
Parathion	0.065	0.013	NA	NA
PCBs (Total)	1.0	0.014	5.0	0.03
Toxaphene	0.73	0.0002	0.21	0.0002
Other Compounds				

Parameter	Freshwater Objectives (µg/l)		Marine Objectives (µg/l)	
	Acute	**Chronic**	**Acute**	**Chronic**
Cyanide (free)	22	5.2	1	1
Pentachlorophenol	$e^{(1.005*pH-4.83)}$	$e^{(1.005*pH-5.29)}$	13	7.9
Indicator Parameters				
Whole Effluent Toxicity	0.3 Toxic Units $_{acute}$	1.0 Toxic Units $_{chronic}$	0.3 TU_a	1.0 TU_c

Footnotes to Table 5:

[a] **Total recoverable criteria**

[b] **Aluminum criteria listed are restricted to waters with pH between 6.5 and 9.0.**

[c] **Dissolved criteria**

[d] **Criteria apply to DDT and its metabolites (i.e., the total concentration of DDT and its metabolites should not exceed this value).**

[e] **Values were derived from data for endosulfan and are most appropriately applied to the sum of alpha-endosulfan and beta-endosulfan.**

Criteria for cadmium, chromium (trivalent), copper, nickel, silver and zinc are hardness-dependent and are expressed as the dissolved form (see Section 3.10.3.C.2. on form of metal).

TABLE 6: STREAM QUALITY OBJECTIVES FOR CARCINOGENS FOR THE DELAWARE RIVER ESTUARY AND BAY.

Parameter	Freshwater Objectives (µg/l)		Marine Objectives (µg/l)
	Fish & Water Ingestion	Fish Ingestion Only	Fish Ingestion Only
Metals			
Arsenic	*	NA	NA
Pesticides/PCBs			
Aldrin	0.000049	0.000050	0.000050
alpha – BHC	0.0026	0.0049	0.0049
beta – BHC	0.0091	0.017	0.017
Chlordane	0.00080	0.00081	0.00081
DDD	0.00031	0.00031	0.00031
DDE	0.00022	0.00022	0.00022
DDT	0.00022	0.00022	0.00022
Dieldrin	0.000052	0.000054	0.000054
Heptachlor	0.000079	0.000079	0.000079
Heptachlor Epoxide	0.000039	0.000039	0.000039
PCBs (Total)	0.0000444	0.0000448	0.0000079
Toxaphene	0.00028	0.00028	0.00028
Volatile Organic Compounds (VOCs)			
Acrylonitrile	0.051	0.25	0.25
Benzene	0.61	14	14
Benzidine	0.000086	0.00020	0.00020
Bromoform	4.3	140	140
Bromodichloromethane	0.55	17	17
Carbon Tetrachloride	0.23	1.6	1.6
Chlorodibromomethane	0.40	13	13
Chloroform	5.7	470	470
3,3 – Dichlorobenzidine	0.021	0.028	0.028
1,2 – Dichloroethane	0.38	37	37
1,2 – Dichloropropane	0.50	15	15
1,3 – Dichloropropene	0.34	21	21

Parameter	Freshwater Objectives (µg/l)		Marine Objectives (µg/l)
	Fish & Water Ingestion	Fish Ingestion Only	Fish Ingestion Only
Dichloromethane (Methylene Chloride)	*	590	590
Tetrachloroethylene	0.69	3.3	3.3
1,1,2,2 – Tetrachloroethane	0.17	4.0	4.0
1,1,2 – Trichloroethane	0.59	16	16
Trichloroethylene	2.5	30	30
Vinyl Chloride	0.025	2.4	2.4
Polycyclic Aromatic Hydrocarbons (PAHs)			
Benz[a]anthracene	0.0038	0.18	0.18
Benzo[b]fluoranthene	0.038	0.18	0.18
Benzo[k]fluoranthene	0.38	1.8	1.8
Benzo[a]pyrene	0.0038	0.018	0.018
Chrysene	3.8	18	18
Dibenz[a,h]anthracene	0.0038	0.018	0.018
Indeno[1,2,3-cd]pyrene	0.038	0.18	0.18
Other Compounds			
Bis (2-chloroethyl) ether	0.03	0.53	0.53
Bis (2-ethylhexyl) phthalate	1.2	2.2	2.2
2,4 - Dinitrotoluene	0.11	3.4	3.4
1,2 – Diphenylhydrazine	0.036	0.2	0.2
Hexachlorobenzene	0.00028	0.00029	0.00029
Hexachlorobutadiene	0.44	18	18
Hexachloroethane	1.4	3.3	3.3
Isophorone	35	960	960
N-Nitrosodi-N-butylamine	0.0063	14	14
N-Nitrosodi-N-methylamine	0.00069	3.0	3.0
N-Nitrosodiethylamine	0.0008	1.24	1.24
N-Nitrosodi-N-phenylamine	3.3	6	6
N-Nitrosodi-N-propylamine	0.0050	0.51	0.51
N-Nitrosopyrrolidine	0.016	34	34

Parameter	Freshwater Objectives (µg/l)		Marine Objectives (µg/l)
	Fish & Water Ingestion	Fish Ingestion Only	Fish Ingestion Only
Pentachlorophenol	0.27	3.0	3.0
Dioxin (2,3,7,8 – TCDD)	0.000000005	0.0000000051	0.0000000051
2,4,6 – Trichlorophenol	1.4	2.4	2.4

*** The MCL for this compound applies in Zones 2 and 3 and is listed in Table 3.**

TABLE 7: STREAM QUALITY OBJECTIVES FOR SYSTEMIC TOXICANTS FOR THE DELAWARE RIVER ESTUARY AND BAY.

Parameter	Freshwater Objectives (µg/l)		Marine Objectives (µg/l)
	Fish & Water Ingestion	Fish Ingestion Only	Fish Ingestion Only
Metals			
Antimony	5.6	640	640
Arsenic	*	NA	NA
Beryllium	*	420	420
Cadmium	3.4	16	16
Chromium (trivalent)	*	380,000	380,000
Chromium (hexavalent)	92	NA	NA
Chromium (total)	NA	750	750
Mercury	0.050	0.051	0.051
Methylmercury	0.3 mg/kg fish tissue	0.3 mg/kg fish tissue	0.3 mg/kg fish tissue
Nickel	500	1,700	1,700
Selenium	170	4,200	4,200
Silver	170	40,000	40,000
Thallium	0.24	0.47	0.47
Zinc	7,400	26,000	26,000
Pesticides/PCBs			
Aldrin	0.025	0.025	0.025
gamma - BHC (Lindane)	0.98	1.8	1.8
Chlordane	0.14	0.14	0.14
DDT and Metabolites (DDD and DDE)	0.037	0.037	0.037
Dieldrin	0.041	0.043	0.043
alpha -Endosulfan	62	89	89
beta- Endosulfan	62	89	89
Endosulfan Sulfate	62	89	89
Endrin	0.059	0.060	0.060
Endrin Aldehyde	0.29	0.30	0.30
Heptachlor	0.18	0.18	0.18

Parameter	Freshwater Objectives (µg/l)		Marine Objectives (µg/l)
	Fish & Water Ingestion	Fish Ingestion Only	Fish Ingestion Only
Heptachlor Epoxide	0.0046	0.0046	0.0046
Total PCBs	0.00839	0.00849	0.00149
Volatile Organic Compounds (VOCs)			
Acrolein	6.1	9.3	9.3
Benzene	*	3,100	3,100
Bromoform	650	9,600	9,600
Bromodichloromethane	680	NA	NA
Dibromochloromethane	680	21,000	21,000
Carbon Tetrachloride	*	150	150
Chloroform	68	2,100	2,100
Chlorobenzene	130	1,600	1,600
1,1 - Dichloroethylene	*	7,100	7,100
1,2 - trans - Dichloroethylene	140	10,000	10,000
1,3 - Dichloropropene	1,000	63,000	63,000
Ethylbenzene	530	2,100	2,100
Methyl Bromide	47	1,500	1,500
Methylene Chloride (Dichloromethane)	*	260,000	260,000
1,1,2 – Trichloroethane	*	3,600	3,600
Tetrachloroethylene	*	1,300	1,300
Toluene	1,300	15,000	15,000
Polycyclic Aromatic Hydrocarbons (PAHs)			
Anthracene	8,300	40,000	40,000
Fluoranthene	130	140	140
Fluorene	1,100	5,300	5,300
Pyrene	830	4,000	4,000
Other Compounds			
Acenaphthene	670	990	990
Benzidine	59	140	140

Parameter	Freshwater Objectives (µg/l)		Marine Objectives (µg/l)
	Fish & Water Ingestion	Fish Ingestion Only	Fish Ingestion Only
Bis (2-chloroisopropyl) ether	1,400	65,000	65,000
Bis (2-ethylhexyl) phthalate	*	620	620
Butylbenzyl phthalate	1,500	1,900	1,900
2 - Chloronaphthalene	1,000	1,600	1,600
2 - Chlorophenol	81	150	150
Cyanide	140	140	140
Dibutyl Phthalate	2,000	4,500	4,500
1,2 - Dichlorobenzene	420	1,300	1,300
1,3 - Dichlorobenzene	420	1,300	1,300
1,4 - Dichlorobenzene	63	190	190
2,4 - Dichlorophenol	77	290	290
Diethyl Phthalate	17,000	44,000	44,000
Dimethyl Phthalate	270,000	1,100,000	1,100,000
2,4 - Dimethylphenol	380	850	850
2,4 - Dinitrophenol	69	5,300	5,300
2,4 - Dinitrotoluene	68	2,100	2,100
Hexachlorobenzene	0.35	0.36	0.36
Hexachlorocyclopentadiene	40	1,100	1,100
Hexachloroethane	20	46	46
Isophorone	6,700	180,000	180,000
2-Methyl-4,6-dinitrophenol	13	280	280
Nitrobenzene	17	690	690
Pentachlorobenzene	1.4	1.5	1.5
Pentachlorophenol	*	11,000	11,000
Phenol	10,000	860,000	860,000
1,2,4,5-Tetrachlorobenzene	0.97	1.1	1.1
1,2,4 - Trichlorobenzene	35	70	70
2,4,5-Trichlorophenol	1,800	3,600	3,600
Vinyl Chloride	*	10,000	10,000

*** The MCL for this compound applies in Zones 2 and 3 and is listed in Table 3.**

3.30.3 **Zone 3.**

A. **Description**. Zone 3 is that part of the Delaware River extending from R.M. 108.4 to R.M. 95.0 below the mouth of Big Timber Creek, including the tidal portions of the tributaries thereof.

B. **Water Uses to be Protected**. The quality of Zone 3 waters shall be maintained in a safe and satisfactory condition for the following uses:

1. a. public water supplies after reasonable treatment,
   b. industrial water supplies after reasonable treatment,
   c. agricultural water supplies;

2. a. maintenance of resident fish and other aquatic life,
   b. passage of anadromous fish,
   c. wildlife;

3. a. recreation - secondary contact;

4. a. navigation.

C. **Stream Quality Objectives.**

1. **Dissolved Oxygen**.
   a. 24-hour average concentration shall not be less than 3.5 mg/l.
   b. During the periods from April 1 to June 15, and September 16 to December 31, the dissolved oxygen shall not have a seasonal average less than 6.5 mg/l.

2. **Temperature**. Shall not exceed
   a. 5°F (2.8°C) above the average 24-hour temperature gradient displayed during the 1961-66 period, or
   b. a maximum of 86°F (30.0°C), whichever is less. [See 4.30.6.F.3.]

3. **pH**. Between 6.5 and 8.5.

4. **Phenols**. Maximum 0.005 mg/l, unless exceeded due to natural conditions.

5. **Threshold Odor Number**. Not to exceed 24 at 60°C.

6. **Synthetic Detergents.** (M.B.A.S.) Maximum 30-day average 1.0 mg/l.

7. **Radioactivity**.
   a. alpha emitters - maximum 3 pc/l (picocuries per liter);
   b. beta emitters - maximum 1,000 pc/l.

8. **Bacteria**.
   a. **Fecal Coliform**. Maximum geometric average 770 per 100 milliliters.
   b. **Enterococcus**. Maximum geometric average 88 per 100 milliliters.

9. **Total Dissolved Solids**. Not to exceed
   a. 133 percent of background, or
   b. 500 mg/l, whichever is less.

10. **Turbidity**. Unless exceeded due to natural conditions
    a. maximum 30-day average 40 units,
    b. maximum 150 units.

11. **Alkalinity**. Between 20 and 120 mg/l.

12. **Chlorides**. Maximum 30-day average concentration of 180 mg/l at R.M. 98.

13. **Hardness**. Maximum 30-day average 150 mg/l.

14. **Sodium**. Maximum 30-day average concentration of 100 mg/l at R.M. 98.

15. **Toxic Pollutants**.

    a. Applicable MCLs and criteria to protect the taste and odor of ingested water and fish are presented in Tables 3 and 4.
    b. Applicable freshwater stream quality objectives for the protection of aquatic life are presented in Table 5.
    c. Applicable freshwater stream quality objectives for the protection of human health are presented in Tables 6 and 7.

D. **Effluent Quality Requirements**.

1. All discharges shall meet the effluent quality requirements of Section 3.10.

2. The carbonaceous oxygen demand from all outfalls in the zone (exclusive of stormwater bypass) shall not exceed that assigned by Commission regulations.

3.30.4 **Zone 4.**

A. **Description**. Zone 4 is that part of the Delaware River extending from R.M. 95.0 to R.M. 78.8, the Pennsylvania-Delaware boundary line, including the tidal portions of the tributaries thereof.

B. **Water Uses to be Protected**. The quality of Zone 4 waters shall be maintained in a safe and satisfactory condition for the following uses:

1. a. industrial water supplies after reasonable treatment;

2. a. maintenance of resident fish and other aquatic life,
   b. passage of anadromous fish,
   c. wildlife;

3. a. recreation - secondary contact above R.M. 81.8,
   b. recreation below R.M. 81.8;

4. a. navigation.

C. **Stream Quality Objectives.**

1. **Dissolved Oxygen**.
   a. 24-hour average concentration shall not be less than 3.5 mg/l.
   b. During the periods from April 1 to June 15, and September 16 to December 31, the dissolved oxygen shall not have a seasonal average less than 6.5 mg/l.

2. **Temperature**. Shall not exceed
   a. 5°F (2.8°C) above the average 24-hour temperature gradient displayed during the 1961-66 period, or
   b. a maximum of 86°F (30.0°C), whichever is less. [See 4.30.6.F.3.]

3. **pH**.Between 6.5 and 8.5.

4. **Phenols**. Maximum 0.02 mg/l, unless exceeded due to natural conditions.

5. **Threshold Odor Number**. Not to exceed 24 at 60°C.

6. **Synthetic Detergents**. (M.B.A.S.). Maximum 30-day average 1.0 mg/l.

7. **Radioactivity**.
   a. alpha emitters - maximum 3 pc/l (picocuries per liter);
   b. beta emitters - maximum 1,000 pc/l.

8. **Bacteria**.
   a. **Fecal Coliform**.
      1) Above R.M. 81.8 maximum geometric average 770 per 100 milliliters.
      2) Below R.M. 81.8 maximum geometric average 200 per 100 milliliters.

   b. **Enterococcus**
      1) Above R.M. 81.8 maximum geometric average 88 per 100 milliliters.
      2) Below R.M. 81.8 maximum geometric average 33 per 100 milliliters.

9. **Total Dissolved Solids**. Not to exceed 133 percent of background.

10. **Turbidity**. Unless exceeded due to natural conditions
    a. maximum 30-day average 40 units,
    b. maximum 150 units.

11. **Alkalinity**. Between 20 and 120 mg/l.

12. **Toxic Pollutants**.

    a. Applicable criteria to protect the taste and odor of ingested water and fish are presented in Table 4.
    b. Applicable freshwater stream quality objectives for the protection of aquatic life are presented in Table 5.
    c. Applicable freshwater stream quality objectives for the protection of human health are presented in Tables 6 and 7.

D. **Effluent Quality Requirements**.

1. All discharges shall meet the effluent quality requirements of Section 3.10.

2. The carbonaceous oxygen demand from all outfalls in the zone (exclusive of stormwater bypass) shall not exceed that assigned by Commission regulations.

3.30.5 **Zone 5.**

A. **Description**. Zone 5 is that part of the Delaware River extending from R.M. 78.8 to R.M. 48.2, Liston Point, including the tidal portions of the tributaries thereof.

B. **Water Uses to be Protected**. The quality of waters in Zone 5 shall be maintained in a safe and satisfactory condition for the following uses:

1. a. industrial water supplies after reasonable treatment;

2. a. maintenance of resident fish and other aquatic life,
   b. propagation of resident fish from R.M. 70.0 to R.M. 48.2,
   c. passage of anadromous fish,
   d. wildlife;

3. a. recreation;

4. a. navigation.

C. **Stream Quality Objectives.**

1. **Dissolved Oxygen**.
   a. 24-hour average concentration shall not be less than
      1) 3.5 mg/l at R.M. 78.8,
      2) 4.5 mg/l at R.M. 70.0,
      3) 6.0 mg/l at R.M. 59.5.

   b. During the periods from April 1 to June 15, and September 16 to December 31, the dissolved oxygen shall not have a seasonal average less than 6.5 mg/l in the entire zone.

2. **Temperature**.
   a. Shall not be raised above ambient by more than
      1) 4°F (2.2°C) during September through May, nor
      2) 1.5°F (0.8°C) during June through August;
   b. nor shall maximum temperatures exceed 86°F (30.0°C). [See 4.30.6.F.4.]

3. **pH**. Between 6.5 and 8.5.

4. **Phenols**. Maximum 0.01 mg/l, unless exceeded due to natural conditions.

5. **Threshold Odor Number**. Not to exceed 24 at 60°C.

6. **Synthetic Detergents**. (M.B.A.S.) Maximum 30-day average 1.0 mg/l.

7. **Radioactivity**.
   a. alpha emitters - maximum 3 pc/l (picocuries per liter);
   b. beta emitters - maximum 1,000 pc/l.

8. **Bacteria**.
   a. **Fecal Coliform**. Maximum geometric average 200 per 100 milliliters.
   b. **Enterococcus**. Maximum geometric average 35 per 100 milliliters.

9. **Turbidity**. Unless exceeded due to natural conditions.
   a. maximum 30-day average 40 units,
   b. maximum 150 units.

10. **Alkalinity**. Between 20 and 120 mg/l.

11. **Toxic Pollutants**. Freshwater stream quality objectives apply in areas upstream of the Delaware Memorial Bridges (River Mile 68.75), and the more stringent of the freshwater or marine stream quality objectives apply in areas below RM 68.75.

    a. Applicable criteria to protect the taste and odor of ingested water and fish are presented in Table 4.

b. Applicable freshwater and marine stream quality objectives to protect aquatic life are presented in Table 5.

c. Applicable freshwater and marine stream quality objectives to protect human health are presented in Tables 6 and 7.

D. **Effluent Quality Requirements**.

1. All discharges shall meet the effluent quality requirements of Section 3.10.

2. The carbonaceous oxygen demand from all outfalls in the zone (exclusive of stormwater bypass) shall not exceed that assigned by Commission regulations.

3.30.6 **Zone 6.**

A. **Description**. Zone 6 is Delaware Bay extending from R.M. 48.2 to R.M. 0.0, the Atlantic Ocean, including the tidal portions of the tributaries thereof.

B. **Water Uses to be Protected**. The quality of Zone 6 waters shall be maintained in a safe and satisfactory condition for the following uses:

1. a. industrial water supplies after reasonable treatment,

2. a. maintenance and propagation of resident fish and other aquatic life,
   b. maintenance and propagation of shellfish,
   c. passage of anadromous fish,
   d. wildlife;

3. a. recreation;

4. a. navigation.

C. **Stream Quality Objectives.**

1. **Dissolved Oxygen**.
   a. 24-hour average concentration shall not be less than 6.0 mg/l;
   b. not less than 5.0 mg/l at any time unless due to natural conditions.

2. **Temperature**.
   a. Shall not be raised above ambient by more than
      1) 4°F (2.2°C) during September through May, nor
      2) 1.5°F (0.8°C) during June through August;

   b. nor shall maximum temperatures exceed 85°F (29.4°C). [See 4.30.6.F.4.]

3. **pH**.Between 6.5 and 8.5.

4. **Phenols**. Maximum 0.01 mg/l, unless exceeded due to natural conditions.

5. **Threshold Odor Number**. Not to exceed 24 at 60°C.

6. **Synthetic Detergents**. (M.B.A.S.) Maximum 30-day average 1.0 mg/l.

7. **Radioactivity**.
   a. alpha emitters - maximum 3 pc/l (picocuries per liter);
   b. beta emitters - maximum 1,000 pc/l.

8. **Bacteria**.
   a. **Fecal Coliform**. Maximum geometric average 200 per 100 milliliters.
   b. **Enterococcus** Maximum geometric average 35 per 100 milliliters.
   c. **Coliform**. MPN (most probable number) not to exceed federal shellfish standards in designated shellfish areas.

9. **Turbidity**. Unless exceeded due to natural conditions
   a. maximum 30-day average 40 units,
   b. maximum 150 units.

10. **Alkalinity**. Between 20 and 120 mg/l.

11. **Toxic Pollutants.**

    a. Applicable criteria to protect the taste and odor of ingested water and fish are presented in Table 4.
    b. Applicable marine stream quality objectives for the protection of aquatic life are presented in Table 5.
    c. Applicable marine stream quality objectives for the protection of human health are presented in Tables 6 and 7.

D. **Effluent Quality Requirements**

1. All discharges shall meet the effluent quality requirements of Section 3.10.

2. The carbonaceous oxygen demand from an outfall (exclusive of stormwater bypass) shall not exceed that assigned by the Commission to maintain stream quality objectives.

Section 3.40 Ground Water - Basinwide.

3.40.1 **Application**. This Section shall apply to the ground water of the Delaware River Basin.

3.40.2 **Description**. Ground water shall include all water beneath the surface of the ground.

3.40.3 **Water Uses**.

A. The quality of ground water shall be maintained in a safe and satisfactory condition, except where such uses are precluded by natural quality, for use as:

1. domestic, agricultural, industrial, and public water supplies;

2. a source of surface water suitable for recreation, wildlife, fish and other aquatic life.

B. Other uses may be designated by the Commission.

3.40.4 **Ground Water Quality Objectives.**

A. **Limits**. The ground waters of the Basin shall not contain substances or properties attributable to the activities of man in concentrations or amounts sufficient to endanger or preclude the water uses to be protected.

1. Within this requirement, the ground waters shall be free from substances or properties in concentrations or combinations which are toxic or harmful to human, animal, plant, or aquatic life, or that produce color, taste, or odor of the waters.

2. Concentrations at any point shall not be degraded by the activities of man to exceed values specified by current U.S. Public Health Service Drinking Water Standards.

B. **Nondegradation of Ground Waters**. It is the policy of the Commission to prevent degradation of ground water quality. In implementing this policy, the Commission will require the best water management determined to be practicable. No quality change will be considered which, in the judgment of the Commission, may be injurious to any designated present or future ground or surface water use.

3.40.5 **Ground Water Quality Control.**

A. **Controls**. The processing, handling, transportation, disposal, storage, excavation or removal of any solid, liquid, or gaseous material on or beneath the ground surface of the Basin shall be conducted in such manner and with such facilities, in accordance with such regulations and requirements as the Commission may prescribe, as to prevent any of the criteria or requirements of this Section from being violated.

B. **Limitations**.

1. No substances or properties which are in harmful or toxic concentrations or that produce color, taste, or odor of the water shall be permitted or induced by the activities of man to become ground water.

2. Heat discharges which may adversely affect ground water shall be regulated by the Commission.

3. Notwithstanding any other criteria or requirements of this Section, the Commission may establish requirements, conditions, or prohibitions which, in its judgment, are necessary to protect ground water quality.

4. Certain activities otherwise prohibited by paragraph (A) of this Section, such as approved solid or liquid waste disposal systems or fertilizer applications for farming practices, may be permitted subject to such requirements as may be prescribed.

ARTICLE 4

APPLICATION OF STANDARDS

Section 4.10 Water Uses. Protected water uses are as prescribed by the Comprehensive Plan. In the interpretation and application of the Standards and these Regulations, the purpose of protection of such water uses shall control the meaning. It is the further purpose of this part to preserve and protect the quality of Basin waters in a safe and adequate condition for the uses specified in the Comprehensive Plan.

Section 4.20 Water Quality Criteria. Stream quality objectives as set forth in the Standards shall be the criteria under these Regulations.

4.20.1 **Purpose**. It is the purpose and intent of the stream quality objectives specified in the Comprehensive Plan to apply to artificial (man-made as opposed to natural) causes of pollution.

4.20.2 **Additional Specifications**. The Standards have set limits for most of the significant and commonly used indicators which are pertinent to water quality management in the Basin. When a need arises, or upon application to the Commission, additional indicators and limits will be defined.

A. **Background, Total Dissolved Solids.** The following background levels of total dissolved solids shall be utilized for the specified zones of the Delaware River:

Zone	T.D.S.
1A	75 mg/l
1B	90 mg/l
1C	90 mg/l
1D	90 mg/l
1E	200 mg/l
2	200 mg/l

4.20.3 **Water Quality Measurements**. Water quality shall be measured outside of mixing areas when such areas have been designated for particular discharges.

4.20.4 **Tributaries to Interstate Waters**. Waste discharged into, or permitted to flow into or be placed in any intrastate tributary of interstate waters shall be treated to such extent as may be necessary:

A. to maintain the waters of such intrastate tributary, immediately above its confluence with such interstate waters, in a condition at least equal to the water quality criteria specified for the receiving interstate waters;

B. so that the assimilation of such waste by the interstate waters will not result in a violation of such water quality criteria.

1. For the purposes of establishing wasteload allocations for toxic pollutants for the Delaware River Estuary, the lower of the 95th percentile of the available data at the appropriate criteria duration, or the water quality criterion at or above the head of the tide shall be used to establish boundary conditions.

4.20.5 **Application of Criteria for Toxic Pollutants**.

A. **Delaware River Estuary.**

1. In establishing wasteload allocations and other effluent requirements, exceedence of stream quality objectives for the protection of aquatic life from acute effects may be permitted in small areas near outfall structures, provided that all of the following requirements are met.

   a. As a guideline, the dimensions of the area where objectives are exceeded should be limited to the more stringent of the following restrictions:

      1) a distance of 50 times the discharge length scale in any direction from the outfall structure, or

      2) a distance of 5 times the local water depth in any direction from the outfall structure.

   b. Stream quality objectives shall not be exceeded in areas designated as critical habitat for fish and benthic organisms.

   c. Stream quality objectives shall not be exceeded where effluent flows over exposed benthic habitat prior to mixing with the receiving waters.

   d. A zone of passage for free-swimming and drifting organisms equal to 50% of the surface width of the river at the location of the discharge shall be provided.

   e. The total surface area of the Delaware River Estuary where stream quality objectives for the protection of aquatic life from acute effects are exceeded shall be limited to:

      1) 5% of the total surface area of Zones 2, 3 and 4, and

      2) 5% of the total surface area of Zone 5.

   f. Upon the request of one or more dischargers, the Executive Director may consider requests for alternatives to the requirements of subsections a. through e. of Section 4.20.5.A.1. Such requests shall provide a demonstration that the alternative requirement requested will not adversely impact free-swimming, drifting and benthic organisms. The demonstration(s) shall provide a sound rationale, and be supported by substantial scientific data and analysis. The methodology and form of the demonstration shall be approved by the Executive

Director. The Executive Director may reject any requests which are not substantive. The Commission may establish alternative areas where acute stream quality objectives may be exceeded based upon the evaluation of submitted demonstrations.

g. The Executive Director may consider requests to conduct studies to confirm the mixing characteristics and the predicted dilution isopleth of a discharge. Such requests shall provide a demonstration based upon sound scientific and technical rationale, and be supported by substantial data and analysis. The methodology and form of the demonstration shall be approved by the Executive Director. The Executive Director may reject any requests which are not substantive. The Commission may establish alternative dilution factors based upon the evaluation of submitted demonstrations.

2. For those stream quality objectives whose numerical value is related to hardness, a median hardness value of 74 mg/l as $CaCO_3$ shall be used to represent the hardness of the receiving water for the purposes of determining the numerical value of those objectives. This median hardness value shall be used to establish the aquatic life objective for protection from chronic effects; and in conjunction with the site-specific median hardness value of the effluent and the dilution factor, the aquatic life objective for protection from acute effects.

3. For those stream quality objectives whose numerical value is related to pH, a median pH value of 7.1 shall be used to represent the pH of the receiving water for the purposes of determining the numerical value of those objectives. This median pH value shall be used to establish the aquatic life objective for protection from chronic effects; and in conjunction with the site-specific median pH value of the effluent and the dilution factor, the aquatic life objective for protection from acute effects.

4. **Assumptions for Estuaries Mixing.** Complete vertical and lateral mixing shall be assumed in the Estuary in applying chronic aquatic life and human health stream quality objectives under design conditions. Site-specific data which does not support this assumption will be considered by the Executive Director in establishing allocations to discharges.

5. **Deriving Total Recoverable Wasteload Allocations for Metals.** Wasteload allocations developed from the dissolved stream quality objectives for seven cationic metals shall be converted into total recoverable wasteload allocations using a translator. The translator shall be determined using procedures specified by the Commission. In the absence of data to develop a translator for any of the metals, the reciprocal of the conversion factor established under Section 3.10.3C.2. shall be used for the translator.

B. **Definitions.**

1. **Critical Habitat**. Specific areas within the tidal Delaware River which are or could be occupied by a species absent the toxic effect of pollutants; and which have those

physical, chemical and biological features which are essential to the conservation and maintenance of the Delaware Estuary population. The Commission shall identify and determine critical habitat within the tidal Delaware River. Such determination shall consider the spatial and temporal requirements of the species including critical life stages. Determinations shall be governed by the Commission's *Rules of Practice and Procedure* relating to review, hearing and decisions of objections thereto.

2. **Discharge Length Scale**. The square root of the cross-sectional area of any discharge outlet.

Section 4.30 Effluent Quality Requirements.

4.30.1 **Prohibited Discharges**. No person, firm, partnership, corporation, association or other entity, including any of the signatory parties, any political subdivision, agency department or instrumentality of any of them, shall cause or permit any pollution or violate the effluent quality requirements or allocations of stream assimilative capacity imposed by or determined pursuant to this Article.

4.30.2 **Oxygen Demand**.

A. **Biochemical Oxygen Demand.** The biochemical oxygen demand (BOD) shall mean the oxygen utilized during the first five days of aerobic decomposition at 20° C consistent with the latest edition of *Standard Methods for the Examination of Water and Wastewater*, published jointly by the American Public Health Association, the American Water Works Association, and the Water Pollution Control Federation.

B. **Carbonaceous Oxygen Demand.** The carbonaceous oxygen demand of wastes forms the basis of allocating the capacity of the receiving waters to assimilate the oxygen demand generated by the waste discharges. The carbonaceous, or first stage, oxygen demand is defined as the oxygen utilized in the carbonaceous reaction, as distinguished from that utilized in the nitrogenous or second stage reaction. The carbonaceous oxygen demand is calculated by projecting the logarithmic rate of carbonaceous oxidation to completion.

C. **Nitrogenous Oxygen Demand.** The Commission will consider the nitrogenous demand of wastes, which generates a further gross oxygen demand upon the receiving waters, in establishing treatment requirements where appropriate.

4.30.3 **Minimum Treatment**.

A. **General.**

1. All wastes shall be treated to remove practically all suspended solids and shall receive such additional treatment as determined by the Commission upon consideration of the waste assimilative capacity of the receiving stream and as required to meet the limitations of Section 3.10 of the Standards.

2. Wastes containing biodegradable matter shall receive a minimum of secondary treatment as defined in the Standards.

3. Biodegradable and other waste matter to be treated or reduced shall not include that incorporated in inflect waters, unless special circumstances as determined by the Commission require such inclusion.

B. **BOD Reduction.**

1. The 85 percent minimum BOD reduction for secondary treatment will be determined by an average of samples taken over each period of thirty consecutive days of the year.

2. It is recognized that optimum efficiency may not be achieved with certain secondary treatment facilities during the colder months. A slight deviation may be permitted by the Commission when it results from reduced plant efficiency caused by temperatures below 59° F (15° C).

3. For dilute industrial process wastewater, the percent BOD reduction may be modified, upon application, provided it has been demonstrated that the best management practices and the highest degree of waste treatment determined to be practicable will be applied.

4.30.4 **Effective Disinfection**. Effective disinfection is defined as the destruction of pathogenic organisms. Since isolation of pathogenic organisms in water is not routine, the test for the fecal coliform group of organisms will be used as an indicator.

A. **Coliform Requirement.** Effective disinfection means the treatment of wastes such that the number of organisms of the fecal coliform group remaining after treatment does not exceed:

1. 200 per 100 milliliters as a geometric average;

2. 1000 per 100 milliliters in more than 10 percent of the samples taken over a period of thirty consecutive days.

B. **Chlorination.**

1. Chlorination facilities shall be designed to obtain a minimum contact time of 15 minutes at peak hourly flow.

2. After the required contact time, maintenance of a free chlorine residual of 1.0 milligram per liter at all times, as determined by the orthotolidine-arsenite (OTA) test, will be considered satisfactory if the effluent is found to meet the coliform requirements of this Section.

C. **Other Methods, Other Tests.** Other methods of achieving effective disinfection and other tests which satisfactorily demonstrate that effective disinfection has been achieved may be approved by the Commission.

4.30.5 **Other Substances in Effluents**.

A. **Color.** For municipal, industrial, or sanitary wastes, the effluent:

1. shall not impart objectionable color to the receiving waters,

2. shall not exhibit more than
   a. true color of 100 units on the platinum cobalt scale, or its equivalent, or
   b. the natural color of the receiving waters, whichever is greater.
   c. A true color intensity greater than specified in (a) or (b) may be permitted when it is demonstrated that:
      1) the maximum practicable treatment will be provided, and
      2) rapid dispersion will take place, and
      3) the natural color characteristics of the receiving waters will be protected.

B. **Dissolved Substances.** Dissolved and colloidal substances, including nutrients, discharged in waste effluents shall be limited where necessary to prevent deposition of sediments, formation of flocculent materials, or excessive aquatic growths, that impair protected uses, violate water quality criteria, or generate additional oxygen demands upon the receiving waters.

C. **pH.**

1. Between 6 and 9.

2. Where streams have high acidity levels a discharge with a pH greater than 9 may be permitted.

D. **Ammonia.**

1. In non-tidal waters, not to exceed a 30-day average of 20 mg/l as nitrogen.

2. In tidal waters, not to exceed a 30-day average of 35 mg/l as nitrogen.

4.30.6 **Temperature**.

A. **Trout Waters.** In waters classified for trout use the discharge of waste effluents shall not increase the ambient temperature of the receiving waters by more than 5° F (2.8° C) until stream temperatures reach 50° F (10.0° C), nor by more than 2° F (1.1° C) when stream temperatures are between 50° F (10.0° C), and 58° F (14.4° C), nor shall such discharge result in stream temperature exceeding 58° F (14.4° C), which temperatures shall be measured in the stream outside of heat dissipation areas as described in 4.30.6.F.

B. **Other Nontidal Waters.** In nontidal waters other than described in 4.30.6.A, the discharge of waste effluents shall not increase the ambient temperature of the receiving waters by more than 5° F (2.8° C), nor shall such discharge result in stream temperature exceeding 87° F (30.6° C), which temperatures shall be measured in the stream outside of heat dissipation areas as described in 4.30.6.F.

C. **Zones 2, 3, and 4.** The induced temperature increase shall not exceed 5° F (2.8° C) above the average 24-hour temperature gradient displayed during the 1961-1966 period, or a maximum of 86° F (30.0° C), whichever is less, which temperatures shall be measured outside of designated heat dissipation areas as described in 4.30.6.F.

1. The average 24-hour temperature gradient displayed during the 1961-1966 period may be interpolated from the following table, which is based on available records:

Date	Zone 2		Zone 3		Zone 4	
	RM 133.4 to 108.4		RM 108.4 to 95.0		RM 95.0 to 78.8	
	°F	°C	°F	°C	°F	°C
January 1	37	2.8	41	5.0	42	5.6
February 1	35	1.7	35	1.7	36	2.2
March 1	38	3.3	38	3.3	40	4.4
April 1	46	7.8	46	7.8	47	8.3
May 1	58	14.4	58	14.4	58	14.4
June 1	71	21.7	71	21.7	72	22.2
July 1	79	26.1	79	26.1	80	26.7
August 1	81	27.2	81	27.2	81	27.2
September 1	78	25.6	79	26.1	78	25.6
September 15	76	24.4	77	25.0	76	24.4
October 1	70	21.1	70	21.1	70	21.1
November 1	59	15.0	61	16.1	60	15.6
December 1	46	7.8	50	10.0	50	10.0
December 15	40	4.4	45	7.2	45	7.2

D. **Zone 5.** The induced increase above ambient temperature shall not exceed 4° F (2.2° C) from September to May and 1.5° F (0.8° C) from June to August, or a maximum of 86° F (30.0° C), whichever is less, which temperatures shall be measured outside of designated heat dissipation areas as described in 4.30.6.F.

E. **Zone 6.** The induced increase above ambient temperature shall not exceed 4° F (2.2° C) from September to May and 1.5° F (0.8° C) from June to August, or a maximum of 85° F (29.4° C), whichever is less, which temperatures shall be measured outside of designated heat dissipation areas as described in 4.30.6.F.

F. **Heat Dissipation Areas.** The limitations specified above may be exceeded by special permit in heat dissipation areas designated on a case-by-case basis, subject to the following conditions:

1. **Zones 1A, 1B, and 1C.**

   a. **Maximum Length.** As a guideline, heat dissipation areas shall not be longer than 1000 feet, or twenty times the average width of the stream, whichever is less, measured from the point where waste discharge enters the stream.

   b. **Maximum Width.** Heat dissipation areas shall not exceed a maximum width of one-half the surface width of the stream or the width encompassing one-half of the entire cross-sectional area of the stream, whichever is less. Within any one heat dissipation area only one shore shall be used in determining the limits of the area.

2. **Zones 1D and 1E.**

   a. **Maximum Length**. As a guideline, heat dissipation areas shall not be longer than 3500 feet, or twenty times the average width of the stream, whichever is less, measured from the point where the waste discharge enters the stream.

   b. **Maximum Width**. Heat dissipation areas shall not exceed a maximum width of one-half the surface width of the stream or the width encompassing one-half of the entire cross-sectional area of the stream, whichever is less. Within any one heat dissipation area only one shore shall be used in determining the limits of the area.

3. **Zones 2, 3, and 4.**

   a. **Maximum Length**. As a guideline, heat dissipation areas shall not be longer than 3500 feet, measured from the point where the waste discharge enters the stream.

   b. **Maximum Width**. Heat dissipation areas shall not exceed a maximum width of two-thirds the surface width measured from shore to shore at any stage of tide. Within any one heat dissipation area, only one shore shall be used in determining the limits of the area.

   c. **Maximum Cross-section**. Heat dissipation areas shall not exceed a maximum of one-quarter of the cross-sectional area of the stream.

4. **Zones 5 and 6.**

   a. **Maximum Length**. As a guideline, heat dissipation areas shall not be longer than 3500 feet, measured from the point where the waste discharge enters the stream.

5. **All Other Zones.**

a. **Maximum Length**. As a guideline, heat dissipation areas shall not be longer than 1000 feet, or twenty times the average width of the stream, whichever is less, measured from the point where the waste discharge enters the stream.

b. **Maximum Width**. Heat dissipation areas shall not exceed a maximum width of one-half the surface width of the stream or the width encompassing one-half of the entire cross-sectional area of the stream, whichever is less. Within any one heat dissipation area, only one shore shall be used in determining the limits of the area.

6. **Adjacent Heat Dissipation Areas**. Where waste discharges would result in heat dissipation areas in such close proximity as to impair protected uses, additional limitations may be prescribed to avoid such impairment.

7. **Other Considerations.**

a. The rate of temperature change in designated heat dissipation areas shall not cause mortality of fish or shellfish.

b. The determination of heat dissipation areas in tidal waters shall take into special consideration the extent and nature of the receiving waters so as to meet the intent and purpose of the criteria and standards, including provisions for the passage of free-swimming and drifting organisms so that negligible or no effects are produced on their populations.

G. **Definitions**.

1. Ambient temperature is the temperature of a water body unaffected by the heated waste discharge or waste discharge complex.

2. Natural temperature is the temperature of a water body unaffected by artificial sources of waste heat.

3. Stream temperature is the temperature of the stream outside of the heat dissipation area.

4.30.7 **Allocation of Capacity**.

A. **Basinwide**. Where necessary to maintain stream quality objectives or protect water uses in a given zone, the waste assimilative capacity of the receiving waters shall be allocated by the Commission among individual dischargers in accordance with the doctrine of equitable apportionment.

1. **Commission Procedure**.

   a. Whenever the Commission determines that allocations of a stream's waste assimilative capacity are necessary in a zone, the Executive Director shall find and determine an allocation for each waste discharge in that zone.

   b. Such determination shall be governed by the Commission's *Rules of Practice and Procedure* relating to review, hearing and decision of objections thereto.

2. **Allocations not a Property Right**. Allocations are not transferable except upon consent of the Commission.

3. **Limitations**.

   a. No allocation will exceed the residual after treatment as required in accordance with 4.30.3 of this Article.

   b. No allocation will exceed the residual after treatment necessary to meet any other requirements.

4. **Reserve**. In each zone, as part of the initial allocation, and each subsequent reallocation, a reserve may be set aside by the Commission.

   a. The reserve in each zone shall be utilized to accommodate new discharges or major revisions to an allocation, or any reallocation, when appropriate in the judgment of the Commission.

   b. Individual allocations or portions thereof which are no longer needed because use of the facilities to which they are assigned is discontinued or substantially decreased shall be returned to the reserve.

   c. Where improved waste management practice results in a reduction of the load discharged to less than the allocation, the unused portion of the allocation shall not revert to the reserve.

5. **Reallocations**.

   a. **Carbonaceous Oxygen Demand**

      1) All allocations shall be subject to review by the Commission and, after such review, the Commission may make such reallocation as it deems necessary.

      2) If any factors upon which an individual allocation is based change significantly, application shall be made to the Executive Director for a revised allocation.

3) Whenever the reserve in a zone approaches depletion, or when the full use of the assimilative capacity is approached, or when in the judgment of the Commission, the allocations existing at that time are no longer equitable, the capacity in the zone, minus a reserve, will be reallocated among the waste dischargers in that zone.

b. **Toxic Pollutants**

1) All allocations shall be subject to review by the Commission and, after such review, the Commission may make such reallocation as it deems necessary.

2) If any factors upon which an individual allocation is based change significantly, application shall be made to the Executive Director for a revised allocation. The Executive Director shall provide notice to interested and affected parties prior to establishing the revised allocation.

3) Allocations shall, as a minimum, be reviewed and, if required, revised every five years, or as directed by the Commission.

6. **Regionalization**. Whenever two or more waste dischargers with separate allocations formulate a regional plan for water quality control, allocations may be revised by the Commission.

7. **Design Streamflow**. For the purpose of determining the waste assimilative capacity of a stream, the following design minimum streamflows will be used:

a. **Unregulated Streams**. Where streams are unregulated, a minimum consecutive 7-day (average) flow with a 10-year recurrence interval shall be the design flow.

b. **Regulated Streams**. Where the pattern of regulation is such as to result in weekly, daily, or hourly variations in flow significantly different from the natural pattern of variation, the above design flow may reflect the effects of these variations.

c. **Lakes and Reservoirs**. Wherever waste discharges may affect the protected uses of lakes or reservoirs, the Commission, after consultation with the appropriate States, will determine the characteristics upon which to base effluent quality requirements in relation to the special characteristics of the receiving body of water.

d. **Tidal Waters**. Wherever waste discharges may affect the protected uses or the water quality criteria of tidal waters, the Commission, after consultation with the appropriate States, will determine the characteristics upon which to base effluent quality requirements in relation to the special characteristics of the receiving body of water.

8. **Design Effluent Flow**. For the purpose of determining the waste assimilative capacity of a stream and the wasteload allocations for discharges of toxic pollutants, the following design effluent flows will be used:

   a. For industrial wastewater treatment plant discharges covered by Effluent Limitations Guidelines (ELG) promulgated by the U.S. EPA, the effluent design flow shall be the average daily flow associated with:

      1) the month having the highest monthly production rate of the previous twelve months or, if greater,

      2) the year having the highest annual production rate of the previous five years.

   b. If the discharge from an industrial wastewater treatment plant is **not** covered by Effluent Limitations Guidelines (ELG) promulgated by the U.S. EPA, is mixed with stormwater or cooling water, or production data are not available, the effluent design flow shall be the average daily flow associated with:

      1) the month with the highest monthly flow rate of the previous twelve months, or if greater,

      2) the year having the highest annual flow rate of the previous five years.

   c. For municipal wastewater treatment plant discharges, the effluent design flow shall be the higher of:

      1) the average daily flow of the plant for the previous three years including a growth factor based upon a five-year projection, if available, or

      2) the capacity of the plant that was used to establish effluent limitations for the NPDES permit expressed as the annual average flow.

B. **Delaware River Estuary.**

   1. **Carbonaceous Oxygen Demand**. Pursuant to the provision of 3.10.4.E of the Standards, the Commission determines that the 1964 carbonaceous oxygen demand of the effluent load to Zones 2, 3, 4, and 5 exceeded the waste assimilative capacity of those zones to meet the stream quality objectives. Accordingly, the total carbonaceous oxygen demand exerted by the sum of all waste discharges to each of these zones shall be reduced to the following:

Zone 2	18,600 pounds per day
Zone 3	144,800 pounds per day
Zone 4	91,000 pounds per day
Zone 5	67,600 pounds per day

a. **Reserve**. In Zones 2, 3, 4, and 5, as a part of the initial allocation, and each subsequent reallocation, a reserve of about 10 percent of the total permissible load to the Zone may be set aside by the Commission.

b. **Allocation to Individual Dischargers**.

1) Within Zones 2, 3, 4, and 5, the pounds of carbonaceous oxygen demand prescribed above, minus the reserve, will be allocated among individual dischargers.

2) Allocations will be based upon the concept of uniform reduction of raw waste in a zone.

3) Upon application, in special cases, for dilute industrial process wastewater, an allocation may be assigned consistent with Section 4.30.3B.3.

c. **Allowable Variations**.

1) The number of pounds in the discharge permitted by the allocation will be determined by an average of samples taken over a period of thirty consecutive days of the year.

2) It is recognized that optimum efficiency may not be achieved with certain secondary treatment facilities during the colder months. A discharge exceeding the allocation may be permitted by the Commission when it results from reduced plant efficiency caused by temperatures below 59° F (15° C), provided that the pounds discharged by any individual discharger shall not exceed its allocation by more than an average of two-thirds over any consecutive ten days.

d. **Allocations from the Reserve**. Allocations from the reserve will be made upon the same principles as provided in 4.30.7.B.1.b. based upon the concept of uniform raw waste reduction in a zone at the time the allocation is made.

e. **Reallocations**. Reallocations will be made upon the same principles as provided by 4.30.7.B.1.b., provided that where the waste reduction by any discharger results in lower poundage input than it has been allocated such poundage differential will not be returned to the reserve in the absence of conditions requiring a reallocation for the zone.

f. **Tidal Tributaries**.

1) Wastes discharged to the portions of tributaries of the Delaware River Estuary affected by tidal action are included in the total permissible load in each zone, and poundage allocations will be assigned to these

dischargers on the same basis as effluents discharged directly to the estuary.

2) However, additional requirements may be imposed if any one or group of waste dischargers complying with estuary load allocations exceeds the waste assimilative capacity of the tidal tributary.

2. Toxic Pollutants. Pursuant to Sections 3.10.4.E. and 4.30.7.A. of these regulations, the Commission shall establish wasteload allocations and other effluent requirements that may be necessary to meet the stream quality objectives for toxic pollutants contained in Section 3.30.

a. **Reserve**. A reserve allocation of 5% of the Total Maximum Daily Load (TMDL) shall be established as a part of an allocation or reallocation, by increasing the effluent design flow by 5%.

b. **Margin of Safety**. As part of an allocation or reallocation, a proportion of the Total Maximum Daily Load shall be established as a margin of safety. The proportion established shall reflect the degree of uncertainty in the data and resulting water quality-based controls.

c. **Allocation to Discharges**.

1) Wasteload allocations shall be established for Phase 1 continuous point source discharges to address acute aquatic life protection, chronic aquatic life protection and both carcinogenic and systemic toxicants.

a) The water quality objective for the establishment of any allocation or reallocation shall be the stream quality objectives contained in Section 3.30. If the background concentration of a toxic pollutant at the appropriate criteria duration exceeds the stream quality objective as a result of loadings from sources not subject to control, then the water quality objective shall be the background concentration of the pollutant.

b) The minimum flows for aquatic life protection and to protect the taste and odor of ingested water and fish are based on a minimum consecutive 7-day flow with a 10-year recurrence interval for all tributaries; and for the Delaware River, a flow of 2500 cfs at Trenton. For the protection of human health, the harmonic mean flow shall be used for carcinogens, and the minimum consecutive 30-day flow with a 5-year recurrence interval shall be used for systemic toxicants.

2) Allocations shall be determined by the Executive Director using the procedure described in Section 4.30.7.B.2.c.4) or alternative procedures that are consistent with the doctrine of equitable apportionment, and achieve the following:

a) assure compliance with applicable stream quality objectives;

b) provide maximum equity among competing discharges; and

c) minimize the overall cost of compliance.

3) The loadings of toxic pollutants identified in Section 4.30.7.B.2.c. shall be allocated among individual Phase 1 continuous point source discharges which meet any of the following criteria:

a) The discharge has an existing permit limit for the parameter,

b) Effluent data indicates the presence of the parameter, or

c) The reasonable potential exists for the parameter to occur in the discharge.

4) Allocations for Phase 1 continuous point source discharges will be based upon the equal marginal percent reduction procedure which has been determined to be consistent with the requirements of Section 4.30.7.B.2.c.2). This procedure requires all dischargers, whether they are part of a multiple discharge wasteload allocation scenario or not, to provide treatment of their wastewater to achieve the applicable water quality standard; and in addition, requires some dischargers to provide additional treatment due to the cumulative impact of all discharges.

a) Alternative wasteload allocation procedures may be considered by the Commission if they provide timely compliance with Section 4.30.7.B.2.c.2) and include the consent of all dischargers affected by the alternative procedure.

b) Discharges meeting any of the requirements of Section 4.30.7.B.2.c.3) will be assigned an initial loading based upon the following information in order of preference:

i) The average monthly limit obtained from effluent guideline limitations promulgated by the U.S. Environmental Protection Agency for the point source category applicable to the discharge,

ii) Any average monthly limitation for the parameter in the current discharge permit,

iii) Monitoring data of sufficient quantity and quality, as determined by the Executive Director, to characterize the concentration of the parameter in the discharge, or

iv) Minimum performance standards established by the Executive Director for industrial and municipal wastewater treatment plants discharging to the tidal Delaware River.

In assigning the initial loading, the average loading at the appropriate criteria duration will be calculated using the coefficient of variation (CV) calculated from monitoring data or a default value of 0.6 in the absence of data of sufficient quantity and quality, as determined by the Executive Director.

c) Discharges contributing to an exceedence of a stream quality objective due to the cumulative effect of all discharges may not be required to provide additional treatment or loading reduction if the discharge does not represent a significant proportion of the marginal loading.

5) Allocations established by the Executive Director and reallocations required under Section 4.30.7.A.5.b.2) shall be published in a document containing the specific procedures, tools and assumptions used to derive the allocations.

6) Wasteload allocations established under Section 4.30.7.B.2.c. shall be referred to the appropriate agency of the signatory parties, respectively, for use, as appropriate, in developing effluent limitations, schedules of compliance, and other requirements in permits.

d. **Adjustment for Pollutants in Intake Water.** Wasteload allocations established for an industrial discharge may be adjusted by the Executive Director, in consultation with the appropriate agency of the signatory parties, to account for pollutants present in water withdrawn for use by the facility from the receiving water provided that the following conditions are met:

1) In the absence of pollutants in the water withdrawn, there would be no exceedence of the stream quality objectives for toxic pollutants;

2) Pollutants in the discharge resulting from any other activity, operation or materials used or produced at the facility do not significantly contribute to an exceedence of the stream quality objectives for toxic pollutants contained in Section 3.30.;

3) No statistically significant difference can be detected between the intake and effluent concentrations and loadings of a toxic pollutant based upon a rigorous analysis of data representative of operating and ambient conditions at the facility; and

4) No practicable alternative source of intake water is available.

C. **Definitions**.

1. **Wasteload Allocation**. The portion of the Total Maximum Daily Load of a body of water or section thereof that is allocated to an existing or future point source of pollution. Or, any limitation on the loading and/or concentration of a pollutant discharged from a point source required to ensure that stream quality objectives are not exceeded.

2. **Total Maximum Daily Load (TMDL)**. The maximum daily loading of a pollutant from all sources which still ensures that water quality objectives are met.

3. **Margin of Safety**. A factor that takes into account any uncertainty or lack of knowledge about the relationship between pollutant loadings and the quality of the receiving water.

4. **Marginal Load**. The portion of the loading of a pollutant that contributes to an exceedence of a stream quality objective when the cumulative loading from all point sources is considered.

5. **Effluent Limitations Guidelines**. Effluent limitations for pollutants for categories and classes of point sources promulgated by the U.S. Environmental Protection Agency under Section 301 of the Clean Water Act which reflect the best available treatment technology.

6. **Harmonic Mean Flow**. The flow value corresponding to the number of daily flow measurements divided by the sum of the reciprocals of the flows.

7. **Background Concentration**. The concentration of a toxic pollutant at any point in the Estuary that results from loadings from tributaries, sediments (if applicable), and any point or non-point sources not subject to control in the current allocation or reallocation.

8. **Phase 1 Continuous Point Source Discharge**. A discharge of wastewater other than non-contact cooling water, permitted under the National Pollutant Discharge Elimination System (NPDES) which occurs without interruption during the operating hours of a facility except for infrequent shutdowns, and is not primarily dependent on precipitation-induced flows.

9. **Long-term Average Concentration**. The mean concentration of a toxic pollutant in the effluent that represents the desired performance of a wastewater treatment plant.

10. **Minimum Performance Standards.** The long-term average concentration for a parameter for which stream quality objectives have been established under Section 3.10.3.C. or D.

a. For volatile and non-volatile organic chemicals, the standard is the maximum for a monthly average specified in the effluent guideline limitations for the Organic Chemicals, Plastics, and Synthetic Fibers (OCPSF) industrial category, or the highest reported effluent value for activated sludge treatment specified in the U.S. EPA's Water Engineering Research Laboratory data base.

b. For chlorinated pesticides and polychlorinated biphenyls, the standard is the Practical Quantitation Limit (PQL) for the compound.

c. For metals and indicator parameters, the standard is the average concentration of the parameter in industrial or municipal treatment plant discharges to the Estuary.

11. **Initial Loading.** The concentration or mass of a pollutant that is initially assigned to a discharge that meets the criteria specified in Section 4.30.7.B.2.c.3) during the baseline analysis portion of a wasteload allocation exercise.

4.30.8 **Tests, Sampling and Analysis Procedures**.

A. **Records**.

1. Adequate records shall be kept by the discharger of the operation of each facility which discharges waste effluents to Basin waters, as required by the member pollution control agencies, or as may be required by the Commission.

2. Such records shall be made available to the Commission upon request of the Executive Director.

B. **Sampling Facilities**. Facilities, subject to Commission approval, shall be provided for each discharge so that representative samples may be readily collected under safe conditions.

C. **Sampling**.

1. Samples shall be taken by the discharger in such manner and in such number as shall be determined by the Commission upon consideration of the volume, location, and characteristics of the wastes, sufficient to permit the Commission to determine the quality of waste treatment influents and effluents and evaluate in-plant reductions.

2. Samples may be composited, continuously or hourly, in proportion to flow over 24 hours, or over a working cycle, as appropriate.

D. **Bioassays**. The Commission may require bioassays to demonstrate that waste discharges are neither toxic nor harmful and will not taint fish or shellfish flesh beyond the mixing zone.

E. **Analysis Procedures**. Samples shall be analyzed and bioassays performed in accordance with the procedures in the latest edition of Standard Methods for the Examination of Water and Wastewater, or as prescribed by the Commission.

1. In the analysis of oil and grease samples from oil storage terminal runoff, the liquid-liquid extraction with trichlorotrifluoro-ethane gravimetric method shall be used.

F. **Access**. The Commission, its officers, agents, and employees shall have access to observe and inspect waste treatment and in-plant control facilities and to collect samples for analyses.

4.30.9 **Pollutant Minimization Plans for Toxic Pollutants**

A. **Applicability.** Following either (i) a determination of assimilative capacity by the Commission for a toxic pollutant in accordance with Section 4.30.7 of these regulations or (ii) the issuance of a total maximum daily load (TMDL) by the U.S. Environmental Protection Agency or a Basin State for a toxic pollutant in accordance with Section 304(d)(1)(c) of the Clean Water Act, the Commission may add such pollutant to the list established at Section 4.30.9A.1, and in accordance with Section 4.30.9A.2, may require classes of point or non-point dischargers or individual dischargers to prepare pollutant minimization plans (PMPs) to reduce or prevent releases of the toxic pollutant to Basin waters.

1. In accordance with Section 5.2 of the *Delaware River Basin Compact*, the Commission has determined that the effectuation of the Comprehensive Plan requires control and abatement of the pollutants listed below, through the PMP requirements set forth herein.

   (a) Total Polychlorinated Biphenyls (PCBs).

2. The following classes of dischargers or individual dischargers shall be subject to Section 4.30.9 of these Regulations and shall be so notified in writing by the Executive Director:

   (a) any discharger to which the Commission has assigned an individual allocation for a pollutant listed at Section 4.30.9A.1., in accordance with an assimilative capacity determination issued under Section 4.30.7 of these Regulations

   (b) any discharger that has received an individual wasteload allocation in a TMDL established by the U.S. Environmental Protection Agency or a Basin State for a pollutant listed at Section 4.30.9A.1.

   Provided, however, that dischargers listed in Group 2 of Tables 3-2 through 3-5 of Appendix 3 of the document, *U.S. Environmental Protection Agency Regions II and III, Total Maximum Daily Loads for Polychlorinated Biphenyls (PCBs) for Zones 2-5 of the Tidal Delaware River* (December 15, 2003) ("Group 2 dischargers"), shall only be subject to Section 4.30.9 in the event that the

presence of PCB congeners is confirmed through monitoring in accordance with the requirements set forth in Appendix 3 of the same document.

(c) any discharger or class of dischargers of a pollutant listed at Section 4.30.9A.1 that the Commission determines after public notice and a hearing, has an adverse effect on the water resources of the Basin.

3. Until such time, if any, as the NPDES permitting authority issues a permit in accordance with Section I, the Commission may relieve a discharger of the requirements of Section 4.30.9 for a pollutant, effective upon written notice to the discharger, if the Commission determines, in consultation with the State in which the discharger is located, that the discharger has (a) achieved the maximum practicable reduction of releases of the pollutant to the air, soil or water in accordance with Section 4.30.9E.9; and (b) is not having or has ceased to have an adverse effect on the water resources of the Basin. Notice of a determination in accordance with this section shall be published by the Commission in the applicable state register and on the Commission's website.

B. **Purpose.** For toxic pollutants listed in Section 4.30.9A.1, implementation of a comprehensive set of measures, including trackdown studies, process modifications, materials substitutions, treatment technologies, best management practices and/or procedures tailored to the facility or site may be necessary to achieve required loading reductions. Owners and operators, who possess the greatest knowledge of their operations and site conditions, are in the best position to develop and implement such measures. The pollutant minimization plan requirements of Section 4.30.9 may be used to require owners and operators to perform a systematic analysis of their facilities and sites in order to locate pollutant sources and to design and implement measures to achieve the necessary reductions. The elements of a PMP set forth at Section 4.30.9E of the rule are intended to ensure that similarly situated dischargers make comparable efforts, and that progress in implementing plans and reducing pollutant loadings is measured and reported. Within these constraints, creative approaches to pollutant trackdown and reduction are encouraged.

C. **Definitions.** For the purposes of Section 4.30.9 of these Regulations, key terms are defined as follows:

1. **Adverse Effect.** A point or non-point source of a toxic pollutant has an "adverse effect" on the water resources of the Basin if it is causing or contributing to a violation of applicable stream quality objectives or water quality standards in Basin waters for which, in accordance with Section 4.30.9A., a TMDL or assimilative capacity determination has been established.

2. **Maximum Practicable Reduction.** The "maximum practicable reduction" of releases of a toxic pollutant is the maximum degree of reduction in releases of the pollutant to the air, soil and water (including elimination of such releases where achievable), taking into account economic and technological feasibility and any new environmental impacts that would result, that is achievable for a given site or facility

through the application of equipment, technology, process or procedure modifications; reformation or redesign of products; substitution of raw materials; or changes in management practices, materials handling, inventory control, or other general operational phases of the site or facility, either alone or in combination. If the pollutant is present within a site or facility but is contained, maximum practicable reduction includes the implementation of measures to prevent its future release. For municipal wastewater treatment plants, maximum practicable reduction shall include system trackdown and analysis and may include, among other things, reductions achieved through education and outreach and coordination with other local, state, and federal regulatory agencies.

3. **Service Area.** A "service area" is the area served by a municipal or industrial wastewater treatment plant. It includes the geographic area served by the plant's collection system, plus any sites or facilities outside the collection system that transport waste to the plant for treatment.

4. **Toxic pollutant.** A "toxic pollutant" is any pollutant defined as toxic in a federal or Basin state statute or a regulation issued by the Commission, the U.S. EPA or a Basin state.

D. **Procedures for Submission, Review, Implementation and Continuation of PMPs.** The following procedures shall apply to a discharger required to develop, submit and implement a PMP in accordance with Section 4.30.9, until such time, if any, as the NPDES permitting authority issues a permit in accordance with Section I:

1. **Time of Submission.** The discharger shall develop and submit the PMP to the Commission and the permitting agency (if any) within 90 days of receipt of notice from the Executive Director.

2. **Completeness Determination.** The Commission staff, in consultation with permitting agency staff (if applicable), shall review each PMP for completeness, and the Executive Director shall issue a completeness determination to the discharger, copied to the permitting agency, confirming that a PMP is complete or identifying deficiencies in the PMP. The completeness determination shall not be construed as a determination of the adequacy of the PMP to achieve the maximum practicable reduction of pollutant discharges to the air, soil or water in accordance with Section E.9.

3. **Cure of Deficiency.** Within 30 days of receipt of a completeness determination in accordance with Section 4.30.9D.2., above, dischargers shall submit a PMP to the Commission and the State in which the discharger is located that reflects a good faith effort to cure any deficiency identified in the determination. If the revised PMP is satisfactory, the Executive Director shall issue a second determination of completeness stating that the deficiency has been cured. If the revised PMP is still incomplete, the Executive Director in her discretion may either grant the discharger additional time to cure the deficiency or commence an enforcement action and/or seek penalties against the discharger, unless for good cause shown the Executive

Director grants a waiver in accordance with Section 4.30.9E. The Executive Director may commence an enforcement action and/or seek penalties in accordance with Section 14.17 of the *Compact* and Section 4.30.9D.9 below in the event of persistent or bad faith failure by the discharger to submit a complete PMP.

4. **Commencement of PMP Implementation.** The discharger shall commence implementation of its PMP as submitted, within 60 days of receipt of a determination of completeness under Section 4.30.9D.2 or D.3.

5. **Initial Term of PMP.** Each PMP shall be designed for an initial term of five years.

6. **Additional Term of PMP.** The term of the PMP shall be reviewed by the Commission staff in consultation with the State in which the discharger is located prior to the expiration of the PMP, and an additional term shall be determined by the Executive Director.

7. **Plans Deemed Non-Compliant.** If the Commission determines at any time, upon the recommendation of the Executive Director, that a PMP being implemented or to be implemented in accordance with Section 4.30.9 is not likely to achieve the maximum practicable reduction of pollutant discharges to the air, soil and water, then the Commission may require the discharger to submit a revised PMP to more aggressively reduce pollutant loading. The discharger shall submit a revised PMP responsive to the Commission's request within 60 days of receipt of the request. The time periods provided in Sections 4.30.9D.2 through D.4., with respect to curing a deficiency and commencing implementation, shall apply.

8. **Persistent or Bad Faith Failure to Comply.** The Executive Director is authorized to commence an enforcement action against a discharger in accordance with Article 7 of the Commission's *Rules of Practice and Procedure* for persistent or bad faith failure to submit a complete plan, to modify a plan deemed non-compliant, or to implement a plan.

E. **Plan Elements.** A PMP prepared in accordance with these regulations shall contain the following elements:

1. **Good Faith Commitment.** A signed and dated statement by the highest ranking official having day-to-day managerial and operational responsibilities for the facility, expressing the company's good faith commitment to reducing discharges of the target pollutant through the PMP process.

2. **Discharger Contact.** Name and contact information for an individual who will serve as the contact for information concerning the PMP.

3. **Description and Maps of Facility.**

   a. For Industrial Facilities:
      - company and facility name and address;

- raw materials and industrial processes used, and products generated that either contain the pollutant or that may be related to the generation or release of the pollutant;
- for facilities accepting non-facility wastes, a description of all such wastes;
- a map of all point and nonpoint source releases from the facility or site and a description of such releases;
- all local, state and federal discharge permits and permit numbers for permits that relate to releases of the pollutant; and
- receiving stream for all discharges, including River Mile in instances where the receiving stream is the main stem Delaware River.

b. For Municipal Wastewater Treatment Plants (WWTPs):
- facility name and address;
- description and map of the facility's service area;
- description and map or schematic diagram of the collection system;
- description of any wastes accepted from outside the collection system (e.g., wastes trucked or transported by rail to the collection system for treatment);
- map of all point and nonpoint source releases from the facility or site and description of the nature of such releases;
- all local, state and federal permits and permit numbers for permits that relate to releases of the pollutant;
- receiving stream for all discharges, including River Mile in instances where the receiving stream is the main stem Delaware River; and
- a list of all known industrial users of the collection system and pretreatment permit numbers if any.

4. **Description and Map of Known Sources.**

a. Description of all materials, equipment, processes, soil areas or sediment areas within a facility, site, or service area, from which the pollutant is released directly or indirectly into a wastewater treatment system, sewage collection system, stormwater collection system, stream or river, including a description of the pathways if known.

b. Site map or collection system map showing location of known sources and pathways.

5. **List of Potential Sources.**

a. For industrial dischargers, identify any material, equipment, process, soil area, sediment area or facility on the site known to contain or generate the pollutant, but that is not deemed a source because it is not known to be releasing the pollutant or because no pathway to surface water or groundwater exists. Provide estimate of the mass of the pollutant present, if known.

b. For municipal WWTPs, identify any material, equipment, process, soil area, sediment area or facility that is part of the collection system or that is within the

service area and that is known to contain the pollutant, but that is not deemed a source because no pathway to surface water or groundwater exists. Provide estimate of the mass of the pollutant present if known.

6. **Strategy for Identifying Unknown Sources of the Pollutant (Trackdown).**

   a. For industrial dischargers, the strategy for identifying pollutant sources may include, but shall not be limited to, investigation of an industrial process used by the discharger that is similar to one known to have generated the pollutant elsewhere; investigation of historic activities on the site; or investigation of possible soil or sediment contamination or stormwater management system contamination as a result of historic or ongoing activities.

   b. For municipal WWTPs, trackdown strategy may include, but shall not be limited to, identification, through screening, of any portions of the collection system containing higher concentrations or masses of the pollutant; identification of industrial users of the collection system that are likely to have used or generated the pollutant in the past; industrial processes known to be in use that could generate the pollutant; sites containing equipment that is likely contaminated with the pollutant, and sites that have been used to dispose of the pollutant.

   c. Trackdown efforts may rely upon analytical methods other than those required under Section 4.30.9E.13, below, for purposes of screening or identification of pollutant sources.

7. **Previous, Ongoing or Planned Minimization Activities Undertaken Voluntarily or Required by Other Regulatory Programs.** Previous, ongoing or planned pollutant minimization activities underway or to be undertaken voluntarily or in accordance with a federal or state requirement for the pollutant that is the subject of the PMP, including the level of pollutant reduction attained, level of pollutant reduction targeted, measures completed, measures underway, and the schedule for planned activities.

8. **For Municipal WWTPs Only, Recommendations for Action Under Other Regulatory Programs.** Based on information known at the time of PMP submission or identified during implementation of the PMP, recommendations for remediation activities to be undertaken under the auspices of other local, state or federal regulatory agencies or programs.

9. **Pollutant Minimization Measures.** A description of measures to be taken to achieve the maximum practicable reduction of discharges to the air, soil or water.

10. **Source Prioritization.** Prioritization of known and potential sources, either individually or in categories, from most to least significant, on the basis of available information. Factors to be considered in prioritizing known sources should include, but shall not be limited to, available information on pollutant mass (or volume of the discharge and concentration of the pollutant), and likelihood of release into Basin

waters. Factors to be considered in prioritizing potential sources may include, but shall not be limited to, current or past industrial activity, presence and type of equipment containing the pollutant, waste management activities and overall condition of the site and facilities.

11. **Key Dates.** Date of submission of waste implementation plan; date by which initiation of plan activities is required; and schedule for implementation of each of the measures described in Section 4.30.9E.9 above.

12. **Measurement of Progress.**

    a. **Loading Baseline and Reductions.** A PMP shall contain a loading baseline as set forth below, and shall provide for the measurement of mass loadings on a biennial basis using methods listed at Section 4.30.9E.13. In addition to biennial monitoring using methods listed in Section 4.30.9E.13, a PMP shall contain alternative methods for estimating loading reductions for all non-point sources and may contain such alternative methods for point sources.

    Descriptions of the following shall be included in a PMP:

    - for point sources, procedures and data obtained utilizing the appropriate method listed in Section 4.30.9E.13 below, for establishing a loading baseline;

    - for non-point sources, procedures and data to be used in establishing a loading baseline;

    - procedures and data, in addition to biennial monitoring using methods listed in Section 4.30.9E.13, to be used to estimate loading reductions. Such measures may include indirect effluent monitoring, direct and indirect monitoring of treatment plant influent, and/or engineering calculations.

    b. **Additional Measures of Progress.** A PMP shall contain a description of the methods, other than measurement of loading reductions, to be used to measure and report progress toward achieving maximum practicable reduction of the pollutant. Such measures shall reflect the approaches to be taken to achieve maximum practicable reduction of the pollutant.

13. **Sampling and Analytical Methods.** The following sampling and analytical methods shall be used to establish a loading baseline for point sources and to establish pollutant reductions for point and non-point sources, in accordance with section 4.30.9E.12.a., above.

    a. PCBs – EPA Method 1668, Revision A, including sampling and analytical requirements specified in the document entitled, *Delaware River Estuary Stage 2 PCB TMDL – Polychlorinated Biphenyls – EPA Method 1668A – Project Quality Control Requirements* (DRBC, 2004).

F. **Annual Report.** Each year, commencing one year from the date by which initiation of PMP activities is required to begin in accordance with Section 4.30.9D.4 above, or such other date as may be specified in a NPDES permit issued in accordance with Section 4.30.9I, and continuing through the fifth year of the plan, the discharger shall submit to the Commission and the State in which the discharger is located an annual report that:

1. describes any material modifications to the facility's operations, site boundary, service area, or waste streams in the course of the preceding year that might affect releases of the pollutant, along with appropriate revisions made to the PMP;

2. outlines measures under way and completed to achieve maximum practicable reduction of pollutant releases since the last report and since initiation of the PMP;

3. reports incremental and cumulative changes from the pollutant loading baseline established in accordance with Section 4.30.9E.12.a., above; and

4. describes progress toward achieving maximum practicable reduction of the pollutant, using measures identified in accordance with Section 4.30.9E.12.b., above.

G. **Waiver.** Until such time, if any, as the NPDES permitting authority issues a permit in accordance with Section I, the Executive Director, in consultation with the State in which the discharger is located, may modify any of the time requirements of Section 4.30.9D for a PMP for good cause and may waive any of the plan element requirements of Section 4.30.9E for a PMP, upon a showing that an element listed at Section 4.30.9E is inapplicable to or inappropriate for the particular facility or site to which the PMP applies. Any discharger seeking such a waiver must submit such request to the Executive Director in writing.

H. **Guidance.** The Commission may develop guidance for the development of PMPs for specific pollutants consistent with the requirements set forth in Section 4.30.9E.

I. **Relationship to NPDES Permit.** Upon issuance of an initial, renewed or modified NPDES permit by the State in which the discharger is located or the U.S. Environmental Protection Agency to a discharger that has been made subject to Section 4.30.9, which permit contains the requirements to develop, submit to the permitting authority and implement a PMP consistent with that Section, then as to that discharger:

1. the Commission shall cease to administer Section 4.30.9 with respect to the discharge of the pollutant to which the PMP requirements of the permit relate, upon the date such requirements become effective; and

2. the NPDES permitting authority shall apply the more stringent of Section 4.30.9 or other applicable state or federal requirements with respect to the discharge of the pollutant to which the PMP requirements of the permit relate.

J. **Reservation of Authority.** Nothing in this rule shall limit the authority of the Commission or the Executive Director under the *Compact* to control future pollution, abate existing pollution or require review of a project by the Commission under Section 3.8 of the *Compact*, including through the issuance of docket-specific PMP requirements or other methods.

4.30.10 **Other Considerations**

A. **Intrastate Tributaries.** In addition to the requirements of this Article, effluent quality requirements or intrastate tributaries shall include such regulations as the State in which the tributary is located may impose in order to comply with the water quality criteria provided by 4.20.4.

B. **Operations**

1. Waste treatment operations, except disinfection, shall not be curtailed at any time of the year.

2. The capability to resume disinfection, upon reasonable notice not to exceed 15 days, shall be maintained.

Section 4.40 Ground Water Quality Requirements

4.40.1 **Prohibited Activities.** No person, firm, partnership, corporation, association, or other entity, including any of the signatory parties, any political subdivision, agency, department or instrumentality of any of them, shall cause or permit any pollution of ground waters or violate the ground water quality objectives or control requirements imposed by or determined pursuant to this Section or Section 3.40.

4.40.2 **Enforcement Procedures**. The enforcement procedure of Section 4.50 with respect to effluent quality requirements for discharges shall be deemed applicable to the enforcement of this Section and Section 3.40. For the purposes thereof, the word "discharger" as used in Section 4.50 includes any party affected by this Section.

Section 4.50 Enforcement Procedures.

4.50.1 **Scope**. The Standards will be enforced with respect to effluent quality requirements in accordance with this Section. It is intended that such enforcement procedures will be administered with due recognition of the laws and requirements of the signatory parties, and with the utilization to the maximum practical extent of the functions, powers and duties of water pollution control agencies of the signatory parties in accordance with administrative agreements which may be entered into by and between the Commission and such agencies.

4.50.2 **Abatement Schedules and Permits**.

A. Abatement schedules approved by the Commission prior to October 1, 1973, shall be referred to the appropriate agency of the signatory parties, respectively, for all further proceedings.

B. On and after October 1, 1973, each discharger shall comply with the requirements for an abatement schedule under the laws and regulations of the appropriate signatory parties.

C. A copy of each abatement schedule and permit, and any revision or amendment thereof, shall be promptly filed with the Commission by the agency of the signatory party issuing it.

D. Each agency of a signatory party which issues or approves an abatement schedule or a discharge permit relating to waters of the Basin shall provide for the use of the Commission an annual report of such actions including the progress of abatement measures thereunder, in such form as the Executive Director may request.

4.50.3 **Waste Load Allocations**. Waste load allocations will be made by the Executive Director in accordance with these Regulations. Every allocation shall be met:

A. by an existing waste treatment facility;

B. in accordance with an abatement schedule duly adopted and approved by a signatory party, with respect to an existing project;

C. at all times with respect to a new project.

4.50.4 **Inspection and Surveillance.**

A. The Commission, its officers, agents, and employees may inspect the operations of waste treatment and in-plant control facilities of any waste discharger and may install, operate, and maintain facilities for monitoring and surveillance of effluents as well as water quality objectives.

B. Provision for such monitoring and surveillance shall be deemed to be part of every order, determination, or permit of the Commission approving an allocation or an abatement schedule for any waste discharger.

4.50.5 **Noncompliance; Notice.**

A. Whenever the Executive Director determines that there is cause to conclude that a waste discharger may be in violation of these Regulations, the Director shall serve upon the waste discharger a notice of hearing, requiring the waste discharger to show cause within 20 days thereafter, at a hearing to be conducted by a hearing officer designated by the Director, why a citation for non-compliance should not be issued.

B. Following the hearing, the officer shall determine whether the waste discharger is in fact in violation of these Regulations and upon such finding shall recommend to the Executive Director an appropriate determination.

C. If the Executive Director determines that the waste discharger is in violation, he shall cause to be issued and served upon the waste discharger a citation for noncompliance.

D. A copy of the citation shall also be served and filed with the water pollution control agency of the signatory State in which the violation occurs.

4.50.6 **Order of Abatement; Sanctions.**

A. **Order**. An order of abatement shall be issued by the Executive Director, following a citation for noncompliance, whenever:

1. The state pollution control agency has not taken appropriate and timely action to obtain compliance, or

2. There is a disagreement between two or more States regarding satisfactory compliance by a waste discharge, or

3. A waste discharge involves a federally-owned or operated facility, or

4. There is doubt or conflict of jurisdiction among the States.

B. **Sanctions**. The Commission may invoke the sanctions of the Compact for violation of these Regulations following the issuance of an order of abatement by the Executive Director.

INTERPRETIVE GUIDELINE NO. 1

On January 26, 1972 the Delaware River Basin Commission adopted Interpretive Guideline No. 1, as Resolution No. 72-1, directing that the following numerical definitions be used as guidelines by the Commission staff in administering Sections 3.10.3.A, 3.10.4.A, 3.10.4.C, and 3.10.4.D of the Water Quality Standards, and that they be administered in accordance with the procedures of the Basin Regulations - Water Quality.

A. **Stream Quality Objectives.**

(1) **Limits.**

a. **Toxic Substances.** The following limits shall apply in Basin waters other than Zones 2, 3, 4 and 5.

(i) The concentration of a toxic substance in Basin waters shall not exceed one-twentieth of the TL_{50} value at 96 hours, as determined by appropriate bioassays, except in designated mixing areas. Criteria for combinations of toxic substances will be based upon the same principle.

(ii) The substances listed below shall not exceed the specified limits or one-twentieth of the TL_{50} value at 96 hours, whichever is lower.

	Limit mg/l
Arsenic	0.05
Barium	1.0
Cadmium	0.01
Chromium (hexavalent)	0.05
Lead	0.05
Mercury	0.005
Selenium	0.01
Silver	0.05

(iii) The concentration of a persistent pesticide[1] in Basin waters shall not exceed one one-hundredth of the TL_{50} value at 96 hours, as determined by appropriate bioassay.

b. **Oil.** No readily visible oil.

[1] Persistent pesticides are defined as natural and synthetic materials having a half-life of greater than 96 hours, which are used to control unwanted or noxious animals or plants. They include fungicides, herbicides, insecticides, fumigants and rodenticides.

B. **Effluent Quality Requirements.**

(1) **Public Safety.**

a. **Temperature.** Maximum 110° F (43.3° C) where readily accessible to human contact.

(2) **Limits.**

a. **Debris, Scum, or Other Floating Materials.** None.

b. **Toxicity.** The following requirements shall apply in Basin waters other than Zones 2, 3, 4 and 5.

(i) Not more than 50 percent mortality in 96 hours in an appropriate bioassay test with a 1:1 dilution. Wastes containing chlorine may be dechlorinated prior to the bioassay test.

(ii) Notwithstanding the results of the tests prescribed in paragraph (I) above, the substances listed below being accumulative or conservative, shall not exceed the following specified limits in an effluent.

	Limit mg/l
Arsenic	0.1
Barium	2.0
Cadmium	0.02
Chromium (hexavalent)	0.10
Copper	0.20
Lead	0.10
Mercury	0.01
Selenium	0.02
Zinc	0.60

(iii) Persistent pesticides - not to exceed one one-hundredth of the TL_{50} value at 96 hours as determined by appropriate bioassay.

c. **Odor.** Not to exceed a threshold number of 250.

d. **BOD.** In Zones 2, 3, 4 and 5 a waste shall receive not less than zone percent reduction in addition to meeting allocation requirements.

APPENDIX C

NATIONAL PARK CDF MONITORING LABORATORY DATA

(see separate files on this CD)

APPENDIX D

NATIONAL PARK CDF MONITORING DATA EVALUATION

DAILY REPORT OF OPERATIONS

CONTRACT NO.: W912BU-12-C-0034 | DATE: 9/9/12 | Report # 1

DREDGE: Illinois

CONTRACTOR: Great Lakes Dredge & Dock Company, LLC

LOCATION OF WORK: AS27, River Station 561+43 to 560+50, northbound

CHARACTER OF WORK: [ ] Maintenance [X] New

DISPOSAL AREA OR REHANDLING BASIN: National Park Disposal Area

LENGTH OF DISCHARGE OF PIPELINE: Total Length 7230 Ft.
Pontoon 2120 Ft. Shore 270 Ft. Submerged 4840 Ft.

CHARACTER OF MATERIAL AND PERCENTAGE OF EACH: 75% Clay, 15% Gravel & Sand, 5% Debris (tires,concrete, wire cables) 5% Rock (8"-10" clayballs)

AVERAGE DEPTH (Feet and Tenths)
Before Dredging: 43 After Dredging: 46 Payment Depth: 45+1

WEATHER: Temp 61-78F; Wind 6-12 mph; Precip 0 in

NUMBER OF MEN: 54

MAN HOURS: 648

MAN HOURS TO DATE: 648

WORK PERFORMED

ITEM	UNIT	AMOUNT GROSS	AMOUNT NET
Av. Width of cut	Feet		150
Area dredged	Sq. Ft.		9720
Distance advanced this period	Feet		88
Distance advanced previously	Feet		0
Distance advanced to date	Feet		88
Amt. dredged this period	Cu. Yds.	1019	680
Amt. dredged previously	Cu. Yds.	0	0
Total amt. dredged to date	Cu. Yds.	1019	680

ITEM	NAME	HOURS
Tugboat	Brangus	3
Tugboat	RL Enterkin	3
Tugboat	Pelican State	6.92
Tugboat	Atalantic Dawn	6.92
Crew Boat	Muskegon River	6.92
Anchor Barge	GL 106	3
Derrick	Mobro 1220	3

COMMODITIES CONSUMED

ITEM	UNIT	QUANTITY
Fuel Oil	Gals.	2234
Lubricants	Gals.	
Lubricants	Pounds	
Water	Gals.	

DISTRIBUTION OF TIME

EFFECTIVE WORKING TIME	HOURS	MINUTES
Dredging	1	5
Percentage of total time		15.6
NON- EFFECTIVE TIME		
Handling pipelines		
Handling swinging lines		
Clearing pump and pipe line	5	50
Clearing cutter or suction head		
Changing location of plant on job		
Loss due to opposing natural elements <8hr		
Loss due to opposing natural elements >8hr		
Loss due to passing vessels		
Minor operating repairs <4hr		
Secure for weekend		
Miscellaneous (Explain in remarks)		
Total Non-effective Time		
LOST TIME NOT CHARGEABLE		
Loss due to repairs >4hr		
Loss due to laying / relaying submerged line		
Lay time off shift		
Sundays and Holidays		
Waiting for equipment plant		
Collisions		
TOTAL TIME IN PERIOD	6	55

No. of Supervisory Inspections: 2 By field personnel 2 By office personnel

Remarks:

DAILY REPORT OF OPERATIONS

CONTRACT NO.: W912BU-12-C-0034 | DATE: 9/10/12 | Report # 2

DREDGE: Illinois

CONTRACTOR: Great Lakes Dredge & Dock Company, LLC

LOCATION OF WORK: AS27, River Station 560+50, dredge down

CHARACTER OF WORK: [ ] Maintenance [X] New

DISPOSAL AREA OR REHANDLING BASIN: National Park Disposal Area

LENGTH OF DISCHARGE OF PIPELINE: Total Length 7230 Ft.
Pontoon 2120 Ft. Shore 270 Ft. Submerged 4840 Ft.

CHARACTER OF MATERIAL AND PERCENTAGE OF EACH: N/A

AVERAGE DEPTH (Feet and Tenths)
Before Dredging: N/A After Dredging: N/A Payment Depth: 45+1

WEATHER: Temp 55-73F; Wind 10-16 mph; Precip 0 in

NUMBER OF MEN: 54

MAN HOURS: 648

MAN HOURS TO DATE: 1296

WORK PERFORMED

ITEM	UNIT	AMOUNT GROSS	AMOUNT NET
Av. Width of cut	Feet		0
Area dredged	Sq. Ft.		0
Distance advanced this period	Feet		0
Distance advanced previously	Feet		88
Distance advanced to date	Feet		88
Amt. dredged this period	Cu. Yds.	0	0
Amt. dredged previously	Cu. Yds.	1019	680
Total amt. dredged to date	Cu. Yds.	1019	680

ITEM	NAME	HOURS
Tugboat	Brangus	12
Tugboat	RL Enterkin	12
Tugboat	Pelican State	24
Tugboat	Atalantic Dawn	24
Crew Boat	Muskegon River	24
Anchor Barge	GL 106	12
Derrick	Mobro 1220	12

COMMODITIES CONSUMED

ITEM	UNIT	QUANTITY
Fuel Oil	Gals.	250
Lubricants	Gals.	
Lubricants	Pounds	
Water	Gals.	

DISTRIBUTION OF TIME

EFFECTIVE WORKING TIME	HOURS	MINUTES
Dredging	0	0
Percentage of total time		0
NON- EFFECTIVE TIME		
Handling pipelines		
Handling swinging lines		
Clearing pump and pipe line	24	0
Clearing cutter or suction head		
Changing location of plant on job		
Loss due to opposing natural elements <8hr		
Loss due to opposing natural elements >8hr		
Loss due to passing vessels		
Minor operating repairs <4hr		
Secure for weekend		
Miscellaneous (Explain in remarks)		
Total Non-effective Time		
LOST TIME NOT CHARGEABLE		
Loss due to repairs >4hr		
Loss due to laying / relaying submerged line		
Lay time off shift		
Sundays and Holidays		
Waiting for equipment plant		
Collisions		
TOTAL TIME IN PERIOD	24	0

No. of Supervisory Inspections: 2 By field personnel 2 By office personnel

Remarks:

Summary of Daily Safety Activities & Observations

Date: 10 Sept 2012

Project Name: Philadelphia Naval Shipyard

Vessel: ILLINOIS

Project Manager: Dave Allen

SSHA(s): G. Haught

Prepared By:

Pre-Shift Meeting:	The Chief Engineer discussed the plan for locating the clog in the pipe safely with good communications and team work with the tug boat and deck crew. Deck Captain reviewed the job tasks to be performed with the operators and deck crew. SSHA led the stretch and flex exercises following the meeting
JSA Discussions:	A review of routine task; Hot work(welding/cutting/grinding); Crew boat to dredge transfer, Unloading trucks/trailers,
Behavioral Observations:	Good communications and team work with derrick and tug crew while working to free the clog in the pipe line
Site Conditions & Housekeeping:	Good housekeeping practices being followed. No trip hazards noted and egress passages remained clear
General Comments:	SSHA conducted an inspection on the GL66 Derrick Barge; the decks were clean and tripping hazards were identified; few discrepancies were noted in the SOL log

DAILY REPORT OF OPERATIONS

CONTRACT NO.: W912BU-12-C-0034 | DATE: 9/11/12 | Report # 3

DREDGE: Illinois

CONTRACTOR: Great Lakes Dredge & Dock Company, LLC

LOCATION OF WORK: AS27, River Station 560+50, dredge down

CHARACTER OF WORK: [ ] Maintenance [X] New

DISPOSAL AREA OR REHANDLING BASIN: National Park Disposal Area

LENGTH OF DISCHARGE OF PIPELINE: Total Length 7230 Ft.
Pontoon 2120 Ft. Shore 270 Ft. Submerged 4840 Ft.

CHARACTER OF MATERIAL AND PERCENTAGE OF EACH: N/A

AVERAGE DEPTH (Feet and Tenths)
Before Dredging: N/A After Dredging: N/A Payment Depth: 45+1

WEATHER: Temp 52-76F; Wind 10-16 mph; Precip 0 in

NUMBER OF MEN: 54

MAN HOURS: 648

MAN HOURS TO DATE: 1944

WORK PERFORMED

ITEM	UNIT	AMOUNT GROSS	AMOUNT NET
Av. Width of cut	Feet		0
Area dredged	Sq. Ft.		0
Distance advanced this period	Feet		0
Distance advanced previously	Feet		0
Distance advanced to date	Feet		88
Amt. dredged this period	Cu. Yds.	0	0
Amt. dredged previously	Cu. Yds.	1019	680
Total amt. dredged to date	Cu. Yds.	1019	680

ITEM	NAME	HOURS
Tugboat	Brangus	12
Tugboat	RL Enterkin	12
Tugboat	Pelican State	24
Tugboat	Atalantic Dawn	24
Crew Boat	Muskegon River	24
Anchor Barge	GL 106	12
Derrick	Mobro 1220	12

COMMODITIES CONSUMED

ITEM	UNIT	QUANTITY
Fuel Oil	Gals.	250
Lubricants	Gals.	
Lubricants	Pounds	
Water	Gals.	

DISTRIBUTION OF TIME

EFFECTIVE WORKING TIME	HOURS	MINUTES
Dredging	0	0
Percentage of total time		0
NON- EFFECTIVE TIME		
Handling pipelines		
Handling swinging lines		
Clearing pump and pipe line	24	0
Clearing cutter or suction head		
Changing location of plant on job		
Loss due to opposing natural elements <8hr		
Loss due to opposing natural elements >8hr		
Loss due to passing vessels		
Minor operating repairs <4hr		
Secure for weekend		
Miscellaneous (Explain in remarks)		
Total Non-effective Time		
LOST TIME NOT CHARGEABLE		
Loss due to repairs >4hr		
Loss due to laying / relaying submerged line		
Lay time off shift		
Sundays and Holidays		
Waiting for equipment plant		
Collisions		
TOTAL TIME IN PERIOD	24	0

No. of Supervisory Inspections: 2 By field personnel 2 By office personnel

Remarks: no dreding this date. Crews continue to remove subline plug due to stiff clay, aggregate boulders, and debris.

DAILY REPORT OF OPERATIONS

CONTRACT NO.: W912BU-12-C-0034 | DATE: 9/12/12 | Report # 4

DREDGE: Illinois

CONTRACTOR: Great Lakes Dredge & Dock Company, LLC

LOCATION OF WORK: AS27, River Station 560+50, dredge down

CHARACTER OF WORK: [ ] Maintenance [X] New

DISPOSAL AREA OR REHANDLING BASIN: National Park Disposal Area

LENGTH OF DISCHARGE OF PIPELINE: Total Length 7230 Ft.
Pontoon 2120 Ft. Shore 270 Ft. Submerged 4840 Ft.

CHARACTER OF MATERIAL AND PERCENTAGE OF EACH: N/A

AVERAGE DEPTH (Feet and Tenths)
Before Dredging: N/A After Dredging: N/A Payment Depth: 45+1

WEATHER: Temp 52-79F; Wind 5-10 mph; Precip 0 in

NUMBER OF MEN: 54

MAN HOURS: 648

MAN HOURS TO DATE: 2592

WORK PERFORMED

ITEM	UNIT	AMOUNT GROSS	AMOUNT NET
Av. Width of cut	Feet		0
Area dredged	Sq. Ft.		0
Distance advanced this period	Feet		0
Distance advanced previously	Feet		0
Distance advanced to date	Feet		88
Amt. dredged this period	Cu. Yds.	0	0
Amt. dredged previously	Cu. Yds.	1019	680
Total amt. dredged to date	Cu. Yds.	1019	680

ITEM	NAME	HOURS
Tugboat	Brangus	12
Tugboat	RL Enterkin	12
Tugboat	Pelican State	24
Tugboat	Atalantic Dawn	24
Crew Boat	Muskegon River	24
Anchor Barge	GL 106	12
Derrick	Mobro 1220	12

COMMODITIES CONSUMED

ITEM	UNIT	QUANTITY
Fuel Oil	Gals.	250
Lubricants	Gals.	
Lubricants	Pounds	
Water	Gals.	

DISTRIBUTION OF TIME

EFFECTIVE WORKING TIME	HOURS	MINUTES
Dredging	0	0
Percentage of total time		0
NON- EFFECTIVE TIME		
Handling pipelines		
Handling swinging lines		
Clearing pump and pipe line	14	0
Clearing cutter or suction head		
Changing location of plant on job		
Loss due to opposing natural elements <8hr		
Loss due to opposing natural elements >8hr		
Loss due to passing vessels		
Minor operating repairs <4hr		
Secure for weekend		
Miscellaneous (Explain in remarks)		
Total Non-effective Time		
LOST TIME NOT CHARGEABLE		
Loss due to repairs >4hr	10	0
Loss due to laying / relaying submerged line		
Lay time off shift		
Sundays and Holidays		
Waiting for equipment plant		
Collisions		
TOTAL TIME IN PERIOD	24	0

No. of Supervisory Inspections: 2 By field personnel 2 By office personnel

Remarks: no dreding this date. Crews cleared the subline plug due to stiff clay, aggregate boulders, and debris by 1600 hours. While starting up, an electical problem occurred to the cutter motor resulting in dredging operations being suspended for the remainder of the day.

DAILY REPORT OF OPERATIONS

CONTRACT NO.: W912BU-12-C-0034 | DATE: 9/13/12 | Report # 5

DREDGE: Illinois

CONTRACTOR: Great Lakes Dredge & Dock Company, LLC

LOCATION OF WORK: AS27, River Station 557+32, dredge down

CHARACTER OF WORK: [ ] Maintenance [X] New

DISPOSAL AREA OR REHANDLING BASIN: National Park Disposal Area

LENGTH OF DISCHARGE OF PIPELINE: Total Length 7230 Ft.
Pontoon 2120 Ft. Shore 270 Ft. Submerged 4840 Ft.

CHARACTER OF MATERIAL AND PERCENTAGE OF EACH: N/A

AVERAGE DEPTH (Feet and Tenths)
Before Dredging: N/A After Dredging: N/A Payment Depth: 45+1

WEATHER: Temp 55-79F; Wind 5-10 mph; Precip 0 in

NUMBER OF MEN: 54

MAN HOURS: 648

MAN HOURS TO DATE: 3240

WORK PERFORMED

ITEM	UNIT	AMOUNT GROSS	AMOUNT NET
Av. Width of cut	Feet		179
Area dredged	Sq. Ft.		41,102
Distance advanced this period	Feet		230
Distance advanced previously	Feet		88
Distance advanced to date	Feet		318
Amt. dredged this period	Cu. Yds.	1555	870
Amt. dredged previously	Cu. Yds.	1019	680
Total amt. dredged to date	Cu. Yds.	2574	1550

ITEM	NAME	HOURS
Tugboat	Brangus	12
Tugboat	RL Enterkin	12
Tugboat	Pelican State	24
Tugboat	Atlantic Dawn	24
Crew Boat	Muskegon River	24
Anchor Barge	GL 106	12
Derrick	Mobro 1220	12

COMMODITIES CONSUMED

ITEM	UNIT	QUANTITY
Fuel Oil	Gals.	1774
Lubricants	Gals.	
Lubricants	Pounds	
Water	Gals.	

DISTRIBUTION OF TIME

EFFECTIVE WORKING TIME	HOURS	MINUTES
Dredging	2	45
Percentage of total time		11
NON- EFFECTIVE TIME		
Handling pipelines		
Handling swinging lines		25
Clearing pump and pipe line	20	25
Clearing cutter or suction head		25
Changing location of plant on job		
Loss due to opposing natural elements <8hr		
Loss due to opposing natural elements >8hr		
Loss due to passing vessels		
Minor operating repairs <4hr		
Secure for weekend		
Miscellaneous (Explain in remarks)		
Total Non-effective Time	21	15
LOST TIME NOT CHARGEABLE		
Loss due to repairs >4hr		
Loss due to laying / relaying submerged line		
Lay time off shift		
Sundays and Holidays		
Waiting for equipment plant		
Collisions		
TOTAL TIME IN PERIOD	24	0

No. of Supervisory Inspections: 2 By field personnel 2 By office personnel

Remarks: The Illinois resumed dredging at 1740 hours,after repairing the electrical issue with the cutter motor. At 2034, another subline blockage occurred. The derrick and two anchor barges lifted the subline wher access holes were cut in the pipe to remove the material and identify /isolate the location and limits of the plug.The material consisted of a stiff, reddish clay mixed withe aggregate of varying size to include boulders. A large (18"x18") boulder was removed from the dredge pump when the line plug occurred. The cutter was cleaned of clay, and debris.

DAILY REPORT OF OPERATIONS

CONTRACT NO.: W912BU-12-C-0034 | DATE: 9/14/12 | Report # 6

DREDGE: Illinois

CONTRACTOR: Great Lakes Dredge & Dock Company, LLC

LOCATION OF WORK: AS27, River Station 557+32, dredge down

CHARACTER OF WORK: [ ] Maintenance [X] New

DISPOSAL AREA OR REHANDLING BASIN: National Park Disposal Area

LENGTH OF DISCHARGE OF PIPELINE: Total Length 7230 Ft.
Pontoon 2120 Ft. Shore 270 Ft. Submerged 4840 Ft.

CHARACTER OF MATERIAL AND PERCENTAGE OF EACH: N/A

AVERAGE DEPTH (Feet and Tenths)
Before Dredging: N/A After Dredging: N/A Payment Depth: 45+1

WEATHER: Temp 55-79F; Wind 5-10 mph; Precip 0 in

NUMBER OF MEN: 54

MAN HOURS: 648

MAN HOURS TO DATE: 3240

WORK PERFORMED

ITEM	UNIT	AMOUNT GROSS	AMOUNT NET
Av. Width of cut	Feet		0
Area dredged	Sq. Ft.		0
Distance advanced this period	Feet		0
Distance advanced previously	Feet		230
Distance advanced to date	Feet		318
Amt. dredged this period	Cu. Yds.	0	0
Amt. dredged previously	Cu. Yds.	1555	870
Total amt. dredged to date	Cu. Yds.	2574	1550

ITEM	NAME	HOURS
Tugboat	Brangus	12
Tugboat	RL Enterkin	12
Tugboat	Pelican State	24
Tugboat	Atlantic Dawn	24
Crew Boat	Muskegon River	24
Anchor Barge	GL 106	12
Derrick	Mobro 1220	12

COMMODITIES CONSUMED

ITEM	UNIT	QUANTITY
Fuel Oil	Gals.	1774
Lubricants	Gals.	
Lubricants	Pounds	
Water	Gals.	

DISTRIBUTION OF TIME

EFFECTIVE WORKING TIME	HOURS	MINUTES
Dredging	0	0
Percentage of total time		0
NON- EFFECTIVE TIME		
Handling pipelines		
Handling swinging lines		
Clearing pump and pipe line	24	0
Clearing cutter or suction head		
Changing location of plant on job		
Loss due to opposing natural elements <8hr		
Loss due to opposing natural elements >8hr		
Loss due to passing vessels		
Minor operating repairs <4hr		
Secure for weekend		
Miscellaneous (Explain in remarks)		
Total Non-effective Time	24	0
LOST TIME NOT CHARGEABLE		
Loss due to repairs >4hr		
Loss due to laying / relaying submerged line		
Lay time off shift		
Sundays and Holidays		
Waiting for equipment plant		
Collisions		
TOTAL TIME IN PERIOD	24	0

No. of Supervisory Inspections: 2 By field personnel 2 By office personnel

Remarks: The Illinois continued to isolate, and remove the subline blockage by using the derrick and two anchor barges to lift the line so access hole could be cut in order to remove the material. This material consisted of a stiff, reddish clay, mixed with aggregate of varying size. To complicate this excercise, the affected subline lay in shallow water, which restricted operations during the lower half of the tide cycle.

DAILY REPORT OF OPERATIONS

CONTRACT NO.: W912BU-12-C-0034 | DATE: 9/15/12 | Report # 7

DREDGE: Illinois

CONTRACTOR: Great Lakes Dredge & Dock Company, LLC

LOCATION OF WORK: AS27, River Station 557+32, dredge down

CHARACTER OF WORK: [ ] Maintenance [X] New

DISPOSAL AREA OR REHANDLING BASIN: National Park Disposal Area

LENGTH OF DISCHARGE OF PIPELINE: Total Length 7230 Ft.
Pontoon 2120 Ft. Shore 270 Ft. Submerged 4840 Ft.

CHARACTER OF MATERIAL AND PERCENTAGE OF EACH: N/A

AVERAGE DEPTH (Feet and Tenths)
Before Dredging: N/A After Dredging: N/A Payment Depth: 45+1

WEATHER: Temp 57-73F; Wind 10-15 mph; Precip 0 in

NUMBER OF MEN: 59

MAN HOURS: 708

MAN HOURS TO DATE: 3948

WORK PERFORMED

ITEM	UNIT	AMOUNT GROSS	AMOUNT NET
Av. Width of cut	Feet		0
Area dredged	Sq. Ft.		0
Distance advanced this period	Feet		0
Distance advanced previously	Feet		318
Distance advanced to date	Feet		318
Amt. dredged this period	Cu. Yds.	0	0
Amt. dredged previously	Cu. Yds.	2574	1550
Total amt. dredged to date	Cu. Yds.	2574	1550

ITEM	NAME	HOURS
DREDGE	Illinois	24
Tugboat	Brangus	12
Tugboat	RL Enterkin	12
Tugboat	Pelican State	24
Tugboat	Atlantic Dawn	24
Crew Boat	Muskegon River	24
Anchor Barge	GL 106	12
Booster	Reggie	12
Derrick	Mobro 1220	12

COMMODITIES CONSUMED

ITEM	UNIT	QUANTITY
Fuel Oil	Gals.	1614
Lubricants	Gals.	
Lubricants	Pounds	
Water	Gals.	

DISTRIBUTION OF TIME

EFFECTIVE WORKING TIME	HOURS	MINUTES
Dredging	0	0
Percentage of total time		0
NON- EFFECTIVE TIME		
Handling pipelines		
Handling swinging lines		
Clearing pump and pipe line	16	30
Clearing cutter or suction head		
Changing location of plant on job		
Loss due to opposing natural elements <8hr		
Loss due to opposing natural elements >8hr		
Loss due to passing vessels		
Minor operating repairs <4hr		
Secure for weekend		
Miscellaneous (Explain in remarks)	7	30
Total Non-effective Time	24	0
LOST TIME NOT CHARGEABLE		
Loss due to repairs >4hr		
Loss due to laying / relaying submerged line		
Lay time off shift		
Sundays and Holidays		
Waiting for equipment plant		
Collisions		
TOTAL TIME IN PERIOD	24	0

No. of Supervisory Inspections: 2 By field personnel 2 By office personnel

Remarks: The Illinois cleared the subline plug at 1630 hours, and was down the remainder of this date as crews worked modifying the cutter to include bars across the suction and the incorporation of a wiper. Also, the booster, "Reggie" was being prepared to place in line tomorrow. These modifications and additions will be in place prior to resuming dredging.

DAILY REPORT OF OPERATIONS

CONTRACT NO.: W912BU-12-C-0034 | DATE: 9/16/12 | Report # 8

DREDGE: Illinois

CONTRACTOR: Great Lakes Dredge & Dock Company, LLC

LOCATION OF WORK: AS27, River Station 557+32, dredge down

CHARACTER OF WORK: [ ] Maintenance [X] New

DISPOSAL AREA OR REHANDLING BASIN: National Park Disposal Area

LENGTH OF DISCHARGE OF PIPELINE: Total Length 7230 Ft.
Pontoon 2120 Ft. Shore 270 Ft. Submerged 4840 Ft.

CHARACTER OF MATERIAL AND PERCENTAGE OF EACH: N/A

AVERAGE DEPTH (Feet and Tenths)
Before Dredging: N/A After Dredging: N/A Payment Depth: 45+1

WEATHER: Temp 59-77F; Wind 10-15 mph; Precip 0 in

NUMBER OF MEN: 59

MAN HOURS: 708

MAN HOURS TO DATE: 4656

WORK PERFORMED

ITEM	UNIT	AMOUNT GROSS	AMOUNT NET
Av. Width of cut	Feet		0
Area dredged	Sq. Ft.		0
Distance advanced this period	Feet		0
Distance advanced previously	Feet		318
Distance advanced to date	Feet		318
Amt. dredged this period	Cu. Yds.	0	0
Amt. dredged previously	Cu. Yds.	2574	1550
Total amt. dredged to date	Cu. Yds.	2574	1550

ITEM	NAME	HOURS
DREDGE	Illinois	24
Tugboat	Brangus	12
Tugboat	RL Enterkin	12
Tugboat	Pelican State	24
Tugboat	Atlantic Dawn	24
Crew Boat	Muskegon River	24
Anchor Barge	GL 106	12
Booster	Reggie	12
Derrick	Mobro 1220	12

COMMODITIES CONSUMED

ITEM	UNIT	QUANTITY
Fuel Oil	Gals.	1614
Lubricants	Gals.	
Lubricants	Pounds	
Water	Gals.	

DISTRIBUTION OF TIME

EFFECTIVE WORKING TIME	HOURS	MINUTES
Dredging	0	0
Percentage of total time		0
NON- EFFECTIVE TIME		
Handling pipelines		
Handling swinging lines		
Clearing pump and pipe line	24	0
Clearing cutter or suction head		
Changing location of plant on job		
Loss due to opposing natural elements <8hr		
Loss due to opposing natural elements >8hr		
Loss due to passing vessels		
Minor operating repairs <4hr		
Secure for weekend		
Miscellaneous (Explain in remarks)	0	0
Total Non-effective Time	24	0
LOST TIME NOT CHARGEABLE		
Loss due to repairs >4hr		
Loss due to laying / relaying submerged line		
Lay time off shift		
Sundays and Holidays		
Waiting for equipment plant		
Collisions		
TOTAL TIME IN PERIOD	24	0

No. of Supervisory Inspections: 2 By field personnel 2 By office personnel

Remarks: The Illinois remained down as crews sealed the subline access holes, placed the booster"Reggie" inline, welded bars on the cutter suction, and modified the cutter head by incorporating a wiper. While welding the last patch on the subline, the line broke. Two sections were removed, and due to tidal draft restrictions, the new sections will not be added until tomorrow. The USACE completed the addition of "sturgeon" boxes in each sluice box at the upstream mouth of each outfall pipe.

DAILY REPORT OF OPERATIONS

CONTRACT NO.: W912BU-12-C-0034 | DATE: 9/17/12 | Report # 9

DREDGE: Illinois

CONTRACTOR: Great Lakes Dredge & Dock Company, LLC

LOCATION OF WORK: AS27, River Station 555+42, dredge down / start up at 1515 hours.

CHARACTER OF WORK: [ ] Maintenance [X] New

DISPOSAL AREA OR REHANDLING BASIN: National Park Disposal Area

LENGTH OF DISCHARGE OF PIPELINE: Total Length 7230 Ft.
Pontoon 2120 Ft. Shore 270 Ft. Submerged 4840 Ft.

CHARACTER OF MATERIAL AND PERCENTAGE OF EACH: Medium clay, aggregates, and silty sand.

AVERAGE DEPTH (Feet and Tenths)
Before Dredging: N/A After Dredging: N/A Payment Depth: 45+1

WEATHER: Temp 61-76F; Wind 10-15 mph; Precip 0 in

NUMBER OF MEN: 59

MAN HOURS: 708

MAN HOURS TO DATE: 5364

WORK PERFORMED

ITEM	UNIT	AMOUNT GROSS	AMOUNT NET
Av. Width of cut	Feet		244
Area dredged	Sq. Ft.		45,204
Distance advanced this period	Feet		185
Distance advanced previously	Feet		318
Distance advanced to date	Feet		503
Amt. dredged this period	Cu. Yds.	5261	2655
Amt. dredged previously	Cu. Yds.	2574	1550
Total amt. dredged to date	Cu. Yds.	7835	4205

ITEM	NAME	HOURS
DREDGE	Illinois	24
Tugboat	Brangus	24
Tugboat	RL Enterkin	24
Tugboat	Pelican State	24
Tugboat	Atlantic Dawn	24
Crew Boat	Muskegon River	12
Anchor Barge	GL 106	24
Booster	Reggie	24
Derrick	Mobro 1220	12

COMMODITIES CONSUMED

ITEM	UNIT	QUANTITY
Fuel Oil	Gals.	2269
Lubricants	Gals.	
Lubricants	Pounds	
Water	Gals.	

DISTRIBUTION OF TIME

EFFECTIVE WORKING TIME	HOURS	MINUTES
Dredging	5	30
Percentage of total time		23
NON- EFFECTIVE TIME		
Handling pipelines		
Handling swinging lines		
Clearing pump and pipe line	15	15
Clearing cutter or suction head		45
Changing location of plant on job		
Loss due to opposing natural elements <8hr		
Loss due to opposing natural elements >8hr		
Loss due to passing vessels	1	30
Minor operating repairs <4hr	1	0
Secure for weekend		
Miscellaneous (Explain in remarks)	0	0
Total Non-effective Time	24	0
LOST TIME NOT CHARGEABLE		
Loss due to repairs >4hr		
Loss due to laying / relaying submerged line		
Lay time off shift		
Sundays and Holidays		
Waiting for equipment plant		
Collisions		
TOTAL TIME IN PERIOD	24	0

No. of Supervisory Inspections: 2 By field personnel 2 By office personnel

Remarks: The Illinois remained down as crews replaced the broken subline sections, and reinstalled the cutterhead with the wiper. At 1550 hours, dredging resumed at station 555+42, digging to station 553+57 in cut #1.

DAILY REPORT OF OPERATIONS

CONTRACT NO.: W912BU-12-C-0034 | 18-Sep | Report # 10

DREDGE: Illinois

CONTRACTOR: Great Lakes Dredge & Dock Company, LLC

LOCATION OF WORK: AS26, River Station 546+10, northbound

CHARACTER OF WORK: [ ] Maintenance [X] New

DISPOSAL AREA OR REHANDLING BASIN: National Park Disposal Area

LENGTH OF DISCHARGE OF PIPELINE: Total Length 7230 Ft.
Pontoon 2120 Ft. Shore 270 Ft. Submerged 4840 Ft.

CHARACTER OF MATERIAL AND PERCENTAGE OF EACH: Medium clay, aggregates, and silty sand.

AVERAGE DEPTH (Feet and Tenths)
Before Dredging: 43 After Dredging: 46 Payment Depth: 45+1

WEATHER: Temp 66-79F; Wind 7-26 mph; Precip 0.91 in. of Rain

NUMBER OF MEN: 59

MAN HOURS: 708

MAN HOURS TO DATE: 6072

WORK PERFORMED

ITEM	UNIT	AMOUNT GROSS	AMOUNT NET
Av. Width of cut	Feet		163
Area dredged	Sq. Ft.		158,809
Distance advanced this period	Feet		972
Distance advanced previously	Feet		185
Distance advanced to date	Feet		1157
Amt. dredged this period	Cu. Yds.	12525	6135
Amt. dredged previously	Cu. Yds.	4735	2405
Total amt. dredged to date	Cu. Yds.	20360	10340

ITEM	NAME	HOURS
DREDGE	Illinois	24
Tugboat	Brangus	24
Tugboat	RL Enterkin	24
Tugboat	Pelican State	24
Tugboat	Atlantic Dawn	24
Crew Boat	Muskegon River	12
Anchor Barge	GL 106	24
Booster	Reggie	24
Derrick	Mobro 1220	12

COMMODITIES CONSUMED

ITEM	UNIT	QUANTITY
Fuel Oil	Gals.	3640
Lubricants	Gals.	
Lubricants	Pounds	
Water	Gals.	

DISTRIBUTION OF TIME

EFFECTIVE WORKING TIME	HOURS	MINUTES
Dredging	13	45
Percentage of total time		57.29
NON- EFFECTIVE TIME		
Handling pipelines		
Handling swinging lines	1	40
Clearing pump and pipe line		55
Clearing cutter or suction head	1	45
Changing location of plant on job	2	30
Loss due to opposing natural elements <8hr		
Loss due to opposing natural elements >8hr		
Loss due to passing vessels	1	15
Minor operating repairs <4hr	1	20
Secure for weekend		
Miscellaneous (Explain in remarks)		50
Total Non-effective Time	10	15
LOST TIME NOT CHARGEABLE		
Loss due to repairs >4hr		
Loss due to laying / relaying submerged line		
Lay time off shift		
Sundays and Holidays		
Waiting for equipment plant		
Collisions		
TOTAL TIME IN PERIOD	24	0

No. of Supervisory Inspections: 2 By field personnel 2 By office personnel

Remarks: The Dredge Illinois continued at station 548+73 and dug in cut #1 to station 542+07. The dredge moved to station 543+56 and dug in cut #3 to station 541+30. The dredge moved to station 540+77 and dug in cut #1 to station 539+97. Miscellaneous delay due to changing 28 cutter teeth and check and grease equipment. Minor operating repairs due to work on the booster and in dredge engine room.

DAILY REPORT OF OPERATIONS

CONTRACT NO.: W912BU-12-C-0034 | Date: 9/19/12 | Report # 11

DREDGE: Illinois

CONTRACTOR: Great Lakes Dredge & Dock Company, LLC

LOCATION OF WORK: AS26 & AS27, River Station 548+50, northbound/southbound

CHARACTER OF WORK: [ ] Maintenance [X] New

DISPOSAL AREA OR REHANDLING BASIN: National Park Disposal Area

LENGTH OF DISCHARGE OF PIPELINE: Total Length 7230 Ft.
Pontoon 2120 Ft. Shore 270 Ft. Submerged 4840 Ft.

CHARACTER OF MATERIAL AND PERCENTAGE OF EACH: Medium clay, aggregates, and silty sand.

AVERAGE DEPTH (Feet and Tenths)
Before Dredging: 43 After Dredging: 46 Payment Depth: 45+1

WEATHER: Temp 54-71F; Wind 9-16 mph; Precip 0 in.

NUMBER OF MEN: 59

MAN HOURS: 708

MAN HOURS TO DATE: 6780

WORK PERFORMED

ITEM	UNIT	AMOUNT GROSS	AMOUNT NET
Av. Width of cut	Feet		209
Area dredged	Sq. Ft.		137,483
Distance advanced this period	Feet		659
Distance advanced previously	Feet		972
Distance advanced to date	Feet		2046
Amt. dredged this period	Cu. Yds.	14130	7637
Amt. dredged previously	Cu. Yds.	12525	6135
Total amt. dredged to date	Cu. Yds.	34490	17977

ITEM	NAME	HOURS
DREDGE	Illinois	24
Tugboat	Brangus	24
Tugboat	RL Enterkin	24
Tugboat	Pelican State	24
Tugboat	Atlantic Dawn	24
Crew Boat	Muskegon River	12
Anchor Barge	GL 106	24
Booster	Reggie	24
Derrick	Mobro 1220	12

COMMODITIES CONSUMED

ITEM	UNIT	QUANTITY
Fuel Oil	Gals.	6771
Lubricants	Gals.	
Lubricants	Pounds	
Water	Gals.	

DISTRIBUTION OF TIME

EFFECTIVE WORKING TIME	HOURS	MINUTES
Dredging	12	35
Percentage of total time		52.54
NON- EFFECTIVE TIME		
Handling pipelines		
Handling swinging lines	1	40
Clearing pump and pipe line	2	
Clearing cutter or suction head	1	20
Changing location of plant on job	6	25
Loss due to opposing natural elements <8hr		
Loss due to opposing natural elements >8hr		
Loss due to passing vessels		
Minor operating repairs <4hr		
Secure for weekend		
Miscellaneous (Explain in remarks)		
Total Non-effective Time	11	25
LOST TIME NOT CHARGEABLE		
Loss due to repairs >4hr		
Loss due to laying / relaying submerged line		
Lay time off shift		
Sundays and Holidays		
Waiting for equipment plant		
Collisions		
TOTAL TIME IN PERIOD	24	0

No. of Supervisory Inspections: 2 By field personnel 2 By office personnel

Remarks: The Dredge Illinois continued at station 540+00 and dug in cut #1 to station 536+34. The dredge moved to station 550+48 and dug in cut #1 to station 554+20.

DAILY REPORT OF OPERATIONS

CONTRACT NO.: W912BU-12-C-0034 | Date: 9/20/12 | Report # 12

DREDGE: Illinois

CONTRACTOR: Great Lakes Dredge & Dock Company, LLC

LOCATION OF WORK: AS27, River Station 556+70, southbound

CHARACTER OF WORK: [ ] Maintenance [X] New

DISPOSAL AREA OR REHANDLING BASIN: National Park Disposal Area

LENGTH OF DISCHARGE OF PIPELINE: Total Length 7230 Ft.
Pontoon 2120 Ft. Shore 270 Ft. Submerged 4840 Ft.

CHARACTER OF MATERIAL AND PERCENTAGE OF EACH: Medium clay, aggregates, silty sand, and boulders.

AVERAGE DEPTH (Feet and Tenths)
Before Dredging: 43 After Dredging: 46 Payment Depth: 45+1

WEATHER: Temp 50-73F; Wind 4-8 mph; Precip 0 in.

NUMBER OF MEN: 59

MAN HOURS: 708

MAN HOURS TO DATE: 7488

WORK PERFORMED

ITEM	UNIT	AMOUNT GROSS	AMOUNT NET
Av. Width of cut	Feet		233
Area dredged	Sq. Ft.		35,409
Distance advanced this period	Feet		152
Distance advanced previously	Feet		659
Distance advanced to date	Feet		2198
Amt. dredged this period	Cu. Yds.	2491	1245
Amt. dredged previously	Cu. Yds.	14130	7637
Total amt. dredged to date	Cu. Yds.	36981	19222

ITEM	NAME	HOURS
DREDGE	Illinois	24
Tugboat	Brangus	24
Tugboat	RL Enterkin	24
Tugboat	Pelican State	24
Tugboat	Atlantic Dawn	24
Crew Boat	Muskegon River	12
Anchor Barge	GL 106	24
Booster	Reggie	24
Derrick	Mobro 1220	12

COMMODITIES CONSUMED

ITEM	UNIT	QUANTITY
Fuel Oil	Gals.	2975
Lubricants	Gals.	
Lubricants	Pounds	
Water	Gals.	

DISTRIBUTION OF TIME

EFFECTIVE WORKING TIME	HOURS	MINUTES
Dredging	3	40
Percentage of total time		15.29
NON- EFFECTIVE TIME		
Handling pipelines		
Handling swinging lines		
Clearing pump and pipe line		55
Clearing cutter or suction head	4	20
Changing location of plant on job		
Loss due to opposing natural elements <8hr		
Loss due to opposing natural elements >8hr		
Loss due to passing vessels		
Minor operating repairs <4hr	15	5
Secure for weekend		
Miscellaneous (Explain in remarks)		
Total Non-effective Time	20	20
LOST TIME NOT CHARGEABLE		
Loss due to repairs >4hr		
Loss due to laying / relaying submerged line		
Lay time off shift		
Sundays and Holidays		
Waiting for equipment plant		
Collisions		
TOTAL TIME IN PERIOD	24	0

No. of Supervisory Inspections: 2 By field personnel 2 By office personnel

Remarks: The Dredge Illinois continued at station 554+08 and dug in cut #1 to station 555+71. Down for repairs to bars in dredge suction mouth.

DAILY REPORT OF OPERATIONS

CONTRACT NO.: W912BU-12-C-0034 | Date: 9/21/12 | Report # 13

DREDGE: Illinois

CONTRACTOR: Great Lakes Dredge & Dock Company, LLC

LOCATION OF WORK: AS27, River Station 564+90, southbound

CHARACTER OF WORK: [ ] Maintenance [X] New

DISPOSAL AREA OR REHANDLING BASIN: National Park Disposal Area

LENGTH OF DISCHARGE OF PIPELINE: Total Length 7230 Ft.
Pontoon 2120 Ft. Shore 270 Ft. Submerged 4840 Ft.

CHARACTER OF MATERIAL AND PERCENTAGE OF EACH: Aggregates, coarse sand, and boulders.

AVERAGE DEPTH (Feet and Tenths)
Before Dredging: 43 After Dredging: 46 Payment Depth: 45+1

WEATHER: Temp 55-75F; Wind 3-9 mph; Precip 0 in.

NUMBER OF MEN: 59

MAN HOURS: 708

MAN HOURS TO DATE: 8196

WORK PERFORMED

ITEM	UNIT	AMOUNT GROSS	AMOUNT NET
Av. Width of cut	Feet		176
Area dredged	Sq. Ft.		79,306
Distance advanced this period	Feet		451
Distance advanced previously	Feet		152
Distance advanced to date	Feet		2649
Amt. dredged this period	Cu. Yds.	5580	2790
Amt. dredged previously	Cu. Yds.	2491	1245
Total amt. dredged to date	Cu. Yds.	38,531	19,425

ITEM	NAME	HOURS
DREDGE	Illinois	24
Tugboat	Brangus	24
Tugboat	RL Enterkin	24
Tugboat	Pelican State	24
Tugboat	Atlantic Dawn	24
Crew Boat	Muskegon River	12
Anchor Barge	GL 106	24
Booster	Reggie	24
Derrick	Mobro 1220	12

COMMODITIES CONSUMED

ITEM	UNIT	QUANTITY
Fuel Oil	Gals.	2164
Lubricants	Gals.	
Lubricants	Pounds	
Water	Gals.	

DISTRIBUTION OF TIME

EFFECTIVE WORKING TIME	HOURS	MINUTES
Dredging	6	35
Percentage of total time		27.41
NON- EFFECTIVE TIME		
Handling pipelines		
Handling swinging lines		25
Clearing pump and pipe line	1	25
Clearing cutter or suction head	1	15
Changing location of plant on job	2	45
Loss due to opposing natural elements <8hr		
Loss due to opposing natural elements >8hr		
Loss due to passing vessels	1	45
Minor operating repairs <4hr	9	50
Secure for weekend		
Miscellaneous (Explain in remarks)		
Total Non-effective Time	17	25
LOST TIME NOT CHARGEABLE		
Loss due to repairs >4hr		
Loss due to laying / relaying submerged line		
Lay time off shift		
Sundays and Holidays		
Waiting for equipment plant		
Collisions		
TOTAL TIME IN PERIOD	24	0

No. of Supervisory Inspections: 2 By field personnel 2 By office personnel

Remarks: The Dredge Illinois continued at station 563+08 and dug in cut #2 to station 566+79. The dredge moved ahead to station 567+74 and dug in cut #2 to station 568+47. Down for repairs to broken parts and change cutter to spare.

DAILY REPORT OF OPERATIONS

CONTRACT NO.: W912BU-12-C-0034 | Date: 9/22/12 | Report # 14

DREDGE: Illinois

CONTRACTOR: Great Lakes Dredge & Dock Company, LLC

LOCATION OF WORK: AS27 & AS26, River Station 547+25, southbound

CHARACTER OF WORK
[ ] Maintenance [X] New

DISPOSAL AREA OR REHANDLING BASIN: National Park Disposal Area

LENGTH OF DISCHARGE OF PIPELINE: Total Length 7230 Ft.
Pontoon 2120 Ft. Shore 270 Ft. Submerged 4840 Ft.

CHARACTER OF MATERIAL AND PERCENTAGE OF EACH: Aggregates and coarse sand.

AVERAGE DEPTH (Feet and Tenths)
Before Dredging: 43 After Dredging: 46 Payment Depth: 45+1

WEATHER: Temp 57-82F; Wind 5-21 mph; Precip 0.34 in of Rain.

NUMBER OF MEN: 59

MAN HOURS: 708

MAN HOURS TO DATE: 8904

WORK PERFORMED

ITEM	UNIT	AMOUNT GROSS	AMOUNT NET
Av. Width of cut	Feet		93
Area dredged	Sq. Ft.		114,892
Distance advanced this period	Feet		1234
Distance advanced previously	Feet		451
Distance advanced to date	Feet		3883
Amt. dredged this period	Cu. Yds.	5689	2844
Amt. dredged previously	Cu. Yds.	5580	2790
Total amt. dredged to date	Cu. Yds.	42,943	21,630

ITEM	NAME	HOURS
DREDGE	Illinois	24
Tugboat	Brangus	24
Tugboat	RL Enterkin	24
Tugboat	Pelican State	24
Tugboat	Atlantic Dawn	24
Crew Boat	Muskegon River	12
Anchor Barge	GL 106	24
Booster	Reggie	24
Derrick	Mobro 1220	12

COMMODITIES CONSUMED

ITEM	UNIT	QUANTITY
Fuel Oil	Gals.	4719
Lubricants	Gals.	
Lubricants	Pounds	
Water	Gals.	

DISTRIBUTION OF TIME

EFFECTIVE WORKING TIME	HOURS	MINUTES
Dredging	10	5
Percentage of total time		42
NON- EFFECTIVE TIME		
Handling pipelines		
Handling swinging lines	4	
Clearing pump and pipe line		
Clearing cutter or suction head	4	
Changing location of plant on job	4	55
Loss due to opposing natural elements <8hr		
Loss due to opposing natural elements >8hr		
Loss due to passing vessels		
Minor operating repairs <4hr		
Secure for weekend		
Miscellaneous (Explain in remarks)	1	
Total Non-effective Time	13	55
LOST TIME NOT CHARGEABLE		
Loss due to repairs >4hr		
Loss due to laying / relaying submerged line		
Lay time off shift		
Sundays and Holidays		
Waiting for equipment plant		
Collisions		
TOTAL TIME IN PERIOD	24	0

No. of Supervisory Inspections: 2 By field personnel 2 By office personnel

Remarks: The Dredge Illinois continued at station 547+60 and dug in cut #2 to station 562+97. The dredge moved back to station 563+87 and dug in cut #5 to station 569+70. Miscellaneous delay due to changing cutter teeth and grease and check equipment.

DAILY REPORT OF OPERATIONS

CONTRACT NO.: W912BU-12-C-0034 | Date: 9/23/12 | Report # 15

DREDGE: Illinois

CONTRACTOR: Great Lakes Dredge & Dock Company, LLC

LOCATION OF WORK: AS27, River Station 569+00, southbound/northbound

CHARACTER OF WORK: [ ] Maintenance [X] New

DISPOSAL AREA OR REHANDLING BASIN: National Park Disposal Area

LENGTH OF DISCHARGE OF PIPELINE: Total Length 7210 Ft.
Pontoon 2100 Ft. Shore 210 Ft. Submerged 4900 Ft.

CHARACTER OF MATERIAL AND PERCENTAGE OF EACH: Aggregates, clay, rock, coarse sand.

AVERAGE DEPTH (Feet and Tenths)
Before Dredging: 43 After Dredging: 46 Payment Depth: 45+1

WEATHER: Temp 53-69F; Wind 7-16 mph; Precip 0 in.

NUMBER OF MEN: 59

MAN HOURS: 708

MAN HOURS TO DATE: 9612

WORK PERFORMED

ITEM	UNIT	AMOUNT GROSS	AMOUNT NET
Av. Width of cut	Feet		55
Area dredged	Sq. Ft.		62,682
Distance advanced this period	Feet		1142
Distance advanced previously	Feet		1234
Distance advanced to date	Feet		5025
Amt. dredged this period	Cu. Yds.	4433	2788
Amt. dredged previously	Cu. Yds.	5689	2844
Total amt. dredged to date	Cu. Yds.	47,376	24,418

ITEM	NAME	HOURS
DREDGE	Illinois	24
Tugboat	Brangus	24
Tugboat	RL Enterkin	24
Tugboat	Pelican State	24
Tugboat	Atlantic Dawn	24
Crew Boat	Muskegon River	12
Anchor Barge	GL 106	24
Booster	Reggie	24
Derrick	Mobro 1220	12

COMMODITIES CONSUMED

ITEM	UNIT	QUANTITY
Fuel Oil	Gals.	3075
Lubricants	Gals.	
Lubricants	Pounds	
Water	Gals.	

DISTRIBUTION OF TIME

EFFECTIVE WORKING TIME	HOURS	MINUTES
Dredging	6	0
Percentage of total time		25
NON- EFFECTIVE TIME		
Handling pipelines		
Handling swinging lines	2	0
Clearing pump and pipe line	1	50
Clearing cutter or suction head	2	30
Changing location of plant on job	8	45
Loss due to opposing natural elements <8hr		
Loss due to opposing natural elements >8hr		
Loss due to passing vessels		
Minor operating repairs <4hr		
Secure for weekend		
Miscellaneous (Explain in remarks)	2	55
Total Non-effective Time	18	0
LOST TIME NOT CHARGEABLE		
Loss due to repairs >4hr		
Loss due to laying / relaying submerged line		
Lay time off shift		
Sundays and Holidays		
Waiting for equipment plant		
Collisions		
TOTAL TIME IN PERIOD	24	0

No. of Supervisory Inspections: 2 By field personnel 2 By office personnel

Remarks: The Dredge Illinois continued at station 564+21 and dug in cut #2 to station 564+71. The dredge moved back to station 565+00 and dug in cut #5 to station 568+68. The dredge moved ahead to station 572+00 and dug in cut #6 to station 578+00. Miscellaneous delay due to changing cutter, changing cutter teeth, and survey delay.

DAILY REPORT OF OPERATIONS

CONTRACT NO.: W912BU-12-C-0034 | Date: 9/24/12 | Report # 16

DREDGE: Illinois

CONTRACTOR: Great Lakes Dredge & Dock Company, LLC

LOCATION OF WORK: AS27, River Station 559+80, northbound

CHARACTER OF WORK: [ ] Maintenance [X] New

DISPOSAL AREA OR REHANDLING BASIN: National Park Disposal Area

LENGTH OF DISCHARGE OF PIPELINE: Total Length 7210 Ft.
Pontoon 2100 Ft. Shore 210 Ft. Submerged 4900 Ft.

CHARACTER OF MATERIAL AND PERCENTAGE OF EACH: Rock and Clay.

AVERAGE DEPTH (Feet and Tenths)
Before Dredging: 43 After Dredging: 46 Payment Depth: 45+1

WEATHER: Temp 48-66F; Wind 6-13 mph; Precip 0 in.

NUMBER OF MEN: 59

MAN HOURS: 708

MAN HOURS TO DATE: 10320

WORK PERFORMED

ITEM	UNIT	AMOUNT GROSS	AMOUNT NET
Av. Width of cut	Feet		231
Area dredged	Sq. Ft.		56,773
Distance advanced this period	Feet		246
Distance advanced previously	Feet		1142
Distance advanced to date	Feet		5271
Amt. dredged this period	Cu. Yds.	4650	3419
Amt. dredged previously	Cu. Yds.	4433	2788
Total amt. dredged to date	Cu. Yds.	52,026	27,837

ITEM	NAME	HOURS
DREDGE	Illinois	24
Tugboat	Brangus	24
Tugboat	RL Enterkin	24
Tugboat	Pelican State	24
Tugboat	Atlantic Dawn	24
Crew Boat	Muskegon River	12
Anchor Barge	GL 106	24
Booster	Reggie	24
Derrick	Mobro 1220	12

COMMODITIES CONSUMED

ITEM	UNIT	QUANTITY
Fuel Oil	Gals.	4102
Lubricants	Gals.	
Lubricants	Pounds	
Water	Gals.	

DISTRIBUTION OF TIME

EFFECTIVE WORKING TIME	HOURS	MINUTES
Dredging	6	15
Percentage of total time		26.04
NON- EFFECTIVE TIME		
Handling pipelines		
Handling swinging lines	3	15
Clearing pump and pipe line		55
Clearing cutter or suction head	10	25
Changing location of plant on job		
Loss due to opposing natural elements <8hr		
Loss due to opposing natural elements >8hr		
Loss due to passing vessels		10
Minor operating repairs <4hr	3	
Secure for weekend		
Miscellaneous (Explain in remarks)		
Total Non-effective Time	17	45
LOST TIME NOT CHARGEABLE		
Loss due to repairs >4hr		
Loss due to laying / relaying submerged line		
Lay time off shift		
Sundays and Holidays		
Waiting for equipment plant		
Collisions		
TOTAL TIME IN PERIOD	24	0

No. of Supervisory Inspections: 2 By field personnel 2 By office personnel

Remarks: The Dredge Illinois continued at station 558+72 and dug in cut #3 to station 556+26. Minor Operating Repairs delay due to working on generator. Clearing Cutter delay due to four occasions when cutter required clearing.

DAILY REPORT OF OPERATIONS

CONTRACT NO.: W912BU-12-C-0034 | Date: 9/25/12 | Report # 17

DREDGE: Illinois

CONTRACTOR: Great Lakes Dredge & Dock Company, LLC

LOCATION OF WORK: AS27, River Station 559+50, northbound

CHARACTER OF WORK: [ ] Maintenance [X] New

DISPOSAL AREA OR REHANDLING BASIN: National Park Disposal Area

LENGTH OF DISCHARGE OF PIPELINE: Total Length 7210 Ft.
Pontoon 2100 Ft. Shore 210 Ft. Submerged 4900 Ft.

CHARACTER OF MATERIAL AND PERCENTAGE OF EACH: Rock and Clay.

AVERAGE DEPTH (Feet and Tenths)
Before Dredging: 43 After Dredging: 46 Payment Depth: 45+1

WEATHER: Temp 46-72F; Wind 4-15 mph; Precip 0 in.

NUMBER OF MEN: 59

MAN HOURS: 708

MAN HOURS TO DATE: 11028

WORK PERFORMED

ITEM	UNIT	AMOUNT GROSS	AMOUNT NET
Av. Width of cut	Feet		311
Area dredged	Sq. Ft.		83,336
Distance advanced this period	Feet		268
Distance advanced previously	Feet		246
Distance advanced to date	Feet		5539
Amt. dredged this period	Cu. Yds.	7632	5191
Amt. dredged previously	Cu. Yds.	4650	3419
Total amt. dredged to date	Cu. Yds.	59,658	33,028

ITEM	NAME	HOURS
DREDGE	Illinois	24
Tugboat	Brangus	24
Tugboat	RL Enterkin	24
Tugboat	Pelican State	24
Tugboat	Atlantic Dawn	24
Crew Boat	Muskegon River	12
Anchor Barge	GL 106	24
Booster	Reggie	24
Derrick	Mobro 1220	12

COMMODITIES CONSUMED

ITEM	UNIT	QUANTITY
Fuel Oil	Gals.	3653
Lubricants	Gals.	
Lubricants	Pounds	
Water	Gals.	

DISTRIBUTION OF TIME

EFFECTIVE WORKING TIME	HOURS	MINUTES
Dredging	10	30
Percentage of total time		43.75
NON- EFFECTIVE TIME		
Handling pipelines		
Handling swinging lines	4	20
Clearing pump and pipe line		
Clearing cutter or suction head	5	
Changing location of plant on job	2	10
Loss due to opposing natural elements <8hr		
Loss due to opposing natural elements >8hr		
Loss due to passing vessels	2	
Minor operating repairs <4hr		
Secure for weekend		
Miscellaneous (Explain in remarks)		
Total Non-effective Time	13	30
LOST TIME NOT CHARGEABLE		
Loss due to repairs >4hr		
Loss due to laying / relaying submerged line		
Lay time off shift		
Sundays and Holidays		
Waiting for equipment plant		
Collisions		
TOTAL TIME IN PERIOD	24	0

No. of Supervisory Inspections: 2 By field personnel 2 By office personnel

Remarks: The Dredge Illinois continued at station 556+26 and dug in cut #3 to station 554+81. The dredge moved to station 556+78 and dug in cut #1 to station 555+07. Clearing Cutter delay due to four occasions when cutter required clearing.

DAILY REPORT OF OPERATIONS

CONTRACT NO.: W912BU-12-C-0034 | Date: 9/26/12 | Report # 18

DREDGE: Illinois

CONTRACTOR: Great Lakes Dredge & Dock Company, LLC

LOCATION OF WORK: AS27 & AS26, River Station 556+10, northbound

CHARACTER OF WORK: [ ] Maintenance [X] New

DISPOSAL AREA OR REHANDLING BASIN: National Park Disposal Area

LENGTH OF DISCHARGE OF PIPELINE: Total Length 7270 Ft.
Pontoon 2100 Ft. Shore 270 Ft. Submerged 4900 Ft.

CHARACTER OF MATERIAL AND PERCENTAGE OF EACH: Rock, Clay, and Sand.

AVERAGE DEPTH (Feet and Tenths)
Before Dredging: 43 After Dredging: 46 Payment Depth: 45+1

WEATHER: Temp 62-78F; Wind 6-15 mph; Precip 0.2 in. of Rain

NUMBER OF MEN: 59

MAN HOURS: 708

MAN HOURS TO DATE: 11736

WORK PERFORMED

ITEM	UNIT	AMOUNT GROSS	AMOUNT NET
Av. Width of cut	Feet		293
Area dredged	Sq. Ft.		97,047
Distance advanced this period	Feet		331
Distance advanced previously	Feet		268
Distance advanced to date	Feet		5870
Amt. dredged this period	Cu. Yds.	7827	5590
Amt. dredged previously	Cu. Yds.	7632	5191
Total amt. dredged to date	Cu. Yds.	67,485	38,618

ITEM	NAME	HOURS
DREDGE	Illinois	24
Tugboat	Brangus	24
Tugboat	RL Enterkin	24
Tugboat	Pelican State	24
Tugboat	Atlantic Dawn	24
Crew Boat	Muskegon River	12
Anchor Barge	GL 106	24
Booster	Reggie	24
Derrick	Mobro 1220	12

COMMODITIES CONSUMED

ITEM	UNIT	QUANTITY
Fuel Oil	Gals.	6874
Lubricants	Gals.	
Lubricants	Pounds	
Water	Gals.	

DISTRIBUTION OF TIME

EFFECTIVE WORKING TIME	HOURS	MINUTES
Dredging	13	25
Percentage of total time		55.87
NON- EFFECTIVE TIME		
Handling pipelines		
Handling swinging lines	2	
Clearing pump and pipe line	2	10
Clearing cutter or suction head	4	30
Changing location of plant on job		
Loss due to opposing natural elements <8hr		
Loss due to opposing natural elements >8hr		
Loss due to passing vessels	1	55
Minor operating repairs <4hr		
Secure for weekend		
Miscellaneous (Explain in remarks)		
Total Non-effective Time	10	35
LOST TIME NOT CHARGEABLE		
Loss due to repairs >4hr		
Loss due to laying / relaying submerged line		
Lay time off shift		
Sundays and Holidays		
Waiting for equipment plant		
Collisions		
TOTAL TIME IN PERIOD	24	0

No. of Supervisory Inspections: 2 By field personnel 2 By office personnel

Remarks: The Dredge Illinois continued at station 554+75 and dug in cut #3 to station 551+45. Clearing Cutter delay due to four occasions when cutter required clearing.

DAILY REPORT OF OPERATIONS

CONTRACT NO.: W912BU-12-C-0034 | Date: 9/27/12 | Report # 19

DREDGE: Illinois

CONTRACTOR: Great Lakes Dredge & Dock Company, LLC

LOCATION OF WORK: AS26, River Station 551+21, northbound

CHARACTER OF WORK: [ ] Maintenance [X] New

DISPOSAL AREA OR REHANDLING BASIN: National Park Disposal Area

LENGTH OF DISCHARGE OF PIPELINE: Total Length 7210 Ft.
Pontoon 2100 Ft. Shore 270 Ft. Submerged 4840 Ft.

CHARACTER OF MATERIAL AND PERCENTAGE OF EACH: Rock, Clay, Sand, and Debris

AVERAGE DEPTH (Feet and Tenths)
Before Dredging: 43 After Dredging: 46 Payment Depth: 45+1

WEATHER: Temp 64-73F; Wind 2-6 mph; Precip 0.1 in. of Rain

NUMBER OF MEN: 60

MAN HOURS: 720

MAN HOURS TO DATE: 12,456

WORK PERFORMED

ITEM	UNIT	AMOUNT GROSS	AMOUNT NET
Av. Width of cut	Feet		250
Area dredged	Sq. Ft.		12,505
Distance advanced this period	Feet		50
Distance advanced previously	Feet		331
Distance advanced to date	Feet		5920
Amt. dredged this period	Cu. Yds.	685	425
Amt. dredged previously	Cu. Yds.	7827	5590
Total amt. dredged to date	Cu. Yds.	68,170	39,043

ITEM	NAME	HOURS
DREDGE	Illinois	24
Tugboat	Brangus	24
Tugboat	RL Enterkin	24
Tugboat	Pelican State	24
Tugboat	Atlantic Dawn	24
Crew Boat	Muskegon River	12
Anchor Barge	GL 106	24
Booster	Reggie	24
Derrick	Mobro 1220	12

COMMODITIES CONSUMED

ITEM	UNIT	QUANTITY
Fuel Oil	Gals.	6874
Lubricants	Gals.	
Lubricants	Pounds	
Water	Gals.	

DISTRIBUTION OF TIME

EFFECTIVE WORKING TIME	HOURS	MINUTES
Dredging		
Percentage of total time		
NON- EFFECTIVE TIME		
Handling pipelines		
Handling swinging lines	1	40.2
Clearing pump and pipe line		
Clearing cutter or suction head		19.8
Changing location of plant on job		
Loss due to opposing natural elements <8hr		
Loss due to opposing natural elements >8hr		
Loss due to passing vessels		
Minor operating repairs <4hr		
Secure for weekend		
Miscellaneous (Explain in remarks)		
Total Non-effective Time	2	0
LOST TIME NOT CHARGEABLE		
Loss due to repairs >4hr	22	0
Loss due to laying / relaying submerged line		
Lay time off shift		
Sundays and Holidays		
Waiting for equipment plant		
Collisions		
TOTAL TIME IN PERIOD	24	0

No. of Supervisory Inspections: 2 By field personnel 2 By office personnel

Remarks: The Dredge Illinois was down until 2310 hrs with an electrical problem to the cutter motor. Once dredging began, the Illinois dug from station 551+71 to 551+21, in cut # 3 of AS26. Material encountered included clay, rock of various size, sand, and debris. A weekly project coordination meeting was conducted this date. Crews on the disposal area continued to monitor water seeping through the perimeter dike along the southern side.

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DAILY REPORT OF OPERATIONS

CONTRACT NO.: W912BU-12-C-0034 | Date: 9/28/12 | Report # 20

DREDGE: Illinois

CONTRACTOR: Great Lakes Dredge & Dock Company, LLC

LOCATION OF WORK: AS26, River Station 545+85, northbound

CHARACTER OF WORK: [ ] Maintenance [X] New

DISPOSAL AREA OR REHANDLING BASIN: National Park Disposal Area

LENGTH OF DISCHARGE OF PIPELINE: Total Length 7210 Ft.
Pontoon 2100 Ft. Shore 270 Ft. Submerged 4840 Ft.

CHARACTER OF MATERIAL AND PERCENTAGE OF EACH: Rock, Clay, Sand, and Debris (Cutter cleaned of debris 5 times)

AVERAGE DEPTH (Feet and Tenths)
Before Dredging: 43 After Dredging: 46 Payment Depth: 45+1

WEATHER: Temp 64-78F; Wind 5-12 mph; Precip 0.0 in. of Rain

NUMBER OF MEN: 60

MAN HOURS: 720

MAN HOURS TO DATE: 13,176

WORK PERFORMED

ITEM	UNIT	AMOUNT GROSS	AMOUNT NET
Av. Width of cut	Feet		284
Area dredged	Sq. Ft.		152,528
Distance advanced this period	Feet		538
Distance advanced previously	Feet		50
Distance advanced to date	Feet		6458
Amt. dredged this period	Cu. Yds.	10800	7714
Amt. dredged previously	Cu. Yds.	685	425
Total amt. dredged to date	Cu. Yds.	78,970	46,757

ITEM	NAME	HOURS
DREDGE	Illinois	24
Tugboat	Brangus	24
Tugboat	RL Enterkin	24
Tugboat	Pelican State	24
Tugboat	Atlantic Dawn	24
Crew Boat	Muskegon River	12
Anchor Barge	GL 106	24
Booster	Reggie	24
Derrick	Mobro 1220	12

COMMODITIES CONSUMED

ITEM	UNIT	QUANTITY
Fuel Oil	Gals.	4628
Lubricants	Gals.	
Lubricants	Pounds	
Water	Gals.	

DISTRIBUTION OF TIME

EFFECTIVE WORKING TIME	HOURS	MINUTES
Dredging	11	45.4
Percentage of total time		
NON- EFFECTIVE TIME		
Handling pipelines		
Handling swinging lines	2	19.8
Clearing pump and pipe line	2	10.2
Clearing cutter or suction head	3	0
Changing location of plant on job	2	49.8
Loss due to opposing natural elements <8hr		
Loss due to opposing natural elements >8hr		
Loss due to passing vessels	1	19.8
Minor operating repairs <4hr	1	15
Secure for weekend		
Miscellaneous (Explain in remarks)		
Total Non-effective Time	12	54.6
LOST TIME NOT CHARGEABLE		
Loss due to repairs >4hr		
Loss due to laying / relaying submerged line		
Lay time off shift		
Sundays and Holidays		
Waiting for equipment plant		
Collisions		
TOTAL TIME IN PERIOD	24	0

No. of Supervisory Inspections: 2 By field personnel 2 By office personnel

Remarks: The Dredge Illinois continued construction in cut 3, AS 26. Material excavated consisted of clay, rock of various size, sand and debris (removed from cutter). The dredge was down to remove debris from the cutter 5 times. Seepage through the disposal area perimeter dike continues to be monitored and is a concern. The 24"outfall pipe leaks at the exposed joints are being addressed. There is a concern as to whether the 24" outfall pipes beneath the dike are,(or have the potential to), leaking as well.

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DAILY REPORT OF OPERATIONS

CONTRACT NO.: W912BU-12-C-0034 | Date: 9/29/12 | Report # 21

DREDGE: Illinois

CONTRACTOR: Great Lakes Dredge & Dock Company, LLC

LOCATION OF WORK: AS27, River Station 553+35, 562+62, 559+82- northbound

CHARACTER OF WORK: [ ] Maintenance [X] New

DISPOSAL AREA OR REHANDLING BASIN: National Park Disposal Area

LENGTH OF DISCHARGE OF PIPELINE: Total Length 7210 Ft.
Pontoon 2100 Ft. Shore 270 Ft. Submerged 4840 Ft.

CHARACTER OF MATERIAL AND PERCENTAGE OF EACH: Rock, Clay, Sand, and Debris (Cleaned Pump of Rock)

AVERAGE DEPTH (Feet and Tenths)
Before Dredging: 43 After Dredging: 46 Payment Depth: 45+1

WEATHER: Temp 57-64F; Wind 6-14 mph; Precip 0.0 in. of Rain

NUMBER OF MEN: 60

MAN HOURS: 720

MAN HOURS TO DATE: 13,896

WORK PERFORMED

ITEM	UNIT	AMOUNT GROSS	AMOUNT NET
Av. Width of cut	Feet		143
Area dredged	Sq. Ft.		109,535
Distance advanced this period	Feet		764
Distance advanced previously	Feet		538
Distance advanced to date	Feet		7222
Amt. dredged this period	Cu. Yds.	3107	1407
Amt. dredged previously	Cu. Yds.	10800	7714
Total amt. dredged to date	Cu. Yds.	82,077	48,164

ITEM	NAME	HOURS
DREDGE	Illinois	24
Tugboat	Brangus	24
Tugboat	RL Enterkin	24
Tugboat	Pelican State	24
Tugboat	Atlantic Dawn	24
Crew Boat	Muskegon River	12
Anchor Barge	GL 106	24
Booster	Reggie	24
Derrick	Mobro 1220	12

COMMODITIES CONSUMED

ITEM	UNIT	QUANTITY
Fuel Oil	Gals.	4628
Lubricants	Gals.	
Lubricants	Pounds	
Water	Gals.	

DISTRIBUTION OF TIME

EFFECTIVE WORKING TIME	HOURS	MINUTES
Dredging	6	6.8
Percentage of total time	25	
NON- EFFECTIVE TIME		
Handling pipelines		
Handling swinging lines		19.8
Clearing pump and pipe line		25.8
Clearing cutter or suction head	1	0
Changing location of plant on job	4	43.8
Loss due to opposing natural elements <8hr		
Loss due to opposing natural elements >8hr		
Loss due to passing vessels		34.8
Minor operating repairs <4hr		
Secure for weekend		
Miscellaneous (Explain in remarks)		
Total Non-effective Time	7	4.2
LOST TIME NOT CHARGEABLE		
Loss due to repairs >4hr	10	0
Loss due to laying / relaying submerged line		
Lay time off shift		
Sundays and Holidays		
Waiting for equipment plant		
Collisions		
TOTAL TIME IN PERIOD	24	0

No. of Supervisory Inspections: 2 By field personnel 2 By office personnel

Remarks: The Dredge Illinois continued construction in cut 4, 2, and 5, AS 27. Material excavated consisted of clay, rock of various size, sand and debris (Rocks removed from main pump and debris removed from the cutter). The dredge shut down at 1400 hour for the remainder of this date due to a mechanical problem with the port main engine turbo.. Seepage through the disposal area perimeter dike continues to be monitored and is a concern. The 24"outfall pipe leaks at the exposed joints are being addressed. There is a concern as to

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DAILY REPORT OF OPERATIONS

CONTRACT NO.: W912BU-12-C-0034 | Date: 9/30/12 | Report # 22

DREDGE: Illinois

CONTRACTOR: Great Lakes Dredge & Dock Company, LLC

LOCATION OF WORK: AS27, River Station, 559+82- northbound - Out of the Channel, Red Side

CHARACTER OF WORK: [ ] Maintenance [X] New

DISPOSAL AREA OR REHANDLING BASIN: National Park Disposal Area

LENGTH OF DISCHARGE OF PIPELINE: Total Length 7210 Ft.
Pontoon 2100 Ft. Shore 270 Ft. Submerged 4840 Ft.

CHARACTER OF MATERIAL AND PERCENTAGE OF EACH: No Production

AVERAGE DEPTH (Feet and Tenths)
Before Dredging: N/A After Dredging: N/A Payment Depth: 45+1

WEATHER: Temp 54-67F; Wind 5-13 mph; Precip 0.0 in. of Rain

NUMBER OF MEN: 60

MAN HOURS: 720

MAN HOURS TO DATE: 14,616

WORK PERFORMED

ITEM	UNIT	AMOUNT GROSS	AMOUNT NET
Av. Width of cut	Feet		0
Area dredged	Sq. Ft.		0
Distance advanced this period	Feet		0
Distance advanced previously	Feet		764
Distance advanced to date	Feet		7222
Amt. dredged this period	Cu. Yds.	0	0
Amt. dredged previously	Cu. Yds.	3107	1407
Total amt. dredged to date	Cu. Yds.	82,077	48,164

ITEM	NAME	HOURS
DREDGE	Illinois	24
Tugboat	Brangus	24
Tugboat	RL Enterkin	24
Tugboat	Pelican State	24
Tugboat	Atlantic Dawn	24
Crew Boat	Muskegon River	12
Anchor Barge	GL 106	24
Booster	Reggie	24
Derrick	Mobro 1220	12

COMMODITIES CONSUMED

ITEM	UNIT	QUANTITY
Fuel Oil	Gals.	1800
Lubricants	Gals.	
Lubricants	Pounds	
Water	Gals.	

DISTRIBUTION OF TIME

EFFECTIVE WORKING TIME	HOURS	MINUTES
Dredging	0	0
Percentage of total time	0	
NON- EFFECTIVE TIME		
Handling pipelines		
Handling swinging lines		
Clearing pump and pipe line		
Clearing cutter or suction head		
Changing location of plant on job		
Loss due to opposing natural elements <8hr		
Loss due to opposing natural elements >8hr		
Loss due to passing vessels		
Minor operating repairs <4hr		
Secure for weekend		
Miscellaneous (Explain in remarks)		
Total Non-effective Time		
LOST TIME NOT CHARGEABLE		
Loss due to repairs >4hr	24	0
Loss due to laying / relaying submerged line		
Lay time off shift		
Sundays and Holidays		
Waiting for equipment plant		
Collisions		
TOTAL TIME IN PERIOD	24	0

No. of Supervisory Inspections: 2 By field personnel 2 By office personnel

Remarks: The Dredge Illinois remained shut down this date as repairs were made to the port main engine turbo. The dredge was positioned out of the channel on the red side. Seepage through the disposal area perimeter dike continues to be monitored and is a concern. The 24"outfall pipe leaks at the exposed joints are being addressed. There is a concern as to whether the 24" outfall pipes beneath the dike are,(or have the potential to), leaking as well.

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DAILY REPORT OF OPERATIONS

CONTRACT NO.: W912BU-12-C-0034 | Date: 10/01/12 | Report # 23

DREDGE: Illinois

CONTRACTOR: Great Lakes Dredge & Dock Company, LLC

LOCATION OF WORK AS25/26, River Station, 515+11- northbound

CHARACTER OF WORK
[ ] Maintenance [X] New

DISPOSAL AREA OR REHANDLING BASIN: National Park Disposal Area

LENGTH OF DISCHARGE OF PIPELINE: Total Length 7270 Ft.
Pontoon 2100 Ft. Shore 330 Ft. Submerged 4840 Ft.

CHARACTER OF MATERIAL AND PERCENTAGE OF EACH: Sand, rock, gravel, debris

AVERAGE DEPTH (Feet and Tenths)
Before Dredging: 43' After Dredging: 46 Payment Depth: 45+1

WEATHER: Temp 48-71F; Wind 5-13 mph; Precip 0.0 in. of Rain

NUMBER OF MEN: 60

MAN HOURS: 720

MAN HOURS TO DATE: 14,616

WORK PERFORMED

ITEM	UNIT	AMOUNT GROSS	AMOUNT NET
Av. Width of cut	Feet		80
Area dredged	Sq. Ft.		101,841
Distance advanced this period	Feet		1277
Distance advanced previously	Feet		0
Distance advanced to date	Feet		8499
Amt. dredged this period	Cu. Yds.	7543	5802
Amt. dredged previously	Cu. Yds.	0	0
Total amt. dredged to date	Cu. Yds.	89,620	53,966

ITEM	NAME	HOURS
DREDGE	Illinois	24
Tugboat	Brangus	0
Tugboat	RL Enterkin	24
Tugboat	Pelican State	24
Tugboat	Atlantic Dawn	24
Crew Boat	Muskegon River	12
Anchor Barge	GL 106	24
Booster	Reggie	24
Derrick	Mobro 1220	12

COMMODITIES CONSUMED

ITEM	UNIT	QUANTITY
Fuel Oil	Gals.	3777
Lubricants	Gals.	
Lubricants	Pounds	
Water	Gals.	

DISTRIBUTION OF TIME

EFFECTIVE WORKING TIME	HOURS	MINUTES
Dredging	5	48
Percentage of total time	23	
NON- EFFECTIVE TIME		
Handling pipelines		
Handling swinging lines	2	55.2
Clearing pump and pipe line		39.6
Clearing cutter or suction head	1	20.4
Changing location of plant on job	7	19.8
Loss due to opposing natural elements <8hr		
Loss due to opposing natural elements >8hr		
Loss due to passing vessels	5	25.2
Minor operating repairs <4hr		31.8
Secure for weekend		
Miscellaneous (Explain in remarks)		
Total Non-effective Time	18	12
LOST TIME NOT CHARGEABLE		
Loss due to repairs >4hr		
Loss due to laying / relaying submerged line		
Lay time off shift		
Sundays and Holidays		
Waiting for equipment plant		
Collisions		
TOTAL TIME IN PERIOD	24	0

No. of Supervisory Inspections: 2 By field personnel 2 By office personnel

Remarks: The Dredge Illinois continued construction in AS 25/26, stations 539+13 to 515+11. Material encontered consisted of sand, gravel, rock, debris. Down times were to move the dredge for passing vessels/changing cuts, and cleaning the pump and cutter of debris .Seepage through the disposal area perimeter dike continues to be monitored and is a concern. The 24"outfall pipe leaks at the exposed joints are being addressed. There is a concern as to whether the 24" outfall pipes beneath the dike are,(or will) leak.

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DAILY REPORT OF OPERATIONS

CONTRACT NO.: W912BU-12-C-0034 | Date: 10/02/12 | Report # 24

DREDGE: Illinois

CONTRACTOR: Great Lakes Dredge & Dock Company, LLC

LOCATION OF WORK: AS25, River Station 524+40, northbound

CHARACTER OF WORK: [ ] Maintenance [X] New

DISPOSAL AREA OR REHANDLING BASIN: National Park Disposal Area

LENGTH OF DISCHARGE OF PIPELINE: Total Length 8050 Ft.
Pontoon 2100 Ft. Shore 330 Ft. Submerged 5620 Ft.

CHARACTER OF MATERIAL AND PERCENTAGE OF EACH: Sand and Gravel

AVERAGE DEPTH (Feet and Tenths)
Before Dredging: 43' After Dredging: 46 Payment Depth: 45+1

WEATHER: Temp 62-69F; Wind 4-9 mph; Precip 0.14 in. of Rain

NUMBER OF MEN: 60

MAN HOURS: 720

MAN HOURS TO DATE: 15,336

WORK PERFORMED

ITEM	UNIT	AMOUNT GROSS	AMOUNT NET
Av. Width of cut	Feet		68
Area dredged	Sq. Ft.		107,608
Distance advanced this period	Feet		1574
Distance advanced previously	Feet		1277
Distance advanced to date	Feet		10073
Amt. dredged this period	Cu. Yds.	6984	4365
Amt. dredged previously	Cu. Yds.	7543	5802
Total amt. dredged to date	Cu. Yds.	101,179	60,883

ITEM	NAME	HOURS
DREDGE	Illinois	24
Tugboat	Brangus	0
Tugboat	RL Enterkin	24
Tugboat	Pelican State	24
Tugboat	Atlantic Dawn	24
Crew Boat	Muskegon River	12
Anchor Barge	GL 106	24
Booster	Reggie	24
Derrick	Mobro 1220	12

COMMODITIES CONSUMED

ITEM	UNIT	QUANTITY
Fuel Oil	Gals.	3704
Lubricants	Gals.	
Lubricants	Pounds	
Water	Gals.	

DISTRIBUTION OF TIME

EFFECTIVE WORKING TIME	HOURS	MINUTES
Dredging	7	30
Percentage of total time	31.25	
NON- EFFECTIVE TIME		
Handling pipelines		
Handling swinging lines	2	20
Clearing pump and pipe line	3	25
Clearing cutter or suction head	3	
Changing location of plant on job	7	25
Loss due to opposing natural elements <8hr		
Loss due to opposing natural elements >8hr		
Loss due to passing vessels		20
Minor operating repairs <4hr		
Secure for weekend		
Miscellaneous (Explain in remarks)		
Total Non-effective Time	16	30
LOST TIME NOT CHARGEABLE		
Loss due to repairs >4hr		
Loss due to laying / relaying submerged line		
Lay time off shift		
Sundays and Holidays		
Waiting for equipment plant		
Collisions		
TOTAL TIME IN PERIOD	24	0

No. of Supervisory Inspections: 2 By field personnel 2 By office personnel

Remarks: The Dredge Illinois continued dredging operations at station 525+90 and dug in cut #7 & cut #7A to station 515+53. Cutter required cleaning on six occasions.

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DAILY REPORT OF OPERATIONS

CONTRACT NO.: W912BU-12-C-0034 | Date: 10/03/12 | Report # 25

DREDGE: Illinois

CONTRACTOR: Great Lakes Dredge & Dock Company, LLC

LOCATION OF WORK: AS26, AS7, & AS7 River Station 528+20, northbound/southbound

CHARACTER OF WORK: [ ] Maintenance [X] New

DISPOSAL AREA OR REHANDLING BASIN: National Park Disposal Area

LENGTH OF DISCHARGE OF PIPELINE: Total Length 10230 Ft.
Pontoon 2100 Ft. Shore 450 Ft. Submerged 7680 Ft.

CHARACTER OF MATERIAL AND PERCENTAGE OF EACH: Clay, Sand, & Gravel

AVERAGE DEPTH (Feet and Tenths)
Before Dredging: 43' After Dredging: 46 Payment Depth: 45+1

WEATHER: Temp 64-81F; Wind 3-8 mph; Precip 0.05 in. of Rain

NUMBER OF MEN: 60

MAN HOURS: 720

MAN HOURS TO DATE: 16056

WORK PERFORMED

ITEM	UNIT	AMOUNT GROSS	AMOUNT NET
Av. Width of cut	Feet		86
Area dredged	Sq. Ft.		28,905
Distance advanced this period	Feet		335
Distance advanced previously	Feet		1574
Distance advanced to date	Feet		10408
Amt. dredged this period	Cu. Yds.	1384	623
Amt. dredged previously	Cu. Yds.	6984	4365
Total amt. dredged to date	Cu. Yds.	92,429	54,760

ITEM	NAME	HOURS
DREDGE	Illinois	24
Tugboat	Brangus	0
Tugboat	RL Enterkin	24
Tugboat	Pelican State	24
Tugboat	Atlantic Dawn	24
Crew Boat	Muskegon River	12
Anchor Barge	GL 106	24
Booster	Reggie	24
Derrick	Mobro 1220	12

COMMODITIES CONSUMED

ITEM	UNIT	QUANTITY
Fuel Oil	Gals.	2161
Lubricants	Gals.	
Lubricants	Pounds	
Water	Gals.	

DISTRIBUTION OF TIME

EFFECTIVE WORKING TIME	HOURS	MINUTES
Dredging	1	50
Percentage of total time	7.67	
NON- EFFECTIVE TIME		
Handling pipelines	4	
Handling swinging lines		
Clearing pump and pipe line		
Clearing cutter or suction head		
Changing location of plant on job	14	5
Loss due to opposing natural elements <8hr		
Loss due to opposing natural elements >8hr		
Loss due to passing vessels	4	5
Minor operating repairs <4hr		
Secure for weekend		
Miscellaneous (Explain in remarks)		
Total Non-effective Time	22	10
LOST TIME NOT CHARGEABLE		
Loss due to repairs >4hr		
Loss due to laying / relaying submerged line		
Lay time off shift		
Sundays and Holidays		
Waiting for equipment plant		
Collisions		
TOTAL TIME IN PERIOD	24	0

No. of Supervisory Inspections: 2 By field personnel 2 By office personnel

Remarks: The Dredge Illinois continued dredging operations at station 551+94 and dug in cut #3 to station 551+50. The dredge moved to station 545+45 and dug in cut #3 to station 546+25. The dredge moved to station 528+08 and dug in cut #8 to station 530+21. Dredge change locations 3x for two small areas of cleanup and start of new cut.

DAILY REPORT OF OPERATIONS

CONTRACT NO.: W912BU-12-C-0034 | Date: 10/04/12 | Report # 26

DREDGE: Illinois

CONTRACTOR: Great Lakes Dredge & Dock Company, LLC

LOCATION OF WORK: AS7 River Station 530+40, southbound

CHARACTER OF WORK: [ ] Maintenance [X] New

DISPOSAL AREA OR REHANDLING BASIN: National Park Disposal Area

LENGTH OF DISCHARGE OF PIPELINE: Total Length 10230 Ft.
Pontoon 2100 Ft. Shore 450 Ft. Submerged 7680 Ft.

CHARACTER OF MATERIAL AND PERCENTAGE OF EACH: Rock, Sand, & Gravel

AVERAGE DEPTH (Feet and Tenths)
Before Dredging: 43' After Dredging: 46 Payment Depth: 45+1

WEATHER: Temp 63-75F; Wind 1-8 mph; Precip 0.01 in. of Rain

NUMBER OF MEN: 60

MAN HOURS: 720

MAN HOURS TO DATE: 16776

WORK PERFORMED

ITEM	UNIT	AMOUNT GROSS	AMOUNT NET
Av. Width of cut	Feet		141
Area dredged	Sq. Ft.		126,876
Distance advanced this period	Feet		897
Distance advanced previously	Feet		335
Distance advanced to date	Feet		11305
Amt. dredged this period	Cu. Yds.	7157	4027
Amt. dredged previously	Cu. Yds.	1384	623
Total amt. dredged to date	Cu. Yds.	99,586	58,787

ITEM	NAME	HOURS
DREDGE	Illinois	24
Tugboat	Brangus	0
Tugboat	RL Enterkin	24
Tugboat	Pelican State	24
Tugboat	Atlantic Dawn	24
Crew Boat	Muskegon River	12
Anchor Barge	GL 106	24
Booster	Reggie	24
Derrick	Mobro 1220	12

COMMODITIES CONSUMED

ITEM	UNIT	QUANTITY
Fuel Oil	Gals.	4064
Lubricants	Gals.	
Lubricants	Pounds	
Water	Gals.	

DISTRIBUTION OF TIME

EFFECTIVE WORKING TIME	HOURS	MINUTES
Dredging	9	55
Percentage of total time	41.33	
NON- EFFECTIVE TIME		
Handling pipelines		
Handling swinging lines	3	10
Clearing pump and pipe line	2	25
Clearing cutter or suction head	1	10
Changing location of plant on job	3	25
Loss due to opposing natural elements <8hr		
Loss due to opposing natural elements >8hr		
Loss due to passing vessels		
Minor operating repairs <4hr	1	55
Secure for weekend		
Miscellaneous (Explain in remarks)	2	
Total Non-effective Time	14	5
LOST TIME NOT CHARGEABLE		
Loss due to repairs >4hr		
Loss due to laying / relaying submerged line		
Lay time off shift		
Sundays and Holidays		
Waiting for equipment plant		
Collisions		
TOTAL TIME IN PERIOD	24	0

No. of Supervisory Inspections: 2 By field personnel 2 By office personnel

Remarks: The Dredge Illinois continued dredging operations at station 530+19 and dug in cut #8 to station 536+40. The dredge moved to station 528+40 and dug in cut #8 to station 529+26. The dredge moved to station 530+72 and dug in cut #9 to station 533+04. Dredge change locations 3x for two small areas of cleanup and start of new cut. Encountered two small areas of hard rock in cut 5 and cut 8 where the dredge has broken numerous teeth attempting to clear the areas. Misc delay due to changing teeth.

DAILY REPORT OF OPERATIONS

CONTRACT NO.: W912BU-12-C-0034 | Date: 10/05/12 | Report # 27

DREDGE: Illinois

CONTRACTOR: Great Lakes Dredge & Dock Company, LLC

LOCATION OF WORK: AS7 & AS8, River Station 534+70, southbound

CHARACTER OF WORK: [ ] Maintenance [X] New

DISPOSAL AREA OR REHANDLING BASIN: National Park Disposal Area

LENGTH OF DISCHARGE OF PIPELINE: Total Length 10790 Ft.
Pontoon 2660 Ft. Shore 450 Ft. Submerged 7680 Ft.

CHARACTER OF MATERIAL AND PERCENTAGE OF EACH: Sand & Gravel

AVERAGE DEPTH (Feet and Tenths)
Before Dredging: 43' After Dredging: 46 Payment Depth: 45+1

WEATHER: Temp 61-80F; Wind 5-12 mph; Precip 0 in.

NUMBER OF MEN: 60

MAN HOURS: 720

MAN HOURS TO DATE: 17496

WORK PERFORMED

ITEM	UNIT	AMOUNT GROSS	AMOUNT NET
Av. Width of cut	Feet		146
Area dredged	Sq. Ft.		141,600
Distance advanced this period	Feet		971
Distance advanced previously	Feet		897
Distance advanced to date	Feet		12276
Amt. dredged this period	Cu. Yds.	8167	4917
Amt. dredged previously	Cu. Yds.	7157	4027
Total amt. dredged to date	Cu. Yds.	107,753	63,704

ITEM	NAME	HOURS
DREDGE	Illinois	24
Tugboat	Brangus	0
Tugboat	RL Enterkin	0
Tugboat	Pelican State	24
Tugboat	Atlantic Dawn	24
Crew Boat	Muskegon River	24
Anchor Barge	GL 106	24
Booster	Reggie	24
Derrick	Mobro 1220	12

COMMODITIES CONSUMED

ITEM	UNIT	QUANTITY
Fuel Oil	Gals.	3358
Lubricants	Gals.	
Lubricants	Pounds	
Water	Gals.	

DISTRIBUTION OF TIME

EFFECTIVE WORKING TIME	HOURS	MINUTES
Dredging	10	50
Percentage of total time	45.04	
NON- EFFECTIVE TIME		
Handling pipelines		55
Handling swinging lines	2	45
Clearing pump and pipe line	1	45
Clearing cutter or suction head	2	45
Changing location of plant on job		
Loss due to opposing natural elements <8hr		
Loss due to opposing natural elements >8hr		
Loss due to passing vessels	2	30
Minor operating repairs <4hr	1	40
Secure for weekend		
Miscellaneous (Explain in remarks)		50
Total Non-effective Time	13	10
LOST TIME NOT CHARGEABLE		
Loss due to repairs >4hr		
Loss due to laying / relaying submerged line		
Lay time off shift		
Sundays and Holidays		
Waiting for equipment plant		
Collisions		
TOTAL TIME IN PERIOD	24	0

No. of Supervisory Inspections: 2 By field personnel 2 By office personnel

Remarks: The Dredge Illinois continued dredging operations at station 533+01 and dug in cut #9 to station 542+38. Misc delay due to changing teeth.

DAILY REPORT OF OPERATIONS

CONTRACT NO.: W912BU-12-C-0034 | Date: 10/06/12 | Report # 28

DREDGE: Illinois

CONTRACTOR: Great Lakes Dredge & Dock Company, LLC

LOCATION OF WORK: AS8, River Station 546+10, southbound

CHARACTER OF WORK: [ ] Maintenance [X] New

DISPOSAL AREA OR REHANDLING BASIN: National Park Disposal Area

LENGTH OF DISCHARGE OF PIPELINE: Total Length 10790 Ft.
Pontoon 2660 Ft. Shore 450 Ft. Submerged 7680 Ft.

CHARACTER OF MATERIAL AND PERCENTAGE OF EACH: Sand & Gravel

AVERAGE DEPTH (Feet and Tenths)
Before Dredging: 43' After Dredging: 46 Payment Depth: 45+1

WEATHER: Temp 52-77F; Wind 5-17 mph; Precip 0 in.

NUMBER OF MEN: 60

MAN HOURS: 720

MAN HOURS TO DATE: 18216

WORK PERFORMED

ITEM	UNIT	AMOUNT GROSS	AMOUNT NET
Av. Width of cut	Feet		203
Area dredged	Sq. Ft.		212,858
Distance advanced this period	Feet		1046
Distance advanced previously	Feet		971
Distance advanced to date	Feet		13322
Amt. dredged this period	Cu. Yds.	16237	7967
Amt. dredged previously	Cu. Yds.	8167	4917
Total amt. dredged to date	Cu. Yds.	124,150	68,201

ITEM	NAME	HOURS
DREDGE	Illinois	24
Tugboat	Brangus	0
Tugboat	RL Enterkin	12
Tugboat	Pelican State	24
Tugboat	Atlantic Dawn	24
Crew Boat	Muskegon River	24
Anchor Barge	GL 106	24
Booster	Reggie	24
Derrick	Mobro 1220	12

COMMODITIES CONSUMED

ITEM	UNIT	QUANTITY
Fuel Oil	Gals.	3046
Lubricants	Gals.	
Lubricants	Pounds	
Water	Gals.	

DISTRIBUTION OF TIME

EFFECTIVE WORKING TIME	HOURS	MINUTES
Dredging	13	5
Percentage of total time	54	25
NON- EFFECTIVE TIME		
Handling pipelines		
Handling swinging lines	2	15
Clearing pump and pipe line		
Clearing cutter or suction head	3	45
Changing location of plant on job	3	50
Loss due to opposing natural elements <8hr		
Loss due to opposing natural elements >8hr		
Loss due to passing vessels		45
Minor operating repairs <4hr		10
Secure for weekend		
Miscellaneous (Explain in remarks)		10
Total Non-effective Time	10	55
LOST TIME NOT CHARGEABLE		
Loss due to repairs >4hr		
Loss due to laying / relaying submerged line		
Lay time off shift		
Sundays and Holidays		
Waiting for equipment plant		
Collisions		
TOTAL TIME IN PERIOD	24	0

No. of Supervisory Inspections: 2 By field personnel 2 By office personnel

Remarks: The Dredge Illinois continued dredging operations at station 545+35 and dug in cut #9 and cut #10 to station 554+53. Misc delay due to standby for fuel barge. The cutter required cleaning on three occasioins (wire, rope, rocks).

DAILY REPORT OF OPERATIONS

CONTRACT NO.: W912BU-12-C-0034 | Date: 10/07/12 | Report # 29

DREDGE: Illinois

CONTRACTOR: Great Lakes Dredge & Dock Company, LLC

LOCATION OF WORK: AS8, River Station 546+40, southbound

CHARACTER OF WORK: [ ] Maintenance [X] New

DISPOSAL AREA OR REHANDLING BASIN: National Park Disposal Area

LENGTH OF DISCHARGE OF PIPELINE: Total Length 12570 Ft.
Pontoon 2100 Ft. Shore 450 Ft. Submerged 10020 Ft.

CHARACTER OF MATERIAL AND PERCENTAGE OF EACH: Clay, Sand, & Gravel

AVERAGE DEPTH (Feet and Tenths)
Before Dredging: 43' After Dredging: 46 Payment Depth: 45+1

WEATHER: Temp 43-52F; Wind 3-6 mph; Precip 0.19 in. of Rain

NUMBER OF MEN: 60

MAN HOURS: 720

MAN HOURS TO DATE: 18936

WORK PERFORMED

ITEM	UNIT	AMOUNT GROSS	AMOUNT NET
Av. Width of cut	Feet		257
Area dredged	Sq. Ft.		124,523
Distance advanced this period	Feet		484
Distance advanced previously	Feet		1046
Distance advanced to date	Feet		13806
Amt. dredged this period	Cu. Yds.	10347	5127
Amt. dredged previously	Cu. Yds.	16237	7967
Total amt. dredged to date	Cu. Yds.	134,497	73,328

ITEM	NAME	HOURS
DREDGE	Illinois	24
Tugboat	Brangus	0
Tugboat	RL Enterkin	12
Tugboat	Pelican State	24
Tugboat	Atlantic Dawn	24
Crew Boat	Muskegon River	24
Anchor Barge	GL 106	24
Booster	Reggie	24
Derrick	Mobro 1220	12

COMMODITIES CONSUMED

ITEM	UNIT	QUANTITY
Fuel Oil	Gals.	5549
Lubricants	Gals.	
Lubricants	Pounds	
Water	Gals.	

DISTRIBUTION OF TIME

EFFECTIVE WORKING TIME	HOURS	MINUTES
Dredging	11	50
Percentage of total time	49.25	
NON- EFFECTIVE TIME		
Handling pipelines	7	
Handling swinging lines	1	
Clearing pump and pipe line	1	5
Clearing cutter or suction head	2	20
Changing location of plant on job		15
Loss due to opposing natural elements <8hr		
Loss due to opposing natural elements >8hr		
Loss due to passing vessels		30
Minor operating repairs <4hr		
Secure for weekend		
Miscellaneous (Explain in remarks)		
Total Non-effective Time	12	10
LOST TIME NOT CHARGEABLE		
Loss due to repairs >4hr		
Loss due to laying / relaying submerged line		
Lay time off shift		
Sundays and Holidays		
Waiting for equipment plant		
Collisions		
TOTAL TIME IN PERIOD	24	0

No. of Supervisory Inspections: 2 By field personnel 2 By office personnel

Remarks: The Dredge Illinois continued dredging operations at station 546+42 and dug in cut #4 to station 552+15. The cutter required cleaning on three occasioins (wire, rope, rocks).

DAILY REPORT OF OPERATIONS

CONTRACT NO.: W912BU-12-C-0034 | Date: 10/08/12 | Report # 30

DREDGE: Illinois

CONTRACTOR: Great Lakes Dredge & Dock Company, LLC

LOCATION OF WORK: AS8 & AS9, River Station 559+20, southbound

CHARACTER OF WORK: [ ] Maintenance [X] New

DISPOSAL AREA OR REHANDLING BASIN: National Park Disposal Area

LENGTH OF DISCHARGE OF PIPELINE: Total Length 12570 Ft.
Pontoon 2100 Ft. Shore 450 Ft. Submerged 10020 Ft.

CHARACTER OF MATERIAL AND PERCENTAGE OF EACH: Clay, Sand, Silt & Gravel

AVERAGE DEPTH (Feet and Tenths)
Before Dredging: 43' After Dredging: 46 Payment Depth: 45+1

WEATHER: Temp 42-54F; Wind 3-8 mph; Precip 0.05 in. of Rain

NUMBER OF MEN: 60

MAN HOURS: 720

MAN HOURS TO DATE: 19656

WORK PERFORMED

ITEM	UNIT	AMOUNT GROSS	AMOUNT NET
Av. Width of cut	Feet		100
Area dredged	Sq. Ft.		114,339
Distance advanced this period	Feet		1140
Distance advanced previously	Feet		484
Distance advanced to date	Feet		14946
Amt. dredged this period	Cu. Yds.	9297	3127
Amt. dredged previously	Cu. Yds.	10347	5127
Total amt. dredged to date	Cu. Yds.	143,794	76,455

ITEM	NAME	HOURS
DREDGE	Illinois	24
Tugboat	Brangus	0
Tugboat	RL Enterkin	12
Tugboat	Pelican State	24
Tugboat	Atlantic Dawn	24
Crew Boat	Muskegon River	24
Anchor Barge	GL 106	24
Booster	Reggie	24
Derrick	Mobro 1220	12

COMMODITIES CONSUMED

ITEM	UNIT	QUANTITY
Fuel Oil	Gals.	8450
Lubricants	Gals.	
Lubricants	Pounds	
Water	Gals.	

DISTRIBUTION OF TIME

EFFECTIVE WORKING TIME	HOURS	MINUTES
Dredging	12	10
Percentage of total time	50.67	
NON- EFFECTIVE TIME		
Handling pipelines		
Handling swinging lines	3	55
Clearing pump and pipe line		35
Clearing cutter or suction head	1	25
Changing location of plant on job	2	15
Loss due to opposing natural elements <8hr		
Loss due to opposing natural elements >8hr		
Loss due to passing vessels	1	5
Minor operating repairs <4hr	2	
Secure for weekend		
Miscellaneous (Explain in remarks)		35
Total Non-effective Time	11	50
LOST TIME NOT CHARGEABLE		
Loss due to repairs >4hr		
Loss due to laying / relaying submerged line		
Lay time off shift		
Sundays and Holidays		
Waiting for equipment plant		
Collisions		
TOTAL TIME IN PERIOD	24	0

No. of Supervisory Inspections: 2 By field personnel 2 By office personnel

Remarks: The Dredge Illinois continued dredging operations at station 552+11 and dug in cut #4 to station 553+82. The dredge moved to station 559+15 and dug in cut #11 to station 570+32. Misc delay due to changing teeth. Minor operating repairs delay due to changing swing wire.

DAILY REPORT OF OPERATIONS

CONTRACT NO.: W912BU-12-C-0034 | Date: 10/09/12 | Report # 31

DREDGE: Illinois

CONTRACTOR: Great Lakes Dredge & Dock Company, LLC

LOCATION OF WORK: AS9, River Station 571+80, southbound

CHARACTER OF WORK: [ ] Maintenance [X] New

DISPOSAL AREA OR REHANDLING BASIN: National Park Disposal Area

LENGTH OF DISCHARGE OF PIPELINE: Total Length 12570 Ft.
Pontoon 2100 Ft. Shore 450 Ft. Submerged 10020 Ft.

CHARACTER OF MATERIAL AND PERCENTAGE OF EACH: Clay, Silt & Gravel

AVERAGE DEPTH (Feet and Tenths)
Before Dredging: 43' After Dredging: 46 Payment Depth: 45+1

WEATHER: Temp 48-57F; Wind 8-10 mph; Precip 0.12 in. of Rain

NUMBER OF MEN: 60

MAN HOURS: 720

MAN HOURS TO DATE: 20376

WORK PERFORMED

ITEM	UNIT	AMOUNT GROSS	AMOUNT NET
Av. Width of cut	Feet		69
Area dredged	Sq. Ft.		91,772
Distance advanced this period	Feet		1322
Distance advanced previously	Feet		1140
Distance advanced to date	Feet		16268
Amt. dredged this period	Cu. Yds.	5227	1987
Amt. dredged previously	Cu. Yds.	9297	3127
Total amt. dredged to date	Cu. Yds.	149,021	78,442

ITEM	NAME	HOURS
DREDGE	Illinois	24
Tugboat	Brangus	0
Tugboat	RL Enterkin	12
Tugboat	Pelican State	24
Tugboat	Atlantic Dawn	24
Crew Boat	Cooper River	24
Anchor Barge	GL 106	24
Booster	Reggie	24
Derrick	Mobro 1220	12

COMMODITIES CONSUMED

ITEM	UNIT	QUANTITY
Fuel Oil	Gals.	1461
Lubricants	Gals.	
Lubricants	Pounds	
Water	Gals.	

DISTRIBUTION OF TIME

EFFECTIVE WORKING TIME	HOURS	MINUTES
Dredging	5	55
Percentage of total time	24.7	
NON- EFFECTIVE TIME		
Handling pipelines	6	35
Handling swinging lines	1	25
Clearing pump and pipe line		
Clearing cutter or suction head		35
Changing location of plant on job		
Loss due to opposing natural elements <8hr		
Loss due to opposing natural elements >8hr		
Loss due to passing vessels		
Minor operating repairs <4hr	9	30
Secure for weekend		
Miscellaneous (Explain in remarks)		
Total Non-effective Time	18	5
LOST TIME NOT CHARGEABLE		
Loss due to repairs >4hr		
Loss due to laying / relaying submerged line		
Lay time off shift		
Sundays and Holidays		
Waiting for equipment plant		
Collisions		
TOTAL TIME IN PERIOD	24	0

No. of Supervisory Inspections: 2 By field personnel 2 By office personnel

Remarks: The Dredge Illinois continued dredging operations at station 571+13 and dug in cut #11 to station 584+35. Repairs delay due to repair electrical issues on the dredge. Pipeline delay due to adding pontoon pipe and subline.

DAILY REPORT OF OPERATIONS

CONTRACT NO.: W912BU-12-C-0034 | Date: 10/10/12 | Report # 32

DREDGE: Illinois

CONTRACTOR: Great Lakes Dredge & Dock Company, LLC

LOCATION OF WORK: AS9, River Station 590+19, southbound

CHARACTER OF WORK: [ ] Maintenance [X] New

DISPOSAL AREA OR REHANDLING BASIN: National Park Disposal Area

LENGTH OF DISCHARGE OF PIPELINE: Total Length 12750 Ft.
Pontoon 2100 Ft. Shore 450 Ft. Submerged 10200 Ft.

CHARACTER OF MATERIAL AND PERCENTAGE OF EACH: Clay, Silt & Gravel

AVERAGE DEPTH (Feet and Tenths)
Before Dredging: 43' After Dredging: 46 Payment Depth: 45+1

WEATHER: Temp 53-66F; Wind 7-15 mph; Precip 0.0 in. of Rain

NUMBER OF MEN: 60

MAN HOURS: 720

MAN HOURS TO DATE: 20376

WORK PERFORMED

ITEM	UNIT	AMOUNT GROSS	AMOUNT NET
Av. Width of cut	Feet		105
Area dredged	Sq. Ft.		53,997
Distance advanced this period	Feet		516
Distance advanced previously	Feet		1322
Distance advanced to date	Feet		16,784
Amt. dredged this period	Cu. Yds.	4003	820
Amt. dredged previously	Cu. Yds.	5227	1987
Total amt. dredged to date	Cu. Yds.	153,024	79,262

ITEM	NAME	HOURS
DREDGE	Illinois	4:40
Tugboat	Brangus	0
Tugboat	RL Enterkin	12
Tugboat	Pelican State	24
Tugboat	Atlantic Dawn	24
Crew Boat	Cooper River	24
Anchor Barge	GL 106	24
Booster	Reggie	24
Derrick	Mobro 1220	12

COMMODITIES CONSUMED

ITEM	UNIT	QUANTITY
Fuel Oil	Gals.	3534
Lubricants	Gals.	
Lubricants	Pounds	
Water	Gals.	

DISTRIBUTION OF TIME

EFFECTIVE WORKING TIME	HOURS	MINUTES
Dredging	2	50
Percentage of total time	10.4	
NON- EFFECTIVE TIME		
Handling pipelines		
Handling swinging lines	1	50
Clearing pump and pipe line		
Clearing cutter or suction head		
Changing location of plant on job		
Loss due to opposing natural elements <8hr		
Loss due to opposing natural elements >8hr		
Loss due to passing vessels		
Minor operating repairs <4hr		
Secure for weekend		
Miscellaneous (Explain in remarks)		
Off Contract	19	20
Total Non-effective Time	21	10
LOST TIME NOT CHARGEABLE		
Loss due to repairs >4hr		
Loss due to laying / relaying submerged line		
Lay time off shift		
Sundays and Holidays		
Waiting for equipment plant		
Collisions		
TOTAL TIME IN PERIOD	24	0

No. of Supervisory Inspections: 2 By field personnel 2 By office personnel

Remarks: The Dredge Illinois continued dredging operations in A/S 9 stations 584+41 to 590+19. At 0440 hours, A/S 9 was complete and the Illinois was taken off contract. Crews began prepping the Dredge Florida to start up in the place of the Illinois. Station 492+00 is the targeted starting point.

DAILY REPORT OF OPERATIONS

CONTRACT NO.: W912BU-12-C-0034 | Date: 10/11/12 | Report # 33

DREDGE: Illinois

CONTRACTOR: Great Lakes Dredge & Dock Company, LLC

LOCATION OF WORK: No Production - Preparing the Dredge Florida to Commence Operations Sta 492+00 A/S 6 & 24

CHARACTER OF WORK: [ ] Maintenance [X] New

DISPOSAL AREA OR REHANDLING BASIN: National Park Disposal Area

LENGTH OF DISCHARGE OF PIPELINE: Total Length NA Ft.
Pontoon NA. Shore NA Submerged NA

CHARACTER OF MATERIAL AND PERCENTAGE OF EACH: Clay, Silt & Gravel

AVERAGE DEPTH (Feet and Tenths)
Before Dredging: 43' After Dredging: 46 Payment Depth: 45+1

WEATHER: Temp 45-61F; Wind 15-20 mph; Precip 0.0 in. of Rain

NUMBER OF MEN: 60

MAN HOURS: 720

MAN HOURS TO DATE: 21,816

WORK PERFORMED

ITEM	UNIT	AMOUNT GROSS	AMOUNT NET
Av. Width of cut	Feet		0
Area dredged	Sq. Ft.		0
Distance advanced this period	Feet		0
Distance advanced previously	Feet		516
Distance advanced to date	Feet		16,784
Amt. dredged this period	Cu. Yds.	0	0
Amt. dredged previously	Cu. Yds.	4003	820
Total amt. dredged to date	Cu. Yds.	157,027	80,082

ITEM	NAME	HOURS
DREDGE	Florida	0:00
Tugboat	Brangus	0
Tugboat	RL Enterkin	12
Tugboat	Pelican State	24
Tugboat	Atlantic Dawn	24
Crew Boat	Cooper River	24
Anchor Barge	GL 106	24
Booster	Reggie	0
Derrick	GL 66	12

COMMODITIES CONSUMED

ITEM	UNIT	QUANTITY
Fuel Oil	Gals.	1500
Lubricants	Gals.	
Lubricants	Pounds	
Water	Gals.	

DISTRIBUTION OF TIME

EFFECTIVE WORKING TIME	HOURS	MINUTES
Dredging	0	0
Percentage of total time	0	0
NON- EFFECTIVE TIME		
Handling pipelines		
Handling swinging lines		
Clearing pump and pipe line		
Clearing cutter or suction head		
Changing location of plant on job	24	0
Loss due to opposing natural elements <8hr		
Loss due to opposing natural elements >8hr		
Loss due to passing vessels		
Minor operating repairs <4hr		
Secure for weekend		
Miscellaneous (Explain in remarks)		
Off Contract		
Total Non-effective Time	24	0
LOST TIME NOT CHARGEABLE		
Loss due to repairs >4hr		
Loss due to laying / relaying submerged line		
Lay time off shift		
Sundays and Holidays		
Waiting for equipment plant		
Collisions		
TOTAL TIME IN PERIOD	24	0

No. of Supervisory Inspections: 2 By field personnel 2 By office personnel

Remarks: The Dredge Illinois is off contract and preparing for tow from the site. Crews are setting up the Dredge Florida and related equipment to began dredging in AS6 & 24, Station 492+00.

DAILY REPORT OF OPERATIONS

CONTRACT NO.: W912BU-12-C-0034 | Date: 10/12/12 | Report # 34

DREDGE: Florida

CONTRACTOR: Great Lakes Dredge & Dock Company, LLC

LOCATION OF WORK: Sta 490+50 A/S 6 & 24, northbound

CHARACTER OF WORK: [ ] Maintenance [X] New

DISPOSAL AREA OR REHANDLING BASIN: National Park Disposal Area

LENGTH OF DISCHARGE OF PIPELINE: Total Length 12,353 Ft.
Pontoon 2100. Shore 450 Submerged 9803

CHARACTER OF MATERIAL AND PERCENTAGE OF EACH: Sand, Silt & Gravel

AVERAGE DEPTH (Feet and Tenths)
Before Dredging: 43.8' After Dredging: 46 Payment Depth: 45+1

WEATHER: Temp 41-59F; Wind 15-20 mph; Precip 0.0 in. of Rain

NUMBER OF MEN: 60

MAN HOURS: 720

MAN HOURS TO DATE: 22,536

WORK PERFORMED

ITEM	UNIT	AMOUNT GROSS	AMOUNT NET
Av. Width of cut	Feet		105
Area dredged	Sq. Ft.		12,378
Distance advanced this period	Feet		118
Distance advanced previously	Feet		0
Distance advanced to date	Feet		16,902
Amt. dredged this period	Cu. Yds.	860	239
Amt. dredged previously	Cu. Yds.	0	0
Total amt. dredged to date	Cu. Yds.	157,887	80,321

ITEM	NAME	HOURS
DREDGE	Florida	0:00
Tugboat	Brangus	0
Tugboat	RL Enterkin	12
Tugboat	Pelican State	24
Tugboat	Atlantic Dawn	24
Crew Boat	Cooper River	24
Anchor Barge	GL 106	24
Booster	Reggie	24
Derrick	GL 66	12

COMMODITIES CONSUMED

ITEM	UNIT	QUANTITY
Fuel Oil	Gals.	656
Lubricants	Gals.	
Lubricants	Pounds	
Water	Gals.	

DISTRIBUTION OF TIME

EFFECTIVE WORKING TIME	HOURS	MINUTES
Dredging	2	50
Percentage of total time	8%	0
NON- EFFECTIVE TIME		
Handling pipelines		
Handling swinging lines		
Clearing pump and pipe line		
Clearing cutter or suction head		
Changing location of plant on job	20	40
Loss due to opposing natural elements <8hr		
Loss due to opposing natural elements >8hr		
Loss due to passing vessels		5
Minor operating repairs <4hr		25
Secure for weekend		
Miscellaneous (Explain in remarks)		
Off Contract		
Total Non-effective Time	21	10
LOST TIME NOT CHARGEABLE		
Loss due to repairs >4hr		
Loss due to laying / relaying submerged line		
Lay time off shift		
Sundays and Holidays		
Waiting for equipment plant		
Collisions		
TOTAL TIME IN PERIOD	24	0

No. of Supervisory Inspections: 2 By field personnel 2 By office personnel

Remarks: The Dredge Florida resumed dredging at 2040 hrs. at station 492+10, A/S 6 and 24. The Dredge Illinois and related equipment was towed from the site.

DAILY REPORT OF OPERATIONS

CONTRACT NO.: W912BU-12-C-0034 | Date: 10/13/12 | Report # 35

DREDGE: Florida

CONTRACTOR: Great Lakes Dredge & Dock Company, LLC

LOCATION OF WORK: Sta 486+30 A/S 6 & 24, northbound

CHARACTER OF WORK: [ ] Maintenance [X] New

DISPOSAL AREA OR REHANDLING BASIN: National Park Disposal Area

LENGTH OF DISCHARGE OF PIPELINE: Total Length 14,395 Ft.
Pontoon 2100. Shore 450 Submerged 12,203

CHARACTER OF MATERIAL AND PERCENTAGE OF EACH: Sand, Silt & Gravel

AVERAGE DEPTH (Feet and Tenths)
Before Dredging: 43.0' After Dredging: 46 Payment Depth: 45+1

WEATHER: Temp 34-55F; Wind 3-8 mph; Precip 0.0 in. of Rain

NUMBER OF MEN: 60

MAN HOURS: 720

MAN HOURS TO DATE: 23,256

WORK PERFORMED

ITEM	UNIT	AMOUNT GROSS	AMOUNT NET
Av. Width of cut	Feet		127
Area dredged	Sq. Ft.		79,034
Distance advanced this period	Feet		623
Distance advanced previously	Feet		118
Distance advanced to date	Feet		17,525
Amt. dredged this period	Cu. Yds.	4907	1507
Amt. dredged previously	Cu. Yds.	860	239
Total amt. dredged to date	Cu. Yds.	162,794	81,828

ITEM	NAME	HOURS
DREDGE	Florida	0:00
Tugboat	Brangus	0
Tugboat	RL Enterkin	12
Tugboat	Pelican State	24
Tugboat	Atlantic Dawn	24
Crew Boat	Cooper River	24
Anchor Barge	GL 106	24
Booster	Reggie	24
Derrick	GL 66	12

COMMODITIES CONSUMED

ITEM	UNIT	QUANTITY
Fuel Oil	Gals.	5461
Lubricants	Gals.	
Lubricants	Pounds	
Water	Gals.	

DISTRIBUTION OF TIME

EFFECTIVE WORKING TIME	HOURS	MINUTES
Dredging	12	20
Percentage of total time	51%	0
NON- EFFECTIVE TIME		
Handling pipelines		
Handling swinging lines	1	5
Clearing pump and pipe line	2	5
Clearing cutter or suction head		25
Changing location of plant on job		
Loss due to opposing natural elements <8hr		
Loss due to opposing natural elements >8hr		
Loss due to passing vessels		15
Minor operating repairs <4hr	2	45
Secure for weekend		
Miscellaneous (Explain in remarks)		
Off Contract		
Total Non-effective Time	6	35
LOST TIME NOT CHARGEABLE		
Loss due to repairs >4hr		
Loss due to laying / relaying submerged line	5	5
Lay time off shift		
Sundays and Holidays		
Waiting for equipment plant		
Collisions		
TOTAL TIME IN PERIOD	24	0

No. of Supervisory Inspections: 2 By field personnel 2 By office personnel

Remarks: The Dredge Florida continued dredging station 490+50 to 486+30, A/S 6 and 24. Approximately 2400 LF of subline was placed..

DAILY REPORT OF OPERATIONS

CONTRACT NO.: W912BU-12-C-0034 | Date: 10/14/12 | Report # 36

DREDGE: Florida

CONTRACTOR: Great Lakes Dredge & Dock Company, LLC

LOCATION OF WORK: Sta 482+98 A/S 6 & 24, northbound

CHARACTER OF WORK: [ ] Maintenance [X] New

DISPOSAL AREA OR REHANDLING BASIN: National Park Disposal Area

LENGTH OF DISCHARGE OF PIPELINE: Total Length 14,753 Ft.
Pontoon 2100. Shore 450 Submerged 12,203

CHARACTER OF MATERIAL AND PERCENTAGE OF EACH: Sand, Silt & Gravel

AVERAGE DEPTH (Feet and Tenths)
Before Dredging: 43.0' After Dredging: 46 Payment Depth: 45+1

WEATHER: Temp 46-73F; Wind 6-17 mph; Precip 0.0 in. of Rain

NUMBER OF MEN: 60

MAN HOURS: 720

MAN HOURS TO DATE: 23,976

WORK PERFORMED

ITEM	UNIT	AMOUNT GROSS	AMOUNT NET
Av. Width of cut	Feet		73
Area dredged	Sq. Ft.		37,972
Distance advanced this period	Feet		521
Distance advanced previously	Feet		623
Distance advanced to date	Feet		18,046
Amt. dredged this period	Cu. Yds.	3333	1992
Amt. dredged previously	Cu. Yds.	4907	1507
Total amt. dredged to date	Cu. Yds.	166,127	83,820

ITEM	NAME	HOURS
DREDGE	Florida	24
Tugboat	Bobby A	24
Tugboat	RL Enterkin	12
Tugboat	Pelican State	24
Tugboat	Layla Renee	14.5
Tugboat	Atlantic Dawn	0
Crew Boat	Cooper River	24
Anchor Barge	GL 106	24
Booster	Reggie	24
Derrick	GL 66	12

COMMODITIES CONSUMED

ITEM	UNIT	QUANTITY
Fuel Oil	Gals.	11,718
Lubricants	Gals.	
Lubricants	Pounds	
Water	Gals.	

DISTRIBUTION OF TIME

EFFECTIVE WORKING TIME	HOURS	MINUTES
Dredging	12	50
Percentage of total time	52%	0
NON- EFFECTIVE TIME		
Handling pipelines		
Handling swinging lines		10
Clearing pump and pipe line	2	0
Clearing cutter or suction head	3	50
Changing location of plant on job		55
Loss due to opposing natural elements <8hr		
Loss due to opposing natural elements >8hr		
Loss due to passing vessels	3	40
Minor operating repairs <4hr		35
Secure for weekend		
Miscellaneous (Explain in remarks)		
Off Contract		
Total Non-effective Time	11	10
LOST TIME NOT CHARGEABLE		
Loss due to repairs >4hr		
Loss due to laying / relaying submerged line		
Lay time off shift		
Sundays and Holidays		
Waiting for equipment plant		
Collisions		
TOTAL TIME IN PERIOD	24	0

No. of Supervisory Inspections: 2 By field personnel 2 By office personnel

Remarks: The Dredge Florida continued dredging station 487+00 to 482+98, AS 6 & 24. majority of the down time was a result of cleaning cutter, pumps, and passing vessels.

DAILY REPORT OF OPERATIONS

CONTRACT NO.: W912BU-12-C-0034 | Date: 10/15/12 | Report # 37

DREDGE: Florida

CONTRACTOR: Great Lakes Dredge & Dock Company, LLC

LOCATION OF WORK: Sta 479+37 A/S 5/39, northbound

CHARACTER OF WORK: [ ] Maintenance [X] New

DISPOSAL AREA OR REHANDLING BASIN: National Park Disposal Area

LENGTH OF DISCHARGE OF PIPELINE: Total Length 14,753 Ft.
Pontoon 2100. Shore 450 Submerged 12,203

CHARACTER OF MATERIAL AND PERCENTAGE OF EACH: Sand, Silt & Gravel

AVERAGE DEPTH (Feet and Tenths)
Before Dredging: 43.0' After Dredging: 46 Payment Depth: 45+1

WEATHER: Temp 59-68F; Wind 8-14 mph; Precip 0.5 in. of Rain

NUMBER OF MEN: 60

MAN HOURS: 720

MAN HOURS TO DATE: 24,696

WORK PERFORMED

ITEM	UNIT	AMOUNT GROSS	AMOUNT NET
Av. Width of cut	Feet		23
Area dredged	Sq. Ft.		10,052
Distance advanced this period	Feet		436
Distance advanced previously	Feet		521
Distance advanced to date	Feet		18,482
Amt. dredged this period	Cu. Yds.	1187	989
Amt. dredged previously	Cu. Yds.	3333	1992
Total amt. dredged to date	Cu. Yds.	167,314	84,809

ITEM	NAME	HOURS
DREDGE	Florida	24
Tugboat	Bobby A	24
Tugboat	RL Enterkin	12
Tugboat	Pelican State	24
Tugboat	Layla Renee	24
Tugboat	Atlantic Dawn	0
Crew Boat	Cooper River	24
Anchor Barge	GL 106	24
Booster	Reggie	24
Derrick	GL 66	12

COMMODITIES CONSUMED

ITEM	UNIT	QUANTITY
Fuel Oil	Gals.	14,076
Lubricants	Gals.	
Lubricants	Pounds	
Water	Gals.	

DISTRIBUTION OF TIME

EFFECTIVE WORKING TIME	HOURS	MINUTES
Dredging	12	30
Percentage of total time	51%	0
NON- EFFECTIVE TIME		
Handling pipelines		
Handling swinging lines	1	10
Clearing pump and pipe line		
Clearing cutter or suction head		
Changing location of plant on job	2	50
Loss due to opposing natural elements <8hr		
Loss due to opposing natural elements >8hr		
Loss due to passing vessels	5	15
Minor operating repairs <4hr	2	15
Secure for weekend		
Miscellaneous (Explain in remarks)		
Off Contract		
Total Non-effective Time	11	30
LOST TIME NOT CHARGEABLE		
Loss due to repairs >4hr		
Loss due to laying / relaying submerged line		
Lay time off shift		
Sundays and Holidays		
Waiting for equipment plant		
Collisions		
TOTAL TIME IN PERIOD	24	0

No. of Supervisory Inspections: 2 By field personnel 2 By office personnel

Remarks: The Dredge Florida continued dredging station 483+50 to 479+37, AS 5/39. Majority of the down time was a result of moving dredge, and passing vessels.

DAILY REPORT OF OPERATIONS

CONTRACT NO.: W912BU-12-C-0034 | Date: 10/16/12 | Report # 38

DREDGE: Florida

CONTRACTOR: Great Lakes Dredge & Dock Company, LLC

LOCATION OF WORK: Sta 468+65 A/S 5/39, northbound

CHARACTER OF WORK: [ ] Maintenance [X] New

DISPOSAL AREA OR REHANDLING BASIN: National Park Disposal Area

LENGTH OF DISCHARGE OF PIPELINE: Total Length 14,753 Ft.
Pontoon 2100. Shore 450 Submerged 12,203

CHARACTER OF MATERIAL AND PERCENTAGE OF EACH: Sand, Silt & Gravel

AVERAGE DEPTH (Feet and Tenths)
Before Dredging: 43.0' After Dredging: 46 Payment Depth: 45+1

WEATHER: Temp 43-61F; Wind 8-17 mph; Precip 0.0 in. of Rain

NUMBER OF MEN: 60

MAN HOURS: 720

MAN HOURS TO DATE: 25,416

WORK PERFORMED

ITEM	UNIT	AMOUNT GROSS	AMOUNT NET
Av. Width of cut	Feet		88
Area dredged	Sq. Ft.		47,660
Distance advanced this period	Feet		543
Distance advanced previously	Feet		521
Distance advanced to date	Feet		19,025
Amt. dredged this period	Cu. Yds.	6368	2036
Amt. dredged previously	Cu. Yds.	1187	989
Total amt. dredged to date	Cu. Yds.	173,682	86,845

ITEM	NAME	HOURS
DREDGE	Florida	24
Tugboat	Bobby A	24
Tugboat	RL Enterkin	12
Tugboat	Pelican State	24
Tugboat	Layla Renee	0
Tugboat	Atlantic Dawn	0
Crew Boat	Cooper River	24
Anchor Barge	GL 106	24
Booster	Reggie	24
Derrick	GL 66	12

COMMODITIES CONSUMED

ITEM	UNIT	QUANTITY
Fuel Oil	Gals.	14,076
Lubricants	Gals.	
Lubricants	Pounds	
Water	Gals.	

DISTRIBUTION OF TIME

EFFECTIVE WORKING TIME	HOURS	MINUTES
Dredging	10	40
Percentage of total time	43%	
NON- EFFECTIVE TIME		
Handling pipelines		
Handling swinging lines	2	35
Clearing pump and pipe line		
Clearing cutter or suction head		
Changing location of plant on job		
Loss due to opposing natural elements <8hr		
Loss due to opposing natural elements >8hr		
Loss due to passing vessels	1	0
Minor operating repairs <4hr	3	10
Secure for weekend		
Miscellaneous (Explain in remarks)		
Off Contract		
Total Non-effective Time	6	45
LOST TIME NOT CHARGEABLE		
Loss due to repairs >4hr	6	35
Loss due to laying / relaying submerged line		
Lay time off shift		
Sundays and Holidays		
Waiting for equipment plant		
Collisions		
TOTAL TIME IN PERIOD	24	0

No. of Supervisory Inspections: 2 By field personnel 2 By office personnel

Remarks: The Dredge Florida continued dredging station 474+21 to 468+65, AS 5/39. Majority of the down time was a result of repairing cutter motor, and passing vessels.

DAILY REPORT OF OPERATIONS

CONTRACT NO.: W912BU-12-C-0034 | Date: 10/17/12 | Report # 39

DREDGE: Florida

CONTRACTOR: Great Lakes Dredge & Dock Company, LLC

LOCATION OF WORK: AS5 & AS39, River Station 468+50, northbound

CHARACTER OF WORK: [ ] Maintenance [X] New

DISPOSAL AREA OR REHANDLING BASIN: National Park Disposal Area

LENGTH OF DISCHARGE OF PIPELINE: Total Length 14,753 Ft.
Pontoon 2100. Shore 450 Submerged 12,203

CHARACTER OF MATERIAL AND PERCENTAGE OF EACH: Mud & Gravel

AVERAGE DEPTH (Feet and Tenths)
Before Dredging: 43.0' After Dredging: 46 Payment Depth: 45+1

WEATHER: Temp 43-61F; Wind 8-17 mph; Precip 0.0 in. of Rain

NUMBER OF MEN: 60

MAN HOURS: 720

MAN HOURS TO DATE: 26,136

WORK PERFORMED

ITEM	UNIT	AMOUNT GROSS	AMOUNT NET
Av. Width of cut	Feet		277
Area dredged	Sq. Ft.		110,805
Distance advanced this period	Feet		400
Distance advanced previously	Feet		543
Distance advanced to date	Feet		19,519
Amt. dredged this period	Cu. Yds.	18100	6465
Amt. dredged previously	Cu. Yds.	6368	2036
Total amt. dredged to date	Cu. Yds.	190,535	92,961

ITEM	NAME	HOURS
DREDGE	Florida	24
Tugboat	Bobby A	24
Tugboat	RL Enterkin	24
Tugboat	Pelican State	24
Tugboat	Layla Renee	0
Crew Boat	Cooper River	24
Survey Boat	Pearl River	12
Anchor Barge	GL 107	24
Booster	Reggie	0
Derrick	GL 66	12

COMMODITIES CONSUMED

ITEM	UNIT	QUANTITY
Fuel Oil	Gals.	4,293
Lubricants	Gals.	
Lubricants	Pounds	
Water	Gals.	

DISTRIBUTION OF TIME

EFFECTIVE WORKING TIME	HOURS	MINUTES
Dredging	12	35
Percentage of total time	52%	
NON- EFFECTIVE TIME		
Handling pipelines	1	35
Handling swinging lines		45
Clearing pump and pipe line	3	35
Clearing cutter or suction head	5	30
Changing location of plant on job		
Loss due to opposing natural elements <8hr		
Loss due to opposing natural elements >8hr		
Loss due to passing vessels		
Minor operating repairs <4hr		
Secure for weekend		
Miscellaneous (Explain in remarks)		
Off Contract		
Total Non-effective Time	11	25
LOST TIME NOT CHARGEABLE		
Loss due to repairs >4hr	6	35
Loss due to laying / relaying submerged line		
Lay time off shift		
Sundays and Holidays		
Waiting for equipment plant		
Collisions		
TOTAL TIME IN PERIOD	24	0

No. of Supervisory Inspections: 2 By field personnel 2 By office personnel

Remarks: The Dredge Florida continued dredging operations at station 568+80 and dug in cut #13 to station 463+43.

DAILY REPORT OF OPERATIONS

CONTRACT NO.: W912BU-12-C-0034 | Date: 10/18/12 | Report # 40

DREDGE: Florida

CONTRACTOR: Great Lakes Dredge & Dock Company, LLC

LOCATION OF WORK: AS5 & AS39, River Station 464+20, northbound

CHARACTER OF WORK: [ ] Maintenance [X] New

DISPOSAL AREA OR REHANDLING BASIN: National Park Disposal Area

LENGTH OF DISCHARGE OF PIPELINE: Total Length 14,953 Ft.
Pontoon 2300. Shore 450 Submerged 12,203

CHARACTER OF MATERIAL AND PERCENTAGE OF EACH: Sand, Mud, & Gravel

AVERAGE DEPTH (Feet and Tenths)
Before Dredging: 43.0' After Dredging: 46 Payment Depth: 45+1

WEATHER: Temp 42-70F; Wind 4-16 mph; Precip 0.05 in. of Rain

NUMBER OF MEN: 60

MAN HOURS: 720

MAN HOURS TO DATE: 26,856

WORK PERFORMED

ITEM	UNIT	AMOUNT GROSS	AMOUNT NET
Av. Width of cut	Feet		293
Area dredged	Sq. Ft.		105,000
Distance advanced this period	Feet		358
Distance advanced previously	Feet		400
Distance advanced to date	Feet		19,877
Amt. dredged this period	Cu. Yds.	17166	10751
Amt. dredged previously	Cu. Yds.	18100	6465
Total amt. dredged to date	Cu. Yds.	207,701	103,712

ITEM	NAME	HOURS
DREDGE	Florida	24
Tugboat	Bobby A	24
Tugboat	RL Enterkin	24
Tugboat	Pelican State	24
Tugboat	Layla Renee	0
Crew Boat	Cooper River	24
Survey Boat	Pearl River	12
Anchor Barge	GL 107	24
Booster	Reggie	0
Derrick	GL 66	12

COMMODITIES CONSUMED

ITEM	UNIT	QUANTITY
Fuel Oil	Gals.	7,038
Lubricants	Gals.	
Lubricants	Pounds	
Water	Gals.	

DISTRIBUTION OF TIME

EFFECTIVE WORKING TIME	HOURS	MINUTES
Dredging	13	5
Percentage of total time	52%	
NON- EFFECTIVE TIME		
Handling pipelines	1	5
Handling swinging lines		25
Clearing pump and pipe line	6	10
Clearing cutter or suction head		
Changing location of plant on job		
Loss due to opposing natural elements <8hr		
Loss due to opposing natural elements >8hr		
Loss due to passing vessels		
Minor operating repairs <4hr		
Secure for weekend		
Miscellaneous (Explain in remarks)	2	15
Off Contract		
Total Non-effective Time	10	55
LOST TIME NOT CHARGEABLE		
Loss due to repairs >4hr		
Loss due to laying / relaying submerged line		
Lay time off shift		
Sundays and Holidays		
Waiting for equipment plant		
Collisions		
TOTAL TIME IN PERIOD	24	0

No. of Supervisory Inspections: 2 By field personnel 2 By office personnel

Remarks: The Dredge Florida continued dredging operations at station 463+43 and dug in cut #13 to station 459+88. Misc delay due to changing the cutter and check and grease equipment.

DAILY REPORT OF OPERATIONS

CONTRACT NO.: W912BU-12-C-0034 | Date: 10/19/12 | Report # 41

DREDGE: Florida

CONTRACTOR: Great Lakes Dredge & Dock Company, LLC

LOCATION OF WORK: AS5 & AS39, River Station 460+70, northbound

CHARACTER OF WORK: [ ] Maintenance [X] New

DISPOSAL AREA OR REHANDLING BASIN: National Park Disposal Area

LENGTH OF DISCHARGE OF PIPELINE: Total Length 15,453 Ft.
Pontoon 2800. Shore 450 Submerged 12,203

CHARACTER OF MATERIAL AND PERCENTAGE OF EACH: Sand, Mud, & Gravel

AVERAGE DEPTH (Feet and Tenths)
Before Dredging: 41.0' After Dredging: 46 Payment Depth: 45+1

WEATHER: Temp 64-73F; Wind 7-15 mph; Precip 0.82 in. of Rain

NUMBER OF MEN: 60

MAN HOURS: 720

MAN HOURS TO DATE: 27576

WORK PERFORMED

ITEM	UNIT	AMOUNT GROSS	AMOUNT NET
Av. Width of cut	Feet		354
Area dredged	Sq. Ft.		133,068
Distance advanced this period	Feet		376
Distance advanced previously	Feet		358
Distance advanced to date	Feet		20,253
Amt. dredged this period	Cu. Yds.	26580	19105
Amt. dredged previously	Cu. Yds.	17166	10751
Total amt. dredged to date	Cu. Yds.	229,556	123,547

ITEM	NAME	HOURS
DREDGE	Florida	24
Tugboat	Bobby A	24
Tugboat	RL Enterkin	24
Tugboat	Pelican State	24
Tugboat	Layla Renee	0
Crew Boat	Cooper River	24
Survey Boat	Pearl River	12
Anchor Barge	GL 107	24
Booster	Reggie	0
Derrick	GL 66	12

COMMODITIES CONSUMED

ITEM	UNIT	QUANTITY
Fuel Oil	Gals.	13,320
Lubricants	Gals.	
Lubricants	Pounds	
Water	Gals.	

DISTRIBUTION OF TIME

EFFECTIVE WORKING TIME	HOURS	MINUTES
Dredging	15	5
Percentage of total time	63%	
NON- EFFECTIVE TIME		
Handling pipelines	1	
Handling swinging lines		35
Clearing pump and pipe line	1	
Clearing cutter or suction head	5	5
Changing location of plant on job		
Loss due to opposing natural elements <8hr		
Loss due to opposing natural elements >8hr		
Loss due to passing vessels		50
Minor operating repairs <4hr		
Secure for weekend		
Miscellaneous (Explain in remarks)		25
Off Contract		
Total Non-effective Time	8	55
LOST TIME NOT CHARGEABLE		
Loss due to repairs >4hr		
Loss due to laying / relaying submerged line		
Lay time off shift		
Sundays and Holidays		
Waiting for equipment plant		
Collisions		
TOTAL TIME IN PERIOD	24	0

No. of Supervisory Inspections: 2 By field personnel 2 By office personnel

Remarks: The Dredge Florida continued dredging operations at station 459+81 and dug in cut #13 to station 456+05. Misc delay due to work on pontoon line.

DAILY REPORT OF OPERATIONS

CONTRACT NO.: W912BU-12-C-0034 | Date: 10/20/12 | Report # 42

DREDGE: Florida

CONTRACTOR: Great Lakes Dredge & Dock Company, LLC

LOCATION OF WORK: AS 5, 38 & 39, River Station 456+85, northbound

CHARACTER OF WORK: [ ] Maintenance [X] New

DISPOSAL AREA OR REHANDLING BASIN: National Park Disposal Area

LENGTH OF DISCHARGE OF PIPELINE: Total Length 15,953 Ft.
Pontoon 3300. Shore 450 Submerged 12,203

CHARACTER OF MATERIAL AND PERCENTAGE OF EACH: Sand, Mud, & Gravel

AVERAGE DEPTH (Feet and Tenths)
Before Dredging: 30.0' After Dredging: 38 Payment Depth: 45+1

WEATHER: Temp 50-66F; Wind 3-14 mph; Precip 0.0 in.

NUMBER OF MEN: 60

MAN HOURS: 720

MAN HOURS TO DATE: 28296

WORK PERFORMED

ITEM	UNIT	AMOUNT GROSS	AMOUNT NET
Av. Width of cut	Feet		326
Area dredged	Sq. Ft.		148,733
Distance advanced this period	Feet		456
Distance advanced previously	Feet		376
Distance advanced to date	Feet		20,709
Amt. dredged this period	Cu. Yds.	55091	39351
Amt. dredged previously	Cu. Yds.	26580	19105
Total amt. dredged to date	Cu. Yds.	284,647	162,898

ITEM	NAME	HOURS
DREDGE	Florida	24
Tugboat	Bobby A	24
Tugboat	RL Enterkin	24
Tugboat	Pelican State	24
Tugboat	Layla Renee	24
Crew Boat	Cooper River	24
Survey Boat	Pearl River	12
Anchor Barge	GL 107	24
Booster	Reggie	0
Derrick	GL 66	12

COMMODITIES CONSUMED

ITEM	UNIT	QUANTITY
Fuel Oil	Gals.	10,227
Lubricants	Gals.	
Lubricants	Pounds	
Water	Gals.	

DISTRIBUTION OF TIME

EFFECTIVE WORKING TIME	HOURS	MINUTES
Dredging	17	30
Percentage of total time	73%	
NON- EFFECTIVE TIME		
Handling pipelines	1	40
Handling swinging lines		55
Clearing pump and pipe line		50
Clearing cutter or suction head	3	5
Changing location of plant on job		
Loss due to opposing natural elements <8hr		
Loss due to opposing natural elements >8hr		
Loss due to passing vessels		
Minor operating repairs <4hr		
Secure for weekend		
Miscellaneous (Explain in remarks)		
Off Contract		
Total Non-effective Time	6	30
LOST TIME NOT CHARGEABLE		
Loss due to repairs >4hr		
Loss due to laying / relaying submerged line		
Lay time off shift		
Sundays and Holidays		
Waiting for equipment plant		
Collisions		
TOTAL TIME IN PERIOD	24	0

No. of Supervisory Inspections: 2 By field personnel 2 By office personnel

Remarks: The Dredge Florida continued dredging operations at station 456+00 and dug in cut #14 to station 451+49. Dredging top lift. Dredge will eventually set back for second lift.

DAILY REPORT OF OPERATIONS

CONTRACT NO.: W912BU-12-C-0034 | Date: 10/21/12 | Report # 43

DREDGE: Florida

CONTRACTOR: Great Lakes Dredge & Dock Company, LLC

LOCATION OF WORK: AS 5, 4, & 38, River Station 452+25, northbound

CHARACTER OF WORK: [ ] Maintenance [X] New

DISPOSAL AREA OR REHANDLING BASIN: National Park Disposal Area

LENGTH OF DISCHARGE OF PIPELINE: Total Length 16,253 Ft.
Pontoon 3600. Shore 450 Submerged 12,203

CHARACTER OF MATERIAL AND PERCENTAGE OF EACH: Sand, Mud, & Gravel

AVERAGE DEPTH (Feet and Tenths)
Before Dredging: 26.0' After Dredging: 38.0' Payment Depth: 45+1

WEATHER: Temp 46-64F; Wind 8-15 mph; Precip 0.0 in.

NUMBER OF MEN: 60

MAN HOURS: 720

MAN HOURS TO DATE: 29016

WORK PERFORMED

ITEM	UNIT	AMOUNT GROSS	AMOUNT NET
Av. Width of cut	Feet		300
Area dredged	Sq. Ft.		129,829
Distance advanced this period	Feet		433
Distance advanced previously	Feet		456
Distance advanced to date	Feet		21,142
Amt. dredged this period	Cu. Yds.	50602	50300
Amt. dredged previously	Cu. Yds.	55091	39351
Total amt. dredged to date	Cu. Yds.	335,249	213,198

ITEM	NAME	HOURS
DREDGE	Florida	24
Tugboat	Bobby A	24
Tugboat	RL Enterkin	24
Tugboat	Pelican State	24
Tugboat	Layla Renee	24
Crew Boat	Cooper River	24
Survey Boat	Pearl River	12
Anchor Barge	GL 107	24
Booster	Reggie	0
Derrick	GL 66	12

COMMODITIES CONSUMED

ITEM	UNIT	QUANTITY
Fuel Oil	Gals.	7,792
Lubricants	Gals.	
Lubricants	Pounds	
Water	Gals.	

DISTRIBUTION OF TIME

EFFECTIVE WORKING TIME	HOURS	MINUTES
Dredging	15	
Percentage of total time	63%	
NON- EFFECTIVE TIME		
Handling pipelines		30
Handling swinging lines		50
Clearing pump and pipe line	4	
Clearing cutter or suction head		
Changing location of plant on job		
Loss due to opposing natural elements <8hr		
Loss due to opposing natural elements >8hr		
Loss due to passing vessels		55
Minor operating repairs <4hr		
Secure for weekend		
Miscellaneous (Explain in remarks)	2	45
Off Contract		
Total Non-effective Time	9	
LOST TIME NOT CHARGEABLE		
Loss due to repairs >4hr		
Loss due to laying / relaying submerged line		
Lay time off shift		
Sundays and Holidays		
Waiting for equipment plant		
Collisions		
TOTAL TIME IN PERIOD	24	0

No. of Supervisory Inspections: 2 By field personnel 2 By office personnel

Remarks: The Dredge Florida continued dredging operations at station 451+44 and dug in cut #14 to station 447+13. Misc delay due to changing cutter. Dredging top lift. Dredge will eventually set back for second lift.

DAILY REPORT OF OPERATIONS

CONTRACT NO.: W912BU-12-C-0034 | Date: 10/22/12 | Report # 44

DREDGE: Florida

CONTRACTOR: Great Lakes Dredge & Dock Company, LLC

LOCATION OF WORK: AS 5, 4, & 38, River Station 447+10, northbound

CHARACTER OF WORK: [ ] Maintenance [X] New

DISPOSAL AREA OR REHANDLING BASIN: National Park Disposal Area

LENGTH OF DISCHARGE OF PIPELINE: Total Length 16,653 Ft.
Pontoon 4000. Shore 450 Submerged 12,203

CHARACTER OF MATERIAL AND PERCENTAGE OF EACH: Sand, Mud, & Gravel

AVERAGE DEPTH (Feet and Tenths)
Before Dredging: 28.0' After Dredging: 38.0' Payment Depth: 45+1

WEATHER: Temp 45-69F; Wind 6-16 mph; Precip 0.0 in.

NUMBER OF MEN: 60

MAN HOURS: 720

MAN HOURS TO DATE: 29736

WORK PERFORMED

ITEM	UNIT	AMOUNT GROSS	AMOUNT NET
Av. Width of cut	Feet		327
Area dredged	Sq. Ft.		118,153
Distance advanced this period	Feet		361
Distance advanced previously	Feet		433
Distance advanced to date	Feet		21,503
Amt. dredged this period	Cu. Yds.	45500	45000
Amt. dredged previously	Cu. Yds.	50602	50300
Total amt. dredged to date	Cu. Yds.	380,749	258,198

ITEM	NAME	HOURS
DREDGE	Florida	24
Tugboat	Bobby A	24
Tugboat	RL Enterkin	24
Tugboat	Pelican State	24
Tugboat	Layla Renee	24
Crew Boat	Cooper River	24
Survey Boat	Pearl River	12
Anchor Barge	GL 107	24
Booster	Reggie	0
Derrick	GL 66	12

COMMODITIES CONSUMED

ITEM	UNIT	QUANTITY
Fuel Oil	Gals.	11,344
Lubricants	Gals.	
Lubricants	Pounds	
Water	Gals.	

DISTRIBUTION OF TIME

EFFECTIVE WORKING TIME	HOURS	MINUTES
Dredging	13	50
Percentage of total time	58%	
NON- EFFECTIVE TIME		
Handling pipelines		45
Handling swinging lines		15
Clearing pump and pipe line	4	50
Clearing cutter or suction head	2	10
Changing location of plant on job		
Loss due to opposing natural elements <8hr		
Loss due to opposing natural elements >8hr		
Loss due to passing vessels		
Minor operating repairs <4hr	2	
Secure for weekend		
Miscellaneous (Explain in remarks)		10
Off Contract		
Total Non-effective Time	10	10
LOST TIME NOT CHARGEABLE		
Loss due to repairs >4hr		
Loss due to laying / relaying submerged line		
Lay time off shift		
Sundays and Holidays		
Waiting for equipment plant		
Collisions		
TOTAL TIME IN PERIOD	24	0

No. of Supervisory Inspections: 2 By field personnel 2 By office personnel

Remarks: The Dredge Florida continued dredging operations at station 447+00 and dug in cut #14 to station 443+36. Repairs delay due to work on pontoon pipe and ladder pump. Dredging top lift. Dredge will eventually set back for second lift.

DAILY REPORT OF OPERATIONS

CONTRACT NO.: W912BU-12-C-0034 | Date: 10/23/12 | Report # 45

DREDGE: Florida

CONTRACTOR: Great Lakes Dredge & Dock Company, LLC

LOCATION OF WORK: AS 4 & 38, River Station 443+50, northbound

CHARACTER OF WORK: [ ] Maintenance [X] New

DISPOSAL AREA OR REHANDLING BASIN: National Park Disposal Area

LENGTH OF DISCHARGE OF PIPELINE: Total Length 17,130 Ft.
Pontoon 4480. Shore 450 Submerged 12,200

CHARACTER OF MATERIAL AND PERCENTAGE OF EACH: Sand, Mud, & Gravel

AVERAGE DEPTH (Feet and Tenths)
Before Dredging: 30.0' After Dredging: 38.0' Payment Depth: 45+1

WEATHER: Temp 58-68F; Wind 2-5 mph; Precip 0.0 in.

NUMBER OF MEN: 60

MAN HOURS: 720

MAN HOURS TO DATE: 30456

WORK PERFORMED

ITEM	UNIT	AMOUNT GROSS	AMOUNT NET
Av. Width of cut	Feet		306
Area dredged	Sq. Ft.		122,790
Distance advanced this period	Feet		401
Distance advanced previously	Feet		361
Distance advanced to date	Feet		21,904
Amt. dredged this period	Cu. Yds.	39007	38952
Amt. dredged previously	Cu. Yds.	45500	45000
Total amt. dredged to date	Cu. Yds.	419,756	297,150

ITEM	NAME	HOURS
DREDGE	Florida	24
Tugboat	Bobby A	24
Tugboat	RL Enterkin	24
Tugboat	Pelican State	24
Tugboat	Layla Renee	24
Crew Boat	Cooper River	24
Survey Boat	Pearl River	12
Anchor Barge	GL 107	24
Booster	Reggie	0
Derrick	GL 66	12

COMMODITIES CONSUMED

ITEM	UNIT	QUANTITY
Fuel Oil	Gals.	9,459
Lubricants	Gals.	
Lubricants	Pounds	
Water	Gals.	

DISTRIBUTION OF TIME

EFFECTIVE WORKING TIME	HOURS	MINUTES
Dredging	13	40
Percentage of total time	57%	
NON- EFFECTIVE TIME		
Handling pipelines	1	25
Handling swinging lines	1	
Clearing pump and pipe line	3	35
Clearing cutter or suction head	3	10
Changing location of plant on job		
Loss due to opposing natural elements <8hr		
Loss due to opposing natural elements >8hr		
Loss due to passing vessels		
Minor operating repairs <4hr	1	10
Secure for weekend		
Miscellaneous (Explain in remarks)		
Off Contract		
Total Non-effective Time	10	20
LOST TIME NOT CHARGEABLE		
Loss due to repairs >4hr		
Loss due to laying / relaying submerged line		
Lay time off shift		
Sundays and Holidays		
Waiting for equipment plant		
Collisions		
TOTAL TIME IN PERIOD	24	0

No. of Supervisory Inspections: 2 By field personnel 2 By office personnel

Remarks: The Dredge Florida continued dredging operations at station 443+36 and dug in cut #14 to station 439+35. Repairs delay due to work on the main pump. Dredging top lift. Dredge will eventually set back for second lift.

DAILY REPORT OF OPERATIONS

CONTRACT NO.: W912BU-12-C-0034 | Date: 10/24/12 | Report # 46

DREDGE: Florida

CONTRACTOR: Great Lakes Dredge & Dock Company, LLC

LOCATION OF WORK: AS 4, 5, 38 & 39, River Station 439+50, northbound

CHARACTER OF WORK: [ ] Maintenance [X] New

DISPOSAL AREA OR REHANDLING BASIN: National Park Disposal Area

LENGTH OF DISCHARGE OF PIPELINE: Total Length 15,130 Ft.
Pontoon 2480. Shore 450 Submerged 12,200

CHARACTER OF MATERIAL AND PERCENTAGE OF EACH: Sand, Mud, & Gravel

AVERAGE DEPTH (Feet and Tenths)
Before Dredging: 38.0' After Dredging: 46.0' Payment Depth: 45+1

WEATHER: Temp 61-69F; Wind 5-13 mph; Precip 0.0 in.

NUMBER OF MEN: 60

MAN HOURS: 720

MAN HOURS TO DATE: 31176

WORK PERFORMED

ITEM	UNIT	AMOUNT GROSS	AMOUNT NET
Av. Width of cut	Feet		184
Area dredged	Sq. Ft.		129,397
Distance advanced this period	Feet		704
Distance advanced previously	Feet		401
Distance advanced to date	Feet		22,608
Amt. dredged this period	Cu. Yds.	26500	22000
Amt. dredged previously	Cu. Yds.	39007	38952
Total amt. dredged to date	Cu. Yds.	446,456	319,150

ITEM	NAME	HOURS
DREDGE	Florida	24
Tugboat	Bobby Ann	24
Tugboat	RL Enterkin	24
Tugboat	Pelican State	24
Tugboat	Layla Renee	24
Crew Boat	Cooper River	24
Survey Boat	Pearl River	12
Anchor Barge	GL 107	24
Booster	Reggie	0
Derrick	GL 66	12

COMMODITIES CONSUMED

ITEM	UNIT	QUANTITY
Fuel Oil	Gals.	13,636
Lubricants	Gals.	
Lubricants	Pounds	
Water	Gals.	

DISTRIBUTION OF TIME

EFFECTIVE WORKING TIME	HOURS	MINUTES
Dredging	10	50
Percentage of total time	45%	
NON- EFFECTIVE TIME		
Handling pipelines		30
Handling swinging lines	1	
Clearing pump and pipe line	4	20
Clearing cutter or suction head	3	35
Changing location of plant on job	1	40
Loss due to opposing natural elements <8hr		
Loss due to opposing natural elements >8hr		
Loss due to passing vessels		10
Minor operating repairs <4hr	1	35
Secure for weekend		
Miscellaneous (Explain in remarks)		20
Off Contract		
Total Non-effective Time	13	10
LOST TIME NOT CHARGEABLE		
Loss due to repairs >4hr		
Loss due to laying / relaying submerged line		
Lay time off shift		
Sundays and Holidays		
Waiting for equipment plant		
Collisions		
TOTAL TIME IN PERIOD	24	0

No. of Supervisory Inspections: 2 By field personnel 2 By office personnel

Remarks: The Dredge Florida continued dredging operations at station 439+35 and dug in cut #14 to station 438+28. The dredge moved back to station 459+26 and dug in cut #13 & 14 to station 453+29. Repairs delay due to work on the ladder pump, wires, and engine room. Misc delay due to grease and check equipment. Finished dredging top lift. Dredge set back for bottom lift.

DAILY REPORT OF OPERATIONS

CONTRACT NO.: W912BU-12-C-0034 | Date: 10/25/12 | Report # 47

DREDGE: Florida

CONTRACTOR: Great Lakes Dredge & Dock Company, LLC

LOCATION OF WORK: AS 5 & 39, River Station 453+70, northbound

CHARACTER OF WORK: [ ] Maintenance [X] New

DISPOSAL AREA OR REHANDLING BASIN: National Park Disposal Area

LENGTH OF DISCHARGE OF PIPELINE: Total Length 15,550 Ft.
Pontoon 2980. Shore 370 Submerged 12,200

CHARACTER OF MATERIAL AND PERCENTAGE OF EACH: Sand, Mud, & Gravel

AVERAGE DEPTH (Feet and Tenths)
Before Dredging: 38.0' After Dredging: 46.0' Payment Depth: 45+1

WEATHER: Temp 60-62F; Wind 6-8 mph; Precip 0.0 in.

NUMBER OF MEN: 60

MAN HOURS: 720

MAN HOURS TO DATE: 31896

WORK PERFORMED

ITEM	UNIT	AMOUNT GROSS	AMOUNT NET
Av. Width of cut	Feet		203
Area dredged	Sq. Ft.		101,541
Distance advanced this period	Feet		501
Distance advanced previously	Feet		704
Distance advanced to date	Feet		23,109
Amt. dredged this period	Cu. Yds.	21800	17300
Amt. dredged previously	Cu. Yds.	26500	22000
Total amt. dredged to date	Cu. Yds.	468,256	336,450

ITEM	NAME	HOURS
DREDGE	Florida	24
Tugboat	Bobby Ann	24
Tugboat	RL Enterkin	24
Tugboat	Pelican State	24
Tugboat	Layla Renee	24
Crew Boat	Cooper River	24
Survey Boat	Pearl River	12
Anchor Barge	GL 107	24
Booster	Reggie	0
Derrick	GL 66	12

COMMODITIES CONSUMED

ITEM	UNIT	QUANTITY
Fuel Oil	Gals.	9,211
Lubricants	Gals.	
Lubricants	Pounds	
Water	Gals.	

DISTRIBUTION OF TIME

EFFECTIVE WORKING TIME	HOURS	MINUTES
Dredging	11	10
Percentage of total time	47%	
NON- EFFECTIVE TIME		
Handling pipelines	1	5
Handling swinging lines	1	10
Clearing pump and pipe line	3	10
Clearing cutter or suction head	3	5
Changing location of plant on job		30
Loss due to opposing natural elements <8hr		
Loss due to opposing natural elements >8hr		
Loss due to passing vessels		
Minor operating repairs <4hr	3	50
Secure for weekend		
Miscellaneous (Explain in remarks)		
Off Contract		
Total Non-effective Time	12	50
LOST TIME NOT CHARGEABLE		
Loss due to repairs >4hr		
Loss due to laying / relaying submerged line		
Lay time off shift		
Sundays and Holidays		
Waiting for equipment plant		
Collisions		
TOTAL TIME IN PERIOD	24	0

No. of Supervisory Inspections: 2 By field personnel 2 By office personnel

Remarks: The Dredge Florida continued dredging operations at station 453+29 and dug in cut #14 to station 451+38. Repairs delay due to work on the suction mouth. Continued dredging bottom lift.

DAILY REPORT OF OPERATIONS

CONTRACT NO.: W912BU-12-C-0034 | Date: 10/26/12 | Report # 48

DREDGE: Florida

CONTRACTOR: Great Lakes Dredge & Dock Company, LLC

LOCATION OF WORK: AS 5 & 39, River Station 448+43, northbound

CHARACTER OF WORK: [ ] Maintenance [X] New

DISPOSAL AREA OR REHANDLING BASIN: National Park Disposal Area

LENGTH OF DISCHARGE OF PIPELINE: Total Length 15,550 Ft.
Pontoon 2980. Shore 370 Submerged 12,200

CHARACTER OF MATERIAL AND PERCENTAGE OF EACH: Sand, Silt, & Gravel

AVERAGE DEPTH (Feet and Tenths)
Before Dredging: 39.0' After Dredging: 45.0' Payment Depth: 45+1

WEATHER: Temp 58-68F; Wind 2-5 mph; Precip 0.0 in.

NUMBER OF MEN: 60

MAN HOURS: 720

MAN HOURS TO DATE: 31,176

WORK PERFORMED

ITEM	UNIT	AMOUNT GROSS	AMOUNT NET
Av. Width of cut	Feet		268
Area dredged	Sq. Ft.		123,162
Distance advanced this period	Feet		459
Distance advanced previously	Feet		501
Distance advanced to date	Feet		22,363
Amt. dredged this period	Cu. Yds.	26700	19600
Amt. dredged previously	Cu. Yds.	39007	38952
Total amt. dredged to date	Cu. Yds.	494,956	356,050

ITEM	NAME	HOURS
DREDGE	Florida	24
Tugboat	Bobby A	24
Tugboat	RL Enterkin	24
Tugboat	Pelican State	24
Tugboat	Layla Renee	24
Crew Boat	Cooper River	24
Survey Boat	Pearl River	12
Anchor Barge	GL 107	24
Booster	Reggie	0
Derrick	GL 66	12

COMMODITIES CONSUMED

ITEM	UNIT	QUANTITY
Fuel Oil	Gals.	8,602
Lubricants	Gals.	
Lubricants	Pounds	
Water	Gals.	

DISTRIBUTION OF TIME

EFFECTIVE WORKING TIME	HOURS	MINUTES
Dredging	13	30
Percentage of total time	57%	
NON- EFFECTIVE TIME		
Handling pipelines		55
Handling swinging lines		20
Clearing pump and pipe line	4	30
Clearing cutter or suction head	4	10
Changing location of plant on job		35
Loss due to opposing natural elements <8hr		
Loss due to opposing natural elements >8hr		
Loss due to passing vessels		
Minor operating repairs <4hr		
Secure for weekend		
Miscellaneous (Explain in remarks)		
Off Contract		
Total Non-effective Time	10	30
LOST TIME NOT CHARGEABLE		
Loss due to repairs >4hr		
Loss due to laying / relaying submerged line		
Lay time off shift		
Sundays and Holidays		
Waiting for equipment plant		
Collisions		
TOTAL TIME IN PERIOD	24	0

No. of Supervisory Inspections: 2 By field personnel 2 By office personnel

Remarks: The Dredge Florida continued dredging operations at station 451+58 and dug in cut #14 to station 448+43. Majority of the down time was to clean debris from pump and cutter.

DAILY REPORT OF OPERATIONS

CONTRACT NO.: W912BU-12-C-0034 | Date: 10/27/12 | Report # 49

DREDGE: Florida

CONTRACTOR: Great Lakes Dredge & Dock Company, LLC

LOCATION OF WORK: AS 5 & 39, River Station 447+09, northbound

CHARACTER OF WORK: [ ] Maintenance [X] New

DISPOSAL AREA OR REHANDLING BASIN: National Park Disposal Area

LENGTH OF DISCHARGE OF PIPELINE: Total Length 15,550 Ft.
Pontoon 2980. Shore 370 Submerged 12,200

CHARACTER OF MATERIAL AND PERCENTAGE OF EACH: Sand, Silt, & Gravel

AVERAGE DEPTH (Feet and Tenths)
Before Dredging: 39.0' After Dredging: 45.0' Payment Depth: 45+1

WEATHER: Temp 57-64F; Wind 7-13 mph; Precip 0.0 in.

NUMBER OF MEN: 60

MAN HOURS: 720

MAN HOURS TO DATE: 31,896

WORK PERFORMED

ITEM	UNIT	AMOUNT GROSS	AMOUNT NET
Av. Width of cut	Feet		210
Area dredged	Sq. Ft.		71,854
Distance advanced this period	Feet		342
Distance advanced previously	Feet		459
Distance advanced to date	Feet		22,705
Amt. dredged this period	Cu. Yds.	16500	14300
Amt. dredged previously	Cu. Yds.	26700	19600
Total amt. dredged to date	Cu. Yds.	511,456	370,350

ITEM	NAME	HOURS
DREDGE	Florida	24
Tugboat	Bobby A	24
Tugboat	RL Enterkin	24
Tugboat	Pelican State	24
Tugboat	Layla Renee	24
Crew Boat	Cooper River	24
Survey Boat	Pearl River	12
Anchor Barge	GL 107	24
Booster	Reggie	0
Derrick	GL 66	12

COMMODITIES CONSUMED

ITEM	UNIT	QUANTITY
Fuel Oil	Gals.	7,717
Lubricants	Gals.	
Lubricants	Pounds	
Water	Gals.	

DISTRIBUTION OF TIME

EFFECTIVE WORKING TIME	HOURS	MINUTES
Dredging	8	0
Percentage of total time	33%	
NON- EFFECTIVE TIME		
Handling pipelines	1	5
Handling swinging lines		20
Clearing pump and pipe line	2	55
Clearing cutter or suction head	3	15
Changing location of plant on job		20
Loss due to opposing natural elements <8hr		
Loss due to opposing natural elements >8hr		
Loss due to passing vessels		20
Minor operating repairs <4hr		45
Secure for weekend		
Miscellaneous (Explain in remarks)	7	0
Off Contract		
Total Non-effective Time	16	0
LOST TIME NOT CHARGEABLE		
Loss due to repairs >4hr		
Loss due to laying / relaying submerged line		
Lay time off shift		
Sundays and Holidays		
Waiting for equipment plant		
Collisions		
TOTAL TIME IN PERIOD	24	0

No. of Supervisory Inspections: 2 By field personnel 2 By office personnel

Remarks: The Dredge Florida continued dredging operations at station 448+44 and dug in cut #14 to station 447+09. Majority of the down time was as a result of removing the booster Reggie from the line (7 hours.), cleaning debris from pump and cutter.

DAILY REPORT OF OPERATIONS

CONTRACT NO.: W912BU-12-C-0034 | Date: 10/28/12 | Report # 50

DREDGE: Florida

CONTRACTOR: Great Lakes Dredge & Dock Company, LLC

LOCATION OF WORK: AS 5 & 39, River Station 444+56, northbound

CHARACTER OF WORK: [ ] Maintenance [X] New

DISPOSAL AREA OR REHANDLING BASIN: National Park Disposal Area

LENGTH OF DISCHARGE OF PIPELINE: Total Length 15,550 Ft.
Pontoon 2980. Shore 370 Submerged 14,200

CHARACTER OF MATERIAL AND PERCENTAGE OF EACH: Sand, Silt, & Gravel

AVERAGE DEPTH (Feet and Tenths)
Before Dredging: 39.0' After Dredging: 45.0' Payment Depth: 45+1

WEATHER: Temp 53-57F; Wind 12-20 mph; Precip 0.0 in.

NUMBER OF MEN: 60

MAN HOURS: 720

MAN HOURS TO DATE: 32,616

WORK PERFORMED

ITEM	UNIT	AMOUNT GROSS	AMOUNT NET
Av. Width of cut	Feet		494
Area dredged	Sq. Ft.		124,879
Distance advanced this period	Feet		253
Distance advanced previously	Feet		342
Distance advanced to date	Feet		23,047
Amt. dredged this period	Cu. Yds.	27800	23900
Amt. dredged previously	Cu. Yds.	16500	14300
Total amt. dredged to date	Cu. Yds.	539,256	394,250

ITEM	NAME	HOURS
DREDGE	Florida	24
Tugboat	Bobby A	24
Tugboat	RL Enterkin	24
Tugboat	Pelican State	24
Tugboat	Layla Renee	24
Crew Boat	Cooper River	24
Survey Boat	Pearl River	12
Anchor Barge	GL 107	24
Booster	Reggie	0
Derrick	GL 66	12

COMMODITIES CONSUMED

ITEM	UNIT	QUANTITY
Fuel Oil	Gals.	11,243
Lubricants	Gals.	
Lubricants	Pounds	
Water	Gals.	

DISTRIBUTION OF TIME

EFFECTIVE WORKING TIME	HOURS	MINUTES
Dredging	11	25
Percentage of total time	45%	
NON- EFFECTIVE TIME		
Handling pipelines	4	10
Handling swinging lines		40
Clearing pump and pipe line	2	10
Clearing cutter or suction head	5	35
Changing location of plant on job		
Loss due to opposing natural elements <8hr		
Loss due to opposing natural elements >8hr		
Loss due to passing vessels		
Minor operating repairs <4hr		
Secure for weekend		
Miscellaneous (Explain in remarks)		
Off Contract		
Total Non-effective Time	12	35
LOST TIME NOT CHARGEABLE		
Loss due to repairs >4hr		
Loss due to laying / relaying submerged line		
Lay time off shift		
Sundays and Holidays		
Waiting for equipment plant		
Collisions		
TOTAL TIME IN PERIOD	24	0

No. of Supervisory Inspections: 2 By field personnel 2 By office personnel

Remarks: The Dredge Florida continued dredging operations at station 447+09 and dug to 444+56. Downtime was to add subline, clean pumps and cutter of debris (7 Hrs. 45 min)

DAILY REPORT OF OPERATIONS

CONTRACT NO.: W912BU-12-C-0034 | Date: 10/29/12 | Report # 51

DREDGE: Florida

CONTRACTOR: Great Lakes Dredge & Dock Company, LLC

LOCATION OF WORK: AS 5 & 39, River Station 442+92, northbound

CHARACTER OF WORK: [ ] Maintenance [X] New

DISPOSAL AREA OR REHANDLING BASIN: National Park Disposal Area

LENGTH OF DISCHARGE OF PIPELINE: Total Length 15,550 Ft.
Pontoon 2980. Shore 370 Submerged 14,200

CHARACTER OF MATERIAL AND PERCENTAGE OF EACH: Sand, Silt, & Gravel

AVERAGE DEPTH (Feet and Tenths)
Before Dredging: 39.0' After Dredging: 45.0' Payment Depth: 45+1

WEATHER: Temp 51-62F; Wind 26-47 mph; Precip 2.5 in.

NUMBER OF MEN: 60

MAN HOURS: 720

MAN HOURS TO DATE: 33,336

WORK PERFORMED

ITEM	UNIT	AMOUNT GROSS	AMOUNT NET
Av. Width of cut	Feet		466
Area dredged	Sq. Ft.		76,461
Distance advanced this period	Feet		164
Distance advanced previously	Feet		253
Distance advanced to date	Feet		23,211
Amt. dredged this period	Cu. Yds.	17600	15100
Amt. dredged previously	Cu. Yds.	27800	23900
Total amt. dredged to date	Cu. Yds.	556,856	409,350

ITEM	NAME	HOURS
DREDGE	Florida	24
Tugboat	Bobby A	24
Tugboat	RL Enterkin	24
Tugboat	Pelican State	24
Tugboat	Layla Renee	24
Crew Boat	Cooper River	24
Survey Boat	Pearl River	12
Anchor Barge	GL 107	24
Booster	Reggie	0
Derrick	GL 66	12

COMMODITIES CONSUMED

ITEM	UNIT	QUANTITY
Fuel Oil	Gals.	4,692
Lubricants	Gals.	
Lubricants	Pounds	
Water	Gals.	

DISTRIBUTION OF TIME

EFFECTIVE WORKING TIME	HOURS	MINUTES
Dredging	6	5
Percentage of total time	25%	
NON- EFFECTIVE TIME		
Handling pipelines		
Handling swinging lines		35
Clearing pump and pipe line	3	20
Clearing cutter or suction head	3	10
Changing location of plant on job		
Loss due to opposing natural elements <8hr		
Loss due to opposing natural elements >8hr	10	50
Loss due to passing vessels		
Minor operating repairs <4hr		
Secure for weekend		
Miscellaneous (Explain in remarks)		
Off Contract		
Total Non-effective Time	17	55
LOST TIME NOT CHARGEABLE		
Loss due to repairs >4hr		
Loss due to laying / relaying submerged line		
Lay time off shift		
Sundays and Holidays		
Waiting for equipment plant		
Collisions		
TOTAL TIME IN PERIOD	24	0

No. of Supervisory Inspections: 2 By field personnel 2 By office personnel

Remarks: The Dredge Florida continued dredging operations at station 444+56 and dug to 442+92. Downtime to clean pumps and cutter of debris (6 Hrs. 30 min). Operations with suspended at 1310 hours due to Hurricane Sandy.

DAILY REPORT OF OPERATIONS

CONTRACT NO.: W912BU-12-C-0034 | Date: 10/30/12 | Report # 52

DREDGE: Florida

CONTRACTOR: Great Lakes Dredge & Dock Company, LLC

LOCATION OF WORK: AS 4 & 38, River Station 443+90, northbound

CHARACTER OF WORK: [ ] Maintenance [X] New

DISPOSAL AREA OR REHANDLING BASIN: National Park Disposal Area

LENGTH OF DISCHARGE OF PIPELINE: Total Length 16,810 Ft.
Pontoon 2240. Shore 370 Submerged 14,200

CHARACTER OF MATERIAL AND PERCENTAGE OF EACH: Sand, Mud, & Gravel

AVERAGE DEPTH (Feet and Tenths)
Before Dredging: 39.0' After Dredging: 46.0' Payment Depth: 45+1

WEATHER: Temp 46-50F; Wind 12-30 mph; Precip 1.5 in.

NUMBER OF MEN: 60

MAN HOURS: 720

MAN HOURS TO DATE: 34056

WORK PERFORMED

ITEM	UNIT	AMOUNT GROSS	AMOUNT NET
Av. Width of cut	Feet		538
Area dredged	Sq. Ft.		81,280
Distance advanced this period	Feet		151
Distance advanced previously	Feet		164
Distance advanced to date	Feet		23,362
Amt. dredged this period	Cu. Yds.	18000	15400
Amt. dredged previously	Cu. Yds.	17600	15100
Total amt. dredged to date	Cu. Yds.	559,295	447,258

ITEM	NAME	HOURS
DREDGE	Florida	24
Tugboat	Bobby A	24
Tugboat	RL Enterkin	24
Tugboat	Pelican State	24
Tugboat	Layla Renee	24
Crew Boat	Cooper River	24
Survey Boat	Pearl River	12
Anchor Barge	GL 107	24
Booster	Reggie	0
Derrick	GL 66	12

COMMODITIES CONSUMED

ITEM	UNIT	QUANTITY
Fuel Oil	Gals.	9,284
Lubricants	Gals.	
Lubricants	Pounds	
Water	Gals.	

DISTRIBUTION OF TIME

EFFECTIVE WORKING TIME	HOURS	MINUTES
Dredging	6	30
Percentage of total time	27%	
NON- EFFECTIVE TIME		
Handling pipelines		
Handling swinging lines		
Clearing pump and pipe line	3	5
Clearing cutter or suction head	1	40
Changing location of plant on job		
Loss due to opposing natural elements <8hr		
Loss due to opposing natural elements >8hr	10	40
Loss due to passing vessels		
Minor operating repairs <4hr	2	5
Secure for weekend		
Miscellaneous (Explain in remarks)		
Off Contract		
Total Non-effective Time	17	30
LOST TIME NOT CHARGEABLE		
Loss due to repairs >4hr		
Loss due to laying / relaying submerged line		
Lay time off shift		
Sundays and Holidays		
Waiting for equipment plant		
Collisions		
TOTAL TIME IN PERIOD	24	0

No. of Supervisory Inspections: 2 By field personnel 2 By office personnel

Remarks: The Dredge Florida continued dredging operations at station 443+07 and dug in cut #14 to station 441+56. Repairs delay due to work on cutter motor gear box. Operations remained suspended until 1040 hrs due to Hurricane Sandy. Continued dredging bottom lift.

DAILY REPORT OF OPERATIONS

CONTRACT NO.: W912BU-12-C-0034 | Date: 10/31/12 | Report # 53

DREDGE: Florida

CONTRACTOR: Great Lakes Dredge & Dock Company, LLC

LOCATION OF WORK: AS 4 & 38, River Station 441+20, northbound

CHARACTER OF WORK: [ ] Maintenance [X] New

DISPOSAL AREA OR REHANDLING BASIN: National Park Disposal Area

LENGTH OF DISCHARGE OF PIPELINE: Total Length 17,210 Ft.
Pontoon 2640. Shore 370 Submerged 14,200

CHARACTER OF MATERIAL AND PERCENTAGE OF EACH: Sand, Mud, & Gravel

AVERAGE DEPTH (Feet and Tenths)
Before Dredging: 39.0' After Dredging: 46.0' Payment Depth: 45+1

WEATHER: Temp 45-48F; Wind 5-13 mph; Precip 0 in.

NUMBER OF MEN: 60

MAN HOURS: 720

MAN HOURS TO DATE: 34776

WORK PERFORMED

ITEM	UNIT	AMOUNT GROSS	AMOUNT NET
Av. Width of cut	Feet		365
Area dredged	Sq. Ft.		161,373
Distance advanced this period	Feet		442
Distance advanced previously	Feet		151
Distance advanced to date	Feet		23,804
Amt. dredged this period	Cu. Yds.	38524	28431
Amt. dredged previously	Cu. Yds.	18000	15400
Total amt. dredged to date	Cu. Yds.	597,819	475,689

ITEM	NAME	HOURS
DREDGE	Florida	24
Tugboat	Bobby A	24
Tugboat	RL Enterkin	24
Tugboat	Pelican State	24
Tugboat	Layla Renee	24
Crew Boat	Cooper River	24
Survey Boat	Pearl River	12
Anchor Barge	GL 107	24
Booster	Reggie	0
Derrick	GL 66	12

COMMODITIES CONSUMED

ITEM	UNIT	QUANTITY
Fuel Oil	Gals.	12,815
Lubricants	Gals.	
Lubricants	Pounds	
Water	Gals.	

DISTRIBUTION OF TIME

EFFECTIVE WORKING TIME	HOURS	MINUTES
Dredging	16	20
Percentage of total time	68%	
NON- EFFECTIVE TIME		
Handling pipelines		40
Handling swinging lines		40
Clearing pump and pipe line	1	40
Clearing cutter or suction head	2	40
Changing location of plant on job		
Loss due to opposing natural elements <8hr		
Loss due to opposing natural elements >8hr		
Loss due to passing vessels	1	10
Minor operating repairs <4hr		
Secure for weekend		
Miscellaneous (Explain in remarks)		50
Off Contract		
Total Non-effective Time	7	40
LOST TIME NOT CHARGEABLE		
Loss due to repairs >4hr		
Loss due to laying / relaying submerged line		
Lay time off shift		
Sundays and Holidays		
Waiting for equipment plant		
Collisions		
TOTAL TIME IN PERIOD	24	0

No. of Supervisory Inspections: 2 By field personnel 2 By office personnel

Remarks: The Dredge Florida continued dredging operations at station 441+56 and dug in cut #14 to station 436+95. Continued dredging bottom lift. Misc delay due to cleaning strainers on service pump.

DAILY REPORT OF OPERATIONS

CONTRACT NO.: W912BU-12-C-0034 | Date: 11/1/12 | Report # 54

DREDGE: Florida

CONTRACTOR: Great Lakes Dredge & Dock Company, LLC

LOCATION OF WORK: AS 4 & 38, River Station 437+00, northbound

CHARACTER OF WORK: [ ] Maintenance [X] New

DISPOSAL AREA OR REHANDLING BASIN: National Park Disposal Area

LENGTH OF DISCHARGE OF PIPELINE: Total Length 17,210 Ft.
Pontoon 2640. Shore 370 Submerged 14,200

CHARACTER OF MATERIAL AND PERCENTAGE OF EACH: Sand, Mud, & Gravel

AVERAGE DEPTH (Feet and Tenths)
Before Dredging: 39.0' After Dredging: 46.0' Payment Depth: 45+1

WEATHER: Temp 46-51F; Wind 7-15 mph; Precip 0 in.

NUMBER OF MEN: 60

MAN HOURS: 720

MAN HOURS TO DATE: 35496

WORK PERFORMED

ITEM	UNIT	AMOUNT GROSS	AMOUNT NET
Av. Width of cut	Feet		275
Area dredged	Sq. Ft.		70,217
Distance advanced this period	Feet		255
Distance advanced previously	Feet		442
Distance advanced to date	Feet		24,059
Amt. dredged this period	Cu. Yds.	29388	18486
Amt. dredged previously	Cu. Yds.	38524	28431
Total amt. dredged to date	Cu. Yds.	627,207	494,175

ITEM	NAME	HOURS
DREDGE	Florida	24
Tugboat	Bobby A	24
Tugboat	RL Enterkin	24
Tugboat	Pelican State	24
Tugboat	Layla Renee	24
Crew Boat	Cooper River	24
Survey Boat	Pearl River	12
Anchor Barge	GL 107	24
Booster	Reggie	0
Derrick	GL 66	12

COMMODITIES CONSUMED

ITEM	UNIT	QUANTITY
Fuel Oil	Gals.	13,229
Lubricants	Gals.	
Lubricants	Pounds	
Water	Gals.	

DISTRIBUTION OF TIME

EFFECTIVE WORKING TIME	HOURS	MINUTES
Dredging	14	10
Percentage of total time	59%	
NON- EFFECTIVE TIME		
Handling pipelines		
Handling swinging lines		30
Clearing pump and pipe line	2	55
Clearing cutter or suction head	6	
Changing location of plant on job		
Loss due to opposing natural elements <8hr		
Loss due to opposing natural elements >8hr		
Loss due to passing vessels		
Minor operating repairs <4hr		
Secure for weekend		
Miscellaneous (Explain in remarks)		25
Off Contract		
Total Non-effective Time	9	50
LOST TIME NOT CHARGEABLE		
Loss due to repairs >4hr		
Loss due to laying / relaying submerged line		
Lay time off shift		
Sundays and Holidays		
Waiting for equipment plant		
Collisions		
TOTAL TIME IN PERIOD	24	0

No. of Supervisory Inspections: 2 By field personnel 2 By office personnel

Remarks: The Dredge Florida continued dredging operations at station 435+20 and dug in cut #16 to station 432+66. Misc delay due to work on the disposal area.

DAILY REPORT OF OPERATIONS

CONTRACT NO.: W912BU-12-C-0034 | Date: 11/2/12 | Report # 55

DREDGE: Florida

CONTRACTOR: Great Lakes Dredge & Dock Company, LLC

LOCATION OF WORK: AS 4 & 38, River Station 435+00, northbound

CHARACTER OF WORK: [ ] Maintenance [X] New

DISPOSAL AREA OR REHANDLING BASIN: National Park Disposal Area

LENGTH OF DISCHARGE OF PIPELINE: Total Length 17,610 Ft.
Pontoon 3040. Shore 370 Submerged 14,200

CHARACTER OF MATERIAL AND PERCENTAGE OF EACH: Sand, Mud, & Gravel

AVERAGE DEPTH (Feet and Tenths)
Before Dredging: 40.0' After Dredging: 46.0' Payment Depth: 45+1

WEATHER: Temp 47-52F; Wind 11-16 mph; Precip 0 in.

NUMBER OF MEN: 60

MAN HOURS: 720

MAN HOURS TO DATE: 36216

WORK PERFORMED

ITEM	UNIT	AMOUNT GROSS	AMOUNT NET
Av. Width of cut	Feet		393
Area dredged	Sq. Ft.		100,167
Distance advanced this period	Feet		255
Distance advanced previously	Feet		255
Distance advanced to date	Feet		24,314
Amt. dredged this period	Cu. Yds.	27107	17358
Amt. dredged previously	Cu. Yds.	29388	18486
Total amt. dredged to date	Cu. Yds.	654,314	511,533

ITEM	NAME	HOURS
DREDGE	Florida	24
Tugboat	Bobby A	24
Tugboat	RL Enterkin	24
Tugboat	Pelican State	24
Tugboat	Layla Renee	24
Crew Boat	Cooper River	24
Survey Boat	Pearl River	12
Anchor Barge	GL 107	24
Booster	Reggie	0
Derrick	GL 66	12

COMMODITIES CONSUMED

ITEM	UNIT	QUANTITY
Fuel Oil	Gals.	9,758
Lubricants	Gals.	
Lubricants	Pounds	
Water	Gals.	

DISTRIBUTION OF TIME

EFFECTIVE WORKING TIME	HOURS	MINUTES
Dredging	12	10
Percentage of total time	51%	
NON- EFFECTIVE TIME		
Handling pipelines		45
Handling swinging lines		10
Clearing pump and pipe line	4	
Clearing cutter or suction head	5	55
Changing location of plant on job		
Loss due to opposing natural elements <8hr		
Loss due to opposing natural elements >8hr		
Loss due to passing vessels	1	
Minor operating repairs <4hr		
Secure for weekend		
Miscellaneous (Explain in remarks)		
Off Contract		
Total Non-effective Time	11	50
LOST TIME NOT CHARGEABLE		
Loss due to repairs >4hr		
Loss due to laying / relaying submerged line		
Lay time off shift		
Sundays and Holidays		
Waiting for equipment plant		
Collisions		
TOTAL TIME IN PERIOD	24	0

No. of Supervisory Inspections: 2 By field personnel 2 By office personnel

Remarks: The Dredge Florida continued dredging operations at station 432+92 and dug in cut #16 to station 430+37. The cutter required cleaning on five occasions.

DAILY REPORT OF OPERATIONS

CONTRACT NO.: W912BU-12-C-0034 | Date: 11/3/12 | Report # 56

DREDGE: Florida

CONTRACTOR: Great Lakes Dredge & Dock Company, LLC

LOCATION OF WORK: AS 4 & 38, River Station 430+00, northbound

CHARACTER OF WORK: [ ] Maintenance [X] New

DISPOSAL AREA OR REHANDLING BASIN: National Park Disposal Area

LENGTH OF DISCHARGE OF PIPELINE: Total Length 17,610 Ft.
Pontoon 3040. Shore 370 Submerged 14,200

CHARACTER OF MATERIAL AND PERCENTAGE OF EACH: Sand, Mud, & Gravel

AVERAGE DEPTH (Feet and Tenths)
Before Dredging: 40.0' After Dredging: 46.0' Payment Depth: 45+1

WEATHER: Temp 45-48F; Wind 11-20 mph; Precip 0 in.

NUMBER OF MEN: 60

MAN HOURS: 720

MAN HOURS TO DATE: 36936

WORK PERFORMED

ITEM	UNIT	AMOUNT GROSS	AMOUNT NET
Av. Width of cut	Feet		375
Area dredged	Sq. Ft.		120,159
Distance advanced this period	Feet		320
Distance advanced previously	Feet		255
Distance advanced to date	Feet		24,634
Amt. dredged this period	Cu. Yds.	31359	21968
Amt. dredged previously	Cu. Yds.	27107	17358
Total amt. dredged to date	Cu. Yds.	685,673	533,501

ITEM	NAME	HOURS
DREDGE	Florida	24
Tugboat	Bobby A	24
Tugboat	RL Enterkin	24
Tugboat	Pelican State	24
Tugboat	Layla Renee	24
Crew Boat	Cooper River	24
Survey Boat	Pearl River	12
Anchor Barge	GL 107	24
Booster	Reggie	0
Derrick	GL 66	12

COMMODITIES CONSUMED

ITEM	UNIT	QUANTITY
Fuel Oil	Gals.	6,808
Lubricants	Gals.	
Lubricants	Pounds	
Water	Gals.	

DISTRIBUTION OF TIME

EFFECTIVE WORKING TIME	HOURS	MINUTES
Dredging	16	
Percentage of total time	67%	
NON- EFFECTIVE TIME		
Handling pipelines		
Handling swinging lines		45
Clearing pump and pipe line	3	5
Clearing cutter or suction head	4	
Changing location of plant on job		
Loss due to opposing natural elements <8hr		
Loss due to opposing natural elements >8hr		
Loss due to passing vessels		
Minor operating repairs <4hr		
Secure for weekend		
Miscellaneous (Explain in remarks)		10
Off Contract		
Total Non-effective Time	8	
LOST TIME NOT CHARGEABLE		
Loss due to repairs >4hr		
Loss due to laying / relaying submerged line		
Lay time off shift		
Sundays and Holidays		
Waiting for equipment plant		
Collisions		
TOTAL TIME IN PERIOD	24	0

No. of Supervisory Inspections: 2 By field personnel 2 By office personnel

Remarks: The Dredge Florida continued dredging operations at station 430+60 and dug in cut #16 to station 427+40.

DAILY REPORT OF OPERATIONS

CONTRACT NO.: W912BU-12-C-0034 | Date: 11/4/12 | Report # 57

DREDGE: Florida

CONTRACTOR: Great Lakes Dredge & Dock Company, LLC

LOCATION OF WORK: AS 4 & 38, River Station 426+80, northbound

CHARACTER OF WORK: [ ] Maintenance [X] New

DISPOSAL AREA OR REHANDLING BASIN: National Park Disposal Area

LENGTH OF DISCHARGE OF PIPELINE: Total Length 18,110 Ft.
Pontoon 3540. Shore 370 Submerged 14,200

CHARACTER OF MATERIAL AND PERCENTAGE OF EACH: Sand, Mud, & Gravel

AVERAGE DEPTH (Feet and Tenths)
Before Dredging: 39.0' After Dredging: 46.0' Payment Depth: 45+1

WEATHER: Temp 40-48F; Wind 9-14 mph; Precip 0 in.

NUMBER OF MEN: 60

MAN HOURS: 720

MAN HOURS TO DATE: 37656

WORK PERFORMED

ITEM	UNIT	AMOUNT GROSS	AMOUNT NET
Av. Width of cut	Feet		165
Area dredged	Sq. Ft.		103,995
Distance advanced this period	Feet		630
Distance advanced previously	Feet		320
Distance advanced to date	Feet		25,254
Amt. dredged this period	Cu. Yds.	27940	19588
Amt. dredged previously	Cu. Yds.	31359	21968
Total amt. dredged to date	Cu. Yds.	713,613	553,089

ITEM	NAME	HOURS
DREDGE	Florida	24
Tugboat	Bobby A	24
Tugboat	RL Enterkin	24
Tugboat	Pelican State	24
Tugboat	Layla Renee	24
Crew Boat	Cooper River	24
Survey Boat	Pearl River	12
Anchor Barge	GL 107	24
Booster	Reggie	0
Derrick	GL 66	12

COMMODITIES CONSUMED

ITEM	UNIT	QUANTITY
Fuel Oil	Gals.	13,838
Lubricants	Gals.	
Lubricants	Pounds	
Water	Gals.	

DISTRIBUTION OF TIME

EFFECTIVE WORKING TIME	HOURS	MINUTES
Dredging	13	40
Percentage of total time	76%	
NON- EFFECTIVE TIME		
Handling pipelines		40
Handling swinging lines	1	45
Clearing pump and pipe line	3	55
Clearing cutter or suction head	1	50
Changing location of plant on job		
Loss due to opposing natural elements <8hr		
Loss due to opposing natural elements >8hr		
Loss due to passing vessels	1	10
Minor operating repairs <4hr	1	
Secure for weekend		
Miscellaneous (Explain in remarks)		
Off Contract		
Total Non-effective Time	10	20
LOST TIME NOT CHARGEABLE		
Loss due to repairs >4hr		
Loss due to laying / relaying submerged line		
Lay time off shift		
Sundays and Holidays		
Waiting for equipment plant		
Collisions		
TOTAL TIME IN PERIOD	24	0

No. of Supervisory Inspections: 2 By field personnel 2 By office personnel

Remarks: The Dredge Florida continued dredging operations at station 427+48 and dug in cut #16 to station 423+45. Repairs delay due to work on underwater pump.

DAILY REPORT OF OPERATIONS

CONTRACT NO.: W912BU-12-C-0034 | Date: 11/5/12 | Report # 58

DREDGE: Florida

CONTRACTOR: Great Lakes Dredge & Dock Company, LLC

LOCATION OF WORK: AS 4 & 37, River Station 423+40, northbound

CHARACTER OF WORK: [ ] Maintenance [X] New

DISPOSAL AREA OR REHANDLING BASIN: National Park Disposal Area

LENGTH OF DISCHARGE OF PIPELINE: Total Length 20,410 Ft.
Pontoon 3540. Shore 370 Submerged 16,500

CHARACTER OF MATERIAL AND PERCENTAGE OF EACH: Sand, Mud, & Gravel

AVERAGE DEPTH (Feet and Tenths)
Before Dredging: 39.0' After Dredging: 46.0' Payment Depth: 45+1

WEATHER: Temp 40-45F; Wind 11-14 mph; Precip 0 in.

NUMBER OF MEN: 60

MAN HOURS: 720

MAN HOURS TO DATE: 38376

WORK PERFORMED

ITEM	UNIT	AMOUNT GROSS	AMOUNT NET
Av. Width of cut	Feet		167
Area dredged	Sq. Ft.		89,254
Distance advanced this period	Feet		533
Distance advanced previously	Feet		630
Distance advanced to date	Feet		25,787
Amt. dredged this period	Cu. Yds.	24490	17942
Amt. dredged previously	Cu. Yds.	27940	19588
Total amt. dredged to date	Cu. Yds.	738,103	571,031

ITEM	NAME	HOURS
DREDGE	Florida	24
Tugboat	Bobby A	24
Tugboat	RL Enterkin	24
Tugboat	Pelican State	24
Tugboat	Layla Renee	24
Crew Boat	Cooper River	24
Survey Boat	Pearl River	12
Anchor Barge	GL 107	24
Booster	Reggie	0
Derrick	GL 66	12

COMMODITIES CONSUMED

ITEM	UNIT	QUANTITY
Fuel Oil	Gals.	11,702
Lubricants	Gals.	
Lubricants	Pounds	
Water	Gals.	

DISTRIBUTION OF TIME

EFFECTIVE WORKING TIME	HOURS	MINUTES
Dredging	12	15
Percentage of total time	51%	
NON- EFFECTIVE TIME		
Handling pipelines	3	
Handling swinging lines		35
Clearing pump and pipe line	2	35
Clearing cutter or suction head	3	10
Changing location of plant on job		
Loss due to opposing natural elements <8hr		
Loss due to opposing natural elements >8hr		
Loss due to passing vessels		35
Minor operating repairs <4hr	1	50
Secure for weekend		
Miscellaneous (Explain in remarks)		
Off Contract		
Total Non-effective Time	11	45
LOST TIME NOT CHARGEABLE		
Loss due to repairs >4hr		
Loss due to laying / relaying submerged line		
Lay time off shift		
Sundays and Holidays		
Waiting for equipment plant		
Collisions		
TOTAL TIME IN PERIOD	24	0

No. of Supervisory Inspections: 2 By field personnel 2 By office personnel

Remarks: The Dredge Florida continued dredging operations at station 423+35 and dug in cut #17 to station 420+84. Repairs delay due to work on the electric system.

DAILY REPORT OF OPERATIONS

CONTRACT NO.: W912BU-12-C-0034 | Date: 11/6/12 | Report # 59

DREDGE: Florida

CONTRACTOR: Great Lakes Dredge & Dock Company, LLC

LOCATION OF WORK: AS 4 & 37, River Station 421+00, northbound

CHARACTER OF WORK: [ ] Maintenance [X] New

DISPOSAL AREA OR REHANDLING BASIN: National Park Disposal Area

LENGTH OF DISCHARGE OF PIPELINE: Total Length 20,410 Ft.
Pontoon 3540. Shore 370 Submerged 16,500

CHARACTER OF MATERIAL AND PERCENTAGE OF EACH: Sand, Mud, & Gravel

AVERAGE DEPTH (Feet and Tenths)
Before Dredging: 39.0' After Dredging: 46.0' Payment Depth: 45+1

WEATHER: Temp 36-44F; Wind 7-9 mph; Precip 0 in.

NUMBER OF MEN: 60

MAN HOURS: 720

MAN HOURS TO DATE: 39096

WORK PERFORMED

ITEM	UNIT	AMOUNT GROSS	AMOUNT NET
Av. Width of cut	Feet		174
Area dredged	Sq. Ft.		97,938
Distance advanced this period	Feet		562
Distance advanced previously	Feet		533
Distance advanced to date	Feet		26,349
Amt. dredged this period	Cu. Yds.	26874	21590
Amt. dredged previously	Cu. Yds.	24490	17942
Total amt. dredged to date	Cu. Yds.	764,977	592,621

ITEM	NAME	HOURS
DREDGE	Florida	24
Tugboat	Bobby A	24
Tugboat	RL Enterkin	24
Tugboat	Pelican State	24
Tugboat	Layla Renee	24
Crew Boat	Cooper River	24
Survey Boat	Pearl River	12
Anchor Barge	GL 107	24
Booster	Reggie	0
Derrick	GL 66	12

COMMODITIES CONSUMED

ITEM	UNIT	QUANTITY
Fuel Oil	Gals.	11,186
Lubricants	Gals.	
Lubricants	Pounds	
Water	Gals.	

DISTRIBUTION OF TIME

EFFECTIVE WORKING TIME	HOURS	MINUTES
Dredging	12	45
Percentage of total time	53%	
NON- EFFECTIVE TIME		
Handling pipelines		
Handling swinging lines	1	
Clearing pump and pipe line	3	
Clearing cutter or suction head	3	20
Changing location of plant on job		
Loss due to opposing natural elements <8hr		
Loss due to opposing natural elements >8hr		
Loss due to passing vessels	1	50
Minor operating repairs <4hr	2	5
Secure for weekend		
Miscellaneous (Explain in remarks)		
Off Contract		
Total Non-effective Time	11	15
LOST TIME NOT CHARGEABLE		
Loss due to repairs >4hr		
Loss due to laying / relaying submerged line		
Lay time off shift		
Sundays and Holidays		
Waiting for equipment plant		
Collisions		
TOTAL TIME IN PERIOD	24	0

No. of Supervisory Inspections: 2 By field personnel 2 By office personnel

Remarks: The Dredge Florida continued dredging operations at station 420+84 and dug in cut #17 to station 416+27. Repairs delay due to work in the dredge engine room and work on the pontoon pipe.

DAILY REPORT OF OPERATIONS

CONTRACT NO.: W912BU-12-C-0034 | Date: 11/7/12 | Report # 60

DREDGE: Florida

CONTRACTOR: Great Lakes Dredge & Dock Company, LLC

LOCATION OF WORK: AS 4 & 37, River Station 412+12, northbound

CHARACTER OF WORK: [ ] Maintenance [X] New

DISPOSAL AREA OR REHANDLING BASIN: National Park Disposal Area

LENGTH OF DISCHARGE OF PIPELINE: Total Length 21,020 Ft.
Pontoon 4150. Shore 370 Submerged 16,500

CHARACTER OF MATERIAL AND PERCENTAGE OF EACH: Sand, Mud, & Gravel

AVERAGE DEPTH (Feet and Tenths)
Before Dredging: 39.0' After Dredging: 46.0' Payment Depth: 45+1

WEATHER: Temp 33-39F; Wind 15-20 mph; Precip .48 in.

NUMBER OF MEN: 60

MAN HOURS: 936

MAN HOURS TO DATE: 40,032

WORK PERFORMED

ITEM	UNIT	AMOUNT GROSS	AMOUNT NET
Av. Width of cut	Feet		159
Area dredged	Sq. Ft.		87,073
Distance advanced this period	Feet		548
Distance advanced previously	Feet		562
Distance advanced to date	Feet		26,897
Amt. dredged this period	Cu. Yds.	20500	16800
Amt. dredged previously	Cu. Yds.	26874	21590
Total amt. dredged to date	Cu. Yds.	785,477	609,421

ITEM	NAME	HOURS
DREDGE	Florida	24
Tugboat	Bobby A	24
Tugboat	RL Enterkin	24
Tugboat	Pelican State	24
Tugboat	Layla Renee	24
Crew Boat	Cooper River	24
Survey Boat	Pearl River	12
Anchor Barge	GL 107	24
Booster	Reggie	0
Derrick	GL 66	12

COMMODITIES CONSUMED

ITEM	UNIT	QUANTITY
Fuel Oil	Gals.	9,369
Lubricants	Gals.	
Lubricants	Pounds	
Water	Gals.	

DISTRIBUTION OF TIME

EFFECTIVE WORKING TIME	HOURS	MINUTES
Dredging	11	15
Percentage of total time		
NON- EFFECTIVE TIME		
Handling pipelines		40
Handling swinging lines		25
Clearing pump and pipe line	3	25
Clearing cutter or suction head	5	25
Changing location of plant on job		
Loss due to opposing natural elements <8hr		
Loss due to opposing natural elements >8hr		
Loss due to passing vessels		
Minor operating repairs <4hr	2	50
Secure for weekend		
Miscellaneous (Explain in remarks)		
Off Contract		
Total Non-effective Time	12	45
LOST TIME NOT CHARGEABLE		
Loss due to repairs >4hr		
Loss due to laying / relaying submerged line		
Lay time off shift		
Sundays and Holidays		
Waiting for equipment plant		
Collisions		
TOTAL TIME IN PERIOD	24	0

No. of Supervisory Inspections: 2 By field personnel 2 By office personnel

Remarks: The Dredge Florida continued dredging operations at station 414+35 and dug in cut #17 to station 412+12. Downtime was a result of clearing pumps and the cutter of debris, and min or repairs.

DAILY REPORT OF OPERATIONS

CONTRACT NO.: W912BU-12-C-0034 | Date: 11/8/12 | Report # 59

DREDGE: Florida

CONTRACTOR: Great Lakes Dredge & Dock Company, LLC

LOCATION OF WORK: AS 4,5 & 38,39, River Station 407+92, northbound

CHARACTER OF WORK: [ ] Maintenance [X] New

DISPOSAL AREA OR REHANDLING BASIN: National Park Disposal Area

LENGTH OF DISCHARGE OF PIPELINE: Total Length 21,340 Ft.
Pontoon 4470. Shore 370 Submerged 16,500

CHARACTER OF MATERIAL AND PERCENTAGE OF EACH: Sand, Mud, & Gravel

AVERAGE DEPTH (Feet and Tenths)
Before Dredging: 39.0' After Dredging: 46.0' Payment Depth: 45+1

WEATHER: Temp 33-50F; Wind 13-20 mph; Precip .0 in.

NUMBER OF MEN: 60

MAN HOURS: 936

MAN HOURS TO DATE: 40,968

WORK PERFORMED

ITEM	UNIT	AMOUNT GROSS	AMOUNT NET
Av. Width of cut	Feet		210
Area dredged	Sq. Ft.		150,104
Distance advanced this period	Feet		714
Distance advanced previously	Feet		548
Distance advanced to date	Feet		27,611
Amt. dredged this period	Cu. Yds.	35533	21076
Amt. dredged previously	Cu. Yds.	20500	16800
Total amt. dredged to date	Cu. Yds.	821,010	630,497

ITEM	NAME	HOURS
DREDGE	Florida	24
Tugboat	Bobby A	24
Tugboat	RL Enterkin	24
Tugboat	Pelican State	24
Tugboat	Layla Renee	24
Crew Boat	Cooper River	24
Survey Boat	Pearl River	12
Anchor Barge	GL 107	24
Booster	Reggie	0
Derrick	GL 66	12

COMMODITIES CONSUMED

ITEM	UNIT	QUANTITY
Fuel Oil	Gals.	12,844
Lubricants	Gals.	
Lubricants	Pounds	
Water	Gals.	

DISTRIBUTION OF TIME

EFFECTIVE WORKING TIME	HOURS	MINUTES
Dredging	16	35
Percentage of total time		
NON- EFFECTIVE TIME		
Handling pipelines	1	40
Handling swinging lines		50
Clearing pump and pipe line	1	30
Clearing cutter or suction head	2	25
Changing location of plant on job		
Loss due to opposing natural elements <8hr		
Loss due to opposing natural elements >8hr		
Loss due to passing vessels		
Minor operating repairs <4hr	1	0
Secure for weekend		
Miscellaneous (Explain in remarks)		
Off Contract		
Total Non-effective Time	7	25
LOST TIME NOT CHARGEABLE		
Loss due to repairs >4hr		
Loss due to laying / relaying submerged line		
Lay time off shift		
Sundays and Holidays		
Waiting for equipment plant		
Collisions		
TOTAL TIME IN PERIOD	24	0

No. of Supervisory Inspections: 2 By field personnel 2 By office personnel

Remarks: The Dredge Florida continued dredging operations from station 412+13 to 407+92, AS 4,5/38,39. Downtime was a result of clearing pumps and the cutter of debris, and min or repairs.

DAILY REPORT OF OPERATIONS

CONTRACT NO.: W912BU-12-C-0034 | Date: 11/9/12 | Report # 60

DREDGE: Florida

CONTRACTOR: Great Lakes Dredge & Dock Company, LLC

LOCATION OF WORK: AS 4, 37 River Station 402+56, northbound

CHARACTER OF WORK: [ ] Maintenance [X] New

DISPOSAL AREA OR REHANDLING BASIN: National Park Disposal Area

LENGTH OF DISCHARGE OF PIPELINE: Total Length 18,950 Ft.
Pontoon 2080. Shore 370 Submerged 16,500

CHARACTER OF MATERIAL AND PERCENTAGE OF EACH: Sand, Mud, & Gravel

AVERAGE DEPTH (Feet and Tenths)
Before Dredging: 39.0' After Dredging: 46.0' Payment Depth: 45+1

WEATHER: Temp 33-55F; Wind 8-17 mph; Precip .0 in.

NUMBER OF MEN: 60

MAN HOURS: 936

MAN HOURS TO DATE: 41904

WORK PERFORMED

ITEM	UNIT	AMOUNT GROSS	AMOUNT NET
Av. Width of cut	Feet		317
Area dredged	Sq. Ft.		169,982
Distance advanced this period	Feet		526
Distance advanced previously	Feet		714
Distance advanced to date	Feet		28,137
Amt. dredged this period	Cu. Yds.	34500	13100
Amt. dredged previously	Cu. Yds.	35533	21076
Total amt. dredged to date	Cu. Yds.	855,510	643,597

ITEM	NAME	HOURS
DREDGE	Florida	24
Tugboat	Bobby A	24
Tugboat	RL Enterkin	24
Tugboat	Pelican State	24
Tugboat	Layla Renee	24
Crew Boat	Cooper River	24
Survey Boat	Pearl River	12
Anchor Barge	GL 107	24
Booster	Reggie	0
Derrick	GL 66	12

COMMODITIES CONSUMED

ITEM	UNIT	QUANTITY
Fuel Oil	Gals.	12,844
Lubricants	Gals.	
Lubricants	Pounds	
Water	Gals.	

DISTRIBUTION OF TIME

EFFECTIVE WORKING TIME	HOURS	MINUTES
Dredging	13	35
Percentage of total time	60%	
NON- EFFECTIVE TIME		
Handling pipelines	1	10
Handling swinging lines		55
Clearing pump and pipe line	1	50
Clearing cutter or suction head	6	30
Changing location of plant on job		
Loss due to opposing natural elements <8hr		
Loss due to opposing natural elements >8hr		
Loss due to passing vessels		
Minor operating repairs <4hr		
Secure for weekend		
Miscellaneous (Explain in remarks)		
Off Contract		
Total Non-effective Time	10	25
LOST TIME NOT CHARGEABLE		
Loss due to repairs >4hr		
Loss due to laying / relaying submerged line		
Lay time off shift		
Sundays and Holidays		
Waiting for equipment plant		
Collisions		
TOTAL TIME IN PERIOD	24	0

No. of Supervisory Inspections: 2 By field personnel 2 By office personnel

Remarks: The Dredge Florida continued dredging operations from station 407+92 to 402+56, AS 4/37. Downtime was a result of clearing pumps and the cutter of debris, and minor repairs.

DAILY REPORT OF OPERATIONS

CONTRACT NO.: W912BU-12-C-0034 | Date: 11/10/12 | Report # 61

DREDGE: Florida

CONTRACTOR: Great Lakes Dredge & Dock Company, LLC

LOCATION OF WORK: AS 3/37 River Station 391+52, northbound

CHARACTER OF WORK: [ ] Maintenance [X] New

DISPOSAL AREA OR REHANDLING BASIN: National Park Disposal Area

LENGTH OF DISCHARGE OF PIPELINE: Total Length 20450 Ft.
Pontoon 3580. Shore 370 Submerged 16,500

CHARACTER OF MATERIAL AND PERCENTAGE OF EACH: Sand, Silt, & Debris

AVERAGE DEPTH (Feet and Tenths)
Before Dredging: 39.0' After Dredging: 46.0' Payment Depth: 45+1

WEATHER: Temp 48-65F; Wind 1-5 mph; Precip .0 in.

NUMBER OF MEN: 60

MAN HOURS: 936

MAN HOURS TO DATE: 41904

WORK PERFORMED

ITEM	UNIT	AMOUNT GROSS	AMOUNT NET
Av. Width of cut	Feet		150
Area dredged	Sq. Ft.		165,593
Distance advanced this period	Feet		1104
Distance advanced previously	Feet		526
Distance advanced to date	Feet		29,241
Amt. dredged this period	Cu. Yds.	22000	10700
Amt. dredged previously	Cu. Yds.	34500	13100
Total amt. dredged to date	Cu. Yds.	877,510	654,297

ITEM	NAME	HOURS
DREDGE	Florida	24
Tugboat	Bobby A	24
Tugboat	RL Enterkin	24
Tugboat	Pelican State	24
Tugboat	Layla Renee	24
Crew Boat	Cooper River	24
Survey Boat	Pearl River	12
Anchor Barge	GL 107	24
Booster	Reggie	0
Derrick	GL 66	12

COMMODITIES CONSUMED

ITEM	UNIT	QUANTITY
Fuel Oil	Gals.	9,267
Lubricants	Gals.	
Lubricants	Pounds	
Water	Gals.	

DISTRIBUTION OF TIME

EFFECTIVE WORKING TIME	HOURS	MINUTES
Dredging	13	45
Percentage of total time	56%	
NON- EFFECTIVE TIME		
Handling pipelines	4	0
Handling swinging lines	1	35
Clearing pump and pipe line	1	5
Clearing cutter or suction head	1	40
Changing location of plant on job		
Loss due to opposing natural elements <8hr		
Loss due to opposing natural elements >8hr		
Loss due to passing vessels		
Minor operating repairs <4hr	1	55
Secure for weekend		
Miscellaneous (Explain in remarks)		
Off Contract		
Total Non-effective Time	10	15
LOST TIME NOT CHARGEABLE		
Loss due to repairs >4hr		
Loss due to laying / relaying submerged line		
Lay time off shift		
Sundays and Holidays		
Waiting for equipment plant		
Collisions		
TOTAL TIME IN PERIOD	24	0

No. of Supervisory Inspections: 2 By field personnel 2 By office personnel

Remarks: The Dredge Florida continued dredging operations from station 402+56 to 391+52, AS 3/37. Downtime was a result of clearing pumps and the cutter of debris, and adding pontoon line.

DAILY REPORT OF OPERATIONS

CONTRACT NO.: W912BU-12-C-0034 | Date: 11/11/12 | Report # 62

DREDGE: Florida

CONTRACTOR: Great Lakes Dredge & Dock Company, LLC

LOCATION OF WORK: AS 3/37 River Station 382+50, northbound

CHARACTER OF WORK: [ ] Maintenance [X] New

DISPOSAL AREA OR REHANDLING BASIN: National Park Disposal Area

LENGTH OF DISCHARGE OF PIPELINE: Total Length 19,871 Ft.
Pontoon 3458. Shore 362 Submerged 16,052

CHARACTER OF MATERIAL AND PERCENTAGE OF EACH: Sand, Silt, & Debris

AVERAGE DEPTH (Feet and Tenths)
Before Dredging: 39.0' After Dredging: 46.0' Payment Depth: 45+1

WEATHER: Temp 50-70F; Wind 1-5 mph; Precip .0 in.

NUMBER OF MEN: 60

MAN HOURS: 936

MAN HOURS TO DATE: 42840

WORK PERFORMED

ITEM	UNIT	AMOUNT GROSS	AMOUNT NET
Av. Width of cut	Feet		50
Area dredged	Sq. Ft.		44,943
Distance advanced this period	Feet		902
Distance advanced previously	Feet		1104
Distance advanced to date	Feet		30,143
Amt. dredged this period	Cu. Yds.	4000	1464
Amt. dredged previously	Cu. Yds.	22000	10700
Total amt. dredged to date	Cu. Yds.	881,510	655,761

ITEM	NAME	HOURS
DREDGE	Florida	24
Tugboat	Bobby A	24
Tugboat	RL Enterkin	0
Tugboat	Pelican State	24
Tugboat	Layla Renee	24
Crew Boat	Cooper River	24
Survey Boat	Pearl River	12
Anchor Barge	GL 107	24
Booster	Reggie	0
Derrick	GL 66	12

COMMODITIES CONSUMED

ITEM	UNIT	QUANTITY
Fuel Oil	Gals.	9,384
Lubricants	Gals.	
Lubricants	Pounds	
Water	Gals.	

DISTRIBUTION OF TIME

EFFECTIVE WORKING TIME	HOURS	MINUTES
Dredging	10	10
Percentage of total time	41%	
NON- EFFECTIVE TIME		
Handling pipelines	7	50
Handling swinging lines	2	45
Clearing pump and pipe line		45
Clearing cutter or suction head	2	15
Changing location of plant on job		
Loss due to opposing natural elements <8hr		
Loss due to opposing natural elements >8hr		
Loss due to passing vessels		
Minor operating repairs <4hr		15
Secure for weekend		
Miscellaneous (Explain in remarks)		
Off Contract		
Total Non-effective Time	13	50
LOST TIME NOT CHARGEABLE		
Loss due to repairs >4hr		
Loss due to laying / relaying submerged line		
Lay time off shift		
Sundays and Holidays		
Waiting for equipment plant		
Collisions		
TOTAL TIME IN PERIOD	24	0

No. of Supervisory Inspections: 2 By field personnel 2 By office personnel

Remarks: The Dredge Florida continued dredging operations from station 391+52 to 382+50, AS 3/37. Downtime was a result of clearing pumps and the cutter of debris, and adding pontoon line.

DAILY REPORT OF OPERATIONS

CONTRACT NO.: W912BU-12-C-0034 | Date: 11/12/12 | Report # 63

DREDGE: Florida

CONTRACTOR: Great Lakes Dredge & Dock Company, LLC

LOCATION OF WORK: AS 1/19 River Station 363+95, northbound

CHARACTER OF WORK: [ ] Maintenance [X] New

DISPOSAL AREA OR REHANDLING BASIN: National Park Disposal Area

LENGTH OF DISCHARGE OF PIPELINE: Total Length 21,810 Ft.
Pontoon 1800. Shore 370 Submerged 19,640

CHARACTER OF MATERIAL AND PERCENTAGE OF EACH: Sand, Silt, Cobbles & Debris

AVERAGE DEPTH (Feet and Tenths)
Before Dredging: 39.0' After Dredging: 46.0' Payment Depth: 45+1

WEATHER: Temp 39-69F; Wind 10-18 mph; Precip .0 in.

NUMBER OF MEN: 60

MAN HOURS: 936

MAN HOURS TO DATE: 43776

WORK PERFORMED

ITEM	UNIT	AMOUNT GROSS	AMOUNT NET
Av. Width of cut	Feet		106
Area dredged	Sq. Ft.		133,474
Distance advanced this period	Feet		1264
Distance advanced previously	Feet		902
Distance advanced to date	Feet		31,407
Amt. dredged this period	Cu. Yds.	23760	16300
Amt. dredged previously	Cu. Yds.	4000	1464
Total amt. dredged to date	Cu. Yds.	905,270	672,061

ITEM	NAME	HOURS
DREDGE	Florida	24
Tugboat	Bobby A	24
Tugboat	RL Enterkin	0
Tugboat	Pelican State	24
Tugboat	Layla Renee	24
Crew Boat	Cooper River	24
Survey Boat	Red Witch	12
Survey Boat	Pearl River	12
Anchor Barge	GL 107	24
Booster	Reggie	0
Derrick	GL 66	12

COMMODITIES CONSUMED

ITEM	UNIT	QUANTITY
Fuel Oil	Gals.	9,384
Lubricants	Gals.	
Lubricants	Pounds	
Water	Gals.	

DISTRIBUTION OF TIME

EFFECTIVE WORKING TIME	HOURS	MINUTES
Dredging	11	40
Percentage of total time	47%	
NON- EFFECTIVE TIME		
Handling pipelines	2	50
Handling swinging lines	1	50
Clearing pump and pipe line	3	20
Clearing cutter or suction head	4	15
Changing location of plant on job		
Loss due to opposing natural elements <8hr		
Loss due to opposing natural elements >8hr		
Loss due to passing vessels		
Minor operating repairs <4hr		5
Secure for weekend		
Miscellaneous (Explain in remarks)		
Off Contract		
Total Non-effective Time	12	20
LOST TIME NOT CHARGEABLE		
Loss due to repairs >4hr		
Loss due to laying / relaying submerged line		
Lay time off shift		
Sundays and Holidays		
Waiting for equipment plant		
Collisions		
TOTAL TIME IN PERIOD	24	0

No. of Supervisory Inspections: 2 By field personnel 2 By office personnel

Remarks: The Dredge Florida continued dredging operations from station 376+59 to 363+95, AS 1/19. Downtime was a result of clearing pumps and the cutter of debris, and adding pontoon line.

DAILY REPORT OF OPERATIONS

CONTRACT NO.: W912BU-12-C-0034 | Date: 11/13/12 | Report # 64

DREDGE: Florida

CONTRACTOR: Great Lakes Dredge & Dock Company, LLC

LOCATION OF WORK: AS 2, River Station 364+00, northbound

CHARACTER OF WORK: [ ] Maintenance [X] New

DISPOSAL AREA OR REHANDLING BASIN: National Park Disposal Area

LENGTH OF DISCHARGE OF PIPELINE: Total Length 21,770 Ft.
Pontoon 1800. Shore 370 Submerged 19,600

CHARACTER OF MATERIAL AND PERCENTAGE OF EACH: Sand, Silt, & Gravel

AVERAGE DEPTH (Feet and Tenths)
Before Dredging: 41.0' After Dredging: 46.0' Payment Depth: 45+1

WEATHER: Temp 37-63F; Wind 12-25 mph; Precip 0.18 in.

NUMBER OF MEN: 60

MAN HOURS: 936

MAN HOURS TO DATE: 44712

WORK PERFORMED

ITEM	UNIT	AMOUNT GROSS	AMOUNT NET
Av. Width of cut	Feet		164
Area dredged	Sq. Ft.		99,772
Distance advanced this period	Feet		608
Distance advanced previously	Feet		1264
Distance advanced to date	Feet		32,015
Amt. dredged this period	Cu. Yds.	19400	17000
Amt. dredged previously	Cu. Yds.	23760	16300
Total amt. dredged to date	Cu. Yds.	928,217	690,686

ITEM	NAME	HOURS
DREDGE	Florida	24
Tugboat	Bobby A	24
Tugboat	RL Enterkin	0
Tugboat	Pelican State	24
Tugboat	Layla Renee	24
Crew Boat	Cooper River	24
Survey Boat	Red Witch	12
Survey Boat	Pearl River	12
Anchor Barge	GL 107	24
Booster	Reggie	0
Derrick	GL 66	12

COMMODITIES CONSUMED

ITEM	UNIT	QUANTITY
Fuel Oil	Gals.	8,915
Lubricants	Gals.	
Lubricants	Pounds	
Water	Gals.	

DISTRIBUTION OF TIME

EFFECTIVE WORKING TIME	HOURS	MINUTES
Dredging	8	20
Percentage of total time	35%	
NON- EFFECTIVE TIME		
Handling pipelines	11	20
Handling swinging lines		35
Clearing pump and pipe line	1	45
Clearing cutter or suction head		30
Changing location of plant on job		
Loss due to opposing natural elements <8hr		
Loss due to opposing natural elements >8hr		
Loss due to passing vessels	1	30
Minor operating repairs <4hr		
Secure for weekend		
Miscellaneous (Explain in remarks)		
Off Contract		
Total Non-effective Time	15	40
LOST TIME NOT CHARGEABLE		
Loss due to repairs >4hr		
Loss due to laying / relaying submerged line		
Lay time off shift		
Sundays and Holidays		
Waiting for equipment plant		
Collisions		
TOTAL TIME IN PERIOD	24	0

No. of Supervisory Inspections: 2 By field personnel 2 By office personnel

Remarks: The Dredge Florida continued dredging operations from station 363+95 and dug to station 357+87. Pipeline delay due to adding subline.

DAILY REPORT OF OPERATIONS

CONTRACT NO.: W912BU-12-C-0034 | Date: 11/14/12 | Report # 65

DREDGE: Florida

CONTRACTOR: Great Lakes Dredge & Dock Company, LLC

LOCATION OF WORK: AS 1 & 2, River Station 358+00, northbound

CHARACTER OF WORK: [ ] Maintenance [X] New

DISPOSAL AREA OR REHANDLING BASIN: National Park Disposal Area

LENGTH OF DISCHARGE OF PIPELINE: Total Length 25,090 Ft.
Pontoon 2300. Shore 370 Submerged 22,420

CHARACTER OF MATERIAL AND PERCENTAGE OF EACH: Sand, Silt, & Gravel

AVERAGE DEPTH (Feet and Tenths)
Before Dredging: 42.0' After Dredging: 46.0' Payment Depth: 45+1

WEATHER: Temp 32-48F; Wind 9-15 mph; Precip 0.0 in.

NUMBER OF MEN: 60

MAN HOURS: 936

MAN HOURS TO DATE: 45648

WORK PERFORMED

ITEM	UNIT	AMOUNT GROSS	AMOUNT NET
Av. Width of cut	Feet		180
Area dredged	Sq. Ft.		42,170
Distance advanced this period	Feet		234
Distance advanced previously	Feet		608
Distance advanced to date	Feet		32,249
Amt. dredged this period	Cu. Yds.	6592	4385
Amt. dredged previously	Cu. Yds.	19400	17000
Total amt. dredged to date	Cu. Yds.	934,809	695,071

ITEM	NAME	HOURS
DREDGE	Florida	24
Tugboat	Bobby A	24
Tugboat	RL Enterkin	0
Tugboat	Pelican State	24
Tugboat	Layla Renee	24
Crew Boat	Cooper River	24
Survey Boat	Red Witch	12
Survey Boat	Pearl River	12
Anchor Barge	GL 107	24
Booster	Reggie	0
Derrick	GL 66	12

COMMODITIES CONSUMED

ITEM	UNIT	QUANTITY
Fuel Oil	Gals.	2,819
Lubricants	Gals.	
Lubricants	Pounds	
Water	Gals.	

DISTRIBUTION OF TIME

EFFECTIVE WORKING TIME	HOURS	MINUTES
Dredging	3	5
Percentage of total time	13%	
NON- EFFECTIVE TIME		
Handling pipelines	16	55
Handling swinging lines		
Clearing pump and pipe line		50
Clearing cutter or suction head		
Changing location of plant on job		
Loss due to opposing natural elements <8hr		
Loss due to opposing natural elements >8hr		
Loss due to passing vessels		
Minor operating repairs <4hr	3	10
Secure for weekend		
Miscellaneous (Explain in remarks)		
Off Contract		
Total Non-effective Time	20	55
LOST TIME NOT CHARGEABLE		
Loss due to repairs >4hr		
Loss due to laying / relaying submerged line		
Lay time off shift		
Sundays and Holidays		
Waiting for equipment plant		
Collisions		
TOTAL TIME IN PERIOD	24	0

No. of Supervisory Inspections: 2 By field personnel 2 By office personnel

Remarks: The Dredge Florida continued dredging operations from station 357+95 and dug to station 355+61. Pipeline delays due to adding subline. Repairs delay due to changing swing wire.

DAILY REPORT OF OPERATIONS

CONTRACT NO.: W912BU-12-C-0034 | Date: 11/15/12 | Report # 66

DREDGE: Florida

CONTRACTOR: Great Lakes Dredge & Dock Company, LLC

LOCATION OF WORK: AS 1, River Station 355+60, northbound

CHARACTER OF WORK: [ ] Maintenance [X] New

DISPOSAL AREA OR REHANDLING BASIN: National Park Disposal Area

LENGTH OF DISCHARGE OF PIPELINE: Total Length 25,670 Ft.
Pontoon 2880. Shore 370 Submerged 22,420

CHARACTER OF MATERIAL AND PERCENTAGE OF EACH: Sand, Silt, & Gravel

AVERAGE DEPTH (Feet and Tenths)
Before Dredging: 44.0' After Dredging: 46.0' Payment Depth: 45+1

WEATHER: Temp 39-46F; Wind 6-10 mph; Precip 0.0 in.

NUMBER OF MEN: 60

MAN HOURS: 936

MAN HOURS TO DATE: 46584

WORK PERFORMED

ITEM	UNIT	AMOUNT GROSS	AMOUNT NET
Av. Width of cut	Feet		154
Area dredged	Sq. Ft.		112,635
Distance advanced this period	Feet		730
Distance advanced previously	Feet		234
Distance advanced to date	Feet		32,979
Amt. dredged this period	Cu. Yds.	11500	5600
Amt. dredged previously	Cu. Yds.	6592	4385
Total amt. dredged to date	Cu. Yds.	946,309	700,671

ITEM	NAME	HOURS
DREDGE	Florida	24
Tugboat	Bobby A	24
Tugboat	RL Enterkin	0
Tugboat	Pelican State	24
Tugboat	Layla Renee	24
Crew Boat	Cooper River	24
Survey Boat	Red Witch	12
Survey Boat	Pearl River	12
Anchor Barge	GL 107	24
Booster	Reggie	0
Derrick	GL 66	12

COMMODITIES CONSUMED

ITEM	UNIT	QUANTITY
Fuel Oil	Gals.	10,177
Lubricants	Gals.	
Lubricants	Pounds	
Water	Gals.	

DISTRIBUTION OF TIME

EFFECTIVE WORKING TIME	HOURS	MINUTES
Dredging	8	30
Percentage of total time	35%	
NON- EFFECTIVE TIME		
Handling pipelines	1	45
Handling swinging lines		45
Clearing pump and pipe line	4	55
Clearing cutter or suction head	1	35
Changing location of plant on job		
Loss due to opposing natural elements <8hr		
Loss due to opposing natural elements >8hr		
Loss due to passing vessels		
Minor operating repairs <4hr	6	30
Secure for weekend		
Miscellaneous (Explain in remarks)		
Off Contract		
Total Non-effective Time	15	30
LOST TIME NOT CHARGEABLE		
Loss due to repairs >4hr		
Loss due to laying / relaying submerged line		
Lay time off shift		
Sundays and Holidays		
Waiting for equipment plant		
Collisions		
TOTAL TIME IN PERIOD	24	0

No. of Supervisory Inspections: 2 By field personnel 2 By office personnel

Remarks: The Dredge Florida continued dredging operations from station 355+61 and dug to station 345+30. Repairs delay due to work welding on the suction mouth bars.

DAILY REPORT OF OPERATIONS

CONTRACT NO.: W912BU-12-C-0034 | Date: 11/16/12 | Report # 67

DREDGE: Florida

CONTRACTOR: Great Lakes Dredge & Dock Company, LLC

LOCATION OF WORK: AS 1, River Station 348+30, northbound

CHARACTER OF WORK: [ ] Maintenance [X] New

DISPOSAL AREA OR REHANDLING BASIN: National Park Disposal Area

LENGTH OF DISCHARGE OF PIPELINE: Total Length 26,210 Ft.
Pontoon 3420. Shore 370 Submerged 22,420

CHARACTER OF MATERIAL AND PERCENTAGE OF EACH: Sand, Silt, & Gravel

AVERAGE DEPTH (Feet and Tenths)
Before Dredging: 43.0' After Dredging: 46.0' Payment Depth: 45+1

WEATHER: Temp 33-48F; Wind 5-8 mph; Precip 0.0 in.

NUMBER OF MEN: 60

MAN HOURS: 936

MAN HOURS TO DATE: 47520

WORK PERFORMED

ITEM	UNIT	AMOUNT GROSS	AMOUNT NET
Av. Width of cut	Feet		169
Area dredged	Sq. Ft.		73,268
Distance advanced this period	Feet		434
Distance advanced previously	Feet		730
Distance advanced to date	Feet		33,413
Amt. dredged this period	Cu. Yds.	10718	6739
Amt. dredged previously	Cu. Yds.	11500	5600
Total amt. dredged to date	Cu. Yds.	957,027	707,410

ITEM	NAME	HOURS
DREDGE	Florida	24
Tugboat	Bobby A	24
Tugboat	RL Enterkin	0
Tugboat	Pelican State	24
Tugboat	Layla Renee	24
Crew Boat	Cooper River	24
Survey Boat	Red Witch	12
Survey Boat	Pearl River	12
Anchor Barge	GL 107	24
Booster	Reggie	0
Derrick	GL 66	12

COMMODITIES CONSUMED

ITEM	UNIT	QUANTITY
Fuel Oil	Gals.	7,525
Lubricants	Gals.	
Lubricants	Pounds	
Water	Gals.	

DISTRIBUTION OF TIME

EFFECTIVE WORKING TIME	HOURS	MINUTES
Dredging	6	35
Percentage of total time	27%	
NON- EFFECTIVE TIME		
Handling pipelines		25
Handling swinging lines		40
Clearing pump and pipe line	2	20
Clearing cutter or suction head	1	10
Changing location of plant on job		
Loss due to opposing natural elements <8hr		
Loss due to opposing natural elements >8hr		
Loss due to passing vessels	12	50
Minor operating repairs <4hr		
Secure for weekend		
Miscellaneous (Explain in remarks)		
Off Contract		
Total Non-effective Time	17	25
LOST TIME NOT CHARGEABLE		
Loss due to repairs >4hr		
Loss due to laying / relaying submerged line		
Lay time off shift		
Sundays and Holidays		
Waiting for equipment plant		
Collisions		
TOTAL TIME IN PERIOD	24	0

No. of Supervisory Inspections: 2 By field personnel 2 By office personnel

Remarks: The Dredge Florida continued dredging operations from station 348+30 and dug to station 343+85. Numerous traffic delays today.

DAILY REPORT OF OPERATIONS

CONTRACT NO.: W912BU-12-C-0034 | Date: 11/17/12 | Report # 68

DREDGE: Florida

CONTRACTOR: Great Lakes Dredge & Dock Company, LLC

LOCATION OF WORK: AS 1, River Station 343+90, northbound

CHARACTER OF WORK: [ ] Maintenance [X] New

DISPOSAL AREA OR REHANDLING BASIN: National Park Disposal Area

LENGTH OF DISCHARGE OF PIPELINE: Total Length 24,770 Ft.
Pontoon 1980. Shore 370 Submerged 22,420

CHARACTER OF MATERIAL AND PERCENTAGE OF EACH: Sand, Silt, & Gravel

AVERAGE DEPTH (Feet and Tenths)
Before Dredging: 42.0' After Dredging: 46.0' Payment Depth: 45+1

WEATHER: Temp 32-53F; Wind 6-14 mph; Precip 0.0 in.

NUMBER OF MEN: 60

MAN HOURS: 936

MAN HOURS TO DATE: 48456

WORK PERFORMED

ITEM	UNIT	AMOUNT GROSS	AMOUNT NET
Av. Width of cut	Feet		186
Area dredged	Sq. Ft.		65,891
Distance advanced this period	Feet		355
Distance advanced previously	Feet		434
Distance advanced to date	Feet		33,768
Amt. dredged this period	Cu. Yds.	11500	8235
Amt. dredged previously	Cu. Yds.	10718	6739
Total amt. dredged to date	Cu. Yds.	968,527	715,645

ITEM	NAME	HOURS
DREDGE	Florida	24
Tugboat	Bobby A	24
Tugboat	RL Enterkin	0
Tugboat	Pelican State	24
Tugboat	Layla Renee	24
Crew Boat	Cooper River	24
Survey Boat	Red Witch	12
Survey Boat	Pearl River	12
Anchor Barge	GL 107	24
Booster	Reggie	0
Derrick	GL 66	12

COMMODITIES CONSUMED

ITEM	UNIT	QUANTITY
Fuel Oil	Gals.	8,438
Lubricants	Gals.	
Lubricants	Pounds	
Water	Gals.	

DISTRIBUTION OF TIME

EFFECTIVE WORKING TIME	HOURS	MINUTES
Dredging	6	45
Percentage of total time	28%	
NON- EFFECTIVE TIME		
Handling pipelines		
Handling swinging lines		10
Clearing pump and pipe line	1	15
Clearing cutter or suction head	1	50
Changing location of plant on job		
Loss due to opposing natural elements <8hr		
Loss due to opposing natural elements >8hr		
Loss due to passing vessels	3	20
Minor operating repairs <4hr	9	45
Secure for weekend		
Miscellaneous (Explain in remarks)		55
Off Contract		
Total Non-effective Time	17	15
LOST TIME NOT CHARGEABLE		
Loss due to repairs >4hr		
Loss due to laying / relaying submerged line		
Lay time off shift		
Sundays and Holidays		
Waiting for equipment plant		
Collisions		
TOTAL TIME IN PERIOD	24	0

No. of Supervisory Inspections: 2 By field personnel 2 By office personnel

Remarks: The Dredge Florida continued dredging operations from station 343+85 and dug to station 340+30. Dredging over Transco Pipeline. Misc delay due to changing the cutter. Repairs delay due to changing the ladder wire and work in the engine room.

DAILY REPORT OF OPERATIONS

CONTRACT NO.: W912BU-12-C-0034 | Date: 11/18/12 | Report # 69

DREDGE: Florida

CONTRACTOR: Great Lakes Dredge & Dock Company, LLC

LOCATION OF WORK: AS 1, River Station 343+30, northbound

CHARACTER OF WORK: [ ] Maintenance [X] New

DISPOSAL AREA OR REHANDLING BASIN: National Park Disposal Area

LENGTH OF DISCHARGE OF PIPELINE: Total Length 25,270 Ft.
Pontoon 2480. Shore 370 Submerged 22,420

CHARACTER OF MATERIAL AND PERCENTAGE OF EACH: Sand, Silt, & Gravel

AVERAGE DEPTH (Feet and Tenths)
Before Dredging: 42.0' After Dredging: 46.0' Payment Depth: 45+1

WEATHER: Temp 34-50F; Wind 8-13 mph; Precip 0.0 in.

NUMBER OF MEN: 60

MAN HOURS: 936

MAN HOURS TO DATE: 49392

WORK PERFORMED

ITEM	UNIT	AMOUNT GROSS	AMOUNT NET
Av. Width of cut	Feet		223
Area dredged	Sq. Ft.		68,075
Distance advanced this period	Feet		305
Distance advanced previously	Feet		355
Distance advanced to date	Feet		34,073
Amt. dredged this period	Cu. Yds.	12200	7970
Amt. dredged previously	Cu. Yds.	11500	8235
Total amt. dredged to date	Cu. Yds.	980,727	723,615

ITEM	NAME	HOURS
DREDGE	Florida	24
Tugboat	Bobby A	24
Tugboat	RL Enterkin	0
Tugboat	Pelican State	24
Tugboat	Layla Renee	24
Crew Boat	Cooper River	24
Survey Boat	Red Witch	12
Survey Boat	Pearl River	12
Anchor Barge	GL 107	24
Booster	Reggie	0
Derrick	GL 66	12

COMMODITIES CONSUMED

ITEM	UNIT	QUANTITY
Fuel Oil	Gals.	8,852
Lubricants	Gals.	
Lubricants	Pounds	
Water	Gals.	

DISTRIBUTION OF TIME

EFFECTIVE WORKING TIME	HOURS	MINUTES
Dredging	6	5
Percentage of total time	25%	
NON- EFFECTIVE TIME		
Handling pipelines	2	15
Handling swinging lines		10
Clearing pump and pipe line	3	
Clearing cutter or suction head		
Changing location of plant on job		
Loss due to opposing natural elements <8hr		
Loss due to opposing natural elements >8hr		
Loss due to passing vessels	8	
Minor operating repairs <4hr	4	30
Secure for weekend		
Miscellaneous (Explain in remarks)		
Off Contract		
Total Non-effective Time	17	55
LOST TIME NOT CHARGEABLE		
Loss due to repairs >4hr		
Loss due to laying / relaying submerged line		
Lay time off shift		
Sundays and Holidays		
Waiting for equipment plant		
Collisions		
TOTAL TIME IN PERIOD	24	0

No. of Supervisory Inspections: 2 By field personnel 2 By office personnel

Remarks: The Dredge Florida continued dredging operations from station 340+30 and dug to station 337+25. Cleared Transco Pipeline at 11:30 hrs. Repairs delay due to work on cutter gear box.

DAILY REPORT OF OPERATIONS

CONTRACT NO.: W912BU-12-C-0034 | Date: 11/19/12 | Report # 70

DREDGE: Florida

CONTRACTOR: Great Lakes Dredge & Dock Company, LLC

LOCATION OF WORK: AS 1, River Station 337+20, northbound

CHARACTER OF WORK: [ ] Maintenance [X] New

DISPOSAL AREA OR REHANDLING BASIN: National Park Disposal Area

LENGTH OF DISCHARGE OF PIPELINE: Total Length 25,770 Ft.
Pontoon 2980. Shore 370 Submerged 22,420

CHARACTER OF MATERIAL AND PERCENTAGE OF EACH: Sand, Silt, & Gravel

AVERAGE DEPTH (Feet and Tenths)
Before Dredging: 42.0' After Dredging: 46.0' Payment Depth: 45+1

WEATHER: Temp 36-51F; Wind 9-13 mph; Precip 0.0 in.

NUMBER OF MEN: 60

MAN HOURS: 936

MAN HOURS TO DATE: 50328

WORK PERFORMED

ITEM	UNIT	AMOUNT GROSS	AMOUNT NET
Av. Width of cut	Feet		215
Area dredged	Sq. Ft.		134,371
Distance advanced this period	Feet		626
Distance advanced previously	Feet		305
Distance advanced to date	Feet		34,699
Amt. dredged this period	Cu. Yds.	22643	14545
Amt. dredged previously	Cu. Yds.	12200	7970
Total amt. dredged to date	Cu. Yds.	1,003,370	738,160

ITEM	NAME	HOURS
DREDGE	Florida	24
Tugboat	Bobby A	24
Tugboat	RL Enterkin	0
Tugboat	Pelican State	24
Tugboat	Layla Renee	24
Crew Boat	Cooper River	24
Survey Boat	Red Witch	12
Survey Boat	Pearl River	12
Anchor Barge	GL 107	24
Booster	Reggie	0
Derrick	GL 66	12

COMMODITIES CONSUMED

ITEM	UNIT	QUANTITY
Fuel Oil	Gals.	7,789
Lubricants	Gals.	
Lubricants	Pounds	
Water	Gals.	

DISTRIBUTION OF TIME

EFFECTIVE WORKING TIME	HOURS	MINUTES
Dredging	12	40
Percentage of total time	53%	
NON- EFFECTIVE TIME		
Handling pipelines	1	40
Handling swinging lines	1	
Clearing pump and pipe line	3	
Clearing cutter or suction head	1	
Changing location of plant on job		
Loss due to opposing natural elements <8hr		
Loss due to opposing natural elements >8hr		
Loss due to passing vessels	3	20
Minor operating repairs <4hr		35
Secure for weekend		
Miscellaneous (Explain in remarks)		45
Off Contract		
Total Non-effective Time	11	20
LOST TIME NOT CHARGEABLE		
Loss due to repairs >4hr		
Loss due to laying / relaying submerged line		
Lay time off shift		
Sundays and Holidays		
Waiting for equipment plant		
Collisions		
TOTAL TIME IN PERIOD	24	0

No. of Supervisory Inspections: 2 By field personnel 2 By office personnel

Remarks: The Dredge Florida continued dredging operations from station 337+25 and dug to station 330+99. Misc delay due to changing cutter teeth.

DAILY REPORT OF OPERATIONS

CONTRACT NO.: W912BU-12-C-0034 | Date: 11/20/12 | Report # 71

DREDGE: Florida

CONTRACTOR: Great Lakes Dredge & Dock Company, LLC

LOCATION OF WORK: AS 1, River Station 331+10, northbound

CHARACTER OF WORK: [ ] Maintenance [X] New

DISPOSAL AREA OR REHANDLING BASIN: National Park Disposal Area

LENGTH OF DISCHARGE OF PIPELINE: Total Length 25,770 Ft.
Pontoon 2980. Shore 370 Submerged 22,420

CHARACTER OF MATERIAL AND PERCENTAGE OF EACH: Sand, Silt, & Gravel

AVERAGE DEPTH (Feet and Tenths)
Before Dredging: 43.0' After Dredging: 46.0' Payment Depth: 45+1

WEATHER: Temp 36-51F; Wind 5-8 mph; Precip 0.0 in.

NUMBER OF MEN: 60

MAN HOURS: 936

MAN HOURS TO DATE: 51264

WORK PERFORMED

ITEM	UNIT	AMOUNT GROSS	AMOUNT NET
Av. Width of cut	Feet		229
Area dredged	Sq. Ft.		36,480
Distance advanced this period	Feet		159
Distance advanced previously	Feet		626
Distance advanced to date	Feet		34,858
Amt. dredged this period	Cu. Yds.	4452	2572
Amt. dredged previously	Cu. Yds.	22643	14545
Total amt. dredged to date	Cu. Yds.	1,007,822	740,732

ITEM	NAME	HOURS
DREDGE	Florida	24
Tugboat	Bobby A	24
Tugboat	RL Enterkin	0
Tugboat	Pelican State	24
Tugboat	Layla Renee	24
Crew Boat	Cooper River	24
Survey Boat	Red Witch	12
Survey Boat	Pearl River	12
Anchor Barge	GL 107	24
Booster	Reggie	0
Derrick	GL 66	12

COMMODITIES CONSUMED

ITEM	UNIT	QUANTITY
Fuel Oil	Gals.	12,508
Lubricants	Gals.	
Lubricants	Pounds	
Water	Gals.	

DISTRIBUTION OF TIME

EFFECTIVE WORKING TIME	HOURS	MINUTES
Dredging	3	10
Percentage of total time	53%	
NON- EFFECTIVE TIME		
Handling pipelines		
Handling swinging lines		10
Clearing pump and pipe line		50
Clearing cutter or suction head		30
Changing location of plant on job		
Loss due to opposing natural elements <8hr		
Loss due to opposing natural elements >8hr		
Loss due to passing vessels	3	35
Minor operating repairs <4hr	15	45
Secure for weekend		
Miscellaneous (Explain in remarks)		
Off Contract		
Total Non-effective Time	20	50
LOST TIME NOT CHARGEABLE		
Loss due to repairs >4hr		
Loss due to laying / relaying submerged line		
Lay time off shift		
Sundays and Holidays		
Waiting for equipment plant		
Collisions		
TOTAL TIME IN PERIOD	24	0

No. of Supervisory Inspections: 2 By field personnel 2 By office personnel

Remarks: The Dredge Florida continued dredging operations from station 330+99 and dug to station 329+40. Repairs delay to work on pipeline.

DAILY REPORT OF OPERATIONS

CONTRACT NO.: W912BU-12-C-0034 | Date: 11/21/12 | Report # 72

DREDGE: Florida

CONTRACTOR: Great Lakes Dredge & Dock Company, LLC

LOCATION OF WORK: AS 1, River Station 329+00, northbound

CHARACTER OF WORK: [ ] Maintenance [X] New

DISPOSAL AREA OR REHANDLING BASIN: National Park Disposal Area

LENGTH OF DISCHARGE OF PIPELINE: Total Length 25,770 Ft.
Pontoon 2980. Shore 370 Submerged 22,420

CHARACTER OF MATERIAL AND PERCENTAGE OF EACH: Sand & Silt

AVERAGE DEPTH (Feet and Tenths)
Before Dredging: 43.0' After Dredging: 46.0' Payment Depth: 45+1

WEATHER: Temp 35-54F; Wind 4-10 mph; Precip 0.0 in.

NUMBER OF MEN: 60

MAN HOURS: 688

MAN HOURS TO DATE: 51952

WORK PERFORMED

ITEM	UNIT	AMOUNT GROSS	AMOUNT NET
Av. Width of cut	Feet		250
Area dredged	Sq. Ft.		56,164
Distance advanced this period	Feet		225
Distance advanced previously	Feet		159
Distance advanced to date	Feet		35,083
Amt. dredged this period	Cu. Yds.	8342	5274
Amt. dredged previously	Cu. Yds.	4452	2572
Total amt. dredged to date	Cu. Yds.	1,016,164	746,006

ITEM	NAME	HOURS
DREDGE	Florida	9.25
Tugboat	Bobby A	9.25
Tugboat	RL Enterkin	0
Tugboat	Pelican State	9.25
Tugboat	Layla Renee	9.25
Crew Boat	Cooper River	9.25
Survey Boat	Red Witch	3.25
Survey Boat	Pearl River	3.25
Anchor Barge	GL 107	9.25
Booster	Reggie	0
Derrick	GL 66	3.25

COMMODITIES CONSUMED

ITEM	UNIT	QUANTITY
Fuel Oil	Gals.	5,601
Lubricants	Gals.	
Lubricants	Pounds	
Water	Gals.	

DISTRIBUTION OF TIME

EFFECTIVE WORKING TIME	HOURS	MINUTES
Dredging	3	45
Percentage of total time	41%	
NON- EFFECTIVE TIME		
Handling pipelines		
Handling swinging lines		45
Clearing pump and pipe line		55
Clearing cutter or suction head	1	20
Changing location of plant on job		
Loss due to opposing natural elements <8hr		
Loss due to opposing natural elements >8hr		
Loss due to passing vessels	1	15
Minor operating repairs <4hr		
Secure for weekend		
Miscellaneous (Explain in remarks)	1	15
Off Contract	14	45
Total Non-effective Time	5	3
LOST TIME NOT CHARGEABLE		
Loss due to repairs >4hr		
Loss due to laying / relaying submerged line		
Lay time off shift		
Sundays and Holidays		
Waiting for equipment plant		
Collisions		
TOTAL TIME IN PERIOD	24	0

No. of Supervisory Inspections: 2 By field personnel 2 By office personnel

Remarks: The Dredge Florida continued dredging operations from station 329+40 and dug to station 327+15. Misc delay due to washing out line before tow to Schuylkill. The dredge Florida went off contract at 09:15 hrs to perform work on the Schuylkill Contract.

DAILY REPORT OF OPERATIONS

CONTRACT NO.: W912BU-12-C-0034 | Date: 12/19/12 | Report # 73

DREDGE: Florida

CONTRACTOR: Great Lakes Dredge & Dock Company, LLC

LOCATION OF WORK: AS 31, River Station 687+16, northbound

CHARACTER OF WORK: [ ] Maintenance [X] New

DISPOSAL AREA OR REHANDLING BASIN: National Park Disposal Area

LENGTH OF DISCHARGE OF PIPELINE: Total Length 12,706 Ft.
Pontoon 640. Shore 370 Submerged 11,696

CHARACTER OF MATERIAL AND PERCENTAGE OF EACH: Sand, Silt, Debris

AVERAGE DEPTH (Feet and Tenths)
Before Dredging: 43.0' After Dredging: 46.0' Payment Depth: 45+1

WEATHER: Temp 37-48F; Wind 11-20 mph; Precip 0.0 in.

NUMBER OF MEN: 60

MAN HOURS: 688

MAN HOURS TO DATE: 52,640

WORK PERFORMED

ITEM	UNIT	AMOUNT GROSS	AMOUNT NET
Av. Width of cut	Feet		287
Area dredged	Sq. Ft.		173,562
Distance advanced this period	Feet		602
Distance advanced previously	Feet		225
Distance advanced to date	Feet		35,915
Amt. dredged this period	Cu. Yds.	22253	10641
Amt. dredged previously	Cu. Yds.	8342	5274
Total amt. dredged to date	Cu. Yds.	1,038,417	756,647

ITEM	NAME	HOURS
DREDGE	Florida	24.00
Tugboat	Bobby A	24
Tugboat	RL Enterkin	0
Tugboat	Pelican State	24
Tugboat	Layla Renee	24
Crew Boat	Cooper River	12
Survey Boat	Red Witch	0
Survey Boat	Pearl River	12
Anchor Barge	GL 107	24
Booster	Reggie	0
Derrick	GL 66	12

COMMODITIES CONSUMED

ITEM	UNIT	QUANTITY
Fuel Oil	Gals.	7,895
Lubricants	Gals.	
Lubricants	Pounds	
Water	Gals.	

DISTRIBUTION OF TIME

EFFECTIVE WORKING TIME	HOURS	MINUTES
Dredging	12	55
Percentage of total time	48%	
NON- EFFECTIVE TIME		
Handling pipelines	1	40
Handling swinging lines	1	55
Clearing pump and pipe line		45
Clearing cutter or suction head	4	55
Changing location of plant on job		
Loss due to opposing natural elements <8hr		
Loss due to opposing natural elements >8hr		
Loss due to passing vessels		
Minor operating repairs <4hr		35
Secure for weekend		
Miscellaneous (Explain in remarks)		
Off Contract		
Total Non-effective Time	9	50
LOST TIME NOT CHARGEABLE		
Loss due to repairs >4hr		
Loss due to laying / relaying submerged line	1	15
Lay time off shift		
Sundays and Holidays		
Waiting for equipment plant		
Collisions		
TOTAL TIME IN PERIOD	24	0

No. of Supervisory Inspections: 2 By field personnel 2 By office personnel

Remarks: The Dredge Florida resumed dredging operations from station 693+20 and dug to station 687+16, AS 31 - along the red toe. Down 4:45 hours to clear debris from cutter and suction.

DAILY REPORT OF OPERATIONS

CONTRACT NO.: W912BU-12-C-0034 | Date: 12/20/12 | Report # 74

DREDGE: Florida

CONTRACTOR: Great Lakes Dredge & Dock Company, LLC

LOCATION OF WORK: AS 31, River Station 681+46, northbound

CHARACTER OF WORK: [ ] Maintenance [X] New

DISPOSAL AREA OR REHANDLING BASIN: National Park Disposal Area

LENGTH OF DISCHARGE OF PIPELINE: Total Length 12,986 Ft.
Pontoon 920. Shore 370 Submerged 11,696

CHARACTER OF MATERIAL AND PERCENTAGE OF EACH: Sand, Silt, Debris

AVERAGE DEPTH (Feet and Tenths)
Before Dredging: 43.0' After Dredging: 46.0' Payment Depth: 45+1

WEATHER: Temp 30-46F; Wind 5-20 mph; Precip 1.0 in.

NUMBER OF MEN: 60

MAN HOURS: 688

MAN HOURS TO DATE: 53,328

WORK PERFORMED

ITEM	UNIT	AMOUNT GROSS	AMOUNT NET
Av. Width of cut	Feet		432
Area dredged	Sq. Ft.		246,037
Distance advanced this period	Feet		570
Distance advanced previously	Feet		602
Distance advanced to date	Feet		36,485
Amt. dredged this period	Cu. Yds.	39830	28654
Amt. dredged previously	Cu. Yds.	22253	10641
Total amt. dredged to date	Cu. Yds.	1,078,247	785,301

ITEM	NAME	HOURS
DREDGE	Florida	24.00
Tugboat	Bobby A	24
Tugboat	RL Enterkin	0
Tugboat	Pelican State	24
Tugboat	Layla Renee	24
Crew Boat	Cooper River	24
Survey Boat	Red Witch	0
Survey Boat	Pearl River	12
Anchor Barge	GL 107	24
Booster	Reggie	0
Derrick	GL 66	12

COMMODITIES CONSUMED

ITEM	UNIT	QUANTITY
Fuel Oil	Gals.	12,012
Lubricants	Gals.	
Lubricants	Pounds	
Water	Gals.	

DISTRIBUTION OF TIME

EFFECTIVE WORKING TIME	HOURS	MINUTES
Dredging	13	35
Percentage of total time	58%	
NON- EFFECTIVE TIME		
Handling pipelines	1	10
Handling swinging lines		35
Clearing pump and pipe line	3	35
Clearing cutter or suction head	4	45
Changing location of plant on job		
Loss due to opposing natural elements <8hr		
Loss due to opposing natural elements >8hr		
Loss due to passing vessels		
Minor operating repairs <4hr		20
Secure for weekend		
Miscellaneous (Explain in remarks)		
Off Contract		
Total Non-effective Time	10	25
LOST TIME NOT CHARGEABLE		
Loss due to repairs >4hr		
Loss due to laying / relaying submerged line		
Lay time off shift		
Sundays and Holidays		
Waiting for equipment plant		
Collisions		
TOTAL TIME IN PERIOD	24	0

No. of Supervisory Inspections: 2 By field personnel 2 By office personnel

Remarks: The Dredge Florida resumed dredging operations from station 687+16 and dug to station 681+46, AS 31 - along the red toe. Down 8:25 hours to clear debris from cutter and pumps (wood, tires, cable).

DAILY REPORT OF OPERATIONS

CONTRACT NO.: W912BU-12-C-0034 | Date: 12/21/12 | Report # 75

DREDGE: Florida

CONTRACTOR: Great Lakes Dredge & Dock Company, LLC

LOCATION OF WORK: AS 30,31, River Station 675+80, northbound

CHARACTER OF WORK: [ ] Maintenance [X] New

DISPOSAL AREA OR REHANDLING BASIN: National Park Disposal Area

LENGTH OF DISCHARGE OF PIPELINE: Total Length 13686 Ft.
Pontoon 1620. Shore 370 Submerged 11,696

CHARACTER OF MATERIAL AND PERCENTAGE OF EACH: Sand, Silt, Debris

AVERAGE DEPTH (Feet and Tenths)
Before Dredging: 43.0' After Dredging: 46.0' Payment Depth: 45+1

WEATHER: Temp 36-57F; Wind 18-24 mph; Precip 1.0 in.

NUMBER OF MEN: 60

MAN HOURS: 688

MAN HOURS TO DATE: 54016

WORK PERFORMED

ITEM	UNIT	AMOUNT GROSS	AMOUNT NET
Av. Width of cut	Feet		413
Area dredged	Sq. Ft.		233,891
Distance advanced this period	Feet		566
Distance advanced previously	Feet		570
Distance advanced to date	Feet		37,051
Amt. dredged this period	Cu. Yds.	36852	26065
Amt. dredged previously	Cu. Yds.	39830	28654
Total amt. dredged to date	Cu. Yds.	1,115,099	811,366

ITEM	NAME	HOURS
DREDGE	Florida	24.00
Tugboat	Bobby A	24
Tugboat	RL Enterkin	0
Tugboat	Pelican State	24
Tugboat	Layla Renee	24
Crew Boat	Cooper River	24
Survey Boat	Red Witch	0
Survey Boat	Pearl River	12
Anchor Barge	GL 107	24
Booster	Reggie	0
Derrick	GL 66	12

COMMODITIES CONSUMED

ITEM	UNIT	QUANTITY
Fuel Oil	Gals.	6,434
Lubricants	Gals.	
Lubricants	Pounds	
Water	Gals.	

DISTRIBUTION OF TIME

EFFECTIVE WORKING TIME	HOURS	MINUTES
Dredging	13	15
Percentage of total time	54%	
NON- EFFECTIVE TIME		
Handling pipelines	2	5
Handling swinging lines	1	35
Clearing pump and pipe line	2	45
Clearing cutter or suction head	1	45
Changing location of plant on job		
Loss due to opposing natural elements <8hr		
Loss due to opposing natural elements >8hr		
Loss due to passing vessels		35
Minor operating repairs <4hr	2	0
Secure for weekend		
Miscellaneous (Explain in remarks)		
Off Contract		
Total Non-effective Time	10	45
LOST TIME NOT CHARGEABLE		
Loss due to repairs >4hr		
Loss due to laying / relaying submerged line		
Lay time off shift		
Sundays and Holidays		
Waiting for equipment plant		
Collisions		
TOTAL TIME IN PERIOD	24	0

No. of Supervisory Inspections: 2 By field personnel 2 By office personnel

Remarks: The Dredge Florida continued dredging operations from station 681+46 and dug to station 675+80, AS 31, 30 - along the red toe. Down 4:30 hours to clear debris from cutter and pumps (wood, tires, cable).

DAILY REPORT OF OPERATIONS

CONTRACT NO.: W912BU-12-C-0034 | Date: 12/22/12 | Report # 76

DREDGE: Florida

CONTRACTOR: Great Lakes Dredge & Dock Company, LLC

LOCATION OF WORK: AS 30, River Station 666+07, northbound

CHARACTER OF WORK: [ ] Maintenance [X] New

DISPOSAL AREA OR REHANDLING BASIN: National Park Disposal Area

LENGTH OF DISCHARGE OF PIPELINE: Total Length 14816 Ft.
Pontoon 2750 Shore 370 Submerged 11,696

CHARACTER OF MATERIAL AND PERCENTAGE OF EACH: Sand, Silt, Debris

AVERAGE DEPTH (Feet and Tenths)
Before Dredging: 43.0' After Dredging: 46.0' Payment Depth: 45+1

WEATHER: Temp 35-41F; Wind 18-31 mph; Precip .0 in.

NUMBER OF MEN: 60

MAN HOURS: 688

MAN HOURS TO DATE: 54704

WORK PERFORMED

ITEM	UNIT	AMOUNT GROSS	AMOUNT NET
Av. Width of cut	Feet		221
Area dredged	Sq. Ft.		214,784
Distance advanced this period	Feet		973
Distance advanced previously	Feet		566
Distance advanced to date	Feet		38,024
Amt. dredged this period	Cu. Yds.	25500	15300
Amt. dredged previously	Cu. Yds.	36852	26065
Total amt. dredged to date	Cu. Yds.	1,140,599	826,666

ITEM	NAME	HOURS
DREDGE	Florida	24.00
Tugboat	Bobby A	24
Tugboat	RL Enterkin	0
Tugboat	Pelican State	24
Tugboat	Layla Renee	24
Crew Boat	Cooper River	24
Survey Boat	Red Witch	0
Survey Boat	Pearl River	12
Anchor Barge	GL 107	24
Booster	Reggie	0
Derrick	GL 66	12

COMMODITIES CONSUMED

ITEM	UNIT	QUANTITY
Fuel Oil	Gals.	14,446
Lubricants	Gals.	
Lubricants	Pounds	
Water	Gals.	

DISTRIBUTION OF TIME

EFFECTIVE WORKING TIME	HOURS	MINUTES
Dredging	11	20
Percentage of total time	46%	
NON- EFFECTIVE TIME		
Handling pipelines	3	0
Handling swinging lines	1	0
Clearing pump and pipe line	3	55
Clearing cutter or suction head	2	20
Changing location of plant on job		
Loss due to opposing natural elements <8hr		
Loss due to opposing natural elements >8hr		
Loss due to passing vessels	1	45
Minor operating repairs <4hr		40
Secure for weekend		
Miscellaneous (Explain in remarks)		
Off Contract		
Total Non-effective Time	12	40
LOST TIME NOT CHARGEABLE		
Loss due to repairs >4hr		
Loss due to laying / relaying submerged line		
Lay time off shift		
Sundays and Holidays		
Waiting for equipment plant		
Collisions		
TOTAL TIME IN PERIOD	24	0

No. of Supervisory Inspections: 2 By field personnel 2 By office personnel

Remarks: The Dredge Florida continued dredging operations from station 675+80 and dug to station 666+07, AS 30 - along the red toe. Down 6:15 hours to clear debris from cutter and pumps (wood, tires, cable). Drag barge worked clearing material from station 651+25 to 648+50, along the red toe (above the Sunoco asset).

DAILY REPORT OF OPERATIONS

CONTRACT NO.: W912BU-12-C-0034 | Date: 12/26/12 | Report # 79

DREDGE: Florida

CONTRACTOR: Great Lakes Dredge & Dock Company, LLC

LOCATION OF WORK AS 13, River Station 700+23, outbound AS 31, River Station 701+35 outbound

CHARACTER OF WORK
[ ] Maintenance [X] New

DISPOSAL AREA OR REHANDLING BASIN: National Park Disposal Area

LENGTH OF DISCHARGE OF PIPELINE: Total Length 17436 Ft.
Pontoon 5370. Shore 370 Submerged 11696

CHARACTER OF MATERIAL AND PERCENTAGE OF EACH: Sand, Silt, Clay, Debris (wood, tires, cable)

AVERAGE DEPTH (Feet and Tenths)
Before Dredging: 43.0' After Dredging: 46.0' Payment Depth: 45+1

WEATHER: Temp 28-42F; Wind 13-33 mph; Precip 1.13 in.

NUMBER OF MEN: 60

MAN HOURS: 688

MAN HOURS TO DATE: 56768

WORK PERFORMED

ITEM	UNIT	AMOUNT GROSS	AMOUNT NET
Av. Width of cut	Feet		126
Area dredged	Sq. Ft.		118,382
Distance advanced this period	Feet		936
Distance advanced previously	Feet		620
Distance advanced to date	Feet		41,258
Amt. dredged this period	Cu. Yds.	16275	10900
Amt. dredged previously	Cu. Yds.	23239	13762
Total amt. dredged to date	Cu. Yds.	1,219,064	880,285

ITEM	NAME	HOURS
DREDGE	Florida	24
Tugboat	Bobby Ann	24
Tugboat	Bayou Dawn	24
Tugboat	Pelican State	24
Tugboat	Layla Renee	24
Crew Boat	Cooper River	24
Survey Boat	Pearl River	12
Anchor Barge	GL 107	24
Booster	Reggie	0
Derrick	GL 66	12

COMMODITIES CONSUMED

ITEM	UNIT	QUANTITY
Fuel Oil	Gals.	8,350
Lubricants	Gals.	
Lubricants	Pounds	
Water	Gals.	

DISTRIBUTION OF TIME

EFFECTIVE WORKING TIME	HOURS	MINUTES
Dredging	9	40
Percentage of total time	40%	
NON- EFFECTIVE TIME		
Handling pipelines	2	35
Handling swinging lines		10
Clearing pump and pipe line	3	5
Clearing cutter or suction head	2	10
Changing location of plant on job	2	40
Loss due to opposing natural elements <8hr		
Loss due to opposing natural elements >8hr		
Loss due to passing vessels	2	25
Minor operating repairs <4hr	1	15
Secure for weekend		
Miscellaneous (Explain in remarks)		
Off Contract		
Total Non-effective Time	14	20
LOST TIME NOT CHARGEABLE		
Loss due to repairs >4hr		
Loss due to laying / relaying submerged line		
Lay time off shift		
Sundays and Holidays		
Waiting for equipment plant		
Collisions		
TOTAL TIME IN PERIOD	24	0

No. of Supervisory Inspections: 2 By field personnel 2 By office personnel

The Dredge Florida continued work along the green toe from station 700+23 to 707+13 heading outbound. The dredge was moved to the red toe and continued work from station 701+35 to 704+32 heading outbound. Dredge encountered Clay on the red toe today. Repairs delay due to work on the pump.

DAILY REPORT OF OPERATIONS

CONTRACT NO.: W912BU-12-C-0034 | Date: 12/27/12 | Report # 80

DREDGE: Florida

CONTRACTOR: Great Lakes Dredge & Dock Company, LLC

LOCATION OF WORK AS 31, River Station 704+32, outbound AS 13, River Station 692+88 outbound

CHARACTER OF WORK
[ ] Maintenance [X] New

DISPOSAL AREA OR REHANDLING BASIN: National Park Disposal Area

LENGTH OF DISCHARGE OF PIPELINE: Total Length 17436 Ft.
Pontoon 5370. Shore 370 Submerged 11696

CHARACTER OF MATERIAL AND PERCENTAGE OF EACH: Sand, Silt, Clay, Debris (wood, tires, cable)

AVERAGE DEPTH (Feet and Tenths)
Before Dredging: 42.0' After Dredging: 46.0' Payment Depth: 45+1

WEATHER: Temp 34-41F; Wind 17-24 mph; Precip 0.03 in.

NUMBER OF MEN: 60

MAN HOURS: 688

MAN HOURS TO DATE: 57456

WORK PERFORMED

ITEM	UNIT	AMOUNT GROSS	AMOUNT NET
Av. Width of cut	Feet		268
Area dredged	Sq. Ft.		45,656
Distance advanced this period	Feet		170
Distance advanced previously	Feet		936
Distance advanced to date	Feet		41,428
Amt. dredged this period	Cu. Yds.	9645	7323
Amt. dredged previously	Cu. Yds.	16275	10900
Total amt. dredged to date	Cu. Yds.	1,228,709	887,608

ITEM	NAME	HOURS
DREDGE	Florida	24
Tugboat	Bobby Ann	24
Tugboat	Bayou Dawn	24
Tugboat	Pelican State	24
Tugboat	Layla Renee	24
Crew Boat	Cooper River	24
Survey Boat	Pearl River	12
Anchor Barge	GL 107	24
Booster	Reggie	0
Derrick	GL 66	12

COMMODITIES CONSUMED

ITEM	UNIT	QUANTITY
Fuel Oil	Gals.	8,257
Lubricants	Gals.	
Lubricants	Pounds	
Water	Gals.	

DISTRIBUTION OF TIME

EFFECTIVE WORKING TIME	HOURS	MINUTES
Dredging	5	45
Percentage of total time	24%	
NON- EFFECTIVE TIME		
Handling pipelines		
Handling swinging lines		
Clearing pump and pipe line		
Clearing cutter or suction head	11	
Changing location of plant on job	2	45
Loss due to opposing natural elements <8hr		
Loss due to opposing natural elements >8hr		
Loss due to passing vessels	2	10
Minor operating repairs <4hr	2	20
Secure for weekend		
Miscellaneous (Explain in remarks)		
Off Contract		
Total Non-effective Time	18	15
LOST TIME NOT CHARGEABLE		
Loss due to repairs >4hr		
Loss due to laying / relaying submerged line		
Lay time off shift		
Sundays and Holidays		
Waiting for equipment plant		
Collisions		
TOTAL TIME IN PERIOD	24	0

No. of Supervisory Inspections: 2 By field personnel 2 By office personnel

The Dredge Florida continued dredging operations along the red toe from station 704+32 to 705+02 heading outbound. The dredge was moved to the green toe and continued operations from station 692+88 to 693+68 heading outbound. Dredge encountered Clay on the red toe today. Repairs delay due to work in the Engine Room.

DAILY REPORT OF OPERATIONS

CONTRACT NO.: W912BU-12-C-0034 | Date: 12/28/12 | Report # 81

DREDGE: Florida

CONTRACTOR: Great Lakes Dredge & Dock Company, LLC

LOCATION OF WORK AS 13, River Station 693+59 outbound

CHARACTER OF WORK
[ ] Maintenance [X] New

DISPOSAL AREA OR REHANDLING BASIN: National Park Disposal Area

LENGTH OF DISCHARGE OF PIPELINE: Total Length 13545 Ft.
Pontoon 1480. Shore 370 Submerged 11695

CHARACTER OF MATERIAL AND PERCENTAGE OF EACH: Sand, Silt, Debris (wood, tires, cable)

AVERAGE DEPTH (Feet and Tenths)
Before Dredging: 40.0' After Dredging: 46.0' Payment Depth: 45+1

WEATHER: Temp 37-48F; Wind 9-12 mph; Precip 0 in.

NUMBER OF MEN: 60

MAN HOURS: 688

MAN HOURS TO DATE: 58144

WORK PERFORMED

ITEM	UNIT	AMOUNT GROSS	AMOUNT NET
Av. Width of cut	Feet		407
Area dredged	Sq. Ft.		162,029
Distance advanced this period	Feet		398
Distance advanced previously	Feet		170
Distance advanced to date	Feet		41,826
Amt. dredged this period	Cu. Yds.	38548	28000
Amt. dredged previously	Cu. Yds.	9645	7323
Total amt. dredged to date	Cu. Yds.	1,267,257	915,608

ITEM	NAME	HOURS
DREDGE	Florida	24
Tugboat	Bobby Ann	24
Tugboat	Bayou Dawn	24
Tugboat	Pelican State	24
Tugboat	Layla Renee	24
Crew Boat	Cooper River	24
Survey Boat	Pearl River	12
Anchor Barge	GL 107	24
Booster	Reggie	0
Derrick	GL 66	12

COMMODITIES CONSUMED

ITEM	UNIT	QUANTITY
Fuel Oil	Gals.	12,116
Lubricants	Gals.	
Lubricants	Pounds	
Water	Gals.	

DISTRIBUTION OF TIME

EFFECTIVE WORKING TIME	HOURS	MINUTES
Dredging	10	10
Percentage of total time	42%	
NON- EFFECTIVE TIME		
Handling pipelines	1	45
Handling swinging lines		15
Clearing pump and pipe line	4	25
Clearing cutter or suction head	2	20
Changing location of plant on job		
Loss due to opposing natural elements <8hr		
Loss due to opposing natural elements >8hr		
Loss due to passing vessels	4	10
Minor operating repairs <4hr		55
Secure for weekend		
Miscellaneous (Explain in remarks)		
Off Contract		
Total Non-effective Time	13	50
LOST TIME NOT CHARGEABLE		
Loss due to repairs >4hr		
Loss due to laying / relaying submerged line		
Lay time off shift		
Sundays and Holidays		
Waiting for equipment plant		
Collisions		
TOTAL TIME IN PERIOD	24	0

No. of Supervisory Inspections: 2 By field personnel 2 By office personnel

The Dredge Florida continued dredging operations along the green toe and continued operations from station 693+59 to 697+57 heading outbound. Repairs delay due to work on the main pump.

DAILY REPORT OF OPERATIONS

CONTRACT NO.: W912BU-12-C-0034 | Date: 12/29/12 | Report # 82

DREDGE: Florida

CONTRACTOR: Great Lakes Dredge & Dock Company, LLC

LOCATION OF WORK AS 13, River Station 697+57 outbound

CHARACTER OF WORK
[ ] Maintenance [X] New

DISPOSAL AREA OR REHANDLING BASIN: National Park Disposal Area

LENGTH OF DISCHARGE OF PIPELINE: Total Length 13545 Ft.
Pontoon 1480. Shore 370 Submerged 11695

CHARACTER OF MATERIAL AND PERCENTAGE OF EACH:

AVERAGE DEPTH (Feet and Tenths)
Before Dredging: 40.0' After Dredging: 46.0' Payment Depth: 45+1

WEATHER: Temp 28-33F; Wind 6-13 mph; Precip 0.24 in. Rain/Snow

NUMBER OF MEN: 60

MAN HOURS: 688

MAN HOURS TO DATE: 58832

WORK PERFORMED

ITEM	UNIT	AMOUNT GROSS	AMOUNT NET
Av. Width of cut	Feet		
Area dredged	Sq. Ft.		
Distance advanced this period	Feet		
Distance advanced previously	Feet		398
Distance advanced to date	Feet		41,826
Amt. dredged this period	Cu. Yds.		
Amt. dredged previously	Cu. Yds.	38548	28000
Total amt. dredged to date	Cu. Yds.	1,267,257	915,608

ITEM	NAME	HOURS
DREDGE	Florida	24
Tugboat	Bobby Ann	24
Tugboat	Bayou Dawn	24
Tugboat	Pelican State	24
Tugboat	Layla Renee	24
Crew Boat	Cooper River	24
Survey Boat	Pearl River	12
Anchor Barge	GL 107	24
Booster	Reggie	0
Derrick	GL 66	12

COMMODITIES CONSUMED

ITEM	UNIT	QUANTITY
Fuel Oil	Gals.	550
Lubricants	Gals.	
Lubricants	Pounds	
Water	Gals.	

DISTRIBUTION OF TIME

EFFECTIVE WORKING TIME	HOURS	MINUTES
Dredging		
Percentage of total time	0%	
NON- EFFECTIVE TIME		
Handling pipelines		
Handling swinging lines		
Clearing pump and pipe line		
Clearing cutter or suction head		
Changing location of plant on job		
Loss due to opposing natural elements <8hr		
Loss due to opposing natural elements >8hr		
Loss due to passing vessels		
Minor operating repairs <4hr	24	
Secure for weekend		
Miscellaneous (Explain in remarks)		
Off Contract		
Total Non-effective Time	24	
LOST TIME NOT CHARGEABLE		
Loss due to repairs >4hr		
Loss due to laying / relaying submerged line		
Lay time off shift		
Sundays and Holidays		
Waiting for equipment plant		
Collisions		
TOTAL TIME IN PERIOD	24	0

No. of Supervisory Inspections: 2 By field personnel 2 By office personnel

The Dredge Florida was down all day for repairs to the main pump.

DAILY REPORT OF OPERATIONS

CONTRACT NO.: W912BU-12-C-0034 | Date: 12/30/12 | Report # 83

DREDGE: Florida

CONTRACTOR: Great Lakes Dredge & Dock Company, LLC

LOCATION OF WORK AS 13, River Station 697+57 outbound; AS 13, River Station 692+90 inbound

CHARACTER OF WORK
[ ] Maintenance [X] New

DISPOSAL AREA OR REHANDLING BASIN: National Park Disposal Area

LENGTH OF DISCHARGE OF PIPELINE: Total Length 13545 Ft.
Pontoon 1480. Shore 370 Submerged 11695

CHARACTER OF MATERIAL AND PERCENTAGE OF EACH: Sand, Silt, Debris (wood, tires, cable)

AVERAGE DEPTH (Feet and Tenths)
Before Dredging: 41.0' After Dredging: 46.0' Payment Depth: 45+1

WEATHER: Temp 28-37F; Wind 14-25 mph; Precip 0 in.

NUMBER OF MEN: 60

MAN HOURS: 688

MAN HOURS TO DATE: 59520

WORK PERFORMED

ITEM	UNIT	AMOUNT GROSS	AMOUNT NET
Av. Width of cut	Feet		305
Area dredged	Sq. Ft.		160,260
Distance advanced this period	Feet		525
Distance advanced previously	Feet		0
Distance advanced to date	Feet		42,351
Amt. dredged this period	Cu. Yds.	29350	24500
Amt. dredged previously	Cu. Yds.	0	0
Total amt. dredged to date	Cu. Yds.	1,296,607	940,108

ITEM	NAME	HOURS
DREDGE	Florida	24
Tugboat	Bobby Ann	24
Tugboat	Bayou Dawn	24
Tugboat	Pelican State	24
Tugboat	Layla Renee	24
Crew Boat	Cooper River	24
Survey Boat	Pearl River	12
Anchor Barge	GL 107	24
Booster	Reggie	0
Derrick	GL 66	12

COMMODITIES CONSUMED

ITEM	UNIT	QUANTITY
Fuel Oil	Gals.	6,309
Lubricants	Gals.	
Lubricants	Pounds	
Water	Gals.	

DISTRIBUTION OF TIME

EFFECTIVE WORKING TIME	HOURS	MINUTES
Dredging	9	35
Percentage of total time	45%	
NON- EFFECTIVE TIME		
Handling pipelines		
Handling swinging lines		10
Clearing pump and pipe line	1	30
Clearing cutter or suction head	1	35
Changing location of plant on job	2	25
Loss due to opposing natural elements <8hr		
Loss due to opposing natural elements >8hr		
Loss due to passing vessels	2	15
Minor operating repairs <4hr	6	30
Secure for weekend		
Miscellaneous (Explain in remarks)		
Off Contract		
Total Non-effective Time	14	25
LOST TIME NOT CHARGEABLE		
Loss due to repairs >4hr		
Loss due to laying / relaying submerged line		
Lay time off shift		
Sundays and Holidays		
Waiting for equipment plant		
Collisions		
TOTAL TIME IN PERIOD	24	0

No. of Supervisory Inspections: 2 By field personnel 2 By office personnel

The Dredge Florida completed repairs to the main pump at 02:55 hrs and continued dredging operations along the green toe from station 697+50 to 699+85 heading outbound. The dredge turned around and continued dredging operations along the green toe from station 692+90 to 690+00 heading inbound. Repairs delay due to work on the main pump and fixing electrical issues.

DAILY REPORT OF OPERATIONS

CONTRACT NO.: W912BU-12-C-0034 | Date: 12/31/12 | Report # 82

DREDGE: Florida

CONTRACTOR: Great Lakes Dredge & Dock Company, LLC

LOCATION OF WORK AS 13, River Station 690+00 inbound

CHARACTER OF WORK
[ ] Maintenance [X] New

DISPOSAL AREA OR REHANDLING BASIN: National Park Disposal Area

LENGTH OF DISCHARGE OF PIPELINE: Total Length 13785 Ft.
Pontoon 1720. Shore 370 Submerged 11695

CHARACTER OF MATERIAL AND PERCENTAGE OF EACH: Sand, Silt, Debris (wood, tires, cable)

AVERAGE DEPTH (Feet and Tenths)
Before Dredging: 39.0' After Dredging: 46.0' Payment Depth: 45+1

WEATHER: Temp 28-42F; Wind 10-14 mph; Precip 0 in.

NUMBER OF MEN: 60

MAN HOURS: 688

MAN HOURS TO DATE: 60208

WORK PERFORMED

ITEM	UNIT	AMOUNT GROSS	AMOUNT NET
Av. Width of cut	Feet		392
Area dredged	Sq. Ft.		215,760
Distance advanced this period	Feet		550
Distance advanced previously	Feet		525
Distance advanced to date	Feet		42,901
Amt. dredged this period	Cu. Yds.	53764	46911
Amt. dredged previously	Cu. Yds.	29350	24500
Total amt. dredged to date	Cu. Yds.	1,350,371	987,019

ITEM	NAME	HOURS
DREDGE	Florida	24
Tugboat	Bobby Ann	24
Tugboat	Bayou Dawn	24
Tugboat	Pelican State	24
Tugboat	Layla Renee	24
Crew Boat	Cooper River	24
Survey Boat	Pearl River	12
Anchor Barge	GL 107	24
Booster	Reggie	0
Derrick	GL 66	12

COMMODITIES CONSUMED

ITEM	UNIT	QUANTITY
Fuel Oil	Gals.	9,236
Lubricants	Gals.	
Lubricants	Pounds	
Water	Gals.	

DISTRIBUTION OF TIME

EFFECTIVE WORKING TIME	HOURS	MINUTES
Dredging	13	40
Percentage of total time	57%	
NON- EFFECTIVE TIME		
Handling pipelines	1	10
Handling swinging lines		55
Clearing pump and pipe line	2	25
Clearing cutter or suction head	2	55
Changing location of plant on job		
Loss due to opposing natural elements <8hr		
Loss due to opposing natural elements >8hr		
Loss due to passing vessels	2	40
Minor operating repairs <4hr		15
Secure for weekend		
Miscellaneous (Explain in remarks)		
Off Contract		
Total Non-effective Time	10	20
LOST TIME NOT CHARGEABLE		
Loss due to repairs >4hr		
Loss due to laying / relaying submerged line		
Lay time off shift		
Sundays and Holidays		
Waiting for equipment plant		
Collisions		
TOTAL TIME IN PERIOD	24	0

No. of Supervisory Inspections: 2 By field personnel 2 By office personnel

The Dredge Florida continued dredging operations along the green toe from station 690+00 to 684+50 heading inbound. Repairs delay due to replace generator on power barge.

DAILY REPORT OF OPERATIONS

CONTRACT NO.: W912BU-12-C-0034 | Date: 1/1/13 | Report # 83

DREDGE: Florida

CONTRACTOR: Great Lakes Dredge & Dock Company, LLC

LOCATION OF WORK AS 13, River Station 679+20 inbound

CHARACTER OF WORK
[ ] Maintenance [X] New

DISPOSAL AREA OR REHANDLING BASIN: National Park Disposal Area

LENGTH OF DISCHARGE OF PIPELINE: Total Length 13905 Ft.
Pontoon 1840. Shore 370 Submerged 11695

CHARACTER OF MATERIAL AND PERCENTAGE OF EACH: Sand, Silt, Debris (wood, tires, cable)

AVERAGE DEPTH (Feet and Tenths)
Before Dredging: 39.0' After Dredging: 46.0' Payment Depth: 45+1

WEATHER: Temp 30-42F; Wind 8-13 mph; Precip 0 in.

NUMBER OF MEN: 60

MAN HOURS: 688

MAN HOURS TO DATE: 60896

WORK PERFORMED

ITEM	UNIT	AMOUNT GROSS	AMOUNT NET
Av. Width of cut	Feet		400
Area dredged	Sq. Ft.		213,951
Distance advanced this period	Feet		535
Distance advanced previously	Feet		550
Distance advanced to date	Feet		43,436
Amt. dredged this period	Cu. Yds.	51500	44625
Amt. dredged previously	Cu. Yds.	53764	46911
Total amt. dredged to date	Cu. Yds.	1,401,871	1,031,644

ITEM	NAME	HOURS
DREDGE	Florida	24
Tugboat	Bobby Ann	24
Tugboat	Bayou Dawn	24
Tugboat	Pelican State	24
Tugboat	Layla Renee	24
Crew Boat	Cooper River	24
Survey Boat	Pearl River	12
Anchor Barge	GL 107	24
Booster	Reggie	0
Derrick	GL 66	12

COMMODITIES CONSUMED

ITEM	UNIT	QUANTITY
Fuel Oil	Gals.	4,575
Lubricants	Gals.	
Lubricants	Pounds	
Water	Gals.	

DISTRIBUTION OF TIME

EFFECTIVE WORKING TIME	HOURS	MINUTES
Dredging	12	15
Percentage of total time	50%	
NON- EFFECTIVE TIME		
Handling pipelines	1	45
Handling swinging lines		30
Clearing pump and pipe line	3	55
Clearing cutter or suction head	2	10
Changing location of plant on job		
Loss due to opposing natural elements <8hr		
Loss due to opposing natural elements >8hr		
Loss due to passing vessels		55
Minor operating repairs <4hr	2	30
Secure for weekend		
Miscellaneous (Explain in remarks)		
Off Contract		
Total Non-effective Time	11	45
LOST TIME NOT CHARGEABLE		
Loss due to repairs >4hr		
Loss due to laying / relaying submerged line		
Lay time off shift		
Sundays and Holidays		
Waiting for equipment plant		
Collisions		
TOTAL TIME IN PERIOD	24	0

No. of Supervisory Inspections: 2 By field personnel 2 By office personnel

The Dredge Florida continued dredging operations along the green toe from station 684+45 to 679+20 heading inbound. Down for cleaning debris from pumps / cutter, and welding the stern elbow. The ponded water within the disposal site was elevation 24.00' with the material build up around the sluice boxes at elevation 21.00'.

DAILY REPORT OF OPERATIONS

CONTRACT NO.: W912BU-12-C-0034 | Date: 1/2/13 | Report # 84

DREDGE: Florida

CONTRACTOR: Great Lakes Dredge & Dock Company, LLC

LOCATION OF WORK AS 12, 13, River Station 674+09 inbound

CHARACTER OF WORK
[ ] Maintenance [X] New

DISPOSAL AREA OR REHANDLING BASIN: National Park Disposal Area

LENGTH OF DISCHARGE OF PIPELINE: Total Length 14,425 Ft.
Pontoon 2360. Shore 370 Submerged 11695

CHARACTER OF MATERIAL AND PERCENTAGE OF EACH: Sand, Silt, Debris (wood, tires, cable)

AVERAGE DEPTH (Feet and Tenths)
Before Dredging: 39.0' After Dredging: 46.0' Payment Depth: 45+1

WEATHER: Temp 25-33F; Wind 8-14 mph; Precip 0 in.

NUMBER OF MEN: 60

MAN HOURS: 688

MAN HOURS TO DATE: 61584

WORK PERFORMED

ITEM	UNIT	AMOUNT GROSS	AMOUNT NET
Av. Width of cut	Feet		390
Area dredged	Sq. Ft.		197,621
Distance advanced this period	Feet		507
Distance advanced previously	Feet		535
Distance advanced to date	Feet		43,971
Amt. dredged this period	Cu. Yds.	44855	32259
Amt. dredged previously	Cu. Yds.	51500	44625
Total amt. dredged to date	Cu. Yds.	1,446,726	1,063,903

ITEM	NAME	HOURS
DREDGE	Florida	24
Tugboat	Bobby Ann	24
Tugboat	Bayou Dawn	24
Tugboat	Pelican State	24
Tugboat	Layla Renee	24
Crew Boat	Cooper River	24
Survey Boat	Pearl River	12
Anchor Barge	GL 107	24
Booster	Reggie	0
Derrick	GL 66	12

COMMODITIES CONSUMED

ITEM	UNIT	QUANTITY
Fuel Oil	Gals.	9,459
Lubricants	Gals.	
Lubricants	Pounds	
Water	Gals.	

DISTRIBUTION OF TIME

EFFECTIVE WORKING TIME	HOURS	MINUTES
Dredging	11	5
Percentage of total time	46%	
NON- EFFECTIVE TIME		
Handling pipelines	3	20
Handling swinging lines		40
Clearing pump and pipe line	3	20
Clearing cutter or suction head	2	55
Changing location of plant on job		
Loss due to opposing natural elements <8hr		
Loss due to opposing natural elements >8hr		
Loss due to passing vessels	2	30
Minor operating repairs <4hr		10
Secure for weekend		
Miscellaneous (Explain in remarks)		
Off Contract		
Total Non-effective Time	12	55
LOST TIME NOT CHARGEABLE		
Loss due to repairs >4hr		
Loss due to laying / relaying submerged line		
Lay time off shift		
Sundays and Holidays		
Waiting for equipment plant		
Collisions		
TOTAL TIME IN PERIOD	24	0

No. of Supervisory Inspections: 2 By field personnel 2 By office personnel

The Dredge Florida continued dredging operations along the green toe from station 679+20 to 674+09 heading inbound. Down for cleaning debris from pumps / cutter, adding pontoons, and ship traffic.

DAILY REPORT OF OPERATIONS

CONTRACT NO.: W912BU-12-C-0034 | Date: 1/3/13 | Report # 85

DREDGE: Florida

CONTRACTOR: Great Lakes Dredge & Dock Company, LLC

LOCATION OF WORK AS 12, River Station 665+11 Inbound Red Side

CHARACTER OF WORK
[ ] Maintenance [X] New

DISPOSAL AREA OR REHANDLING BASIN: National Park Disposal Area

LENGTH OF DISCHARGE OF PIPELINE: Total Length 15325 Ft.
Pontoon 3260. Shore 370 Submerged 11695

CHARACTER OF MATERIAL AND PERCENTAGE OF EACH: Sand, Silt, Debris (wood, tires, cable)

AVERAGE DEPTH (Feet and Tenths)
Before Dredging: 39.0' After Dredging: 46.0' Payment Depth: 45+1

WEATHER: Temp 23-34F; Wind 7-13 mph; Precip 0 in.

NUMBER OF MEN: 60

MAN HOURS: 688

MAN HOURS TO DATE: 62272

WORK PERFORMED

ITEM	UNIT	AMOUNT GROSS	AMOUNT NET
Av. Width of cut	Feet		207
Area dredged	Sq. Ft.		125,355
Distance advanced this period	Feet		606
Distance advanced previously	Feet		507
Distance advanced to date	Feet		45,461
Amt. dredged this period	Cu. Yds.	22995	15087
Amt. dredged previously	Cu. Yds.	44855	32259
Total amt. dredged to date	Cu. Yds.	1,469,721	1,078,990

ITEM	NAME	HOURS
DREDGE	Florida	24
Tugboat	Bobby Ann	24
Tugboat	Sea Bear	24
Tugboat	Pelican State	24
Tugboat	Layla Renee	24
Crew Boat	Cooper River	24
Survey Boat	Pearl River	12
Anchor Barge	GL 107	24
Booster	Reggie	0
Derrick	GL 66	12

COMMODITIES CONSUMED

ITEM	UNIT	QUANTITY
Fuel Oil	Gals.	6,887
Lubricants	Gals.	
Lubricants	Pounds	
Water	Gals.	

DISTRIBUTION OF TIME

EFFECTIVE WORKING TIME	HOURS	MINUTES
Dredging	10	45
Percentage of total time	42%	
NON- EFFECTIVE TIME		
Handling pipelines	2	55
Handling swinging lines	1	28
Clearing pump and pipe line	2	45
Clearing cutter or suction head	2	50
Changing location of plant on job		17
Loss due to opposing natural elements <8hr		
Loss due to opposing natural elements >8hr		
Loss due to passing vessels	3	0
Minor operating repairs <4hr		
Secure for weekend		
Miscellaneous (Explain in remarks)		
Off Contract		
Total Non-effective Time	13	15
LOST TIME NOT CHARGEABLE		
Loss due to repairs >4hr		
Loss due to laying / relaying submerged line		
Lay time off shift		
Sundays and Holidays		
Waiting for equipment plant		
Collisions		
TOTAL TIME IN PERIOD	24	0

No. of Supervisory Inspections: 2 By field personnel 2 By office personnel

The Dredge Florida continued dredging operations along the green toe from station 674+09 to 671+69 heading inbound and along the red toe from station 668+77 to 665+11. Down for cleaning debris from pumps / cutter, adding pontoons, and ship traffic.

DAILY REPORT OF OPERATIONS

CONTRACT NO.: W912BU-12-C-0034 | Date: 1/4/13 | Report # 86

DREDGE: Florida

CONTRACTOR: Great Lakes Dredge & Dock Company, LLC

LOCATION OF WORK AS 12, River Station 655+75 Inbound Green Side

CHARACTER OF WORK
[ ] Maintenance [X] New

DISPOSAL AREA OR REHANDLING BASIN: National Park Disposal Area

LENGTH OF DISCHARGE OF PIPELINE: Total Length 15825 Ft.
Pontoon 3760. Shore 370 Submerged 11695

CHARACTER OF MATERIAL AND PERCENTAGE OF EACH: Sand, Silt, Debris (wood, tires, cable)

AVERAGE DEPTH (Feet and Tenths)
Before Dredging: 39.0' After Dredging: 46.0' Payment Depth: 45+1

WEATHER: Temp 28-37F; Wind 10-18 mph; Precip 0 in.

NUMBER OF MEN: 60

MAN HOURS: 688

MAN HOURS TO DATE: 62960

WORK PERFORMED

ITEM	UNIT	AMOUNT GROSS	AMOUNT NET
Av. Width of cut	Feet		111
Area dredged	Sq. Ft.		103,915
Distance advanced this period	Feet		936
Distance advanced previously	Feet		606
Distance advanced to date	Feet		46,397
Amt. dredged this period	Cu. Yds.	15952	9980
Amt. dredged previously	Cu. Yds.	22955	15087
Total amt. dredged to date	Cu. Yds.	1,485,673	1,088,970

ITEM	NAME	HOURS
DREDGE	Florida	24
Tugboat	Bobby Ann	24
Tugboat	Sea Bear	24
Tugboat	Pelican State	24
Tugboat	Layla Renee	24
Crew Boat	Cooper River	24
Survey Boat	Pearl River	12
Anchor Barge	GL 107	24
Booster	Reggie	0
Derrick	GL 66	12

COMMODITIES CONSUMED

ITEM	UNIT	QUANTITY
Fuel Oil	Gals.	10,049
Lubricants	Gals.	
Lubricants	Pounds	
Water	Gals.	

DISTRIBUTION OF TIME

EFFECTIVE WORKING TIME	HOURS	MINUTES
Dredging	10	0
Percentage of total time	42%	
NON- EFFECTIVE TIME		
Handling pipelines	2	45
Handling swinging lines	1	10
Clearing pump and pipe line	3	0
Clearing cutter or suction head	3	0
Changing location of plant on job		
Loss due to opposing natural elements <8hr		
Loss due to opposing natural elements >8hr		
Loss due to passing vessels	4	5
Minor operating repairs <4hr		
Secure for weekend		
Miscellaneous (Explain in remarks)		
Off Contract		
Total Non-effective Time	14	0
LOST TIME NOT CHARGEABLE		
Loss due to repairs >4hr		
Loss due to laying / relaying submerged line		
Lay time off shift		
Sundays and Holidays		
Waiting for equipment plant		
Collisions		
TOTAL TIME IN PERIOD	24	0

No. of Supervisory Inspections: 2 By field personnel 2 By office personnel

The Dredge Florida continued dredging operations along the green toe from station 665+11 to 655+75. Both the Colonial and Buckeye pipeline assets were crossed this date. A representative from Colonial was notified. Down for cleaning debris from pumps / cutter, adding pontoons, and ship traffic.

DAILY REPORT OF OPERATIONS

CONTRACT NO.: W912BU-12-C-0034 | Date: 1/5/13 | Report # 87

DREDGE: Florida

CONTRACTOR: Great Lakes Dredge & Dock Company, LLC

LOCATION OF WORK AS 12, River Station 653+27 Inbound Green Side / ASD 30, Station 659+78 Inbound Red Side

CHARACTER OF WORK
[ ] Maintenance [X] New

DISPOSAL AREA OR REHANDLING BASIN: National Park Disposal Area

LENGTH OF DISCHARGE OF PIPELINE: Total Length 15825 Ft.
Pontoon 3760. Shore 370 Submerged 11695

CHARACTER OF MATERIAL AND PERCENTAGE OF EACH: Sand, Silt, Debris (wood, tires, cable)

AVERAGE DEPTH (Feet and Tenths)
Before Dredging: 39.0' After Dredging: 46.0' Payment Depth: 45+1

WEATHER: Temp 28-41F; Wind 6-15 mph; Precip 0 in.

NUMBER OF MEN: 60

MAN HOURS: 688

MAN HOURS TO DATE: 63648

WORK PERFORMED

ITEM	UNIT	AMOUNT GROSS	AMOUNT NET
Av. Width of cut	Feet		70
Area dredged	Sq. Ft.		79,157
Distance advanced this period	Feet		1083
Distance advanced previously	Feet		936
Distance advanced to date	Feet		47,480
Amt. dredged this period	Cu. Yds.	8377	4398
Amt. dredged previously	Cu. Yds.	15952	9980
Total amt. dredged to date	Cu. Yds.	1,494,050	1,093,368

ITEM	NAME	HOURS
DREDGE	Florida	24
Tugboat	Bobby Ann	24
Tugboat	Sea Bear	24
Tugboat	Pelican State	24
Tugboat	Layla Renee	24
Crew Boat	Cooper River	24
Survey Boat	Pearl River	12
Anchor Barge	GL 107	24
Booster	Reggie	0
Derrick	GL 66	12

COMMODITIES CONSUMED

ITEM	UNIT	QUANTITY
Fuel Oil	Gals.	4,486
Lubricants	Gals.	
Lubricants	Pounds	
Water	Gals.	

DISTRIBUTION OF TIME

EFFECTIVE WORKING TIME	HOURS	MINUTES
Dredging	8	5
Percentage of total time	33%	
NON- EFFECTIVE TIME		
Handling pipelines	7	10
Handling swinging lines	1	20
Clearing pump and pipe line		55
Clearing cutter or suction head	2	10
Changing location of plant on job	1	20
Loss due to opposing natural elements <8hr		
Loss due to opposing natural elements >8hr		
Loss due to passing vessels	3	0
Minor operating repairs <4hr		
Secure for weekend		
Miscellaneous (Explain in remarks)		
Off Contract		
Total Non-effective Time	15	55
LOST TIME NOT CHARGEABLE		
Loss due to repairs >4hr		
Loss due to laying / relaying submerged line		
Lay time off shift		
Sundays and Holidays		
Waiting for equipment plant		
Collisions		
TOTAL TIME IN PERIOD	24	0

No. of Supervisory Inspections: 2 By field personnel 2 By office personnel

The Dredge Florida continued dredging operations along the green toe from station 655+75 to 653+27; and along the red side from station 668+13 to station 659+78. Down for cleaning debris from pumps / cutter, adding pontoons, moving cuts, and ship traffic. The drag barge cleaned high spots within the Sunoco buffer. A Sunoco rep was on board during this excercise.

DAILY REPORT OF OPERATIONS

CONTRACT NO.: W912BU-12-C-0034 | Date: 1/6/13 | Report # 88

DREDGE: Florida

CONTRACTOR: Great Lakes Dredge & Dock Company, LLC

LOCATION OF WORK AS 14, River Station 718+79 Outbound, Green Side

CHARACTER OF WORK
[ ] Maintenance [X] New

DISPOSAL AREA OR REHANDLING BASIN: National Park Disposal Area

LENGTH OF DISCHARGE OF PIPELINE: Total Length 14625 Ft.
Pontoon 2560 Shore 370 Submerged 11695

CHARACTER OF MATERIAL AND PERCENTAGE OF EACH: Clay, Sand, Cobbles.

AVERAGE DEPTH (Feet and Tenths)
Before Dredging: 42.0' After Dredging: 46.0' Payment Depth: 45+1

WEATHER: Temp 32-48F; Wind 3-13 mph; Precip 0 in.

NUMBER OF MEN: 60

MAN HOURS: 688

MAN HOURS TO DATE: 64336

WORK PERFORMED

ITEM	UNIT	AMOUNT GROSS	AMOUNT NET
Av. Width of cut	Feet		101
Area dredged	Sq. Ft.		64,563
Distance advanced this period	Feet		637
Distance advanced previously	Feet		1083
Distance advanced to date	Feet		48,117
Amt. dredged this period	Cu. Yds.	6390	3129
Amt. dredged previously	Cu. Yds.	8377	4398
Total amt. dredged to date	Cu. Yds.	1,500,440	1,096,497

ITEM	NAME	HOURS
DREDGE	Florida	24
Tugboat	Bobby Ann	24
Tugboat	Sea Bear	24
Tugboat	Pelican State	24
Tugboat	Layla Renee	24
Crew Boat	Cooper River	24
Survey Boat	Pearl River	12
Anchor Barge	GL 107	24
Booster	Reggie	0
Derrick	GL 66	12

COMMODITIES CONSUMED

ITEM	UNIT	QUANTITY
Fuel Oil	Gals.	10,347
Lubricants	Gals.	
Lubricants	Pounds	
Water	Gals.	

DISTRIBUTION OF TIME

EFFECTIVE WORKING TIME	HOURS	MINUTES
Dredging	5	5
Percentage of total time	8%	
NON- EFFECTIVE TIME		
Handling pipelines	7	40
Handling swinging lines	1	25
Clearing pump and pipe line		45
Clearing cutter or suction head	2	5
Changing location of plant on job	4	15
Loss due to opposing natural elements <8hr		
Loss due to opposing natural elements >8hr		
Loss due to passing vessels	1	30
Minor operating repairs <4hr	1	15
Secure for weekend		
Miscellaneous (Explain in remarks)		
Off Contract		
Total Non-effective Time	18	55
LOST TIME NOT CHARGEABLE		
Loss due to repairs >4hr		
Loss due to laying / relaying submerged line		
Lay time off shift		
Sundays and Holidays		
Waiting for equipment plant		
Collisions		
TOTAL TIME IN PERIOD	24	0

No. of Supervisory Inspections: 2 By field personnel 2 By office personnel

The Dredge Florida continued dredging operations along the red toe from station 659+78 to 657+52-inbound; and along the green side from station 653+27 to station 650+45-inbound; from station 717+50 to 718+79, along the green side-outbound. Clay, and cobbles were cleaned from the cutter and suction. Down for cleaning cutter/ pumps, adding pontoons, moving cuts, ship traffic, and a mechanical issue with the cutter gear box.

DAILY REPORT OF OPERATIONS

CONTRACT NO.: W912BU-12-C-0034 | Date: 1/7/13 | Report # 89

DREDGE: Florida

CONTRACTOR: Great Lakes Dredge & Dock Company, LLC

LOCATION OF WORK AS 14, River Station 718+79 Outbound, Green Side

CHARACTER OF WORK
[ ] Maintenance [X] New

DISPOSAL AREA OR REHANDLING BASIN: National Park Disposal Area

LENGTH OF DISCHARGE OF PIPELINE: Total Length 14625 Ft.
Pontoon 2560 Shore 370 Submerged 11695

CHARACTER OF MATERIAL AND PERCENTAGE OF EACH: No Production.

AVERAGE DEPTH (Feet and Tenths)
Before Dredging: 42.0' After Dredging: NA Payment Depth: 45+1

WEATHER: Temp 25-46F; Wind 5-15 mph; Precip 0 in.

NUMBER OF MEN: 60

MAN HOURS: 688

MAN HOURS TO DATE: 65024

WORK PERFORMED

ITEM	UNIT	AMOUNT GROSS	AMOUNT NET
Av. Width of cut	Feet		
Area dredged	Sq. Ft.		
Distance advanced this period	Feet		
Distance advanced previously	Feet		637
Distance advanced to date	Feet		48,117
Amt. dredged this period	Cu. Yds.		
Amt. dredged previously	Cu. Yds.	6390	3129
Total amt. dredged to date	Cu. Yds.	1,500,440	1,096,497

ITEM	NAME	HOURS
DREDGE	Florida	24
Tugboat	Bobby Ann	24
Tugboat	Sea Bear	24
Tugboat	Pelican State	24
Tugboat	Layla Renee	24
Crew Boat	Cooper River	24
Survey Boat	Pearl River	12
Anchor Barge	GL 107	24
Booster	Reggie	0
Derrick	GL 66	12

COMMODITIES CONSUMED

ITEM	UNIT	QUANTITY
Fuel Oil	Gals.	NA
Lubricants	Gals.	
Lubricants	Pounds	
Water	Gals.	

DISTRIBUTION OF TIME

EFFECTIVE WORKING TIME	HOURS	MINUTES
Dredging	0	0
Percentage of total time	0%	
NON- EFFECTIVE TIME		
Handling pipelines		
Handling swinging lines		
Clearing pump and pipe line		
Clearing cutter or suction head		
Changing location of plant on job		
Loss due to opposing natural elements <8hr		
Loss due to opposing natural elements >8hr		
Loss due to passing vessels		
Minor operating repairs <4hr		
Secure for weekend		
Miscellaneous (Explain in remarks)		
Off Contract		
Total Non-effective Time		
LOST TIME NOT CHARGEABLE		
Loss due to repairs >4hr	24	0
Loss due to laying / relaying submerged line		
Lay time off shift		
Sundays and Holidays		
Waiting for equipment plant		
Collisions		
TOTAL TIME IN PERIOD	24	0

No. of Supervisory Inspections: 2 By field personnel 2 By office personnel

The Dredge Florida remained down this date as crews performed mechanical repairs to the cutter gear box.

DAILY REPORT OF OPERATIONS

CONTRACT NO.: W912BU-12-C-0034 | Date: 1/8/13 | Report # 90

DREDGE: Florida

CONTRACTOR: Great Lakes Dredge & Dock Company, LLC

LOCATION OF WORK AS 31, River Station 701+00 Outbound, Red Side

CHARACTER OF WORK
[ ] Maintenance [X] New

DISPOSAL AREA OR REHANDLING BASIN: National Park Disposal Area

LENGTH OF DISCHARGE OF PIPELINE: Total Length 14625 Ft.
Pontoon 2560 Shore 370 Submerged 11695

CHARACTER OF MATERIAL AND PERCENTAGE OF EACH: No Production.

AVERAGE DEPTH (Feet and Tenths)
Before Dredging: 42.0' After Dredging: NA Payment Depth: 45+1

WEATHER: Temp 25-46F; Wind 5-15 mph; Precip 0 in.

NUMBER OF MEN: 60

MAN HOURS: 688

MAN HOURS TO DATE: 65712

WORK PERFORMED

ITEM	UNIT	AMOUNT GROSS	AMOUNT NET
Av. Width of cut	Feet		
Area dredged	Sq. Ft.		
Distance advanced this period	Feet		
Distance advanced previously	Feet		637
Distance advanced to date	Feet		48,117
Amt. dredged this period	Cu. Yds.		
Amt. dredged previously	Cu. Yds.	6390	3129
Total amt. dredged to date	Cu. Yds.	1,500,440	1,096,497

ITEM	NAME	HOURS
DREDGE	Florida	24
Tugboat	Bobby Ann	24
Tugboat	Sea Bear	24
Tugboat	Pelican State	24
Tugboat	Layla Renee	24
Crew Boat	Cooper River	24
Survey Boat	Pearl River	12
Anchor Barge	GL 107	24
Booster	Reggie	0
Derrick	GL 66	12

COMMODITIES CONSUMED

ITEM	UNIT	QUANTITY
Fuel Oil	Gals.	NA
Lubricants	Gals.	
Lubricants	Pounds	
Water	Gals.	

DISTRIBUTION OF TIME

EFFECTIVE WORKING TIME	HOURS	MINUTES
Dredging	0	0
Percentage of total time	0%	
NON- EFFECTIVE TIME		
Handling pipelines		
Handling swinging lines		
Clearing pump and pipe line		
Clearing cutter or suction head		
Changing location of plant on job		
Loss due to opposing natural elements <8hr		
Loss due to opposing natural elements >8hr		
Loss due to passing vessels		
Minor operating repairs <4hr		
Secure for weekend		
Miscellaneous (Explain in remarks)		
Off Contract		
Total Non-effective Time		
LOST TIME NOT CHARGEABLE		
Loss due to repairs >4hr	24	0
Loss due to laying / relaying submerged line		
Lay time off shift		
Sundays and Holidays		
Waiting for equipment plant		
Collisions		
TOTAL TIME IN PERIOD	24	0

No. of Supervisory Inspections: 2 By field personnel 2 By office personnel

The Dredge Florida remained down this date as crews performed mechanical repairs to the cutter gear box.

DAILY REPORT OF OPERATIONS

CONTRACT NO.: W912BU-12-C-0034 | Date: 1/9/13 | Report # 91

DREDGE: Florida

CONTRACTOR: Great Lakes Dredge & Dock Company, LLC

LOCATION OF WORK AS 31, River Station 703+10 Outbound, Red Side

CHARACTER OF WORK
[ ] Maintenance [X] New

DISPOSAL AREA OR REHANDLING BASIN: National Park Disposal Area

LENGTH OF DISCHARGE OF PIPELINE: Total Length 14625 Ft.
Pontoon 2560 Shore 370 Submerged 11695

CHARACTER OF MATERIAL AND PERCENTAGE OF EACH: Cobbles, Gravel, Silt, Clay, and Debris

AVERAGE DEPTH (Feet and Tenths)
Before Dredging: 42.0' After Dredging: 46' Payment Depth: 45+1

WEATHER: Temp 28-50F; Wind 3-12 mph; Precip 0 in.

NUMBER OF MEN: 60

MAN HOURS: 688

MAN HOURS TO DATE: 66400

WORK PERFORMED

ITEM	UNIT	AMOUNT GROSS	AMOUNT NET
Av. Width of cut	Feet		135
Area dredged	Sq. Ft.		42,118
Distance advanced this period	Feet		311
Distance advanced previously	Feet		0
Distance advanced to date	Feet		48,428
Amt. dredged this period	Cu. Yds.	6276	5170
Amt. dredged previously	Cu. Yds.	0	0
Total amt. dredged to date	Cu. Yds.	1,506,716	1,101,667

ITEM	NAME	HOURS
DREDGE	Florida	24
Tugboat	Bobby Ann	24
Tugboat	Sea Bear	24
Tugboat	Pelican State	24
Tugboat	Layla Renee	24
Crew Boat	Cooper River	24
Survey Boat	Pearl River	12
Anchor Barge	GL 107	24
Booster	Reggie	24
Derrick	GL 66	12

COMMODITIES CONSUMED

ITEM	UNIT	QUANTITY
Fuel Oil	Gals.	13,486
Lubricants	Gals.	
Lubricants	Pounds	
Water	Gals.	

DISTRIBUTION OF TIME

EFFECTIVE WORKING TIME	HOURS	MINUTES
Dredging	9	25
Percentage of total time	39%	
NON- EFFECTIVE TIME		
Handling pipelines	2	10
Handling swinging lines		10
Clearing pump and pipe line		45
Clearing cutter or suction head	2	30
Changing location of plant on job		30
Loss due to opposing natural elements <8hr		
Loss due to opposing natural elements >8hr		
Loss due to passing vessels		
Minor operating repairs <4hr	8	30
Secure for weekend		
Miscellaneous (Explain in remarks)		
Off Contract		
Total Non-effective Time	14	35
LOST TIME NOT CHARGEABLE		
Loss due to repairs >4hr		
Loss due to laying / relaying submerged line		
Lay time off shift		
Sundays and Holidays		
Waiting for equipment plant		
Collisions		
TOTAL TIME IN PERIOD	24	0

No. of Supervisory Inspections: 2 By field personnel 2 By office personnel

The Dredge Florida continued repairs to the cutter gear box until 08:30 hrs and started back up along the red toe from from station 703+10 to 706+21 heading outbound.

DAILY REPORT OF OPERATIONS

CONTRACT NO.: W912BU-12-C-0034 | Date: 1/10/13 | Report # 92

DREDGE: Florida

CONTRACTOR: Great Lakes Dredge & Dock Company, LLC

LOCATION OF WORK AS 32, River Station 706+21 Outbound, Red Side

CHARACTER OF WORK
[ ] Maintenance [X] New

DISPOSAL AREA OR REHANDLING BASIN: National Park Disposal Area

LENGTH OF DISCHARGE OF PIPELINE: Total Length 15385 Ft.
Pontoon 3320 Shore 370 Submerged 11695

CHARACTER OF MATERIAL AND PERCENTAGE OF EACH: Cobbles, Gravel, Sand, Clay, and Debris

AVERAGE DEPTH (Feet and Tenths)
Before Dredging: 43.0' After Dredging: 46' Payment Depth: 45+1

WEATHER: Temp 37-48F; Wind 8-14 mph; Precip 0 in.

NUMBER OF MEN: 60

MAN HOURS: 688

MAN HOURS TO DATE: 67088

WORK PERFORMED

ITEM	UNIT	AMOUNT GROSS	AMOUNT NET
Av. Width of cut	Feet		138
Area dredged	Sq. Ft.		95,089
Distance advanced this period	Feet		687
Distance advanced previously	Feet		311
Distance advanced to date	Feet		49,115
Amt. dredged this period	Cu. Yds.	10609	7406
Amt. dredged previously	Cu. Yds.	6276	5170
Total amt. dredged to date	Cu. Yds.	1,517,325	1,109,073

ITEM	NAME	HOURS
DREDGE	Florida	24
Tugboat	Bobby Ann	24
Tugboat	Sea Bear	24
Tugboat	Pelican State	24
Tugboat	Layla Renee	24
Crew Boat	Cooper River	24
Survey Boat	Pearl River	12
Anchor Barge	GL 107	24
Booster	Reggie	24
Derrick	GL 66	12

COMMODITIES CONSUMED

ITEM	UNIT	QUANTITY
Fuel Oil	Gals.	6,485
Lubricants	Gals.	
Lubricants	Pounds	
Water	Gals.	

DISTRIBUTION OF TIME

EFFECTIVE WORKING TIME	HOURS	MINUTES
Dredging	13	35
Percentage of total time	57%	
NON- EFFECTIVE TIME		
Handling pipelines	3	20
Handling swinging lines	1	15
Clearing pump and pipe line		35
Clearing cutter or suction head	3	10
Changing location of plant on job		10
Loss due to opposing natural elements <8hr		
Loss due to opposing natural elements >8hr		
Loss due to passing vessels		
Minor operating repairs <4hr	1	55
Secure for weekend		
Miscellaneous (Explain in remarks)		
Off Contract		
Total Non-effective Time	10	25
LOST TIME NOT CHARGEABLE		
Loss due to repairs >4hr		
Loss due to laying / relaying submerged line		
Lay time off shift		
Sundays and Holidays		
Waiting for equipment plant		
Collisions		
TOTAL TIME IN PERIOD	24	0

No. of Supervisory Inspections: 2 By field personnel 2 By office personnel

The Dredge Florida continued along the red toe from from station 706+21 to 713+08 heading outbound. Repairs delay due to work on electrical issues.

DAILY REPORT OF OPERATIONS

CONTRACT NO.: W912BU-12-C-0034 | Date: 1/11/13 | Report # 93

DREDGE: Florida

CONTRACTOR: Great Lakes Dredge & Dock Company, LLC

LOCATION OF WORK AS 32, River Station 713+08 Outbound, Red Side

CHARACTER OF WORK
[ ] Maintenance [X] New

DISPOSAL AREA OR REHANDLING BASIN: National Park Disposal Area

LENGTH OF DISCHARGE OF PIPELINE: Total Length 15965 Ft.
Pontoon 3900 Shore 370 Submerged 11695

CHARACTER OF MATERIAL AND PERCENTAGE OF EACH: Cobbles, Gravel, Sand, Clay, and Debris

AVERAGE DEPTH (Feet and Tenths)
Before Dredging: 44.0' After Dredging: 46' Payment Depth: 45+1

WEATHER: Temp 34-46F; Wind 4-9 mph; Precip 0.37 in. Rain

NUMBER OF MEN: 60

MAN HOURS: 688

MAN HOURS TO DATE: 67776

WORK PERFORMED

ITEM	UNIT	AMOUNT GROSS	AMOUNT NET
Av. Width of cut	Feet		243
Area dredged	Sq. Ft.		120,974
Distance advanced this period	Feet		498
Distance advanced previously	Feet		687
Distance advanced to date	Feet		49,613
Amt. dredged this period	Cu. Yds.	11422	6619
Amt. dredged previously	Cu. Yds.	10609	7406
Total amt. dredged to date	Cu. Yds.	1,653,295	1,162,944

ITEM	NAME	HOURS
DREDGE	Florida	24
Tugboat	Bobby Ann	24
Tugboat	Sea Bear	24
Tugboat	Pelican State	24
Tugboat	Layla Renee	24
Crew Boat	Cooper River	24
Survey Boat	Pearl River	12
Anchor Barge	GL 107	24
Booster	Reggie	24
Derrick	GL 66	12

COMMODITIES CONSUMED

ITEM	UNIT	QUANTITY
Fuel Oil	Gals.	10,049
Lubricants	Gals.	
Lubricants	Pounds	
Water	Gals.	

DISTRIBUTION OF TIME

EFFECTIVE WORKING TIME	HOURS	MINUTES
Dredging	14	15
Percentage of total time	59%	
NON- EFFECTIVE TIME		
Handling pipelines	2	15
Handling swinging lines		30
Clearing pump and pipe line	2	25
Clearing cutter or suction head	3	10
Changing location of plant on job		
Loss due to opposing natural elements <8hr		
Loss due to opposing natural elements >8hr		
Loss due to passing vessels		45
Minor operating repairs <4hr		40
Secure for weekend		
Miscellaneous (Explain in remarks)		
Off Contract		
Total Non-effective Time	9	45
LOST TIME NOT CHARGEABLE		
Loss due to repairs >4hr		
Loss due to laying / relaying submerged line		
Lay time off shift		
Sundays and Holidays		
Waiting for equipment plant		
Collisions		
TOTAL TIME IN PERIOD	24	0

No. of Supervisory Inspections: 2 By field personnel 2 By office personnel

The Dredge Florida continued along the red toe from from station 713+08 to 718+06 heading outbound. Repairs delay due to work on electrical issues.

DAILY REPORT OF OPERATIONS

CONTRACT NO.: W912BU-12-C-0034 | Date: 1/12/13 | Report # 94

DREDGE: Florida

CONTRACTOR: Great Lakes Dredge & Dock Company, LLC

LOCATION OF WORK AS 32, River Station 718+06 Outbound, Red Side

CHARACTER OF WORK
[ ] Maintenance [X] New

DISPOSAL AREA OR REHANDLING BASIN: National Park Disposal Area

LENGTH OF DISCHARGE OF PIPELINE: Total Length 16145 Ft.
Pontoon 4080 Shore 370 Submerged 11695

CHARACTER OF MATERIAL AND PERCENTAGE OF EACH: Cobbles, Gravel, Sand, Clay, and Debris

AVERAGE DEPTH (Feet and Tenths)
Before Dredging: 43.0' After Dredging: 46' Payment Depth: 45+1

WEATHER: Temp 42-50F; Wind 3-6 mph; Precip 0.0 in.

NUMBER OF MEN: 60

MAN HOURS: 688

MAN HOURS TO DATE: 68464

WORK PERFORMED

ITEM	UNIT	AMOUNT GROSS	AMOUNT NET
Av. Width of cut	Feet		278
Area dredged	Sq. Ft.		104,354
Distance advanced this period	Feet		375
Distance advanced previously	Feet		498
Distance advanced to date	Feet		49,988
Amt. dredged this period	Cu. Yds.	10938	8381
Amt. dredged previously	Cu. Yds.	11422	6619
Total amt. dredged to date	Cu. Yds.	1,664,233	1,171,325

ITEM	NAME	HOURS
DREDGE	Florida	24
Tugboat	Bobby Ann	24
Tugboat	Sea Bear	24
Tugboat	Pelican State	24
Tugboat	Layla Renee	24
Crew Boat	Cooper River	24
Survey Boat	Pearl River	12
Anchor Barge	GL 107	24
Booster	Reggie	24
Derrick	GL 66	12

COMMODITIES CONSUMED

ITEM	UNIT	QUANTITY
Fuel Oil	Gals.	13,636
Lubricants	Gals.	
Lubricants	Pounds	
Water	Gals.	

DISTRIBUTION OF TIME

EFFECTIVE WORKING TIME	HOURS	MINUTES
Dredging	13	35
Percentage of total time	57%	
NON- EFFECTIVE TIME		
Handling pipelines	3	15
Handling swinging lines		10
Clearing pump and pipe line		
Clearing cutter or suction head		40
Changing location of plant on job		
Loss due to opposing natural elements <8hr		
Loss due to opposing natural elements >8hr		
Loss due to passing vessels		
Minor operating repairs <4hr	5	20
Secure for weekend		
Miscellaneous (Explain in remarks)	1	
Off Contract		
Total Non-effective Time	10	25
LOST TIME NOT CHARGEABLE		
Loss due to repairs >4hr		
Loss due to laying / relaying submerged line		
Lay time off shift		
Sundays and Holidays		
Waiting for equipment plant		
Collisions		
TOTAL TIME IN PERIOD	24	0

No. of Supervisory Inspections: 2 By field personnel 2 By office personnel

The Dredge Florida continued along the red toe from from station 718+06 to 721+81 heading outbound. Repairs delay due to work on the booster.

DAILY REPORT OF OPERATIONS

CONTRACT NO.: W912BU-12-C-0034 | Date: 1/13/13 | Report # 95

DREDGE: Florida

CONTRACTOR: Great Lakes Dredge & Dock Company, LLC

LOCATION OF WORK AS 32, River Station 721+81 Outbound, Red Side

CHARACTER OF WORK
[ ] Maintenance [X] New

DISPOSAL AREA OR REHANDLING BASIN: National Park Disposal Area

LENGTH OF DISCHARGE OF PIPELINE: Total Length 16145 Ft.
Pontoon 4080 Shore 370 Submerged 11695

CHARACTER OF MATERIAL AND PERCENTAGE OF EACH: Cobbles, Gravel, Sand, Clay, and Debris

AVERAGE DEPTH (Feet and Tenths)
Before Dredging: 43.0' After Dredging: 46' Payment Depth: 45+1

WEATHER: Temp 43-50F; Wind 2-6 mph; Precip 0.01 in.

NUMBER OF MEN: 60

MAN HOURS: 688

MAN HOURS TO DATE: 69152

WORK PERFORMED

ITEM	UNIT	AMOUNT GROSS	AMOUNT NET
Av. Width of cut	Feet		235
Area dredged	Sq. Ft.		53,541
Distance advanced this period	Feet		228
Distance advanced previously	Feet		375
Distance advanced to date	Feet		50,216
Amt. dredged this period	Cu. Yds.	6820	4667
Amt. dredged previously	Cu. Yds.	10938	8381
Total amt. dredged to date	Cu. Yds.	1,671,053	1,175,992

ITEM	NAME	HOURS
DREDGE	Florida	24
Tugboat	Bobby Ann	24
Tugboat	Sea Bear	24
Tugboat	Pelican State	24
Tugboat	Layla Renee	24
Crew Boat	Cooper River	24
Survey Boat	Pearl River	12
Anchor Barge	GL 107	24
Booster	Reggie	24
Derrick	GL 66	12

COMMODITIES CONSUMED

ITEM	UNIT	QUANTITY
Fuel Oil	Gals.	9,296
Lubricants	Gals.	
Lubricants	Pounds	
Water	Gals.	

DISTRIBUTION OF TIME

EFFECTIVE WORKING TIME	HOURS	MINUTES
Dredging	10	
Percentage of total time	42%	
NON- EFFECTIVE TIME		
Handling pipelines	5	
Handling swinging lines		25
Clearing pump and pipe line		
Clearing cutter or suction head	4	15
Changing location of plant on job		
Loss due to opposing natural elements <8hr		
Loss due to opposing natural elements >8hr		
Loss due to passing vessels		
Minor operating repairs <4hr	3	35
Secure for weekend		
Miscellaneous (Explain in remarks)		45
Off Contract		
Total Non-effective Time	14	
LOST TIME NOT CHARGEABLE		
Loss due to repairs >4hr		
Loss due to laying / relaying submerged line		
Lay time off shift		
Sundays and Holidays		
Waiting for equipment plant		
Collisions		
TOTAL TIME IN PERIOD	24	0

No. of Supervisory Inspections: 2 By field personnel 2 By office personnel

The Dredge Florida continued along the red toe from from station 721+81 to 724+09 heading outbound. Repairs delay due to work on the booster. Misc delay due to changing teeth.

DAILY REPORT OF OPERATIONS

CONTRACT NO.: W912BU-12-C-0034 | Date: 1/14/13 | Report # 96

DREDGE: Florida

CONTRACTOR: Great Lakes Dredge & Dock Company, LLC

LOCATION OF WORK AS 32/33, River Station 726+57 Outbound, Red Side

CHARACTER OF WORK
[ ] Maintenance [X] New

DISPOSAL AREA OR REHANDLING BASIN: National Park Disposal Area

LENGTH OF DISCHARGE OF PIPELINE: Total Length 16405 Ft.
Pontoon 4340 Shore 370 Submerged 11695

CHARACTER OF MATERIAL AND PERCENTAGE OF EACH: Cobbles, Gravel, Sand, Clay, and Debris

AVERAGE DEPTH (Feet and Tenths)
Before Dredging: 43.0' After Dredging: 46' Payment Depth: 45+1

WEATHER: Temp 41-55F; Wind 5-10 mph; Precip 0.00 in.

NUMBER OF MEN: 60

MAN HOURS: 688

MAN HOURS TO DATE: 69840

WORK PERFORMED

ITEM	UNIT	AMOUNT GROSS	AMOUNT NET
Av. Width of cut	Feet		245
Area dredged	Sq. Ft.		60,271
Distance advanced this period	Feet		248
Distance advanced previously	Feet		228
Distance advanced to date	Feet		50,464
Amt. dredged this period	Cu. Yds.	6573	3708
Amt. dredged previously	Cu. Yds.	6820	4667
Total amt. dredged to date	Cu. Yds.	1,677,626	1,179,700

ITEM	NAME	HOURS
DREDGE	Florida	24
Tugboat	Bobby Ann	24
Tugboat	Sea Bear	24
Tugboat	Pelican State	24
Tugboat	Layla Renee	24
Crew Boat	Cooper River	24
Survey Boat	Pearl River	12
Anchor Barge	GL 107	24
Booster	Reggie	24
Derrick	GL 66	12

COMMODITIES CONSUMED

ITEM	UNIT	QUANTITY
Fuel Oil	Gals.	8,677
Lubricants	Gals.	
Lubricants	Pounds	
Water	Gals.	

DISTRIBUTION OF TIME

EFFECTIVE WORKING TIME	HOURS	MINUTES
Dredging	11	20
Percentage of total time	46%	
NON- EFFECTIVE TIME		
Handling pipelines	2	40
Handling swinging lines	1	40
Clearing pump and pipe line		20
Clearing cutter or suction head	2	35
Changing location of plant on job		
Loss due to opposing natural elements <8hr		
Loss due to opposing natural elements >8hr		
Loss due to passing vessels	4	50
Minor operating repairs <4hr		35
Secure for weekend		
Miscellaneous (Explain in remarks)		
Off Contract		
Total Non-effective Time	12	40
LOST TIME NOT CHARGEABLE		
Loss due to repairs >4hr		
Loss due to laying / relaying submerged line		
Lay time off shift		
Sundays and Holidays		
Waiting for equipment plant		
Collisions		
TOTAL TIME IN PERIOD	24	0

No. of Supervisory Inspections: 2 By field personnel 2 By office personnel

The Dredge Florida continued along the red toe from from station 724+09 to 726+57 heading outbound. Down time as a result of ship traffic and adding pontoon line. Misc delay due to changing teeth.

DAILY REPORT OF OPERATIONS

CONTRACT NO.: W912BU-12-C-0034 | Date: 1/15/13 | Report # 97

DREDGE: Florida

CONTRACTOR: Great Lakes Dredge & Dock Company, LLC

LOCATION OF WORK AS 33/14, River Station 729+76 Outbound, Red Side; 718+68 Green

CHARACTER OF WORK
[ ] Maintenance [X] New

DISPOSAL AREA OR REHANDLING BASIN: National Park Disposal Area

LENGTH OF DISCHARGE OF PIPELINE: Total Length 16145 Ft.
Pontoon 4080 Shore 370 Submerged 11695

CHARACTER OF MATERIAL AND PERCENTAGE OF EACH: Clay, Cobbles, Gravel, Sand, and Debris

AVERAGE DEPTH (Feet and Tenths)
Before Dredging: 43.0' After Dredging: 46' Payment Depth: 45+1

WEATHER: Temp 35- 39F; Wind 7-13 mph; Precip 0.00 in.

NUMBER OF MEN: 60

MAN HOURS: 688

MAN HOURS TO DATE: 70528

WORK PERFORMED

ITEM	UNIT	AMOUNT GROSS	AMOUNT NET
Av. Width of cut	Feet		135
Area dredged	Sq. Ft.		59,866
Distance advanced this period	Feet		443
Distance advanced previously	Feet		248
Distance advanced to date	Feet		50,907
Amt. dredged this period	Cu. Yds.	8261	4266
Amt. dredged previously	Cu. Yds.	6573	3708
Total amt. dredged to date	Cu. Yds.	16,858,887	1,183,966

ITEM	NAME	HOURS
DREDGE	Florida	24
Tugboat	Bobby Ann	24
Tugboat	Sea Bear	24
Tugboat	Pelican State	24
Tugboat	Layla Renee	24
Crew Boat	Cooper River	24
Survey Boat	Pearl River	12
Anchor Barge	GL 107	24
Booster	Reggie	24
Derrick	GL 66	12

COMMODITIES CONSUMED

ITEM	UNIT	QUANTITY
Fuel Oil	Gals.	10,138
Lubricants	Gals.	
Lubricants	Pounds	
Water	Gals.	

DISTRIBUTION OF TIME

EFFECTIVE WORKING TIME	HOURS	MINUTES
Dredging	10	20
Percentage of total time	42%	
NON- EFFECTIVE TIME		
Handling pipelines	7	0
Handling swinging lines		55
Clearing pump and pipe line		50
Clearing cutter or suction head	2	20
Changing location of plant on job	1	20
Loss due to opposing natural elements <8hr		
Loss due to opposing natural elements >8hr		
Loss due to passing vessels		45
Minor operating repairs <4hr		30
Secure for weekend		
Miscellaneous (Explain in remarks)		
Off Contract		
Total Non-effective Time	13	40
LOST TIME NOT CHARGEABLE		
Loss due to repairs >4hr		
Loss due to laying / relaying submerged line		
Lay time off shift		
Sundays and Holidays		
Waiting for equipment plant		
Collisions		
TOTAL TIME IN PERIOD	24	0

No. of Supervisory Inspections: 2 By field personnel 2 By office personnel

The Dredge Florida continued along the red toe from from station 726+57 to 729+76 heading outbound; and 717+44 to 718+68 along the green side. Down time as a result of moving cuts, adding pontoon, ship traffic and adding pontoon line. Misc delay due to changing teeth. Sub line was placed across the channel at station 700+00 and the booster incorporated on the green side - outside of the channel.

DAILY REPORT OF OPERATIONS

CONTRACT NO.: W912BU-12-C-0034 | Date: 1/16/13 | Report # 98

DREDGE: Florida

CONTRACTOR: Great Lakes Dredge & Dock Company, LLC

LOCATION OF WORK AS /14, River Station 721+41 Outbound, Green Toe

CHARACTER OF WORK
[ ] Maintenance [X] New

DISPOSAL AREA OR REHANDLING BASIN: National Park Disposal Area

LENGTH OF DISCHARGE OF PIPELINE: Total Length 16145 Ft.
Pontoon 4080 Shore 370 Submerged 11695

CHARACTER OF MATERIAL AND PERCENTAGE OF EACH: Clay, Cobbles, Gravel, Sand, and Debris

AVERAGE DEPTH (Feet and Tenths)
Before Dredging: 43.0' After Dredging: 46' Payment Depth: 45+1

WEATHER: Temp 31-40F; Wind 7-13 mph; Precip 0.05 in.

NUMBER OF MEN: 60

MAN HOURS: 688

MAN HOURS TO DATE: 71216

WORK PERFORMED

ITEM	UNIT	AMOUNT GROSS	AMOUNT NET
Av. Width of cut	Feet		295
Area dredged	Sq. Ft.		79,624
Distance advanced this period	Feet		270
Distance advanced previously	Feet		443
Distance advanced to date	Feet		51,177
Amt. dredged this period	Cu. Yds.	8206	5459
Amt. dredged previously	Cu. Yds.	8261	4266
Total amt. dredged to date	Cu. Yds.	1,694,093	1,189,425

ITEM	NAME	HOURS
DREDGE	Florida	24
Tugboat	Bobby Ann	24
Tugboat	Sea Bear	24
Tugboat	Pelican State	24
Tugboat	Layla Renee	24
Crew Boat	Cooper River	24
Survey Boat	Pearl River	12
Anchor Barge	GL 107	24
Booster	Reggie	24
Derrick	GL 66	12

COMMODITIES CONSUMED

ITEM	UNIT	QUANTITY
Fuel Oil	Gals.	10,138
Lubricants	Gals.	
Lubricants	Pounds	
Water	Gals.	

DISTRIBUTION OF TIME

EFFECTIVE WORKING TIME	HOURS	MINUTES
Dredging	14	0
Percentage of total time	58%	
NON- EFFECTIVE TIME		
Handling pipelines	1	5
Handling swinging lines		25
Clearing pump and pipe line	2	20
Clearing cutter or suction head	3	40
Changing location of plant on job		
Loss due to opposing natural elements <8hr		
Loss due to opposing natural elements >8hr		
Loss due to passing vessels		25
Minor operating repairs <4hr	2	5
Secure for weekend		
Miscellaneous (Explain in remarks)		
Off Contract		
Total Non-effective Time	10	0
LOST TIME NOT CHARGEABLE		
Loss due to repairs >4hr		
Loss due to laying / relaying submerged line		
Lay time off shift		
Sundays and Holidays		
Waiting for equipment plant		
Collisions		
TOTAL TIME IN PERIOD	24	0

No. of Supervisory Inspections: 2 By field personnel 2 By office personnel

The Dredge Florida continued outbound along the green toe, AS 14, station 718+68 to 721+41. The booster was taken off line due to mechanical problems with the gear box. The dredge was down to clean the cutter of clay, remove the booster, and adding pontoon.

DAILY REPORT OF OPERATIONS

CONTRACT NO.: W912BU-12-C-0034 | Date: 1/17/13 | Report # 99

DREDGE: Florida

CONTRACTOR: Great Lakes Dredge & Dock Company, LLC

LOCATION OF WORK AS /14, River Station 722+37 Outbound, Green Toe

CHARACTER OF WORK
[ ] Maintenance [X] New

DISPOSAL AREA OR REHANDLING BASIN: National Park Disposal Area

LENGTH OF DISCHARGE OF PIPELINE: Total Length 16177 Ft.
Pontoon 1090 Shore 250 Submerged 14777

CHARACTER OF MATERIAL AND PERCENTAGE OF EACH: Clay, Cobbles, Gravel, Sand, and Debris

AVERAGE DEPTH (Feet and Tenths)
Before Dredging: 43.0' After Dredging: 46' Payment Depth: 45+1

WEATHER: Temp 31-38 F; Wind 4-14 mph; Precip 0.03 in.

NUMBER OF MEN: 60

MAN HOURS: 688

MAN HOURS TO DATE: 71904

WORK PERFORMED

ITEM	UNIT	AMOUNT GROSS	AMOUNT NET
Av. Width of cut	Feet		454
Area dredged	Sq. Ft.		44,080
Distance advanced this period	Feet		97
Distance advanced previously	Feet		270
Distance advanced to date	Feet		51,274
Amt. dredged this period	Cu. Yds.	4745	2977
Amt. dredged previously	Cu. Yds.	8206	5459
Total amt. dredged to date	Cu. Yds.	1,698,838	1,192,402

ITEM	NAME	HOURS
DREDGE	Florida	24
Tugboat	Bobby Ann	24
Tugboat	Sea Bear	24
Tugboat	Pelican State	24
Tugboat	Layla Renee	24
Crew Boat	Cooper River	24
Survey Boat	Pearl River	12
Anchor Barge	GL 107	24
Booster	Reggie	24
Derrick	GL 66	12

COMMODITIES CONSUMED

ITEM	UNIT	QUANTITY
Fuel Oil	Gals.	11,510
Lubricants	Gals.	
Lubricants	Pounds	
Water	Gals.	

DISTRIBUTION OF TIME

EFFECTIVE WORKING TIME	HOURS	MINUTES
Dredging	9	25
Percentage of total time	38%	
NON- EFFECTIVE TIME		
Handling pipelines	1	0
Handling swinging lines		
Clearing pump and pipe line		
Clearing cutter or suction head	12	25
Changing location of plant on job		
Loss due to opposing natural elements <8hr		
Loss due to opposing natural elements >8hr		
Loss due to passing vessels		30
Minor operating repairs <4hr		40
Secure for weekend		
Miscellaneous (Explain in remarks)		
Off Contract		
Total Non-effective Time	14	35
LOST TIME NOT CHARGEABLE		
Loss due to repairs >4hr		
Loss due to laying / relaying submerged line		
Lay time off shift		
Sundays and Holidays		
Waiting for equipment plant		
Collisions		
TOTAL TIME IN PERIOD	24	0

No. of Supervisory Inspections: 2 By field personnel 2 By office personnel

The Dredge Florida continued outbound along the green toe, AS 14, station 721+41 to 722+37. The dredge was down 5 times (12:25 Hours) to clean the cutter of clay. The booster was placed back inline.

DAILY REPORT OF OPERATIONS

CONTRACT NO.: W912BU-12-C-0034 | Date: 1/18/13 | Report # 100

DREDGE: Florida

CONTRACTOR: Great Lakes Dredge & Dock Company, LLC

LOCATION OF WORK AS /14/15, River Station 730+59 Outbound, Green Toe

CHARACTER OF WORK
[ ] Maintenance [X] New

DISPOSAL AREA OR REHANDLING BASIN: National Park Disposal Area

LENGTH OF DISCHARGE OF PIPELINE: Total Length 16317 Ft.
Pontoon 1290 Shore 250 Submerged 14777

CHARACTER OF MATERIAL AND PERCENTAGE OF EACH: Clay, Cobbles, Gravel, Sand, and Debris

AVERAGE DEPTH (Feet and Tenths)
Before Dredging: 43.0' After Dredging: 46' Payment Depth: 45+1

WEATHER: Temp 33-42 F; Wind 4-14 mph; Precip 0.00 in.

NUMBER OF MEN: 60

MAN HOURS: 688

MAN HOURS TO DATE: 72592

WORK PERFORMED

ITEM	UNIT	AMOUNT GROSS	AMOUNT NET
Av. Width of cut	Feet		186
Area dredged	Sq. Ft.		93,173
Distance advanced this period	Feet		500
Distance advanced previously	Feet		97
Distance advanced to date	Feet		51,774
Amt. dredged this period	Cu. Yds.	9364	5393
Amt. dredged previously	Cu. Yds.	4745	2977
Total amt. dredged to date	Cu. Yds.	1,708,202	1,197,975

ITEM	NAME	HOURS
DREDGE	Florida	24
Tugboat	Bobby Ann	24
Tugboat	Sea Bear	24
Tugboat	Pelican State	24
Tugboat	Layla Renee	24
Crew Boat	Cooper River	24
Survey Boat	Pearl River	12
Anchor Barge	GL 107	24
Booster	Reggie	24
Derrick	GL 66	12

COMMODITIES CONSUMED

ITEM	UNIT	QUANTITY
Fuel Oil	Gals.	11,243
Lubricants	Gals.	
Lubricants	Pounds	
Water	Gals.	

DISTRIBUTION OF TIME

EFFECTIVE WORKING TIME	HOURS	MINUTES
Dredging	12	55
Percentage of total time	50%	
NON- EFFECTIVE TIME		
Handling pipelines		50
Handling swinging lines	1	50
Clearing pump and pipe line		
Clearing cutter or suction head	3	30
Changing location of plant on job	1	10
Loss due to opposing natural elements <8hr		
Loss due to opposing natural elements >8hr		
Loss due to passing vessels	1	10
Minor operating repairs <4hr	2	35
Secure for weekend		
Miscellaneous (Explain in remarks)		
Off Contract		
Total Non-effective Time	11	5
LOST TIME NOT CHARGEABLE		
Loss due to repairs >4hr		
Loss due to laying / relaying submerged line		
Lay time off shift		
Sundays and Holidays		
Waiting for equipment plant		
Collisions		
TOTAL TIME IN PERIOD	24	0

No. of Supervisory Inspections: 2 By field personnel 2 By office personnel

The Dredge Florida continued outbound along the green toe, AS 14/15, station 722+37 to 723+70; 723+52 to 724+18; 727+38 to 730+59.

DAILY REPORT OF OPERATIONS

CONTRACT NO.: W912BU-12-C-0034 | Date: 1/19/13 | Report # 101

DREDGE: Florida

CONTRACTOR: Great Lakes Dredge & Dock Company, LLC

LOCATION OF WORK AS 15, River Station 732+81 Outbound, Green Toe

CHARACTER OF WORK
[ ] Maintenance [X] New

DISPOSAL AREA OR REHANDLING BASIN: National Park Disposal Area

LENGTH OF DISCHARGE OF PIPELINE: Total Length 16317 Ft.
Pontoon 1290 Shore 250 Submerged 14777

CHARACTER OF MATERIAL AND PERCENTAGE OF EACH: Coarse Sand, Cobbles, Gravel, and Debris

AVERAGE DEPTH (Feet and Tenths)
Before Dredging: 43.0' After Dredging: 46' Payment Depth: 45+1

WEATHER: Temp 35-50 F; Wind 4-14 mph; Precip 0.00 in.

NUMBER OF MEN: 60

MAN HOURS: 688

MAN HOURS TO DATE: 73280

WORK PERFORMED

ITEM	UNIT	AMOUNT GROSS	AMOUNT NET
Av. Width of cut	Feet		390
Area dredged	Sq. Ft.		89,716
Distance advanced this period	Feet		230
Distance advanced previously	Feet		500
Distance advanced to date	Feet		52,004
Amt. dredged this period	Cu. Yds.	11831	9641
Amt. dredged previously	Cu. Yds.	9364	5393
Total amt. dredged to date	Cu. Yds.	1,720,033	1,207,616

ITEM	NAME	HOURS
DREDGE	Florida	24
Tugboat	Bobby Ann	24
Tugboat	Sea Bear	24
Tugboat	Pelican State	24
Tugboat	Layla Renee	24
Crew Boat	Cooper River	24
Survey Boat	Pearl River	12
Anchor Barge	GL 107	24
Booster	Reggie	24
Derrick	GL 66	12

COMMODITIES CONSUMED

ITEM	UNIT	QUANTITY
Fuel Oil	Gals.	11,387
Lubricants	Gals.	
Lubricants	Pounds	
Water	Gals.	

DISTRIBUTION OF TIME

EFFECTIVE WORKING TIME	HOURS	MINUTES
Dredging	13	25
Percentage of total time	54%	
NON- EFFECTIVE TIME		
Handling pipelines	1	50
Handling swinging lines		45
Clearing pump and pipe line		
Clearing cutter or suction head	7	30
Changing location of plant on job		
Loss due to opposing natural elements <8hr		
Loss due to opposing natural elements >8hr		
Loss due to passing vessels		10
Minor operating repairs <4hr		20
Secure for weekend		
Miscellaneous (Explain in remarks)		
Off Contract		
Total Non-effective Time	10	35
LOST TIME NOT CHARGEABLE		
Loss due to repairs >4hr		
Loss due to laying / relaying submerged line		
Lay time off shift		
Sundays and Holidays		
Waiting for equipment plant		
Collisions		
TOTAL TIME IN PERIOD	24	0

No. of Supervisory Inspections: 2 By field personnel 2 By office personnel

The Dredge Florida continued outbound along the green toe, AS15, station 730+59 to 732+81. The dredge was down for 7:30 hrs. to clean cable from the cutter.

DAILY REPORT OF OPERATIONS

CONTRACT NO.: W912BU-12-C-0034 | Date: 1/20/13 | Report # 102

DREDGE: Florida

CONTRACTOR: Great Lakes Dredge & Dock Company, LLC

LOCATION OF WORK AS 15, River Station 734+88 Outbound, Green Toe

CHARACTER OF WORK
[ ] Maintenance [X] New

DISPOSAL AREA OR REHANDLING BASIN: National Park Disposal Area

LENGTH OF DISCHARGE OF PIPELINE: Total Length 17237 Ft.
Pontoon 2210 Shore 250 Submerged 14777

CHARACTER OF MATERIAL AND PERCENTAGE OF EACH: Coarse Sand, Stiff Clay, Cobbles, Gravel, and Debris

AVERAGE DEPTH (Feet and Tenths)
Before Dredging: 43.0' After Dredging: 46' Payment Depth: 45+1

WEATHER: Temp 35-48 F; Wind 13-26 mph; Precip 0.00 in.

NUMBER OF MEN: 60

MAN HOURS: 688

MAN HOURS TO DATE: 73968

WORK PERFORMED

ITEM	UNIT	AMOUNT GROSS	AMOUNT NET
Av. Width of cut	Feet		449
Area dredged	Sq. Ft.		114,141
Distance advanced this period	Feet		254
Distance advanced previously	Feet		230
Distance advanced to date	Feet		52,258
Amt. dredged this period	Cu. Yds.	11900	9139
Amt. dredged previously	Cu. Yds.	11831	9641
Total amt. dredged to date	Cu. Yds.	1,731,933	1,217,257

ITEM	NAME	HOURS
DREDGE	Florida	24
Tugboat	Bobby Ann	24
Tugboat	Sea Bear	24
Tugboat	Pelican State	24
Tugboat	Layla Renee	24
Crew Boat	Cooper River	24
Survey Boat	Pearl River	12
Anchor Barge	GL 107	24
Booster	Reggie	24
Derrick	GL 66	12

COMMODITIES CONSUMED

ITEM	UNIT	QUANTITY
Fuel Oil	Gals.	17,237
Lubricants	Gals.	
Lubricants	Pounds	
Water	Gals.	

DISTRIBUTION OF TIME

EFFECTIVE WORKING TIME	HOURS	MINUTES
Dredging	14	30
Percentage of total time	58%	
NON- EFFECTIVE TIME		
Handling pipelines		30
Handling swinging lines		10
Clearing pump and pipe line		40
Clearing cutter or suction head	7	50
Changing location of plant on job		
Loss due to opposing natural elements <8hr		
Loss due to opposing natural elements >8hr		
Loss due to passing vessels		20
Minor operating repairs <4hr		
Secure for weekend		
Miscellaneous (Explain in remarks)		
Off Contract		
Total Non-effective Time	9	30
LOST TIME NOT CHARGEABLE		
Loss due to repairs >4hr		
Loss due to laying / relaying submerged line		
Lay time off shift		
Sundays and Holidays		
Waiting for equipment plant		
Collisions		
TOTAL TIME IN PERIOD	24	0

No. of Supervisory Inspections: 2 By field personnel 2 By office personnel

The Dredge Florida continued outbound along the green toe, AS15, station 732+81 to 734+88. The dredge was down for 7:50 hrs. to clean clay, cable, and debris from the cutter.

DAILY REPORT OF OPERATIONS

CONTRACT NO.: W912BU-12-C-0034 | Date: 1/21/13 | Report # 103

DREDGE: Florida

CONTRACTOR: Great Lakes Dredge & Dock Company, LLC

LOCATION OF WORK AS 15, River Station 735+61 Outbound, Green Toe

CHARACTER OF WORK
[ ] Maintenance [X] New

DISPOSAL AREA OR REHANDLING BASIN: National Park Disposal Area

LENGTH OF DISCHARGE OF PIPELINE: Total Length 17237 Ft.
Pontoon 2210 Shore 250 Submerged 14777

CHARACTER OF MATERIAL AND PERCENTAGE OF EACH: Stiff Clay, Cobbles, Gravel, and Debris

AVERAGE DEPTH (Feet and Tenths)
Before Dredging: 43.0' After Dredging: 46' Payment Depth: 45+1

WEATHER: Temp 28-38 F; Wind 10-15 mph; Precip 0.05 in. (Snow)

NUMBER OF MEN: 60

MAN HOURS: 688

MAN HOURS TO DATE: 74656

WORK PERFORMED

ITEM	UNIT	AMOUNT GROSS	AMOUNT NET
Av. Width of cut	Feet		317
Area dredged	Sq. Ft.		51,643
Distance advanced this period	Feet		163
Distance advanced previously	Feet		254
Distance advanced to date	Feet		52,421
Amt. dredged this period	Cu. Yds.	6267	2873
Amt. dredged previously	Cu. Yds.	11900	9139
Total amt. dredged to date	Cu. Yds.	1,738,200	1,220,130

ITEM	NAME	HOURS
DREDGE	Florida	24
Tugboat	Bobby Ann	24
Tugboat	Sea Bear	24
Tugboat	Pelican State	24
Tugboat	Layla Renee	24
Crew Boat	Cooper River	24
Survey Boat	Pearl River	12
Anchor Barge	GL 107	24
Booster	Reggie	24
Derrick	GL 66	12

COMMODITIES CONSUMED

ITEM	UNIT	QUANTITY
Fuel Oil	Gals.	13,294
Lubricants	Gals.	
Lubricants	Pounds	
Water	Gals.	

DISTRIBUTION OF TIME

EFFECTIVE WORKING TIME	HOURS	MINUTES
Dredging	13	20
Percentage of total time	54%	
NON- EFFECTIVE TIME		
Handling pipelines		
Handling swinging lines	1	15
Clearing pump and pipe line		15
Clearing cutter or suction head	7	35
Changing location of plant on job		
Loss due to opposing natural elements <8hr		
Loss due to opposing natural elements >8hr		
Loss due to passing vessels	1	35
Minor operating repairs <4hr		
Secure for weekend		
Miscellaneous (Explain in remarks)		
Off Contract		
Total Non-effective Time	10	40
LOST TIME NOT CHARGEABLE		
Loss due to repairs >4hr		
Loss due to laying / relaying submerged line		
Lay time off shift		
Sundays and Holidays		
Waiting for equipment plant		
Collisions		
TOTAL TIME IN PERIOD	24	0

No. of Supervisory Inspections: 2 By field personnel 2 By office personnel

The Dredge Florida continued outbound along the green toe, AS15, station 734+88 to 735+61. The dredge was down for 7:35 hrs. to clean clay, cable, and debris from the cutter.

DAILY REPORT OF OPERATIONS

CONTRACT NO.: W912BU-12-C-0034 | Date: 1/22/13 | Report # 104

DREDGE: Florida

CONTRACTOR: Great Lakes Dredge & Dock Company, LLC

LOCATION OF WORK AS 15, River Station 736+25 Outbound, Green Toe

CHARACTER OF WORK
[ ] Maintenance [X] New

DISPOSAL AREA OR REHANDLING BASIN: National Park Disposal Area

LENGTH OF DISCHARGE OF PIPELINE: Total Length 17237 Ft.
Pontoon 2210 Shore 250 Submerged 14777

CHARACTER OF MATERIAL AND PERCENTAGE OF EACH: Stiff Clay, Cobbles, Gravel, and Debris

AVERAGE DEPTH (Feet and Tenths)
Before Dredging: 43.0' After Dredging: 46' Payment Depth: 45+1

WEATHER: Temp 15-19 F; Wind 10-15 mph; Precip 0.00 in.

NUMBER OF MEN: 60

MAN HOURS: 688

MAN HOURS TO DATE: 75344

WORK PERFORMED

ITEM	UNIT	AMOUNT GROSS	AMOUNT NET
Av. Width of cut	Feet		165
Area dredged	Sq. Ft.		20,080
Distance advanced this period	Feet		122
Distance advanced previously	Feet		163
Distance advanced to date	Feet		52,543
Amt. dredged this period	Cu. Yds.	2364	929
Amt. dredged previously	Cu. Yds.	6267	2873
Total amt. dredged to date	Cu. Yds.	1,740,564	1,221,059

ITEM	NAME	HOURS
DREDGE	Florida	24
Tugboat	Bobby Ann	24
Tugboat	Sea Bear	24
Tugboat	Pelican State	24
Tugboat	Layla Renee	24
Crew Boat	Cooper River	24
Survey Boat	Pearl River	12
Anchor Barge	GL 107	24
Booster	Reggie	24
Derrick	GL 66	12

COMMODITIES CONSUMED

ITEM	UNIT	QUANTITY
Fuel Oil	Gals.	2,346
Lubricants	Gals.	
Lubricants	Pounds	
Water	Gals.	

DISTRIBUTION OF TIME

EFFECTIVE WORKING TIME	HOURS	MINUTES
Dredging	3	10
Percentage of total time	7%	
NON- EFFECTIVE TIME		
Handling pipelines		
Handling swinging lines	5	15
Clearing pump and pipe line		
Clearing cutter or suction head	1	20
Changing location of plant on job		30
Loss due to opposing natural elements <8hr		
Loss due to opposing natural elements >8hr		
Loss due to passing vessels	1	35
Minor operating repairs <4hr	2	55
Secure for weekend		
Miscellaneous (Explain in remarks)		
Off Contract		
Total Non-effective Time	11	35
LOST TIME NOT CHARGEABLE		
Loss due to repairs >4hr	9	15
Loss due to laying / relaying submerged line		
Lay time off shift		
Sundays and Holidays		
Waiting for equipment plant		
Collisions		
TOTAL TIME IN PERIOD	24	0

No. of Supervisory Inspections: 2 By field personnel 2 By office personnel

The Dredge Florida continued outbound along the green toe, AS15, station 735+05 to 736+25. The dredge shut down at 1445 hours, for the remainder of the day, due to a mechanical issue with the underwater pump gear box.

DAILY REPORT OF OPERATIONS

CONTRACT NO.: W912BU-12-C-0034 | Date: 1/23/13 | Report # 105

DREDGE: Florida

CONTRACTOR: Great Lakes Dredge & Dock Company, LLC

LOCATION OF WORK AS 15, River Station 736+25 Outbound, Green Toe

CHARACTER OF WORK
[ ] Maintenance [X] New

DISPOSAL AREA OR REHANDLING BASIN: National Park Disposal Area

LENGTH OF DISCHARGE OF PIPELINE: Total Length 17237 Ft.
Pontoon 2210 Shore 250 Submerged 14777

CHARACTER OF MATERIAL AND PERCENTAGE OF EACH: NA

AVERAGE DEPTH (Feet and Tenths)
Before Dredging: 43.0' After Dredging: NA Payment Depth: 45+1

WEATHER: Temp 15-19 F; Wind 10-15 mph; Precip 0.00 in.

NUMBER OF MEN: 60

MAN HOURS: 688

MAN HOURS TO DATE: 76032

WORK PERFORMED

ITEM	UNIT	AMOUNT GROSS	AMOUNT NET
Av. Width of cut	Feet		NA
Area dredged	Sq. Ft.		NA
Distance advanced this period	Feet		NA
Distance advanced previously	Feet		122
Distance advanced to date	Feet		52,543
Amt. dredged this period	Cu. Yds.	NA	NA
Amt. dredged previously	Cu. Yds.	2364	929
Total amt. dredged to date	Cu. Yds.	1,740,564	1,221,059

ITEM	NAME	HOURS
DREDGE	Florida	24
Tugboat	Bobby Ann	24
Tugboat	Sea Bear	24
Tugboat	Pelican State	24
Tugboat	Layla Renee	24
Crew Boat	Cooper River	24
Survey Boat	Pearl River	12
Anchor Barge	GL 107	24
Booster	Reggie	24
Derrick	GL 66	12

COMMODITIES CONSUMED

ITEM	UNIT	QUANTITY
Fuel Oil	Gals.	NA
Lubricants	Gals.	
Lubricants	Pounds	
Water	Gals.	

DISTRIBUTION OF TIME

EFFECTIVE WORKING TIME	HOURS	MINUTES
Dredging	0	0
Percentage of total time	0%	
NON- EFFECTIVE TIME		
Handling pipelines		
Handling swinging lines		
Clearing pump and pipe line		
Clearing cutter or suction head		
Changing location of plant on job		
Loss due to opposing natural elements <8hr		
Loss due to opposing natural elements >8hr		
Loss due to passing vessels		
Minor operating repairs <4hr		
Secure for weekend		
Miscellaneous (Explain in remarks)		
Off Contract		
Total Non-effective Time		
LOST TIME NOT CHARGEABLE		
Loss due to repairs >4hr	24	0
Loss due to laying / relaying submerged line		
Lay time off shift		
Sundays and Holidays		
Waiting for equipment plant		
Collisions		
TOTAL TIME IN PERIOD	24	0

No. of Supervisory Inspections: 2 By field personnel 2 By office personnel

The Dredge Florida remained down and dredging operations temporarily suspended due to a mechanical issue with the underwater pump gear box.

DAILY REPORT OF OPERATIONS

CONTRACT NO.: W912BU-12-C-0034 | Date: 1/24/13 | Report # 106

DREDGE: Florida

CONTRACTOR: Great Lakes Dredge & Dock Company, LLC

LOCATION OF WORK AS 15, River Station 736+25 Outbound, Green Toe (Outside Channel)

CHARACTER OF WORK
[ ] Maintenance [X] New

DISPOSAL AREA OR REHANDLING BASIN: National Park Disposal Area

LENGTH OF DISCHARGE OF PIPELINE: Total Length 17237 Ft.
Pontoon 2210 Shore 250 Submerged 14777

CHARACTER OF MATERIAL AND PERCENTAGE OF EACH: NA

AVERAGE DEPTH (Feet and Tenths)
Before Dredging: 43.0' After Dredging: NA Payment Depth: 45+1

WEATHER: Temp 18-23 F; Wind 10-15 mph; Precip 0.00 in.

NUMBER OF MEN: 60

MAN HOURS: 688

MAN HOURS TO DATE: 76720

WORK PERFORMED

ITEM	UNIT	AMOUNT GROSS	AMOUNT NET
Av. Width of cut	Feet		NA
Area dredged	Sq. Ft.		NA
Distance advanced this period	Feet		NA
Distance advanced previously	Feet		122
Distance advanced to date	Feet		52,543
Amt. dredged this period	Cu. Yds.	NA	NA
Amt. dredged previously	Cu. Yds.	2364	929
Total amt. dredged to date	Cu. Yds.	1,740,564	1,221,059

ITEM	NAME	HOURS
DREDGE	Florida	24
Tugboat	Bobby Ann	24
Tugboat	Sea Bear	24
Tugboat	Pelican State	24
Tugboat	Layla Renee	24
Crew Boat	Cooper River	24
Survey Boat	Pearl River	12
Anchor Barge	GL 107	24
Booster	Reggie	24
Derrick	GL 66	12

COMMODITIES CONSUMED

ITEM	UNIT	QUANTITY
Fuel Oil	Gals.	NA
Lubricants	Gals.	
Lubricants	Pounds	
Water	Gals.	

DISTRIBUTION OF TIME

EFFECTIVE WORKING TIME	HOURS	MINUTES
Dredging	0	0
Percentage of total time	0%	
NON- EFFECTIVE TIME		
Handling pipelines		
Handling swinging lines		
Clearing pump and pipe line		
Clearing cutter or suction head		
Changing location of plant on job		
Loss due to opposing natural elements <8hr		
Loss due to opposing natural elements >8hr		
Loss due to passing vessels		
Minor operating repairs <4hr		
Secure for weekend		
Miscellaneous (Explain in remarks)		
Off Contract		
Total Non-effective Time		
LOST TIME NOT CHARGEABLE		
Loss due to repairs >4hr	24	0
Loss due to laying / relaying submerged line		
Lay time off shift		
Sundays and Holidays		
Waiting for equipment plant		
Collisions		
TOTAL TIME IN PERIOD	24	0

No. of Supervisory Inspections: 2 By field personnel 2 By office personnel

The Dredge Florida remained down and dredging operations temporarily suspended due to a mechanical issue with the underwater pump gear box.

DAILY REPORT OF OPERATIONS

CONTRACT NO.: W912BU-12-C-0034 | Date: 1/25/13 | Report # 107

DREDGE: Florida

CONTRACTOR: Great Lakes Dredge & Dock Company, LLC

LOCATION OF WORK AS 15, River Station 736+25 Outbound, Green Toe (Outside Channel)

CHARACTER OF WORK
[ ] Maintenance [X] New

DISPOSAL AREA OR REHANDLING BASIN: National Park Disposal Area

LENGTH OF DISCHARGE OF PIPELINE: Total Length 17237 Ft.
Pontoon 2210 Shore 250 Submerged 14777

CHARACTER OF MATERIAL AND PERCENTAGE OF EACH: NA

AVERAGE DEPTH (Feet and Tenths)
Before Dredging: 43.0' After Dredging: NA Payment Depth: 45+1

WEATHER: Temp 18-23 F; Wind 10-15 mph; Precip 2.00 in.Snow

NUMBER OF MEN: 60

MAN HOURS: 688

MAN HOURS TO DATE: 77408

WORK PERFORMED

ITEM	UNIT	AMOUNT GROSS	AMOUNT NET
Av. Width of cut	Feet		NA
Area dredged	Sq. Ft.		NA
Distance advanced this period	Feet		NA
Distance advanced previously	Feet		122
Distance advanced to date	Feet		52,543
Amt. dredged this period	Cu. Yds.	NA	NA
Amt. dredged previously	Cu. Yds.	2364	929
Total amt. dredged to date	Cu. Yds.	1,740,564	1,221,059

ITEM	NAME	HOURS
DREDGE	Florida	24
Tugboat	Bobby Ann	24
Tugboat	Sea Bear	24
Tugboat	Pelican State	24
Tugboat	Layla Renee	24
Crew Boat	Cooper River	24
Survey Boat	Pearl River	12
Anchor Barge	GL 107	24
Booster	Reggie	24
Derrick	GL 66	12

COMMODITIES CONSUMED

ITEM	UNIT	QUANTITY
Fuel Oil	Gals.	NA
Lubricants	Gals.	
Lubricants	Pounds	
Water	Gals.	

DISTRIBUTION OF TIME

EFFECTIVE WORKING TIME	HOURS	MINUTES
Dredging	0	0
Percentage of total time	0%	
NON- EFFECTIVE TIME		
Handling pipelines		
Handling swinging lines		
Clearing pump and pipe line		
Clearing cutter or suction head		
Changing location of plant on job		
Loss due to opposing natural elements <8hr		
Loss due to opposing natural elements >8hr		
Loss due to passing vessels		
Minor operating repairs <4hr		
Secure for weekend		
Miscellaneous (Explain in remarks)		
Off Contract		
Total Non-effective Time		
LOST TIME NOT CHARGEABLE		
Loss due to repairs >4hr	24	0
Loss due to laying / relaying submerged line		
Lay time off shift		
Sundays and Holidays		
Waiting for equipment plant		
Collisions		
TOTAL TIME IN PERIOD	24	0

No. of Supervisory Inspections: 2 By field personnel 2 By office personnel

The Dredge Florida remained down and dredging operations temporarily suspended due to a mechanical issue with the underwater pump gear box.

DAILY REPORT OF OPERATIONS

CONTRACT NO.: W912BU-12-C-0034 | Date: 1/26/13 | Report # 108

DREDGE: Florida

CONTRACTOR: Great Lakes Dredge & Dock Company, LLC

LOCATION OF WORK AS 15, River Station 736+25 Outbound, Green Toe (Outside Channel)

CHARACTER OF WORK
[ ] Maintenance [X] New

DISPOSAL AREA OR REHANDLING BASIN: National Park Disposal Area

LENGTH OF DISCHARGE OF PIPELINE: Total Length 17237 Ft.
Pontoon 2210 Shore 250 Submerged 14777

CHARACTER OF MATERIAL AND PERCENTAGE OF EACH: NA

AVERAGE DEPTH (Feet and Tenths)
Before Dredging: 43.0' After Dredging: NA Payment Depth: 45+1

WEATHER: Temp 11-27 F; Wind 10-15 mph; Precip 3.00 in.Snow

NUMBER OF MEN: 60

MAN HOURS: 688

MAN HOURS TO DATE: 78096

WORK PERFORMED

ITEM	UNIT	AMOUNT GROSS	AMOUNT NET
Av. Width of cut	Feet		NA
Area dredged	Sq. Ft.		NA
Distance advanced this period	Feet		NA
Distance advanced previously	Feet		122
Distance advanced to date	Feet		52,543
Amt. dredged this period	Cu. Yds.	NA	NA
Amt. dredged previously	Cu. Yds.	2364	929
Total amt. dredged to date	Cu. Yds.	1,740,564	1,221,059

ITEM	NAME	HOURS
DREDGE	Florida	24
Tugboat	Bobby Ann	24
Tugboat	Sea Bear	24
Tugboat	Pelican State	24
Tugboat	Layla Renee	24
Crew Boat	Cooper River	24
Survey Boat	Pearl River	12
Anchor Barge	GL 107	24
Booster	Reggie	24
Derrick	GL 66	12

COMMODITIES CONSUMED

ITEM	UNIT	QUANTITY
Fuel Oil	Gals.	NA
Lubricants	Gals.	
Lubricants	Pounds	
Water	Gals.	

DISTRIBUTION OF TIME

EFFECTIVE WORKING TIME	HOURS	MINUTES
Dredging	0	0
Percentage of total time	0%	
NON- EFFECTIVE TIME		
Handling pipelines		
Handling swinging lines		
Clearing pump and pipe line		
Clearing cutter or suction head		
Changing location of plant on job		
Loss due to opposing natural elements <8hr		
Loss due to opposing natural elements >8hr		
Loss due to passing vessels		
Minor operating repairs <4hr		
Secure for weekend		
Miscellaneous (Explain in remarks)		
Off Contract		
Total Non-effective Time		
LOST TIME NOT CHARGEABLE		
Loss due to repairs >4hr	24	0
Loss due to laying / relaying submerged line		
Lay time off shift		
Sundays and Holidays		
Waiting for equipment plant		
Collisions		
TOTAL TIME IN PERIOD	24	0

No. of Supervisory Inspections: 2 By field personnel 2 By office personnel

The Dredge Florida remained down and dredging operations temporarily suspended due to a mechanical issue with the underwater pump gear box.

DAILY REPORT OF OPERATIONS

CONTRACT NO.: W912BU-12-C-0034 | Date: 1/27/13 | Report # 109

DREDGE: Florida

CONTRACTOR: Great Lakes Dredge & Dock Company, LLC

LOCATION OF WORK AS 15, River Station 736+25 Outbound, Green Toe (Outside Channel)

CHARACTER OF WORK
[ ] Maintenance [X] New

DISPOSAL AREA OR REHANDLING BASIN: National Park Disposal Area

LENGTH OF DISCHARGE OF PIPELINE: Total Length 17237 Ft.
Pontoon 2210 Shore 250 Submerged 14777

CHARACTER OF MATERIAL AND PERCENTAGE OF EACH: NA

AVERAGE DEPTH (Feet and Tenths)
Before Dredging: 43.0' After Dredging: NA Payment Depth: 45+1

WEATHER: Temp 17-34 F; Wind 10-15 mph; Precip 1.00 in.

NUMBER OF MEN: 60

MAN HOURS: 688

MAN HOURS TO DATE: 78784

WORK PERFORMED

ITEM	UNIT	AMOUNT GROSS	AMOUNT NET
Av. Width of cut	Feet		NA
Area dredged	Sq. Ft.		NA
Distance advanced this period	Feet		NA
Distance advanced previously	Feet		122
Distance advanced to date	Feet		52,543
Amt. dredged this period	Cu. Yds.	NA	NA
Amt. dredged previously	Cu. Yds.	2364	929
Total amt. dredged to date	Cu. Yds.	1,740,564	1,221,059

ITEM	NAME	HOURS
DREDGE	Florida	24
Tugboat	Bobby Ann	24
Tugboat	Sea Bear	24
Tugboat	Pelican State	24
Tugboat	Layla Renee	24
Crew Boat	Cooper River	24
Survey Boat	Pearl River	12
Anchor Barge	GL 107	24
Booster	Reggie	24
Derrick	GL 66	12

COMMODITIES CONSUMED

ITEM	UNIT	QUANTITY
Fuel Oil	Gals.	NA
Lubricants	Gals.	
Lubricants	Pounds	
Water	Gals.	

DISTRIBUTION OF TIME

EFFECTIVE WORKING TIME	HOURS	MINUTES
Dredging	0	0
Percentage of total time	0%	
NON- EFFECTIVE TIME		
Handling pipelines		
Handling swinging lines		
Clearing pump and pipe line		
Clearing cutter or suction head		
Changing location of plant on job		
Loss due to opposing natural elements <8hr		
Loss due to opposing natural elements >8hr		
Loss due to passing vessels		
Minor operating repairs <4hr		
Secure for weekend		
Miscellaneous (Explain in remarks)		
Off Contract		
Total Non-effective Time		
LOST TIME NOT CHARGEABLE		
Loss due to repairs >4hr	24	0
Loss due to laying / relaying submerged line		
Lay time off shift		
Sundays and Holidays		
Waiting for equipment plant		
Collisions		
TOTAL TIME IN PERIOD	24	0

No. of Supervisory Inspections: 2 By field personnel 2 By office personnel

The Dredge Florida remained down and dredging operations temporarily suspended due to a mechanical issue with the underwater pump gear box.

DAILY REPORT OF OPERATIONS

CONTRACT NO.: W912BU-12-C-0034 | Date: 1/28/13 | Report # 110

DREDGE: Florida

CONTRACTOR: Great Lakes Dredge & Dock Company, LLC

LOCATION OF WORK AS 15, River Station 751+10 Outbound, Green Toe

CHARACTER OF WORK
[ ] Maintenance [X] New

DISPOSAL AREA OR REHANDLING BASIN: National Park Disposal Area

LENGTH OF DISCHARGE OF PIPELINE: Total Length 19237 Ft.
Pontoon 2210 Shore 250 Submerged 16777

CHARACTER OF MATERIAL AND PERCENTAGE OF EACH: Coarse Sand, Rock, Gravel, Clay, Silt

AVERAGE DEPTH (Feet and Tenths)
Before Dredging: 43.0' After Dredging: 46 Payment Depth: 45+1

WEATHER: Temp 24-37 F; Wind 4-10 mph; Precip .50 in. Snow

NUMBER OF MEN: 60

MAN HOURS: 688

MAN HOURS TO DATE: 79472

WORK PERFORMED

ITEM	UNIT	AMOUNT GROSS	AMOUNT NET
Av. Width of cut	Feet		175
Area dredged	Sq. Ft.		106,615
Distance advanced this period	Feet		610
Distance advanced previously	Feet		NA
Distance advanced to date	Feet		53,153
Amt. dredged this period	Cu. Yds.	11451	4337
Amt. dredged previously	Cu. Yds.	NA	NA
Total amt. dredged to date	Cu. Yds.	1,752,015	1,225,396

ITEM	NAME	HOURS
DREDGE	Florida	24
Tugboat	Bobby Ann	24
Tugboat	Sea Bear	24
Tugboat	Pelican State	24
Tugboat	Layla Renee	24
Crew Boat	Cooper River	24
Survey Boat	Pearl River	12
Anchor Barge	GL 107	24
Booster	Reggie	24
Derrick	GL 66	12

COMMODITIES CONSUMED

ITEM	UNIT	QUANTITY
Fuel Oil	Gals.	10,949
Lubricants	Gals.	
Lubricants	Pounds	
Water	Gals.	

DISTRIBUTION OF TIME

EFFECTIVE WORKING TIME	HOURS	MINUTES
Dredging	8	30
Percentage of total time		
NON- EFFECTIVE TIME		
Handling pipelines		
Handling swinging lines	1	5
Clearing pump and pipe line		
Clearing cutter or suction head		25
Changing location of plant on job		
Loss due to opposing natural elements <8hr		
Loss due to opposing natural elements >8hr		
Loss due to passing vessels		
Minor operating repairs <4hr		
Secure for weekend		
Miscellaneous (Explain in remarks)		
Off Contract		
Total Non-effective Time	1	30
LOST TIME NOT CHARGEABLE		
Loss due to repairs >4hr	14	0
Loss due to laying / relaying submerged line		
Lay time off shift		
Sundays and Holidays		
Waiting for equipment plant		
Collisions		
TOTAL TIME IN PERIOD	24	0

No. of Supervisory Inspections: 2 By field personnel 2 By office personnel

The Dredge Florida resumed construction at 1400 hours by digging outbound in AS 15, station 745+08 to 751+10. Material consisted of coarse sand, rock, gravel, clay, and silt.

DAILY REPORT OF OPERATIONS

CONTRACT NO.: W912BU-12-C-0034 | Date: 1/29/13 | Report # 111

DREDGE: Florida

CONTRACTOR: Great Lakes Dredge & Dock Company, LLC

LOCATION OF WORK AS 15, River Station 757+06 Outbound, Green Toe

CHARACTER OF WORK
[ ] Maintenance [X] New

DISPOSAL AREA OR REHANDLING BASIN: National Park Disposal Area

LENGTH OF DISCHARGE OF PIPELINE: Total Length 20347 Ft.
Pontoon 3320 Shore 250 Submerged 16777

CHARACTER OF MATERIAL AND PERCENTAGE OF EACH: Coarse Sand, Rock, Gravel, Clay, Silt

AVERAGE DEPTH (Feet and Tenths)
Before Dredging: 43.0' After Dredging: 46 Payment Depth: 45+1

WEATHER: Temp 33-50 F; Wind 5-10 mph; Precip 0.00 in.

NUMBER OF MEN: 60

MAN HOURS: 688

MAN HOURS TO DATE: 80160

WORK PERFORMED

ITEM	UNIT	AMOUNT GROSS	AMOUNT NET
Av. Width of cut	Feet		280
Area dredged	Sq. Ft.		167,715
Distance advanced this period	Feet		598
Distance advanced previously	Feet		610
Distance advanced to date	Feet		53,751
Amt. dredged this period	Cu. Yds.	17563	6226
Amt. dredged previously	Cu. Yds.	11451	4337
Total amt. dredged to date	Cu. Yds.	1,763,466	1,229,733

ITEM	NAME	HOURS
DREDGE	Florida	24
Tugboat	Bobby Ann	24
Tugboat	Sea Bear	24
Tugboat	Pelican State	24
Tugboat	Layla Renee	24
Crew Boat	Cooper River	24
Survey Boat	Pearl River	12
Anchor Barge	GL 107	24
Booster	Reggie	24
Derrick	GL 66	12

COMMODITIES CONSUMED

ITEM	UNIT	QUANTITY
Fuel Oil	Gals.	10,000
Lubricants	Gals.	
Lubricants	Pounds	
Water	Gals.	

DISTRIBUTION OF TIME

EFFECTIVE WORKING TIME	HOURS	MINUTES
Dredging	12	25
Percentage of total time		
NON- EFFECTIVE TIME		
Handling pipelines	2	40
Handling swinging lines	5	15
Clearing pump and pipe line	1	5
Clearing cutter or suction head	1	20
Changing location of plant on job		
Loss due to opposing natural elements <8hr		
Loss due to opposing natural elements >8hr		
Loss due to passing vessels		10
Minor operating repairs <4hr	1	5
Secure for weekend		
Miscellaneous (Explain in remarks)		
Off Contract		
Total Non-effective Time	11	35
LOST TIME NOT CHARGEABLE		
Loss due to repairs >4hr		
Loss due to laying / relaying submerged line		
Lay time off shift		
Sundays and Holidays		
Waiting for equipment plant		
Collisions		
TOTAL TIME IN PERIOD	24	0

No. of Supervisory Inspections: 2 By field personnel 2 By office personnel

The Dredge Florida continued construction this date by digging outbound in AS 15, station 751+10 to 757+06. Material consisted of coarse sand, rock, gravel, clay, and silt.

DAILY REPORT OF OPERATIONS

CONTRACT NO.: W912BU-12-C-0034 | Date: 1/30/13 | Report # 112

DREDGE: Florida

CONTRACTOR: Great Lakes Dredge & Dock Company, LLC

LOCATION OF WORK AS 16, River Station 762+29 Outbound, Green Toe

CHARACTER OF WORK
[ ] Maintenance [X] New

DISPOSAL AREA OR REHANDLING BASIN: National Park Disposal Area

LENGTH OF DISCHARGE OF PIPELINE: Total Length 20847 Ft.
Pontoon 3820 Shore 250 Submerged 16777

CHARACTER OF MATERIAL AND PERCENTAGE OF EACH: Coarse Sand, Rock, Gravel, Clay, Silt

AVERAGE DEPTH (Feet and Tenths)
Before Dredging: 43.0' After Dredging: 46 Payment Depth: 45+1

WEATHER: Temp 39-66 F; Wind 15-30 mph; Precip 0.30 in.

NUMBER OF MEN: 60

MAN HOURS: 688

MAN HOURS TO DATE: 80848

WORK PERFORMED

ITEM	UNIT	AMOUNT GROSS	AMOUNT NET
Av. Width of cut	Feet		324
Area dredged	Sq. Ft.		169,226
Distance advanced this period	Feet		523
Distance advanced previously	Feet		598
Distance advanced to date	Feet		54,274
Amt. dredged this period	Cu. Yds.	13000	6500
Amt. dredged previously	Cu. Yds.	17563	6226
Total amt. dredged to date	Cu. Yds.	1,776,466	1,236,233

ITEM	NAME	HOURS
DREDGE	Florida	24
Tugboat	Bobby Ann	24
Tugboat	Sea Bear	24
Tugboat	Pelican State	24
Tugboat	Layla Renee	24
Crew Boat	Cooper River	24
Survey Boat	Pearl River	12
Anchor Barge	GL 107	24
Booster	Reggie	24
Derrick	GL 66	12

COMMODITIES CONSUMED

ITEM	UNIT	QUANTITY
Fuel Oil	Gals.	7,500
Lubricants	Gals.	
Lubricants	Pounds	
Water	Gals.	

DISTRIBUTION OF TIME

EFFECTIVE WORKING TIME	HOURS	MINUTES
Dredging	13	45
Percentage of total time		
NON- EFFECTIVE TIME		
Handling pipelines	1	5
Handling swinging lines		45
Clearing pump and pipe line	1	55
Clearing cutter or suction head		30
Changing location of plant on job		
Loss due to opposing natural elements <8hr		
Loss due to opposing natural elements >8hr		
Loss due to passing vessels		55
Minor operating repairs <4hr		
Secure for weekend		
Miscellaneous (Explain in remarks)		
Off Contract		
Total Non-effective Time	5	10
LOST TIME NOT CHARGEABLE		
Loss due to repairs >4hr	5	5
Loss due to laying / relaying submerged line		
Lay time off shift		
Sundays and Holidays		
Waiting for equipment plant		
Collisions		
TOTAL TIME IN PERIOD	24	0

No. of Supervisory Inspections: 2 By field personnel 2 By office personnel

The Dredge Florida continued construction this date by digging outbound in AS 16, station 757+06 to 762+29. Material consisted of coarse sand, rock, gravel, clay, and silt. The dredge was down to change cuts and an electrical problem to the ladder guage.

DAILY REPORT OF OPERATIONS

CONTRACT NO.: W912BU-12-C-0034 | Date: 1/31/13 | Report # 113

DREDGE: Florida

CONTRACTOR: Great Lakes Dredge & Dock Company, LLC

LOCATION OF WORK AS 16, River Station 771+85 Outbound, Green Toe

CHARACTER OF WORK
[ ] Maintenance [X] New

DISPOSAL AREA OR REHANDLING BASIN: National Park Disposal Area

LENGTH OF DISCHARGE OF PIPELINE: Total Length 21817 Ft.
Pontoon 4790 Shore 250 Submerged 16777

CHARACTER OF MATERIAL AND PERCENTAGE OF EACH: Coarse Sand, Rock, Gravel, Clay, Silt

AVERAGE DEPTH (Feet and Tenths)
Before Dredging: 43.0' After Dredging: 46 Payment Depth: 45+1

WEATHER: Temp 28-62 F; Wind 20-50 mph; Precip 0.92 in.

NUMBER OF MEN: 60

MAN HOURS: 688

MAN HOURS TO DATE: 81536

WORK PERFORMED

ITEM	UNIT	AMOUNT GROSS	AMOUNT NET
Av. Width of cut	Feet		89
Area dredged	Sq. Ft.		67,000
Distance advanced this period	Feet		750
Distance advanced previously	Feet		523
Distance advanced to date	Feet		55,024
Amt. dredged this period	Cu. Yds.	6900	2500
Amt. dredged previously	Cu. Yds.	13000	6500
Total amt. dredged to date	Cu. Yds.	1,783,366	1,238,733

ITEM	NAME	HOURS
DREDGE	Florida	24
Tugboat	Bobby Ann	24
Tugboat	Sea Bear	24
Tugboat	Pelican State	24
Tugboat	Layla Renee	24
Crew Boat	Cooper River	24
Survey Boat	Pearl River	12
Anchor Barge	GL 107	24
Booster	Reggie	24
Derrick	GL 66	12

COMMODITIES CONSUMED

ITEM	UNIT	QUANTITY
Fuel Oil	Gals.	6,256
Lubricants	Gals.	
Lubricants	Pounds	
Water	Gals.	

DISTRIBUTION OF TIME

EFFECTIVE WORKING TIME	HOURS	MINUTES
Dredging	4	50
Percentage of total time	20%	
NON- EFFECTIVE TIME		
Handling pipelines	3	45
Handling swinging lines	1	20
Clearing pump and pipe line		
Clearing cutter or suction head		30
Changing location of plant on job	3	50
Loss due to opposing natural elements <8hr		
Loss due to opposing natural elements >8hr		
Loss due to passing vessels	1	20
Minor operating repairs <4hr	1	20
Secure for weekend		
Miscellaneous (Explain in remarks)		
Off Contract		
Total Non-effective Time	12	5
LOST TIME NOT CHARGEABLE		
Loss due to repairs >4hr	7	5
Loss due to laying / relaying submerged line		
Lay time off shift		
Sundays and Holidays		
Waiting for equipment plant		
Collisions		
TOTAL TIME IN PERIOD	24	0

No. of Supervisory Inspections: 2 By field personnel 2 By office personnel

The Dredge Florida continued construction this date by digging outbound in AS 16, station 757+06 to 762+29. Material consisted of coarse sand, rock, gravel, clay, and silt. The dredge was down to change cuts and an electrical problem to the ladder guage.

DAILY REPORT OF OPERATIONS

CONTRACT NO.: W912BU-12-C-0034 | Date: 2/01/13 | Report # 114

DREDGE: Florida

CONTRACTOR: Great Lakes Dredge & Dock Company, LLC

LOCATION OF WORK AS 15, River Station 735+97 Inbound, Green Toe

CHARACTER OF WORK
[ ] Maintenance [X] New

DISPOSAL AREA OR REHANDLING BASIN: National Park Disposal Area

LENGTH OF DISCHARGE OF PIPELINE: Total Length 21817 Ft.
Pontoon 2411 Shore 250 Submerged 14356

CHARACTER OF MATERIAL AND PERCENTAGE OF EACH: Red Clay, Gravel

AVERAGE DEPTH (Feet and Tenths)
Before Dredging: 43.0' After Dredging: 46 Payment Depth: 45+1

WEATHER: Temp 19-35 F; Wind 20-25 mph; Precip 0.00 in.

NUMBER OF MEN: 60

MAN HOURS: 688

MAN HOURS TO DATE: 82224

WORK PERFORMED

ITEM	UNIT	AMOUNT GROSS	AMOUNT NET
Av. Width of cut	Feet		213
Area dredged	Sq. Ft.		75,621
Distance advanced this period	Feet		355
Distance advanced previously	Feet		750
Distance advanced to date	Feet		55,379
Amt. dredged this period	Cu. Yds.	5400	3500
Amt. dredged previously	Cu. Yds.	6900	2500
Total amt. dredged to date	Cu. Yds.	1,788,766	1,242,233

ITEM	NAME	HOURS
DREDGE	Florida	24
Tugboat	Bobby Ann	24
Tugboat	Sea Bear	24
Tugboat	Pelican State	24
Tugboat	Layla Renee	24
Crew Boat	Cooper River	24
Survey Boat	Pearl River	12
Anchor Barge	GL 107	24
Booster	Reggie	24
Tugboat	Gulf Dawn	24
Derrick	GL 66	12

COMMODITIES CONSUMED

ITEM	UNIT	QUANTITY
Fuel Oil	Gals.	10,166
Lubricants	Gals.	
Lubricants	Pounds	
Water	Gals.	

DISTRIBUTION OF TIME

EFFECTIVE WORKING TIME	HOURS	MINUTES
Dredging	11	33
Percentage of total time	46%	
NON- EFFECTIVE TIME		
Handling pipelines		10
Handling swinging lines		45
Clearing pump and pipe line		
Clearing cutter or suction head	3	15
Changing location of plant on job	5	55
Loss due to opposing natural elements <8hr		
Loss due to opposing natural elements >8hr		
Loss due to passing vessels		20
Minor operating repairs <4hr	2	0
Secure for weekend		
Miscellaneous (Explain in remarks)		
Off Contract		
Total Non-effective Time	12	25
LOST TIME NOT CHARGEABLE		
Loss due to repairs >4hr		
Loss due to laying / relaying submerged line		
Lay time off shift		
Sundays and Holidays		
Waiting for equipment plant		
Collisions		
TOTAL TIME IN PERIOD	24	0

No. of Supervisory Inspections: 2 By field personnel 2 By office personnel

The Dredge Florida continued construction this date by digging inbound, AS 15, station 739+53 to 735+97. The dredge was turned and began digging inbound on the green side after finishing the southern reach of the contract. Downtime was for moving dredge, and cleaning red clay from the cutter (3:15).

DAILY REPORT OF OPERATIONS

CONTRACT NO.: W912BU-12-C-0034 | Date: 2/02/13 | Report # 115

DREDGE: Florida

CONTRACTOR: Great Lakes Dredge & Dock Company, LLC

LOCATION OF WORK AS 15, River Station 735+57 Inbound, Red Toe

CHARACTER OF WORK
[ ] Maintenance [X] New

DISPOSAL AREA OR REHANDLING BASIN: National Park Disposal Area

LENGTH OF DISCHARGE OF PIPELINE: Total Length 21817 Ft.
Pontoon 2411 Shore 250 Submerged 14356

CHARACTER OF MATERIAL AND PERCENTAGE OF EACH: Red Clay, Gravel

AVERAGE DEPTH (Feet and Tenths)
Before Dredging: 43.0' After Dredging: 46 Payment Depth: 45+1

WEATHER: Temp 19-20 F; Wind 10-15 mph; Precip 0.5 in. Snow

NUMBER OF MEN: 60

MAN HOURS: 688

MAN HOURS TO DATE: 82912

WORK PERFORMED

ITEM	UNIT	AMOUNT GROSS	AMOUNT NET
Av. Width of cut	Feet		126
Area dredged	Sq. Ft.		18,329
Distance advanced this period	Feet		145
Distance advanced previously	Feet		750
Distance advanced to date	Feet		55,524
Amt. dredged this period	Cu. Yds.	1900	1010
Amt. dredged previously	Cu. Yds.	5400	3500
Total amt. dredged to date	Cu. Yds.	1,790,666	1,243,243

ITEM	NAME	HOURS
DREDGE	Florida	24
Tugboat	Bobby Ann	24
Tugboat	Sea Bear	24
Tugboat	Pelican State	24
Tugboat	Layla Renee	24
Crew Boat	Cooper River	24
Survey Boat	Pearl River	12
Anchor Barge	GL 107	24
Booster	Reggie	24
Tugboat	Gulf Dawn	24
Derrick	GL 66	12

COMMODITIES CONSUMED

ITEM	UNIT	QUANTITY
Fuel Oil	Gals.	6,256
Lubricants	Gals.	
Lubricants	Pounds	
Water	Gals.	

DISTRIBUTION OF TIME

EFFECTIVE WORKING TIME	HOURS	MINUTES
Dredging	5	10
Percentage of total time	21%	
NON- EFFECTIVE TIME		
Handling pipelines	2	55
Handling swinging lines		25
Clearing pump and pipe line		
Clearing cutter or suction head	7	30
Changing location of plant on job	5	30
Loss due to opposing natural elements <8hr		
Loss due to opposing natural elements >8hr		
Loss due to passing vessels	2	20
Minor operating repairs <4hr		10
Secure for weekend		
Miscellaneous (Explain in remarks)		
Off Contract		
Total Non-effective Time	18	50
LOST TIME NOT CHARGEABLE		
Loss due to repairs >4hr		
Loss due to laying / relaying submerged line		
Lay time off shift		
Sundays and Holidays		
Waiting for equipment plant		
Collisions		
TOTAL TIME IN PERIOD	24	0

No. of Supervisory Inspections: 2 By field personnel 2 By office personnel

The Dredge Florida continued construction this date by digging a clean up pass inbound along the red toe, AS 15, station 736+97 - 735+57. Downtime was experiencd for cleaning red clay from the cutter (7:30), and moving the dredge.

DAILY REPORT OF OPERATIONS

CONTRACT NO.: W912BU-12-C-0034 | Date: 2/3/13 | Report # 116

DREDGE: Florida

CONTRACTOR: Great Lakes Dredge & Dock Company, LLC

LOCATION OF WORK AS 15, River Station 735+57 Inbound, Red Toe; AS 33, River Station 733+00 Inbound, Green Toe

CHARACTER OF WORK
[ ] Maintenance [X] New

DISPOSAL AREA OR REHANDLING BASIN: National Park Disposal Area

LENGTH OF DISCHARGE OF PIPELINE: Total Length 21817 Ft.
Pontoon 2411 Shore 250 Submerged 14356

CHARACTER OF MATERIAL AND PERCENTAGE OF EACH: Clay, Gravel, Sand, and Debris

AVERAGE DEPTH (Feet and Tenths)
Before Dredging: 44.0' After Dredging: 46 Payment Depth: 45+1

WEATHER: Temp 24-30 F; Wind 4-17 mph; Precip 0.03 in. Snow

NUMBER OF MEN: 60

MAN HOURS: 688

MAN HOURS TO DATE: 83600

WORK PERFORMED

ITEM	UNIT	AMOUNT GROSS	AMOUNT NET
Av. Width of cut	Feet		38
Area dredged	Sq. Ft.		10,512
Distance advanced this period	Feet		280
Distance advanced previously	Feet		145
Distance advanced to date	Feet		55,804
Amt. dredged this period	Cu. Yds.	2200	900
Amt. dredged previously	Cu. Yds.	1900	1010
Total amt. dredged to date	Cu. Yds.	1,792,866	1,244,143

ITEM	NAME	HOURS
DREDGE	Florida	24
Tugboat	Bobby Ann	24
Tugboat	Sea Bear	24
Tugboat	Pelican State	24
Tugboat	Layla Renee	24
Crew Boat	Cooper River	24
Survey Boat	Pearl River	12
Anchor Barge	GL 107	24
Booster	Reggie	24
Tugboat	Gulf Dawn	24
Derrick	GL 66	12

COMMODITIES CONSUMED

ITEM	UNIT	QUANTITY
Fuel Oil	Gals.	2,346
Lubricants	Gals.	
Lubricants	Pounds	
Water	Gals.	

DISTRIBUTION OF TIME

EFFECTIVE WORKING TIME	HOURS	MINUTES
Dredging	4	10
Percentage of total time	45%	
NON- EFFECTIVE TIME		
Handling pipelines		
Handling swinging lines		
Clearing pump and pipe line		
Clearing cutter or suction head	1	55
Changing location of plant on job	2	20
Loss due to opposing natural elements <8hr		
Loss due to opposing natural elements >8hr		
Loss due to passing vessels		50
Minor operating repairs <4hr		
Secure for weekend		
Miscellaneous (Explain in remarks)		
Off Contract	14	45
Total Non-effective Time	19	50
LOST TIME NOT CHARGEABLE		
Loss due to repairs >4hr		
Loss due to laying / relaying submerged line		
Lay time off shift		
Sundays and Holidays		
Waiting for equipment plant		
Collisions		
TOTAL TIME IN PERIOD	24	0

No. of Supervisory Inspections: 2 By field personnel 2 By office personnel

The Florida continued dredging inbound from station 735+57 to station 734+50 performing clean up work along the red toe, AS 33. Material consisted of Gravel and Clay. The dredge moved and continued inbound from station 733+00 to station 731+90 performing clean up work along the green toe, AS 15. Material consisted of Sand and Gravel. The dredge completed work at 09:15 hrs and commenced demobilization.

DAILY REPORT OF OPERATIONS - HOPPER DREDGES

REPORTS CONTROL SYMBOL ENG-CWO-13 — Report # 1

DISTRICT Philadelphia — W912BU-12-B-0006 — DREDGE **Terrapin Island**

EXACT LOCATION OF WORK
Delaware River Channel
Stations: 28+135 – 82+700

[X] NEW WORK
[ ] MAINTENANCE
[ ] BEACH FILL/REHAND

DATE 7-Nov-2012

NUMBER OF PERSONS IN CREW 19

Length of Cut	6000	CHARACTER OF MATERIAL		HOPPER CAPACITY	6194 CU. YDS
Width of Cut	800 ft	AVG INSITU DENSITY	1.800 kg/L	AV. VOL. BIN WATER	5481 CU. YDS
RT to dump	0.64 NMRT	DENSITY OF WATER	1.000 kg/L	AV. UNFILLED CAP.	713 CU. YDS

NAVIGATION AND OTHER DREDGING AIDS (Describe and include statement on adequacy and recommendations)
DGPS position track plotting equipment in use

WORK PERFORMED

DREDGING AND HAULING			AGITATING	DRAFT FOR LOAD NO.	LIGHT	LOADED (for one load only)
# OF LOADS	TOT. CU. YDS	DISPOSAL AREA	TOT. CYD..	FORWARD	12.9 ft	22.2 ft
0	0	National Park Disposal Area		AFT	17.3 ft	22.9 ft
				DRAG DEPTH	46.0 ft	
Cumulative				INDICATORS LAST CHECKED ON	11/7/2012	
0	0			GAS EJECTORS USED	No	0 % OF PUMPING TIME

DISTRIBUTION OF TIME AND MILES RUN

EFFECTIVE WORKING TIME	AGITATING	DREDGING & HAULING MINUTES	HOURS	KILOMETERS RUN
PUMPING		96	1.60	
TURNING		53	0.88	
TO DUMP		10	0.17	
CONNECT		15	0.25	
DUMPING		0	0.00	
DISCONNECT		0	0.00	
TO CUT		0	0.00	
TOTALS		174	2.90	
NON-EFFECTIVE WORKING TIME				
TAKING ON FUEL AND SUPPLIES				
TO AND FROM WHARF OR ANCHORAGE				
LOSS DUE NATURAL ELEMENTS		350		
LOSS DUE TRAFFIC AND BRIDGES				
MINOR OPERATING REPAIRS		30		
TRANSFERRING BETWEEN WORKS				
LAY TIME				
FIRE AND BOAT DRILLS				
MISCELLANEOUS		117		
TOTALS		497		
LOST TIME				
MAJOR REPAIRS AND ALTERATIONS				
TIME ON OTHER PROJECT(S)				
COLLISIONS				
TOTAL LOST TIME				
TOTAL TIME IN PERIOD		671		

AVERAGE SPEED OF DREDGE — MINUTES RADAR IN USE — CONTINUOUSLY X

LOADING 1.0 to 2.0 knots — FEET/MINUTE

TIDE DATA FROM Valeport Tide Gauges Near Dig Area

AGITATING	TODAY	TO DATE
GALS. OF FUEL OIL CONSUMED	1,938	1,938
GALS. OF WATER CONSUMED	1,000	1,000

WEATHER Temp 35-42°F, Wind 14-23 mph, Vis 7.4 miles, Precip 0.39 in

NUMBER OF INSPECTIONS BY SUPERVISORY PERSONNEL — FIELD — OFFICE

REMARKS
LOCATION IN CHANNEL: Sta. 58+700 - 64+700

CONTR. REP. — PROJ. INSP.

ENG. FORM 27A — DATE: 11/8/2012

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DAILY REPORT OF OPERATIONS - HOPPER DREDGES

REPORTS CONTROL SYMBOL ENG-CWO-13 — Report # 2

DISTRICT Philadelphia — W912BU-12-B-0006 — DREDGE **Terrapin Island**

EXACT LOCATION OF WORK
Delaware River Channel
Stations: 28+135 – 82+700

[X] NEW WORK
[ ] MAINTENANCE
[ ] BEACH FILL/REHAND

DATE 8-Nov-2012

NUMBER OF PERSONS IN CREW 19

Length of Cut	6000	CHARACTER OF MATERIAL		HOPPER CAPACITY	6194	CU. YDS
Width of Cut	800 ft	AVG INSITU DENSITY	1.800 kg/L	AV. VOL. BIN WATER	5446	CU. YDS
RT to dump	0.64 NMRT	DENSITY OF WATER	1.003 kg/L	AV. UNFILLED CAP.	748	CU. YDS

NAVIGATION AND OTHER DREDGING AIDS (Describe and include statement on adequacy and recommendations)
DGPS position track plotting equipment in use

WORK PERFORMED — DRAFT FOR LOAD NO. (for one load only)

DREDGING AND HAULING # OF LOADS	TOT. CU. YDS	DISPOSAL AREA	AGITATING TOT. CYD..		LIGHT	LOADED
2	2,935	National Park Disposal Area		FORWARD	12.9 ft	22.2 ft
				AFT	17.3 ft	22.9 ft
				DRAG DEPTH	46.0 ft	
Cumulative				INDICATORS LAST CHECKED ON	11/7/2012	
2	2,935			GAS EJECTORS USED	No	0 % OF PUMPING TIME

DISTRIBUTION OF TIME AND MILES RUN

EFFECTIVE WORKING TIME	AGITATING	DREDGING & HAULING MINUTES	HOURS	KILOMETERS RUN
PUMPING		97	1.62	
TURNING		81	1.35	
TO DUMP		59	0.98	
CONNECT		116	1.93	
DUMPING		171	2.85	
DISCONNECT		54	0.90	
TO CUT		103	1.72	
TOTALS		681	11.35	
NON-EFFECTIVE WORKING TIME				
TAKING ON FUEL AND SUPPLIES				
TO AND FROM WHARF OR ANCHORAGE				
LOSS DUE NATURAL ELEMENTS		360		
LOSS DUE TRAFFIC AND BRIDGES				
MINOR OPERATING REPAIRS		68		
TRANSFERRING BETWEEN WORKS				
LAY TIME				
FIRE AND BOAT DRILLS				
MISCELLANEOUS		331		
TOTALS		759		
LOST TIME				
MAJOR REPAIRS AND ALTERATIONS				
TIME ON OTHER PROJECT(S)				
COLLISIONS				
TOTAL LOST TIME				
TOTAL TIME IN PERIOD		1440		

AVERAGE SPEED OF DREDGE — MINUTES RADAR IN USE — CONTINUOUSLY X

LOADING 1.0 to 2.0 knots — FEET/MINUTE

TIDE DATA FROM Valeport Tide Gauges Near Dig Area

AGITATING	TODAY	TO DATE
GALS. OF FUEL OIL CONSUMED	2,681	4,619
GALS. OF WATER CONSUMED	1,000	2,000

WEATHER 0

NUMBER OF INSPECTIONS BY SUPERVISORY PERSONNEL — FIELD — OFFICE

REMARKS
LOCATION IN CHANNEL: Sta. 58+700 - 64+700

CONTR. REP. — PROJ. INSP.

ENG. FORM 27A — DATE: 11/9/2012

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DAILY REPORT OF OPERATIONS - HOPPER DREDGES

REPORTS CONTROL SYMBOL ENG-CWO-13 — Report # 3

DISTRICT Philadelphia — W912BU-12-B-0006 — DREDGE **Terrapin Island**

EXACT LOCATION OF WORK
Delaware River Channel
Stations: 28+135 – 82+700

[X] NEW WORK
[ ] MAINTENANCE
[ ] BEACH FILL/REHAND

DATE 9-Nov-2012

NUMBER OF PERSONS IN CREW 19

Length of Cut	6000	CHARACTER OF MATERIAL		HOPPER CAPACITY	6194 CU. YDS
Width of Cut	800 ft	AVG INSITU DENSITY	1.800 kg/L	AV. VOL. BIN WATER	5466 CU. YDS
RT to dump	0.64 NMRT	DENSITY OF WATER	1.003 kg/L	AV. UNFILLED CAP.	728 CU. YDS

NAVIGATION AND OTHER DREDGING AIDS (Describe and include statement on adequacy and recommendations)
DGPS position track plotting equipment in use

WORK PERFORMED

DREDGING AND HAULING			AGITATING
# OF LOADS	TOT. CU. YDS	DISPOSAL AREA	TOT. CYD..
8	14,548	National Park Disposal Area	
Cumulative			
10	17,483		

DRAFT FOR LOAD NO. (for one load only)

	LIGHT	LOADED
FORWARD	12.9 ft	22.2 ft
AFT	17.3 ft	22.9 ft
DRAG DEPTH	46.0 ft	
INDICATORS LAST CHECKED ON	11/7/2012	
GAS EJECTORS USED	No	0 % OF PUMPING TIME

DISTRIBUTION OF TIME AND MILES RUN

EFFECTIVE WORKING TIME	AGITATING	DREDGING & HAULING MINUTES	HOURS	KILOMETERS RUN
PUMPING		342	5.70	
TURNING		129	2.15	
TO DUMP		183	3.05	
CONNECT		96	1.60	
DUMPING		423	7.05	
DISCONNECT		68	1.13	
TO CUT		169	2.82	
TOTALS		1410	23.50	
NON-EFFECTIVE WORKING TIME				
TAKING ON FUEL AND SUPPLIES				
TO AND FROM WHARF OR ANCHORAGE				
LOSS DUE NATURAL ELEMENTS				
LOSS DUE TRAFFIC AND BRIDGES				
MINOR OPERATING REPAIRS		15		
TRANSFERRING BETWEEN WORKS				
LAY TIME				
FIRE AND BOAT DRILLS				
MISCELLANEOUS		15		
TOTALS		30		
LOST TIME				
MAJOR REPAIRS AND ALTERATIONS				
TIME ON OTHER PROJECT(S)				
COLLISIONS				
TOTAL LOST TIME				
TOTAL TIME IN PERIOD		1440		

AVERAGE SPEED OF DREDGE — MINUTES RADAR IN USE — CONTINUOUSLY X

LOADING 1.0 to 2.0 knots — FEET/MINUTE

TIDE DATA FROM
Valeport Tide Gauges Near Dig Area

AGITATING	TODAY	TO DATE
GALS. OF FUEL OIL CONSUMED	3,773	8,392
GALS. OF WATER CONSUMED	1,000	3,000

WEATHER 0

NUMBER OF INSPECTIONS BY SUPERVISORY PERSONNEL
FIELD — OFFICE

REMARKS
LOCATION IN CHANNEL: Sta. 58+700 - 64+700

CONTR. REP. — PROJ. INSP.

ENG. FORM 27A — DATE: 11/10/2012

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DAILY REPORT OF OPERATIONS - HOPPER DREDGES

REPORTS CONTROL SYMBOL ENG-CWO-13 — Report # 3

DISTRICT Philadelphia — W912BU-12-B-0006 — DREDGE **Terrapin Island**

EXACT LOCATION OF WORK
Delaware River Channel
Stations: 28+135 – 82+700

[X] NEW WORK
[ ] MAINTENANCE
[ ] BEACH FILL/REHAND

DATE 10-Nov-2012

NUMBER OF PERSONS IN CREW 19

Length of Cut	6000	CHARACTER OF MATERIAL		HOPPER CAPACITY	6194 CU. YDS
Width of Cut	800 ft	AVG INSITU DENSITY	1.800 kg/L	AV. VOL. BIN WATER	5482 CU. YDS
RT to dump	0.64 NMRT	DENSITY OF WATER	1.003 kg/L	AV. UNFILLED CAP.	712 CU. YDS

NAVIGATION AND OTHER DREDGING AIDS (Describe and include statement on adequacy and recommendations)
DGPS position track plotting equipment in use

WORK PERFORMED — DRAFT FOR LOAD NO. (for one load only)

DREDGING AND HAULING # OF LOADS	TOT. CU. YDS	DISPOSAL AREA	AGITATING TOT. CYD..		LIGHT	LOADED
7	11,619	National Park Disposal Area		FORWARD	12.9 ft	22.2 ft
				AFT	17.3 ft	22.9 ft
				DRAG DEPTH	46.0 ft	
Cumulative				INDICATORS LAST CHECKED ON	11/7/2012	
17	29,102			GAS EJECTORS USED	No	0 % OF PUMPING TIME

DISTRIBUTION OF TIME AND MILES RUN

EFFECTIVE WORKING TIME	AGITATING	DREDGING & HAULING MINUTES	HOURS	KILOMETERS RUN
PUMPING		261	4.35	
TURNING		110	1.83	
TO DUMP		203	3.38	
CONNECT		97	1.62	
DUMPING		515	8.58	
DISCONNECT		88	1.47	
TO CUT		120	2.00	
TOTALS		1394	23.23	
NON-EFFECTIVE WORKING TIME				
TAKING ON FUEL AND SUPPLIES				
TO AND FROM WHARF OR ANCHORAGE				
LOSS DUE NATURAL ELEMENTS				
LOSS DUE TRAFFIC AND BRIDGES		10		
MINOR OPERATING REPAIRS		36		
TRANSFERRING BETWEEN WORKS				
LAY TIME				
FIRE AND BOAT DRILLS				
MISCELLANEOUS				
TOTALS		46		
LOST TIME				
MAJOR REPAIRS AND ALTERATIONS				
TIME ON OTHER PROJECT(S)				
COLLISIONS				
TOTAL LOST TIME				
TOTAL TIME IN PERIOD		1440		

AVERAGE SPEED OF DREDGE — MINUTES RADAR IN USE — CONTINUOUSLY X

LOADING 1.0 to 2.0 knots — FEET/MINUTE

TIDE DATA FROM Valeport Tide Gauges Near Dig Area

AGITATING	TODAY	TO DATE
GALS. OF FUEL OIL CONSUMED	4,214	12,606
GALS. OF WATER CONSUMED	1,000	4,000

WEATHER 0

NUMBER OF INSPECTIONS BY SUPERVISORY PERSONNEL — FIELD — OFFICE

REMARKS
LOCATION IN CHANNEL: Sta. 58+700 - 64+700

CONTR. REP. — PROJ. INSP.

ENG. FORM 27A — DATE: 11/11/2012

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DAILY REPORT OF OPERATIONS - HOPPER DREDGES

REPORTS CONTROL SYMBOL ENG-CWO-13 — Report # 5

DISTRICT Philadelphia — W912BU-12-B-0006 — DREDGE **Terrapin Island**

EXACT LOCATION OF WORK
Delaware River Channel
Stations: 28+135 - 82+700

[X] NEW WORK
[ ] MAINTENANCE
[ ] BEACH FILL/REHAND

DATE 11-Nov-2012

NUMBER OF PERSONS IN CREW 19

Length of Cut	6,000 ft	CHARACTER OF MATERIAL		HOPPER CAPACITY	6194	CU. YDS
Width of Cut	800 ft	AVG INSITU DENSITY	1.800 kg/L	AV. VOL. BIN WATER	5481	CU. YDS
RT to dump	0.64 nm-rt	DENSITY OF WATER	1.000 kg/L	AV. UNFILLED CAP.	713	CU. YDS

NAVIGATION AND OTHER DREDGING AIDS (Describe and include statement on adequacy and recommendations)
DGPS position track plotting equipment in use

WORK PERFORMED — DRAFT FOR LOAD NO. (for one load only)

DREDGING AND HAULING # OF LOADS	TOT. CU. YDS	DISPOSAL AREA	AGITATING TOT. CYD..		LIGHT	LOADED
6	8,977	National Park Disposal Area		FORWARD	12.9	22.2
				AFT	17.30	22.9
				DRAG DEPTH	46 ft	
Cumulative				INDICATORS LAST CHECKED ON	11/7/2012	
23	38,079			GAS EJECTORS USED	No	0 % OF PUMPING TIME

DISTRIBUTION OF TIME AND MILES RUN

	AGITATING	DREDGING & HAULING MINUTES	HOURS	KILOMETERS RUN
EFFECTIVE WORKING TIME				
PUMPING		211	3.52	
TURNING		134	2.23	
TO DUMP		292	4.87	
CONNECT		71	1.18	
DUMPING		399	6.65	
DISCONNECT		68	1.13	
TO CUT		197	3.28	
TOTALS		1372	22.87	
NON-EFFECTIVE WORKING TIME				
TAKING ON FUEL AND SUPPLIES				
TO AND FROM WHARF OR ANCHORAGE				
LOSS DUE NATURAL ELEMENTS				
LOSS DUE TRAFFIC AND BRIDGES		39		
MINOR OPERATING REPAIRS		11		
TRANSFERRING BETWEEN WORKS				
LAY TIME				
FIRE AND BOAT DRILLS				
MISCELLANEOUS		18		
TOTALS		68		
LOST TIME				
MAJOR REPAIRS AND ALTERATIONS				
TIME ON OTHER PROJECT(S)				
COLLISIONS				
TOTAL LOST TIME				
TOTAL TIME IN PERIOD		1440		

AVERAGE SPEED OF DREDGE — MINUTES RADAR IN USE — CONTINUOUSLY X

LOADING 1.0 to 2.0 knots — FEET/MINUTE

TIDE DATA FROM Valeport tide gauges near dig area.

AGITATING	TODAY	TO DATE
GALS. OF FUEL OIL CONSUMED	4,306	16,912
GALS. OF WATER CONSUMED	1,000	5,000

WEATHER

NUMBER OF INSPECTIONS BY SUPERVISORY PERSONNEL — FIELD — OFFICE

REMARKS
LOCATION IN CHANNEL: 58+700 to 64+700; 40+500 to 55+500

CONTR. REP. — PROJ. INSP.

ENG. FORM 27A — DATE: 11/12/2012

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DAILY REPORT OF OPERATIONS - HOPPER DREDGES

REPORTS CONTROL SYMBOL ENG-CWO-13 — Report # 6

DISTRICT Philadelphia — W912BU-12-B-0006 — DREDGE **Terrapin Island**

EXACT LOCATION OF WORK
Delaware River Channel
Stations: 28+135 – 82+700

[X] NEW WORK
[ ] MAINTENANCE
[ ] BEACH FILL/REHAND

DATE 12-Nov-2012

NUMBER OF PERSONS IN CREW 19

Length of Cut	6000	CHARACTER OF MATERIAL		HOPPER CAPACITY	6194 CU. YDS
Width of Cut	800 ft	AVG INSITU DENSITY	1.800 kg/L	AV. VOL. BIN WATER	5833 CU. YDS
RT to dump	0.64/5.4 NMRT	DENSITY OF WATER	1.000 kg/L	AV. UNFILLED CAP.	361 CU. YDS

NAVIGATION AND OTHER DREDGING AIDS (Describe and include statement on adequacy and recommendations)
DGPS position track plotting equipment in use

WORK PERFORMED

DREDGING AND HAULING			AGITATING	DRAFT FOR LOAD NO.	LIGHT	LOADED (for one load only)
# OF LOADS	TOT. CU. YDS	DISPOSAL AREA	TOT. CYD..	FORWARD	12.9 ft	22.2 ft
7	10,192	National Park Disposal Area		AFT	17.3 ft	22.9 ft
				DRAG DEPTH	46.0 ft	
Cumulative				INDICATORS LAST CHECKED ON	11/7/2012	
30	48,270			GAS EJECTORS USED	No	0 % OF PUMPING TIME

DISTRIBUTION OF TIME AND MILES RUN

EFFECTIVE WORKING TIME	AGITATING	DREDGING & HAULING MINUTES	HOURS	KILOMETERS RUN
PUMPING		251	4.18	
TURNING		143	2.38	
TO DUMP		257	4.28	
CONNECT		83	1.38	
DUMPING		400	6.67	
DISCONNECT		72	1.20	
TO CUT		148	2.47	
TOTALS		1354	22.57	
NON-EFFECTIVE WORKING TIME				
TAKING ON FUEL AND SUPPLIES				
TO AND FROM WHARF OR ANCHORAGE				
LOSS DUE NATURAL ELEMENTS				
LOSS DUE TRAFFIC AND BRIDGES		61		
MINOR OPERATING REPAIRS		19		
TRANSFERRING BETWEEN WORKS				
LAY TIME				
FIRE AND BOAT DRILLS				
MISCELLANEOUS		6		
TOTALS		86		
LOST TIME				
MAJOR REPAIRS AND ALTERATIONS				
TIME ON OTHER PROJECT(S)				
COLLISIONS				
TOTAL LOST TIME				
TOTAL TIME IN PERIOD		1440		

AVERAGE SPEED OF DREDGE — MINUTES RADAR IN USE — CONTINUOUSLY X

LOADING 1.0 to 2.0 knots — FEET/MINUTE

TIDE DATA FROM Valeport Tide Gauges Near Dig Area

AGITATING	TODAY	TO DATE
GALS. OF FUEL OIL CONSUMED	3,941	20,853
GALS. OF WATER CONSUMED	1,000	6,000

WEATHER 0

NUMBER OF INSPECTIONS BY SUPERVISORY PERSONNEL — FIELD — OFFICE

REMARKS
LOCATION IN CHANNEL: Sta. 58+700 - 64+700 & Sta. 40+500 - 55+500

CONTR. REP. — PROJ. INSP.

ENG. FORM 27A — DATE: 11/13/2012

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DAILY REPORT OF OPERATIONS - HOPPER DREDGES

REPORTS CONTROL SYMBOL ENG-CWO-13 — Report # 6

DISTRICT Philadelphia — W912BU-12-B-0006 — DREDGE **Terrapin Island**

EXACT LOCATION OF WORK
Delaware River Channel
Stations: 28+135 – 82+700

[X] NEW WORK
[ ] MAINTENANCE
[ ] BEACH FILL/REHAND

DATE 13-Nov-2012

NUMBER OF PERSONS IN CREW 19

Length of Cut	6000	CHARACTER OF MATERIAL		HOPPER CAPACITY	6194	CU. YDS
Width of Cut	800 ft	AVG INSITU DENSITY	1.800 kg/L	AV. VOL. BIN WATER	4988	CU. YDS
RT to dump	0.64/5.4 NMRT	DENSITY OF WATER	1.000 kg/L	AV. UNFILLED CAP.	1206	CU. YDS

NAVIGATION AND OTHER DREDGING AIDS (Describe and include statement on adequacy and recommendations)
DGPS position track plotting equipment in use

WORK PERFORMED — DRAFT FOR LOAD NO. (for one load only)

DREDGING AND HAULING			AGITATING		LIGHT	LOADED
# OF LOADS	TOT. CU. YDS	DISPOSAL AREA	TOT. CYD..	FORWARD	12.9 ft	22.2 ft
5	8,036	National Park Disposal Area		AFT	17.3 ft	22.9 ft
				DRAG DEPTH	46.0 ft	
Cumulative				INDICATORS LAST CHECKED ON	11/7/2012	
35	56,306			GAS EJECTORS USED	No	0 % OF PUMPING TIME

DISTRIBUTION OF TIME AND MILES RUN

EFFECTIVE WORKING TIME	AGITATING	DREDGING & HAULING MINUTES	HOURS	KILOMETERS RUN
PUMPING		147	2.45	
TURNING		113	1.88	
TO DUMP		173	2.88	
CONNECT		75	1.25	
DUMPING		451	7.52	
DISCONNECT		54	0.90	
TO CUT		132	2.20	
TOTALS		1145	19.08	
NON-EFFECTIVE WORKING TIME				
TAKING ON FUEL AND SUPPLIES				
TO AND FROM WHARF OR ANCHORAGE				
LOSS DUE NATURAL ELEMENTS				
LOSS DUE TRAFFIC AND BRIDGES				
MINOR OPERATING REPAIRS		186		
TRANSFERRING BETWEEN WORKS				
LAY TIME				
FIRE AND BOAT DRILLS				
MISCELLANEOUS		109		
TOTALS		295		
LOST TIME				
MAJOR REPAIRS AND ALTERATIONS				
TIME ON OTHER PROJECT(S)				
COLLISIONS				
TOTAL LOST TIME				
TOTAL TIME IN PERIOD		1440		

AVERAGE SPEED OF DREDGE — MINUTES RADAR IN USE — CONTINUOUSLY X

LOADING 1.0 to 2.0 knots — FEET/MINUTE

TIDE DATA FROM
Valeport Tide Gauges Near Dig Area

AGITATING	TODAY	TO DATE
GALS. OF FUEL OIL CONSUMED	3,379	24,232
GALS. OF WATER CONSUMED	1,000	7,000

WEATHER 0

NUMBER OF INSPECTIONS BY SUPERVISORY PERSONNEL — FIELD — OFFICE

REMARKS
LOCATION IN CHANNEL: Sta. 58+700 - 64+700 & Sta. 40+500 - 55+500

CONTR. REP. — PROJ. INSP.

ENG. FORM 27A — DATE: 11/14/2012

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DAILY REPORT OF OPERATIONS - HOPPER DREDGES

REPORTS CONTROL SYMBOL ENG-CWO-13 — Report # 8

DISTRICT Philadelphia — W912BU-12-B-0006 — DREDGE **Terrapin Island**

EXACT LOCATION OF WORK
Delaware River Channel
Stations: 28+135 – 82+700

[X] NEW WORK
[ ] MAINTENANCE
[ ] BEACH FILL/REHAND

DATE: 14-Nov-2012
NUMBER OF PERSONS IN CREW: 19

Length of Cut	6000	CHARACTER OF MATERIAL		HOPPER CAPACITY	6194 CU. YDS
Width of Cut	800 ft	AVG INSITU DENSITY	1.800 kg/L	AV. VOL. BIN WATER	5752 CU. YDS
RT to dump	0.64/5.4 NMRT	DENSITY OF WATER	1.000 kg/L	AV. UNFILLED CAP.	442 CU. YDS

NAVIGATION AND OTHER DREDGING AIDS (Describe and include statement on adequacy and recommendations)
DGPS position track plotting equipment in use

WORK PERFORMED — DRAFT FOR LOAD NO. (for one load only)

DREDGING AND HAULING			AGITATING		LIGHT	LOADED
# OF LOADS	TOT. CU. YDS	DISPOSAL AREA	TOT. CYD..	FORWARD	12.9 ft	22.2 ft
5	7,217	National Park Disposal Area		AFT	17.3 ft	22.9 ft
				DRAG DEPTH	46.0 ft	
Cumulative				INDICATORS LAST CHECKED ON	11/7/2012	
40	63,522			GAS EJECTORS USED	No	0 % OF PUMPING TIME

DISTRIBUTION OF TIME AND MILES RUN

	AGITATING	DREDGING & HAULING MINUTES	DREDGING & HAULING HOURS	KILOMETERS RUN
EFFECTIVE WORKING TIME				
PUMPING		198	3.30	
TURNING		159	2.65	
TO DUMP		211	3.52	
CONNECT		64	1.07	
DUMPING		363	6.05	
DISCONNECT		79	1.32	
TO CUT		194	3.23	
TOTALS		1268	21.13	
NON-EFFECTIVE WORKING TIME				
TAKING ON FUEL AND SUPPLIES				
TO AND FROM WHARF OR ANCHORAGE				
LOSS DUE NATURAL ELEMENTS				
LOSS DUE TRAFFIC AND BRIDGES		26		
MINOR OPERATING REPAIRS				
TRANSFERRING BETWEEN WORKS				
LAY TIME				
FIRE AND BOAT DRILLS				
MISCELLANEOUS		146		
TOTALS		172		
LOST TIME				
MAJOR REPAIRS AND ALTERATIONS				
TIME ON OTHER PROJECT(S)				
COLLISIONS				
TOTAL LOST TIME				
TOTAL TIME IN PERIOD		1440		

AVERAGE SPEED OF DREDGE — MINUTES RADAR IN USE — CONTINUOUSLY X

LOADING 1.0 to 2.0 knots — FEET/MINUTE

TIDE DATA FROM
Valeport Tide Gauges Near Dig Area

WEATHER 0

AGITATING	TODAY	TO DATE
GALS. OF FUEL OIL CONSUMED	4,305	28,537
GALS. OF WATER CONSUMED	1,000	8,000

NUMBER OF INSPECTIONS BY SUPERVISORY PERSONNEL: FIELD — OFFICE

REMARKS
LOCATION IN CHANNEL: Sta. 58+700 - 64+700 & Sta. 40+500 - 55+500 & Sta 815+00 to 830+00

CONTR. REP. — PROJ. INSP.

ENG. FORM 27A — DATE: 11/15/2012

DAILY REPORT OF OPERATIONS - HOPPER DREDGES

REPORTS CONTROL SYMBOL ENG-CWO-13 — Report # 9

DISTRICT Philadelphia — W912BU-12-B-0006 — DREDGE **Terrapin Island**

EXACT LOCATION OF WORK
Delaware River Channel
Stations: 28+135 – 82+700

[X] NEW WORK
[ ] MAINTENANCE
[ ] BEACH FILL/REHAND

DATE 15-Nov-2012

NUMBER OF PERSONS IN CREW 19

Length of Cut	6000	CHARACTER OF MATERIAL		HOPPER CAPACITY	6194 CU. YDS
Width of Cut	800 ft	AVG INSITU DENSITY	1.800 kg/L	AV. VOL. BIN WATER	5752 CU. YDS
RT to dump	0.64/5.4 NMRT	DENSITY OF WATER	1.000 kg/L	AV. UNFILLED CAP.	442 CU. YDS

NAVIGATION AND OTHER DREDGING AIDS (Describe and include statement on adequacy and recommendations)
DGPS position track plotting equipment in use

WORK PERFORMED — DRAFT FOR LOAD NO. (for one load only)

DREDGING AND HAULING			AGITATING		LIGHT	LOADED
# OF LOADS	TOT. CU. YDS	DISPOSAL AREA	TOT. CYD..	FORWARD	12.9 ft	22.2 ft
7	10,597	National Park Disposal Area		AFT	17.3 ft	22.9 ft
				DRAG DEPTH	46.0 ft	
Cumulative				INDICATORS LAST CHECKED ON	11/7/2012	
47	74,119			GAS EJECTORS USED	No	0 % OF PUMPING TIME

DISTRIBUTION OF TIME AND MILES RUN

EFFECTIVE WORKING TIME	AGITATING	DREDGING & HAULING MINUTES	HOURS	KILOMETERS RUN
PUMPING		231	3.85	
TURNING		144	2.40	
TO DUMP		247	4.12	
CONNECT		105	1.75	
DUMPING		374	6.23	
DISCONNECT		107	1.78	
TO CUT		216	3.60	
TOTALS		1424	23.73	
NON-EFFECTIVE WORKING TIME				
TAKING ON FUEL AND SUPPLIES				
TO AND FROM WHARF OR ANCHORAGE				
LOSS DUE NATURAL ELEMENTS				
LOSS DUE TRAFFIC AND BRIDGES		16		
MINOR OPERATING REPAIRS				
TRANSFERRING BETWEEN WORKS				
LAY TIME				
FIRE AND BOAT DRILLS				
MISCELLANEOUS				
TOTALS		16		
LOST TIME				
MAJOR REPAIRS AND ALTERATIONS				
TIME ON OTHER PROJECT(S)				
COLLISIONS				
TOTAL LOST TIME				
TOTAL TIME IN PERIOD		1440		

AVERAGE SPEED OF DREDGE — MINUTES RADAR IN USE — CONTINUOUSLY X

LOADING 1.0 to 2.0 knots — FEET/MINUTE

TIDE DATA FROM
Valeport Tide Gauges Near Dig Area

AGITATING	TODAY	TO DATE
GALS. OF FUEL OIL CONSUMED	3,815	32,352
GALS. OF WATER CONSUMED	1,000	9,000

WEATHER 0

NUMBER OF INSPECTIONS BY SUPERVISORY PERSONNEL — FIELD — OFFICE

REMARKS
LOCATION IN CHANNEL: Sta. 58+700 - 64+700 & Sta. 40+500 - 55+500 & Sta 815+00 to 830+00

CONTR. REP. — PROJ. INSP.

ENG. FORM 27A — DATE: 11/16/2012

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DAILY REPORT OF OPERATIONS - HOPPER DREDGES

REPORTS CONTROL SYMBOL ENG-CWO-13 — Report # 10

DISTRICT Philadelphia — W912BU-12-B-0006 — DREDGE **Terrapin Island**

EXACT LOCATION OF WORK
Delaware River Channel
Stations: 28+135 – 82+700

[X] NEW WORK
[ ] MAINTENANCE
[ ] BEACH FILL/REHAND

DATE 16-Nov-2012

NUMBER OF PERSONS IN CREW 19

Length of Cut	6000	CHARACTER OF MATERIAL		HOPPER CAPACITY	6194	CU. YDS
Width of Cut	800 ft	AVG INSITU DENSITY	1.800 kg/L	AV. VOL. BIN WATER	5833	CU. YDS
RT to dump	.64/5.4/7.5 NMR	DENSITY OF WATER	1.000 kg/L	AV. UNFILLED CAP.	361	CU. YDS

NAVIGATION AND OTHER DREDGING AIDS (Describe and include statement on adequacy and recommendations)
DGPS position track plotting equipment in use

WORK PERFORMED — DRAFT FOR LOAD NO. (for one load only)

DREDGING AND HAULING # OF LOADS	TOT. CU. YDS	DISPOSAL AREA	AGITATING TOT. CYD..		LIGHT	LOADED
4	5,581	National Park Disposal Area		FORWARD	12.9 ft	22.2 ft
				AFT	17.3 ft	22.9 ft
				DRAG DEPTH	46.0 ft	
Cumulative				INDICATORS LAST CHECKED ON	11/7/2012	
51	79,699			GAS EJECTORS USED	No	0 % OF PUMPING TIME

DISTRIBUTION OF TIME AND MILES RUN

EFFECTIVE WORKING TIME	AGITATING	DREDGING & HAULING MINUTES	HOURS	KILOMETERS RUN
PUMPING		174	2.90	
TURNING		123	2.05	
TO DUMP		254	4.23	
CONNECT		44	0.73	
DUMPING		253	4.22	
DISCONNECT		69	1.15	
TO CUT		180	3.00	
TOTALS		1097	18.28	
NON-EFFECTIVE WORKING TIME				
TAKING ON FUEL AND SUPPLIES				
TO AND FROM WHARF OR ANCHORAGE				
LOSS DUE NATURAL ELEMENTS				
LOSS DUE TRAFFIC AND BRIDGES				
MINOR OPERATING REPAIRS		20		
TRANSFERRING BETWEEN WORKS				
LAY TIME				
FIRE AND BOAT DRILLS				
MISCELLANEOUS		323		
TOTALS		343		
LOST TIME				
MAJOR REPAIRS AND ALTERATIONS				
TIME ON OTHER PROJECT(S)				
COLLISIONS				
TOTAL LOST TIME				
TOTAL TIME IN PERIOD		1440		

AVERAGE SPEED OF DREDGE — MINUTES RADAR IN USE — CONTINUOUSLY X

LOADING 1.0 to 2.0 knots — FEET/MINUTE

TIDE DATA FROM
Valeport Tide Gauges Near Dig Area

AGITATING	TODAY	TO DATE
GALS. OF FUEL OIL CONSUMED	3,383	35,735
GALS. OF WATER CONSUMED	1,000	10,000

WEATHER 0

NUMBER OF INSPECTIONS BY SUPERVISORY PERSONNEL — FIELD — OFFICE

REMARKS
LOCATION IN CHANNEL: Sta. 58+700 - 64+700 & Sta. 40+500 - 55+500 & Sta 815+00 to 830+00

CONTR. REP. — PROJ. INSP.

ENG. FORM 27A — DATE: 11/17/2012

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DAILY REPORT OF OPERATIONS - HOPPER DREDGES

REPORTS CONTROL SYMBOL ENG-CWO-13 — Report # 11

DISTRICT Philadelphia — W912BU-12-B-0006 — DREDGE **Terrapin Island**

EXACT LOCATION OF WORK
Delaware River Channel
Stations: 28+135 – 82+700

[X] NEW WORK
[ ] MAINTENANCE
[ ] BEACH FILL/REHAND

DATE: 17-Nov-2012

NUMBER OF PERSONS IN CREW: 19

Length of Cut	6000	CHARACTER OF MATERIAL		HOPPER CAPACITY	6194 CU. YDS
Width of Cut	800 ft	AVG INSITU DENSITY	1.800 kg/L	AV. VOL. BIN WATER	5823 CU. YDS
RT to dump	.64/5.4/7.5 NMR	DENSITY OF WATER	1.000 kg/L	AV. UNFILLED CAP.	371 CU. YDS

NAVIGATION AND OTHER DREDGING AIDS (Describe and include statement on adequacy and recommendations)
DGPS position track plotting equipment in use

WORK PERFORMED

DREDGING AND HAULING			AGITATING
# OF LOADS	TOT. CU. YDS	DISPOSAL AREA	TOT. CYD..
4	4,172	National Park Disposal Area	
Cumulative			
55	83,871		

DRAFT FOR LOAD NO. (for one load only)

	LIGHT	LOADED
FORWARD	12.9 ft	22.2 ft
AFT	17.3 ft	22.9 ft
DRAG DEPTH	46.0 ft	
INDICATORS LAST CHECKED ON	11/7/2012	
GAS EJECTORS USED	No	0 % OF PUMPING TIME

DISTRIBUTION OF TIME AND MILES RUN

EFFECTIVE WORKING TIME	AGITATING	DREDGING & HAULING MINUTES	DREDGING & HAULING HOURS	KILOMETERS RUN
PUMPING		154	2.57	
TURNING		59	0.98	
TO DUMP		172	2.87	
CONNECT		55	0.92	
DUMPING		272	4.53	
DISCONNECT		62	1.03	
TO CUT		121	2.02	
TOTALS		895	14.92	
NON-EFFECTIVE WORKING TIME				
TAKING ON FUEL AND SUPPLIES				
TO AND FROM WHARF OR ANCHORAGE				
LOSS DUE NATURAL ELEMENTS				
LOSS DUE TRAFFIC AND BRIDGES				
MINOR OPERATING REPAIRS		22		
TRANSFERRING BETWEEN WORKS				
LAY TIME				
FIRE AND BOAT DRILLS				
MISCELLANEOUS		523		
TOTALS		545		
LOST TIME				
MAJOR REPAIRS AND ALTERATIONS				
TIME ON OTHER PROJECT(S)				
COLLISIONS				
TOTAL LOST TIME				
TOTAL TIME IN PERIOD		1440		

AVERAGE SPEED OF DREDGE — MINUTES RADAR IN USE — CONTINUOUSLY X

LOADING 1.0 to 2.0 knots — FEET/MINUTE

TIDE DATA FROM
Valeport Tide Gauges Near Dig Area

WEATHER 0

AGITATING	TODAY	TO DATE
GALS. OF FUEL OIL CONSUMED	3,232	38,967
GALS. OF WATER CONSUMED	1,000	11,000

NUMBER OF INSPECTIONS BY SUPERVISORY PERSONNEL
FIELD — OFFICE

REMARKS
LOCATION IN CHANNEL: Sta. 58+700 - 64+700 & Sta. 40+500 - 55+500 & Sta 815+00 to 830+00

CONTR. REP. — PROJ. INSP.

ENG. FORM 27A — DATE: 11/18/2012

DAILY REPORT OF OPERATIONS - HOPPER DREDGES

REPORTS CONTROL SYMBOL ENG-CWO-13 — Report # 12

DISTRICT Philadelphia — W912BU-12-B-0006 — DREDGE **Terrapin Island**

EXACT LOCATION OF WORK
Delaware River Channel
Stations: 28+135 – 82+700

[X] NEW WORK
[ ] MAINTENANCE
[ ] BEACH FILL/REHAND

DATE 18-Nov-2012

NUMBER OF PERSONS IN CREW 19

Length of Cut	6000	CHARACTER OF MATERIAL		HOPPER CAPACITY	6194	CU. YDS
Width of Cut	800 ft	AVG INSITU DENSITY	1.800 kg/L	AV. VOL. BIN WATER	5813	CU. YDS
RT to dump	.64/5.4/7.5 NMR	DENSITY OF WATER	1.000 kg/L	AV. UNFILLED CAP.	381	CU. YDS

NAVIGATION AND OTHER DREDGING AIDS (Describe and include statement on adequacy and recommendations)
DGPS position track plotting equipment in use

WORK PERFORMED

DREDGING AND HAULING			AGITATING	DRAFT FOR LOAD NO.	LIGHT	LOADED (for one load only)
# OF LOADS	TOT. CU. YDS	DISPOSAL AREA	TOT. CYD..	FORWARD	12.9 ft	22.2 ft
5	6,127	National Park Disposal Area		AFT	17.3 ft	22.9 ft
				DRAG DEPTH	46.0 ft	
Cumulative				INDICATORS LAST CHECKED ON	11/7/2012	
60	89,998			GAS EJECTORS USED	No	0 % OF PUMPING TIME

DISTRIBUTION OF TIME AND MILES RUN

EFFECTIVE WORKING TIME	AGITATING	DREDGING & HAULING MINUTES	HOURS	KILOMETERS RUN
PUMPING		218	3.63	
TURNING		73	1.22	
TO DUMP		274	4.57	
CONNECT		90	1.50	
DUMPING		416	6.93	
DISCONNECT		86	1.43	
TO CUT		153	2.55	
TOTALS		1310	21.83	
NON-EFFECTIVE WORKING TIME				
TAKING ON FUEL AND SUPPLIES				
TO AND FROM WHARF OR ANCHORAGE				
LOSS DUE NATURAL ELEMENTS				
LOSS DUE TRAFFIC AND BRIDGES		14		
MINOR OPERATING REPAIRS				
TRANSFERRING BETWEEN WORKS				
LAY TIME				
FIRE AND BOAT DRILLS				
MISCELLANEOUS		116		
TOTALS		130		
LOST TIME				
MAJOR REPAIRS AND ALTERATIONS				
TIME ON OTHER PROJECT(S)				
COLLISIONS				
TOTAL LOST TIME				
TOTAL TIME IN PERIOD		1440		

AVERAGE SPEED OF DREDGE — MINUTES RADAR IN USE — CONTINUOUSLY X

LOADING 1.0 to 2.0 knots — FEET/MINUTE

TIDE DATA FROM
Valeport Tide Gauges Near Dig Area

AGITATING	TODAY	TO DATE
GALS. OF FUEL OIL CONSUMED	4,329	43,296
GALS. OF WATER CONSUMED	1,000	12,000

WEATHER 0

NUMBER OF INSPECTIONS BY SUPERVISORY PERSONNEL
FIELD — OFFICE

REMARKS
LOCATION IN CHANNEL: Sta. 58+700 - 64+700 & Sta. 40+500 - 55+500 & Sta 815+00 to 830+00

CONTR. REP. — PROJ. INSP.

ENG. FORM 27A — DATE: 11/19/2012

Printed 11/19/2012 8:39 AM

DAILY REPORT OF OPERATIONS - HOPPER DREDGES

REPORTS CONTROL SYMBOL ENG-CWO-13 — Report # 13

DISTRICT Philadelphia — W912BU-12-B-0006 — DREDGE **Terrapin Island**

EXACT LOCATION OF WORK
Delaware River Channel
Stations: 28+135 – 82+700

[X] NEW WORK
[ ] MAINTENANCE
[ ] BEACH FILL/REHAND

DATE 19-Nov-2012

NUMBER OF PERSONS IN CREW 19

Length of Cut	6000	CHARACTER OF MATERIAL		HOPPER CAPACITY	6194 CU. YDS
Width of Cut	800 ft	AVG INSITU DENSITY	1.800 kg/L	AV. VOL. BIN WATER	5757 CU. YDS
RT to dump	.64/5.4/7.5 NMR	DENSITY OF WATER	1.000 kg/L	AV. UNFILLED CAP.	437 CU. YDS

NAVIGATION AND OTHER DREDGING AIDS (Describe and include statement on adequacy and recommendations)
DGPS position track plotting equipment in use

WORK PERFORMED

DREDGING AND HAULING			AGITATING
# OF LOADS	TOT. CU. YDS	DISPOSAL AREA	TOT. CYD..
6	7,203	National Park Disposal Area	
Cumulative			
66	97,200		

DRAFT FOR LOAD NO. (for one load only)

	LIGHT	LOADED
FORWARD	12.9 ft	22.2 ft
AFT	17.3 ft	22.9 ft
DRAG DEPTH	46.0 ft	
INDICATORS LAST CHECKED ON	11/7/2012	
GAS EJECTORS USED	No	0 % OF PUMPING TIME

DISTRIBUTION OF TIME AND MILES RUN

EFFECTIVE WORKING TIME	AGITATING	DREDGING & HAULING MINUTES	HOURS	KILOMETERS RUN
PUMPING		270	4.50	
TURNING		205	3.42	
TO DUMP		220	3.67	
CONNECT		81	1.35	
DUMPING		391	6.52	
DISCONNECT		95	1.58	
TO CUT		178	2.97	
TOTALS		1440	24.00	
NON-EFFECTIVE WORKING TIME				
TAKING ON FUEL AND SUPPLIES				
TO AND FROM WHARF OR ANCHORAGE				
LOSS DUE NATURAL ELEMENTS				
LOSS DUE TRAFFIC AND BRIDGES				
MINOR OPERATING REPAIRS				
TRANSFERRING BETWEEN WORKS				
LAY TIME				
FIRE AND BOAT DRILLS				
MISCELLANEOUS				
TOTALS				
LOST TIME				
MAJOR REPAIRS AND ALTERATIONS				
TIME ON OTHER PROJECT(S)				
COLLISIONS				
TOTAL LOST TIME				
TOTAL TIME IN PERIOD		1440		

AVERAGE SPEED OF DREDGE — MINUTES RADAR IN USE — CONTINUOUSLY X

LOADING 1.0 to 2.0 knots — FEET/MINUTE

TIDE DATA FROM
Valeport Tide Gauges Near Dig Area

AGITATING	TODAY	TO DATE
GALS. OF FUEL OIL CONSUMED	4,366	47,662
GALS. OF WATER CONSUMED	1,000	13,000

WEATHER 0

NUMBER OF INSPECTIONS BY SUPERVISORY PERSONNEL
FIELD — OFFICE

REMARKS
LOCATION IN CHANNEL: Sta. 58+700 - 64+700 & Sta. 40+500 - 55+500 & Sta 815+00 to 830+00

CONTR. REP. — PROJ. INSP.

ENG. FORM 27A — DATE: 11/20/2012

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DAILY REPORT OF OPERATIONS - HOPPER DREDGES

REPORTS CONTROL SYMBOL ENG-CWO-13 — Report # 14

DISTRICT Philadelphia — W912BU-12-B-0006 — DREDGE **Terrapin Island**

EXACT LOCATION OF WORK
Delaware River Channel
Stations: 28+135 – 82+700

[X] NEW WORK
[ ] MAINTENANCE
[ ] BEACH FILL/REHAND

DATE 20-Nov-2012
NUMBER OF PERSONS IN CREW 19

Length of Cut	6000	CHARACTER OF MATERIAL		HOPPER CAPACITY	6194 CU. YDS
Width of Cut	800 ft	AVG INSITU DENSITY	1.800 kg/L	AV. VOL. BIN WATER	5808 CU. YDS
RT to dump	.64/5.4/7.5 NMR	DENSITY OF WATER	1.000 kg/L	AV. UNFILLED CAP.	386 CU. YDS

NAVIGATION AND OTHER DREDGING AIDS (Describe and include statement on adequacy and recommendations)
DGPS position track plotting equipment in use

WORK PERFORMED

DREDGING AND HAULING			AGITATING	DRAFT FOR LOAD NO.	LIGHT	LOADED (for one load only)
# OF LOADS	TOT. CU. YDS	DISPOSAL AREA	TOT. CYD..	FORWARD	12.9 ft	22.2 ft
5	5,023	National Park Disposal Area		AFT	17.3 ft	22.9 ft
				DRAG DEPTH	46.0 ft	
Cumulative				INDICATORS LAST CHECKED ON	11/7/2012	
71	102,222			GAS EJECTORS USED	No	0 % OF PUMPING TIME

DISTRIBUTION OF TIME AND MILES RUN

EFFECTIVE WORKING TIME	AGITATING	DREDGING & HAULING MINUTES	HOURS	KILOMETERS RUN
PUMPING		285	4.75	
TURNING		109	1.82	
TO DUMP		211	3.52	
CONNECT		93	1.55	
DUMPING		351	5.85	
DISCONNECT		94	1.57	
TO CUT		167	2.78	
TOTALS		1310	21.83	
NON-EFFECTIVE WORKING TIME				
TAKING ON FUEL AND SUPPLIES				
TO AND FROM WHARF OR ANCHORAGE				
LOSS DUE NATURAL ELEMENTS				
LOSS DUE TRAFFIC AND BRIDGES				
MINOR OPERATING REPAIRS				
TRANSFERRING BETWEEN WORKS				
LAY TIME				
FIRE AND BOAT DRILLS				
MISCELLANEOUS		130		
TOTALS		130		
LOST TIME				
MAJOR REPAIRS AND ALTERATIONS				
TIME ON OTHER PROJECT(S)				
COLLISIONS				
TOTAL LOST TIME				
TOTAL TIME IN PERIOD		1440		

AVERAGE SPEED OF DREDGE — MINUTES RADAR IN USE — CONTINUOUSLY X

LOADING 1.0 to 2.0 knots — FEET/MINUTE

TIDE DATA FROM
Valeport Tide Gauges Near Dig Area

AGITATING	TODAY	TO DATE
GALS. OF FUEL OIL CONSUMED	4,166	51,828
GALS. OF WATER CONSUMED	1,000	14,000

WEATHER 0

NUMBER OF INSPECTIONS BY SUPERVISORY PERSONNEL
FIELD — OFFICE

REMARKS
LOCATION IN CHANNEL: Sta. 58+700 - 64+700 & Sta. 40+500 - 55+500 & Sta 815+00 to 830+00

CONTR. REP. — PROJ. INSP.

ENG. FORM 27A — DATE: 11/21/2012

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DAILY REPORT OF OPERATIONS - HOPPER DREDGES

REPORTS CONTROL SYMBOL ENG-CWO-13 — Report # 15

DISTRICT Philadelphia — W912BU-12-B-0006 — DREDGE **Terrapin Island**

EXACT LOCATION OF WORK
Delaware River Channel
Stations: 28+135 – 82+700

[X] NEW WORK
[ ] MAINTENANCE
[ ] BEACH FILL/REHAND

DATE 21-Nov-2012
NUMBER OF PERSONS IN CREW 19

Length of Cut	6000	CHARACTER OF MATERIAL		HOPPER CAPACITY	6194 CU. YDS
Width of Cut	800 ft	AVG INSITU DENSITY	1.800 kg/L	AV. VOL. BIN WATER	5818 CU. YDS
RT to dump	.64/5.4/7.5 NMR	DENSITY OF WATER	1.000 kg/L	AV. UNFILLED CAP.	376 CU. YDS

NAVIGATION AND OTHER DREDGING AIDS (Describe and include statement on adequacy and recommendations)
DGPS position track plotting equipment in use

WORK PERFORMED

DREDGING AND HAULING			AGITATING
# OF LOADS	TOT. CU. YDS	DISPOSAL AREA	TOT. CYD..
5	4,939	National Park Disposal Area	
Cumulative			
76	107,160		

DRAFT FOR LOAD NO. (for one load only)

	LIGHT	LOADED
FORWARD	12.9 ft	22.2 ft
AFT	17.3 ft	22.9 ft
DRAG DEPTH	46.0 ft	
INDICATORS LAST CHECKED ON	11/7/2012	
GAS EJECTORS USED	No	0 % OF PUMPING TIME

DISTRIBUTION OF TIME AND MILES RUN

EFFECTIVE WORKING TIME	AGITATING	DREDGING & HAULING MINUTES	HOURS	KILOMETERS RUN
PUMPING		286	4.77	
TURNING		150	2.50	
TO DUMP		265	4.42	
CONNECT		95	1.58	
DUMPING		372	6.20	
DISCONNECT		80	1.33	
TO CUT		192	3.20	
TOTALS		1440	24.00	
NON-EFFECTIVE WORKING TIME				
TAKING ON FUEL AND SUPPLIES				
TO AND FROM WHARF OR ANCHORAGE				
LOSS DUE NATURAL ELEMENTS				
LOSS DUE TRAFFIC AND BRIDGES				
MINOR OPERATING REPAIRS				
TRANSFERRING BETWEEN WORKS				
LAY TIME				
FIRE AND BOAT DRILLS				
MISCELLANEOUS				
TOTALS				
LOST TIME				
MAJOR REPAIRS AND ALTERATIONS				
TIME ON OTHER PROJECT(S)				
COLLISIONS				
TOTAL LOST TIME				
TOTAL TIME IN PERIOD		1440		

AVERAGE SPEED OF DREDGE — MINUTES RADAR IN USE — CONTINUOUSLY X

LOADING 1.0 to 2.0 knots — FEET/MINUTE

TIDE DATA FROM
Valeport Tide Gauges Near Dig Area

AGITATING	TODAY	TO DATE
GALS. OF FUEL OIL CONSUMED	4,474	56,302
GALS. OF WATER CONSUMED	1,000	15,000

WEATHER Temp 39-56°F, Wind 6-14 mph, Vis 10 miles, Precip 0.00 in

NUMBER OF INSPECTIONS BY SUPERVISORY PERSONNEL
FIELD — OFFICE

REMARKS
LOCATION IN CHANNEL: Sta. 58+700 - 64+700 & Sta. 72+754 - 78+700

CONTR. REP. — PROJ. INSP.

ENG. FORM 27A — DATE: 11/22/2012

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DAILY REPORT OF OPERATIONS - HOPPER DREDGES

REPORTS CONTROL SYMBOL ENG-CWO-13 — Report # 16

DISTRICT Philadelphia — W912BU-12-B-0006 — DREDGE **Terrapin Island**

EXACT LOCATION OF WORK
Delaware River Channel
Stations: 28+135 – 82+700

[X] NEW WORK
[ ] MAINTENANCE
[ ] BEACH FILL/REHAND

DATE 22-Nov-2012
NUMBER OF PERSONS IN CREW 19

Length of Cut	6000	CHARACTER OF MATERIAL		HOPPER CAPACITY	6194	CU. YDS
Width of Cut	800 ft	AVG INSITU DENSITY	1.800 kg/L	AV. VOL. BIN WATER	5838	CU. YDS
RT to dump	6.3/4.6 NMRT	DENSITY OF WATER	1.000 kg/L	AV. UNFILLED CAP.	356	CU. YDS

NAVIGATION AND OTHER DREDGING AIDS (Describe and include statement on adequacy and recommendations)
DGPS position track plotting equipment in use

WORK PERFORMED — DRAFT FOR LOAD NO. (for one load only)

DREDGING AND HAULING # OF LOADS	TOT. CU. YDS	DISPOSAL AREA	AGITATING TOT. CYD..		LIGHT	LOADED
4	3,612	National Park Disposal Area		FORWARD	12.9 ft	22.2 ft
				AFT	17.3 ft	22.9 ft
				DRAG DEPTH	46.0 ft	
Cumulative				INDICATORS LAST CHECKED ON	11/7/2012	
80	110,772			GAS EJECTORS USED	No	0 % OF PUMPING TIME

DISTRIBUTION OF TIME AND MILES RUN

EFFECTIVE WORKING TIME	AGITATING	DREDGING & HAULING MINUTES	HOURS	KILOMETERS RUN
PUMPING		192	3.20	
TURNING		169	2.82	
TO DUMP		185	3.08	
CONNECT		84	1.40	
DUMPING		222	3.70	
DISCONNECT		68	1.13	
TO CUT		115	1.92	
TOTALS		1035	17.25	
NON-EFFECTIVE WORKING TIME				
TAKING ON FUEL AND SUPPLIES				
TO AND FROM WHARF OR ANCHORAGE				
LOSS DUE NATURAL ELEMENTS				
LOSS DUE TRAFFIC AND BRIDGES				
MINOR OPERATING REPAIRS		80		
TRANSFERRING BETWEEN WORKS				
LAY TIME				
FIRE AND BOAT DRILLS				
MISCELLANEOUS		325		
TOTALS		405		
LOST TIME				
MAJOR REPAIRS AND ALTERATIONS				
TIME ON OTHER PROJECT(S)				
COLLISIONS				
TOTAL LOST TIME				
TOTAL TIME IN PERIOD		1440		

AVERAGE SPEED OF DREDGE — MINUTES RADAR IN USE CONTINUOUSLY X

LOADING 1.0 to 2.0 knots — FEET/MINUTE

TIDE DATA FROM Valeport Tide Gauges Near Dig Area

AGITATING	TODAY	TO DATE
GALS. OF FUEL OIL CONSUMED	4,232	60,534
GALS. OF WATER CONSUMED	1,000	16,000

WEATHER Temp 36-58°F, Wind 4-10 mph, Vis 10 miles, Precip 0.00 in

NUMBER OF INSPECTIONS BY SUPERVISORY PERSONNEL — FIELD — OFFICE

REMARKS
LOCATION IN CHANNEL: Sta. 38+209 - 44+820 & Sta. 70+700 - 75+700

CONTR. REP. — PROJ. INSP.

ENG. FORM 27A — DATE: 11/23/2012

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DAILY REPORT OF OPERATIONS - HOPPER DREDGES

REPORTS CONTROL SYMBOL ENG-CWO-13 — Report # 17

DISTRICT Philadelphia — W912BU-12-B-0006 — DREDGE **Terrapin Island**

EXACT LOCATION OF WORK
Delaware River Channel
Stations: 28+135 – 82+700

[X] NEW WORK
[ ] MAINTENANCE
[ ] BEACH FILL/REHAND

DATE 23-Nov-2012

NUMBER OF PERSONS IN CREW 19

Length of Cut	6000	CHARACTER OF MATERIAL		HOPPER CAPACITY	6194 CU. YDS
Width of Cut	800 ft	AVG INSITU DENSITY	1.800 kg/L	AV. VOL. BIN WATER	5741 CU. YDS
RT to dump	0.8/4.6 NMRT	DENSITY OF WATER	1.000 kg/L	AV. UNFILLED CAP.	453 CU. YDS

NAVIGATION AND OTHER DREDGING AIDS (Describe and include statement on adequacy and recommendations)
DGPS position track plotting equipment in use

WORK PERFORMED

DREDGING AND HAULING			AGITATING
# OF LOADS	TOT. CU. YDS	DISPOSAL AREA	TOT. CYD..
2	1,698	National Park Disposal Area	
Cumulative			
82	112,470		

DRAFT FOR LOAD NO. (for one load only)

	LIGHT	LOADED
FORWARD	12.9 ft	22.2 ft
AFT	17.3 ft	22.9 ft
DRAG DEPTH	46.0 ft	
INDICATORS LAST CHECKED ON	11/7/2012	
GAS EJECTORS USED	No	0 % OF PUMPING TIME

DISTRIBUTION OF TIME AND MILES RUN

	AGITATING	DREDGING & HAULING MINUTES	DREDGING & HAULING HOURS	KILOMETERS RUN
EFFECTIVE WORKING TIME				
PUMPING		30	0.50	
TURNING		13	0.22	
TO DUMP		33	0.55	
CONNECT		15	0.25	
DUMPING		57	0.95	
DISCONNECT		30	0.50	
TO CUT		35	0.58	
TOTALS		213	3.55	
NON-EFFECTIVE WORKING TIME				
TAKING ON FUEL AND SUPPLIES				
TO AND FROM WHARF OR ANCHORAGE				
LOSS DUE NATURAL ELEMENTS				
LOSS DUE TRAFFIC AND BRIDGES				
MINOR OPERATING REPAIRS				
TRANSFERRING BETWEEN WORKS				
LAY TIME				
FIRE AND BOAT DRILLS				
MISCELLANEOUS		30		
TOTALS		30		
LOST TIME				
MAJOR REPAIRS AND ALTERATIONS				
TIME ON OTHER PROJECT(S)				
COLLISIONS				
TOTAL LOST TIME				
TOTAL TIME IN PERIOD		243		

AVERAGE SPEED OF DREDGE — MINUTES RADAR IN USE — CONTINUOUSLY X

LOADING 1.0 to 2.0 knots — FEET/MINUTE

TIDE DATA FROM
Valeport Tide Gauges Near Dig Area

WEATHER Temp 33-58°F, Wind 1-13 mph, Vis 4.1 miles, Precip 0.00 in

AGITATING	TODAY	TO DATE
GALS. OF FUEL OIL CONSUMED	500	61,034
GALS. OF WATER CONSUMED	1,000	17,000

NUMBER OF INSPECTIONS BY SUPERVISORY PERSONNEL
FIELD — OFFICE

REMARKS
LOCATION IN CHANNEL: Sta. 38+209 - 44+820 & Sta. 70+700 - 75+700

CONTR. REP. — PROJ. INSP.

ENG. FORM 27A — DATE: 11/24/2012

From File: Dioxins-Furans.wst

Summary Statistics for Raw Data Sets with NDs using Detected Data Only

					Raw Statistics using Detected Observations							
Variable	Num Ds	NumNDs	% NDs	Minimum	Maximum	Mean	Median	SD	MAD/0.675	Skewness	CV
1,2,3,4,6,7,8-HpCDD (background)	2	0	0.00%	12	14	13	13	1.414	1.483	N/A	0.109
1,2,3,4,6,7,8-HpCDD (effluent)	5	0	0.00%	1.9	180	94.18	91	76.45	102.3	-0.0428	0.812
1,2,3,4,6,7,8-HpCDF (background)	2	0	0.00%	3.8	5	4.4	4.4	0.849	0.89	N/A	0.193
1,2,3,4,6,7,8-HpCDF (effluent)	4	1	20.00%	5.5	22	14.88	16	6.909	5.189	-0.915	0.464
1,2,3,4,7,8,9-HpCDF (background)	0	2	100.00%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1,2,3,4,7,8,9-HpCDF (effluent)	2	3	60.00%	1.3	1.5	1.4	1.4	0.141	0.148	N/A	0.101
1,2,3,4,7,8-HxCDD (background)	0	2	100.00%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1,2,3,4,7,8-HxCDD (effluent)	3	2	40.00%	2.9	5.1	3.733	3.2	1.193	0.445	1.61	0.32
1,2,3,4,7,8-HxCDF (background)	1	1	50.00%	0.74	0.74	0.74	0.74	N/A	0	N/A	N/A
1,2,3,4,7,8-HxCDF (effluent)	4	1	20.00%	0.61	4.6	2.303	2	1.674	1.179	1.016	0.727
1,2,3,6,7,8-HxCDD (background)	1	1	50.00%	0.68	0.68	0.68	0.68	N/A	0	N/A	N/A
1,2,3,6,7,8-HxCDD (effluent)	4	1	20.00%	2.7	6.9	5.075	5.35	1.943	1.927	-0.496	0.383
1,2,3,6,7,8-HxCDF (background)	0	2	100.00%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1,2,3,6,7,8-HxCDF (effluent)	3	2	40.00%	1.3	3.4	2.667	3.3	1.185	0.148	-1.718	0.444
1,2,3,7,8,9-HxCDD (background)	1	1	50.00%	1.2	1.2	1.2	1.2	N/A	0	N/A	N/A
1,2,3,7,8,9-HxCDD (effluent)	4	1	20.00%	1.3	13	7.675	8.2	5.034	4.893	-0.51	0.656
1,2,3,7,8,9-HxCDF (background)	0	2	100.00%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1,2,3,7,8,9-HxCDF (effluent)	0	5	100.00%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1,2,3,7,8-PeCDD (background)	0	2	100.00%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1,2,3,7,8-PeCDD (effluent)	1	4	80.00%	2.6	2.6	2.6	2.6	N/A	0	N/A	N/A
1,2,3,7,8-PeCDF (background)	0	2	100.00%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1,2,3,7,8-PeCDF (effluent)	0	5	100.00%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2,3,4,6,7,8-HxCDF (background)	0	2	100.00%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2,3,4,6,7,8-HxCDF (effluent)	3	2	40.00%	0.82	2.3	1.36	0.96	0.817	0.208	1.675	0.601
2,3,4,7,8-PeCDF (background)	0	2	100.00%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2,3,4,7,8-PeCDF (effluent)	1	4	80.00%	1.2	1.2	1.2	1.2	N/A	0	N/A	N/A
2,3,7,8-TCDD (background)	0	2	100.00%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2,3,7,8-TCDD (effluent)	0	4	100.00%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2,3,7,8-TCDF (background)	0	2	100.00%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2,3,7,8-TCDF (effluent)	3	2	40.00%	0.77	3.2	1.58	0.77	1.403	0	1.732	0.888
OCDD (background)	2	0	0.00%	220	220	220	220	0	0	N/A	0
OCDD (effluent)	5	0	0.00%	43	2800	1479	1200	1231	1715	0.13	0.833
OCDF (background)	2	0	0.00%	5.9	6.8	6.35	6.35	0.636	0.667	N/A	0.1
OCDF (effluent)	5	0	0.00%	1.9	26	16.38	21	10.1	7.413	-0.815	0.617
TEQ (background)	2	0	0.00%	0.358	10.35	5.354	5.354	7.065	7.407	N/A	1.32
TEQ (effluent)	5	0	0.00%	0.0325	5.796	3.871	5.556	2.621	0.356	-0.985	0.677
TEQHALFND (background)	2	0	0.00%	1.646	11.51	6.579	6.579	6.976	7.313	N/A	1.06
TEQHALFND (effluent)	5	0	0.00%	1.487	7.594	4.958	5.887	2.463	2.53	-0.65	0.497

	Reach A Flow Data from National Park																	Reach A Flow Data from National Park				
	Dredging began September 16, 2012														(22)	(5)		Hopper Dredging began November 7, 2012				
		Daily Discharge (MGD)				Daily	Quantity	Cumul.	Pumping	Pumping				Weir	Inlet	(9)		Quantity	Cumul.	Pumping	Pumping	
		From Flow Data (m3/sec)				Precip.	Dredged	Dredged	Time	Rate	Stations Dredged			Water	Slurry	Bkgd		Dredged	Dredged	Time	Rate	
Day	Date	Pipe 1	Pipe 2	Pipe 3	Total	(in)	(cy)	(cy)	(Hr:Min)	(cy/hr)	From	To		Sample	Sample	Sample		(cy)	(cy)	(Hrs)	(cy/hr)	Loads
1	9-Sep-12					Mt. Holly	680	680	1:05	628	561+43	560+50										
2	10-Sep-12					NJ Station	0	680	0:00			Illinois										
3	11-Sep-12					data	0	680	0:00													
4	12-Sep-12						0	680	0:00													
5	13-Sep-12						870	1,550	2:45	316	557+32											
6	14-Sep-12						0	1,550	0:00													
7	15-Sep-12						0	1,550	0:00													
8	16-Sep-12						0	1,550	0:00													
9	17-Sep-12	values					2,655	4,205	5:30	483	555+42	data										
10	18-Sep-12	not					6,135	10,340	13:45	446	546+10	not										
11	19-Sep-12	included					7,637	17,977	12:35	607	548+50	filled										
12	20-Sep-12	in totals					1,245	19,222	3:40	340	556+70	in										
13	21-Sep-12	0.0655	0.0089	0.8161	0.8904823		2,790	22,012	6:35	424	564+90											
14	22-Sep-12	0.2943	0.0332	1.4990	1.8264865		2,844	24,856	10:05	282	547+25											
15	23-Sep-12	0.5833	0.4924	0.4730	1.548588		2,788	27,644	6:00	465	569+00											
16	24-Sep-12	0.6395	0.7447	0.8855	2.2697144		3,419	31,063	6:15	547	559+80											
17	25-Sep-12	3.5245	2.8713	4.2846	10.680423		5,191	36,254	10:30	494	559+50			X								
18	26-Sep-12	14.7258	15.9263	11.6178	42.269817		5,590	41,844	13:25	417	556+10											
19	27-Sep-12	2.5636	1.7246	5.5638	9.8520217		425	42,269	missing	data	551+21			X	X							
20	28-Sep-12	13.4310	11.1552	16.1923	40.778509	from 9/9	7,714	49,983	11:45	657	545+85											
21	29-Sep-12	14.7696	13.1240	16.0702	43.96382	to 10/1	1,407	51,390	6:06	231	553+35											
22	30-Sep-12	4.0189	1.8343	4.7468	10.599974	1.47	0	51,390	0		559+82											
23	1-Oct-12	2.2887	1.6982	1.6239	5.6107496		5,802	57,192	5:48	1,000	515+11			X								
24	2-Oct-12	18.3120	5.3190	18.4424	42.073392		4,365	61,557	7:30	582	524+40											
25	3-Oct-12	4.5453	2.0608	5.3614	11.967516		623	62,180	1:50	340	528+20											
26	4-Oct-12	15.3284	4.2012	15.5083	35.037839		4,027	66,207	9:55	406	530+40			X								
27	5-Oct-12	18.0894	18.6923	18.6960	55.477714		4,917	71,124	10:50	454	534+70											
28	6-Oct-12	17.9899	18.0364	18.1526	54.178913		7,967	79,091	13:05	609	546+10											
29	7-Oct-12	18.1031	17.7704	18.6499	54.523343		5,127	84,218	11:50	433	546+40											
30	8-Oct-12	18.2676	17.6292	18.6268	54.523568		3,127	87,345	12:10	257	559+20			X	X							
31	9-Oct-12	18.3123	18.4240	18.9363	55.672551		1,987	89,332	5:55	336	571+80											
32	10-Oct-12	18.1690	12.9565	15.4563	46.581837		830	90,162	2:50	293	590+19	Illinois				XXX						
33	11-Oct-12	2.4003	1.6464	1.7211	5.7677053		0	90,162	0		492+00	Florida		X								
34	12-Oct-12	11.9903	8.3679	11.0726	31.430812		239	90,401	2:50	84	490+50											
35	13-Oct-12	18.0726	17.6861	18.7103	54.468945		1,507	91,908	12:20	122	486+30											
36	14-Oct-12	18.2059	18.3358	18.8659	55.407721		1,992	93,900	12:50	155	482+98											
37	15-Oct-12	17.7733	17.3459	18.3971	53.516327		999	94,899	12:30	80	479+37			X								
38	16-Oct-12	17.4613	17.8166	18.2643	53.542191		2,036	96,935	10:40	191	468+65											
39	17-Oct-12	17.7899	15.9394	18.5503	52.279671		6,465	103,400	12:35	514	468+50											
40	18-Oct-12	17.8425	17.1791	18.5649	53.586456		10,751	114,151	13:05	822	464+20			X								
41	19-Oct-12	17.5956	17.7652	18.2625	53.623309		19,105	133,256	15:05	1,267	460+70											
42	20-Oct-12	17.7270	15.7127	18.0233	51.462872		39,351	172,607	17:30	2,249	456+85											
43	21-Oct-12	17.7129	15.8644	18.1223	51.699657		50,300	222,907	15:00	3,353	452+25											
44	22-Oct-12	17.6641	16.0794	18.5449	52.288408		45,000	267,907	13:50	3,253	447+10			X	X							
45	23-Oct-12	17.7620	15.8607	18.5305	52.153211		38,952	306,859	13:40	2,850	443+50											
46	24-Oct-12	17.9335	16.0867	18.3847	52.404882	from 10/1	22,000	328,859	10:50	2,031	439+50					XXX						
47	25-Oct-12	18.0963	17.0581	18.5151	53.66958	to 10/26	17,300	346,159	11:10	1,549	453+70											

	Reach A Flow Data from National Park																		Reach A Flow Data from National Park				
	Dredging began September 16, 2012														(22)	(5)			Hopper Dredging began November 7, 2012				
		Daily Discharge (MGD)				Daily	Quantity	Cumul.	Pumping	Pumping				Weir	Inlet	(9)		Quantity	Cumul.	Pumping	Pumping	
		From Flow Data (m3/sec)				Precip.	Dredged	Dredged	Time	Rate	Stations Dredged			Water	Slurry	Bkgd		Dredged	Dredged	Time	Rate	
Day	Date	Pipe 1	Pipe 2	Pipe 3	Total	(in)	(cy)	(cy)	(Hr:Min)	(cy/hr)	From	To		Sample	Sample	Sample		(cy)	(cy)	(Hrs)	(cy/hr)	Loads
48	26-Oct-12	17.8895	17.2222	18.3226	53.434329	0.73	19,600	365,759	13:30	1,452	448+43			X								
49	27-Oct-12	18.3387	17.1113	18.6794	54.129382	0	14,300	380,059	8:00	1,788	447+09											
50	28-Oct-12	18.4570	17.5182	18.7964	54.771586	0	23,900	403,959	11:25	2,093	444+56											
51	29-Oct-12	18.2588	16.7282	18.5610	53.547921	0.41	15,100	419,059	6:05	2,482	442+92											
52	30-Oct-12	10.3825	8.1896	8.9216	27.493646	2.68	15,400	434,459	6:30	2,369	443+90											
53	31-Oct-12	18.2480	17.0501	15.1610	50.459151	0.26	28,431	462,890	16:20	1,741	441+20			X	X							
54	1-Nov-12	17.7752	15.9021	18.3445	52.021812		18,486	481,376	14:10	1,305	437+00											
55	2-Nov-12	16.1937	9.3571	10.8439	36.394629		17,358	498,734	12:10	1,427	435+00			X								
56	3-Nov-12	17.0619	14.3645	3.2252	34.651626		21,968	520,702	16:00	1,373	430+00											
57	4-Nov-12	18.1906	17.3349	18.7028	54.228299		19,588	540,290	13:40	1,433	426+80											
58	5-Nov-12	18.2372	17.9873	18.6119	54.836346		17,942	558,232	12:15	1,465	423+40			X	X							
59	6-Nov-12	18.0370	17.5167	18.5000	54.053779		21,590	579,822	12:45	1,693	421+00											
60	7-Nov-12	17.9924	17.4796	18.3472	53.819257		16,800	596,622	11:15	1,493	412+12						1	0	0	1.6		0
61	8-Nov-12	17.7249	16.4204	18.1239	52.269176		21,076	617,698	16:35	1,271	407+92			X			2	2,935	2,935	1.62	1,812	2
62	9-Nov-12	17.5577	5.9506	16.9418	40.450086		13,100	630,798	13:35	964	402+56						3	14,548	17,483	5.7	2,552	8
63	10-Nov-12	0.4230	-	-	0.4230039		10,700	641,498	13:45	778	391+52						4	11,619	29,102	4.35	2,671	7
64	11-Nov-12	-	-	-	0		1,464	642,962	10:10	144	382+50						5	8,977	38,079	3.52	2,550	6
65	12-Nov-12	18.1063	17.1881	1.0808	36.375143		16,300	659,262	11:40	1,397	363+95			x			6	10,192	48,271	4.18	2,438	7
66	13-Nov-12	17.8639	15.3513	0.9823	34.197476		17,000	676,262	8:20	2,040	364+00						7	8,036	56,307	2.45	3,280	5
67	14-Nov-12	8.0595	3.4832	18.3059	29.848631		4,385	680,647	3:05	1,422	358+00						8	7,217	63,524	3.3	2,187	5
68	15-Nov-12	16.2788	8.2099	17.0346	41.523259		5,600	686,247	8:30	659	355+60						9	10,597	74,121	3.85	2,752	7
69	16-Nov-12	14.0260	8.7447	16.9150	39.685589		6,739	692,986	6:35	1,024	348+30						10	5,581	79,702	2.9	1,924	4
70	17-Nov-12	9.9738	3.6712	17.8453	31.490293		8,235	701,221	6:45	1,220	343+90						11	4,172	83,874	2.57	1,623	4
71	18-Nov-12	11.7698	6.1745	17.9314	35.875676		7,970	709,191	6:05	1,310	343+30						12	6,127	90,001	3.63	1,688	5
72	19-Nov-12	17.8186	16.0783	14.7893	48.686269		14,545	723,736	12:40	1,148	337+20					XXX	13	7,203	97,204	4.5	1,601	6
73	20-Nov-12	2.8877	1.9738	17.6636	22.525167		2,572	726,308	3:10	812	331+10			X			14	5,023	102,227	4.75	1,057	5
74	21-Nov-12	10.0318	7.3772	15.5877	32.99668		5,274	731,582	3:45	1,406	329+00						15	4,939	107,166	4.77	1,035	5
75	22-Nov-12	4.0621	2.2704	16.5878	22.920248		0	731,582	0	0							16	3,612	110,778	3.2	1,129	4
76	23-Nov-12	7.7400	3.0004	6.6906	17.43094		0	731,582	0	0							17	1,698	112,476	0.5	3,396	2
77	24-Nov-12	1.4779	7.3187	3.6976	12.494216		0	731,582	0	0												
78	25-Nov-12	0.1353	1.3216	4.7350	6.1917995		0	731,582	0	0												
79	26-Nov-12	0.0643	0.1720	1.1841	1.4203338		0	731,582	0	0				x								
80	27-Nov-12	0.0566	0.1001	1.0053	1.1620741		0	731,582	0	0												
81	28-Nov-12	0.0484	0.0173	0.5181	0.5838626		0	731,582	0	0												
82	29-Nov-12	0.0417	0.0032	0.3140	0.3589488	from 11/1	0	731,582	0	0												
83	30-Nov-12	0.0419	0.0075	0.2709	0.320319	to 11/30	0	731,582	0	0												
84	1-Dec-12	0.0385	0.0115	0.2287	0.278585	1.05	0	731,582	0	0												
85	2-Dec-12	0.0384	0.0231	0.1849	0.2464762		0	731,582	0	0												
86	3-Dec-12	0.0275	0.0837	0.1458	0.2570687		0	731,582	0	0												
87	4-Dec-12	0.0314	0.0806	0.1108	0.2227852		0	731,582	0	0												
88	5-Dec-12	0.0290	0.0591	0.0780	0.1660969		0	731,582	0	0												
89	6-Dec-12	0.0301	0.0537	0.0750	0.1588499		0	731,582	0	0												
90	7-Dec-12	0.0355	0.0720	0.0868	0.1943108		0	731,582	0	0				X								
91	8-Dec-12	0.0323	0.1178	0.1182	0.2683723		0	731,582	0	0												
92	9-Dec-12	0.0354	0.1450	0.0869	0.2673761		0	731,582	0	0												
93	10-Dec-12	0.0292	0.1420	0.1018	0.2729934		0	731,582	0	0												
94	11-Dec-12	0.0348	0.1253	0.0653	0.2254392		0	731,582	0	0												

	Reach A Flow Data from National Park																		Reach A Flow Data from National Park				
	Dredging began September 16, 2012														(22)	(5)			Hopper Dredging began November 7, 2012				
		Daily Discharge (MGD)				Daily	Quantity	Cumul.	Pumping	Pumping				Weir	Inlet	(9)		Quantity	Cumul.	Pumping	Pumping	
		From Flow Data (m3/sec)				Precip.	Dredged	Dredged	Time	Rate	Stations Dredged			Water	Slurry	Bkgd		Dredged	Dredged	Time	Rate	
Day	Date	Pipe 1	Pipe 2	Pipe 3	Total	(in)	(cy)	(cy)	(Hr:Min)	(cy/hr)	From	To		Sample	Sample	Sample		(cy)	(cy)	(Hrs)	(cy/hr)	Loads
95	12-Dec-12	0.0336	0.0993	0.0372	0.1701301		0	731,582	0	0												
96	13-Dec-12	0.0288	0.0779	0.0260	0.1326762		0	731,582	0	0												
97	14-Dec-12	0.0328	0.0512	0.0517	0.1356912		0	731,582	0	0												
98	15-Dec-12	0.0365	0.0160	0.0208	0.0731942		0	731,582	0	0												
99	16-Dec-12	0.0345	0.0144	0.0120	0.0609443		0	731,582	0	0												
100	17-Dec-12	0.0484	0.0171	0.0459	0.1114368		0	731,582	0	0												
101	18-Dec-12	0.0339	0.0141	0.0223	0.0703752		0	731,582	0	0												
102	19-Dec-12	0.2242	0.3030	0.7042	1.2313876		10,641	742,223	12:55	823	687+16											
103	20-Dec-12	13.9582	5.4568	18.4751	37.890048		28,654	770,877	13:35	2,109	681+46											
104	21-Dec-12	17.8510	3.7250	16.9933	38.569326		26,065	796,942	13:15	1,967	675+80											
105	22-Dec-12	16.7444	1.9927	13.1013	31.83839		15,300	812,242	11:20	1,350	666+07											
106	23-Dec-12	15.8553	6.0411	6.1691	28.065525		27,000	839,242	missing report	2,160												
107	24-Dec-12	16.2959	4.4512	17.7917	38.538702		26,619	865,861	missing report	2,130												
108	25-Dec-12	16.1996	2.2289	17.5770	36.00546		0	865,861	assuming 0	0												
109	26-Dec-12	17.2702	3.9560	17.5803	38.806547		10,900	876,761	9:40	1,128	700+23			X								
110	27-Dec-12	17.3280	1.7467	18.4810	37.555752		7,323	884,084	5:45	1,274	704+32											
111	28-Dec-12	17.5610	2.9840	17.9205	38.465501		28,000	912,084	10:10	2,754	693+59											
112	29-Dec-12	3.3321	1.2911	2.8769	7.5000366	from 12/1	0	912,084	0	0	697+57											
113	30-Dec-12	8.9581	5.0866	3.3405	17.385125	to 12/30	24,500	936,584	9:35	2,557	697+57											
114	31-Dec-12	5.9894	8.6447	0.3013	14.935444	4.42	46,911	983,495	13:40	3,433	690+00											
115	1-Jan-13	12.6951	14.3770	8.4419	35.513994		44,625	1,028,120	12:15	3,643	679+20											
116	2-Jan-13	6.9203	5.9186	2.6935	15.532372		32,259	1,060,379	11:05	2,911	674+09			X								
117	3-Jan-13	6.0079	6.4626	3.6634	16.133971		15,087	1,075,466	10:45	1,403	665+11											
118	4-Jan-13	6.5083	6.6541	1.5904	14.752802		9,980	1,085,446	10:00	998	655+75											
119	5-Jan-13	3.8238	8.9029	14.3054	27.032041		4,398	1,089,844	8:05	544	653+27											
120	6-Jan-13	6.6387	6.0416	16.9265	29.606852		3,129	1,092,973	5:05	616	718+79											
121	7-Jan-13	4.3067	2.8602	3.0938	10.260649		0	1,092,973	0	0	718+79											
122	8-Jan-13	0.5771	-	0.0275	0.6045382		0	1,092,973	0	0	701+00											
123	9-Jan-13	2.0882	0.0044	1.1553	3.2479325		5,170	1,098,143	9:25	549	703+10			X								
124	10-Jan-13	14.9918	0.0030	6.1210	21.115801		7,406	1,105,549	13:35	545	706+21											
125	11-Jan-13	14.0940	0.0015	6.8269	20.922376		6,619	1,112,168	14:15	464	713+08											
126	12-Jan-13	12.7598	0.0014	15.0389	27.800088		8,381	1,120,549	13:35	617	718+06											
127	13-Jan-13	13.9960	0.1436	4.7205	18.860142	from 1/1	4,667	1,125,216	10:00	467	721+81											
128	14-Jan-13	15.6109	0.9901	0.9381	17.539127	to 1/14	3,708	1,128,924	11:20	327	726+57											
129	15-Jan-13	14.9779	0.6533	18.3897	34.020932	0.97	4,266	1,133,190	10:20	413	729+76											
130	16-Jan-13	15.9259	-	9.0662	24.992101		5,459	1,138,649	14:00	390	721+41											
131	17-Jan-13	16.3177	0.0000	16.3777	32.695399		2,977	1,141,626	9:25	316	722+37			X								
132	18-Jan-13	15.4561	0.0000	15.4175	30.873637		5,393	1,147,019	12:55	418	730+59											
133	19-Jan-13	15.3589	-	11.9620	27.320929		9,641	1,156,660	13:25	719	732+81											
134	20-Jan-13	14.9583	-	9.7683	24.726647		9,139	1,165,799	14:30	630	734+88											
135	21-Jan-13	15.5547	-	10.6189	26.173545		2,873	1,168,672	13:20	215	735+61											
136	22-Jan-13	10.2608	0.0004	8.0879	18.349206		929	1,169,601	3:10	293	736+25											
137	23-Jan-13	0.5030	0.2091	10.7107	11.422816		0	1,169,601	0	0	736+25											
138	24-Jan-13	0.0136	0.6822	8.3504	9.0461645		0	1,169,601	0	0	736+25											
139	25-Jan-13	0.0140	1.2309	0.1057	1.3505406		0	1,169,601	0	0	736+25											
140	26-Jan-13	0.0107	1.6626	0.2031	1.8764401		0	1,169,601	0	0	736+25											
141	27-Jan-13	0.0088	1.9295	0.1087	2.0469846		0	1,169,601	0	0	736+25											

Reach A Flow Data from National Park
Dredging began September 16, 2012

Day	Date	Daily Discharge (MGD) From Flow Data (m3/sec) Pipe 1	Pipe 2	Pipe 3	Total	Daily Precip. (in)	Quantity Dredged (cy)	Cumul. Dredged (cy)	Pumping Time (Hr:Min)	Pumping Rate (cy/hr)	Stations Dredged From	To	(22) Weir Water Sample	(5) Inlet Slurry Sample	(9) Bkgd Sample
142	28-Jan-13	1.1022	1.9368	3.5200	6.5590715		4,337	1,173,938	8:30	510	750+10				
143	29-Jan-13	12.3207	1.6684	13.4490	27.438056		6,226	1,180,164	12:25	501	757+06				
144	30-Jan-13	13.8724	0.3355	9.8698	24.07772		6,500	1,186,664	13:45	473	762+29				
145	31-Jan-13	14.4112	0.0000	16.6991	31.11034		2,500	1,189,164	4:50	517	771+85				
146	1-Feb-13	-	0.0001	12.2481	12.248276		3,500	1,192,664	11:33	304	735+97				
147	2-Feb-13	-	0.0268	8.0211	8.0478982		1,010	1,193,674	5:10	195	735+57				
148	3-Feb-13	-	0.0050	2.4952	2.5001492		900	1,194,574	4:10	216	731+90				
149	4-Feb-13	-	0.0054	0.1031	0.1084723	from 1/15		1,194,574							
150	5-Feb-13	-	0.0020	0.1061	0.1081671	to 2/6		1,194,574							
151	6-Feb-13	-	-	-	0	2.42		1,194,574							
						Rainfall from 9/9/12 to 2/6/13									
						14.41									
				Billion Gallons	3.436816191		1,194,574								
				Billion Liters	13.009758377		112,470								
		Flow Monitoring Stopped on February 6, 2013					1,307,044	Total as Determined by Dredge Logs							

Assume: NP CDF is 90 acres and received 14.41" rain during project;
at 325,851 gal per acre-foot, that is 35,216,347 gal (133,308,311 L) of rain

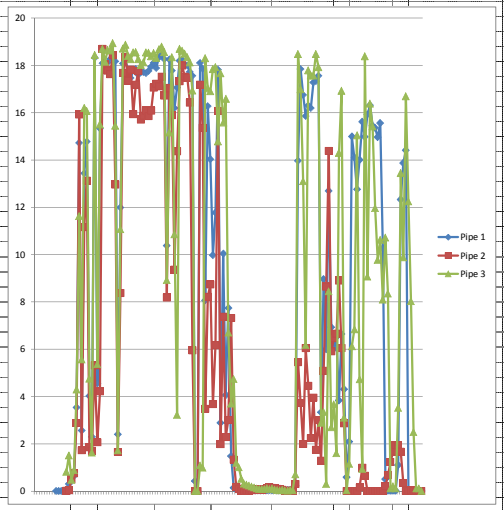
Dredging Completed on February 3, 2013
Cumulative Quantity Dredged (as reported): 1,244,143 cy

Raw Reports are short on these days (there are other dates where added totals are also off)
Dredge Logs reported a total of 1,244,143 cy for Illinois and Florida
Add - 112,470 cy from Hopper Dredge Terrapin Island - 82 loads from 11/7 to 11/23/12
Reported combined total = 1,356,613 cy

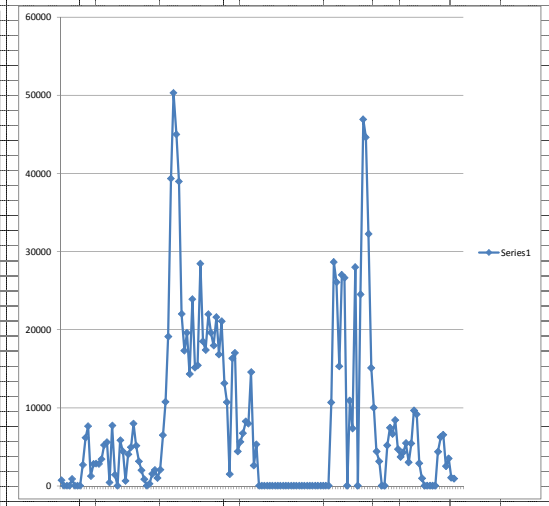
1,356,613 cy sediment spread over 90 acres (43,560 sf/acre) -
3.4603943 yards high (>10 feet)

Reach A Flow Data from National Park
Hopper Dredging began November 7, 2012

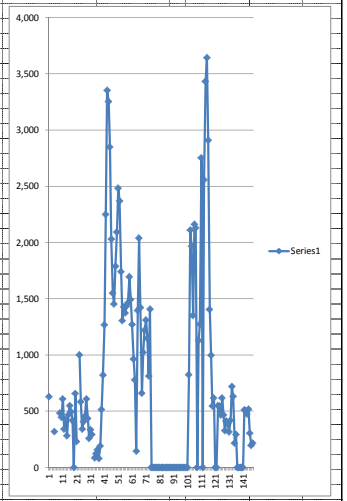
Quantity Dredged (cy)	Cumul. Dredged (cy)	Pumping Time (Hrs)	Pumping Rate (cy/hr)	Loads
		57.39	1,960	82
112476	Sum of Dredge Reported CY Daily			
112470	Reported Cumulative Total			



Daily effluent flow from Pipes 1, 2, and 3 (MGD)



Daily dredging volumes from daily reports (cy)



Dredging Rate (cy/hr)
Illinois for first month; Florida for the remainder

	Background					Effluent				
Analyte	**N**	**Mean**	**Sdev**	**Min**	**Max**	**N**	**Mean**	**StdD**	**Min**	**Max**
4,4'-DDD	9	0.000000	0.000000	0.000000	0.000000	22	0.001064	0.002054	0.000000	0.007600
4,4'-DDE	9	0.001273	0.000255	0.000960	0.001700	22	0.014941	0.018423	0.000000	0.062000
4,4'-DDT	9	0.000000	0.000000	0.000000	0.000000	22	0.001850	0.004836	0.000000	0.022000
Aldrin	9	0.000000	0.000000	0.000000	0.000000	22	0.000000	0.000000	0.000000	0.000000
Alpha-BHC	9	0.000000	0.000000	0.000000	0.000000	22	0.000035	0.000162	0.000000	0.000760
Alpha-Chlordane	9	0.000133	0.000400	0.000000	0.001200	22	0.000000	0.000000	0.000000	0.000000
Beta-BHC	9	0.000000	0.000000	0.000000	0.000000	22	0.000566	0.001705	0.000000	0.007600
Delta-BHC	9	0.000000	0.000000	0.000000	0.000000	22	0.000100	0.000469	0.000000	0.002200
Dieldrin	9	0.000000	0.000000	0.000000	0.000000	22	0.000000	0.000000	0.000000	0.000000
Endosulfan I	9	0.000000	0.000000	0.000000	0.000000	22	0.000000	0.000000	0.000000	0.000000
Endosulfan II	9	0.000000	0.000000	0.000000	0.000000	22	0.000109	0.000512	0.000000	0.002400
Endosulfan Sulfate	9	0.000000	0.000000	0.000000	0.000000	22	0.000000	0.000000	0.000000	0.000000
Endrin	9	0.000000	0.000000	0.000000	0.000000	22	0.000000	0.000000	0.000000	0.000000
Endrin Aldehyde	9	0.000000	0.000000	0.000000	0.000000	22	0.000000	0.000000	0.000000	0.000000
Endrin Ketone	9	0.000000	0.000000	0.000000	0.000000	22	0.000418	0.001961	0.000000	0.009200
Gamma-BHC (Lindane)	9	0.000000	0.000000	0.000000	0.000000	22	0.000050	0.000235	0.000000	0.001100
Gamma-Chlordane	9	0.001833	0.000520	0.001200	0.002900	22	0.000532	0.001727	0.000000	0.006300
Heptachlor	9	0.000000	0.000000	0.000000	0.000000	22	0.000000	0.000000	0.000000	0.000000
Heptachlor Epoxide	9	0.000000	0.000000	0.000000	0.000000	22	0.000000	0.000000	0.000000	0.000000
Methoxychlor	9	0.000000	0.000000	0.000000	0.000000	22	0.000068	0.000320	0.000000	0.001500
PCB-1016	9	0.000000	0.000000	0.000000	0.000000	22	0.000000	0.000000	0.000000	0.000000
PCB-1221	9	0.000000	0.000000	0.000000	0.000000	22	0.000000	0.000000	0.000000	0.000000
PCB-1232	9	0.000000	0.000000	0.000000	0.000000	22	0.000000	0.000000	0.000000	0.000000
PCB-1242	9	0.000000	0.000000	0.000000	0.000000	22	0.000000	0.000000	0.000000	0.000000
PCB-1248	9	0.000000	0.000000	0.000000	0.000000	22	0.000000	0.000000	0.000000	0.000000
PCB-1254	9	0.000000	0.000000	0.000000	0.000000	22	0.000000	0.000000	0.000000	0.000000
PCB-1260	9	0.000000	0.000000	0.000000	0.000000	22	0.000000	0.000000	0.000000	0.000000
Total Ddt	9	0.005473	0.006397	0.000960	0.014000	22	0.188850	0.811465	0.000000	3.821600
Total Ddt Halfnd	9	0.006141	0.006397	0.001625	0.014670	22	0.191125	0.810956	0.001045	3.821600
Toxaphene	9	0.000000	0.000000	0.000000	0.000000	22	0.003273	0.015350	0.000000	0.072000

	Background					Effluent				
Analyte	**N**	**Mean**	**Sdev**	**Min**	**Max**	**N**	**Mean**	**StdD**	**Min**	**Max**
Aluminum	9	562.2222	339.4767	210.0000	1200.0000	22	49449.0909	63698.0924	350.0000	240000.0000
Antimony	9	0.3189	0.0483	0.2400	0.3900	22	1.3455	1.0825	0.3000	4.2000
Arsenic	9	2.2789	2.2484	0.0000	7.5000	22	26.3500	27.4363	1.3000	100.0000
Barium	9	27.4444	1.6667	25.0000	30.0000	22	419.5909	445.0215	40.0000	1700.0000
Beryllium	9	0.0573	0.0357	0.0000	0.0980	22	2.9446	3.2916	0.0610	11.0000
Cadmium	9	0.0000	0.0000	0.0000	0.0000	22	1.8132	2.1607	0.0000	7.4000
Calcium	9	15333.3333	1000.0000	14000.0000	17000.0000	22	22500.0000	9116.9648	13000.0000	52000.0000
Chromium	9	6.3778	3.6976	3.0000	14.0000	22	162.4955	181.2593	2.2000	610.0000
Cobalt	9	0.5544	0.1728	0.3500	0.7700	22	27.4000	32.1142	0.8200	110.0000
Copper	9	5.7889	1.5479	4.1000	8.5000	22	75.1545	73.2140	2.3000	260.0000
Iron	9	1153.3333	601.9344	500.0000	2100.0000	22	75494.5455	98585.7446	980.0000	350000.0000
Lead	9	2.4111	0.9307	1.1000	3.8000	22	102.4500	109.3561	1.1000	380.0000
Magnesium	9	4911.1111	305.9593	4500.0000	5400.0000	22	20254.5455	20202.6101	5000.0000	81000.0000
Manganese	9	59.5556	19.8564	30.0000	86.0000	22	1759.5455	1732.3820	120.0000	5900.0000
Mercury	9	5.9556	1.9526	3.2000	8.8000	22	159.1909	199.7183	2.3000	730.0000
Nickel	9	2.4778	0.4024	1.9000	3.0000	22	61.6955	73.8482	2.5000	250.0000
Potassium	9	2466.6667	122.4745	2300.0000	2600.0000	22	13063.6364	12880.6442	3600.0000	56000.0000
Selenium	9	0.4500	0.5684	0.0000	1.3000	21	2.8586	3.9864	0.0000	13.0000
Silver	9	0.0176	0.0404	0.0000	0.1200	22	0.9356	1.0658	0.0000	3.4000
Sodium	9	15777.7778	1092.9064	14000.0000	18000.0000	22	17454.5455	3863.4708	11000.0000	28000.0000
Thallium	9	0.0459	0.0173	0.0200	0.0680	22	0.6955	0.7884	0.0920	3.0000
Vanadium	9	3.9556	2.0446	0.0000	6.6000	22	115.3591	120.6545	4.5000	450.0000
Zinc	9	20.4444	3.7786	15.0000	27.0000	22	432.9091	461.3747	17.0000	1700.0000
Cyanide, Total	9	0.0000	0.0000	0.0000	0.0000	22	2.4455	3.3842	0.0000	9.4000

	Background					Effluent				
Analyte	**N**	**Mean**	**Sdev**	**Min**	**Max**	**N**	**Mean**	**StdD**	**Min**	**Max**
Aluminum	9	29.2222	29.5487	6.2000	80.0000	22	1413.1818	5723.6777	6.0000	27000.0000
Antimony	9	0.4956	0.3422	0.2300	1.2000	22	1.4241	1.4394	0.2800	7.3000
Arsenic	9	0.3689	0.6305	0.0000	1.8000	21	4.6210	3.9110	0.5400	18.0000
Barium	9	23.0000	2.9155	20.0000	30.0000	22	63.0909	63.1196	32.0000	290.0000
Beryllium	9	0.0043	0.0130	0.0000	0.0390	22	0.0657	0.2982	0.0000	1.4000
Cadmium	9	0.0000	0.0000	0.0000	0.0000	22	0.0177	0.0831	0.0000	0.3900
Calcium	9	14666.6667	866.0254	13000.0000	16000.0000	22	21204.5455	27154.0662	8000.0000	140000.0000
Chromium	9	13.9333	15.0654	1.1000	38.0000	21	14.8719	15.6873	0.9100	68.0000
Cobalt	9	0.1470	0.0950	0.0000	0.3200	22	1.5609	2.5567	0.4000	12.0000
Copper	9	47.8889	64.1686	3.2000	140.0000	22	23.9682	38.6119	2.3000	120.0000
Iron	9	77.3333	71.0141	19.0000	190.0000	22	2241.5909	7838.9120	0.0000	37000.0000
Lead	9	0.2474	0.2097	0.0770	0.7000	22	1.6857	5.9047	0.0000	28.0000
Magnesium	9	5066.6667	559.0170	4400.0000	5900.0000	22	8400.0000	9092.3306	3600.0000	47000.0000
Manganese	9	10.9000	10.3987	1.4000	32.0000	22	405.9091	338.0146	110.0000	1500.0000
Nickel	9	2.8444	0.8338	1.4000	4.4000	22	5.0273	5.9830	1.6000	29.0000
Potassium	9	2111.1111	231.5407	1800.0000	2500.0000	22	5154.5455	4042.4801	2600.0000	22000.0000
Selenium	9	10.5778	14.8965	0.0000	33.0000	22	6.0364	11.3424	0.0000	41.0000
Silver	9	0.0000	0.0000	0.0000	0.0000	22	0.0145	0.0599	0.0000	0.2800
Sodium	9	15444.4444	1333.3333	13000.0000	18000.0000	22	24545.4545	37068.4403	10000.0000	190000.0000
Thallium	9	0.1670	0.1542	0.0000	0.4400	22	0.3990	0.4603	0.0000	1.7000
Vanadium	9	5.0444	3.7990	0.0000	11.0000	22	8.5455	14.0570	0.0000	57.0000
Zinc	9	20.2778	12.7123	6.9000	38.0000	22	31.5864	51.5845	4.4000	230.0000

	Background					Effluent				
Analyte	**N**	**Mean**	**Sdev**	**Min**	**Max**	**N**	**Mean**	**StdD**	**Min**	**Max**
1,1'-Biphenyl	9	0.000000	0.000000	0.000000	0.000000	22	0.007409	0.019108	0.000000	0.057000
2,2'-Oxybis(1-chloropropane)	9	0.000000	0.000000	0.000000	0.000000	22	0.000000	0.000000	0.000000	0.000000
2,4,5-Trichlorophenol	9	0.000000	0.000000	0.000000	0.000000	22	0.000000	0.000000	0.000000	0.000000
2,4,6-Trichlorophenol	9	0.000000	0.000000	0.000000	0.000000	22	0.000000	0.000000	0.000000	0.000000
2,4-Dichlorophenol	9	0.000000	0.000000	0.000000	0.000000	22	0.000000	0.000000	0.000000	0.000000
2,4-Dimethylphenol	9	0.000000	0.000000	0.000000	0.000000	22	0.000000	0.000000	0.000000	0.000000
2,4-Dinitrophenol	9	0.000000	0.000000	0.000000	0.000000	22	0.000000	0.000000	0.000000	0.000000
2,4-Dinitrotoluene	9	0.000000	0.000000	0.000000	0.000000	22	0.000000	0.000000	0.000000	0.000000
2,6-Dinitrotoluene	9	0.000000	0.000000	0.000000	0.000000	22	0.000000	0.000000	0.000000	0.000000
2-Chloronaphthalene	9	0.000000	0.000000	0.000000	0.000000	22	0.000000	0.000000	0.000000	0.000000
2-Chlorophenol	9	0.000000	0.000000	0.000000	0.000000	22	0.000000	0.000000	0.000000	0.000000
2-Methylnaphthalene	9	0.001333	0.004000	0.000000	0.012000	22	0.060773	0.078800	0.000000	0.250000
2-Methylphenol	9	0.000000	0.000000	0.000000	0.000000	22	0.000000	0.000000	0.000000	0.000000
2-Nitroaniline	9	0.000000	0.000000	0.000000	0.000000	22	0.000000	0.000000	0.000000	0.000000
2-Nitrophenol	9	0.000000	0.000000	0.000000	0.000000	22	0.000000	0.000000	0.000000	0.000000
3,3'-Dichlorobenzidine	9	0.000000	0.000000	0.000000	0.000000	22	0.000000	0.000000	0.000000	0.000000
3-Nitroaniline	9	0.000000	0.000000	0.000000	0.000000	22	0.000000	0.000000	0.000000	0.000000
4,6-Dinitro-2-methylphenol	9	0.000000	0.000000	0.000000	0.000000	22	0.000000	0.000000	0.000000	0.000000
4-Bromophenyl Phenyl Ether	9	0.000000	0.000000	0.000000	0.000000	22	0.000000	0.000000	0.000000	0.000000
4-Chloro-3-methylphenol	9	0.000000	0.000000	0.000000	0.000000	22	0.000000	0.000000	0.000000	0.000000
4-Chloroaniline	9	0.000000	0.000000	0.000000	0.000000	22	0.000000	0.000000	0.000000	0.000000
4-Chlorophenyl Phenyl Ether	9	0.000000	0.000000	0.000000	0.000000	22	0.000000	0.000000	0.000000	0.000000
4-Nitroaniline	9	0.000000	0.000000	0.000000	0.000000	22	0.000000	0.000000	0.000000	0.000000
4-Nitrophenol	9	0.000000	0.000000	0.000000	0.000000	22	0.000000	0.000000	0.000000	0.000000
Acenaphthene	9	0.006778	0.020333	0.000000	0.061000	22	0.040682	0.068348	0.000000	0.260000
Acenaphthylene	9	0.000000	0.000000	0.000000	0.000000	22	0.003500	0.012180	0.000000	0.053000
Acetophenone	9	0.000000	0.000000	0.000000	0.000000	22	0.006364	0.029848	0.000000	0.140000
Anthracene	9	0.000000	0.000000	0.000000	0.000000	22	0.009273	0.022037	0.000000	0.073000
Atrazine	9	0.000000	0.000000	0.000000	0.000000	22	0.000000	0.000000	0.000000	0.000000
Benzaldehyde	9	0.225556	0.267587	0.000000	0.520000	22	0.080909	0.171795	0.000000	0.570000

	Background					Effluent				
Analyte	**N**	**Mean**	**Sdev**	**Min**	**Max**	**N**	**Mean**	**StdD**	**Min**	**Max**
Benzo[a]anthracene	9	0.000000	0.000000	0.000000	0.000000	22	0.023864	0.065244	0.000000	0.290000
Benzo[a]pyrene	9	0.000000	0.000000	0.000000	0.000000	22	0.018455	0.059828	0.000000	0.270000
Benzo[b]fluoranthene	9	0.000000	0.000000	0.000000	0.000000	22	0.017591	0.062496	0.000000	0.290000
Benzo[g,h,i]perylene	9	0.000000	0.000000	0.000000	0.000000	22	0.020682	0.067158	0.000000	0.300000
Benzo[k]fluoranthene	9	0.000000	0.000000	0.000000	0.000000	22	0.020455	0.071212	0.000000	0.310000
Bis(2-chloroethoxy)methane	9	0.000000	0.000000	0.000000	0.000000	22	0.000000	0.000000	0.000000	0.000000
Bis(2-chloroethyl)ether	9	0.000000	0.000000	0.000000	0.000000	22	0.000000	0.000000	0.000000	0.000000
Bis(2-ethylhexyl)phthalate	9	0.000000	0.000000	0.000000	0.000000	22	0.368182	1.295923	0.000000	5.700000
Butylbenzylphthalate	9	0.015556	0.046667	0.000000	0.140000	22	0.053636	0.151643	0.000000	0.680000
Caprolactam	9	0.000000	0.000000	0.000000	0.000000	22	0.000000	0.000000	0.000000	0.000000
Carbazole	9	0.000000	0.000000	0.000000	0.000000	22	0.002545	0.011939	0.000000	0.056000
Chrysene	9	0.000000	0.000000	0.000000	0.000000	22	0.027591	0.083556	0.000000	0.380000
Di-n-butylphthalate	9	0.013333	0.040000	0.000000	0.120000	22	0.000000	0.000000	0.000000	0.000000
Di-n-octylphthalate	9	0.000000	0.000000	0.000000	0.000000	22	0.000000	0.000000	0.000000	0.000000
Dibenz(a,h)anthracene	9	0.000000	0.000000	0.000000	0.000000	22	0.018636	0.057096	0.000000	0.240000
Dibenzofuran	9	0.000000	0.000000	0.000000	0.000000	22	0.010273	0.026541	0.000000	0.081000
Diethylphthalate	9	0.240000	0.208986	0.000000	0.500000	22	0.234545	0.127792	0.000000	0.460000
Dimethylphthalate	9	0.000000	0.000000	0.000000	0.000000	22	0.000000	0.000000	0.000000	0.000000
Fluoranthene	9	0.000000	0.000000	0.000000	0.000000	22	0.045727	0.060896	0.000000	0.230000
Fluorene	9	0.000000	0.000000	0.000000	0.000000	22	0.047864	0.102334	0.000000	0.450000
Hexachlorobenzene	9	0.000000	0.000000	0.000000	0.000000	22	0.000000	0.000000	0.000000	0.000000
Hexachlorobutadiene	9	0.000000	0.000000	0.000000	0.000000	22	0.000000	0.000000	0.000000	0.000000
Hexachlorocyclopentadiene	9	0.000000	0.000000	0.000000	0.000000	22	0.000000	0.000000	0.000000	0.000000
Hexachloroethane	9	0.000000	0.000000	0.000000	0.000000	22	0.000000	0.000000	0.000000	0.000000
Indeno[1,2,3-cd]pyrene	9	0.000000	0.000000	0.000000	0.000000	22	0.018500	0.060402	0.000000	0.270000
Isophorone	9	0.000000	0.000000	0.000000	0.000000	22	0.000000	0.000000	0.000000	0.000000
Methylphenol, 3 & 4	9	0.000000	0.000000	0.000000	0.000000	22	0.161818	0.348707	0.000000	1.500000
N-Nitroso-di-n-propylamine	9	0.000000	0.000000	0.000000	0.000000	22	0.000000	0.000000	0.000000	0.000000
N-Nitrosodiphenylamine (1)	9	0.000000	0.000000	0.000000	0.000000	22	0.000000	0.000000	0.000000	0.000000
Naphthalene	9	0.111111	0.333333	0.000000	1.000000	22	0.140182	0.185351	0.000000	0.630000

	Background					Effluent				
Analyte	**N**	**Mean**	**Sdev**	**Min**	**Max**	**N**	**Mean**	**StdD**	**Min**	**Max**
Nitrobenzene	9	0.000000	0.000000	0.000000	0.000000	22	0.000000	0.000000	0.000000	0.000000
Pentachlorophenol	9	0.000000	0.000000	0.000000	0.000000	22	0.000000	0.000000	0.000000	0.000000
Phenanthrene	9	0.000000	0.000000	0.000000	0.000000	22	0.089773	0.119406	0.000000	0.440000
Phenol	9	0.000000	0.000000	0.000000	0.000000	22	0.000000	0.000000	0.000000	0.000000
Pyrene	9	0.000000	0.000000	0.000000	0.000000	22	0.052636	0.066714	0.000000	0.230000

	Background					Effluent				
Analyte	**N**	**Mean**	**Sdev**	**Min**	**Max**	**N**	**Mean**	**StdD**	**Min**	**Max**
1,2,3,4,6,7,8-HpCDD	2	13.0000	1.4142	12.0000	14.0000	5	94.1800	76.4514	1.9000	180.0000
1,2,3,4,6,7,8-HpCDF	2	4.4000	0.8485	3.8000	5.0000	5	11.9000	8.9471	0.0000	22.0000
1,2,3,4,7,8,9-HpCDF	2	0.0000	0.0000	0.0000	0.0000	5	0.5600	0.7701	0.0000	1.5000
1,2,3,4,7,8-HxCDD	2	0.0000	0.0000	0.0000	0.0000	5	2.2400	2.2120	0.0000	5.1000
1,2,3,4,7,8-HxCDF	2	0.3700	0.5233	0.0000	0.7400	5	1.8420	1.7782	0.0000	4.6000
1,2,3,6,7,8-HxCDD	2	0.3400	0.4808	0.0000	0.6800	5	4.0600	2.8254	0.0000	6.9000
1,2,3,6,7,8-HxCDF	2	0.0000	0.0000	0.0000	0.0000	5	1.6000	1.6837	0.0000	3.4000
1,2,3,7,8,9-HxCDD	2	0.6000	0.8485	0.0000	1.2000	5	6.1400	5.5487	0.0000	13.0000
1,2,3,7,8,9-HxCDF	2	0.0000	0.0000	0.0000	0.0000	5	0.0000	0.0000	0.0000	0.0000
1,2,3,7,8-PeCDD	2	0.0000	0.0000	0.0000	0.0000	5	0.5200	1.1628	0.0000	2.6000
1,2,3,7,8-PeCDF	2	0.0000	0.0000	0.0000	0.0000	5	0.0000	0.0000	0.0000	0.0000
2,3,4,6,7,8-HxCDF	2	0.0000	0.0000	0.0000	0.0000	5	0.8160	0.9427	0.0000	2.3000
2,3,4,7,8-PeCDF	2	0.0000	0.0000	0.0000	0.0000	5	0.2400	0.5367	0.0000	1.2000
2,3,7,8-TCDD	2	0.0000	0.0000	0.0000	0.0000	5	0.0000	0.0000	0.0000	0.0000
2,3,7,8-TCDF	2	0.0000	0.0000	0.0000	0.0000	5	0.9480	1.3165	0.0000	3.2000
OCDD	2	220.0000	0.0000	220.0000	220.0000	5	1478.6000	1231.1640	43.0000	2800.0000
OCDF	2	6.3500	0.6364	5.9000	6.8000	5	16.3800	10.1006	1.9000	26.0000
Teq	2	5.3535	7.0650	0.3578	10.3492	5	3.8715	2.6206	0.0325	5.7963
Teq Halfnd	2	6.5787	6.9760	1.6459	11.5115	5	4.9576	2.4626	1.4871	7.5938
PCB 1 (bz)	2	0.0037	0.0007	0.0032	0.0042	5	0.0127	0.0133	0.0017	0.0350
PCB 10 (bz)	2	0.0044	0.0015	0.0033	0.0054	5	0.0201	0.0119	0.0054	0.0380
PCB 100 (bz)	2	0.0145	0.0021	0.0130	0.0160	5	0.0978	0.1018	0.0000	0.2700
PCB 101 (bz)	2	0.3950	0.0495	0.3600	0.4300	5	4.4260	3.6773	0.1300	10.0000
PCB 102 (bz)	2	0.0155	0.0007	0.0150	0.0160	5	0.1633	0.1382	0.0064	0.3700
PCB 103 (bz)	2	0.0099	0.0030	0.0078	0.0120	5	0.0946	0.0907	0.0000	0.2400
PCB 104 (bz)	2	0.0000	0.0000	0.0000	0.0000	5	0.0000	0.0000	0.0000	0.0000
PCB 105 (bz)	2	0.0790	0.0099	0.0720	0.0860	5	0.8414	0.6590	0.0270	1.7000
PCB 106 (bz)	2	0.0000	0.0000	0.0000	0.0000	5	0.0000	0.0000	0.0000	0.0000
PCB 107 (bz)/109 (iupac)	2	0.0210	0.0042	0.0180	0.0240	5	0.2491	0.1839	0.0053	0.4700

	Background					Effluent				
Analyte	**N**	**Mean**	**Sdev**	**Min**	**Max**	**N**	**Mean**	**StdD**	**Min**	**Max**
1,2,3,4,6,7,8-HpCDD	2	13.0000	1.4142	12.0000	14.0000	5	94.1800	76.4514	1.9000	180.0000
1,2,3,4,6,7,8-HpCDF	2	4.4000	0.8485	3.8000	5.0000	5	11.9000	8.9471	0.0000	22.0000
PCB 108 (bz)/107 (iupac)	2	0.0080	0.0011	0.0072	0.0088	5	0.0892	0.0673	0.0052	0.1800
PCB 109 (bz)/108 (iupac)	2	0.2150	0.0071	0.2100	0.2200	5	2.3126	1.9048	0.0630	5.2000
PCB 11 (bz)	2	0.0175	0.0035	0.0150	0.0200	5	0.0592	0.0631	0.0130	0.1700
PCB 110 (bz)	2	0.3900	0.0283	0.3700	0.4100	5	4.4660	3.6281	0.1300	9.9000
PCB 111 (bz)	2	0.0000	0.0000	0.0000	0.0000	5	0.0049	0.0070	0.0000	0.0150
PCB 112 (bz)	2	0.0000	0.0000	0.0000	0.0000	5	0.0000	0.0000	0.0000	0.0000
PCB 113 (bz)	2	0.3950	0.0495	0.3600	0.4300	5	4.4260	3.6773	0.1300	10.0000
PCB 114 (bz)	2	0.0048	0.0000	0.0048	0.0048	5	0.0464	0.0316	0.0028	0.0820
PCB 115 (bz)	2	0.3900	0.0283	0.3700	0.4100	5	4.4660	3.6281	0.1300	9.9000
PCB 116 (bz)	2	0.0500	0.0042	0.0470	0.0530	5	0.5772	0.4793	0.0160	1.3000
PCB 117 (bz)	2	0.0500	0.0042	0.0470	0.0530	5	0.5772	0.4793	0.0160	1.3000
PCB 118 (bz)	2	0.2450	0.0495	0.2100	0.2800	5	2.6348	1.9890	0.0740	5.3000
PCB 119 (bz)	2	0.2150	0.0071	0.2100	0.2200	5	2.3126	1.9048	0.0630	5.2000
PCB 12 (bz)	2	0.0082	0.0008	0.0076	0.0088	5	0.0634	0.0892	0.0029	0.2200
PCB 120 (bz)	2	0.0015	0.0021	0.0000	0.0029	5	0.0260	0.0186	0.0000	0.0460
PCB 121 (bz)	2	0.0000	0.0000	0.0000	0.0000	5	0.0000	0.0000	0.0000	0.0000
PCB 122 (bz)	2	0.0032	0.0008	0.0026	0.0038	5	0.0378	0.0303	0.0032	0.0790
PCB 123 (bz)	2	0.0081	0.0055	0.0042	0.0120	5	0.0331	0.0256	0.0013	0.0700
PCB 124 (bz)	2	0.0080	0.0011	0.0072	0.0088	5	0.0892	0.0673	0.0052	0.1800
PCB 125 (bz)	2	0.2150	0.0071	0.2100	0.2200	5	2.3126	1.9048	0.0630	5.2000
PCB 126 (bz)	2	0.0000	0.0000	0.0000	0.0000	5	0.0031	0.0052	0.0000	0.0120
PCB 127 (bz)	2	0.0000	0.0000	0.0000	0.0000	5	0.0016	0.0022	0.0000	0.0048
PCB 128 (bz)	2	0.0525	0.0021	0.0510	0.0540	5	0.5530	0.4087	0.0250	1.1000
PCB 129 (bz)	2	0.4050	0.0354	0.3800	0.4300	5	4.5980	3.5344	0.1900	9.5000
PCB 13 (bz)	2	0.0082	0.0008	0.0076	0.0088	5	0.0634	0.0892	0.0029	0.2200
PCB 130 (bz)	2	0.0265	0.0021	0.0250	0.0280	5	0.2897	0.2246	0.0085	0.5900
PCB 131 (bz)	2	0.0043	0.0006	0.0038	0.0047	5	0.0519	0.0348	0.0077	0.1000
PCB 132 (bz)	2	0.1400	0.0141	0.1300	0.1500	5	1.6916	1.3300	0.0580	3.5000

	Background					Effluent				
Analyte	**N**	**Mean**	**Sdev**	**Min**	**Max**	**N**	**Mean**	**StdD**	**Min**	**Max**
1,2,3,4,6,7,8-HpCDD	2	13.0000	1.4142	12.0000	14.0000	5	94.1800	76.4514	1.9000	180.0000
1,2,3,4,6,7,8-HpCDF	2	4.4000	0.8485	3.8000	5.0000	5	11.9000	8.9471	0.0000	22.0000
PCB 133 (bz)	2	0.0105	0.0007	0.0100	0.0110	5	0.1223	0.0946	0.0057	0.2500
PCB 134 (bz)	2	0.0210	0.0028	0.0190	0.0230	5	0.2964	0.2199	0.0120	0.5800
PCB 135 (bz)	2	0.1900	0.0141	0.1800	0.2000	5	2.1356	1.7235	0.0780	4.7000
PCB 136 (bz)	2	0.0605	0.0120	0.0520	0.0690	5	0.7304	0.5885	0.0220	1.6000
PCB 137 (bz)	2	0.0095	0.0036	0.0069	0.0120	5	0.1323	0.1029	0.0064	0.2800
PCB 138 (bz)	2	0.4050	0.0354	0.3800	0.4300	5	4.5980	3.5344	0.1900	9.5000
PCB 139 (bz)	2	0.0074	0.0023	0.0058	0.0090	5	0.0846	0.0538	0.0099	0.1500
PCB 14 (bz)	2	0.0000	0.0000	0.0000	0.0000	5	0.0000	0.0000	0.0000	0.0000
PCB 140 (bz)	2	0.0074	0.0023	0.0058	0.0090	5	0.0846	0.0538	0.0099	0.1500
PCB 141 (bz)	2	0.0700	0.0085	0.0640	0.0760	5	0.8806	0.7015	0.0430	1.9000
PCB 142 (bz)	2	0.0000	0.0000	0.0000	0.0000	5	0.0000	0.0000	0.0000	0.0000
PCB 143 (bz)	2	0.0210	0.0028	0.0190	0.0230	5	0.2964	0.2199	0.0120	0.5800
PCB 144 (bz)	2	0.0170	0.0014	0.0160	0.0180	5	0.1953	0.1554	0.0066	0.4200
PCB 145 (bz)	2	0.0000	0.0000	0.0000	0.0000	5	0.0000	0.0000	0.0000	0.0000
PCB 146 (bz)	2	0.0815	0.0035	0.0790	0.0840	5	0.9478	0.7158	0.0490	1.9000
PCB 147 (bz)	2	0.3700	0.0283	0.3500	0.3900	5	4.5980	3.5563	0.1900	9.5000
PCB 148 (bz)	2	0.0000	0.0000	0.0000	0.0000	5	0.0362	0.0432	0.0000	0.1100
PCB 149 (bz)	2	0.3700	0.0283	0.3500	0.3900	5	4.5980	3.5563	0.1900	9.5000
PCB 15 (bz)	2	0.0270	0.0028	0.0250	0.0290	5	0.1898	0.1776	0.0110	0.4600
PCB 150 (bz)	2	0.0000	0.0000	0.0000	0.0000	5	0.0064	0.0094	0.0000	0.0210
PCB 151 (bz)	2	0.1900	0.0141	0.1800	0.2000	5	2.1356	1.7235	0.0780	4.7000
PCB 152 (bz)	2	0.0000	0.0000	0.0000	0.0000	5	0.0000	0.0000	0.0000	0.0000
PCB 153 (bz)	2	0.3500	0.0424	0.3200	0.3800	5	4.0960	3.1865	0.1800	8.5000
PCB 154 (bz)	2	0.0110	0.0000	0.0110	0.0110	5	0.1311	0.1176	0.0037	0.3100
PCB 155 (bz)	2	0.0000	0.0000	0.0000	0.0000	5	0.0000	0.0000	0.0000	0.0000
PCB 156 (bz)	2	0.0375	0.0049	0.0340	0.0410	5	0.3610	0.2908	0.0150	0.7900
PCB 157 (bz)	2	0.0375	0.0049	0.0340	0.0410	5	0.3610	0.2908	0.0150	0.7900
PCB 158 (bz)	2	0.0355	0.0007	0.0350	0.0360	5	0.3954	0.3120	0.0170	0.8300

	Background					Effluent				
Analyte	**N**	**Mean**	**Sdev**	**Min**	**Max**	**N**	**Mean**	**StdD**	**Min**	**Max**
1,2,3,4,6,7,8-HpCDD	2	13.0000	1.4142	12.0000	14.0000	5	94.1800	76.4514	1.9000	180.0000
1,2,3,4,6,7,8-HpCDF	2	4.4000	0.8485	3.8000	5.0000	5	11.9000	8.9471	0.0000	22.0000
PCB 159 (bz)	2	0.0039	0.0007	0.0034	0.0044	5	0.0453	0.0290	0.0043	0.0770
PCB 16 (bz)	2	0.0505	0.0064	0.0460	0.0550	5	0.4614	0.3035	0.0470	0.7700
PCB 160 (bz)	2	0.4050	0.0354	0.3800	0.4300	5	4.5980	3.5344	0.1900	9.5000
PCB 161 (bz)	2	0.0000	0.0000	0.0000	0.0000	5	0.0000	0.0000	0.0000	0.0000
PCB 162 (bz)	2	0.0005	0.0007	0.0000	0.0010	5	0.0122	0.0092	0.0000	0.0210
PCB 163 (bz)	2	0.4050	0.0354	0.3800	0.4300	5	4.5980	3.5344	0.1900	9.5000
PCB 164 (bz)	2	0.0300	0.0028	0.0280	0.0320	5	0.3370	0.2657	0.0150	0.7200
PCB 165 (bz)	2	0.0000	0.0000	0.0000	0.0000	5	0.0024	0.0054	0.0000	0.0120
PCB 166 (bz)	2	0.0525	0.0021	0.0510	0.0540	5	0.5530	0.4087	0.0250	1.1000
PCB 167 (bz)	2	0.0120	0.0014	0.0110	0.0130	5	0.1166	0.0859	0.0060	0.2300
PCB 168 (bz)	2	0.3500	0.0424	0.3200	0.3800	5	4.0960	3.1865	0.1800	8.5000
PCB 169 (bz)	2	0.0000	0.0000	0.0000	0.0000	5	0.0056	0.0080	0.0000	0.0170
PCB 17 (bz)	2	0.0680	0.0184	0.0550	0.0810	5	0.6422	0.4834	0.0410	1.3000
PCB 170 (bz)	2	0.1150	0.0071	0.1100	0.1200	5	1.1234	0.8595	0.0570	2.3000
PCB 171 (bz)	2	0.0400	0.0042	0.0370	0.0430	5	0.3846	0.3193	0.0130	0.8700
PCB 172 (bz)	2	0.0185	0.0021	0.0170	0.0200	5	0.2019	0.1607	0.0094	0.4400
PCB 173 (bz)	2	0.0400	0.0042	0.0370	0.0430	5	0.3846	0.3193	0.0130	0.8700
PCB 174 (bz)	2	0.1250	0.0071	0.1200	0.1300	5	1.3654	1.0803	0.0570	2.9000
PCB 175 (bz)	2	0.0053	0.0005	0.0049	0.0056	5	0.0576	0.0662	0.0000	0.1700
PCB 176 (bz)	2	0.0170	0.0000	0.0170	0.0170	5	0.1753	0.1440	0.0063	0.3800
PCB 177 (bz)	2	0.0795	0.0021	0.0780	0.0810	5	0.8000	0.6331	0.0300	1.7000
PCB 178 (bz)	2	0.0350	0.0028	0.0330	0.0370	5	0.3258	0.2713	0.0190	0.7400
PCB 179 (bz)	2	0.0625	0.0007	0.0620	0.0630	5	0.6676	0.5524	0.0280	1.5000
PCB 18 (bz)	2	0.1300	0.0424	0.1000	0.1600	5	1.3480	0.9767	0.1100	2.6000
PCB 180 (bz)	2	0.2600	0.0000	0.2600	0.2600	5	2.6240	2.0572	0.1200	5.6000
PCB 181 (bz)	2	0.0000	0.0000	0.0000	0.0000	5	0.0017	0.0037	0.0000	0.0083
PCB 182 (bz)	2	0.0000	0.0000	0.0000	0.0000	5	0.0076	0.0070	0.0000	0.0140
PCB 183 (bz)	2	0.0895	0.0078	0.0840	0.0950	5	0.9178	0.7341	0.0390	2.0000

	Background					Effluent				
Analyte	**N**	**Mean**	**Sdev**	**Min**	**Max**	**N**	**Mean**	**StdD**	**Min**	**Max**
1,2,3,4,6,7,8-HpCDD	2	13.0000	1.4142	12.0000	14.0000	5	94.1800	76.4514	1.9000	180.0000
1,2,3,4,6,7,8-HpCDF	2	4.4000	0.8485	3.8000	5.0000	5	11.9000	8.9471	0.0000	22.0000
PCB 184 (bz)	2	0.0000	0.0000	0.0000	0.0000	5	0.0000	0.0000	0.0000	0.0000
PCB 185 (bz)	2	0.0895	0.0078	0.0840	0.0950	5	0.9178	0.7341	0.0390	2.0000
PCB 186 (bz)	2	0.0000	0.0000	0.0000	0.0000	5	0.0000	0.0000	0.0000	0.0000
PCB 187 (bz)	2	0.1750	0.0212	0.1600	0.1900	5	1.5946	1.1425	0.0730	3.0000
PCB 188 (bz)	2	0.0000	0.0000	0.0000	0.0000	5	0.0000	0.0000	0.0000	0.0000
PCB 189 (bz)	2	0.0044	0.0001	0.0043	0.0044	5	0.0331	0.0234	0.0044	0.0640
PCB 19 (bz)	2	0.0315	0.0021	0.0300	0.0330	5	0.1642	0.1149	0.0210	0.3000
PCB 190 (bz)	2	0.0235	0.0035	0.0210	0.0260	5	0.2160	0.1819	0.0100	0.5000
PCB 191 (bz)	2	0.0044	0.0004	0.0041	0.0046	5	0.0500	0.0316	0.0082	0.0840
PCB 192 (bz)	2	0.0000	0.0000	0.0000	0.0000	5	0.0000	0.0000	0.0000	0.0000
PCB 193 (bz)	2	0.2600	0.0000	0.2600	0.2600	5	2.6240	2.0572	0.1200	5.6000
PCB 194 (bz)	2	0.0580	0.0042	0.0550	0.0610	5	0.5172	0.4133	0.0260	1.1000
PCB 195 (bz)	2	0.0220	0.0014	0.0210	0.0230	5	0.1990	0.1503	0.0150	0.3900
PCB 196 (bz)	2	0.0325	0.0021	0.0310	0.0340	5	0.3464	0.3211	0.0120	0.8700
PCB 197 (bz)	2	0.0016	0.0022	0.0000	0.0031	5	0.0178	0.0129	0.0000	0.0320
PCB 198 (bz)	2	0.0970	0.0042	0.0940	0.1000	5	1.1866	1.3478	0.0330	3.5000
PCB 199 (bz)/200 (iupac)	2	0.0070	0.0020	0.0056	0.0084	5	0.0842	0.0709	0.0000	0.1900
PCB 2 (bz)	2	0.0014	0.0019	0.0000	0.0027	5	0.0085	0.0092	0.0000	0.0240
PCB 20 (bz)	2	0.1550	0.0354	0.1300	0.1800	5	1.6142	1.1871	0.0710	3.0000
PCB 200 (bz)/201 (iupac)	2	0.0078	0.0019	0.0064	0.0091	5	0.1006	0.1024	0.0000	0.2700
PCB 201 (bz)/199 (iupac)	2	0.0970	0.0042	0.0940	0.1000	5	1.1866	1.3478	0.0330	3.5000
PCB 202 (bz)	2	0.0210	0.0014	0.0200	0.0220	5	0.3342	0.4358	0.0210	1.1000
PCB 203 (bz)	2	0.0495	0.0035	0.0470	0.0520	5	0.5698	0.6093	0.0190	1.6000
PCB 204 (bz)	2	0.0000	0.0000	0.0000	0.0000	5	0.0000	0.0000	0.0000	0.0000
PCB 205 (bz)	2	0.0010	0.0013	0.0000	0.0019	5	0.0298	0.0241	0.0000	0.0610
PCB 206 (bz)	2	0.1300	0.0141	0.1200	0.1400	5	2.3066	3.6541	0.0330	8.8000
PCB 207 (bz)	2	0.0109	0.0016	0.0098	0.0120	5	0.1340	0.1955	0.0000	0.4800
PCB 208 (bz)	2	0.0570	0.0071	0.0520	0.0620	5	1.0232	1.6190	0.0160	3.9000

	Background					Effluent				
Analyte	**N**	**Mean**	**Sdev**	**Min**	**Max**	**N**	**Mean**	**StdD**	**Min**	**Max**
1,2,3,4,6,7,8-HpCDD	2	13.0000	1.4142	12.0000	14.0000	5	94.1800	76.4514	1.9000	180.0000
1,2,3,4,6,7,8-HpCDF	2	4.4000	0.8485	3.8000	5.0000	5	11.9000	8.9471	0.0000	22.0000
PCB 209 (bz)	2	0.1750	0.0495	0.1400	0.2100	5	3.7014	5.8039	0.0470	14.0000
PCB 21 (bz)	2	0.0290	0.0057	0.0250	0.0330	5	0.2872	0.2772	0.0160	0.7400
PCB 22 (bz)	2	0.0275	0.0106	0.0200	0.0350	5	0.2672	0.2322	0.0160	0.6300
PCB 23 (bz)	2	0.0000	0.0000	0.0000	0.0000	5	0.0000	0.0000	0.0000	0.0000
PCB 24 (bz)	2	0.0010	0.0014	0.0000	0.0020	5	0.0175	0.0105	0.0026	0.0320
PCB 25 (bz)	2	0.0360	0.0141	0.0260	0.0460	5	0.3220	0.2578	0.0100	0.6400
PCB 26 (bz)	2	0.0485	0.0148	0.0380	0.0590	5	0.5100	0.4074	0.0200	1.0000
PCB 27 (bz)	2	0.0190	0.0014	0.0180	0.0200	5	0.1818	0.2023	0.0170	0.5300
PCB 28 (bz)	2	0.1550	0.0354	0.1300	0.1800	5	1.6142	1.1871	0.0710	3.0000
PCB 29 (bz)	2	0.0485	0.0148	0.0380	0.0590	5	0.5100	0.4074	0.0200	1.0000
PCB 3 (bz)	2	0.0030	0.0008	0.0024	0.0036	5	0.0162	0.0180	0.0000	0.0460
PCB 30 (bz)	2	0.1300	0.0424	0.1000	0.1600	5	1.3480	0.9767	0.1100	2.6000
PCB 31 (bz)	2	0.1220	0.0396	0.0940	0.1500	5	1.3980	1.0436	0.0600	2.6000
PCB 32 (bz)	2	0.0660	0.0028	0.0640	0.0680	5	0.5262	0.4002	0.0410	1.1000
PCB 33 (bz)	2	0.0290	0.0057	0.0250	0.0330	5	0.2872	0.2772	0.0160	0.7400
PCB 34 (bz)	2	0.0009	0.0012	0.0000	0.0017	5	0.0222	0.0175	0.0012	0.0410
PCB 35 (bz)	2	0.0022	0.0000	0.0022	0.0022	5	0.0212	0.0169	0.0000	0.0390
PCB 36 (bz)	2	0.0000	0.0000	0.0000	0.0000	5	0.0000	0.0000	0.0000	0.0000
PCB 37 (bz)	2	0.0270	0.0000	0.0270	0.0270	5	0.2284	0.1663	0.0120	0.4200
PCB 38 (bz)	2	0.0000	0.0000	0.0000	0.0000	5	0.0014	0.0031	0.0000	0.0070
PCB 39 (bz)	2	0.0007	0.0009	0.0000	0.0013	5	0.0127	0.0095	0.0000	0.0260
PCB 4 (bz)	2	0.0615	0.0049	0.0580	0.0650	5	0.3092	0.2086	0.0560	0.5300
PCB 40 (bz)	2	0.1150	0.0071	0.1100	0.1200	5	1.4502	1.1755	0.0510	3.1000
PCB 41 (bz)	2	0.1150	0.0071	0.1100	0.1200	5	1.4502	1.1755	0.0510	3.1000
PCB 42 (bz)	2	0.0590	0.0057	0.0550	0.0630	5	0.7242	0.5786	0.0210	1.5000
PCB 43 (bz)	2	0.0080	0.0013	0.0071	0.0089	5	0.1058	0.0888	0.0049	0.2300
PCB 44 (bz)	2	0.2550	0.0495	0.2200	0.2900	5	3.1740	2.6584	0.1700	7.1000
PCB 45 (bz)	2	0.0750	0.0099	0.0680	0.0820	5	0.6992	0.6364	0.0460	1.7000

	Background					Effluent				
Analyte	**N**	**Mean**	**Sdev**	**Min**	**Max**	**N**	**Mean**	**StdD**	**Min**	**Max**
1,2,3,4,6,7,8-HpCDD	2	13.0000	1.4142	12.0000	14.0000	5	94.1800	76.4514	1.9000	180.0000
1,2,3,4,6,7,8-HpCDF	2	4.4000	0.8485	3.8000	5.0000	5	11.9000	8.9471	0.0000	22.0000
PCB 46 (bz)	2	0.0170	0.0028	0.0150	0.0190	5	0.2124	0.1839	0.0120	0.4900
PCB 47 (bz)	2	0.2550	0.0495	0.2200	0.2900	5	3.1740	2.6584	0.1700	7.1000
PCB 48 (bz)	2	0.0320	0.0071	0.0270	0.0370	5	0.4686	0.3670	0.0130	0.9200
PCB 49 (bz)	2	0.1850	0.0354	0.1600	0.2100	5	2.2536	1.9411	0.0680	5.1000
PCB 5 (bz)	2	0.0006	0.0008	0.0000	0.0012	5	0.0035	0.0060	0.0000	0.0140
PCB 50 (bz)	2	0.0565	0.0049	0.0530	0.0600	5	0.5776	0.5653	0.0380	1.5000
PCB 51 (bz)	2	0.0750	0.0099	0.0680	0.0820	5	0.6992	0.6364	0.0460	1.7000
PCB 52 (bz)	2	0.3300	0.0849	0.2700	0.3900	5	4.1880	3.6381	0.1400	9.7000
PCB 53 (bz)	2	0.0565	0.0049	0.0530	0.0600	5	0.5776	0.5653	0.0380	1.5000
PCB 54 (bz)	2	0.0080	0.0020	0.0066	0.0094	5	0.0262	0.0330	0.0000	0.0840
PCB 55 (bz)	2	0.0028	0.0004	0.0025	0.0031	5	0.0295	0.0256	0.0024	0.0660
PCB 56 (bz)	2	0.0630	0.0057	0.0590	0.0670	5	0.8518	0.6553	0.0290	1.7000
PCB 57 (bz)	2	0.0018	0.0025	0.0000	0.0035	5	0.0248	0.0195	0.0000	0.0470
PCB 58 (bz)	2	0.0006	0.0008	0.0000	0.0011	5	0.0150	0.0128	0.0000	0.0340
PCB 59 (bz)	2	0.0200	0.0057	0.0160	0.0240	5	0.2400	0.1895	0.0100	0.4900
PCB 6 (bz)	2	0.0087	0.0018	0.0074	0.0100	5	0.1324	0.2505	0.0051	0.5800
PCB 60 (bz)	2	0.0175	0.0007	0.0170	0.0180	5	0.1957	0.1729	0.0083	0.4600
PCB 61 (bz)	2	0.2500	0.0566	0.2100	0.2900	5	3.4000	2.7000	0.1000	7.1000
PCB 62 (bz)	2	0.0200	0.0057	0.0160	0.0240	5	0.2400	0.1895	0.0100	0.4900
PCB 63 (bz)	2	0.0077	0.0010	0.0070	0.0084	5	0.0862	0.0683	0.0000	0.1700
PCB 64 (bz)	2	0.0840	0.0085	0.0780	0.0900	5	1.0194	0.7801	0.0370	2.0000
PCB 65 (bz)	2	0.2550	0.0495	0.2200	0.2900	5	3.1740	2.6584	0.1700	7.1000
PCB 66 (bz)	2	0.1400	0.0141	0.1300	0.1500	5	1.9114	1.5187	0.0570	4.0000
PCB 67 (bz)	2	0.0145	0.0049	0.0110	0.0180	5	0.1647	0.1483	0.0045	0.4000
PCB 68 (bz)	2	0.0058	0.0032	0.0035	0.0080	5	0.0464	0.0328	0.0090	0.0940
PCB 69 (bz)	2	0.1850	0.0354	0.1600	0.2100	5	2.2536	1.9411	0.0680	5.1000
PCB 7 (bz)	2	0.0021	0.0007	0.0016	0.0026	5	0.0117	0.0139	0.0023	0.0360
PCB 70 (bz)	2	0.2500	0.0566	0.2100	0.2900	5	3.4000	2.7000	0.1000	7.1000

	Background					Effluent				
Analyte	**N**	**Mean**	**Sdev**	**Min**	**Max**	**N**	**Mean**	**StdD**	**Min**	**Max**
1,2,3,4,6,7,8-HpCDD	2	13.0000	1.4142	12.0000	14.0000	5	94.1800	76.4514	1.9000	180.0000
1,2,3,4,6,7,8-HpCDF	2	4.4000	0.8485	3.8000	5.0000	5	11.9000	8.9471	0.0000	22.0000
PCB 71 (bz)	2	0.1150	0.0071	0.1100	0.1200	5	1.4502	1.1755	0.0510	3.1000
PCB 72 (bz)	2	0.0048	0.0004	0.0045	0.0050	5	0.0636	0.0501	0.0000	0.1300
PCB 73 (bz)	2	0.0080	0.0013	0.0071	0.0089	5	0.1058	0.0888	0.0049	0.2300
PCB 74 (bz)	2	0.2500	0.0566	0.2100	0.2900	5	3.4000	2.7000	0.1000	7.1000
PCB 75 (bz)	2	0.0200	0.0057	0.0160	0.0240	5	0.2400	0.1895	0.0100	0.4900
PCB 76 (bz)	2	0.2500	0.0566	0.2100	0.2900	5	3.4000	2.7000	0.1000	7.1000
PCB 77 (bz)	2	0.0110	0.0014	0.0100	0.0120	5	0.1205	0.0887	0.0056	0.2200
PCB 78 (bz)	2	0.0000	0.0000	0.0000	0.0000	5	0.0008	0.0018	0.0000	0.0041
PCB 79 (bz)	2	0.0031	0.0008	0.0025	0.0036	5	0.0268	0.0185	0.0000	0.0460
PCB 8 (bz)	2	0.0175	0.0035	0.0150	0.0200	5	0.1589	0.2591	0.0093	0.6200
PCB 80 (bz)	2	0.0000	0.0000	0.0000	0.0000	5	0.0000	0.0000	0.0000	0.0000
PCB 81 (bz)	2	0.0000	0.0000	0.0000	0.0000	5	0.0013	0.0029	0.0000	0.0065
PCB 82 (bz)	2	0.0390	0.0000	0.0390	0.0390	5	0.4370	0.3437	0.0150	0.9400
PCB 83 (bz)	2	0.2050	0.0071	0.2000	0.2100	5	2.3136	1.9033	0.0680	5.2000
PCB 84 (bz)	2	0.0850	0.0141	0.0750	0.0950	5	1.0802	0.9121	0.0410	2.5000
PCB 85 (bz)	2	0.0500	0.0042	0.0470	0.0530	5	0.5772	0.4793	0.0160	1.3000
PCB 86 (bz)	2	0.2150	0.0071	0.2100	0.2200	5	2.3126	1.9048	0.0630	5.2000
PCB 87 (bz)	2	0.2150	0.0071	0.2100	0.2200	5	2.3126	1.9048	0.0630	5.2000
PCB 88 (bz)	2	0.0535	0.0007	0.0530	0.0540	5	0.6002	0.5138	0.0210	1.4000
PCB 89 (bz)	2	0.0021	0.0029	0.0000	0.0041	5	0.0480	0.0341	0.0000	0.0810
PCB 9 (bz)	2	0.0017	0.0023	0.0000	0.0033	5	0.0138	0.0187	0.0030	0.0470
PCB 90 (bz)	2	0.3950	0.0495	0.3600	0.4300	5	4.4260	3.6773	0.1300	10.0000
PCB 91 (bz)	2	0.0535	0.0007	0.0530	0.0540	5	0.6002	0.5138	0.0210	1.4000
PCB 92 (bz)	2	0.0875	0.0092	0.0810	0.0940	5	0.9718	0.8056	0.0290	2.2000
PCB 93 (bz)	2	0.0145	0.0021	0.0130	0.0160	5	0.0978	0.1018	0.0000	0.2700
PCB 94 (bz)	2	0.0050	0.0017	0.0038	0.0062	5	0.0420	0.0458	0.0000	0.1200
PCB 95 (bz)	2	0.3200	0.0424	0.2900	0.3500	5	3.7940	3.1063	0.1700	8.5000
PCB 96 (bz)	2	0.0028	0.0008	0.0022	0.0033	5	0.0360	0.0341	0.0000	0.0900

	Background					Effluent				
Analyte	**N**	**Mean**	**Sdev**	**Min**	**Max**	**N**	**Mean**	**StdD**	**Min**	**Max**
1,2,3,4,6,7,8-HpCDD	2	13.0000	1.4142	12.0000	14.0000	5	94.1800	76.4514	1.9000	180.0000
1,2,3,4,6,7,8-HpCDF	2	4.4000	0.8485	3.8000	5.0000	5	11.9000	8.9471	0.0000	22.0000
PCB 97 (bz)	2	0.2150	0.0071	0.2100	0.2200	5	2.3126	1.9048	0.0630	5.2000
PCB 98 (bz)	2	0.0155	0.0007	0.0150	0.0160	5	0.1633	0.1382	0.0064	0.3700
PCB 99 (bz)	2	0.2050	0.0071	0.2000	0.2100	5	2.3136	1.9033	0.0680	5.2000
PCB Total Halfnd	2	14.8807	4.1391	11.9538	17.8075	5	147.1710	119.5083	5.6607	322.4187
PCB Totalpos	2	14.8635	4.1444	11.9330	17.7940	5	147.1060	119.4579	5.6125	322.2360

	Background					Effluent				
Analyte	**N**	**Mean**	**Sdev**	**Min**	**Max**	**N**	**Mean**	**StdD**	**Min**	**Max**
Total Suspended Solids	9	19.8667	10.8273	7.2000	36.0000	22	1513.0455	2193.6617	23.0000	8000.0000

Client Sample ID	Matrix	sort	ion F	Analyte	Val_res	D?	Result	Unit	Qual	Flag	rep Metho	Prep Type	alysis Method	Check	Adj Val	Mean	Max
BKG-01-EM	Water	C	1	Cyanide, Total	1.5	0	ND	ug/L	U	ND			9012A	0	0		
BKG-01-HS	Water	C	1	Cyanide, Total	1.5	0	ND	ug/L	U	ND			9012A	0	0		
BKG-01-MID	Water	C	1	Cyanide, Total	1.5	0	ND	ug/L	U	ND			9012A	0	0		
BKG-02-EM	Water	C	1	Cyanide, Total	1.5	0	ND	ug/L	U	ND	9012A	Total/NA	9012A	0	0		
BKG-02-HS	Water	C	1	Cyanide, Total	1.5	0	ND	ug/L	U	ND	9012A	Total/NA	9012A	0	0		
BKG-02-MID	Water	C	1	Cyanide, Total	1.5	0	ND	ug/L	U	ND	9012A	Total/NA	9012A	0	0		
BKG-03-EM	Water	C	1	Cyanide, Total	1.5	0	ND	ug/L	U	ND	9012A	Total/NA	9012A	0	0		
BKG-03-HS	Water	C	1	Cyanide, Total	1.5	0	ND	ug/L	U	ND	9012A	Total/NA	9012A	0	0		
BKG-03-MID	Water	C	1	Cyanide, Total	1.5	0	ND	ug/L	U	ND	9012A	Total/NA	9012A	0	0	0	0
E-01	Water	C	1	Cyanide, Total	1.5	0	ND	ug/L	U	ND	9012A	Total/NA	9012A	0	0		
E-02	Water	C	1	Cyanide, Total	1.5	0	ND	ug/L	U	ND	9012A	Total/NA	9012A	0	0		
E-03	Water	C	1	Cyanide, Total	1.5	0	ND	ug/L	U	ND	9012A	Total/NA	9012A	0	0		
E-04	Water	C	1	Cyanide, Total	1.5	0	ND	ug/L	U	ND	9012A	Total/NA	9012A	0	0		
E-05	Water	C	1	Cyanide, Total	8.5	1	8.5	ug/L	J B	J B	9012A	Total/NA	9012A	0	8.5		
E-06	Water	C	1	Cyanide, Total	1.5	0	ND	ug/L	U	ND	9012A	Total/NA	9012A	0	0		
E-07	Water	C	1	Cyanide, Total	1.5	0	ND	ug/L	U	ND	9012A	Total/NA	9012A	0	0		
E-08	Water	C	1	Cyanide, Total	1.5	0	ND	ug/L	U	ND	9012A	Total/NA	9012A	0	0		
E-09	Water	C	1	Cyanide, Total	1.5	0	ND	ug/L	U	ND	9012A	Total/NA	9012A	0	0		
E-10	Water	C	1	Cyanide, Total	1.6	1	1.6	ug/L	J	J	9012A	Total/NA	9012A	0	1.6		
E-11	Water	C	1	Cyanide, Total	3.5	1	3.5	ug/L	J	J	9012A	Total/NA	9012A	0	3.5		
E-12	Water	C	1	Cyanide, Total	9.4	1	9.4	ug/L	J B	J B	9012A	Total/NA	9012A	0	9.4		
E-13	Water	C	1	Cyanide, Total	5.1	1	5.1	ug/L	J	J	9012A	Total/NA	9012A	0	5.1		
E-14	Water	C	1	Cyanide, Total	4.4	1	4.4	ug/L	J	J	9012A	Total/NA	9012A	0	4.4		
E-15	Water	C	1	Cyanide, Total	7	1	7	ug/L	J	J	9012A	Total/NA	9012A	0	7		
E-16	Water	C	1	Cyanide, Total	7.3	1	7.3	ug/L	J	J	9012A	Total/NA	9012A	0	7.3		
E-17	Water	C	1	Cyanide, Total	1.5	0	ND	ug/L	U	ND	9012A	Total/NA	9012A	0	0		
E-18	Water	C	1	Cyanide, Total	1.5	0	ND	ug/L	U	ND	9012A	Total/NA	9012A	0	0		
E-19	Water	C	1	Cyanide, Total	6.5	1	6.5	ug/L	J B	J B	9012A	Total/NA	9012A	0	6.5		
E-20	Water	C	1	Cyanide, Total	1.5	0	ND	ug/L	U	ND	9012A	Total/NA	9012A	0	0		
E-21	Water	C	1	Cyanide, Total	1.5	0	ND	ug/L	U	ND	9012A	Total/NA	9012A	0	0		
E-22	Water	C	1	Cyanide, Total	1.5	0	ND	ug/L	U	ND	9012A	Total/NA	9012A	0	0	2.42273	9.4
I-1	Sediment	C	1	Cyanide, Total	0.082	1	0.082	mg/Kg	J	J	9012A	Total/NA	9012A	0	0.082		
I-2	Sediment	C	1	Cyanide, Total	0.057	0	ND	mg/Kg	U	ND	9012A	Total/NA	9012A	0	0		
I-3	Sediment	C	1	Cyanide, Total	0.096	1	0.096	mg/Kg	J	J	9012A	Total/NA	9012A	0	0.096		
I-4	Sediment	C	1	Cyanide, Total	0.054	0	ND	mg/Kg	U	ND	9012A	Total/NA	9012A	0	0		
I-5	Sediment	C	1	Cyanide, Total	0.062	0	ND	mg/Kg	U	ND	9012A	Total/NA	9012A	0	0	0.0356	0.096
RB-01-11192012	Water	C	1	Cyanide, Total	4.1	1	4.1	ug/L	J	J	9012A	Total/NA	9012A	0	4.1		
I-1	Sediment	C	1	Total Organic Carbon -	2100		2100	mg/Kg				Total/NA	Lloyd	0	2100		
I-2	Sediment	C	1	Total Organic Carbon -	2000		2000	mg/Kg				Total/NA	Lloyd	0	2000		
I-3	Sediment	C	1	Total Organic Carbon -	6000		6000	mg/Kg				Total/NA	Lloyd	0	6000		
I-4	Sediment	C	1	Total Organic Carbon -	2000		2000	mg/Kg				Total/NA	Lloyd	0	2000		
I-5	Sediment	C	1	Total Organic Carbon -	2600		2600	mg/Kg				Total/NA	Lloyd	0	2600	2940	6000
BKG-01-EM	Water	C	1	Total Suspended Solids	14		14	mg/L				Total/NA	SM 2540D	0	14		
BKG-01-HS	Water	C	1	Total Suspended Solids	8		8	mg/L				Total/NA	SM 2540D	0	8		
BKG-01-MID	Water	C	1	Total Suspended Solids	9.6		9.6	mg/L				Total/NA	SM 2540D	0	9.6		
BKG-02-EM	Water	C	1	Total Suspended Solids	33		33	mg/L				Total/NA	SM 2540D	0	33		
BKG-02-HS	Water	C	1	Total Suspended Solids	7.2		7.2	mg/L				Total/NA	SM 2540D	0	7.2		
BKG-02-MID	Water	C	1	Total Suspended Solids	20		20	mg/L				Total/NA	SM 2540D	0	20		
BKG-03-EM	Water	C	1	Total Suspended Solids	36		36	mg/L				Total/NA	SM 2540D	0	36		
BKG-03-HS	Water	C	1	Total Suspended Solids	25		25	mg/L				Total/NA	SM 2540D	0	25		
BKG-03-MID	Water	C	1	Total Suspended Solids	26		26	mg/L				Total/NA	SM 2540D	0	26	19.8667	36
E-01	Water	C	1	Total Suspended Solids	24		24	mg/L				Total/NA	SM 2540D	0	24		
E-02	Water	C	1	Total Suspended Solids	61		61	mg/L				Total/NA	SM 2540D	0	61		
E-03	Water	C	1	Total Suspended Solids	50		50	mg/L				Total/NA	SM 2540D	0	50		
E-04	Water	C	1	Total Suspended Solids	24		24	mg/L				Total/NA	SM 2540D	0	24		
E-05	Water	C	1	Total Suspended Solids	85		85	mg/L				Total/NA	SM 2540D	0	85		
E-06	Water	C	1	Total Suspended Solids	150		150	mg/L				Total/NA	SM 2540D	0	150		
E-07	Water	C	1	Total Suspended Solids	340		340	mg/L				Total/NA	SM 2540D	0	340		
E-08	Water	C	1	Total Suspended Solids	320		320	mg/L				Total/NA	SM 2540D	0	320		
E-09	Water	C	1	Total Suspended Solids	870		870	mg/L				Total/NA	SM 2540D	0	870		
E-10	Water	C	1	Total Suspended Solids	590		590	mg/L				Total/NA	SM 2540D	0	590		
E-11	Water	C	1	Total Suspended Solids	1100		1100	mg/L				Total/NA	SM 2540D	0	1100		
E-12	Water	C	1	Total Suspended Solids	8000		8000	mg/L				Total/NA	SM 2540D	0	8000		
E-13	Water	C	1	Total Suspended Solids	4400		4400	mg/L				Total/NA	SM 2540D	0	4400		
E-14	Water	C	1	Total Suspended Solids	5900		5900	mg/L				Total/NA	SM 2540D	0	5900		
E-15	Water	C	1	Total Suspended Solids	4500		4500	mg/L				Total/NA	SM 2540D	0	4500		
E-16	Water	C	1	Total Suspended Solids	1000		1000	mg/L				Total/NA	SM 2540D	0	1000		
E-17	Water	C	1	Total Suspended Solids	180		180	mg/L				Total/NA	SM 2540D	0	180		
E-18	Water	C	1	Total Suspended Solids	23		23	mg/L				Total/NA	SM 2540D	0	23		
E-19	Water	C	1	Total Suspended Solids	2400		2400	mg/L				Total/NA	SM 2540D	0	2400		
E-20	Water	C	1	Total Suspended Solids	870		870	mg/L				Total/NA	SM 2540D	0	870		
E-21	Water	C	1	Total Suspended Solids	1200		1200	mg/L				Total/NA	SM 2540D	0	1200		
E-22	Water	C	1	Total Suspended Solids	1200		1200	mg/L				Total/NA	SM 2540D	0	1200	1513.05	8000
RB-01-11192012	Water	C	1	Total Suspended Solids	2		ND	mg/L	U	ND		Total/NA	SM 2540D	0	0		
TSS-01	Water	C	1	Total Suspended Solids	20		20	mg/L				Total/NA	SM 2540D	0	20		
TSS-02	Water	C	1	Total Suspended Solids	46		46	mg/L				Total/NA	SM 2540D	0	46		
TSS-03	Water	C	1	Total Suspended Solids	86		86	mg/L				Total/NA	SM 2540D	0	86		
TSS-04	Water	C	1	Total Suspended Solids	78		78	mg/L				Total/NA	SM 2540D	0	78		
TSS-05	Water	C	1	Total Suspended Solids	74		74	mg/L				Total/NA	SM 2540D	0	74		
TSS-06	Water	C	1	Total Suspended Solids	64		64	mg/L				Total/NA	SM 2540D	0	64		
TSS-07	Water	C	1	Total Suspended Solids	61		61	mg/L				Total/NA	SM 2540D	0	61		
TSS-08	Water	C	1	Total Suspended Solids	34		34	mg/L				Total/NA	SM 2540D	0	34		
TSS-09	Water	C	1	Total Suspended Solids	32		32	mg/L				Total/NA	SM 2540D	0	32		
TSS-10	Water	C	1	Total Suspended Solids	65		65	mg/L				Total/NA	SM 2540D	0	65		
TSS-11	Water	C	1	Total Suspended Solids	56		56	mg/L				Total/NA	SM 2540D	0	56		
TSS-12	Water	C	1	Total Suspended Solids	98		98	mg/L				Total/NA	SM 2540D	0	98		
TSS-13	Water	C	1	Total Suspended Solids	140		140	mg/L				Total/NA	SM 2540D	0	140		
TSS-14	Water	C	1	Total Suspended Solids	82		82	mg/L				Total/NA	SM 2540D	0	82		
TSS-15	Water	C	1	Total Suspended Solids	95		95	mg/L				Total/NA	SM 2540D	0	95		
TSS-16	Water	C	1	Total Suspended Solids	160		160	mg/L				Total/NA	SM 2540D	0	160		
TSS-17	Water	C	1	Total Suspended Solids	190		190	mg/L				Total/NA	SM 2540D	0	190		
TSS-18	Water	C	1	Total Suspended Solids	440		440	mg/L				Total/NA	SM 2540D	0	440		
TSS-19	Water	C	1	Total Suspended Solids	390		390	mg/L				Total/NA	SM 2540D	0	390		
TSS-20	Water	C	1	Total Suspended Solids	480		480	mg/L				Total/NA	SM 2540D	0	480		
TSS-21	Water	C	1	Total Suspended Solids	500		500	mg/L				Total/NA	SM 2540D	0	500		
TSS-22	Water	C	1	Total Suspended Solids	520		520	mg/L				Total/NA	SM 2540D	0	520		
TSS-23	Water	C	1	Total Suspended Solids	380		380	mg/L				Total/NA	SM 2540D	0	380		
TSS-24	Water	C	1	Total Suspended Solids	550		550	mg/L				Total/NA	SM 2540D	0	550		
TSS-25	Water	C	1	Total Suspended Solids	450		450	mg/L				Total/NA	SM 2540D	0	450		
TSS-26	Water	C	1	Total Suspended Solids	450		450	mg/L				Total/NA	SM 2540D	0	450		
TSS-27	Water	C	1	Total Suspended Solids	450		450	mg/L				Total/NA	SM 2540D	0	450		
TSS-28	Water	C	1	Total Suspended Solids	830		830	mg/L				Total/NA	SM 2540D	0	830		
TSS-29	Water	C	1	Total Suspended Solids	1300		1300	mg/L				Total/NA	SM 2540D	0	1300		
TSS-30	Water	C	1	Total Suspended Solids	1000		1000	mg/L				Total/NA	SM 2540D	0	1000		
TSS-31	Water	C	1	Total Suspended Solids	710		710	mg/L				Total/NA	SM 2540D	0	710		
TSS-32	Water	C	1	Total Suspended Solids	220		220	mg/L				Total/NA	SM 2540D	0	220		
TSS-33	Water	C	1	Total Suspended Solids	150		150	mg/L				Total/NA	SM 2540D	0	150		
TSS-37	Water	C	1	Total Suspended Solids	2000		2000	mg/L				Total/NA	SM 2540D	0	2000		
TSS-38	Water	C	1	Total Suspended Solids	5400		5400	mg/L				Total/NA	SM 2540D	0	5400		
TSS-39	Water	C	1	Total Suspended Solids	5400		5400	mg/L				Total/NA	SM 2540D	0	5400		
TSS-40	Water	C	1	Total Suspended Solids	5000		5000	mg/L				Total/NA	SM 2540D	0	5000		
TSS-41	Water	C	1	Total Suspended Solids	3700		3700	mg/L				Total/NA	SM 2540D	0	3700		
TSS-42	Water	C	1	Total Suspended Solids	3300		3300	mg/L				Total/NA	SM 2540D	0	3300		
TSS-43	Water	C	1	Total Suspended Solids	2300		2300	mg/L				Total/NA	SM 2540D	0	2300		
TSS-44	Water	C	1	Total Suspended Solids	4100		4100	mg/L				Total/NA	SM 2540D	0	4100		
TSS-45	Water	C	1	Total Suspended Solids	6400		6400	mg/L				Total/NA	SM 2540D	0	6400		
TSS-46	Water	C	1	Total Suspended Solids	9200		9200	mg/L				Total/NA	SM 2540D	0	9200		
TSS-47	Water	C	1	Total Suspended Solids	6600		6600	mg/L				Total/NA	SM 2540D	0	6600		
TSS-48	Water	C	1	Total Suspended Solids	4800		4800	mg/L				Total/NA	SM 2540D	0	4800		
TSS-49	Water	C	1	Total Suspended Solids	3900		3900	mg/L	H	H		Total/NA	SM 2540D	0	3900		
TSS-50	Water	C	1	Total Suspended Solids	3000		3000	mg/L				Total/NA	SM 2540D	0	3000		
TSS-51	Water	C	1	Total Suspended Solids	2400		2400	mg/L				Total/NA	SM 2540D	0	2400		

Client Sample ID	Matrix	sort	ion F	Analyte	Val_res	D?	Result	Unit	Qual	Flag	rep Metho	Prep Type	alysis Method	Check	Adj Val	Mean	Max
TSS-52	Water	C	1	Total Suspended Solids	3600		3600	mg/L				Total/NA	SM 2540D	0	3600		
TSS-53	Water	C	1	Total Suspended Solids	2100		2100	mg/L				Total/NA	SM 2540D	0	2100		
TSS-54	Water	C	1	Total Suspended Solids	1400		1400	mg/L				Total/NA	SM 2540D	0	1400		
TSS-55	Water	C	1	Total Suspended Solids	2300		2300	mg/L				Total/NA	SM 2540D	0	2300		
TSS-56	Water	C	1	Total Suspended Solids	1900		1900	mg/L				Total/NA	SM 2540D	0	1900		
TSS-57	Water	C	1	Total Suspended Solids	2800		2800	mg/L				Total/NA	SM 2540D	0	2800		
TSS-58	Water	C	1	Total Suspended Solids	1800		1800	mg/L				Total/NA	SM 2540D	0	1800		
TSS-59	Water	C	1	Total Suspended Solids	1300		1300	mg/L				Total/NA	SM 2540D	0	1300		
TSS-60	Water	C	1	Total Suspended Solids	920		920	mg/L				Total/NA	SM 2540D	0	920		
TSS-61	Water	C	1	Total Suspended Solids	2900		2900	mg/L				Total/NA	SM 2540D	0	2900		
TSS-62	Water	C	1	Total Suspended Solids	670		670	mg/L				Total/NA	SM 2540D	0	670		
TSS-63	Water	C	1	Total Suspended Solids	120		120	mg/L				Total/NA	SM 2540D	0	120		
TSS-64	Water	C	1	Total Suspended Solids	110		110	mg/L				Total/NA	SM 2540D	0	110		
TSS-65	Water	C	1	Total Suspended Solids	140		140	mg/L				Total/NA	SM 2540D	0	140		
TSS-66	Water	C	1	Total Suspended Solids	100		100	mg/L				Total/NA	SM 2540D	0	100		
TSS-67	Water	C	1	Total Suspended Solids	82		82	mg/L				Total/NA	SM 2540D	0	82		
TSS-68	Water	C	1	Total Suspended Solids	85		85	mg/L				Total/NA	SM 2540D	0	85		
TSS-69	Water	C	1	Total Suspended Solids	68		68	mg/L				Total/NA	SM 2540D	0	68		
TSS-70	Water	C	1	Total Suspended Solids	67		67	mg/L				Total/NA	SM 2540D	0	67		
TSS-71	Water	C	1	Total Suspended Solids	93		93	mg/L				Total/NA	SM 2540D	0	93		
TSS-72	Water	C	1	Total Suspended Solids	83		83	mg/L				Total/NA	SM 2540D	0	83		
TSS-73	Water	C	1	Total Suspended Solids	2200		2200	mg/L				Total/NA	SM 2540D	0	2200		
TSS-74	Water	C	1	Total Suspended Solids	7900		7900	mg/L				Total/NA	SM 2540D	0	7900		
TSS-75	Water	C	1	Total Suspended Solids	3300		3300	mg/L				Total/NA	SM 2540D	0	3300		
TSS-76	Water	C	1	Total Suspended Solids	2000		2000	mg/L				Total/NA	SM 2540D	0	2000		
TSS-77	Water	C	1	Total Suspended Solids	2000		2000	mg/L				Total/NA	SM 2540D	0	2000		
TSS-78	Water	C	1	Total Suspended Solids	13000		13000	mg/L				Total/NA	SM 2540D	0	13000		
TSS-79	Water	C	1	Total Suspended Solids	2000		2000	mg/L	H	H		Total/NA	SM 2540D	0	2000		
TSS-80	Water	C	1	Total Suspended Solids	2200		2200	mg/L				Total/NA	SM 2540D	0	2200		
TSS-81	Water	C	1	Total Suspended Solids	4400		4400	mg/L				Total/NA	SM 2540D	0	4400		
TSS-82	Water	C	1	Total Suspended Solids	1000		1000	mg/L				Total/NA	SM 2540D	0	1000		
TSS-83	Water	C	1	Total Suspended Solids	6700		6700	mg/L				Total/NA	SM 2540D	0	6700		
TSS-84	Water	C	1	Total Suspended Solids	22000		22000	mg/L				Total/NA	SM 2540D	0	22000		
TSS-85	Water	C	1	Total Suspended Solids	14000		14000	mg/L				Total/NA	SM 2540D	0	14000		
TSS-86	Water	C	1	Total Suspended Solids	11000		11000	mg/L	H	H		Total/NA	SM 2540D	0	11000		
BKG-02-EM	Water	D	1	1,2,3,4,6,7,8-HpCDD	12	1	12	pg/L	B J	B J	1613	Total	1613B	0	12		
BKG-03-MID	Water	D	1	1,2,3,4,6,7,8-HpCDD	14	1	14	pg/L	J	J	1613	Total	1613B	0	14	13	14
E-02	Water	D	1	1,2,3,4,6,7,8-HpCDD	1.9	1	1.9	pg/L	Q J	Q J	1613	Total	1613B	0	1.9		
E-05	Water	D	1	1,2,3,4,6,7,8-HpCDD	38	1	38	pg/L	J	J	1613	Total	1613B	0	38		
E-07	Water	D	1	1,2,3,4,6,7,8-HpCDD	180	1	180	pg/L	B	B	1613	Total	1613B	0	180		
E-09	Water	D	1	1,2,3,4,6,7,8-HpCDD	91	1	91	pg/L	B	B	1613	Total	1613B	0	91		
E-13	Water	D	1	1,2,3,4,6,7,8-HpCDD	160	1	160	pg/L			1613	Total	1613B	0	160	94.18	180
I-1	Sediment	D	1	1,2,3,4,6,7,8-HpCDD	0.62	1	0.62	pg/g	B J	B J	1613	Total	1613B	0	0.62		
I-2	Sediment	D	1	1,2,3,4,6,7,8-HpCDD	0.59	1	0.59	pg/g	Q J	Q J	1613	Total	1613B	0	0.59		
I-3	Sediment	D	1	1,2,3,4,6,7,8-HpCDD	3.1	1	3.1	pg/g	B J	B J	1613	Total	1613B	0	3.1	1.43667	3.1
RB-01-11192012	Water	D	1	1,2,3,4,6,7,8-HpCDD	0.45	1	ND	pg/L	U	ND	1613	Total	1613B	0	0		
BKG-02-EM	Water	D	1	1,2,3,4,6,7,8-HpCDF	5	1	5	pg/L	Q S J	Q S J	1613	Total	1613B	0	5		
BKG-03-MID	Water	D	1	1,2,3,4,6,7,8-HpCDF	3.8	1	3.8	pg/L	Q J	Q J	1613	Total	1613B	0	3.8	4.4	5
E-02	Water	D	1	1,2,3,4,6,7,8-HpCDF	0.57	0	ND	pg/L	U	ND	1613	Total	1613B	0	0		
E-05	Water	D	1	1,2,3,4,6,7,8-HpCDF	15	1	15	pg/L	J	J	1613	Total	1613B	0	15		
E-07	Water	D	1	1,2,3,4,6,7,8-HpCDF	17	1	17	pg/L	J	J	1613	Total	1613B	0	17		
E-09	Water	D	1	1,2,3,4,6,7,8-HpCDF	5.5	1	5.5	pg/L	Q B J	Q B J	1613	Total	1613B	0	5.5		
E-13	Water	D	1	1,2,3,4,6,7,8-HpCDF	22	1	22	pg/L	S B J	S B J	1613	Total	1613B	0	22	11.9	22
I-1	Sediment	D	1	1,2,3,4,6,7,8-HpCDF	0.14	1	0.14	pg/g	Q B J	Q B J	1613	Total	1613B	0	0.14		
I-2	Sediment	D	1	1,2,3,4,6,7,8-HpCDF	0.092	1	0.092	pg/g	Q J	Q J	1613	Total	1613B	0	0.092		
I-3	Sediment	D	1	1,2,3,4,6,7,8-HpCDF	0.49	1	0.49	pg/g	Q J	Q J	1613	Total	1613B	0	0.49	0.24067	0.49
RB-01-11192012	Water	D	1	1,2,3,4,6,7,8-HpCDF	0.31	0	ND	pg/L	U	ND	1613	Total	1613B	0	0		
BKG-02-EM	Water	D	1	1,2,3,4,7,8,9-HpCDF	0.89	0	ND	pg/L	U	ND	1613	Total	1613B	0	0		
BKG-03-MID	Water	D	1	1,2,3,4,7,8,9-HpCDF	0.68	0	ND	pg/L	U	ND	1613	Total	1613B	0	0	0	0
E-02	Water	D	1	1,2,3,4,7,8,9-HpCDF	0.89	0	ND	pg/L	U	ND	1613	Total	1613B	0	0		
E-05	Water	D	1	1,2,3,4,7,8,9-HpCDF	1.5	1	1.5	pg/L	J	J	1613	Total	1613B	0	1.5		
E-07	Water	D	1	1,2,3,4,7,8,9-HpCDF	1.3	1	1.3	pg/L	Q J	Q J	1613	Total	1613B	0	1.3		
E-09	Water	D	1	1,2,3,4,7,8,9-HpCDF	1	0	ND	pg/L	U	ND	1613	Total	1613B	0	0		
E-13	Water	D	1	1,2,3,4,7,8,9-HpCDF	1.5	0	ND	pg/L	U	ND	1613	Total	1613B	0	0	0.56	1.5
I-1	Sediment	D	1	1,2,3,4,7,8,9-HpCDF	0.18	0	ND	pg/g	U	ND	1613	Total	1613B	0	0		
I-2	Sediment	D	1	1,2,3,4,7,8,9-HpCDF	0.037	0	ND	pg/g	U	ND	1613	Total	1613B	0	0		
I-3	Sediment	D	1	1,2,3,4,7,8,9-HpCDF	0.056	0	ND	pg/g	U	ND	1613	Total	1613B	0	0	0	0
RB-01-11192012	Water	D	1	1,2,3,4,7,8,9-HpCDF	0.42	0	ND	pg/L	U	ND	1613	Total	1613B	0	0		
BKG-02-EM	Water	D	1	1,2,3,4,7,8-HxCDD	0.54	0	ND	pg/L	U	ND	1613	Total	1613B	0	0		
BKG-03-MID	Water	D	1	1,2,3,4,7,8-HxCDD	0.48	0	ND	pg/L	U	ND	1613	Total	1613B	0	0	0	0
E-02	Water	D	1	1,2,3,4,7,8-HxCDD	0.73	0	ND	pg/L	U	ND	1613	Total	1613B	0	0		
E-05	Water	D	1	1,2,3,4,7,8-HxCDD	0.65	0	ND	pg/L	U	ND	1613	Total	1613B	0	0		
E-07	Water	D	1	1,2,3,4,7,8-HxCDD	3.2	1	3.2	pg/L	J	J	1613	Total	1613B	0	3.2		
E-09	Water	D	1	1,2,3,4,7,8-HxCDD	2.9	1	2.9	pg/L	Q J	Q J	1613	Total	1613B	0	2.9		
E-13	Water	D	1	1,2,3,4,7,8-HxCDD	5.1	1	5.1	pg/L	J	J	1613	Total	1613B	0	5.1	2.24	5.1
I-1	Sediment	D	1	1,2,3,4,7,8-HxCDD	0.075	0	ND	pg/g	U	ND	1613	Total	1613B	0	0		
I-2	Sediment	D	1	1,2,3,4,7,8-HxCDD	0.043	0	ND	pg/g	U	ND	1613	Total	1613B	0	0		
I-3	Sediment	D	1	1,2,3,4,7,8-HxCDD	0.05	0	ND	pg/g	U	ND	1613	Total	1613B	0	0	0	0
RB-01-11192012	Water	D	1	1,2,3,4,7,8-HxCDD	0.38	0	ND	pg/L	U	ND	1613	Total	1613B	0	0		
BKG-02-EM	Water	D	1	1,2,3,4,7,8-HxCDF	0.34	0	ND	pg/L	U	ND	1613	Total	1613B	0	0		
BKG-03-MID	Water	D	1	1,2,3,4,7,8-HxCDF	0.74	1	0.74	pg/L	J	J	1613	Total	1613B	0	0.74	0.37	0.74
E-02	Water	D	1	1,2,3,4,7,8-HxCDF	0.36	0	ND	pg/L	U	ND	1613	Total	1613B	0	0		
E-05	Water	D	1	1,2,3,4,7,8-HxCDF	2.2	1	2.2	pg/L	Q S J	Q S J	1613	Total	1613B	0	2.2		
E-07	Water	D	1	1,2,3,4,7,8-HxCDF	1.8	1	1.8	pg/L	B J	B J	1613	Total	1613B	0	1.8		
E-09	Water	D	1	1,2,3,4,7,8-HxCDF	0.61	1	0.61	pg/L	Q J	Q J	1613	Total	1613B	0	0.61		
E-13	Water	D	1	1,2,3,4,7,8-HxCDF	4.6	1	4.6	pg/L	Q J	Q J	1613	Total	1613B	0	4.6	1.842	4.6
I-1	Sediment	D	1	1,2,3,4,7,8-HxCDF	0.054	0	ND	pg/g	U	ND	1613	Total	1613B	0	0		
I-2	Sediment	D	1	1,2,3,4,7,8-HxCDF	0.084	1	0.084	pg/g	Q J	Q J	1613	Total	1613B	0	0.084		
I-3	Sediment	D	1	1,2,3,4,7,8-HxCDF	0.16	1	0.16	pg/g	Q J	Q J	1613	Total	1613B	0	0.16	0.08133	0.16
RB-01-11192012	Water	D	1	1,2,3,4,7,8-HxCDF	0.21	0	ND	pg/L	U	ND	1613	Total	1613B	0	0		
BKG-02-EM	Water	D	1	1,2,3,6,7,8-HxCDD	0.54	0	ND	pg/L	U	ND	1613	Total	1613B	0	0		
BKG-03-MID	Water	D	1	1,2,3,6,7,8-HxCDD	0.68	1	0.68	pg/L	Q J	Q J	1613	Total	1613B	0	0.68	0.34	0.68
E-02	Water	D	1	1,2,3,6,7,8-HxCDD	0.83	0	ND	pg/L	U	ND	1613	Total	1613B	0	0		
E-05	Water	D	1	1,2,3,6,7,8-HxCDD	2.7	1	2.7	pg/L	J	J	1613	Total	1613B	0	2.7		
E-07	Water	D	1	1,2,3,6,7,8-HxCDD	6.9	1	6.9	pg/L	J	J	1613	Total	1613B	0	6.9		
E-09	Water	D	1	1,2,3,6,7,8-HxCDD	4.3	1	4.3	pg/L	B J	B J	1613	Total	1613B	0	4.3		
E-13	Water	D	1	1,2,3,6,7,8-HxCDD	6.4	1	6.4	pg/L	Q J	Q J	1613	Total	1613B	0	6.4	4.06	6.9
I-1	Sediment	D	1	1,2,3,6,7,8-HxCDD	0.08	0	ND	pg/g	U	ND	1613	Total	1613B	0	0		
I-2	Sediment	D	1	1,2,3,6,7,8-HxCDD	0.046	0	ND	pg/g	U	ND	1613	Total	1613B	0	0		
I-3	Sediment	D	1	1,2,3,6,7,8-HxCDD	0.12	1	0.12	pg/g	Q J	Q J	1613	Total	1613B	0	0.12	0.04	0.12
RB-01-11192012	Water	D	1	1,2,3,6,7,8-HxCDD	0.4	0	ND	pg/L	U	ND	1613	Total	1613B	0	0		
BKG-02-EM	Water	D	1	1,2,3,6,7,8-HxCDF	0.59	0	ND	pg/L	U	ND	1613	Total	1613B	0	0		
BKG-03-MID	Water	D	1	1,2,3,6,7,8-HxCDF	0.33	0	ND	pg/L	U	ND	1613	Total	1613B	0	0	0	0
E-02	Water	D	1	1,2,3,6,7,8-HxCDF	0.37	0	ND	pg/L	U	ND	1613	Total	1613B	0	0		
E-05	Water	D	1	1,2,3,6,7,8-HxCDF	3.3	1	3.3	pg/L	Q J	Q J	1613	Total	1613B	0	3.3		
E-07	Water	D	1	1,2,3,6,7,8-HxCDF	3.4	1	3.4	pg/L	Q B J	Q B J	1613	Total	1613B	0	3.4		
E-09	Water	D	1	1,2,3,6,7,8-HxCDF	1.3	1	1.3	pg/L	Q B J	Q B J	1613	Total	1613B	0	1.3		
E-13	Water	D	1	1,2,3,6,7,8-HxCDF	1.1	0	ND	pg/L	U	ND	1613	Total	1613B	0	0	1.6	3.4
I-1	Sediment	D	1	1,2,3,6,7,8-HxCDF	0.055	0	ND	pg/g	U	ND	1613	Total	1613B	0	0		
I-2	Sediment	D	1	1,2,3,6,7,8-HxCDF	0.044	0	ND	pg/g	U	ND	1613	Total	1613B	0	0		
I-3	Sediment	D	1	1,2,3,6,7,8-HxCDF	0.078	1	0.078	pg/g	Q J	Q J	1613	Total	1613B	0	0.078	0.026	0.078
RB-01-11192012	Water	D	1	1,2,3,6,7,8-HxCDF	0.21	0	ND	pg/L	U	ND	1613	Total	1613B	0	0		
BKG-02-EM	Water	D	1	1,2,3,7,8,9-HxCDD	1.2	1	1.2	pg/L	J	J	1613	Total	1613B	0	1.2		
BKG-03-MID	Water	D	1	1,2,3,7,8,9-HxCDD	0.47	0	ND	pg/L	U	ND	1613	Total	1613B	0	0	0.6	1.2
E-02	Water	D	1	1,2,3,7,8,9-HxCDD	0.73	0	ND	pg/L	U	ND	1613	Total	1613B	0	0		
E-05	Water	D	1	1,2,3,7,8,9-HxCDD	1.3	1	1.3	pg/L	Q J	Q J	1613	Total	1613B	0	1.3		
E-07	Water	D	1	1,2,3,7,8,9-HxCDD	13	1	13	pg/L	C J	C J	1613	Total	1613B	0	13		
E-09	Water	D	1	1,2,3,7,8,9-HxCDD	6.4	1	6.4	pg/L	Q J	Q J	1613	Total	1613B	0	6.4		
E-13	Water	D	1	1,2,3,7,8,9-HxCDD	10	1	10	pg/L	B J	B J	1613	Total	1613B	0	10	6.14	13
I-1	Sediment	D	1	1,2,3,7,8,9-HxCDD	0.073	0	ND	pg/g	U	ND	1613	Total	1613B	0	0		
I-2	Sediment	D	1	1,2,3,7,8,9-HxCDD	0.042	0	ND	pg/g	U	ND	1613	Total	1613B	0	0		
I-3	Sediment	D	1	1,2,3,7,8,9-HxCDD	0.17	1	0.17	pg/g	J	J	1613	Total	1613B	0	0.17	0.05667	0.17

Client Sample ID	Matrix	sort	ion F	Analyte	Val_res	D?	Result	Unit	Qual	Flag	ep Metho	Prep Type	alysis Method	Check	Adj Val	Mean	Max
RB-01-11192012	Water	D	1	1,2,3,7,8,9-HxCDD	0.37	0	ND	pg/L	U	ND	1613	Total	1613B	0	0		
BKG-02-EM	Water	D	1	1,2,3,7,8,9-HxCDF	0.38	0	ND	pg/L	U	ND	1613	Total	1613B	0	0		
BKG-03-MID	Water	D	1	1,2,3,7,8,9-HxCDF	0.38	0	ND	pg/L	U	ND	1613	Total	1613B	0	0	0	0
E-02	Water	D	1	1,2,3,7,8,9-HxCDF	0.41	0	ND	pg/L	U	ND	1613	Total	1613B	0	0		
E-05	Water	D	1	1,2,3,7,8,9-HxCDF	0.53	0	ND	pg/L	U	ND	1613	Total	1613B	0	0		
E-07	Water	D	1	1,2,3,7,8,9-HxCDF	0.6	0	ND	pg/L	U	ND	1613	Total	1613B	0	0		
E-09	Water	D	1	1,2,3,7,8,9-HxCDF	0.38	0	ND	pg/L	U	ND	1613	Total	1613B	0	0		
E-13	Water	D	1	1,2,3,7,8,9-HxCDF	1.7	0	ND	pg/L	U	ND	1613	Total	1613B	0	0	0	0
I-1	Sediment	D	1	1,2,3,7,8,9-HxCDF	0.07	0	ND	pg/g	U	ND	1613	Total	1613B	0	0		
I-2	Sediment	D	1	1,2,3,7,8,9-HxCDF	0.063	0	ND	pg/g	U	ND	1613	Total	1613B	0	0		
I-3	Sediment	D	1	1,2,3,7,8,9-HxCDF	0.036	0	ND	pg/g	U	ND	1613	Total	1613B	0	0	0	0
RB-01-11192012	Water	D	1	1,2,3,7,8,9-HxCDF	0.23	0	ND	pg/L	U	ND	1613	Total	1613B	0	0		
BKG-02-EM	Water	D	1	1,2,3,7,8-PeCDD	0.9	0	ND	pg/L	U	ND	1613	Total	1613B	0	0		
BKG-03-MID	Water	D	1	1,2,3,7,8-PeCDD	0.68	0	ND	pg/L	U	ND	1613	Total	1613B	0	0	0	0
E-02	Water	D	1	1,2,3,7,8-PeCDD	0.92	0	ND	pg/L	U	ND	1613	Total	1613B	0	0		
E-05	Water	D	1	1,2,3,7,8-PeCDD	0.95	0	ND	pg/L	U	ND	1613	Total	1613B	0	0		
E-07	Water	D	1	1,2,3,7,8-PeCDD	0.65	0	ND	pg/L	U	ND	1613	Total	1613B	0	0		
E-09	Water	D	1	1,2,3,7,8-PeCDD	2.6	1	2.6	pg/L	Q J	Q J	1613	Total	1613B	0	2.6		
E-13	Water	D	1	1,2,3,7,8-PeCDD	1.1	0	ND	pg/L	U	ND	1613	Total	1613B	0	0	0.52	2.6
I-1	Sediment	D	1	1,2,3,7,8-PeCDD	0.14	0	ND	pg/g	U	ND	1613	Total	1613B	0	0		
I-2	Sediment	D	1	1,2,3,7,8-PeCDD	0.017	0	ND	pg/g	U	ND	1613	Total	1613B	0	0		
I-3	Sediment	D	1	1,2,3,7,8-PeCDD	0.076	0	ND	pg/g	U	ND	1613	Total	1613B	0	0	0	0
RB-01-11192012	Water	D	1	1,2,3,7,8-PeCDD	0.52	0	ND	pg/L	U	ND	1613	Total	1613B	0	0		
BKG-02-EM	Water	D	1	1,2,3,7,8-PeCDF	0.81	0	ND	pg/L	U	ND	1613	Total	1613B	0	0		
BKG-03-MID	Water	D	1	1,2,3,7,8-PeCDF	0.49	0	ND	pg/L	U	ND	1613	Total	1613B	0	0	0	0
E-02	Water	D	1	1,2,3,7,8-PeCDF	0.62	0	ND	pg/L	U	ND	1613	Total	1613B	0	0		
E-05	Water	D	1	1,2,3,7,8-PeCDF	0.86	0	ND	pg/L	U	ND	1613	Total	1613B	0	0		
E-07	Water	D	1	1,2,3,7,8-PeCDF	0.72	0	ND	pg/L	U	ND	1613	Total	1613B	0	0		
E-09	Water	D	1	1,2,3,7,8-PeCDF	0.59	0	ND	pg/L	U	ND	1613	Total	1613B	0	0		
E-13	Water	D	1	1,2,3,7,8-PeCDF	2	0	ND	pg/L	U	ND	1613	Total	1613B	0	0	0	0
I-1	Sediment	D	1	1,2,3,7,8-PeCDF	0.098	0	ND	pg/g	U	ND	1613	Total	1613B	0	0		
I-2	Sediment	D	1	1,2,3,7,8-PeCDF	0.056	1	0.056	pg/g	Q J	Q J	1613	Total	1613B	0	0.056		
I-3	Sediment	D	1	1,2,3,7,8-PeCDF	0.069	0	ND	pg/g	U	ND	1613	Total	1613B	0	0	0.01867	0.056
RB-01-11192012	Water	D	1	1,2,3,7,8-PeCDF	0.39	0	ND	pg/L	U	ND	1613	Total	1613B	0	0		
BKG-02-EM	Water	D	1	2,3,4,6,7,8-HxCDF	0.41	0	ND	pg/L	U	ND	1613	Total	1613B	0	0		
BKG-03-MID	Water	D	1	2,3,4,6,7,8-HxCDF	0.32	0	ND	pg/L	U	ND	1613	Total	1613B	0	0	0	0
E-02	Water	D	1	2,3,4,6,7,8-HxCDF	0.41	0	ND	pg/L	U	ND	1613	Total	1613B	0	0		
E-05	Water	D	1	2,3,4,6,7,8-HxCDF	0.96	1	0.96	pg/L	J	J	1613	Total	1613B	0	0.96		
E-07	Water	D	1	2,3,4,6,7,8-HxCDF	0.82	1	0.82	pg/L	Q B J	Q B J	1613	Total	1613B	0	0.82		
E-09	Water	D	1	2,3,4,6,7,8-HxCDF	0.31	0	ND	pg/L	U	ND	1613	Total	1613B	0	0		
E-13	Water	D	1	2,3,4,6,7,8-HxCDF	2.3	1	2.3	pg/L	Q J	Q J	1613	Total	1613B	0	2.3	0.816	2.3
I-1	Sediment	D	1	2,3,4,6,7,8-HxCDF	0.06	0	ND	pg/g	U	ND	1613	Total	1613B	0	0		
I-2	Sediment	D	1	2,3,4,6,7,8-HxCDF	0.051	0	ND	pg/g	U	ND	1613	Total	1613B	0	0		
I-3	Sediment	D	1	2,3,4,6,7,8-HxCDF	0.029	0	ND	pg/g	U	ND	1613	Total	1613B	0	0	0	0
RB-01-11192012	Water	D	1	2,3,4,6,7,8-HxCDF	0.21	0	ND	pg/L	U	ND	1613	Total	1613B	0	0		
BKG-02-EM	Water	D	1	2,3,4,7,8-PeCDF	0.62	0	ND	pg/L	U	ND	1613	Total	1613B	0	0		
BKG-03-MID	Water	D	1	2,3,4,7,8-PeCDF	0.49	0	ND	pg/L	U	ND	1613	Total	1613B	0	0	0	0
E-02	Water	D	1	2,3,4,7,8-PeCDF	0.61	0	ND	pg/L	U	ND	1613	Total	1613B	0	0		
E-05	Water	D	1	2,3,4,7,8-PeCDF	1.2	1	1.2	pg/L	Q J	Q J	1613	Total	1613B	0	1.2		
E-07	Water	D	1	2,3,4,7,8-PeCDF	0.52	0	ND	pg/L	U	ND	1613	Total	1613B	0	0		
E-09	Water	D	1	2,3,4,7,8-PeCDF	0.62	0	ND	pg/L	U	ND	1613	Total	1613B	0	0		
E-13	Water	D	1	2,3,4,7,8-PeCDF	1.8	0	ND	pg/L	U	ND	1613	Total	1613B	0	0	0.24	1.2
I-1	Sediment	D	1	2,3,4,7,8-PeCDF	0.089	0	ND	pg/g	U	ND	1613	Total	1613B	0	0		
I-2	Sediment	D	1	2,3,4,7,8-PeCDF	0.042	0	ND	pg/g	U	ND	1613	Total	1613B	0	0		
I-3	Sediment	D	1	2,3,4,7,8-PeCDF	0.06	0	ND	pg/g	U	ND	1613	Total	1613B	0	0	0	0
RB-01-11192012	Water	D	1	2,3,4,7,8-PeCDF	0.39	0	ND	pg/L	U	ND	1613	Total	1613B	0	0		
BKG-02-EM	Water	D	1	2,3,7,8-TCDD	1.1	0	ND	pg/L	U	ND	1613	Total	1613B	0	0		
BKG-03-MID	Water	D	1	2,3,7,8-TCDD	1.2	0	ND	pg/L	U	ND	1613	Total	1613B	0	0	0	0
E-02	Water	D	1	2,3,7,8-TCDD	1.3	0	ND	pg/L	U	ND	1613	Total	1613B	0	0		
E-05	Water	D	1	2,3,7,8-TCDD	1.3	0	ND	pg/L	U	ND	1613	Total	1613B	0	0		
E-07	Water	D	1	2,3,7,8-TCDD	0.35	0	ND	pg/L	U	ND	1613	Total	1613B	0	0		
E-09	Water	D	1	2,3,7,8-TCDD	0.38	0	ND	pg/L	U	ND	1613	Total	1613B	0	0		
E-13	Water	D	1	2,3,7,8-TCDD	1.6	0	ND	pg/L	U	ND	1613	Total	1613B	0	0	0	0
I-1	Sediment	D	1	2,3,7,8-TCDD	0.17	0	ND	pg/g	U	ND	1613	Total	1613B	0	0		
I-2	Sediment	D	1	2,3,7,8-TCDD	0.023	0	ND	pg/g	U	ND	1613	Total	1613B	0	0		
I-3	Sediment	D	1	2,3,7,8-TCDD	0.11	0	ND	pg/g	U	ND	1613	Total	1613B	0	0	0	0
RB-01-11192012	Water	D	1	2,3,7,8-TCDD	1.1	0	ND	pg/L	U	ND	1613	Total	1613B	0	0		
BKG-02-EM	Water	D	1	2,3,7,8-TCDF	0.77	0	ND	pg/L	U	ND	1613	Total	1613B	0	0		
BKG-03-MID	Water	D	1	2,3,7,8-TCDF	0.78	0	ND	pg/L	U	ND	1613	Total	1613B	0	0	0	0
E-02	Water	D	1	2,3,7,8-TCDF	0.89	0	ND	pg/L	U	ND	1613	Total	1613B	0	0		
E-05	Water	D	1	2,3,7,8-TCDF	0.77	1	0.77	pg/L	Q J	Q J	1613	Total	1613B	0	0.77		
E-07	Water	D	1	2,3,7,8-TCDF	0.63	0	ND	pg/L	U	ND	1613	Total	1613B	0	0		
E-09	Water	D	1	2,3,7,8-TCDF	0.77	1	0.77	pg/L	Q J	Q J	1613	Total	1613B	0	0.77		
E-13	Water	D	1	2,3,7,8-TCDF	3.2	1	3.2	pg/L	J	J	1613	Total	1613B	0	3.2	0.948	3.2
I-1	Sediment	D	1	2,3,7,8-TCDF	0.11	0	ND	pg/g	U	ND	1613	Total	1613B	0	0		
I-2	Sediment	D	1	2,3,7,8-TCDF	0.027	0	ND	pg/g	U	ND	1613	Total	1613B	0	0		
I-3	Sediment	D	1	2,3,7,8-TCDF	0.38	1	0.38	pg/g	Q J	Q J	1613	Total	1613B	0	0.38	0.12667	0.38
RB-01-11192012	Water	D	1	2,3,7,8-TCDF	0.63	0	ND	pg/L	U	ND	1613	Total	1613B	0	0		
BKG-02-EM	Water	D	1	OCDD	220	1	220	pg/L	B	B	1613	Total	1613B	0	220		
BKG-03-MID	Water	D	1	OCDD	220	1	220	pg/L	B	B	1613	Total	1613B	0	220	220	220
E-02	Water	D	1	OCDD	43	1	43	pg/L	B J	B J	1613	Total	1613B	0	43		
E-05	Water	D	1	OCDD	650	1	650	pg/L	B	B	1613	Total	1613B	0	650		
E-07	Water	D	1	OCDD	2800	1	2800	pg/L	B	B	1613	Total	1613B	0	2800		
E-09	Water	D	1	OCDD	1200	1	1200	pg/L	B	B	1613	Total	1613B	0	1200		
E-13	Water	D	1	OCDD	2700	1	2700	pg/L	B	B	1613	Total	1613B	0	2700	1478.6	2800
I-1	Sediment	D	1	OCDD	37	1	37	pg/g	B	B	1613	Total	1613B	0	37		
I-2	Sediment	D	1	OCDD	9.6	1	9.6	pg/g	B J	B J	1613	Total	1613B	0	9.6		
I-3	Sediment	D	1	OCDD	69	1	69	pg/g	B	B	1613	Total	1613B	0	69	38.5333	69
RB-01-11192012	Water	D	1	OCDD	6.9	1	6.9	pg/L	B J	B J	1613	Total	1613B	0	6.9		
BKG-02-EM	Water	D	1	OCDF	5.9	1	5.9	pg/L	Q B J	Q B J	1613	Total	1613B	0	5.9		
BKG-03-MID	Water	D	1	OCDF	6.8	1	6.8	pg/L	Q J	Q J	1613	Total	1613B	0	6.8	6.35	6.8
E-02	Water	D	1	OCDF	1.9	1	1.9	pg/L	J	J	1613	Total	1613B	0	1.9		
E-05	Water	D	1	OCDF	26	1	26	pg/L	J	J	1613	Total	1613B	0	26		
E-07	Water	D	1	OCDF	23	1	23	pg/L	S B J	S B J	1613	Total	1613B	0	23		
E-09	Water	D	1	OCDF	10	1	10	pg/L	B J	B J	1613	Total	1613B	0	10		
E-13	Water	D	1	OCDF	21	1	21	pg/L	Q S B J	Q S B J	1613	Total	1613B	0	21	16.38	26
I-1	Sediment	D	1	OCDF	0.082	0	ND	pg/g	U	ND	1613	Total	1613B	0	0		
I-2	Sediment	D	1	OCDF	0.21	1	0.21	pg/g	B J	B J	1613	Total	1613B	0	0.21		
I-3	Sediment	D	1	OCDF	1.1	1	1.1	pg/g	B J	B J	1613	Total	1613B	0	1.1	0.43667	1.1
RB-01-11192012	Water	D	1	OCDF	0.37	1	0.37	pg/L	Q J	Q J	1613	Total	1613B	0	0.37		
BKG-02-EM		D		TEQ	0.35777	1	0.35777	pg/L						0	0.35777		
BKG-03-MID		D		TEQ	10.34924	1	10.34924	pg/L						0	10.3492	5.35351	10.34924
E-02		D		TEQ	0.03247	1	0.03247	pg/L						0	0.03247		
E-05		D		TEQ	2.2308	1	2.2308	pg/L						0	2.2308		
E-07		D		TEQ	5.7419	1	5.7419	pg/L						0	5.7419		
E-09		D		TEQ	5.556	1	5.556	pg/L						0	5.556		
E-13		D		TEQ	5.7963	1	5.7963	pg/L						0	5.7963	3.87149	5.7963
I-1		D		TEQ	0.0187	1	0.0187	pg/g						0	0.0187		
I-2		D		TEQ	0.019843	1	0.019843	pg/g						0	0.01984		
I-3		D		TEQ	0.14773	1	0.14773	pg/g						0	0.14773	0.06209	0.14773
RB-01-11192012		D		TEQ	0.002091	1	0.002091	pg/L						0	0.00209		
BKG-02-EM		D		TEQ HALFND	1.64587	1	1.64587	pg/L						0	1.64587		
BKG-03-MID		D		TEQ HALFND	11.51149	1	11.51149	pg/L						0	11.5115	6.57868	11.51149
E-02		D		TEQ HALFND	1.48707	1	1.48707	pg/L						0	1.48707		
E-05		D		TEQ HALFND	3.4277	1	3.4277	pg/L						0	3.4277		
E-07		D		TEQ HALFND	6.3922	1	6.3922	pg/L						0	6.3922		
E-09		D		TEQ HALFND	5.88735	1	5.88735	pg/L						0	5.88735		
E-13		D		TEQ HALFND	7.5938	1	7.5938	pg/L						0	7.5938	4.95762	7.5938
I-1		D		TEQ HALFND	0.218282	1	0.218282	pg/g						0	0.21828		
I-2		D		TEQ HALFND	0.062128	1	0.062128	pg/g						0	0.06213		
I-3		D		TEQ HALFND	0.256795	1	0.256795	pg/g						0	0.2568	0.17907	0.256795
RB-01-11192012		D		TEQ HALFND	1.014341	1	1.014341	pg/L						0	1.01434		

Client Sample ID	Matrix	sort	ion F	Analyte	Val_res	D?	Result	Unit	Qual	Flag	ep Metho	Prep Type	alysis Method	Check	Adj Val	Mean	Max
BKG-01-EM	Water	M	1	Aluminum	530	1	530	ug/L	B	B	3010A	Total/NA	6020A	0	530		
BKG-01-HS	Water	M	1	Aluminum	260	1	260	ug/L	B	B	3010A	Total/NA	6020A	0	260		
BKG-01-MID	Water	M	1	Aluminum	210	1	210	ug/L	B	B	3010A	Total/NA	6020A	0	210		
BKG-02-EM	Water	M	1	Aluminum	440	1	440	ug/L			3010A	Total/NA	6020A	0	440		
BKG-02-HS	Water	M	1	Aluminum	290	1	ug/L		30	RL	3010A	Total/NA	6020A		290		
BKG-02-MID	Water	M	1	Aluminum	400	1	400	ug/L			3010A	Total/NA	6020A	0	400		
BKG-03-EM	Water	M	1	Aluminum	870	1	870	ug/L	B	B	3010A	Total/NA	6020A	0	870		
BKG-03-HS	Water	M	1	Aluminum	1200	1	1200	ug/L	B	B	3010A	Total/NA	6020A	0	1200		
BKG-03-MID	Water	M	1	Aluminum	860	1	860	ug/L	B	B	3010A	Total/NA	6020A	0	860	562.222	1200
E-01	Water	M	1	Aluminum	350	1	350	ug/L	B	B	3010A	Total/NA	6020A	0	350		
E-02	Water	M	1	Aluminum	1000	1	1000	ug/L	B	B	3010A	Total/NA	6020A	0	1000		
E-03	Water	M	1	Aluminum	850	1	850	ug/L	B	B	3010A	Total/NA	6020A	0	850		
E-04	Water	M	1	Aluminum	780	1	780	ug/L	B	B	3010A	Total/NA	6020A	0	780		
E-05	Water	M	1	Aluminum	6000	1	6000	ug/L	B	B	3010A	Total/NA	6020A	0	6000		
E-06	Water	M	1	Aluminum	16000	1	16000	ug/L	B	B	3010A	Total/NA	6020A	0	16000		
E-07	Water	M	1	Aluminum	31000	1	31000	ug/L			3010A	Total/NA	6020A	0	31000		
E-08	Water	M	1	Aluminum	48000	1	48000	ug/L			3010A	Total/NA	6020A	0	48000		
E-09	Water	M	1	Aluminum	40000	1	40000	ug/L			3010A	Total/NA	6020A	0	40000		
E-10	Water	M	1	Aluminum	20000	1	20000	ug/L			3010A	Total/NA	6020A	0	20000		
E-11	Water	M	1	Aluminum	40000	1	40000	ug/L			3010A	Total/NA	6020A	0	40000		
E-12	Water	M	1	Aluminum	120000	1	120000	ug/L			3010A	Total/NA	6020A	0	120000		
E-13	Water	M	1	Aluminum	130000	1	130000	ug/L	B	B	3010A	Total/NA	6020A	0	130000		
E-14	Water	M	1	Aluminum	240000	1	240000	ug/L	B	B	3010A	Total/NA	6020A	0	240000		
E-15	Water	M	1	Aluminum	180000	1	180000	ug/L	B	B	3010A	Total/NA	6020A	0	180000		
E-16	Water	M	1	Aluminum	62000	1	62000	ug/L	B	B	3010A	Total/NA	6020A	0	62000		
E-17	Water	M	1	Aluminum	16000	1	16000	ug/L			3010A	Total/NA	6020A	0	16000		
E-18	Water	M	1	Aluminum	1900	1	1900	ug/L			3010A	Total/NA	6020A	0	1900		
E-19	Water	M	1	Aluminum	70000	1	70000	ug/L			3010A	Total/NA	6020A	0	70000		
E-20	Water	M	1	Aluminum	29000	1	29000	ug/L	B	B	3010A	Total/NA	6020A	0	29000		
E-21	Water	M	1	Aluminum	24000	1	24000	ug/L	B	B	3010A	Total/NA	6020A	0	24000		
E-22	Water	M	1	Aluminum	11000	1	11000	ug/L	B	B	3010A	Total/NA	6020A	0	11000	49449.1	240000
I-1	Sediment	M	1	Aluminum	1200	1	1200	mg/Kg	B	B	3050B	Total/NA	6020A	0	1200		
I-2	Sediment	M	1	Aluminum	1100	1	1100	mg/Kg			3050B	Total/NA	6020A	0	1100		
I-3	Sediment	M	1	Aluminum	2500	1	2500	mg/Kg	B	B	3050B	Total/NA	6020A	0	2500		
I-4	Sediment	M	1	Aluminum	2400	1	2400	mg/Kg	B	B	3050B	Total/NA	6020A	0	2400		
I-5	Sediment	M	1	Aluminum	3000	1	3000	mg/Kg	B	B	3050B	Total/NA	6020A	0	3000	2040	3000
RB-01-11192012	Water	M	1	Aluminum	2.6	0	ND	ug/L	U	ND	3010A	Total/NA	6020A	0	0		
BKG-01-EM	Water	M	1	Antimony	0.29	1	0.29	ug/L	J B	J B	3010A	Total/NA	6020A	0	0.29		
BKG-01-HS	Water	M	1	Antimony	0.33	1	0.33	ug/L	J B	J B	3010A	Total/NA	6020A	0	0.33		
BKG-01-MID	Water	M	1	Antimony	0.24	1	0.24	ug/L	J B	J B	3010A	Total/NA	6020A	0	0.24		
BKG-02-EM	Water	M	1	Antimony	0.3	1	0.3	ug/L	J B	J B	3010A	Total/NA	6020A	0	0.3		
BKG-02-HS	Water	M	1	Antimony	0.31	1	0.31	ug/L	J B	J B	3010A	Total/NA	6020A	0	0.31		
BKG-02-MID	Water	M	1	Antimony	0.29	1	0.29	ug/L	J B	J B	3010A	Total/NA	6020A	0	0.29		
BKG-03-EM	Water	M	1	Antimony	0.39	1	0.39	ug/L	J B	J B	3010A	Total/NA	6020A	0	0.39		
BKG-03-HS	Water	M	1	Antimony	0.39	1	0.39	ug/L	J B	J B	3010A	Total/NA	6020A	0	0.39		
BKG-03-MID	Water	M	1	Antimony	0.33	1	0.33	ug/L	J B	J B	3010A	Total/NA	6020A	0	0.33	0.31889	0.39
E-01	Water	M	1	Antimony	0.72	1	0.72	ug/L	J	J	3010A	Total/NA	6020A	0	0.72		
E-02	Water	M	1	Antimony	0.48	1	0.48	ug/L	J	J	3010A	Total/NA	6020A	0	0.48		
E-03	Water	M	1	Antimony	0.3	1	0.3	ug/L	J	J	3010A	Total/NA	6020A	0	0.3		
E-04	Water	M	1	Antimony	0.3	1	0.3	ug/L	J	J	3010A	Total/NA	6020A	0	0.3		
E-05	Water	M	1	Antimony	0.99	1	0.99	ug/L	J B	J B	3010A	Total/NA	6020A	0	0.99		
E-06	Water	M	1	Antimony	1.3	1	1.3	ug/L	J B	J B	3010A	Total/NA	6020A	0	1.3		
E-07	Water	M	1	Antimony	3.9	1	3.9	ug/L	J B	J B	3010A	Total/NA	6020A	0	3.9		
E-08	Water	M	1	Antimony	4.2	1	4.2	ug/L	J B	J B	3010A	Total/NA	6020A	0	4.2		
E-09	Water	M	1	Antimony	0.41	1	0.41	ug/L	J B	J B	3010A	Total/NA	6020A	0	0.41		
E-10	Water	M	1	Antimony	0.62	1	0.62	ug/L	J B	J B	3010A	Total/NA	6020A	0	0.62		
E-11	Water	M	1	Antimony	0.96	1	0.96	ug/L	J B	J B	3010A	Total/NA	6020A	0	0.96		
E-12	Water	M	1	Antimony	0.95	1	0.95	ug/L	J B	J B	3010A	Total/NA	6020A	0	0.95		
E-13	Water	M	1	Antimony	2.3	1	2.3	ug/L	J B	J B	3010A	Total/NA	6020A	0	2.3		
E-14	Water	M	1	Antimony	2.1	1	2.1	ug/L	J B	J B	3010A	Total/NA	6020A	0	2.1		
E-15	Water	M	1	Antimony	0.73	1	0.73	ug/L	J B	J B	3010A	Total/NA	6020A	0	0.73		
E-16	Water	M	1	Antimony	1.8	1	1.8	ug/L	J B	J B	3010A	Total/NA	6020A	0	1.8		
E-17	Water	M	1	Antimony	0.83	1	0.83	ug/L	J	J	3010A	Total/NA	6020A	0	0.83		
E-18	Water	M	1	Antimony	1.1	1	1.1	ug/L	J	J	3010A	Total/NA	6020A	0	1.1		
E-19	Water	M	1	Antimony	1	1	1	ug/L	J	J	3010A	Total/NA	6020A	0	1		
E-20	Water	M	1	Antimony	1.2	1	1.2	ug/L	J	J	3010A	Total/NA	6020A	0	1.2		
E-21	Water	M	1	Antimony	2.7	1	2.7	ug/L			3010A	Total/NA	6020A	0	2.7		
E-22	Water	M	1	Antimony	0.71	1	0.71	ug/L	J B	J B	3010A	Total/NA	6020A	0	0.71	1.34545	4.2
I-1	Sediment	M	1	Antimony	0.11	1	0.11	mg/Kg	J B	J B	3050B	Total/NA	6020A	0	0.11		
I-2	Sediment	M	1	Antimony	0.061	1	0.061	mg/Kg	J B	J B	3050B	Total/NA	6020A	0	0.061		
I-3	Sediment	M	1	Antimony	0.13	1	0.13	mg/Kg			3050B	Total/NA	6020A	0	0.13		
I-4	Sediment	M	1	Antimony	0.081	1	0.081	mg/Kg	J	J	3050B	Total/NA	6020A	0	0.081		
I-5	Sediment	M	1	Antimony	0.093	1	0.093	mg/Kg	J	J	3050B	Total/NA	6020A	0	0.093	0.095	0.13
RB-01-11192012	Water	M	1	Antimony	0.17	1	0.17	ug/L	J B	J B	3010A	Total/NA	6020A	0	0.17		
BKG-01-EM	Water	M	1	Arsenic	1.6	1	1.6	ug/L			3010A	Total/NA	6020A	0	1.6		
BKG-01-HS	Water	M	1	Arsenic	1.6	1	1.6	ug/L			3010A	Total/NA	6020A	0	1.6		
BKG-01-MID	Water	M	1	Arsenic	1.8	1	1.8	ug/L			3010A	Total/NA	6020A	0	1.8		
BKG-02-EM	Water	M	1	Arsenic	3.8	1	3.8	ug/L			3010A	Total/NA	6020A	0	3.8		
BKG-02-HS	Water	M	1	Arsenic	7.5	1	7.5	ug/L			3010A	Total/NA	6020A	0	7.5		
BKG-02-MID	Water	M	1	Arsenic	2.6	1	2.6	ug/L			3010A	Total/NA	6020A	0	2.6		
BKG-03-EM	Water	M	1	Arsenic	0.61	1	0.61	ug/L	J	J	3010A	Total/NA	6020A	0	0.61		
BKG-03-HS	Water	M	1	Arsenic	1	1	1	ug/L			3010A	Total/NA	6020A	0	1		
BKG-03-MID	Water	M	1	Arsenic	0.29	0	ND	ug/L	U	ND	3010A	Total/NA	6020A	0	0	2.27889	7.5
E-01	Water	M	1	Arsenic	2.9	1	2.9	ug/L			3010A	Total/NA	6020A	0	2.9		
E-02	Water	M	1	Arsenic	1.6	1	1.6	ug/L			3010A	Total/NA	6020A	0	1.6		
E-03	Water	M	1	Arsenic	1.8	1	1.8	ug/L			3010A	Total/NA	6020A	0	1.8		
E-04	Water	M	1	Arsenic	1.3	1	1.3	ug/L			3010A	Total/NA	6020A	0	1.3		
E-05	Water	M	1	Arsenic	5.9	1	5.9	ug/L			3010A	Total/NA	6020A	0	5.9		
E-06	Water	M	1	Arsenic	6.8	1	6.8	ug/L			3010A	Total/NA	6020A	0	6.8		
E-07	Water	M	1	Arsenic	14	1	14	ug/L			3010A	Total/NA	6020A	0	14		
E-08	Water	M	1	Arsenic	24	1	24	ug/L			3010A	Total/NA	6020A	0	24		
E-09	Water	M	1	Arsenic	20	1	20	ug/L			3010A	Total/NA	6020A	0	20		
E-10	Water	M	1	Arsenic	34	1	34	ug/L			3010A	Total/NA	6020A	0	34		
E-11	Water	M	1	Arsenic	64	1	64	ug/L			3010A	Total/NA	6020A	0	64		
E-12	Water	M	1	Arsenic	100	1	100	ug/L			3010A	Total/NA	6020A	0	100		
E-13	Water	M	1	Arsenic	56	1	56	ug/L			3010A	Total/NA	6020A	0	56		
E-14	Water	M	1	Arsenic	79	1	79	ug/L			3010A	Total/NA	6020A	0	79		
E-15	Water	M	1	Arsenic	50	1	50	ug/L			3010A	Total/NA	6020A	0	50		
E-16	Water	M	1	Arsenic	28	1	28	ug/L			3010A	Total/NA	6020A	0	28		
E-17	Water	M	1	Arsenic	6.2	1	6.2	ug/L			3010A	Total/NA	6020A	0	6.2		
E-18	Water	M	1	Arsenic	4.3	1	4.3	ug/L			3010A	Total/NA	6020A	0	4.3		
E-19	Water	M	1	Arsenic	31	1	31	ug/L			3010A	Total/NA	6020A	0	31		
E-20	Water	M	1	Arsenic	16	1	16	ug/L			3010A	Total/NA	6020A	0	16		
E-21	Water	M	1	Arsenic	23	1	23	ug/L			3010A	Total/NA	6020A	0	23		
E-22	Water	M	1	Arsenic	9.9	1	9.9	ug/L			3010A	Total/NA	6020A	0	9.9	26.35	100
I-1	Sediment	M	1	Arsenic	1.1	1	1.1	mg/Kg			3050B	Total/NA	6020A	0	1.1		
I-2	Sediment	M	1	Arsenic	1.4	1	1.4	mg/Kg	B	B	3050B	Total/NA	6020A	0	1.4		
I-3	Sediment	M	1	Arsenic	3.8	1	3.8	mg/Kg			3050B	Total/NA	6020A	0	3.8		
I-4	Sediment	M	1	Arsenic	2	1	2	mg/Kg			3050B	Total/NA	6020A	0	2		
I-5	Sediment	M	1	Arsenic	1.7	1	1.7	mg/Kg			3050B	Total/NA	6020A	0	1.7	2	3.8
RB-01-11192012	Water	M	1	Arsenic	0.29	0	ND	ug/L	U	ND	3010A	Total/NA	6020A	0	0		
BKG-01-EM	Water	M	1	Barium	28	1	28	ug/L	B	B	3010A	Total/NA	6020A	0	28		
BKG-01-HS	Water	M	1	Barium	25	1	25	ug/L	B	B	3010A	Total/NA	6020A	0	25		
BKG-01-MID	Water	M	1	Barium	25	1	25	ug/L	B	B	3010A	Total/NA	6020A	0	25		
BKG-02-EM	Water	M	1	Barium	29	1	29	ug/L			3010A	Total/NA	6020A	0	29		
BKG-02-HS	Water	M	1	Barium	27	1	27	ug/L			3010A	Total/NA	6020A	0	27		
BKG-02-MID	Water	M	1	Barium	27	1	27	ug/L			3010A	Total/NA	6020A	0	27		
BKG-03-EM	Water	M	1	Barium	28	1	28	ug/L	B	B	3010A	Total/NA	6020A	0	28		
BKG-03-HS	Water	M	1	Barium	30	1	30	ug/L	B	B	3010A	Total/NA	6020A	0	30		
BKG-03-MID	Water	M	1	Barium	28	1	28	ug/L	B	B	3010A	Total/NA	6020A	0	28	27.4444	30
E-01	Water	M	1	Barium	43	1	43	ug/L			3010A	Total/NA	6020A	0	43		
E-02	Water	M	1	Barium	41	1	41	ug/L			3010A	Total/NA	6020A	0	41		

Client Sample ID	Matrix	sort	ion F	Analyte	Val_res	D?	Result	Unit	Qual	Flag	ep Metho	Prep Type	alysis Method	Check	Adj Val	Mean	Max
E-03	Water	M	1	Barium	42	1	42	ug/L			3010A	Total/NA	6020A	0	42		
E-04	Water	M	1	Barium	40	1	40	ug/L			3010A	Total/NA	6020A	0	40		
E-05	Water	M	1	Barium	79	1	79	ug/L	B	B	3010A	Total/NA	6020A	0	79		
E-06	Water	M	1	Barium	140	1	140	ug/L	B	B	3010A	Total/NA	6020A	0	140		
E-07	Water	M	1	Barium	280	1	280	ug/L			3010A	Total/NA	6020A	0	280		
E-08	Water	M	1	Barium	440	1	440	ug/L			3010A	Total/NA	6020A	0	440		
E-09	Water	M	1	Barium	390	1	390	ug/L			3010A	Total/NA	6020A	0	390		
E-10	Water	M	1	Barium	310	1	310	ug/L			3010A	Total/NA	6020A	0	310		
E-11	Water	M	1	Barium	390	1	390	ug/L			3010A	Total/NA	6020A	0	390		
E-12	Water	M	1	Barium	1100	1	1100	ug/L			3010A	Total/NA	6020A	0	1100		
E-13	Water	M	1	Barium	950	1	950	ug/L	B	B	3010A	Total/NA	6020A	0	950		
E-14	Water	M	1	Barium	1700	1	1700	ug/L	B	B	3010A	Total/NA	6020A	0	1700		
E-15	Water	M	1	Barium	1200	1	1200	ug/L	B	B	3010A	Total/NA	6020A	0	1200		
E-16	Water	M	1	Barium	530	1	530	ug/L	B	B	3010A	Total/NA	6020A	0	530		
E-17	Water	M	1	Barium	140	1	140	ug/L			3010A	Total/NA	6020A	0	140		
E-18	Water	M	1	Barium	56	1	56	ug/L			3010A	Total/NA	6020A	0	56		
E-19	Water	M	1	Barium	600	1	600	ug/L			3010A	Total/NA	6020A	0	600		
E-20	Water	M	1	Barium	350	1	350	ug/L			3010A	Total/NA	6020A	0	350		
E-21	Water	M	1	Barium	290	1	290	ug/L			3010A	Total/NA	6020A	0	290		
E-22	Water	M	1	Barium	120	1	120	ug/L			3010A	Total/NA	6020A	0	120	419.591	1700
I-1	Sediment	M	1	Barium	6.6	1	6.6	mg/Kg	B	B	3050B	Total/NA	6020A	0	6.6		
I-2	Sediment	M	1	Barium	7	1	7	mg/Kg	B	B	3050B	Total/NA	6020A	0	7		
I-3	Sediment	M	1	Barium	19	1	19	mg/Kg			3050B	Total/NA	6020A	0	19		
I-4	Sediment	M	1	Barium	19	1	19	mg/Kg			3050B	Total/NA	6020A	0	19		
I-5	Sediment	M	1	Barium	18	1	18	mg/Kg			3050B	Total/NA	6020A	0	18	13.92	19
RB-01-11192012	Water	M	1	Barium	1.2	1	1.2	ug/L	J B	J B	3010A	Total/NA	6020A	0	1.2		
BKG-01-EM	Water	M	1	Beryllium	0.054	1	0.054	ug/L	J	J	3010A	Total/NA	6020A	0	0.054		
BKG-01-HS	Water	M	1	Beryllium	0.037	0	ND	ug/L	U	ND	3010A	Total/NA	6020A	0	0		
BKG-01-MID	Water	M	1	Beryllium	0.037	0	ND	ug/L	U	ND	3010A	Total/NA	6020A	0	0		
BKG-02-EM	Water	M	1	Beryllium	0.053	1	0.053	ug/L	J	J	3010A	Total/NA	6020A	0	0.053		
BKG-02-HS	Water	M	1	Beryllium	0.098	1	0.098	ug/L	J	J	3010A	Total/NA	6020A	0	0.098		
BKG-02-MID	Water	M	1	Beryllium	0.084	1	0.084	ug/L	J	J	3010A	Total/NA	6020A	0	0.084		
BKG-03-EM	Water	M	1	Beryllium	0.064	1	0.064	ug/L	J	J	3010A	Total/NA	6020A	0	0.064		
BKG-03-HS	Water	M	1	Beryllium	0.085	1	0.085	ug/L	J	J	3010A	Total/NA	6020A	0	0.085		
BKG-03-MID	Water	M	1	Beryllium	0.078	1	0.078	ug/L	J	J	3010A	Total/NA	6020A	0	0.078	0.05733	0.098
E-01	Water	M	1	Beryllium	0.061	1	0.061	ug/L	J	J	3010A	Total/NA	6020A	0	0.061		
E-02	Water	M	1	Beryllium	0.2	1	0.2	ug/L	J	J	3010A	Total/NA	6020A	0	0.2		
E-03	Water	M	1	Beryllium	0.12	1	0.12	ug/L	J	J	3010A	Total/NA	6020A	0	0.12		
E-04	Water	M	1	Beryllium	0.09	1	0.09	ug/L	J	J	3010A	Total/NA	6020A	0	0.09		
E-05	Water	M	1	Beryllium	0.7	1	0.7	ug/L	J	J	3010A	Total/NA	6020A	0	0.7		
E-06	Water	M	1	Beryllium	1.1	1	1.1	ug/L			3010A	Total/NA	6020A	0	1.1		
E-07	Water	M	1	Beryllium	1.8	1	1.8	ug/L	J	J	3010A	Total/NA	6020A	0	1.8		
E-08	Water	M	1	Beryllium	3.2	1	3.2	ug/L	J	J	3010A	Total/NA	6020A	0	3.2		
E-09	Water	M	1	Beryllium	2.3	1	2.3	ug/L			3010A	Total/NA	6020A	0	2.3		
E-10	Water	M	1	Beryllium	1.8	1	1.8	ug/L			3010A	Total/NA	6020A	0	1.8		
E-11	Water	M	1	Beryllium	2.4	1	2.4	ug/L			3010A	Total/NA	6020A	0	2.4		
E-12	Water	M	1	Beryllium	8	1	8	ug/L			3010A	Total/NA	6020A	0	8		
E-13	Water	M	1	Beryllium	5.7	1	5.7	ug/L	J	J	3010A	Total/NA	6020A	0	5.7		
E-14	Water	M	1	Beryllium	11	1	11	ug/L			3010A	Total/NA	6020A	0	11		
E-15	Water	M	1	Beryllium	11	1	11	ug/L			3010A	Total/NA	6020A	0	11		
E-16	Water	M	1	Beryllium	4.6	1	4.6	ug/L			3010A	Total/NA	6020A	0	4.6		
E-17	Water	M	1	Beryllium	0.86	1	0.86	ug/L	J	J	3010A	Total/NA	6020A	0	0.86		
E-18	Water	M	1	Beryllium	0.15	1	0.15	ug/L	J	J	3010A	Total/NA	6020A	0	0.15		
E-19	Water	M	1	Beryllium	4.2	1	4.2	ug/L			3010A	Total/NA	6020A	0	4.2		
E-20	Water	M	1	Beryllium	2.1	1	2.1	ug/L	B	B	3010A	Total/NA	6020A	0	2.1		
E-21	Water	M	1	Beryllium	2.2	1	2.2	ug/L	B	B	3010A	Total/NA	6020A	0	2.2		
E-22	Water	M	1	Beryllium	1.2	1	1.2	ug/L			3010A	Total/NA	6020A	0	1.2	2.94459	11
I-1	Sediment	M	1	Beryllium	0.34	1	0.34	mg/Kg			3050B	Total/NA	6020A	0	0.34		
I-2	Sediment	M	1	Beryllium	0.16	1	0.16	mg/Kg			3050B	Total/NA	6020A	0	0.16		
I-3	Sediment	M	1	Beryllium	0.2	1	0.2	mg/Kg			3050B	Total/NA	6020A	0	0.2		
I-4	Sediment	M	1	Beryllium	0.15	1	0.15	mg/Kg			3050B	Total/NA	6020A	0	0.15		
I-5	Sediment	M	1	Beryllium	0.16	1	0.16	mg/Kg			3050B	Total/NA	6020A	0	0.16	0.202	0.34
RB-01-11192012	Water	M	1	Beryllium	0.037	0	ND	ug/L	U	ND	3010A	Total/NA	6020A	0	0		
BKG-01-EM	Water	M	1	Cadmium	0.11	0	0.11	ug/L	U	ND	3010A	Total/NA	6020A	0	0		
BKG-01-HS	Water	M	1	Cadmium	0.11	0	ND	ug/L	U	ND	3010A	Total/NA	6020A	0	0		
BKG-01-MID	Water	M	1	Cadmium	0.11	0	ND	ug/L	U	ND	3010A	Total/NA	6020A	0	0		
BKG-02-EM	Water	M	1	Cadmium	0.11	0	ND	ug/L	U	ND	3010A	Total/NA	6020A	0	0		
BKG-02-HS	Water	M	1	Cadmium	0.11	0	ND	ug/L	U	ND	3010A	Total/NA	6020A	0	0		
BKG-02-MID	Water	M	1	Cadmium	0.11	0	ND	ug/L	U	ND	3010A	Total/NA	6020A	0	0		
BKG-03-EM	Water	M	1	Cadmium	0.11	0	ND	ug/L	U	ND	3010A	Total/NA	6020A	0	0		
BKG-03-HS	Water	M	1	Cadmium	0.11	0	ND	ug/L	U	ND	3010A	Total/NA	6020A	0	0		
BKG-03-MID	Water	M	1	Cadmium	0.11	0	ND	ug/L	U	ND	3010A	Total/NA	6020A	0	0	0	0
E-01	Water	M	1	Cadmium	0.12	1	0.12	ug/L	J	J	3010A	Total/NA	6020A	0	0.12		
E-02	Water	M	1	Cadmium	0.11	0	ND	ug/L	U	ND	3010A	Total/NA	6020A	0	0		
E-03	Water	M	1	Cadmium	0.11	0	ND	ug/L	U	ND	3010A	Total/NA	6020A	0	0		
E-04	Water	M	1	Cadmium	0.11	0	ND	ug/L	U	ND	3010A	Total/NA	6020A	0	0		
E-05	Water	M	1	Cadmium	0.25	1	0.25	ug/L	J	J	3010A	Total/NA	6020A	0	0.25		
E-06	Water	M	1	Cadmium	0.31	1	0.31	ug/L	J	J	3010A	Total/NA	6020A	0	0.31		
E-07	Water	M	1	Cadmium	1.1	0	ND	ug/L	U	ND	3010A	Total/NA	6020A	0	0		
E-08	Water	M	1	Cadmium	1.1	0	ND	ug/L	U	ND	3010A	Total/NA	6020A	0	0		
E-09	Water	M	1	Cadmium	0.64	1	0.64	ug/L	J	J	3010A	Total/NA	6020A	0	0.64		
E-10	Water	M	1	Cadmium	1.7	1	1.7	ug/L			3010A	Total/NA	6020A	0	1.7		
E-11	Water	M	1	Cadmium	2.5	1	2.5	ug/L			3010A	Total/NA	6020A	0	2.5		
E-12	Water	M	1	Cadmium	7.4	1	7.4	ug/L			3010A	Total/NA	6020A	0	7.4		
E-13	Water	M	1	Cadmium	2.6	1	2.6	ug/L	J	J	3010A	Total/NA	6020A	0	2.6		
E-14	Water	M	1	Cadmium	3.5	1	3.5	ug/L	J	J	3010A	Total/NA	6020A	0	3.5		
E-15	Water	M	1	Cadmium	5.3	1	5.3	ug/L			3010A	Total/NA	6020A	0	5.3		
E-16	Water	M	1	Cadmium	5	1	5	ug/L			3010A	Total/NA	6020A	0	5		
E-17	Water	M	1	Cadmium	0.44	1	0.44	ug/L	J	J	3010A	Total/NA	6020A	0	0.44		
E-18	Water	M	1	Cadmium	0.13	1	0.13	ug/L	J	J	3010A	Total/NA	6020A	0	0.13		
E-19	Water	M	1	Cadmium	4.8	1	4.8	ug/L			3010A	Total/NA	6020A	0	4.8		
E-20	Water	M	1	Cadmium	1.5	1	1.5	ug/L			3010A	Total/NA	6020A	0	1.5		
E-21	Water	M	1	Cadmium	2.7	1	2.7	ug/L			3010A	Total/NA	6020A	0	2.7		
E-22	Water	M	1	Cadmium	1	1	1	ug/L			3010A	Total/NA	6020A	0	1	1.81318	7.4
I-1	Sediment	M	1	Cadmium	0.095	1	0.095	mg/Kg			3050B	Total/NA	6020A	0	0.095		
I-2	Sediment	M	1	Cadmium	0.095	1	0.095	mg/Kg			3050B	Total/NA	6020A	0	0.095		
I-3	Sediment	M	1	Cadmium	0.51	1	0.51	mg/Kg			3050B	Total/NA	6020A	0	0.51		
I-4	Sediment	M	1	Cadmium	0.4	1	0.4	mg/Kg	B	B	3050B	Total/NA	6020A	0	0.4		
I-5	Sediment	M	1	Cadmium	0.39	1	0.39	mg/Kg	B	B	3050B	Total/NA	6020A	0	0.39	0.298	0.51
RB-01-11192012	Water	M	1	Cadmium	0.11	0	ND	ug/L	U	ND	3010A	Total/NA	6020A	0	0		
BKG-01-EM	Water	M	1	Calcium	15000	1	15000	ug/L	B	B	3010A	Total/NA	6020A	0	15000		
BKG-01-HS	Water	M	1	Calcium	16000	1	16000	ug/L	B	B	3010A	Total/NA	6020A	0	16000		
BKG-01-MID	Water	M	1	Calcium	15000	1	15000	ug/L	B	B	3010A	Total/NA	6020A	0	15000		
BKG-02-EM	Water	M	1	Calcium	17000	1	17000	ug/L	B	B	3010A	Total/NA	6020A	0	17000		
BKG-02-HS	Water	M	1	Calcium	16000	1	16000	ug/L			3010A	Total/NA	6020A	0	16000		
BKG-02-MID	Water	M	1	Calcium	16000	1	16000	ug/L			3010A	Total/NA	6020A	0	16000		
BKG-03-EM	Water	M	1	Calcium	14000	1	14000	ug/L	B	B	3010A	Total/NA	6020A	0	14000		
BKG-03-HS	Water	M	1	Calcium	15000	1	15000	ug/L	B	B	3010A	Total/NA	6020A	0	15000		
BKG-03-MID	Water	M	1	Calcium	14000	1	14000	ug/L	B	B	3010A	Total/NA	6020A	0	14000	15333.3	17000
E-01	Water	M	1	Calcium	18000	1	18000	ug/L	B	B	3010A	Total/NA	6020A	0	18000		
E-02	Water	M	1	Calcium	15000	1	15000	ug/L	B	B	3010A	Total/NA	6020A	0	15000		
E-03	Water	M	1	Calcium	15000	1	15000	ug/L	B	B	3010A	Total/NA	6020A	0	15000		
E-04	Water	M	1	Calcium	13000	1	13000	ug/L	B	B	3010A	Total/NA	6020A	0	13000		
E-05	Water	M	1	Calcium	15000	1	15000	ug/L	B	B	3010A	Total/NA	6020A	0	15000		
E-06	Water	M	1	Calcium	15000	1	15000	ug/L	B	B	3010A	Total/NA	6020A	0	15000		
E-07	Water	M	1	Calcium	19000	1	19000	ug/L	B	B	3010A	Total/NA	6020A	0	19000		
E-08	Water	M	1	Calcium	25000	1	25000	ug/L	B	B	3010A	Total/NA	6020A	0	25000		
E-09	Water	M	1	Calcium	18000	1	18000	ug/L			3010A	Total/NA	6020A	0	18000		
E-10	Water	M	1	Calcium	17000	1	17000	ug/L	B	B	3010A	Total/NA	6020A	0	17000		
E-11	Water	M	1	Calcium	16000	1	16000	ug/L	B	B	3010A	Total/NA	6020A	0	16000		
E-12	Water	M	1	Calcium	31000	1	31000	ug/L	B	B	3010A	Total/NA	6020A	0	31000		
E-13	Water	M	1	Calcium	28000	1	28000	ug/L	B	B	3010A	Total/NA	6020A	0	28000		

Client Sample ID	Matrix	sort	ion F	Analyte	Val_res	D?	Result	Unit	Qual	Flag	ep Metho	Prep Type	alysis Method	Check	Adj Val	Mean	Max
E-14	Water	M	1	Calcium	52000	1	52000	ug/L	B	B	3010A	Total/NA	6020A	0	52000		
E-15	Water	M	1	Calcium	36000	1	36000	ug/L	B	B	3010A	Total/NA	6020A	0	36000		
E-16	Water	M	1	Calcium	22000	1	22000	ug/L	B	B	3010A	Total/NA	6020A	0	22000		
E-17	Water	M	1	Calcium	18000	1	18000	ug/L	B	B	3010A	Total/NA	6020A	0	18000		
E-18	Water	M	1	Calcium	25000	1	25000	ug/L			3010A	Total/NA	6020A	0	25000		
E-19	Water	M	1	Calcium	25000	1	25000	ug/L			3010A	Total/NA	6020A	0	25000		
E-20	Water	M	1	Calcium	26000	1	26000	ug/L	B	B	3010A	Total/NA	6020A	0	26000		
E-21	Water	M	1	Calcium	30000	1	30000	ug/L	B	B	3010A	Total/NA	6020A	0	30000		
E-22	Water	M	1	Calcium	16000	1	16000	ug/L	B	B	3010A	Total/NA	6020A	0	16000	22500	52000
I-1	Sediment	M	1	Calcium	270	1	270	mg/Kg	B	B	3050B	Total/NA	6020A	0	270		
I-2	Sediment	M	1	Calcium	9800	1	9800	mg/Kg			3050B	Total/NA	6020A	0	9800		
I-3	Sediment	M	1	Calcium	280	1	280	mg/Kg			3050B	Total/NA	6020A	0	280		
I-4	Sediment	M	1	Calcium	360	1	360	mg/Kg	B	B	3050B	Total/NA	6020A	0	360		
I-5	Sediment	M	1	Calcium	710	1	710	mg/Kg	B	B	3050B	Total/NA	6020A	0	710	2284	9800
RB-01-11192012	Water	M	1	Calcium	330	1	330	ug/L	B	B	3010A	Total/NA	6020A	0	330		
BKG-01-EM	Water	M	1	Chromium	4	1	4	ug/L			3010A	Total/NA	6020A	0	4		
BKG-01-HS	Water	M	1	Chromium	3	1	3	ug/L			3010A	Total/NA	6020A	0	3		
BKG-01-MID	Water	M	1	Chromium	3.7	1	3.7	ug/L			3010A	Total/NA	6020A	0	3.7		
BKG-02-EM	Water	M	1	Chromium	11	1	11	ug/L			3010A	Total/NA	6020A	0	11		
BKG-02-HS	Water	M	1	Chromium	14	1	14	ug/L			3010A	Total/NA	6020A	0	14		
BKG-02-MID	Water	M	1	Chromium	6.5	1	6.5	ug/L			3010A	Total/NA	6020A	0	6.5		
BKG-03-EM	Water	M	1	Chromium	5	1	5	ug/L			3010A	Total/NA	6020A	0	5		
BKG-03-HS	Water	M	1	Chromium	5.6	1	5.6	ug/L			3010A	Total/NA	6020A	0	5.6		
BKG-03-MID	Water	M	1	Chromium	4.6	1	4.6	ug/L			3010A	Total/NA	6020A	0	4.6	6.37778	14
E-01	Water	M	1	Chromium	2.2	1	2.2	ug/L			3010A	Total/NA	6020A	0	2.2		
E-02	Water	M	1	Chromium	5.7	1	5.7	ug/L			3010A	Total/NA	6020A	0	5.7		
E-03	Water	M	1	Chromium	4	1	4	ug/L			3010A	Total/NA	6020A	0	4		
E-04	Water	M	1	Chromium	3	1	3	ug/L			3010A	Total/NA	6020A	0	3		
E-05	Water	M	1	Chromium	33	1	33	ug/L			3010A	Total/NA	6020A	0	33		
E-06	Water	M	1	Chromium	54	1	54	ug/L			3010A	Total/NA	6020A	0	54		
E-07	Water	M	1	Chromium	100	1	100	ug/L			3010A	Total/NA	6020A	0	100		
E-08	Water	M	1	Chromium	140	1	140	ug/L			3010A	Total/NA	6020A	0	140		
E-09	Water	M	1	Chromium	120	1	120	ug/L			3010A	Total/NA	6020A	0	120		
E-10	Water	M	1	Chromium	110	1	110	ug/L			3010A	Total/NA	6020A	0	110		
E-11	Water	M	1	Chromium	210	1	210	ug/L			3010A	Total/NA	6020A	0	210		
E-12	Water	M	1	Chromium	520	1	520	ug/L			3010A	Total/NA	6020A	0	520		
E-13	Water	M	1	Chromium	360	1	360	ug/L			3010A	Total/NA	6020A	0	360		
E-14	Water	M	1	Chromium	610	1	610	ug/L			3010A	Total/NA	6020A	0	610		
E-15	Water	M	1	Chromium	490	1	490	ug/L			3010A	Total/NA	6020A	0	490		
E-16	Water	M	1	Chromium	270	1	270	ug/L			3010A	Total/NA	6020A	0	270		
E-17	Water	M	1	Chromium	44	1	44	ug/L			3010A	Total/NA	6020A	0	44		
E-18	Water	M	1	Chromium	11	1	11	ug/L			3010A	Total/NA	6020A	0	11		
E-19	Water	M	1	Chromium	240	1	240	ug/L			3010A	Total/NA	6020A	0	240		
E-20	Water	M	1	Chromium	95	1	95	ug/L			3010A	Total/NA	6020A	0	95		
E-21	Water	M	1	Chromium	100	1	100	ug/L			3010A	Total/NA	6020A	0	100		
E-22	Water	M	1	Chromium	53	1	53	ug/L			3010A	Total/NA	6020A	0	53	162.495	610
I-1	Sediment	M	1	Chromium	18	1	18	mg/Kg	B	B	3050B	Total/NA	6020A	0	18		
I-2	Sediment	M	1	Chromium	15	1	15	mg/Kg	B	B	3050B	Total/NA	6020A	0	15		
I-3	Sediment	M	1	Chromium	10	1	10	mg/Kg			3050B	Total/NA	6020A	0	10		
I-4	Sediment	M	1	Chromium	9.7	1	9.7	mg/Kg	B	B	3050B	Total/NA	6020A	0	9.7		
I-5	Sediment	M	1	Chromium	8.5	1	8.5	mg/Kg	B	B	3050B	Total/NA	6020A	0	8.5	12.24	18
RB-01-11192012	Water	M	1	Chromium	2	1	2	ug/L			3010A	Total/NA	6020A	0	2		
BKG-01-EM	Water	M	1	Cobalt	0.57	1	0.57	ug/L	B	B	3010A	Total/NA	6020A	0	0.57		
BKG-01-HS	Water	M	1	Cobalt	0.37	1	0.37	ug/L	J B	J B	3010A	Total/NA	6020A	0	0.37		
BKG-01-MID	Water	M	1	Cobalt	0.36	1	0.36	ug/L	J B	J B	3010A	Total/NA	6020A	0	0.36		
BKG-02-EM	Water	M	1	Cobalt	0.63	1	0.63	ug/L			3010A	Total/NA	6020A	0	0.63		
BKG-02-HS	Water	M	1	Cobalt	0.35	1	0.35	ug/L	J	J	3010A	Total/NA	6020A	0	0.35		
BKG-02-MID	Water	M	1	Cobalt	0.47	1	0.47	ug/L	J	J	3010A	Total/NA	6020A	0	0.47		
BKG-03-EM	Water	M	1	Cobalt	0.75	1	0.75	ug/L			3010A	Total/NA	6020A	0	0.75		
BKG-03-HS	Water	M	1	Cobalt	0.72	1	0.72	ug/L			3010A	Total/NA	6020A	0	0.72		
BKG-03-MID	Water	M	1	Cobalt	0.77	1	0.77	ug/L			3010A	Total/NA	6020A	0	0.77	0.55444	0.77
E-01	Water	M	1	Cobalt	0.98	1	0.98	ug/L			3010A	Total/NA	6020A	0	0.98		
E-02	Water	M	1	Cobalt	0.9	1	0.9	ug/L			3010A	Total/NA	6020A	0	0.9		
E-03	Water	M	1	Cobalt	1.1	1	1.1	ug/L			3010A	Total/NA	6020A	0	1.1		
E-04	Water	M	1	Cobalt	0.82	1	0.82	ug/L			3010A	Total/NA	6020A	0	0.82		
E-05	Water	M	1	Cobalt	3.6	1	3.6	ug/L	B	B	3010A	Total/NA	6020A	0	3.6		
E-06	Water	M	1	Cobalt	6.5	1	6.5	ug/L	B	B	3010A	Total/NA	6020A	0	6.5		
E-07	Water	M	1	Cobalt	12	1	12	ug/L			3010A	Total/NA	6020A	0	12		
E-08	Water	M	1	Cobalt	18	1	18	ug/L			3010A	Total/NA	6020A	0	18		
E-09	Water	M	1	Cobalt	22	1	22	ug/L			3010A	Total/NA	6020A	0	22		
E-10	Water	M	1	Cobalt	18	1	18	ug/L			3010A	Total/NA	6020A	0	18		
E-11	Water	M	1	Cobalt	30	1	30	ug/L			3010A	Total/NA	6020A	0	30		
E-12	Water	M	1	Cobalt	88	1	88	ug/L			3010A	Total/NA	6020A	0	88		
E-13	Water	M	1	Cobalt	58	1	58	ug/L	B	B	3010A	Total/NA	6020A	0	58		
E-14	Water	M	1	Cobalt	110	1	110	ug/L	B	B	3010A	Total/NA	6020A	0	110		
E-15	Water	M	1	Cobalt	93	1	93	ug/L			3010A	Total/NA	6020A	0	93		
E-16	Water	M	1	Cobalt	37	1	37	ug/L			3010A	Total/NA	6020A	0	37		
E-17	Water	M	1	Cobalt	7.3	1	7.3	ug/L			3010A	Total/NA	6020A	0	7.3		
E-18	Water	M	1	Cobalt	3.3	1	3.3	ug/L			3010A	Total/NA	6020A	0	3.3		
E-19	Water	M	1	Cobalt	41	1	41	ug/L			3010A	Total/NA	6020A	0	41		
E-20	Water	M	1	Cobalt	21	1	21	ug/L	B	B	3010A	Total/NA	6020A	0	21		
E-21	Water	M	1	Cobalt	21	1	21	ug/L	B	B	3010A	Total/NA	6020A	0	21		
E-22	Water	M	1	Cobalt	9.3	1	9.3	ug/L			3010A	Total/NA	6020A	0	9.3	27.4	110
I-1	Sediment	M	1	Cobalt	1.3	1	1.3	mg/Kg			3050B	Total/NA	6020A	0	1.3		
I-2	Sediment	M	1	Cobalt	0.91	1	0.91	mg/Kg	B	B	3050B	Total/NA	6020A	0	0.91		
I-3	Sediment	M	1	Cobalt	4.3	1	4.3	mg/Kg	B	B	3050B	Total/NA	6020A	0	4.3		
I-4	Sediment	M	1	Cobalt	2.6	1	2.6	mg/Kg	B	B	3050B	Total/NA	6020A	0	2.6		
I-5	Sediment	M	1	Cobalt	2.6	1	2.6	mg/Kg	B	B	3050B	Total/NA	6020A	0	2.6	2.342	4.3
RB-01-11192012	Water	M	1	Cobalt	0.026	0	ND	ug/L	U	ND	3010A	Total/NA	6020A	0	0		
BKG-01-EM	Water	M	1	Copper	5	1	5	ug/L			3010A	Total/NA	6020A	0	5		
BKG-01-HS	Water	M	1	Copper	4.1	1	4.1	ug/L			3010A	Total/NA	6020A	0	4.1		
BKG-01-MID	Water	M	1	Copper	4.1	1	4.1	ug/L			3010A	Total/NA	6020A	0	4.1		
BKG-02-EM	Water	M	1	Copper	8.5	1	8.5	ug/L	B	B	3010A	Total/NA	6020A	0	8.5		
BKG-02-HS	Water	M	1	Copper	7.5	1	7.5	ug/L	B	B	3010A	Total/NA	6020A	0	7.5		
BKG-02-MID	Water	M	1	Copper	6.8	1	6.8	ug/L	B	B	3010A	Total/NA	6020A	0	6.8		
BKG-03-EM	Water	M	1	Copper	5.5	1	5.5	ug/L			3010A	Total/NA	6020A	0	5.5		
BKG-03-HS	Water	M	1	Copper	4.6	1	4.6	ug/L			3010A	Total/NA	6020A	0	4.6		
BKG-03-MID	Water	M	1	Copper	6	1	6	ug/L			3010A	Total/NA	6020A	0	6	5.78889	8.5
E-01	Water	M	1	Copper	13	1	13	ug/L			3010A	Total/NA	6020A	0	13		
E-02	Water	M	1	Copper	3.9	1	3.9	ug/L			3010A	Total/NA	6020A	0	3.9		
E-03	Water	M	1	Copper	3.2	1	3.2	ug/L			3010A	Total/NA	6020A	0	3.2		
E-04	Water	M	1	Copper	2.3	1	2.3	ug/L			3010A	Total/NA	6020A	0	2.3		
E-05	Water	M	1	Copper	19	1	19	ug/L			3010A	Total/NA	6020A	0	19		
E-06	Water	M	1	Copper	25	1	25	ug/L			3010A	Total/NA	6020A	0	25		
E-07	Water	M	1	Copper	32	1	32	ug/L			3010A	Total/NA	6020A	0	32		
E-08	Water	M	1	Copper	39	1	39	ug/L			3010A	Total/NA	6020A	0	39		
E-09	Water	M	1	Copper	38	1	38	ug/L	B	B	3010A	Total/NA	6020A	0	38		
E-10	Water	M	1	Copper	74	1	74	ug/L	B	B	3010A	Total/NA	6020A	0	74		
E-11	Water	M	1	Copper	110	1	110	ug/L	B	B	3010A	Total/NA	6020A	0	110		
E-12	Water	M	1	Copper	260	1	260	ug/L	B	B	3010A	Total/NA	6020A	0	260		
E-13	Water	M	1	Copper	140	1	140	ug/L			3010A	Total/NA	6020A	0	140		
E-14	Water	M	1	Copper	200	1	200	ug/L			3010A	Total/NA	6020A	0	200		
E-15	Water	M	1	Copper	170	1	170	ug/L			3010A	Total/NA	6020A	0	170		
E-16	Water	M	1	Copper	150	1	150	ug/L			3010A	Total/NA	6020A	0	150		
E-17	Water	M	1	Copper	22	1	22	ug/L			3010A	Total/NA	6020A	0	22		
E-18	Water	M	1	Copper	14	1	14	ug/L			3010A	Total/NA	6020A	0	14		
E-19	Water	M	1	Copper	150	1	150	ug/L			3010A	Total/NA	6020A	0	150		
E-20	Water	M	1	Copper	64	1	64	ug/L			3010A	Total/NA	6020A	0	64		
E-21	Water	M	1	Copper	78	1	78	ug/L			3010A	Total/NA	6020A	0	78		
E-22	Water	M	1	Copper	46	1	46	ug/L			3010A	Total/NA	6020A	0	46	75.1545	260
I-1	Sediment	M	1	Copper	7.5	1	7.5	mg/Kg			3050B	Total/NA	6020A	0	7.5		
I-2	Sediment	M	1	Copper	7	1	7	mg/Kg			3050B	Total/NA	6020A	0	7		

Client Sample ID	Matrix	sort	ion F	Analyte	Val_res	D?	Result	Unit	Qual	Flag	ep Metho	Prep Type	alysis Method	Check	Adj Val	Mean	Max
I-3	Sediment	M	1	Copper	11	1	11	mg/Kg			3050B	Total/NA	6020A	0	11		
I-4	Sediment	M	1	Copper	5	1	5	mg/Kg	B	B	3050B	Total/NA	6020A	0	5		
I-5	Sediment	M	1	Copper	4.4	1	4.4	mg/Kg	B	B	3050B	Total/NA	6020A	0	4.4	6.98	11
RB-01-11192012	Water	M	1	Copper	0.63	1	0.63	ug/L	J	J	3010A	Total/NA	6020A	0	0.63		
BKG-01-EM	Water	M	1	Iron	970	1	970	ug/L	B	B	3010A	Total/NA	6020A	0	970		
BKG-01-HS	Water	M	1	Iron	500	1	500	ug/L	B	B	3010A	Total/NA	6020A	0	500		
BKG-01-MID	Water	M	1	Iron	510	1	510	ug/L	B	B	3010A	Total/NA	6020A	0	510		
BKG-02-EM	Water	M	1	Iron	1100	1	1100	ug/L			3010A	Total/NA	6020A	0	1100		
BKG-02-HS	Water	M	1	Iron	660	1	660	ug/L			3010A	Total/NA	6020A	0	660		
BKG-02-MID	Water	M	1	Iron	940	1	940	ug/L			3010A	Total/NA	6020A	0	940		
BKG-03-EM	Water	M	1	Iron	1800	1	1800	ug/L	B	B	3010A	Total/NA	6020A	0	1800		
BKG-03-HS	Water	M	1	Iron	2100	1	2100	ug/L	B	B	3010A	Total/NA	6020A	0	2100		
BKG-03-MID	Water	M	1	Iron	1800	1	1800	ug/L	B	B	3010A	Total/NA	6020A	0	1800	1153.33	2100
E-01	Water	M	1	Iron	980	1	980	ug/L	B	B	3010A	Total/NA	6020A	0	980		
E-02	Water	M	1	Iron	3000	1	3000	ug/L	B	B	3010A	Total/NA	6020A	0	3000		
E-03	Water	M	1	Iron	2500	1	2500	ug/L	B	B	3010A	Total/NA	6020A	0	2500		
E-04	Water	M	1	Iron	1500	1	1500	ug/L	B	B	3010A	Total/NA	6020A	0	1500		
E-05	Water	M	1	Iron	8100	1	8100	ug/L	B	B	3010A	Total/NA	6020A	0	8100		
E-06	Water	M	1	Iron	18000	1	18000	ug/L	B	B	3010A	Total/NA	6020A	0	18000		
E-07	Water	M	1	Iron	36000	1	36000	ug/L			3010A	Total/NA	6020A	0	36000		
E-08	Water	M	1	Iron	56000	1	56000	ug/L			3010A	Total/NA	6020A	0	56000		
E-09	Water	M	1	Iron	68000	1	68000	ug/L			3010A	Total/NA	6020A	0	68000		
E-10	Water	M	1	Iron	39000	1	39000	ug/L			3010A	Total/NA	6020A	0	39000		
E-11	Water	M	1	Iron	69000	1	69000	ug/L			3010A	Total/NA	6020A	0	69000		
E-12	Water	M	1	Iron	230000	1	230000	ug/L			3010A	Total/NA	6020A	0	230000		
E-13	Water	M	1	Iron	180000	1	180000	ug/L	B	B	3010A	Total/NA	6020A	0	180000		
E-14	Water	M	1	Iron	350000	1	350000	ug/L	B	B	3010A	Total/NA	6020A	0	350000		
E-15	Water	M	1	Iron	290000	1	290000	ug/L	B	B	3010A	Total/NA	6020A	0	290000		
E-16	Water	M	1	Iron	100000	1	100000	ug/L	B	B	3010A	Total/NA	6020A	0	100000		
E-17	Water	M	1	Iron	18000	1	18000	ug/L			3010A	Total/NA	6020A	0	18000		
E-18	Water	M	1	Iron	3800	1	3800	ug/L			3010A	Total/NA	6020A	0	3800		
E-19	Water	M	1	Iron	90000	1	90000	ug/L			3010A	Total/NA	6020A	0	90000		
E-20	Water	M	1	Iron	38000	1	38000	ug/L	B	B	3010A	Total/NA	6020A	0	38000		
E-21	Water	M	1	Iron	40000	1	40000	ug/L	B	B	3010A	Total/NA	6020A	0	40000		
E-22	Water	M	1	Iron	19000	1	19000	ug/L	B	B	3010A	Total/NA	6020A	0	19000	75494.5	350000
I-1	Sediment	M	1	Iron	14000	1	14000	mg/Kg	B	B	3050B	Total/NA	6020A	0	14000		
I-2	Sediment	M	1	Iron	9100	1	9100	mg/Kg			3050B	Total/NA	6020A	0	9100		
I-3	Sediment	M	1	Iron	6900	1	6900	mg/Kg	B	B	3050B	Total/NA	6020A	0	6900		
I-4	Sediment	M	1	Iron	6300	1	6300	mg/Kg			3050B	Total/NA	6020A	0	6300		
I-5	Sediment	M	1	Iron	7300	1	7300	mg/Kg			3050B	Total/NA	6020A	0	7300	8720	14000
RB-01-11192012	Water	M	1	Iron	7.6	1	7.6	ug/L	J B	J B	3010A	Total/NA	6020A	0	7.6		
BKG-01-EM	Water	M	1	Lead	2.1	1	2.1	ug/L	B	B	3010A	Total/NA	6020A	0	2.1		
BKG-01-HS	Water	M	1	Lead	1.1	1	1.1	ug/L	B	B	3010A	Total/NA	6020A	0	1.1		
BKG-01-MID	Water	M	1	Lead	1.4	1	1.4	ug/L	B	B	3010A	Total/NA	6020A	0	1.4		
BKG-02-EM	Water	M	1	Lead	2.8	1	2.8	ug/L	B	B	3010A	Total/NA	6020A	0	2.8		
BKG-02-HS	Water	M	1	Lead	1.6	1	1.6	ug/L			3010A	Total/NA	6020A	0	1.6		
BKG-02-MID	Water	M	1	Lead	2.7	1	2.7	ug/L			3010A	Total/NA	6020A	0	2.7		
BKG-03-EM	Water	M	1	Lead	3.8	1	3.8	ug/L	B	B	3010A	Total/NA	6020A	0	3.8		
BKG-03-HS	Water	M	1	Lead	2.7	1	2.7	ug/L	B	B	3010A	Total/NA	6020A	0	2.7		
BKG-03-MID	Water	M	1	Lead	3.5	1	3.5	ug/L	B	B	3010A	Total/NA	6020A	0	3.5	2.41111	3.8
E-01	Water	M	1	Lead	2	1	2	ug/L			3010A	Total/NA	6020A	0	2		
E-02	Water	M	1	Lead	1.9	1	1.9	ug/L			3010A	Total/NA	6020A	0	1.9		
E-03	Water	M	1	Lead	1.4	1	1.4	ug/L			3010A	Total/NA	6020A	0	1.4		
E-04	Water	M	1	Lead	1.1	1	1.1	ug/L			3010A	Total/NA	6020A	0	1.1		
E-05	Water	M	1	Lead	26	1	26	ug/L	B	B	3010A	Total/NA	6020A	0	26		
E-06	Water	M	1	Lead	35	1	35	ug/L	B	B	3010A	Total/NA	6020A	0	35		
E-07	Water	M	1	Lead	26	1	26	ug/L			3010A	Total/NA	6020A	0	26		
E-08	Water	M	1	Lead	27	1	27	ug/L			3010A	Total/NA	6020A	0	27		
E-09	Water	M	1	Lead	34	1	34	ug/L			3010A	Total/NA	6020A	0	34		
E-10	Water	M	1	Lead	100	1	100	ug/L	B	B	3010A	Total/NA	6020A	0	100		
E-11	Water	M	1	Lead	150	1	150	ug/L	B	B	3010A	Total/NA	6020A	0	150		
E-12	Water	M	1	Lead	380	1	380	ug/L	B	B	3010A	Total/NA	6020A	0	380		
E-13	Water	M	1	Lead	200	1	200	ug/L	B	B	3010A	Total/NA	6020A	0	200		
E-14	Water	M	1	Lead	270	1	270	ug/L	B	B	3010A	Total/NA	6020A	0	270		
E-15	Water	M	1	Lead	220	1	220	ug/L	B	B	3010A	Total/NA	6020A	0	220		
E-16	Water	M	1	Lead	200	1	200	ug/L	B	B	3010A	Total/NA	6020A	0	200		
E-17	Water	M	1	Lead	26	1	26	ug/L	B	B	3010A	Total/NA	6020A	0	26		
E-18	Water	M	1	Lead	8.5	1	8.5	ug/L	B	B	3010A	Total/NA	6020A	0	8.5		
E-19	Water	M	1	Lead	260	1	260	ug/L	B	B	3010A	Total/NA	6020A	0	260		
E-20	Water	M	1	Lead	110	1	110	ug/L	B	B	3010A	Total/NA	6020A	0	110		
E-21	Water	M	1	Lead	130	1	130	ug/L	B	B	3010A	Total/NA	6020A	0	130		
E-22	Water	M	1	Lead	45	1	45	ug/L	B	B	3010A	Total/NA	6020A	0	45	102.45	380
I-1	Sediment	M	1	Lead	4.7	1	4.7	mg/Kg			3050B	Total/NA	6020A	0	4.7		
I-2	Sediment	M	1	Lead	2.6	1	2.6	mg/Kg			3050B	Total/NA	6020A	0	2.6		
I-3	Sediment	M	1	Lead	9.5	1	9.5	mg/Kg	B	B	3050B	Total/NA	6020A	0	9.5		
I-4	Sediment	M	1	Lead	7.7	1	7.7	mg/Kg			3050B	Total/NA	6020A	0	7.7		
I-5	Sediment	M	1	Lead	5.4	1	5.4	mg/Kg			3050B	Total/NA	6020A	0	5.4	5.98	9.5
RB-01-11192012	Water	M	1	Lead	0.037	1	0.037	ug/L	J B	J B	3010A	Total/NA	6020A	0	0.037		
BKG-01-EM	Water	M	1	Magnesium	5000	1	5000	ug/L	B	B	3010A	Total/NA	6020A	0	5000		
BKG-01-HS	Water	M	1	Magnesium	5400	1	5400	ug/L	B	B	3010A	Total/NA	6020A	0	5400		
BKG-01-MID	Water	M	1	Magnesium	4700	1	4700	ug/L	B	B	3010A	Total/NA	6020A	0	4700		
BKG-02-EM	Water	M	1	Magnesium	5200	1	5200	ug/L	B	B	3010A	Total/NA	6020A	0	5200		
BKG-02-HS	Water	M	1	Magnesium	5200	1	5200	ug/L	B	B	3010A	Total/NA	6020A	0	5200		
BKG-02-MID	Water	M	1	Magnesium	4800	1	4800	ug/L	B	B	3010A	Total/NA	6020A	0	4800		
BKG-03-EM	Water	M	1	Magnesium	4600	1	4600	ug/L	B	B	3010A	Total/NA	6020A	0	4600		
BKG-03-HS	Water	M	1	Magnesium	4800	1	4800	ug/L	B	B	3010A	Total/NA	6020A	0	4800		
BKG-03-MID	Water	M	1	Magnesium	4500	1	4500	ug/L	B	B	3010A	Total/NA	6020A	0	4500	4911.11	5400
E-01	Water	M	1	Magnesium	7100	1	7100	ug/L	B	B	3010A	Total/NA	6020A	0	7100		
E-02	Water	M	1	Magnesium	5800	1	5800	ug/L	B	B	3010A	Total/NA	6020A	0	5800		
E-03	Water	M	1	Magnesium	5600	1	5600	ug/L	B	B	3010A	Total/NA	6020A	0	5600		
E-04	Water	M	1	Magnesium	5000	1	5000	ug/L	B	B	3010A	Total/NA	6020A	0	5000		
E-05	Water	M	1	Magnesium	5500	1	5500	ug/L	B	B	3010A	Total/NA	6020A	0	5500		
E-06	Water	M	1	Magnesium	7200	1	7200	ug/L	B	B	3010A	Total/NA	6020A	0	7200		
E-07	Water	M	1	Magnesium	12000	1	12000	ug/L			3010A	Total/NA	6020A	0	12000		
E-08	Water	M	1	Magnesium	17000	1	17000	ug/L			3010A	Total/NA	6020A	0	17000		
E-09	Water	M	1	Magnesium	15000	1	15000	ug/L	B	B	3010A	Total/NA	6020A	0	15000		
E-10	Water	M	1	Magnesium	9700	1	9700	ug/L	B	B	3010A	Total/NA	6020A	0	9700		
E-11	Water	M	1	Magnesium	14000	1	14000	ug/L	B	B	3010A	Total/NA	6020A	0	14000		
E-12	Water	M	1	Magnesium	47000	1	47000	ug/L	B	B	3010A	Total/NA	6020A	0	47000		
E-13	Water	M	1	Magnesium	39000	1	39000	ug/L	B	B	3010A	Total/NA	6020A	0	39000		
E-14	Water	M	1	Magnesium	81000	1	81000	ug/L	B	B	3010A	Total/NA	6020A	0	81000		
E-15	Water	M	1	Magnesium	64000	1	64000	ug/L	B	B	3010A	Total/NA	6020A	0	64000		
E-16	Water	M	1	Magnesium	22000	1	22000	ug/L	B	B	3010A	Total/NA	6020A	0	22000		
E-17	Water	M	1	Magnesium	11000	1	11000	ug/L			3010A	Total/NA	6020A	0	11000		
E-18	Water	M	1	Magnesium	10000	1	10000	ug/L	B	B	3010A	Total/NA	6020A	0	10000		
E-19	Water	M	1	Magnesium	26000	1	26000	ug/L	B	B	3010A	Total/NA	6020A	0	26000		
E-20	Water	M	1	Magnesium	17000	1	17000	ug/L	B	B	3010A	Total/NA	6020A	0	17000		
E-21	Water	M	1	Magnesium	18000	1	18000	ug/L	B	B	3010A	Total/NA	6020A	0	18000		
E-22	Water	M	1	Magnesium	6700	1	6700	ug/L	B	B	3010A	Total/NA	6020A	0	6700	20254.5	81000
I-1	Sediment	M	1	Magnesium	160	1	160	mg/Kg	B	B	3050B	Total/NA	6020A	0	160		
I-2	Sediment	M	1	Magnesium	100	1	100	mg/Kg	B	B	3050B	Total/NA	6020A	0	100		
I-3	Sediment	M	1	Magnesium	910	1	910	mg/Kg	B	B	3050B	Total/NA	6020A	0	910		
I-4	Sediment	M	1	Magnesium	720	1	720	mg/Kg	B	B	3050B	Total/NA	6020A	0	720		
I-5	Sediment	M	1	Magnesium	980	1	980	mg/Kg	B	B	3050B	Total/NA	6020A	0	980	574	980
RB-01-11192012	Water	M	1	Magnesium	170	1	170	ug/L	B	B	3010A	Total/NA	6020A	0	170		
BKG-01-EM	Water	M	1	Manganese	60	1	60	ug/L	B	B	3010A	Total/NA	6020A	0	60		
BKG-01-HS	Water	M	1	Manganese	30	1	30	ug/L	B	B	3010A	Total/NA	6020A	0	30		
BKG-01-MID	Water	M	1	Manganese	41	1	41	ug/L	B	B	3010A	Total/NA	6020A	0	41		
BKG-02-EM	Water	M	1	Manganese	70	1	70	ug/L			3010A	Total/NA	6020A	0	70		
BKG-02-HS	Water	M	1	Manganese	37	1	37	ug/L			3010A	Total/NA	6020A	0	37		
BKG-02-MID	Water	M	1	Manganese	58	1	58	ug/L			3010A	Total/NA	6020A	0	58		
BKG-03-EM	Water	M	1	Manganese	79	1	79	ug/L	B	B	3010A	Total/NA	6020A	0	79		

Client Sample ID	Matrix	sort	ion F	Analyte	Val_res	D?	Result	Unit	Qual	Flag	ep Metho	Prep Type	alysis Method	Check	Adj Val	Mean	Max
BKG-03-HS	Water	M	1	Manganese	75	1	75	ug/L	B	B	3010A	Total/NA	6020A	0	75		
BKG-03-MID	Water	M	1	Manganese	86	1	86	ug/L	B	B	3010A	Total/NA	6020A	0	86	59.5556	86
E-01	Water	M	1	Manganese	260	1	260	ug/L	B	B	3010A	Total/NA	6020A	0	260		
E-02	Water	M	1	Manganese	120	1	120	ug/L	B	B	3010A	Total/NA	6020A	0	120		
E-03	Water	M	1	Manganese	280	1	280	ug/L	B	B	3010A	Total/NA	6020A	0	280		
E-04	Water	M	1	Manganese	190	1	190	ug/L	B	B	3010A	Total/NA	6020A	0	190		
E-05	Water	M	1	Manganese	390	1	390	ug/L	B	B	3010A	Total/NA	6020A	0	390		
E-06	Water	M	1	Manganese	420	1	420	ug/L	B	B	3010A	Total/NA	6020A	0	420		
E-07	Water	M	1	Manganese	690	1	690	ug/L			3010A	Total/NA	6020A	0	690		
E-08	Water	M	1	Manganese	930	1	930	ug/L			3010A	Total/NA	6020A	0	930		
E-09	Water	M	1	Manganese	1900	1	1900	ug/L			3010A	Total/NA	6020A	0	1900		
E-10	Water	M	1	Manganese	1500	1	1500	ug/L			3010A	Total/NA	6020A	0	1500		
E-11	Water	M	1	Manganese	1500	1	1500	ug/L			3010A	Total/NA	6020A	0	1500		
E-12	Water	M	1	Manganese	5300	1	5300	ug/L			3010A	Total/NA	6020A	0	5300		
E-13	Water	M	1	Manganese	2600	1	2600	ug/L	B	B	3010A	Total/NA	6020A	0	2600		
E-14	Water	M	1	Manganese	5500	1	5500	ug/L	B	B	3010A	Total/NA	6020A	0	5500		
E-15	Water	M	1	Manganese	5900	1	5900	ug/L	B	B	3010A	Total/NA	6020A	0	5900		
E-16	Water	M	1	Manganese	2000	1	2000	ug/L	B	B	3010A	Total/NA	6020A	0	2000		
E-17	Water	M	1	Manganese	980	1	980	ug/L			3010A	Total/NA	6020A	0	980		
E-18	Water	M	1	Manganese	940	1	940	ug/L	B	B	3010A	Total/NA	6020A	0	940		
E-19	Water	M	1	Manganese	2500	1	2500	ug/L			3010A	Total/NA	6020A	0	2500		
E-20	Water	M	1	Manganese	1500	1	1500	ug/L	B	B	3010A	Total/NA	6020A	0	1500		
E-21	Water	M	1	Manganese	2500	1	2500	ug/L	B	B	3010A	Total/NA	6020A	0	2500		
E-22	Water	M	1	Manganese	810	1	810	ug/L	B	B	3010A	Total/NA	6020A	0	810	1759.55	5900
I-1	Sediment	M	1	Manganese	31	1	31	mg/Kg	B	B	3050B	Total/NA	6020A	0	31		
I-2	Sediment	M	1	Manganese	13	1	13	mg/Kg	B	B	3050B	Total/NA	6020A	0	13		
I-3	Sediment	M	1	Manganese	130	1	130	mg/Kg			3050B	Total/NA	6020A	0	130		
I-4	Sediment	M	1	Manganese	120	1	120	mg/Kg			3050B	Total/NA	6020A	0	120		
I-5	Sediment	M	1	Manganese	220	1	220	mg/Kg			3050B	Total/NA	6020A	0	220	102.8	220
RB-01-11192012	Water	M	1	Manganese	0.099	1	0.099	ug/L	J B	J B	3010A	Total/NA	6020A	0	0.099		
BKG-01-EM	Water	M	1	Mercury	4.8	1	4.8	ng/L			1631E	Total/NA	1631E	0	4.8		
BKG-01-HS	Water	M	1	Mercury	3.3	1	3.3	ng/L			1631E	Total/NA	1631E	0	3.3		
BKG-01-MID	Water	M	4	Mercury	5.4	1	5.4	ng/L			1631E	Total/NA	1631E	0	5.4		
BKG-02-EM	Water	M	1	Mercury	7.9	1	7.9	ng/L			1631E	Total/NA	1631E	0	7.9		
BKG-02-HS	Water	M	1	Mercury	3.2	1	3.2	ng/L			1631E	Total/NA	1631E	0	3.2		
BKG-02-MID	Water	M	1	Mercury	6.3	1	6.3	ng/L			1631E	Total/NA	1631E	0	6.3		
BKG-03-EM	Water	M	1	Mercury	8.8	1	8.8	ng/L	B	B	1631E	Total/NA	1631E	0	8.8		
BKG-03-HS	Water	M	1	Mercury	6.6	1	6.6	ng/L	B	B	1631E	Total/NA	1631E	0	6.6		
BKG-03-MID	Water	M	1	Mercury	7.3	1	7.3	ng/L	B	B	1631E	Total/NA	1631E	0	7.3	5.95556	8.8
E-01	Water	M	1	Mercury	3.8	1	3.8	ng/L			1631E	Total/NA	1631E	0	3.8		
E-02	Water	M	1	Mercury	2.4	1	2.4	ng/L			1631E	Total/NA	1631E	0	2.4		
E-03	Water	M	1	Mercury	2.7	1	2.7	ng/L	B	B	1631E	Total/NA	1631E	0	2.7		
E-04	Water	M	1	Mercury	2.3	1	2.3	ng/L			1631E	Total/NA	1631E	0	2.3		
E-05	Water	M	5	Mercury	38	1	38	ng/L			1631E	Total/NA	1631E	0	38		
E-06	Water	M	5	Mercury	47	1	47	ng/L			1631E	Total/NA	1631E	0	47		
E-07	Water	M	5	Mercury	33	1	33	ng/L			1631E	Total/NA	1631E	0	33		
E-08	Water	M	1	Mercury	9	1	9	ng/L			1631E	Total/NA	1631E	0	9		
E-09	Water	M	2	Mercury	49	1	49	ng/L			1631E	Total/NA	1631E	0	49		
E-10	Water	M	20	Mercury	350	1	350	ng/L			1631E	Total/NA	1631E	0	350		
E-11	Water	M	40	Mercury	410	1	410	ng/L			1631E	Total/NA	1631E	0	410		
E-12	Water	M	40	Mercury	400	1	400	ng/L			1631E	Total/NA	1631E	0	400		
E-13	Water	M	80	Mercury	730	1	730	ng/L			1631E	Total/NA	1631E	0	730		
E-14	Water	M	20	Mercury	110	1	110	ng/L			1631E	Total/NA	1631E	0	110		
E-15	Water	M	20	Mercury	120	1	120	ng/L			1631E	Total/NA	1631E	0	120		
E-16	Water	M	10	Mercury	44	1	44	ng/L			1631E	Total/NA	1631E	0	44		
E-17	Water	M	5	Mercury	31	1	31	ng/L			1631E	Total/NA	1631E	0	31		
E-18	Water	M	5	Mercury	20	1	20	ng/L			1631E	Total/NA	1631E	0	20		
E-19	Water	M	100	Mercury	490	1	490	ng/L			1631E	Total/NA	1631E	0	490		
E-20	Water	M	50	Mercury	250	1	250	ng/L			1631E	Total/NA	1631E	0	250		
E-21	Water	M	40	Mercury	240	1	240	ng/L			1631E	Total/NA	1631E	0	240		
E-22	Water	M	20	Mercury	120	1	120	ng/L			1631E	Total/NA	1631E	0	120	159.191	730
I-1	Sediment	M	1	Mercury	4.4	1	4.4	ug/Kg	B	B	1631E	Total/NA	1631E	0	4.4		
I-2	Sediment	M	4	Mercury	19	1	19	ug/Kg			1631E	Total/NA	1631E	0	19		
I-3	Sediment	M	5	Mercury	28	1	28	ug/Kg			1631E	Total/NA	1631E	0	28		
I-4	Sediment	M	1	Mercury	18	1	18	ug/Kg			1631E	Total/NA	1631E	0	18		
I-5	Sediment	M	10	Mercury	20	1	20	ug/Kg			1631E	Total/NA	1631E	0	20	17.88	28
RB-01-11192012	Water	M	1	Mercury	0.12	0	ND	ng/L	U	ND	1631E	Total/NA	1631E	0	0		
BKG-01-EM	Water	M	1	Nickel	2.6	1	2.6	ug/L			3010A	Total/NA	6020A	0	2.6		
BKG-01-HS	Water	M	1	Nickel	2.3	1	2.3	ug/L			3010A	Total/NA	6020A	0	2.3		
BKG-01-MID	Water	M	1	Nickel	2.7	1	2.7	ug/L			3010A	Total/NA	6020A	0	2.7		
BKG-02-EM	Water	M	1	Nickel	2.3	1	2.3	ug/L	B	B	3010A	Total/NA	6020A	0	2.3		
BKG-02-HS	Water	M	1	Nickel	1.9	1	1.9	ug/L	B	B	3010A	Total/NA	6020A	0	1.9		
BKG-02-MID	Water	M	1	Nickel	1.9	1	1.9	ug/L	B	B	3010A	Total/NA	6020A	0	1.9		
BKG-03-EM	Water	M	1	Nickel	3	1	3	ug/L			3010A	Total/NA	6020A	0	3		
BKG-03-HS	Water	M	1	Nickel	2.7	1	2.7	ug/L			3010A	Total/NA	6020A	0	2.7		
BKG-03-MID	Water	M	1	Nickel	2.9	1	2.9	ug/L			3010A	Total/NA	6020A	0	2.9	2.47778	3
E-01	Water	M	1	Nickel	3.6	1	3.6	ug/L			3010A	Total/NA	6020A	0	3.6		
E-02	Water	M	1	Nickel	3.2	1	3.2	ug/L			3010A	Total/NA	6020A	0	3.2		
E-03	Water	M	1	Nickel	2.6	1	2.6	ug/L			3010A	Total/NA	6020A	0	2.6		
E-04	Water	M	1	Nickel	2.5	1	2.5	ug/L			3010A	Total/NA	6020A	0	2.5		
E-05	Water	M	1	Nickel	8.3	1	8.3	ug/L			3010A	Total/NA	6020A	0	8.3		
E-06	Water	M	1	Nickel	16	1	16	ug/L			3010A	Total/NA	6020A	0	16		
E-07	Water	M	1	Nickel	36	1	36	ug/L			3010A	Total/NA	6020A	0	36		
E-08	Water	M	1	Nickel	48	1	48	ug/L			3010A	Total/NA	6020A	0	48		
E-09	Water	M	1	Nickel	49	1	49	ug/L	B	B	3010A	Total/NA	6020A	0	49		
E-10	Water	M	1	Nickel	30	1	30	ug/L	B	B	3010A	Total/NA	6020A	0	30		
E-11	Water	M	1	Nickel	59	1	59	ug/L	B	B	3010A	Total/NA	6020A	0	59		
E-12	Water	M	1	Nickel	190	1	190	ug/L	B	B	3010A	Total/NA	6020A	0	190		
E-13	Water	M	1	Nickel	130	1	130	ug/L			3010A	Total/NA	6020A	0	130		
E-14	Water	M	1	Nickel	250	1	250	ug/L			3010A	Total/NA	6020A	0	250		
E-15	Water	M	1	Nickel	230	1	230	ug/L			3010A	Total/NA	6020A	0	230		
E-16	Water	M	1	Nickel	86	1	86	ug/L			3010A	Total/NA	6020A	0	86		
E-17	Water	M	1	Nickel	17	1	17	ug/L			3010A	Total/NA	6020A	0	17		
E-18	Water	M	1	Nickel	9.1	1	9.1	ug/L			3010A	Total/NA	6020A	0	9.1		
E-19	Water	M	1	Nickel	88	1	88	ug/L			3010A	Total/NA	6020A	0	88		
E-20	Water	M	1	Nickel	39	1	39	ug/L			3010A	Total/NA	6020A	0	39		
E-21	Water	M	1	Nickel	42	1	42	ug/L			3010A	Total/NA	6020A	0	42		
E-22	Water	M	1	Nickel	18	1	18	ug/L			3010A	Total/NA	6020A	0	18	61.6955	250
I-1	Sediment	M	1	Nickel	2.4	1	2.4	mg/Kg			3050B	Total/NA	6020A	0	2.4		
I-2	Sediment	M	1	Nickel	1.4	1	1.4	mg/Kg	B	B	3050B	Total/NA	6020A	0	1.4		
I-3	Sediment	M	1	Nickel	8.3	1	8.3	mg/Kg			3050B	Total/NA	6020A	0	8.3		
I-4	Sediment	M	1	Nickel	5.1	1	5.1	mg/Kg	B	B	3050B	Total/NA	6020A	0	5.1		
I-5	Sediment	M	1	Nickel	5.3	1	5.3	mg/Kg	B	B	3050B	Total/NA	6020A	0	5.3	4.5	8.3
RB-01-11192012	Water	M	1	Nickel	0.17	0	ND	ug/L	U	ND	3010A	Total/NA	6020A	0	0		
BKG-01-EM	Water	M	1	Potassium	2500	1	2500	ug/L			3010A	Total/NA	6020A	0	2500		
BKG-01-HS	Water	M	1	Potassium	2600	1	2600	ug/L			3010A	Total/NA	6020A	0	2600		
BKG-01-MID	Water	M	1	Potassium	2300	1	2300	ug/L			3010A	Total/NA	6020A	0	2300		
BKG-02-EM	Water	M	1	Potassium	2400	1	2400	ug/L			3010A	Total/NA	6020A	0	2400		
BKG-02-HS	Water	M	1	Potassium	2600	1	2600	ug/L			3010A	Total/NA	6020A	0	2600		
BKG-02-MID	Water	M	1	Potassium	2300	1	2300	ug/L			3010A	Total/NA	6020A	0	2300		
BKG-03-EM	Water	M	1	Potassium	2500	1	2500	ug/L			3010A	Total/NA	6020A	0	2500		
BKG-03-HS	Water	M	1	Potassium	2600	1	2600	ug/L			3010A	Total/NA	6020A	0	2600		
BKG-03-MID	Water	M	1	Potassium	2400	1	2400	ug/L			3010A	Total/NA	6020A	0	2400	2466.67	2600
E-01	Water	M	1	Potassium	6300	1	6300	ug/L	B	B	3010A	Total/NA	6020A	0	6300		
E-02	Water	M	1	Potassium	4200	1	4200	ug/L	B	B	3010A	Total/NA	6020A	0	4200		
E-03	Water	M	1	Potassium	4300	1	4300	ug/L	B	B	3010A	Total/NA	6020A	0	4300		
E-04	Water	M	1	Potassium	3600	1	3600	ug/L	B	B	3010A	Total/NA	6020A	0	3600		
E-05	Water	M	1	Potassium	4300	1	4300	ug/L			3010A	Total/NA	6020A	0	4300		
E-06	Water	M	1	Potassium	5700	1	5700	ug/L			3010A	Total/NA	6020A	0	5700		
E-07	Water	M	1	Potassium	11000	1	11000	ug/L			3010A	Total/NA	6020A	0	11000		
E-08	Water	M	1	Potassium	16000	1	16000	ug/L			3010A	Total/NA	6020A	0	16000		
E-09	Water	M	1	Potassium	10000	1	10000	ug/L			3010A	Total/NA	6020A	0	10000		

Client Sample ID	Matrix	sort	ion F	Analyte	Val_res	D?	Result	Unit	Qual	Flag	ep Metho	Prep Type	alysis Method	Check	Adj Val	Mean	Max
E-10	Water	M	1	Potassium	6400	1	6400	ug/L			3010A	Total/NA	6020A	0	6400		
E-11	Water	M	1	Potassium	9400	1	9400	ug/L			3010A	Total/NA	6020A	0	9400		
E-12	Water	M	1	Potassium	21000	1	21000	ug/L			3010A	Total/NA	6020A	0	21000		
E-13	Water	M	1	Potassium	32000	1	32000	ug/L			3010A	Total/NA	6020A	0	32000		
E-14	Water	M	1	Potassium	56000	1	56000	ug/L			3010A	Total/NA	6020A	0	56000		
E-15	Water	M	1	Potassium	35000	1	35000	ug/L			3010A	Total/NA	6020A	0	35000		
E-16	Water	M	1	Potassium	16000	1	16000	ug/L			3010A	Total/NA	6020A	0	16000		
E-17	Water	M	1	Potassium	6100	1	6100	ug/L	B	B	3010A	Total/NA	6020A	0	6100		
E-18	Water	M	1	Potassium	5100	1	5100	ug/L			3010A	Total/NA	6020A	0	5100		
E-19	Water	M	1	Potassium	13000	1	13000	ug/L			3010A	Total/NA	6020A	0	13000		
E-20	Water	M	1	Potassium	9400	1	9400	ug/L	B	B	3010A	Total/NA	6020A	0	9400		
E-21	Water	M	1	Potassium	8600	1	8600	ug/L	B	B	3010A	Total/NA	6020A	0	8600		
E-22	Water	M	1	Potassium	4000	1	4000	ug/L	B	B	3010A	Total/NA	6020A	0	4000	13063.6	56000
I-1	Sediment	M	1	Potassium	130	1	130	mg/Kg			3050B	Total/NA	6020A	0	130		
I-2	Sediment	M	1	Potassium	110	1	110	mg/Kg	B	B	3050B	Total/NA	6020A	0	110		
I-3	Sediment	M	1	Potassium	380	1	380	mg/Kg	B	B	3050B	Total/NA	6020A	0	380		
I-4	Sediment	M	1	Potassium	350	1	350	mg/Kg			3050B	Total/NA	6020A	0	350		
I-5	Sediment	M	1	Potassium	530	1	530	mg/Kg			3050B	Total/NA	6020A	0	530	300	530
RB-01-11192012	Water	M	1	Potassium	570	1	570	ug/L			3010A	Total/NA	6020A	0	570		
BKG-01-EM	Water	M	1	Selenium	0.42	0	0.42	ug/L	U	ND	3010A	Total/NA	6020A	0	0		
BKG-01-HS	Water	M	1	Selenium	0.58	1	0.58	ug/L	J	J	3010A	Total/NA	6020A	0	0.58		
BKG-01-MID	Water	M	1	Selenium	0.42	0	ND	ug/L	U	ND	3010A	Total/NA	6020A	0	0		
BKG-02-EM	Water	M	1	Selenium	0.42	0	ND	ug/L	U	ND	3010A	Total/NA	6020A	0	0		
BKG-02-HS	Water	M	1	Selenium	0.42	0	ND	ug/L	U	ND	3010A	Total/NA	6020A	0	0		
BKG-02-MID	Water	M	1	Selenium	0.42	0	ND	ug/L	U	ND	3010A	Total/NA	6020A	0	0		
BKG-03-EM	Water	M	1	Selenium	1.3	1	1.3	ug/L	J B	J B	3010A	Total/NA	6020A	0	1.3		
BKG-03-HS	Water	M	1	Selenium	0.97	1	0.97	ug/L	J B	J B	3010A	Total/NA	6020A	0	0.97		
BKG-03-MID	Water	M	1	Selenium	1.2	1	1.2	ug/L	J B	J B	3010A	Total/NA	6020A	0	1.2	0.45	1.3
E-01	Water	M	1	Selenium	0.42	0	ND	ug/L	U	ND	3010A	Total/NA	6020A	0	0		
E-02	Water	M	1	Selenium	0.42	0	ND	ug/L	U	ND	3010A	Total/NA	6020A	0	0		
E-03	Water	M	1	Selenium	0.42	0	ND	ug/L	U	ND	3010A	Total/NA	6020A	0	0		
E-04	Water	M	1	Selenium	0.42	0	ND	ug/L	U	ND	3010A	Total/NA	6020A	0	0		
E-05	Water	M	1	Selenium	0.58	1	0.58	ug/L	J	J	3010A	Total/NA	6020A	0	0.58		
E-06	Water	M	1	Selenium	0.42	0	ND	ug/L	U	ND	3010A	Total/NA	6020A	0	0		
E-07	Water	M	1	Selenium	4.2	0	ND	ug/L	U	ND	3010A	Total/NA	6020A	0	0		
E-08	Water	M	1	Selenium	13	1	13	ug/L	J	J	3010A	Total/NA	6020A	0	13		
E-09	Water	M	1	Selenium	9.6	1	9.6	ug/L			3010A	Total/NA	6020A	0	9.6		
E-10	Water	M	1	Selenium	5.3	1	5.3	ug/L			3010A	Total/NA	6020A	0	5.3		
E-11	Water	M	1	Selenium	8	1	8	ug/L			3010A	Total/NA	6020A	0	8		
E-12	Water	M	1	Selenium	7.7	1	7.7	ug/L			3010A	Total/NA	6020A	0	7.7		
E-13	Water	M	1	Selenium	4.2	0	ND	ug/L	U	ND	3010A	Total/NA	6020A	0	0		
E-14	Water	M	1	Selenium	4.2	0	ND	ug/L	U	ND	3010A	Total/NA	6020A	0	0		
E-15	Water	M	1	Selenium	7	1	7	ug/L	B	B	3010A	Total/NA	6020A	0	7		
E-16	Water	M	1	Selenium	4.3	1	4.3	ug/L	J B	J B	3010A	Total/NA	6020A	0	4.3		
E-17	Water	M	1	Selenium	0.42	0	ND	ug/L	U	ND	3010A	Total/NA	6020A	0	0		
E-18	Water	M	1	Selenium	2.7	1	2.7	ug/L	J B	J B	3010A	Total/NA	6020A	0	2.7		
E-19	Water	M	1	Selenium	0.75	1	0.75	ug/L	J	J	3010A	Total/NA	6020A	0	0.75		
E-20	Water	M	1	Selenium	0.42	0	ND	ug/L	U	ND	3010A	Total/NA	6020A	0	0		
E-21	Water	M	1	Selenium	0.42	0	ND	ug/L	U	ND	3010A	Total/NA	6020A	0	0		
E-22	Water	M	1	Selenium	1.1	1	1.1	ug/L	J	J	3010A	Total/NA	6020A	0	1.1	2.72864	13
I-1	Sediment	M	1	Selenium	0.085	1	0.085	mg/Kg	J	J	3050B	Total/NA	6020A	0	0.085		
I-2	Sediment	M	1	Selenium	0.25	1	0.25	mg/Kg			3050B	Total/NA	6020A	0	0.25		
I-3	Sediment	M	1	Selenium	0.76	1	0.76	mg/Kg			3050B	Total/NA	6020A	0	0.76		
I-4	Sediment	M	1	Selenium	0.89	1	0.89	mg/Kg			3050B	Total/NA	6020A	0	0.89		
I-5	Sediment	M	1	Selenium	1.3	1	1.3	mg/Kg			3050B	Total/NA	6020A	0	1.3	0.657	1.3
RB-01-11192012	Water	M	1	Selenium	0.9	1	0.9	ug/L	J B	J B	3010A	Total/NA	6020A	0	0.9		
BKG-01-EM	Water	M	1	Silver	0.12	1	0.12	ug/L	J	J	3010A	Total/NA	6020A	0	0.12		
BKG-01-HS	Water	M	1	Silver	0.036	0	ND	ug/L	U	ND	3010A	Total/NA	6020A	0	0		
BKG-01-MID	Water	M	1	Silver	0.036	0	ND	ug/L	U	ND	3010A	Total/NA	6020A	0	0		
BKG-02-EM	Water	M	1	Silver	0.036	0	ND	ug/L	U	ND	3010A	Total/NA	6020A	0	0		
BKG-02-HS	Water	M	1	Silver	0.036	0	ND	ug/L	U	ND	3010A	Total/NA	6020A	0	0		
BKG-02-MID	Water	M	1	Silver	0.036	0	ND	ug/L	U	ND	3010A	Total/NA	6020A	0	0		
BKG-03-EM	Water	M	1	Silver	0.038	1	0.038	ug/L	J	J	3010A	Total/NA	6020A	0	0.038		
BKG-03-HS	Water	M	1	Silver	0.036	0	ND	ug/L	U	ND	3010A	Total/NA	6020A	0	0		
BKG-03-MID	Water	M	1	Silver	0.036	0	ND	ug/L	U	ND	3010A	Total/NA	6020A	0	0	0.01756	0.12
E-01	Water	M	1	Silver	0.073	1	0.073	ug/L	J B	J B	3010A	Total/NA	6020A	0	0.073		
E-02	Water	M	1	Silver	0.036	0	ND	ug/L	U	ND	3010A	Total/NA	6020A	0	0		
E-03	Water	M	1	Silver	0.036	0	ND	ug/L	U	ND	3010A	Total/NA	6020A	0	0		
E-04	Water	M	1	Silver	0.036	0	ND	ug/L	U	ND	3010A	Total/NA	6020A	0	0		
E-05	Water	M	1	Silver	0.39	1	0.39	ug/L	J	J	3010A	Total/NA	6020A	0	0.39		
E-06	Water	M	1	Silver	0.5	1	0.5	ug/L	J	J	3010A	Total/NA	6020A	0	0.5		
E-07	Water	M	1	Silver	0.37	1	0.37	ug/L	J	J	3010A	Total/NA	6020A	0	0.37		
E-08	Water	M	1	Silver	0.4	1	0.4	ug/L	J	J	3010A	Total/NA	6020A	0	0.4		
E-09	Water	M	1	Silver	0.31	1	0.31	ug/L	J	J	3010A	Total/NA	6020A	0	0.31		
E-10	Water	M	1	Silver	0.36	1	0.36	ug/L	J	J	3010A	Total/NA	6020A	0	0.36		
E-11	Water	M	1	Silver	0.86	1	0.86	ug/L	J	J	3010A	Total/NA	6020A	0	0.86		
E-12	Water	M	1	Silver	2.6	1	2.6	ug/L			3010A	Total/NA	6020A	0	2.6		
E-13	Water	M	1	Silver	0.61	1	0.61	ug/L	J	J	3010A	Total/NA	6020A	0	0.61		
E-14	Water	M	1	Silver	0.76	1	0.76	ug/L	J	J	3010A	Total/NA	6020A	0	0.76		
E-15	Water	M	1	Silver	2.6	1	2.6	ug/L			3010A	Total/NA	6020A	0	2.6		
E-16	Water	M	1	Silver	3.4	1	3.4	ug/L			3010A	Total/NA	6020A	0	3.4		
E-17	Water	M	1	Silver	0.35	1	0.35	ug/L	J	J	3010A	Total/NA	6020A	0	0.35		
E-18	Water	M	1	Silver	0.14	1	0.14	ug/L	J	J	3010A	Total/NA	6020A	0	0.14		
E-19	Water	M	1	Silver	3.1	1	3.1	ug/L			3010A	Total/NA	6020A	0	3.1		
E-20	Water	M	1	Silver	1.6	1	1.6	ug/L	B	B	3010A	Total/NA	6020A	0	1.6		
E-21	Water	M	1	Silver	1.7	1	1.7	ug/L	B	B	3010A	Total/NA	6020A	0	1.7		
E-22	Water	M	1	Silver	0.46	1	0.46	ug/L	J B	J B	3010A	Total/NA	6020A	0	0.46	0.93559	3.4
I-1	Sediment	M	1	Silver	0.023	1	0.023	mg/Kg	J	J	3050B	Total/NA	6020A	0	0.023		
I-2	Sediment	M	1	Silver	0.018	1	0.018	mg/Kg	J	J	3050B	Total/NA	6020A	0	0.018		
I-3	Sediment	M	1	Silver	0.035	1	0.035	mg/Kg	J	J	3050B	Total/NA	6020A	0	0.035		
I-4	Sediment	M	1	Silver	0.027	1	0.027	mg/Kg	J	J	3050B	Total/NA	6020A	0	0.027		
I-5	Sediment	M	1	Silver	0.022	1	0.022	mg/Kg	J	J	3050B	Total/NA	6020A	0	0.022	0.025	0.035
RB-01-11192012	Water	M	1	Silver	0.036	0	ND	ug/L	U	ND	3010A	Total/NA	6020A	0	0		
BKG-01-EM	Water	M	1	Sodium	16000	1	16000	ug/L	B	B	3010A	Total/NA	6020A	0	16000		
BKG-01-HS	Water	M	1	Sodium	18000	1	18000	ug/L	B	B	3010A	Total/NA	6020A	0	18000		
BKG-01-MID	Water	M	1	Sodium	15000	1	15000	ug/L	B	B	3010A	Total/NA	6020A	0	15000		
BKG-02-EM	Water	M	1	Sodium	15000	1	15000	ug/L			3010A	Total/NA	6020A	0	15000		
BKG-02-HS	Water	M	1	Sodium	16000	1	16000	ug/L			3010A	Total/NA	6020A	0	16000		
BKG-02-MID	Water	M	1	Sodium	14000	1	14000	ug/L			3010A	Total/NA	6020A	0	14000		
BKG-03-EM	Water	M	1	Sodium	16000	1	16000	ug/L			3010A	Total/NA	6020A	0	16000		
BKG-03-HS	Water	M	1	Sodium	16000	1	16000	ug/L			3010A	Total/NA	6020A	0	16000		
BKG-03-MID	Water	M	1	Sodium	16000	1	16000	ug/L			3010A	Total/NA	6020A	0	16000	15777.8	18000
E-01	Water	M	1	Sodium	24000	1	24000	ug/L	B	B	3010A	Total/NA	6020A	0	24000		
E-02	Water	M	1	Sodium	19000	1	19000	ug/L	B	B	3010A	Total/NA	6020A	0	19000		
E-03	Water	M	1	Sodium	19000	1	19000	ug/L	B	B	3010A	Total/NA	6020A	0	19000		
E-04	Water	M	1	Sodium	16000	1	16000	ug/L	B	B	3010A	Total/NA	6020A	0	16000		
E-05	Water	M	1	Sodium	18000	1	18000	ug/L	B	B	3010A	Total/NA	6020A	0	18000		
E-06	Water	M	1	Sodium	15000	1	15000	ug/L	B	B	3010A	Total/NA	6020A	0	15000		
E-07	Water	M	1	Sodium	19000	1	19000	ug/L	B	B	3010A	Total/NA	6020A	0	19000		
E-08	Water	M	1	Sodium	24000	1	24000	ug/L	B	B	3010A	Total/NA	6020A	0	24000		
E-09	Water	M	1	Sodium	17000	1	17000	ug/L			3010A	Total/NA	6020A	0	17000		
E-10	Water	M	1	Sodium	15000	1	15000	ug/L			3010A	Total/NA	6020A	0	15000		
E-11	Water	M	1	Sodium	13000	1	13000	ug/L			3010A	Total/NA	6020A	0	13000		
E-12	Water	M	1	Sodium	11000	1	11000	ug/L			3010A	Total/NA	6020A	0	11000		
E-13	Water	M	1	Sodium	16000	1	16000	ug/L	B	B	3010A	Total/NA	6020A	0	16000		
E-14	Water	M	1	Sodium	28000	1	28000	ug/L	B	B	3010A	Total/NA	6020A	0	28000		
E-15	Water	M	1	Sodium	16000	1	16000	ug/L			3010A	Total/NA	6020A	0	16000		
E-16	Water	M	1	Sodium	17000	1	17000	ug/L			3010A	Total/NA	6020A	0	17000		
E-17	Water	M	1	Sodium	15000	1	15000	ug/L	B	B	3010A	Total/NA	6020A	0	15000		
E-18	Water	M	1	Sodium	15000	1	15000	ug/L	B	B	3010A	Total/NA	6020A	0	15000		
E-19	Water	M	1	Sodium	14000	1	14000	ug/L			3010A	Total/NA	6020A	0	14000		
E-20	Water	M	1	Sodium	16000	1	16000	ug/L	B	B	3010A	Total/NA	6020A	0	16000		

Client Sample ID	Matrix	sort	ion F	Analyte	Val_res	D?	Result	Unit	Qual	Flag	ep Metho	Prep Type	alysis Method	Check	Adj Val	Mean	Max
E-21	Water	M	1	Sodium	19000	1	19000	ug/L	B	B	3010A	Total/NA	6020A	0	19000		
E-22	Water	M	1	Sodium	18000	1	18000	ug/L	B	B	3010A	Total/NA	6020A	0	18000	17454.5	28000
I-1	Sediment	M	1	Sodium	20	1	20	mg/Kg			3050B	Total/NA	6020A	0	20		
I-2	Sediment	M	1	Sodium	94	1	94	mg/Kg	B	B	3050B	Total/NA	6020A	0	94		
I-3	Sediment	M	1	Sodium	37	1	37	mg/Kg	B	B	3050B	Total/NA	6020A	0	37		
I-4	Sediment	M	1	Sodium	20	1	20	mg/Kg			3050B	Total/NA	6020A	0	20		
I-5	Sediment	M	1	Sodium	28	1	28	mg/Kg			3050B	Total/NA	6020A	0	28	39.8	94
RB-01-11192012	Water	M	1	Sodium	1100	1	1100	ug/L			3010A	Total/NA	6020A	0	1100		
BKG-01-EM	Water	M	1	Thallium	0.061	1	0.061	ug/L	J B	J B	3010A	Total/NA	6020A	0	0.061		
BKG-01-HS	Water	M	1	Thallium	0.068	1	0.068	ug/L	J B	J B	3010A	Total/NA	6020A	0	0.068		
BKG-01-MID	Water	M	1	Thallium	0.05	1	0.05	ug/L	J B	J B	3010A	Total/NA	6020A	0	0.05		
BKG-02-EM	Water	M	1	Thallium	0.066	1	0.066	ug/L	J	J	3010A	Total/NA	6020A	0	0.066		
BKG-02-HS	Water	M	1	Thallium	0.032	1	0.032	ug/L	J	J	3010A	Total/NA	6020A	0	0.032		
BKG-02-MID	Water	M	1	Thallium	0.04	1	0.04	ug/L	J	J	3010A	Total/NA	6020A	0	0.04		
BKG-03-EM	Water	M	1	Thallium	0.027	1	0.027	ug/L	J B	J B	3010A	Total/NA	6020A	0	0.027		
BKG-03-HS	Water	M	1	Thallium	0.049	1	0.049	ug/L	J B	J B	3010A	Total/NA	6020A	0	0.049		
BKG-03-MID	Water	M	1	Thallium	0.02	1	0.02	ug/L	J B	J B	3010A	Total/NA	6020A	0	0.02	0.04589	0.068
E-01	Water	M	1	Thallium	0.16	1	0.16	ug/L	J B	J B	3010A	Total/NA	6020A	0	0.16		
E-02	Water	M	1	Thallium	0.2	1	0.2	ug/L	J B	J B	3010A	Total/NA	6020A	0	0.2		
E-03	Water	M	1	Thallium	0.11	1	0.11	ug/L	J B	J B	3010A	Total/NA	6020A	0	0.11		
E-04	Water	M	1	Thallium	0.092	1	0.092	ug/L	J B	J B	3010A	Total/NA	6020A	0	0.092		
E-05	Water	M	1	Thallium	0.16	1	0.16	ug/L	J B	J B	3010A	Total/NA	6020A	0	0.16		
E-06	Water	M	1	Thallium	0.16	1	0.16	ug/L	J B	J B	3010A	Total/NA	6020A	0	0.16		
E-07	Water	M	1	Thallium	0.95	1	0.95	ug/L	J	J	3010A	Total/NA	6020A	0	0.95		
E-08	Water	M	1	Thallium	0.93	1	0.93	ug/L	J	J	3010A	Total/NA	6020A	0	0.93		
E-09	Water	M	1	Thallium	0.36	1	0.36	ug/L	J	J	3010A	Total/NA	6020A	0	0.36		
E-10	Water	M	1	Thallium	0.2	1	0.2	ug/L	J	J	3010A	Total/NA	6020A	0	0.2		
E-11	Water	M	1	Thallium	0.4	1	0.4	ug/L	J	J	3010A	Total/NA	6020A	0	0.4		
E-12	Water	M	1	Thallium	1.2	1	1.2	ug/L			3010A	Total/NA	6020A	0	1.2		
E-13	Water	M	1	Thallium	3	1	3	ug/L	J B	J B	3010A	Total/NA	6020A	0	3		
E-14	Water	M	1	Thallium	2.6	1	2.6	ug/L	J B	J B	3010A	Total/NA	6020A	0	2.6		
E-15	Water	M	1	Thallium	1.6	1	1.6	ug/L	B	B	3010A	Total/NA	6020A	0	1.6		
E-16	Water	M	1	Thallium	0.56	1	0.56	ug/L	J B	J B	3010A	Total/NA	6020A	0	0.56		
E-17	Water	M	1	Thallium	0.44	1	0.44	ug/L	J B	J B	3010A	Total/NA	6020A	0	0.44		
E-18	Water	M	1	Thallium	0.13	1	0.13	ug/L	J	J	3010A	Total/NA	6020A	0	0.13		
E-19	Water	M	1	Thallium	0.79	1	0.79	ug/L	J	J	3010A	Total/NA	6020A	0	0.79		
E-20	Water	M	1	Thallium	0.47	1	0.47	ug/L	J B	J B	3010A	Total/NA	6020A	0	0.47		
E-21	Water	M	1	Thallium	0.5	1	0.5	ug/L	J B	J B	3010A	Total/NA	6020A	0	0.5		
E-22	Water	M	1	Thallium	0.29	1	0.29	ug/L	J B	J B	3010A	Total/NA	6020A	0	0.29	0.69555	3
I-1	Sediment	M	1	Thallium	0.051	1	0.051	mg/Kg	J B	J B	3050B	Total/NA	6020A	0	0.051		
I-2	Sediment	M	1	Thallium	0.027	1	0.027	mg/Kg	J B	J B	3050B	Total/NA	6020A	0	0.027		
I-3	Sediment	M	1	Thallium	0.046	1	0.046	mg/Kg	J B	J B	3050B	Total/NA	6020A	0	0.046		
I-4	Sediment	M	1	Thallium	0.04	1	0.04	mg/Kg	J B	J B	3050B	Total/NA	6020A	0	0.04		
I-5	Sediment	M	1	Thallium	0.046	1	0.046	mg/Kg	J B	J B	3050B	Total/NA	6020A	0	0.046	0.042	0.051
RB-01-11192012	Water	M	1	Thallium	0.015	0	ND	ug/L	U	ND	3010A	Total/NA	6020A	0	0		
BKG-01-EM	Water	M	1	Vanadium	6.6	1	6.6	ug/L	B	B	3010A	Total/NA	6020A	0	6.6		
BKG-01-HS	Water	M	1	Vanadium	5.6	1	5.6	ug/L	B	B	3010A	Total/NA	6020A	0	5.6		
BKG-01-MID	Water	M	1	Vanadium	5.9	1	5.9	ug/L	B	B	3010A	Total/NA	6020A	0	5.9		
BKG-02-EM	Water	M	1	Vanadium	0.082	0	ND	ug/L	U	ND	3010A	Total/NA	6020A	0	0		
BKG-02-HS	Water	M	1	Vanadium	4.8	1	4.8	ug/L			3010A	Total/NA	6020A	0	4.8		
BKG-02-MID	Water	M	1	Vanadium	2.5	1	2.5	ug/L			3010A	Total/NA	6020A	0	2.5		
BKG-03-EM	Water	M	1	Vanadium	3.2	1	3.2	ug/L			3010A	Total/NA	6020A	0	3.2		
BKG-03-HS	Water	M	1	Vanadium	4	1	4	ug/L			3010A	Total/NA	6020A	0	4		
BKG-03-MID	Water	M	1	Vanadium	3	1	3	ug/L			3010A	Total/NA	6020A	0	3	3.95556	6.6
E-01	Water	M	1	Vanadium	4.5	1	4.5	ug/L	B	B	3010A	Total/NA	6020A	0	4.5		
E-02	Water	M	1	Vanadium	11	1	11	ug/L	B	B	3010A	Total/NA	6020A	0	11		
E-03	Water	M	1	Vanadium	7.8	1	7.8	ug/L	B	B	3010A	Total/NA	6020A	0	7.8		
E-04	Water	M	1	Vanadium	5.4	1	5.4	ug/L	B	B	3010A	Total/NA	6020A	0	5.4		
E-05	Water	M	1	Vanadium	39	1	39	ug/L	B	B	3010A	Total/NA	6020A	0	39		
E-06	Water	M	1	Vanadium	57	1	57	ug/L	B	B	3010A	Total/NA	6020A	0	57		
E-07	Water	M	1	Vanadium	130	1	130	ug/L			3010A	Total/NA	6020A	0	130		
E-08	Water	M	1	Vanadium	160	1	160	ug/L			3010A	Total/NA	6020A	0	160		
E-09	Water	M	1	Vanadium	79	1	79	ug/L			3010A	Total/NA	6020A	0	79		
E-10	Water	M	1	Vanadium	41	1	41	ug/L			3010A	Total/NA	6020A	0	41		
E-11	Water	M	1	Vanadium	88	1	88	ug/L			3010A	Total/NA	6020A	0	88		
E-12	Water	M	1	Vanadium	260	1	260	ug/L			3010A	Total/NA	6020A	0	260		
E-13	Water	M	1	Vanadium	240	1	240	ug/L	B	B	3010A	Total/NA	6020A	0	240		
E-14	Water	M	1	Vanadium	450	1	450	ug/L	B	B	3010A	Total/NA	6020A	0	450		
E-15	Water	M	1	Vanadium	370	1	370	ug/L			3010A	Total/NA	6020A	0	370		
E-16	Water	M	1	Vanadium	170	1	170	ug/L			3010A	Total/NA	6020A	0	170		
E-17	Water	M	1	Vanadium	40	1	40	ug/L			3010A	Total/NA	6020A	0	40		
E-18	Water	M	1	Vanadium	8.2	1	8.2	ug/L			3010A	Total/NA	6020A	0	8.2		
E-19	Water	M	1	Vanadium	150	1	150	ug/L			3010A	Total/NA	6020A	0	150		
E-20	Water	M	1	Vanadium	59	1	59	ug/L			3010A	Total/NA	6020A	0	59		
E-21	Water	M	1	Vanadium	79	1	79	ug/L			3010A	Total/NA	6020A	0	79		
E-22	Water	M	1	Vanadium	89	1	89	ug/L			3010A	Total/NA	6020A	0	89	115.359	450
I-1	Sediment	M	1	Vanadium	33	1	33	mg/Kg	B	B	3050B	Total/NA	6020A	0	33		
I-2	Sediment	M	1	Vanadium	28	1	28	mg/Kg	B	B	3050B	Total/NA	6020A	0	28		
I-3	Sediment	M	1	Vanadium	4.8	1	4.8	mg/Kg			3050B	Total/NA	6020A	0	4.8		
I-4	Sediment	M	1	Vanadium	4.8	1	4.8	mg/Kg			3050B	Total/NA	6020A	0	4.8		
I-5	Sediment	M	1	Vanadium	6.5	1	6.5	mg/Kg			3050B	Total/NA	6020A	0	6.5	15.42	33
RB-01-11192012	Water	M	1	Vanadium	0.79	1	0.79	ug/L	J	J	3010A	Total/NA	6020A	0	0.79		
BKG-01-EM	Water	M	1	Zinc	27	1	27	ug/L	B	B	3010A	Total/NA	6020A	0	27		
BKG-01-HS	Water	M	1	Zinc	15	1	15	ug/L	B	B	3010A	Total/NA	6020A	0	15		
BKG-01-MID	Water	M	1	Zinc	17	1	17	ug/L	B	B	3010A	Total/NA	6020A	0	17		
BKG-02-EM	Water	M	1	Zinc	20	1	20	ug/L			3010A	Total/NA	6020A	0	20		
BKG-02-HS	Water	M	1	Zinc	20	1	20	ug/L			3010A	Total/NA	6020A	0	20		
BKG-02-MID	Water	M	1	Zinc	18	1	18	ug/L			3010A	Total/NA	6020A	0	18		
BKG-03-EM	Water	M	1	Zinc	25	1	25	ug/L			3010A	Total/NA	6020A	0	25		
BKG-03-HS	Water	M	1	Zinc	20	1	20	ug/L			3010A	Total/NA	6020A	0	20		
BKG-03-MID	Water	M	1	Zinc	22	1	22	ug/L			3010A	Total/NA	6020A	0	22	20.4444	27
E-01	Water	M	1	Zinc	25	1	25	ug/L	B	B	3010A	Total/NA	6020A	0	25		
E-02	Water	M	1	Zinc	65	1	65	ug/L	B	B	3010A	Total/NA	6020A	0	65		
E-03	Water	M	1	Zinc	24	1	24	ug/L	B	B	3010A	Total/NA	6020A	0	24		
E-04	Water	M	1	Zinc	17	1	17	ug/L	B	B	3010A	Total/NA	6020A	0	17		
E-05	Water	M	1	Zinc	63	1	63	ug/L	B	B	3010A	Total/NA	6020A	0	63		
E-06	Water	M	1	Zinc	91	1	91	ug/L	B	B	3010A	Total/NA	6020A	0	91		
E-07	Water	M	1	Zinc	230	1	230	ug/L			3010A	Total/NA	6020A	0	230		
E-08	Water	M	1	Zinc	320	1	320	ug/L			3010A	Total/NA	6020A	0	320		
E-09	Water	M	1	Zinc	200	1	200	ug/L			3010A	Total/NA	6020A	0	200		
E-10	Water	M	1	Zinc	410	1	410	ug/L			3010A	Total/NA	6020A	0	410		
E-11	Water	M	1	Zinc	660	1	660	ug/L			3010A	Total/NA	6020A	0	660		
E-12	Water	M	1	Zinc	1700	1	1700	ug/L			3010A	Total/NA	6020A	0	1700		
E-13	Water	M	1	Zinc	890	1	890	ug/L	B	B	3010A	Total/NA	6020A	0	890		
E-14	Water	M	1	Zinc	1300	1	1300	ug/L	B	B	3010A	Total/NA	6020A	0	1300		
E-15	Water	M	1	Zinc	1000	1	1000	ug/L			3010A	Total/NA	6020A	0	1000		
E-16	Water	M	1	Zinc	740	1	740	ug/L			3010A	Total/NA	6020A	0	740		
E-17	Water	M	1	Zinc	100	1	100	ug/L			3010A	Total/NA	6020A	0	100		
E-18	Water	M	1	Zinc	69	1	69	ug/L			3010A	Total/NA	6020A	0	69		
E-19	Water	M	1	Zinc	740	1	740	ug/L			3010A	Total/NA	6020A	0	740		
E-20	Water	M	1	Zinc	350	1	350	ug/L			3010A	Total/NA	6020A	0	350		
E-21	Water	M	1	Zinc	390	1	390	ug/L			3010A	Total/NA	6020A	0	390		
E-22	Water	M	1	Zinc	140	1	140	ug/L			3010A	Total/NA	6020A	0	140	432.909	1700
I-1	Sediment	M	1	Zinc	9.5	1	9.5	mg/Kg	B	B	3050B	Total/NA	6020A	0	9.5		
I-2	Sediment	M	1	Zinc	18	1	18	mg/Kg			3050B	Total/NA	6020A	0	18		
I-3	Sediment	M	1	Zinc	81	1	81	mg/Kg			3050B	Total/NA	6020A	0	81		
I-4	Sediment	M	1	Zinc	51	1	51	mg/Kg			3050B	Total/NA	6020A	0	51		
I-5	Sediment	M	1	Zinc	37	1	37	mg/Kg			3050B	Total/NA	6020A	0	37	39.3	81
RB-01-11192012	Water	M	1	Zinc	0.96	0	ND	ug/L	U	ND	3010A	Total/NA	6020A	0	0		
BKG-01-EM	Water	MF	1	Aluminum	6.6	1	6.6	ug/L	J B	J B	3005A	Dissolved	6020A	0	6.6		
BKG-01-HS	Water	MF	1	Aluminum	6.2	1	6.2	ug/L	J B	J B	3005A	Dissolved	6020A	0	6.2		
BKG-01-MID	Water	MF	1	Aluminum	6.2	1	6.2	ug/L	J B	J B	3005A	Dissolved	6020A	0	6.2		

Client Sample ID	Matrix	sort	ion F	Analyte	Val_res	D?	Result	Unit	Qual	Flag	ep Metho	Prep Type	alysis Method	Check	Adj Val	Mean	Max
BKG-02-EM	Water	MF	1	Aluminum	80	1	80	ug/L	J B	J B	3005A	Dissolved	6020A	0	80		
BKG-02-HS	Water	MF	1	Aluminum	74	1	74	ug/L	J B	J B	3005A	Dissolved	6020A	0	74		
BKG-02-MID	Water	MF	1	Aluminum	44	1	44	ug/L	J B	J B	3005A	Dissolved	6020A	0	44		
BKG-03-EM	Water	MF	1	Aluminum	16	1	16	ug/L	J B	J B	3005A	Dissolved	6020	0	16		
BKG-03-HS	Water	MF	1	Aluminum	11	1	11	ug/L	J B	J B	3005A	Dissolved	6020	0	11		
BKG-03-MID	Water	MF	1	Aluminum	19	1	19	ug/L	J B	J B	3005A	Dissolved	6020	0	19	29.2222	80
E-01	Water	MF	1	Aluminum	6	1	6	ug/L	J	J	3005A	Dissolved	6020A	0	6		
E-02	Water	MF	1	Aluminum	34	1	34	ug/L			3005A	Dissolved	6020A	0	34		
E-03	Water	MF	1	Aluminum	430	1	430	ug/L			3005A	Dissolved	6020A	0	430		
E-04	Water	MF	1	Aluminum	67	1	67	ug/L			3005A	Dissolved	6020A	0	67		
E-05	Water	MF	1	Aluminum	17	1	17	ug/L	J	J	3005A	Dissolved	6020A	0	17		
E-06	Water	MF	1	Aluminum	24	1	24	ug/L	J B	J B	3005A	Dissolved	6020A	0	24		
E-07	Water	MF	1	Aluminum	150	1	150	ug/L	B	B	3005A	Dissolved	6020A	0	150		
E-08	Water	MF	1	Aluminum	160	1	160	ug/L	J B	J B	3005A	Dissolved	6020A	0	160		
E-09	Water	MF	1	Aluminum	39	1	39	ug/L	J B	J B	3005A	Dissolved	6020A	0	39		
E-10	Water	MF	1	Aluminum	97	1	97	ug/L	J B	J B	3005A	Dissolved	6020A	0	97		
E-11	Water	MF	1	Aluminum	47	1	47	ug/L	J B	J B	3005A	Dissolved	6020A	0	47		
E-12	Water	MF	1	Aluminum	38	1	38	ug/L	J	J	3005A	Dissolved	6020A	0	38		
E-13	Water	MF	1	Aluminum	310	1	310	ug/L			3005A	Dissolved	6020A	0	310		
E-14	Water	MF	1	Aluminum	1400	1	1400	ug/L			3005A	Dissolved	6020	0	1400		
E-15	Water	MF	1	Aluminum	27000	1	27000	ug/L	B	B	3005A	Dissolved	6020	0	27000		
E-16	Water	MF	1	Aluminum	35	1	35	ug/L	B	B	3005A	Dissolved	6020	0	35		
E-17	Water	MF	1	Aluminum	17	1	17	ug/L	J	J	3005A	Dissolved	6020	0	17		
E-18	Water	MF	1	Aluminum	57	1	57	ug/L			3005A	Dissolved	6020	0	57		
E-19	Water	MF	1	Aluminum	12	1	12	ug/L	J	J	3005A	Dissolved	6020	0	12		
E-20	Water	MF	1	Aluminum	140	1	140	ug/L			3005A	Dissolved	6020	0	140		
E-21	Water	MF	1	Aluminum	330	1	330	ug/L	B	B	3005A	Dissolved	6020	0	330		
E-22	Water	MF	1	Aluminum	680	1	680	ug/L			3005A	Dissolved	6020	0	680	1413.18	27000
RB-01-11192012	Water	MF	1	Aluminum	5.5	1	5.5	ug/L	J B	J B	3005A	Dissolved	6020	0	5.5		
BKG-01-EM	Water	MF	1	Antimony	0.31	1	0.31	ug/L	J	J	3005A	Dissolved	6020A	0	0.31		
BKG-01-HS	Water	MF	1	Antimony	0.25	1	0.25	ug/L	J	J	3005A	Dissolved	6020A	0	0.25		
BKG-01-MID	Water	MF	1	Antimony	0.23	1	0.23	ug/L	J	J	3005A	Dissolved	6020A	0	0.23		
BKG-02-EM	Water	MF	1	Antimony	0.8	1	0.8	ug/L	J	J	3005A	Dissolved	6020A	0	0.8		
BKG-02-HS	Water	MF	1	Antimony	1.2	1	1.2	ug/L	J	J	3005A	Dissolved	6020A	0	1.2		
BKG-02-MID	Water	MF	1	Antimony	0.76	1	0.76	ug/L	J	J	3005A	Dissolved	6020A	0	0.76		
BKG-03-EM	Water	MF	1	Antimony	0.31	1	0.31	ug/L	J	J	3005A	Dissolved	6020	0	0.31		
BKG-03-HS	Water	MF	1	Antimony	0.33	1	0.33	ug/L	J	J	3005A	Dissolved	6020	0	0.33		
BKG-03-MID	Water	MF	1	Antimony	0.27	1	0.27	ug/L	J	J	3005A	Dissolved	6020	0	0.27	0.49556	1.2
E-01	Water	MF	1	Antimony	0.58	1	0.58	ug/L	J	J	3005A	Dissolved	6020A	0	0.58		
E-02	Water	MF	1	Antimony	0.46	1	0.46	ug/L	J	J	3005A	Dissolved	6020A	0	0.46		
E-03	Water	MF	1	Antimony	0.32	1	0.32	ug/L	J	J	3005A	Dissolved	6020A	0	0.32		
E-04	Water	MF	1	Antimony	0.28	1	0.28	ug/L	J	J	3005A	Dissolved	6020A	0	0.28		
E-05	Water	MF	1	Antimony	0.65	1	0.65	ug/L	J	J	3005A	Dissolved	6020A	0	0.65		
E-06	Water	MF	1	Antimony	1.4	1	1.4	ug/L	J	J	3005A	Dissolved	6020A	0	1.4		
E-07	Water	MF	1	Antimony	0.76	1	0.76	ug/L	J	J	3005A	Dissolved	6020A	0	0.76		
E-08	Water	MF	1	Antimony	2	1	2	ug/L	J	J	3005A	Dissolved	6020A	0	2		
E-09	Water	MF	1	Antimony	1.4	1	1.4	ug/L	J	J	3005A	Dissolved	6020A	0	1.4		
E-10	Water	MF	1	Antimony	1.1	1	1.1	ug/L	J	J	3005A	Dissolved	6020A	0	1.1		
E-11	Water	MF	1	Antimony	1.8	1	1.8	ug/L	J	J	3005A	Dissolved	6020A	0	1.8		
E-12	Water	MF	1	Antimony	1	1	1	ug/L	J	J	3005A	Dissolved	6020A	0	1		
E-13	Water	MF	1	Antimony	0.53	1	0.53	ug/L	J	J	3005A	Dissolved	6020A	0	0.53		
E-14	Water	MF	1	Antimony	0.94	1	0.94	ug/L	J	J	3005A	Dissolved	6020	0	0.94		
E-15	Water	MF	1	Antimony	1.2	1	1.2	ug/L	J B	J B	3005A	Dissolved	6020	0	1.2		
E-16	Water	MF	1	Antimony	2.4	1	2.4	ug/L			3005A	Dissolved	6020	0	2.4		
E-17	Water	MF	1	Antimony	0.71	1	0.71	ug/L	J	J	3005A	Dissolved	6020	0	0.71		
E-18	Water	MF	1	Antimony	1.4	1	1.4	ug/L	J	J	3005A	Dissolved	6020	0	1.4		
E-19	Water	MF	1	Antimony	1.9	1	1.9	ug/L	J	J	3005A	Dissolved	6020	0	1.9		
E-20	Water	MF	1	Antimony	1.3	1	1.3	ug/L	J	J	3005A	Dissolved	6020	0	1.3		
E-21	Water	MF	1	Antimony	1.9	1	1.9	ug/L	J	J	3005A	Dissolved	6020	0	1.9		
E-22	Water	MF	1	Antimony	7.3	1	7.3	ug/L	J	J	3005A	Dissolved	6020	0	7.3	1.42409	7.3
RB-01-11192012	Water	MF	1	Antimony	0.24	1	0.24	ug/L	J	J	3005A	Dissolved	6020	0	0.24		
BKG-01-EM	Water	MF	1	Arsenic	0.83	1	0.83	ug/L	J	J	3005A	Dissolved	6020A	0	0.83		
BKG-01-HS	Water	MF	1	Arsenic	1.8	1	1.8	ug/L			3005A	Dissolved	6020A	0	1.8		
BKG-01-MID	Water	MF	1	Arsenic	0.69	1	0.69	ug/L	J	J	3005A	Dissolved	6020A	0	0.69		
BKG-02-EM	Water	MF	1	Arsenic	2.9	0	ND	ug/L	U	ND	3005A	Dissolved	6020A	0	0		
BKG-02-HS	Water	MF	1	Arsenic	2.9	0	ND	ug/L	U	ND	3005A	Dissolved	6020A	0	0		
BKG-02-MID	Water	MF	1	Arsenic	2.9	0	ND	ug/L	U	ND	3005A	Dissolved	6020A	0	0		
BKG-03-EM	Water	MF	1	Arsenic	0.29	0	ND	ug/L	U	ND	3005A	Dissolved	6020	0	0		
BKG-03-HS	Water	MF	1	Arsenic	0.29	0	ND	ug/L	U	ND	3005A	Dissolved	6020	0	0		
BKG-03-MID	Water	MF	1	Arsenic	0.29	0	ND	ug/L	U	ND	3005A	Dissolved	6020	0	0	0.36889	1.8
E-01	Water	MF	1	Arsenic	3.5	1	3.5	ug/L			3005A	Dissolved	6020A	0	3.5		
E-02	Water	MF	1	Arsenic	3.8	1	3.8	ug/L			3005A	Dissolved	6020A	0	3.8		
E-03	Water	MF	1	Arsenic	3.7	1	3.7	ug/L			3005A	Dissolved	6020A	0	3.7		
E-04	Water	MF	1	Arsenic	2.8	1	2.8	ug/L			3005A	Dissolved	6020A	0	2.8		
E-05	Water	MF	1	Arsenic	2.2	1	2.2	ug/L			3005A	Dissolved	6020A	0	2.2		
E-06	Water	MF	1	Arsenic	2.3	1	2.3	ug/L			3005A	Dissolved	6020A	0	2.3		
E-07	Water	MF	1	Arsenic	1.5	1	1.5	ug/L			3005A	Dissolved	6020A	0	1.5		
E-08	Water	MF	1	Arsenic	18	1	18	ug/L	B	B	3005A	Dissolved	6020A	0	18		
E-09	Water	MF	1	Arsenic	5.4	1	5.4	ug/L	J B	J B	3005A	Dissolved	6020A	0	5.4		
E-10	Water	MF	1	Arsenic	9.4	1	9.4	ug/L	J B	J B	3005A	Dissolved	6020A	0	9.4		
E-11	Water	MF	1	Arsenic	2.9	0	ND	ug/L	U	ND	3005A	Dissolved	6020A	0	0		
E-12	Water	MF	1	Arsenic	9.7	1	9.7	ug/L	J	J	3005A	Dissolved	6020A	0	9.7		
E-13	Water	MF	1	Arsenic	6	1	6	ug/L	J	J	3005A	Dissolved	6020A	0	6		
E-14	Water	MF	1	Arsenic	3	1	3	ug/L			3005A	Dissolved	6020	0	3		
E-15	Water	MF	1	Arsenic	5.6	1	5.6	ug/L			3005A	Dissolved	6020	0	5.6		
E-16	Water	MF	1	Arsenic	0.54	1	0.54	ug/L	J	J	3005A	Dissolved	6020	0	0.54		
E-17	Water	MF	1	Arsenic	1.6	1	1.6	ug/L			3005A	Dissolved	6020	0	1.6		
E-18	Water	MF	1	Arsenic	1.5	1	1.5	ug/L			3005A	Dissolved	6020	0	1.5		
E-19	Water	MF	1	Arsenic	4.1	1	4.1	ug/L			3005A	Dissolved	6020	0	4.1		
E-20	Water	MF	1	Arsenic	1.9	1	1.9	ug/L			3005A	Dissolved	6020	0	1.9		
E-21	Water	MF	1	Arsenic	4.5	1	4.5	ug/L			3005A	Dissolved	6020	0	4.5		
E-22	Water	MF	1	Arsenic	6	1	6	ug/L	J	J	3005A	Dissolved	6020	0	6	4.41091	18
RB-01-11192012	Water	MF	1	Arsenic	0.29	0	ND	ug/L	U	ND	3005A	Dissolved	6020	0	0		
BKG-01-EM	Water	MF	1	Barium	22	1	22	ug/L			3005A	Dissolved	6020A	0	22		
BKG-01-HS	Water	MF	1	Barium	22	1	22	ug/L			3005A	Dissolved	6020A	0	22		
BKG-01-MID	Water	MF	1	Barium	22	1	22	ug/L			3005A	Dissolved	6020A	0	22		
BKG-02-EM	Water	MF	1	Barium	25	1	25	ug/L	J	J	3005A	Dissolved	6020A	0	25		
BKG-02-HS	Water	MF	1	Barium	20	1	20	ug/L	J	J	3005A	Dissolved	6020A	0	20		
BKG-02-MID	Water	MF	1	Barium	30	1	30	ug/L	J	J	3005A	Dissolved	6020A	0	30		
BKG-03-EM	Water	MF	1	Barium	22	1	22	ug/L	B	B	3005A	Dissolved	6020	0	22		
BKG-03-HS	Water	MF	1	Barium	22	1	22	ug/L	B	B	3005A	Dissolved	6020	0	22		
BKG-03-MID	Water	MF	1	Barium	22	1	22	ug/L	B	B	3005A	Dissolved	6020	0	22	23	30
E-01	Water	MF	1	Barium	33	1	33	ug/L			3005A	Dissolved	6020A	0	33		
E-02	Water	MF	1	Barium	34	1	34	ug/L			3005A	Dissolved	6020A	0	34		
E-03	Water	MF	1	Barium	40	1	40	ug/L			3005A	Dissolved	6020A	0	40		
E-04	Water	MF	1	Barium	36	1	36	ug/L			3005A	Dissolved	6020A	0	36		
E-05	Water	MF	1	Barium	32	1	32	ug/L			3005A	Dissolved	6020A	0	32		
E-06	Water	MF	1	Barium	33	1	33	ug/L			3005A	Dissolved	6020A	0	33		
E-07	Water	MF	1	Barium	38	1	38	ug/L			3005A	Dissolved	6020A	0	38		
E-08	Water	MF	1	Barium	46	1	46	ug/L	J	J	3005A	Dissolved	6020A	0	46		
E-09	Water	MF	1	Barium	59	1	59	ug/L	J	J	3005A	Dissolved	6020A	0	59		
E-10	Water	MF	1	Barium	55	1	55	ug/L	J	J	3005A	Dissolved	6020A	0	55		
E-11	Water	MF	1	Barium	33	1	33	ug/L	J	J	3005A	Dissolved	6020A	0	33		
E-12	Water	MF	1	Barium	48	1	48	ug/L	J	J	3005A	Dissolved	6020A	0	48		
E-13	Water	MF	1	Barium	38	1	38	ug/L	J	J	3005A	Dissolved	6020A	0	38		
E-14	Water	MF	1	Barium	42	1	42	ug/L			3005A	Dissolved	6020	0	42		
E-15	Water	MF	1	Barium	210	1	210	ug/L			3005A	Dissolved	6020	0	210		
E-16	Water	MF	1	Barium	40	1	40	ug/L	B	B	3005A	Dissolved	6020	0	40		
E-17	Water	MF	1	Barium	47	1	47	ug/L			3005A	Dissolved	6020	0	47		
E-18	Water	MF	1	Barium	45	1	45	ug/L	B	B	3005A	Dissolved	6020	0	45		
E-19	Water	MF	1	Barium	41	1	41	ug/L			3005A	Dissolved	6020	0	41		
E-20	Water	MF	1	Barium	92	1	92	ug/L			3005A	Dissolved	6020	0	92		

Client Sample ID	Matrix	sort	ion F	Analyte	Val_res	D?	Result	Unit	Qual	Flag	ep Metho	Prep Type	alysis Method	Check	Adj Val	Mean	Max
E-21	Water	MF	1	Barium	56	1	56	ug/L	B	B	3005A	Dissolved	6020	0	56		
E-22	Water	MF	1	Barium	290	1	290	ug/L			3005A	Dissolved	6020	0	290	63.0909	290
RB-01-11192012	Water	MF	1	Barium	2.3	1	2.3	ug/L	J B	J B	3005A	Dissolved	6020	0	2.3		
BKG-01-EM	Water	MF	1	Beryllium	0.037	0	0.037	ug/L	U	ND	3005A	Dissolved	6020A	0	0		
BKG-01-HS	Water	MF	1	Beryllium	0.037	0	ND	ug/L	U	ND	3005A	Dissolved	6020A	0	0		
BKG-01-MID	Water	MF	1	Beryllium	0.037	0	ND	ug/L	U	ND	3005A	Dissolved	6020A	0	0		
BKG-02-EM	Water	MF	1	Beryllium	0.37	0	ND	ug/L	U	ND	3005A	Dissolved	6020A	0	0		
BKG-02-HS	Water	MF	1	Beryllium	0.37	0	ND	ug/L	U	ND	3005A	Dissolved	6020A	0	0		
BKG-02-MID	Water	MF	1	Beryllium	0.37	0	ND	ug/L	U	ND	3005A	Dissolved	6020A	0	0		
BKG-03-EM	Water	MF	1	Beryllium	0.037	0	ND	ug/L	U	ND	3005A	Dissolved	6020	0	0		
BKG-03-HS	Water	MF	1	Beryllium	0.039	1	0.039	ug/L	J	J	3005A	Dissolved	6020	0	0.039		
BKG-03-MID	Water	MF	1	Beryllium	0.037	0	ND	ug/L	U	ND	3005A	Dissolved	6020	0	0	0.00433	0.039
E-01	Water	MF	1	Beryllium	0.037	0	ND	ug/L	U	ND	3005A	Dissolved	6020A	0	0		
E-02	Water	MF	1	Beryllium	0.037	0	ND	ug/L	U	ND	3005A	Dissolved	6020A	0	0		
E-03	Water	MF	1	Beryllium	0.037	0	ND	ug/L	U	ND	3005A	Dissolved	6020A	0	0		
E-04	Water	MF	1	Beryllium	0.037	0	ND	ug/L	U	ND	3005A	Dissolved	6020A	0	0		
E-05	Water	MF	1	Beryllium	0.037	0	ND	ug/L	U	ND	3005A	Dissolved	6020A	0	0		
E-06	Water	MF	1	Beryllium	0.037	0	ND	ug/L	U	ND	3005A	Dissolved	6020A	0	0		
E-07	Water	MF	1	Beryllium	0.037	0	ND	ug/L	U	ND	3005A	Dissolved	6020A	0	0		
E-08	Water	MF	1	Beryllium	0.37	0	ND	ug/L	U	ND	3005A	Dissolved	6020A	0	0		
E-09	Water	MF	1	Beryllium	0.37	0	ND	ug/L	U	ND	3005A	Dissolved	6020A	0	0		
E-10	Water	MF	1	Beryllium	0.37	0	ND	ug/L	U	ND	3005A	Dissolved	6020A	0	0		
E-11	Water	MF	1	Beryllium	0.37	0	ND	ug/L	U	ND	3005A	Dissolved	6020A	0	0		
E-12	Water	MF	1	Beryllium	0.37	0	ND	ug/L	U	ND	3005A	Dissolved	6020A	0	0		
E-13	Water	MF	1	Beryllium	0.37	0	ND	ug/L	U	ND	3005A	Dissolved	6020A	0	0		
E-14	Water	MF	1	Beryllium	0.046	1	0.046	ug/L	J	J	3005A	Dissolved	6020	0	0.046		
E-15	Water	MF	1	Beryllium	1.4	1	1.4	ug/L			3005A	Dissolved	6020	0	1.4		
E-16	Water	MF	1	Beryllium	0.037	0	ND	ug/L	U	ND	3005A	Dissolved	6020	0	0		
E-17	Water	MF	1	Beryllium	0.037	0	ND	ug/L	U	ND	3005A	Dissolved	6020	0	0		
E-18	Water	MF	1	Beryllium	0.037	0	ND	ug/L	U	ND	3005A	Dissolved	6020	0	0		
E-19	Water	MF	1	Beryllium	0.037	0	ND	ug/L	U	ND	3005A	Dissolved	6020	0	0		
E-20	Water	MF	1	Beryllium	0.037	0	ND	ug/L	U	ND	3005A	Dissolved	6020	0	0		
E-21	Water	MF	1	Beryllium	0.037	0	ND	ug/L	U	ND	3005A	Dissolved	6020	0	0		
E-22	Water	MF	1	Beryllium	0.37	0	ND	ug/L	U	ND	3005A	Dissolved	6020	0	0	0.06573	1.4
RB-01-11192012	Water	MF	1	Beryllium	0.037	0	ND	ug/L	U	ND	3005A	Dissolved	6020	0	0		
BKG-01-EM	Water	MF	1	Cadmium	0.11	0	0.11	ug/L	U	ND	3005A	Dissolved	6020A	0	0		
BKG-01-HS	Water	MF	1	Cadmium	0.11	0	ND	ug/L	U	ND	3005A	Dissolved	6020A	0	0		
BKG-01-MID	Water	MF	1	Cadmium	0.11	0	ND	ug/L	U	ND	3005A	Dissolved	6020A	0	0		
BKG-02-EM	Water	MF	1	Cadmium	1.1	0	ND	ug/L	U	ND	3005A	Dissolved	6020A	0	0		
BKG-02-HS	Water	MF	1	Cadmium	1.1	0	ND	ug/L	U	ND	3005A	Dissolved	6020A	0	0		
BKG-02-MID	Water	MF	1	Cadmium	1.1	0	ND	ug/L	U	ND	3005A	Dissolved	6020A	0	0		
BKG-03-EM	Water	MF	1	Cadmium	0.11	0	ND	ug/L	U	ND	3005A	Dissolved	6020	0	0		
BKG-03-HS	Water	MF	1	Cadmium	0.11	0	ND	ug/L	U	ND	3005A	Dissolved	6020	0	0		
BKG-03-MID	Water	MF	1	Cadmium	0.11	0	ND	ug/L	U	ND	3005A	Dissolved	6020	0	0	0	0
E-01	Water	MF	1	Cadmium	0.11	0	ND	ug/L	U	ND	3005A	Dissolved	6020A	0	0		
E-02	Water	MF	1	Cadmium	0.11	0	ND	ug/L	U	ND	3005A	Dissolved	6020A	0	0		
E-03	Water	MF	1	Cadmium	0.11	0	ND	ug/L	U	ND	3005A	Dissolved	6020A	0	0		
E-04	Water	MF	1	Cadmium	0.11	0	ND	ug/L	U	ND	3005A	Dissolved	6020A	0	0		
E-05	Water	MF	1	Cadmium	0.11	0	ND	ug/L	U	ND	3005A	Dissolved	6020A	0	0		
E-06	Water	MF	1	Cadmium	0.11	0	ND	ug/L	U	ND	3005A	Dissolved	6020A	0	0		
E-07	Water	MF	1	Cadmium	0.11	0	ND	ug/L	U	ND	3005A	Dissolved	6020A	0	0		
E-08	Water	MF	1	Cadmium	1.1	0	ND	ug/L	U	ND	3005A	Dissolved	6020A	0	0		
E-09	Water	MF	1	Cadmium	1.1	0	ND	ug/L	U	ND	3005A	Dissolved	6020A	0	0		
E-10	Water	MF	1	Cadmium	1.1	0	ND	ug/L	U	ND	3005A	Dissolved	6020A	0	0		
E-11	Water	MF	1	Cadmium	1.1	0	ND	ug/L	U	ND	3005A	Dissolved	6020A	0	0		
E-12	Water	MF	1	Cadmium	1.1	0	ND	ug/L	U	ND	3005A	Dissolved	6020A	0	0		
E-13	Water	MF	1	Cadmium	1.1	0	ND	ug/L	U	ND	3005A	Dissolved	6020A	0	0		
E-14	Water	MF	1	Cadmium	0.11	0	ND	ug/L	U	ND	3005A	Dissolved	6020	0	0		
E-15	Water	MF	1	Cadmium	0.39	1	0.39	ug/L	J	J	3005A	Dissolved	6020	0	0.39		
E-16	Water	MF	1	Cadmium	0.11	0	ND	ug/L	U	ND	3005A	Dissolved	6020	0	0		
E-17	Water	MF	1	Cadmium	0.11	0	ND	ug/L	U	ND	3005A	Dissolved	6020	0	0		
E-18	Water	MF	1	Cadmium	0.11	0	ND	ug/L	U	ND	3005A	Dissolved	6020	0	0		
E-19	Water	MF	1	Cadmium	0.11	0	ND	ug/L	U	ND	3005A	Dissolved	6020	0	0		
E-20	Water	MF	1	Cadmium	0.11	0	ND	ug/L	U	ND	3005A	Dissolved	6020	0	0		
E-21	Water	MF	1	Cadmium	0.11	0	ND	ug/L	U	ND	3005A	Dissolved	6020	0	0		
E-22	Water	MF	1	Cadmium	1.1	0	ND	ug/L	U	ND	3005A	Dissolved	6020	0	0	0.01773	0.39
RB-01-11192012	Water	MF	1	Cadmium	0.11	0	ND	ug/L	U	ND	3005A	Dissolved	6020	0	0		
BKG-01-EM	Water	MF	1	Calcium	14000	1	14000	ug/L	B	B	3005A	Dissolved	6020A	0	14000		
BKG-01-HS	Water	MF	1	Calcium	15000	1	15000	ug/L	B	B	3005A	Dissolved	6020A	0	15000		
BKG-01-MID	Water	MF	1	Calcium	14000	1	14000	ug/L	B	B	3005A	Dissolved	6020A	0	14000		
BKG-02-EM	Water	MF	1	Calcium	16000	1	16000	ug/L	B	B	3005A	Dissolved	6020A	0	16000		
BKG-02-HS	Water	MF	1	Calcium	13000	1	13000	ug/L	B	B	3005A	Dissolved	6020A	0	13000		
BKG-02-MID	Water	MF	1	Calcium	15000	1	15000	ug/L	B	B	3005A	Dissolved	6020A	0	15000		
BKG-03-EM	Water	MF	1	Calcium	15000	1	15000	ug/L	B	B	3005A	Dissolved	6020	0	15000		
BKG-03-HS	Water	MF	1	Calcium	15000	1	15000	ug/L	B	B	3005A	Dissolved	6020	0	15000		
BKG-03-MID	Water	MF	1	Calcium	15000	1	15000	ug/L	B	B	3005A	Dissolved	6020	0	15000	14666.7	16000
E-01	Water	MF	1	Calcium	18000	1	18000	ug/L			3005A	Dissolved	6020A	0	18000		
E-02	Water	MF	1	Calcium	17000	1	17000	ug/L			3005A	Dissolved	6020A	0	17000		
E-03	Water	MF	1	Calcium	17000	1	17000	ug/L			3005A	Dissolved	6020A	0	17000		
E-04	Water	MF	1	Calcium	16000	1	16000	ug/L			3005A	Dissolved	6020A	0	16000		
E-05	Water	MF	1	Calcium	16000	1	16000	ug/L			3005A	Dissolved	6020A	0	16000		
E-06	Water	MF	1	Calcium	14000	1	14000	ug/L	B	B	3005A	Dissolved	6020A	0	14000		
E-07	Water	MF	1	Calcium	13000	1	13000	ug/L	B	B	3005A	Dissolved	6020A	0	13000		
E-08	Water	MF	1	Calcium	14000	1	14000	ug/L	B	B	3005A	Dissolved	6020A	0	14000		
E-09	Water	MF	1	Calcium	12000	1	12000	ug/L	B	B	3005A	Dissolved	6020A	0	12000		
E-10	Water	MF	1	Calcium	14000	1	14000	ug/L	B	B	3005A	Dissolved	6020A	0	14000		
E-11	Water	MF	1	Calcium	8700	1	8700	ug/L	B	B	3005A	Dissolved	6020A	0	8700		
E-12	Water	MF	1	Calcium	11000	1	11000	ug/L	B	B	3005A	Dissolved	6020A	0	11000		
E-13	Water	MF	1	Calcium	8000	1	8000	ug/L	B	B	3005A	Dissolved	6020A	0	8000		
E-14	Water	MF	1	Calcium	8800	1	8800	ug/L	B	B	3005A	Dissolved	6020	0	8800		
E-15	Water	MF	1	Calcium	10000	1	10000	ug/L	B	B	3005A	Dissolved	6020	0	10000		
E-16	Water	MF	1	Calcium	13000	1	13000	ug/L	B	B	3005A	Dissolved	6020	0	13000		
E-17	Water	MF	1	Calcium	19000	1	19000	ug/L	B	B	3005A	Dissolved	6020	0	19000		
E-18	Water	MF	1	Calcium	28000	1	28000	ug/L	B	B	3005A	Dissolved	6020	0	28000		
E-19	Water	MF	1	Calcium	14000	1	14000	ug/L	B	B	3005A	Dissolved	6020	0	14000		
E-20	Water	MF	1	Calcium	27000	1	27000	ug/L	B	B	3005A	Dissolved	6020	0	27000		
E-21	Water	MF	1	Calcium	28000	1	28000	ug/L	B	B	3005A	Dissolved	6020	0	28000		
E-22	Water	MF	1	Calcium	140000	1	140000	ug/L	B	B	3005A	Dissolved	6020	0	140000	21204.5	140000
RB-01-11192012	Water	MF	1	Calcium	410	1	410	ug/L	B	B	3005A	Dissolved	6020	0	410		
BKG-01-EM	Water	MF	1	Chromium	2.3	1	2.3	ug/L			3005A	Dissolved	6020A	0	2.3		
BKG-01-HS	Water	MF	1	Chromium	1.7	1	1.7	ug/L	J	J	3005A	Dissolved	6020A	0	1.7		
BKG-01-MID	Water	MF	1	Chromium	1.1	1	1.1	ug/L	J	J	3005A	Dissolved	6020A	0	1.1		
BKG-02-EM	Water	MF	1	Chromium	32	1	32	ug/L			3005A	Dissolved	6020A	0	32		
BKG-02-HS	Water	MF	1	Chromium	38	1	38	ug/L			3005A	Dissolved	6020A	0	38		
BKG-02-MID	Water	MF	1	Chromium	31	1	31	ug/L			3005A	Dissolved	6020A	0	31		
BKG-03-EM	Water	MF	1	Chromium	6.7	1	6.7	ug/L	B	B	3005A	Dissolved	6020	0	6.7		
BKG-03-HS	Water	MF	1	Chromium	6.7	1	6.7	ug/L	B	B	3005A	Dissolved	6020	0	6.7		
BKG-03-MID	Water	MF	1	Chromium	5.9	1	5.9	ug/L	B	B	3005A	Dissolved	6020	0	5.9	13.9333	38
E-01	Water	MF	1	Chromium	11	1	11	ug/L			3005A	Dissolved	6020A	0	11		
E-02	Water	MF	1	Chromium	13	1	13	ug/L			3005A	Dissolved	6020A	0	13		
E-03	Water	MF	1	Chromium	14	1	14	ug/L			3005A	Dissolved	6020A	0	14		
E-04	Water	MF	1	Chromium	17	1	17	ug/L			3005A	Dissolved	6020A	0	17		
E-05	Water	MF	1	Chromium	17	1	17	ug/L			3005A	Dissolved	6020A	0	17		
E-06	Water	MF	1	Chromium	2.1	1	2.1	ug/L			3005A	Dissolved	6020A	0	2.1		
E-07	Water	MF	1	Chromium	2.3	1	2.3	ug/L			3005A	Dissolved	6020A	0	2.3		
E-08	Water	MF	1	Chromium	35	1	35	ug/L			3005A	Dissolved	6020A	0	35		
E-09	Water	MF	1	Chromium	31	1	31	ug/L			3005A	Dissolved	6020A	0	31		
E-10	Water	MF	1	Chromium	22	1	22	ug/L			3005A	Dissolved	6020A	0	22		
E-11	Water	MF	1	Chromium	24	1	24	ug/L			3005A	Dissolved	6020A	0	24		
E-12	Water	MF	1	Chromium	16	1	16	ug/L	J	J	3005A	Dissolved	6020A	0	16		
E-13	Water	MF	1	Chromium	16	1	16	ug/L	J	J	3005A	Dissolved	6020A	0	16		
E-14	Water	MF	1	Chromium	5.3	1	5.3	ug/L			3005A	Dissolved	6020	0	5.3		

Client Sample ID	Matrix	sort	ion F	Analyte	Val_res	D?	Result	Unit	Qual	Flag	ep Metho	Prep Type	alysis Method	Check	Adj Val	Mean	Max
E-15	Water	MF	1	Chromium	68	1	68	ug/L			3005A	Dissolved	6020	0	68		
E-16	Water	MF	1	Chromium	5.9	1	5.9	ug/L	B	B	3005A	Dissolved	6020	0	5.9		
E-17	Water	MF	1	Chromium	1.6	1	1.6	ug/L	J	J	3005A	Dissolved	6020	0	1.6		
E-18	Water	MF	1	Chromium	1.7	1	1.7	ug/L	J	J	3005A	Dissolved	6020	0	1.7		
E-19	Water	MF	1	Chromium	0.54	0	ND	ug/L	U	ND	3005A	Dissolved	6020	0	0		
E-20	Water	MF	1	Chromium	0.91	1	0.91	ug/L	J	J	3005A	Dissolved	6020	0	0.91		
E-21	Water	MF	1	Chromium	2.6	1	2.6	ug/L			3005A	Dissolved	6020	0	2.6		
E-22	Water	MF	1	Chromium	5.9	1	5.9	ug/L	J	J	3005A	Dissolved	6020	0	5.9	14.1959	68
RB-01-11192012	Water	MF	1	Chromium	6	1	6	ug/L	B	B	3005A	Dissolved	6020	0	6		
BKG-01-EM	Water	MF	1	Cobalt	0.16	1	0.16	ug/L	J	J	3005A	Dissolved	6020A	0	0.16		
BKG-01-HS	Water	MF	1	Cobalt	0.15	1	0.15	ug/L	J	J	3005A	Dissolved	6020A	0	0.15		
BKG-01-MID	Water	MF	1	Cobalt	0.14	1	0.14	ug/L	J	J	3005A	Dissolved	6020A	0	0.14		
BKG-02-EM	Water	MF	1	Cobalt	0.32	1	0.32	ug/L	J	J	3005A	Dissolved	6020A	0	0.32		
BKG-02-HS	Water	MF	1	Cobalt	0.26	1	0.26	ug/L	J	J	3005A	Dissolved	6020A	0	0.26		
BKG-02-MID	Water	MF	1	Cobalt	0.26	0	ND	ug/L	U	ND	3005A	Dissolved	6020A	0	0		
BKG-03-EM	Water	MF	1	Cobalt	0.1	1	0.1	ug/L	J	J	3005A	Dissolved	6020	0	0.1		
BKG-03-HS	Water	MF	1	Cobalt	0.11	1	0.11	ug/L	J	J	3005A	Dissolved	6020	0	0.11		
BKG-03-MID	Water	MF	1	Cobalt	0.083	1	0.083	ug/L	J	J	3005A	Dissolved	6020	0	0.083	0.147	0.32
E-01	Water	MF	1	Cobalt	0.82	1	0.82	ug/L			3005A	Dissolved	6020A	0	0.82		
E-02	Water	MF	1	Cobalt	0.54	1	0.54	ug/L			3005A	Dissolved	6020A	0	0.54		
E-03	Water	MF	1	Cobalt	1.2	1	1.2	ug/L			3005A	Dissolved	6020A	0	1.2		
E-04	Water	MF	1	Cobalt	0.68	1	0.68	ug/L			3005A	Dissolved	6020A	0	0.68		
E-05	Water	MF	1	Cobalt	0.85	1	0.85	ug/L			3005A	Dissolved	6020A	0	0.85		
E-06	Water	MF	1	Cobalt	0.44	1	0.44	ug/L	J	J	3005A	Dissolved	6020A	0	0.44		
E-07	Water	MF	1	Cobalt	0.4	1	0.4	ug/L	J	J	3005A	Dissolved	6020A	0	0.4		
E-08	Water	MF	1	Cobalt	0.5	1	0.5	ug/L	J	J	3005A	Dissolved	6020A	0	0.5		
E-09	Water	MF	1	Cobalt	0.8	1	0.8	ug/L	J	J	3005A	Dissolved	6020A	0	0.8		
E-10	Water	MF	1	Cobalt	0.73	1	0.73	ug/L	J	J	3005A	Dissolved	6020A	0	0.73		
E-11	Water	MF	1	Cobalt	0.58	1	0.58	ug/L	J	J	3005A	Dissolved	6020A	0	0.58		
E-12	Water	MF	1	Cobalt	1.4	1	1.4	ug/L	J	J	3005A	Dissolved	6020A	0	1.4		
E-13	Water	MF	1	Cobalt	0.85	1	0.85	ug/L	J	J	3005A	Dissolved	6020A	0	0.85		
E-14	Water	MF	1	Cobalt	1.1	1	1.1	ug/L			3005A	Dissolved	6020	0	1.1		
E-15	Water	MF	1	Cobalt	12	1	12	ug/L			3005A	Dissolved	6020	0	12		
E-16	Water	MF	1	Cobalt	0.57	1	0.57	ug/L			3005A	Dissolved	6020	0	0.57		
E-17	Water	MF	1	Cobalt	1	1	1	ug/L			3005A	Dissolved	6020	0	1		
E-18	Water	MF	1	Cobalt	1.9	1	1.9	ug/L			3005A	Dissolved	6020	0	1.9		
E-19	Water	MF	1	Cobalt	0.79	1	0.79	ug/L			3005A	Dissolved	6020	0	0.79		
E-20	Water	MF	1	Cobalt	0.99	1	0.99	ug/L			3005A	Dissolved	6020	0	0.99		
E-21	Water	MF	1	Cobalt	0.7	1	0.7	ug/L			3005A	Dissolved	6020	0	0.7		
E-22	Water	MF	1	Cobalt	5.5	1	5.5	ug/L			3005A	Dissolved	6020	0	5.5	1.56091	12
RB-01-11192012	Water	MF	1	Cobalt	0.058	1	0.058	ug/L	J	J	3005A	Dissolved	6020	0	0.058		
BKG-01-EM	Water	MF	1	Copper	3.2	1	3.2	ug/L	B	B	3005A	Dissolved	6020A	0	3.2		
BKG-01-HS	Water	MF	1	Copper	3.3	1	3.3	ug/L	B	B	3005A	Dissolved	6020A	0	3.3		
BKG-01-MID	Water	MF	1	Copper	3.5	1	3.5	ug/L	B	B	3005A	Dissolved	6020A	0	3.5		
BKG-02-EM	Water	MF	1	Copper	130	1	130	ug/L			3005A	Dissolved	6020A	0	130		
BKG-02-HS	Water	MF	1	Copper	140	1	140	ug/L			3005A	Dissolved	6020A	0	140		
BKG-02-MID	Water	MF	1	Copper	130	1	130	ug/L			3005A	Dissolved	6020A	0	130		
BKG-03-EM	Water	MF	1	Copper	7.6	1	7.6	ug/L	B	B	3005A	Dissolved	6020	0	7.6		
BKG-03-HS	Water	MF	1	Copper	6.6	1	6.6	ug/L	B	B	3005A	Dissolved	6020	0	6.6		
BKG-03-MID	Water	MF	1	Copper	6.8	1	6.8	ug/L	B	B	3005A	Dissolved	6020	0	6.8	47.8889	140
E-01	Water	MF	1	Copper	2.4	1	2.4	ug/L	B	B	3005A	Dissolved	6020A	0	2.4		
E-02	Water	MF	1	Copper	3.3	1	3.3	ug/L	B	B	3005A	Dissolved	6020A	0	3.3		
E-03	Water	MF	1	Copper	9.7	1	9.7	ug/L	B	B	3005A	Dissolved	6020A	0	9.7		
E-04	Water	MF	1	Copper	2.9	1	2.9	ug/L	B	B	3005A	Dissolved	6020A	0	2.9		
E-05	Water	MF	1	Copper	3.4	1	3.4	ug/L	B	B	3005A	Dissolved	6020A	0	3.4		
E-06	Water	MF	1	Copper	2.4	1	2.4	ug/L	B	B	3005A	Dissolved	6020A	0	2.4		
E-07	Water	MF	1	Copper	2.3	1	2.3	ug/L	B	B	3005A	Dissolved	6020A	0	2.3		
E-08	Water	MF	1	Copper	94	1	94	ug/L			3005A	Dissolved	6020A	0	94		
E-09	Water	MF	1	Copper	100	1	100	ug/L			3005A	Dissolved	6020A	0	100		
E-10	Water	MF	1	Copper	97	1	97	ug/L			3005A	Dissolved	6020A	0	97		
E-11	Water	MF	1	Copper	120	1	120	ug/L			3005A	Dissolved	6020A	0	120		
E-12	Water	MF	1	Copper	5.5	1	5.5	ug/L	J	J	3005A	Dissolved	6020A	0	5.5		
E-13	Water	MF	1	Copper	3.6	1	3.6	ug/L	J	J	3005A	Dissolved	6020A	0	3.6		
E-14	Water	MF	1	Copper	2.7	1	2.7	ug/L			3005A	Dissolved	6020	0	2.7		
E-15	Water	MF	1	Copper	23	1	23	ug/L	B	B	3005A	Dissolved	6020	0	23		
E-16	Water	MF	1	Copper	8.8	1	8.8	ug/L	B	B	3005A	Dissolved	6020	0	8.8		
E-17	Water	MF	1	Copper	3.2	1	3.2	ug/L	B	B	3005A	Dissolved	6020	0	3.2		
E-18	Water	MF	1	Copper	6.4	1	6.4	ug/L			3005A	Dissolved	6020	0	6.4		
E-19	Water	MF	1	Copper	3.5	1	3.5	ug/L			3005A	Dissolved	6020	0	3.5		
E-20	Water	MF	1	Copper	7.3	1	7.3	ug/L	B	B	3005A	Dissolved	6020	0	7.3		
E-21	Water	MF	1	Copper	7.9	1	7.9	ug/L			3005A	Dissolved	6020	0	7.9		
E-22	Water	MF	1	Copper	18	1	18	ug/L	J	J	3005A	Dissolved	6020	0	18	23.9682	120
RB-01-11192012	Water	MF	1	Copper	4.5	1	4.5	ug/L	B	B	3005A	Dissolved	6020	0	4.5		
BKG-01-EM	Water	MF	1	Iron	25	1	25	ug/L	J	J	3005A	Dissolved	6020A	0	25		
BKG-01-HS	Water	MF	1	Iron	19	1	19	ug/L	J	J	3005A	Dissolved	6020A	0	19		
BKG-01-MID	Water	MF	1	Iron	36	1	36	ug/L	J	J	3005A	Dissolved	6020A	0	36		
BKG-02-EM	Water	MF	1	Iron	190	1	190	ug/L	J B	J B	3005A	Dissolved	6020A	0	190		
BKG-02-HS	Water	MF	1	Iron	180	1	180	ug/L	J B	J B	3005A	Dissolved	6020A	0	180		
BKG-02-MID	Water	MF	1	Iron	140	1	140	ug/L	J B	J B	3005A	Dissolved	6020A	0	140		
BKG-03-EM	Water	MF	1	Iron	35	1	35	ug/L	J B	J B	3005A	Dissolved	6020	0	35		
BKG-03-HS	Water	MF	1	Iron	31	1	31	ug/L	J B	J B	3005A	Dissolved	6020	0	31		
BKG-03-MID	Water	MF	1	Iron	40	1	40	ug/L	J B	J B	3005A	Dissolved	6020	0	40	77.3333	190
E-01	Water	MF	1	Iron	91	1	91	ug/L	B	B	3005A	Dissolved	6020A	0	91		
E-02	Water	MF	1	Iron	200	1	200	ug/L	B	B	3005A	Dissolved	6020A	0	200		
E-03	Water	MF	1	Iron	740	1	740	ug/L	B	B	3005A	Dissolved	6020A	0	740		
E-04	Water	MF	1	Iron	160	1	160	ug/L	B	B	3005A	Dissolved	6020A	0	160		
E-05	Water	MF	1	Iron	70	1	70	ug/L	B	B	3005A	Dissolved	6020A	0	70		
E-06	Water	MF	1	Iron	19	1	19	ug/L	J	J	3005A	Dissolved	6020A	0	19		
E-07	Water	MF	1	Iron	160	1	160	ug/L			3005A	Dissolved	6020A	0	160		
E-08	Water	MF	1	Iron	280	1	280	ug/L	J B	J B	3005A	Dissolved	6020A	0	280		
E-09	Water	MF	1	Iron	860	1	860	ug/L	B	B	3005A	Dissolved	6020A	0	860		
E-10	Water	MF	1	Iron	150	1	150	ug/L	J B	J B	3005A	Dissolved	6020A	0	150		
E-11	Water	MF	1	Iron	92	1	92	ug/L	J B	J B	3005A	Dissolved	6020A	0	92		
E-12	Water	MF	1	Iron	5000	1	5000	ug/L			3005A	Dissolved	6020A	0	5000		
E-13	Water	MF	1	Iron	1000	1	1000	ug/L			3005A	Dissolved	6020A	0	1000		
E-14	Water	MF	1	Iron	1900	1	1900	ug/L	B	B	3005A	Dissolved	6020	0	1900		
E-15	Water	MF	1	Iron	37000	1	37000	ug/L			3005A	Dissolved	6020	0	37000		
E-16	Water	MF	1	Iron	27	1	27	ug/L	J B	J B	3005A	Dissolved	6020	0	27		
E-17	Water	MF	1	Iron	31	1	31	ug/L	J B	J B	3005A	Dissolved	6020	0	31		
E-18	Water	MF	1	Iron	95	1	95	ug/L			3005A	Dissolved	6020	0	95		
E-19	Water	MF	1	Iron	6.1	0	ND	ug/L	U	ND	3005A	Dissolved	6020	0	0		
E-20	Water	MF	1	Iron	170	1	170	ug/L	B	B	3005A	Dissolved	6020	0	170		
E-21	Water	MF	1	Iron	580	1	580	ug/L	B	B	3005A	Dissolved	6020	0	580		
E-22	Water	MF	1	Iron	690	1	690	ug/L			3005A	Dissolved	6020	0	690	2241.59	37000
RB-01-11192012	Water	MF	1	Iron	6.1	0	ND	ug/L	U	ND	3005A	Dissolved	6020	0	0		
BKG-01-EM	Water	MF	1	Lead	0.11	1	0.11	ug/L	J B	J B	3005A	Dissolved	6020A	0	0.11		
BKG-01-HS	Water	MF	1	Lead	0.077	1	0.077	ug/L	J B	J B	3005A	Dissolved	6020A	0	0.077		
BKG-01-MID	Water	MF	1	Lead	0.12	1	0.12	ug/L	J B	J B	3005A	Dissolved	6020A	0	0.12		
BKG-02-EM	Water	MF	1	Lead	0.7	1	0.7	ug/L	J B	J B	3005A	Dissolved	6020A	0	0.7		
BKG-02-HS	Water	MF	1	Lead	0.41	1	0.41	ug/L	J B	J B	3005A	Dissolved	6020A	0	0.41		
BKG-02-MID	Water	MF	1	Lead	0.39	1	0.39	ug/L	J B	J B	3005A	Dissolved	6020A	0	0.39		
BKG-03-EM	Water	MF	1	Lead	0.15	1	0.15	ug/L	J B	J B	3005A	Dissolved	6020	0	0.15		
BKG-03-HS	Water	MF	1	Lead	0.11	1	0.11	ug/L	J B	J B	3005A	Dissolved	6020	0	0.11		
BKG-03-MID	Water	MF	1	Lead	0.16	1	0.16	ug/L	J B	J B	3005A	Dissolved	6020	0	0.16	0.24744	0.7
E-01	Water	MF	1	Lead	0.056	1	0.056	ug/L	J	J	3005A	Dissolved	6020A	0	0.056		
E-02	Water	MF	1	Lead	0.11	1	0.11	ug/L	J	J	3005A	Dissolved	6020A	0	0.11		
E-03	Water	MF	1	Lead	0.11	1	0.11	ug/L	J	J	3005A	Dissolved	6020A	0	0.11		
E-04	Water	MF	1	Lead	0.062	1	0.062	ug/L	J	J	3005A	Dissolved	6020A	0	0.062		
E-05	Water	MF	1	Lead	0.12	1	0.12	ug/L	J	J	3005A	Dissolved	6020A	0	0.12		
E-06	Water	MF	1	Lead	0.11	1	0.11	ug/L	J B	J B	3005A	Dissolved	6020A	0	0.11		
E-07	Water	MF	1	Lead	0.16	1	0.16	ug/L	J B	J B	3005A	Dissolved	6020A	0	0.16		
E-08	Water	MF	1	Lead	0.26	1	0.26	ug/L	J B	J B	3005A	Dissolved	6020A	0	0.26		

Client Sample ID	Matrix	sort	ion F	Analyte	Val_res	D?	Result	Unit	Qual	Flag	ep Metho	Prep Type	alysis Method	Check	Adj Val	Mean	Max
E-09	Water	MF	1	Lead	0.19	1	ND	ug/L	U	ND	3005A	Dissolved	6020A	0	0		
E-10	Water	MF	1	Lead	0.38	1	0.38	ug/L	J B	J B	3005A	Dissolved	6020A	0	0.38		
E-11	Water	MF	1	Lead	0.38	1	0.38	ug/L	J B	J B	3005A	Dissolved	6020A	0	0.38		
E-12	Water	MF	1	Lead	0.28	1	0.28	ug/L	J	J	3005A	Dissolved	6020A	0	0.28		
E-13	Water	MF	1	Lead	0.71	1	0.71	ug/L	J	J	3005A	Dissolved	6020A	0	0.71		
E-14	Water	MF	1	Lead	1.4	1	1.4	ug/L			3005A	Dissolved	6020	0	1.4		
E-15	Water	MF	1	Lead	28	1	28	ug/L	B	B	3005A	Dissolved	6020	0	28		
E-16	Water	MF	1	Lead	0.13	1	0.13	ug/L	J B	J B	3005A	Dissolved	6020	0	0.13		
E-17	Water	MF	1	Lead	0.098	1	0.098	ug/L	J B	J B	3005A	Dissolved	6020	0	0.098		
E-18	Water	MF	1	Lead	0.24	1	0.24	ug/L	J B	J B	3005A	Dissolved	6020	0	0.24		
E-19	Water	MF	1	Lead	0.11	1	0.11	ug/L	J	J	3005A	Dissolved	6020	0	0.11		
E-20	Water	MF	1	Lead	0.57	1	0.57	ug/L	J B	J B	3005A	Dissolved	6020	0	0.57		
E-21	Water	MF	1	Lead	2.1	1	2.1	ug/L	B	B	3005A	Dissolved	6020	0	2.1		
E-22	Water	MF	1	Lead	1.7	1	1.7	ug/L	J	J	3005A	Dissolved	6020	0	1.7	1.68573	28
RB-01-11192012	Water	MF	1	Lead	0.039	1	0.039	ug/L	J B	J B	3005A	Dissolved	6020	0	0.039		
BKG-01-EM	Water	MF	1	Magnesium	4900	1	4900	ug/L	B	B	3005A	Dissolved	6020A	0	4900		
BKG-01-HS	Water	MF	1	Magnesium	5600	1	5600	ug/L	B	B	3005A	Dissolved	6020A	0	5600		
BKG-01-MID	Water	MF	1	Magnesium	4800	1	4800	ug/L	B	B	3005A	Dissolved	6020A	0	4800		
BKG-02-EM	Water	MF	1	Magnesium	5900	1	5900	ug/L	B	B	3005A	Dissolved	6020A	0	5900		
BKG-02-HS	Water	MF	1	Magnesium	5000	1	5000	ug/L	B	B	3005A	Dissolved	6020A	0	5000		
BKG-02-MID	Water	MF	1	Magnesium	5800	1	5800	ug/L	B	B	3005A	Dissolved	6020A	0	5800		
BKG-03-EM	Water	MF	1	Magnesium	4600	1	4600	ug/L	B	B	3005A	Dissolved	6020	0	4600		
BKG-03-HS	Water	MF	1	Magnesium	4600	1	4600	ug/L	B	B	3005A	Dissolved	6020	0	4600		
BKG-03-MID	Water	MF	1	Magnesium	4400	1	4400	ug/L	B	B	3005A	Dissolved	6020	0	4400	5066.67	5900
E-01	Water	MF	1	Magnesium	6300	1	6300	ug/L	B	B	3005A	Dissolved	6020A	0	6300		
E-02	Water	MF	1	Magnesium	5700	1	5700	ug/L	B	B	3005A	Dissolved	6020A	0	5700		
E-03	Water	MF	1	Magnesium	5600	1	5600	ug/L	B	B	3005A	Dissolved	6020A	0	5600		
E-04	Water	MF	1	Magnesium	5000	1	5000	ug/L	B	B	3005A	Dissolved	6020A	0	5000		
E-05	Water	MF	1	Magnesium	4900	1	4900	ug/L	B	B	3005A	Dissolved	6020A	0	4900		
E-06	Water	MF	1	Magnesium	4900	1	4900	ug/L	B	B	3005A	Dissolved	6020A	0	4900		
E-07	Water	MF	1	Magnesium	4900	1	4900	ug/L	B	B	3005A	Dissolved	6020A	0	4900		
E-08	Water	MF	1	Magnesium	5800	1	5800	ug/L	B	B	3005A	Dissolved	6020A	0	5800		
E-09	Water	MF	1	Magnesium	4700	1	4700	ug/L	B	B	3005A	Dissolved	6020A	0	4700		
E-10	Water	MF	1	Magnesium	5700	1	5700	ug/L	B	B	3005A	Dissolved	6020A	0	5700		
E-11	Water	MF	1	Magnesium	3600	1	3600	ug/L	B	B	3005A	Dissolved	6020A	0	3600		
E-12	Water	MF	1	Magnesium	4700	1	4700	ug/L	B	B	3005A	Dissolved	6020A	0	4700		
E-13	Water	MF	1	Magnesium	3700	1	3700	ug/L	B	B	3005A	Dissolved	6020A	0	3700		
E-14	Water	MF	1	Magnesium	4400	1	4400	ug/L	B	B	3005A	Dissolved	6020	0	4400		
E-15	Water	MF	1	Magnesium	10000	1	10000	ug/L			3005A	Dissolved	6020	0	10000		
E-16	Water	MF	1	Magnesium	5100	1	5100	ug/L	B	B	3005A	Dissolved	6020	0	5100		
E-17	Water	MF	1	Magnesium	8100	1	8100	ug/L	B	B	3005A	Dissolved	6020	0	8100		
E-18	Water	MF	1	Magnesium	14000	1	14000	ug/L	B	B	3005A	Dissolved	6020	0	14000		
E-19	Water	MF	1	Magnesium	6700	1	6700	ug/L	B	B	3005A	Dissolved	6020	0	6700		
E-20	Water	MF	1	Magnesium	13000	1	13000	ug/L			3005A	Dissolved	6020	0	13000		
E-21	Water	MF	1	Magnesium	11000	1	11000	ug/L	B	B	3005A	Dissolved	6020	0	11000		
E-22	Water	MF	1	Magnesium	47000	1	47000	ug/L	B	B	3005A	Dissolved	6020	0	47000	8400	47000
RB-01-11192012	Water	MF	1	Magnesium	170	1	170	ug/L	B	B	3005A	Dissolved	6020	0	170		
BKG-01-EM	Water	MF	1	Manganese	8.6	1	8.6	ug/L	B	B	3005A	Dissolved	6020A	0	8.6		
BKG-01-HS	Water	MF	1	Manganese	7.1	1	7.1	ug/L	B	B	3005A	Dissolved	6020A	0	7.1		
BKG-01-MID	Water	MF	1	Manganese	9.1	1	9.1	ug/L	B	B	3005A	Dissolved	6020A	0	9.1		
BKG-02-EM	Water	MF	1	Manganese	21	1	21	ug/L	J B	J B	3005A	Dissolved	6020A	0	21		
BKG-02-HS	Water	MF	1	Manganese	16	1	16	ug/L	J B	J B	3005A	Dissolved	6020A	0	16		
BKG-02-MID	Water	MF	1	Manganese	32	1	32	ug/L	J B	J B	3005A	Dissolved	6020A	0	32		
BKG-03-EM	Water	MF	1	Manganese	1.4	1	1.4	ug/L	J B	J B	3005A	Dissolved	6020	0	1.4		
BKG-03-HS	Water	MF	1	Manganese	1.5	1	1.5	ug/L	J B	J B	3005A	Dissolved	6020	0	1.5		
BKG-03-MID	Water	MF	1	Manganese	1.4	1	1.4	ug/L	J B	J B	3005A	Dissolved	6020	0	1.4	10.9	32
E-01	Water	MF	1	Manganese	220	1	220	ug/L	B	B	3005A	Dissolved	6020A	0	220		
E-02	Water	MF	1	Manganese	110	1	110	ug/L	B	B	3005A	Dissolved	6020A	0	110		
E-03	Water	MF	1	Manganese	290	1	290	ug/L	B	B	3005A	Dissolved	6020A	0	290		
E-04	Water	MF	1	Manganese	190	1	190	ug/L	B	B	3005A	Dissolved	6020A	0	190		
E-05	Water	MF	1	Manganese	320	1	320	ug/L	B	B	3005A	Dissolved	6020A	0	320		
E-06	Water	MF	1	Manganese	230	1	230	ug/L	B	B	3005A	Dissolved	6020A	0	230		
E-07	Water	MF	1	Manganese	230	1	230	ug/L	B	B	3005A	Dissolved	6020A	0	230		
E-08	Water	MF	1	Manganese	270	1	270	ug/L	B	B	3005A	Dissolved	6020A	0	270		
E-09	Water	MF	1	Manganese	790	1	790	ug/L	B	B	3005A	Dissolved	6020A	0	790		
E-10	Water	MF	1	Manganese	580	1	580	ug/L	B	B	3005A	Dissolved	6020A	0	580		
E-11	Water	MF	1	Manganese	240	1	240	ug/L	B	B	3005A	Dissolved	6020A	0	240		
E-12	Water	MF	1	Manganese	450	1	450	ug/L	B	B	3005A	Dissolved	6020A	0	450		
E-13	Water	MF	1	Manganese	230	1	230	ug/L	B	B	3005A	Dissolved	6020A	0	230		
E-14	Water	MF	1	Manganese	120	1	120	ug/L	B	B	3005A	Dissolved	6020	0	120		
E-15	Water	MF	1	Manganese	690	1	690	ug/L	B	B	3005A	Dissolved	6020	0	690		
E-16	Water	MF	1	Manganese	240	1	240	ug/L	B	B	3005A	Dissolved	6020	0	240		
E-17	Water	MF	1	Manganese	740	1	740	ug/L	B	B	3005A	Dissolved	6020	0	740		
E-18	Water	MF	1	Manganese	910	1	910	ug/L	B	B	3005A	Dissolved	6020	0	910		
E-19	Water	MF	1	Manganese	220	1	220	ug/L			3005A	Dissolved	6020	0	220		
E-20	Water	MF	1	Manganese	210	1	210	ug/L			3005A	Dissolved	6020	0	210		
E-21	Water	MF	1	Manganese	150	1	150	ug/L	B	B	3005A	Dissolved	6020	0	150		
E-22	Water	MF	1	Manganese	1500	1	1500	ug/L	B	B	3005A	Dissolved	6020	0	1500	405.909	1500
RB-01-11192012	Water	MF	1	Manganese	0.57	1	0.57	ug/L	J B	J B	3005A	Dissolved	6020	0	0.57		
BKG-01-EM	Water	MF	1	Nickel	2.2	1	2.2	ug/L			3005A	Dissolved	6020A	0	2.2		
BKG-01-HS	Water	MF	1	Nickel	2.8	1	2.8	ug/L			3005A	Dissolved	6020A	0	2.8		
BKG-01-MID	Water	MF	1	Nickel	1.4	1	1.4	ug/L			3005A	Dissolved	6020A	0	1.4		
BKG-02-EM	Water	MF	1	Nickel	3.3	1	3.3	ug/L	J B	J B	3005A	Dissolved	6020A	0	3.3		
BKG-02-HS	Water	MF	1	Nickel	3.4	1	3.4	ug/L	J B	J B	3005A	Dissolved	6020A	0	3.4		
BKG-02-MID	Water	MF	1	Nickel	2.8	1	2.8	ug/L	J B	J B	3005A	Dissolved	6020A	0	2.8		
BKG-03-EM	Water	MF	1	Nickel	2.8	1	2.8	ug/L	B	B	3005A	Dissolved	6020	0	2.8		
BKG-03-HS	Water	MF	1	Nickel	4.4	1	4.4	ug/L	B	B	3005A	Dissolved	6020	0	4.4		
BKG-03-MID	Water	MF	1	Nickel	2.5	1	2.5	ug/L	B	B	3005A	Dissolved	6020	0	2.5	2.84444	4.4
E-01	Water	MF	1	Nickel	4.6	1	4.6	ug/L	B	B	3005A	Dissolved	6020A	0	4.6		
E-02	Water	MF	1	Nickel	3.7	1	3.7	ug/L	B	B	3005A	Dissolved	6020A	0	3.7		
E-03	Water	MF	1	Nickel	3.8	1	3.8	ug/L	B	B	3005A	Dissolved	6020A	0	3.8		
E-04	Water	MF	1	Nickel	3.6	1	3.6	ug/L	B	B	3005A	Dissolved	6020A	0	3.6		
E-05	Water	MF	1	Nickel	3.1	1	3.1	ug/L	B	B	3005A	Dissolved	6020A	0	3.1		
E-06	Water	MF	1	Nickel	1.8	1	1.8	ug/L			3005A	Dissolved	6020A	0	1.8		
E-07	Water	MF	1	Nickel	1.6	1	1.6	ug/L			3005A	Dissolved	6020A	0	1.6		
E-08	Water	MF	1	Nickel	3.3	1	3.3	ug/L	J B	J B	3005A	Dissolved	6020A	0	3.3		
E-09	Water	MF	1	Nickel	3.2	1	3.2	ug/L	J B	J B	3005A	Dissolved	6020A	0	3.2		
E-10	Water	MF	1	Nickel	2.7	1	2.7	ug/L	J B	J B	3005A	Dissolved	6020A	0	2.7		
E-11	Water	MF	1	Nickel	3.3	1	3.3	ug/L	J B	J B	3005A	Dissolved	6020A	0	3.3		
E-12	Water	MF	1	Nickel	4	1	4	ug/L	J	J	3005A	Dissolved	6020A	0	4		
E-13	Water	MF	1	Nickel	3.2	1	3.2	ug/L	J	J	3005A	Dissolved	6020A	0	3.2		
E-14	Water	MF	1	Nickel	2.4	1	2.4	ug/L			3005A	Dissolved	6020	0	2.4		
E-15	Water	MF	1	Nickel	29	1	29	ug/L	B	B	3005A	Dissolved	6020	0	29		
E-16	Water	MF	1	Nickel	3.1	1	3.1	ug/L	B	B	3005A	Dissolved	6020	0	3.1		
E-17	Water	MF	1	Nickel	3.3	1	3.3	ug/L			3005A	Dissolved	6020	0	3.3		
E-18	Water	MF	1	Nickel	6.1	1	6.1	ug/L			3005A	Dissolved	6020	0	6.1		
E-19	Water	MF	1	Nickel	1.9	1	1.9	ug/L	B	B	3005A	Dissolved	6020	0	1.9		
E-20	Water	MF	1	Nickel	3.6	1	3.6	ug/L	B	B	3005A	Dissolved	6020	0	3.6		
E-21	Water	MF	1	Nickel	4.3	1	4.3	ug/L			3005A	Dissolved	6020	0	4.3		
E-22	Water	MF	1	Nickel	15	1	15	ug/L			3005A	Dissolved	6020	0	15	5.02727	29
RB-01-11192012	Water	MF	1	Nickel	1.2	1	1.2	ug/L	B	B	3005A	Dissolved	6020	0	1.2		
BKG-01-EM	Water	MF	1	Potassium	2300	1	2300	ug/L			3005A	Dissolved	6020A	0	2300		
BKG-01-HS	Water	MF	1	Potassium	2500	1	2500	ug/L			3005A	Dissolved	6020A	0	2500		
BKG-01-MID	Water	MF	1	Potassium	2300	1	2300	ug/L			3005A	Dissolved	6020A	0	2300		
BKG-02-EM	Water	MF	1	Potassium	2200	1	2200	ug/L	B	B	3005A	Dissolved	6020A	0	2200		
BKG-02-HS	Water	MF	1	Potassium	1900	1	1900	ug/L	B	B	3005A	Dissolved	6020A	0	1900		
BKG-02-MID	Water	MF	1	Potassium	2000	1	2000	ug/L	B	B	3005A	Dissolved	6020A	0	2000		
BKG-03-EM	Water	MF	1	Potassium	1900	1	1900	ug/L			3005A	Dissolved	6020	0	1900		
BKG-03-HS	Water	MF	1	Potassium	2100	1	2100	ug/L			3005A	Dissolved	6020	0	2100		
BKG-03-MID	Water	MF	1	Potassium	1800	1	1800	ug/L			3005A	Dissolved	6020	0	1800	2111.11	2500
E-01	Water	MF	1	Potassium	6800	1	6800	ug/L			3005A	Dissolved	6020A	0	6800		
E-02	Water	MF	1	Potassium	5200	1	5200	ug/L			3005A	Dissolved	6020A	0	5200		

Client Sample ID	Matrix	sort	ion F	Analyte	Val_res	D?	Result	Unit	Qual	Flag	ep Metho	Prep Type	alysis Method	Check	Adj Val	Mean	Max
E-03	Water	MF	1	Potassium	5200	1	5200	ug/L			3005A	Dissolved	6020A	0	5200		
E-04	Water	MF	1	Potassium	4500	1	4500	ug/L			3005A	Dissolved	6020A	0	4500		
E-05	Water	MF	1	Potassium	4000	1	4000	ug/L			3005A	Dissolved	6020A	0	4000		
E-06	Water	MF	1	Potassium	3000	1	3000	ug/L			3005A	Dissolved	6020A	0	3000		
E-07	Water	MF	1	Potassium	2700	1	2700	ug/L			3005A	Dissolved	6020A	0	2700		
E-08	Water	MF	1	Potassium	2900	1	2900	ug/L	B	B	3005A	Dissolved	6020A	0	2900		
E-09	Water	MF	1	Potassium	3100	1	3100	ug/L	B	B	3005A	Dissolved	6020A	0	3100		
E-10	Water	MF	1	Potassium	3600	1	3600	ug/L	B	B	3005A	Dissolved	6020A	0	3600		
E-11	Water	MF	1	Potassium	2800	1	2800	ug/L	B	B	3005A	Dissolved	6020A	0	2800		
E-12	Water	MF	1	Potassium	3200	1	3200	ug/L			3005A	Dissolved	6020A	0	3200		
E-13	Water	MF	1	Potassium	2600	1	2600	ug/L			3005A	Dissolved	6020A	0	2600		
E-14	Water	MF	1	Potassium	3400	1	3400	ug/L			3005A	Dissolved	6020	0	3400		
E-15	Water	MF	1	Potassium	7700	1	7700	ug/L			3005A	Dissolved	6020	0	7700		
E-16	Water	MF	1	Potassium	3800	1	3800	ug/L			3005A	Dissolved	6020	0	3800		
E-17	Water	MF	1	Potassium	4200	1	4200	ug/L			3005A	Dissolved	6020	0	4200		
E-18	Water	MF	1	Potassium	6000	1	6000	ug/L			3005A	Dissolved	6020	0	6000		
E-19	Water	MF	1	Potassium	4300	1	4300	ug/L			3005A	Dissolved	6020	0	4300		
E-20	Water	MF	1	Potassium	6800	1	6800	ug/L	B	B	3005A	Dissolved	6020	0	6800		
E-21	Water	MF	1	Potassium	5600	1	5600	ug/L			3005A	Dissolved	6020	0	5600		
E-22	Water	MF	1	Potassium	22000	1	22000	ug/L			3005A	Dissolved	6020	0	22000	5154.55	22000
RB-01-11192012	Water	MF	1	Potassium	340	1	340	ug/L			3005A	Dissolved	6020	0	340		
BKG-01-EM	Water	MF	1	Selenium	1	1	1	ug/L	J	J	3005A	Dissolved	6020A	0	1		
BKG-01-HS	Water	MF	1	Selenium	3.2	1	3.2	ug/L	J	J	3005A	Dissolved	6020A	0	3.2		
BKG-01-MID	Water	MF	1	Selenium	0.42	0	ND	ug/L	U	ND	3005A	Dissolved	6020A	0	0		
BKG-02-EM	Water	MF	1	Selenium	33	1	33	ug/L	J	J	3005A	Dissolved	6020A	0	33		
BKG-02-HS	Water	MF	1	Selenium	29	1	29	ug/L	J	J	3005A	Dissolved	6020A	0	29		
BKG-02-MID	Water	MF	1	Selenium	29	1	29	ug/L	J	J	3005A	Dissolved	6020A	0	29		
BKG-03-EM	Water	MF	1	Selenium	0.42	0	ND	ug/L	U	ND	3005A	Dissolved	6020	0	0		
BKG-03-HS	Water	MF	1	Selenium	0.42	0	ND	ug/L	U	ND	3005A	Dissolved	6020	0	0		
BKG-03-MID	Water	MF	1	Selenium	0.42	0	ND	ug/L	U	ND	3005A	Dissolved	6020	0	0	10.5778	33
E-01	Water	MF	1	Selenium	4	1	4	ug/L	J	J	3005A	Dissolved	6020A	0	4		
E-02	Water	MF	1	Selenium	5.3	1	5.3	ug/L			3005A	Dissolved	6020A	0	5.3		
E-03	Water	MF	1	Selenium	3	1	3	ug/L	J	J	3005A	Dissolved	6020A	0	3		
E-04	Water	MF	1	Selenium	0.5	1	0.5	ug/L	J	J	3005A	Dissolved	6020A	0	0.5		
E-05	Water	MF	1	Selenium	0.42	0	ND	ug/L	U	ND	3005A	Dissolved	6020A	0	0		
E-06	Water	MF	1	Selenium	1.5	1	1.5	ug/L	J	J	3005A	Dissolved	6020A	0	1.5		
E-07	Water	MF	1	Selenium	0.42	0	ND	ug/L	U	ND	3005A	Dissolved	6020A	0	0		
E-08	Water	MF	1	Selenium	41	1	41	ug/L	J	J	3005A	Dissolved	6020A	0	41		
E-09	Water	MF	1	Selenium	37	1	37	ug/L	J	J	3005A	Dissolved	6020A	0	37		
E-10	Water	MF	1	Selenium	14	1	14	ug/L	J	J	3005A	Dissolved	6020A	0	14		
E-11	Water	MF	1	Selenium	5.1	1	5.1	ug/L	J	J	3005A	Dissolved	6020A	0	5.1		
E-12	Water	MF	1	Selenium	4.2	0	ND	ug/L	U	ND	3005A	Dissolved	6020A	0	0		
E-13	Water	MF	1	Selenium	12	1	12	ug/L	J	J	3005A	Dissolved	6020A	0	12		
E-14	Water	MF	1	Selenium	5	1	5	ug/L			3005A	Dissolved	6020	0	5		
E-15	Water	MF	1	Selenium	0.42	0	ND	ug/L	U	ND	3005A	Dissolved	6020	0	0		
E-16	Water	MF	1	Selenium	0.42	0	ND	ug/L	U	ND	3005A	Dissolved	6020	0	0		
E-17	Water	MF	1	Selenium	1.8	1	1.8	ug/L	J B	J B	3005A	Dissolved	6020	0	1.8		
E-18	Water	MF	1	Selenium	1.1	1	1.1	ug/L	J	J	3005A	Dissolved	6020	0	1.1		
E-19	Water	MF	1	Selenium	1.5	1	1.5	ug/L	J B	J B	3005A	Dissolved	6020	0	1.5		
E-20	Water	MF	1	Selenium	0.42	0	ND	ug/L	U	ND	3005A	Dissolved	6020	0	0		
E-21	Water	MF	1	Selenium	0.42	0	ND	ug/L	U	ND	3005A	Dissolved	6020	0	0		
E-22	Water	MF	1	Selenium	4.2	0	ND	ug/L	U	ND	3005A	Dissolved	6020	0	0	6.03636	41
RB-01-11192012	Water	MF	1	Selenium	0.42	0	ND	ug/L	U	ND	3005A	Dissolved	6020	0	0		
BKG-01-EM	Water	MF	1	Silver	0.036	0	0.036	ug/L	U	ND	3005A	Dissolved	6020A	0	0		
BKG-01-HS	Water	MF	1	Silver	0.036	0	ND	ug/L	U	ND	3005A	Dissolved	6020A	0	0		
BKG-01-MID	Water	MF	1	Silver	0.036	0	ND	ug/L	U	ND	3005A	Dissolved	6020A	0	0		
BKG-02-EM	Water	MF	1	Silver	0.36	0	ND	ug/L	U	ND	3005A	Dissolved	6020A	0	0		
BKG-02-HS	Water	MF	1	Silver	0.36	0	ND	ug/L	U	ND	3005A	Dissolved	6020A	0	0		
BKG-02-MID	Water	MF	1	Silver	0.36	0	ND	ug/L	U	ND	3005A	Dissolved	6020A	0	0		
BKG-03-EM	Water	MF	1	Silver	0.036	0	ND	ug/L	U	ND	3005A	Dissolved	6020	0	0		
BKG-03-HS	Water	MF	1	Silver	0.036	0	ND	ug/L	U	ND	3005A	Dissolved	6020	0	0		
BKG-03-MID	Water	MF	1	Silver	0.036	0	ND	ug/L	U	ND	3005A	Dissolved	6020	0	0	0	0
E-01	Water	MF	1	Silver	0.036	0	ND	ug/L	U	ND	3005A	Dissolved	6020A	0	0		
E-02	Water	MF	1	Silver	0.036	0	ND	ug/L	U	ND	3005A	Dissolved	6020A	0	0		
E-03	Water	MF	1	Silver	0.036	0	ND	ug/L	U	ND	3005A	Dissolved	6020A	0	0		
E-04	Water	MF	1	Silver	0.036	0	ND	ug/L	U	ND	3005A	Dissolved	6020A	0	0		
E-05	Water	MF	1	Silver	0.036	0	ND	ug/L	U	ND	3005A	Dissolved	6020A	0	0		
E-06	Water	MF	1	Silver	0.036	0	ND	ug/L	U	ND	3005A	Dissolved	6020A	0	0		
E-07	Water	MF	1	Silver	0.036	0	ND	ug/L	U	ND	3005A	Dissolved	6020A	0	0		
E-08	Water	MF	1	Silver	0.36	0	ND	ug/L	U	ND	3005A	Dissolved	6020A	0	0		
E-09	Water	MF	1	Silver	0.36	0	ND	ug/L	U	ND	3005A	Dissolved	6020A	0	0		
E-10	Water	MF	1	Silver	0.36	0	ND	ug/L	U	ND	3005A	Dissolved	6020A	0	0		
E-11	Water	MF	1	Silver	0.36	0	ND	ug/L	U	ND	3005A	Dissolved	6020A	0	0		
E-12	Water	MF	1	Silver	0.36	0	ND	ug/L	U	ND	3005A	Dissolved	6020A	0	0		
E-13	Water	MF	1	Silver	0.36	0	ND	ug/L	U	ND	3005A	Dissolved	6020A	0	0		
E-14	Water	MF	1	Silver	0.036	0	ND	ug/L	U	ND	3005A	Dissolved	6020	0	0		
E-15	Water	MF	1	Silver	0.28	1	0.28	ug/L	J	J	3005A	Dissolved	6020	0	0.28		
E-16	Water	MF	1	Silver	0.036	0	ND	ug/L	U	ND	3005A	Dissolved	6020	0	0		
E-17	Water	MF	1	Silver	0.036	0	ND	ug/L	U	ND	3005A	Dissolved	6020	0	0		
E-18	Water	MF	1	Silver	0.036	0	ND	ug/L	U	ND	3005A	Dissolved	6020	0	0		
E-19	Water	MF	1	Silver	0.036	0	ND	ug/L	U	ND	3005A	Dissolved	6020	0	0		
E-20	Water	MF	1	Silver	0.039	1	0.039	ug/L	J	J	3005A	Dissolved	6020	0	0.039		
E-21	Water	MF	1	Silver	0.036	0	ND	ug/L	U	ND	3005A	Dissolved	6020	0	0		
E-22	Water	MF	1	Silver	0.36	0	ND	ug/L	U	ND	3005A	Dissolved	6020	0	0	0.0145	0.28
RB-01-11192012	Water	MF	1	Silver	0.036	0	ND	ug/L	U	ND	3005A	Dissolved	6020	0	0		
BKG-01-EM	Water	MF	1	Sodium	15000	1	15000	ug/L			3005A	Dissolved	6020A	0	15000		
BKG-01-HS	Water	MF	1	Sodium	18000	1	18000	ug/L			3005A	Dissolved	6020A	0	18000		
BKG-01-MID	Water	MF	1	Sodium	15000	1	15000	ug/L			3005A	Dissolved	6020A	0	15000		
BKG-02-EM	Water	MF	1	Sodium	16000	1	16000	ug/L	B	B	3005A	Dissolved	6020A	0	16000		
BKG-02-HS	Water	MF	1	Sodium	13000	1	13000	ug/L	B	B	3005A	Dissolved	6020A	0	13000		
BKG-02-MID	Water	MF	1	Sodium	16000	1	16000	ug/L	B	B	3005A	Dissolved	6020A	0	16000		
BKG-03-EM	Water	MF	1	Sodium	16000	1	16000	ug/L			3005A	Dissolved	6020	0	16000		
BKG-03-HS	Water	MF	1	Sodium	15000	1	15000	ug/L			3005A	Dissolved	6020	0	15000		
BKG-03-MID	Water	MF	1	Sodium	15000	1	15000	ug/L			3005A	Dissolved	6020	0	15000	15444.4	18000
E-01	Water	MF	1	Sodium	23000	1	23000	ug/L	B	B	3005A	Dissolved	6020A	0	23000		
E-02	Water	MF	1	Sodium	20000	1	20000	ug/L	B	B	3005A	Dissolved	6020A	0	20000		
E-03	Water	MF	1	Sodium	19000	1	19000	ug/L	B	B	3005A	Dissolved	6020A	0	19000		
E-04	Water	MF	1	Sodium	17000	1	17000	ug/L	B	B	3005A	Dissolved	6020A	0	17000		
E-05	Water	MF	1	Sodium	17000	1	17000	ug/L	B	B	3005A	Dissolved	6020A	0	17000		
E-06	Water	MF	1	Sodium	17000	1	17000	ug/L			3005A	Dissolved	6020A	0	17000		
E-07	Water	MF	1	Sodium	15000	1	15000	ug/L			3005A	Dissolved	6020A	0	15000		
E-08	Water	MF	1	Sodium	19000	1	19000	ug/L	B	B	3005A	Dissolved	6020A	0	19000		
E-09	Water	MF	1	Sodium	19000	1	19000	ug/L	B	B	3005A	Dissolved	6020A	0	19000		
E-10	Water	MF	1	Sodium	19000	1	19000	ug/L	B	B	3005A	Dissolved	6020A	0	19000		
E-11	Water	MF	1	Sodium	14000	1	14000	ug/L	B	B	3005A	Dissolved	6020A	0	14000		
E-12	Water	MF	1	Sodium	15000	1	15000	ug/L	B	B	3005A	Dissolved	6020A	0	15000		
E-13	Water	MF	1	Sodium	10000	1	10000	ug/L	B	B	3005A	Dissolved	6020A	0	10000		
E-14	Water	MF	1	Sodium	12000	1	12000	ug/L	B	B	3005A	Dissolved	6020	0	12000		
E-15	Water	MF	1	Sodium	15000	1	15000	ug/L	B	B	3005A	Dissolved	6020	0	15000		
E-16	Water	MF	1	Sodium	15000	1	15000	ug/L			3005A	Dissolved	6020	0	15000		
E-17	Water	MF	1	Sodium	18000	1	18000	ug/L	B	B	3005A	Dissolved	6020	0	18000		
E-18	Water	MF	1	Sodium	17000	1	17000	ug/L	B	B	3005A	Dissolved	6020	0	17000		
E-19	Water	MF	1	Sodium	13000	1	13000	ug/L			3005A	Dissolved	6020	0	13000		
E-20	Water	MF	1	Sodium	18000	1	18000	ug/L	B	B	3005A	Dissolved	6020	0	18000		
E-21	Water	MF	1	Sodium	18000	1	18000	ug/L	B	B	3005A	Dissolved	6020	0	18000		
E-22	Water	MF	1	Sodium	190000	1	190000	ug/L	B	B	3005A	Dissolved	6020	0	190000	24545.5	190000
RB-01-11192012	Water	MF	1	Sodium	660	1	660	ug/L			3005A	Dissolved	6020	0	660		
BKG-01-EM	Water	MF	1	Thallium	0.44	1	0.44	ug/L	J	J	3005A	Dissolved	6020A	0	0.44		
BKG-01-HS	Water	MF	1	Thallium	0.11	1	0.11	ug/L	J	J	3005A	Dissolved	6020A	0	0.11		
BKG-01-MID	Water	MF	1	Thallium	0.15	1	0.15	ug/L	J	J	3005A	Dissolved	6020A	0	0.15		
BKG-02-EM	Water	MF	1	Thallium	0.29	1	0.29	ug/L	J B	J B	3005A	Dissolved	6020A	0	0.29		
BKG-02-HS	Water	MF	1	Thallium	0.31	1	0.31	ug/L	J B	J B	3005A	Dissolved	6020A	0	0.31		

Client Sample ID	Matrix	sort	ion F	Analyte	Val_res	D?	Result	Unit	Qual	Flag	ep Metho	Prep Type	alysis Method	Check	Adj Val	Mean	Max
BKG-02-MID	Water	MF	1	Thallium	0.18	1	0.18	ug/L	J B	J B	3005A	Dissolved	6020A	0	0.18		
BKG-03-EM	Water	MF	1	Thallium	0.015	0	ND	ug/L	U	ND	3005A	Dissolved	6020	0	0		
BKG-03-HS	Water	MF	1	Thallium	0.023	1	0.023	ug/L	J	J	3005A	Dissolved	6020	0	0.023		
BKG-03-MID	Water	MF	1	Thallium	0.015	0	ND	ug/L	U	ND	3005A	Dissolved	6020	0	0	0.167	0.44
E-01	Water	MF	1	Thallium	0.18	1	0.18	ug/L	J	J	3005A	Dissolved	6020A	0	0.18		
E-02	Water	MF	1	Thallium	0.093	1	0.093	ug/L	J	J	3005A	Dissolved	6020A	0	0.093		
E-03	Water	MF	1	Thallium	0.21	1	0.21	ug/L	J	J	3005A	Dissolved	6020A	0	0.21		
E-04	Water	MF	1	Thallium	0.098	1	0.098	ug/L	J	J	3005A	Dissolved	6020A	0	0.098		
E-05	Water	MF	1	Thallium	0.086	1	0.086	ug/L	J	J	3005A	Dissolved	6020A	0	0.086		
E-06	Water	MF	1	Thallium	0.11	1	0.11	ug/L	J	J	3005A	Dissolved	6020A	0	0.11		
E-07	Water	MF	1	Thallium	0.07	1	0.07	ug/L	J	J	3005A	Dissolved	6020A	0	0.07		
E-08	Water	MF	1	Thallium	1.5	1	1.5	ug/L	J B	J B	3005A	Dissolved	6020A	0	1.5		
E-09	Water	MF	1	Thallium	0.55	1	0.55	ug/L	J B	J B	3005A	Dissolved	6020A	0	0.55		
E-10	Water	MF	1	Thallium	0.8	1	0.8	ug/L	J B	J B	3005A	Dissolved	6020A	0	0.8		
E-11	Water	MF	1	Thallium	0.23	1	0.23	ug/L	J B	J B	3005A	Dissolved	6020A	0	0.23		
E-12	Water	MF	1	Thallium	1.7	1	1.7	ug/L	J	J	3005A	Dissolved	6020A	0	1.7		
E-13	Water	MF	1	Thallium	0.75	1	0.75	ug/L	J	J	3005A	Dissolved	6020A	0	0.75		
E-14	Water	MF	1	Thallium	0.069	1	0.069	ug/L	J	J	3005A	Dissolved	6020	0	0.069		
E-15	Water	MF	1	Thallium	0.28	1	0.28	ug/L	J	J	3005A	Dissolved	6020	0	0.28		
E-16	Water	MF	1	Thallium	0.015	0	ND	ug/L	U	ND	3005A	Dissolved	6020	0	0		
E-17	Water	MF	1	Thallium	0.043	1	0.043	ug/L	J B	J B	3005A	Dissolved	6020	0	0.043		
E-18	Water	MF	1	Thallium	0.028	1	0.028	ug/L	J B	J B	3005A	Dissolved	6020	0	0.028		
E-19	Water	MF	1	Thallium	0.51	1	0.51	ug/L	J	J	3005A	Dissolved	6020	0	0.51		
E-20	Water	MF	1	Thallium	0.69	1	0.69	ug/L	J B	J B	3005A	Dissolved	6020	0	0.69		
E-21	Water	MF	1	Thallium	0.33	1	0.33	ug/L	J	J	3005A	Dissolved	6020	0	0.33		
E-22	Water	MF	1	Thallium	0.45	1	0.45	ug/L	J	J	3005A	Dissolved	6020	0	0.45	0.39895	1.7
RB-01-11192012	Water	MF	1	Thallium	0.015	0	ND	ug/L	U	ND	3005A	Dissolved	6020	0	0		
BKG-01-EM	Water	MF	1	Vanadium	2.7	1	2.7	ug/L	B	B	3005A	Dissolved	6020A	0	2.7		
BKG-01-HS	Water	MF	1	Vanadium	2.7	1	2.7	ug/L	B	B	3005A	Dissolved	6020A	0	2.7		
BKG-01-MID	Water	MF	1	Vanadium	1.6	1	1.6	ug/L	B	B	3005A	Dissolved	6020A	0	1.6		
BKG-02-EM	Water	MF	1	Vanadium	9.5	1	9.5	ug/L	J	J	3005A	Dissolved	6020A	0	9.5		
BKG-02-HS	Water	MF	1	Vanadium	4.3	1	4.3	ug/L	J	J	3005A	Dissolved	6020A	0	4.3		
BKG-02-MID	Water	MF	1	Vanadium	0.82	0	ND	ug/L	U	ND	3005A	Dissolved	6020A	0	0		
BKG-03-EM	Water	MF	1	Vanadium	8.4	1	8.4	ug/L	B	B	3005A	Dissolved	6020	0	8.4		
BKG-03-HS	Water	MF	1	Vanadium	11	1	11	ug/L	B	B	3005A	Dissolved	6020	0	11		
BKG-03-MID	Water	MF	1	Vanadium	5.2	1	5.2	ug/L	B	B	3005A	Dissolved	6020	0	5.2	5.04444	11
E-01	Water	MF	1	Vanadium	1.2	1	1.2	ug/L	B	B	3005A	Dissolved	6020A	0	1.2		
E-02	Water	MF	1	Vanadium	0.082	0	ND	ug/L	U	ND	3005A	Dissolved	6020A	0	0		
E-03	Water	MF	1	Vanadium	0.082	0	ND	ug/L	U	ND	3005A	Dissolved	6020A	0	0		
E-04	Water	MF	1	Vanadium	0.082	0	ND	ug/L	U	ND	3005A	Dissolved	6020A	0	0		
E-05	Water	MF	1	Vanadium	0.082	0	ND	ug/L	U	ND	3005A	Dissolved	6020A	0	0		
E-06	Water	MF	1	Vanadium	7.3	1	7.3	ug/L	B	B	3005A	Dissolved	6020A	0	7.3		
E-07	Water	MF	1	Vanadium	5.3	1	5.3	ug/L	B	B	3005A	Dissolved	6020A	0	5.3		
E-08	Water	MF	1	Vanadium	1.4	1	1.4	ug/L	J	J	3005A	Dissolved	6020A	0	1.4		
E-09	Water	MF	1	Vanadium	0.82	0	ND	ug/L	U	ND	3005A	Dissolved	6020A	0	0		
E-10	Water	MF	1	Vanadium	0.82	0	ND	ug/L	U	ND	3005A	Dissolved	6020A	0	0		
E-11	Water	MF	1	Vanadium	2.8	1	2.8	ug/L	J	J	3005A	Dissolved	6020A	0	2.8		
E-12	Water	MF	1	Vanadium	21	1	21	ug/L	B	B	3005A	Dissolved	6020A	0	21		
E-13	Water	MF	1	Vanadium	29	1	29	ug/L	B	B	3005A	Dissolved	6020A	0	29		
E-14	Water	MF	1	Vanadium	6.3	1	6.3	ug/L	B	B	3005A	Dissolved	6020	0	6.3		
E-15	Water	MF	1	Vanadium	57	1	57	ug/L	B	B	3005A	Dissolved	6020	0	57		
E-16	Water	MF	1	Vanadium	11	1	11	ug/L	B	B	3005A	Dissolved	6020	0	11		
E-17	Water	MF	1	Vanadium	1.8	1	1.8	ug/L			3005A	Dissolved	6020	0	1.8		
E-18	Water	MF	1	Vanadium	5	1	5	ug/L	B	B	3005A	Dissolved	6020	0	5		
E-19	Water	MF	1	Vanadium	1.8	1	1.8	ug/L			3005A	Dissolved	6020	0	1.8		
E-20	Water	MF	1	Vanadium	0.8	1	0.8	ug/L	J	J	3005A	Dissolved	6020	0	0.8		
E-21	Water	MF	1	Vanadium	6.3	1	6.3	ug/L			3005A	Dissolved	6020	0	6.3		
E-22	Water	MF	1	Vanadium	30	1	30	ug/L			3005A	Dissolved	6020	0	30	8.54545	57
RB-01-11192012	Water	MF	1	Vanadium	7.2	1	7.2	ug/L	B	B	3005A	Dissolved	6020	0	7.2		
BKG-01-EM	Water	MF	1	Zinc	28	1	28	ug/L	B	B	3005A	Dissolved	6020A	0	28		
BKG-01-HS	Water	MF	1	Zinc	16	1	16	ug/L	B	B	3005A	Dissolved	6020A	0	16		
BKG-01-MID	Water	MF	1	Zinc	13	1	13	ug/L	B	B	3005A	Dissolved	6020A	0	13		
BKG-02-EM	Water	MF	1	Zinc	38	1	38	ug/L	J	J	3005A	Dissolved	6020A	0	38		
BKG-02-HS	Water	MF	1	Zinc	35	1	35	ug/L	J	J	3005A	Dissolved	6020A	0	35		
BKG-02-MID	Water	MF	1	Zinc	31	1	31	ug/L	J	J	3005A	Dissolved	6020A	0	31		
BKG-03-EM	Water	MF	1	Zinc	6.9	1	6.9	ug/L	B	B	3005A	Dissolved	6020	0	6.9		
BKG-03-HS	Water	MF	1	Zinc	6.9	1	6.9	ug/L	B	B	3005A	Dissolved	6020	0	6.9		
BKG-03-MID	Water	MF	1	Zinc	7.7	1	7.7	ug/L	B	B	3005A	Dissolved	6020	0	7.7	20.2778	38
E-01	Water	MF	1	Zinc	12	1	12	ug/L	B	B	3005A	Dissolved	6020A	0	12		
E-02	Water	MF	1	Zinc	8.2	1	8.2	ug/L	B	B	3005A	Dissolved	6020A	0	8.2		
E-03	Water	MF	1	Zinc	23	1	23	ug/L	B	B	3005A	Dissolved	6020A	0	23		
E-04	Water	MF	1	Zinc	9.6	1	9.6	ug/L	B	B	3005A	Dissolved	6020A	0	9.6		
E-05	Water	MF	1	Zinc	6.2	1	6.2	ug/L	B	B	3005A	Dissolved	6020A	0	6.2		
E-06	Water	MF	1	Zinc	15	1	15	ug/L	B	B	3005A	Dissolved	6020A	0	15		
E-07	Water	MF	1	Zinc	12	1	12	ug/L	B	B	3005A	Dissolved	6020A	0	12		
E-08	Water	MF	1	Zinc	41	1	41	ug/L	J	J	3005A	Dissolved	6020A	0	41		
E-09	Water	MF	1	Zinc	34	1	34	ug/L	J	J	3005A	Dissolved	6020A	0	34		
E-10	Water	MF	1	Zinc	25	1	25	ug/L	J	J	3005A	Dissolved	6020A	0	25		
E-11	Water	MF	1	Zinc	22	1	22	ug/L	J	J	3005A	Dissolved	6020A	0	22		
E-12	Water	MF	1	Zinc	230	1	230	ug/L			3005A	Dissolved	6020A	0	230		
E-13	Water	MF	1	Zinc	15	1	15	ug/L	J	J	3005A	Dissolved	6020A	0	15		
E-14	Water	MF	1	Zinc	13	1	13	ug/L			3005A	Dissolved	6020	0	13		
E-15	Water	MF	1	Zinc	130	1	130	ug/L	B	B	3005A	Dissolved	6020	0	130		
E-16	Water	MF	1	Zinc	11	1	11	ug/L	B	B	3005A	Dissolved	6020	0	11		
E-17	Water	MF	1	Zinc	4.4	1	4.4	ug/L	J	J	3005A	Dissolved	6020	0	4.4		
E-18	Water	MF	1	Zinc	14	1	14	ug/L			3005A	Dissolved	6020	0	14		
E-19	Water	MF	1	Zinc	4.5	1	4.5	ug/L	J	J	3005A	Dissolved	6020	0	4.5		
E-20	Water	MF	1	Zinc	10	1	10	ug/L	B	B	3005A	Dissolved	6020	0	10		
E-21	Water	MF	1	Zinc	12	1	12	ug/L			3005A	Dissolved	6020	0	12		
E-22	Water	MF	1	Zinc	43	1	43	ug/L	J	J	3005A	Dissolved	6020	0	43	31.5864	230
RB-01-11192012	Water	MF	1	Zinc	4	1	4	ug/L	J B	J B	3005A	Dissolved	6020	0	4		
BKG-01-EM	Water	OP	1	Azinphos-methyl	0.11	1	0.11	ug/L	U	ND	3510C	Total/NA	8141B	0	0		
BKG-01-EM	Water	OP	1	Bolstar	0.1	0	0.1	ug/L	U	ND	3510C	Total/NA	8141B	0	0		
BKG-01-EM	Water	OP	1	Demeton-O	0.088	0	0.088	ug/L	U	ND	3510C	Total/NA	8141B	0	0		
BKG-01-EM	Water	OP	1	Demeton-S	0.067	0	0.067	ug/L	U	ND	3510C	Total/NA	8141B	0	0		
BKG-01-EM	Water	OP	1	Diazinon	0.089	0	0.089	ug/L	U	ND	3510C	Total/NA	8141B	0	0		
BKG-01-EM	Water	OP	1	Dimethoate	0.11	0	0.11	ug/L	U	ND	3510C	Total/NA	8141B	0	0		
BKG-01-EM	Water	OP	1	Disulfoton	0.095	0	0.095	ug/L	U	ND	3510C	Total/NA	8141B	0	0		
BKG-01-EM	Water	OP	1	EPN	0.11	0	0.11	ug/L	U	ND	3510C	Total/NA	8141B	0	0		
BKG-01-EM	Water	OP	1	Famphur	0.12	0	0.12	ug/L	U	ND	3510C	Total/NA	8141B	0	0		
BKG-01-EM	Water	OP	1	Fensulfothion	0.16	0	0.16	ug/L	U	ND	3510C	Total/NA	8141B	0	0		
BKG-01-EM	Water	OP	1	Fenthion	0.08	0	0.08	ug/L	U	ND	3510C	Total/NA	8141B	0	0		
BKG-01-EM	Water	OP	1	Malathion	0.1	0	0.1	ug/L	U	ND	3510C	Total/NA	8141B	0	0		
BKG-01-EM	Water	OP	1	Methyl parathion	0.1	0	0.1	ug/L	U	ND	3510C	Total/NA	8141B	0	0		
BKG-01-EM	Water	OP	1	Mevinphos	0.092	0	0.092	ug/L	U	ND	3510C	Total/NA	8141B	0	0		
BKG-01-EM	Water	OP	1	Mocap	0.095	0	0.095	ug/L	U	ND	3510C	Total/NA	8141B	0	0		
BKG-01-EM	Water	OP	1	Parathion	0.15	0	0.15	ug/L	U*	ND*	3510C	Total/NA	8141B	0	0.15		
BKG-01-EM	Water	OP	1	Phorate	0.087	0	0.087	ug/L	U	ND	3510C	Total/NA	8141B	0	0		
BKG-01-EM	Water	OP	1	Ronnel	0.097	0	0.097	ug/L	U	ND	3510C	Total/NA	8141B	0	0		
BKG-01-EM	Water	OP	1	Stirophos	0.09	0	0.09	ug/L	U	ND	3510C	Total/NA	8141B	0	0		
BKG-01-EM	Water	OP	1	Sulfotepp	0.089	0	0.089	ug/L	U	ND	3510C	Total/NA	8141B	0	0		
BKG-01-EM	Water	OP	1	Thionazin	0.095	0	0.095	ug/L	U	ND	3510C	Total/NA	8141B	0	0		
BKG-01-EM	Water	OP	1	Tokuthion	0.088	0	0.088	ug/L	U	ND	3510C	Total/NA	8141B	0	0		
BKG-01-EM	Water	OP	1	Trichloronate	0.094		0.094	ug/L	U	ND	3510C	Total/NA	8141B	0	0		
BKG-01-EM	Water	OS	1	1,1'-Biphenyl	0.04	0	0.04	ug/L	U	ND			8270D LL	0	0		
BKG-01-HS	Water	OS	1	1,1'-Biphenyl	0.04	0	ND	ug/L	U	ND			8270D LL	0	0		
BKG-01-MID	Water	OS	1	1,1'-Biphenyl	0.04	0	ND	ug/L	U	ND			8270D LL	0	0		
BKG-02-EM	Water	OS	1	1,1'-Biphenyl	0.04	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-02-HS	Water	OS	1	1,1'-Biphenyl	0.04	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-02-MID	Water	OS	1	1,1'-Biphenyl	0.04	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-03-EM	Water	OS	1	1,1'-Biphenyl	0.04	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-03-HS	Water	OS	1	1,1'-Biphenyl	0.04	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		

Client Sample ID	Matrix	sort	ion F	Analyte	Val_res	D?	Result	Unit	Qual	Flag	ep Metho	Prep Type	alysis Method	Check	Adj Val	Mean	Max
BKG-03-MID	Water	OS	1	1,1'-Biphenyl	0.04	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0	0	0
E-01	Water	OS	1	1,1'-Biphenyl	0.046	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-02	Water	OS	1	1,1'-Biphenyl	0.046	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-03	Water	OS	1	1,1'-Biphenyl	0.043	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-04	Water	OS	1	1,1'-Biphenyl	0.04	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-05	Water	OS	1	1,1'-Biphenyl	0.04	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-06	Water	OS	1	1,1'-Biphenyl	0.042	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-07	Water	OS	1	1,1'-Biphenyl	0.041	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-08	Water	OS	1	1,1'-Biphenyl	0.04	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-09	Water	OS	1	1,1'-Biphenyl	0.04	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-10	Water	OS	1	1,1'-Biphenyl	0.04	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-11	Water	OS	1	1,1'-Biphenyl	0.051	1	0.051	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.051		
E-12	Water	OS	1	1,1'-Biphenyl	0.055	1	0.055	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.055		
E-13	Water	OS	1	1,1'-Biphenyl	0.041	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-14	Water	OS	1	1,1'-Biphenyl	0.041	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-15	Water	OS	1	1,1'-Biphenyl	0.04	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-16	Water	OS	1	1,1'-Biphenyl	0.039	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-17	Water	OS	1	1,1'-Biphenyl	0.04	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-18	Water	OS	1	1,1'-Biphenyl	0.04	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-19	Water	OS	1	1,1'-Biphenyl	0.057	1	0.057	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.057		
E-20	Water	OS	1	1,1'-Biphenyl	0.04	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-21	Water	OS	1	1,1'-Biphenyl	0.04	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-22	Water	OS	1	1,1'-Biphenyl	0.04	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0	0.00741	0.057
I-1	Sediment	OS	1	1,1'-Biphenyl	1.8	0	ND	ug/Kg	U	ND	3541	Total/NA	8270D LL	0	0		
I-2	Sediment	OS	1	1,1'-Biphenyl	1.7	0	ND	ug/Kg	U	ND	3541	Total/NA	8270D LL	0	0		
I-3	Sediment	OS	2	1,1'-Biphenyl	3.8	0	ND	ug/Kg	U	ND	3541	Total/NA	8270D LL	0	0		
I-4	Sediment	OS	1	1,1'-Biphenyl	1.8	1	1.8	ug/Kg	J	J	3541	Total/NA	8270D LL	0	1.8		
I-5	Sediment	OS	1	1,1'-Biphenyl	1.9	0	ND	ug/Kg	U	ND	3541	Total/NA	8270D LL	0	0	0.36	1.8
RB-01-11192012	Water	OS	1	1,1'-Biphenyl	0.041	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-01-EM	Water	OS	1	2-Methylnaphthalene	0.012	0	0.012	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-01-HS	Water	OS	1	2-Methylnaphthalene	0.012	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-01-MID	Water	OS	1	2-Methylnaphthalene	0.012	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-02-EM	Water	OS	1	2-Methylnaphthalene	0.012	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-02-HS	Water	OS	1	2-Methylnaphthalene	0.012	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-02-MID	Water	OS	1	2-Methylnaphthalene	0.012	1	0.012	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.012		
BKG-03-EM	Water	OS	1	2-Methylnaphthalene	0.012	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-03-HS	Water	OS	1	2-Methylnaphthalene	0.012	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-03-MID	Water	OS	1	2-Methylnaphthalene	0.012	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0	0.00133	0.012
E-01	Water	OS	1	2-Methylnaphthalene	0.014	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-02	Water	OS	1	2-Methylnaphthalene	0.014	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-03	Water	OS	1	2-Methylnaphthalene	0.013	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-04	Water	OS	1	2-Methylnaphthalene	0.012	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-05	Water	OS	1	2-Methylnaphthalene	0.012	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-06	Water	OS	1	2-Methylnaphthalene	0.012	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-07	Water	OS	1	2-Methylnaphthalene	0.012	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-08	Water	OS	1	2-Methylnaphthalene	0.012	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-09	Water	OS	1	2-Methylnaphthalene	0.012	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-10	Water	OS	1	2-Methylnaphthalene	0.068	1	0.068	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.068		
E-11	Water	OS	1	2-Methylnaphthalene	0.13	1	0.13	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.13		
E-12	Water	OS	1	2-Methylnaphthalene	0.25	1	0.25	ug/L			3520C	Total/NA	8270D LL	0	0.25		
E-13	Water	OS	1	2-Methylnaphthalene	0.046	1	0.046	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.046		
E-14	Water	OS	1	2-Methylnaphthalene	0.14	1	0.14	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.14		
E-15	Water	OS	1	2-Methylnaphthalene	0.066	1	0.066	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.066		
E-16	Water	OS	1	2-Methylnaphthalene	0.066	1	0.066	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.066		
E-17	Water	OS	1	2-Methylnaphthalene	0.012	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-18	Water	OS	1	2-Methylnaphthalene	0.012	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-19	Water	OS	1	2-Methylnaphthalene	0.21	1	0.21	ug/L			3520C	Total/NA	8270D LL	0	0.21		
E-20	Water	OS	1	2-Methylnaphthalene	0.12	1	0.12	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.12		
E-21	Water	OS	1	2-Methylnaphthalene	0.19	1	0.19	ug/L			3520C	Total/NA	8270D LL	0	0.19		
E-22	Water	OS	1	2-Methylnaphthalene	0.051	1	0.051	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.051	0.06077	0.25
I-1	Sediment	OS	1	2-Methylnaphthalene	0.36	0	ND	ug/Kg	U	ND	3541	Total/NA	8270D LL	0	0		
I-2	Sediment	OS	1	2-Methylnaphthalene	0.35	0	ND	ug/Kg	U	ND	3541	Total/NA	8270D LL	0	0		
I-3	Sediment	OS	2	2-Methylnaphthalene	3.2	1	3.2	ug/Kg	J	J	3541	Total/NA	8270D LL	0	3.2		
I-4	Sediment	OS	1	2-Methylnaphthalene	6.7	1	6.7	ug/Kg			3541	Total/NA	8270D LL	0	6.7		
I-5	Sediment	OS	1	2-Methylnaphthalene	1.7	1	1.7	ug/Kg	J	J	3541	Total/NA	8270D LL	0	1.7	2.32	6.7
RB-01-11192012	Water	OS	1	2-Methylnaphthalene	0.012	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-01-EM	Water	OS	1	Acenaphthene	0.014	0	0.014	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-01-HS	Water	OS	1	Acenaphthene	0.014	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-01-MID	Water	OS	1	Acenaphthene	0.014	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-02-EM	Water	OS	1	Acenaphthene	0.014	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-02-HS	Water	OS	1	Acenaphthene	0.014	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-02-MID	Water	OS	1	Acenaphthene	0.061	1	0.061	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.061		
BKG-03-EM	Water	OS	1	Acenaphthene	0.014	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-03-HS	Water	OS	1	Acenaphthene	0.014	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-03-MID	Water	OS	1	Acenaphthene	0.014	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0	0.00678	0.061
E-01	Water	OS	1	Acenaphthene	0.016	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-02	Water	OS	1	Acenaphthene	0.016	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-03	Water	OS	1	Acenaphthene	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-04	Water	OS	1	Acenaphthene	0.014	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-05	Water	OS	1	Acenaphthene	0.014	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-06	Water	OS	1	Acenaphthene	0.014	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-07	Water	OS	1	Acenaphthene	0.014	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-08	Water	OS	1	Acenaphthene	0.014	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-09	Water	OS	1	Acenaphthene	0.014	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-10	Water	OS	1	Acenaphthene	0.065	1	0.065	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.065		
E-11	Water	OS	1	Acenaphthene	0.064	1	0.064	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.064		
E-12	Water	OS	1	Acenaphthene	0.26	1	0.26	ug/L			3520C	Total/NA	8270D LL	0	0.26		
E-13	Water	OS	1	Acenaphthene	0.014	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-14	Water	OS	1	Acenaphthene	0.052	1	0.052	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.052		
E-15	Water	OS	1	Acenaphthene	0.095	1	0.095	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.095		
E-16	Water	OS	1	Acenaphthene	0.014	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-17	Water	OS	1	Acenaphthene	0.014	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-18	Water	OS	1	Acenaphthene	0.014	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-19	Water	OS	1	Acenaphthene	0.14	1	0.14	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.14		
E-20	Water	OS	1	Acenaphthene	0.014	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-21	Water	OS	1	Acenaphthene	0.15	1	0.15	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.15		
E-22	Water	OS	1	Acenaphthene	0.069	1	0.069	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.069	0.04068	0.26
I-1	Sediment	OS	1	Acenaphthene	0.38	0	ND	ug/Kg	U	ND	3541	Total/NA	8270D LL	0	0		
I-2	Sediment	OS	1	Acenaphthene	0.37	0	ND	ug/Kg	U	ND	3541	Total/NA	8270D LL	0	0		
I-3	Sediment	OS	2	Acenaphthene	3.6	1	3.6	ug/Kg	J	J	3541	Total/NA	8270D LL	0	3.6		
I-4	Sediment	OS	1	Acenaphthene	5.5	1	5.5	ug/Kg			3541	Total/NA	8270D LL	0	5.5		
I-5	Sediment	OS	1	Acenaphthene	2.9	1	2.9	ug/Kg	J	J	3541	Total/NA	8270D LL	0	2.9	2.4	5.5
RB-01-11192012	Water	OS	1	Acenaphthene	0.014	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-01-EM	Water	OS	1	Acenaphthylene	0.015	0	0.015	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-01-HS	Water	OS	1	Acenaphthylene	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-01-MID	Water	OS	1	Acenaphthylene	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-02-EM	Water	OS	1	Acenaphthylene	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-02-HS	Water	OS	1	Acenaphthylene	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-02-MID	Water	OS	1	Acenaphthylene	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-03-EM	Water	OS	1	Acenaphthylene	0.014	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-03-HS	Water	OS	1	Acenaphthylene	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-03-MID	Water	OS	1	Acenaphthylene	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0	0	0
E-01	Water	OS	1	Acenaphthylene	0.017	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-02	Water	OS	1	Acenaphthylene	0.017	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-03	Water	OS	1	Acenaphthylene	0.016	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-04	Water	OS	1	Acenaphthylene	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-05	Water	OS	1	Acenaphthylene	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-06	Water	OS	1	Acenaphthylene	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-07	Water	OS	1	Acenaphthylene	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-08	Water	OS	1	Acenaphthylene	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-09	Water	OS	1	Acenaphthylene	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-10	Water	OS	1	Acenaphthylene	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		

Client Sample ID	Matrix	sort	ion F	Analyte	Val_res	D?	Result	Unit	Qual	Flag	ep Metho	Prep Type	alysis Method	Check	Adj Val	Mean	Max
E-11	Water	OS	1	Acenaphthylene	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-12	Water	OS	1	Acenaphthylene	0.024	1	0.024	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.024		
E-13	Water	OS	1	Acenaphthylene	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-14	Water	OS	1	Acenaphthylene	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-15	Water	OS	1	Acenaphthylene	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-16	Water	OS	1	Acenaphthylene	0.014	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-17	Water	OS	1	Acenaphthylene	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-18	Water	OS	1	Acenaphthylene	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-19	Water	OS	1	Acenaphthylene	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-20	Water	OS	1	Acenaphthylene	0.014	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-21	Water	OS	1	Acenaphthylene	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-22	Water	OS	1	Acenaphthylene	0.053	1	0.053	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.053	0.0035	0.053
I-1	Sediment	OS	1	Acenaphthylene	0.47	1	0.47	ug/Kg	J	J	3541	Total/NA	8270D LL	0	0.47		
I-2	Sediment	OS	1	Acenaphthylene	0.44	0	ND	ug/Kg	U	ND	3541	Total/NA	8270D LL	0	0		
I-3	Sediment	OS	2	Acenaphthylene	2.4	1	2.4	ug/Kg	J	J	3541	Total/NA	8270D LL	0	2.4		
I-4	Sediment	OS	1	Acenaphthylene	6.5	1	6.5	ug/Kg			3541	Total/NA	8270D LL	0	6.5		
I-5	Sediment	OS	1	Acenaphthylene	0.49	0	ND	ug/Kg	U	ND	3541	Total/NA	8270D LL	0	0	1.874	6.5
RB-01-11192012	Water	OS	1	Acenaphthylene	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-01-EM	Water	OS	1	Acetophenone	0.077	0	0.077	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-01-HS	Water	OS	1	Acetophenone	0.077	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-01-MID	Water	OS	1	Acetophenone	0.077	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-02-EM	Water	OS	1	Acetophenone	0.077	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-02-HS	Water	OS	1	Acetophenone	0.077	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-02-MID	Water	OS	1	Acetophenone	0.077	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-03-EM	Water	OS	1	Acetophenone	0.076	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-03-HS	Water	OS	1	Acetophenone	0.077	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-03-MID	Water	OS	1	Acetophenone	0.077	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0	0	0
E-01	Water	OS	1	Acetophenone	0.089	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-02	Water	OS	1	Acetophenone	0.089	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-03	Water	OS	1	Acetophenone	0.082	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-04	Water	OS	1	Acetophenone	0.077	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-05	Water	OS	1	Acetophenone	0.078	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-06	Water	OS	1	Acetophenone	0.08	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-07	Water	OS	1	Acetophenone	0.078	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-08	Water	OS	1	Acetophenone	0.077	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-09	Water	OS	1	Acetophenone	0.078	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-10	Water	OS	1	Acetophenone	0.077	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-11	Water	OS	1	Acetophenone	0.078	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-12	Water	OS	1	Acetophenone	0.078	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-13	Water	OS	1	Acetophenone	0.079	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-14	Water	OS	1	Acetophenone	0.079	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-15	Water	OS	1	Acetophenone	0.077	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-16	Water	OS	1	Acetophenone	0.075	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-17	Water	OS	1	Acetophenone	0.077	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-18	Water	OS	1	Acetophenone	0.078	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-19	Water	OS	1	Acetophenone	0.077	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-20	Water	OS	1	Acetophenone	0.076	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-21	Water	OS	1	Acetophenone	0.14	1	0.14	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.14		
E-22	Water	OS	1	Acetophenone	0.077	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0	0.00636	0.14
I-1	Sediment	OS	1	Acetophenone	2.6	1	2.6	ug/Kg	J	J	3541	Total/NA	8270D LL	0	2.6		
I-2	Sediment	OS	1	Acetophenone	1.6	0	ND	ug/Kg	U	ND	3541	Total/NA	8270D LL	0	0		
I-3	Sediment	OS	2	Acetophenone	3.5	0	ND	ug/Kg	U	ND	3541	Total/NA	8270D LL	0	0		
I-4	Sediment	OS	1	Acetophenone	1.5	0	ND	ug/Kg	U	ND	3541	Total/NA	8270D LL	0	0		
I-5	Sediment	OS	1	Acetophenone	1.8	0	ND	ug/Kg	U	ND	3541	Total/NA	8270D LL	0	0	0.52	2.6
RB-01-11192012	Water	OS	1	Acetophenone	0.078	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-01-EM	Water	OS	1	Anthracene	0.15	0	0.15	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-01-HS	Water	OS	1	Anthracene	0.15	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-01-MID	Water	OS	1	Anthracene	0.15	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-02-EM	Water	OS	1	Anthracene	0.15	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-02-HS	Water	OS	1	Anthracene	0.15	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-02-MID	Water	OS	1	Anthracene	0.15	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-03-EM	Water	OS	1	Anthracene	0.14	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-03-HS	Water	OS	1	Anthracene	0.15	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-03-MID	Water	OS	1	Anthracene	0.15	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0	0	0
E-01	Water	OS	1	Anthracene	0.17	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-02	Water	OS	1	Anthracene	0.17	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-03	Water	OS	1	Anthracene	0.16	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-04	Water	OS	1	Anthracene	0.15	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-05	Water	OS	1	Anthracene	0.15	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-06	Water	OS	1	Anthracene	0.15	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-07	Water	OS	1	Anthracene	0.15	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-08	Water	OS	1	Anthracene	0.15	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-09	Water	OS	1	Anthracene	0.15	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-10	Water	OS	1	Anthracene	0.15	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-11	Water	OS	1	Anthracene	0.15	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-12	Water	OS	1	Anthracene	0.15	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-13	Water	OS	1	Anthracene	0.15	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-14	Water	OS	1	Anthracene	0.15	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-15	Water	OS	1	Anthracene	0.15	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-16	Water	OS	1	Anthracene	0.14	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-17	Water	OS	1	Anthracene	0.15	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-18	Water	OS	1	Anthracene	0.019	1	0.019	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.019		
E-19	Water	OS	1	Anthracene	0.064	1	0.064	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.064		
E-20	Water	OS	1	Anthracene	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-21	Water	OS	1	Anthracene	0.073	1	0.073	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.073		
E-22	Water	OS	1	Anthracene	0.048	1	0.048	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.048	0.00927	0.073
I-1	Sediment	OS	1	Anthracene	2.3	1	2.3	ug/Kg	J	J	3541	Total/NA	8270D LL	0	2.3		
I-2	Sediment	OS	1	Anthracene	0.38	0	ND	ug/Kg	U	ND	3541	Total/NA	8270D LL	0	0		
I-3	Sediment	OS	2	Anthracene	11	1	11	ug/Kg			3541	Total/NA	8270D LL	0	11		
I-4	Sediment	OS	1	Anthracene	18	1	18	ug/Kg			3541	Total/NA	8270D LL	0	18		
I-5	Sediment	OS	1	Anthracene	3.2	1	3.2	ug/Kg	J	J	3541	Total/NA	8270D LL	0	3.2	6.9	18
RB-01-11192012	Water	OS	1	Anthracene	0.15	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-01-EM	Water	OS	1	Benzaldehyde	0.49	1	0.49	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.49		
BKG-01-HS	Water	OS	1	Benzaldehyde	0.14	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-01-MID	Water	OS	1	Benzaldehyde	0.14	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-02-EM	Water	OS	1	Benzaldehyde	0.51	1	0.51	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.51		
BKG-02-HS	Water	OS	1	Benzaldehyde	0.51	1	0.51	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.51		
BKG-02-MID	Water	OS	1	Benzaldehyde	0.52	1	0.52	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.52		
BKG-03-EM	Water	OS	1	Benzaldehyde	0.14	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-03-HS	Water	OS	1	Benzaldehyde	0.14	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-03-MID	Water	OS	1	Benzaldehyde	0.14	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0	0.22556	0.52
E-01	Water	OS	1	Benzaldehyde	0.17	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-02	Water	OS	1	Benzaldehyde	0.17	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-03	Water	OS	1	Benzaldehyde	0.15	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-04	Water	OS	1	Benzaldehyde	0.14	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-05	Water	OS	1	Benzaldehyde	0.15	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-06	Water	OS	1	Benzaldehyde	0.15	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-07	Water	OS	1	Benzaldehyde	0.15	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-08	Water	OS	1	Benzaldehyde	0.14	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-09	Water	OS	1	Benzaldehyde	0.15	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-10	Water	OS	1	Benzaldehyde	0.14	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-11	Water	OS	1	Benzaldehyde	0.15	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-12	Water	OS	1	Benzaldehyde	0.15	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-13	Water	OS	1	Benzaldehyde	0.15	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-14	Water	OS	1	Benzaldehyde	0.15	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-15	Water	OS	1	Benzaldehyde	0.16	1	0.16	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.16		
E-16	Water	OS	1	Benzaldehyde	0.57	1	0.57	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.57		
E-17	Water	OS	1	Benzaldehyde	0.14	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-18	Water	OS	1	Benzaldehyde	0.15	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-19	Water	OS	1	Benzaldehyde	0.14	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-20	Water	OS	1	Benzaldehyde	0.23	1	0.23	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.23		
E-21	Water	OS	1	Benzaldehyde	0.3	1	0.3	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.3		

Client Sample ID	Matrix	sort	ion F	Analyte	Val_res	D?	Result	Unit	Qual	Flag	ep Metho	Prep Type	alysis Method	Check	Adj Val	Mean	Max
E-22	Water	OS	1	Benzaldehyde	0.52	1	0.52	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.52	0.08091	0.57
I-1	Sediment	OS	1	Benzaldehyde	11	1	11	ug/Kg	J	J	3541	Total/NA	8270D LL	0	11		
I-2	Sediment	OS	1	Benzaldehyde	9.9	1	9.9	ug/Kg	J	J	3541	Total/NA	8270D LL	0	9.9		
I-3	Sediment	OS	2	Benzaldehyde	6.4	0	ND	ug/Kg	U	ND	3541	Total/NA	8270D LL	0	0		
I-4	Sediment	OS	1	Benzaldehyde	4.9	1	4.9	ug/Kg	J	J	3541	Total/NA	8270D LL	0	4.9		
I-5	Sediment	OS	1	Benzaldehyde	5.6	1	5.6	ug/Kg	J	J	3541	Total/NA	8270D LL	0	5.6	6.28	11
RB-01-11192012	Water	OS	1	Benzaldehyde	0.66	1	0.66	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.66		
BKG-01-EM	Water	OS	1	Benzo[a]anthracene	0.014	0	0.014	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-01-HS	Water	OS	1	Benzo[a]anthracene	0.014	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-01-MID	Water	OS	1	Benzo[a]anthracene	0.014	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-02-EM	Water	OS	1	Benzo[a]anthracene	0.014	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-02-HS	Water	OS	1	Benzo[a]anthracene	0.014	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-02-MID	Water	OS	1	Benzo[a]anthracene	0.014	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-03-EM	Water	OS	1	Benzo[a]anthracene	0.014	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-03-HS	Water	OS	1	Benzo[a]anthracene	0.014	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-03-MID	Water	OS	1	Benzo[a]anthracene	0.014	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0	0	0
E-01	Water	OS	1	Benzo[a]anthracene	0.016	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-02	Water	OS	1	Benzo[a]anthracene	0.016	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-03	Water	OS	1	Benzo[a]anthracene	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-04	Water	OS	1	Benzo[a]anthracene	0.014	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-05	Water	OS	1	Benzo[a]anthracene	0.014	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-06	Water	OS	1	Benzo[a]anthracene	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-07	Water	OS	1	Benzo[a]anthracene	0.014	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-08	Water	OS	1	Benzo[a]anthracene	0.014	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-09	Water	OS	1	Benzo[a]anthracene	0.014	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-10	Water	OS	1	Benzo[a]anthracene	0.026	1	0.026	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.026		
E-11	Water	OS	1	Benzo[a]anthracene	0.014	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-12	Water	OS	1	Benzo[a]anthracene	0.014	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-13	Water	OS	1	Benzo[a]anthracene	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-14	Water	OS	1	Benzo[a]anthracene	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-15	Water	OS	1	Benzo[a]anthracene	0.014	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-16	Water	OS	1	Benzo[a]anthracene	0.11	1	0.11	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.11		
E-17	Water	OS	1	Benzo[a]anthracene	0.014	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-18	Water	OS	1	Benzo[a]anthracene	0.014	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-19	Water	OS	1	Benzo[a]anthracene	0.041	1	0.041	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.041		
E-20	Water	OS	1	Benzo[a]anthracene	0.014	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-21	Water	OS	1	Benzo[a]anthracene	0.29	1	0.29	ug/L			3520C	Total/NA	8270D LL	0	0.29		
E-22	Water	OS	1	Benzo[a]anthracene	0.058	1	0.058	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.058	0.02386	0.29
I-1	Sediment	OS	1	Benzo[a]anthracene	9.4	1	9.4	ug/Kg			3541	Total/NA	8270D LL	0	9.4		
I-2	Sediment	OS	1	Benzo[a]anthracene	0.48	0	ND	ug/Kg	U	ND	3541	Total/NA	8270D LL	0	0		
I-3	Sediment	OS	2	Benzo[a]anthracene	29	1	29	ug/Kg			3541	Total/NA	8270D LL	0	29		
I-4	Sediment	OS	1	Benzo[a]anthracene	82	1	82	ug/Kg			3541	Total/NA	8270D LL	0	82		
I-5	Sediment	OS	1	Benzo[a]anthracene	5.4	1	5.4	ug/Kg			3541	Total/NA	8270D LL	0	5.4	25.16	82
RB-01-11192012	Water	OS	1	Benzo[a]anthracene	0.014	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-01-EM	Water	OS	1	Benzo[a]pyrene	0.013	0	0.013	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-01-HS	Water	OS	1	Benzo[a]pyrene	0.013	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-01-MID	Water	OS	1	Benzo[a]pyrene	0.013	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-02-EM	Water	OS	1	Benzo[a]pyrene	0.013	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-02-HS	Water	OS	1	Benzo[a]pyrene	0.013	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-02-MID	Water	OS	1	Benzo[a]pyrene	0.013	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-03-EM	Water	OS	1	Benzo[a]pyrene	0.013	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-03-HS	Water	OS	1	Benzo[a]pyrene	0.013	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-03-MID	Water	OS	1	Benzo[a]pyrene	0.013	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0	0	0
E-01	Water	OS	1	Benzo[a]pyrene	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-02	Water	OS	1	Benzo[a]pyrene	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-03	Water	OS	1	Benzo[a]pyrene	0.014	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-04	Water	OS	1	Benzo[a]pyrene	0.013	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-05	Water	OS	1	Benzo[a]pyrene	0.013	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-06	Water	OS	1	Benzo[a]pyrene	0.013	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-07	Water	OS	1	Benzo[a]pyrene	0.013	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-08	Water	OS	1	Benzo[a]pyrene	0.013	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-09	Water	OS	1	Benzo[a]pyrene	0.013	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-10	Water	OS	1	Benzo[a]pyrene	0.013	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-11	Water	OS	1	Benzo[a]pyrene	0.013	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-12	Water	OS	1	Benzo[a]pyrene	0.013	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-13	Water	OS	1	Benzo[a]pyrene	0.013	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-14	Water	OS	1	Benzo[a]pyrene	0.013	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-15	Water	OS	1	Benzo[a]pyrene	0.013	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-16	Water	OS	1	Benzo[a]pyrene	0.084	1	0.084	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.084		
E-17	Water	OS	1	Benzo[a]pyrene	0.013	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-18	Water	OS	1	Benzo[a]pyrene	0.013	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-19	Water	OS	1	Benzo[a]pyrene	0.013	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-20	Water	OS	1	Benzo[a]pyrene	0.013	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-21	Water	OS	1	Benzo[a]pyrene	0.27	1	0.27	ug/L			3520C	Total/NA	8270D LL	0	0.27		
E-22	Water	OS	1	Benzo[a]pyrene	0.052	1	0.052	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.052	0.01845	0.27
I-1	Sediment	OS	1	Benzo[a]pyrene	7.8	1	7.8	ug/Kg			3541	Total/NA	8270D LL	0	7.8		
I-2	Sediment	OS	1	Benzo[a]pyrene	0.39	0	ND	ug/Kg	U	ND	3541	Total/NA	8270D LL	0	0		
I-3	Sediment	OS	2	Benzo[a]pyrene	25	1	25	ug/Kg			3541	Total/NA	8270D LL	0	25		
I-4	Sediment	OS	1	Benzo[a]pyrene	62	1	62	ug/Kg			3541	Total/NA	8270D LL	0	62		
I-5	Sediment	OS	1	Benzo[a]pyrene	4.1	1	4.1	ug/Kg	J	J	3541	Total/NA	8270D LL	0	4.1	19.78	62
RB-01-11192012	Water	OS	1	Benzo[a]pyrene	0.013	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-01-EM	Water	OS	1	Benzo[b]fluoranthene	0.015	0	0.015	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-01-HS	Water	OS	1	Benzo[b]fluoranthene	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-01-MID	Water	OS	1	Benzo[b]fluoranthene	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-02-EM	Water	OS	1	Benzo[b]fluoranthene	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-02-HS	Water	OS	1	Benzo[b]fluoranthene	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-02-MID	Water	OS	1	Benzo[b]fluoranthene	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-03-EM	Water	OS	1	Benzo[b]fluoranthene	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-03-HS	Water	OS	1	Benzo[b]fluoranthene	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-03-MID	Water	OS	1	Benzo[b]fluoranthene	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0	0	0
E-01	Water	OS	1	Benzo[b]fluoranthene	0.017	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-02	Water	OS	1	Benzo[b]fluoranthene	0.017	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-03	Water	OS	1	Benzo[b]fluoranthene	0.016	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-04	Water	OS	1	Benzo[b]fluoranthene	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-05	Water	OS	1	Benzo[b]fluoranthene	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-06	Water	OS	1	Benzo[b]fluoranthene	0.016	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-07	Water	OS	1	Benzo[b]fluoranthene	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-08	Water	OS	1	Benzo[b]fluoranthene	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-09	Water	OS	1	Benzo[b]fluoranthene	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-10	Water	OS	1	Benzo[b]fluoranthene	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-11	Water	OS	1	Benzo[b]fluoranthene	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-12	Water	OS	1	Benzo[b]fluoranthene	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-13	Water	OS	1	Benzo[b]fluoranthene	0.016	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-14	Water	OS	1	Benzo[b]fluoranthene	0.016	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-15	Water	OS	1	Benzo[b]fluoranthene	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-16	Water	OS	1	Benzo[b]fluoranthene	0.052	1	0.052	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.052		
E-17	Water	OS	1	Benzo[b]fluoranthene	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-18	Water	OS	1	Benzo[b]fluoranthene	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-19	Water	OS	1	Benzo[b]fluoranthene	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-20	Water	OS	1	Benzo[b]fluoranthene	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-21	Water	OS	1	Benzo[b]fluoranthene	0.29	1	0.29	ug/L			3520C	Total/NA	8270D LL	0	0.29		
E-22	Water	OS	1	Benzo[b]fluoranthene	0.045	1	0.045	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.045	0.01759	0.29
I-1	Sediment	OS	1	Benzo[b]fluoranthene	9.1	1	9.1	ug/Kg			3541	Total/NA	8270D LL	0	9.1		
I-2	Sediment	OS	1	Benzo[b]fluoranthene	0.61	0	ND	ug/Kg	U	ND	3541	Total/NA	8270D LL	0	0		
I-3	Sediment	OS	2	Benzo[b]fluoranthene	24	1	24	ug/Kg			3541	Total/NA	8270D LL	0	24		
I-4	Sediment	OS	1	Benzo[b]fluoranthene	55	1	55	ug/Kg			3541	Total/NA	8270D LL	0	55		
I-5	Sediment	OS	1	Benzo[b]fluoranthene	4.7	1	4.7	ug/Kg			3541	Total/NA	8270D LL	0	4.7	18.56	55
RB-01-11192012	Water	OS	1	Benzo[b]fluoranthene	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-01-EM	Water	OS	1	Benzo[g,h,i]perylene	0.015	0	0.015	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-01-HS	Water	OS	1	Benzo[g,h,i]perylene	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-01-MID	Water	OS	1	Benzo[g,h,i]perylene	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-02-EM	Water	OS	1	Benzo[g,h,i]perylene	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		

Client Sample ID	Matrix	sort	ion F	Analyte	Val_res	D?	Result	Unit	Qual	Flag	ep Metho	Prep Type	alysis Method	Check	Adj Val	Mean	Max
BKG-02-HS	Water	OS	1	Benzo[g,h,i]perylene	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-02-MID	Water	OS	1	Benzo[g,h,i]perylene	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-03-EM	Water	OS	1	Benzo[g,h,i]perylene	0.014	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-03-HS	Water	OS	1	Benzo[g,h,i]perylene	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-03-MID	Water	OS	1	Benzo[g,h,i]perylene	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0	0	0
E-01	Water	OS	1	Benzo[g,h,i]perylene	0.017	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-02	Water	OS	1	Benzo[g,h,i]perylene	0.017	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-03	Water	OS	1	Benzo[g,h,i]perylene	0.016	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-04	Water	OS	1	Benzo[g,h,i]perylene	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-05	Water	OS	1	Benzo[g,h,i]perylene	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-06	Water	OS	1	Benzo[g,h,i]perylene	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-07	Water	OS	1	Benzo[g,h,i]perylene	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-08	Water	OS	1	Benzo[g,h,i]perylene	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-09	Water	OS	1	Benzo[g,h,i]perylene	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-10	Water	OS	1	Benzo[g,h,i]perylene	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-11	Water	OS	1	Benzo[g,h,i]perylene	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-12	Water	OS	1	Benzo[g,h,i]perylene	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-13	Water	OS	1	Benzo[g,h,i]perylene	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-14	Water	OS	1	Benzo[g,h,i]perylene	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-15	Water	OS	1	Benzo[g,h,i]perylene	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-16	Water	OS	1	Benzo[g,h,i]perylene	0.11	1	0.11	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.11		
E-17	Water	OS	1	Benzo[g,h,i]perylene	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-18	Water	OS	1	Benzo[g,h,i]perylene	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-19	Water	OS	1	Benzo[g,h,i]perylene	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-20	Water	OS	1	Benzo[g,h,i]perylene	0.014	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-21	Water	OS	1	Benzo[g,h,i]perylene	0.3	1	0.3	ug/L			3520C	Total/NA	8270D LL	0	0.3		
E-22	Water	OS	1	Benzo[g,h,i]perylene	0.045	1	0.045	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.045	0.02068	0.3
I-1	Sediment	OS	1	Benzo[g,h,i]perylene	4.2	1	4.2	ug/Kg			3541	Total/NA	8270D LL	0	4.2		
I-2	Sediment	OS	1	Benzo[g,h,i]perylene	0.38	0	ND	ug/Kg	U	ND	3541	Total/NA	8270D LL	0	0		
I-3	Sediment	OS	2	Benzo[g,h,i]perylene	11	1	11	ug/Kg			3541	Total/NA	8270D LL	0	11		
I-4	Sediment	OS	1	Benzo[g,h,i]perylene	26	1	26	ug/Kg			3541	Total/NA	8270D LL	0	26		
I-5	Sediment	OS	1	Benzo[g,h,i]perylene	2.5	1	2.5	ug/Kg	J	J	3541	Total/NA	8270D LL	0	2.5	8.74	26
RB-01-11192012	Water	OS	1	Benzo[g,h,i]perylene	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-01-EM	Water	OS	1	Benzo[k]fluoranthene	0.053	0	0.053	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-01-HS	Water	OS	1	Benzo[k]fluoranthene	0.053	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-01-MID	Water	OS	1	Benzo[k]fluoranthene	0.053	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-02-EM	Water	OS	1	Benzo[k]fluoranthene	0.053	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-02-HS	Water	OS	1	Benzo[k]fluoranthene	0.053	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-02-MID	Water	OS	1	Benzo[k]fluoranthene	0.053	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-03-EM	Water	OS	1	Benzo[k]fluoranthene	0.052	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-03-HS	Water	OS	1	Benzo[k]fluoranthene	0.053	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-03-MID	Water	OS	1	Benzo[k]fluoranthene	0.053	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0	0	0
E-01	Water	OS	1	Benzo[k]fluoranthene	0.061	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-02	Water	OS	1	Benzo[k]fluoranthene	0.061	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-03	Water	OS	1	Benzo[k]fluoranthene	0.056	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-04	Water	OS	1	Benzo[k]fluoranthene	0.053	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-05	Water	OS	1	Benzo[k]fluoranthene	0.053	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-06	Water	OS	1	Benzo[k]fluoranthene	0.055	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-07	Water	OS	1	Benzo[k]fluoranthene	0.054	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-08	Water	OS	1	Benzo[k]fluoranthene	0.053	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-09	Water	OS	1	Benzo[k]fluoranthene	0.053	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-10	Water	OS	1	Benzo[k]fluoranthene	0.053	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-11	Water	OS	1	Benzo[k]fluoranthene	0.054	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-12	Water	OS	1	Benzo[k]fluoranthene	0.053	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-13	Water	OS	1	Benzo[k]fluoranthene	0.054	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-14	Water	OS	1	Benzo[k]fluoranthene	0.054	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-15	Water	OS	1	Benzo[k]fluoranthene	0.053	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-16	Water	OS	1	Benzo[k]fluoranthene	0.14	1	0.14	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.14		
E-17	Water	OS	1	Benzo[k]fluoranthene	0.053	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-18	Water	OS	1	Benzo[k]fluoranthene	0.053	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-19	Water	OS	1	Benzo[k]fluoranthene	0.053	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-20	Water	OS	1	Benzo[k]fluoranthene	0.052	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-21	Water	OS	1	Benzo[k]fluoranthene	0.31	1	0.31	ug/L			3520C	Total/NA	8270D LL	0	0.31		
E-22	Water	OS	1	Benzo[k]fluoranthene	0.053	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0	0.02045	0.31
I-1	Sediment	OS	1	Benzo[k]fluoranthene	0.8	0	ND	ug/Kg	U	ND	3541	Total/NA	8270D LL	0	0		
I-2	Sediment	OS	1	Benzo[k]fluoranthene	0.78	0	ND	ug/Kg	U	ND	3541	Total/NA	8270D LL	0	0		
I-3	Sediment	OS	2	Benzo[k]fluoranthene	16	1	16	ug/Kg			3541	Total/NA	8270D LL	0	16		
I-4	Sediment	OS	1	Benzo[k]fluoranthene	37	1	37	ug/Kg			3541	Total/NA	8270D LL	0	37		
I-5	Sediment	OS	1	Benzo[k]fluoranthene	1.7	1	1.7	ug/Kg	J	J	3541	Total/NA	8270D LL	0	1.7	10.94	37
RB-01-11192012	Water	OS	1	Benzo[k]fluoranthene	0.054	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-01-EM	Water	OS	1	Bis(2-ethylhexyl) phthalate	1.2	0	1.2	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-01-HS	Water	OS	1	Bis(2-ethylhexyl) phthalate	1.2	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-01-MID	Water	OS	1	Bis(2-ethylhexyl) phthalate	1.2	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-02-EM	Water	OS	1	Bis(2-ethylhexyl) phthalate	1.2	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-02-HS	Water	OS	1	Bis(2-ethylhexyl) phthalate	1.2	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-02-MID	Water	OS	1	Bis(2-ethylhexyl) phthalate	1.2	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-03-EM	Water	OS	1	Bis(2-ethylhexyl) phthalate	1.2	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-03-HS	Water	OS	1	Bis(2-ethylhexyl) phthalate	1.2	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-03-MID	Water	OS	1	Bis(2-ethylhexyl) phthalate	1.2	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0	0	0
E-01	Water	OS	1	Bis(2-ethylhexyl) phthalate	2.4	1	2.4	ug/L			3520C	Total/NA	8270D LL	0	2.4		
E-02	Water	OS	1	Bis(2-ethylhexyl) phthalate	1.4	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-03	Water	OS	1	Bis(2-ethylhexyl) phthalate	1.3	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-04	Water	OS	1	Bis(2-ethylhexyl) phthalate	1.2	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-05	Water	OS	1	Bis(2-ethylhexyl) phthalate	1.2	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-06	Water	OS	1	Bis(2-ethylhexyl) phthalate	1.3	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-07	Water	OS	1	Bis(2-ethylhexyl) phthalate	1.2	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-08	Water	OS	1	Bis(2-ethylhexyl) phthalate	1.2	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-09	Water	OS	1	Bis(2-ethylhexyl) phthalate	5.7	1	5.7	ug/L			3520C	Total/NA	8270D LL	0	5.7		
E-10	Water	OS	1	Bis(2-ethylhexyl) phthalate	1.2	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-11	Water	OS	1	Bis(2-ethylhexyl) phthalate	1.2	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-12	Water	OS	1	Bis(2-ethylhexyl) phthalate	1.2	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-13	Water	OS	1	Bis(2-ethylhexyl) phthalate	1.2	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-14	Water	OS	1	Bis(2-ethylhexyl) phthalate	1.2	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-15	Water	OS	1	Bis(2-ethylhexyl) phthalate	1.2	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-16	Water	OS	1	Bis(2-ethylhexyl) phthalate	1.2	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-17	Water	OS	1	Bis(2-ethylhexyl) phthalate	1.2	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-18	Water	OS	1	Bis(2-ethylhexyl) phthalate	1.2	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-19	Water	OS	1	Bis(2-ethylhexyl) phthalate	1.2	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-20	Water	OS	1	Bis(2-ethylhexyl) phthalate	1.2	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-21	Water	OS	1	Bis(2-ethylhexyl) phthalate	1.2	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-22	Water	OS	1	Bis(2-ethylhexyl) phthalate	1.2	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0	0.36818	5.7
I-1	Sediment	OS	1	Bis(2-ethylhexyl) phthalate	6.1	1	6.1	ug/Kg	J	J	3541	Total/NA	8270D LL	0	6.1		
I-2	Sediment	OS	1	Bis(2-ethylhexyl) phthalate	4.4	1	4.4	ug/Kg	J	J	3541	Total/NA	8270D LL	0	4.4		
I-3	Sediment	OS	2	Bis(2-ethylhexyl) phthalate	15	1	15	ug/Kg	J	J	3541	Total/NA	8270D LL	0	15		
I-4	Sediment	OS	1	Bis(2-ethylhexyl) phthalate	11	1	11	ug/Kg	J	J	3541	Total/NA	8270D LL	0	11		
I-5	Sediment	OS	1	Bis(2-ethylhexyl) phthalate	10	1	10	ug/Kg	J	J	3541	Total/NA	8270D LL	0	10	9.3	15
RB-01-11192012	Water	OS	1	Bis(2-ethylhexyl) phthalate	1.2	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-01-EM	Water	OS	1	Butyl benzyl phthalate	0.14	0	0.14	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-01-HS	Water	OS	1	Butyl benzyl phthalate	0.14	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-01-MID	Water	OS	1	Butyl benzyl phthalate	0.14	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-02-EM	Water	OS	1	Butyl benzyl phthalate	0.14	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-02-HS	Water	OS	1	Butyl benzyl phthalate	0.14	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-02-MID	Water	OS	1	Butyl benzyl phthalate	0.14	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-03-EM	Water	OS	1	Butyl benzyl phthalate	0.14	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-03-HS	Water	OS	1	Butyl benzyl phthalate	0.14	1	0.14	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.14		
BKG-03-MID	Water	OS	1	Butyl benzyl phthalate	0.14	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0	0.01556	0.14
E-01	Water	OS	1	Butyl benzyl phthalate	0.16	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-02	Water	OS	1	Butyl benzyl phthalate	0.16	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-03	Water	OS	1	Butyl benzyl phthalate	0.15	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-04	Water	OS	1	Butyl benzyl phthalate	0.14	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-05	Water	OS	1	Butyl benzyl phthalate	0.14	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-06	Water	OS	1	Butyl benzyl phthalate	0.14	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		

Client Sample ID	Matrix	sort	ion F	Analyte	Val_res	D?	Result	Unit	Qual	Flag	ep Metho	Prep Type	alysis Method	Check	Adj Val	Mean	Max
E-07	Water	OS	1	Butyl benzyl phthalate	0.14	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-08	Water	OS	1	Butyl benzyl phthalate	0.14	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-09	Water	OS	1	Butyl benzyl phthalate	0.14	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-10	Water	OS	1	Butyl benzyl phthalate	0.15	1	0.15	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.15		
E-11	Water	OS	1	Butyl benzyl phthalate	0.17	1	0.17	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.17		
E-12	Water	OS	1	Butyl benzyl phthalate	0.14	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-13	Water	OS	1	Butyl benzyl phthalate	0.14	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-14	Water	OS	1	Butyl benzyl phthalate	0.14	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-15	Water	OS	1	Butyl benzyl phthalate	0.14	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-16	Water	OS	1	Butyl benzyl phthalate	0.18	1	0.18	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.18		
E-17	Water	OS	1	Butyl benzyl phthalate	0.14	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-18	Water	OS	1	Butyl benzyl phthalate	0.14	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-19	Water	OS	1	Butyl benzyl phthalate	0.14	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-20	Water	OS	1	Butyl benzyl phthalate	0.14	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-21	Water	OS	1	Butyl benzyl phthalate	0.14	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-22	Water	OS	1	Butyl benzyl phthalate	0.68	1	0.68	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.68	0.05364	0.68
I-1	Sediment	OS	1	Butyl benzyl phthalate	2.7	0	ND	ug/Kg	U	ND	3541	Total/NA	8270D LL	0	0		
I-2	Sediment	OS	1	Butyl benzyl phthalate	2.7	1	2.7	ug/Kg	J	J	3541	Total/NA	8270D LL	0	2.7		
I-3	Sediment	OS	2	Butyl benzyl phthalate	5.8	0	ND	ug/Kg	U	ND	3541	Total/NA	8270D LL	0	0		
I-4	Sediment	OS	1	Butyl benzyl phthalate	3.3	1	3.3	ug/Kg	J	J	3541	Total/NA	8270D LL	0	3.3		
I-5	Sediment	OS	1	Butyl benzyl phthalate	8.5	1	8.5	ug/Kg	J	J	3541	Total/NA	8270D LL	0	8.5	2.9	8.5
RB-01-11192012	Water	OS	1	Butyl benzyl phthalate	0.14	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-01-EM	Water	OS	1	Carbazole	0.015	0	0.015	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-01-HS	Water	OS	1	Carbazole	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-01-MID	Water	OS	1	Carbazole	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-02-EM	Water	OS	1	Carbazole	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-02-HS	Water	OS	1	Carbazole	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-02-MID	Water	OS	1	Carbazole	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-03-EM	Water	OS	1	Carbazole	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-03-HS	Water	OS	1	Carbazole	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-03-MID	Water	OS	1	Carbazole	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0	0	0
E-01	Water	OS	1	Carbazole	0.018	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-02	Water	OS	1	Carbazole	0.018	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-03	Water	OS	1	Carbazole	0.016	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-04	Water	OS	1	Carbazole	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-05	Water	OS	1	Carbazole	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-06	Water	OS	1	Carbazole	0.016	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-07	Water	OS	1	Carbazole	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-08	Water	OS	1	Carbazole	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-09	Water	OS	1	Carbazole	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-10	Water	OS	1	Carbazole	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-11	Water	OS	1	Carbazole	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-12	Water	OS	1	Carbazole	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-13	Water	OS	1	Carbazole	0.016	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-14	Water	OS	1	Carbazole	0.016	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-15	Water	OS	1	Carbazole	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-16	Water	OS	1	Carbazole	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-17	Water	OS	1	Carbazole	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-18	Water	OS	1	Carbazole	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-19	Water	OS	1	Carbazole	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-20	Water	OS	1	Carbazole	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-21	Water	OS	1	Carbazole	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-22	Water	OS	1	Carbazole	0.056	1	0.056	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.056	0.00255	0.056
I-1	Sediment	OS	1	Carbazole	0.37	0	ND	ug/Kg	U	ND	3541	Total/NA	8270D LL	0	0		
I-2	Sediment	OS	1	Carbazole	0.36	0	ND	ug/Kg	U	ND	3541	Total/NA	8270D LL	0	0		
I-3	Sediment	OS	2	Carbazole	2	1	2	ug/Kg	J	J	3541	Total/NA	8270D LL	0	2		
I-4	Sediment	OS	1	Carbazole	0.34	0	ND	ug/Kg	U	ND	3541	Total/NA	8270D LL	0	0		
I-5	Sediment	OS	1	Carbazole	0.82	1	0.82	ug/Kg	J	J	3541	Total/NA	8270D LL	0	0.82	0.564	2
RB-01-11192012	Water	OS	1	Carbazole	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-01-EM	Water	OS	1	Chrysene	0.013	0	0.013	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-01-HS	Water	OS	1	Chrysene	0.013	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-01-MID	Water	OS	1	Chrysene	0.013	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-02-EM	Water	OS	1	Chrysene	0.013	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-02-HS	Water	OS	1	Chrysene	0.013	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-02-MID	Water	OS	1	Chrysene	0.013	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-03-EM	Water	OS	1	Chrysene	0.013	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-03-HS	Water	OS	1	Chrysene	0.013	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-03-MID	Water	OS	1	Chrysene	0.013	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0	0	0
E-01	Water	OS	1	Chrysene	0.016	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-02	Water	OS	1	Chrysene	0.016	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-03	Water	OS	1	Chrysene	0.014	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-04	Water	OS	1	Chrysene	0.013	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-05	Water	OS	1	Chrysene	0.014	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-06	Water	OS	1	Chrysene	0.014	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-07	Water	OS	1	Chrysene	0.014	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-08	Water	OS	1	Chrysene	0.013	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-09	Water	OS	1	Chrysene	0.014	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-10	Water	OS	1	Chrysene	0.014	1	0.014	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.014		
E-11	Water	OS	1	Chrysene	0.014	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-12	Water	OS	1	Chrysene	0.014	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-13	Water	OS	1	Chrysene	0.014	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-14	Water	OS	1	Chrysene	0.014	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-15	Water	OS	1	Chrysene	0.013	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-16	Water	OS	1	Chrysene	0.12	1	0.12	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.12		
E-17	Water	OS	1	Chrysene	0.013	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-18	Water	OS	1	Chrysene	0.014	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-19	Water	OS	1	Chrysene	0.042	1	0.042	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.042		
E-20	Water	OS	1	Chrysene	0.013	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-21	Water	OS	1	Chrysene	0.38	1	0.38	ug/L			3520C	Total/NA	8270D LL	0	0.38		
E-22	Water	OS	1	Chrysene	0.051	1	0.051	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.051	0.02759	0.38
I-1	Sediment	OS	1	Chrysene	8.5	1	8.5	ug/Kg			3541	Total/NA	8270D LL	0	8.5		
I-2	Sediment	OS	1	Chrysene	0.46	0	ND	ug/Kg	U	ND	3541	Total/NA	8270D LL	0	0		
I-3	Sediment	OS	2	Chrysene	27	1	27	ug/Kg			3541	Total/NA	8270D LL	0	27		
I-4	Sediment	OS	1	Chrysene	71	1	71	ug/Kg			3541	Total/NA	8270D LL	0	71		
I-5	Sediment	OS	1	Chrysene	6.5	1	6.5	ug/Kg			3541	Total/NA	8270D LL	0	6.5	22.6	71
RB-01-11192012	Water	OS	1	Chrysene	0.014	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-01-EM	Water	OS	1	Dibenz(a,h)anthracene	0.015	0	ND	ug/L	U	ND			8270D LL	0	0		
BKG-01-HS	Water	OS	1	Dibenz(a,h)anthracene	0.015	0	ND	ug/L	U	ND			8270D LL	0	0		
BKG-01-MID	Water	OS	1	Dibenz(a,h)anthracene	0.015	0	ND	ug/L	U	ND			8270D LL	0	0		
BKG-02-EM	Water	OS	1	Dibenz(a,h)anthracene	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-02-HS	Water	OS	1	Dibenz(a,h)anthracene	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-02-MID	Water	OS	1	Dibenz(a,h)anthracene	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-03-EM	Water	OS	1	Dibenz(a,h)anthracene	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-03-HS	Water	OS	1	Dibenz(a,h)anthracene	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-03-MID	Water	OS	1	Dibenz(a,h)anthracene	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0	0	0
E-01	Water	OS	1	Dibenz(a,h)anthracene	0.017	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-02	Water	OS	1	Dibenz(a,h)anthracene	0.017	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-03	Water	OS	1	Dibenz(a,h)anthracene	0.016	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-04	Water	OS	1	Dibenz(a,h)anthracene	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-05	Water	OS	1	Dibenz(a,h)anthracene	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-06	Water	OS	1	Dibenz(a,h)anthracene	0.016	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-07	Water	OS	1	Dibenz(a,h)anthracene	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-08	Water	OS	1	Dibenz(a,h)anthracene	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-09	Water	OS	1	Dibenz(a,h)anthracene	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-10	Water	OS	1	Dibenz(a,h)anthracene	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-11	Water	OS	1	Dibenz(a,h)anthracene	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-12	Water	OS	1	Dibenz(a,h)anthracene	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-13	Water	OS	1	Dibenz(a,h)anthracene	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-14	Water	OS	1	Dibenz(a,h)anthracene	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-15	Water	OS	1	Dibenz(a,h)anthracene	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-16	Water	OS	1	Dibenz(a,h)anthracene	0.13	1	0.13	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.13		
E-17	Water	OS	1	Dibenz(a,h)anthracene	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		

Client Sample ID	Matrix	sort	ion F	Analyte	Val_res	D?	Result	Unit	Qual	Flag	ep Metho	Prep Type	alysis Method	Check	Adj Val	Mean	Max
E-18	Water	OS	1	Dibenz(a,h)anthracene	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-19	Water	OS	1	Dibenz(a,h)anthracene	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-20	Water	OS	1	Dibenz(a,h)anthracene	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-21	Water	OS	1	Dibenz(a,h)anthracene	0.24	1	0.24	ug/L			3520C	Total/NA	8270D LL	0	0.24		
E-22	Water	OS	1	Dibenz(a,h)anthracene	0.04	1	0.04	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.04	0.01864	0.24
I-1	Sediment	OS	1	Dibenz(a,h)anthracene	0.44	0	ND	ug/Kg	U	ND	3541	Total/NA	8270D LL	0	0		
I-2	Sediment	OS	1	Dibenz(a,h)anthracene	0.43	0	ND	ug/Kg	U	ND	3541	Total/NA	8270D LL	0	0		
I-3	Sediment	OS	2	Dibenz(a,h)anthracene	2.9	1	2.9	ug/Kg	J	J	3541	Total/NA	8270D LL	0	2.9		
I-4	Sediment	OS	1	Dibenz(a,h)anthracene	8.2	1	8.2	ug/Kg			3541	Total/NA	8270D LL	0	8.2		
I-5	Sediment	OS	1	Dibenz(a,h)anthracene	0.48	0	ND	ug/Kg	U	ND	3541	Total/NA	8270D LL	0	0	2.22	8.2
RB-01-11192012	Water	OS	1	Dibenz(a,h)anthracene	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-01-EM	Water	OS	1	Dibenzofuran	0.059	1	0.059	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-01-HS	Water	OS	1	Dibenzofuran	0.059	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-01-MID	Water	OS	1	Dibenzofuran	0.059	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-02-EM	Water	OS	1	Dibenzofuran	0.059	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-02-HS	Water	OS	1	Dibenzofuran	0.059	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-02-MID	Water	OS	1	Dibenzofuran	0.059	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-03-EM	Water	OS	1	Dibenzofuran	0.059	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-03-HS	Water	OS	1	Dibenzofuran	0.059	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-03-MID	Water	OS	1	Dibenzofuran	0.059	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0	0	0
E-01	Water	OS	1	Dibenzofuran	0.069	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-02	Water	OS	1	Dibenzofuran	0.069	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-03	Water	OS	1	Dibenzofuran	0.064	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-04	Water	OS	1	Dibenzofuran	0.059	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-05	Water	OS	1	Dibenzofuran	0.06	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-06	Water	OS	1	Dibenzofuran	0.062	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-07	Water	OS	1	Dibenzofuran	0.06	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-08	Water	OS	1	Dibenzofuran	0.059	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-09	Water	OS	1	Dibenzofuran	0.06	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-10	Water	OS	1	Dibenzofuran	0.059	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-11	Water	OS	1	Dibenzofuran	0.06	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-12	Water	OS	1	Dibenzofuran	0.077	1	0.077	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.077		
E-13	Water	OS	1	Dibenzofuran	0.061	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-14	Water	OS	1	Dibenzofuran	0.061	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-15	Water	OS	1	Dibenzofuran	0.059	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-16	Water	OS	1	Dibenzofuran	0.058	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-17	Water	OS	1	Dibenzofuran	0.059	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-18	Water	OS	1	Dibenzofuran	0.06	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-19	Water	OS	1	Dibenzofuran	0.081	1	0.081	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.081		
E-20	Water	OS	1	Dibenzofuran	0.059	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-21	Water	OS	1	Dibenzofuran	0.068	1	0.068	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.068		
E-22	Water	OS	1	Dibenzofuran	0.059	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0	0.01027	0.081
I-1	Sediment	OS	1	Dibenzofuran	1.9	0	ND	ug/Kg	U	ND	3541	Total/NA	8270D LL	0	0		
I-2	Sediment	OS	1	Dibenzofuran	1.9	0	ND	ug/Kg	U	ND	3541	Total/NA	8270D LL	0	0		
I-3	Sediment	OS	2	Dibenzofuran	4.2	0	ND	ug/Kg	U	ND	3541	Total/NA	8270D LL	0	0		
I-4	Sediment	OS	1	Dibenzofuran	5.6	1	5.6	ug/Kg	J	J	3541	Total/NA	8270D LL	0	5.6		
I-5	Sediment	OS	1	Dibenzofuran	2.1	0	ND	ug/Kg	U	ND	3541	Total/NA	8270D LL	0	0	1.12	5.6
RB-01-11192012	Water	OS	1	Dibenzofuran	0.06	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-01-EM	Water	OS	1	Diethyl phthalate	0.5	1	0.5	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.5		
BKG-01-HS	Water	OS	1	Diethyl phthalate	0.22	1	0.22	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.22		
BKG-01-MID	Water	OS	1	Diethyl phthalate	0.27	1	0.27	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.27		
BKG-02-EM	Water	OS	1	Diethyl phthalate	0.23	1	0.23	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.23		
BKG-02-HS	Water	OS	1	Diethyl phthalate	0.14	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-02-MID	Water	OS	1	Diethyl phthalate	0.14	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-03-EM	Water	OS	1	Diethyl phthalate	0.44	1	0.44	ug/L	J B	J B	3520C	Total/NA	8270D LL	0	0.44		
BKG-03-HS	Water	OS	1	Diethyl phthalate	0.5	1	0.5	ug/L	J B	J B	3520C	Total/NA	8270D LL	0	0.5		
BKG-03-MID	Water	OS	1	Diethyl phthalate	0.14	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0	0.24	0.5
E-01	Water	OS	1	Diethyl phthalate	0.3	1	0.3	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.3		
E-02	Water	OS	1	Diethyl phthalate	0.23	1	0.23	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.23		
E-03	Water	OS	1	Diethyl phthalate	0.17	1	0.17	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.17		
E-04	Water	OS	1	Diethyl phthalate	0.26	1	0.26	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.26		
E-05	Water	OS	1	Diethyl phthalate	0.21	1	0.21	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.21		
E-06	Water	OS	1	Diethyl phthalate	0.16	1	0.16	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.16		
E-07	Water	OS	1	Diethyl phthalate	0.21	1	0.21	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.21		
E-08	Water	OS	1	Diethyl phthalate	0.15	1	0.15	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.15		
E-09	Water	OS	1	Diethyl phthalate	0.14	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-10	Water	OS	1	Diethyl phthalate	0.37	1	0.37	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.37		
E-11	Water	OS	1	Diethyl phthalate	0.34	1	0.34	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.34		
E-12	Water	OS	1	Diethyl phthalate	0.2	1	0.2	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.2		
E-13	Water	OS	1	Diethyl phthalate	0.14	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-14	Water	OS	1	Diethyl phthalate	0.24	1	0.24	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.24		
E-15	Water	OS	1	Diethyl phthalate	0.3	1	0.3	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.3		
E-16	Water	OS	1	Diethyl phthalate	0.36	1	0.36	ug/L	J B	J B	3520C	Total/NA	8270D LL	0	0.36		
E-17	Water	OS	1	Diethyl phthalate	0.46	1	0.46	ug/L	J B	J B	3520C	Total/NA	8270D LL	0	0.46		
E-18	Water	OS	1	Diethyl phthalate	0.26	1	0.26	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.26		
E-19	Water	OS	1	Diethyl phthalate	0.3	1	0.3	ug/L	J B	J B	3520C	Total/NA	8270D LL	0	0.3		
E-20	Water	OS	1	Diethyl phthalate	0.19	1	0.19	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.19		
E-21	Water	OS	1	Diethyl phthalate	0.14	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-22	Water	OS	1	Diethyl phthalate	0.45	1	0.45	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.45	0.23455	0.46
I-1	Sediment	OS	1	Diethyl phthalate	2.2	0	ND	ug/Kg	U	ND	3541	Total/NA	8270D LL	0	0		
I-2	Sediment	OS	1	Diethyl phthalate	2.1	0	ND	ug/Kg	U	ND	3541	Total/NA	8270D LL	0	0		
I-3	Sediment	OS	2	Diethyl phthalate	4.7	0	ND	ug/Kg	U	ND	3541	Total/NA	8270D LL	0	0		
I-4	Sediment	OS	1	Diethyl phthalate	5.5	1	5.5	ug/Kg	J B	J B	3541	Total/NA	8270D LL	0	5.5		
I-5	Sediment	OS	1	Diethyl phthalate	2.4	0	ND	ug/Kg	U	ND	3541	Total/NA	8270D LL	0	0	1.1	5.5
RB-01-11192012	Water	OS	1	Diethyl phthalate	0.33	1	0.33	ug/L	J B	J B	3520C	Total/NA	8270D LL	0	0.33		
BKG-01-EM	Water	OS	1	Di-n-butyl phthalate	0.12	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-01-HS	Water	OS	1	Di-n-butyl phthalate	0.12	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-01-MID	Water	OS	1	Di-n-butyl phthalate	0.12	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-02-EM	Water	OS	1	Di-n-butyl phthalate	0.12	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-02-HS	Water	OS	1	Di-n-butyl phthalate	0.12	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-02-MID	Water	OS	1	Di-n-butyl phthalate	0.12	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-03-EM	Water	OS	1	Di-n-butyl phthalate	0.12	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-03-HS	Water	OS	1	Di-n-butyl phthalate	0.12	1	0.12	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.12		
BKG-03-MID	Water	OS	1	Di-n-butyl phthalate	0.12	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0	0.01333	0.12
E-01	Water	OS	1	Di-n-butyl phthalate	0.14	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-02	Water	OS	1	Di-n-butyl phthalate	0.14	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-03	Water	OS	1	Di-n-butyl phthalate	0.13	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-04	Water	OS	1	Di-n-butyl phthalate	0.12	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-05	Water	OS	1	Di-n-butyl phthalate	0.12	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-06	Water	OS	1	Di-n-butyl phthalate	0.12	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-07	Water	OS	1	Di-n-butyl phthalate	0.12	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-08	Water	OS	1	Di-n-butyl phthalate	0.12	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-09	Water	OS	1	Di-n-butyl phthalate	0.12	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-10	Water	OS	1	Di-n-butyl phthalate	0.12	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-11	Water	OS	1	Di-n-butyl phthalate	0.12	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-12	Water	OS	1	Di-n-butyl phthalate	0.12	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-13	Water	OS	1	Di-n-butyl phthalate	0.12	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-14	Water	OS	1	Di-n-butyl phthalate	0.12	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-15	Water	OS	1	Di-n-butyl phthalate	0.12	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-16	Water	OS	1	Di-n-butyl phthalate	0.12	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-17	Water	OS	1	Di-n-butyl phthalate	0.12	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-18	Water	OS	1	Di-n-butyl phthalate	0.12	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-19	Water	OS	1	Di-n-butyl phthalate	0.12	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-20	Water	OS	1	Di-n-butyl phthalate	0.12	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-21	Water	OS	1	Di-n-butyl phthalate	0.12	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-22	Water	OS	1	Di-n-butyl phthalate	0.12	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0	0	0
I-1	Sediment	OS	1	Di-n-butyl phthalate	2.5	0	ND	ug/Kg	U	ND	3541	Total/NA	8270D LL	0	0		
I-2	Sediment	OS	1	Di-n-butyl phthalate	2.4	0	ND	ug/Kg	U	ND	3541	Total/NA	8270D LL	0	0		
I-3	Sediment	OS	2	Di-n-butyl phthalate	5.4	0	ND	ug/Kg	U	ND	3541	Total/NA	8270D LL	0	0		
I-4	Sediment	OS	1	Di-n-butyl phthalate	2.3	0	ND	ug/Kg	U	ND	3541	Total/NA	8270D LL	0	0		
I-5	Sediment	OS	1	Di-n-butyl phthalate	2.7	0	ND	ug/Kg	U	ND	3541	Total/NA	8270D LL	0	0	0	0
RB-01-11192012	Water	OS	1	Di-n-butyl phthalate	0.12	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		

Client Sample ID	Matrix	sort	ion F	Analyte	Val_res	D?	Result	Unit	Qual	Flag	ep Metho	Prep Type	alysis Method	Check	Adj Val	Mean	Max
BKG-01-EM	Water	OS	1	Fluoranthene	0.016	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-01-HS	Water	OS	1	Fluoranthene	0.016	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-01-MID	Water	OS	1	Fluoranthene	0.016	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-02-EM	Water	OS	1	Fluoranthene	0.016	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-02-HS	Water	OS	1	Fluoranthene	0.016	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-02-MID	Water	OS	1	Fluoranthene	0.016	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-03-EM	Water	OS	1	Fluoranthene	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-03-HS	Water	OS	1	Fluoranthene	0.016	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-03-MID	Water	OS	1	Fluoranthene	0.016	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0	0	0
E-01	Water	OS	1	Fluoranthene	0.018	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-02	Water	OS	1	Fluoranthene	0.018	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-03	Water	OS	1	Fluoranthene	0.017	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-04	Water	OS	1	Fluoranthene	0.016	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-05	Water	OS	1	Fluoranthene	0.016	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-06	Water	OS	1	Fluoranthene	0.016	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-07	Water	OS	1	Fluoranthene	0.016	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-08	Water	OS	1	Fluoranthene	0.016	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-09	Water	OS	1	Fluoranthene	0.016	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-10	Water	OS	1	Fluoranthene	0.075	1	0.075	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.075		
E-11	Water	OS	1	Fluoranthene	0.085	1	0.085	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.085		
E-12	Water	OS	1	Fluoranthene	0.13	1	0.13	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.13		
E-13	Water	OS	1	Fluoranthene	0.016	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-14	Water	OS	1	Fluoranthene	0.085	1	0.085	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.085		
E-15	Water	OS	1	Fluoranthene	0.034	1	0.034	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.034		
E-16	Water	OS	1	Fluoranthene	0.078	1	0.078	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.078		
E-17	Water	OS	1	Fluoranthene	0.022	1	0.022	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.022		
E-18	Water	OS	1	Fluoranthene	0.017	1	0.017	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.017		
E-19	Water	OS	1	Fluoranthene	0.14	1	0.14	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.14		
E-20	Water	OS	1	Fluoranthene	0.042	1	0.042	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.042		
E-21	Water	OS	1	Fluoranthene	0.23	1	0.23	ug/L			3520C	Total/NA	8270D LL	0	0.23		
E-22	Water	OS	1	Fluoranthene	0.068	1	0.068	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.068	0.04573	0.23
I-1	Sediment	OS	1	Fluoranthene	8.8	1	8.8	ug/Kg			3541	Total/NA	8270D LL	0	8.8		
I-2	Sediment	OS	1	Fluoranthene	1.1	1	1.1	ug/Kg	J	J	3541	Total/NA	8270D LL	0	1.1		
I-3	Sediment	OS	2	Fluoranthene	38	1	38	ug/Kg			3541	Total/NA	8270D LL	0	38		
I-4	Sediment	OS	1	Fluoranthene	70	1	70	ug/Kg			3541	Total/NA	8270D LL	0	70		
I-5	Sediment	OS	1	Fluoranthene	8.7	1	8.7	ug/Kg			3541	Total/NA	8270D LL	0	8.7	25.32	70
RB-01-11192012	Water	OS	1	Fluoranthene	0.016	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-01-EM	Water	OS	1	Fluorene	0.021	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-01-HS	Water	OS	1	Fluorene	0.021	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-01-MID	Water	OS	1	Fluorene	0.021	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-02-EM	Water	OS	1	Fluorene	0.021	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-02-HS	Water	OS	1	Fluorene	0.021	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-02-MID	Water	OS	1	Fluorene	0.021	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-03-EM	Water	OS	1	Fluorene	0.021	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-03-HS	Water	OS	1	Fluorene	0.021	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-03-MID	Water	OS	1	Fluorene	0.021	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0	0	0
E-01	Water	OS	1	Fluorene	0.024	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-02	Water	OS	1	Fluorene	0.024	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-03	Water	OS	1	Fluorene	0.022	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-04	Water	OS	1	Fluorene	0.021	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-05	Water	OS	1	Fluorene	0.021	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-06	Water	OS	1	Fluorene	0.022	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-07	Water	OS	1	Fluorene	0.021	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-08	Water	OS	1	Fluorene	0.021	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-09	Water	OS	1	Fluorene	0.021	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-10	Water	OS	1	Fluorene	0.047	1	0.047	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.047		
E-11	Water	OS	1	Fluorene	0.067	1	0.067	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.067		
E-12	Water	OS	1	Fluorene	0.17	1	0.17	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.17		
E-13	Water	OS	1	Fluorene	0.021	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-14	Water	OS	1	Fluorene	0.066	1	0.066	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.066		
E-15	Water	OS	1	Fluorene	0.046	1	0.046	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.046		
E-16	Water	OS	1	Fluorene	0.45	1	0.45	ug/L			3520C	Total/NA	8270D LL	0	0.45		
E-17	Water	OS	1	Fluorene	0.021	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-18	Water	OS	1	Fluorene	0.021	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-19	Water	OS	1	Fluorene	0.15	1	0.15	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.15		
E-20	Water	OS	1	Fluorene	0.021	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-21	Water	OS	1	Fluorene	0.021	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-22	Water	OS	1	Fluorene	0.057	1	0.057	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.057	0.04786	0.45
I-1	Sediment	OS	1	Fluorene	0.63	1	0.63	ug/Kg	J	J	3541	Total/NA	8270D LL	0	0.63		
I-2	Sediment	OS	1	Fluorene	0.51	0	ND	ug/Kg	U	ND	3541	Total/NA	8270D LL	0	0		
I-3	Sediment	OS	2	Fluorene	4.2	1	4.2	ug/Kg	J	J	3541	Total/NA	8270D LL	0	4.2		
I-4	Sediment	OS	1	Fluorene	7.9	1	7.9	ug/Kg			3541	Total/NA	8270D LL	0	7.9		
I-5	Sediment	OS	1	Fluorene	3.7	1	3.7	ug/Kg	J	J	3541	Total/NA	8270D LL	0	3.7	3.286	7.9
RB-01-11192012	Water	OS	1	Fluorene	0.021	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-01-EM	Water	OS	1	Indeno[1,2,3-cd]pyrene	0.019	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-01-HS	Water	OS	1	Indeno[1,2,3-cd]pyrene	0.019	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-01-MID	Water	OS	1	Indeno[1,2,3-cd]pyrene	0.019	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-02-EM	Water	OS	1	Indeno[1,2,3-cd]pyrene	0.019	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-02-HS	Water	OS	1	Indeno[1,2,3-cd]pyrene	0.019	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-02-MID	Water	OS	1	Indeno[1,2,3-cd]pyrene	0.019	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-03-EM	Water	OS	1	Indeno[1,2,3-cd]pyrene	0.019	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-03-HS	Water	OS	1	Indeno[1,2,3-cd]pyrene	0.019	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-03-MID	Water	OS	1	Indeno[1,2,3-cd]pyrene	0.019	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0	0	0
E-01	Water	OS	1	Indeno[1,2,3-cd]pyrene	0.022	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-02	Water	OS	1	Indeno[1,2,3-cd]pyrene	0.022	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-03	Water	OS	1	Indeno[1,2,3-cd]pyrene	0.021	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-04	Water	OS	1	Indeno[1,2,3-cd]pyrene	0.019	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-05	Water	OS	1	Indeno[1,2,3-cd]pyrene	0.019	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-06	Water	OS	1	Indeno[1,2,3-cd]pyrene	0.02	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-07	Water	OS	1	Indeno[1,2,3-cd]pyrene	0.02	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-08	Water	OS	1	Indeno[1,2,3-cd]pyrene	0.019	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-09	Water	OS	1	Indeno[1,2,3-cd]pyrene	0.019	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-10	Water	OS	1	Indeno[1,2,3-cd]pyrene	0.019	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-11	Water	OS	1	Indeno[1,2,3-cd]pyrene	0.02	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-12	Water	OS	1	Indeno[1,2,3-cd]pyrene	0.019	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-13	Water	OS	1	Indeno[1,2,3-cd]pyrene	0.02	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-14	Water	OS	1	Indeno[1,2,3-cd]pyrene	0.02	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-15	Water	OS	1	Indeno[1,2,3-cd]pyrene	0.019	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-16	Water	OS	1	Indeno[1,2,3-cd]pyrene	0.099	1	0.099	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.099		
E-17	Water	OS	1	Indeno[1,2,3-cd]pyrene	0.019	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-18	Water	OS	1	Indeno[1,2,3-cd]pyrene	0.019	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-19	Water	OS	1	Indeno[1,2,3-cd]pyrene	0.019	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-20	Water	OS	1	Indeno[1,2,3-cd]pyrene	0.019	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-21	Water	OS	1	Indeno[1,2,3-cd]pyrene	0.27	1	0.27	ug/L			3520C	Total/NA	8270D LL	0	0.27		
E-22	Water	OS	1	Indeno[1,2,3-cd]pyrene	0.038	1	0.038	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.038	0.0185	0.27
I-1	Sediment	OS	1	Indeno[1,2,3-cd]pyrene	3.9	1	3.9	ug/Kg	J	J	3541	Total/NA	8270D LL	0	3.9		
I-2	Sediment	OS	1	Indeno[1,2,3-cd]pyrene	0.4	0	ND	ug/Kg	U	ND	3541	Total/NA	8270D LL	0	0		
I-3	Sediment	OS	2	Indeno[1,2,3-cd]pyrene	10	1	10	ug/Kg			3541	Total/NA	8270D LL	0	10		
I-4	Sediment	OS	1	Indeno[1,2,3-cd]pyrene	24	1	24	ug/Kg			3541	Total/NA	8270D LL	0	24		
I-5	Sediment	OS	1	Indeno[1,2,3-cd]pyrene	1.9	1	1.9	ug/Kg	J	J	3541	Total/NA	8270D LL	0	1.9	7.96	24
RB-01-11192012	Water	OS	1	Indeno[1,2,3-cd]pyrene	0.02	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-01-EM	Water	OS	1	Methylphenol, 3 & 4	0.087	0	ND	ug/L	U	ND			8270D LL	0	0		
BKG-01-HS	Water	OS	1	Methylphenol, 3 & 4	0.087	0	ND	ug/L	U	ND			8270D LL	0	0		
BKG-01-MID	Water	OS	1	Methylphenol, 3 & 4	0.087	0	ND	ug/L	U	ND			8270D LL	0	0		
BKG-02-EM	Water	OS	1	Methylphenol, 3 & 4	0.087	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-02-HS	Water	OS	1	Methylphenol, 3 & 4	0.087	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-02-MID	Water	OS	1	Methylphenol, 3 & 4	0.087	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-03-EM	Water	OS	1	Methylphenol, 3 & 4	0.086	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-03-HS	Water	OS	1	Methylphenol, 3 & 4	0.087	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-03-MID	Water	OS	1	Methylphenol, 3 & 4	0.087	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0	0	0
E-01	Water	OS	1	Methylphenol, 3 & 4	0.1	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-02	Water	OS	1	Methylphenol, 3 & 4	0.1	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		

Client Sample ID	Matrix	sort	ion F	Analyte	Val_res	D?	Result	Unit	Qual	Flag	ep Metho	Prep Type	alysis Method	Check	Adj Val	Mean	Max
E-03	Water	OS	1	Methylphenol, 3 & 4	0.093	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-04	Water	OS	1	Methylphenol, 3 & 4	0.087	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-05	Water	OS	1	Methylphenol, 3 & 4	0.088	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-06	Water	OS	1	Methylphenol, 3 & 4	0.09	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-07	Water	OS	1	Methylphenol, 3 & 4	0.088	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-08	Water	OS	1	Methylphenol, 3 & 4	0.087	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-09	Water	OS	1	Methylphenol, 3 & 4	0.088	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-10	Water	OS	1	Methylphenol, 3 & 4	0.12	1	0.12	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.12		
E-11	Water	OS	1	Methylphenol, 3 & 4	0.18	1	0.18	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.18		
E-12	Water	OS	1	Methylphenol, 3 & 4	0.44	1	0.44	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.44		
E-13	Water	OS	1	Methylphenol, 3 & 4	0.089	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-14	Water	OS	1	Methylphenol, 3 & 4	0.22	1	0.22	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.22		
E-15	Water	OS	1	Methylphenol, 3 & 4	0.2	1	0.2	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.2		
E-16	Water	OS	1	Methylphenol, 3 & 4	0.085	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-17	Water	OS	1	Methylphenol, 3 & 4	0.087	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-18	Water	OS	1	Methylphenol, 3 & 4	0.088	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-19	Water	OS	1	Methylphenol, 3 & 4	0.72	1	0.72	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.72		
E-20	Water	OS	1	Methylphenol, 3 & 4	0.18	1	0.18	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.18		
E-21	Water	OS	1	Methylphenol, 3 & 4	1.5	1	1.5	ug/L			3520C	Total/NA	8270D LL	0	1.5		
E-22	Water	OS	1	Methylphenol, 3 & 4	0.087	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0	0.16182	1.5
I-1	Sediment	OS	1	Methylphenol, 3 & 4	1.9	0	ND	ug/Kg	U	ND	3541	Total/NA	8270D LL	0	0		
I-2	Sediment	OS	1	Methylphenol, 3 & 4	3.5	1	3.5	ug/Kg	J	J	3541	Total/NA	8270D LL	0	3.5		
I-3	Sediment	OS	2	Methylphenol, 3 & 4	4.2	0	ND	ug/Kg	U	ND	3541	Total/NA	8270D LL	0	0		
I-4	Sediment	OS	1	Methylphenol, 3 & 4	2.8	1	2.8	ug/Kg	J	J	3541	Total/NA	8270D LL	0	2.8		
I-5	Sediment	OS	1	Methylphenol, 3 & 4	3.4	1	3.4	ug/Kg	J	J	3541	Total/NA	8270D LL	0	3.4	1.94	3.5
RB-01-11192012	Water	OS	1	Methylphenol, 3 & 4	0.088	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-01-EM	Water	OS	1	Naphthalene	0.013	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-01-HS	Water	OS	1	Naphthalene	0.013	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-01-MID	Water	OS	1	Naphthalene	0.013	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-02-EM	Water	OS	1	Naphthalene	0.013	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-02-HS	Water	OS	1	Naphthalene	0.013	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-02-MID	Water	OS	1	Naphthalene	1	1	1	ug/L			3520C	Total/NA	8270D LL	0	1		
BKG-03-EM	Water	OS	1	Naphthalene	0.013	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-03-HS	Water	OS	1	Naphthalene	0.013	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-03-MID	Water	OS	1	Naphthalene	0.013	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0	0.11111	1
E-01	Water	OS	1	Naphthalene	0.016	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-02	Water	OS	1	Naphthalene	0.016	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-03	Water	OS	1	Naphthalene	0.014	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-04	Water	OS	1	Naphthalene	0.013	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-05	Water	OS	1	Naphthalene	0.014	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-06	Water	OS	1	Naphthalene	0.014	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-07	Water	OS	1	Naphthalene	0.014	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-08	Water	OS	1	Naphthalene	0.013	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-09	Water	OS	1	Naphthalene	0.014	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-10	Water	OS	1	Naphthalene	0.17	1	0.17	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.17		
E-11	Water	OS	1	Naphthalene	0.33	1	0.33	ug/L			3520C	Total/NA	8270D LL	0	0.33		
E-12	Water	OS	1	Naphthalene	0.63	1	0.63	ug/L			3520C	Total/NA	8270D LL	0	0.63		
E-13	Water	OS	1	Naphthalene	0.17	1	0.17	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.17		
E-14	Water	OS	1	Naphthalene	0.27	1	0.27	ug/L			3520C	Total/NA	8270D LL	0	0.27		
E-15	Water	OS	1	Naphthalene	0.16	1	0.16	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.16		
E-16	Water	OS	1	Naphthalene	0.15	1	0.15	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.15		
E-17	Water	OS	1	Naphthalene	0.013	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-18	Water	OS	1	Naphthalene	0.014	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-19	Water	OS	1	Naphthalene	0.43	1	0.43	ug/L			3520C	Total/NA	8270D LL	0	0.43		
E-20	Water	OS	1	Naphthalene	0.22	1	0.22	ug/L			3520C	Total/NA	8270D LL	0	0.22		
E-21	Water	OS	1	Naphthalene	0.48	1	0.48	ug/L			3520C	Total/NA	8270D LL	0	0.48		
E-22	Water	OS	1	Naphthalene	0.074	1	0.074	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.074	0.14018	0.63
I-1	Sediment	OS	1	Naphthalene	1	1	1	ug/Kg	J	J	3541	Total/NA	8270D LL	0	1		
I-2	Sediment	OS	1	Naphthalene	0.4	1	0.4	ug/Kg	J	J	3541	Total/NA	8270D LL	0	0.4		
I-3	Sediment	OS	2	Naphthalene	9.6	1	9.6	ug/Kg			3541	Total/NA	8270D LL	0	9.6		
I-4	Sediment	OS	1	Naphthalene	16	1	16	ug/Kg			3541	Total/NA	8270D LL	0	16		
I-5	Sediment	OS	1	Naphthalene	3.7	1	3.7	ug/Kg	J	J	3541	Total/NA	8270D LL	0	3.7	6.14	16
RB-01-11192012	Water	OS	1	Naphthalene	0.014	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-01-EM	Water	OS	1	Phenanthrene	0.041	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-01-HS	Water	OS	1	Phenanthrene	0.041	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-01-MID	Water	OS	1	Phenanthrene	0.041	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-02-EM	Water	OS	1	Phenanthrene	0.041	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-02-HS	Water	OS	1	Phenanthrene	0.041	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-02-MID	Water	OS	1	Phenanthrene	0.041	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-03-EM	Water	OS	1	Phenanthrene	0.041	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-03-HS	Water	OS	1	Phenanthrene	0.041	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-03-MID	Water	OS	1	Phenanthrene	0.041	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0	0	0
E-01	Water	OS	1	Phenanthrene	0.047	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-02	Water	OS	1	Phenanthrene	0.047	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-03	Water	OS	1	Phenanthrene	0.044	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-04	Water	OS	1	Phenanthrene	0.041	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-05	Water	OS	1	Phenanthrene	0.041	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-06	Water	OS	1	Phenanthrene	0.043	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-07	Water	OS	1	Phenanthrene	0.042	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-08	Water	OS	1	Phenanthrene	0.041	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-09	Water	OS	1	Phenanthrene	0.041	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-10	Water	OS	1	Phenanthrene	0.16	1	0.16	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.16		
E-11	Water	OS	1	Phenanthrene	0.27	1	0.27	ug/L			3520C	Total/NA	8270D LL	0	0.27		
E-12	Water	OS	1	Phenanthrene	0.44	1	0.44	ug/L			3520C	Total/NA	8270D LL	0	0.44		
E-13	Water	OS	1	Phenanthrene	0.049	1	0.049	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.049		
E-14	Water	OS	1	Phenanthrene	0.14	1	0.14	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.14		
E-15	Water	OS	1	Phenanthrene	0.1	1	0.1	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.1		
E-16	Water	OS	1	Phenanthrene	0.11	1	0.11	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.11		
E-17	Water	OS	1	Phenanthrene	0.041	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-18	Water	OS	1	Phenanthrene	0.041	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-19	Water	OS	1	Phenanthrene	0.26	1	0.26	ug/L			3520C	Total/NA	8270D LL	0	0.26		
E-20	Water	OS	1	Phenanthrene	0.14	1	0.14	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.14		
E-21	Water	OS	1	Phenanthrene	0.21	1	0.21	ug/L			3520C	Total/NA	8270D LL	0	0.21		
E-22	Water	OS	1	Phenanthrene	0.096	1	0.096	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.096	0.08977	0.44
I-1	Sediment	OS	1	Phenanthrene	5.2	1	5.2	ug/Kg			3541	Total/NA	8270D LL	0	5.2		
I-2	Sediment	OS	1	Phenanthrene	0.72	1	0.72	ug/Kg	J	J	3541	Total/NA	8270D LL	0	0.72		
I-3	Sediment	OS	2	Phenanthrene	25	1	25	ug/Kg			3541	Total/NA	8270D LL	0	25		
I-4	Sediment	OS	1	Phenanthrene	48	1	48	ug/Kg			3541	Total/NA	8270D LL	0	48		
I-5	Sediment	OS	1	Phenanthrene	11	1	11	ug/Kg			3541	Total/NA	8270D LL	0	11	17.984	48
RB-01-11192012	Water	OS	1	Phenanthrene	0.042	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
I-5	Sediment	OS	1	Phenol	3.2	1	3.2	ug/Kg	J	J	3541	Total/NA	8270D LL	0	3.2		
RB-01-11192012	Water	OS	1	Phenol	0.057	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-01-EM	Water	OS	1	Pyrene	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-01-HS	Water	OS	1	Pyrene	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-01-MID	Water	OS	1	Pyrene	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-02-EM	Water	OS	1	Pyrene	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-02-HS	Water	OS	1	Pyrene	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-02-MID	Water	OS	1	Pyrene	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-03-EM	Water	OS	1	Pyrene	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-03-HS	Water	OS	1	Pyrene	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
BKG-03-MID	Water	OS	1	Pyrene	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0	0	0
E-01	Water	OS	1	Pyrene	0.017	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-02	Water	OS	1	Pyrene	0.017	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-03	Water	OS	1	Pyrene	0.016	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-04	Water	OS	1	Pyrene	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-05	Water	OS	1	Pyrene	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-06	Water	OS	1	Pyrene	0.016	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-07	Water	OS	1	Pyrene	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-08	Water	OS	1	Pyrene	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0		
E-09	Water	OS	1	Pyrene	0.026	1	0.026	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.026		
E-10	Water	OS	1	Pyrene	0.1	1	0.1	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.1		
E-11	Water	OS	1	Pyrene	0.15	1	0.15	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.15		

Client Sample ID	Matrix	sort	ion F	Analyte	Val_res	D?	Result	Unit	Qual	Flag	ep Metho	Prep Type	alysis Method	Check	Adj Val	Mean	Max		
E-12	Water	OS	1	Pyrene	0.17	1	0.17	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.17				
E-13	Water	OS	1	Pyrene	0.016	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0				
E-14	Water	OS	1	Pyrene	0.09	1	0.09	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.09				
E-15	Water	OS	1	Pyrene	0.043	1	0.043	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.043				
E-16	Water	OS	1	Pyrene	0.09	1	0.09	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.09				
E-17	Water	OS	1	Pyrene	0.041	1	0.041	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.041				
E-18	Water	OS	1	Pyrene	0.033	1	0.033	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.033				
E-19	Water	OS	1	Pyrene	0.12	1	0.12	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.12				
E-20	Water	OS	1	Pyrene	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0				
E-21	Water	OS	1	Pyrene	0.23	1	0.23	ug/L			3520C	Total/NA	8270D LL	0	0.23				
E-22	Water	OS	1	Pyrene	0.065	1	0.065	ug/L	J	J	3520C	Total/NA	8270D LL	0	0.065	0.05264	0.23		
I-1	Sediment	OS	1	Pyrene	9.5	1	9.5	ug/Kg			3541	Total/NA	8270D LL	0	9.5				
I-2	Sediment	OS	1	Pyrene	1.6	1	1.6	ug/Kg	J	J	3541	Total/NA	8270D LL	0	1.6				
I-3	Sediment	OS	2	Pyrene	39	1	39	ug/Kg			3541	Total/NA	8270D LL	0	39				
I-4	Sediment	OS	1	Pyrene	97	1	97	ug/Kg			3541	Total/NA	8270D LL	0	97				
I-5	Sediment	OS	1	Pyrene	11	1	11	ug/Kg			3541	Total/NA	8270D LL	0	11	31.62	97		
RB-01-11192012	Water	OS	1	Pyrene	0.015	0	ND	ug/L	U	ND	3520C	Total/NA	8270D LL	0	0				
BKG-01-EM	Water	P	1	4,4'-DDD	0.00064	0	0.00064	ug/L	U	ND			8081B_LL	0	0				
BKG-01-HS	Water	P	1	4,4'-DDD	0.00063	0	ND	ug/L	U	ND			8081B_LL	0	0				
BKG-01-MID	Water	P	1	4,4'-DDD	0.00064	0	ND	ug/L	U	ND			8081B_LL	0	0				
BKG-02-EM	Water	P	1	4,4'-DDD	0.00064	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0				
BKG-02-HS	Water	P	1	4,4'-DDD	0.00063	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0				
BKG-02-MID	Water	P	1	4,4'-DDD	0.00063	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0				
BKG-03-EM	Water	P	1	4,4'-DDD	0.00064	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0				
BKG-03-HS	Water	P	1	4,4'-DDD	0.00063	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0				
BKG-03-MID	Water	P	1	4,4'-DDD	0.00064	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0	0	0		
E-01	Water	P	5	4,4'-DDD	0.0034	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0				
E-02	Water	P	5	4,4'-DDD	0.0032	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0				
E-03	Water	P	1	4,4'-DDD	0.00064	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0				
E-04	Water	P	1	4,4'-DDD	0.00064	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0				
E-05	Water	P	5	4,4'-DDD	0.0032	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0				
E-06	Water	P	5	4,4'-DDD	0.0032	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0				
E-07	Water	P	1	4,4'-DDD	0.00065	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0				
E-08	Water	P	5	4,4'-DDD	0.0032	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0				
E-09	Water	P	5	4,4'-DDD	0.0032	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0				
E-10	Water	P	5	4,4'-DDD	0.0032	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0				
E-11	Water	P	1	4,4'-DDD	0.0011	1	0.0011	ug/L	J p	J p	3510C	Total/NA	8081B_LL	0	0.0011				
E-12	Water	P	1	4,4'-DDD	0.0018	1	0.0018	ug/L			3510C	Total/NA	8081B_LL	0	0.0018				
E-13	Water	P	1	4,4'-DDD	0.00064	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0				
E-14	Water	P	5	4,4'-DDD	0.0032	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0				
E-15	Water	P	5	4,4'-DDD	0.0033	1	0.0033	ug/L	J p	J p	3510C	Total/NA	8081B_LL	0	0.0033				
E-16	Water	P	10	4,4'-DDD	0.0064	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0				
E-17	Water	P	5	4,4'-DDD	0.0032	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0				
E-18	Water	P	1	4,4'-DDD	0.001	1	0.001	ug/L	J	J	3510C	Total/NA	8081B_LL	0	0.001				
E-19	Water	P	5	4,4'-DDD	0.0054	1	0.0054	ug/L	J p	J p	3510C	Total/NA	8081B_LL	0	0.0054				
E-20	Water	P	5	4,4'-DDD	0.0032	1	0.0032	ug/L	J p	J p	3510C	Total/NA	8081B_LL	0	0.0032				
E-21	Water	P	5	4,4'-DDD	0.0032	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0				
E-22	Water	P	5	4,4'-DDD	0.0076	1	0.0076	ug/L			3510C	Total/NA	8081B_LL	0	0.0076	0.00106	0.0076		
I-1	Sediment	P	1	4,4'-DDD	0.028	1	0.028	ug/Kg	J B	J B	3541	Total/NA	8081B_LL	0	0.028				
I-2	Sediment	P	1	4,4'-DDD	0.0063	0	ND	ug/Kg	U	ND	3541	Total/NA	8081B_LL	0	0				
I-3	Sediment	P	250	4,4'-DDD	2000	1	2000	ug/Kg			3541	Total/NA	8081B_LL	0	2000				
I-4	Sediment	P	5	4,4'-DDD	0.5	1	0.5	ug/Kg			3541	Total/NA	8081B_LL	0	0.5				
I-5	Sediment	P	2	4,4'-DDD	0.14	1	0.14	ug/Kg	p	p	3541	Total/NA	8081B_LL	0	0.14	400.134	2000		
RB-01-11192012	Water	P	1	4,4'-DDD	0.00064	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0				
BKG-01-EM	Water	P	1	4,4'-DDE	0.0013	1	0.0013	ug/L					8081B_LL	0	0.0013				
BKG-01-HS	Water	P	1	4,4'-DDE	0.00096	1	0.00096	ug/L	J	J			8081B_LL	0	0.00096				
BKG-01-MID	Water	P	1	4,4'-DDE	0.0011	1	0.0011	ug/L	J	J			8081B_LL	0	0.0011				
BKG-02-EM	Water	P	1	4,4'-DDE	0.0015	1	0.0015	ug/L			3510C	Total/NA	8081B_LL	0	0.0015				
BKG-02-HS	Water	P	1	4,4'-DDE	0.0011	1	0.0011	ug/L	J p	J p	3510C	Total/NA	8081B_LL	0	0.0011				
BKG-02-MID	Water	P	1	4,4'-DDE	0.0013	1	0.0013	ug/L			3510C	Total/NA	8081B_LL	0	0.0013				
BKG-03-EM	Water	P	1	4,4'-DDE	0.0017	1	0.0017	ug/L			3510C	Total/NA	8081B_LL	0	0.0017				
BKG-03-HS	Water	P	1	4,4'-DDE	0.001	1	0.001	ug/L	J	J	3510C	Total/NA	8081B_LL	0	0.001				
BKG-03-MID	Water	P	1	4,4'-DDE	0.0015	1	0.0015	ug/L			3510C	Total/NA	8081B_LL	0	0.0015	0.00127	0.0017		
E-01	Water	P	5	4,4'-DDE	0.004	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0				
E-02	Water	P	5	4,4'-DDE	0.0037	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0				
E-03	Water	P	1	4,4'-DDE	0.00075	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0				
E-04	Water	P	1	4,4'-DDE	0.00075	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0				
E-05	Water	P	5	4,4'-DDE	0.03	1	0.03	ug/L			3510C	Total/NA	8081B_LL	0	0.03				
E-06	Water	P	5	4,4'-DDE	0.023	1	0.023	ug/L			3510C	Total/NA	8081B_LL	0	0.023				
E-07	Water	P	1	4,4'-DDE	0.0053	1	0.0053	ug/L			3510C	Total/NA	8081B_LL	0	0.0053				
E-08	Water	P	5	4,4'-DDE	0.0038	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0				
E-09	Water	P	5	4,4'-DDE	0.0082	1	0.0082	ug/L			3510C	Total/NA	8081B_LL	0	0.0082				
E-10	Water	P	5	4,4'-DDE	0.015	1	0.015	ug/L			3510C	Total/NA	8081B_LL	0	0.015				
E-11	Water	P	1	4,4'-DDE	0.0053	1	0.0053	ug/L			3510C	Total/NA	8081B_LL	0	0.0053				
E-12	Water	P	1	4,4'-DDE	0.011	1	0.011	ug/L			3510C	Total/NA	8081B_LL	0	0.011				
E-13	Water	P	1	4,4'-DDE	0.0037	1	0.0037	ug/L			3510C	Total/NA	8081B_LL	0	0.0037				
E-14	Water	P	5	4,4'-DDE	0.0058	1	0.0058	ug/L	J	J	3510C	Total/NA	8081B_LL	0	0.0058				
E-15	Water	P	5	4,4'-DDE	0.059	1	0.059	ug/L			3510C	Total/NA	8081B_LL	0	0.059				
E-16	Water	P	10	4,4'-DDE	0.062	1	0.062	ug/L			3510C	Total/NA	8081B_LL	0	0.062				
E-17	Water	P	5	4,4'-DDE	0.012	1	0.012	ug/L			3510C	Total/NA	8081B_LL	0	0.012				
E-18	Water	P	1	4,4'-DDE	0.005	1	0.005	ug/L			3510C	Total/NA	8081B_LL	0	0.005				
E-19	Water	P	5	4,4'-DDE	0.045	1	0.045	ug/L			3510C	Total/NA	8081B_LL	0	0.045				
E-20	Water	P	5	4,4'-DDE	0.017	1	0.017	ug/L			3510C	Total/NA	8081B_LL	0	0.017				
E-21	Water	P	5	4,4'-DDE	0.016	1	0.016	ug/L			3510C	Total/NA	8081B_LL	0	0.016				
E-22	Water	P	5	4,4'-DDE	0.0054	1	0.0054	ug/L	J	J	3510C	Total/NA	8081B_LL	0	0.0054	0.01494	0.062		
I-1	Sediment	P	1	4,4'-DDE	0.034	1	0.034	ug/Kg	J	J	3541	Total/NA	8081B_LL	0	0.034				
I-2	Sediment	P	1	4,4'-DDE	0.26	1	0.26	ug/Kg			3541	Total/NA	8081B_LL	0	0.26				
I-3	Sediment	P	250	4,4'-DDE	420	1	420	ug/Kg			3541	Total/NA	8081B_LL	0	420				
I-4	Sediment	P	5	4,4'-DDE	1.2	1	1.2	ug/Kg			3541	Total/NA	8081B_LL	0	1.2				
I-5	Sediment	P	2	4,4'-DDE	0.79	1	0.79	ug/Kg			3541	Total/NA	8081B_LL	0	0.79	84.4568	420	DDX Sum	Mean
RB-01-11192012	Water	P	1	4,4'-DDE	0.00075	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0				
BKG-01-EM	Water	P	1	4,4'-DDT	0.0007	0	0.0007	ug/L	U	ND			8081B_LL	0	0			0.0013	0.001273
BKG-01-HS	Water	P	1	4,4'-DDT	0.0007	0	ND	ug/L	U	ND			8081B_LL	0	0			0.00096	
BKG-01-MID	Water	P	1	4,4'-DDT	0.0007	0	ND	ug/L	U	ND			8081B_LL	0	0			0.0011	
BKG-02-EM	Water	P	1	4,4'-DDT	0.0007	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0			0.0015	
BKG-02-HS	Water	P	1	4,4'-DDT	0.0007	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0			0.0011	
BKG-02-MID	Water	P	1	4,4'-DDT	0.0007	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0			0.0013	
BKG-03-EM	Water	P	1	4,4'-DDT	0.0007	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0			0.0017	
BKG-03-HS	Water	P	1	4,4'-DDT	0.0007	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0			0.001	
BKG-03-MID	Water	P	1	4,4'-DDT	0.0007	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0	0	0	0.0015	
E-01	Water	P	5	4,4'-DDT	0.0037	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0			0	0.017855
E-02	Water	P	5	4,4'-DDT	0.022	1	0.022	ug/L			3510C	Total/NA	8081B_LL	0	0.022			0.022	
E-03	Water	P	1	4,4'-DDT	0.0047	1	0.0047	ug/L			3510C	Total/NA	8081B_LL	0	0.0047			0.0047	
E-04	Water	P	1	4,4'-DDT	0.0007	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0			0	
E-05	Water	P	5	4,4'-DDT	0.0035	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0			0.03	
E-06	Water	P	5	4,4'-DDT	0.0035	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0			0.023	
E-07	Water	P	1	4,4'-DDT	0.00072	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0			0.0053	
E-08	Water	P	5	4,4'-DDT	0.0035	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0			0	
E-09	Water	P	5	4,4'-DDT	0.0035	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0			0.0082	
E-10	Water	P	5	4,4'-DDT	0.0035	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0			0.015	
E-11	Water	P	1	4,4'-DDT	0.0007	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0			0.0064	
E-12	Water	P	1	4,4'-DDT	0.0007	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0			0.0128	
E-13	Water	P	1	4,4'-DDT	0.0007	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0			0.0037	
E-14	Water	P	5	4,4'-DDT	0.0036	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0			0.0058	
E-15	Water	P	5	4,4'-DDT	0.0056	1	0.0056	ug/L	J	J	3510C	Total/NA	8081B_LL	0	0.0056			0.0679	
E-16	Water	P	10	4,4'-DDT	0.007	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0			0.062	
E-17	Water	P	5	4,4'-DDT	0.0036	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0			0.012	
E-18	Water	P	1	4,4'-DDT	0.0009	1	0.0009	ug/L	J	J	3510C	Total/NA	8081B_LL	0	0.0009			0.0069	
E-19	Water	P	5	4,4'-DDT	0.004	1	0.004	ug/L	J p	J p	3510C	Total/NA	8081B_LL	0	0.004			0.0544	
E-20	Water	P	5	4,4'-DDT	0.0035	1	0.0035	ug/L	J p	J p	3510C	Total/NA	8081B_LL	0	0.0035			0.0237	
E-21	Water	P	5	4,4'-DDT	0.0035	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0			0.016	
E-22	Water	P	5	4,4'-DDT	0.0035	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0	0.00185	0.022	0.013	

Client Sample ID	Matrix	sort	ion F	Analyte	Val_res	D?	Result	Unit	Qual	Flag	ep Metho	Prep Type	alysis Method	Check	Adj Val	Mean	Max	
I-1	Sediment	P	1	4,4'-DDT	0.0074	0	ND	ug/Kg	U	ND	3541	Total/NA	8081B_LL	0	0			0.062
I-2	Sediment	P	1	4,4'-DDT	0.0072	0	ND	ug/Kg	U	ND	3541	Total/NA	8081B_LL	0	0			0.26
I-3	Sediment	P	250	4,4'-DDT	400	1	400	ug/Kg			3541	Total/NA	8081B_LL	0	400			2820
I-4	Sediment	P	5	4,4'-DDT	0.11	1	0.11	ug/Kg	J	J	3541	Total/NA	8081B_LL	0	0.11			1.81
I-5	Sediment	P	2	4,4'-DDT	0.031	1	0.031	ug/Kg	J p	J p	3541	Total/NA	8081B_LL	0	0.031	80.0282	400	0.961
RB-01-11192012	Water	P	1	4,4'-DDT	0.0007	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0			
BKG-01-EM	Water	P	1	alpha-BHC	0.00063	0	0.00063	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0			
BKG-01-HS	Water	P	1	alpha-BHC	0.00062	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0			
BKG-01-MID	Water	P	1	alpha-BHC	0.00063	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0			
BKG-02-EM	Water	P	1	alpha-BHC	0.00063	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0			
BKG-02-HS	Water	P	1	alpha-BHC	0.00062	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0			
BKG-02-MID	Water	P	1	alpha-BHC	0.00062	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0			
BKG-03-EM	Water	P	1	alpha-BHC	0.00063	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0			
BKG-03-HS	Water	P	1	alpha-BHC	0.00062	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0			
BKG-03-MID	Water	P	1	alpha-BHC	0.00063	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0	0	0	
E-01	Water	P	5	alpha-BHC	0.0033	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0			
E-02	Water	P	5	alpha-BHC	0.0031	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0			
E-03	Water	P	1	alpha-BHC	0.00076	1	0.00076	ug/L	J p	J p	3510C	Total/NA	8081B_LL	0	0.00076			
E-04	Water	P	1	alpha-BHC	0.00063	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0			
E-05	Water	P	5	alpha-BHC	0.0031	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0			
E-06	Water	P	5	alpha-BHC	0.0031	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0			
E-07	Water	P	1	alpha-BHC	0.00064	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0			
E-08	Water	P	5	alpha-BHC	0.0031	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0			
E-09	Water	P	5	alpha-BHC	0.0031	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0			
E-10	Water	P	5	alpha-BHC	0.0031	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0			
E-11	Water	P	1	alpha-BHC	0.00063	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0			
E-12	Water	P	1	alpha-BHC	0.00063	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0			
E-13	Water	P	1	alpha-BHC	0.00063	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0			
E-14	Water	P	5	alpha-BHC	0.0032	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0			
E-15	Water	P	5	alpha-BHC	0.0031	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0			
E-16	Water	P	10	alpha-BHC	0.0063	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0			
E-17	Water	P	5	alpha-BHC	0.0032	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0			
E-18	Water	P	1	alpha-BHC	0.00063	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0			
E-19	Water	P	5	alpha-BHC	0.0031	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0			
E-20	Water	P	5	alpha-BHC	0.0031	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0			
E-21	Water	P	5	alpha-BHC	0.0031	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0			
E-22	Water	P	5	alpha-BHC	0.0031	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0	3.5E-05	0.00076	
I-1	Sediment	P	1	alpha-BHC	0.0081	0	ND	ug/Kg	U	ND	3541	Total/NA	8081B_LL	0	0			
I-2	Sediment	P	1	alpha-BHC	0.0078	0	ND	ug/Kg	U	ND	3541	Total/NA	8081B_LL	0	0			
I-3	Sediment	P	250	alpha-BHC	5.2	1	5.2	ug/Kg	J	J	3541	Total/NA	8081B_LL	0	5.2			
I-4	Sediment	P	5	alpha-BHC	0.037	0	ND	ug/Kg	U	ND	3541	Total/NA	8081B_LL	0	0			
I-5	Sediment	P	2	alpha-BHC	0.018	0	ND	ug/Kg	U	ND	3541	Total/NA	8081B_LL	0	0	1.04	5.2	
RB-01-11192012	Water	P	1	alpha-BHC	0.00063	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0			
BKG-01-EM	Water	P	1	alpha-Chlordane	0.00093	0	0.00093	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0			
BKG-01-HS	Water	P	1	alpha-Chlordane	0.00092	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0			
BKG-01-MID	Water	P	1	alpha-Chlordane	0.00093	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0			
BKG-02-EM	Water	P	1	alpha-Chlordane	0.00093	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0			
BKG-02-HS	Water	P	1	alpha-Chlordane	0.0012	1	0.0012	ug/L			3510C	Total/NA	8081B_LL	0	0.0012			
BKG-02-MID	Water	P	1	alpha-Chlordane	0.00092	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0			
BKG-03-EM	Water	P	1	alpha-Chlordane	0.00093	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0			
BKG-03-HS	Water	P	1	alpha-Chlordane	0.00092	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0			
BKG-03-MID	Water	P	1	alpha-Chlordane	0.00093	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0	0.00013	0.0012	
E-01	Water	P	5	alpha-Chlordane	0.0049		ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0			
E-02	Water	P	5	alpha-Chlordane	0.0046		ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0			
E-03	Water	P	1	alpha-Chlordane	0.00093		ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0			
E-04	Water	P	1	alpha-Chlordane	0.00093		ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0			
E-05	Water	P	5	alpha-Chlordane	0.0047		ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0			
E-06	Water	P	5	alpha-Chlordane	0.0047		ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0			
E-07	Water	P	1	alpha-Chlordane	0.00095		ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0			
E-08	Water	P	5	alpha-Chlordane	0.0047		ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0			
E-09	Water	P	5	alpha-Chlordane	0.0046		ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0			
E-10	Water	P	5	alpha-Chlordane	0.0047		ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0			
E-11	Water	P	1	alpha-Chlordane	0.00093		ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0			
E-12	Water	P	1	alpha-Chlordane	0.00093		ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0			
E-13	Water	P	1	alpha-Chlordane	0.00093		ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0			
E-14	Water	P	5	alpha-Chlordane	0.0047		ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0			
E-15	Water	P	5	alpha-Chlordane	0.0047		ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0			
E-16	Water	P	10	alpha-Chlordane	0.0093		ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0			
E-17	Water	P	5	alpha-Chlordane	0.0047		ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0			
E-18	Water	P	1	alpha-Chlordane	0.00093		ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0			
E-19	Water	P	5	alpha-Chlordane	0.0047		ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0			
E-20	Water	P	5	alpha-Chlordane	0.0047		ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0			
E-21	Water	P	5	alpha-Chlordane	0.0047		ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0			
E-22	Water	P	5	alpha-Chlordane	0.0047		ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0	0	0	
I-1	Sediment	P	1	alpha-Chlordane	0.0098		ND	ug/Kg	U	ND	3541	Total/NA	8081B_LL	0	0			
I-2	Sediment	P	1	alpha-Chlordane	0.0095		ND	ug/Kg	U	ND	3541	Total/NA	8081B_LL	0	0			
I-3	Sediment	P	250	alpha-Chlordane	2.6		ND	ug/Kg	U	ND	3541	Total/NA	8081B_LL	0	0			
I-4	Sediment	P	5	alpha-Chlordane	0.045		ND	ug/Kg	U	ND	3541	Total/NA	8081B_LL	0	0			
I-5	Sediment	P	2	alpha-Chlordane	0.021		ND	ug/Kg	U	ND	3541	Total/NA	8081B_LL	0	0	0	0	
RB-01-11192012	Water	P	1	alpha-Chlordane	0.00093		ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0			
BKG-01-EM	Water	P	1	beta-BHC	0.00095	0	0.00095	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0			
BKG-01-HS	Water	P	1	beta-BHC	0.00094	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0			
BKG-01-MID	Water	P	1	beta-BHC	0.00095	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0			
BKG-02-EM	Water	P	1	beta-BHC	0.00095	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0			
BKG-02-HS	Water	P	1	beta-BHC	0.00094	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0			
BKG-02-MID	Water	P	1	beta-BHC	0.00094	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0			
BKG-03-EM	Water	P	1	beta-BHC	0.00095	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0			
BKG-03-HS	Water	P	1	beta-BHC	0.00094	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0			
BKG-03-MID	Water	P	1	beta-BHC	0.00095	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0	0	0	
E-01	Water	P	5	beta-BHC	0.0076	1	0.0076	ug/L			3510C	Total/NA	8081B_LL	0	0.0076			
E-02	Water	P	5	beta-BHC	0.0047	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0			
E-03	Water	P	1	beta-BHC	0.0029	1	0.0029	ug/L	p	p	3510C	Total/NA	8081B_LL	0	0.0029			
E-04	Water	P	1	beta-BHC	0.00097	1	0.00097	ug/L	J	J	3510C	Total/NA	8081B_LL	0	0.00097			
E-05	Water	P	5	beta-BHC	0.0048	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0			
E-06	Water	P	5	beta-BHC	0.0048	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0			
E-07	Water	P	1	beta-BHC	0.00097	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0			
E-08	Water	P	5	beta-BHC	0.0048	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0			
E-09	Water	P	5	beta-BHC	0.0047	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0			
E-10	Water	P	5	beta-BHC	0.0048	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0			
E-11	Water	P	1	beta-BHC	0.00095	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0			
E-12	Water	P	1	beta-BHC	0.00098	1	0.00098	ug/L	J p	J p	3510C	Total/NA	8081B_LL	0	0.00098			
E-13	Water	P	1	beta-BHC	0.00095	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0			
E-14	Water	P	5	beta-BHC	0.0048	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0			
E-15	Water	P	5	beta-BHC	0.0048	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0			
E-16	Water	P	10	beta-BHC	0.0095	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0			
E-17	Water	P	5	beta-BHC	0.0048	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0			
E-18	Water	P	1	beta-BHC	0.00095	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0			
E-19	Water	P	5	beta-BHC	0.0048	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0			
E-20	Water	P	5	beta-BHC	0.0048	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0			
E-21	Water	P	5	beta-BHC	0.0048	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0			
E-22	Water	P	5	beta-BHC	0.0048	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0	0.00057	0.0076	
I-1	Sediment	P	1	beta-BHC	0.013	0	ND	ug/Kg	U	ND	3541	Total/NA	8081B_LL	0	0			
I-2	Sediment	P	1	beta-BHC	0.012	0	ND	ug/Kg	U	ND	3541	Total/NA	8081B_LL	0	0			
I-3	Sediment	P	250	beta-BHC	3.4	0	ND	ug/Kg	U	ND	3541	Total/NA	8081B_LL	0	0			
I-4	Sediment	P	5	beta-BHC	0.059	0	ND	ug/Kg	U	ND	3541	Total/NA	8081B_LL	0	0			
I-5	Sediment	P	2	beta-BHC	0.028	0	ND	ug/Kg	U	ND	3541	Total/NA	8081B_LL	0	0	0	0	
RB-01-11192012	Water	P	1	beta-BHC	0.00095	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0			
BKG-01-EM	Water	P	1	delta-BHC	0.00036	0	0.00036	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0			
BKG-01-HS	Water	P	1	delta-BHC	0.00036	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0			
BKG-01-MID	Water	P	1	delta-BHC	0.00036	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0			
BKG-02-EM	Water	P	1	delta-BHC	0.00036	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0			
BKG-02-HS	Water	P	1	delta-BHC	0.00036	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0			

Client Sample ID	Matrix	sort	ion F	Analyte	Val_res	D?	Result	Unit	Qual	Flag	ep Metho	Prep Type	alysis Method	Check	Adj Val	Mean	Max
BKG-02-MID	Water	P	1	delta-BHC	0.00036	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
BKG-03-EM	Water	P	1	delta-BHC	0.00036	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
BKG-03-HS	Water	P	1	delta-BHC	0.00036	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
BKG-03-MID	Water	P	1	delta-BHC	0.00036	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0	0	0
E-01	Water	P	5	delta-BHC	0.0019	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-02	Water	P	5	delta-BHC	0.0022	1	0.0022	ug/L	J p	J p	3510C	Total/NA	8081B_LL	0	0.0022		
E-03	Water	P	1	delta-BHC	0.00036	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-04	Water	P	1	delta-BHC	0.00036	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-05	Water	P	5	delta-BHC	0.0018	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-06	Water	P	5	delta-BHC	0.0018	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-07	Water	P	1	delta-BHC	0.00037	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-08	Water	P	5	delta-BHC	0.0018	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-09	Water	P	5	delta-BHC	0.0018	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-10	Water	P	5	delta-BHC	0.0018	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-11	Water	P	1	delta-BHC	0.00036	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-12	Water	P	1	delta-BHC	0.00036	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-13	Water	P	1	delta-BHC	0.00036	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-14	Water	P	5	delta-BHC	0.0018	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-15	Water	P	5	delta-BHC	0.0018	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-16	Water	P	10	delta-BHC	0.0036	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-17	Water	P	5	delta-BHC	0.0018	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-18	Water	P	1	delta-BHC	0.00036	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-19	Water	P	5	delta-BHC	0.0018	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-20	Water	P	5	delta-BHC	0.0018	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-21	Water	P	5	delta-BHC	0.0018	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-22	Water	P	5	delta-BHC	0.0018	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0	0.0001	0.0022
I-1	Sediment	P	1	delta-BHC	0.0076	0	ND	ug/Kg	U	ND	3541	Total/NA	8081B_LL	0	0		
I-2	Sediment	P	1	delta-BHC	0.0074	0	ND	ug/Kg	U	ND	3541	Total/NA	8081B_LL	0	0		
I-3	Sediment	P	250	delta-BHC	3.4	1	3.4	ug/Kg	J	J	3541	Total/NA	8081B_LL	0	3.4		
I-4	Sediment	P	5	delta-BHC	0.035	0	ND	ug/Kg	U	ND	3541	Total/NA	8081B_LL	0	0		
I-5	Sediment	P	2	delta-BHC	0.016	0	ND	ug/Kg	U	ND	3541	Total/NA	8081B_LL	0	0	0.68	3.4
RB-01-11192012	Water	P	1	delta-BHC	0.00036	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
BKG-01-EM	Water	P	1	Dieldrin	0.00078	0	0.00078	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
BKG-01-HS	Water	P	1	Dieldrin	0.00077	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
BKG-01-MID	Water	P	1	Dieldrin	0.00078	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
BKG-02-EM	Water	P	1	Dieldrin	0.00078	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
BKG-02-HS	Water	P	1	Dieldrin	0.00077	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
BKG-02-MID	Water	P	1	Dieldrin	0.00077	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
BKG-03-EM	Water	P	1	Dieldrin	0.00078	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
BKG-03-HS	Water	P	1	Dieldrin	0.00077	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
BKG-03-MID	Water	P	1	Dieldrin	0.00078	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0	0	0
E-01	Water	P	5	Dieldrin	0.0041	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-02	Water	P	5	Dieldrin	0.0039	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-03	Water	P	1	Dieldrin	0.00078	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-04	Water	P	1	Dieldrin	0.00078	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-05	Water	P	5	Dieldrin	0.0039	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-06	Water	P	5	Dieldrin	0.0039	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-07	Water	P	1	Dieldrin	0.0008	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-08	Water	P	5	Dieldrin	0.0039	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-09	Water	P	5	Dieldrin	0.0039	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-10	Water	P	5	Dieldrin	0.0039	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-11	Water	P	1	Dieldrin	0.00078	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-12	Water	P	1	Dieldrin	0.00078	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-13	Water	P	1	Dieldrin	0.00078	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-14	Water	P	5	Dieldrin	0.0039	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-15	Water	P	5	Dieldrin	0.0039	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-16	Water	P	10	Dieldrin	0.0078	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-17	Water	P	5	Dieldrin	0.0039	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-18	Water	P	1	Dieldrin	0.00078	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-19	Water	P	5	Dieldrin	0.0039	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-20	Water	P	5	Dieldrin	0.0039	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-21	Water	P	5	Dieldrin	0.0039	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-22	Water	P	5	Dieldrin	0.0039	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0	0	0
I-1	Sediment	P	1	Dieldrin	0.0082	0	ND	ug/Kg	U	ND	3541	Total/NA	8081B_LL	0	0		
I-2	Sediment	P	1	Dieldrin	0.008	0	ND	ug/Kg	U	ND	3541	Total/NA	8081B_LL	0	0		
I-3	Sediment	P	250	Dieldrin	390	1	390	ug/Kg			3541	Total/NA	8081B_LL	0	390		
I-4	Sediment	P	5	Dieldrin	0.062	1	0.062	ug/Kg	J p B	J p B	3541	Total/NA	8081B_LL	0	0.062		
I-5	Sediment	P	2	Dieldrin	0.018	0	ND	ug/Kg	U	ND	3541	Total/NA	8081B_LL	0	0	78.0124	390
RB-01-11192012	Water	P	1	Dieldrin	0.00078	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
BKG-01-EM	Water	P	1	Endosulfan I	0.0009	0	0.0009	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
BKG-01-HS	Water	P	1	Endosulfan I	0.00089	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
BKG-01-MID	Water	P	1	Endosulfan I	0.0009	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
BKG-02-EM	Water	P	1	Endosulfan I	0.0009	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
BKG-02-HS	Water	P	1	Endosulfan I	0.00089	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
BKG-02-MID	Water	P	1	Endosulfan I	0.00089	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
BKG-03-EM	Water	P	1	Endosulfan I	0.0009	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
BKG-03-HS	Water	P	1	Endosulfan I	0.00089	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
BKG-03-MID	Water	P	1	Endosulfan I	0.0009	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0	0	0
E-01	Water	P	5	Endosulfan I	0.0047	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-02	Water	P	5	Endosulfan I	0.0044	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-03	Water	P	1	Endosulfan I	0.0009	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-04	Water	P	1	Endosulfan I	0.0009	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-05	Water	P	5	Endosulfan I	0.0045	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-06	Water	P	5	Endosulfan I	0.0045	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-07	Water	P	1	Endosulfan I	0.00091	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-08	Water	P	5	Endosulfan I	0.0045	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-09	Water	P	5	Endosulfan I	0.0044	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-10	Water	P	5	Endosulfan I	0.0045	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-11	Water	P	1	Endosulfan I	0.0009	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-12	Water	P	1	Endosulfan I	0.0009	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-13	Water	P	1	Endosulfan I	0.0009	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-14	Water	P	5	Endosulfan I	0.0045	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-15	Water	P	5	Endosulfan I	0.0045	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-16	Water	P	10	Endosulfan I	0.009	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-17	Water	P	5	Endosulfan I	0.0045	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-18	Water	P	1	Endosulfan I	0.0009	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-19	Water	P	5	Endosulfan I	0.0045	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-20	Water	P	5	Endosulfan I	0.0045	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-21	Water	P	5	Endosulfan I	0.0045	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-22	Water	P	5	Endosulfan I	0.0045	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0	0	0
I-1	Sediment	P	1	Endosulfan I	0.0093	0	ND	ug/Kg	U	ND	3541	Total/NA	8081B_LL	0	0		
I-2	Sediment	P	1	Endosulfan I	0.009	0	ND	ug/Kg	U	ND	3541	Total/NA	8081B_LL	0	0		
I-3	Sediment	P	250	Endosulfan I	9.8	1	9.8	ug/Kg	J	J	3541	Total/NA	8081B_LL	0	9.8		
I-4	Sediment	P	5	Endosulfan I	0.043	0	ND	ug/Kg	U	ND	3541	Total/NA	8081B_LL	0	0		
I-5	Sediment	P	2	Endosulfan I	0.02	0	ND	ug/Kg	U	ND	3541	Total/NA	8081B_LL	0	0	1.96	9.8
RB-01-11192012	Water	P	1	Endosulfan I	0.0009	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
BKG-01-EM	Water	P	1	Endosulfan II	0.00093	0	0.00093	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
BKG-01-HS	Water	P	1	Endosulfan II	0.00092	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
BKG-01-MID	Water	P	1	Endosulfan II	0.00093	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
BKG-02-EM	Water	P	1	Endosulfan II	0.00093	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
BKG-02-HS	Water	P	1	Endosulfan II	0.00092	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
BKG-02-MID	Water	P	1	Endosulfan II	0.00092	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
BKG-03-EM	Water	P	1	Endosulfan II	0.00093	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
BKG-03-HS	Water	P	1	Endosulfan II	0.00092	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
BKG-03-MID	Water	P	1	Endosulfan II	0.00093	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0	0	0
E-01	Water	P	5	Endosulfan II	0.0049	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-02	Water	P	5	Endosulfan II	0.0046	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-03	Water	P	1	Endosulfan II	0.00093	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-04	Water	P	1	Endosulfan II	0.0024	1	0.0024	ug/L			3510C	Total/NA	8081B_LL	0	0.0024		
E-05	Water	P	5	Endosulfan II	0.0047	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-06	Water	P	5	Endosulfan II	0.0047	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-07	Water	P	1	Endosulfan II	0.00095	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		

Client Sample ID	Matrix	sort	ion F	Analyte	Val_res	D?	Result	Unit	Qual	Flag	ep Metho	Prep Type	alysis Method	Check	Adj Val	Mean	Max
E-08	Water	P	5	Endosulfan II	0.0047	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-09	Water	P	5	Endosulfan II	0.0046	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-10	Water	P	5	Endosulfan II	0.0047	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-11	Water	P	1	Endosulfan II	0.00093	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-12	Water	P	1	Endosulfan II	0.00093	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-13	Water	P	1	Endosulfan II	0.00093	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-14	Water	P	5	Endosulfan II	0.0047	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-15	Water	P	5	Endosulfan II	0.0047	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-16	Water	P	10	Endosulfan II	0.0093	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-17	Water	P	5	Endosulfan II	0.0047	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-18	Water	P	1	Endosulfan II	0.00093	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-19	Water	P	5	Endosulfan II	0.0047	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-20	Water	P	5	Endosulfan II	0.0047	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-21	Water	P	5	Endosulfan II	0.0047	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-22	Water	P	5	Endosulfan II	0.0047	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0	0.00011	0.0024
I-1	Sediment	P	1	Endosulfan II	0.0087	0	ND	ug/Kg	U	ND	3541	Total/NA	8081B_LL	0	0		
I-2	Sediment	P	1	Endosulfan II	0.0085	0	ND	ug/Kg	U	ND	3541	Total/NA	8081B_LL	0	0		
I-3	Sediment	P	250	Endosulfan II	2.3	0	ND	ug/Kg	U	ND	3541	Total/NA	8081B_LL	0	0		
I-4	Sediment	P	5	Endosulfan II	0.04	0	ND	ug/Kg	U	ND	3541	Total/NA	8081B_LL	0	0		
I-5	Sediment	P	2	Endosulfan II	0.019	1	0.019	ug/Kg	J	J	3541	Total/NA	8081B_LL	0	0.019	0.0038	0.019
RB-01-11192012	Water	P	1	Endosulfan II	0.00093	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
BKG-01-EM	Water	P	1	Endrin	0.00091	0	0.00091	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
BKG-01-HS	Water	P	1	Endrin	0.00091	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
BKG-01-MID	Water	P	1	Endrin	0.00091	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
BKG-02-EM	Water	P	1	Endrin	0.00091	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
BKG-02-HS	Water	P	1	Endrin	0.00091	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
BKG-02-MID	Water	P	1	Endrin	0.00091	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
BKG-03-EM	Water	P	1	Endrin	0.00091	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
BKG-03-HS	Water	P	1	Endrin	0.00091	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
BKG-03-MID	Water	P	1	Endrin	0.00091	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0	0	0
E-01	Water	P	5	Endrin	0.0048	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-02	Water	P	5	Endrin	0.0045	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-03	Water	P	1	Endrin	0.00091	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-04	Water	P	1	Endrin	0.00091	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-05	Water	P	5	Endrin	0.0046	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-06	Water	P	5	Endrin	0.0046	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-07	Water	P	1	Endrin	0.00093	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-08	Water	P	5	Endrin	0.0046	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-09	Water	P	5	Endrin	0.0045	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-10	Water	P	5	Endrin	0.0046	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-11	Water	P	1	Endrin	0.00091	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-12	Water	P	1	Endrin	0.00091	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-13	Water	P	1	Endrin	0.00091	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-14	Water	P	5	Endrin	0.0046	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-15	Water	P	5	Endrin	0.0046	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-16	Water	P	10	Endrin	0.0091	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-17	Water	P	5	Endrin	0.0046	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-18	Water	P	1	Endrin	0.00091	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-19	Water	P	5	Endrin	0.0046	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-20	Water	P	5	Endrin	0.0046	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-21	Water	P	5	Endrin	0.0046	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-22	Water	P	5	Endrin	0.0046	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0	0	0
I-1	Sediment	P	1	Endrin	0.0096	0	ND	ug/Kg	U	ND	3541	Total/NA	8081B_LL	0	0		
I-2	Sediment	P	1	Endrin	0.019	1	0.019	ug/Kg	J	J	3541	Total/NA	8081B_LL	0	0.019		
I-3	Sediment	P	250	Endrin	2.6	0	ND	ug/Kg	U	ND	3541	Total/NA	8081B_LL	0	0		
I-4	Sediment	P	5	Endrin	0.062	1	0.062	ug/Kg	J p	J p	3541	Total/NA	8081B_LL	0	0.062		
I-5	Sediment	P	2	Endrin	0.048	1	0.048	ug/Kg	J p	J p	3541	Total/NA	8081B_LL	0	0.048	0.0258	0.062
RB-01-11192012	Water	P	1	Endrin	0.00091	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
BKG-01-EM	Water	P	1	Endrin ketone	0.00088	0	0.00088	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
BKG-01-HS	Water	P	1	Endrin ketone	0.00087	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
BKG-01-MID	Water	P	1	Endrin ketone	0.00088	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
BKG-02-EM	Water	P	1	Endrin ketone	0.00088	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
BKG-02-HS	Water	P	1	Endrin ketone	0.00087	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
BKG-02-MID	Water	P	1	Endrin ketone	0.00087	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
BKG-03-EM	Water	P	1	Endrin ketone	0.00088	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
BKG-03-HS	Water	P	1	Endrin ketone	0.00087	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
BKG-03-MID	Water	P	1	Endrin ketone	0.00088	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0	0	0
E-01	Water	P	5	Endrin ketone	0.0046	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-02	Water	P	5	Endrin ketone	0.0043	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-03	Water	P	1	Endrin ketone	0.00088	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-04	Water	P	1	Endrin ketone	0.00088	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-05	Water	P	5	Endrin ketone	0.0044	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-06	Water	P	5	Endrin ketone	0.0044	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-07	Water	P	1	Endrin ketone	0.00089	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-08	Water	P	5	Endrin ketone	0.0044	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-09	Water	P	5	Endrin ketone	0.0043	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-10	Water	P	5	Endrin ketone	0.0044	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-11	Water	P	1	Endrin ketone	0.00088	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-12	Water	P	1	Endrin ketone	0.00088	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-13	Water	P	1	Endrin ketone	0.00088	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-14	Water	P	5	Endrin ketone	0.0044	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-15	Water	P	5	Endrin ketone	0.0044	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-16	Water	P	10	Endrin ketone	0.0088	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-17	Water	P	5	Endrin ketone	0.0044	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-18	Water	P	1	Endrin ketone	0.00088	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-19	Water	P	5	Endrin ketone	0.0092	1	0.0092	ug/L			3510C	Total/NA	8081B_LL	0	0.0092		
E-20	Water	P	5	Endrin ketone	0.0044	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-21	Water	P	5	Endrin ketone	0.0044	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-22	Water	P	5	Endrin ketone	0.0044	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0	0.00042	0.0092
I-1	Sediment	P	1	Endrin ketone	0.0077	0	ND	ug/Kg	U	ND	3541	Total/NA	8081B_LL	0	0		
I-2	Sediment	P	1	Endrin ketone	0.0075	0	ND	ug/Kg	U	ND	3541	Total/NA	8081B_LL	0	0		
I-3	Sediment	P	250	Endrin ketone	2.1	0	ND	ug/Kg	U	ND	3541	Total/NA	8081B_LL	0	0		
I-4	Sediment	P	5	Endrin ketone	0.036	0	ND	ug/Kg	U	ND	3541	Total/NA	8081B_LL	0	0		
I-5	Sediment	P	2	Endrin ketone	0.092	1	0.092	ug/Kg	J	J	3541	Total/NA	8081B_LL	0	0.092	0.0184	0.092
RB-01-11192012	Water	P	1	Endrin ketone	0.00088	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
BKG-01-EM	Water	P	1	gamma-BHC (Lindane)	0.00076	0	0.00076	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
BKG-01-HS	Water	P	1	gamma-BHC (Lindane)	0.00075	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
BKG-01-MID	Water	P	1	gamma-BHC (Lindane)	0.00076	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
BKG-02-EM	Water	P	1	gamma-BHC (Lindane)	0.00076	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
BKG-02-HS	Water	P	1	gamma-BHC (Lindane)	0.00075	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
BKG-02-MID	Water	P	1	gamma-BHC (Lindane)	0.00075	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
BKG-03-EM	Water	P	1	gamma-BHC (Lindane)	0.00076	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
BKG-03-HS	Water	P	1	gamma-BHC (Lindane)	0.00075	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
BKG-03-MID	Water	P	1	gamma-BHC (Lindane)	0.00076	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0	0	0
E-01	Water	P	5	gamma-BHC (Lindane)	0.004	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-02	Water	P	5	gamma-BHC (Lindane)	0.0038	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-03	Water	P	1	gamma-BHC (Lindane)	0.00076	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-04	Water	P	1	gamma-BHC (Lindane)	0.00076	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-05	Water	P	5	gamma-BHC (Lindane)	0.0038	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-06	Water	P	5	gamma-BHC (Lindane)	0.0038	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-07	Water	P	1	gamma-BHC (Lindane)	0.00078	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-08	Water	P	5	gamma-BHC (Lindane)	0.0038	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-09	Water	P	5	gamma-BHC (Lindane)	0.0038	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-10	Water	P	5	gamma-BHC (Lindane)	0.0038	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-11	Water	P	1	gamma-BHC (Lindane)	0.00076	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-12	Water	P	1	gamma-BHC (Lindane)	0.0011	1	0.0011	ug/L	J p	J p	3510C	Total/NA	8081B_LL	0	0.0011		
E-13	Water	P	1	gamma-BHC (Lindane)	0.00076	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-14	Water	P	5	gamma-BHC (Lindane)	0.0038	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-15	Water	P	5	gamma-BHC (Lindane)	0.0038	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-16	Water	P	10	gamma-BHC (Lindane)	0.0076	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-17	Water	P	5	gamma-BHC (Lindane)	0.0038	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-18	Water	P	1	gamma-BHC (Lindane)	0.00076	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		

Client Sample ID	Matrix	sort	ion F	Analyte	Val_res	D?	Result	Unit	Qual	Flag	ep Metho	Prep Type	alysis Method	Check	Adj Val	Mean	Max
E-19	Water	P	5	gamma-BHC (Lindane)	0.0038	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-20	Water	P	5	gamma-BHC (Lindane)	0.0038	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-21	Water	P	5	gamma-BHC (Lindane)	0.0038	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-22	Water	P	5	gamma-BHC (Lindane)	0.0038	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0	0.00005	0.0011
I-1	Sediment	P	1	gamma-BHC (Lindane)	0.0086	0	ND	ug/Kg	U	ND	3541	Total/NA	8081B_LL	0	0		
I-2	Sediment	P	1	gamma-BHC (Lindane)	0.0084	0	ND	ug/Kg	U	ND	3541	Total/NA	8081B_LL	0	0		
I-3	Sediment	P	250	gamma-BHC (Lindane)	2.3	0	ND	ug/Kg	U	ND	3541	Total/NA	8081B_LL	0	0		
I-4	Sediment	P	5	gamma-BHC (Lindane)	0.04	0	ND	ug/Kg	U	ND	3541	Total/NA	8081B_LL	0	0		
I-5	Sediment	P	2	gamma-BHC (Lindane)	0.019	0	ND	ug/Kg	U	ND	3541	Total/NA	8081B_LL	0	0	0	0
RB-01-11192012	Water	P	1	gamma-BHC (Lindane)	0.00076	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
BKG-01-EM	Water	P	1	gamma-Chlordane	0.0017	1	0.0017	ug/L	p	p	3510C	Total/NA	8081B_LL	0	0.0017		
BKG-01-HS	Water	P	1	gamma-Chlordane	0.0012	1	0.0012	ug/L	p	p	3510C	Total/NA	8081B_LL	0	0.0012		
BKG-01-MID	Water	P	1	gamma-Chlordane	0.0016	1	0.0016	ug/L	p	p	3510C	Total/NA	8081B_LL	0	0.0016		
BKG-02-EM	Water	P	1	gamma-Chlordane	0.0021	1	0.0021	ug/L			3510C	Total/NA	8081B_LL	0	0.0021		
BKG-02-HS	Water	P	1	gamma-Chlordane	0.0029	1	0.0029	ug/L			3510C	Total/NA	8081B_LL	0	0.0029		
BKG-02-MID	Water	P	1	gamma-Chlordane	0.0023	1	0.0023	ug/L			3510C	Total/NA	8081B_LL	0	0.0023		
BKG-03-EM	Water	P	1	gamma-Chlordane	0.0017	1	0.0017	ug/L			3510C	Total/NA	8081B_LL	0	0.0017		
BKG-03-HS	Water	P	1	gamma-Chlordane	0.0014	1	0.0014	ug/L			3510C	Total/NA	8081B_LL	0	0.0014		
BKG-03-MID	Water	P	1	gamma-Chlordane	0.0016	1	0.0016	ug/L			3510C	Total/NA	8081B_LL	0	0.0016	0.00183	0.0029
E-01	Water	P	5	gamma-Chlordane	0.0048	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-02	Water	P	5	gamma-Chlordane	0.0045	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-03	Water	P	1	gamma-Chlordane	0.00091	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-04	Water	P	1	gamma-Chlordane	0.00091	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-05	Water	P	5	gamma-Chlordane	0.0046	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-06	Water	P	5	gamma-Chlordane	0.0046	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-07	Water	P	1	gamma-Chlordane	0.00093	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-08	Water	P	5	gamma-Chlordane	0.0046	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-09	Water	P	5	gamma-Chlordane	0.0045	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-10	Water	P	5	gamma-Chlordane	0.0046	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-11	Water	P	1	gamma-Chlordane	0.00091	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-12	Water	P	1	gamma-Chlordane	0.00091	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-13	Water	P	1	gamma-Chlordane	0.00091	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-14	Water	P	5	gamma-Chlordane	0.0046	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-15	Water	P	5	gamma-Chlordane	0.0046	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-16	Water	P	10	gamma-Chlordane	0.0091	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-17	Water	P	5	gamma-Chlordane	0.0046	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-18	Water	P	1	gamma-Chlordane	0.00091	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-19	Water	P	5	gamma-Chlordane	0.0054	1	0.0054	ug/L	J	J	3510C	Total/NA	8081B_LL	0	0.0054		
E-20	Water	P	5	gamma-Chlordane	0.0063	1	0.0063	ug/L			3510C	Total/NA	8081B_LL	0	0.0063		
E-21	Water	P	5	gamma-Chlordane	0.0046	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-22	Water	P	5	gamma-Chlordane	0.0046	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0	0.00053	0.0063
I-1	Sediment	P	1	gamma-Chlordane	0.013	1	0.013	ug/Kg	J p	J p	3541	Total/NA	8081B_LL	0	0.013		
I-2	Sediment	P	1	gamma-Chlordane	0.0094	0	ND	ug/Kg	U	ND	3541	Total/NA	8081B_LL	0	0		
I-3	Sediment	P	250	gamma-Chlordane	150	1	150	ug/Kg			3541	Total/NA	8081B_LL	0	150		
I-4	Sediment	P	5	gamma-Chlordane	0.048	1	0.048	ug/Kg	J p	J p	3541	Total/NA	8081B_LL	0	0.048		
I-5	Sediment	P	2	gamma-Chlordane	0.034	1	0.034	ug/Kg	J p	J p	3541	Total/NA	8081B_LL	0	0.034	30.019	150
RB-01-11192012	Water	P	1	gamma-Chlordane	0.00091	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
BKG-01-EM	Water	P	1	Heptachlor	0.00094	0	0.00094	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
BKG-01-HS	Water	P	1	Heptachlor	0.00093	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
BKG-01-MID	Water	P	1	Heptachlor	0.00094	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
BKG-02-EM	Water	P	1	Heptachlor	0.00094	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
BKG-02-HS	Water	P	1	Heptachlor	0.00093	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
BKG-02-MID	Water	P	1	Heptachlor	0.00093	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
BKG-03-EM	Water	P	1	Heptachlor	0.00094	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
BKG-03-HS	Water	P	1	Heptachlor	0.00093	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
BKG-03-MID	Water	P	1	Heptachlor	0.00094	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0	0	0
E-01	Water	P	5	Heptachlor	0.005	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-02	Water	P	5	Heptachlor	0.0047	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-03	Water	P	1	Heptachlor	0.00094	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-04	Water	P	1	Heptachlor	0.00094	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-05	Water	P	5	Heptachlor	0.0047	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-06	Water	P	5	Heptachlor	0.0047	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-07	Water	P	1	Heptachlor	0.00096	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-08	Water	P	5	Heptachlor	0.0047	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-09	Water	P	5	Heptachlor	0.0047	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-10	Water	P	5	Heptachlor	0.0047	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-11	Water	P	1	Heptachlor	0.00094	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-12	Water	P	1	Heptachlor	0.00094	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-13	Water	P	1	Heptachlor	0.00094	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-14	Water	P	5	Heptachlor	0.0048	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-15	Water	P	5	Heptachlor	0.0047	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-16	Water	P	10	Heptachlor	0.0094	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-17	Water	P	5	Heptachlor	0.0048	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-18	Water	P	1	Heptachlor	0.00094	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-19	Water	P	5	Heptachlor	0.0047	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-20	Water	P	5	Heptachlor	0.0047	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-21	Water	P	5	Heptachlor	0.0047	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-22	Water	P	5	Heptachlor	0.0047	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0	0	0
I-1	Sediment	P	1	Heptachlor	0.011	0	ND	ug/Kg	U	ND	3541	Total/NA	8081B_LL	0	0		
I-2	Sediment	P	1	Heptachlor	0.011	0	ND	ug/Kg	U	ND	3541	Total/NA	8081B_LL	0	0		
I-3	Sediment	P	250	Heptachlor	3	0	ND	ug/Kg	U	ND	3541	Total/NA	8081B_LL	0	0		
I-4	Sediment	P	5	Heptachlor	0.051	0	ND	ug/Kg	U	ND	3541	Total/NA	8081B_LL	0	0		
I-5	Sediment	P	2	Heptachlor	0.024	0	ND	ug/Kg	U	ND	3541	Total/NA	8081B_LL	0	0	0	0
RB-01-11192012	Water	P	1	Heptachlor	0.0031	1	0.0031	ug/L			3510C	Total/NA	8081B_LL	0	0.0031		
BKG-01-EM	Water	P	1	Heptachlor epoxide	0.00092	0	0.00092	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
BKG-01-HS	Water	P	1	Heptachlor epoxide	0.00092	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
BKG-01-MID	Water	P	1	Heptachlor epoxide	0.00092	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
BKG-02-EM	Water	P	1	Heptachlor epoxide	0.00092	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
BKG-02-HS	Water	P	1	Heptachlor epoxide	0.00092	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
BKG-02-MID	Water	P	1	Heptachlor epoxide	0.00092	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
BKG-03-EM	Water	P	1	Heptachlor epoxide	0.00092	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
BKG-03-HS	Water	P	1	Heptachlor epoxide	0.00092	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
BKG-03-MID	Water	P	1	Heptachlor epoxide	0.00092	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0	0	0
E-01	Water	P	5	Heptachlor epoxide	0.0049	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-02	Water	P	5	Heptachlor epoxide	0.0046	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-03	Water	P	1	Heptachlor epoxide	0.00092	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-04	Water	P	1	Heptachlor epoxide	0.00092	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-05	Water	P	5	Heptachlor epoxide	0.0046	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-06	Water	P	5	Heptachlor epoxide	0.0046	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-07	Water	P	1	Heptachlor epoxide	0.00094	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-08	Water	P	5	Heptachlor epoxide	0.0046	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-09	Water	P	5	Heptachlor epoxide	0.0046	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-10	Water	P	5	Heptachlor epoxide	0.0046	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-11	Water	P	1	Heptachlor epoxide	0.00092	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-12	Water	P	1	Heptachlor epoxide	0.00092	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-13	Water	P	1	Heptachlor epoxide	0.00092	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-14	Water	P	5	Heptachlor epoxide	0.0047	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-15	Water	P	5	Heptachlor epoxide	0.0046	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-16	Water	P	10	Heptachlor epoxide	0.0092	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-17	Water	P	5	Heptachlor epoxide	0.0047	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-18	Water	P	1	Heptachlor epoxide	0.00092	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-19	Water	P	5	Heptachlor epoxide	0.0046	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-20	Water	P	5	Heptachlor epoxide	0.0046	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-21	Water	P	5	Heptachlor epoxide	0.0046	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-22	Water	P	5	Heptachlor epoxide	0.0046	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0	0	0
I-1	Sediment	P	1	Heptachlor epoxide	0.0096	0	ND	ug/Kg	U	ND	3541	Total/NA	8081B_LL	0	0		
I-2	Sediment	P	1	Heptachlor epoxide	0.014	1	0.014	ug/Kg	J	J	3541	Total/NA	8081B_LL	0	0.014		
I-3	Sediment	P	250	Heptachlor epoxide	2.6	0	ND	ug/Kg	U	ND	3541	Total/NA	8081B_LL	0	0		
I-4	Sediment	P	5	Heptachlor epoxide	0.088	1	0.088	ug/Kg	J	J	3541	Total/NA	8081B_LL	0	0.088		
I-5	Sediment	P	2	Heptachlor epoxide	0.059	1	0.059	ug/Kg	J	J	3541	Total/NA	8081B_LL	0	0.059	0.0322	0.088
RB-01-11192012	Water	P	1	Heptachlor epoxide	0.00092	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
BKG-01-EM	Water	P	1	Methoxychlor	0.00087	0	0.00087	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		

Client Sample ID	Matrix	sort	ion F	Analyte	Val_res	D?	Result	Unit	Qual	Flag	ep Metho	Prep Type	alysis Method	Check	Adj Val	Mean	Max
BKG-01-HS	Water	P	1	Methoxychlor	0.00086	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
BKG-01-MID	Water	P	1	Methoxychlor	0.00087	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
BKG-02-EM	Water	P	1	Methoxychlor	0.00087	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
BKG-02-HS	Water	P	1	Methoxychlor	0.00086	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
BKG-02-MID	Water	P	1	Methoxychlor	0.00086	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
BKG-03-EM	Water	P	1	Methoxychlor	0.00087	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
BKG-03-HS	Water	P	1	Methoxychlor	0.00086	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
BKG-03-MID	Water	P	1	Methoxychlor	0.00087	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0	0	0
E-01	Water	P	5	Methoxychlor	0.0046	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-02	Water	P	5	Methoxychlor	0.0043	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-03	Water	P	1	Methoxychlor	0.0015	1	0.0015	ug/L	J p	J p	3510C	Total/NA	8081B_LL	0	0.0015		
E-04	Water	P	1	Methoxychlor	0.00087	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-05	Water	P	5	Methoxychlor	0.0043	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-06	Water	P	5	Methoxychlor	0.0043	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-07	Water	P	1	Methoxychlor	0.00088	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-08	Water	P	5	Methoxychlor	0.0043	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-09	Water	P	5	Methoxychlor	0.0043	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-10	Water	P	5	Methoxychlor	0.0043	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-11	Water	P	1	Methoxychlor	0.00087	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-12	Water	P	1	Methoxychlor	0.00087	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-13	Water	P	1	Methoxychlor	0.00087	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-14	Water	P	5	Methoxychlor	0.0044	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-15	Water	P	5	Methoxychlor	0.0043	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-16	Water	P	10	Methoxychlor	0.0087	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-17	Water	P	5	Methoxychlor	0.0044	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-18	Water	P	1	Methoxychlor	0.00087	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-19	Water	P	5	Methoxychlor	0.0043	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-20	Water	P	5	Methoxychlor	0.0043	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-21	Water	P	5	Methoxychlor	0.0043	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-22	Water	P	5	Methoxychlor	0.0043	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0	6.8E-05	0.0015
I-1	Sediment	P	1	Methoxychlor	0.01	0	ND	ug/Kg	U	ND	3541	Total/NA	8081B_LL	0	0		
I-2	Sediment	P	1	Methoxychlor	0.029	1	0.029	ug/Kg	J p	J p	3541	Total/NA	8081B_LL	0	0.029		
I-3	Sediment	P	250	Methoxychlor	2.8	0	ND	ug/Kg	U	ND	3541	Total/NA	8081B_LL	0	0		
I-4	Sediment	P	5	Methoxychlor	0.048	0	ND	ug/Kg	U	ND	3541	Total/NA	8081B_LL	0	0		
I-5	Sediment	P	2	Methoxychlor	0.041	1	0.041	ug/Kg	J p	J p	3541	Total/NA	8081B_LL	0	0.041	0.014	0.041
RB-01-11192012	Water	P	1	Methoxychlor	0.00087	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
BKG-01-EM	Water	P	1	PCB-1254	0.086	1	0.086	ug/L	U	ND	3510C	Total/NA	8082A	0	0		
BKG-01-HS	Water	P	1	PCB-1254	0.086		ND	ug/L	U	ND	3510C	Total/NA	8082A	0	0		
BKG-01-MID	Water	P	1	PCB-1254	0.087		ND	ug/L	U	ND	3510C	Total/NA	8082A	0	0		
BKG-02-EM	Water	P	1	PCB-1254	0.088		ND	ug/L	U	ND	3510C	Total/NA	8082A	0	0		
BKG-02-HS	Water	P	1	PCB-1254	0.087		ND	ug/L	U	ND	3510C	Total/NA	8082A	0	0		
BKG-02-MID	Water	P	1	PCB-1254	0.087		ND	ug/L	U	ND	3510C	Total/NA	8082A	0	0		
BKG-03-EM	Water	P	1	PCB-1254	0.087		ND	ug/L	U	ND	3510C	Total/NA	8082A	0	0		
BKG-03-HS	Water	P	1	PCB-1254	0.087		ND	ug/L	U	ND	3510C	Total/NA	8082A	0	0		
BKG-03-MID	Water	P	1	PCB-1254	0.087		ND	ug/L	U	ND	3510C	Total/NA	8082A	0	0	0	0
E-01	Water	P	1	PCB-1254	0.092		ND	ug/L	U	ND	3510C	Total/NA	8082A	0	0		
E-02	Water	P	1	PCB-1254	0.092		ND	ug/L	U	ND	3510C	Total/NA	8082A	0	0		
E-03	Water	P	1	PCB-1254	0.089		ND	ug/L	U	ND	3510C	Total/NA	8082A	0	0		
E-04	Water	P	1	PCB-1254	0.087		ND	ug/L	U	ND	3510C	Total/NA	8082A	0	0		
E-05	Water	P	1	PCB-1254	0.087		ND	ug/L	U	ND	3510C	Total/NA	8082A	0	0		
E-06	Water	P	1	PCB-1254	0.086		ND	ug/L	U	ND	3510C	Total/NA	8082A	0	0		
E-07	Water	P	1	PCB-1254	0.091		ND	ug/L	U	ND	3510C	Total/NA	8082A	0	0		
E-08	Water	P	1	PCB-1254	0.087		ND	ug/L	U	ND	3510C	Total/NA	8082A	0	0		
E-09	Water	P	1	PCB-1254	0.087		ND	ug/L	U	ND	3510C	Total/NA	8082A	0	0		
E-10	Water	P	1	PCB-1254	0.087		ND	ug/L	U	ND	3510C	Total/NA	8082A	0	0		
E-11	Water	P	1	PCB-1254	0.086		ND	ug/L	U	ND	3510C	Total/NA	8082A	0	0		
E-12	Water	P	1	PCB-1254	0.087		ND	ug/L	U	ND	3510C	Total/NA	8082A	0	0		
E-13	Water	P	1	PCB-1254	0.089		ND	ug/L	U	ND	3510C	Total/NA	8082A	0	0		
E-14	Water	P	1	PCB-1254	0.089		ND	ug/L	U	ND	3510C	Total/NA	8082A	0	0		
E-15	Water	P	1	PCB-1254	0.087		ND	ug/L	U	ND	3510C	Total/NA	8082A	0	0		
E-16	Water	P	1	PCB-1254	0.087		ND	ug/L	U	ND	3510C	Total/NA	8082A	0	0		
E-17	Water	P	1	PCB-1254	0.087		ND	ug/L	U	ND	3510C	Total/NA	8082A	0	0		
E-18	Water	P	1	PCB-1254	0.087		ND	ug/L	U	ND	3510C	Total/NA	8082A	0	0		
E-19	Water	P	1	PCB-1254	0.087		ND	ug/L	U	ND	3510C	Total/NA	8082A	0	0		
E-20	Water	P	1	PCB-1254	0.087		ND	ug/L	U	ND	3510C	Total/NA	8082A	0	0		
E-21	Water	P	1	PCB-1254	0.087		ND	ug/L	U	ND	3510C	Total/NA	8082A	0	0		
E-22	Water	P	1	PCB-1254	0.09		ND	ug/L	U	ND	3510C	Total/NA	8082A	0	0	0	0
I-1	Sediment	P	1	PCB-1254	1.4		ND	ug/Kg	U	ND	3541	Total/NA	8082A	0	0		
I-2	Sediment	P	1	PCB-1254	1.4		ND	ug/Kg	U	ND	3541	Total/NA	8082A	0	0		
I-3	Sediment	P	1	PCB-1254	1.5		ND	ug/Kg	U	ND	3541	Total/NA	8082A	0	0		
I-4	Sediment	P	1	PCB-1254	4		4	ug/Kg	J	J	3541	Total/NA	8082A	0	4		
I-5	Sediment	P	1	PCB-1254	1.5		ND	ug/Kg	U	ND	3541	Total/NA	8082A	0	0	0.8	4
RB-01-11192012	Water	P	1	PCB-1254	0.089	0	ND	ug/L	U	ND	3510C	Total/NA	8082A	0	0		
BKG-01-EM		P		TOTAL DDT	0.0013	1	0.0013	ug/L						0	0.0013		
BKG-01-HS		P		TOTAL DDT	0.00096	1	0.00096	ug/L						0	0.00096		
BKG-01-MID		P		TOTAL DDT	0.0011	1	0.0011	ug/L						0	0.0011		
BKG-02-EM		P		TOTAL DDT	0.0015	1	0.0015	ug/L						0	0.0015		
BKG-02-HS		P		TOTAL DDT	0.0011	1	0.0011	ug/L						0	0.0011		
BKG-02-MID		P		TOTAL DDT	0.0013	1	0.0013	ug/L						0	0.0013		
BKG-03-EM		P		TOTAL DDT	0.014	1	0.014	ug/L						0	0.014		
BKG-03-HS		P		TOTAL DDT	0.014	1	0.014	ug/L						0	0.014		
BKG-03-MID		P		TOTAL DDT	0.014	1	0.014	ug/L						0	0.014	0.00547	0.014
E-01		P		TOTAL DDT	0	0	0	ug/L	U					0	0		
E-02		P		TOTAL DDT	0.022	1	0.022	ug/L						0	0.022		
E-03		P		TOTAL DDT	0.0047	1	0.0047	ug/L						0	0.0047		
E-04		P		TOTAL DDT	0	0	0	ug/L	U					0	0		
E-05		P		TOTAL DDT	0.03	1	0.03	ug/L						0	0.03		
E-06		P		TOTAL DDT	0.023	1	0.023	ug/L						0	0.023		
E-07		P		TOTAL DDT	0.0053	1	0.0053	ug/L						0	0.0053		
E-08		P		TOTAL DDT	0	0	0	ug/L	U					0	0		
E-09		P		TOTAL DDT	0.0082	1	0.0082	ug/L						0	0.0082		
E-10		P		TOTAL DDT	0.015	1	0.015	ug/L						0	0.015		
E-11		P		TOTAL DDT	0.0193	1	0.0193	ug/L						0	0.0193		
E-12		P		TOTAL DDT	0.0128	1	0.0128	ug/L						0	0.0128		
E-13		P		TOTAL DDT	0.0037	1	0.0037	ug/L						0	0.0037		
E-14		P		TOTAL DDT	0.0058	1	0.0058	ug/L						0	0.0058		
E-15		P		TOTAL DDT	3.8216	1	3.8216	ug/L						0	3.8216		
E-16		P		TOTAL DDT	0.022	1	0.022	ug/L						0	0.022		
E-17		P		TOTAL DDT	0.025	1	0.025	ug/L						0	0.025		
E-18		P		TOTAL DDT	0.0249	1	0.0249	ug/L						0	0.0249		
E-19		P		TOTAL DDT	0.0186	1	0.0186	ug/L						0	0.0186		
E-20		P		TOTAL DDT	0.0318	1	0.0318	ug/L						0	0.0318		
E-21		P		TOTAL DDT	0.021	1	0.021	ug/L						0	0.021		
E-22		P		TOTAL DDT	0.04	1	0.04	ug/L						0	0.04	0.18885	3.8216
I-1		P		TOTAL DDT	0.062	1	0.062	ug/Kg						0	0.062		
I-2		P		TOTAL DDT	0.26	1	0.26	ug/Kg						0	0.26		
I-3		P		TOTAL DDT	2820	1	2820	ug/Kg						0	2820		
I-4		P		TOTAL DDT	1.31	1	1.31	ug/Kg						0	1.31		
I-5		P		TOTAL DDT	0.961	1	0.961	ug/Kg						0	0.961	564.519	2820
RB-01-11192012		P		TOTAL DDT	0	0	0	ug/L	U					0	0		
BKG-01-EM		P		TOTAL DDT HALFND	0.00197	1	0.00197	ug/L						0	0.00197		
BKG-01-HS		P		TOTAL DDT HALFND	0.001625	1	0.001625	ug/L						0	0.00163		
BKG-01-MID		P		TOTAL DDT HALFND	0.00177	1	0.00177	ug/L						0	0.00177		
BKG-02-EM		P		TOTAL DDT HALFND	0.00217	1	0.00217	ug/L						0	0.00217		
BKG-02-HS		P		TOTAL DDT HALFND	0.001765	1	0.001765	ug/L						0	0.00177		
BKG-02-MID		P		TOTAL DDT HALFND	0.001965	1	0.001965	ug/L						0	0.00197		
BKG-03-EM		P		TOTAL DDT HALFND	0.01467	1	0.01467	ug/L						0	0.01467		
BKG-03-HS		P		TOTAL DDT HALFND	0.014665	1	0.014665	ug/L						0	0.01467		
BKG-03-MID		P		TOTAL DDT HALFND	0.01467	1	0.01467	ug/L						0	0.01467	0.00614	0.01467
E-01		P		TOTAL DDT HALFND	0.00555	1	0.00555	ug/L						0	0.00555		
E-02		P		TOTAL DDT HALFND	0.02545	1	0.02545	ug/L						0	0.02545		
E-03		P		TOTAL DDT HALFND	0.005395	1	0.005395	ug/L						0	0.0054		

Client Sample ID	Matrix	sort	ion F	Analyte	Val_res	D?	Result	Unit	Qual	Flag	rep Metho	Prep Type	alysis Method	Check	Adj Val	Mean	Max
E-04		P		TOTAL DDT HALFND	0.001045	1	0.001045	ug/L						0	0.00105		
E-05		P		TOTAL DDT HALFND	0.03335	1	0.03335	ug/L						0	0.03335		
E-06		P		TOTAL DDT HALFND	0.02635	1	0.02635	ug/L						0	0.02635		
E-07		P		TOTAL DDT HALFND	0.005985	1	0.005985	ug/L						0	0.00599		
E-08		P		TOTAL DDT HALFND	0.00525	1	0.00525	ug/L						0	0.00525		
E-09		P		TOTAL DDT HALFND	0.01155	1	0.01155	ug/L						0	0.01155		
E-10		P		TOTAL DDT HALFND	0.01835	1	0.01835	ug/L						0	0.01835		
E-11		P		TOTAL DDT HALFND	0.01965	1	0.01965	ug/L						0	0.01965		
E-12		P		TOTAL DDT HALFND	0.01315	1	0.01315	ug/L						0	0.01315		
E-13		P		TOTAL DDT HALFND	0.00437	1	0.00437	ug/L						0	0.00437		
E-14		P		TOTAL DDT HALFND	0.0092	1	0.0092	ug/L						0	0.0092		
E-15		P		TOTAL DDT HALFND	3.8216	1	3.8216	ug/L						0	3.8216		
E-16		P		TOTAL DDT HALFND	0.0287	1	0.0287	ug/L						0	0.0287		
E-17		P		TOTAL DDT HALFND	0.0284	1	0.0284	ug/L						0	0.0284		
E-18		P		TOTAL DDT HALFND	0.0249	1	0.0249	ug/L						0	0.0249		
E-19		P		TOTAL DDT HALFND	0.0186	1	0.0186	ug/L						0	0.0186		
E-20		P		TOTAL DDT HALFND	0.0318	1	0.0318	ug/L						0	0.0318		
E-21		P		TOTAL DDT HALFND	0.02435	1	0.02435	ug/L						0	0.02435		
E-22		P		TOTAL DDT HALFND	0.04175	1	0.04175	ug/L						0	0.04175	0.19112	3.8216
I-1		P		TOTAL DDT HALFND	0.0657	1	0.0657	ug/Kg						0	0.0657		
I-2		P		TOTAL DDT HALFND	0.26675	1	0.26675	ug/Kg						0	0.26675		
I-3		P		TOTAL DDT HALFND	2820	1	2820	ug/Kg						0	2820		
I-4		P		TOTAL DDT HALFND	1.31	1	1.31	ug/Kg						0	1.31		
I-5		P		TOTAL DDT HALFND	0.961	1	0.961	ug/Kg						0	0.961	564.521	2820
RB-01-11192012		P		TOTAL DDT HALFND	0.001045	1	0.001045	ug/L						0	0.00105		
BKG-01-EM	Water	P	1	Toxaphene	0.018	0	0.018	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
BKG-01-HS	Water	P	1	Toxaphene	0.018	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
BKG-01-MID	Water	P	1	Toxaphene	0.018	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
BKG-02-EM	Water	P	1	Toxaphene	0.018	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
BKG-02-HS	Water	P	1	Toxaphene	0.018	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
BKG-02-MID	Water	P	1	Toxaphene	0.018	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
BKG-03-EM	Water	P	1	Toxaphene	0.018	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
BKG-03-HS	Water	P	1	Toxaphene	0.018	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
BKG-03-MID	Water	P	1	Toxaphene	0.018	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0	0	0
E-01	Water	P	5	Toxaphene	0.093	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-02	Water	P	5	Toxaphene	0.088	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-03	Water	P	1	Toxaphene	0.072	1	0.072	ug/L	J p	J p	3510C	Total/NA	8081B_LL	0	0.072		
E-04	Water	P	1	Toxaphene	0.018	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-05	Water	P	5	Toxaphene	0.089	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-06	Water	P	5	Toxaphene	0.089	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-07	Water	P	1	Toxaphene	0.018	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-08	Water	P	5	Toxaphene	0.089	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-09	Water	P	5	Toxaphene	0.088	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-10	Water	P	5	Toxaphene	0.089	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-11	Water	P	1	Toxaphene	0.018	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-12	Water	P	1	Toxaphene	0.018	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-13	Water	P	1	Toxaphene	0.018	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-14	Water	P	5	Toxaphene	0.09	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-15	Water	P	5	Toxaphene	0.089	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-16	Water	P	10	Toxaphene	0.18	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-17	Water	P	5	Toxaphene	0.09	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-18	Water	P	1	Toxaphene	0.018	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-19	Water	P	5	Toxaphene	0.089	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-20	Water	P	5	Toxaphene	0.089	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-21	Water	P	5	Toxaphene	0.089	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
E-22	Water	P	5	Toxaphene	0.089	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0	0.00327	0.072
I-1	Sediment	P	1	Toxaphene	0.33	0	ND	ug/Kg	U	ND	3541	Total/NA	8081B_LL	0	0		
I-2	Sediment	P	1	Toxaphene	0.32	0	ND	ug/Kg	U	ND	3541	Total/NA	8081B_LL	0	0		
I-3	Sediment	P	250	Toxaphene	89	0	ND	ug/Kg	U	ND	3541	Total/NA	8081B_LL	0	0		
I-4	Sediment	P	5	Toxaphene	1.5	0	ND	ug/Kg	U	ND	3541	Total/NA	8081B_LL	0	0		
I-5	Sediment	P	2	Toxaphene	0.72	0	ND	ug/Kg	U	ND	3541	Total/NA	8081B_LL	0	0	0	0
RB-01-11192012	Water	P	1	Toxaphene	0.018	0	ND	ug/L	U	ND	3510C	Total/NA	8081B_LL	0	0		
BKG-02-EM	Water	PCB	1	PCB 1 (BZ)	0.0032	1	0.0032	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.0032		
BKG-03-MID	Water	PCB	1	PCB 1 (BZ)	0.0042	1	0.0042	ng/L	J	J	LIQ/LIQ,	Total	1668A	0	0.0042	0.0037	0.0042
E-02	Water	PCB	1	PCB 1 (BZ)	0.0017	1	0.0017	ng/L	Q B J	Q B J	LIQ/LIQ,	Total	1668A	0	0.0017		
E-05	Water	PCB	1	PCB 1 (BZ)	0.014	1	0.014	ng/L	B J	B J	LIQ/LIQ,	Total	1668A	0	0.014		
E-07	Water	PCB	1	PCB 1 (BZ)	0.0053	1	0.0053	ng/L	Q B J	Q B J	LIQ/LIQ,	Total	1668A	0	0.0053		
E-09	Water	PCB	1	PCB 1 (BZ)	0.0074	1	0.0074	ng/L	J	J	LIQ/LIQ,	Total	1668A	0	0.0074		
E-13	Water	PCB	1	PCB 1 (BZ)	0.035	1	0.035	ng/L	J	J	LIQ/LIQ,	Total	1668A	0	0.035	0.01268	0.035
I-1	Sediment	PCB	1	PCB 1 (BZ)	0.00008	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-2	Sediment	PCB	1	PCB 1 (BZ)	0.00078	1	0.00078	ng/g	B J	B J	SOXHLET	Total	1668A	0	0.00078		
I-3	Sediment	PCB	1	PCB 1 (BZ)	0.0044	1	0.0044	ng/g	Q J	Q J	SOXHLET	Total	1668A	0	0.0044	0.00173	0.0044
RB-01-11192012	Water	PCB	1	PCB 1 (BZ)	0.00016	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 10 (BZ)	0.0033	1	0.0033	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.0033		
BKG-03-MID	Water	PCB	1	PCB 10 (BZ)	0.0054	1	0.0054	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.0054	0.00435	0.0054
E-02	Water	PCB	1	PCB 10 (BZ)	0.0054	1	0.0054	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.0054		
E-05	Water	PCB	1	PCB 10 (BZ)	0.038	1	0.038	ng/L	J	J	LIQ/LIQ,	Total	1668A	0	0.038		
E-07	Water	PCB	1	PCB 10 (BZ)	0.018	1	0.018	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.018		
E-09	Water	PCB	1	PCB 10 (BZ)	0.016	1	0.016	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.016		
E-13	Water	PCB	1	PCB 10 (BZ)	0.023	1	0.023	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.023	0.02008	0.038
I-1	Sediment	PCB	1	PCB 10 (BZ)	0.00056	1	0.00056	ng/g	Q J	Q J	SOXHLET	Total	1668A	0	0.00056		
I-2	Sediment	PCB	1	PCB 10 (BZ)	0.0009	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-3	Sediment	PCB	1	PCB 10 (BZ)	0.0017	1	0.0017	ng/g	Q J	Q J	SOXHLET	Total	1668A	0	0.0017	0.00075	0.0017
RB-01-11192012	Water	PCB	1	PCB 10 (BZ)	0.0016	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 100 (BZ)	0.013	1	0.013	ng/L	C93 J	C93 J	LIQ/LIQ,	Total	1668A	0	0.013		
BKG-03-MID	Water	PCB	1	PCB 100 (BZ)	0.016	1	0.016	ng/L	Q C93 J	Q C93 J	LIQ/LIQ,	Total	1668A	0	0.016	0.0145	0.016
E-02	Water	PCB	1	PCB 100 (BZ)	0.0023	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
E-05	Water	PCB	1	PCB 100 (BZ)	0.084	1	0.084	ng/L	Q C93	Q C93	LIQ/LIQ,	Total	1668A	0	0.084		
E-07	Water	PCB	1	PCB 100 (BZ)	0.057	1	0.057	ng/L	C93	C93	LIQ/LIQ,	Total	1668A	0	0.057		
E-09	Water	PCB	1	PCB 100 (BZ)	0.078	1	0.078	ng/L	C93	C93	LIQ/LIQ,	Total	1668A	0	0.078		
E-13	Water	PCB	1	PCB 100 (BZ)	0.27	1	0.27	ng/L	Q C93	Q C93	LIQ/LIQ,	Total	1668A	0	0.27	0.0978	0.27
I-1	Sediment	PCB	1	PCB 100 (BZ)	0.00048	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-2	Sediment	PCB	1	PCB 100 (BZ)	0.00096	1	0.00096	ng/g	Q C93 J	Q C93 J	SOXHLET	Total	1668A	0	0.00096		
I-3	Sediment	PCB	1	PCB 100 (BZ)	0.0066	1	0.0066	ng/g	Q C93 J	Q C93 J	SOXHLET	Total	1668A	0	0.0066	0.00252	0.0066
RB-01-11192012	Water	PCB	1	PCB 100 (BZ)	0.00069	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 101 (BZ)	0.36	1	0.36	ng/L	C90	C90	LIQ/LIQ,	Total	1668A	0	0.36		
BKG-03-MID	Water	PCB	1	PCB 101 (BZ)	0.43	1	0.43	ng/L	C90	C90	LIQ/LIQ,	Total	1668A	0	0.43	0.395	0.43
E-02	Water	PCB	1	PCB 101 (BZ)	0.13	1	0.13	ng/L	B C90	B C90	LIQ/LIQ,	Total	1668A	0	0.13		
E-05	Water	PCB	1	PCB 101 (BZ)	5.6	1	5.6	ng/L	B C90	B C90	LIQ/LIQ,	Total	1668A	0	5.6		
E-07	Water	PCB	1	PCB 101 (BZ)	2.9	1	2.9	ng/L	B C90	B C90	LIQ/LIQ,	Total	1668A	0	2.9		
E-09	Water	PCB	1	PCB 101 (BZ)	3.5	1	3.5	ng/L	C90	C90	LIQ/LIQ,	Total	1668A	0	3.5		
E-13	Water	PCB	1	PCB 101 (BZ)	10	1	10	ng/L	B C90	B C90	LIQ/LIQ,	Total	1668A	0	10	4.426	10
I-1	Sediment	PCB	1	PCB 101 (BZ)	0.033	1	0.033	ng/g	C90	C90	SOXHLET	Total	1668A	0	0.033		
I-2	Sediment	PCB	1	PCB 101 (BZ)	0.032	1	0.032	ng/g	B C90	B C90	SOXHLET	Total	1668A	0	0.032		
I-3	Sediment	PCB	1	PCB 101 (BZ)	0.29	1	0.29	ng/g	C90	C90	SOXHLET	Total	1668A	0	0.29	0.11833	0.29
RB-01-11192012	Water	PCB	1	PCB 101 (BZ)	0.0033	1	0.0033	ng/L	C90 J	C90 J	LIQ/LIQ,	Total	1668A	0	0.0033		
BKG-02-EM	Water	PCB	1	PCB 102 (BZ)	0.016	1	0.016	ng/L	C98 J	C98 J	LIQ/LIQ,	Total	1668A	0	0.016		
BKG-03-MID	Water	PCB	1	PCB 102 (BZ)	0.015	1	0.015	ng/L	Q C98 J	Q C98 J	LIQ/LIQ,	Total	1668A	0	0.015	0.0155	0.016
E-02	Water	PCB	1	PCB 102 (BZ)	0.0064	1	0.0064	ng/L	Q C98 J	Q C98 J	LIQ/LIQ,	Total	1668A	0	0.0064		
E-05	Water	PCB	1	PCB 102 (BZ)	0.22	1	0.22	ng/L	C98	C98	LIQ/LIQ,	Total	1668A	0	0.22		
E-07	Water	PCB	1	PCB 102 (BZ)	0.1	1	0.1	ng/L	C98	C98	LIQ/LIQ,	Total	1668A	0	0.1		
E-09	Water	PCB	1	PCB 102 (BZ)	0.12	1	0.12	ng/L	Q C98	Q C98	LIQ/LIQ,	Total	1668A	0	0.12		
E-13	Water	PCB	1	PCB 102 (BZ)	0.37	1	0.37	ng/L	C98	C98	LIQ/LIQ,	Total	1668A	0	0.37	0.16328	0.37
I-1	Sediment	PCB	1	PCB 102 (BZ)	0.00046	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-2	Sediment	PCB	1	PCB 102 (BZ)	0.0006	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-3	Sediment	PCB	1	PCB 102 (BZ)	0.013	1	0.013	ng/g	Q C98	Q C98	SOXHLET	Total	1668A	0	0.013	0.00433	0.013
RB-01-11192012	Water	PCB	1	PCB 102 (BZ)	0.00067	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 103 (BZ)	0.0078	1	0.0078	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.0078		
BKG-03-MID	Water	PCB	1	PCB 103 (BZ)	0.012	1	0.012	ng/L	J	J	LIQ/LIQ,	Total	1668A	0	0.012	0.0099	0.012
E-02	Water	PCB	1	PCB 103 (BZ)	0.0022	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
E-05	Water	PCB	1	PCB 103 (BZ)	0.11	1	0.11	ng/L			LIQ/LIQ,	Total	1668A	0	0.11		
E-07	Water	PCB	1	PCB 103 (BZ)	0.047	1	0.047	ng/L	Q	Q	LIQ/LIQ,	Total	1668A	0	0.047		

Client Sample ID	Matrix	sort	ion F	Analyte	Val_res	D?	Result	Unit	Qual	Flag	ep Metho	Prep Type	alysis Method	Check	Adj Val	Mean	Max
E-09	Water	PCB	1	PCB 103 (BZ)	0.076	1	0.076	ng/L			LIQ/LIQ,	Total	1668A	0	0.076		
E-13	Water	PCB	1	PCB 103 (BZ)	0.24	1	0.24	ng/L	Q	Q	LIQ/LIQ,	Total	1668A	0	0.24	0.0946	0.24
I-1	Sediment	PCB	1	PCB 103 (BZ)	0.00047	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-2	Sediment	PCB	1	PCB 103 (BZ)	0.00061	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-3	Sediment	PCB	1	PCB 103 (BZ)	0.0076	1	0.0076	ng/g	J	J	SOXHLET	Total	1668A	0	0.0076	0.00253	0.0076
RB-01-11192012	Water	PCB	1	PCB 103 (BZ)	0.00068	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 104 (BZ)	0.0012	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-03-MID	Water	PCB	1	PCB 104 (BZ)	0.00089	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0	0	0
E-02	Water	PCB	1	PCB 104 (BZ)	0.0017	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
E-05	Water	PCB	1	PCB 104 (BZ)	0.003	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
E-07	Water	PCB	1	PCB 104 (BZ)	0.0026	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
E-09	Water	PCB	1	PCB 104 (BZ)	0.0025	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
E-13	Water	PCB	1	PCB 104 (BZ)	0.014	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0	0	0
I-1	Sediment	PCB	1	PCB 104 (BZ)	0.00036	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-2	Sediment	PCB	1	PCB 104 (BZ)	0.00046	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-3	Sediment	PCB	1	PCB 104 (BZ)	0.00075	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0	0	0
RB-01-11192012	Water	PCB	1	PCB 104 (BZ)	0.00052	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 105 (BZ)	0.072	1	0.072	ng/L			LIQ/LIQ,	Total	1668A	0	0.072		
BKG-03-MID	Water	PCB	1	PCB 105 (BZ)	0.086	1	0.086	ng/L	B	B	LIQ/LIQ,	Total	1668A	0	0.086	0.079	0.086
E-02	Water	PCB	1	PCB 105 (BZ)	0.027	1	0.027	ng/L	B J	B J	LIQ/LIQ,	Total	1668A	0	0.027		
E-05	Water	PCB	1	PCB 105 (BZ)	1.3	1	1.3	ng/L	B	B	LIQ/LIQ,	Total	1668A	0	1.3		
E-07	Water	PCB	1	PCB 105 (BZ)	0.59	1	0.59	ng/L	B	B	LIQ/LIQ,	Total	1668A	0	0.59		
E-09	Water	PCB	1	PCB 105 (BZ)	0.59	1	0.59	ng/L			LIQ/LIQ,	Total	1668A	0	0.59		
E-13	Water	PCB	1	PCB 105 (BZ)	1.7	1	1.7	ng/L	B	B	LIQ/LIQ,	Total	1668A	0	1.7	0.8414	1.7
I-1	Sediment	PCB	1	PCB 105 (BZ)	0.025	1	0.025	ng/g			SOXHLET	Total	1668A	0	0.025		
I-2	Sediment	PCB	1	PCB 105 (BZ)	0.0066	1	0.0066	ng/g	Q B J	Q B J	SOXHLET	Total	1668A	0	0.0066		
I-3	Sediment	PCB	1	PCB 105 (BZ)	0.056	1	0.056	ng/g			SOXHLET	Total	1668A	0	0.056	0.0292	0.056
RB-01-11192012	Water	PCB	1	PCB 105 (BZ)	0.00029	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 106 (BZ)	0.00085	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-03-MID	Water	PCB	1	PCB 106 (BZ)	0.00054	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0	0	0
E-02	Water	PCB	1	PCB 106 (BZ)	0.00097	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
E-05	Water	PCB	1	PCB 106 (BZ)	0.0017	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
E-07	Water	PCB	1	PCB 106 (BZ)	0.0015	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
E-09	Water	PCB	1	PCB 106 (BZ)	0.0018	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
E-13	Water	PCB	1	PCB 106 (BZ)	0.0091	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0	0	0
I-1	Sediment	PCB	1	PCB 106 (BZ)	0.00024	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-2	Sediment	PCB	1	PCB 106 (BZ)	0.00028	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-3	Sediment	PCB	1	PCB 106 (BZ)	0.00055	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0	0	0
RB-01-11192012	Water	PCB	1	PCB 106 (BZ)	0.00032	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 107 (BZ)/109 (IUPAC)	0.018	1	0.018	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.018		
BKG-03-MID	Water	PCB	1	PCB 107 (BZ)/109 (IUPAC)	0.024	1	0.024	ng/L	J	J	LIQ/LIQ,	Total	1668A	0	0.024	0.021	0.024
E-02	Water	PCB	1	PCB 107 (BZ)/109 (IUPAC)	0.0053	1	0.0053	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.0053		
E-05	Water	PCB	1	PCB 107 (BZ)/109 (IUPAC)	0.39	1	0.39	ng/L			LIQ/LIQ,	Total	1668A	0	0.39		
E-07	Water	PCB	1	PCB 107 (BZ)/109 (IUPAC)	0.18	1	0.18	ng/L			LIQ/LIQ,	Total	1668A	0	0.18		
E-09	Water	PCB	1	PCB 107 (BZ)/109 (IUPAC)	0.2	1	0.2	ng/L			LIQ/LIQ,	Total	1668A	0	0.2		
E-13	Water	PCB	1	PCB 107 (BZ)/109 (IUPAC)	0.47	1	0.47	ng/L			LIQ/LIQ,	Total	1668A	0	0.47	0.24906	0.47
I-1	Sediment	PCB	1	PCB 107 (BZ)/109 (IUPAC)	0.0029	1	0.0029	ng/g	Q J	Q J	SOXHLET	Total	1668A	0	0.0029		
I-2	Sediment	PCB	1	PCB 107 (BZ)/109 (IUPAC)	0.0023	1	0.0023	ng/g	Q J	Q J	SOXHLET	Total	1668A	0	0.0023		
I-3	Sediment	PCB	1	PCB 107 (BZ)/109 (IUPAC)	0.017	1	0.017	ng/g			SOXHLET	Total	1668A	0	0.017	0.0074	0.017
RB-01-11192012	Water	PCB	1	PCB 107 (BZ)/109 (IUPAC)	0.00032	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 108 (BZ)/107 (IUPAC)	0.0072	1	0.0072	ng/L	C J	C J	LIQ/LIQ,	Total	1668A	0	0.0072		
BKG-03-MID	Water	PCB	1	PCB 108 (BZ)/107 (IUPAC)	0.0088	1	0.0088	ng/L	C J	C J	LIQ/LIQ,	Total	1668A	0	0.0088	0.008	0.0088
E-02	Water	PCB	1	PCB 108 (BZ)/107 (IUPAC)	0.0052	1	0.0052	ng/L	C J	C J	LIQ/LIQ,	Total	1668A	0	0.0052		
E-05	Water	PCB	1	PCB 108 (BZ)/107 (IUPAC)	0.13	1	0.13	ng/L	C	C	LIQ/LIQ,	Total	1668A	0	0.13		
E-07	Water	PCB	1	PCB 108 (BZ)/107 (IUPAC)	0.067	1	0.067	ng/L	C	C	LIQ/LIQ,	Total	1668A	0	0.067		
E-09	Water	PCB	1	PCB 108 (BZ)/107 (IUPAC)	0.064	1	0.064	ng/L	C	C	LIQ/LIQ,	Total	1668A	0	0.064		
E-13	Water	PCB	1	PCB 108 (BZ)/107 (IUPAC)	0.18	1	0.18	ng/L	C	C	LIQ/LIQ,	Total	1668A	0	0.18	0.08924	0.18
I-1	Sediment	PCB	1	PCB 108 (BZ)/107 (IUPAC)	0.0022	1	0.0022	ng/g	C J	C J	SOXHLET	Total	1668A	0	0.0022		
I-2	Sediment	PCB	1	PCB 108 (BZ)/107 (IUPAC)	0.00029	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-3	Sediment	PCB	1	PCB 108 (BZ)/107 (IUPAC)	0.005	1	0.005	ng/g	Q C J	Q C J	SOXHLET	Total	1668A	0	0.005	0.0024	0.005
RB-01-11192012	Water	PCB	1	PCB 108 (BZ)/107 (IUPAC)	0.00033	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 109 (BZ)/108 (IUPAC)	0.21	1	0.21	ng/L	B C86	B C86	LIQ/LIQ,	Total	1668A	0	0.21		
BKG-03-MID	Water	PCB	1	PCB 109 (BZ)/108 (IUPAC)	0.22	1	0.22	ng/L	B C86	B C86	LIQ/LIQ,	Total	1668A	0	0.22	0.215	0.22
E-02	Water	PCB	1	PCB 109 (BZ)/108 (IUPAC)	0.063	1	0.063	ng/L	B C86	B C86	LIQ/LIQ,	Total	1668A	0	0.063		
E-05	Water	PCB	1	PCB 109 (BZ)/108 (IUPAC)	2.9	1	2.9	ng/L	B C86	B C86	LIQ/LIQ,	Total	1668A	0	2.9		
E-07	Water	PCB	1	PCB 109 (BZ)/108 (IUPAC)	1.6	1	1.6	ng/L	Q B C86	Q B C86	LIQ/LIQ,	Total	1668A	0	1.6		
E-09	Water	PCB	1	PCB 109 (BZ)/108 (IUPAC)	1.8	1	1.8	ng/L	B C86	B C86	LIQ/LIQ,	Total	1668A	0	1.8		
E-13	Water	PCB	1	PCB 109 (BZ)/108 (IUPAC)	5.2	1	5.2	ng/L	Q B C86	Q B C86	LIQ/LIQ,	Total	1668A	0	5.2	2.3126	5.2
I-1	Sediment	PCB	1	PCB 109 (BZ)/108 (IUPAC)	0.025	1	0.025	ng/g	Q C86	Q C86	SOXHLET	Total	1668A	0	0.025		
I-2	Sediment	PCB	1	PCB 109 (BZ)/108 (IUPAC)	0.017	1	0.017	ng/g	C86	C86	SOXHLET	Total	1668A	0	0.017		
I-3	Sediment	PCB	1	PCB 109 (BZ)/108 (IUPAC)	0.15	1	0.15	ng/g	C86	C86	SOXHLET	Total	1668A	0	0.15	0.064	0.15
RB-01-11192012	Water	PCB	1	PCB 109 (BZ)/108 (IUPAC)	0.0006	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 11 (BZ)	0.02	1	0.02	ng/L	Q B J	Q B J	LIQ/LIQ,	Total	1668A	0	0.02		
BKG-03-MID	Water	PCB	1	PCB 11 (BZ)	0.015	1	0.015	ng/L	Q B J	Q B J	LIQ/LIQ,	Total	1668A	0	0.015	0.0175	0.02
E-02	Water	PCB	1	PCB 11 (BZ)	0.013	1	0.013	ng/L	Q B J	Q B J	LIQ/LIQ,	Total	1668A	0	0.013		
E-05	Water	PCB	1	PCB 11 (BZ)	0.044	1	0.044	ng/L	B J	B J	LIQ/LIQ,	Total	1668A	0	0.044		
E-07	Water	PCB	1	PCB 11 (BZ)	0.04	1	0.04	ng/L	Q B J	Q B J	LIQ/LIQ,	Total	1668A	0	0.04		
E-09	Water	PCB	1	PCB 11 (BZ)	0.029	1	0.029	ng/L	Q B J	Q B J	LIQ/LIQ,	Total	1668A	0	0.029		
E-13	Water	PCB	1	PCB 11 (BZ)	0.17	1	0.17	ng/L	B	B	LIQ/LIQ,	Total	1668A	0	0.17	0.0592	0.17
I-1	Sediment	PCB	1	PCB 11 (BZ)	0.0028	1	0.0028	ng/g	Q B J	Q B J	SOXHLET	Total	1668A	0	0.0028		
I-2	Sediment	PCB	1	PCB 11 (BZ)	0.0025	1	0.0025	ng/g	Q B J	Q B J	SOXHLET	Total	1668A	0	0.0025		
I-3	Sediment	PCB	1	PCB 11 (BZ)	0.009	1	0.009	ng/g	Q B J	Q B J	SOXHLET	Total	1668A	0	0.009	0.00477	0.009
RB-01-11192012	Water	PCB	1	PCB 11 (BZ)	0.0083	1	0.0083	ng/L	Q B J	Q B J	LIQ/LIQ,	Total	1668A	0	0.0083		
BKG-02-EM	Water	PCB	1	PCB 110 (BZ)	0.37	1	0.37	ng/L	C	C	LIQ/LIQ,	Total	1668A	0	0.37		
BKG-03-MID	Water	PCB	1	PCB 110 (BZ)	0.41	1	0.41	ng/L	C	C	LIQ/LIQ,	Total	1668A	0	0.41	0.39	0.41
E-02	Water	PCB	1	PCB 110 (BZ)	0.13	1	0.13	ng/L	B C	B C	LIQ/LIQ,	Total	1668A	0	0.13		
E-05	Water	PCB	1	PCB 110 (BZ)	5.7	1	5.7	ng/L	B C	B C	LIQ/LIQ,	Total	1668A	0	5.7		
E-07	Water	PCB	1	PCB 110 (BZ)	3.1	1	3.1	ng/L	B C	B C	LIQ/LIQ,	Total	1668A	0	3.1		
E-09	Water	PCB	1	PCB 110 (BZ)	3.5	1	3.5	ng/L	C	C	LIQ/LIQ,	Total	1668A	0	3.5		
E-13	Water	PCB	1	PCB 110 (BZ)	9.9	1	9.9	ng/L	B C	B C	LIQ/LIQ,	Total	1668A	0	9.9	4.466	9.9
I-1	Sediment	PCB	1	PCB 110 (BZ)	0.054	1	0.054	ng/g	C	C	SOXHLET	Total	1668A	0	0.054		
I-2	Sediment	PCB	1	PCB 110 (BZ)	0.033	1	0.033	ng/g	B C	B C	SOXHLET	Total	1668A	0	0.033		
I-3	Sediment	PCB	1	PCB 110 (BZ)	0.32	1	0.32	ng/g	C	C	SOXHLET	Total	1668A	0	0.32	0.13567	0.32
RB-01-11192012	Water	PCB	1	PCB 110 (BZ)	0.002	1	0.002	ng/L	C J	C J	LIQ/LIQ,	Total	1668A	0	0.002		
BKG-02-EM	Water	PCB	1	PCB 111 (BZ)	0.0011	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-03-MID	Water	PCB	1	PCB 111 (BZ)	0.00084	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0	0	0
E-02	Water	PCB	1	PCB 111 (BZ)	0.0016	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
E-05	Water	PCB	1	PCB 111 (BZ)	0.0093	1	0.0093	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.0093		
E-07	Water	PCB	1	PCB 111 (BZ)	0.015	1	0.015	ng/L	J	J	LIQ/LIQ,	Total	1668A	0	0.015		
E-09	Water	PCB	1	PCB 111 (BZ)	0.0023	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
E-13	Water	PCB	1	PCB 111 (BZ)	0.013	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0	0.00486	0.015
I-1	Sediment	PCB	1	PCB 111 (BZ)	0.00034	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-2	Sediment	PCB	1	PCB 111 (BZ)	0.00044	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-3	Sediment	PCB	1	PCB 111 (BZ)	0.0007	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0	0	0
RB-01-11192012	Water	PCB	1	PCB 111 (BZ)	0.00049	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 112 (BZ)	0.0012	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-03-MID	Water	PCB	1	PCB 112 (BZ)	0.00091	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0	0	0
E-02	Water	PCB	1	PCB 112 (BZ)	0.0017	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
E-05	Water	PCB	1	PCB 112 (BZ)	0.003	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
E-07	Water	PCB	1	PCB 112 (BZ)	0.0026	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
E-09	Water	PCB	1	PCB 112 (BZ)	0.0025	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
E-13	Water	PCB	1	PCB 112 (BZ)	0.014	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0	0	0
I-1	Sediment	PCB	1	PCB 112 (BZ)	0.00037	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-2	Sediment	PCB	1	PCB 112 (BZ)	0.00047	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-3	Sediment	PCB	1	PCB 112 (BZ)	0.00077	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0	0	0
RB-01-11192012	Water	PCB	1	PCB 112 (BZ)	0.00053	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 113 (BZ)	0.36	1	0.36	ng/L	C90	C90	LIQ/LIQ,	Total	1668A	0	0.36		
BKG-03-MID	Water	PCB	1	PCB 113 (BZ)	0.43	1	0.43	ng/L	C90	C90	LIQ/LIQ,	Total	1668A	0	0.43	0.395	0.43
E-02	Water	PCB	1	PCB 113 (BZ)	0.13	1	0.13	ng/L	B C90	B C90	LIQ/LIQ,	Total	1668A	0	0.13		
E-05	Water	PCB	1	PCB 113 (BZ)	5.6	1	5.6	ng/L	B C90	B C90	LIQ/LIQ,	Total	1668A	0	5.6		
E-07	Water	PCB	1	PCB 113 (BZ)	2.9	1	2.9	ng/L	B C90	B C90	LIQ/LIQ,	Total	1668A	0	2.9		
E-09	Water	PCB	1	PCB 113 (BZ)	3.5	1	3.5	ng/L	C90	C90	LIQ/LIQ,	Total	1668A	0	3.5		

Client Sample ID	Matrix	sort	ion F	Analyte	Val_res	D?	Result	Unit	Qual	Flag	ep Metho	Prep Type	alysis Method	Check	Adj Val	Mean	Max
E-13	Water	PCB	1	PCB 113 (BZ)	10	1	10	ng/L	B C90	B C90	LIQ/LIQ,	Total	1668A	0	10	4.426	10
I-1	Sediment	PCB	1	PCB 113 (BZ)	0.033	1	0.033	ng/g	C90	C90	SOXHLET	Total	1668A	0	0.033		
I-2	Sediment	PCB	1	PCB 113 (BZ)	0.032	1	0.032	ng/g	B C90	B C90	SOXHLET	Total	1668A	0	0.032		
I-3	Sediment	PCB	1	PCB 113 (BZ)	0.29	1	0.29	ng/g	C90	C90	SOXHLET	Total	1668A	0	0.29	0.11833	0.29
RB-01-11192012	Water	PCB	1	PCB 113 (BZ)	0.0033	1	0.0033	ng/L	C90 J	C90 J	LIQ/LIQ,	Total	1668A	0	0.0033		
BKG-02-EM	Water	PCB	1	PCB 114 (BZ)	0.0048	1	0.0048	ng/L	B J	B J	LIQ/LIQ,	Total	1668A	0	0.0048		
BKG-03-MID	Water	PCB	1	PCB 114 (BZ)	0.0048	1	0.0048	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.0048	0.0048	0.0048
E-02	Water	PCB	1	PCB 114 (BZ)	0.0028	1	0.0028	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.0028		
E-05	Water	PCB	1	PCB 114 (BZ)	0.072	1	0.072	ng/L			LIQ/LIQ,	Total	1668A	0	0.072		
E-07	Water	PCB	1	PCB 114 (BZ)	0.035	1	0.035	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.035		
E-09	Water	PCB	1	PCB 114 (BZ)	0.04	1	0.04	ng/L	B	B	LIQ/LIQ,	Total	1668A	0	0.04		
E-13	Water	PCB	1	PCB 114 (BZ)	0.082	1	0.082	ng/L			LIQ/LIQ,	Total	1668A	0	0.082	0.04636	0.082
I-1	Sediment	PCB	1	PCB 114 (BZ)	0.001	1	0.001	ng/g	Q J	Q J	SOXHLET	Total	1668A	0	0.001		
I-2	Sediment	PCB	1	PCB 114 (BZ)	0.00042	1	0.00042	ng/g	Q J	Q J	SOXHLET	Total	1668A	0	0.00042		
I-3	Sediment	PCB	1	PCB 114 (BZ)	0.0025	1	0.0025	ng/g	Q J	Q J	SOXHLET	Total	1668A	0	0.0025	0.00131	0.0025
RB-01-11192012	Water	PCB	1	PCB 114 (BZ)	0.00031	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 115 (BZ)	0.37	1	0.37	ng/L	C110	C110	LIQ/LIQ,	Total	1668A	0	0.37		
BKG-03-MID	Water	PCB	1	PCB 115 (BZ)	0.41	1	0.41	ng/L	C110	C110	LIQ/LIQ,	Total	1668A	0	0.41	0.39	0.41
E-02	Water	PCB	1	PCB 115 (BZ)	0.13	1	0.13	ng/L	B C110	B C110	LIQ/LIQ,	Total	1668A	0	0.13		
E-05	Water	PCB	1	PCB 115 (BZ)	5.7	1	5.7	ng/L	B C110	B C110	LIQ/LIQ,	Total	1668A	0	5.7		
E-07	Water	PCB	1	PCB 115 (BZ)	3.1	1	3.1	ng/L	B C110	B C110	LIQ/LIQ,	Total	1668A	0	3.1		
E-09	Water	PCB	1	PCB 115 (BZ)	3.5	1	3.5	ng/L	C110	C110	LIQ/LIQ,	Total	1668A	0	3.5		
E-13	Water	PCB	1	PCB 115 (BZ)	9.9	1	9.9	ng/L	B C110	B C110	LIQ/LIQ,	Total	1668A	0	9.9	4.466	9.9
I-1	Sediment	PCB	1	PCB 115 (BZ)	0.054	1	0.054	ng/g	C110	C110	SOXHLET	Total	1668A	0	0.054		
I-2	Sediment	PCB	1	PCB 115 (BZ)	0.033	1	0.033	ng/g	B C110	B C110	SOXHLET	Total	1668A	0	0.033		
I-3	Sediment	PCB	1	PCB 115 (BZ)	0.32	1	0.32	ng/g	C110	C110	SOXHLET	Total	1668A	0	0.32	0.13567	0.32
RB-01-11192012	Water	PCB	1	PCB 115 (BZ)	0.002	1	0.002	ng/L	C110 J	C110 J	LIQ/LIQ,	Total	1668A	0	0.002		
BKG-02-EM	Water	PCB	1	PCB 116 (BZ)	0.047	1	0.047	ng/L	Q C85	Q C85	LIQ/LIQ,	Total	1668A	0	0.047		
BKG-03-MID	Water	PCB	1	PCB 116 (BZ)	0.053	1	0.053	ng/L	C85	C85	LIQ/LIQ,	Total	1668A	0	0.053	0.05	0.053
E-02	Water	PCB	1	PCB 116 (BZ)	0.016	1	0.016	ng/L	C85 J	C85 J	LIQ/LIQ,	Total	1668A	0	0.016		
E-05	Water	PCB	1	PCB 116 (BZ)	0.74	1	0.74	ng/L	C85	C85	LIQ/LIQ,	Total	1668A	0	0.74		
E-07	Water	PCB	1	PCB 116 (BZ)	0.38	1	0.38	ng/L	C85	C85	LIQ/LIQ,	Total	1668A	0	0.38		
E-09	Water	PCB	1	PCB 116 (BZ)	0.45	1	0.45	ng/L	C85	C85	LIQ/LIQ,	Total	1668A	0	0.45		
E-13	Water	PCB	1	PCB 116 (BZ)	1.3	1	1.3	ng/L	B C85	B C85	LIQ/LIQ,	Total	1668A	0	1.3	0.5772	1.3
I-1	Sediment	PCB	1	PCB 116 (BZ)	0.0072	1	0.0072	ng/g	C85 J	C85 J	SOXHLET	Total	1668A	0	0.0072		
I-2	Sediment	PCB	1	PCB 116 (BZ)	0.0043	1	0.0043	ng/g	C85 J	C85 J	SOXHLET	Total	1668A	0	0.0043		
I-3	Sediment	PCB	1	PCB 116 (BZ)	0.04	1	0.04	ng/g	C85	C85	SOXHLET	Total	1668A	0	0.04	0.01717	0.04
RB-01-11192012	Water	PCB	1	PCB 116 (BZ)	0.00058	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 117 (BZ)	0.047	1	0.047	ng/L	Q C85	Q C85	LIQ/LIQ,	Total	1668A	0	0.047		
BKG-03-MID	Water	PCB	1	PCB 117 (BZ)	0.053	1	0.053	ng/L	C85	C85	LIQ/LIQ,	Total	1668A	0	0.053	0.05	0.053
E-02	Water	PCB	1	PCB 117 (BZ)	0.016	1	0.016	ng/L	C85 J	C85 J	LIQ/LIQ,	Total	1668A	0	0.016		
E-05	Water	PCB	1	PCB 117 (BZ)	0.74	1	0.74	ng/L	C85	C85	LIQ/LIQ,	Total	1668A	0	0.74		
E-07	Water	PCB	1	PCB 117 (BZ)	0.38	1	0.38	ng/L	C85	C85	LIQ/LIQ,	Total	1668A	0	0.38		
E-09	Water	PCB	1	PCB 117 (BZ)	0.45	1	0.45	ng/L	C85	C85	LIQ/LIQ,	Total	1668A	0	0.45		
E-13	Water	PCB	1	PCB 117 (BZ)	1.3	1	1.3	ng/L	B C85	B C85	LIQ/LIQ,	Total	1668A	0	1.3	0.5772	1.3
I-1	Sediment	PCB	1	PCB 117 (BZ)	0.0072	1	0.0072	ng/g	C85 J	C85 J	SOXHLET	Total	1668A	0	0.0072		
I-2	Sediment	PCB	1	PCB 117 (BZ)	0.0043	1	0.0043	ng/g	C85 J	C85 J	SOXHLET	Total	1668A	0	0.0043		
I-3	Sediment	PCB	1	PCB 117 (BZ)	0.04	1	0.04	ng/g	C85	C85	SOXHLET	Total	1668A	0	0.04	0.01717	0.04
RB-01-11192012	Water	PCB	1	PCB 117 (BZ)	0.00058	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 118 (BZ)	0.21	1	0.21	ng/L	B	B	LIQ/LIQ,	Total	1668A	0	0.21		
BKG-03-MID	Water	PCB	1	PCB 118 (BZ)	0.28	1	0.28	ng/L	B	B	LIQ/LIQ,	Total	1668A	0	0.28	0.245	0.28
E-02	Water	PCB	1	PCB 118 (BZ)	0.074	1	0.074	ng/L	B	B	LIQ/LIQ,	Total	1668A	0	0.074		
E-05	Water	PCB	1	PCB 118 (BZ)	3.8	1	3.8	ng/L	B	B	LIQ/LIQ,	Total	1668A	0	3.8		
E-07	Water	PCB	1	PCB 118 (BZ)	2	1	2	ng/L	B	B	LIQ/LIQ,	Total	1668A	0	2		
E-09	Water	PCB	1	PCB 118 (BZ)	2	1	2	ng/L	B	B	LIQ/LIQ,	Total	1668A	0	2		
E-13	Water	PCB	1	PCB 118 (BZ)	5.3	1	5.3	ng/L	B	B	LIQ/LIQ,	Total	1668A	0	5.3	2.6348	5.3
I-1	Sediment	PCB	1	PCB 118 (BZ)	0.054	1	0.054	ng/g			SOXHLET	Total	1668A	0	0.054		
I-2	Sediment	PCB	1	PCB 118 (BZ)	0.02	1	0.02	ng/g	B	B	SOXHLET	Total	1668A	0	0.02		
I-3	Sediment	PCB	1	PCB 118 (BZ)	0.2	1	0.2	ng/g			SOXHLET	Total	1668A	0	0.2	0.09133	0.2
RB-01-11192012	Water	PCB	1	PCB 118 (BZ)	0.00032	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 119 (BZ)	0.21	1	0.21	ng/L	B C86	B C86	LIQ/LIQ,	Total	1668A	0	0.21		
BKG-03-MID	Water	PCB	1	PCB 119 (BZ)	0.22	1	0.22	ng/L	B C86	B C86	LIQ/LIQ,	Total	1668A	0	0.22	0.215	0.22
E-02	Water	PCB	1	PCB 119 (BZ)	0.063	1	0.063	ng/L	B C86	B C86	LIQ/LIQ,	Total	1668A	0	0.063		
E-05	Water	PCB	1	PCB 119 (BZ)	2.9	1	2.9	ng/L	B C86	B C86	LIQ/LIQ,	Total	1668A	0	2.9		
E-07	Water	PCB	1	PCB 119 (BZ)	1.6	1	1.6	ng/L	Q B C86	Q B C86	LIQ/LIQ,	Total	1668A	0	1.6		
E-09	Water	PCB	1	PCB 119 (BZ)	1.8	1	1.8	ng/L	B C86	B C86	LIQ/LIQ,	Total	1668A	0	1.8		
E-13	Water	PCB	1	PCB 119 (BZ)	5.2	1	5.2	ng/L	Q B C86	Q B C86	LIQ/LIQ,	Total	1668A	0	5.2	2.3126	5.2
I-1	Sediment	PCB	1	PCB 119 (BZ)	0.025	1	0.025	ng/g	Q C86	Q C86	SOXHLET	Total	1668A	0	0.025		
I-2	Sediment	PCB	1	PCB 119 (BZ)	0.017	1	0.017	ng/g	C86	C86	SOXHLET	Total	1668A	0	0.017		
I-3	Sediment	PCB	1	PCB 119 (BZ)	0.15	1	0.15	ng/g	C86	C86	SOXHLET	Total	1668A	0	0.15	0.064	0.15
RB-01-11192012	Water	PCB	1	PCB 119 (BZ)	0.0006	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 12 (BZ)	0.0088	1	0.0088	ng/L	Q B C J	Q B C J	LIQ/LIQ,	Total	1668A	0	0.0088		
BKG-03-MID	Water	PCB	1	PCB 12 (BZ)	0.0076	1	0.0076	ng/L	Q B C J	Q B C J	LIQ/LIQ,	Total	1668A	0	0.0076	0.0082	0.0088
E-02	Water	PCB	1	PCB 12 (BZ)	0.0029	1	0.0029	ng/L	Q C J	Q C J	LIQ/LIQ,	Total	1668A	0	0.0029		
E-05	Water	PCB	1	PCB 12 (BZ)	0.05	1	0.05	ng/L	B C J	B C J	LIQ/LIQ,	Total	1668A	0	0.05		
E-07	Water	PCB	1	PCB 12 (BZ)	0.019	1	0.019	ng/L	Q B C J	Q B C J	LIQ/LIQ,	Total	1668A	0	0.019		
E-09	Water	PCB	1	PCB 12 (BZ)	0.025	1	0.025	ng/L	B C J	B C J	LIQ/LIQ,	Total	1668A	0	0.025		
E-13	Water	PCB	1	PCB 12 (BZ)	0.22	1	0.22	ng/L	Q B C	Q B C	LIQ/LIQ,	Total	1668A	0	0.22	0.06338	0.22
I-1	Sediment	PCB	1	PCB 12 (BZ)	0.0012	1	0.0012	ng/g	Q C J	Q C J	SOXHLET	Total	1668A	0	0.0012		
I-2	Sediment	PCB	1	PCB 12 (BZ)	0.00099	1	0.00099	ng/g	Q C J	Q C J	SOXHLET	Total	1668A	0	0.00099		
I-3	Sediment	PCB	1	PCB 12 (BZ)	0.019	1	0.019	ng/g	Q C	Q C	SOXHLET	Total	1668A	0	0.019	0.00706	0.019
RB-01-11192012	Water	PCB	1	PCB 12 (BZ)	0.0014	1	0.0014	ng/L	Q B C J	Q B C J	LIQ/LIQ,	Total	1668A	0	0.0014		
BKG-02-EM	Water	PCB	1	PCB 120 (BZ)	0.0012	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-03-MID	Water	PCB	1	PCB 120 (BZ)	0.0029	1	0.0029	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.0029	0.00145	0.0029
E-02	Water	PCB	1	PCB 120 (BZ)	0.0016	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
E-05	Water	PCB	1	PCB 120 (BZ)	0.042	1	0.042	ng/L			LIQ/LIQ,	Total	1668A	0	0.042		
E-07	Water	PCB	1	PCB 120 (BZ)	0.02	1	0.02	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.02		
E-09	Water	PCB	1	PCB 120 (BZ)	0.022	1	0.022	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.022		
E-13	Water	PCB	1	PCB 120 (BZ)	0.046	1	0.046	ng/L			LIQ/LIQ,	Total	1668A	0	0.046	0.026	0.046
I-1	Sediment	PCB	1	PCB 120 (BZ)	0.00035	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-2	Sediment	PCB	1	PCB 120 (BZ)	0.00045	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-3	Sediment	PCB	1	PCB 120 (BZ)	0.0022	1	0.0022	ng/g	Q J	Q J	SOXHLET	Total	1668A	0	0.0022	0.00073	0.0022
RB-01-11192012	Water	PCB	1	PCB 120 (BZ)	0.0005	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 121 (BZ)	0.0012	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-03-MID	Water	PCB	1	PCB 121 (BZ)	0.00087	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0	0	0
E-02	Water	PCB	1	PCB 121 (BZ)	0.0017	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
E-05	Water	PCB	1	PCB 121 (BZ)	0.0029	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
E-07	Water	PCB	1	PCB 121 (BZ)	0.0025	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
E-09	Water	PCB	1	PCB 121 (BZ)	0.0024	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
E-13	Water	PCB	1	PCB 121 (BZ)	0.013	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0	0	0
I-1	Sediment	PCB	1	PCB 121 (BZ)	0.00035	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-2	Sediment	PCB	1	PCB 121 (BZ)	0.00045	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-3	Sediment	PCB	1	PCB 121 (BZ)	0.00073	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0	0	0
RB-01-11192012	Water	PCB	1	PCB 121 (BZ)	0.00051	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 122 (BZ)	0.0026	1	0.0026	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.0026		
BKG-03-MID	Water	PCB	1	PCB 122 (BZ)	0.0038	1	0.0038	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.0038	0.0032	0.0038
E-02	Water	PCB	1	PCB 122 (BZ)	0.0032	1	0.0032	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.0032		
E-05	Water	PCB	1	PCB 122 (BZ)	0.058	1	0.058	ng/L	Q	Q	LIQ/LIQ,	Total	1668A	0	0.058		
E-07	Water	PCB	1	PCB 122 (BZ)	0.026	1	0.026	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.026		
E-09	Water	PCB	1	PCB 122 (BZ)	0.023	1	0.023	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.023		
E-13	Water	PCB	1	PCB 122 (BZ)	0.079	1	0.079	ng/L			LIQ/LIQ,	Total	1668A	0	0.079	0.03784	0.079
I-1	Sediment	PCB	1	PCB 122 (BZ)	0.00089	1	0.00089	ng/g	Q J	Q J	SOXHLET	Total	1668A	0	0.00089		
I-2	Sediment	PCB	1	PCB 122 (BZ)	0.00031	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-3	Sediment	PCB	1	PCB 122 (BZ)	0.0023	1	0.0023	ng/g	Q J	Q J	SOXHLET	Total	1668A	0	0.0023	0.00106	0.0023
RB-01-11192012	Water	PCB	1	PCB 122 (BZ)	0.00035	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 123 (BZ)	0.012	1	0.012	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.012		
BKG-03-MID	Water	PCB	1	PCB 123 (BZ)	0.0042	1	0.0042	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.0042	0.0081	0.012
E-02	Water	PCB	1	PCB 123 (BZ)	0.0013	1	0.0013	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.0013		
E-05	Water	PCB	1	PCB 123 (BZ)	0.043	1	0.043	ng/L			LIQ/LIQ,	Total	1668A	0	0.043		
E-07	Water	PCB	1	PCB 123 (BZ)	0.03	1	0.03	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.03		
E-09	Water	PCB	1	PCB 123 (BZ)	0.021	1	0.021	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.021		
E-13	Water	PCB	1	PCB 123 (BZ)	0.07	1	0.07	ng/L			LIQ/LIQ,	Total	1668A	0	0.07	0.03306	0.07

Client Sample ID	Matrix	sort	ion F	Analyte	Val_res	D?	Result	Unit	Qual	Flag	ep Metho	Prep Type	alysis Method	Check	Adj Val	Mean	Max
I-1	Sediment	PCB	1	PCB 123 (BZ)	0.0009	1	0.0009	ng/g	J	J	SOXHLET	Total	1668A	0	0.0009		
I-2	Sediment	PCB	1	PCB 123 (BZ)	0.00028	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-3	Sediment	PCB	1	PCB 123 (BZ)	0.0033	1	0.0033	ng/g	J	J	SOXHLET	Total	1668A	0	0.0033	0.0014	0.0033
RB-01-11192012	Water	PCB	1	PCB 123 (BZ)	0.00034	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 124 (BZ)	0.0072	1	0.0072	ng/L	C108 J	C108 J	LIQ/LIQ,	Total	1668A	0	0.0072		
BKG-03-MID	Water	PCB	1	PCB 124 (BZ)	0.0088	1	0.0088	ng/L	C108 J	C108 J	LIQ/LIQ,	Total	1668A	0	0.0088	0.008	0.0088
E-02	Water	PCB	1	PCB 124 (BZ)	0.0052	1	0.0052	ng/L	C108 J	C108 J	LIQ/LIQ,	Total	1668A	0	0.0052		
E-05	Water	PCB	1	PCB 124 (BZ)	0.13	1	0.13	ng/L	C108	C108	LIQ/LIQ,	Total	1668A	0	0.13		
E-07	Water	PCB	1	PCB 124 (BZ)	0.067	1	0.067	ng/L	C108	C108	LIQ/LIQ,	Total	1668A	0	0.067		
E-09	Water	PCB	1	PCB 124 (BZ)	0.064	1	0.064	ng/L	C108	C108	LIQ/LIQ,	Total	1668A	0	0.064		
E-13	Water	PCB	1	PCB 124 (BZ)	0.18	1	0.18	ng/L	C108	C108	LIQ/LIQ,	Total	1668A	0	0.18	0.08924	0.18
I-1	Sediment	PCB	1	PCB 124 (BZ)	0.0022	1	0.0022	ng/g	C108 J	C108 J	SOXHLET	Total	1668A	0	0.0022		
I-2	Sediment	PCB	1	PCB 124 (BZ)	0.00029	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-3	Sediment	PCB	1	PCB 124 (BZ)	0.005	1	0.005	ng/g	Q C108	Q C108	SOXHLET	Total	1668A	0	0.005	0.0024	0.005
RB-01-11192012	Water	PCB	1	PCB 124 (BZ)	0.00033	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 125 (BZ)	0.21	1	0.21	ng/L	B C86	B C86	LIQ/LIQ,	Total	1668A	0	0.21		
BKG-03-MID	Water	PCB	1	PCB 125 (BZ)	0.22	1	0.22	ng/L	B C86	B C86	LIQ/LIQ,	Total	1668A	0	0.22	0.215	0.22
E-02	Water	PCB	1	PCB 125 (BZ)	0.063	1	0.063	ng/L	B C86	B C86	LIQ/LIQ,	Total	1668A	0	0.063		
E-05	Water	PCB	1	PCB 125 (BZ)	2.9	1	2.9	ng/L	B C86	B C86	LIQ/LIQ,	Total	1668A	0	2.9		
E-07	Water	PCB	1	PCB 125 (BZ)	1.6	1	1.6	ng/L	Q B C86	Q B C86	LIQ/LIQ,	Total	1668A	0	1.6		
E-09	Water	PCB	1	PCB 125 (BZ)	1.8	1	1.8	ng/L	B C86	B C86	LIQ/LIQ,	Total	1668A	0	1.8		
E-13	Water	PCB	1	PCB 125 (BZ)	5.2	1	5.2	ng/L	Q B C86	Q B C86	LIQ/LIQ,	Total	1668A	0	5.2	2.3126	5.2
I-1	Sediment	PCB	1	PCB 125 (BZ)	0.025	1	0.025	ng/g	Q C86	Q C86	SOXHLET	Total	1668A	0	0.025		
I-2	Sediment	PCB	1	PCB 125 (BZ)	0.017	1	0.017	ng/g	C86	C86	SOXHLET	Total	1668A	0	0.017		
I-3	Sediment	PCB	1	PCB 125 (BZ)	0.15	1	0.15	ng/g	C86	C86	SOXHLET	Total	1668A	0	0.15	0.064	0.15
RB-01-11192012	Water	PCB	1	PCB 125 (BZ)	0.0006	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 126 (BZ)	0.00077	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-03-MID	Water	PCB	1	PCB 126 (BZ)	0.00051	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0	0	0
E-02	Water	PCB	1	PCB 126 (BZ)	0.001	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
E-05	Water	PCB	1	PCB 126 (BZ)	0.012	1	0.012	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.012		
E-07	Water	PCB	1	PCB 126 (BZ)	0.0034	1	0.0034	ng/L	J	J	LIQ/LIQ,	Total	1668A	0	0.0034		
E-09	Water	PCB	1	PCB 126 (BZ)	0.0017	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
E-13	Water	PCB	1	PCB 126 (BZ)	0.0086	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0	0.00308	0.012
I-1	Sediment	PCB	1	PCB 126 (BZ)	0.00023	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-2	Sediment	PCB	1	PCB 126 (BZ)	0.00029	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-3	Sediment	PCB	1	PCB 126 (BZ)	0.00051	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0	0	0
RB-01-11192012	Water	PCB	1	PCB 126 (BZ)	0.0003	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 127 (BZ)	0.00084	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-03-MID	Water	PCB	1	PCB 127 (BZ)	0.00054	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0	0	0
E-02	Water	PCB	1	PCB 127 (BZ)	0.00096	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
E-05	Water	PCB	1	PCB 127 (BZ)	0.0048	1	0.0048	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.0048		
E-07	Water	PCB	1	PCB 127 (BZ)	0.0031	1	0.0031	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.0031		
E-09	Water	PCB	1	PCB 127 (BZ)	0.0018	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
E-13	Water	PCB	1	PCB 127 (BZ)	0.009	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0	0.00158	0.0048
I-1	Sediment	PCB	1	PCB 127 (BZ)	0.00024	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-2	Sediment	PCB	1	PCB 127 (BZ)	0.00028	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-3	Sediment	PCB	1	PCB 127 (BZ)	0.00054	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0	0	0
RB-01-11192012	Water	PCB	1	PCB 127 (BZ)	0.00032	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 128 (BZ)	0.051	1	0.051	ng/L	C	C	LIQ/LIQ,	Total	1668A	0	0.051		
BKG-03-MID	Water	PCB	1	PCB 128 (BZ)	0.054	1	0.054	ng/L	C	C	LIQ/LIQ,	Total	1668A	0	0.054	0.0525	0.054
E-02	Water	PCB	1	PCB 128 (BZ)	0.025	1	0.025	ng/L	C J	C J	LIQ/LIQ,	Total	1668A	0	0.025		
E-05	Water	PCB	1	PCB 128 (BZ)	0.79	1	0.79	ng/L	C	C	LIQ/LIQ,	Total	1668A	0	0.79		
E-07	Water	PCB	1	PCB 128 (BZ)	0.45	1	0.45	ng/L	C	C	LIQ/LIQ,	Total	1668A	0	0.45		
E-09	Water	PCB	1	PCB 128 (BZ)	0.4	1	0.4	ng/L	C	C	LIQ/LIQ,	Total	1668A	0	0.4		
E-13	Water	PCB	1	PCB 128 (BZ)	1.1	1	1.1	ng/L	B C	B C	LIQ/LIQ,	Total	1668A	0	1.1	0.553	1.1
I-1	Sediment	PCB	1	PCB 128 (BZ)	0.0076	1	0.0076	ng/g	C J	C J	SOXHLET	Total	1668A	0	0.0076		
I-2	Sediment	PCB	1	PCB 128 (BZ)	0.0044	1	0.0044	ng/g	B C J	B C J	SOXHLET	Total	1668A	0	0.0044		
I-3	Sediment	PCB	1	PCB 128 (BZ)	0.034	1	0.034	ng/g	C	C	SOXHLET	Total	1668A	0	0.034	0.01533	0.034
RB-01-11192012	Water	PCB	1	PCB 128 (BZ)	0.00066	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 129 (BZ)	0.38	1	0.38	ng/L	C	C	LIQ/LIQ,	Total	1668A	0	0.38		
BKG-03-MID	Water	PCB	1	PCB 129 (BZ)	0.43	1	0.43	ng/L	B C	B C	LIQ/LIQ,	Total	1668A	0	0.43	0.405	0.43
E-02	Water	PCB	1	PCB 129 (BZ)	0.19	1	0.19	ng/L	B C	B C	LIQ/LIQ,	Total	1668A	0	0.19		
E-05	Water	PCB	1	PCB 129 (BZ)	6.5	1	6.5	ng/L	B C	B C	LIQ/LIQ,	Total	1668A	0	6.5		
E-07	Water	PCB	1	PCB 129 (BZ)	3.5	1	3.5	ng/L	B C	B C	LIQ/LIQ,	Total	1668A	0	3.5		
E-09	Water	PCB	1	PCB 129 (BZ)	3.3	1	3.3	ng/L	C	C	LIQ/LIQ,	Total	1668A	0	3.3		
E-13	Water	PCB	1	PCB 129 (BZ)	9.5	1	9.5	ng/L	B C	B C	LIQ/LIQ,	Total	1668A	0	9.5	4.598	9.5
I-1	Sediment	PCB	1	PCB 129 (BZ)	0.049	1	0.049	ng/g	C	C	SOXHLET	Total	1668A	0	0.049		
I-2	Sediment	PCB	1	PCB 129 (BZ)	0.032	1	0.032	ng/g	B C	B C	SOXHLET	Total	1668A	0	0.032		
I-3	Sediment	PCB	1	PCB 129 (BZ)	0.26	1	0.26	ng/g	C	C	SOXHLET	Total	1668A	0	0.26	0.11367	0.26
RB-01-11192012	Water	PCB	1	PCB 129 (BZ)	0.0013	1	0.0013	ng/L	Q B C J	Q B C J	LIQ/LIQ,	Total	1668A	0	0.0013		
BKG-02-EM	Water	PCB	1	PCB 13 (BZ)	0.0088	1	0.0088	ng/L	Q B C12	Q B C12	LIQ/LIQ,	Total	1668A	0	0.0088		
BKG-03-MID	Water	PCB	1	PCB 13 (BZ)	0.0076	1	0.0076	ng/L	Q B C12	Q B C12	LIQ/LIQ,	Total	1668A	0	0.0076	0.0082	0.0088
E-02	Water	PCB	1	PCB 13 (BZ)	0.0029	1	0.0029	ng/L	Q C12 J	Q C12 J	LIQ/LIQ,	Total	1668A	0	0.0029		
E-05	Water	PCB	1	PCB 13 (BZ)	0.05	1	0.05	ng/L	B C12 J	B C12 J	LIQ/LIQ,	Total	1668A	0	0.05		
E-07	Water	PCB	1	PCB 13 (BZ)	0.019	1	0.019	ng/L	Q B C12	Q B C12	LIQ/LIQ,	Total	1668A	0	0.019		
E-09	Water	PCB	1	PCB 13 (BZ)	0.025	1	0.025	ng/L	B C12 J	B C12 J	LIQ/LIQ,	Total	1668A	0	0.025		
E-13	Water	PCB	1	PCB 13 (BZ)	0.22	1	0.22	ng/L	Q B C12	Q B C12	LIQ/LIQ,	Total	1668A	0	0.22	0.06338	0.22
I-1	Sediment	PCB	1	PCB 13 (BZ)	0.0012	1	0.0012	ng/g	Q C12 J	Q C12 J	SOXHLET	Total	1668A	0	0.0012		
I-2	Sediment	PCB	1	PCB 13 (BZ)	0.00099	1	0.00099	ng/g	Q C12 J	Q C12 J	SOXHLET	Total	1668A	0	0.00099		
I-3	Sediment	PCB	1	PCB 13 (BZ)	0.019	1	0.019	ng/g	Q C12	Q C12	SOXHLET	Total	1668A	0	0.019	0.00706	0.019
RB-01-11192012	Water	PCB	1	PCB 13 (BZ)	0.0014	1	0.0014	ng/L	Q B C12	Q B C12	LIQ/LIQ,	Total	1668A	0	0.0014		
BKG-02-EM	Water	PCB	1	PCB 130 (BZ)	0.025	1	0.025	ng/L	J	J	LIQ/LIQ,	Total	1668A	0	0.025		
BKG-03-MID	Water	PCB	1	PCB 130 (BZ)	0.028	1	0.028	ng/L	J	J	LIQ/LIQ,	Total	1668A	0	0.028	0.0265	0.028
E-02	Water	PCB	1	PCB 130 (BZ)	0.0085	1	0.0085	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.0085		
E-05	Water	PCB	1	PCB 130 (BZ)	0.43	1	0.43	ng/L			LIQ/LIQ,	Total	1668A	0	0.43		
E-07	Water	PCB	1	PCB 130 (BZ)	0.22	1	0.22	ng/L			LIQ/LIQ,	Total	1668A	0	0.22		
E-09	Water	PCB	1	PCB 130 (BZ)	0.2	1	0.2	ng/L			LIQ/LIQ,	Total	1668A	0	0.2		
E-13	Water	PCB	1	PCB 130 (BZ)	0.59	1	0.59	ng/L			LIQ/LIQ,	Total	1668A	0	0.59	0.2897	0.59
I-1	Sediment	PCB	1	PCB 130 (BZ)	0.0028	1	0.0028	ng/g	J	J	SOXHLET	Total	1668A	0	0.0028		
I-2	Sediment	PCB	1	PCB 130 (BZ)	0.0025	1	0.0025	ng/g	Q J	Q J	SOXHLET	Total	1668A	0	0.0025		
I-3	Sediment	PCB	1	PCB 130 (BZ)	0.019	1	0.019	ng/g			SOXHLET	Total	1668A	0	0.019	0.0081	0.019
RB-01-11192012	Water	PCB	1	PCB 130 (BZ)	0.00088	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 131 (BZ)	0.0038	1	0.0038	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.0038		
BKG-03-MID	Water	PCB	1	PCB 131 (BZ)	0.0047	1	0.0047	ng/L	J	J	LIQ/LIQ,	Total	1668A	0	0.0047	0.00425	0.0047
E-02	Water	PCB	1	PCB 131 (BZ)	0.0077	1	0.0077	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.0077		
E-05	Water	PCB	1	PCB 131 (BZ)	0.07	1	0.07	ng/L	Q	Q	LIQ/LIQ,	Total	1668A	0	0.07		
E-07	Water	PCB	1	PCB 131 (BZ)	0.042	1	0.042	ng/L	Q	Q	LIQ/LIQ,	Total	1668A	0	0.042		
E-09	Water	PCB	1	PCB 131 (BZ)	0.04	1	0.04	ng/L			LIQ/LIQ,	Total	1668A	0	0.04		
E-13	Water	PCB	1	PCB 131 (BZ)	0.1	1	0.1	ng/L			LIQ/LIQ,	Total	1668A	0	0.1	0.05194	0.1
I-1	Sediment	PCB	1	PCB 131 (BZ)	0.00052	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-2	Sediment	PCB	1	PCB 131 (BZ)	0.00066	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-3	Sediment	PCB	1	PCB 131 (BZ)	0.0011	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0	0	0
RB-01-11192012	Water	PCB	1	PCB 131 (BZ)	0.0009	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 132 (BZ)	0.13	1	0.13	ng/L			LIQ/LIQ,	Total	1668A	0	0.13		
BKG-03-MID	Water	PCB	1	PCB 132 (BZ)	0.15	1	0.15	ng/L			LIQ/LIQ,	Total	1668A	0	0.15	0.14	0.15
E-02	Water	PCB	1	PCB 132 (BZ)	0.058	1	0.058	ng/L	Q B	Q B	LIQ/LIQ,	Total	1668A	0	0.058		
E-05	Water	PCB	1	PCB 132 (BZ)	2.5	1	2.5	ng/L			LIQ/LIQ,	Total	1668A	0	2.5		
E-07	Water	PCB	1	PCB 132 (BZ)	1.2	1	1.2	ng/L			LIQ/LIQ,	Total	1668A	0	1.2		
E-09	Water	PCB	1	PCB 132 (BZ)	1.2	1	1.2	ng/L			LIQ/LIQ,	Total	1668A	0	1.2		
E-13	Water	PCB	1	PCB 132 (BZ)	3.5	1	3.5	ng/L	B	B	LIQ/LIQ,	Total	1668A	0	3.5	1.6916	3.5
I-1	Sediment	PCB	1	PCB 132 (BZ)	0.014	1	0.014	ng/g			SOXHLET	Total	1668A	0	0.014		
I-2	Sediment	PCB	1	PCB 132 (BZ)	0.011	1	0.011	ng/g	B	B	SOXHLET	Total	1668A	0	0.011		
I-3	Sediment	PCB	1	PCB 132 (BZ)	0.096	1	0.096	ng/g			SOXHLET	Total	1668A	0	0.096	0.04033	0.096
RB-01-11192012	Water	PCB	1	PCB 132 (BZ)	0.00086	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 133 (BZ)	0.011	1	0.011	ng/L	J	J	LIQ/LIQ,	Total	1668A	0	0.011		
BKG-03-MID	Water	PCB	1	PCB 133 (BZ)	0.01	1	0.01	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.01	0.0105	0.011
E-02	Water	PCB	1	PCB 133 (BZ)	0.0057	1	0.0057	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.0057		
E-05	Water	PCB	1	PCB 133 (BZ)	0.18	1	0.18	ng/L			LIQ/LIQ,	Total	1668A	0	0.18		
E-07	Water	PCB	1	PCB 133 (BZ)	0.078	1	0.078	ng/L			LIQ/LIQ,	Total	1668A	0	0.078		
E-09	Water	PCB	1	PCB 133 (BZ)	0.098	1	0.098	ng/L			LIQ/LIQ,	Total	1668A	0	0.098		
E-13	Water	PCB	1	PCB 133 (BZ)	0.25	1	0.25	ng/L	B	B	LIQ/LIQ,	Total	1668A	0	0.25	0.12234	0.25
I-1	Sediment	PCB	1	PCB 133 (BZ)	0.00047	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		

Client Sample ID	Matrix	sort	ion F	Analyte	Val_res	D?	Result	Unit	Qual	Flag	ep Metho	Prep Type	alysis Method	Check	Adj Val	Mean	Max
I-2	Sediment	PCB	1	PCB 133 (BZ)	0.00093	1	0.00093	ng/g	Q J	Q J	SOXHLET	Total	1668A	0	0.00093		
I-3	Sediment	PCB	1	PCB 133 (BZ)	0.0066	1	0.0066	ng/g	Q J	Q J	SOXHLET	Total	1668A	0	0.0066	0.00251	0.0066
RB-01-11192012	Water	PCB	1	PCB 133 (BZ)	0.00082	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 134 (BZ)	0.019	1	0.019	ng/L	C J	C J	LIQ/LIQ,	Total	1668A	0	0.019		
BKG-03-MID	Water	PCB	1	PCB 134 (BZ)	0.023	1	0.023	ng/L	C J	C J	LIQ/LIQ,	Total	1668A	0	0.023	0.021	0.023
E-02	Water	PCB	1	PCB 134 (BZ)	0.012	1	0.012	ng/L	Q C J	Q C J	LIQ/LIQ,	Total	1668A	0	0.012		
E-05	Water	PCB	1	PCB 134 (BZ)	0.44	1	0.44	ng/L	C	C	LIQ/LIQ,	Total	1668A	0	0.44		
E-07	Water	PCB	1	PCB 134 (BZ)	0.25	1	0.25	ng/L	C	C	LIQ/LIQ,	Total	1668A	0	0.25		
E-09	Water	PCB	1	PCB 134 (BZ)	0.2	1	0.2	ng/L	C	C	LIQ/LIQ,	Total	1668A	0	0.2		
E-13	Water	PCB	1	PCB 134 (BZ)	0.58	1	0.58	ng/L	C	C	LIQ/LIQ,	Total	1668A	0	0.58	0.2964	0.58
I-1	Sediment	PCB	1	PCB 134 (BZ)	0.002	1	0.002	ng/g	Q C J	Q C J	SOXHLET	Total	1668A	0	0.002		
I-2	Sediment	PCB	1	PCB 134 (BZ)	0.0018	1	0.0018	ng/g	Q C J	Q C J	SOXHLET	Total	1668A	0	0.0018		
I-3	Sediment	PCB	1	PCB 134 (BZ)	0.017	1	0.017	ng/g	C	C	SOXHLET	Total	1668A	0	0.017	0.00693	0.017
RB-01-11192012	Water	PCB	1	PCB 134 (BZ)	0.00088	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 135 (BZ)	0.18	1	0.18	ng/L	Q C	Q C	LIQ/LIQ,	Total	1668A	0	0.18		
BKG-03-MID	Water	PCB	1	PCB 135 (BZ)	0.2	1	0.2	ng/L	C	C	LIQ/LIQ,	Total	1668A	0	0.2	0.19	0.2
E-02	Water	PCB	1	PCB 135 (BZ)	0.078	1	0.078	ng/L	C	C	LIQ/LIQ,	Total	1668A	0	0.078		
E-05	Water	PCB	1	PCB 135 (BZ)	2.7	1	2.7	ng/L	C	C	LIQ/LIQ,	Total	1668A	0	2.7		
E-07	Water	PCB	1	PCB 135 (BZ)	1.3	1	1.3	ng/L	C	C	LIQ/LIQ,	Total	1668A	0	1.3		
E-09	Water	PCB	1	PCB 135 (BZ)	1.9	1	1.9	ng/L	C	C	LIQ/LIQ,	Total	1668A	0	1.9		
E-13	Water	PCB	1	PCB 135 (BZ)	4.7	1	4.7	ng/L	B C	B C	LIQ/LIQ,	Total	1668A	0	4.7	2.1356	4.7
I-1	Sediment	PCB	1	PCB 135 (BZ)	0.012	1	0.012	ng/g	C	C	SOXHLET	Total	1668A	0	0.012		
I-2	Sediment	PCB	1	PCB 135 (BZ)	0.011	1	0.011	ng/g	Q C	Q C	SOXHLET	Total	1668A	0	0.011		
I-3	Sediment	PCB	1	PCB 135 (BZ)	0.14	1	0.14	ng/g	C	C	SOXHLET	Total	1668A	0	0.14	0.05433	0.14
RB-01-11192012	Water	PCB	1	PCB 135 (BZ)	0.0011	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 136 (BZ)	0.052	1	0.052	ng/L	Q	Q	LIQ/LIQ,	Total	1668A	0	0.052		
BKG-03-MID	Water	PCB	1	PCB 136 (BZ)	0.069	1	0.069	ng/L			LIQ/LIQ,	Total	1668A	0	0.069	0.0605	0.069
E-02	Water	PCB	1	PCB 136 (BZ)	0.022	1	0.022	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.022		
E-05	Water	PCB	1	PCB 136 (BZ)	0.94	1	0.94	ng/L			LIQ/LIQ,	Total	1668A	0	0.94		
E-07	Water	PCB	1	PCB 136 (BZ)	0.46	1	0.46	ng/L			LIQ/LIQ,	Total	1668A	0	0.46		
E-09	Water	PCB	1	PCB 136 (BZ)	0.63	1	0.63	ng/L			LIQ/LIQ,	Total	1668A	0	0.63		
E-13	Water	PCB	1	PCB 136 (BZ)	1.6	1	1.6	ng/L			LIQ/LIQ,	Total	1668A	0	1.6	0.7304	1.6
I-1	Sediment	PCB	1	PCB 136 (BZ)	0.0042	1	0.0042	ng/g	J	J	SOXHLET	Total	1668A	0	0.0042		
I-2	Sediment	PCB	1	PCB 136 (BZ)	0.0038	1	0.0038	ng/g	Q J	Q J	SOXHLET	Total	1668A	0	0.0038		
I-3	Sediment	PCB	1	PCB 136 (BZ)	0.043	1	0.043	ng/g			SOXHLET	Total	1668A	0	0.043	0.017	0.043
RB-01-11192012	Water	PCB	1	PCB 136 (BZ)	0.00083	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 137 (BZ)	0.0069	1	0.0069	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.0069		
BKG-03-MID	Water	PCB	1	PCB 137 (BZ)	0.012	1	0.012	ng/L	J	J	LIQ/LIQ,	Total	1668A	0	0.012	0.00945	0.012
E-02	Water	PCB	1	PCB 137 (BZ)	0.0064	1	0.0064	ng/L	J	J	LIQ/LIQ,	Total	1668A	0	0.0064		
E-05	Water	PCB	1	PCB 137 (BZ)	0.18	1	0.18	ng/L			LIQ/LIQ,	Total	1668A	0	0.18		
E-07	Water	PCB	1	PCB 137 (BZ)	0.1	1	0.1	ng/L			LIQ/LIQ,	Total	1668A	0	0.1		
E-09	Water	PCB	1	PCB 137 (BZ)	0.095	1	0.095	ng/L			LIQ/LIQ,	Total	1668A	0	0.095		
E-13	Water	PCB	1	PCB 137 (BZ)	0.28	1	0.28	ng/L	Q	Q	LIQ/LIQ,	Total	1668A	0	0.28	0.13228	0.28
I-1	Sediment	PCB	1	PCB 137 (BZ)	0.0025	1	0.0025	ng/g	J	J	SOXHLET	Total	1668A	0	0.0025		
I-2	Sediment	PCB	1	PCB 137 (BZ)	0.00056	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-3	Sediment	PCB	1	PCB 137 (BZ)	0.0047	1	0.0047	ng/g	J	J	SOXHLET	Total	1668A	0	0.0047	0.0024	0.0047
RB-01-11192012	Water	PCB	1	PCB 137 (BZ)	0.00076	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 138 (BZ)	0.38	1	0.38	ng/L	C129	C129	LIQ/LIQ,	Total	1668A	0	0.38		
BKG-03-MID	Water	PCB	1	PCB 138 (BZ)	0.43	1	0.43	ng/L	B C129	B C129	LIQ/LIQ,	Total	1668A	0	0.43	0.405	0.43
E-02	Water	PCB	1	PCB 138 (BZ)	0.19	1	0.19	ng/L	B C129	B C129	LIQ/LIQ,	Total	1668A	0	0.19		
E-05	Water	PCB	1	PCB 138 (BZ)	6.5	1	6.5	ng/L	B C129	B C129	LIQ/LIQ,	Total	1668A	0	6.5		
E-07	Water	PCB	1	PCB 138 (BZ)	3.5	1	3.5	ng/L	B C129	B C129	LIQ/LIQ,	Total	1668A	0	3.5		
E-09	Water	PCB	1	PCB 138 (BZ)	3.3	1	3.3	ng/L	C129	C129	LIQ/LIQ,	Total	1668A	0	3.3		
E-13	Water	PCB	1	PCB 138 (BZ)	9.5	1	9.5	ng/L	B C129	B C129	LIQ/LIQ,	Total	1668A	0	9.5	4.598	9.5
I-1	Sediment	PCB	1	PCB 138 (BZ)	0.049	1	0.049	ng/g	C129	C129	SOXHLET	Total	1668A	0	0.049		
I-2	Sediment	PCB	1	PCB 138 (BZ)	0.032	1	0.032	ng/g	B C129	B C129	SOXHLET	Total	1668A	0	0.032		
I-3	Sediment	PCB	1	PCB 138 (BZ)	0.26	1	0.26	ng/g	C129	C129	SOXHLET	Total	1668A	0	0.26	0.11367	0.26
RB-01-11192012	Water	PCB	1	PCB 138 (BZ)	0.0013	1	0.0013	ng/L	Q B	Q B	LIQ/LIQ,	Total	1668A	0	0.0013		
BKG-02-EM	Water	PCB	1	PCB 139 (BZ)	0.0058	1	0.0058	ng/L	Q C J	Q C J	LIQ/LIQ,	Total	1668A	0	0.0058		
BKG-03-MID	Water	PCB	1	PCB 139 (BZ)	0.009	1	0.009	ng/L	C J	C J	LIQ/LIQ,	Total	1668A	0	0.009	0.0074	0.009
E-02	Water	PCB	1	PCB 139 (BZ)	0.0099	1	0.0099	ng/L	Q C J	Q C J	LIQ/LIQ,	Total	1668A	0	0.0099		
E-05	Water	PCB	1	PCB 139 (BZ)	0.12	1	0.12	ng/L	C	C	LIQ/LIQ,	Total	1668A	0	0.12		
E-07	Water	PCB	1	PCB 139 (BZ)	0.079	1	0.079	ng/L	C	C	LIQ/LIQ,	Total	1668A	0	0.079		
E-09	Water	PCB	1	PCB 139 (BZ)	0.064	1	0.064	ng/L	C	C	LIQ/LIQ,	Total	1668A	0	0.064		
E-13	Water	PCB	1	PCB 139 (BZ)	0.15	1	0.15	ng/L	Q C	Q C	LIQ/LIQ,	Total	1668A	0	0.15	0.08458	0.15
I-1	Sediment	PCB	1	PCB 139 (BZ)	0.00043	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-2	Sediment	PCB	1	PCB 139 (BZ)	0.00055	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-3	Sediment	PCB	1	PCB 139 (BZ)	0.0041	1	0.0041	ng/g	C J	C J	SOXHLET	Total	1668A	0	0.0041	0.00137	0.0041
RB-01-11192012	Water	PCB	1	PCB 139 (BZ)	0.00075	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 14 (BZ)	0.00094	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-03-MID	Water	PCB	1	PCB 14 (BZ)	0.0009	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0	0	0
E-02	Water	PCB	1	PCB 14 (BZ)	0.0015	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
E-05	Water	PCB	1	PCB 14 (BZ)	0.0017	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
E-07	Water	PCB	1	PCB 14 (BZ)	0.0018	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
E-09	Water	PCB	1	PCB 14 (BZ)	0.0016	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
E-13	Water	PCB	1	PCB 14 (BZ)	0.0054	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0	0	0
I-1	Sediment	PCB	1	PCB 14 (BZ)	0.0005	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-2	Sediment	PCB	1	PCB 14 (BZ)	0.00071	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-3	Sediment	PCB	1	PCB 14 (BZ)	0.00072	1	0.00072	ng/g	Q J	Q J	SOXHLET	Total	1668A	0	0.00072	0.00024	0.00072
RB-01-11192012	Water	PCB	1	PCB 14 (BZ)	0.0012	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 140 (BZ)	0.0058	1	0.0058	ng/L	Q C139	Q C139	LIQ/LIQ,	Total	1668A	0	0.0058		
BKG-03-MID	Water	PCB	1	PCB 140 (BZ)	0.009	1	0.009	ng/L	C139 J	C139 J	LIQ/LIQ,	Total	1668A	0	0.009	0.0074	0.009
E-02	Water	PCB	1	PCB 140 (BZ)	0.0099	1	0.0099	ng/L	Q C139	Q C139	LIQ/LIQ,	Total	1668A	0	0.0099		
E-05	Water	PCB	1	PCB 140 (BZ)	0.12	1	0.12	ng/L	C139	C139	LIQ/LIQ,	Total	1668A	0	0.12		
E-07	Water	PCB	1	PCB 140 (BZ)	0.079	1	0.079	ng/L	C139	C139	LIQ/LIQ,	Total	1668A	0	0.079		
E-09	Water	PCB	1	PCB 140 (BZ)	0.064	1	0.064	ng/L	C139	C139	LIQ/LIQ,	Total	1668A	0	0.064		
E-13	Water	PCB	1	PCB 140 (BZ)	0.15	1	0.15	ng/L	Q C139	Q C139	LIQ/LIQ,	Total	1668A	0	0.15	0.08458	0.15
I-1	Sediment	PCB	1	PCB 140 (BZ)	0.00043	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-2	Sediment	PCB	1	PCB 140 (BZ)	0.00055	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-3	Sediment	PCB	1	PCB 140 (BZ)	0.0041	1	0.0041	ng/g	C139 J	C139 J	SOXHLET	Total	1668A	0	0.0041	0.00137	0.0041
RB-01-11192012	Water	PCB	1	PCB 140 (BZ)	0.00075	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 141 (BZ)	0.064	1	0.064	ng/L			LIQ/LIQ,	Total	1668A	0	0.064		
BKG-03-MID	Water	PCB	1	PCB 141 (BZ)	0.076	1	0.076	ng/L			LIQ/LIQ,	Total	1668A	0	0.076	0.07	0.076
E-02	Water	PCB	1	PCB 141 (BZ)	0.043	1	0.043	ng/L			LIQ/LIQ,	Total	1668A	0	0.043		
E-05	Water	PCB	1	PCB 141 (BZ)	1.2	1	1.2	ng/L			LIQ/LIQ,	Total	1668A	0	1.2		
E-07	Water	PCB	1	PCB 141 (BZ)	0.64	1	0.64	ng/L			LIQ/LIQ,	Total	1668A	0	0.64		
E-09	Water	PCB	1	PCB 141 (BZ)	0.62	1	0.62	ng/L			LIQ/LIQ,	Total	1668A	0	0.62		
E-13	Water	PCB	1	PCB 141 (BZ)	1.9	1	1.9	ng/L	B	B	LIQ/LIQ,	Total	1668A	0	1.9	0.8806	1.9
I-1	Sediment	PCB	1	PCB 141 (BZ)	0.0075	1	0.0075	ng/g	J	J	SOXHLET	Total	1668A	0	0.0075		
I-2	Sediment	PCB	1	PCB 141 (BZ)	0.0061	1	0.0061	ng/g	B J	B J	SOXHLET	Total	1668A	0	0.0061		
I-3	Sediment	PCB	1	PCB 141 (BZ)	0.049	1	0.049	ng/g			SOXHLET	Total	1668A	0	0.049	0.02087	0.049
RB-01-11192012	Water	PCB	1	PCB 141 (BZ)	0.00078	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 142 (BZ)	0.0015	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-03-MID	Water	PCB	1	PCB 142 (BZ)	0.0012	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0	0	0
E-02	Water	PCB	1	PCB 142 (BZ)	0.003	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
E-05	Water	PCB	1	PCB 142 (BZ)	0.0055	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
E-07	Water	PCB	1	PCB 142 (BZ)	0.0048	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
E-09	Water	PCB	1	PCB 142 (BZ)	0.0036	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
E-13	Water	PCB	1	PCB 142 (BZ)	0.02	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0	0	0
I-1	Sediment	PCB	1	PCB 142 (BZ)	0.0005	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-2	Sediment	PCB	1	PCB 142 (BZ)	0.00063	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-3	Sediment	PCB	1	PCB 142 (BZ)	0.0011	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0	0	0
RB-01-11192012	Water	PCB	1	PCB 142 (BZ)	0.00086	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 143 (BZ)	0.019	1	0.019	ng/L	C134 J	C134 J	LIQ/LIQ,	Total	1668A	0	0.019		
BKG-03-MID	Water	PCB	1	PCB 143 (BZ)	0.023	1	0.023	ng/L	C134 J	C134 J	LIQ/LIQ,	Total	1668A	0	0.023	0.021	0.023
E-02	Water	PCB	1	PCB 143 (BZ)	0.012	1	0.012	ng/L	Q C134	Q C134	LIQ/LIQ,	Total	1668A	0	0.012		
E-05	Water	PCB	1	PCB 143 (BZ)	0.44	1	0.44	ng/L	C134	C134	LIQ/LIQ,	Total	1668A	0	0.44		
E-07	Water	PCB	1	PCB 143 (BZ)	0.25	1	0.25	ng/L	C134	C134	LIQ/LIQ,	Total	1668A	0	0.25		
E-09	Water	PCB	1	PCB 143 (BZ)	0.2	1	0.2	ng/L	C134	C134	LIQ/LIQ,	Total	1668A	0	0.2		
E-13	Water	PCB	1	PCB 143 (BZ)	0.58	1	0.58	ng/L	C134	C134	LIQ/LIQ,	Total	1668A	0	0.58	0.2964	0.58
I-1	Sediment	PCB	1	PCB 143 (BZ)	0.002	1	0.002	ng/g	Q C134	Q C134	SOXHLET	Total	1668A	0	0.002		
I-2	Sediment	PCB	1	PCB 143 (BZ)	0.0018	1	0.0018	ng/g	Q C134	Q C134	SOXHLET	Total	1668A	0	0.0018		

Client Sample ID	Matrix	sort	ion F	Analyte	Val_res	D?	Result	Unit	Qual	Flag	ep Metho	Prep Type	alysis Method	Check	Adj Val	Mean	Max
I-3	Sediment	PCB	1	PCB 143 (BZ)	0.017	1	0.017	ng/g	C134	C134	SOXHLET	Total	1668A	0	0.017	0.00693	0.017
RB-01-11192012	Water	PCB	1	PCB 143 (BZ)	0.00088	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 144 (BZ)	0.018	1	0.018	ng/L	J	J	LIQ/LIQ,	Total	1668A	0	0.018		
BKG-03-MID	Water	PCB	1	PCB 144 (BZ)	0.016	1	0.016	ng/L	J	J	LIQ/LIQ,	Total	1668A	0	0.016	0.017	0.018
E-02	Water	PCB	1	PCB 144 (BZ)	0.0066	1	0.0066	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.0066		
E-05	Water	PCB	1	PCB 144 (BZ)	0.26	1	0.26	ng/L			LIQ/LIQ,	Total	1668A	0	0.26		
E-07	Water	PCB	1	PCB 144 (BZ)	0.12	1	0.12	ng/L			LIQ/LIQ,	Total	1668A	0	0.12		
E-09	Water	PCB	1	PCB 144 (BZ)	0.17	1	0.17	ng/L			LIQ/LIQ,	Total	1668A	0	0.17		
E-13	Water	PCB	1	PCB 144 (BZ)	0.42	1	0.42	ng/L			LIQ/LIQ,	Total	1668A	0	0.42	0.19532	0.42
I-1	Sediment	PCB	1	PCB 144 (BZ)	0.0017	1	0.0017	ng/g	J	J	SOXHLET	Total	1668A	0	0.0017		
I-2	Sediment	PCB	1	PCB 144 (BZ)	0.00075	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-3	Sediment	PCB	1	PCB 144 (BZ)	0.011	1	0.011	ng/g			SOXHLET	Total	1668A	0	0.011	0.00423	0.011
RB-01-11192012	Water	PCB	1	PCB 144 (BZ)	0.0011	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 145 (BZ)	0.0015	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-03-MID	Water	PCB	1	PCB 145 (BZ)	0.0011	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0	0	0
E-02	Water	PCB	1	PCB 145 (BZ)	0.0023	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
E-05	Water	PCB	1	PCB 145 (BZ)	0.0045	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
E-07	Water	PCB	1	PCB 145 (BZ)	0.0041	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
E-09	Water	PCB	1	PCB 145 (BZ)	0.0037	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
E-13	Water	PCB	1	PCB 145 (BZ)	0.021	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0	0	0
I-1	Sediment	PCB	1	PCB 145 (BZ)	0.00044	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-2	Sediment	PCB	1	PCB 145 (BZ)	0.00057	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-3	Sediment	PCB	1	PCB 145 (BZ)	0.00098	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0	0	0
RB-01-11192012	Water	PCB	1	PCB 145 (BZ)	0.0008	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 146 (BZ)	0.079	1	0.079	ng/L			LIQ/LIQ,	Total	1668A	0	0.079		
BKG-03-MID	Water	PCB	1	PCB 146 (BZ)	0.084	1	0.084	ng/L			LIQ/LIQ,	Total	1668A	0	0.084	0.0815	0.084
E-02	Water	PCB	1	PCB 146 (BZ)	0.049	1	0.049	ng/L			LIQ/LIQ,	Total	1668A	0	0.049		
E-05	Water	PCB	1	PCB 146 (BZ)	1.4	1	1.4	ng/L			LIQ/LIQ,	Total	1668A	0	1.4		
E-07	Water	PCB	1	PCB 146 (BZ)	0.66	1	0.66	ng/L			LIQ/LIQ,	Total	1668A	0	0.66		
E-09	Water	PCB	1	PCB 146 (BZ)	0.73	1	0.73	ng/L			LIQ/LIQ,	Total	1668A	0	0.73		
E-13	Water	PCB	1	PCB 146 (BZ)	1.9	1	1.9	ng/L	B	B	LIQ/LIQ,	Total	1668A	0	1.9	0.9478	1.9
I-1	Sediment	PCB	1	PCB 146 (BZ)	0.006	1	0.006	ng/g	J	J	SOXHLET	Total	1668A	0	0.006		
I-2	Sediment	PCB	1	PCB 146 (BZ)	0.0076	1	0.0076	ng/g	J	J	SOXHLET	Total	1668A	0	0.0076		
I-3	Sediment	PCB	1	PCB 146 (BZ)	0.055	1	0.055	ng/g			SOXHLET	Total	1668A	0	0.055	0.02287	0.055
RB-01-11192012	Water	PCB	1	PCB 146 (BZ)	0.00071	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 147 (BZ)	0.35	1	0.35	ng/L	C	C	LIQ/LIQ,	Total	1668A	0	0.35		
BKG-03-MID	Water	PCB	1	PCB 147 (BZ)	0.39	1	0.39	ng/L	C	C	LIQ/LIQ,	Total	1668A	0	0.39	0.37	0.39
E-02	Water	PCB	1	PCB 147 (BZ)	0.19	1	0.19	ng/L	B C	B C	LIQ/LIQ,	Total	1668A	0	0.19		
E-05	Water	PCB	1	PCB 147 (BZ)	6.6	1	6.6	ng/L	B C	B C	LIQ/LIQ,	Total	1668A	0	6.6		
E-07	Water	PCB	1	PCB 147 (BZ)	3.3	1	3.3	ng/L	B C	B C	LIQ/LIQ,	Total	1668A	0	3.3		
E-09	Water	PCB	1	PCB 147 (BZ)	3.4	1	3.4	ng/L	C	C	LIQ/LIQ,	Total	1668A	0	3.4		
E-13	Water	PCB	1	PCB 147 (BZ)	9.5	1	9.5	ng/L	B C	B C	LIQ/LIQ,	Total	1668A	0	9.5	4.598	9.5
I-1	Sediment	PCB	1	PCB 147 (BZ)	0.03	1	0.03	ng/g	C	C	SOXHLET	Total	1668A	0	0.03		
I-2	Sediment	PCB	1	PCB 147 (BZ)	0.033	1	0.033	ng/g	B C	B C	SOXHLET	Total	1668A	0	0.033		
I-3	Sediment	PCB	1	PCB 147 (BZ)	0.27	1	0.27	ng/g	C	C	SOXHLET	Total	1668A	0	0.27	0.111	0.27
RB-01-11192012	Water	PCB	1	PCB 147 (BZ)	0.00073	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 148 (BZ)	0.002	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-03-MID	Water	PCB	1	PCB 148 (BZ)	0.0016	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0	0	0
E-02	Water	PCB	1	PCB 148 (BZ)	0.0032	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
E-05	Water	PCB	1	PCB 148 (BZ)	0.026	1	0.026	ng/L	J	J	LIQ/LIQ,	Total	1668A	0	0.026		
E-07	Water	PCB	1	PCB 148 (BZ)	0.012	1	0.012	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.012		
E-09	Water	PCB	1	PCB 148 (BZ)	0.033	1	0.033	ng/L	J	J	LIQ/LIQ,	Total	1668A	0	0.033		
E-13	Water	PCB	1	PCB 148 (BZ)	0.11	1	0.11	ng/L			LIQ/LIQ,	Total	1668A	0	0.11	0.0362	0.11
I-1	Sediment	PCB	1	PCB 148 (BZ)	0.00061	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-2	Sediment	PCB	1	PCB 148 (BZ)	0.00079	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-3	Sediment	PCB	1	PCB 148 (BZ)	0.0014	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0	0	0
RB-01-11192012	Water	PCB	1	PCB 148 (BZ)	0.0011	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 149 (BZ)	0.35	1	0.35	ng/L	C147	C147	LIQ/LIQ,	Total	1668A	0	0.35		
BKG-03-MID	Water	PCB	1	PCB 149 (BZ)	0.39	1	0.39	ng/L	C147	C147	LIQ/LIQ,	Total	1668A	0	0.39	0.37	0.39
E-02	Water	PCB	1	PCB 149 (BZ)	0.19	1	0.19	ng/L	B C147	B C147	LIQ/LIQ,	Total	1668A	0	0.19		
E-05	Water	PCB	1	PCB 149 (BZ)	6.6	1	6.6	ng/L	B C147	B C147	LIQ/LIQ,	Total	1668A	0	6.6		
E-07	Water	PCB	1	PCB 149 (BZ)	3.3	1	3.3	ng/L	B C147	B C147	LIQ/LIQ,	Total	1668A	0	3.3		
E-09	Water	PCB	1	PCB 149 (BZ)	3.4	1	3.4	ng/L	C147	C147	LIQ/LIQ,	Total	1668A	0	3.4		
E-13	Water	PCB	1	PCB 149 (BZ)	9.5	1	9.5	ng/L	B C147	B C147	LIQ/LIQ,	Total	1668A	0	9.5	4.598	9.5
I-1	Sediment	PCB	1	PCB 149 (BZ)	0.03	1	0.03	ng/g	C147	C147	SOXHLET	Total	1668A	0	0.03		
I-2	Sediment	PCB	1	PCB 149 (BZ)	0.033	1	0.033	ng/g	B C147	B C147	SOXHLET	Total	1668A	0	0.033		
I-3	Sediment	PCB	1	PCB 149 (BZ)	0.27	1	0.27	ng/g	C147	C147	SOXHLET	Total	1668A	0	0.27	0.111	0.27
RB-01-11192012	Water	PCB	1	PCB 149 (BZ)	0.00073	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 15 (BZ)	0.029	1	0.029	ng/L	B J	B J	LIQ/LIQ,	Total	1668A	0	0.029		
BKG-03-MID	Water	PCB	1	PCB 15 (BZ)	0.025	1	0.025	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.025	0.027	0.029
E-02	Water	PCB	1	PCB 15 (BZ)	0.011	1	0.011	ng/L	Q B J	Q B J	LIQ/LIQ,	Total	1668A	0	0.011		
E-05	Water	PCB	1	PCB 15 (BZ)	0.27	1	0.27	ng/L	B	B	LIQ/LIQ,	Total	1668A	0	0.27		
E-07	Water	PCB	1	PCB 15 (BZ)	0.11	1	0.11	ng/L	B	B	LIQ/LIQ,	Total	1668A	0	0.11		
E-09	Water	PCB	1	PCB 15 (BZ)	0.098	1	0.098	ng/L	Q B	Q B	LIQ/LIQ,	Total	1668A	0	0.098		
E-13	Water	PCB	1	PCB 15 (BZ)	0.46	1	0.46	ng/L	B	B	LIQ/LIQ,	Total	1668A	0	0.46	0.1898	0.46
I-1	Sediment	PCB	1	PCB 15 (BZ)	0.0041	1	0.0041	ng/g	Q J	Q J	SOXHLET	Total	1668A	0	0.0041		
I-2	Sediment	PCB	1	PCB 15 (BZ)	0.0037	1	0.0037	ng/g	Q B J	Q B J	SOXHLET	Total	1668A	0	0.0037		
I-3	Sediment	PCB	1	PCB 15 (BZ)	0.063	1	0.063	ng/g	B	B	SOXHLET	Total	1668A	0	0.063	0.0236	0.063
RB-01-11192012	Water	PCB	1	PCB 15 (BZ)	0.0018	1	0.0018	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.0018		
BKG-02-EM	Water	PCB	1	PCB 150 (BZ)	0.0014	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-03-MID	Water	PCB	1	PCB 150 (BZ)	0.0011	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0	0	0
E-02	Water	PCB	1	PCB 150 (BZ)	0.0022	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
E-05	Water	PCB	1	PCB 150 (BZ)	0.021	1	0.021	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.021		
E-07	Water	PCB	1	PCB 150 (BZ)	0.004	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
E-09	Water	PCB	1	PCB 150 (BZ)	0.011	1	0.011	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.011		
E-13	Water	PCB	1	PCB 150 (BZ)	0.021	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0	0.0064	0.021
I-1	Sediment	PCB	1	PCB 150 (BZ)	0.00042	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-2	Sediment	PCB	1	PCB 150 (BZ)	0.00055	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-3	Sediment	PCB	1	PCB 150 (BZ)	0.00096	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0	0	0
RB-01-11192012	Water	PCB	1	PCB 150 (BZ)	0.00078	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 151 (BZ)	0.18	1	0.18	ng/L	Q C135	Q C135	LIQ/LIQ,	Total	1668A	0	0.18		
BKG-03-MID	Water	PCB	1	PCB 151 (BZ)	0.2	1	0.2	ng/L	C135	C135	LIQ/LIQ,	Total	1668A	0	0.2	0.19	0.2
E-02	Water	PCB	1	PCB 151 (BZ)	0.078	1	0.078	ng/L	C135	C135	LIQ/LIQ,	Total	1668A	0	0.078		
E-05	Water	PCB	1	PCB 151 (BZ)	2.7	1	2.7	ng/L	C135	C135	LIQ/LIQ,	Total	1668A	0	2.7		
E-07	Water	PCB	1	PCB 151 (BZ)	1.3	1	1.3	ng/L	C135	C135	LIQ/LIQ,	Total	1668A	0	1.3		
E-09	Water	PCB	1	PCB 151 (BZ)	1.9	1	1.9	ng/L	C135	C135	LIQ/LIQ,	Total	1668A	0	1.9		
E-13	Water	PCB	1	PCB 151 (BZ)	4.7	1	4.7	ng/L	B C135	B C135	LIQ/LIQ,	Total	1668A	0	4.7	2.1356	4.7
I-1	Sediment	PCB	1	PCB 151 (BZ)	0.012	1	0.012	ng/g	C135	C135	SOXHLET	Total	1668A	0	0.012		
I-2	Sediment	PCB	1	PCB 151 (BZ)	0.011	1	0.011	ng/g	Q C135	Q C135	SOXHLET	Total	1668A	0	0.011		
I-3	Sediment	PCB	1	PCB 151 (BZ)	0.14	1	0.14	ng/g	C135	C135	SOXHLET	Total	1668A	0	0.14	0.05433	0.14
RB-01-11192012	Water	PCB	1	PCB 151 (BZ)	0.0011	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 152 (BZ)	0.0014	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-03-MID	Water	PCB	1	PCB 152 (BZ)	0.0011	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0	0	0
E-02	Water	PCB	1	PCB 152 (BZ)	0.0023	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
E-05	Water	PCB	1	PCB 152 (BZ)	0.0045	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
E-07	Water	PCB	1	PCB 152 (BZ)	0.0041	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
E-09	Water	PCB	1	PCB 152 (BZ)	0.0037	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
E-13	Water	PCB	1	PCB 152 (BZ)	0.021	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0	0	0
I-1	Sediment	PCB	1	PCB 152 (BZ)	0.00043	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-2	Sediment	PCB	1	PCB 152 (BZ)	0.00056	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-3	Sediment	PCB	1	PCB 152 (BZ)	0.00098	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0	0	0
RB-01-11192012	Water	PCB	1	PCB 152 (BZ)	0.00079	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 153 (BZ)	0.32	1	0.32	ng/L	C	C	LIQ/LIQ,	Total	1668A	0	0.32		
BKG-03-MID	Water	PCB	1	PCB 153 (BZ)	0.38	1	0.38	ng/L	C	C	LIQ/LIQ,	Total	1668A	0	0.38	0.35	0.38
E-02	Water	PCB	1	PCB 153 (BZ)	0.18	1	0.18	ng/L	B C	B C	LIQ/LIQ,	Total	1668A	0	0.18		
E-05	Water	PCB	1	PCB 153 (BZ)	5.9	1	5.9	ng/L	B C	B C	LIQ/LIQ,	Total	1668A	0	5.9		
E-07	Water	PCB	1	PCB 153 (BZ)	2.9	1	2.9	ng/L	B C	B C	LIQ/LIQ,	Total	1668A	0	2.9		
E-09	Water	PCB	1	PCB 153 (BZ)	3	1	3	ng/L	C	C	LIQ/LIQ,	Total	1668A	0	3		
E-13	Water	PCB	1	PCB 153 (BZ)	8.5	1	8.5	ng/L	B C	B C	LIQ/LIQ,	Total	1668A	0	8.5	4.096	8.5
I-1	Sediment	PCB	1	PCB 153 (BZ)	0.034	1	0.034	ng/g	C	C	SOXHLET	Total	1668A	0	0.034		
I-2	Sediment	PCB	1	PCB 153 (BZ)	0.029	1	0.029	ng/g	B C	B C	SOXHLET	Total	1668A	0	0.029		
I-3	Sediment	PCB	1	PCB 153 (BZ)	0.24	1	0.24	ng/g	C	C	SOXHLET	Total	1668A	0	0.24	0.101	0.24

Client Sample ID	Matrix	sort	ion F	Analyte	Val_res	D?	Result	Unit	Qual	Flag	ep Metho	Prep Type	alysis Method	Check	Adj Val	Mean	Max
RB-01-11192012	Water	PCB	1	PCB 153 (BZ)	0.00059	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 154 (BZ)	0.011	1	0.011	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.011		
BKG-03-MID	Water	PCB	1	PCB 154 (BZ)	0.011	1	0.011	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.011	0.011	0.011
E-02	Water	PCB	1	PCB 154 (BZ)	0.0037	1	0.0037	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.0037		
E-05	Water	PCB	1	PCB 154 (BZ)	0.16	1	0.16	ng/L			LIQ/LIQ,	Total	1668A	0	0.16		
E-07	Water	PCB	1	PCB 154 (BZ)	0.052	1	0.052	ng/L	Q	Q	LIQ/LIQ,	Total	1668A	0	0.052		
E-09	Water	PCB	1	PCB 154 (BZ)	0.13	1	0.13	ng/L			LIQ/LIQ,	Total	1668A	0	0.13		
E-13	Water	PCB	1	PCB 154 (BZ)	0.31	1	0.31	ng/L			LIQ/LIQ,	Total	1668A	0	0.31	0.13114	0.31
I-1	Sediment	PCB	1	PCB 154 (BZ)	0.00068	1	0.00068	ng/g	Q J	Q J	SOXHLET	Total	1668A	0	0.00068		
I-2	Sediment	PCB	1	PCB 154 (BZ)	0.00078	1	0.00078	ng/g	Q J	Q J	SOXHLET	Total	1668A	0	0.00078		
I-3	Sediment	PCB	1	PCB 154 (BZ)	0.0098	1	0.0098	ng/g	J	J	SOXHLET	Total	1668A	0	0.0098	0.00375	0.0098
RB-01-11192012	Water	PCB	1	PCB 154 (BZ)	0.00092	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 155 (BZ)	0.0014	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-03-MID	Water	PCB	1	PCB 155 (BZ)	0.0011	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0	0	0
E-02	Water	PCB	1	PCB 155 (BZ)	0.0021	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
E-05	Water	PCB	1	PCB 155 (BZ)	0.0043	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
E-07	Water	PCB	1	PCB 155 (BZ)	0.0039	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
E-09	Water	PCB	1	PCB 155 (BZ)	0.0035	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
E-13	Water	PCB	1	PCB 155 (BZ)	0.02	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0	0	0
I-1	Sediment	PCB	1	PCB 155 (BZ)	0.00041	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-2	Sediment	PCB	1	PCB 155 (BZ)	0.00054	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-3	Sediment	PCB	1	PCB 155 (BZ)	0.00093	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0	0	0
RB-01-11192012	Water	PCB	1	PCB 155 (BZ)	0.00076	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 156 (BZ)	0.034	1	0.034	ng/L	C J	C J	LIQ/LIQ,	Total	1668A	0	0.034		
BKG-03-MID	Water	PCB	1	PCB 156 (BZ)	0.041	1	0.041	ng/L	C	C	LIQ/LIQ,	Total	1668A	0	0.041	0.0375	0.041
E-02	Water	PCB	1	PCB 156 (BZ)	0.015	1	0.015	ng/L	B C J	B C J	LIQ/LIQ,	Total	1668A	0	0.015		
E-05	Water	PCB	1	PCB 156 (BZ)	0.48	1	0.48	ng/L	C	C	LIQ/LIQ,	Total	1668A	0	0.48		
E-07	Water	PCB	1	PCB 156 (BZ)	0.26	1	0.26	ng/L	C	C	LIQ/LIQ,	Total	1668A	0	0.26		
E-09	Water	PCB	1	PCB 156 (BZ)	0.26	1	0.26	ng/L	C	C	LIQ/LIQ,	Total	1668A	0	0.26		
E-13	Water	PCB	1	PCB 156 (BZ)	0.79	1	0.79	ng/L	B C	B C	LIQ/LIQ,	Total	1668A	0	0.79	0.361	0.79
I-1	Sediment	PCB	1	PCB 156 (BZ)	0.0062	1	0.0062	ng/g	C J	C J	SOXHLET	Total	1668A	0	0.0062		
I-2	Sediment	PCB	1	PCB 156 (BZ)	0.003	1	0.003	ng/g	Q B C J	Q B C J	SOXHLET	Total	1668A	0	0.003		
I-3	Sediment	PCB	1	PCB 156 (BZ)	0.021	1	0.021	ng/g	Q C	Q C	SOXHLET	Total	1668A	0	0.021	0.01007	0.021
RB-01-11192012	Water	PCB	1	PCB 156 (BZ)	0.0007	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 157 (BZ)	0.034	1	0.034	ng/L	C156 J	C156 J	LIQ/LIQ,	Total	1668A	0	0.034		
BKG-03-MID	Water	PCB	1	PCB 157 (BZ)	0.041	1	0.041	ng/L	C156	C156	LIQ/LIQ,	Total	1668A	0	0.041	0.0375	0.041
E-02	Water	PCB	1	PCB 157 (BZ)	0.015	1	0.015	ng/L	B C156 J	B C156	LIQ/LIQ,	Total	1668A	0	0.015		
E-05	Water	PCB	1	PCB 157 (BZ)	0.48	1	0.48	ng/L	C156	C156	LIQ/LIQ,	Total	1668A	0	0.48		
E-07	Water	PCB	1	PCB 157 (BZ)	0.26	1	0.26	ng/L	C156	C156	LIQ/LIQ,	Total	1668A	0	0.26		
E-09	Water	PCB	1	PCB 157 (BZ)	0.26	1	0.26	ng/L	C156	C156	LIQ/LIQ,	Total	1668A	0	0.26		
E-13	Water	PCB	1	PCB 157 (BZ)	0.79	1	0.79	ng/L	B C156	B C156	LIQ/LIQ,	Total	1668A	0	0.79	0.361	0.79
I-1	Sediment	PCB	1	PCB 157 (BZ)	0.0062	1	0.0062	ng/g	C156 J	C156 J	SOXHLET	Total	1668A	0	0.0062		
I-2	Sediment	PCB	1	PCB 157 (BZ)	0.003	1	0.003	ng/g	Q B	Q B	SOXHLET	Total	1668A	0	0.003		
I-3	Sediment	PCB	1	PCB 157 (BZ)	0.021	1	0.021	ng/g	Q C156	Q C156	SOXHLET	Total	1668A	0	0.021	0.01007	0.021
RB-01-11192012	Water	PCB	1	PCB 157 (BZ)	0.0007	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 158 (BZ)	0.035	1	0.035	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.035		
BKG-03-MID	Water	PCB	1	PCB 158 (BZ)	0.036	1	0.036	ng/L	J	J	LIQ/LIQ,	Total	1668A	0	0.036	0.0355	0.036
E-02	Water	PCB	1	PCB 158 (BZ)	0.017	1	0.017	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.017		
E-05	Water	PCB	1	PCB 158 (BZ)	0.57	1	0.57	ng/L	B	B	LIQ/LIQ,	Total	1668A	0	0.57		
E-07	Water	PCB	1	PCB 158 (BZ)	0.29	1	0.29	ng/L	B	B	LIQ/LIQ,	Total	1668A	0	0.29		
E-09	Water	PCB	1	PCB 158 (BZ)	0.27	1	0.27	ng/L			LIQ/LIQ,	Total	1668A	0	0.27		
E-13	Water	PCB	1	PCB 158 (BZ)	0.83	1	0.83	ng/L	B	B	LIQ/LIQ,	Total	1668A	0	0.83	0.3954	0.83
I-1	Sediment	PCB	1	PCB 158 (BZ)	0.0053	1	0.0053	ng/g	J	J	SOXHLET	Total	1668A	0	0.0053		
I-2	Sediment	PCB	1	PCB 158 (BZ)	0.0031	1	0.0031	ng/g	J	J	SOXHLET	Total	1668A	0	0.0031		
I-3	Sediment	PCB	1	PCB 158 (BZ)	0.021	1	0.021	ng/g			SOXHLET	Total	1668A	0	0.021	0.0098	0.021
RB-01-11192012	Water	PCB	1	PCB 158 (BZ)	0.00054	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 159 (BZ)	0.0044	1	0.0044	ng/L	J	J	LIQ/LIQ,	Total	1668A	0	0.0044		
BKG-03-MID	Water	PCB	1	PCB 159 (BZ)	0.0034	1	0.0034	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.0034	0.0039	0.0044
E-02	Water	PCB	1	PCB 159 (BZ)	0.0043	1	0.0043	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.0043		
E-05	Water	PCB	1	PCB 159 (BZ)	0.069	1	0.069	ng/L			LIQ/LIQ,	Total	1668A	0	0.069		
E-07	Water	PCB	1	PCB 159 (BZ)	0.039	1	0.039	ng/L			LIQ/LIQ,	Total	1668A	0	0.039		
E-09	Water	PCB	1	PCB 159 (BZ)	0.037	1	0.037	ng/L	J	J	LIQ/LIQ,	Total	1668A	0	0.037		
E-13	Water	PCB	1	PCB 159 (BZ)	0.077	1	0.077	ng/L	Q	Q	LIQ/LIQ,	Total	1668A	0	0.077	0.04526	0.077
I-1	Sediment	PCB	1	PCB 159 (BZ)	0.00033	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-2	Sediment	PCB	1	PCB 159 (BZ)	0.00042	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-3	Sediment	PCB	1	PCB 159 (BZ)	0.0025	1	0.0025	ng/g	Q J	Q J	SOXHLET	Total	1668A	0	0.0025	0.00083	0.0025
RB-01-11192012	Water	PCB	1	PCB 159 (BZ)	0.00057	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 16 (BZ)	0.046	1	0.046	ng/L			LIQ/LIQ,	Total	1668A	0	0.046		
BKG-03-MID	Water	PCB	1	PCB 16 (BZ)	0.055	1	0.055	ng/L			LIQ/LIQ,	Total	1668A	0	0.055	0.0505	0.055
E-02	Water	PCB	1	PCB 16 (BZ)	0.047	1	0.047	ng/L			LIQ/LIQ,	Total	1668A	0	0.047		
E-05	Water	PCB	1	PCB 16 (BZ)	0.73	1	0.73	ng/L			LIQ/LIQ,	Total	1668A	0	0.73		
E-07	Water	PCB	1	PCB 16 (BZ)	0.29	1	0.29	ng/L			LIQ/LIQ,	Total	1668A	0	0.29		
E-09	Water	PCB	1	PCB 16 (BZ)	0.47	1	0.47	ng/L			LIQ/LIQ,	Total	1668A	0	0.47		
E-13	Water	PCB	1	PCB 16 (BZ)	0.77	1	0.77	ng/L	B	B	LIQ/LIQ,	Total	1668A	0	0.77	0.4614	0.77
I-1	Sediment	PCB	1	PCB 16 (BZ)	0.003	1	0.003	ng/g	J	J	SOXHLET	Total	1668A	0	0.003		
I-2	Sediment	PCB	1	PCB 16 (BZ)	0.0023	1	0.0023	ng/g	Q J	Q J	SOXHLET	Total	1668A	0	0.0023		
I-3	Sediment	PCB	1	PCB 16 (BZ)	0.06	1	0.06	ng/g			SOXHLET	Total	1668A	0	0.06	0.02177	0.06
RB-01-11192012	Water	PCB	1	PCB 16 (BZ)	0.001	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 160 (BZ)	0.38	1	0.38	ng/L	C129	C129	LIQ/LIQ,	Total	1668A	0	0.38		
BKG-03-MID	Water	PCB	1	PCB 160 (BZ)	0.43	1	0.43	ng/L	B C129	B C129	LIQ/LIQ,	Total	1668A	0	0.43	0.405	0.43
E-02	Water	PCB	1	PCB 160 (BZ)	0.19	1	0.19	ng/L	B C129	B C129	LIQ/LIQ,	Total	1668A	0	0.19		
E-05	Water	PCB	1	PCB 160 (BZ)	6.5	1	6.5	ng/L	B C129	B C129	LIQ/LIQ,	Total	1668A	0	6.5		
E-07	Water	PCB	1	PCB 160 (BZ)	3.5	1	3.5	ng/L	B C129	B C129	LIQ/LIQ,	Total	1668A	0	3.5		
E-09	Water	PCB	1	PCB 160 (BZ)	3.3	1	3.3	ng/L	C129	C129	LIQ/LIQ,	Total	1668A	0	3.3		
E-13	Water	PCB	1	PCB 160 (BZ)	9.5	1	9.5	ng/L	B C129	B C129	LIQ/LIQ,	Total	1668A	0	9.5	4.598	9.5
I-1	Sediment	PCB	1	PCB 160 (BZ)	0.049	1	0.049	ng/g	C129	C129	SOXHLET	Total	1668A	0	0.049		
I-2	Sediment	PCB	1	PCB 160 (BZ)	0.032	1	0.032	ng/g	B C129	B C129	SOXHLET	Total	1668A	0	0.032		
I-3	Sediment	PCB	1	PCB 160 (BZ)	0.26	1	0.26	ng/g	C129	C129	SOXHLET	Total	1668A	0	0.26	0.11367	0.26
RB-01-11192012	Water	PCB	1	PCB 160 (BZ)	0.0013	1	0.0013	ng/L	Q B	Q B	LIQ/LIQ,	Total	1668A	0	0.0013		
BKG-02-EM	Water	PCB	1	PCB 161 (BZ)	0.001	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-03-MID	Water	PCB	1	PCB 161 (BZ)	0.00078	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0	0	0
E-02	Water	PCB	1	PCB 161 (BZ)	0.002	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
E-05	Water	PCB	1	PCB 161 (BZ)	0.0036	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
E-07	Water	PCB	1	PCB 161 (BZ)	0.0032	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
E-09	Water	PCB	1	PCB 161 (BZ)	0.0024	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
E-13	Water	PCB	1	PCB 161 (BZ)	0.013	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0	0	0
I-1	Sediment	PCB	1	PCB 161 (BZ)	0.00033	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-2	Sediment	PCB	1	PCB 161 (BZ)	0.00042	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-3	Sediment	PCB	1	PCB 161 (BZ)	0.00072	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0	0	0
RB-01-11192012	Water	PCB	1	PCB 161 (BZ)	0.00057	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 162 (BZ)	0.00099	1	0.00099	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.00099		
BKG-03-MID	Water	PCB	1	PCB 162 (BZ)	0.00078	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0	0.0005	0.00099
E-02	Water	PCB	1	PCB 162 (BZ)	0.002	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
E-05	Water	PCB	1	PCB 162 (BZ)	0.021	1	0.021	ng/L	J	J	LIQ/LIQ,	Total	1668A	0	0.021		
E-07	Water	PCB	1	PCB 162 (BZ)	0.013	1	0.013	ng/L	J	J	LIQ/LIQ,	Total	1668A	0	0.013		
E-09	Water	PCB	1	PCB 162 (BZ)	0.0062	1	0.0062	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.0062		
E-13	Water	PCB	1	PCB 162 (BZ)	0.021	1	0.021	ng/L	J	J	LIQ/LIQ,	Total	1668A	0	0.021	0.01224	0.021
I-1	Sediment	PCB	1	PCB 162 (BZ)	0.00033	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-2	Sediment	PCB	1	PCB 162 (BZ)	0.00042	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-3	Sediment	PCB	1	PCB 162 (BZ)	0.00072	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0	0	0
RB-01-11192012	Water	PCB	1	PCB 162 (BZ)	0.00057	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 163 (BZ)	0.38	1	0.38	ng/L	C129	C129	LIQ/LIQ,	Total	1668A	0	0.38		
BKG-03-MID	Water	PCB	1	PCB 163 (BZ)	0.43	1	0.43	ng/L	B C129	B C129	LIQ/LIQ,	Total	1668A	0	0.43	0.405	0.43
E-02	Water	PCB	1	PCB 163 (BZ)	0.19	1	0.19	ng/L	B C129	B C129	LIQ/LIQ,	Total	1668A	0	0.19		
E-05	Water	PCB	1	PCB 163 (BZ)	6.5	1	6.5	ng/L	B C129	B C129	LIQ/LIQ,	Total	1668A	0	6.5		
E-07	Water	PCB	1	PCB 163 (BZ)	3.5	1	3.5	ng/L	B C129	B C129	LIQ/LIQ,	Total	1668A	0	3.5		
E-09	Water	PCB	1	PCB 163 (BZ)	3.3	1	3.3	ng/L	C129	C129	LIQ/LIQ,	Total	1668A	0	3.3		
E-13	Water	PCB	1	PCB 163 (BZ)	9.5	1	9.5	ng/L	B C129	B C129	LIQ/LIQ,	Total	1668A	0	9.5	4.598	9.5
I-1	Sediment	PCB	1	PCB 163 (BZ)	0.049	1	0.049	ng/g	C129	C129	SOXHLET	Total	1668A	0	0.049		
I-2	Sediment	PCB	1	PCB 163 (BZ)	0.032	1	0.032	ng/g	B C129	B C129	SOXHLET	Total	1668A	0	0.032		
I-3	Sediment	PCB	1	PCB 163 (BZ)	0.26	1	0.26	ng/g	C129	C129	SOXHLET	Total	1668A	0	0.26	0.11367	0.26
RB-01-11192012	Water	PCB	1	PCB 163 (BZ)	0.0013	1	0.0013	ng/L	Q B	Q B	LIQ/LIQ,	Total	1668A	0	0.0013		

Client Sample ID	Matrix	sort	ion F	Analyte	Val_res	D?	Result	Unit	Qual	Flag	ep Metho	Prep Type	alysis Method	Check	Adj Val	Mean	Max
BKG-02-EM	Water	PCB	1	PCB 164 (BZ)	0.028	1	0.028	ng/L	J	J	LIQ/LIQ,	Total	1668A	0	0.028		
BKG-03-MID	Water	PCB	1	PCB 164 (BZ)	0.032	1	0.032	ng/L	J	J	LIQ/LIQ,	Total	1668A	0	0.032	0.03	0.032
E-02	Water	PCB	1	PCB 164 (BZ)	0.015	1	0.015	ng/L	J	J	LIQ/LIQ,	Total	1668A	0	0.015		
E-05	Water	PCB	1	PCB 164 (BZ)	0.46	1	0.46	ng/L			LIQ/LIQ,	Total	1668A	0	0.46		
E-07	Water	PCB	1	PCB 164 (BZ)	0.25	1	0.25	ng/L			LIQ/LIQ,	Total	1668A	0	0.25		
E-09	Water	PCB	1	PCB 164 (BZ)	0.24	1	0.24	ng/L			LIQ/LIQ,	Total	1668A	0	0.24		
E-13	Water	PCB	1	PCB 164 (BZ)	0.72	1	0.72	ng/L	B	B	LIQ/LIQ,	Total	1668A	0	0.72	0.337	0.72
I-1	Sediment	PCB	1	PCB 164 (BZ)	0.0034	1	0.0034	ng/g	J	J	SOXHLET	Total	1668A	0	0.0034		
I-2	Sediment	PCB	1	PCB 164 (BZ)	0.0015	1	0.0015	ng/g	Q J	Q J	SOXHLET	Total	1668A	0	0.0015		
I-3	Sediment	PCB	1	PCB 164 (BZ)	0.022	1	0.022	ng/g			SOXHLET	Total	1668A	0	0.022	0.00897	0.022
RB-01-11192012	Water	PCB	1	PCB 164 (BZ)	0.0006	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 165 (BZ)	0.0011	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-03-MID	Water	PCB	1	PCB 165 (BZ)	0.00086	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0	0	0
E-02	Water	PCB	1	PCB 165 (BZ)	0.0022	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
E-05	Water	PCB	1	PCB 165 (BZ)	0.004	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
E-07	Water	PCB	1	PCB 165 (BZ)	0.0035	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
E-09	Water	PCB	1	PCB 165 (BZ)	0.012	1	0.012	ng/L	J	J	LIQ/LIQ,	Total	1668A	0	0.012		
E-13	Water	PCB	1	PCB 165 (BZ)	0.014	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0	0.0024	0.012
I-1	Sediment	PCB	1	PCB 165 (BZ)	0.00036	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-2	Sediment	PCB	1	PCB 165 (BZ)	0.00046	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-3	Sediment	PCB	1	PCB 165 (BZ)	0.0008	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0	0	0
RB-01-11192012	Water	PCB	1	PCB 165 (BZ)	0.00063	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 166 (BZ)	0.051	1	0.051	ng/L	C128	C128	LIQ/LIQ,	Total	1668A	0	0.051		
BKG-03-MID	Water	PCB	1	PCB 166 (BZ)	0.054	1	0.054	ng/L	C128	C128	LIQ/LIQ,	Total	1668A	0	0.054	0.0525	0.054
E-02	Water	PCB	1	PCB 166 (BZ)	0.025	1	0.025	ng/L	C128 J	C128 J	LIQ/LIQ,	Total	1668A	0	0.025		
E-05	Water	PCB	1	PCB 166 (BZ)	0.79	1	0.79	ng/L	C128	C128	LIQ/LIQ,	Total	1668A	0	0.79		
E-07	Water	PCB	1	PCB 166 (BZ)	0.45	1	0.45	ng/L	C128	C128	LIQ/LIQ,	Total	1668A	0	0.45		
E-09	Water	PCB	1	PCB 166 (BZ)	0.4	1	0.4	ng/L	C128	C128	LIQ/LIQ,	Total	1668A	0	0.4		
E-13	Water	PCB	1	PCB 166 (BZ)	1.1	1	1.1	ng/L	B C128	B C128	LIQ/LIQ,	Total	1668A	0	1.1	0.553	1.1
I-1	Sediment	PCB	1	PCB 166 (BZ)	0.0076	1	0.0076	ng/g	C128 J	C128 J	SOXHLET	Total	1668A	0	0.0076		
I-2	Sediment	PCB	1	PCB 166 (BZ)	0.0044	1	0.0044	ng/g	B C128 J	B C128	SOXHLET	Total	1668A	0	0.0044		
I-3	Sediment	PCB	1	PCB 166 (BZ)	0.034	1	0.034	ng/g	C128	C128	SOXHLET	Total	1668A	0	0.034	0.01533	0.034
RB-01-11192012	Water	PCB	1	PCB 166 (BZ)	0.00066	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 167 (BZ)	0.011	1	0.011	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.011		
BKG-03-MID	Water	PCB	1	PCB 167 (BZ)	0.013	1	0.013	ng/L	J	J	LIQ/LIQ,	Total	1668A	0	0.013	0.012	0.013
E-02	Water	PCB	1	PCB 167 (BZ)	0.006	1	0.006	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.006		
E-05	Water	PCB	1	PCB 167 (BZ)	0.17	1	0.17	ng/L			LIQ/LIQ,	Total	1668A	0	0.17		
E-07	Water	PCB	1	PCB 167 (BZ)	0.089	1	0.089	ng/L			LIQ/LIQ,	Total	1668A	0	0.089		
E-09	Water	PCB	1	PCB 167 (BZ)	0.088	1	0.088	ng/L			LIQ/LIQ,	Total	1668A	0	0.088		
E-13	Water	PCB	1	PCB 167 (BZ)	0.23	1	0.23	ng/L	B	B	LIQ/LIQ,	Total	1668A	0	0.23	0.1166	0.23
I-1	Sediment	PCB	1	PCB 167 (BZ)	0.0017	1	0.0017	ng/g	Q J	Q J	SOXHLET	Total	1668A	0	0.0017		
I-2	Sediment	PCB	1	PCB 167 (BZ)	0.00076	1	0.00076	ng/g	Q J	Q J	SOXHLET	Total	1668A	0	0.00076		
I-3	Sediment	PCB	1	PCB 167 (BZ)	0.0075	1	0.0075	ng/g	Q J	Q J	SOXHLET	Total	1668A	0	0.0075	0.00332	0.0075
RB-01-11192012	Water	PCB	1	PCB 167 (BZ)	0.00048	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 168 (BZ)	0.32	1	0.32	ng/L	C153	C153	LIQ/LIQ,	Total	1668A	0	0.32		
BKG-03-MID	Water	PCB	1	PCB 168 (BZ)	0.38	1	0.38	ng/L	C153	C153	LIQ/LIQ,	Total	1668A	0	0.38	0.35	0.38
E-02	Water	PCB	1	PCB 168 (BZ)	0.18	1	0.18	ng/L	B C153	B C153	LIQ/LIQ,	Total	1668A	0	0.18		
E-05	Water	PCB	1	PCB 168 (BZ)	5.9	1	5.9	ng/L	B C153	B C153	LIQ/LIQ,	Total	1668A	0	5.9		
E-07	Water	PCB	1	PCB 168 (BZ)	2.9	1	2.9	ng/L	B C153	B C153	LIQ/LIQ,	Total	1668A	0	2.9		
E-09	Water	PCB	1	PCB 168 (BZ)	3	1	3	ng/L	C153	C153	LIQ/LIQ,	Total	1668A	0	3		
E-13	Water	PCB	1	PCB 168 (BZ)	8.5	1	8.5	ng/L	B C153	B C153	LIQ/LIQ,	Total	1668A	0	8.5	4.096	8.5
I-1	Sediment	PCB	1	PCB 168 (BZ)	0.034	1	0.034	ng/g	C153	C153	SOXHLET	Total	1668A	0	0.034		
I-2	Sediment	PCB	1	PCB 168 (BZ)	0.029	1	0.029	ng/g	B C153	B C153	SOXHLET	Total	1668A	0	0.029		
I-3	Sediment	PCB	1	PCB 168 (BZ)	0.24	1	0.24	ng/g	C153	C153	SOXHLET	Total	1668A	0	0.24	0.101	0.24
RB-01-11192012	Water	PCB	1	PCB 168 (BZ)	0.00059	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 169 (BZ)	0.00076	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-03-MID	Water	PCB	1	PCB 169 (BZ)	0.00057	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0	0	0
E-02	Water	PCB	1	PCB 169 (BZ)	0.0016	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
E-05	Water	PCB	1	PCB 169 (BZ)	0.017	1	0.017	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.017		
E-07	Water	PCB	1	PCB 169 (BZ)	0.011	1	0.011	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.011		
E-09	Water	PCB	1	PCB 169 (BZ)	0.0018	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
E-13	Water	PCB	1	PCB 169 (BZ)	0.0097	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0	0.0056	0.017
I-1	Sediment	PCB	1	PCB 169 (BZ)	0.00025	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-2	Sediment	PCB	1	PCB 169 (BZ)	0.00032	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-3	Sediment	PCB	1	PCB 169 (BZ)	0.00054	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0	0	0
RB-01-11192012	Water	PCB	1	PCB 169 (BZ)	0.00041	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 17 (BZ)	0.055	1	0.055	ng/L			LIQ/LIQ,	Total	1668A	0	0.055		
BKG-03-MID	Water	PCB	1	PCB 17 (BZ)	0.081	1	0.081	ng/L			LIQ/LIQ,	Total	1668A	0	0.081	0.068	0.081
E-02	Water	PCB	1	PCB 17 (BZ)	0.041	1	0.041	ng/L	J	J	LIQ/LIQ,	Total	1668A	0	0.041		
E-05	Water	PCB	1	PCB 17 (BZ)	0.91	1	0.91	ng/L			LIQ/LIQ,	Total	1668A	0	0.91		
E-07	Water	PCB	1	PCB 17 (BZ)	0.39	1	0.39	ng/L			LIQ/LIQ,	Total	1668A	0	0.39		
E-09	Water	PCB	1	PCB 17 (BZ)	0.57	1	0.57	ng/L			LIQ/LIQ,	Total	1668A	0	0.57		
E-13	Water	PCB	1	PCB 17 (BZ)	1.3	1	1.3	ng/L	B	B	LIQ/LIQ,	Total	1668A	0	1.3	0.6422	1.3
I-1	Sediment	PCB	1	PCB 17 (BZ)	0.0032	1	0.0032	ng/g	Q J	Q J	SOXHLET	Total	1668A	0	0.0032		
I-2	Sediment	PCB	1	PCB 17 (BZ)	0.0033	1	0.0033	ng/g	Q J	Q J	SOXHLET	Total	1668A	0	0.0033		
I-3	Sediment	PCB	1	PCB 17 (BZ)	0.087	1	0.087	ng/g			SOXHLET	Total	1668A	0	0.087	0.03117	0.087
RB-01-11192012	Water	PCB	1	PCB 17 (BZ)	0.00083	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 170 (BZ)	0.11	1	0.11	ng/L			LIQ/LIQ,	Total	1668A	0	0.11		
BKG-03-MID	Water	PCB	1	PCB 170 (BZ)	0.12	1	0.12	ng/L			LIQ/LIQ,	Total	1668A	0	0.12	0.115	0.12
E-02	Water	PCB	1	PCB 170 (BZ)	0.057	1	0.057	ng/L	Q	Q	LIQ/LIQ,	Total	1668A	0	0.057		
E-05	Water	PCB	1	PCB 170 (BZ)	1.6	1	1.6	ng/L			LIQ/LIQ,	Total	1668A	0	1.6		
E-07	Water	PCB	1	PCB 170 (BZ)	0.7	1	0.7	ng/L			LIQ/LIQ,	Total	1668A	0	0.7		
E-09	Water	PCB	1	PCB 170 (BZ)	0.96	1	0.96	ng/L			LIQ/LIQ,	Total	1668A	0	0.96		
E-13	Water	PCB	1	PCB 170 (BZ)	2.3	1	2.3	ng/L	B	B	LIQ/LIQ,	Total	1668A	0	2.3	1.1234	2.3
I-1	Sediment	PCB	1	PCB 170 (BZ)	0.0071	1	0.0071	ng/g	J	J	SOXHLET	Total	1668A	0	0.0071		
I-2	Sediment	PCB	1	PCB 170 (BZ)	0.0074	1	0.0074	ng/g	Q B J	Q B J	SOXHLET	Total	1668A	0	0.0074		
I-3	Sediment	PCB	1	PCB 170 (BZ)	0.073	1	0.073	ng/g			SOXHLET	Total	1668A	0	0.073	0.02917	0.073
RB-01-11192012	Water	PCB	1	PCB 170 (BZ)	0.0008	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 171 (BZ)	0.037	1	0.037	ng/L	C J	C J	LIQ/LIQ,	Total	1668A	0	0.037		
BKG-03-MID	Water	PCB	1	PCB 171 (BZ)	0.043	1	0.043	ng/L	C	C	LIQ/LIQ,	Total	1668A	0	0.043	0.04	0.043
E-02	Water	PCB	1	PCB 171 (BZ)	0.013	1	0.013	ng/L	Q C J	Q C J	LIQ/LIQ,	Total	1668A	0	0.013		
E-05	Water	PCB	1	PCB 171 (BZ)	0.48	1	0.48	ng/L	C	C	LIQ/LIQ,	Total	1668A	0	0.48		
E-07	Water	PCB	1	PCB 171 (BZ)	0.24	1	0.24	ng/L	C	C	LIQ/LIQ,	Total	1668A	0	0.24		
E-09	Water	PCB	1	PCB 171 (BZ)	0.32	1	0.32	ng/L	C	C	LIQ/LIQ,	Total	1668A	0	0.32		
E-13	Water	PCB	1	PCB 171 (BZ)	0.87	1	0.87	ng/L	C	C	LIQ/LIQ,	Total	1668A	0	0.87	0.3846	0.87
I-1	Sediment	PCB	1	PCB 171 (BZ)	0.0022	1	0.0022	ng/g	Q C J	Q C J	SOXHLET	Total	1668A	0	0.0022		
I-2	Sediment	PCB	1	PCB 171 (BZ)	0.0023	1	0.0023	ng/g	Q C J	Q C J	SOXHLET	Total	1668A	0	0.0023		
I-3	Sediment	PCB	1	PCB 171 (BZ)	0.018	1	0.018	ng/g	Q C	Q C	SOXHLET	Total	1668A	0	0.018	0.0075	0.018
RB-01-11192012	Water	PCB	1	PCB 171 (BZ)	0.00084	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 172 (BZ)	0.017	1	0.017	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.017		
BKG-03-MID	Water	PCB	1	PCB 172 (BZ)	0.02	1	0.02	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.02	0.0185	0.02
E-02	Water	PCB	1	PCB 172 (BZ)	0.0094	1	0.0094	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.0094		
E-05	Water	PCB	1	PCB 172 (BZ)	0.26	1	0.26	ng/L			LIQ/LIQ,	Total	1668A	0	0.26		
E-07	Water	PCB	1	PCB 172 (BZ)	0.13	1	0.13	ng/L			LIQ/LIQ,	Total	1668A	0	0.13		
E-09	Water	PCB	1	PCB 172 (BZ)	0.17	1	0.17	ng/L			LIQ/LIQ,	Total	1668A	0	0.17		
E-13	Water	PCB	1	PCB 172 (BZ)	0.44	1	0.44	ng/L			LIQ/LIQ,	Total	1668A	0	0.44	0.20188	0.44
I-1	Sediment	PCB	1	PCB 172 (BZ)	0.001	1	0.001	ng/g	Q J	Q J	SOXHLET	Total	1668A	0	0.001		
I-2	Sediment	PCB	1	PCB 172 (BZ)	0.0005	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-3	Sediment	PCB	1	PCB 172 (BZ)	0.011	1	0.011	ng/g	Q	Q	SOXHLET	Total	1668A	0	0.011	0.004	0.011
RB-01-11192012	Water	PCB	1	PCB 172 (BZ)	0.00083	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 173 (BZ)	0.037	1	0.037	ng/L	C171 J	C171 J	LIQ/LIQ,	Total	1668A	0	0.037		
BKG-03-MID	Water	PCB	1	PCB 173 (BZ)	0.043	1	0.043	ng/L	C171	C171	LIQ/LIQ,	Total	1668A	0	0.043	0.04	0.043
E-02	Water	PCB	1	PCB 173 (BZ)	0.013	1	0.013	ng/L	Q C171	Q C171	LIQ/LIQ,	Total	1668A	0	0.013		
E-05	Water	PCB	1	PCB 173 (BZ)	0.48	1	0.48	ng/L	C171	C171	LIQ/LIQ,	Total	1668A	0	0.48		
E-07	Water	PCB	1	PCB 173 (BZ)	0.24	1	0.24	ng/L	C171	C171	LIQ/LIQ,	Total	1668A	0	0.24		
E-09	Water	PCB	1	PCB 173 (BZ)	0.32	1	0.32	ng/L	C171	C171	LIQ/LIQ,	Total	1668A	0	0.32		
E-13	Water	PCB	1	PCB 173 (BZ)	0.87	1	0.87	ng/L	C171	C171	LIQ/LIQ,	Total	1668A	0	0.87	0.3846	0.87
I-1	Sediment	PCB	1	PCB 173 (BZ)	0.0022	1	0.0022	ng/g	Q C171	Q C171	SOXHLET	Total	1668A	0	0.0022		
I-2	Sediment	PCB	1	PCB 173 (BZ)	0.0023	1	0.0023	ng/g	Q C171	Q C171	SOXHLET	Total	1668A	0	0.0023		
I-3	Sediment	PCB	1	PCB 173 (BZ)	0.018	1	0.018	ng/g	Q C171	Q C171	SOXHLET	Total	1668A	0	0.018	0.0075	0.018
RB-01-11192012	Water	PCB	1	PCB 173 (BZ)	0.00084	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 174 (BZ)	0.12	1	0.12	ng/L			LIQ/LIQ,	Total	1668A	0	0.12		

Client Sample ID	Matrix	sort	ion F	Analyte	Val_res	D?	Result	Unit	Qual	Flag	ep Metho	Prep Type	alysis Method	Check	Adj Val	Mean	Max
BKG-03-MID	Water	PCB	1	PCB 174 (BZ)	0.13	1	0.13	ng/L			LIQ/LIQ,	Total	1668A	0	0.13	0.125	0.13
E-02	Water	PCB	1	PCB 174 (BZ)	0.057	1	0.057	ng/L			LIQ/LIQ,	Total	1668A	0	0.057		
E-05	Water	PCB	1	PCB 174 (BZ)	1.9	1	1.9	ng/L			LIQ/LIQ,	Total	1668A	0	1.9		
E-07	Water	PCB	1	PCB 174 (BZ)	0.87	1	0.87	ng/L			LIQ/LIQ,	Total	1668A	0	0.87		
E-09	Water	PCB	1	PCB 174 (BZ)	1.1	1	1.1	ng/L			LIQ/LIQ,	Total	1668A	0	1.1		
E-13	Water	PCB	1	PCB 174 (BZ)	2.9	1	2.9	ng/L	B	B	LIQ/LIQ,	Total	1668A	0	2.9	1.3654	2.9
I-1	Sediment	PCB	1	PCB 174 (BZ)	0.006	1	0.006	ng/g	Q J	Q J	SOXHLET	Total	1668A	0	0.006		
I-2	Sediment	PCB	1	PCB 174 (BZ)	0.0095	1	0.0095	ng/g	B J	B J	SOXHLET	Total	1668A	0	0.0095		
I-3	Sediment	PCB	1	PCB 174 (BZ)	0.087	1	0.087	ng/g			SOXHLET	Total	1668A	0	0.087	0.03417	0.087
RB-01-11192012	Water	PCB	1	PCB 174 (BZ)	0.00078	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 175 (BZ)	0.0056	1	0.0056	ng/L	J	J	LIQ/LIQ,	Total	1668A	0	0.0056		
BKG-03-MID	Water	PCB	1	PCB 175 (BZ)	0.0049	1	0.0049	ng/L	J	J	LIQ/LIQ,	Total	1668A	0	0.0049	0.00525	0.0056
E-02	Water	PCB	1	PCB 175 (BZ)	0.0025	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
E-05	Water	PCB	1	PCB 175 (BZ)	0.055	1	0.055	ng/L	Q	Q	LIQ/LIQ,	Total	1668A	0	0.055		
E-07	Water	PCB	1	PCB 175 (BZ)	0.021	1	0.021	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.021		
E-09	Water	PCB	1	PCB 175 (BZ)	0.042	1	0.042	ng/L			LIQ/LIQ,	Total	1668A	0	0.042		
E-13	Water	PCB	1	PCB 175 (BZ)	0.17	1	0.17	ng/L			LIQ/LIQ,	Total	1668A	0	0.17	0.0576	0.17
I-1	Sediment	PCB	1	PCB 175 (BZ)	0.00034	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-2	Sediment	PCB	1	PCB 175 (BZ)	0.00045	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-3	Sediment	PCB	1	PCB 175 (BZ)	0.0033	1	0.0033	ng/g	J	J	SOXHLET	Total	1668A	0	0.0033	0.0011	0.0033
RB-01-11192012	Water	PCB	1	PCB 175 (BZ)	0.00075	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 176 (BZ)	0.017	1	0.017	ng/L	J	J	LIQ/LIQ,	Total	1668A	0	0.017		
BKG-03-MID	Water	PCB	1	PCB 176 (BZ)	0.017	1	0.017	ng/L	J	J	LIQ/LIQ,	Total	1668A	0	0.017	0.017	0.017
E-02	Water	PCB	1	PCB 176 (BZ)	0.0063	1	0.0063	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.0063		
E-05	Water	PCB	1	PCB 176 (BZ)	0.25	1	0.25	ng/L			LIQ/LIQ,	Total	1668A	0	0.25		
E-07	Water	PCB	1	PCB 176 (BZ)	0.1	1	0.1	ng/L	Q	Q	LIQ/LIQ,	Total	1668A	0	0.1		
E-09	Water	PCB	1	PCB 176 (BZ)	0.14	1	0.14	ng/L			LIQ/LIQ,	Total	1668A	0	0.14		
E-13	Water	PCB	1	PCB 176 (BZ)	0.38	1	0.38	ng/L			LIQ/LIQ,	Total	1668A	0	0.38	0.17526	0.38
I-1	Sediment	PCB	1	PCB 176 (BZ)	0.001	1	0.001	ng/g	J	J	SOXHLET	Total	1668A	0	0.001		
I-2	Sediment	PCB	1	PCB 176 (BZ)	0.0013	1	0.0013	ng/g	Q J	Q J	SOXHLET	Total	1668A	0	0.0013		
I-3	Sediment	PCB	1	PCB 176 (BZ)	0.01	1	0.01	ng/g			SOXHLET	Total	1668A	0	0.01	0.0041	0.01
RB-01-11192012	Water	PCB	1	PCB 176 (BZ)	0.00057	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 177 (BZ)	0.081	1	0.081	ng/L			LIQ/LIQ,	Total	1668A	0	0.081		
BKG-03-MID	Water	PCB	1	PCB 177 (BZ)	0.078	1	0.078	ng/L			LIQ/LIQ,	Total	1668A	0	0.078	0.0795	0.081
E-02	Water	PCB	1	PCB 177 (BZ)	0.03	1	0.03	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.03		
E-05	Water	PCB	1	PCB 177 (BZ)	1.1	1	1.1	ng/L			LIQ/LIQ,	Total	1668A	0	1.1		
E-07	Water	PCB	1	PCB 177 (BZ)	0.49	1	0.49	ng/L			LIQ/LIQ,	Total	1668A	0	0.49		
E-09	Water	PCB	1	PCB 177 (BZ)	0.68	1	0.68	ng/L			LIQ/LIQ,	Total	1668A	0	0.68		
E-13	Water	PCB	1	PCB 177 (BZ)	1.7	1	1.7	ng/L			LIQ/LIQ,	Total	1668A	0	1.7	0.8	1.7
I-1	Sediment	PCB	1	PCB 177 (BZ)	0.0037	1	0.0037	ng/g	J	J	SOXHLET	Total	1668A	0	0.0037		
I-2	Sediment	PCB	1	PCB 177 (BZ)	0.0058	1	0.0058	ng/g	J	J	SOXHLET	Total	1668A	0	0.0058		
I-3	Sediment	PCB	1	PCB 177 (BZ)	0.051	1	0.051	ng/g			SOXHLET	Total	1668A	0	0.051	0.02017	0.051
RB-01-11192012	Water	PCB	1	PCB 177 (BZ)	0.0008	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 178 (BZ)	0.037	1	0.037	ng/L	J	J	LIQ/LIQ,	Total	1668A	0	0.037		
BKG-03-MID	Water	PCB	1	PCB 178 (BZ)	0.033	1	0.033	ng/L	J	J	LIQ/LIQ,	Total	1668A	0	0.033	0.035	0.037
E-02	Water	PCB	1	PCB 178 (BZ)	0.019	1	0.019	ng/L	J	J	LIQ/LIQ,	Total	1668A	0	0.019		
E-05	Water	PCB	1	PCB 178 (BZ)	0.41	1	0.41	ng/L			LIQ/LIQ,	Total	1668A	0	0.41		
E-07	Water	PCB	1	PCB 178 (BZ)	0.19	1	0.19	ng/L			LIQ/LIQ,	Total	1668A	0	0.19		
E-09	Water	PCB	1	PCB 178 (BZ)	0.27	1	0.27	ng/L			LIQ/LIQ,	Total	1668A	0	0.27		
E-13	Water	PCB	1	PCB 178 (BZ)	0.74	1	0.74	ng/L			LIQ/LIQ,	Total	1668A	0	0.74	0.3258	0.74
I-1	Sediment	PCB	1	PCB 178 (BZ)	0.0013	1	0.0013	ng/g	Q J	Q J	SOXHLET	Total	1668A	0	0.0013		
I-2	Sediment	PCB	1	PCB 178 (BZ)	0.0029	1	0.0029	ng/g	Q J	Q J	SOXHLET	Total	1668A	0	0.0029		
I-3	Sediment	PCB	1	PCB 178 (BZ)	0.019	1	0.019	ng/g			SOXHLET	Total	1668A	0	0.019	0.00773	0.019
RB-01-11192012	Water	PCB	1	PCB 178 (BZ)	0.00081	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 179 (BZ)	0.063	1	0.063	ng/L			LIQ/LIQ,	Total	1668A	0	0.063		
BKG-03-MID	Water	PCB	1	PCB 179 (BZ)	0.062	1	0.062	ng/L			LIQ/LIQ,	Total	1668A	0	0.062	0.0625	0.063
E-02	Water	PCB	1	PCB 179 (BZ)	0.028	1	0.028	ng/L	J	J	LIQ/LIQ,	Total	1668A	0	0.028		
E-05	Water	PCB	1	PCB 179 (BZ)	0.84	1	0.84	ng/L			LIQ/LIQ,	Total	1668A	0	0.84		
E-07	Water	PCB	1	PCB 179 (BZ)	0.38	1	0.38	ng/L			LIQ/LIQ,	Total	1668A	0	0.38		
E-09	Water	PCB	1	PCB 179 (BZ)	0.59	1	0.59	ng/L			LIQ/LIQ,	Total	1668A	0	0.59		
E-13	Water	PCB	1	PCB 179 (BZ)	1.5	1	1.5	ng/L			LIQ/LIQ,	Total	1668A	0	1.5	0.6676	1.5
I-1	Sediment	PCB	1	PCB 179 (BZ)	0.0025	1	0.0025	ng/g	Q J	Q J	SOXHLET	Total	1668A	0	0.0025		
I-2	Sediment	PCB	1	PCB 179 (BZ)	0.005	1	0.005	ng/g	B J	B J	SOXHLET	Total	1668A	0	0.005		
I-3	Sediment	PCB	1	PCB 179 (BZ)	0.042	1	0.042	ng/g			SOXHLET	Total	1668A	0	0.042	0.0165	0.042
RB-01-11192012	Water	PCB	1	PCB 179 (BZ)	0.0006	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 18 (BZ)	0.1	1	0.1	ng/L	B C	B C	LIQ/LIQ,	Total	1668A	0	0.1		
BKG-03-MID	Water	PCB	1	PCB 18 (BZ)	0.16	1	0.16	ng/L	B C	B C	LIQ/LIQ,	Total	1668A	0	0.16	0.13	0.16
E-02	Water	PCB	1	PCB 18 (BZ)	0.11	1	0.11	ng/L	B C	B C	LIQ/LIQ,	Total	1668A	0	0.11		
E-05	Water	PCB	1	PCB 18 (BZ)	2	1	2	ng/L	C	C	LIQ/LIQ,	Total	1668A	0	2		
E-07	Water	PCB	1	PCB 18 (BZ)	0.83	1	0.83	ng/L	C	C	LIQ/LIQ,	Total	1668A	0	0.83		
E-09	Water	PCB	1	PCB 18 (BZ)	1.2	1	1.2	ng/L	B C	B C	LIQ/LIQ,	Total	1668A	0	1.2		
E-13	Water	PCB	1	PCB 18 (BZ)	2.6	1	2.6	ng/L	B C	B C	LIQ/LIQ,	Total	1668A	0	2.6	1.348	2.6
I-1	Sediment	PCB	1	PCB 18 (BZ)	0.0077	1	0.0077	ng/g	C J	C J	SOXHLET	Total	1668A	0	0.0077		
I-2	Sediment	PCB	1	PCB 18 (BZ)	0.006	1	0.006	ng/g	Q B C J	Q B C J	SOXHLET	Total	1668A	0	0.006		
I-3	Sediment	PCB	1	PCB 18 (BZ)	0.18	1	0.18	ng/g	C	C	SOXHLET	Total	1668A	0	0.18	0.06457	0.18
RB-01-11192012	Water	PCB	1	PCB 18 (BZ)	0.00074	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 180 (BZ)	0.26	1	0.26	ng/L	C	C	LIQ/LIQ,	Total	1668A	0	0.26		
BKG-03-MID	Water	PCB	1	PCB 180 (BZ)	0.26	1	0.26	ng/L	C	C	LIQ/LIQ,	Total	1668A	0	0.26	0.26	0.26
E-02	Water	PCB	1	PCB 180 (BZ)	0.12	1	0.12	ng/L	B C	B C	LIQ/LIQ,	Total	1668A	0	0.12		
E-05	Water	PCB	1	PCB 180 (BZ)	3.5	1	3.5	ng/L	B C	B C	LIQ/LIQ,	Total	1668A	0	3.5		
E-07	Water	PCB	1	PCB 180 (BZ)	1.7	1	1.7	ng/L	B C	B C	LIQ/LIQ,	Total	1668A	0	1.7		
E-09	Water	PCB	1	PCB 180 (BZ)	2.2	1	2.2	ng/L	C	C	LIQ/LIQ,	Total	1668A	0	2.2		
E-13	Water	PCB	1	PCB 180 (BZ)	5.6	1	5.6	ng/L	B C	B C	LIQ/LIQ,	Total	1668A	0	5.6	2.624	5.6
I-1	Sediment	PCB	1	PCB 180 (BZ)	0.015	1	0.015	ng/g	B C	B C	SOXHLET	Total	1668A	0	0.015		
I-2	Sediment	PCB	1	PCB 180 (BZ)	0.021	1	0.021	ng/g	B C	B C	SOXHLET	Total	1668A	0	0.021		
I-3	Sediment	PCB	1	PCB 180 (BZ)	0.16	1	0.16	ng/g	C	C	SOXHLET	Total	1668A	0	0.16	0.06533	0.16
RB-01-11192012	Water	PCB	1	PCB 180 (BZ)	0.00063	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 181 (BZ)	0.0015	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-03-MID	Water	PCB	1	PCB 181 (BZ)	0.00092	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0	0	0
E-02	Water	PCB	1	PCB 181 (BZ)	0.0025	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
E-05	Water	PCB	1	PCB 181 (BZ)	0.0083	1	0.0083	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.0083		
E-07	Water	PCB	1	PCB 181 (BZ)	0.0036	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
E-09	Water	PCB	1	PCB 181 (BZ)	0.0031	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
E-13	Water	PCB	1	PCB 181 (BZ)	0.016	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0	0.00166	0.0083
I-1	Sediment	PCB	1	PCB 181 (BZ)	0.00034	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-2	Sediment	PCB	1	PCB 181 (BZ)	0.00045	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-3	Sediment	PCB	1	PCB 181 (BZ)	0.00079	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0	0	0
RB-01-11192012	Water	PCB	1	PCB 181 (BZ)	0.00075	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 182 (BZ)	0.0014	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-03-MID	Water	PCB	1	PCB 182 (BZ)	0.0009	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0	0	0
E-02	Water	PCB	1	PCB 182 (BZ)	0.0024	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
E-05	Water	PCB	1	PCB 182 (BZ)	0.014	1	0.014	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.014		
E-07	Water	PCB	1	PCB 182 (BZ)	0.013	1	0.013	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.013		
E-09	Water	PCB	1	PCB 182 (BZ)	0.011	1	0.011	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.011		
E-13	Water	PCB	1	PCB 182 (BZ)	0.016	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0	0.0076	0.014
I-1	Sediment	PCB	1	PCB 182 (BZ)	0.00033	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-2	Sediment	PCB	1	PCB 182 (BZ)	0.00044	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-3	Sediment	PCB	1	PCB 182 (BZ)	0.00077	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0	0	0
RB-01-11192012	Water	PCB	1	PCB 182 (BZ)	0.00072	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 183 (BZ)	0.095	1	0.095	ng/L	C	C	LIQ/LIQ,	Total	1668A	0	0.095		
BKG-03-MID	Water	PCB	1	PCB 183 (BZ)	0.084	1	0.084	ng/L	Q C	Q C	LIQ/LIQ,	Total	1668A	0	0.084	0.0895	0.095
E-02	Water	PCB	1	PCB 183 (BZ)	0.039	1	0.039	ng/L	C J	C J	LIQ/LIQ,	Total	1668A	0	0.039		
E-05	Water	PCB	1	PCB 183 (BZ)	1.2	1	1.2	ng/L	C	C	LIQ/LIQ,	Total	1668A	0	1.2		
E-07	Water	PCB	1	PCB 183 (BZ)	0.59	1	0.59	ng/L	C	C	LIQ/LIQ,	Total	1668A	0	0.59		
E-09	Water	PCB	1	PCB 183 (BZ)	0.76	1	0.76	ng/L	C	C	LIQ/LIQ,	Total	1668A	0	0.76		
E-13	Water	PCB	1	PCB 183 (BZ)	2	1	2	ng/L	C	C	LIQ/LIQ,	Total	1668A	0	2	0.9178	2
I-1	Sediment	PCB	1	PCB 183 (BZ)	0.005	1	0.005	ng/g	Q C J	Q C J	SOXHLET	Total	1668A	0	0.005		
I-2	Sediment	PCB	1	PCB 183 (BZ)	0.0063	1	0.0063	ng/g	Q C J	Q C J	SOXHLET	Total	1668A	0	0.0063		
I-3	Sediment	PCB	1	PCB 183 (BZ)	0.055	1	0.055	ng/g	C	C	SOXHLET	Total	1668A	0	0.055	0.0221	0.055
RB-01-11192012	Water	PCB	1	PCB 183 (BZ)	0.00074	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 184 (BZ)	0.0012	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-03-MID	Water	PCB	1	PCB 184 (BZ)	0.00076	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0	0	0

Client Sample ID	Matrix	sort	ion F	Analyte	Val_res	D?	Result	Unit	Qual	Flag	ep Metho	Prep Type	alysis Method	Check	Adj Val	Mean	Max
E-02	Water	PCB	1	PCB 184 (BZ)	0.0021	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
E-05	Water	PCB	1	PCB 184 (BZ)	0.0038	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
E-07	Water	PCB	1	PCB 184 (BZ)	0.0029	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
E-09	Water	PCB	1	PCB 184 (BZ)	0.0026	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
E-13	Water	PCB	1	PCB 184 (BZ)	0.013	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0	0	0
I-1	Sediment	PCB	1	PCB 184 (BZ)	0.00028	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-2	Sediment	PCB	1	PCB 184 (BZ)	0.00037	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-3	Sediment	PCB	1	PCB 184 (BZ)	0.00065	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0	0	0
RB-01-11192012	Water	PCB	1	PCB 184 (BZ)	0.00062	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 185 (BZ)	0.095	1	0.095	ng/L	C183	C183	LIQ/LIQ,	Total	1668A	0	0.095		
BKG-03-MID	Water	PCB	1	PCB 185 (BZ)	0.084	1	0.084	ng/L	Q C183	Q C183	LIQ/LIQ,	Total	1668A	0	0.084	0.0895	0.095
E-02	Water	PCB	1	PCB 185 (BZ)	0.039	1	0.039	ng/L	C183 J	C183 J	LIQ/LIQ,	Total	1668A	0	0.039		
E-05	Water	PCB	1	PCB 185 (BZ)	1.2	1	1.2	ng/L	C183	C183	LIQ/LIQ,	Total	1668A	0	1.2		
E-07	Water	PCB	1	PCB 185 (BZ)	0.59	1	0.59	ng/L	C183	C183	LIQ/LIQ,	Total	1668A	0	0.59		
E-09	Water	PCB	1	PCB 185 (BZ)	0.76	1	0.76	ng/L	C183	C183	LIQ/LIQ,	Total	1668A	0	0.76		
E-13	Water	PCB	1	PCB 185 (BZ)	2	1	2	ng/L	C183	C183	LIQ/LIQ,	Total	1668A	0	2	0.9178	2
I-1	Sediment	PCB	1	PCB 185 (BZ)	0.005	1	0.005	ng/g	Q C183	Q C183	SOXHLET	Total	1668A	0	0.005		
I-2	Sediment	PCB	1	PCB 185 (BZ)	0.0063	1	0.0063	ng/g	Q C183	Q C183	SOXHLET	Total	1668A	0	0.0063		
I-3	Sediment	PCB	1	PCB 185 (BZ)	0.055	1	0.055	ng/g	C183	C183	SOXHLET	Total	1668A	0	0.055	0.0221	0.055
RB-01-11192012	Water	PCB	1	PCB 185 (BZ)	0.00074	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 186 (BZ)	0.0012	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-03-MID	Water	PCB	1	PCB 186 (BZ)	0.00074	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0	0	0
E-02	Water	PCB	1	PCB 186 (BZ)	0.002	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
E-05	Water	PCB	1	PCB 186 (BZ)	0.0036	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
E-07	Water	PCB	1	PCB 186 (BZ)	0.0029	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
E-09	Water	PCB	1	PCB 186 (BZ)	0.0025	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
E-13	Water	PCB	1	PCB 186 (BZ)	0.013	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0	0	0
I-1	Sediment	PCB	1	PCB 186 (BZ)	0.00027	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-2	Sediment	PCB	1	PCB 186 (BZ)	0.00036	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-3	Sediment	PCB	1	PCB 186 (BZ)	0.00063	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0	0	0
RB-01-11192012	Water	PCB	1	PCB 186 (BZ)	0.0006	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 187 (BZ)	0.19	1	0.19	ng/L			LIQ/LIQ,	Total	1668A	0	0.19		
BKG-03-MID	Water	PCB	1	PCB 187 (BZ)	0.16	1	0.16	ng/L	B	B	LIQ/LIQ,	Total	1668A	0	0.16	0.175	0.19
E-02	Water	PCB	1	PCB 187 (BZ)	0.073	1	0.073	ng/L			LIQ/LIQ,	Total	1668A	0	0.073		
E-05	Water	PCB	1	PCB 187 (BZ)	2.4	1	2.4	ng/L			LIQ/LIQ,	Total	1668A	0	2.4		
E-07	Water	PCB	1	PCB 187 (BZ)	1.1	1	1.1	ng/L			LIQ/LIQ,	Total	1668A	0	1.1		
E-09	Water	PCB	1	PCB 187 (BZ)	1.4	1	1.4	ng/L			LIQ/LIQ,	Total	1668A	0	1.4		
E-13	Water	PCB	1	PCB 187 (BZ)	3	1	3	ng/L	B	B	LIQ/LIQ,	Total	1668A	0	3	1.5946	3
I-1	Sediment	PCB	1	PCB 187 (BZ)	0.0078	1	0.0078	ng/g	Q J	Q J	SOXHLET	Total	1668A	0	0.0078		
I-2	Sediment	PCB	1	PCB 187 (BZ)	0.013	1	0.013	ng/g	Q B	Q B	SOXHLET	Total	1668A	0	0.013		
I-3	Sediment	PCB	1	PCB 187 (BZ)	0.12	1	0.12	ng/g			SOXHLET	Total	1668A	0	0.12	0.04693	0.12
RB-01-11192012	Water	PCB	1	PCB 187 (BZ)	0.00069	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 188 (BZ)	0.001	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-03-MID	Water	PCB	1	PCB 188 (BZ)	0.00067	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0	0	0
E-02	Water	PCB	1	PCB 188 (BZ)	0.0017	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
E-05	Water	PCB	1	PCB 188 (BZ)	0.0032	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
E-07	Water	PCB	1	PCB 188 (BZ)	0.0026	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
E-09	Water	PCB	1	PCB 188 (BZ)	0.0022	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
E-13	Water	PCB	1	PCB 188 (BZ)	0.012	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0	0	0
I-1	Sediment	PCB	1	PCB 188 (BZ)	0.00024	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-2	Sediment	PCB	1	PCB 188 (BZ)	0.00033	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-3	Sediment	PCB	1	PCB 188 (BZ)	0.00057	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0	0	0
RB-01-11192012	Water	PCB	1	PCB 188 (BZ)	0.00056	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 189 (BZ)	0.0044	1	0.0044	ng/L	J	J	LIQ/LIQ,	Total	1668A	0	0.0044		
BKG-03-MID	Water	PCB	1	PCB 189 (BZ)	0.0043	1	0.0043	ng/L	J	J	LIQ/LIQ,	Total	1668A	0	0.0043	0.00435	0.0044
E-02	Water	PCB	1	PCB 189 (BZ)	0.0044	1	0.0044	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.0044		
E-05	Water	PCB	1	PCB 189 (BZ)	0.049	1	0.049	ng/L			LIQ/LIQ,	Total	1668A	0	0.049		
E-07	Water	PCB	1	PCB 189 (BZ)	0.023	1	0.023	ng/L	J	J	LIQ/LIQ,	Total	1668A	0	0.023		
E-09	Water	PCB	1	PCB 189 (BZ)	0.025	1	0.025	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.025		
E-13	Water	PCB	1	PCB 189 (BZ)	0.064	1	0.064	ng/L			LIQ/LIQ,	Total	1668A	0	0.064	0.03308	0.064
I-1	Sediment	PCB	1	PCB 189 (BZ)	0.00018	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-2	Sediment	PCB	1	PCB 189 (BZ)	0.00023	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-3	Sediment	PCB	1	PCB 189 (BZ)	0.0027	1	0.0027	ng/g	J	J	SOXHLET	Total	1668A	0	0.0027	0.0009	0.0027
RB-01-11192012	Water	PCB	1	PCB 189 (BZ)	0.00035	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 19 (BZ)	0.033	1	0.033	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.033		
BKG-03-MID	Water	PCB	1	PCB 19 (BZ)	0.03	1	0.03	ng/L	J	J	LIQ/LIQ,	Total	1668A	0	0.03	0.0315	0.033
E-02	Water	PCB	1	PCB 19 (BZ)	0.021	1	0.021	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.021		
E-05	Water	PCB	1	PCB 19 (BZ)	0.26	1	0.26	ng/L			LIQ/LIQ,	Total	1668A	0	0.26		
E-07	Water	PCB	1	PCB 19 (BZ)	0.1	1	0.1	ng/L	Q	Q	LIQ/LIQ,	Total	1668A	0	0.1		
E-09	Water	PCB	1	PCB 19 (BZ)	0.14	1	0.14	ng/L	Q	Q	LIQ/LIQ,	Total	1668A	0	0.14		
E-13	Water	PCB	1	PCB 19 (BZ)	0.3	1	0.3	ng/L			LIQ/LIQ,	Total	1668A	0	0.3	0.1642	0.3
I-1	Sediment	PCB	1	PCB 19 (BZ)	0.00057	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-2	Sediment	PCB	1	PCB 19 (BZ)	0.0008	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-3	Sediment	PCB	1	PCB 19 (BZ)	0.014	1	0.014	ng/g	Q	Q	SOXHLET	Total	1668A	0	0.014	0.00467	0.014
RB-01-11192012	Water	PCB	1	PCB 19 (BZ)	0.001	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 190 (BZ)	0.026	1	0.026	ng/L	J	J	LIQ/LIQ,	Total	1668A	0	0.026		
BKG-03-MID	Water	PCB	1	PCB 190 (BZ)	0.021	1	0.021	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.021	0.0235	0.026
E-02	Water	PCB	1	PCB 190 (BZ)	0.01	1	0.01	ng/L	J	J	LIQ/LIQ,	Total	1668A	0	0.01		
E-05	Water	PCB	1	PCB 190 (BZ)	0.25	1	0.25	ng/L			LIQ/LIQ,	Total	1668A	0	0.25		
E-07	Water	PCB	1	PCB 190 (BZ)	0.13	1	0.13	ng/L			LIQ/LIQ,	Total	1668A	0	0.13		
E-09	Water	PCB	1	PCB 190 (BZ)	0.19	1	0.19	ng/L			LIQ/LIQ,	Total	1668A	0	0.19		
E-13	Water	PCB	1	PCB 190 (BZ)	0.5	1	0.5	ng/L			LIQ/LIQ,	Total	1668A	0	0.5	0.216	0.5
I-1	Sediment	PCB	1	PCB 190 (BZ)	0.0012	1	0.0012	ng/g	J	J	SOXHLET	Total	1668A	0	0.0012		
I-2	Sediment	PCB	1	PCB 190 (BZ)	0.0016	1	0.0016	ng/g	Q J	Q J	SOXHLET	Total	1668A	0	0.0016		
I-3	Sediment	PCB	1	PCB 190 (BZ)	0.014	1	0.014	ng/g			SOXHLET	Total	1668A	0	0.014	0.0056	0.014
RB-01-11192012	Water	PCB	1	PCB 190 (BZ)	0.00058	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 191 (BZ)	0.0046	1	0.0046	ng/L	J	J	LIQ/LIQ,	Total	1668A	0	0.0046		
BKG-03-MID	Water	PCB	1	PCB 191 (BZ)	0.0041	1	0.0041	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.0041	0.00435	0.0046
E-02	Water	PCB	1	PCB 191 (BZ)	0.0082	1	0.0082	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.0082		
E-05	Water	PCB	1	PCB 191 (BZ)	0.079	1	0.079	ng/L			LIQ/LIQ,	Total	1668A	0	0.079		
E-07	Water	PCB	1	PCB 191 (BZ)	0.036	1	0.036	ng/L	J	J	LIQ/LIQ,	Total	1668A	0	0.036		
E-09	Water	PCB	1	PCB 191 (BZ)	0.043	1	0.043	ng/L			LIQ/LIQ,	Total	1668A	0	0.043		
E-13	Water	PCB	1	PCB 191 (BZ)	0.084	1	0.084	ng/L	Q	Q	LIQ/LIQ,	Total	1668A	0	0.084	0.05004	0.084
I-1	Sediment	PCB	1	PCB 191 (BZ)	0.00026	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-2	Sediment	PCB	1	PCB 191 (BZ)	0.00034	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-3	Sediment	PCB	1	PCB 191 (BZ)	0.0023	1	0.0023	ng/g	Q J	Q J	SOXHLET	Total	1668A	0	0.0023	0.00077	0.0023
RB-01-11192012	Water	PCB	1	PCB 191 (BZ)	0.00057	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 192 (BZ)	0.0012	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-03-MID	Water	PCB	1	PCB 192 (BZ)	0.00079	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0	0	0
E-02	Water	PCB	1	PCB 192 (BZ)	0.0021	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
E-05	Water	PCB	1	PCB 192 (BZ)	0.0039	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
E-07	Water	PCB	1	PCB 192 (BZ)	0.003	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
E-09	Water	PCB	1	PCB 192 (BZ)	0.0026	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
E-13	Water	PCB	1	PCB 192 (BZ)	0.014	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0	0	0
I-1	Sediment	PCB	1	PCB 192 (BZ)	0.00029	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-2	Sediment	PCB	1	PCB 192 (BZ)	0.00038	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-3	Sediment	PCB	1	PCB 192 (BZ)	0.00067	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0	0	0
RB-01-11192012	Water	PCB	1	PCB 192 (BZ)	0.00063	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 193 (BZ)	0.26	1	0.26	ng/L	C180	C180	LIQ/LIQ,	Total	1668A	0	0.26		
BKG-03-MID	Water	PCB	1	PCB 193 (BZ)	0.26	1	0.26	ng/L	C180	C180	LIQ/LIQ,	Total	1668A	0	0.26	0.26	0.26
E-02	Water	PCB	1	PCB 193 (BZ)	0.12	1	0.12	ng/L	B C180	B C180	LIQ/LIQ,	Total	1668A	0	0.12		
E-05	Water	PCB	1	PCB 193 (BZ)	3.5	1	3.5	ng/L	B C180	B C180	LIQ/LIQ,	Total	1668A	0	3.5		
E-07	Water	PCB	1	PCB 193 (BZ)	1.7	1	1.7	ng/L	B C180	B C180	LIQ/LIQ,	Total	1668A	0	1.7		
E-09	Water	PCB	1	PCB 193 (BZ)	2.2	1	2.2	ng/L	C180	C180	LIQ/LIQ,	Total	1668A	0	2.2		
E-13	Water	PCB	1	PCB 193 (BZ)	5.6	1	5.6	ng/L	B C180	B C180	LIQ/LIQ,	Total	1668A	0	5.6	2.624	5.6
I-1	Sediment	PCB	1	PCB 193 (BZ)	0.015	1	0.015	ng/g	B C180	B C180	SOXHLET	Total	1668A	0	0.015		
I-2	Sediment	PCB	1	PCB 193 (BZ)	0.021	1	0.021	ng/g	B C180	B C180	SOXHLET	Total	1668A	0	0.021		
I-3	Sediment	PCB	1	PCB 193 (BZ)	0.16	1	0.16	ng/g	C180	C180	SOXHLET	Total	1668A	0	0.16	0.06533	0.16
RB-01-11192012	Water	PCB	1	PCB 193 (BZ)	0.00063	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 194 (BZ)	0.055	1	0.055	ng/L			LIQ/LIQ,	Total	1668A	0	0.055		
BKG-03-MID	Water	PCB	1	PCB 194 (BZ)	0.061	1	0.061	ng/L			LIQ/LIQ,	Total	1668A	0	0.061	0.058	0.061
E-02	Water	PCB	1	PCB 194 (BZ)	0.026	1	0.026	ng/L	Q B J	Q B J	LIQ/LIQ,	Total	1668A	0	0.026		

Client Sample ID	Matrix	sort	ion F	Analyte	Val_res	D?	Result	Unit	Qual	Flag	ep Metho	Prep Type	alysis Method	Check	Adj Val	Mean	Max
E-05	Water	PCB	1	PCB 194 (BZ)	0.74	1	0.74	ng/L			LIQ/LIQ,	Total	1668A	0	0.74		
E-07	Water	PCB	1	PCB 194 (BZ)	0.32	1	0.32	ng/L			LIQ/LIQ,	Total	1668A	0	0.32		
E-09	Water	PCB	1	PCB 194 (BZ)	0.4	1	0.4	ng/L			LIQ/LIQ,	Total	1668A	0	0.4		
E-13	Water	PCB	1	PCB 194 (BZ)	1.1	1	1.1	ng/L	B	B	LIQ/LIQ,	Total	1668A	0	1.1	0.5172	1.1
I-1	Sediment	PCB	1	PCB 194 (BZ)	0.0027	1	0.0027	ng/g	J	J	SOXHLET	Total	1668A	0	0.0027		
I-2	Sediment	PCB	1	PCB 194 (BZ)	0.0043	1	0.0043	ng/g	Q B J	Q B J	SOXHLET	Total	1668A	0	0.0043		
I-3	Sediment	PCB	1	PCB 194 (BZ)	0.032	1	0.032	ng/g			SOXHLET	Total	1668A	0	0.032	0.013	0.032
RB-01-11192012	Water	PCB	1	PCB 194 (BZ)	0.00041	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 195 (BZ)	0.021	1	0.021	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.021		
BKG-03-MID	Water	PCB	1	PCB 195 (BZ)	0.023	1	0.023	ng/L	J	J	LIQ/LIQ,	Total	1668A	0	0.023	0.022	0.023
E-02	Water	PCB	1	PCB 195 (BZ)	0.015	1	0.015	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.015		
E-05	Water	PCB	1	PCB 195 (BZ)	0.31	1	0.31	ng/L			LIQ/LIQ,	Total	1668A	0	0.31		
E-07	Water	PCB	1	PCB 195 (BZ)	0.12	1	0.12	ng/L	Q	Q	LIQ/LIQ,	Total	1668A	0	0.12		
E-09	Water	PCB	1	PCB 195 (BZ)	0.16	1	0.16	ng/L			LIQ/LIQ,	Total	1668A	0	0.16		
E-13	Water	PCB	1	PCB 195 (BZ)	0.39	1	0.39	ng/L			LIQ/LIQ,	Total	1668A	0	0.39	0.199	0.39
I-1	Sediment	PCB	1	PCB 195 (BZ)	0.0011	1	0.0011	ng/g	J	J	SOXHLET	Total	1668A	0	0.0011		
I-2	Sediment	PCB	1	PCB 195 (BZ)	0.0019	1	0.0019	ng/g	J	J	SOXHLET	Total	1668A	0	0.0019		
I-3	Sediment	PCB	1	PCB 195 (BZ)	0.01	1	0.01	ng/g	Q	Q	SOXHLET	Total	1668A	0	0.01	0.00433	0.01
RB-01-11192012	Water	PCB	1	PCB 195 (BZ)	0.00045	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 196 (BZ)	0.034	1	0.034	ng/L	J	J	LIQ/LIQ,	Total	1668A	0	0.034		
BKG-03-MID	Water	PCB	1	PCB 196 (BZ)	0.031	1	0.031	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.031	0.0325	0.034
E-02	Water	PCB	1	PCB 196 (BZ)	0.012	1	0.012	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.012		
E-05	Water	PCB	1	PCB 196 (BZ)	0.38	1	0.38	ng/L	Q	Q	LIQ/LIQ,	Total	1668A	0	0.38		
E-07	Water	PCB	1	PCB 196 (BZ)	0.22	1	0.22	ng/L			LIQ/LIQ,	Total	1668A	0	0.22		
E-09	Water	PCB	1	PCB 196 (BZ)	0.25	1	0.25	ng/L			LIQ/LIQ,	Total	1668A	0	0.25		
E-13	Water	PCB	1	PCB 196 (BZ)	0.87	1	0.87	ng/L			LIQ/LIQ,	Total	1668A	0	0.87	0.3464	0.87
I-1	Sediment	PCB	1	PCB 196 (BZ)	0.0013	1	0.0013	ng/g	Q J	Q J	SOXHLET	Total	1668A	0	0.0013		
I-2	Sediment	PCB	1	PCB 196 (BZ)	0.0019	1	0.0019	ng/g	Q J	Q J	SOXHLET	Total	1668A	0	0.0019		
I-3	Sediment	PCB	1	PCB 196 (BZ)	0.018	1	0.018	ng/g			SOXHLET	Total	1668A	0	0.018	0.00707	0.018
RB-01-11192012	Water	PCB	1	PCB 196 (BZ)	0.00074	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 197 (BZ)	0.0031	1	0.0031	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.0031		
BKG-03-MID	Water	PCB	1	PCB 197 (BZ)	0.00067	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0	0.00155	0.0031
E-02	Water	PCB	1	PCB 197 (BZ)	0.0025	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
E-05	Water	PCB	1	PCB 197 (BZ)	0.032	1	0.032	ng/L	J	J	LIQ/LIQ,	Total	1668A	0	0.032		
E-07	Water	PCB	1	PCB 197 (BZ)	0.011	1	0.011	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.011		
E-09	Water	PCB	1	PCB 197 (BZ)	0.018	1	0.018	ng/L	J	J	LIQ/LIQ,	Total	1668A	0	0.018		
E-13	Water	PCB	1	PCB 197 (BZ)	0.028	1	0.028	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.028	0.0178	0.032
I-1	Sediment	PCB	1	PCB 197 (BZ)	0.00025	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-2	Sediment	PCB	1	PCB 197 (BZ)	0.00025	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-3	Sediment	PCB	1	PCB 197 (BZ)	0.0015	1	0.0015	ng/g	Q J	Q J	SOXHLET	Total	1668A	0	0.0015	0.0005	0.0015
RB-01-11192012	Water	PCB	1	PCB 197 (BZ)	0.00055	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 198 (BZ)	0.1	1	0.1	ng/L	C	C	LIQ/LIQ,	Total	1668A	0	0.1		
BKG-03-MID	Water	PCB	1	PCB 198 (BZ)	0.094	1	0.094	ng/L	C	C	LIQ/LIQ,	Total	1668A	0	0.094	0.097	0.1
E-02	Water	PCB	1	PCB 198 (BZ)	0.033	1	0.033	ng/L	C J	C J	LIQ/LIQ,	Total	1668A	0	0.033		
E-05	Water	PCB	1	PCB 198 (BZ)	1.1	1	1.1	ng/L	C	C	LIQ/LIQ,	Total	1668A	0	1.1		
E-07	Water	PCB	1	PCB 198 (BZ)	0.63	1	0.63	ng/L	C	C	LIQ/LIQ,	Total	1668A	0	0.63		
E-09	Water	PCB	1	PCB 198 (BZ)	0.67	1	0.67	ng/L	C	C	LIQ/LIQ,	Total	1668A	0	0.67		
E-13	Water	PCB	1	PCB 198 (BZ)	3.5	1	3.5	ng/L	C	C	LIQ/LIQ,	Total	1668A	0	3.5	1.1866	3.5
I-1	Sediment	PCB	1	PCB 198 (BZ)	0.0045	1	0.0045	ng/g	Q C J	Q C J	SOXHLET	Total	1668A	0	0.0045		
I-2	Sediment	PCB	1	PCB 198 (BZ)	0.0049	1	0.0049	ng/g	Q C J	Q C J	SOXHLET	Total	1668A	0	0.0049		
I-3	Sediment	PCB	1	PCB 198 (BZ)	0.052	1	0.052	ng/g	C	C	SOXHLET	Total	1668A	0	0.052	0.02047	0.052
RB-01-11192012	Water	PCB	1	PCB 198 (BZ)	0.00076	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 199 (BZ)/200 (IUPAC)	0.0056	1	0.0056	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.0056		
BKG-03-MID	Water	PCB	1	PCB 199 (BZ)/200 (IUPAC)	0.0084	1	0.0084	ng/L	J	J	LIQ/LIQ,	Total	1668A	0	0.0084	0.007	0.0084
E-02	Water	PCB	1	PCB 199 (BZ)/200 (IUPAC)	0.0024	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
E-05	Water	PCB	1	PCB 199 (BZ)/200 (IUPAC)	0.11	1	0.11	ng/L			LIQ/LIQ,	Total	1668A	0	0.11		
E-07	Water	PCB	1	PCB 199 (BZ)/200 (IUPAC)	0.058	1	0.058	ng/L			LIQ/LIQ,	Total	1668A	0	0.058		
E-09	Water	PCB	1	PCB 199 (BZ)/200 (IUPAC)	0.063	1	0.063	ng/L			LIQ/LIQ,	Total	1668A	0	0.063		
E-13	Water	PCB	1	PCB 199 (BZ)/200 (IUPAC)	0.19	1	0.19	ng/L			LIQ/LIQ,	Total	1668A	0	0.19	0.0842	0.19
I-1	Sediment	PCB	1	PCB 199 (BZ)/200 (IUPAC)	0.00062	1	0.00062	ng/g	Q J	Q J	SOXHLET	Total	1668A	0	0.00062		
I-2	Sediment	PCB	1	PCB 199 (BZ)/200 (IUPAC)	0.00025	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-3	Sediment	PCB	1	PCB 199 (BZ)/200 (IUPAC)	0.0034	1	0.0034	ng/g	J	J	SOXHLET	Total	1668A	0	0.0034	0.00134	0.0034
RB-01-11192012	Water	PCB	1	PCB 199 (BZ)/200 (IUPAC)	0.00054	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 2 (BZ)	0.0027	1	0.0027	ng/L	B J	B J	LIQ/LIQ,	Total	1668A	0	0.0027		
BKG-03-MID	Water	PCB	1	PCB 2 (BZ)	0.00021	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0	0.00135	0.0027
E-02	Water	PCB	1	PCB 2 (BZ)	0.00035	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
E-05	Water	PCB	1	PCB 2 (BZ)	0.0087	1	0.0087	ng/L	B J	B J	LIQ/LIQ,	Total	1668A	0	0.0087		
E-07	Water	PCB	1	PCB 2 (BZ)	0.0045	1	0.0045	ng/L	Q B J	Q B J	LIQ/LIQ,	Total	1668A	0	0.0045		
E-09	Water	PCB	1	PCB 2 (BZ)	0.0052	1	0.0052	ng/L	Q B J	Q B J	LIQ/LIQ,	Total	1668A	0	0.0052		
E-13	Water	PCB	1	PCB 2 (BZ)	0.024	1	0.024	ng/L	B J	B J	LIQ/LIQ,	Total	1668A	0	0.024	0.00848	0.024
I-1	Sediment	PCB	1	PCB 2 (BZ)	0.000095	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-2	Sediment	PCB	1	PCB 2 (BZ)	0.00013	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-3	Sediment	PCB	1	PCB 2 (BZ)	0.0018	1	0.0018	ng/g	J	J	SOXHLET	Total	1668A	0	0.0018	0.0006	0.0018
RB-01-11192012	Water	PCB	1	PCB 2 (BZ)	0.00017	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 20 (BZ)	0.13	1	0.13	ng/L	C	C	LIQ/LIQ,	Total	1668A	0	0.13		
BKG-03-MID	Water	PCB	1	PCB 20 (BZ)	0.18	1	0.18	ng/L	B C	B C	LIQ/LIQ,	Total	1668A	0	0.18	0.155	0.18
E-02	Water	PCB	1	PCB 20 (BZ)	0.071	1	0.071	ng/L	B C	B C	LIQ/LIQ,	Total	1668A	0	0.071		
E-05	Water	PCB	1	PCB 20 (BZ)	2.6	1	2.6	ng/L	B C	B C	LIQ/LIQ,	Total	1668A	0	2.6		
E-07	Water	PCB	1	PCB 20 (BZ)	1.1	1	1.1	ng/L	B C	B C	LIQ/LIQ,	Total	1668A	0	1.1		
E-09	Water	PCB	1	PCB 20 (BZ)	1.3	1	1.3	ng/L	C	C	LIQ/LIQ,	Total	1668A	0	1.3		
E-13	Water	PCB	1	PCB 20 (BZ)	3	1	3	ng/L	B C	B C	LIQ/LIQ,	Total	1668A	0	3	1.6142	3
I-1	Sediment	PCB	1	PCB 20 (BZ)	0.021	1	0.021	ng/g	C	C	SOXHLET	Total	1668A	0	0.021		
I-2	Sediment	PCB	1	PCB 20 (BZ)	0.018	1	0.018	ng/g	B C J	B C J	SOXHLET	Total	1668A	0	0.018		
I-3	Sediment	PCB	1	PCB 20 (BZ)	0.23	1	0.23	ng/g	B C	B C	SOXHLET	Total	1668A	0	0.23	0.08967	0.23
RB-01-11192012	Water	PCB	1	PCB 20 (BZ)	0.0027	1	0.0027	ng/L	Q B C J	Q B C J	LIQ/LIQ,	Total	1668A	0	0.0027		
BKG-02-EM	Water	PCB	1	PCB 200 (BZ)/201 (IUPAC)	0.0091	1	0.0091	ng/L	J	J	LIQ/LIQ,	Total	1668A	0	0.0091		
BKG-03-MID	Water	PCB	1	PCB 200 (BZ)/201 (IUPAC)	0.0064	1	0.0064	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.0064	0.00775	0.0091
E-02	Water	PCB	1	PCB 200 (BZ)/201 (IUPAC)	0.0023	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
E-05	Water	PCB	1	PCB 200 (BZ)/201 (IUPAC)	0.11	1	0.11	ng/L			LIQ/LIQ,	Total	1668A	0	0.11		
E-07	Water	PCB	1	PCB 200 (BZ)/201 (IUPAC)	0.062	1	0.062	ng/L			LIQ/LIQ,	Total	1668A	0	0.062		
E-09	Water	PCB	1	PCB 200 (BZ)/201 (IUPAC)	0.061	1	0.061	ng/L	Q	Q	LIQ/LIQ,	Total	1668A	0	0.061		
E-13	Water	PCB	1	PCB 200 (BZ)/201 (IUPAC)	0.27	1	0.27	ng/L			LIQ/LIQ,	Total	1668A	0	0.27	0.1006	0.27
I-1	Sediment	PCB	1	PCB 200 (BZ)/201 (IUPAC)	0.00061	1	0.00061	ng/g	J	J	SOXHLET	Total	1668A	0	0.00061		
I-2	Sediment	PCB	1	PCB 200 (BZ)/201 (IUPAC)	0.00024	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-3	Sediment	PCB	1	PCB 200 (BZ)/201 (IUPAC)	0.0046	1	0.0046	ng/g	Q J	Q J	SOXHLET	Total	1668A	0	0.0046	0.00174	0.0046
RB-01-11192012	Water	PCB	1	PCB 200 (BZ)/201 (IUPAC)	0.00052	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 201 (BZ)/199 (IUPAC)	0.1	1	0.1	ng/L	C198	C198	LIQ/LIQ,	Total	1668A	0	0.1		
BKG-03-MID	Water	PCB	1	PCB 201 (BZ)/199 (IUPAC)	0.094	1	0.094	ng/L	C198	C198	LIQ/LIQ,	Total	1668A	0	0.094	0.097	0.1
E-02	Water	PCB	1	PCB 201 (BZ)/199 (IUPAC)	0.033	1	0.033	ng/L	C198 J	C198 J	LIQ/LIQ,	Total	1668A	0	0.033		
E-05	Water	PCB	1	PCB 201 (BZ)/199 (IUPAC)	1.1	1	1.1	ng/L	C198	C198	LIQ/LIQ,	Total	1668A	0	1.1		
E-07	Water	PCB	1	PCB 201 (BZ)/199 (IUPAC)	0.63	1	0.63	ng/L	C198	C198	LIQ/LIQ,	Total	1668A	0	0.63		
E-09	Water	PCB	1	PCB 201 (BZ)/199 (IUPAC)	0.67	1	0.67	ng/L	C198	C198	LIQ/LIQ,	Total	1668A	0	0.67		
E-13	Water	PCB	1	PCB 201 (BZ)/199 (IUPAC)	3.5	1	3.5	ng/L	C198	C198	LIQ/LIQ,	Total	1668A	0	3.5	1.1866	3.5
I-1	Sediment	PCB	1	PCB 201 (BZ)/199 (IUPAC)	0.0045	1	0.0045	ng/g	Q C198	Q C198	SOXHLET	Total	1668A	0	0.0045		
I-2	Sediment	PCB	1	PCB 201 (BZ)/199 (IUPAC)	0.0049	1	0.0049	ng/g	Q C198	Q C198	SOXHLET	Total	1668A	0	0.0049		
I-3	Sediment	PCB	1	PCB 201 (BZ)/199 (IUPAC)	0.052	1	0.052	ng/g	C198	C198	SOXHLET	Total	1668A	0	0.052	0.02047	0.052
RB-01-11192012	Water	PCB	1	PCB 201 (BZ)/199 (IUPAC)	0.00076	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 202 (BZ)	0.02	1	0.02	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.02		
BKG-03-MID	Water	PCB	1	PCB 202 (BZ)	0.022	1	0.022	ng/L	J	J	LIQ/LIQ,	Total	1668A	0	0.022	0.021	0.022
E-02	Water	PCB	1	PCB 202 (BZ)	0.021	1	0.021	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.021		
E-05	Water	PCB	1	PCB 202 (BZ)	0.25	1	0.25	ng/L			LIQ/LIQ,	Total	1668A	0	0.25		
E-07	Water	PCB	1	PCB 202 (BZ)	0.16	1	0.16	ng/L			LIQ/LIQ,	Total	1668A	0	0.16		
E-09	Water	PCB	1	PCB 202 (BZ)	0.14	1	0.14	ng/L	Q	Q	LIQ/LIQ,	Total	1668A	0	0.14		
E-13	Water	PCB	1	PCB 202 (BZ)	1.1	1	1.1	ng/L			LIQ/LIQ,	Total	1668A	0	1.1	0.3342	1.1
I-1	Sediment	PCB	1	PCB 202 (BZ)	0.00026	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-2	Sediment	PCB	1	PCB 202 (BZ)	0.0012	1	0.0012	ng/g	Q J	Q J	SOXHLET	Total	1668A	0	0.0012		
I-3	Sediment	PCB	1	PCB 202 (BZ)	0.012	1	0.012	ng/g			SOXHLET	Total	1668A	0	0.012	0.0044	0.012
RB-01-11192012	Water	PCB	1	PCB 202 (BZ)	0.00058	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 203 (BZ)	0.052	1	0.052	ng/L			LIQ/LIQ,	Total	1668A	0	0.052		
BKG-03-MID	Water	PCB	1	PCB 203 (BZ)	0.047	1	0.047	ng/L			LIQ/LIQ,	Total	1668A	0	0.047	0.0495	0.052
E-02	Water	PCB	1	PCB 203 (BZ)	0.019	1	0.019	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.019		
E-05	Water	PCB	1	PCB 203 (BZ)	0.58	1	0.58	ng/L			LIQ/LIQ,	Total	1668A	0	0.58		

Client Sample ID	Matrix	sort	ion F	Analyte	Val_res	D?	Result	Unit	Qual	Flag	ep Metho	Prep Type	alysis Method	Check	Adj Val	Mean	Max
E-07	Water	PCB	1	PCB 203 (BZ)	0.31	1	0.31	ng/L			LIQ/LIQ,	Total	1668A	0	0.31		
E-09	Water	PCB	1	PCB 203 (BZ)	0.34	1	0.34	ng/L			LIQ/LIQ,	Total	1668A	0	0.34		
E-13	Water	PCB	1	PCB 203 (BZ)	1.6	1	1.6	ng/L			LIQ/LIQ,	Total	1668A	0	1.6	0.5698	1.6
I-1	Sediment	PCB	1	PCB 203 (BZ)	0.0023	1	0.0023	ng/g	Q J	Q J	SOXHLET	Total	1668A	0	0.0023		
I-2	Sediment	PCB	1	PCB 203 (BZ)	0.0043	1	0.0043	ng/g	J	J	SOXHLET	Total	1668A	0	0.0043		
I-3	Sediment	PCB	1	PCB 203 (BZ)	0.024	1	0.024	ng/g	Q	Q	SOXHLET	Total	1668A	0	0.024	0.0102	0.024
RB-01-11192012	Water	PCB	1	PCB 203 (BZ)	0.00068	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 204 (BZ)	0.0011	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-03-MID	Water	PCB	1	PCB 204 (BZ)	0.00069	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0	0	0
E-02	Water	PCB	1	PCB 204 (BZ)	0.0026	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
E-05	Water	PCB	1	PCB 204 (BZ)	0.0038	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
E-07	Water	PCB	1	PCB 204 (BZ)	0.0029	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
E-09	Water	PCB	1	PCB 204 (BZ)	0.0018	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
E-13	Water	PCB	1	PCB 204 (BZ)	0.014	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0	0	0
I-1	Sediment	PCB	1	PCB 204 (BZ)	0.00026	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-2	Sediment	PCB	1	PCB 204 (BZ)	0.00026	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-3	Sediment	PCB	1	PCB 204 (BZ)	0.00051	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0	0	0
RB-01-11192012	Water	PCB	1	PCB 204 (BZ)	0.00057	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 205 (BZ)	0.00072	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-03-MID	Water	PCB	1	PCB 205 (BZ)	0.0019	1	0.0019	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.0019	0.00095	0.0019
E-02	Water	PCB	1	PCB 205 (BZ)	0.0021	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
E-05	Water	PCB	1	PCB 205 (BZ)	0.047	1	0.047	ng/L			LIQ/LIQ,	Total	1668A	0	0.047		
E-07	Water	PCB	1	PCB 205 (BZ)	0.02	1	0.02	ng/L	J	J	LIQ/LIQ,	Total	1668A	0	0.02		
E-09	Water	PCB	1	PCB 205 (BZ)	0.021	1	0.021	ng/L	J	J	LIQ/LIQ,	Total	1668A	0	0.021		
E-13	Water	PCB	1	PCB 205 (BZ)	0.061	1	0.061	ng/L	Q	Q	LIQ/LIQ,	Total	1668A	0	0.061	0.0298	0.061
I-1	Sediment	PCB	1	PCB 205 (BZ)	0.00016	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-2	Sediment	PCB	1	PCB 205 (BZ)	0.00016	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-3	Sediment	PCB	1	PCB 205 (BZ)	0.00038	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0	0	0
RB-01-11192012	Water	PCB	1	PCB 205 (BZ)	0.00035	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 206 (BZ)	0.14	1	0.14	ng/L			LIQ/LIQ,	Total	1668A	0	0.14		
BKG-03-MID	Water	PCB	1	PCB 206 (BZ)	0.12	1	0.12	ng/L			LIQ/LIQ,	Total	1668A	0	0.12	0.13	0.14
E-02	Water	PCB	1	PCB 206 (BZ)	0.033	1	0.033	ng/L	J	J	LIQ/LIQ,	Total	1668A	0	0.033		
E-05	Water	PCB	1	PCB 206 (BZ)	1.1	1	1.1	ng/L			LIQ/LIQ,	Total	1668A	0	1.1		
E-07	Water	PCB	1	PCB 206 (BZ)	1	1	1	ng/L			LIQ/LIQ,	Total	1668A	0	1		
E-09	Water	PCB	1	PCB 206 (BZ)	0.6	1	0.6	ng/L			LIQ/LIQ,	Total	1668A	0	0.6		
E-13	Water	PCB	1	PCB 206 (BZ)	8.8	1	8.8	ng/L			LIQ/LIQ,	Total	1668A	0	8.8	2.3066	8.8
I-1	Sediment	PCB	1	PCB 206 (BZ)	0.01	1	0.01	ng/g			SOXHLET	Total	1668A	0	0.01		
I-2	Sediment	PCB	1	PCB 206 (BZ)	0.0084	1	0.0084	ng/g	J	J	SOXHLET	Total	1668A	0	0.0084		
I-3	Sediment	PCB	1	PCB 206 (BZ)	0.041	1	0.041	ng/g	Q	Q	SOXHLET	Total	1668A	0	0.041	0.0198	0.041
RB-01-11192012	Water	PCB	1	PCB 206 (BZ)	0.0019	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 207 (BZ)	0.012	1	0.012	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.012		
BKG-03-MID	Water	PCB	1	PCB 207 (BZ)	0.0098	1	0.0098	ng/L	J	J	LIQ/LIQ,	Total	1668A	0	0.0098	0.0109	0.012
E-02	Water	PCB	1	PCB 207 (BZ)	0.0016	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
E-05	Water	PCB	1	PCB 207 (BZ)	0.069	1	0.069	ng/L	Q	Q	LIQ/LIQ,	Total	1668A	0	0.069		
E-07	Water	PCB	1	PCB 207 (BZ)	0.071	1	0.071	ng/L			LIQ/LIQ,	Total	1668A	0	0.071		
E-09	Water	PCB	1	PCB 207 (BZ)	0.05	1	0.05	ng/L			LIQ/LIQ,	Total	1668A	0	0.05		
E-13	Water	PCB	1	PCB 207 (BZ)	0.48	1	0.48	ng/L			LIQ/LIQ,	Total	1668A	0	0.48	0.134	0.48
I-1	Sediment	PCB	1	PCB 207 (BZ)	0.00041	1	0.00041	ng/g	Q J	Q J	SOXHLET	Total	1668A	0	0.00041		
I-2	Sediment	PCB	1	PCB 207 (BZ)	0.00032	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-3	Sediment	PCB	1	PCB 207 (BZ)	0.0056	1	0.0056	ng/g	J	J	SOXHLET	Total	1668A	0	0.0056	0.002	0.0056
RB-01-11192012	Water	PCB	1	PCB 207 (BZ)	0.0014	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 208 (BZ)	0.062	1	0.062	ng/L			LIQ/LIQ,	Total	1668A	0	0.062		
BKG-03-MID	Water	PCB	1	PCB 208 (BZ)	0.052	1	0.052	ng/L			LIQ/LIQ,	Total	1668A	0	0.052	0.057	0.062
E-02	Water	PCB	1	PCB 208 (BZ)	0.016	1	0.016	ng/L	J	J	LIQ/LIQ,	Total	1668A	0	0.016		
E-05	Water	PCB	1	PCB 208 (BZ)	0.48	1	0.48	ng/L			LIQ/LIQ,	Total	1668A	0	0.48		
E-07	Water	PCB	1	PCB 208 (BZ)	0.46	1	0.46	ng/L			LIQ/LIQ,	Total	1668A	0	0.46		
E-09	Water	PCB	1	PCB 208 (BZ)	0.26	1	0.26	ng/L			LIQ/LIQ,	Total	1668A	0	0.26		
E-13	Water	PCB	1	PCB 208 (BZ)	3.9	1	3.9	ng/L			LIQ/LIQ,	Total	1668A	0	3.9	1.0232	3.9
I-1	Sediment	PCB	1	PCB 208 (BZ)	0.0032	1	0.0032	ng/g	Q J	Q J	SOXHLET	Total	1668A	0	0.0032		
I-2	Sediment	PCB	1	PCB 208 (BZ)	0.0035	1	0.0035	ng/g	Q J	Q J	SOXHLET	Total	1668A	0	0.0035		
I-3	Sediment	PCB	1	PCB 208 (BZ)	0.021	1	0.021	ng/g			SOXHLET	Total	1668A	0	0.021	0.00923	0.021
RB-01-11192012	Water	PCB	1	PCB 208 (BZ)	0.0014	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 209 (BZ)	0.21	1	0.21	ng/L			LIQ/LIQ,	Total	1668A	0	0.21		
BKG-03-MID	Water	PCB	1	PCB 209 (BZ)	0.14	1	0.14	ng/L			LIQ/LIQ,	Total	1668A	0	0.14	0.175	0.21
E-02	Water	PCB	1	PCB 209 (BZ)	0.047	1	0.047	ng/L			LIQ/LIQ,	Total	1668A	0	0.047		
E-05	Water	PCB	1	PCB 209 (BZ)	1.7	1	1.7	ng/L			LIQ/LIQ,	Total	1668A	0	1.7		
E-07	Water	PCB	1	PCB 209 (BZ)	1.9	1	1.9	ng/L			LIQ/LIQ,	Total	1668A	0	1.9		
E-09	Water	PCB	1	PCB 209 (BZ)	0.86	1	0.86	ng/L			LIQ/LIQ,	Total	1668A	0	0.86		
E-13	Water	PCB	1	PCB 209 (BZ)	14	1	14	ng/L			LIQ/LIQ,	Total	1668A	0	14	3.7014	14
I-1	Sediment	PCB	1	PCB 209 (BZ)	0.011	1	0.011	ng/g			SOXHLET	Total	1668A	0	0.011		
I-2	Sediment	PCB	1	PCB 209 (BZ)	0.013	1	0.013	ng/g			SOXHLET	Total	1668A	0	0.013		
I-3	Sediment	PCB	1	PCB 209 (BZ)	0.13	1	0.13	ng/g			SOXHLET	Total	1668A	0	0.13	0.05133	0.13
RB-01-11192012	Water	PCB	1	PCB 209 (BZ)	0.0009	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 21 (BZ)	0.025	1	0.025	ng/L	C J	C J	LIQ/LIQ,	Total	1668A	0	0.025		
BKG-03-MID	Water	PCB	1	PCB 21 (BZ)	0.033	1	0.033	ng/L	Q B C J	Q B C J	LIQ/LIQ,	Total	1668A	0	0.033	0.029	0.033
E-02	Water	PCB	1	PCB 21 (BZ)	0.016	1	0.016	ng/L	B C J	B C J	LIQ/LIQ,	Total	1668A	0	0.016		
E-05	Water	PCB	1	PCB 21 (BZ)	0.3	1	0.3	ng/L	B C	B C	LIQ/LIQ,	Total	1668A	0	0.3		
E-07	Water	PCB	1	PCB 21 (BZ)	0.12	1	0.12	ng/L	B C	B C	LIQ/LIQ,	Total	1668A	0	0.12		
E-09	Water	PCB	1	PCB 21 (BZ)	0.26	1	0.26	ng/L	C	C	LIQ/LIQ,	Total	1668A	0	0.26		
E-13	Water	PCB	1	PCB 21 (BZ)	0.74	1	0.74	ng/L	B C	B C	LIQ/LIQ,	Total	1668A	0	0.74	0.2872	0.74
I-1	Sediment	PCB	1	PCB 21 (BZ)	0.0048	1	0.0048	ng/g	C J	C J	SOXHLET	Total	1668A	0	0.0048		
I-2	Sediment	PCB	1	PCB 21 (BZ)	0.0043	1	0.0043	ng/g	Q B C J	Q B C J	SOXHLET	Total	1668A	0	0.0043		
I-3	Sediment	PCB	1	PCB 21 (BZ)	0.052	1	0.052	ng/g	C	C	SOXHLET	Total	1668A	0	0.052	0.02037	0.052
RB-01-11192012	Water	PCB	1	PCB 21 (BZ)	0.0019	1	0.0019	ng/L	Q B C J	Q B C J	LIQ/LIQ,	Total	1668A	0	0.0019		
BKG-02-EM	Water	PCB	1	PCB 22 (BZ)	0.02	1	0.02	ng/L	J	J	LIQ/LIQ,	Total	1668A	0	0.02		
BKG-03-MID	Water	PCB	1	PCB 22 (BZ)	0.035	1	0.035	ng/L	B J	B J	LIQ/LIQ,	Total	1668A	0	0.035	0.0275	0.035
E-02	Water	PCB	1	PCB 22 (BZ)	0.016	1	0.016	ng/L	J	J	LIQ/LIQ,	Total	1668A	0	0.016		
E-05	Water	PCB	1	PCB 22 (BZ)	0.31	1	0.31	ng/L	B	B	LIQ/LIQ,	Total	1668A	0	0.31		
E-07	Water	PCB	1	PCB 22 (BZ)	0.13	1	0.13	ng/L	B	B	LIQ/LIQ,	Total	1668A	0	0.13		
E-09	Water	PCB	1	PCB 22 (BZ)	0.25	1	0.25	ng/L			LIQ/LIQ,	Total	1668A	0	0.25		
E-13	Water	PCB	1	PCB 22 (BZ)	0.63	1	0.63	ng/L	B	B	LIQ/LIQ,	Total	1668A	0	0.63	0.2672	0.63
I-1	Sediment	PCB	1	PCB 22 (BZ)	0.0032	1	0.0032	ng/g	Q J	Q J	SOXHLET	Total	1668A	0	0.0032		
I-2	Sediment	PCB	1	PCB 22 (BZ)	0.0044	1	0.0044	ng/g	B J	B J	SOXHLET	Total	1668A	0	0.0044		
I-3	Sediment	PCB	1	PCB 22 (BZ)	0.051	1	0.051	ng/g			SOXHLET	Total	1668A	0	0.051	0.01953	0.051
RB-01-11192012	Water	PCB	1	PCB 22 (BZ)	0.00084	1	0.00084	ng/L	Q B J	Q B J	LIQ/LIQ,	Total	1668A	0	0.00084		
BKG-02-EM	Water	PCB	1	PCB 23 (BZ)	0.0007	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-03-MID	Water	PCB	1	PCB 23 (BZ)	0.00041	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0	0	0
E-02	Water	PCB	1	PCB 23 (BZ)	0.00077	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
E-05	Water	PCB	1	PCB 23 (BZ)	0.0012	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
E-07	Water	PCB	1	PCB 23 (BZ)	0.0011	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
E-09	Water	PCB	1	PCB 23 (BZ)	0.0013	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
E-13	Water	PCB	1	PCB 23 (BZ)	0.0044	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0	0	0
I-1	Sediment	PCB	1	PCB 23 (BZ)	0.00019	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-2	Sediment	PCB	1	PCB 23 (BZ)	0.00031	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-3	Sediment	PCB	1	PCB 23 (BZ)	0.00048	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0	0	0
RB-01-11192012	Water	PCB	1	PCB 23 (BZ)	0.00038	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 24 (BZ)	0.0012	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-03-MID	Water	PCB	1	PCB 24 (BZ)	0.002	1	0.002	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.002	0.001	0.002
E-02	Water	PCB	1	PCB 24 (BZ)	0.0026	1	0.0026	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.0026		
E-05	Water	PCB	1	PCB 24 (BZ)	0.032	1	0.032	ng/L	J	J	LIQ/LIQ,	Total	1668A	0	0.032		
E-07	Water	PCB	1	PCB 24 (BZ)	0.015	1	0.015	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.015		
E-09	Water	PCB	1	PCB 24 (BZ)	0.019	1	0.019	ng/L	J	J	LIQ/LIQ,	Total	1668A	0	0.019		
E-13	Water	PCB	1	PCB 24 (BZ)	0.019	1	0.019	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.019	0.01752	0.032
I-1	Sediment	PCB	1	PCB 24 (BZ)	0.00039	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-2	Sediment	PCB	1	PCB 24 (BZ)	0.00055	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-3	Sediment	PCB	1	PCB 24 (BZ)	0.0025	1	0.0025	ng/g	Q J	Q J	SOXHLET	Total	1668A	0	0.0025	0.00083	0.0025
RB-01-11192012	Water	PCB	1	PCB 24 (BZ)	0.0007	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 25 (BZ)	0.026	1	0.026	ng/L	J	J	LIQ/LIQ,	Total	1668A	0	0.026		
BKG-03-MID	Water	PCB	1	PCB 25 (BZ)	0.046	1	0.046	ng/L			LIQ/LIQ,	Total	1668A	0	0.046	0.036	0.046
E-02	Water	PCB	1	PCB 25 (BZ)	0.01	1	0.01	ng/L	J	J	LIQ/LIQ,	Total	1668A	0	0.01		
E-05	Water	PCB	1	PCB 25 (BZ)	0.64	1	0.64	ng/L			LIQ/LIQ,	Total	1668A	0	0.64		
E-07	Water	PCB	1	PCB 25 (BZ)	0.24	1	0.24	ng/L			LIQ/LIQ,	Total	1668A	0	0.24		

Client Sample ID	Matrix	sort	ion F	Analyte	Val_res	D?	Result	Unit	Qual	Flag	ep Metho	Prep Type	alysis Method	Check	Adj Val	Mean	Max
E-09	Water	PCB	1	PCB 25 (BZ)	0.19	1	0.19	ng/L			LIQ/LIQ,	Total	1668A	0	0.19		
E-13	Water	PCB	1	PCB 25 (BZ)	0.53	1	0.53	ng/L	B	B	LIQ/LIQ,	Total	1668A	0	0.53	0.322	0.64
I-1	Sediment	PCB	1	PCB 25 (BZ)	0.0046	1	0.0046	ng/g	J	J	SOXHLET	Total	1668A	0	0.0046		
I-2	Sediment	PCB	1	PCB 25 (BZ)	0.0034	1	0.0034	ng/g	Q J	Q J	SOXHLET	Total	1668A	0	0.0034		
I-3	Sediment	PCB	1	PCB 25 (BZ)	0.032	1	0.032	ng/g			SOXHLET	Total	1668A	0	0.032	0.01333	0.032
RB-01-11192012	Water	PCB	1	PCB 25 (BZ)	0.00034	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 26 (BZ)	0.038	1	0.038	ng/L	C J	C J	LIQ/LIQ,	Total	1668A	0	0.038		
BKG-03-MID	Water	PCB	1	PCB 26 (BZ)	0.059	1	0.059	ng/L	C	C	LIQ/LIQ,	Total	1668A	0	0.059	0.0485	0.059
E-02	Water	PCB	1	PCB 26 (BZ)	0.02	1	0.02	ng/L	C J	C J	LIQ/LIQ,	Total	1668A	0	0.02		
E-05	Water	PCB	1	PCB 26 (BZ)	0.86	1	0.86	ng/L	C	C	LIQ/LIQ,	Total	1668A	0	0.86		
E-07	Water	PCB	1	PCB 26 (BZ)	0.34	1	0.34	ng/L	C	C	LIQ/LIQ,	Total	1668A	0	0.34		
E-09	Water	PCB	1	PCB 26 (BZ)	0.33	1	0.33	ng/L	C	C	LIQ/LIQ,	Total	1668A	0	0.33		
E-13	Water	PCB	1	PCB 26 (BZ)	1	1	1	ng/L	B C	B C	LIQ/LIQ,	Total	1668A	0	1	0.51	1
I-1	Sediment	PCB	1	PCB 26 (BZ)	0.0045	1	0.0045	ng/g	C J	C J	SOXHLET	Total	1668A	0	0.0045		
I-2	Sediment	PCB	1	PCB 26 (BZ)	0.0044	1	0.0044	ng/g	B C J	B C J	SOXHLET	Total	1668A	0	0.0044		
I-3	Sediment	PCB	1	PCB 26 (BZ)	0.062	1	0.062	ng/g	C	C	SOXHLET	Total	1668A	0	0.062	0.02363	0.062
RB-01-11192012	Water	PCB	1	PCB 26 (BZ)	0.00036	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 27 (BZ)	0.018	1	0.018	ng/L	J	J	LIQ/LIQ,	Total	1668A	0	0.018		
BKG-03-MID	Water	PCB	1	PCB 27 (BZ)	0.02	1	0.02	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.02	0.019	0.02
E-02	Water	PCB	1	PCB 27 (BZ)	0.017	1	0.017	ng/L	J	J	LIQ/LIQ,	Total	1668A	0	0.017		
E-05	Water	PCB	1	PCB 27 (BZ)	0.17	1	0.17	ng/L			LIQ/LIQ,	Total	1668A	0	0.17		
E-07	Water	PCB	1	PCB 27 (BZ)	0.082	1	0.082	ng/L			LIQ/LIQ,	Total	1668A	0	0.082		
E-09	Water	PCB	1	PCB 27 (BZ)	0.11	1	0.11	ng/L			LIQ/LIQ,	Total	1668A	0	0.11		
E-13	Water	PCB	1	PCB 27 (BZ)	0.53	1	0.53	ng/L			LIQ/LIQ,	Total	1668A	0	0.53	0.1818	0.53
I-1	Sediment	PCB	1	PCB 27 (BZ)	0.00085	1	0.00085	ng/g	J	J	SOXHLET	Total	1668A	0	0.00085		
I-2	Sediment	PCB	1	PCB 27 (BZ)	0.00047	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-3	Sediment	PCB	1	PCB 27 (BZ)	0.039	1	0.039	ng/g			SOXHLET	Total	1668A	0	0.039	0.01328	0.039
RB-01-11192012	Water	PCB	1	PCB 27 (BZ)	0.0006	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 28 (BZ)	0.13	1	0.13	ng/L	C20	C20	LIQ/LIQ,	Total	1668A	0	0.13		
BKG-03-MID	Water	PCB	1	PCB 28 (BZ)	0.18	1	0.18	ng/L	B C20	B C20	LIQ/LIQ,	Total	1668A	0	0.18	0.155	0.18
E-02	Water	PCB	1	PCB 28 (BZ)	0.071	1	0.071	ng/L	B C20	B C20	LIQ/LIQ,	Total	1668A	0	0.071		
E-05	Water	PCB	1	PCB 28 (BZ)	2.6	1	2.6	ng/L	B C20	B C20	LIQ/LIQ,	Total	1668A	0	2.6		
E-07	Water	PCB	1	PCB 28 (BZ)	1.1	1	1.1	ng/L	B C20	B C20	LIQ/LIQ,	Total	1668A	0	1.1		
E-09	Water	PCB	1	PCB 28 (BZ)	1.3	1	1.3	ng/L	C20	C20	LIQ/LIQ,	Total	1668A	0	1.3		
E-13	Water	PCB	1	PCB 28 (BZ)	3	1	3	ng/L	B C20	B C20	LIQ/LIQ,	Total	1668A	0	3	1.6142	3
I-1	Sediment	PCB	1	PCB 28 (BZ)	0.021	1	0.021	ng/g	C20	C20	SOXHLET	Total	1668A	0	0.021		
I-2	Sediment	PCB	1	PCB 28 (BZ)	0.018	1	0.018	ng/g	B C20 J	B C20 J	SOXHLET	Total	1668A	0	0.018		
I-3	Sediment	PCB	1	PCB 28 (BZ)	0.23	1	0.23	ng/g	B C20	B C20	SOXHLET	Total	1668A	0	0.23	0.08967	0.23
RB-01-11192012	Water	PCB	1	PCB 28 (BZ)	0.0027	1	0.0027	ng/L	Q B C20	Q B C20	LIQ/LIQ,	Total	1668A	0	0.0027		
BKG-02-EM	Water	PCB	1	PCB 29 (BZ)	0.038	1	0.038	ng/L	C26 J	C26 J	LIQ/LIQ,	Total	1668A	0	0.038		
BKG-03-MID	Water	PCB	1	PCB 29 (BZ)	0.059	1	0.059	ng/L	C26	C26	LIQ/LIQ,	Total	1668A	0	0.059	0.0485	0.059
E-02	Water	PCB	1	PCB 29 (BZ)	0.02	1	0.02	ng/L	C26 J	C26 J	LIQ/LIQ,	Total	1668A	0	0.02		
E-05	Water	PCB	1	PCB 29 (BZ)	0.86	1	0.86	ng/L	C26	C26	LIQ/LIQ,	Total	1668A	0	0.86		
E-07	Water	PCB	1	PCB 29 (BZ)	0.34	1	0.34	ng/L	C26	C26	LIQ/LIQ,	Total	1668A	0	0.34		
E-09	Water	PCB	1	PCB 29 (BZ)	0.33	1	0.33	ng/L	C26	C26	LIQ/LIQ,	Total	1668A	0	0.33		
E-13	Water	PCB	1	PCB 29 (BZ)	1	1	1	ng/L	B C26	B C26	LIQ/LIQ,	Total	1668A	0	1	0.51	1
I-1	Sediment	PCB	1	PCB 29 (BZ)	0.0045	1	0.0045	ng/g	C26 J	C26 J	SOXHLET	Total	1668A	0	0.0045		
I-2	Sediment	PCB	1	PCB 29 (BZ)	0.0044	1	0.0044	ng/g	B C26 J	B C26 J	SOXHLET	Total	1668A	0	0.0044		
I-3	Sediment	PCB	1	PCB 29 (BZ)	0.062	1	0.062	ng/g	C26	C26	SOXHLET	Total	1668A	0	0.062	0.02363	0.062
RB-01-11192012	Water	PCB	1	PCB 29 (BZ)	0.00036	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 3 (BZ)	0.0036	1	0.0036	ng/L	B J	B J	LIQ/LIQ,	Total	1668A	0	0.0036		
BKG-03-MID	Water	PCB	1	PCB 3 (BZ)	0.0024	1	0.0024	ng/L	J	J	LIQ/LIQ,	Total	1668A	0	0.0024	0.003	0.0036
E-02	Water	PCB	1	PCB 3 (BZ)	0.00041	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
E-05	Water	PCB	1	PCB 3 (BZ)	0.019	1	0.019	ng/L	B J	B J	LIQ/LIQ,	Total	1668A	0	0.019		
E-07	Water	PCB	1	PCB 3 (BZ)	0.0075	1	0.0075	ng/L	B J	B J	LIQ/LIQ,	Total	1668A	0	0.0075		
E-09	Water	PCB	1	PCB 3 (BZ)	0.0083	1	0.0083	ng/L	B J	B J	LIQ/LIQ,	Total	1668A	0	0.0083		
E-13	Water	PCB	1	PCB 3 (BZ)	0.046	1	0.046	ng/L	B	B	LIQ/LIQ,	Total	1668A	0	0.046	0.01616	0.046
I-1	Sediment	PCB	1	PCB 3 (BZ)	0.00061	1	0.00061	ng/g	J	J	SOXHLET	Total	1668A	0	0.00061		
I-2	Sediment	PCB	1	PCB 3 (BZ)	0.00082	1	0.00082	ng/g	Q B J	Q B J	SOXHLET	Total	1668A	0	0.00082		
I-3	Sediment	PCB	1	PCB 3 (BZ)	0.007	1	0.007	ng/g	J	J	SOXHLET	Total	1668A	0	0.007	0.00281	0.007
RB-01-11192012	Water	PCB	1	PCB 3 (BZ)	0.00018	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 30 (BZ)	0.1	1	0.1	ng/L	B C18	B C18	LIQ/LIQ,	Total	1668A	0	0.1		
BKG-03-MID	Water	PCB	1	PCB 30 (BZ)	0.16	1	0.16	ng/L	B C18	B C18	LIQ/LIQ,	Total	1668A	0	0.16	0.13	0.16
E-02	Water	PCB	1	PCB 30 (BZ)	0.11	1	0.11	ng/L	B C18	B C18	LIQ/LIQ,	Total	1668A	0	0.11		
E-05	Water	PCB	1	PCB 30 (BZ)	2	1	2	ng/L	C18	C18	LIQ/LIQ,	Total	1668A	0	2		
E-07	Water	PCB	1	PCB 30 (BZ)	0.83	1	0.83	ng/L	C18	C18	LIQ/LIQ,	Total	1668A	0	0.83		
E-09	Water	PCB	1	PCB 30 (BZ)	1.2	1	1.2	ng/L	B C18	B C18	LIQ/LIQ,	Total	1668A	0	1.2		
E-13	Water	PCB	1	PCB 30 (BZ)	2.6	1	2.6	ng/L	B C18	B C18	LIQ/LIQ,	Total	1668A	0	2.6	1.348	2.6
I-1	Sediment	PCB	1	PCB 30 (BZ)	0.0077	1	0.0077	ng/g	C18 J	C18 J	SOXHLET	Total	1668A	0	0.0077		
I-2	Sediment	PCB	1	PCB 30 (BZ)	0.006	1	0.006	ng/g	Q B C18	Q B C18	SOXHLET	Total	1668A	0	0.006		
I-3	Sediment	PCB	1	PCB 30 (BZ)	0.18	1	0.18	ng/g	C18	C18	SOXHLET	Total	1668A	0	0.18	0.06457	0.18
RB-01-11192012	Water	PCB	1	PCB 30 (BZ)	0.00074	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 31 (BZ)	0.094	1	0.094	ng/L	B	B	LIQ/LIQ,	Total	1668A	0	0.094		
BKG-03-MID	Water	PCB	1	PCB 31 (BZ)	0.15	1	0.15	ng/L	B	B	LIQ/LIQ,	Total	1668A	0	0.15	0.122	0.15
E-02	Water	PCB	1	PCB 31 (BZ)	0.06	1	0.06	ng/L	B	B	LIQ/LIQ,	Total	1668A	0	0.06		
E-05	Water	PCB	1	PCB 31 (BZ)	2.3	1	2.3	ng/L	B	B	LIQ/LIQ,	Total	1668A	0	2.3		
E-07	Water	PCB	1	PCB 31 (BZ)	0.93	1	0.93	ng/L	B	B	LIQ/LIQ,	Total	1668A	0	0.93		
E-09	Water	PCB	1	PCB 31 (BZ)	1.1	1	1.1	ng/L	B	B	LIQ/LIQ,	Total	1668A	0	1.1		
E-13	Water	PCB	1	PCB 31 (BZ)	2.6	1	2.6	ng/L	B	B	LIQ/LIQ,	Total	1668A	0	2.6	1.398	2.6
I-1	Sediment	PCB	1	PCB 31 (BZ)	0.012	1	0.012	ng/g	J	J	SOXHLET	Total	1668A	0	0.012		
I-2	Sediment	PCB	1	PCB 31 (BZ)	0.014	1	0.014	ng/g	B J	B J	SOXHLET	Total	1668A	0	0.014		
I-3	Sediment	PCB	1	PCB 31 (BZ)	0.18	1	0.18	ng/g	B	B	SOXHLET	Total	1668A	0	0.18	0.06867	0.18
RB-01-11192012	Water	PCB	1	PCB 31 (BZ)	0.0021	1	0.0021	ng/L	B J	B J	LIQ/LIQ,	Total	1668A	0	0.0021		
BKG-02-EM	Water	PCB	1	PCB 32 (BZ)	0.064	1	0.064	ng/L			LIQ/LIQ,	Total	1668A	0	0.064		
BKG-03-MID	Water	PCB	1	PCB 32 (BZ)	0.068	1	0.068	ng/L			LIQ/LIQ,	Total	1668A	0	0.068	0.066	0.068
E-02	Water	PCB	1	PCB 32 (BZ)	0.041	1	0.041	ng/L	J	J	LIQ/LIQ,	Total	1668A	0	0.041		
E-05	Water	PCB	1	PCB 32 (BZ)	0.7	1	0.7	ng/L			LIQ/LIQ,	Total	1668A	0	0.7		
E-07	Water	PCB	1	PCB 32 (BZ)	0.32	1	0.32	ng/L			LIQ/LIQ,	Total	1668A	0	0.32		
E-09	Water	PCB	1	PCB 32 (BZ)	0.47	1	0.47	ng/L			LIQ/LIQ,	Total	1668A	0	0.47		
E-13	Water	PCB	1	PCB 32 (BZ)	1.1	1	1.1	ng/L			LIQ/LIQ,	Total	1668A	0	1.1	0.5262	1.1
I-1	Sediment	PCB	1	PCB 32 (BZ)	0.0036	1	0.0036	ng/g	J	J	SOXHLET	Total	1668A	0	0.0036		
I-2	Sediment	PCB	1	PCB 32 (BZ)	0.0042	1	0.0042	ng/g	Q J	Q J	SOXHLET	Total	1668A	0	0.0042		
I-3	Sediment	PCB	1	PCB 32 (BZ)	0.06	1	0.06	ng/g	B	B	SOXHLET	Total	1668A	0	0.06	0.0226	0.06
RB-01-11192012	Water	PCB	1	PCB 32 (BZ)	0.00059	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 33 (BZ)	0.025	1	0.025	ng/L	C21 J	C21 J	LIQ/LIQ,	Total	1668A	0	0.025		
BKG-03-MID	Water	PCB	1	PCB 33 (BZ)	0.033	1	0.033	ng/L	Q B C21	Q B C21	LIQ/LIQ,	Total	1668A	0	0.033	0.029	0.033
E-02	Water	PCB	1	PCB 33 (BZ)	0.016	1	0.016	ng/L	B C21 J	B C21 J	LIQ/LIQ,	Total	1668A	0	0.016		
E-05	Water	PCB	1	PCB 33 (BZ)	0.3	1	0.3	ng/L	B C21	B C21	LIQ/LIQ,	Total	1668A	0	0.3		
E-07	Water	PCB	1	PCB 33 (BZ)	0.12	1	0.12	ng/L	B C21	B C21	LIQ/LIQ,	Total	1668A	0	0.12		
E-09	Water	PCB	1	PCB 33 (BZ)	0.26	1	0.26	ng/L	C21	C21	LIQ/LIQ,	Total	1668A	0	0.26		
E-13	Water	PCB	1	PCB 33 (BZ)	0.74	1	0.74	ng/L	B C21	B C21	LIQ/LIQ,	Total	1668A	0	0.74	0.2872	0.74
I-1	Sediment	PCB	1	PCB 33 (BZ)	0.0048	1	0.0048	ng/g	C21 J	C21 J	SOXHLET	Total	1668A	0	0.0048		
I-2	Sediment	PCB	1	PCB 33 (BZ)	0.0043	1	0.0043	ng/g	Q B C21	Q B C21	SOXHLET	Total	1668A	0	0.0043		
I-3	Sediment	PCB	1	PCB 33 (BZ)	0.052	1	0.052	ng/g	C21	C21	SOXHLET	Total	1668A	0	0.052	0.02037	0.052
RB-01-11192012	Water	PCB	1	PCB 33 (BZ)	0.0019	1	0.0019	ng/L	Q B C21	Q B C21	LIQ/LIQ,	Total	1668A	0	0.0019		
BKG-02-EM	Water	PCB	1	PCB 34 (BZ)	0.00069	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-03-MID	Water	PCB	1	PCB 34 (BZ)	0.0017	1	0.0017	ng/L	J	J	LIQ/LIQ,	Total	1668A	0	0.0017	0.00085	0.0017
E-02	Water	PCB	1	PCB 34 (BZ)	0.0012	1	0.0012	ng/L	J	J	LIQ/LIQ,	Total	1668A	0	0.0012		
E-05	Water	PCB	1	PCB 34 (BZ)	0.04	1	0.04	ng/L			LIQ/LIQ,	Total	1668A	0	0.04		
E-07	Water	PCB	1	PCB 34 (BZ)	0.014	1	0.014	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.014		
E-09	Water	PCB	1	PCB 34 (BZ)	0.015	1	0.015	ng/L	J	J	LIQ/LIQ,	Total	1668A	0	0.015		
E-13	Water	PCB	1	PCB 34 (BZ)	0.041	1	0.041	ng/L			LIQ/LIQ,	Total	1668A	0	0.041	0.02224	0.041
I-1	Sediment	PCB	1	PCB 34 (BZ)	0.00019	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-2	Sediment	PCB	1	PCB 34 (BZ)	0.0003	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-3	Sediment	PCB	1	PCB 34 (BZ)	0.0018	1	0.0018	ng/g	J	J	SOXHLET	Total	1668A	0	0.0018	0.0006	0.0018
RB-01-11192012	Water	PCB	1	PCB 34 (BZ)	0.00037	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 35 (BZ)	0.0022	1	0.0022	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.0022		
BKG-03-MID	Water	PCB	1	PCB 35 (BZ)	0.0022	1	0.0022	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.0022	0.0022	0.0022
E-02	Water	PCB	1	PCB 35 (BZ)	0.00078	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
E-05	Water	PCB	1	PCB 35 (BZ)	0.039	1	0.039	ng/L	B	B	LIQ/LIQ,	Total	1668A	0	0.039		
E-07	Water	PCB	1	PCB 35 (BZ)	0.015	1	0.015	ng/L	Q B J	Q B J	LIQ/LIQ,	Total	1668A	0	0.015		
E-09	Water	PCB	1	PCB 35 (BZ)	0.014	1	0.014	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.014		

Client Sample ID	Matrix	sort	ion F	Analyte	Val_res	D?	Result	Unit	Qual	Flag	ep Metho	Prep Type	alysis Method	Check	Adj Val	Mean	Max
E-13	Water	PCB	1	PCB 35 (BZ)	0.038	1	0.038	ng/L	Q B J	Q B J	LIQ/LIQ,	Total	1668A	0	0.038	0.0212	0.039
I-1	Sediment	PCB	1	PCB 35 (BZ)	0.00019	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-2	Sediment	PCB	1	PCB 35 (BZ)	0.00031	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-3	Sediment	PCB	1	PCB 35 (BZ)	0.0027	1	0.0027	ng/g	Q J	Q J	SOXHLET	Total	1668A	0	0.0027	0.0009	0.0027
RB-01-11192012	Water	PCB	1	PCB 35 (BZ)	0.00038	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 36 (BZ)	0.00068	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-03-MID	Water	PCB	1	PCB 36 (BZ)	0.0004	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0	0	0
E-02	Water	PCB	1	PCB 36 (BZ)	0.00075	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
E-05	Water	PCB	1	PCB 36 (BZ)	0.0011	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
E-07	Water	PCB	1	PCB 36 (BZ)	0.001	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
E-09	Water	PCB	1	PCB 36 (BZ)	0.0013	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
E-13	Water	PCB	1	PCB 36 (BZ)	0.0043	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0	0	0
I-1	Sediment	PCB	1	PCB 36 (BZ)	0.00019	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-2	Sediment	PCB	1	PCB 36 (BZ)	0.0003	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-3	Sediment	PCB	1	PCB 36 (BZ)	0.00047	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0	0	0
RB-01-11192012	Water	PCB	1	PCB 36 (BZ)	0.00037	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 37 (BZ)	0.027	1	0.027	ng/L	J	J	LIQ/LIQ,	Total	1668A	0	0.027		
BKG-03-MID	Water	PCB	1	PCB 37 (BZ)	0.027	1	0.027	ng/L	B J	B J	LIQ/LIQ,	Total	1668A	0	0.027	0.027	0.027
E-02	Water	PCB	1	PCB 37 (BZ)	0.012	1	0.012	ng/L	Q B J	Q B J	LIQ/LIQ,	Total	1668A	0	0.012		
E-05	Water	PCB	1	PCB 37 (BZ)	0.42	1	0.42	ng/L	B	B	LIQ/LIQ,	Total	1668A	0	0.42		
E-07	Water	PCB	1	PCB 37 (BZ)	0.16	1	0.16	ng/L	B	B	LIQ/LIQ,	Total	1668A	0	0.16		
E-09	Water	PCB	1	PCB 37 (BZ)	0.18	1	0.18	ng/L			LIQ/LIQ,	Total	1668A	0	0.18		
E-13	Water	PCB	1	PCB 37 (BZ)	0.37	1	0.37	ng/L	B	B	LIQ/LIQ,	Total	1668A	0	0.37	0.2284	0.42
I-1	Sediment	PCB	1	PCB 37 (BZ)	0.0032	1	0.0032	ng/g	J	J	SOXHLET	Total	1668A	0	0.0032		
I-2	Sediment	PCB	1	PCB 37 (BZ)	0.0032	1	0.0032	ng/g	Q B J	Q B J	SOXHLET	Total	1668A	0	0.0032		
I-3	Sediment	PCB	1	PCB 37 (BZ)	0.055	1	0.055	ng/g			SOXHLET	Total	1668A	0	0.055	0.02047	0.055
RB-01-11192012	Water	PCB	1	PCB 37 (BZ)	0.00038	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 38 (BZ)	0.00072	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-03-MID	Water	PCB	1	PCB 38 (BZ)	0.00042	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0	0	0
E-02	Water	PCB	1	PCB 38 (BZ)	0.00079	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
E-05	Water	PCB	1	PCB 38 (BZ)	0.007	1	0.007	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.007		
E-07	Water	PCB	1	PCB 38 (BZ)	0.0011	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
E-09	Water	PCB	1	PCB 38 (BZ)	0.0013	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
E-13	Water	PCB	1	PCB 38 (BZ)	0.0045	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0	0.0014	0.007
I-1	Sediment	PCB	1	PCB 38 (BZ)	0.0002	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-2	Sediment	PCB	1	PCB 38 (BZ)	0.00032	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-3	Sediment	PCB	1	PCB 38 (BZ)	0.00049	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0	0	0
RB-01-11192012	Water	PCB	1	PCB 38 (BZ)	0.00039	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 39 (BZ)	0.00064	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-03-MID	Water	PCB	1	PCB 39 (BZ)	0.0013	1	0.0013	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.0013	0.00065	0.0013
E-02	Water	PCB	1	PCB 39 (BZ)	0.0007	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
E-05	Water	PCB	1	PCB 39 (BZ)	0.026	1	0.026	ng/L	J	J	LIQ/LIQ,	Total	1668A	0	0.026		
E-07	Water	PCB	1	PCB 39 (BZ)	0.012	1	0.012	ng/L	J	J	LIQ/LIQ,	Total	1668A	0	0.012		
E-09	Water	PCB	1	PCB 39 (BZ)	0.0095	1	0.0095	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.0095		
E-13	Water	PCB	1	PCB 39 (BZ)	0.016	1	0.016	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.016	0.0127	0.026
I-1	Sediment	PCB	1	PCB 39 (BZ)	0.00017	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-2	Sediment	PCB	1	PCB 39 (BZ)	0.00028	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-3	Sediment	PCB	1	PCB 39 (BZ)	0.00085	1	0.00085	ng/g	Q J	Q J	SOXHLET	Total	1668A	0	0.00085	0.00028	0.00085
RB-01-11192012	Water	PCB	1	PCB 39 (BZ)	0.00034	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 4 (BZ)	0.058	1	0.058	ng/L	Q B J	Q B J	LIQ/LIQ,	Total	1668A	0	0.058		
BKG-03-MID	Water	PCB	1	PCB 4 (BZ)	0.065	1	0.065	ng/L			LIQ/LIQ,	Total	1668A	0	0.065	0.0615	0.065
E-02	Water	PCB	1	PCB 4 (BZ)	0.056	1	0.056	ng/L	B J	B J	LIQ/LIQ,	Total	1668A	0	0.056		
E-05	Water	PCB	1	PCB 4 (BZ)	0.52	1	0.52	ng/L			LIQ/LIQ,	Total	1668A	0	0.52		
E-07	Water	PCB	1	PCB 4 (BZ)	0.2	1	0.2	ng/L			LIQ/LIQ,	Total	1668A	0	0.2		
E-09	Water	PCB	1	PCB 4 (BZ)	0.24	1	0.24	ng/L	B	B	LIQ/LIQ,	Total	1668A	0	0.24		
E-13	Water	PCB	1	PCB 4 (BZ)	0.53	1	0.53	ng/L	B	B	LIQ/LIQ,	Total	1668A	0	0.53	0.3092	0.53
I-1	Sediment	PCB	1	PCB 4 (BZ)	0.0018	1	0.0018	ng/g	Q J	Q J	SOXHLET	Total	1668A	0	0.0018		
I-2	Sediment	PCB	1	PCB 4 (BZ)	0.002	1	0.002	ng/g	Q B J	Q B J	SOXHLET	Total	1668A	0	0.002		
I-3	Sediment	PCB	1	PCB 4 (BZ)	0.024	1	0.024	ng/g	Q B	Q B	SOXHLET	Total	1668A	0	0.024	0.00927	0.024
RB-01-11192012	Water	PCB	1	PCB 4 (BZ)	0.002	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 40 (BZ)	0.11	1	0.11	ng/L	C	C	LIQ/LIQ,	Total	1668A	0	0.11		
BKG-03-MID	Water	PCB	1	PCB 40 (BZ)	0.12	1	0.12	ng/L	C	C	LIQ/LIQ,	Total	1668A	0	0.12	0.115	0.12
E-02	Water	PCB	1	PCB 40 (BZ)	0.051	1	0.051	ng/L	B C	B C	LIQ/LIQ,	Total	1668A	0	0.051		
E-05	Water	PCB	1	PCB 40 (BZ)	2.1	1	2.1	ng/L	C	C	LIQ/LIQ,	Total	1668A	0	2.1		
E-07	Water	PCB	1	PCB 40 (BZ)	0.9	1	0.9	ng/L	C	C	LIQ/LIQ,	Total	1668A	0	0.9		
E-09	Water	PCB	1	PCB 40 (BZ)	1.1	1	1.1	ng/L	C	C	LIQ/LIQ,	Total	1668A	0	1.1		
E-13	Water	PCB	1	PCB 40 (BZ)	3.1	1	3.1	ng/L	B C	B C	LIQ/LIQ,	Total	1668A	0	3.1	1.4502	3.1
I-1	Sediment	PCB	1	PCB 40 (BZ)	0.0085	1	0.0085	ng/g	C J	C J	SOXHLET	Total	1668A	0	0.0085		
I-2	Sediment	PCB	1	PCB 40 (BZ)	0.0094	1	0.0094	ng/g	B C J	B C J	SOXHLET	Total	1668A	0	0.0094		
I-3	Sediment	PCB	1	PCB 40 (BZ)	0.12	1	0.12	ng/g	C	C	SOXHLET	Total	1668A	0	0.12	0.04597	0.12
RB-01-11192012	Water	PCB	1	PCB 40 (BZ)	0.0008	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 41 (BZ)	0.11	1	0.11	ng/L	C40	C40	LIQ/LIQ,	Total	1668A	0	0.11		
BKG-03-MID	Water	PCB	1	PCB 41 (BZ)	0.12	1	0.12	ng/L	C40	C40	LIQ/LIQ,	Total	1668A	0	0.12	0.115	0.12
E-02	Water	PCB	1	PCB 41 (BZ)	0.051	1	0.051	ng/L	B C40	B C40	LIQ/LIQ,	Total	1668A	0	0.051		
E-05	Water	PCB	1	PCB 41 (BZ)	2.1	1	2.1	ng/L	C40	C40	LIQ/LIQ,	Total	1668A	0	2.1		
E-07	Water	PCB	1	PCB 41 (BZ)	0.9	1	0.9	ng/L	C40	C40	LIQ/LIQ,	Total	1668A	0	0.9		
E-09	Water	PCB	1	PCB 41 (BZ)	1.1	1	1.1	ng/L	C40	C40	LIQ/LIQ,	Total	1668A	0	1.1		
E-13	Water	PCB	1	PCB 41 (BZ)	3.1	1	3.1	ng/L	B C40	B C40	LIQ/LIQ,	Total	1668A	0	3.1	1.4502	3.1
I-1	Sediment	PCB	1	PCB 41 (BZ)	0.0085	1	0.0085	ng/g	C40 J	C40 J	SOXHLET	Total	1668A	0	0.0085		
I-2	Sediment	PCB	1	PCB 41 (BZ)	0.0094	1	0.0094	ng/g	B C40 J	B C40 J	SOXHLET	Total	1668A	0	0.0094		
I-3	Sediment	PCB	1	PCB 41 (BZ)	0.12	1	0.12	ng/g	C40	C40	SOXHLET	Total	1668A	0	0.12	0.04597	0.12
RB-01-11192012	Water	PCB	1	PCB 41 (BZ)	0.0008	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 42 (BZ)	0.055	1	0.055	ng/L			LIQ/LIQ,	Total	1668A	0	0.055		
BKG-03-MID	Water	PCB	1	PCB 42 (BZ)	0.063	1	0.063	ng/L			LIQ/LIQ,	Total	1668A	0	0.063	0.059	0.063
E-02	Water	PCB	1	PCB 42 (BZ)	0.021	1	0.021	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.021		
E-05	Water	PCB	1	PCB 42 (BZ)	1.1	1	1.1	ng/L			LIQ/LIQ,	Total	1668A	0	1.1		
E-07	Water	PCB	1	PCB 42 (BZ)	0.48	1	0.48	ng/L			LIQ/LIQ,	Total	1668A	0	0.48		
E-09	Water	PCB	1	PCB 42 (BZ)	0.52	1	0.52	ng/L			LIQ/LIQ,	Total	1668A	0	0.52		
E-13	Water	PCB	1	PCB 42 (BZ)	1.5	1	1.5	ng/L			LIQ/LIQ,	Total	1668A	0	1.5	0.7242	1.5
I-1	Sediment	PCB	1	PCB 42 (BZ)	0.0039	1	0.0039	ng/g	J	J	SOXHLET	Total	1668A	0	0.0039		
I-2	Sediment	PCB	1	PCB 42 (BZ)	0.0049	1	0.0049	ng/g	Q J	Q J	SOXHLET	Total	1668A	0	0.0049		
I-3	Sediment	PCB	1	PCB 42 (BZ)	0.056	1	0.056	ng/g			SOXHLET	Total	1668A	0	0.056	0.0216	0.056
RB-01-11192012	Water	PCB	1	PCB 42 (BZ)	0.00081	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 43 (BZ)	0.0089	1	0.0089	ng/L	Q C J	Q C J	LIQ/LIQ,	Total	1668A	0	0.0089		
BKG-03-MID	Water	PCB	1	PCB 43 (BZ)	0.0071	1	0.0071	ng/L	C J	C J	LIQ/LIQ,	Total	1668A	0	0.0071	0.008	0.0089
E-02	Water	PCB	1	PCB 43 (BZ)	0.0049	1	0.0049	ng/L	C J	C J	LIQ/LIQ,	Total	1668A	0	0.0049		
E-05	Water	PCB	1	PCB 43 (BZ)	0.16	1	0.16	ng/L	C	C	LIQ/LIQ,	Total	1668A	0	0.16		
E-07	Water	PCB	1	PCB 43 (BZ)	0.069	1	0.069	ng/L	C	C	LIQ/LIQ,	Total	1668A	0	0.069		
E-09	Water	PCB	1	PCB 43 (BZ)	0.065	1	0.065	ng/L	C	C	LIQ/LIQ,	Total	1668A	0	0.065		
E-13	Water	PCB	1	PCB 43 (BZ)	0.23	1	0.23	ng/L	C	C	LIQ/LIQ,	Total	1668A	0	0.23	0.10578	0.23
I-1	Sediment	PCB	1	PCB 43 (BZ)	0.00033	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-2	Sediment	PCB	1	PCB 43 (BZ)	0.001	1	0.001	ng/g	Q C J	Q C J	SOXHLET	Total	1668A	0	0.001		
I-3	Sediment	PCB	1	PCB 43 (BZ)	0.0045	1	0.0045	ng/g	Q C J	Q C J	SOXHLET	Total	1668A	0	0.0045	0.00183	0.0045
RB-01-11192012	Water	PCB	1	PCB 43 (BZ)	0.00075	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 44 (BZ)	0.22	1	0.22	ng/L	B C	B C	LIQ/LIQ,	Total	1668A	0	0.22		
BKG-03-MID	Water	PCB	1	PCB 44 (BZ)	0.29	1	0.29	ng/L	B C	B C	LIQ/LIQ,	Total	1668A	0	0.29	0.255	0.29
E-02	Water	PCB	1	PCB 44 (BZ)	0.17	1	0.17	ng/L	B C	B C	LIQ/LIQ,	Total	1668A	0	0.17		
E-05	Water	PCB	1	PCB 44 (BZ)	4.4	1	4.4	ng/L	B C	B C	LIQ/LIQ,	Total	1668A	0	4.4		
E-07	Water	PCB	1	PCB 44 (BZ)	2	1	2	ng/L	B C	B C	LIQ/LIQ,	Total	1668A	0	2		
E-09	Water	PCB	1	PCB 44 (BZ)	2.2	1	2.2	ng/L	B C	B C	LIQ/LIQ,	Total	1668A	0	2.2		
E-13	Water	PCB	1	PCB 44 (BZ)	7.1	1	7.1	ng/L	B C	B C	LIQ/LIQ,	Total	1668A	0	7.1	3.174	7.1
I-1	Sediment	PCB	1	PCB 44 (BZ)	0.019	1	0.019	ng/g	C	C	SOXHLET	Total	1668A	0	0.019		
I-2	Sediment	PCB	1	PCB 44 (BZ)	0.022	1	0.022	ng/g	B C	B C	SOXHLET	Total	1668A	0	0.022		
I-3	Sediment	PCB	1	PCB 44 (BZ)	0.23	1	0.23	ng/g	C	C	SOXHLET	Total	1668A	0	0.23	0.09033	0.23
RB-01-11192012	Water	PCB	1	PCB 44 (BZ)	0.011	1	0.011	ng/L	B C J	B C J	LIQ/LIQ,	Total	1668A	0	0.011		
BKG-02-EM	Water	PCB	1	PCB 45 (BZ)	0.068	1	0.068	ng/L	C	C	LIQ/LIQ,	Total	1668A	0	0.068		
BKG-03-MID	Water	PCB	1	PCB 45 (BZ)	0.082	1	0.082	ng/L	B C	B C	LIQ/LIQ,	Total	1668A	0	0.082	0.075	0.082
E-02	Water	PCB	1	PCB 45 (BZ)	0.046	1	0.046	ng/L	B C	B C	LIQ/LIQ,	Total	1668A	0	0.046		
E-05	Water	PCB	1	PCB 45 (BZ)	0.9	1	0.9	ng/L	C	C	LIQ/LIQ,	Total	1668A	0	0.9		
E-07	Water	PCB	1	PCB 45 (BZ)	0.4	1	0.4	ng/L	C	C	LIQ/LIQ,	Total	1668A	0	0.4		
E-09	Water	PCB	1	PCB 45 (BZ)	0.45	1	0.45	ng/L	C	C	LIQ/LIQ,	Total	1668A	0	0.45		
E-13	Water	PCB	1	PCB 45 (BZ)	1.7	1	1.7	ng/L	Q B C	Q B C	LIQ/LIQ,	Total	1668A	0	1.7	0.6992	1.7

Client Sample ID	Matrix	sort	ion F	Analyte	Val_res	D?	Result	Unit	Qual	Flag	ep Metho	Prep Type	alysis Method	Check	Adj Val	Mean	Max
I-1	Sediment	PCB	1	PCB 45 (BZ)	0.0023	1	0.0023	ng/g	Q C J	Q C J	SOXHLET	Total	1668A	0	0.0023		
I-2	Sediment	PCB	1	PCB 45 (BZ)	0.0046	1	0.0046	ng/g	C J	C J	SOXHLET	Total	1668A	0	0.0046		
I-3	Sediment	PCB	1	PCB 45 (BZ)	0.048	1	0.048	ng/g	Q C	Q C	SOXHLET	Total	1668A	0	0.048	0.0183	0.048
RB-01-11192012	Water	PCB	1	PCB 45 (BZ)	0.0048	1	0.0048	ng/L	Q B C J	Q B C J	LIQ/LIQ,	Total	1668A	0	0.0048		
BKG-02-EM	Water	PCB	1	PCB 46 (BZ)	0.015	1	0.015	ng/L	J	J	LIQ/LIQ,	Total	1668A	0	0.015		
BKG-03-MID	Water	PCB	1	PCB 46 (BZ)	0.019	1	0.019	ng/L	J	J	LIQ/LIQ,	Total	1668A	0	0.019	0.017	0.019
E-02	Water	PCB	1	PCB 46 (BZ)	0.012	1	0.012	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.012		
E-05	Water	PCB	1	PCB 46 (BZ)	0.29	1	0.29	ng/L			LIQ/LIQ,	Total	1668A	0	0.29		
E-07	Water	PCB	1	PCB 46 (BZ)	0.13	1	0.13	ng/L			LIQ/LIQ,	Total	1668A	0	0.13		
E-09	Water	PCB	1	PCB 46 (BZ)	0.14	1	0.14	ng/L			LIQ/LIQ,	Total	1668A	0	0.14		
E-13	Water	PCB	1	PCB 46 (BZ)	0.49	1	0.49	ng/L			LIQ/LIQ,	Total	1668A	0	0.49	0.2124	0.49
I-1	Sediment	PCB	1	PCB 46 (BZ)	0.00044	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-2	Sediment	PCB	1	PCB 46 (BZ)	0.0007	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-3	Sediment	PCB	1	PCB 46 (BZ)	0.014	1	0.014	ng/g			SOXHLET	Total	1668A	0	0.014	0.00467	0.014
RB-01-11192012	Water	PCB	1	PCB 46 (BZ)	0.00098	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 47 (BZ)	0.22	1	0.22	ng/L	B C44	B C44	LIQ/LIQ,	Total	1668A	0	0.22		
BKG-03-MID	Water	PCB	1	PCB 47 (BZ)	0.29	1	0.29	ng/L	B C44	B C44	LIQ/LIQ,	Total	1668A	0	0.29	0.255	0.29
E-02	Water	PCB	1	PCB 47 (BZ)	0.17	1	0.17	ng/L	B C44	B C44	LIQ/LIQ,	Total	1668A	0	0.17		
E-05	Water	PCB	1	PCB 47 (BZ)	4.4	1	4.4	ng/L	B C44	B C44	LIQ/LIQ,	Total	1668A	0	4.4		
E-07	Water	PCB	1	PCB 47 (BZ)	2	1	2	ng/L	B C44	B C44	LIQ/LIQ,	Total	1668A	0	2		
E-09	Water	PCB	1	PCB 47 (BZ)	2.2	1	2.2	ng/L	B C44	B C44	LIQ/LIQ,	Total	1668A	0	2.2		
E-13	Water	PCB	1	PCB 47 (BZ)	7.1	1	7.1	ng/L	B C44	B C44	LIQ/LIQ,	Total	1668A	0	7.1	3.174	7.1
I-1	Sediment	PCB	1	PCB 47 (BZ)	0.019	1	0.019	ng/g	C44	C44	SOXHLET	Total	1668A	0	0.019		
I-2	Sediment	PCB	1	PCB 47 (BZ)	0.022	1	0.022	ng/g	B C44	B C44	SOXHLET	Total	1668A	0	0.022		
I-3	Sediment	PCB	1	PCB 47 (BZ)	0.23	1	0.23	ng/g	C44	C44	SOXHLET	Total	1668A	0	0.23	0.09033	0.23
RB-01-11192012	Water	PCB	1	PCB 47 (BZ)	0.011	1	0.011	ng/L	B C44 J	B C44 J	LIQ/LIQ,	Total	1668A	0	0.011		
BKG-02-EM	Water	PCB	1	PCB 48 (BZ)	0.027	1	0.027	ng/L	J	J	LIQ/LIQ,	Total	1668A	0	0.027		
BKG-03-MID	Water	PCB	1	PCB 48 (BZ)	0.037	1	0.037	ng/L	J	J	LIQ/LIQ,	Total	1668A	0	0.037	0.032	0.037
E-02	Water	PCB	1	PCB 48 (BZ)	0.013	1	0.013	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.013		
E-05	Water	PCB	1	PCB 48 (BZ)	0.76	1	0.76	ng/L			LIQ/LIQ,	Total	1668A	0	0.76		
E-07	Water	PCB	1	PCB 48 (BZ)	0.3	1	0.3	ng/L			LIQ/LIQ,	Total	1668A	0	0.3		
E-09	Water	PCB	1	PCB 48 (BZ)	0.35	1	0.35	ng/L			LIQ/LIQ,	Total	1668A	0	0.35		
E-13	Water	PCB	1	PCB 48 (BZ)	0.92	1	0.92	ng/L			LIQ/LIQ,	Total	1668A	0	0.92	0.4686	0.92
I-1	Sediment	PCB	1	PCB 48 (BZ)	0.0019	1	0.0019	ng/g	Q J	Q J	SOXHLET	Total	1668A	0	0.0019		
I-2	Sediment	PCB	1	PCB 48 (BZ)	0.0031	1	0.0031	ng/g	Q J	Q J	SOXHLET	Total	1668A	0	0.0031		
I-3	Sediment	PCB	1	PCB 48 (BZ)	0.033	1	0.033	ng/g			SOXHLET	Total	1668A	0	0.033	0.01267	0.033
RB-01-11192012	Water	PCB	1	PCB 48 (BZ)	0.00079	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 49 (BZ)	0.16	1	0.16	ng/L	C	C	LIQ/LIQ,	Total	1668A	0	0.16		
BKG-03-MID	Water	PCB	1	PCB 49 (BZ)	0.21	1	0.21	ng/L	C	C	LIQ/LIQ,	Total	1668A	0	0.21	0.185	0.21
E-02	Water	PCB	1	PCB 49 (BZ)	0.068	1	0.068	ng/L	B C	B C	LIQ/LIQ,	Total	1668A	0	0.068		
E-05	Water	PCB	1	PCB 49 (BZ)	3.2	1	3.2	ng/L	C	C	LIQ/LIQ,	Total	1668A	0	3.2		
E-07	Water	PCB	1	PCB 49 (BZ)	1.4	1	1.4	ng/L	C	C	LIQ/LIQ,	Total	1668A	0	1.4		
E-09	Water	PCB	1	PCB 49 (BZ)	1.5	1	1.5	ng/L	C	C	LIQ/LIQ,	Total	1668A	0	1.5		
E-13	Water	PCB	1	PCB 49 (BZ)	5.1	1	5.1	ng/L	B C	B C	LIQ/LIQ,	Total	1668A	0	5.1	2.2536	5.1
I-1	Sediment	PCB	1	PCB 49 (BZ)	0.013	1	0.013	ng/g	C	C	SOXHLET	Total	1668A	0	0.013		
I-2	Sediment	PCB	1	PCB 49 (BZ)	0.015	1	0.015	ng/g	B C	B C	SOXHLET	Total	1668A	0	0.015		
I-3	Sediment	PCB	1	PCB 49 (BZ)	0.16	1	0.16	ng/g	C	C	SOXHLET	Total	1668A	0	0.16	0.06267	0.16
RB-01-11192012	Water	PCB	1	PCB 49 (BZ)	0.00066	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 5 (BZ)	0.0011	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-03-MID	Water	PCB	1	PCB 5 (BZ)	0.0012	1	0.0012	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.0012	0.0006	0.0012
E-02	Water	PCB	1	PCB 5 (BZ)	0.0019	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
E-05	Water	PCB	1	PCB 5 (BZ)	0.0024	1	0.0024	ng/L	Q B J	Q B J	LIQ/LIQ,	Total	1668A	0	0.0024		
E-07	Water	PCB	1	PCB 5 (BZ)	0.0011	1	0.0011	ng/L	Q B J	Q B J	LIQ/LIQ,	Total	1668A	0	0.0011		
E-09	Water	PCB	1	PCB 5 (BZ)	0.0019	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
E-13	Water	PCB	1	PCB 5 (BZ)	0.014	1	0.014	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.014	0.0035	0.014
I-1	Sediment	PCB	1	PCB 5 (BZ)	0.00061	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-2	Sediment	PCB	1	PCB 5 (BZ)	0.00086	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-3	Sediment	PCB	1	PCB 5 (BZ)	0.00098	1	0.00098	ng/g	Q B J	Q B J	SOXHLET	Total	1668A	0	0.00098	0.00033	0.00098
RB-01-11192012	Water	PCB	1	PCB 5 (BZ)	0.0015	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 50 (BZ)	0.053	1	0.053	ng/L	C	C	LIQ/LIQ,	Total	1668A	0	0.053		
BKG-03-MID	Water	PCB	1	PCB 50 (BZ)	0.06	1	0.06	ng/L	C	C	LIQ/LIQ,	Total	1668A	0	0.06	0.0565	0.06
E-02	Water	PCB	1	PCB 50 (BZ)	0.038	1	0.038	ng/L	C J	C J	LIQ/LIQ,	Total	1668A	0	0.038		
E-05	Water	PCB	1	PCB 50 (BZ)	0.69	1	0.69	ng/L	C	C	LIQ/LIQ,	Total	1668A	0	0.69		
E-07	Water	PCB	1	PCB 50 (BZ)	0.31	1	0.31	ng/L	C	C	LIQ/LIQ,	Total	1668A	0	0.31		
E-09	Water	PCB	1	PCB 50 (BZ)	0.35	1	0.35	ng/L	C	C	LIQ/LIQ,	Total	1668A	0	0.35		
E-13	Water	PCB	1	PCB 50 (BZ)	1.5	1	1.5	ng/L	B C	B C	LIQ/LIQ,	Total	1668A	0	1.5	0.5776	1.5
I-1	Sediment	PCB	1	PCB 50 (BZ)	0.0018	1	0.0018	ng/g	C J	C J	SOXHLET	Total	1668A	0	0.0018		
I-2	Sediment	PCB	1	PCB 50 (BZ)	0.0022	1	0.0022	ng/g	Q B C J	Q B C J	SOXHLET	Total	1668A	0	0.0022		
I-3	Sediment	PCB	1	PCB 50 (BZ)	0.046	1	0.046	ng/g	C	C	SOXHLET	Total	1668A	0	0.046	0.01667	0.046
RB-01-11192012	Water	PCB	1	PCB 50 (BZ)	0.00077	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 51 (BZ)	0.068	1	0.068	ng/L	C45	C45	LIQ/LIQ,	Total	1668A	0	0.068		
BKG-03-MID	Water	PCB	1	PCB 51 (BZ)	0.082	1	0.082	ng/L	B C45	B C45	LIQ/LIQ,	Total	1668A	0	0.082	0.075	0.082
E-02	Water	PCB	1	PCB 51 (BZ)	0.046	1	0.046	ng/L	B C45	B C45	LIQ/LIQ,	Total	1668A	0	0.046		
E-05	Water	PCB	1	PCB 51 (BZ)	0.9	1	0.9	ng/L	C45	C45	LIQ/LIQ,	Total	1668A	0	0.9		
E-07	Water	PCB	1	PCB 51 (BZ)	0.4	1	0.4	ng/L	C45	C45	LIQ/LIQ,	Total	1668A	0	0.4		
E-09	Water	PCB	1	PCB 51 (BZ)	0.45	1	0.45	ng/L	C45	C45	LIQ/LIQ,	Total	1668A	0	0.45		
E-13	Water	PCB	1	PCB 51 (BZ)	1.7	1	1.7	ng/L	Q B C45	Q B C45	LIQ/LIQ,	Total	1668A	0	1.7	0.6992	1.7
I-1	Sediment	PCB	1	PCB 51 (BZ)	0.0023	1	0.0023	ng/g	Q C45 J	Q C45 J	SOXHLET	Total	1668A	0	0.0023		
I-2	Sediment	PCB	1	PCB 51 (BZ)	0.0046	1	0.0046	ng/g	C45 J	C45 J	SOXHLET	Total	1668A	0	0.0046		
I-3	Sediment	PCB	1	PCB 51 (BZ)	0.048	1	0.048	ng/g	Q C45	Q C45	SOXHLET	Total	1668A	0	0.048	0.0183	0.048
RB-01-11192012	Water	PCB	1	PCB 51 (BZ)	0.0048	1	0.0048	ng/L	Q B C45	Q B C45	LIQ/LIQ,	Total	1668A	0	0.0048		
BKG-02-EM	Water	PCB	1	PCB 52 (BZ)	0.27	1	0.27	ng/L	B	B	LIQ/LIQ,	Total	1668A	0	0.27		
BKG-03-MID	Water	PCB	1	PCB 52 (BZ)	0.39	1	0.39	ng/L	B	B	LIQ/LIQ,	Total	1668A	0	0.39	0.33	0.39
E-02	Water	PCB	1	PCB 52 (BZ)	0.14	1	0.14	ng/L	B	B	LIQ/LIQ,	Total	1668A	0	0.14		
E-05	Water	PCB	1	PCB 52 (BZ)	5.6	1	5.6	ng/L	B	B	LIQ/LIQ,	Total	1668A	0	5.6		
E-07	Water	PCB	1	PCB 52 (BZ)	2.6	1	2.6	ng/L	B	B	LIQ/LIQ,	Total	1668A	0	2.6		
E-09	Water	PCB	1	PCB 52 (BZ)	2.9	1	2.9	ng/L	B	B	LIQ/LIQ,	Total	1668A	0	2.9		
E-13	Water	PCB	1	PCB 52 (BZ)	9.7	1	9.7	ng/L	B	B	LIQ/LIQ,	Total	1668A	0	9.7	4.188	9.7
I-1	Sediment	PCB	1	PCB 52 (BZ)	0.022	1	0.022	ng/g			SOXHLET	Total	1668A	0	0.022		
I-2	Sediment	PCB	1	PCB 52 (BZ)	0.025	1	0.025	ng/g	B	B	SOXHLET	Total	1668A	0	0.025		
I-3	Sediment	PCB	1	PCB 52 (BZ)	0.28	1	0.28	ng/g			SOXHLET	Total	1668A	0	0.28	0.109	0.28
RB-01-11192012	Water	PCB	1	PCB 52 (BZ)	0.0024	1	0.0024	ng/L	B J	B J	LIQ/LIQ,	Total	1668A	0	0.0024		
BKG-02-EM	Water	PCB	1	PCB 53 (BZ)	0.053	1	0.053	ng/L	C50	C50	LIQ/LIQ,	Total	1668A	0	0.053		
BKG-03-MID	Water	PCB	1	PCB 53 (BZ)	0.06	1	0.06	ng/L	C50	C50	LIQ/LIQ,	Total	1668A	0	0.06	0.0565	0.06
E-02	Water	PCB	1	PCB 53 (BZ)	0.038	1	0.038	ng/L	C50 J	C50 J	LIQ/LIQ,	Total	1668A	0	0.038		
E-05	Water	PCB	1	PCB 53 (BZ)	0.69	1	0.69	ng/L	C50	C50	LIQ/LIQ,	Total	1668A	0	0.69		
E-07	Water	PCB	1	PCB 53 (BZ)	0.31	1	0.31	ng/L	C50	C50	LIQ/LIQ,	Total	1668A	0	0.31		
E-09	Water	PCB	1	PCB 53 (BZ)	0.35	1	0.35	ng/L	C50	C50	LIQ/LIQ,	Total	1668A	0	0.35		
E-13	Water	PCB	1	PCB 53 (BZ)	1.5	1	1.5	ng/L	B C50	B C50	LIQ/LIQ,	Total	1668A	0	1.5	0.5776	1.5
I-1	Sediment	PCB	1	PCB 53 (BZ)	0.0018	1	0.0018	ng/g	C50 J	C50 J	SOXHLET	Total	1668A	0	0.0018		
I-2	Sediment	PCB	1	PCB 53 (BZ)	0.0022	1	0.0022	ng/g	Q B C50	Q B C50	SOXHLET	Total	1668A	0	0.0022		
I-3	Sediment	PCB	1	PCB 53 (BZ)	0.046	1	0.046	ng/g	C50	C50	SOXHLET	Total	1668A	0	0.046	0.01667	0.046
RB-01-11192012	Water	PCB	1	PCB 53 (BZ)	0.00077	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 54 (BZ)	0.0094	1	0.0094	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.0094		
BKG-03-MID	Water	PCB	1	PCB 54 (BZ)	0.0066	1	0.0066	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.0066	0.008	0.0094
E-02	Water	PCB	1	PCB 54 (BZ)	0.0025	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
E-05	Water	PCB	1	PCB 54 (BZ)	0.017	1	0.017	ng/L	J	J	LIQ/LIQ,	Total	1668A	0	0.017		
E-07	Water	PCB	1	PCB 54 (BZ)	0.016	1	0.016	ng/L	J	J	LIQ/LIQ,	Total	1668A	0	0.016		
E-09	Water	PCB	1	PCB 54 (BZ)	0.014	1	0.014	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.014		
E-13	Water	PCB	1	PCB 54 (BZ)	0.084	1	0.084	ng/L	Q	Q	LIQ/LIQ,	Total	1668A	0	0.084	0.0262	0.084
I-1	Sediment	PCB	1	PCB 54 (BZ)	0.00058	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-2	Sediment	PCB	1	PCB 54 (BZ)	0.0008	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-3	Sediment	PCB	1	PCB 54 (BZ)	0.0015	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0	0	0
RB-01-11192012	Water	PCB	1	PCB 54 (BZ)	0.0011	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 55 (BZ)	0.0025	1	0.0025	ng/L	J	J	LIQ/LIQ,	Total	1668A	0	0.0025		
BKG-03-MID	Water	PCB	1	PCB 55 (BZ)	0.0031	1	0.0031	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.0031	0.0028	0.0031
E-02	Water	PCB	1	PCB 55 (BZ)	0.0024	1	0.0024	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.0024		
E-05	Water	PCB	1	PCB 55 (BZ)	0.066	1	0.066	ng/L			LIQ/LIQ,	Total	1668A	0	0.066		
E-07	Water	PCB	1	PCB 55 (BZ)	0.025	1	0.025	ng/L	J	J	LIQ/LIQ,	Total	1668A	0	0.025		
E-09	Water	PCB	1	PCB 55 (BZ)	0.011	1	0.011	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.011		
E-13	Water	PCB	1	PCB 55 (BZ)	0.043	1	0.043	ng/L	Q	Q	LIQ/LIQ,	Total	1668A	0	0.043	0.02948	0.066
I-1	Sediment	PCB	1	PCB 55 (BZ)	0.00028	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		

Client Sample ID	Matrix	sort	ion F	Analyte	Val_res	D?	Result	Unit	Qual	Flag	ep Metho	Prep Type	alysis Method	Check	Adj Val	Mean	Max
I-2	Sediment	PCB	1	PCB 55 (BZ)	0.00044	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-3	Sediment	PCB	1	PCB 55 (BZ)	0.0019	1	0.0019	ng/g	Q J	Q J	SOXHLET	Total	1668A	0	0.0019	0.00063	0.0019
RB-01-11192012	Water	PCB	1	PCB 55 (BZ)	0.00062	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 56 (BZ)	0.059	1	0.059	ng/L			LIQ/LIQ,	Total	1668A	0	0.059		
BKG-03-MID	Water	PCB	1	PCB 56 (BZ)	0.067	1	0.067	ng/L			LIQ/LIQ,	Total	1668A	0	0.067	0.063	0.067
E-02	Water	PCB	1	PCB 56 (BZ)	0.029	1	0.029	ng/L	B J	B J	LIQ/LIQ,	Total	1668A	0	0.029		
E-05	Water	PCB	1	PCB 56 (BZ)	1.3	1	1.3	ng/L	B	B	LIQ/LIQ,	Total	1668A	0	1.3		
E-07	Water	PCB	1	PCB 56 (BZ)	0.55	1	0.55	ng/L	B	B	LIQ/LIQ,	Total	1668A	0	0.55		
E-09	Water	PCB	1	PCB 56 (BZ)	0.68	1	0.68	ng/L			LIQ/LIQ,	Total	1668A	0	0.68		
E-13	Water	PCB	1	PCB 56 (BZ)	1.7	1	1.7	ng/L	B	B	LIQ/LIQ,	Total	1668A	0	1.7	0.8518	1.7
I-1	Sediment	PCB	1	PCB 56 (BZ)	0.0087	1	0.0087	ng/g	J	J	SOXHLET	Total	1668A	0	0.0087		
I-2	Sediment	PCB	1	PCB 56 (BZ)	0.0071	1	0.0071	ng/g	J	J	SOXHLET	Total	1668A	0	0.0071		
I-3	Sediment	PCB	1	PCB 56 (BZ)	0.081	1	0.081	ng/g			SOXHLET	Total	1668A	0	0.081	0.03227	0.081
RB-01-11192012	Water	PCB	1	PCB 56 (BZ)	0.00058	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 57 (BZ)	0.00086	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-03-MID	Water	PCB	1	PCB 57 (BZ)	0.0035	1	0.0035	ng/L	J	J	LIQ/LIQ,	Total	1668A	0	0.0035	0.00175	0.0035
E-02	Water	PCB	1	PCB 57 (BZ)	0.0012	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
E-05	Water	PCB	1	PCB 57 (BZ)	0.042	1	0.042	ng/L			LIQ/LIQ,	Total	1668A	0	0.042		
E-07	Water	PCB	1	PCB 57 (BZ)	0.016	1	0.016	ng/L	J	J	LIQ/LIQ,	Total	1668A	0	0.016		
E-09	Water	PCB	1	PCB 57 (BZ)	0.019	1	0.019	ng/L	J	J	LIQ/LIQ,	Total	1668A	0	0.019		
E-13	Water	PCB	1	PCB 57 (BZ)	0.047	1	0.047	ng/L	Q	Q	LIQ/LIQ,	Total	1668A	0	0.047	0.0248	0.047
I-1	Sediment	PCB	1	PCB 57 (BZ)	0.00026	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-2	Sediment	PCB	1	PCB 57 (BZ)	0.00042	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-3	Sediment	PCB	1	PCB 57 (BZ)	0.0022	1	0.0022	ng/g	Q J	Q J	SOXHLET	Total	1668A	0	0.0022	0.00073	0.0022
RB-01-11192012	Water	PCB	1	PCB 57 (BZ)	0.00059	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 58 (BZ)	0.00086	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-03-MID	Water	PCB	1	PCB 58 (BZ)	0.0011	1	0.0011	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.0011	0.00055	0.0011
E-02	Water	PCB	1	PCB 58 (BZ)	0.0012	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
E-05	Water	PCB	1	PCB 58 (BZ)	0.02	1	0.02	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.02		
E-07	Water	PCB	1	PCB 58 (BZ)	0.01	1	0.01	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.01		
E-09	Water	PCB	1	PCB 58 (BZ)	0.011	1	0.011	ng/L	J	J	LIQ/LIQ,	Total	1668A	0	0.011		
E-13	Water	PCB	1	PCB 58 (BZ)	0.034	1	0.034	ng/L	J	J	LIQ/LIQ,	Total	1668A	0	0.034	0.015	0.034
I-1	Sediment	PCB	1	PCB 58 (BZ)	0.00026	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-2	Sediment	PCB	1	PCB 58 (BZ)	0.00042	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-3	Sediment	PCB	1	PCB 58 (BZ)	0.00082	1	0.00082	ng/g	Q J	Q J	SOXHLET	Total	1668A	0	0.00082	0.00027	0.00082
RB-01-11192012	Water	PCB	1	PCB 58 (BZ)	0.00059	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 59 (BZ)	0.016	1	0.016	ng/L	Q C J	Q C J	LIQ/LIQ,	Total	1668A	0	0.016		
BKG-03-MID	Water	PCB	1	PCB 59 (BZ)	0.024	1	0.024	ng/L	C J	C J	LIQ/LIQ,	Total	1668A	0	0.024	0.02	0.024
E-02	Water	PCB	1	PCB 59 (BZ)	0.01	1	0.01	ng/L	C J	C J	LIQ/LIQ,	Total	1668A	0	0.01		
E-05	Water	PCB	1	PCB 59 (BZ)	0.37	1	0.37	ng/L	C	C	LIQ/LIQ,	Total	1668A	0	0.37		
E-07	Water	PCB	1	PCB 59 (BZ)	0.17	1	0.17	ng/L	C	C	LIQ/LIQ,	Total	1668A	0	0.17		
E-09	Water	PCB	1	PCB 59 (BZ)	0.16	1	0.16	ng/L	C	C	LIQ/LIQ,	Total	1668A	0	0.16		
E-13	Water	PCB	1	PCB 59 (BZ)	0.49	1	0.49	ng/L	B C	B C	LIQ/LIQ,	Total	1668A	0	0.49	0.24	0.49
I-1	Sediment	PCB	1	PCB 59 (BZ)	0.0013	1	0.0013	ng/g	Q C J	Q C J	SOXHLET	Total	1668A	0	0.0013		
I-2	Sediment	PCB	1	PCB 59 (BZ)	0.0017	1	0.0017	ng/g	Q C J	Q C J	SOXHLET	Total	1668A	0	0.0017		
I-3	Sediment	PCB	1	PCB 59 (BZ)	0.018	1	0.018	ng/g	C	C	SOXHLET	Total	1668A	0	0.018	0.007	0.018
RB-01-11192012	Water	PCB	1	PCB 59 (BZ)	0.00057	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 6 (BZ)	0.0074	1	0.0074	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.0074		
BKG-03-MID	Water	PCB	1	PCB 6 (BZ)	0.01	1	0.01	ng/L	Q B J	Q B J	LIQ/LIQ,	Total	1668A	0	0.01	0.0087	0.01
E-02	Water	PCB	1	PCB 6 (BZ)	0.0051	1	0.0051	ng/L	Q B J	Q B J	LIQ/LIQ,	Total	1668A	0	0.0051		
E-05	Water	PCB	1	PCB 6 (BZ)	0.035	1	0.035	ng/L	Q B J	Q B J	LIQ/LIQ,	Total	1668A	0	0.035		
E-07	Water	PCB	1	PCB 6 (BZ)	0.014	1	0.014	ng/L	Q B J	Q B J	LIQ/LIQ,	Total	1668A	0	0.014		
E-09	Water	PCB	1	PCB 6 (BZ)	0.028	1	0.028	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.028		
E-13	Water	PCB	1	PCB 6 (BZ)	0.58	1	0.58	ng/L	B	B	LIQ/LIQ,	Total	1668A	0	0.58	0.13242	0.58
I-1	Sediment	PCB	1	PCB 6 (BZ)	0.0014	1	0.0014	ng/g	Q J	Q J	SOXHLET	Total	1668A	0	0.0014		
I-2	Sediment	PCB	1	PCB 6 (BZ)	0.0021	1	0.0021	ng/g	Q B J	Q B J	SOXHLET	Total	1668A	0	0.0021		
I-3	Sediment	PCB	1	PCB 6 (BZ)	0.028	1	0.028	ng/g	Q	Q	SOXHLET	Total	1668A	0	0.028	0.0105	0.028
RB-01-11192012	Water	PCB	1	PCB 6 (BZ)	0.0014	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 60 (BZ)	0.017	1	0.017	ng/L	J	J	LIQ/LIQ,	Total	1668A	0	0.017		
BKG-03-MID	Water	PCB	1	PCB 60 (BZ)	0.018	1	0.018	ng/L	J	J	LIQ/LIQ,	Total	1668A	0	0.018	0.0175	0.018
E-02	Water	PCB	1	PCB 60 (BZ)	0.0083	1	0.0083	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.0083		
E-05	Water	PCB	1	PCB 60 (BZ)	0.26	1	0.26	ng/L			LIQ/LIQ,	Total	1668A	0	0.26		
E-07	Water	PCB	1	PCB 60 (BZ)	0.11	1	0.11	ng/L			LIQ/LIQ,	Total	1668A	0	0.11		
E-09	Water	PCB	1	PCB 60 (BZ)	0.14	1	0.14	ng/L			LIQ/LIQ,	Total	1668A	0	0.14		
E-13	Water	PCB	1	PCB 60 (BZ)	0.46	1	0.46	ng/L	B	B	LIQ/LIQ,	Total	1668A	0	0.46	0.19566	0.46
I-1	Sediment	PCB	1	PCB 60 (BZ)	0.0028	1	0.0028	ng/g	J	J	SOXHLET	Total	1668A	0	0.0028		
I-2	Sediment	PCB	1	PCB 60 (BZ)	0.0013	1	0.0013	ng/g	Q J	Q J	SOXHLET	Total	1668A	0	0.0013		
I-3	Sediment	PCB	1	PCB 60 (BZ)	0.02	1	0.02	ng/g			SOXHLET	Total	1668A	0	0.02	0.00803	0.02
RB-01-11192012	Water	PCB	1	PCB 60 (BZ)	0.0006	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 61 (BZ)	0.21	1	0.21	ng/L	B C	B C	LIQ/LIQ,	Total	1668A	0	0.21		
BKG-03-MID	Water	PCB	1	PCB 61 (BZ)	0.29	1	0.29	ng/L	B C	B C	LIQ/LIQ,	Total	1668A	0	0.29	0.25	0.29
E-02	Water	PCB	1	PCB 61 (BZ)	0.1	1	0.1	ng/L	B C	B C	LIQ/LIQ,	Total	1668A	0	0.1		
E-05	Water	PCB	1	PCB 61 (BZ)	5	1	5	ng/L	B C	B C	LIQ/LIQ,	Total	1668A	0	5		
E-07	Water	PCB	1	PCB 61 (BZ)	2.3	1	2.3	ng/L	B C	B C	LIQ/LIQ,	Total	1668A	0	2.3		
E-09	Water	PCB	1	PCB 61 (BZ)	2.5	1	2.5	ng/L	B C	B C	LIQ/LIQ,	Total	1668A	0	2.5		
E-13	Water	PCB	1	PCB 61 (BZ)	7.1	1	7.1	ng/L	B C	B C	LIQ/LIQ,	Total	1668A	0	7.1	3.4	7.1
I-1	Sediment	PCB	1	PCB 61 (BZ)	0.033	1	0.033	ng/g	B C	B C	SOXHLET	Total	1668A	0	0.033		
I-2	Sediment	PCB	1	PCB 61 (BZ)	0.027	1	0.027	ng/g	B C	B C	SOXHLET	Total	1668A	0	0.027		
I-3	Sediment	PCB	1	PCB 61 (BZ)	0.31	1	0.31	ng/g	B C	B C	SOXHLET	Total	1668A	0	0.31	0.12333	0.31
RB-01-11192012	Water	PCB	1	PCB 61 (BZ)	0.0028	1	0.0028	ng/L	Q B C J	Q B C J	LIQ/LIQ,	Total	1668A	0	0.0028		
BKG-02-EM	Water	PCB	1	PCB 62 (BZ)	0.016	1	0.016	ng/L	Q C59 J	Q C59 J	LIQ/LIQ,	Total	1668A	0	0.016		
BKG-03-MID	Water	PCB	1	PCB 62 (BZ)	0.024	1	0.024	ng/L	C59 J	C59 J	LIQ/LIQ,	Total	1668A	0	0.024	0.02	0.024
E-02	Water	PCB	1	PCB 62 (BZ)	0.01	1	0.01	ng/L	C59 J	C59 J	LIQ/LIQ,	Total	1668A	0	0.01		
E-05	Water	PCB	1	PCB 62 (BZ)	0.37	1	0.37	ng/L	C59	C59	LIQ/LIQ,	Total	1668A	0	0.37		
E-07	Water	PCB	1	PCB 62 (BZ)	0.17	1	0.17	ng/L	C59	C59	LIQ/LIQ,	Total	1668A	0	0.17		
E-09	Water	PCB	1	PCB 62 (BZ)	0.16	1	0.16	ng/L	C59	C59	LIQ/LIQ,	Total	1668A	0	0.16		
E-13	Water	PCB	1	PCB 62 (BZ)	0.49	1	0.49	ng/L	B C59	B C59	LIQ/LIQ,	Total	1668A	0	0.49	0.24	0.49
I-1	Sediment	PCB	1	PCB 62 (BZ)	0.0013	1	0.0013	ng/g	Q C59 J	Q C59 J	SOXHLET	Total	1668A	0	0.0013		
I-2	Sediment	PCB	1	PCB 62 (BZ)	0.0017	1	0.0017	ng/g	Q C59 J	Q C59 J	SOXHLET	Total	1668A	0	0.0017		
I-3	Sediment	PCB	1	PCB 62 (BZ)	0.018	1	0.018	ng/g	C59	C59	SOXHLET	Total	1668A	0	0.018	0.007	0.018
RB-01-11192012	Water	PCB	1	PCB 62 (BZ)	0.00057	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 63 (BZ)	0.007	1	0.007	ng/L	J	J	LIQ/LIQ,	Total	1668A	0	0.007		
BKG-03-MID	Water	PCB	1	PCB 63 (BZ)	0.0084	1	0.0084	ng/L	J	J	LIQ/LIQ,	Total	1668A	0	0.0084	0.0077	0.0084
E-02	Water	PCB	1	PCB 63 (BZ)	0.0011	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
E-05	Water	PCB	1	PCB 63 (BZ)	0.14	1	0.14	ng/L			LIQ/LIQ,	Total	1668A	0	0.14		
E-07	Water	PCB	1	PCB 63 (BZ)	0.058	1	0.058	ng/L			LIQ/LIQ,	Total	1668A	0	0.058		
E-09	Water	PCB	1	PCB 63 (BZ)	0.063	1	0.063	ng/L			LIQ/LIQ,	Total	1668A	0	0.063		
E-13	Water	PCB	1	PCB 63 (BZ)	0.17	1	0.17	ng/L	Q	Q	LIQ/LIQ,	Total	1668A	0	0.17	0.0862	0.17
I-1	Sediment	PCB	1	PCB 63 (BZ)	0.00094	1	0.00094	ng/g	Q J	Q J	SOXHLET	Total	1668A	0	0.00094		
I-2	Sediment	PCB	1	PCB 63 (BZ)	0.00039	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-3	Sediment	PCB	1	PCB 63 (BZ)	0.0064	1	0.0064	ng/g	J	J	SOXHLET	Total	1668A	0	0.0064	0.00245	0.0064
RB-01-11192012	Water	PCB	1	PCB 63 (BZ)	0.00055	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 64 (BZ)	0.078	1	0.078	ng/L	B	B	LIQ/LIQ,	Total	1668A	0	0.078		
BKG-03-MID	Water	PCB	1	PCB 64 (BZ)	0.09	1	0.09	ng/L			LIQ/LIQ,	Total	1668A	0	0.09	0.084	0.09
E-02	Water	PCB	1	PCB 64 (BZ)	0.037	1	0.037	ng/L	B J	B J	LIQ/LIQ,	Total	1668A	0	0.037		
E-05	Water	PCB	1	PCB 64 (BZ)	1.6	1	1.6	ng/L	B	B	LIQ/LIQ,	Total	1668A	0	1.6		
E-07	Water	PCB	1	PCB 64 (BZ)	0.69	1	0.69	ng/L	B	B	LIQ/LIQ,	Total	1668A	0	0.69		
E-09	Water	PCB	1	PCB 64 (BZ)	0.77	1	0.77	ng/L	B	B	LIQ/LIQ,	Total	1668A	0	0.77		
E-13	Water	PCB	1	PCB 64 (BZ)	2	1	2	ng/L	B	B	LIQ/LIQ,	Total	1668A	0	2	1.0194	2
I-1	Sediment	PCB	1	PCB 64 (BZ)	0.0063	1	0.0063	ng/g	Q J	Q J	SOXHLET	Total	1668A	0	0.0063		
I-2	Sediment	PCB	1	PCB 64 (BZ)	0.0084	1	0.0084	ng/g	B J	B J	SOXHLET	Total	1668A	0	0.0084		
I-3	Sediment	PCB	1	PCB 64 (BZ)	0.081	1	0.081	ng/g			SOXHLET	Total	1668A	0	0.081	0.0319	0.081
RB-01-11192012	Water	PCB	1	PCB 64 (BZ)	0.00054	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 65 (BZ)	0.22	1	0.22	ng/L	B C44	B C44	LIQ/LIQ,	Total	1668A	0	0.22		
BKG-03-MID	Water	PCB	1	PCB 65 (BZ)	0.29	1	0.29	ng/L	B C44	B C44	LIQ/LIQ,	Total	1668A	0	0.29	0.255	0.29
E-02	Water	PCB	1	PCB 65 (BZ)	0.17	1	0.17	ng/L	B C44	B C44	LIQ/LIQ,	Total	1668A	0	0.17		
E-05	Water	PCB	1	PCB 65 (BZ)	4.4	1	4.4	ng/L	B C44	B C44	LIQ/LIQ,	Total	1668A	0	4.4		
E-07	Water	PCB	1	PCB 65 (BZ)	2	1	2	ng/L	B C44	B C44	LIQ/LIQ,	Total	1668A	0	2		
E-09	Water	PCB	1	PCB 65 (BZ)	2.2	1	2.2	ng/L	B C44	B C44	LIQ/LIQ,	Total	1668A	0	2.2		
E-13	Water	PCB	1	PCB 65 (BZ)	7.1	1	7.1	ng/L	B C44	B C44	LIQ/LIQ,	Total	1668A	0	7.1	3.174	7.1
I-1	Sediment	PCB	1	PCB 65 (BZ)	0.019	1	0.019	ng/g	C44	C44	SOXHLET	Total	1668A	0	0.019		
I-2	Sediment	PCB	1	PCB 65 (BZ)	0.022	1	0.022	ng/g	B C44	B C44	SOXHLET	Total	1668A	0	0.022		

Client Sample ID	Matrix	sort	ion F	Analyte	Val_res	D?	Result	Unit	Qual	Flag	ep Metho	Prep Type	alysis Method	Check	Adj Val	Mean	Max
I-3	Sediment	PCB	1	PCB 65 (BZ)	0.23	1	0.23	ng/g	C44	C44	SOXHLET	Total	1668A	0	0.23	0.09033	0.23
RB-01-11192012	Water	PCB	1	PCB 65 (BZ)	0.011	1	0.011	ng/L	B C44 J	B C44 J	LIQ/LIQ,	Total	1668A	0	0.011		
BKG-02-EM	Water	PCB	1	PCB 66 (BZ)	0.13	1	0.13	ng/L			LIQ/LIQ,	Total	1668A	0	0.13		
BKG-03-MID	Water	PCB	1	PCB 66 (BZ)	0.15	1	0.15	ng/L	B	B	LIQ/LIQ,	Total	1668A	0	0.15	0.14	0.15
E-02	Water	PCB	1	PCB 66 (BZ)	0.057	1	0.057	ng/L	B	B	LIQ/LIQ,	Total	1668A	0	0.057		
E-05	Water	PCB	1	PCB 66 (BZ)	2.8	1	2.8	ng/L			LIQ/LIQ,	Total	1668A	0	2.8		
E-07	Water	PCB	1	PCB 66 (BZ)	1.3	1	1.3	ng/L			LIQ/LIQ,	Total	1668A	0	1.3		
E-09	Water	PCB	1	PCB 66 (BZ)	1.4	1	1.4	ng/L			LIQ/LIQ,	Total	1668A	0	1.4		
E-13	Water	PCB	1	PCB 66 (BZ)	4	1	4	ng/L	B	B	LIQ/LIQ,	Total	1668A	0	4	1.9114	4
I-1	Sediment	PCB	1	PCB 66 (BZ)	0.023	1	0.023	ng/g			SOXHLET	Total	1668A	0	0.023		
I-2	Sediment	PCB	1	PCB 66 (BZ)	0.017	1	0.017	ng/g	B	B	SOXHLET	Total	1668A	0	0.017		
I-3	Sediment	PCB	1	PCB 66 (BZ)	0.18	1	0.18	ng/g			SOXHLET	Total	1668A	0	0.18	0.07333	0.18
RB-01-11192012	Water	PCB	1	PCB 66 (BZ)	0.00057	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 67 (BZ)	0.011	1	0.011	ng/L	J	J	LIQ/LIQ,	Total	1668A	0	0.011		
BKG-03-MID	Water	PCB	1	PCB 67 (BZ)	0.018	1	0.018	ng/L	J	J	LIQ/LIQ,	Total	1668A	0	0.018	0.0145	0.018
E-02	Water	PCB	1	PCB 67 (BZ)	0.0045	1	0.0045	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.0045		
E-05	Water	PCB	1	PCB 67 (BZ)	0.4	1	0.4	ng/L			LIQ/LIQ,	Total	1668A	0	0.4		
E-07	Water	PCB	1	PCB 67 (BZ)	0.14	1	0.14	ng/L			LIQ/LIQ,	Total	1668A	0	0.14		
E-09	Water	PCB	1	PCB 67 (BZ)	0.089	1	0.089	ng/L			LIQ/LIQ,	Total	1668A	0	0.089		
E-13	Water	PCB	1	PCB 67 (BZ)	0.19	1	0.19	ng/L			LIQ/LIQ,	Total	1668A	0	0.19	0.1647	0.4
I-1	Sediment	PCB	1	PCB 67 (BZ)	0.00055	1	0.00055	ng/g	Q J	Q J	SOXHLET	Total	1668A	0	0.00055		
I-2	Sediment	PCB	1	PCB 67 (BZ)	0.0021	1	0.0021	ng/g	Q J	Q J	SOXHLET	Total	1668A	0	0.0021		
I-3	Sediment	PCB	1	PCB 67 (BZ)	0.008	1	0.008	ng/g	J	J	SOXHLET	Total	1668A	0	0.008	0.00355	0.008
RB-01-11192012	Water	PCB	1	PCB 67 (BZ)	0.00053	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 68 (BZ)	0.0035	1	0.0035	ng/L	J	J	LIQ/LIQ,	Total	1668A	0	0.0035		
BKG-03-MID	Water	PCB	1	PCB 68 (BZ)	0.008	1	0.008	ng/L	Q B J	Q B J	LIQ/LIQ,	Total	1668A	0	0.008	0.00575	0.008
E-02	Water	PCB	1	PCB 68 (BZ)	0.009	1	0.009	ng/L	J	J	LIQ/LIQ,	Total	1668A	0	0.009		
E-05	Water	PCB	1	PCB 68 (BZ)	0.063	1	0.063	ng/L			LIQ/LIQ,	Total	1668A	0	0.063		
E-07	Water	PCB	1	PCB 68 (BZ)	0.035	1	0.035	ng/L	J	J	LIQ/LIQ,	Total	1668A	0	0.035		
E-09	Water	PCB	1	PCB 68 (BZ)	0.031	1	0.031	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.031		
E-13	Water	PCB	1	PCB 68 (BZ)	0.094	1	0.094	ng/L	Q	Q	LIQ/LIQ,	Total	1668A	0	0.094	0.0464	0.094
I-1	Sediment	PCB	1	PCB 68 (BZ)	0.00053	1	0.00053	ng/g	Q J	Q J	SOXHLET	Total	1668A	0	0.00053		
I-2	Sediment	PCB	1	PCB 68 (BZ)	0.00038	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-3	Sediment	PCB	1	PCB 68 (BZ)	0.0019	1	0.0019	ng/g	Q J	Q J	SOXHLET	Total	1668A	0	0.0019	0.00081	0.0019
RB-01-11192012	Water	PCB	1	PCB 68 (BZ)	0.0041	1	0.0041	ng/L	B J	B J	LIQ/LIQ,	Total	1668A	0	0.0041		
BKG-02-EM	Water	PCB	1	PCB 69 (BZ)	0.16	1	0.16	ng/L	C49	C49	LIQ/LIQ,	Total	1668A	0	0.16		
BKG-03-MID	Water	PCB	1	PCB 69 (BZ)	0.21	1	0.21	ng/L	C49	C49	LIQ/LIQ,	Total	1668A	0	0.21	0.185	0.21
E-02	Water	PCB	1	PCB 69 (BZ)	0.068	1	0.068	ng/L	B C49	B C49	LIQ/LIQ,	Total	1668A	0	0.068		
E-05	Water	PCB	1	PCB 69 (BZ)	3.2	1	3.2	ng/L	C49	C49	LIQ/LIQ,	Total	1668A	0	3.2		
E-07	Water	PCB	1	PCB 69 (BZ)	1.4	1	1.4	ng/L	C49	C49	LIQ/LIQ,	Total	1668A	0	1.4		
E-09	Water	PCB	1	PCB 69 (BZ)	1.5	1	1.5	ng/L	C49	C49	LIQ/LIQ,	Total	1668A	0	1.5		
E-13	Water	PCB	1	PCB 69 (BZ)	5.1	1	5.1	ng/L	B C49	B C49	LIQ/LIQ,	Total	1668A	0	5.1	2.2536	5.1
I-1	Sediment	PCB	1	PCB 69 (BZ)	0.013	1	0.013	ng/g	C49	C49	SOXHLET	Total	1668A	0	0.013		
I-2	Sediment	PCB	1	PCB 69 (BZ)	0.015	1	0.015	ng/g	B C49	B C49	SOXHLET	Total	1668A	0	0.015		
I-3	Sediment	PCB	1	PCB 69 (BZ)	0.16	1	0.16	ng/g	C49	C49	SOXHLET	Total	1668A	0	0.16	0.06267	0.16
RB-01-11192012	Water	PCB	1	PCB 69 (BZ)	0.00066	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 7 (BZ)	0.0026	1	0.0026	ng/L	Q B J	Q B J	LIQ/LIQ,	Total	1668A	0	0.0026		
BKG-03-MID	Water	PCB	1	PCB 7 (BZ)	0.0016	1	0.0016	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.0016	0.0021	0.0026
E-02	Water	PCB	1	PCB 7 (BZ)	0.0023	1	0.0023	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.0023		
E-05	Water	PCB	1	PCB 7 (BZ)	0.0096	1	0.0096	ng/L	Q B J	Q B J	LIQ/LIQ,	Total	1668A	0	0.0096		
E-07	Water	PCB	1	PCB 7 (BZ)	0.0042	1	0.0042	ng/L	Q B J	Q B J	LIQ/LIQ,	Total	1668A	0	0.0042		
E-09	Water	PCB	1	PCB 7 (BZ)	0.0063	1	0.0063	ng/L	Q B J	Q B J	LIQ/LIQ,	Total	1668A	0	0.0063		
E-13	Water	PCB	1	PCB 7 (BZ)	0.036	1	0.036	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.036	0.01168	0.036
I-1	Sediment	PCB	1	PCB 7 (BZ)	0.0007	1	0.0007	ng/g	Q J	Q J	SOXHLET	Total	1668A	0	0.0007		
I-2	Sediment	PCB	1	PCB 7 (BZ)	0.00084	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-3	Sediment	PCB	1	PCB 7 (BZ)	0.003	1	0.003	ng/g	Q B J	Q B J	SOXHLET	Total	1668A	0	0.003	0.00123	0.003
RB-01-11192012	Water	PCB	1	PCB 7 (BZ)	0.0015	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 70 (BZ)	0.21	1	0.21	ng/L	B C61	B C61	LIQ/LIQ,	Total	1668A	0	0.21		
BKG-03-MID	Water	PCB	1	PCB 70 (BZ)	0.29	1	0.29	ng/L	B C61	B C61	LIQ/LIQ,	Total	1668A	0	0.29	0.25	0.29
E-02	Water	PCB	1	PCB 70 (BZ)	0.1	1	0.1	ng/L	B C61	B C61	LIQ/LIQ,	Total	1668A	0	0.1		
E-05	Water	PCB	1	PCB 70 (BZ)	5	1	5	ng/L	B C61	B C61	LIQ/LIQ,	Total	1668A	0	5		
E-07	Water	PCB	1	PCB 70 (BZ)	2.3	1	2.3	ng/L	B C61	B C61	LIQ/LIQ,	Total	1668A	0	2.3		
E-09	Water	PCB	1	PCB 70 (BZ)	2.5	1	2.5	ng/L	B C61	B C61	LIQ/LIQ,	Total	1668A	0	2.5		
E-13	Water	PCB	1	PCB 70 (BZ)	7.1	1	7.1	ng/L	B C61	B C61	LIQ/LIQ,	Total	1668A	0	7.1	3.4	7.1
I-1	Sediment	PCB	1	PCB 70 (BZ)	0.033	1	0.033	ng/g	B C61	B C61	SOXHLET	Total	1668A	0	0.033		
I-2	Sediment	PCB	1	PCB 70 (BZ)	0.027	1	0.027	ng/g	B C61	B C61	SOXHLET	Total	1668A	0	0.027		
I-3	Sediment	PCB	1	PCB 70 (BZ)	0.31	1	0.31	ng/g	B C61	B C61	SOXHLET	Total	1668A	0	0.31	0.12333	0.31
RB-01-11192012	Water	PCB	1	PCB 70 (BZ)	0.0028	1	0.0028	ng/L	Q B C61	Q B C61	LIQ/LIQ,	Total	1668A	0	0.0028		
BKG-02-EM	Water	PCB	1	PCB 71 (BZ)	0.11	1	0.11	ng/L	C40	C40	LIQ/LIQ,	Total	1668A	0	0.11		
BKG-03-MID	Water	PCB	1	PCB 71 (BZ)	0.12	1	0.12	ng/L	C40	C40	LIQ/LIQ,	Total	1668A	0	0.12	0.115	0.12
E-02	Water	PCB	1	PCB 71 (BZ)	0.051	1	0.051	ng/L	B C40	B C40	LIQ/LIQ,	Total	1668A	0	0.051		
E-05	Water	PCB	1	PCB 71 (BZ)	2.1	1	2.1	ng/L	C40	C40	LIQ/LIQ,	Total	1668A	0	2.1		
E-07	Water	PCB	1	PCB 71 (BZ)	0.9	1	0.9	ng/L	C40	C40	LIQ/LIQ,	Total	1668A	0	0.9		
E-09	Water	PCB	1	PCB 71 (BZ)	1.1	1	1.1	ng/L	C40	C40	LIQ/LIQ,	Total	1668A	0	1.1		
E-13	Water	PCB	1	PCB 71 (BZ)	3.1	1	3.1	ng/L	B C40	B C40	LIQ/LIQ,	Total	1668A	0	3.1	1.4502	3.1
I-1	Sediment	PCB	1	PCB 71 (BZ)	0.0085	1	0.0085	ng/g	C40 J	C40 J	SOXHLET	Total	1668A	0	0.0085		
I-2	Sediment	PCB	1	PCB 71 (BZ)	0.0094	1	0.0094	ng/g	B C40 J	B C40 J	SOXHLET	Total	1668A	0	0.0094		
I-3	Sediment	PCB	1	PCB 71 (BZ)	0.12	1	0.12	ng/g	C40	C40	SOXHLET	Total	1668A	0	0.12	0.04597	0.12
RB-01-11192012	Water	PCB	1	PCB 71 (BZ)	0.0008	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 72 (BZ)	0.0045	1	0.0045	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.0045		
BKG-03-MID	Water	PCB	1	PCB 72 (BZ)	0.005	1	0.005	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.005	0.00475	0.005
E-02	Water	PCB	1	PCB 72 (BZ)	0.0012	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
E-05	Water	PCB	1	PCB 72 (BZ)	0.095	1	0.095	ng/L			LIQ/LIQ,	Total	1668A	0	0.095		
E-07	Water	PCB	1	PCB 72 (BZ)	0.05	1	0.05	ng/L			LIQ/LIQ,	Total	1668A	0	0.05		
E-09	Water	PCB	1	PCB 72 (BZ)	0.043	1	0.043	ng/L			LIQ/LIQ,	Total	1668A	0	0.043		
E-13	Water	PCB	1	PCB 72 (BZ)	0.13	1	0.13	ng/L	Q	Q	LIQ/LIQ,	Total	1668A	0	0.13	0.0636	0.13
I-1	Sediment	PCB	1	PCB 72 (BZ)	0.00026	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-2	Sediment	PCB	1	PCB 72 (BZ)	0.00054	1	0.00054	ng/g	Q J	Q J	SOXHLET	Total	1668A	0	0.00054		
I-3	Sediment	PCB	1	PCB 72 (BZ)	0.0042	1	0.0042	ng/g	J	J	SOXHLET	Total	1668A	0	0.0042	0.00158	0.0042
RB-01-11192012	Water	PCB	1	PCB 72 (BZ)	0.00057	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 73 (BZ)	0.0089	1	0.0089	ng/L	Q C43 J	Q C43 J	LIQ/LIQ,	Total	1668A	0	0.0089		
BKG-03-MID	Water	PCB	1	PCB 73 (BZ)	0.0071	1	0.0071	ng/L	C43 J	C43 J	LIQ/LIQ,	Total	1668A	0	0.0071	0.008	0.0089
E-02	Water	PCB	1	PCB 73 (BZ)	0.0049	1	0.0049	ng/L	C43 J	C43 J	LIQ/LIQ,	Total	1668A	0	0.0049		
E-05	Water	PCB	1	PCB 73 (BZ)	0.16	1	0.16	ng/L	C43	C43	LIQ/LIQ,	Total	1668A	0	0.16		
E-07	Water	PCB	1	PCB 73 (BZ)	0.069	1	0.069	ng/L	C43	C43	LIQ/LIQ,	Total	1668A	0	0.069		
E-09	Water	PCB	1	PCB 73 (BZ)	0.065	1	0.065	ng/L	C43	C43	LIQ/LIQ,	Total	1668A	0	0.065		
E-13	Water	PCB	1	PCB 73 (BZ)	0.23	1	0.23	ng/L	C43	C43	LIQ/LIQ,	Total	1668A	0	0.23	0.10578	0.23
I-1	Sediment	PCB	1	PCB 73 (BZ)	0.00033	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-2	Sediment	PCB	1	PCB 73 (BZ)	0.001	1	0.001	ng/g	Q C43 J	Q C43 J	SOXHLET	Total	1668A	0	0.001		
I-3	Sediment	PCB	1	PCB 73 (BZ)	0.0045	1	0.0045	ng/g	Q C43 J	Q C43 J	SOXHLET	Total	1668A	0	0.0045	0.00183	0.0045
RB-01-11192012	Water	PCB	1	PCB 73 (BZ)	0.00075	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 74 (BZ)	0.21	1	0.21	ng/L	B C61	B C61	LIQ/LIQ,	Total	1668A	0	0.21		
BKG-03-MID	Water	PCB	1	PCB 74 (BZ)	0.29	1	0.29	ng/L	B C61	B C61	LIQ/LIQ,	Total	1668A	0	0.29	0.25	0.29
E-02	Water	PCB	1	PCB 74 (BZ)	0.1	1	0.1	ng/L	B C61	B C61	LIQ/LIQ,	Total	1668A	0	0.1		
E-05	Water	PCB	1	PCB 74 (BZ)	5	1	5	ng/L	B C61	B C61	LIQ/LIQ,	Total	1668A	0	5		
E-07	Water	PCB	1	PCB 74 (BZ)	2.3	1	2.3	ng/L	B C61	B C61	LIQ/LIQ,	Total	1668A	0	2.3		
E-09	Water	PCB	1	PCB 74 (BZ)	2.5	1	2.5	ng/L	B C61	B C61	LIQ/LIQ,	Total	1668A	0	2.5		
E-13	Water	PCB	1	PCB 74 (BZ)	7.1	1	7.1	ng/L	B C61	B C61	LIQ/LIQ,	Total	1668A	0	7.1	3.4	7.1
I-1	Sediment	PCB	1	PCB 74 (BZ)	0.033	1	0.033	ng/g	B C61	B C61	SOXHLET	Total	1668A	0	0.033		
I-2	Sediment	PCB	1	PCB 74 (BZ)	0.027	1	0.027	ng/g	B C61	B C61	SOXHLET	Total	1668A	0	0.027		
I-3	Sediment	PCB	1	PCB 74 (BZ)	0.31	1	0.31	ng/g	B C61	B C61	SOXHLET	Total	1668A	0	0.31	0.12333	0.31
RB-01-11192012	Water	PCB	1	PCB 74 (BZ)	0.0028	1	0.0028	ng/L	Q B C61	Q B C61	LIQ/LIQ,	Total	1668A	0	0.0028		
BKG-02-EM	Water	PCB	1	PCB 75 (BZ)	0.016	1	0.016	ng/L	Q C59 J	Q C59 J	LIQ/LIQ,	Total	1668A	0	0.016		
BKG-03-MID	Water	PCB	1	PCB 75 (BZ)	0.024	1	0.024	ng/L	C59 J	C59 J	LIQ/LIQ,	Total	1668A	0	0.024	0.02	0.024
E-02	Water	PCB	1	PCB 75 (BZ)	0.01	1	0.01	ng/L	C59 J	C59 J	LIQ/LIQ,	Total	1668A	0	0.01		
E-05	Water	PCB	1	PCB 75 (BZ)	0.37	1	0.37	ng/L	C59	C59	LIQ/LIQ,	Total	1668A	0	0.37		
E-07	Water	PCB	1	PCB 75 (BZ)	0.17	1	0.17	ng/L	C59	C59	LIQ/LIQ,	Total	1668A	0	0.17		
E-09	Water	PCB	1	PCB 75 (BZ)	0.16	1	0.16	ng/L	C59	C59	LIQ/LIQ,	Total	1668A	0	0.16		
E-13	Water	PCB	1	PCB 75 (BZ)	0.49	1	0.49	ng/L	B C59	B C59	LIQ/LIQ,	Total	1668A	0	0.49	0.24	0.49
I-1	Sediment	PCB	1	PCB 75 (BZ)	0.0013	1	0.0013	ng/g	Q C59 J	Q C59 J	SOXHLET	Total	1668A	0	0.0013		
I-2	Sediment	PCB	1	PCB 75 (BZ)	0.0017	1	0.0017	ng/g	Q C59 J	Q C59 J	SOXHLET	Total	1668A	0	0.0017		
I-3	Sediment	PCB	1	PCB 75 (BZ)	0.018	1	0.018	ng/g	C59	C59	SOXHLET	Total	1668A	0	0.018	0.007	0.018

Client Sample ID	Matrix	sort	ion F	Analyte	Val_res	D?	Result	Unit	Qual	Flag	ep Metho	Prep Type	alysis Method	Check	Adj Val	Mean	Max
RB-01-11192012	Water	PCB	1	PCB 75 (BZ)	0.00057	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 76 (BZ)	0.21	1	0.21	ng/L	B C61	B C61	LIQ/LIQ,	Total	1668A	0	0.21		
BKG-03-MID	Water	PCB	1	PCB 76 (BZ)	0.29	1	0.29	ng/L	B C61	B C61	LIQ/LIQ,	Total	1668A	0	0.29	0.25	0.29
E-02	Water	PCB	1	PCB 76 (BZ)	0.1	1	0.1	ng/L	B C61	B C61	LIQ/LIQ,	Total	1668A	0	0.1		
E-05	Water	PCB	1	PCB 76 (BZ)	5	1	5	ng/L	B C61	B C61	LIQ/LIQ,	Total	1668A	0	5		
E-07	Water	PCB	1	PCB 76 (BZ)	2.3	1	2.3	ng/L	B C61	B C61	LIQ/LIQ,	Total	1668A	0	2.3		
E-09	Water	PCB	1	PCB 76 (BZ)	2.5	1	2.5	ng/L	B C61	B C61	LIQ/LIQ,	Total	1668A	0	2.5		
E-13	Water	PCB	1	PCB 76 (BZ)	7.1	1	7.1	ng/L	B C61	B C61	LIQ/LIQ,	Total	1668A	0	7.1	3.4	7.1
I-1	Sediment	PCB	1	PCB 76 (BZ)	0.033	1	0.033	ng/g	B C61	B C61	SOXHLET	Total	1668A	0	0.033		
I-2	Sediment	PCB	1	PCB 76 (BZ)	0.027	1	0.027	ng/g	B C61	B C61	SOXHLET	Total	1668A	0	0.027		
I-3	Sediment	PCB	1	PCB 76 (BZ)	0.31	1	0.31	ng/g	B C61	B C61	SOXHLET	Total	1668A	0	0.31	0.12333	0.31
RB-01-11192012	Water	PCB	1	PCB 76 (BZ)	0.0054	1	0.0028	ng/L	Q B C61	Q B C61	LIQ/LIQ,	Total	1668A	-0	0.0054		
BKG-02-EM	Water	PCB	1	PCB 77 (BZ)	0.012	1	0.012	ng/L	J	J	LIQ/LIQ,	Total	1668A	0	0.012		
BKG-03-MID	Water	PCB	1	PCB 77 (BZ)	0.01	1	0.01	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.01	0.011	0.012
E-02	Water	PCB	1	PCB 77 (BZ)	0.0056	1	0.0056	ng/L	J	J	LIQ/LIQ,	Total	1668A	0	0.0056		
E-05	Water	PCB	1	PCB 77 (BZ)	0.2	1	0.2	ng/L			LIQ/LIQ,	Total	1668A	0	0.2		
E-07	Water	PCB	1	PCB 77 (BZ)	0.086	1	0.086	ng/L			LIQ/LIQ,	Total	1668A	0	0.086		
E-09	Water	PCB	1	PCB 77 (BZ)	0.091	1	0.091	ng/L			LIQ/LIQ,	Total	1668A	0	0.091		
E-13	Water	PCB	1	PCB 77 (BZ)	0.22	1	0.22	ng/L	B	B	LIQ/LIQ,	Total	1668A	0	0.22	0.12052	0.22
I-1	Sediment	PCB	1	PCB 77 (BZ)	0.003	1	0.003	ng/g	J	J	SOXHLET	Total	1668A	0	0.003		
I-2	Sediment	PCB	1	PCB 77 (BZ)	0.0011	1	0.0011	ng/g	Q J	Q J	SOXHLET	Total	1668A	0	0.0011		
I-3	Sediment	PCB	1	PCB 77 (BZ)	0.018	1	0.018	ng/g			SOXHLET	Total	1668A	0	0.018	0.00737	0.018
RB-01-11192012	Water	PCB	1	PCB 77 (BZ)	0.00053	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 78 (BZ)	0.00089	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-03-MID	Water	PCB	1	PCB 78 (BZ)	0.00068	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0	0	0
E-02	Water	PCB	1	PCB 78 (BZ)	0.0013	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
E-05	Water	PCB	1	PCB 78 (BZ)	0.0041	1	0.0041	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.0041		
E-07	Water	PCB	1	PCB 78 (BZ)	0.0021	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
E-09	Water	PCB	1	PCB 78 (BZ)	0.0017	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
E-13	Water	PCB	1	PCB 78 (BZ)	0.01	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0	0.00082	0.0041
I-1	Sediment	PCB	1	PCB 78 (BZ)	0.00027	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-2	Sediment	PCB	1	PCB 78 (BZ)	0.00044	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-3	Sediment	PCB	1	PCB 78 (BZ)	0.00062	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0	0	0
RB-01-11192012	Water	PCB	1	PCB 78 (BZ)	0.00061	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 79 (BZ)	0.0025	1	0.0025	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.0025		
BKG-03-MID	Water	PCB	1	PCB 79 (BZ)	0.0036	1	0.0036	ng/L	J	J	LIQ/LIQ,	Total	1668A	0	0.0036	0.00305	0.0036
E-02	Water	PCB	1	PCB 79 (BZ)	0.0011	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
E-05	Water	PCB	1	PCB 79 (BZ)	0.046	1	0.046	ng/L			LIQ/LIQ,	Total	1668A	0	0.046		
E-07	Water	PCB	1	PCB 79 (BZ)	0.02	1	0.02	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.02		
E-09	Water	PCB	1	PCB 79 (BZ)	0.026	1	0.026	ng/L	J	J	LIQ/LIQ,	Total	1668A	0	0.026		
E-13	Water	PCB	1	PCB 79 (BZ)	0.042	1	0.042	ng/L	Q	Q	LIQ/LIQ,	Total	1668A	0	0.042	0.0268	0.046
I-1	Sediment	PCB	1	PCB 79 (BZ)	0.00042	1	0.00042	ng/g	Q J	Q J	SOXHLET	Total	1668A	0	0.00042		
I-2	Sediment	PCB	1	PCB 79 (BZ)	0.00038	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-3	Sediment	PCB	1	PCB 79 (BZ)	0.0025	1	0.0025	ng/g	J	J	SOXHLET	Total	1668A	0	0.0025	0.00097	0.0025
RB-01-11192012	Water	PCB	1	PCB 79 (BZ)	0.00053	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 8 (BZ)	0.015	1	0.015	ng/L	Q B J	Q B J	LIQ/LIQ,	Total	1668A	0	0.015		
BKG-03-MID	Water	PCB	1	PCB 8 (BZ)	0.02	1	0.02	ng/L	Q B J	Q B J	LIQ/LIQ,	Total	1668A	0	0.02	0.0175	0.02
E-02	Water	PCB	1	PCB 8 (BZ)	0.0093	1	0.0093	ng/L	Q B J	Q B J	LIQ/LIQ,	Total	1668A	0	0.0093		
E-05	Water	PCB	1	PCB 8 (BZ)	0.08	1	0.08	ng/L	B	B	LIQ/LIQ,	Total	1668A	0	0.08		
E-07	Water	PCB	1	PCB 8 (BZ)	0.031	1	0.031	ng/L	Q B J	Q B J	LIQ/LIQ,	Total	1668A	0	0.031		
E-09	Water	PCB	1	PCB 8 (BZ)	0.054	1	0.054	ng/L	Q B J	Q B J	LIQ/LIQ,	Total	1668A	0	0.054		
E-13	Water	PCB	1	PCB 8 (BZ)	0.62	1	0.62	ng/L	Q B	Q B	LIQ/LIQ,	Total	1668A	0	0.62	0.15886	0.62
I-1	Sediment	PCB	1	PCB 8 (BZ)	0.0039	1	0.0039	ng/g	Q B J	Q B J	SOXHLET	Total	1668A	0	0.0039		
I-2	Sediment	PCB	1	PCB 8 (BZ)	0.0056	1	0.0056	ng/g	Q B J	Q B J	SOXHLET	Total	1668A	0	0.0056		
I-3	Sediment	PCB	1	PCB 8 (BZ)	0.046	1	0.046	ng/g	B	B	SOXHLET	Total	1668A	0	0.046	0.0185	0.046
RB-01-11192012	Water	PCB	1	PCB 8 (BZ)	0.0054	1	0.0054	ng/L	Q B J	Q B J	LIQ/LIQ,	Total	1668A	0	0.0054		
BKG-02-EM	Water	PCB	1	PCB 80 (BZ)	0.00077	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-03-MID	Water	PCB	1	PCB 80 (BZ)	0.00058	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0	0	0
E-02	Water	PCB	1	PCB 80 (BZ)	0.0011	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
E-05	Water	PCB	1	PCB 80 (BZ)	0.0022	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
E-07	Water	PCB	1	PCB 80 (BZ)	0.0018	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
E-09	Water	PCB	1	PCB 80 (BZ)	0.0015	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
E-13	Water	PCB	1	PCB 80 (BZ)	0.0088	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0	0	0
I-1	Sediment	PCB	1	PCB 80 (BZ)	0.00023	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-2	Sediment	PCB	1	PCB 80 (BZ)	0.00038	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-3	Sediment	PCB	1	PCB 80 (BZ)	0.00053	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0	0	0
RB-01-11192012	Water	PCB	1	PCB 80 (BZ)	0.00052	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 81 (BZ)	0.00082	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-03-MID	Water	PCB	1	PCB 81 (BZ)	0.00063	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0	0	0
E-02	Water	PCB	1	PCB 81 (BZ)	0.0011	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
E-05	Water	PCB	1	PCB 81 (BZ)	0.0065	1	0.0065	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.0065		
E-07	Water	PCB	1	PCB 81 (BZ)	0.0019	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
E-09	Water	PCB	1	PCB 81 (BZ)	0.0016	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
E-13	Water	PCB	1	PCB 81 (BZ)	0.0096	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0	0.0013	0.0065
I-1	Sediment	PCB	1	PCB 81 (BZ)	0.00024	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-2	Sediment	PCB	1	PCB 81 (BZ)	0.00039	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-3	Sediment	PCB	1	PCB 81 (BZ)	0.00058	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0	0	0
RB-01-11192012	Water	PCB	1	PCB 81 (BZ)	0.00057	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 82 (BZ)	0.039	1	0.039	ng/L			LIQ/LIQ,	Total	1668A	0	0.039		
BKG-03-MID	Water	PCB	1	PCB 82 (BZ)	0.039	1	0.039	ng/L			LIQ/LIQ,	Total	1668A	0	0.039	0.039	0.039
E-02	Water	PCB	1	PCB 82 (BZ)	0.015	1	0.015	ng/L	J	J	LIQ/LIQ,	Total	1668A	0	0.015		
E-05	Water	PCB	1	PCB 82 (BZ)	0.57	1	0.57	ng/L			LIQ/LIQ,	Total	1668A	0	0.57		
E-07	Water	PCB	1	PCB 82 (BZ)	0.31	1	0.31	ng/L			LIQ/LIQ,	Total	1668A	0	0.31		
E-09	Water	PCB	1	PCB 82 (BZ)	0.35	1	0.35	ng/L			LIQ/LIQ,	Total	1668A	0	0.35		
E-13	Water	PCB	1	PCB 82 (BZ)	0.94	1	0.94	ng/L			LIQ/LIQ,	Total	1668A	0	0.94	0.437	0.94
I-1	Sediment	PCB	1	PCB 82 (BZ)	0.0049	1	0.0049	ng/g	Q J	Q J	SOXHLET	Total	1668A	0	0.0049		
I-2	Sediment	PCB	1	PCB 82 (BZ)	0.0029	1	0.0029	ng/g	Q J	Q J	SOXHLET	Total	1668A	0	0.0029		
I-3	Sediment	PCB	1	PCB 82 (BZ)	0.028	1	0.028	ng/g			SOXHLET	Total	1668A	0	0.028	0.01193	0.028
RB-01-11192012	Water	PCB	1	PCB 82 (BZ)	0.00084	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 83 (BZ)	0.2	1	0.2	ng/L	C	C	LIQ/LIQ,	Total	1668A	0	0.2		
BKG-03-MID	Water	PCB	1	PCB 83 (BZ)	0.21	1	0.21	ng/L	C	C	LIQ/LIQ,	Total	1668A	0	0.21	0.205	0.21
E-02	Water	PCB	1	PCB 83 (BZ)	0.068	1	0.068	ng/L	C	C	LIQ/LIQ,	Total	1668A	0	0.068		
E-05	Water	PCB	1	PCB 83 (BZ)	2.9	1	2.9	ng/L	C	C	LIQ/LIQ,	Total	1668A	0	2.9		
E-07	Water	PCB	1	PCB 83 (BZ)	1.6	1	1.6	ng/L	C	C	LIQ/LIQ,	Total	1668A	0	1.6		
E-09	Water	PCB	1	PCB 83 (BZ)	1.8	1	1.8	ng/L	C	C	LIQ/LIQ,	Total	1668A	0	1.8		
E-13	Water	PCB	1	PCB 83 (BZ)	5.2	1	5.2	ng/L	B C	B C	LIQ/LIQ,	Total	1668A	0	5.2	2.3136	5.2
I-1	Sediment	PCB	1	PCB 83 (BZ)	0.021	1	0.021	ng/g	C	C	SOXHLET	Total	1668A	0	0.021		
I-2	Sediment	PCB	1	PCB 83 (BZ)	0.014	1	0.014	ng/g	Q B C	Q B C	SOXHLET	Total	1668A	0	0.014		
I-3	Sediment	PCB	1	PCB 83 (BZ)	0.16	1	0.16	ng/g	C	C	SOXHLET	Total	1668A	0	0.16	0.065	0.16
RB-01-11192012	Water	PCB	1	PCB 83 (BZ)	0.00071	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 84 (BZ)	0.075	1	0.075	ng/L	Q	Q	LIQ/LIQ,	Total	1668A	0	0.075		
BKG-03-MID	Water	PCB	1	PCB 84 (BZ)	0.095	1	0.095	ng/L			LIQ/LIQ,	Total	1668A	0	0.095	0.085	0.095
E-02	Water	PCB	1	PCB 84 (BZ)	0.041		0.041	ng/L	J	J	LIQ/LIQ,	Total	1668A	0	0.041		
E-05	Water	PCB	1	PCB 84 (BZ)	1.3	1	1.3	ng/L			LIQ/LIQ,	Total	1668A	0	1.3		
E-07	Water	PCB	1	PCB 84 (BZ)	0.74	1	0.74	ng/L			LIQ/LIQ,	Total	1668A	0	0.74		
E-09	Water	PCB	1	PCB 84 (BZ)	0.82	1	0.82	ng/L			LIQ/LIQ,	Total	1668A	0	0.82		
E-13	Water	PCB	1	PCB 84 (BZ)	2.5	1	2.5	ng/L	B	B	LIQ/LIQ,	Total	1668A	0	2.5	1.0802	2.5
I-1	Sediment	PCB	1	PCB 84 (BZ)	0.0068	1	0.0068	ng/g	J	J	SOXHLET	Total	1668A	0	0.0068		
I-2	Sediment	PCB	1	PCB 84 (BZ)	0.0077	1	0.0077	ng/g	J	J	SOXHLET	Total	1668A	0	0.0077		
I-3	Sediment	PCB	1	PCB 84 (BZ)	0.067	1	0.067	ng/g			SOXHLET	Total	1668A	0	0.067	0.02717	0.067
RB-01-11192012	Water	PCB	1	PCB 84 (BZ)	0.00081	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 85 (BZ)	0.047	1	0.047	ng/L	Q C	Q C	LIQ/LIQ,	Total	1668A	0	0.047		
BKG-03-MID	Water	PCB	1	PCB 85 (BZ)	0.053	1	0.053	ng/L	C	C	LIQ/LIQ,	Total	1668A	0	0.053	0.05	0.053
E-02	Water	PCB	1	PCB 85 (BZ)	0.016	1	0.016	ng/L	C J	C J	LIQ/LIQ,	Total	1668A	0	0.016		
E-05	Water	PCB	1	PCB 85 (BZ)	0.74	1	0.74	ng/L	C	C	LIQ/LIQ,	Total	1668A	0	0.74		
E-07	Water	PCB	1	PCB 85 (BZ)	0.38	1	0.38	ng/L	C	C	LIQ/LIQ,	Total	1668A	0	0.38		
E-09	Water	PCB	1	PCB 85 (BZ)	0.45	1	0.45	ng/L	C	C	LIQ/LIQ,	Total	1668A	0	0.45		
E-13	Water	PCB	1	PCB 85 (BZ)	1.3	1	1.3	ng/L	B C	B C	LIQ/LIQ,	Total	1668A	0	1.3	0.5772	1.3
I-1	Sediment	PCB	1	PCB 85 (BZ)	0.0072	1	0.0072	ng/g	C J	C J	SOXHLET	Total	1668A	0	0.0072		
I-2	Sediment	PCB	1	PCB 85 (BZ)	0.0043	1	0.0043	ng/g	C J	C J	SOXHLET	Total	1668A	0	0.0043		
I-3	Sediment	PCB	1	PCB 85 (BZ)	0.04	1	0.04	ng/g	C	C	SOXHLET	Total	1668A	0	0.04	0.01717	0.04
RB-01-11192012	Water	PCB	1	PCB 85 (BZ)	0.00058	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		

Client Sample ID	Matrix	sort	ion F	Analyte	Val_res	D?	Result	Unit	Qual	Flag	ep Metho	Prep Type	alysis Method	Check	Adj Val	Mean	Max
BKG-02-EM	Water	PCB	1	PCB 86 (BZ)	0.21	1	0.21	ng/L	B C	B C	LIQ/LIQ,	Total	1668A	0	0.21		
BKG-03-MID	Water	PCB	1	PCB 86 (BZ)	0.22	1	0.22	ng/L	B C	B C	LIQ/LIQ,	Total	1668A	0	0.22	0.215	0.22
E-02	Water	PCB	1	PCB 86 (BZ)	0.063	1	0.063	ng/L	B C	B C	LIQ/LIQ,	Total	1668A	0	0.063		
E-05	Water	PCB	1	PCB 86 (BZ)	2.9	1	2.9	ng/L	B C	B C	LIQ/LIQ,	Total	1668A	0	2.9		
E-07	Water	PCB	1	PCB 86 (BZ)	1.6	1	1.6	ng/L	Q B C	Q B C	LIQ/LIQ,	Total	1668A	0	1.6		
E-09	Water	PCB	1	PCB 86 (BZ)	1.8	1	1.8	ng/L	B C	B C	LIQ/LIQ,	Total	1668A	0	1.8		
E-13	Water	PCB	1	PCB 86 (BZ)	5.2	1	5.2	ng/L	Q B C	Q B C	LIQ/LIQ,	Total	1668A	0	5.2	2.3126	5.2
I-1	Sediment	PCB	1	PCB 86 (BZ)	0.025	1	0.025	ng/g	Q C	Q C	SOXHLET	Total	1668A	0	0.025		
I-2	Sediment	PCB	1	PCB 86 (BZ)	0.017	1	0.017	ng/g	C	C	SOXHLET	Total	1668A	0	0.017		
I-3	Sediment	PCB	1	PCB 86 (BZ)	0.15	1	0.15	ng/g	C	C	SOXHLET	Total	1668A	0	0.15	0.064	0.15
RB-01-11192012	Water	PCB	1	PCB 86 (BZ)	0.0006	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 87 (BZ)	0.21	1	0.21	ng/L	B C86	B C86	LIQ/LIQ,	Total	1668A	0	0.21		
BKG-03-MID	Water	PCB	1	PCB 87 (BZ)	0.22	1	0.22	ng/L	B C86	B C86	LIQ/LIQ,	Total	1668A	0	0.22	0.215	0.22
E-02	Water	PCB	1	PCB 87 (BZ)	0.063	1	0.063	ng/L	B C86	B C86	LIQ/LIQ,	Total	1668A	0	0.063		
E-05	Water	PCB	1	PCB 87 (BZ)	2.9	1	2.9	ng/L	B C86	B C86	LIQ/LIQ,	Total	1668A	0	2.9		
E-07	Water	PCB	1	PCB 87 (BZ)	1.6	1	1.6	ng/L	Q B C86	Q B C86	LIQ/LIQ,	Total	1668A	0	1.6		
E-09	Water	PCB	1	PCB 87 (BZ)	1.8	1	1.8	ng/L	B C86	B C86	LIQ/LIQ,	Total	1668A	0	1.8		
E-13	Water	PCB	1	PCB 87 (BZ)	5.2	1	5.2	ng/L	Q B C86	Q B C86	LIQ/LIQ,	Total	1668A	0	5.2	2.3126	5.2
I-1	Sediment	PCB	1	PCB 87 (BZ)	0.025	1	0.025	ng/g	Q C86	Q C86	SOXHLET	Total	1668A	0	0.025		
I-2	Sediment	PCB	1	PCB 87 (BZ)	0.017	1	0.017	ng/g	C86	C86	SOXHLET	Total	1668A	0	0.017		
I-3	Sediment	PCB	1	PCB 87 (BZ)	0.15	1	0.15	ng/g	C86	C86	SOXHLET	Total	1668A	0	0.15	0.064	0.15
RB-01-11192012	Water	PCB	1	PCB 87 (BZ)	0.0006	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 88 (BZ)	0.053	1	0.053	ng/L	C	C	LIQ/LIQ,	Total	1668A	0	0.053		
BKG-03-MID	Water	PCB	1	PCB 88 (BZ)	0.054	1	0.054	ng/L	C	C	LIQ/LIQ,	Total	1668A	0	0.054	0.0535	0.054
E-02	Water	PCB	1	PCB 88 (BZ)	0.021	1	0.021	ng/L	C J	C J	LIQ/LIQ,	Total	1668A	0	0.021		
E-05	Water	PCB	1	PCB 88 (BZ)	0.73	1	0.73	ng/L	C	C	LIQ/LIQ,	Total	1668A	0	0.73		
E-07	Water	PCB	1	PCB 88 (BZ)	0.39	1	0.39	ng/L	C	C	LIQ/LIQ,	Total	1668A	0	0.39		
E-09	Water	PCB	1	PCB 88 (BZ)	0.46	1	0.46	ng/L	C	C	LIQ/LIQ,	Total	1668A	0	0.46		
E-13	Water	PCB	1	PCB 88 (BZ)	1.4	1	1.4	ng/L	C	C	LIQ/LIQ,	Total	1668A	0	1.4	0.6002	1.4
I-1	Sediment	PCB	1	PCB 88 (BZ)	0.0029	1	0.0029	ng/g	C J	C J	SOXHLET	Total	1668A	0	0.0029		
I-2	Sediment	PCB	1	PCB 88 (BZ)	0.0043	1	0.0043	ng/g	B C J	B C J	SOXHLET	Total	1668A	0	0.0043		
I-3	Sediment	PCB	1	PCB 88 (BZ)	0.039	1	0.039	ng/g	C	C	SOXHLET	Total	1668A	0	0.039	0.0154	0.039
RB-01-11192012	Water	PCB	1	PCB 88 (BZ)	0.00072	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 89 (BZ)	0.0041	1	0.0041	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.0041		
BKG-03-MID	Water	PCB	1	PCB 89 (BZ)	0.0013	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0	0.00205	0.0041
E-02	Water	PCB	1	PCB 89 (BZ)	0.0025	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
E-05	Water	PCB	1	PCB 89 (BZ)	0.08	1	0.08	ng/L			LIQ/LIQ,	Total	1668A	0	0.08		
E-07	Water	PCB	1	PCB 89 (BZ)	0.033	1	0.033	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.033		
E-09	Water	PCB	1	PCB 89 (BZ)	0.046	1	0.046	ng/L			LIQ/LIQ,	Total	1668A	0	0.046		
E-13	Water	PCB	1	PCB 89 (BZ)	0.081	1	0.081	ng/L	Q	Q	LIQ/LIQ,	Total	1668A	0	0.081	0.048	0.081
I-1	Sediment	PCB	1	PCB 89 (BZ)	0.00054	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-2	Sediment	PCB	1	PCB 89 (BZ)	0.0007	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-3	Sediment	PCB	1	PCB 89 (BZ)	0.0027	1	0.0027	ng/g	Q J	Q J	SOXHLET	Total	1668A	0	0.0027	0.0009	0.0027
RB-01-11192012	Water	PCB	1	PCB 89 (BZ)	0.00078	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 9 (BZ)	0.0011	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-03-MID	Water	PCB	1	PCB 9 (BZ)	0.0033	1	0.0033	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.0033	0.00165	0.0033
E-02	Water	PCB	1	PCB 9 (BZ)	0.003	1	0.003	ng/L	Q B J	Q B J	LIQ/LIQ,	Total	1668A	0	0.003		
E-05	Water	PCB	1	PCB 9 (BZ)	0.0078	1	0.0078	ng/L	Q B J	Q B J	LIQ/LIQ,	Total	1668A	0	0.0078		
E-07	Water	PCB	1	PCB 9 (BZ)	0.0041	1	0.0041	ng/L	Q B J	Q B J	LIQ/LIQ,	Total	1668A	0	0.0041		
E-09	Water	PCB	1	PCB 9 (BZ)	0.0071	1	0.0071	ng/L	J	J	LIQ/LIQ,	Total	1668A	0	0.0071		
E-13	Water	PCB	1	PCB 9 (BZ)	0.047	1	0.047	ng/L	Q B	Q B	LIQ/LIQ,	Total	1668A	0	0.047	0.0138	0.047
I-1	Sediment	PCB	1	PCB 9 (BZ)	0.00055	1	0.00055	ng/g	Q J	Q J	SOXHLET	Total	1668A	0	0.00055		
I-2	Sediment	PCB	1	PCB 9 (BZ)	0.00084	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-3	Sediment	PCB	1	PCB 9 (BZ)	0.0028	1	0.0028	ng/g	Q J	Q J	SOXHLET	Total	1668A	0	0.0028	0.00112	0.0028
RB-01-11192012	Water	PCB	1	PCB 9 (BZ)	0.0015	1	0.0015	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.0015		
BKG-02-EM	Water	PCB	1	PCB 90 (BZ)	0.36	1	0.36	ng/L	C	C	LIQ/LIQ,	Total	1668A	0	0.36		
BKG-03-MID	Water	PCB	1	PCB 90 (BZ)	0.43	1	0.43	ng/L	C	C	LIQ/LIQ,	Total	1668A	0	0.43	0.395	0.43
E-02	Water	PCB	1	PCB 90 (BZ)	0.13	1	0.13	ng/L	B C	B C	LIQ/LIQ,	Total	1668A	0	0.13		
E-05	Water	PCB	1	PCB 90 (BZ)	5.6	1	5.6	ng/L	B C	B C	LIQ/LIQ,	Total	1668A	0	5.6		
E-07	Water	PCB	1	PCB 90 (BZ)	2.9	1	2.9	ng/L	B C	B C	LIQ/LIQ,	Total	1668A	0	2.9		
E-09	Water	PCB	1	PCB 90 (BZ)	3.5	1	3.5	ng/L	C	C	LIQ/LIQ,	Total	1668A	0	3.5		
E-13	Water	PCB	1	PCB 90 (BZ)	10	1	10	ng/L	B C	B C	LIQ/LIQ,	Total	1668A	0	10	4.426	10
I-1	Sediment	PCB	1	PCB 90 (BZ)	0.033	1	0.033	ng/g	C	C	SOXHLET	Total	1668A	0	0.033		
I-2	Sediment	PCB	1	PCB 90 (BZ)	0.032	1	0.032	ng/g	B C	B C	SOXHLET	Total	1668A	0	0.032		
I-3	Sediment	PCB	1	PCB 90 (BZ)	0.29	1	0.29	ng/g	C	C	SOXHLET	Total	1668A	0	0.29	0.11833	0.29
RB-01-11192012	Water	PCB	1	PCB 90 (BZ)	0.0033	1	0.0033	ng/L	C J	C J	LIQ/LIQ,	Total	1668A	0	0.0033		
BKG-02-EM	Water	PCB	1	PCB 91 (BZ)	0.053	1	0.053	ng/L	C88	C88	LIQ/LIQ,	Total	1668A	0	0.053		
BKG-03-MID	Water	PCB	1	PCB 91 (BZ)	0.054	1	0.054	ng/L	C88	C88	LIQ/LIQ,	Total	1668A	0	0.054	0.0535	0.054
E-02	Water	PCB	1	PCB 91 (BZ)	0.021	1	0.021	ng/L	C88 J	C88 J	LIQ/LIQ,	Total	1668A	0	0.021		
E-05	Water	PCB	1	PCB 91 (BZ)	0.73	1	0.73	ng/L	C88	C88	LIQ/LIQ,	Total	1668A	0	0.73		
E-07	Water	PCB	1	PCB 91 (BZ)	0.39	1	0.39	ng/L	C88	C88	LIQ/LIQ,	Total	1668A	0	0.39		
E-09	Water	PCB	1	PCB 91 (BZ)	0.46	1	0.46	ng/L	C88	C88	LIQ/LIQ,	Total	1668A	0	0.46		
E-13	Water	PCB	1	PCB 91 (BZ)	1.4	1	1.4	ng/L	C88	C88	LIQ/LIQ,	Total	1668A	0	1.4	0.6002	1.4
I-1	Sediment	PCB	1	PCB 91 (BZ)	0.0029	1	0.0029	ng/g	C88 J	C88 J	SOXHLET	Total	1668A	0	0.0029		
I-2	Sediment	PCB	1	PCB 91 (BZ)	0.0043	1	0.0043	ng/g	B C88 J	B C88 J	SOXHLET	Total	1668A	0	0.0043		
I-3	Sediment	PCB	1	PCB 91 (BZ)	0.039	1	0.039	ng/g	C88	C88	SOXHLET	Total	1668A	0	0.039	0.0154	0.039
RB-01-11192012	Water	PCB	1	PCB 91 (BZ)	0.00072	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 92 (BZ)	0.081	1	0.081	ng/L			LIQ/LIQ,	Total	1668A	0	0.081		
BKG-03-MID	Water	PCB	1	PCB 92 (BZ)	0.094	1	0.094	ng/L			LIQ/LIQ,	Total	1668A	0	0.094	0.0875	0.094
E-02	Water	PCB	1	PCB 92 (BZ)	0.029	1	0.029	ng/L	J	J	LIQ/LIQ,	Total	1668A	0	0.029		
E-05	Water	PCB	1	PCB 92 (BZ)	1.2	1	1.2	ng/L			LIQ/LIQ,	Total	1668A	0	1.2		
E-07	Water	PCB	1	PCB 92 (BZ)	0.63	1	0.63	ng/L			LIQ/LIQ,	Total	1668A	0	0.63		
E-09	Water	PCB	1	PCB 92 (BZ)	0.8	1	0.8	ng/L			LIQ/LIQ,	Total	1668A	0	0.8		
E-13	Water	PCB	1	PCB 92 (BZ)	2.2	1	2.2	ng/L			LIQ/LIQ,	Total	1668A	0	2.2	0.9718	2.2
I-1	Sediment	PCB	1	PCB 92 (BZ)	0.0053	1	0.0053	ng/g	Q J	Q J	SOXHLET	Total	1668A	0	0.0053		
I-2	Sediment	PCB	1	PCB 92 (BZ)	0.0053	1	0.0053	ng/g	Q J	Q J	SOXHLET	Total	1668A	0	0.0053		
I-3	Sediment	PCB	1	PCB 92 (BZ)	0.067	1	0.067	ng/g	Q	Q	SOXHLET	Total	1668A	0	0.067	0.02587	0.067
RB-01-11192012	Water	PCB	1	PCB 92 (BZ)	0.00069	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 93 (BZ)	0.013	1	0.013	ng/L	C J	C J	LIQ/LIQ,	Total	1668A	0	0.013		
BKG-03-MID	Water	PCB	1	PCB 93 (BZ)	0.016	1	0.016	ng/L	Q C J	Q C J	LIQ/LIQ,	Total	1668A	0	0.016	0.0145	0.016
E-02	Water	PCB	1	PCB 93 (BZ)	0.0023	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
E-05	Water	PCB	1	PCB 93 (BZ)	0.084	1	0.084	ng/L	Q C	Q C	LIQ/LIQ,	Total	1668A	0	0.084		
E-07	Water	PCB	1	PCB 93 (BZ)	0.057	1	0.057	ng/L	C	C	LIQ/LIQ,	Total	1668A	0	0.057		
E-09	Water	PCB	1	PCB 93 (BZ)	0.078	1	0.078	ng/L	C	C	LIQ/LIQ,	Total	1668A	0	0.078		
E-13	Water	PCB	1	PCB 93 (BZ)	0.27	1	0.27	ng/L	Q C	Q C	LIQ/LIQ,	Total	1668A	0	0.27	0.0978	0.27
I-1	Sediment	PCB	1	PCB 93 (BZ)	0.00048	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-2	Sediment	PCB	1	PCB 93 (BZ)	0.00096	1	0.00096	ng/g	Q C J	Q C J	SOXHLET	Total	1668A	0	0.00096		
I-3	Sediment	PCB	1	PCB 93 (BZ)	0.0066	1	0.0066	ng/g	Q C J	Q C J	SOXHLET	Total	1668A	0	0.0066	0.00252	0.0066
RB-01-11192012	Water	PCB	1	PCB 93 (BZ)	0.00069	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 94 (BZ)	0.0062	1	0.0062	ng/L	J	J	LIQ/LIQ,	Total	1668A	0	0.0062		
BKG-03-MID	Water	PCB	1	PCB 94 (BZ)	0.0038	1	0.0038	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.0038	0.005	0.0062
E-02	Water	PCB	1	PCB 94 (BZ)	0.0025	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
E-05	Water	PCB	1	PCB 94 (BZ)	0.038	1	0.038	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.038		
E-07	Water	PCB	1	PCB 94 (BZ)	0.024	1	0.024	ng/L	J	J	LIQ/LIQ,	Total	1668A	0	0.024		
E-09	Water	PCB	1	PCB 94 (BZ)	0.028	1	0.028	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.028		
E-13	Water	PCB	1	PCB 94 (BZ)	0.12	1	0.12	ng/L			LIQ/LIQ,	Total	1668A	0	0.12	0.042	0.12
I-1	Sediment	PCB	1	PCB 94 (BZ)	0.00054	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-2	Sediment	PCB	1	PCB 94 (BZ)	0.0007	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-3	Sediment	PCB	1	PCB 94 (BZ)	0.0011	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0	0	0
RB-01-11192012	Water	PCB	1	PCB 94 (BZ)	0.00078	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 95 (BZ)	0.29	1	0.29	ng/L	B	B	LIQ/LIQ,	Total	1668A	0	0.29		
BKG-03-MID	Water	PCB	1	PCB 95 (BZ)	0.35	1	0.35	ng/L	B	B	LIQ/LIQ,	Total	1668A	0	0.35	0.32	0.35
E-02	Water	PCB	1	PCB 95 (BZ)	0.17	1	0.17	ng/L			LIQ/LIQ,	Total	1668A	0	0.17		
E-05	Water	PCB	1	PCB 95 (BZ)	4.8	1	4.8	ng/L			LIQ/LIQ,	Total	1668A	0	4.8		
E-07	Water	PCB	1	PCB 95 (BZ)	2.5	1	2.5	ng/L			LIQ/LIQ,	Total	1668A	0	2.5		
E-09	Water	PCB	1	PCB 95 (BZ)	3	1	3	ng/L	B	B	LIQ/LIQ,	Total	1668A	0	3		
E-13	Water	PCB	1	PCB 95 (BZ)	8.5	1	8.5	ng/L	B	B	LIQ/LIQ,	Total	1668A	0	8.5	3.794	8.5
I-1	Sediment	PCB	1	PCB 95 (BZ)	0.019	1	0.019	ng/g	Q	Q	SOXHLET	Total	1668A	0	0.019		
I-2	Sediment	PCB	1	PCB 95 (BZ)	0.024	1	0.024	ng/g	B	B	SOXHLET	Total	1668A	0	0.024		
I-3	Sediment	PCB	1	PCB 95 (BZ)	0.24	1	0.24	ng/g			SOXHLET	Total	1668A	0	0.24	0.09433	0.24
RB-01-11192012	Water	PCB	1	PCB 95 (BZ)	0.00074	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 96 (BZ)	0.0022	1	0.0022	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.0022		

Client Sample ID	Matrix	sort	ion F	Analyte	Val_res	D?	Result	Unit	Qual	Flag	ep Metho	Prep Type	alysis Method	Check	Adj Val	Mean	Max
BKG-03-MID	Water	PCB	1	PCB 96 (BZ)	0.0033	1	0.0033	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.0033	0.00275	0.0033
E-02	Water	PCB	1	PCB 96 (BZ)	0.0019	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
E-05	Water	PCB	1	PCB 96 (BZ)	0.044	1	0.044	ng/L			LIQ/LIQ,	Total	1668A	0	0.044		
E-07	Water	PCB	1	PCB 96 (BZ)	0.018	1	0.018	ng/L	Q J	Q J	LIQ/LIQ,	Total	1668A	0	0.018		
E-09	Water	PCB	1	PCB 96 (BZ)	0.028	1	0.028	ng/L	J	J	LIQ/LIQ,	Total	1668A	0	0.028		
E-13	Water	PCB	1	PCB 96 (BZ)	0.09	1	0.09	ng/L	Q	Q	LIQ/LIQ,	Total	1668A	0	0.09	0.036	0.09
I-1	Sediment	PCB	1	PCB 96 (BZ)	0.0004	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-2	Sediment	PCB	1	PCB 96 (BZ)	0.00052	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-3	Sediment	PCB	1	PCB 96 (BZ)	0.002	1	0.002	ng/g	Q J	Q J	SOXHLET	Total	1668A	0	0.002	0.00067	0.002
RB-01-11192012	Water	PCB	1	PCB 96 (BZ)	0.00058	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 97 (BZ)	0.21	1	0.21	ng/L	B C86	B C86	LIQ/LIQ,	Total	1668A	0	0.21		
BKG-03-MID	Water	PCB	1	PCB 97 (BZ)	0.22	1	0.22	ng/L	B C86	B C86	LIQ/LIQ,	Total	1668A	0	0.22	0.215	0.22
E-02	Water	PCB	1	PCB 97 (BZ)	0.063	1	0.063	ng/L	B C86	B C86	LIQ/LIQ,	Total	1668A	0	0.063		
E-05	Water	PCB	1	PCB 97 (BZ)	2.9	1	2.9	ng/L	B C86	B C86	LIQ/LIQ,	Total	1668A	0	2.9		
E-07	Water	PCB	1	PCB 97 (BZ)	1.6	1	1.6	ng/L	Q B C86	Q B C86	LIQ/LIQ,	Total	1668A	0	1.6		
E-09	Water	PCB	1	PCB 97 (BZ)	1.8	1	1.8	ng/L	B C86	B C86	LIQ/LIQ,	Total	1668A	0	1.8		
E-13	Water	PCB	1	PCB 97 (BZ)	5.2	1	5.2	ng/L	Q B C86	Q B C86	LIQ/LIQ,	Total	1668A	0	5.2	2.3126	5.2
I-1	Sediment	PCB	1	PCB 97 (BZ)	0.025	1	0.025	ng/g	Q C86	Q C86	SOXHLET	Total	1668A	0	0.025		
I-2	Sediment	PCB	1	PCB 97 (BZ)	0.017	1	0.017	ng/g	C86	C86	SOXHLET	Total	1668A	0	0.017		
I-3	Sediment	PCB	1	PCB 97 (BZ)	0.15	1	0.15	ng/g	C86	C86	SOXHLET	Total	1668A	0	0.15	0.064	0.15
RB-01-11192012	Water	PCB	1	PCB 97 (BZ)	0.0006	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 98 (BZ)	0.016	1	0.016	ng/L	C J	C J	LIQ/LIQ,	Total	1668A	0	0.016		
BKG-03-MID	Water	PCB	1	PCB 98 (BZ)	0.015	1	0.015	ng/L	Q C J	Q C J	LIQ/LIQ,	Total	1668A	0	0.015	0.0155	0.016
E-02	Water	PCB	1	PCB 98 (BZ)	0.0064	1	0.0064	ng/L	Q C J	Q C J	LIQ/LIQ,	Total	1668A	0	0.0064		
E-05	Water	PCB	1	PCB 98 (BZ)	0.22	1	0.22	ng/L	C	C	LIQ/LIQ,	Total	1668A	0	0.22		
E-07	Water	PCB	1	PCB 98 (BZ)	0.1	1	0.1	ng/L	C	C	LIQ/LIQ,	Total	1668A	0	0.1		
E-09	Water	PCB	1	PCB 98 (BZ)	0.12	1	0.12	ng/L	Q C	Q C	LIQ/LIQ,	Total	1668A	0	0.12		
E-13	Water	PCB	1	PCB 98 (BZ)	0.37	1	0.37	ng/L	C	C	LIQ/LIQ,	Total	1668A	0	0.37	0.16328	0.37
I-1	Sediment	PCB	1	PCB 98 (BZ)	0.00046	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-2	Sediment	PCB	1	PCB 98 (BZ)	0.0006	0	ND	ng/g	U	ND	SOXHLET	Total	1668A	0	0		
I-3	Sediment	PCB	1	PCB 98 (BZ)	0.013	1	0.013	ng/g	Q C	Q C	SOXHLET	Total	1668A	0	0.013	0.00433	0.013
RB-01-11192012	Water	PCB	1	PCB 98 (BZ)	0.00067	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM	Water	PCB	1	PCB 99 (BZ)	0.2	1	0.2	ng/L	C83	C83	LIQ/LIQ,	Total	1668A	0	0.2		
BKG-03-MID	Water	PCB	1	PCB 99 (BZ)	0.21	1	0.21	ng/L	C83	C83	LIQ/LIQ,	Total	1668A	0	0.21	0.205	0.21
E-02	Water	PCB	1	PCB 99 (BZ)	0.068	1	0.068	ng/L	C83	C83	LIQ/LIQ,	Total	1668A	0	0.068		
E-05	Water	PCB	1	PCB 99 (BZ)	2.9	1	2.9	ng/L	C83	C83	LIQ/LIQ,	Total	1668A	0	2.9		
E-07	Water	PCB	1	PCB 99 (BZ)	1.6	1	1.6	ng/L	C83	C83	LIQ/LIQ,	Total	1668A	0	1.6		
E-09	Water	PCB	1	PCB 99 (BZ)	1.8	1	1.8	ng/L	C83	C83	LIQ/LIQ,	Total	1668A	0	1.8		
E-13	Water	PCB	1	PCB 99 (BZ)	5.2	1	5.2	ng/L	B C83	B C83	LIQ/LIQ,	Total	1668A	0	5.2	2.3136	5.2
I-1	Sediment	PCB	1	PCB 99 (BZ)	0.021	1	0.021	ng/g	C83	C83	SOXHLET	Total	1668A	0	0.021		
I-2	Sediment	PCB	1	PCB 99 (BZ)	0.014	1	0.014	ng/g	Q B C83	Q B C83	SOXHLET	Total	1668A	0	0.014		
I-3	Sediment	PCB	1	PCB 99 (BZ)	0.16	1	0.16	ng/g	C83	C83	SOXHLET	Total	1668A	0	0.16	0.065	0.16
RB-01-11192012	Water	PCB	1	PCB 99 (BZ)	0.00071	0	ND	ng/L	U	ND	LIQ/LIQ,	Total	1668A	0	0		
BKG-02-EM		PCB		PCB TOTAL HALFND	11.95385	1	11.95385	ng/L						0	11.9538		
BKG-03-MID		PCB		PCB TOTAL HALFND	17.80748	1	17.80748	ng/L						0	17.8075	14.8807	17.80748
E-02		PCB		PCB TOTAL HALFND	5.66069	1	5.66069	ng/L						0	5.66069		
E-05		PCB		PCB TOTAL HALFND	198.8613	1	198.8613	ng/L						0	198.861		
E-07		PCB		PCB TOTAL HALFND	98.49295	1	98.49295	ng/L						0	98.493		
E-09		PCB		PCB TOTAL HALFND	110.4214	1	110.4214	ng/L						0	110.421		
E-13		PCB		PCB TOTAL HALFND	322.4187	1	322.4187	ng/L						0	322.419	147.171	322.4187
I-1		PCB		PCB TOTAL HALFND	1.214462	1	1.214462	ng/g						0	1.21446		
I-2		PCB		PCB TOTAL HALFND	1.04751	1	1.04751	ng/g						0	1.04751		
I-3		PCB		PCB TOTAL HALFND	10.59143	1	10.59143	ng/g						0	10.5914	4.28447	10.59143
RB-01-11192012		PCB		PCB TOTAL HALFND	11.14293	1	11.14293	ng/L						0	11.1429		
BKG-02-EM		PCB		PCB TOTALPOS	11.93299	1	11.93299	ng/L						0	11.933		
BKG-03-MID		PCB		PCB TOTALPOS	17.794	1	17.794	ng/L						0	17.794	14.8635	17.794
E-02		PCB		PCB TOTALPOS	5.6125	1	5.6125	ng/L						0	5.6125		
E-05		PCB		PCB TOTALPOS	198.8305	1	198.8305	ng/L						0	198.831		
E-07		PCB		PCB TOTALPOS	98.4602	1	98.4602	ng/L						0	98.4602		
E-09		PCB		PCB TOTALPOS	110.391	1	110.391	ng/L						0	110.391		
E-13		PCB		PCB TOTALPOS	322.236	1	322.236	ng/L						0	322.236	147.106	322.236
I-1		PCB		PCB TOTALPOS	1.20302	1	1.20302	ng/g						0	1.20302		
I-2		PCB		PCB TOTALPOS	1.02993	1	1.02993	ng/g						0	1.02993		
I-3		PCB		PCB TOTALPOS	10.57867	1	10.57867	ng/g						0	10.5787	4.27054	10.57867
RB-01-11192012		PCB		PCB TOTALPOS	11.08674	1	11.08674	ng/L						0	11.0867		
Sum of duplicate values from the co-eluting peaks that reported multiple congeners.																	
BKG-02-EM		PCB		PCB TOTALPOS NO DUPS	6.9378	1	6.9378	ng/L						0	6.9378		
BKG-03-MID		PCB		PCB TOTALPOS NO DUPS	8.0969	1	8.0969	ng/L						0	8.0969	7.51735	8.0969
E-02		PCB		PCB TOTALPOS NO DUPS	3.2329	1	3.2329	ng/L						0	3.2329		
E-05		PCB		PCB TOTALPOS NO DUPS	118.264	1	118.264	ng/L						0	118.264		
E-07		PCB		PCB TOTALPOS NO DUPS	59.133	1	59.133	ng/L						0	59.133		
E-09		PCB		PCB TOTALPOS NO DUPS	65.287	1	65.287	ng/L						0	65.287		
E-13		PCB		PCB TOTALPOS NO DUPS	187.25	1	187.25	ng/L						0	187.25	86.6334	187.25
I-1		PCB		PCB TOTALPOS NO DUPS	0.76171	1	0.76171	ng/g						0	0.76171		
I-2		PCB		PCB TOTALPOS NO DUPS	0.62303	1	0.62303	ng/g						0	0.62303		
I-3		PCB		PCB TOTALPOS NO DUPS	6.1648	1	6.1648	ng/g						0	6.1648	2.51651	6.1648
RB-01-11192012		PCB		PCB TOTALPOS NO DUPS	0.07774	1	0.07774	ng/L						0	0.07774		
Calculated PCB Congeners Total, determined by removing the duplicate values from the co-eluting peaks that reported multiple congeners.																	
BKG-02-EM		PCB		PCB TOTALPOS NO DUPS	4.99519	1	4.99519	ng/L						0	4.99519		
BKG-03-MID		PCB		PCB TOTALPOS NO DUPS	9.6971	1	9.6971	ng/L						0	9.6971	7.34615	9.6971
E-02		PCB		PCB TOTALPOS NO DUPS	2.3796	1	2.3796	ng/L						0	2.3796		
E-05		PCB		PCB TOTALPOS NO DUPS	80.5665	1	80.5665	ng/L						0	80.5665		
E-07		PCB		PCB TOTALPOS NO DUPS	39.3272	1	39.3272	ng/L						0	39.3272		
E-09		PCB		PCB TOTALPOS NO DUPS	45.104	1	45.104	ng/L						0	45.104		
E-13		PCB		PCB TOTALPOS NO DUPS	134.986	1	134.986	ng/L						0	134.986	60.4727	134.986
I-1		PCB		PCB TOTALPOS NO DUPS	0.44131	1	0.44131	ng/g						0	0.44131		
I-2		PCB		PCB TOTALPOS NO DUPS	0.4069	1	0.4069	ng/g						0	0.4069		
I-3		PCB		PCB TOTALPOS NO DUPS	4.41387	1	4.41387	ng/g						0	4.41387	1.75403	4.41387
RB-01-11192012		PCB		PCB TOTALPOS NO DUPS	11.009	1	11.009	ng/L						0	11.009		

From File: CongenersSum.wst

Summary Statistics for Raw Full Data Sets

Variable	NumObs	Minimum	Maximum	Mean	Median	Variance	SD	MAD/0.675	Skewness	Kurtosis	CV
Congeners Sum (background)	2	11.93	17.79	14.86	14.86	17.18	4.144	4.345	N/A	N/A	0.279
Congeners Sum (effluent)	5	5.613	322.2	147.1	110.4	14270	119.5	131.1	0.614	0.324	0.812
Congeners Sum HalfND (background)	2	11.95	17.81	14.88	14.88	17.13	4.139	4.339	N/A	N/A	0.278
Congeners Sum HalfND (effluent)	5	5.661	322.4	147.2	110.4	14282	119.5	131.1	0.616	0.327	0.812

Percentiles for Raw Full Data Sets

Variable	NumObs	5%ile	10%ile	20%ile	25%ile(Q1)	50%ile(Q2)	75%ile(Q3)	80%ile	90%ile	95%ile	99%ile
Congeners Sum (background)	2	12.23	12.52	13.11	13.4	14.86	16.33	16.62	17.21	17.5	17.74
Congeners Sum (effluent)	5	24.18	42.75	79.89	98.46	110.4	198.8	223.5	272.9	297.6	317.3
Congeners Sum HalfND (background)	2	12.25	12.54	13.12	13.42	14.88	16.34	16.64	17.22	17.51	17.75
Congeners Sum HalfND (effluent)	5	24.23	42.79	79.93	98.49	110.4	198.9	223.6	273	297.7	317.5