GREAT LAKES ARCHITECT ENGINEER SERVICES (GLAES)

CONTRACT

FINAL
CLEANUP VALIDATION REPORT

Great Lakes Legacy Act Dredging—Sheboygan River
Remedial Action Oversight
USEPA GLAES Contract

Task Order No. 0006/Contract No. EP-R5-11-09

August 2013

PREPARED FOR

EPA
United States
Environmental Protection
Agency

PREPARED BY

CH2MHILL®

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Acronyms and Abbreviations

AOC	area of concern
BUI	beneficial use impairment
CAD	computer-aided design
DMU	dredge management unit
yd^3	cubic yards
GLLA	Great Lakes Legacy Act
GLNPO	Great Lakes National Program Office
GLRI	Great Lakes Restoration Initiative
mg/kg	milligrams per kilogram
MGP	manufactured gas plant
NAPL	nonaqueous phase liquid
NHPA	National Historic Preservation Office
NRT	Natural Resources Technology, Inc.
PAH	polynuclear aromatic hydrocarbon
PCB	polychlorinated biphenyl
PRS	Pollution Risk Services
QA	quality assurance
QC	quality control
RI	remedial investigation
RTJV	Ryba-Terra Joint Venture
SOP	standard operating procedure
SWAC	surface-weighted average concentration
TSCA	Toxic Substances Control Act
USEPA	U.S. Environmental Protection Agency
WDNR	Wisconsin Department of Natural Resources
WPSC	Wisconsin Public Service Corporation

SECTION 1

Introduction and Background

1.1 Introduction

This cleanup validation report presents the post-dredge sediment confirmation sampling results for the Great Lakes Legacy Act (GLLA) sediment remediation project within the Lower River and Inner Harbor of the Sheboygan River Area of Concern (AOC) in Sheboygan, Wisconsin. This report has been prepared by CH2M HILL for the U.S. Environmental Protection Agency (USEPA) Great Lakes National Program Office (GLNPO), in consultation with the Wisconsin Department of Natural Resources (WDNR), City of Sheboygan, Sheboygan County, and GLNPO's construction contractor Ryba-Terra Joint Venture (RTJV), under Contract No. EP-R5-11-09. The report includes elements specified in the Statement of Work dated May 16, 2012, and the approved work plan dated June 29, 2012, for Task Order No. 0006.

The purpose of the Cleanup Validation Report is to document the post-dredge polychlorinated biphenyl (PCB) and polynuclear aromatic hydrocarbon (PAH) confirmation sampling results, and provide a total project area surface-weighted average concentration (SWAC) value for each chemical class. The report also includes a breakdown of the dredged volume by dredge management unit (DMU) and by category of PCB-contaminated sediments regulated under the Toxic Substance Control Act (TSCA) and PCB-contaminated sediments not regulated under TSCA; commonly referred to as non-TSCA. Finally, the report discusses the post-dredge sand cover that was placed over a portion of the dredge area.

The specific stretch of the Lower River and Inner Harbor of the Sheboygan River AOC covered in this report consists of the Lower River reach from 0.25 mile upstream of the 14th Street Bridge to the end of the Lower River reach at the Pennsylvania Avenue Bridge, and the Inner Harbor reach from the Pennsylvania Avenue Bridge to the 8th Street Bridge (Figure 1). Dredging within the project reach was primarily conducted by GLNPO's cleanup services contractor RTJV from August through December 2012. A proportionally smaller amount of dredging was also conducted within this project reach by Pollution Risk Services (PRS), through the Superfund program.

1.2 Project Background

The Lower River and Inner Harbor segments of the Sheboygan River are located within the Sheboygan River AOC, in Sheboygan, Wisconsin. Historical waste discharge practices associated with the former Tecumseh Plant in Sheboygan Falls and the former Wisconsin Public Service Corporation (WPSC) Campmarina Manufactured Gas Plant (MGP) Site in Sheboygan have resulted in sediment contaminated with PCBs (Tecumseh) and PAHs (WPSC) in the Sheboygan River. Sediment characterization and remediation associated with the Sheboygan River Superfund Site have been progressing in phases, as performed by PRS through a liability transfer agreement with Tecumseh, since 2003. PRS removed approximately 65,000 cubic yards (yd^3) of PCB-contaminated sediment from the Lower River and Inner Harbor. Integrys, the parent company of WPSC, removed approximately 24,000 yd^3 of sediment and shoreline contaminated with PAHs and nonaqueous phase liquid (NAPL) from the Campmarina MGP Site in 2011.

The Superfund program projects focused on addressing human and ecological risk threats. As a result, PCB- and PAH-contaminated sediment remained in the Sheboygan River following removal of material required by the Superfund authority. The remaining sediment contamination also contributed to several beneficial use impairments (BUIs) in the Sheboygan River AOC, including restrictions on fish and wildlife consumption, degradation of benthos, and restrictions on dredging activities. Under the auspices of the Great Lakes Restoration Initiative (GLRI), GLNPO's goal was to take action that leads to removing BUIs and eventually delisting the AOC.

The GLNPO remedial action focused on sediment remaining in-place following the PRS and Campmarina MGP Site actions. A remedial investigation (RI) conducted in 2010–2011 by CH2M HILL augmented existing characterization data collected by PRS and Natural Resources Technology (NRT) for WPSC, particularly the vertical extent of contamination (CH2M HILL 2011). A focused feasibility study (CH2M HILL 2012a) and remedial design (CH2M HILL 2012b) underpinned the remedial action and confirmation sediment sampling conducted by RTJV and its subcontractor TechLaw (quality assurance [QA] project plan and sampling support) and second-tier subcontractor

Great Lakes Environmental Center for vibracore vessel and sediment core sample collection. The appendixes of this report contain raw data such as sediment core logs and photographs produced by TechLaw. Actions and results undertaken by CH2M HILL to compile, illustrate, analyze, and evaluate the raw sediment confirmation sampling data are presented mainly in the body of the report. Construction documentation information is presented by RTJV in a separate report.

SECTION 2

Sediment Sampling and Analysis

2.1 Objectives

The objective of the sediment sampling and laboratory analysis was to obtain data to accomplish the following:

- Evaluate and document PAH and PCB concentrations from post-dredge sediment confirmation samples against cleanup criteria concentrations and the project site SWAC goal to determine if further action (re-dredging and/or sand cover placement) was required.
- Confirm removal of Toxic Substances Control Act (TSCA) sediment (in situ sediment with total PCB concentration greater than 50 milligrams per kilogram [mg/kg]).
- Document PCB and PAH sediment concentrations within the designated shoreline offset areas.

The sediment sampling design was developed by CH2M HILL (2012c) with input from the project partners—USEPA GLNPO and WDNR—and was implemented by USEPA GLNPO's Contractor RTJV and their subcontractor TechLaw. Sediment sampling included the following sample categories:

- Sediment Confirmation Samples (station location code: CS)—Collected and analyzed with the objective to ensure that the specified remedial action limit was achieved during site remediation.
- Delineation Samples (station location code: DS)—Collected to further refine the horizontal and vertical extent of PCBs and PAHs within a specific area.
- TSCA Confirmation Samples (station location code: T)—Collected to confirm if the in-situ TSCA areas had been removed.
- Shoreline Samples (station location code: S)—Collected to characterize the in situ concentration of un-dredged sediments within shoreline offset. Samples collected along the shoreline of Kiwanis Park (station location code: SD) were collected to further refine the dredge extent along the Kiwanis Park shoreline.

2.2 Approach and Procedures

Sediment confirmation sampling was conducted after dredging to the specified design elevation. The results were used to determine if additional dredging was required and to document post-dredge PCB and PAH sediment concentrations. The post-dredge sediment surface concentrations were used for sand cover placement considerations and conducting post-remedial action SWAC calculations. A flowchart was prepared to guide the re-dredge decision making process, which is based on the PCB and PAH analytical results of the sediment confirmation samples (Figure 2). Sediment core locations collected during the remedial action are depicted in Figure 3, sheets 1 through 5. A summary of sediment core physical data measurements and analytical data for post-dredge confirmation and in situ shoreline sample locations are located in Tables 1 and 2, respectively.

2.2.1 TSCA Post-dredge Confirmation Sampling

At the time the final design was submitted 16 of the initial 26 TSCA areas (1 through 5, 9 through 13, 15, 19 through 21, 23, and 26) delineated from the RI data remained for removal. The reduction in TSCA areas slated for removal decreased because of dredging activities by PRS, as well as sediment elevation shifts, and areas determined to be inaccessible due to shoreline offset and side slope restrictions. The number of TSCA areas removed by RTJV further decreased to 14 areas (1 through 5, 9, 10, 13, 15, 19 through 21, 23, and 26) due to the continued dredging by PRS as confirmed by confirmation sampling and bathymetry surveys performed by PRS.

TSCA area sediment cores were collected using manual coring techniques from each of the designated 15 TSCA areas once dredging to the TSCA dredge tolerance specifications were confirmed by RTJV. Sediment cores were collected at a rate of 1 location for every 6,000 square feet, with a minimum of 3 locations per TSCA area to a maximum depth of 4 feet or refusal, whichever occurred first and were segmented into 1-foot sample intervals. The surface interval (0- to 1-foot) from each core was composited into a single sample and sent to the laboratory for quick turnaround,

48-hour PCB analysis. The remaining TSCA sediment core grab sample intervals were archived onsite at 0 degrees Celsius for potential analysis if the composite sample result was greater than 50 mg/kg total PCBs. If a respective TSCA area composite sample exceeded 50 mg/kg all the grab samples from the respective TSCA area were analyzed to define lateral and vertical extents for TSCA re-dredge activities. Archived TSCA grab samples were analyzed in three of the TSCA areas (T15B, T19, and T23).

2.2.2 Non-TSCA Post-dredge Confirmation Sampling

In order to facilitate and effectively manage re-dredge and sand placement decision making, the dredge extent was divided into 81 primary grids approximately 110 by 110 feet square. Each primary grid was further subdivided into sub-grids (quarters) each containing an additional sample location to provide further delineation of the primary grid if its respective sample result concentration exceeded the re-dredge criteria. The primary grid and sub-grid sizes were determined by using the number of distinct analytical data locations used within the 3-dimensional geostatistical model developed for interpolating the concentration isopachs implemented into the remedial design. The number of analytical data locations (518) was divided by the project area (1,600,500 square feet), to determine the average area represented by each location (3,090 square feet [55- by 55-foot grid]). Due to the number of locations and sample intervals needed to delineate a 55-foot square grid, the primary grid size was increased to 110 by 110 feet, with the inclusion of subgrids pending analytical results of the primary grid.

Once dredging was completed to the dredge tolerance specifications in each primary grid; sampling was performed using manual coring techniques. Primary and sub-grid sample locations were collected during the same mobilization with priority given to the primary grid sample locations, as they determined if additional analytical analysis would be needed from the sub-grid sample locations to determine re-dredge extents. Sediment cores were segmented into two 0.5-foot intervals for the first 1 foot of recovered sediment (resulting in sample intervals of 0 to 0.5 and 0.5 to 1 foot) followed by 1-foot intervals beyond the first foot of recovered sediment (sample interval of 1 to 2, 2 to 3 feet, etc.).

Samples within the upper 1 foot designated for PCB analysis were submitted for quick turnaround, 48-hour analysis, while samples intervals greater than 1 foot were archived at the laboratory and submitted for analysis pending review of the 0- to 0.5-foot and 0.5- to 1-foot sample interval analytical results. Samples were collected from the primary and sub-grid sample locations at the Campmarina Site (grids 30, 32, 34, 36, 38, and 40) by NRT and submitted for 48-hour analysis to aid in the design of an 18 mg/kg total PAH dredge design surface. PAH samples collected within the remaining primary grids outside the Campmarina Site were archived until the final dredge surface was achieved. Following the completion of the final dredge surface the sample interval representing the final sediment surface was then submitted for analysis and used for sand cover placement considerations and the PAH SWAC calculation.

2.2.3 In situ Shoreline Sediment Sampling

Shoreline samples were initially located at a density of 1 location per 110 linear feet to replicate the primary grid spacing, resulting in one shoreline sample per primary grid. However, the number of shoreline sample locations was reduced to 50 locations after reviewing existing in situ shoreline data locations collected within the vicinity of the shoreline as part of the Superfund project. Shoreline locations were sampled to refusal using manual coring techniques and segmented into 2 intervals (0 to 2 feet and 2 feet to refusal depth). Samples analyzed for total PCBs and PAHs in order to characterize the in situ concentration of sediments left in place and are incorporated within the PCB and PAH SWAC calculations.

2.2.4 Sediment Core Collection and Processing

Sediment sampling was conducted by the GLNPO Cleanup Services dredging contractor RTJV between October 1 and December 19, 2012, and by NRT, a contractor to GLNPO project partner Integrys, between October 24 and 26, 2012, within the Campmarina Site. Sediment cores were originally proposed to be collected using vibracore equipment; however, after several attempts using vibracore sampling equipment during the initial stages of sampling, it was determined that manual coring methods would be implemented for all sediment sampling. The manual coring process used a 2-inch polycarbonate core liner with a sediment retainer at the end. The core liner was housed within a steel core barrel that was manually driven with a slide hammer. The change in sampling method was implemented to obtain the specified sediment core recovery depths of 2 or 4 feet below the post-dredge sediment surface. Locations upstream of the Pennsylvania Avenue Bridge (Areas 1 and 2) were sampled to a minimum depth of 2 feet or to native

clay, whichever was shallower. Locations downstream of the Pennsylvania Avenue Bridge (Area 3) were sampled to a minimum depth of 4 feet to account for the potential of greater sediment thickness remaining following dredging.

After sediment cores were collected on the sampling vessel, they were transported to the shore processing area and staged within the WINSA building. The sediment core liners were laid horizontally on a decontaminated processing table and cut open longitudinally with a power shears for visual characterization, photographs, and collection of the specified sample intervals. Sediment core logs and core processing photographs are included in Appendixes A and B, respectively. Photographs of the sediment coring processes are located in Appendix C.

2.2.5 Field Measurement Collection

Field measurements were collected by RTJV during sediment sampling activities and provided to CH2M HILL following each sampling event. Field measurements collected at the time of sampling included location coordinates; water elevation as determined from an onsite staff gauge, water depth, sediment core penetration depth, sediment core recovery, sediment thickness, and depth to native till (if applicable). From these field measurements, CH2M HILL calculated the sediment elevations including sample interval elevations and the elevation of native sediment (if applicable). The data were used to assess and ensure proper profile characterization of sediments and determining re-dredge target elevation if required. Field measurement data are summarized within Table 1 (confirmation samples) and Table 2 (shoreline samples). Sediment core logs containing sediment descriptions and field measurements are provided in Appendix A.

2.2.6 Deviation Summary

Deviations to the confirmation sampling approach and procedures as originally described within the project site plans has been prepared by RTJV and is included within Appendix F.

2.3 Analytical Program

Samples collected by TechLaw or NRT were handed to CH2M HILL onsite personnel who labeled the jars and completed chain-of-custody documentation. The samples were packed and stored in coolers at 4 degrees Celsius until they were picked up by courier or shipped for overnight delivery to the laboratory by Federal Express.

Sediment samples and associated QA/quality control (QC) samples were analyzed by Pace Analytical Services, Inc. (Pace) in Green Bay, Wisconsin. PCB Aroclors were extracted and analyzed by USEPA SW-846 Method 3541/ 8082A, Pace Standard Operating Procedures (SOPs) S-GB-O-041-REV.04 and S-GB-O-047-REV.02. PAH compounds were extracted and analyzed by USEPA SW-846 Method 3546/8270C SIM, Pace SOPs S-GB-O-045-REV.03, and S-GB-O-050-Rev.02.

- 397 sediment samples and 42 field duplicate samples from 186 locations were analyzed for PCB Aroclors by USEPA Method SW-846 3541/8082A.
- 320 sediment samples and 36 field duplicate samples from 175 locations were analyzed for PAHs by USEPA Method SW-846 3546/8270C SIM.

2.3.1 Data Quality Evaluation

A detailed data quality evaluation memorandum is provided in Appendix D. The key findings of that evaluation indicated that the completeness objective of 90 percent was met for all method/analyte combinations. The evaluation also found that the precision and accuracy of the data, as measured by field and laboratory QC indicators, indicated that the data quality objectives were met.

2.4 Analytical Results

The total PCB and total PAH analytical results for confirmation samples are presented in Table 1, Field Measurement and Analytical Data Summary – Confirmation Samples. In Table 1, samples representing the final dredge surface are indicated with an “S” and samples that were removed during dredging are shaded gray. Re-dredge activities sometimes resulted in the removal of sediments characterized by confirmation samples. Re-dredge design modifications are discussed in Section 3.

The total PCB and total PAH analytical results for shoreline samples are presented in Table 2, Field Measurement and Analytical Data Summary – Shoreline Samples. In Table 2, samples that represent the final dredge sediment surface are indicated with an "S" and samples removed during dredging are shaded gray.

Analytical results for total and individual PCB and PAH compounds are shown in Tables 3 and 4 in Appendix D.

2.4.1 Polychlorinated Biphenyls

Total PCBs and the four Aroclors historically found at the site (Aroclors 1242, 1248, 1254, and 1260) were reported by the laboratory.

Total PCB concentrations for confirmation samples that were not removed during dredging activities ranged from nondetect, to a maximum of 43.2 mg/kg detected at location CS061. Total PCB concentrations for shoreline samples ranged from nondetect to 119 mg/kg. The highest concentration was detected at shoreline location S67 in the 2.0- to 3.7-foot interval.

2.4.2 Polynuclear Aromatic Hydrocarbons

PAH analysis consisted of the following 13 PAH compounds:

- Acenapthene
- acenaphthylene
- anthracene
- benzo(a)anthracene
- benzo(a)pyrene
- benzo(b)fluoranthene
- benzo(k)fluoranthene
- chrysene
- fluoranthene
- fluorine
- naphthalene
- phenanthrene
- pyrene

For the subset of samples analyzed on behalf of Integrys, results for total PAHs and 6 individual PAH compounds were reported in addition to the 13 listed above. The following individual PAHs were reported by the laboratory:

- benzo(e)pyrene
- benzo(g,h,i)perylene
- dibenz(a,h)anthracene
- indeno(1,2,3-cd)pyrene
- 1-methylnaphthalene
- 2-methylnaphthalene

Total PAH results (PAH-13) were calculated by summing detect values of the 13 compounds. When all compounds were reported as nondetect, total PAH-13 is represented by the sum of the method detection limits for each compound.

Total PAH-13 concentrations for confirmation samples that were not removed during dredging activities ranged from nondetect to a maximum of 589.3 mg/kg detected at location CS028A. Complete removal of impacted sediments at location CS028A was not possible due to the location of existing utilities. Total PAH concentrations for shoreline samples ranged from nondetect, to a maximum of 216.81 mg/kg detected at location S43 in the 2.0- to 5.7-foot interval.

SECTION 3

Design Modification Procedures and Implementation

3.1 Re-dredged Sediments

At the completion of dredging and confirmation sampling; PCB and/or PAH analytical results revealed several grid areas for re-dredge based on the dredge decision making process (Figure 2). The volumes associated with re-dredging are located in Table 3. Electronic records, including design drawing markups and *x,y,z* data files of areas re-dredged, are included within Appendix E.

3.1.1 TSCA Sediment Re-dredging

TSCA re-dredging was performed within designated TSCA areas T15, T19, and T23 and within Area 3 grids 57, 59, 61, 67, and 74 through 77. Re-dredging of TSCA material was implemented if any confirmation sample results were greater than or equal to 50 mg/kg. During post-dredge confirmation sampling conducted after the dredging to the design surface was completed three newly identified areas with TSCA level sediments were identified within Area 3 grids 65, 67, and 71. A total of 8,593 yd^3 of TSCA material was removed, with 1,447 yd^3 of the total TSCA material removed was associated with re-dredging.

3.1.2 Non-TSCA Sediment Re-dredging

Re-dredging of sediment classified as non-TSCA was performed if the confirmation sampling revealed an average post dredge surface concentration of the primary and sub-grid samples greater than or equal to 10 mg/kg total PCB. A total of 5 re-dredge areas primarily within the historic navigational channel (grids 63, 65, 66, 67, 71, and 74 through 77) were performed to address remaining sediments with total PCB levels greater than 10 mg/kg. Two areas of PAH re-dredge located outside of the Campmarina project area occurred within grids 19 and 28. The total yardage of re-dredged non-TSCA material is 7,761 yd^3, of which 4,965 and 2,796 are associated with Areas 2 and 3, respectively.

3.1.3 PAH Sediment Re-Dredging

After completion of initial dredging within the grids representative of the Campmarina Site (28, 30, 32, 34, 36, 38, and 40) NRT conducted the post dredge confirmation sampling on behalf of WPSC to delineate the horizontal and vertical extent of total PAHs below the dredge design elevation. Upon receipt and review of the analytical results WPSC proposed further dredging within the Campmarina Site addressing the remaining elevated total PAH concentrations. NRT prepared a draft re-dredge design to address areas within the Campmarina Site with a total PAH concentration greater than or equal to 45 mg/kg on November 13, 2012. An approved re-dredge design was agreed upon by the project partners and provided to RTJV for implementation on November 16, 2012. During the re-dredge operation, RTJV noted areas with sediments below the agreed upon re-dredge design that contained visual staining and produced a sheen when dredged. In order to address the visually impacted sediment RTJV was given direction to dredge all impacted sediments as determined by visual observation. At the completion of the Campmarina re-dredging additional confirmation sampling was performed and revealed total PAH concentrations exceeding the removal criteria. Four additional step-out locations—DS040-1A and DS040-2 through DS040-4—were collected to delineate the area prior to concluding dredging for the 2012 season. In May 2013, an additional re-dredge effort of Grid 40 was implemented based on the Grid 40 re-dredge design prepared by NRT in April 2013.

3.2 Shoreline Adjustments

On October 3, 2012 RTJV notified CH2M HILL that the proposed limits of excavation along river left from station 50+00 to 64+00 and within Area 3 were not representative of actual site conditions. During the digitizing process of the shoreline boundary from an ortho-rectified aerial photograph the shoreline boundary was positioned further upland than the actual surveyed shoreline conducted by RTJV. The inexact positioning of the digitized shoreline was influenced by the heavy vegetation within the ortho-rectified aerial photo from which the digitized boundary was created. The shoreline adjustment resulted in a decrease of volume to be removed estimated at 3,339 yd^3. Updated design drawings and *x,y,z* data file of the impacted shoreline and accompanying side slope were prepared by CH2M HILL and delivered to RTJV on October 8, 2012 (Appendix E).

3.3 Area 1 Dredge Boundary Adjustment

On September 25, 2012, a change to the proposed dredge extent within Area 1 from station 11+00 to 18+00 was proposed. The proposed change was approved by the project partners on September 26, 2012, and incorporated into the design drawings and computer-aided design (CAD) files on October 5, 2012. The adjustment was proposed due concerns with the cost effectiveness and feasibility of excavating the sediment from shore as it was of low PCB concentration (less than 5 mg/kg) within thin soft sediment deposits (less than 0.75 foot). Adjustments to the Area 1 dredge boundary resulted in the removal of one confirmation sample location in grid 1 and shifting six locations throughout grids 1, 3, 5 and 6 (Appendix E). The reduction of material for removal due to the Area 1 dredge extent adjustment was estimated to be 977 yd^3.

3.4 Dredge Quantity Reporting

Dredge quantities and tonnage were reported monthly by RTJV and corresponded to RTJV's monthly invoices. Upon receipt from USEPA of the quantities and tonnage invoiced, CH2M HILL provided an independent check of the invoiced quantities. Dredge volumes were verified by CH2M HILL using bathymetric survey files provided by RTJV's subcontracted hydrographic surveyor and importing them into CAD software capable of cut/fill volume calculations. Verifying tonnage disposed of TSCA and non-TSCA sediments, as well as, debris was performed by checking the each of the respective landfills waste manifests.

3.4.1 Approach

Volumes were calculated through comparison of pre and post-dredge multi-beam bathymetric surveys. Post-dredge surveys were conducted daily within each days respective dredge area. Intermediate surveys were collected as needed to document changing river bottom conditions due to heavy precipitation events, potential sloughing of side slopes, air-bubble curtain deposition, etc. Each intermediate and daily post dredge survey was consecutively combined with the previous survey to create a contiguous survey representing post dredge surface elevations. The combined post-dredge survey at the end of each month was then compared against the pre-dredge survey within the areas dredged to determine the quantity dredged each month. TSCA quantities were determined in a similar manner; however, independent pre- and post-TSCA dredge surveys were performed prior to and after the dredging of TSCA material. The pre-TSCA dredge survey was reviewed prior dredging for determination of meeting the specified dredge tolerance criteria of +0/-0.5 foot in reference to the designed upper TSCA neatline surface. The post-TSCA dredge survey was reviewed against the dredge criteria of +0.5/-0.0 foot as compared to the lower TSCA neatline surface. The survey was performed to ensure that complete removal of the TSCA deposits as defined by the upper and lower neatline surfaces of the TSCA deposit was accomplished and to verify that non-TSCA sediments were not categorized as TSCA material.

3.4.2 Results

A summary of dredge quantities and tonnage are summarized within Table 3. Quantities are reported in cubic yards and summarized by month to correlate with the monthly invoiced quantities as well as by project area (Areas 1 through 3), and category (TSCA, non-TSCA, and re-dredge). A total of 147,822 yd^3 were dredged within the project area from August to December 2012 and May 2013 (Grid 40) resulting in the disposal of approximately 212,575 tons of non-TSCA sediment, 13,641 tons of TSCA sediment, and 1,141 tons of debris.

SECTION 4

Post-dredge Surface-weighted Average Concentration Calculation

Section 4 summarizes the process and calculations used to determine the post-dredge SWAC values in the GLLA sediment remediation project. The basis of the SWAC approach is that the exposure domain for receptors is broader than the small areas represented by individual samples, so an average concentration of the exposure domain should be calculated and used.

4.1 SWAC Methodology

The following steps were used to develop the SWAC conditions of the dredged area and the project reach:

1. Within the dredge footprint, A_i is the estimated area of river for each grid. The grid area represents the relative weighting of the sediment concentration.

   Within the project area but outside of the dredge footprint, the area, A_i was determined based on polygonal declustering. The method divides the total area of influence into polygons (one for each core location), with the polygon area representing the relative weighting of that sample. The polygons of influence, or Thiessen polygons, were delineated within a geographic information system computer application, such that a polygon contains all the area that is closer to a given sample point than to any other sample point.

   $$Cw_i = Conc \times A_i$$

2. Within the dredge footprint, the post-dredge sediment surface concentrations were determined by using the sample interval representing the post-dredge sediment surface. In some cases, additional dredging activities occurred after the initial sampling. When this occurred, the sample interval representing the sediment surface at the final dredge elevation was used, when available. If the area was resampled after additional dredging activities, this data was used. When multiple samples were collected from within a grid, the average concentration was used to represent the grid.

   The data used to represent the areas outside of the dredge footprint comprise the shoreline sample locations collected during dredging activities, post-dredge sediment samples collected by PRS, and results from samples used in the remedial investigation (CH2M HILL 2011).

   The weighted concentration for each grid or polygon (Cw_i) was calculated by multiplying the concentration (*Conc*) by the area (A_i).

3. The products of the surface sediment concentrations and surface areas of each polygon were summed and the total was divided by the total surface area (A) to get a SWAC, as follows:

$$SWAC = \frac{\sum_{i=1}^{n} Cw_i}{A}$$

4.2 SWAC Results

The pre-remediation sediment surface SWAC was 4.17 mg/kg PCBs (CH2M HILL 2012a). The post-remediation PCB SWAC value for the project reach (including dredged and non-dredged areas) is 2.67 mg/kg PCB and 3.11 mg/kg PCB within the dredge footprint portion of the project reach. The post-remediation PAH SWAC value for the project reach is 8.65 mg/kg PAH and 10.60 mg/kg PAH within the dredge footprint.

Based on the post-remediation surface sediment concentrations, the addition of sand was determined to be used by the project stakeholders as a cover material. The addition of sand was used to calculate SWAC values that theoretically would be achieved if the sand cover was placed over a portion of the dredged area.

Extent of sand cover placement was selected to be the same extent as sample grids. A total of 26 sample grids were selected for sand cover placement. Grids selected by the project partners included each of the grids representing the Campmarina project site (28, 30, 32, 34, 36, 38, and 40) as well as, grids having an average post dredge surface concentration greater than or equal to 5 mg/kg and 18 mg/kg, total PCBs or PAHs respectively. Although the average PAH concentration for grid 10 was 26.7 mg/kg total PAH, it was not selected for sand placement due to access restraints caused by the shallow water levels upstream of the 14th Street bridge based on the above criteria. For the selected grids, a 6-inch sand cover using the minimum method detection limit for PCBs and PAHs (0.024 and 0.078 mg/kg, respectively) to represent the sand concentration without homogenous mixing of the sand with the surface sediment was assumed. Factoring in the sand cover resulted in a project reach SWAC of 1.09 mg/kg PCB and 2.98 mg/kg PAH, while the dredge footprint SWAC resulted in 0.65 mg/kg PCB and 1.73 mg/kg PAH. The SWAC calculations and the values for PCB and PAH post-dredge sediment surfaces are presented in Table 4. The post-dredge SWAC concentrations are presented in Figures 4 and 5. Grids receiving sand cover placement are presented in Figure 6. A summary of the SWAC values is presented in Exhibit 4-1.

EXHIBIT 4-1
SWAC Value Summary
Sheboygan River GLLA Remedial Design Cleanup Validation Report

	PCB SWAC (mg/kg)	PCB SWAC with Proposed Sand Cover[a] (mg/kg)	PAH SWAC (mg/kg)	PAH SWAC with 6-inch Sand Cover [a] (mg/kg)
Project Reach[b] Post-remediation SWAC	2.67	1.09	8.65	2.98
Dredge Footprint[c] Post-remediation SWAC	3.11	0.65	10.60	1.73

mg/kg = milligrams per kilogram; PAH = polynuclear aromatic hydrocarbons; PCB = polychlorinated biphenyl; SWAC = surface-weighted average concentration
[a] SWAC values reported as "with 6-inch sand cover" are estimated values based on sand cover placement that occurred in spring 2013.
[b] Project reach SWAC values represent the entire project extent including non-dredge areas (that is, shoreline offsets and areas below removal criteria).
[c] Dredge footprint SWAC values are representative of areas where dredging occurred (that is, DMUs).

SECTION 5

Sand Cover Thickness Verification

A minimum tolerance of 5 inches of sand was specified in the remedial design and bidding documents. In-place thickness was measured using weighted buckets attached by rope to a pulley support beam on both the starboard and port sides of the barge. The buckets were calibrated by marking 1-inch interval lines on the inside of the buckets. As the barge-mounted sand spreader set up on an area, the buckets were lowered to the river bottom. Sand spreading commenced at a set rate and time period. At the completion of sand spreading in that area, the buckets were raised and the thickness of sand within the bucket was observed and recorded in a spreadsheet. The locations of the buckets were recorded by the ClamVision software, which was also used to direct barge positioning for sand placement.

A total of 280 recorded sand bucket thickness locations were collected, as shown in Figure 7. The bucket test measured thicknesses are provided in Table 5.

SECTION 6

References

CH2M HILL. 2011. *Final Remediation Investigation Report, Lower River and Inner Harbor of the Sheboygan River, Sheboygan, Wisconsin*. June.

CH2M HILL. 2012a. *Final Focused Feasibility Study, Lower River and Inner Harbor of the Sheboygan River, Sheboygan, Wisconsin*. February.

CH2M HILL. 2012b. *Basis of Design Report, Lower River and Inner Harbor of the Sheboygan River, Sheboygan, Wisconsin*. August.

CH2M HILL. 2012c. *Supplemental Quality Assurance Plan, Lower River and Inner Harbor of the Sheboygan River, Sheboygan, Wisconsin*. September.

Tables

TABLE 1
Field Measurement and Analytical Data Summary—Confirmation Samples
Sheboygan River GLLA Remedial Design Cleanup Validation Report

	Location ID	Sample ID	Sample Date	Total PCBs[1] (mg/kg)	Total of 13 PAHs[2] (mg/kg)	Northing (WI SPS)	Easting (WI SPS)	Latitude (NAD83)	Longitude (NAD83)	Sample Interval Top (ft)	Sample Interval Bottom (ft)	Water Elevation (NAVD88)	Tide Elevation (ft from LWD)	Water Depth (ft)	Sediment Surface Elevation (NAVD88)	Core Penetration (ft)	Core Recovery (ft)	Sediment Thickness (ft)	Native Sediment Elevation (NAVD88)
S	CS001	SR-CS001-0.0/0.5	12/19/2012	0.0276 J	0.0615	2569392.943	647134.114	43.75304510	-87.72549758	0	0.5	576.3	-1.7	3.3	573	7.9	2.6	7.8	570.5
	CS001	SR-CS001-0.5/1.0	12/19/2012	0.0279 U		2569392.943	647134.114	43.75304510	-87.72549758	0.5	1	576.3	-1.7	3.3	573	7.9	2.6	7.8	570.5
S	CS002	SR-CS002-0.0/0.5	12/19/2012	0.887	0.0564	2569364.486	647243.101	43.75334611	-87.72559399	0	0.5	576.2	-1.8	3.2	573	8.1	3		
	CS002	SR-CS002-0.5/1.0	12/19/2012	0.0251 U		2569364.486	647243.101	43.75334611	-87.72559399	0.5	1	576.2	-1.8	3.2	573	8.1	3		
S	CS003	SR-CS003-0.0/0.6	12/12/2012	1.52	0.2398	2569386.755	647354.036	43.75364868	-87.72549829	0	0.6	576.2	-1.8	4.3	571.9	7.1	0.6		
S	CS004	SR-CS004-0.0/0.5	12/19/2012	2.58	0.658	2569361.493	647451.899	43.75391895	-87.72558377	0	0.5	576.3	-1.7	5.1	571.2	8.6	2.2		
	CS004	SR-CS004-0.5/1.0	12/19/2012	0.606		2569361.493	647451.899	43.75391895	-87.72558377	0.5	1	576.3	-1.7	5.1	571.2	8.6	2.2		
S	CS005	SR-CS005-0.0/0.5	12/12/2012	0.345	0.049	2569372.576	647575.973	43.75425838	-87.72552903	0	0.5	576.2	-1.8	3.1	573.1	6.8	2.1		
	CS005	SR-CS005-0.5/1.0	12/12/2012	0.0292 U		2569372.576	647575.973	43.75425838	-87.72552903	0.5	1	576.2	-1.8	3.1	573.1	6.8	2.1		
S	CS006	SR-CS006-0.0/0.8	12/19/2012	0.932	0.1642	2569429.597	647736.511	43.75469437	-87.72529672	0	0.8	576.3	-1.7	2.1	574.2	6.3	0.8		
S	CS007	SR-CS007-0.0/0.5	12/10/2012	0.05 J	0.5901 U	2569564.993	647925.524	43.75520259	-87.72476494	0	0.5	576.7	-1.3	5.2	571.5	6.2	3.8	5.8	568.1
	CS007	SR-CS007-0.5/1.0	12/10/2012	0.0265 U		2569564.993	647925.524	43.75520259	-87.72476494	0.5	1	576.7	-1.3	5.2	571.5	6.2	3.8	5.8	568.1
S	CS008B	SR-CS008B-0.0/0.5	12/11/2012	0.446	0.5785 J	2569658.672	647945.809	43.75525121	-87.72440842	0	0.5	576.5	-1.5	6.8	569.7	6.7	4.1		
	CS008B	SR-CS008B-0.5/1.0	12/11/2012	0.0317 J		2569658.672	647945.809	43.75525121	-87.72440842	0.5	1	576.5	-1.5	6.8	569.7	6.7	4.1		
S	CS009	SR-CS009-0.0/0.5	12/10/2012	0.0522 J	0.5611 U	2569647.783	647849.069	43.75498672	-87.72445961	0	0.5	576.68	-1.32	4.2	572.48	6.6	4		
	CS009	SR-CS009-0.5/1.0	12/10/2012	0.027 U		2569647.783	647849.069	43.75498672	-87.72445961	0.5	1	576.68	-1.32	4.2	572.48	6.6	4		
S	CS010	SR-CS010-0.0/0.5	12/10/2012	0.594	26.7	2569710.729	647892.912	43.75510225	-87.72421693	0	0.5	576.6	-1.4	4.9	571.7	6.6	2.4		
	CS010	SR-CS010-0.5/1.0	12/10/2012	0.0408 J		2569710.729	647892.912	43.75510225	-87.72421693	0.5	1	576.6	-1.4	4.9	571.7	6.6	2.4		
S	CS011	SR-CS011-0.0/0.5	12/10/2012	0.407	0.7967	2569809.376	647952.79	43.75525907	-87.72383751	0	0.5	576.5	-1.5	5	571.5	8	4.5		
	CS011	SR-CS011-0.5/1.0	12/10/2012	0.0268 U		2569809.376	647952.79	43.75525907	-87.72383751	0.5	1	576.5	-1.5	5	571.5	8	4.5		
S	CS012	SR-CS012-0.0/0.8	12/10/2012	0.524	1.1644	2569905.429	647969.124	43.75529667	-87.72347241	0	0.8	576.5	-1.5	5.6	570.9	5.2	0.8		
S	CS013	SR-CS013-0.0/0.7	12/10/2012	2.86	0.3671	2570011.063	647978.79	43.75531527	-87.72307175	0	0.7	576.5	-1.5	6.1	570.4	4.8	0.7		
S	CS014	SR-CS014-0.0/0.5	11/29/2012	0.182	0.5579	2570122.396	647974.659	43.75529560	-87.72265095	0	0.5	576.54	-1.46	4.4	572.14	6.1	3.9	5.5	568.84
	CS014	SR-CS014-0.5/1.0	11/29/2012	0.395		2570122.396	647974.659	43.75529560	-87.72265095	0.5	1	576.54	-1.46	4.4	572.14	6.1	3.9	5.5	568.84
S	CS015	SR-CS015-0.0/0.5	11/27/2012	0.186	0.492 U	2570613.91	647774.065	43.75470865	-87.72081208	0	0.5	576.34	-1.66	6.8	569.54	6.3	2.4	5	568.44
	CS015	SR-CS015-0.5/1.1	11/27/2012	0.028 U		2570613.91	647774.065	43.75470865	-87.72081208	0.5	1.1	576.34	-1.66	6.8	569.54	6.3	2.4	5	568.44
S	CS016	SR-CS016-0.0/0.5	11/27/2012	0.152	0.5341 U	2570779.903	647554.645	43.75409447	-87.72020676	0	0.5	576.34	-1.66	6	570.34	5.3	3.4	5.1	567.14
	CS016	SR-CS016-0.5/1.0	11/27/2012	0.124		2570779.903	647554.645	43.75409447	-87.72020676	0.5	1	576.34	-1.66	6	570.34	5.3	3.4	5.1	567.14
S	CS017	SR-CS017-0.0/0.5	11/27/2012	0.546	2.0312	2570850.682	647300.533	43.75339228	-87.71996527	0	0.5	576.36	-1.64	4.8	571.56	6.9	3.3		
	CS017	SR-CS017-0.5/1.0	11/27/2012	0.0362 U		2570850.682	647300.533	43.75339228	-87.71996527	0.5	1	576.36	-1.64	4.8	571.56	6.9	3.3		
S	CS018	SR-CS018-0.0/0.5	11/27/2012	0.0303 J	0.5686 U	2570924.739	647180.398	43.75305727	-87.71969752	0	0.5	576.32	-1.68	6.2	570.12	7.7	6		
	CS018	SR-CS018-0.5/1.0	11/27/2012	0.0289 U		2570924.739	647180.398	43.75305727	-87.71969752	0.5	1	576.32	-1.68	6.2	570.12	7.7	6		
	CS019	SR-CS019-0.0/0.5	11/19/2012	0.594	0.2388	2571055.929	647051.27	43.75269331	-87.71921455	0	0.5	576.6	-1.4	6.5	570.1	5	3.7	4.5	566.9
	CS019	SR-CS019-0.5/1.0	11/19/2012	0.0301 U	1157.5	2571055.929	647051.27	43.75269331	-87.71921455	0.5	1	576.6	-1.4	6.5	570.1	5	3.7	4.5	566.9
S	CS019	SR-CS019-1.0/2.0	11/19/2012	0.0304 U	0.7543	2571055.929	647051.27	43.75269331	-87.71921455	1	2	576.6	-1.4	6.5	570.1	5	3.7	4.5	566.9
S	CS019A	SR-CS019A-0.0/0.5	11/27/2012		0.0849	2571052.726	647078.14	43.75276723	-87.71922389	0	0.5	576.21	-1.79	6.3	569.91	6.9	4		
	CS019A	SR-CS019A-0.5/1.0	11/27/2012		0.9035	2571052.726	647078.14	43.75276723	-87.71922389	0.5	1	576.21	-1.79	6.3	569.91	6.9	4		
	CS019A	SR-CS019A-1.0/2.0	11/27/2012		0.5471 U	2571052.726	647078.14	43.75276723	-87.71922389	1	2	576.21	-1.79	6.3	569.91	6.9	4		
	CS019A	SR-CS019A-2.0/3.0	11/27/2012		7.086	2571052.726	647078.14	43.75276723	-87.71922389	2	3	576.21	-1.79	6.3	569.91	6.9	4		
	CS019A	SR-CS019A-3.0/4.0	11/27/2012		0.4444	2571052.726	647078.14	43.75276723	-87.71922389	3	4	576.21	-1.79	6.3	569.91	6.9	4		
S	CS019B	SR-CS019B-0.0/0.5	11/27/2012		0.4092	2571106.605	647039.601	43.75265750	-87.71902404	0	0.5	576.41	-1.59	8.2	568.21	4.7	3.3		
	CS019B	SR-CS019B-0.5/1.0	11/27/2012		0.5116 U	2571106.605	647039.601	43.75265750	-87.71902404	0.5	1	576.41	-1.59	8.2	568.21	4.7	3.3		
	CS019B	SR-CS019B-1.0/2.0	11/27/2012		1.9878	2571106.605	647039.601	43.75265750	-87.71902404	1	2	576.41	-1.59	8.2	568.21	4.7	3.3		
	CS019B	SR-CS019B-2.0/3.0	11/27/2012		3.1283	2571106.605	647039.601	43.75265750	-87.71902404	2	3	576.41	-1.59	8.2	568.21	4.7	3.3		
S	CS020	SR-CS020-0.0/0.5	11/19/2012	0.444	1.457 J	2571166.44	646975.235	43.75247650	-87.71880433	0	0.5	576.65	-1.35	6.3	570.35	6.7	4.6		
	CS020	SR-CS020-0.5/1.0	11/19/2012	0.0292 U	40.097 J	2571166.44	646975.235	43.75247650	-87.71880433	0.5	1	576.65	-1.35	6.3	570.35	6.7	4.6		
S	CS020D	SR-CS020D-0.0/0.5	11/27/2012		0.2374	2571120.398	646983.92	43.75250377	-87.71897762	0	0.5	576.28	-1.72	6.9	569.38	4.9	2.5	4.6	567.18
	CS020D	SR-CS020D-0.5/1.0	11/27/2012		0.8305	2571120.398	646983.92	43.75250377	-87.71897762	0.5	1	576.28	-1.72	6.9	569.38	4.9	2.5	4.6	567.18
	CS020D	SR-CS020D-1.0/2.2	11/27/2012		0.476	2571120.398	646983.92	43.75250377	-87.71897762	1	2.2	576.28	-1.72	6.9	569.38	4.9	2.5	4.6	567.18
S	CS021	SR-CS021-0.0/0.5	11/20/2012	0.335	0.5874 U	2571065.414	646919.533	43.75233132	-87.71919230	0	0.5	576.5	-1.5	6.3	570.2	4.3	3.3		
	CS021	SR-CS021-0.5/1.0	11/20/2012	0.158	0.5228 U	2571065.414	646919.533	43.75233132	-87.71919230	0.5	1	576.5	-1.5	6.3	570.2	4.3	3.3		
S	CS022	SR-CS022-0.0/0.5	11/20/2012	0.563	3.693	2571219.201	646899.639	43.75226522	-87.71861254	0	0.5	576.69	-1.31	9.1	567.59	4.1	1.7		
	CS022	SR-CS022-0.5/1.0	11/20/2012	0.326	6.026	2571219.201	646899.639	43.75226522	-87.71861254	0.5	1	576.69	-1.31	9.1	567.59	4.1	1.7		
S	CS023	SR-CS023-0.0/0.5	11/20/2012	1.79	0.9422	2571096.802	646845.821	43.75212682	-87.71908118	0	0.5	576.53	-1.47	6.6	569.93	6.4	2.3		
	CS023	SR-CS023-0.5/1.0	11/20/2012	0.366	4.848	2571096.802	646845.821	43.75212682	-87.71908118	0.5	1	576.53	-1.47	6.6	569.93	6.4	2.3		

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	Location ID	Sample ID	Sample Date	Total PCBs[1] (mg/kg)	Total of 13 PAHs[2] (mg/kg)	Northing (WI SPS)	Easting (WI SPS)	Latitude (NAD83)	Longitude (NAD83)	Sample Interval Top (ft)	Sample Interval Bottom (ft)	Water Elevation (NAVD88)	Tide Elevation (ft from LWD)	Water Depth (ft)	Sediment Surface Elevation (NAVD88)	Core Penetration (ft)	Core Recovery (ft)	Sediment Thickness (ft)	Native Sediment Elevation (NAVD88)
S	CS024	SR-CS024-0.0/0.5	11/20/2012	0.0845 J	1.5545	2571268.425	646816.227	43.75203278	-87.71843495	0	0.5	576.61	-1.39	8.8	567.81	4.2	3.1		
	CS024	SR-CS024-0.5/1.0	11/20/2012	0.0292 U	0.0559	2571268.425	646816.227	43.75203278	-87.71843495	0.5	1	576.61	-1.39	8.8	567.81	4.2	3.1		
S	CS025	SR-CS025-0.0/0.5	11/20/2012	0.0503 J	0.6155 U	2571174.264	646746.741	43.75184929	-87.71879838	0	0.5	576.7	-1.3	6.9	569.8	6.1	4.3	5.2	569.8
	CS025	SR-CS025-0.5/1.0	11/20/2012	0.0325 U	0.6387 U	2571174.264	646746.741	43.75184929	-87.71879838	0.5	1	576.7	-1.3	6.9	569.8	6.1	4.3	5.2	569.8
S	CS026	SR-CS026-0.0/0.5	11/20/2012	0.67	2.525	2571334.431	646733.578	43.75180117	-87.71819379	0	0.5	576.67	-1.33	8.6	568.07	4.4	4		
	CS026	SR-CS026-0.5/1.0	11/20/2012	0.0298 U	0.0419	2571334.431	646733.578	43.75180117	-87.71819379	0.5	1	576.67	-1.33	8.6	568.07	4.4	4		
S	CS027	SR-CS027-0.0/0.5	11/20/2012	1.51	0.5692	2571237.959	646663.845	43.75161717	-87.71856599	0	0.5	576.59	-1.41	7.4	569.19	5.6	3.9		
	CS027	SR-CS027-0.5/1.0	11/20/2012	0.29	0.564 U	2571237.959	646663.845	43.75161717	-87.71856599	0.5	1	576.59	-1.41	7.4	569.19	5.6	3.9		
S	CS028-1	SR-CS028-1-0.0/0.5	12/12/2012	0.067 J	1.0956	2571439.45	646678.239	43.75164152	-87.71780221	0	0.5	576.5	-1.5	10.1	566.4	3.8	3.1	3.3	563.8
S	CS028A	SR-CS028A-0.0/0.5	11/20/2012	4.31	280.6	2571423.268	646687.503	43.75166814	-87.71786247	0	0.5	576.56	-1.44	7.5	569.06	6.5	3.8		
	CS028A	SR-CS028A-0.5/1.0	11/20/2012	0.254	589.3	2571423.268	646687.503	43.75166814	-87.71786247	0.5	1	576.56	-1.44	7.5	569.06	6.5	3.8		
	CS028A	SR-CS028A-1.0/2.0	11/20/2012		20.23	2571423.268	646687.503	43.75166814	-87.71786247	1	2	576.56	-1.44	7.5	569.06	6.5	3.8		
S	CS028B	SR-CS028B-0.0/0.5	11/20/2012	0.106 J	79.18	2571471.416	646659.334	43.75158728	-87.71768323	0	0.5	576.64	-1.36	9.1	567.54	3.9	1.7		
	CS028B	SR-CS028B-0.5/1.0	11/20/2012	0.0291 U	7.069	2571471.416	646659.334	43.75158728	-87.71768323	0.5	1	576.64	-1.36	9.1	567.54	3.9	1.7		
S	CS029	SR-CS029-0.0/0.5	11/20/2012	11.4	0.6438	2571293.109	646560.439	43.75132945	-87.71836805	0	0.5	576.65	-1.35	6.1	570.55	7.9	3.8		
	CS029	SR-CS029-0.5/1.0	11/20/2012	3.87	5.168	2571293.109	646560.439	43.75132945	-87.71836805	0.5	1	576.65	-1.35	6.1	570.55	7.9	3.8		
	CS030	SR-CS030-0.0/0.5	10/24/2012	0.043 J	2.0176	2571505.334	646570.609	43.75134141	-87.71756410	0	0.5	577.12	-0.88	10.1	567.02	1.1	0.8		
	CS030	SR-CS030-0.5/0.8	10/24/2012	0.0286 U	1.4194	2571505.334	646570.609	43.75134141	-87.71756410	0.5	0.8	577.12	-0.88	10.1	567.02	1.1	0.8		
S	CS030-1	SR-CS030-1-0.0/0.5	12/12/2012	0.0293 U	0.8613	2571510.48	646584.355	43.75137872	-87.71754321	0	0.5	576.5	-1.5	12.8	563.7	4.1	3.3		
	CS030A	SR-CS030A-0.0/0.5	10/24/2012		702.97	2571514.139	646611.532	43.75145298	-87.71752655	0	0.5	577.15	-0.85	10.2	566.95	1.3	1.2		
	CS030A	SR-CS030A-0.5/1.2	10/24/2012		2364.5	2571514.139	646611.532	43.75145298	-87.71752655	0.5	1.2	577.15	-0.85	10.2	566.95	1.3	1.2		
	CS030B	SR-CS030B-0.0/0.5	10/24/2012		726.58	2571548.779	646564.147	43.75132043	-87.71740041	0	0.5	577.12	-0.88	11.5	565.62	0.8	0.8		
	CS030B	SR-CS030B-0.5/0.8	10/24/2012		160.21	2571548.779	646564.147	43.75132043	-87.71740041	0.5	0.8	577.12	-0.88	11.5	565.62	0.8	0.8		
S	CS030C	SR-CS030C-0.0/0.5	10/24/2012		21.146	2571510.773	646527.579	43.75122300	-87.71754798	0	0.5	577.12	-0.88	7.9	569.22	1	0.8		
	CS030C	SR-CS030C-0.5/0.8	10/24/2012		27.304	2571510.773	646527.579	43.75122300	-87.71754798	0.5	0.8	577.12	-0.88	7.9	569.22	1	0.8		
S	CS030D	SR-CS030D-0.0/0.5	10/26/2012		2.2547	2571462.3	646566.78	43.75133414	-87.71772731	0	0.5	576.65	-1.35	4.2	572.45	2	1.8		
	CS030D	SR-CS030D-0.5/1.0	10/26/2012		0.8192	2571462.3	646566.78	43.75133414	-87.71772731	0.5	1	576.65	-1.35	4.2	572.45	2	1.8		
	CS030D	SR-CS030D-1.0/1.8	10/26/2012		0.0096	2571462.3	646566.78	43.75133414	-87.71772731	1	1.8	576.65	-1.35	4.2	572.45	2	1.8		
	CS030RE	SR-CS030RE-0.0/0.5	10/25/2012		99.52	2571506.269	646569.033	43.75133702	-87.71756073	0	0.5	576.69	-1.31	9.4	567.29	2	1.7		
	CS030RE	SR-CS030RE-0.5/1.0	10/25/2012		1.9157	2571506.269	646569.033	43.75133702	-87.71756073	0.5	1	576.69	-1.31	9.4	567.29	2	1.7		
	CS030RE	SR-CS030RE-1.0/1.7	10/25/2012		0.7177	2571506.269	646569.033	43.75133702	-87.71756073	1	1.7	576.69	-1.31	9.4	567.29	2	1.7		
	CS030TL	SR-CS030TL-0.0/0.5	10/26/2012		0.4235	2571507.779	646573.666	43.75134961	-87.71755454	0	0.5	576.91	-1.09	10.1	566.81	6.7	4.9		
	CS030TL	SR-CS030TL-0.5/1.0	10/26/2012		0.2114	2571507.779	646573.666	43.75134961	-87.71755454	0.5	1	576.91	-1.09	10.1	566.81	6.7	4.9		
	CS030TL	SR-CS030TL-1.0/2.0	10/26/2012		0.1452	2571507.779	646573.666	43.75134961	-87.71755454	1	2	576.91	-1.09	10.1	566.81	6.7	4.9		
	CS030TL	SR-CS030TL-2.0/3.0	10/26/2012		0.3479	2571507.779	646573.666	43.75134961	-87.71755454	2	3	576.91	-1.09	10.1	566.81	6.7	4.9		
	CS030TL	SR-CS030TL-3.0/4.0	10/26/2012		0.1991	2571507.779	646573.666	43.75134961	-87.71755454	3	4	576.91	-1.09	10.1	566.81	6.7	4.9		
S	CS031	SR-CS031-0.0/0.5	11/20/2012	0.0334 U	0.6649 U	2571344.452	646468.535	43.75107356	-87.71818333	0	0.5	576.55	-1.45	7.5	569.05	6	3.9		
	CS031	SR-CS031-0.5/1.0	11/20/2012	0.033 U	0.6528 U	2571344.452	646468.535	43.75107356	-87.71818333	0.5	1	576.55	-1.45	7.5	569.05	6	3.9		
	CS032	SR-CS032-0.0/0.5	10/24/2012	0.484	116.56	2571590.555	646485.431	43.75110142	-87.71725052	0	0.5	577.19	-0.81	8.9	568.29	1.5	1.1		
	CS032	SR-CS032-0.5/1.1	10/24/2012	0.0292 U	11.718	2571590.555	646485.431	43.75110142	-87.71725052	0.5	1.1	577.19	-0.81	8.9	568.29	1.5	1.1		
S	CS032-1	SR-CS032-1-0.0/0.5	12/12/2012	0.0521 J	3.0813 J	2571596.895	646489.172	43.75111120	-87.71722615	0	0.5	576.3	-1.7	13.3	563	3.7	2.5		
	CS032A	SR-CS032A-0.0/0.5	10/24/2012		210.73	2571590.624	646524.811	43.75120941	-87.71724618	0	0.5	577.19	-0.81	8.3	568.89	1.7	1.2		
	CS032A	SR-CS032A-0.5/1.2	10/24/2012		110.096 J	2571590.624	646524.811	43.75120941	-87.71724618	0.5	1.2	577.19	-0.81	8.3	568.89	1.7	1.2		
	CS032B	SR-CS032B-0.0/0.5	10/24/2012		221.45	2571642.321	646485.524	43.75109779	-87.71705467	0	0.5	577.02	-0.98	12.6	564.42	1.1	1.1		
	CS032B	SR-CS032B-0.5/1.1	10/24/2012		254.68	2571642.321	646485.524	43.75109779	-87.71705467	0.5	1.1	577.02	-0.98	12.6	564.42	1.1	1.1		
S	CS032C	SR-CS032C-0.0/0.6	10/24/2012		1.8834	2571595.275	646447.771	43.75099778	-87.71723656	0	0.6	577.02	-0.98	8.2	568.82	0.9	0.6		
S	CS032D	SR-CS032D-0.0/0.3	10/24/2012		43.171	2571555.77	646489.477	43.75111513	-87.71738170	0	0.3	577.19	-0.81	7.2	569.99	0.8	0.7		
	CS032D	SR-CS032D-0.3/0.7	10/24/2012		0.5319	2571555.77	646489.477	43.75111513	-87.71738170	0.3	0.7	577.19	-0.81	7.2	569.99	0.8	0.7		
	CS032RE	SR-CS032RE-0.0/0.5	10/25/2012		89.061	2571590.671	646485.333	43.75110114	-87.71725009	0	0.5	576.69	-1.31	8.3	568.39	2	1.5		
	CS032RE	SR-CS032RE-0.5/1.0	10/25/2012		75.181	2571590.671	646485.333	43.75110114	-87.71725009	0.5	1	576.69	-1.31	8.3	568.39	2	1.5		
	CS032RE	SR-CS032RE-1.0/1.5	10/25/2012		17.184	2571590.671	646485.333	43.75110114	-87.71725009	1	1.5	576.69	-1.31	8.3	568.39	2	1.5		
	CS032TL	SR-CS032TL-0.0/0.5	10/26/2012		8.4931	2571595.329	646482.621	43.75109335	-87.71723275	0	0.5	576.99	-1.01	9.1	567.89	7.8	5.7	6.7	563.29
	CS032TL	SR-CS032TL-0.5/1.0	10/26/2012		3.273	2571595.329	646482.621	43.75109335	-87.71723275	0.5	1	576.99	-1.01	9.1	567.89	7.8	5.7	6.7	563.29
	CS032TL	SR-CS032TL-1.0/2.0	10/26/2012		7.329	2571595.329	646482.621	43.75109335	-87.71723275	1	2	576.99	-1.01	9.1	567.89	7.8	5.7	6.7	563.29
	CS032TL	SR-CS032TL-2.0/3.0	10/26/2012		0.6673	2571595.329	646482.621	43.75109335	-87.71723275	2	3	576.99	-1.01	9.1	567.89	7.8	5.7	6.7	563.29
	CS032TL	SR-CS032TL-3.0/4.0	10/26/2012		0.5816 UJ	2571595.329	646482.621	43.75109335	-87.71723275	3	4	576.99	-1.01	9.1	567.89	7.8	5.7	6.7	563.29
S	CS033	SR-CS033-0.0/0.5	11/20/2012	0.373	0.6415 U	2571390.352	646354.281	43.75075678	-87.71802151	0	0.5	576.64	-1.36	7.8	568.84	6.1	4		

TABLE 1
Field Measurement and Analytical Data Summary—Confirmation Samples
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	Location ID	Sample ID	Sample Date	Total PCBs[1] (mg/kg)	Total of 13 PAHs[2] (mg/kg)	Northing (WI SPS)	Easting (WI SPS)	Latitude (NAD83)	Longitude (NAD83)	Sample Interval Top (ft)	Sample Interval Bottom (ft)	Water Elevation (NAVD88)	Tide Elevation (ft from LWD)	Water Depth (ft)	Sediment Surface Elevation (NAVD88)	Core Penetration (ft)	Core Recovery (ft)	Sediment Thickness (ft)	Native Sediment Elevation (NAVD88)
	CS033	SR-CS033-0.5/1.0	11/20/2012	0.0334 U	0.6669 U	2571390.352	646354.281	43.75075678	-87.71802151	0.5	1	576.64	-1.36	7.8	568.84	6.1	4		
	CS034	SR-CS034-0.0/0.5	10/24/2012	1.9	846	2571670.359	646402.205	43.75086719	-87.71695723	0	0.5	577.06	-0.94	11.2	565.86	2.5	1.9		
	CS034	SR-CS034-0.5/1.0	10/24/2012	0.112 J	868	2571670.359	646402.205	43.75086719	-87.71695723	0.5	1	577.06	-0.94	11.2	565.86	2.5	1.9		
	CS034	SR-CS034-1.0/2.0	10/24/2012		713.4	2571670.359	646402.205	43.75086719	-87.71695723	1	2	577.06	-0.94	11.2	565.86	2.5	1.9		
S	CS034-1	SR-CS034-1-0.0/0.5	12/12/2012	0.339	14.432	2571665.504	646401.227	43.75086487	-87.71697570	0	0.5	576.5	-1.5	12.4	564.1	4.2	2.9		
	CS034A	SR-CS034A-0.0/0.5	10/24/2012		94.04	2571675.907	646438.884	43.75096736	-87.71693244	0	0.5	577.06	-0.94	11.1	565.96	3.1	2		
	CS034A	SR-CS034A-0.5/1.0	10/24/2012		277.74	2571675.907	646438.884	43.75096736	-87.71693244	0.5	1	577.06	-0.94	11.1	565.96	3.1	2		
	CS034A	SR-CS034A-1.0/2.0	10/24/2012		236.65	2571675.907	646438.884	43.75096736	-87.71693244	1	2	577.06	-0.94	11.1	565.96	3.1	2		
	CS034B	SR-CS034B-0.0/0.5	10/24/2012		858.18 J	2571700.9	646381.567	43.75080829	-87.71684382	0	0.5	577.06	-0.94	10.3	566.76	2	1.5		
	CS034B	SR-CS034B-0.5/1.0	10/24/2012		255.83	2571700.9	646381.567	43.75080829	-87.71684382	0.5	1	577.06	-0.94	10.3	566.76	2	1.5		
	CS034B	SR-CS034B-1.0/1.5	10/24/2012		139.13	2571700.9	646381.567	43.75080829	-87.71684382	1	1.5	577.06	-0.94	10.3	566.76	2	1.5		
	CS034C	SR-CS034C-0.0/0.5	10/24/2012		353.63	2571651.275	646351.84	43.75073050	-87.71703464	0	0.5	577.06	-0.94	6	571.06	1.1	1		
	CS034C	SR-CS034C-0.5/1.0	10/24/2012		135.79	2571651.275	646351.84	43.75073050	-87.71703464	0.5	1	577.06	-0.94	6	571.06	1.1	1		
	CS034D	SR-CS034D-0.0/0.5	10/24/2012		27.445	2571627.418	646403.545	43.75087409	-87.71711954	0	0.5	577.19	-0.81	8.6	568.59	1.7	1.4		
	CS034D	SR-CS034D-0.5/1.4	10/24/2012		134.273	2571627.418	646403.545	43.75087409	-87.71711954	0.5	1.4	577.19	-0.81	8.6	568.59	1.7	1.4		
S	CS035	SR-CS035-0.0/0.5	11/20/2012	0.876	0.636 U	2571450.732	646261.47	43.75049772	-87.71780269	0	0.5	576.66	-1.34	6.1	570.56	3.2	1.6		
	CS035	SR-CS035-0.5/1.0	11/20/2012	0.123 J	0.7744 U	2571450.732	646261.47	43.75049772	-87.71780269	0.5	1	576.66	-1.34	6.1	570.56	3.2	1.6		
	CS036	SR-CS036-0.0/0.5	10/25/2012	0.221	674.7	2571704.602	646282.683	43.75053684	-87.71684006	0	0.5	577.09	-0.91	12.6	564.49	2	1.4		
	CS036	SR-CS036-0.5/1.4	10/25/2012	0.0318 U	20.77	2571704.602	646282.683	43.75053684	-87.71684006	0.5	1.4	577.09	-0.91	12.6	564.49	2	1.4		
S	CS036-1	SR-CS036-1-0.0/0.5	12/12/2012	1.51 J	127.11	2571709.754	646279.263	43.75052707	-87.71682093	0	0.5	576.5	-1.5	13	563.5	4	3.5	2.7	561.3
	CS036-1	SR-CS036-1-0.5/1.0	12/12/2012		33.448	2571709.754	646279.263	43.75052707	-87.71682093	0.5	1	576.5	-1.5	13	563.5	4	3.5	2.7	561.3
	CS036A	SR-CS036A-0.0/0.5	10/24/2012		102.86	2571731.74	646328.317	43.75065994	-87.71673267	0	0.5	577.06	-0.94	9.8	567.26	2	1.4		
	CS036A	SR-CS036A-0.5/1.4	10/24/2012		91.58	2571731.74	646328.317	43.75065994	-87.71673267	0.5	1.4	577.06	-0.94	9.8	567.26	2	1.4		
	CS036B	SR-CS036B-0.0/0.3	10/25/2012		370.63	2571736.994	646265.44	43.75048712	-87.71671931	0	0.3	577.09	-0.91	11.9	565.19	1	0.7		
	CS036B	SR-CS036B-0.3/0.7	10/25/2012		9.816	2571736.994	646265.44	43.75048712	-87.71671931	0.3	0.7	577.09	-0.91	11.9	565.19	1	0.7		
S	CS036C	SR-CS036C-0.0/0.7	10/25/2012		3.7245 J	2571685.025	646238.898	43.75041823	-87.71691866	0	0.7	576.92	-1.08	12.6	564.32	1	0.7		
S	CS036D	SR-CS036D-0.0/0.5	10/25/2012		68.023	2571671.47	646294.053	43.75057051	-87.71696423	0	0.5	576.94	-1.06	9.5	567.44	2.5	1.9		
	CS036D	SR-CS036D-0.5/1.0	10/25/2012		44.631	2571671.47	646294.053	43.75057051	-87.71696423	0.5	1	576.94	-1.06	9.5	567.44	2.5	1.9		
	CS036D	SR-CS036D-1.0/1.9	10/25/2012		38.733	2571671.47	646294.053	43.75057051	-87.71696423	1	1.9	576.94	-1.06	9.5	567.44	2.5	1.9		
S	CS037	SR-CS037-0.0/0.5	11/20/2012	1.06	0.7736 U	2571513.901	646162.666	43.75022202	-87.71757395	0	0.5	576.58	-1.42	7	569.58	8	4.3		
	CS037	SR-CS037-0.5/1.0	11/20/2012	0.0389 J	0.6689 U	2571513.901	646162.666	43.75022202	-87.71757395	0.5	1	576.58	-1.42	7	569.58	8	4.3		
	CS038	SR-CS038-0.0/0.5	10/25/2012	0.692	39.518	2571732.272	646159.282	43.75019634	-87.71674817	0	0.5	577.06	-0.94	13	564.06	2	1.7		
	CS038	SR-CS038-0.5/1.0	10/25/2012	0.864	41.914	2571732.272	646159.282	43.75019634	-87.71674817	0.5	1	577.06	-0.94	13	564.06	2	1.7		
	CS038	SR-CS038-1.0/1.7	10/25/2012		238.94	2571732.272	646159.282	43.75019634	-87.71674817	1	1.7	577.06	-0.94	13	564.06	2	1.7		
S	CS038-1	SR-CS038-1-0.0/0.5	12/12/2012	0.286	7.4083	2571738.449	646161.268	43.75020133	-87.71672460	0	0.5	576.3	-1.7	14.5	561.8	2.6	2.4		
	CS038A	SR-CS038A-0.0/0.5	10/25/2012		106.081	2571757.83	646196.589	43.75029673	-87.71664762	0	0.5	577.06	-0.94	10.6	566.46	1	1		
	CS038A	SR-CS038A-0.5/1.0	10/25/2012		12.841	2571757.83	646196.589	43.75029673	-87.71664762	0.5	1	577.06	-0.94	10.6	566.46	1	1		
	CS038B	SR-CS038B-0.0/0.5	10/25/2012		3.1701	2571769.348	646148.462	43.75016389	-87.71660903	0	0.5	577.11	-0.89	11.1	566.01	0.7	0.5		
S	CS038C	SR-CS038C-0.0/0.5	10/25/2012		33.753	2571701.273	646123.586	43.75010078	-87.71686914	0	0.5	577.11	-0.89	12.8	564.31	1	1		
	CS038C	SR-CS038C-0.5/1.0	10/25/2012		0.5818 U	2571701.273	646123.586	43.75010078	-87.71686914	0.5	1	577.11	-0.89	12.8	564.31	1	1		
S	CS038D	SR-CS038D-0.0/0.5	10/25/2012		3.993	2571680.971	646169.558	43.75022838	-87.71694118	0	0.5	576.92	-1.08	11.7	565.22	3.5	2.6		
	CS038D	SR-CS038D-0.5/1.0	10/25/2012		0.591 U	2571680.971	646169.558	43.75022838	-87.71694118	0.5	1	576.92	-1.08	11.7	565.22	3.5	2.6		
	CS038D	SR-CS038D-1.0/2.0	10/25/2012		0.5743 U	2571680.971	646169.558	43.75022838	-87.71694118	1	2	576.92	-1.08	11.7	565.22	3.5	2.6		
	CS038D	SR-CS038D-2.0/2.6	10/25/2012		0.2982	2571680.971	646169.558	43.75022838	-87.71694118	2	2.6	576.92	-1.08	11.7	565.22	3.5	2.6		
S	CS039	SR-CS039-0.0/0.5	11/20/2012	0.874	0.5217	2571591.035	646081.546	43.74999377	-87.71729054	0	0.5	576.79	-1.21	7.8	568.99	6.7	3.8		
	CS039	SR-CS039-0.5/1.0	11/20/2012	0.594 J	0.4574 J	2571591.035	646081.546	43.74999377	-87.71729054	0.5	1	576.79	-1.21	7.8	568.99	6.7	3.8		
	CS040	SR-CS040-0.0/0.5	10/25/2012	2.09	2239.1	2571754.641	646075.006	43.74996354	-87.71667228	0	0.5	576.93	-1.07	7.3	569.63	2.5	1.8		
	CS040	SR-CS040-0.5/1.0	10/25/2012	0.162	7931.7	2571754.641	646075.006	43.74996354	-87.71667228	0.5	1	576.93	-1.07	7.3	569.63	2.5	1.8		
	CS040	SR-CS040-1.0/1.8	10/25/2012		1021.1	2571754.641	646075.006	43.74996354	-87.71667228	1	1.8	576.93	-1.07	7.3	569.63	2.5	1.8		
	CS040-1	SR-CS040-1-0.0/0.5	12/12/2012	0.512 J	0.045 J	2571750.295	646069.897	43.74994986	-87.71668925	0	0.5	576.2	-1.8	11.6	564.6	3	2.5		
	CS040-1	SR-CS040-1-0.5/1.0	12/12/2012		642.7 J	2571750.295	646069.897	43.74994986	-87.71668925	0.5	1	576.2	-1.8	11.6	564.6	3	2.5		
	CS040-1	SR-CS040-1-1.0/2.0	12/12/2012		185.01 J	2571750.295	646069.897	43.74994986	-87.71668925	1	2	576.2	-1.8	11.6	564.6	3	2.5		
	CS040-1	SR-CS040-1-2.0/2.5	12/12/2012		2.9355	2571750.295	646069.897	43.74994986	-87.71668925	2	2.5	576.2	-1.8	11.6	564.6	3	2.5		

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Field Measurement and Analytical Data Summary—Confirmation Samples
Sheboygan River GLLA Remedial Design Cleanup Validation Report

	Location ID	Sample ID	Sample Date	Total PCBs[1] (mg/kg)	Total of 13 PAHs[2] (mg/kg)	Northing (WI SPS)	Easting (WI SPS)	Latitude (NAD83)	Longitude (NAD83)	Sample Interval Top (ft)	Sample Interval Bottom (ft)	Water Elevation (NAVD88)	Tide Elevation (ft from LWD)	Water Depth (ft)	Sediment Surface Elevation (NAVD88)	Core Penetration (ft)	Core Recovery (ft)	Sediment Thickness (ft)	Native Sediment Elevation (NAVD88)
	CS040A	SR-CS040A-0.0/0.5	10/25/2012		309.42	2571788.157	646108.927	43.75005405	-87.71654197	0	0.5	577.06	-0.94	9.5	567.56	2.8	2.1		
	CS040A	SR-CS040A-0.5/1.0	10/25/2012		1631.8	2571788.157	646108.927	43.75005405	-87.71654197	0.5	1	577.06	-0.94	9.5	567.56	2.8	2.1		
	CS040A	SR-CS040A-1.0/1.7	10/25/2012		563.1	2571788.157	646108.927	43.75005405	-87.71654197	1	1.7	577.06	-0.94	9.5	567.56	2.8	2.1		
	CS040A	SR-CS040A-1.7/2.1	10/25/2012		29.529	2571788.157	646108.927	43.75005405	-87.71654197	1.7	2.1	577.06	-0.94	9.5	567.56	2.8	2.1		
	CS040B	SR-CS040B-0.0/0.5	10/25/2012		11.839	2571808.453	646060.479	43.74991966	-87.71647021	0	0.5	576.927	-1.073	6.8	570.127	4.7	3.2		
	CS040B	SR-CS040B-0.5/1.0	10/25/2012		18.931	2571808.453	646060.479	43.74991966	-87.71647021	0.5	1	576.927	-1.073	6.8	570.127	4.7	3.2		
	CS040B	SR-CS040B-1.0/2.0	10/25/2012		51.318	2571808.453	646060.479	43.74991966	-87.71647021	1	2	576.927	-1.073	6.8	570.127	4.7	3.2		
	CS040B	SR-CS040B-2.0/3.2	10/25/2012		901.6	2571808.453	646060.479	43.74991966	-87.71647021	2	3.2	576.927	-1.073	6.8	570.127	4.7	3.2		
S	CS040C	SR-CS040C-0.0/0.5	10/25/2012		5.641	2571723.067	646042.937	43.74987797	-87.71679505	0	0.5	576.87	-1.13	6.8	570.07	2	1.6		
	CS040C	SR-CS040C-0.5/1.0	10/25/2012		8.791	2571723.067	646042.937	43.74987797	-87.71679505	0.5	1	576.87	-1.13	6.8	570.07	2	1.6		
	CS040C	SR-CS040C-1.0/1.6	10/25/2012		3.544	2571723.067	646042.937	43.74987797	-87.71679505	1	1.6	576.87	-1.13	6.8	570.07	2	1.6		
S	CS040D	SR-CS040D-0.0/0.5	10/25/2012		7.3577	2571706.397	646085.419	43.74999572	-87.71685371	0	0.5	576.93	-1.07	8.1	568.83	1.8	1.8		
	CS040D	SR-CS040D-0.5/1.0	10/25/2012		29.169	2571706.397	646085.419	43.74999572	-87.71685371	0.5	1	576.93	-1.07	8.1	568.83	1.8	1.8		
	CS040D	SR-CS040D-1.0/1.8	10/25/2012		38.112	2571706.397	646085.419	43.74999572	-87.71685371	1	1.8	576.93	-1.07	8.1	568.83	1.8	1.8		
	DS040-1A	SR-DS040-1A-0.0/0.5	12/19/2012		795.2	2571797.808	646076.744	43.74996507	-87.71650879	0	0.5	576.2	-1.8	11.5	564.7	3.9	1		
S	DS040-1A	SR-DS040-1A-0.5/1.0	12/19/2012		13.66	2571797.808	646076.744	43.74996507	-87.71650879	0.5	1	576.2	-1.8	11.5	564.7	3.9	1		
	DS040-2	SR-DS040-2-0.0/0.5	12/19/2012		0.5157	2571763	646056.94	43.7499134	-87.7166425	0	0.5	576.2	-1.8	7.6	568.6	7.4	3		
	DS040-2	SR-DS040-2-0.5/1.0	12/19/2012		12.8959	2571763	646056.94	43.7499134	-87.7166425	0.5	1	576.2	-1.8	7.6	568.6	7.4	3		
	DS040-2	SR-DS040-2-1.0/2.0	12/19/2012		138.311	2571763	646056.94	43.7499134	-87.7166425	1	2	576.2	-1.8	7.6	568.6	7.4	3		
	DS040-2	SR-DS040-2-2.0/3.0	12/19/2012		4.1428	2571763	646056.94	43.7499134	-87.7166425	2	3	576.2	-1.8	7.6	568.6	7.4	3		
	DS040-3	SR-DS040-3-0.0/0.5	12/19/2012		22.016	2571740.857	646075.062	43.74996473	-87.71672442	0	0.5	576.3	-1.7	10.6	565.7	4.1	1.5		
	DS040-3	SR-DS040-3-0.5/1.0	12/19/2012		98.32	2571740.857	646075.062	43.74996473	-87.71672442	0.5	1	576.3	-1.7	10.6	565.7	4.1	1.5		
	DS040-3	SR-DS040-3-1.0/1.5	12/19/2012		5.903	2571740.857	646075.062	43.74996473	-87.71672442	1	1.5	576.3	-1.7	10.6	565.7	4.1	1.5		
	DS040-4	SR-DS040-4-0.0/0.3	12/19/2012		48.299	2571748.929	646093.038	43.75001342	-87.71669202	0	0.3	576.3	-1.7	12.1	564.2	3.6	2.1		
	DS040-4	SR-DS040-4-0.5/1.5	12/19/2012		0.3934 J	2571748.929	646093.038	43.75001342	-87.71669202	0.5	1.5	576.3	-1.7	12.1	564.2	3.6	2.1		
S	DS040-4	SR-DS040-4-1.5/2.1	12/19/2012		0.1527	2571748.929	646093.038	43.75001342	-87.71669202	1.5	2.1	576.3	-1.7	12.1	564.2	3.6	2.1		
S	CS041	SR-CS041-0.0/0.5	11/6/2012	5.3	14.435	2571760.16	646011.10	43.7497879	-87.7166580	0	0.5	576.83	-1.17	6	570.83	-0.2	2.8		
	CS041	SR-CS041-0.5/1.0	11/6/2012	0.694	31.212	2571760.16	646011.10	43.7497879	-87.7166580	0.5	1	576.83	-1.17	6	570.83	-0.2	2.8		
S	CS042	SR-CS042-0.0/0.5	11/28/2012	1.94	2.737	2571611.27	646027.06	43.7498428	-87.7172196	0	0.5	576.17	-1.83	2.7	573.47	10.4	3.8		
	CS042	SR-CS042-0.5/1.0	11/28/2012	2.67	0.3973	2571611.27	646027.06	43.7498428	-87.7172196	0.5	1	576.17	-1.83	2.7	573.47	10.4	3.8		
S	CS042A	SR-CS042A-0.0/0.5	11/28/2012	0.493	1.4646	2571555.05	646005.16	43.7497870	-87.7174346	0	0.5	576.19	-1.81	4.5	571.69	7.3	1.6		
	CS042A	SR-CS042A-0.5/1.0	11/28/2012	0.206	0.0184	2571555.05	646005.16	43.7497870	-87.7174346	0.5	1	576.19	-1.81	4.5	571.69	7.3	1.6		
S	CS042B	SR-CS042B-0.0/0.5	11/28/2012	4.19	3.6	2571664.80	646009.49	43.7497906	-87.7170189	0	0.5	576.24	-1.76	2.7	573.54	10.3	3.7		
	CS042B	SR-CS042B-0.5/1.0	11/28/2012	0.192	0.2195	2571664.80	646009.49	43.7497906	-87.7170189	0.5	1	576.24	-1.76	2.7	573.54	10.3	3.7		
S	CS043	SR-CS043-0.0/0.5	11/6/2012	0.848	11.689	2571792.166	645940.106	43.74959077	-87.71654429	0	0.5	576.83	-1.17	9.9	566.93	6.5	3.9	4.9	564.63
	CS043	SR-CS043-0.5/1.0	11/6/2012	0.0578 J	7.607	2571792.166	645940.106	43.74959077	-87.71654429	0.5	1	576.83	-1.17	9.9	566.93	6.5	3.9	4.9	564.63
S	CS044	SR-CS044-0.0/0.5	11/8/2012	4.64	1.9571	2571644.134	645876.466	43.74942737	-87.71711091	0	0.5	576.63	-1.37	9.5	567.13	7.5	4.3		
	CS044	SR-CS044-0.5/1.0	11/8/2012	0.0562 J	0.6087	2571644.134	645876.466	43.74942737	-87.71711091	0.5	1	576.63	-1.37	9.5	567.13	7.5	4.3		
S	CS045	SR-CS045-0.0/0.5	11/6/2012	0.314	15.146	2571816.922	645846.543	43.74933233	-87.71646034	0	0.5	576.82	-1.18	9.8	567.02	6.2	4.1	4	565.12
	CS045	SR-CS045-0.5/1.0	11/6/2012	0.0328 U	39.432	2571816.922	645846.543	43.74933233	-87.71646034	0.5	1	576.82	-1.18	9.8	567.02	6.2	4.1	4	565.12
S	CS046	SR-CS046-0.0/0.5	11/8/2012	0.0378 U	13.4378	2571716.474	645801.865	43.74921735	-87.71684497	0	0.5	576.59	-1.41	12	564.59	8	4.8		
	CS046	SR-CS046-0.5/1.0	11/8/2012	0.0375 U	48.945	2571716.474	645801.865	43.74921735	-87.71684497	0.5	1	576.59	-1.41	12	564.59	8	4.8		
S	CS047	SR-CS047-0.0/0.5	11/6/2012	1.23	6.153	2571858.348	645729.277	43.74900762	-87.71631577	0	0.5	576.87	-1.13	9.5	567.37	6	3.9		
	CS047	SR-CS047-0.5/1.0	11/6/2012	0.0978 J	0.9778	2571858.348	645729.277	43.74900762	-87.71631577	0.5	1	576.87	-1.13	9.5	567.37	6	3.9		
S	CS048	SR-CS048-0.0/0.5	11/8/2012	0.289	8.1653 J	2571723.994	645671.997	43.74886063	-87.71682997	0	0.5	576.59	-1.41	13	563.59	8	5		
	CS048	SR-CS048-0.5/1.0	11/8/2012	0.0284 U	0.5296 J	2571723.994	645671.997	43.74886063	-87.71682997	0.5	1	576.59	-1.41	13	563.59	8	5		
S	CS049	SR-CS049-0.0/0.5	11/6/2012	1.59	39.718	2571901.862	645616.159	43.74869414	-87.71616288	0	0.5	576.75	-1.25	9.1	567.65	7.9	4.4	6.5	564.65
	CS049	SR-CS049-0.5/1.0	11/6/2012	0.07 J	2.69	2571901.862	645616.159	43.74869414	-87.71616288	0.5	1	576.75	-1.25	9.1	567.65	7.9	4.4	6.5	564.65
S	CS050	SR-CS050-0.0/0.5	11/8/2012	1.23	24.554	2571775.206	645592.252	43.74863809	-87.71664450	0	0.5	576.56	-1.44	12.9	563.66	8.1	5.3		
	CS050	SR-CS050-0.5/1.0	11/8/2012	0.168	51.576	2571775.206	645592.252	43.74863809	-87.71664450	0.5	1	576.56	-1.44	12.9	563.66	8.1	5.3		
S	CS051	SR-CS051-0.0/0.5	11/9/2012	0.496	0.8413	2571918.944	645481.758	43.74832428	-87.71611218	0	0.5	576.71	-1.29	9	567.71	8	3.7	7	565.01
	CS051	SR-CS051-0.5/1.0	11/9/2012	0.0342 U		2571918.944	645481.758	43.74832428	-87.71611218	0.5	1	576.71	-1.29	9	567.71	8	3.7	7	565.01
S	CS052	SR-CS052-0.0/0.5	11/7/2012	18.8	6.9409	2571873.707	645404.514	43.74811584	-87.71629132	0	0.5	576.73	-1.27	14.5	562.23	6.5	4.3		
	CS052	SR-CS052-0.5/1.0	11/7/2012	0.804		2571873.707	645404.514	43.74811584	-87.71629132	0.5	1	576.73	-1.27	14.5	562.23	6.5	4.3		
S	CS053	SR-CS053-0.0/0.5	11/8/2012	1.57	0.1191	2571987.721	645288.645	43.74778951	-87.71587202	0	0.5	576.6	-1.4	7.5	569.1	7	3.6	4.8	567.7
	CS053	SR-CS053-0.5/1.4	11/8/2012	0.029 U		2571987.721	645288.645	43.74778951	-87.71587202	0.5	1.4	576.6	-1.4	7.5	569.1	7	3.6	4.8	567.7
S	CS054	SR-CS054-0.0/0.5	11/8/2012	5.35	4.84	2571854.782	645335.295	43.74792743	-87.71637009	0	0.5	576.87	-1.13	13.5	563.37	7.5	4.4		

TABLE 1
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	Location ID	Sample ID	Sample Date	Total PCBs[1] (mg/kg)	Total of 13 PAHs[2] (mg/kg)	Northing (WI SPS)	Easting (WI SPS)	Latitude (NAD83)	Longitude (NAD83)	Sample Interval Top (ft)	Sample Interval Bottom (ft)	Water Elevation (NAVD88)	Tide Elevation (ft from LWD)	Water Depth (ft)	Sediment Surface Elevation (NAVD88)	Core Penetration (ft)	Core Recovery (ft)	Sediment Thickness (ft)	Native Sediment Elevation (NAVD88)
	CS054	SR-CS054-0.5/1.0	11/8/2012	0.238		2571854.782	645335.295	43.74792743	-87.71637009	0.5	1	576.87	-1.13	13.5	563.37	7.5	4.4		
S	CS055	SR-CS055-0.0/0.5	11/8/2012	36.8	1.2069	2571901.425	645225.414	43.74762259	-87.71620503	0	0.5	576.73	-1.27	12	564.73	11	4.4		
	CS055	SR-CS055-0.5/1.0	11/8/2012	1.69		2571901.425	645225.414	43.74762259	-87.71620503	0.5	1	576.73	-1.27	12	564.73	11	4.4		
S	CS056	SR-CS056-0.0/0.7	11/9/2012	2	5.164	2572019.581	645168.164	43.74745671	-87.71576398	0	0.7	576.65	-1.35	8.9	567.75	6.1	3.2	3.6	567.05
S	CS057	SR-CS057-0.0/0.5	11/8/2012	1.3	6.2611	2571913.166	645160.964	43.74744496	-87.71616729	0	0.5	576.57	-1.43	13.5	563.07	7.5	4.7		
	CS057	SR-CS057-0.5/1.0	11/8/2012	0.155		2571913.166	645160.964	43.74744496	-87.71616729	0.5	1	576.57	-1.43	13.5	563.07	7.5	4.7		
S	CS058	SR-CS058-0.0/0.5	10/24/2012	0.0294 U	0.0179	2572050.097	645106.046	43.74728407	-87.71565498	0	0.5	577.26	-0.74	9.1	568.16	1.5	1.5	0	568.16
	CS058	SR-CS058-0.5/1.0	10/24/2012	0.0289 U		2572050.097	645106.046	43.74728407	-87.71565498	0.5	1	577.26	-0.74	9.1	568.16	1.5	1.5	0	568.16
S	CS059	SR-CS059-0.0/0.5	10/24/2012	0.372	0.2856	2572074.536	645016.387	43.74703635	-87.71557182	0	0.5	577.11	-0.89	9.5	567.61	2.8	2.6	0.7	567.11
	CS059	SR-CS059-0.5/1.0	10/24/2012	0.0281 U		2572074.536	645016.387	43.74703635	-87.71557182	0.5	1	577.11	-0.89	9.5	567.61	2.8	2.6	0.7	567.11
S	CS060	SR-CS060-0.0/0.5	10/24/2012	0.892	0.7951	2572101.036	644920.744	43.74677207	-87.71548149	0	0.5	577.17	-0.83	9.1	568.07	3.4	2.4		
	CS060	SR-CS060-0.5/1.0	10/24/2012	0.12 J		2572101.036	644920.744	43.74677207	-87.71548149	0.5	1	577.17	-0.83	9.1	568.07	3.4	2.4		
S	CS061	SR-CS061-0.0/0.5	11/9/2012	43.2	0.4036	2571997.48	644901.546	43.74672720	-87.71587522	0	0.5	576.53	-1.47	13.3	563.23	8.7	4.8		
	CS061	SR-CS061-0.5/1.0	11/9/2012	8.64		2571997.48	644901.546	43.74672720	-87.71587522	0.5	1	576.53	-1.47	13.3	563.23	8.7	4.8		
S	CS062	SR-CS062-0.0/0.5	10/24/2012	0.276	0.3681	2572122.481	644816.077	43.74648341	-87.71541121	0	0.5	577.15	-0.85	8.8	568.35	5	3.1	2.4	567.85
	CS062	SR-CS062-0.5/1.0	10/24/2012	0.0288 U		2572122.481	644816.077	43.74648341	-87.71541121	0.5	1	577.15	-0.85	8.8	568.35	5	3.1	2.4	567.85
	CS063	SR-CS063-0.0/0.5	10/24/2012	2.18		2572023.143	644785.871	43.74640804	-87.71579013	0	0.5	577.12	-0.88	13.7	563.42	8.8	4.9		
	CS063	SR-CS063-0.5/1.0	10/24/2012	25.2		2572023.143	644785.871	43.74640804	-87.71579013	0.5	1	577.12	-0.88	13.7	563.42	8.8	4.9		
	CS063	SR-CS063-1.0/2.0	10/24/2012	33.4		2572023.143	644785.871	43.74640804	-87.71579013	1	2	577.12	-0.88	13.7	563.42	8.8	4.9		
S	CS063	SR-CS063-2.0/3.0	10/24/2012	0.534	5.807	2572023.143	644785.871	43.74640804	-87.71579013	2	3	577.12	-0.88	13.7	563.42	8.8	4.9		
	CS063	SR-CS063-3.0/4.0	10/24/2012	0.0381 J		2572023.143	644785.871	43.74640804	-87.71579013	3	4	577.12	-0.88	13.7	563.42	8.8	4.9		
	CS063B	SR-CS063B-0.0/0.5	11/5/2012	20		2572039.793	644818.609	43.74649657	-87.71572375	0	0.5	576.86	-1.14	14	562.86	8.5	3.4		
	CS063B	SR-CS063B-0.5/1.0	11/5/2012	41		2572039.793	644818.609	43.74649657	-87.71572375	0.5	1	576.86	-1.14	14	562.86	8.5	3.4		
S	CS063B	SR-CS063B-1.0/2.0	11/5/2012	15.4		2572039.793	644818.609	43.74649657	-87.71572375	1	2	576.86	-1.14	14	562.86	8.5	3.4		
	CS063B	SR-CS063B-2.0/3.4	11/5/2012	0.193		2572039.793	644818.609	43.74649657	-87.71572375	2	3.4	576.86	-1.14	14	562.86	8.5	3.4		
	CS063C	SR-CS063C-0.0/0.5	11/5/2012	38.5		2572053.254	644761.56	43.74633911	-87.71567874	0	0.5	576.82	-1.18	13.7	563.12	7.8	3.7		
	CS063C	SR-CS063C-0.5/1.0	11/5/2012	32.4		2572053.254	644761.56	43.74633911	-87.71567874	0.5	1	576.82	-1.18	13.7	563.12	7.8	3.7		
S	CS063C	SR-CS063C-1.0/2.0	11/5/2012	5.11		2572053.254	644761.56	43.74633911	-87.71567874	1	2	576.82	-1.18	13.7	563.12	7.8	3.7		
	CS063C	SR-CS063C-2.0/3.0	11/5/2012	0.124 J		2572053.254	644761.56	43.74633911	-87.71567874	2	3	576.82	-1.18	13.7	563.12	7.8	3.7		
	CS063C	SR-CS063C-3.0/3.7	11/5/2012	0.174		2572053.254	644761.56	43.74633911	-87.71567874	3	3.7	576.82	-1.18	13.7	563.12	7.8	3.7		
S	CS064	SR-CS064-0.0/0.5	10/24/2012	0.094 J	0.0572	2572188.612	644724.859	43.74622829	-87.71517050	0	0.5	577.19	-0.81	7.4	569.79	5	3.4	3.1	568.29
	CS064	SR-CS064-0.5/1.0	10/24/2012	0.0287 U		2572188.612	644724.859	43.74622829	-87.71517050	0.5	1	577.19	-0.81	7.4	569.79	5	3.4	3.1	568.29
	CS065	SR-CS065-0.0/0.5	10/10/2012	79.9		2572095.397	644690.485	43.74614103	-87.71552669	0	0.5	576.57	-1.43	12.5	564.07	9.3	4.3	8.7	560.37
	CS065	SR-CS065-0.5/1.0	10/10/2012	87.1		2572095.397	644690.485	43.74614103	-87.71552669	0.5	1	576.57	-1.43	12.5	564.07	9.3	4.3	8.7	560.37
	CS065	SR-CS065-1.0/2.0	10/10/2012	44.8		2572095.397	644690.485	43.74614103	-87.71552669	1	2	576.57	-1.43	12.5	564.07	9.3	4.3	8.7	560.37
S	CS065	SR-CS065-2.0/3.0	10/10/2012	0.029 U	92.55	2572095.397	644690.485	43.74614103	-87.71552669	2	3	576.57	-1.43	12.5	564.07	9.3	4.3	8.7	560.37
	CS065	SR-CS065-3.0/4.0	10/10/2012	0.562		2572095.397	644690.485	43.74614103	-87.71552669	3	4	576.57	-1.43	12.5	564.07	9.3	4.3	8.7	560.37
	CS065A	SR-CS065A-0.0/0.5	10/23/2012	55.3		2572058.7	644708.567	43.74619337	-87.71566363	0	0.5	577.09	-0.91	15.1	561.99	7	3.8		
	CS065A	SR-CS065A-0.0/0.5-RE1	10/23/2012	60.5		2572058.7	644708.567	43.74619337	-87.71566363	0	0.5	577.09	-0.91	15.1	561.99	7	3.8		
	CS065A	SR-CS065A-0.0/0.5-RE2	10/23/2012	67.9		2572058.7	644708.567	43.74619337	-87.71566363	0	0.5	577.09	-0.91	15.1	561.99	7	3.8		
S	CS065A	SR-CS065A-0.5/1.0	10/23/2012	4.87		2572058.7	644708.567	43.74619337	-87.71566363	0.5	1	577.09	-0.91	15.1	561.99	7	3.8		
	CS065A	SR-CS065A-1.0/2.0	10/23/2012	0.421		2572058.7	644708.567	43.74619337	-87.71566363	1	2	577.09	-0.91	15.1	561.99	7	3.8		
	CS065A	SR-CS065A-2.0/3.0	10/23/2012	0.129 J		2572058.7	644708.567	43.74619337	-87.71566363	2	3	577.09	-0.91	15.1	561.99	7	3.8		
	CS065A	SR-CS065A-3.0/3.8	10/23/2012	0.118 J		2572058.7	644708.567	43.74619337	-87.71566363	3	3.8	577.09	-0.91	15.1	561.99	7	3.8		
	CS065B[3]	SR-CS065B-0.0/0.5	10/24/2012	73		2572107.599	644723.946	43.74623187	-87.71547706	0	0.5	577.06	-0.94	13.2	563.86	5.4	2.8		
	CS065B[3]	SR-CS065B-0.5/1.0	10/24/2012	99.1		2572107.599	644723.946	43.74623187	-87.71547706	0.5	1	577.06	-0.94	13.2	563.86	5.4	2.8		
	CS065B[3]	SR-CS065B-1.0/2.0	10/24/2012	53.6		2572107.599	644723.946	43.74623187	-87.71547706	1	2	577.06	-0.94	13.2	563.86	5.4	2.8		
	CS065B[3]	SR-CS065B-2.0/2.8	10/24/2012	1.54		2572107.599	644723.946	43.74623187	-87.71547706	2	2.8	577.06	-0.94	13.2	563.86	5.4	2.8		
	CS065B-1	SR-CS065B-1-0.0/0.5	11/19/2012	21.7		2572110.333	644724.192	43.74623234	-87.71546669	0	0.5	576.74	-1.26	9.2	567.54	13.8	5.9		
	CS065B-1	SR-CS065B-1-0.5/1.0	11/19/2012	5.77		2572110.333	644724.192	43.74623234	-87.71546669	0.5	1	576.74	-1.26	9.2	567.54	13.8	5.9		
	CS065B-1	SR-CS065B-1-1.0/2.0	11/19/2012	0.751		2572110.333	644724.192	43.74623234	-87.71546669	1	2	576.74	-1.26	9.2	567.54	13.8	5.9		
	CS065B-1	SR-CS065B-1-2.0/3.0	11/19/2012	0.159		2572110.333	644724.192	43.74623234	-87.71546669	2	3	576.74	-1.26	9.2	567.54	13.8	5.9		
S	CS065B-1	SR-CS065B-1-3.0/4.0	11/19/2012	0.0302 U		2572110.333	644724.192	43.74623234	-87.71546669	3	4	576.74	-1.26	9.2	567.54	13.8	5.9		

TABLE 1
Field Measurement and Analytical Data Summary—Confirmation Samples
Sheboygan River GLLA Remedial Design Cleanup Validation Report

	Location ID	Sample ID	Sample Date	Total PCBs[1] (mg/kg)	Total of 13 PAHs[2] (mg/kg)	Northing (WI SPS)	Easting (WI SPS)	Latitude (NAD83)	Longitude (NAD83)	Sample Interval Top (ft)	Sample Interval Bottom (ft)	Water Elevation (NAVD88)	Tide Elevation (ft from LWD)	Water Depth (ft)	Sediment Surface Elevation (NAVD88)	Core Penetration (ft)	Core Recovery (ft)	Sediment Thickness (ft)	Native Sediment Elevation (NAVD88)
	CS065C [4]	SR-CS065C-0.0/0.5	10/24/2012	23.2		2572125.731	644658.268	43.74605039	-87.71541528	0	0.5	577.08	-0.92	13.5	563.58	7.3	3.9		
	CS065C [4]	SR-CS065C-0.5/1.0	10/24/2012	80.3		2572125.731	644658.268	43.74605039	-87.71541528	0.5	1	577.08	-0.92	13.5	563.58	7.3	3.9		
	CS065C [4]	SR-CS065C-1.0/2.0	10/24/2012	114		2572125.731	644658.268	43.74605039	-87.71541528	1	2	577.08	-0.92	13.5	563.58	7.3	3.9		
	CS065C [4]	SR-CS065C-2.0/3.0	10/24/2012	1.35		2572125.731	644658.268	43.74605039	-87.71541528	2	3	577.08	-0.92	13.5	563.58	7.3	3.9		
	CS065C [4]	SR-CS065C-3.0/3.9	10/24/2012	0.29		2572125.731	644658.268	43.74605039	-87.71541528	3	3.9	577.08	-0.92	13.5	563.58	7.3	3.9		
	CS065C-1	SR-CS065C-1-0.0/0.5	11/19/2012	11.6		2572134.08	644666.298	43.74607179	-87.71538286	0	0.5	576.64	-1.36	9.2	567.44	10.8	4.5		
	CS065C-1	SR-CS065C-1-0.5/1.0	11/19/2012	11.1		2572134.08	644666.298	43.74607179	-87.71538286	0.5	1	576.64	-1.36	9.2	567.44	10.8	4.5		
	CS065C-1	SR-CS065C-1-1.0/2.0	11/19/2012	132		2572134.08	644666.298	43.74607179	-87.71538286	1	2	576.64	-1.36	9.2	567.44	10.8	4.5		
	CS065C-1	SR-CS065C-1-2.0/3.0	11/19/2012	134		2572134.08	644666.298	43.74607179	-87.71538286	2	3	576.64	-1.36	9.2	567.44	10.8	4.5		
S	CS065C-1	SR-CS065C-1-3.0/4.0	11/19/2012	2.54		2572134.08	644666.298	43.74607179	-87.71538286	3	4	576.64	-1.36	9.2	567.44	10.8	4.5		
	CS065D	SR-CS065D-0.0/0.5	10/24/2012	17.8		2572084.396	644644.75	43.74601643	-87.71557304	0	0.5	577.19	-0.81	14.1	563.09	7.7	5		
	CS065D	SR-CS065D-0.5/1.0	10/24/2012	35.9		2572084.396	644644.75	43.74601643	-87.71557304	0.5	1	577.19	-0.81	14.1	563.09	7.7	5		
S	CS065D	SR-CS065D-1.0/2.0	10/24/2012	0.138 J		2572084.396	644644.75	43.74601643	-87.71557304	1	2	577.19	-0.81	14.1	563.09	7.7	5		
	CS065D	SR-CS065D-2.0/3.0	10/24/2012	0.0366 U		2572084.396	644644.75	43.74601643	-87.71557304	2	3	577.19	-0.81	14.1	563.09	7.7	5		
	CS065D	SR-CS065D-3.0/4.0	10/24/2012	2		2572084.396	644644.75	43.74601643	-87.71557304	3	4	577.19	-0.81	14.1	563.09	7.7	5		
S	CS066	SR-CS066-0.0/0.5	10/24/2012	0.132 J	0.3171	2572231.682	644596.256	43.74587237	-87.71502091	0	0.5	577.02	-0.98	9	568.02	8.2	5.3		
	CS066	SR-CS066-0.5/1.0	10/24/2012	0.0346 U		2572231.682	644596.256	43.74587237	-87.71502091	0.5	1	577.02	-0.98	9	568.02	8.2	5.3		
	CS067	SR-CS067-0.0/0.5	10/24/2012	8.28		2572105.204	644497.04	43.74560978	-87.71550964	0	0.5	577.15	-0.85	10.6	566.55	7.3	5.1		
	CS067	SR-CS067-0.5/1.0	10/24/2012	23		2572105.204	644497.04	43.74560978	-87.71550964	0.5	1	577.15	-0.85	10.6	566.55	7.3	5.1		
	CS067	SR-CS067-1.0/2.0	10/24/2012	1.51		2572105.204	644497.04	43.74560978	-87.71550964	1	2	577.15	-0.85	10.6	566.55	7.3	5.1		
	CS067	SR-CS067-2.0/3.0	10/24/2012	109		2572105.204	644497.04	43.74560978	-87.71550964	2	3	577.15	-0.85	10.6	566.55	7.3	5.1		
	CS067	SR-CS067-3.0/4.0	10/24/2012	31.5		2572105.204	644497.04	43.74560978	-87.71550964	3	4	577.15	-0.85	10.6	566.55	7.3	5.1		
S	CS067A	SR-CS067A-0.0/0.5	11/5/2012	0.955		2572071.789	644588.522	43.74586318	-87.71562656	0	0.5	576.86	-1.14	8.3	568.56	8.5	4.4		
	CS067A	SR-CS067A-0.5/1.0	11/5/2012	3.68 J		2572071.789	644588.522	43.74586318	-87.71562656	0.5	1	576.86	-1.14	8.3	568.56	8.5	4.4		
	CS067A	SR-CS067A-1.0/2.0	11/5/2012	28.3		2572071.789	644588.522	43.74586318	-87.71562656	1	2	576.86	-1.14	8.3	568.56	8.5	4.4		
	CS067A	SR-CS067A-2.0/3.0	11/5/2012	5.32		2572071.789	644588.522	43.74586318	-87.71562656	2	3	576.86	-1.14	8.3	568.56	8.5	4.4		
	CS067A	SR-CS067A-3.0/4.0	11/5/2012	0.103 J		2572071.789	644588.522	43.74586318	-87.71562656	3	4	576.86	-1.14	8.3	568.56	8.5	4.4		
S	CS068	SR-CS068-0.0/0.5	10/4/2012	0.713	3.2803	2572291.939	644472.925	43.74552962	-87.71480575	0	0.5	577.04	-0.96	9.2	567.84	6.3	3	6	565.14
	CS068	SR-CS068-0.5/1.0	10/4/2012	0.0346 U		2572291.939	644472.925	43.74552962	-87.71480575	0.5	1	577.04	-0.96	9.2	567.84	6.3	3	6	565.14
S	CS069	SR-CS069-0.0/0.5	10/3/2012	14.1	1.8436	2572187.185	644424.296	43.74540413	-87.71520706	0	0.5	576.95	-1.05	13.8	563.15	10.2	4.9		
	CS069	SR-CS069-0.5/1.0	10/3/2012	8.35		2572187.185	644424.296	43.74540413	-87.71520706	0.5	1	576.95	-1.05	13.8	563.15	10.2	4.9		
S	CS070	SR-CS070-0.0/0.5	10/4/2012	1.59	30.153	2572348.221	644400.89	43.74532783	-87.71460032	0	0.5	576.95	-1.05	9.2	567.75	6.9	4.5	5.5	564.65
	CS070	SR-CS070-0.5/1.0	10/4/2012	0.0481 J		2572348.221	644400.89	43.74532783	-87.71460032	0.5	1	576.95	-1.05	9.2	567.75	6.9	4.5	5.5	564.65
	CS071	SR-CS071-0.0/0.5	10/4/2012	51.9		2572256.694	644322.351	43.74511933	-87.71495469	0	0.5	576.99	-1.01	14.4	562.59	9.6	3.8		
	CS071	SR-CS071-0.0/0.5-RE1	10/4/2012	81.5		2572256.694	644322.351	43.74511933	-87.71495469	0	0.5	576.99	-1.01	14.4	562.59	9.6	3.8		
	CS071	SR-CS071-0.0/0.5-RE2	10/4/2012	58.9		2572256.694	644322.351	43.74511933	-87.71495469	0	0.5	576.99	-1.01	14.4	562.59	9.6	3.8		
	CS071	SR-CS071-0.5/1.0	10/4/2012	37		2572256.694	644322.351	43.74511933	-87.71495469	0.5	1	576.99	-1.01	14.4	562.59	9.6	3.8		
	CS071	SR-CS071-1.0/2.0	10/4/2012	41.2		2572256.694	644322.351	43.74511933	-87.71495469	1	2	576.99	-1.01	14.4	562.59	9.6	3.8		
S	CS071	SR-CS071-2.0/3.0	10/4/2012	0.353	26.676	2572256.694	644322.351	43.74511933	-87.71495469	2	3	576.99	-1.01	14.4	562.59	9.6	3.8		
	CS071	SR-CS071-3.0/4.0	10/4/2012	0.0333 U		2572256.694	644322.351	43.74511933	-87.71495469	3	4	576.99	-1.01	14.4	562.59	9.6	3.8		
S	CS071A	SR-CS071A-0.0/0.5	10/9/2012	1.8		2572204.42	644305.432	43.74507686	-87.71515419	0	0.5	576.44	-1.56	13.7	562.74	8.2	5.8		
	CS071A	SR-CS071A-0.5/1.0	10/9/2012	4.86		2572204.42	644305.432	43.74507686	-87.71515419	0.5	1	576.44	-1.56	13.7	562.74	8.2	5.8		
	CS071A	SR-CS071A-1.0/2.0	10/9/2012	8.1		2572204.42	644305.432	43.74507686	-87.71515419	1	2	576.44	-1.56	13.7	562.74	8.2	5.8		
	CS071A	SR-CS071A-2.0/3.0	10/9/2012	25.1		2572204.42	644305.432	43.74507686	-87.71515419	2	3	576.44	-1.56	13.7	562.74	8.2	5.8		
	CS071A	SR-CS071A-3.0/4.0	10/9/2012	26.4		2572204.42	644305.432	43.74507686	-87.71515419	3	4	576.44	-1.56	13.7	562.74	8.2	5.8		
	CS071B	SR-CS071B-0.0/0.5	10/9/2012	20.8		2572257.57	644359.635	43.74522151	-87.71494751	0	0.5	576.42	-1.58	13.9	562.52	6.9	5.7		
	CS071B	SR-CS071B-0.5/1.0	10/9/2012	5.29		2572257.57	644359.635	43.74522151	-87.71494751	0.5	1	576.42	-1.58	13.9	562.52	6.9	5.7		
	CS071B	SR-CS071B-1.0/2.0	10/9/2012	1.81		2572257.57	644359.635	43.74522151	-87.71494751	1	2	576.42	-1.58	13.9	562.52	6.9	5.7		
	CS071B	SR-CS071B-2.0/3.0	10/9/2012	29.6		2572257.57	644359.635	43.74522151	-87.71494751	2	3	576.42	-1.58	13.9	562.52	6.9	5.7		
S	CS071B	SR-CS071B-3.0/4.0	10/9/2012	17.6		2572257.57	644359.635	43.74522151	-87.71494751	3	4	576.42	-1.58	13.9	562.52	6.9	5.7		
	CS071C	SR-CS071C-0.0/0.5	10/9/2012	32.1		2572298.914	644318.484	43.74510555	-87.71479538	0	0.5	576.45	-1.55	13.6	562.85	8.4	5.9		
	CS071C	SR-CS071C-0.5/1.0	10/9/2012	6.89		2572298.914	644318.484	43.74510555	-87.71479538	0.5	1	576.45	-1.55	13.6	562.85	8.4	5.9		
	CS071C	SR-CS071C-1.0/2.0	10/9/2012	28.3		2572298.914	644318.484	43.74510555	-87.71479538	1	2	576.45	-1.55	13.6	562.85	8.4	5.9		
	CS071C	SR-CS071C-2.0/3.0	10/9/2012	31.7		2572298.914	644318.484	43.74510555	-87.71479538	2	3	576.45	-1.55	13.6	562.85	8.4	5.9		
S	CS071C	SR-CS071C-3.0/4.0	10/9/2012	4.61		2572298.914	644318.484	43.74510555	-87.71479538	3	4	576.45	-1.55	13.6	562.85	8.4	5.9		
S	CS071D	SR-CS071D-0.0/0.5	10/9/2012	12.8		2572234.898	644262.047	43.74495559	-87.71504339	0	0.5	576.53	-1.47	12.6	563.93	9.3	4.8		

TABLE 1

Field Measurement and Analytical Data Summary—Confirmation Samples

Sheboygan River GLLA Remedial Design Cleanup Validation Report

	Location ID	Sample ID	Sample Date	Total PCBs[1] (mg/kg)	Total of 13 PAHs[2] (mg/kg)	Northing (WI SPS)	Easting (WI SPS)	Latitude (NAD83)	Longitude (NAD83)	Sample Interval Top (ft)	Sample Interval Bottom (ft)	Water Elevation (NAVD88)	Tide Elevation (ft from LWD)	Water Depth (ft)	Sediment Surface Elevation (NAVD88)	Core Penetration (ft)	Core Recovery (ft)	Sediment Thickness (ft)	Native Sediment Elevation (NAVD88)
	CS071D	SR-CS071D-0.5/1.0	10/9/2012	2.95		2572234.898	644262.047	43.74495559	-87.71504339	0.5	1	576.53	-1.47	12.6	563.93	9.3	4.8		
	CS071D	SR-CS071D-1.0/2.0	10/9/2012	7.71		2572234.898	644262.047	43.74495559	-87.71504339	1	2	576.53	-1.47	12.6	563.93	9.3	4.8		
	CS071D	SR-CS071D-2.0/3.0	10/9/2012	4.7		2572234.898	644262.047	43.74495559	-87.71504339	2	3	576.53	-1.47	12.6	563.93	9.3	4.8		
	CS071D	SR-CS071D-3.0/4.0	10/9/2012	8.24		2572234.898	644262.047	43.74495559	-87.71504339	3	4	576.53	-1.47	12.6	563.93	9.3	4.8		
S	CS072	SR-CS072-0.0/0.5	10/3/2012	0.0937 J	26.615	2572412.504	644329.092	43.74512610	-87.71436459	0	0.5	576.97	-1.03	8.9	568.07	5.3	5.2	2.6	565.57
	CS072	SR-CS072-0.5/1.0	10/3/2012	0.0659 J		2572412.504	644329.092	43.74512610	-87.71436459	0.5	1	576.97	-1.03	8.9	568.07	5.3	5.2	2.6	565.57
S	CS073	SR-CS073-0.0/0.5	10/3/2012	4.01	1.6699	2572314.579	644237.425	43.74488208	-87.71474453	0	0.5	576.92	-1.08	13.8	563.12	6.3	3.5		
	CS073	SR-CS073-0.5/1.0	10/3/2012	1.9		2572314.579	644237.425	43.74488208	-87.71474453	0.5	1	576.92	-1.08	13.8	563.12	6.3	3.5		
S	CS074	SR-CS074-0.0/0.5	10/25/2012	0.0369 U	25.496	2572493.81	644277.427	43.74497830	-87.71406238	0	0.5	577.17	-0.83	9.8	567.37	8.4	4.7		
	CS074	SR-CS074-0.5/1.0	10/25/2012	0.0385 U		2572493.81	644277.427	43.74497830	-87.71406238	0.5	1	577.17	-0.83	9.8	567.37	8.4	4.7		
S	CS075	SR-CS075-0.0/0.5	10/3/2012	4.98	46.228	2572392.943	644159.871	43.74466350	-87.71445614	0	0.5	577.27	-0.73	15.1	562.17	7.7	4.3		
	CS075	SR-CS075-0.5/1.0	10/3/2012	10.5		2572392.943	644159.871	43.74466350	-87.71445614	0.5	1	577.27	-0.73	15.1	562.17	7.7	4.3		
S	CS076	SR-CS076-0.0/0.5	10/24/2012	0.0401 U	10.432	2572612.694	644249.582	43.74489300	-87.71361556	0	0.5	577.12	-0.88	8.2	568.92	8.6	5	6.1	566.42
	CS076	SR-CS076-0.5/1.0	10/24/2012	0.037 U		2572612.694	644249.582	43.74489300	-87.71361556	0.5	1	577.12	-0.88	8.2	568.92	8.6	5	6.1	566.42
S	CS077	SR-CS077-0.0/0.5	10/3/2012	1.45	1.3173	2572497.462	644088.064	43.74445872	-87.71406821	0	0.5	576.96	-1.04	12	564.96	4.3	3.5		
	CS077	SR-CS077-0.5/1.0	10/3/2012	0.876		2572497.462	644088.064	43.74445872	-87.71406821	0.5	1	576.96	-1.04	12	564.96	4.3	3.5		
S	CS078	SR-CS078-0.0/0.5	10/10/2012	3.13	5.038	2572652.997	644184.617	43.74471181	-87.71346984	0	0.5	576.46	-1.54	8.1	568.36	11	5.9		
	CS078	SR-CS078-0.5/1.0	10/10/2012	4.6		2572652.997	644184.617	43.74471181	-87.71346984	0.5	1	576.46	-1.54	8.1	568.36	11	5.9		
S	CS079	SR-CS079-0.0/0.5	10/3/2012	0.491	7.7179	2572635.904	644067.496	43.74439190	-87.71354665	0	0.5	577.02	-0.98	7.4	569.62	5.7	3.5		
	CS079	SR-CS079-0.5/1.0	10/3/2012	0.349		2572635.904	644067.496	43.74439190	-87.71354665	0.5	1	577.02	-0.98	7.4	569.62	5.7	3.5		
S	CS080	SR-CS080-0.0/0.5	10/10/2012	2.41	14.656	2572735.948	644157.176	43.74463031	-87.71315890	0	0.5	576.38	-1.62	8.6	567.78	10.3	5.8		
	CS080	SR-CS080-0.5/1.0	10/10/2012	2.64		2572735.948	644157.176	43.74463031	-87.71315890	0.5	1	576.38	-1.62	8.6	567.78	10.3	5.8		
S	CS081	SR-CS081-0.0/0.5	10/3/2012	1.69	2.1217	2572732.207	644027.278	43.74427436	-87.71318653	0	0.5	576.98	-1.02	8.9	568.08	10.4	4.7	9.8	563.98
	CS081	SR-CS081-0.5/1.0	10/3/2012	0.812		2572732.207	644027.278	43.74427436	-87.71318653	0.5	1	576.98	-1.02	8.9	568.08	10.4	4.7	9.8	563.98
S	T01-C	SR-T01-C	11/7/2012	0.0312 U		Composite of T01-1, T01-2, T01-3													
	T01-1					2569386.834	647171.87	43.75314910	-87.72551680			576.8	-1.2	1	575.8	12	6.7	10.9	570.2
	T01-2					2569364.106	647200.747	43.75322999	-87.72559980			576.83	-1.17	1	575.83	15	7.3	14.3	569.23
	T01-3					2569400.84	647224.655	43.75329281	-87.72545836			576.83	-1.17	1	575.83	12.5	6.8	11.7	569.83
	T02-C	SR-T02-C	10/25/2012	3.14		Composite of T02-1, T02-2, T02-3				0.28	1.97								
	T02-1					2569407.267	647284.852	43.75345741	-87.72542783			577.01	-0.99	3.2	573.81	8.7	5.4		
	T02-2					2569409.242	647273.553	43.75342628	-87.72542152			577.04	-0.96	3.1	573.94	8.6	3.97		
	T02-3					2569416.907	647283.596	43.75345324	-87.72539149			577.04	-0.96	3.5	573.54	8.3	4.95	5.55	571.34
	T03-C	SR-T03-C	10/25/2012	4.92		Composite of T03-1, T03-2, T03-3				0.62	2.9								
	T03-1					2569348.939	647326.26	43.75357533	-87.72564423			577.03	-0.97	1	576.03	8.8	4.3		
	T03-2					2569355.777	647305.168	43.75351698	-87.72562054			577.07	-0.93	1.7	575.37	8.4	5.3		
	T03-3					2569371.052	647323.217	43.75356533	-87.72556088			576.92	-1.08	1.9	575.02	8.1	5.1	5.7	572.32
	T04-C	SR-T04-C	10/25/2012	0.53		Composite of T04-1, T04-2, T04-3				0.89	2.95								
	T04-1					2569346.363	647497.196	43.75404430	-87.72563633			577.06	-0.94	1.2	575.86	8.2	4.5		
	T04-2					2569359.899	647506.011	43.75406746	-87.72558421			576.93	-1.07	1.8	575.13	8.4	4.9		
	T04-3					2569361.439	647546.174	43.75417749	-87.72557424			577.02	-0.98	1.7	575.32	8.6	5.1		
	T05-C	SR-T05-C	10/26/2012	0.273		Composite of T05-1, T05-2, T05-3				0	2.4								
	T05-1					2569373.704	647688.987	43.75456823	-87.72551309			576.91	-1.09	0.9	576.01	7.9	2.4		
	T05-2					2569408.503	647707.979	43.75461771	-87.72537948			577.01	-0.99	3.1	573.91	6.8	4		
	T05-3					2569386.887	647735.505	43.75469481	-87.72545842			577.06	-0.94	2.1	574.96	7.7	5		
	T09-C	SR-T09-C-0.0/1.0	10/22/2012	12.6		Composite of T09-1, T09-2, T09-3				0	1								
	T09-1					2571846.901	645826.521	43.74927517	-87.71634900			576.98	-1.02	5.9	571.08	7.9	4.4	4	570.58
	T09-2					2571866.705	645818.467	43.74925159	-87.71627491			576.92	-1.08	7.1	569.82	4.2	2.9	2.6	568.52
	T09-3					2571826.133	645790.662	43.74917839	-87.71643128			576.84	-1.16	7.5	569.34	9	5.3		
	T10-C	SR-T10-C-0.0/1.0	10/22/2012	2.66		Composite of T10-1, T10-2, T10-3				0	1								
	T10-1					2571727.761	645732.657	43.74902670	-87.71680944			577.02	-0.98	9.8	567.22	7.3	5.3		
	T10-2					2571759.831	645719.418	43.74898799	-87.71668949			576.98	-1.02	10.9	566.08	6	4		
	T10-3					2571744.594	645701.793	43.74894080	-87.71674896			576.79	-1.21	11.4	565.39	6.7	4.5		

TABLE 1
Field Measurement and Analytical Data Summary—Confirmation Samples
Sheboygan River GLLA Remedial Design Cleanup Validation Report

	Location ID	Sample ID	Sample Date	Total PCBs[1] (mg/kg)	Total of 13 PAHs[2] (mg/kg)	Northing (WI SPS)	Easting (WI SPS)	Latitude (NAD83)	Longitude (NAD83)	Sample Interval Top (ft)	Sample Interval Bottom (ft)	Water Elevation (NAVD88)	Tide Elevation (ft from LWD)	Water Depth (ft)	Sediment Surface Elevation (NAVD88)	Core Penetration (ft)	Core Recovery (ft)	Sediment Thickness (ft)	Native Sediment Elevation (NAVD88)
S	T13-C	SR-T13-C-0.0/1.0	10/23/2012	6.34			Composite of T13-1, T13-2, T13-3			0	1								
	T13-1					2571851.585	645454.29	43.74825401	-87.71636985			576.78	-1.22	15.5	561.28	6.3	3.7		
	T13-2					2571898.113	645451.089	43.74824173	-87.71619417			576.93	-1.07	15.3	561.63	8.5	4.8	8.2	557.13
	T13-3					2571841.572	645528.586	43.74845851	-87.71640003			577.05	-0.95	14.5	562.55	7.4	4.9		
	T15A-C	SR-T15A-C-0.0/1.0	10/23/2012	8.59			Composite of T15-1, T15-2, T15-6			0	1								
	T15-1					2571963.853	645198.99	43.74754544	-87.71597160			577.09	-0.91	12	565.09	7.8	3		
	T15-2					2571940.353	645196.229	43.74753963	-87.71606079			577.05	-0.95	12.1	564.95	7.8	4.7	6.4	561.65
	T15-6					2571947.032	645226.428	43.74762195	-87.71603239			577.19	-0.81	12.2	564.99	6.5	3.9		
	T15B-C	SR-T15B-C-0.0/1.0	10/9/2012	75.5			Composite of T15-3, T15-4, T15-5			0	1								
	T15-3					2571931.978	645059.957	43.74716655	-87.71610659			576.49	-1.51	11.3	565.19	7.5	4.2		
	T15-4					2571938.691	645003.082	43.74701007	-87.71608709			576.45	-1.55	10.1	566.35	9	3.4		
	T15-5					2572000.893	645003.602	43.74700682	-87.71585173			576.58	-1.42	11.4	565.18	7.5	3.7		
	T15-3	SR-T15-3-0.0/1.0	10/9/2012	80.3		2571931.978	645059.957	43.74716655	-87.71610659	0	1	576.49	-1.51	11.3	565.19	7.5	4.2		
S	T15-3	SR-T15-3-1.0/2.0	10/9/2012	3.17		2571931.978	645059.957	43.74716655	-87.71610659	1	2	576.49	-1.51	11.3	565.19	7.5	4.2		
	T15-3	SR-T15-3-2.0/3.0	10/9/2012	0.112 J		2571931.978	645059.957	43.74716655	-87.71610659	2	3	576.49	-1.51	11.3	565.19	7.5	4.2		
	T15-3	SR-T15-3-3.0/4.0	10/9/2012	0.0779 J		2571931.978	645059.957	43.74716655	-87.71610659	3	4	576.49	-1.51	11.3	565.19	7.5	4.2		
	T15-4	SR-T15-4-0.0/1.0	10/9/2012	68.7		2571938.691	645003.082	43.74701007	-87.71608709	0	1	576.45	-1.55	10.1	566.35	9	3.4		
	T15-4	SR-T15-4-1.0/2.0	10/9/2012	96.7		2571938.691	645003.082	43.74701007	-87.71608709	1	2	576.45	-1.55	10.1	566.35	9	3.4		
S	T15-4	SR-T15-4-2.0/3.4	10/9/2012	1.12		2571938.691	645003.082	43.74701007	-87.71608709	2	3.4	576.45	-1.55	10.1	566.35	9	3.4		
	T15-5	SR-T15-5-0.0/1.0	10/9/2012	179		2572000.893	645003.602	43.74700682	-87.71585173	0	1	576.58	-1.42	11.4	565.18	7.5	3.7		
	T15-5	SR-T15-5-1.0/2.0	10/9/2012	28.6		2572000.893	645003.602	43.74700682	-87.71585173	1	2	576.58	-1.42	11.4	565.18	7.5	3.7		
S	T15-5	SR-T15-5-2.0/3.0	10/9/2012	0.909		2572000.893	645003.602	43.74700682	-87.71585173	2	3	576.58	-1.42	11.4	565.18	7.5	3.7		
	T15-5	SR-T15-5-3.0/3.7	10/9/2012	0.3		2572000.893	645003.602	43.74700682	-87.71585173	3	3.7	576.58	-1.42	11.4	565.18	7.5	3.7		
	T19-C	SR-T19-C-0.0/1.0	10/9/2012	163			Composite of T19-1, T19-2, T19-3			0	1								
	T19-1					2572134.381	644613.676	43.74592745	-87.71538718			576.47	-1.53	14.1	562.37	6.8	3.8		
	T19-2					2572148.41	644575.365	43.74582134	-87.71533808			576.59	-1.41	14.7	561.89	6.3	2.6		
	T19-3					2572168.181	644553.083	43.74575874	-87.71526560			576.57	-1.43	14.3	562.27	8	3.4		
	T19-1	SR-T19-1-0.0/1.0	10/9/2012	108		2572134.381	644613.676	43.74592745	-87.71538718	0	1	576.47	-1.53	14.1	562.37	6.8	3.8		
	T19-1	SR-T19-1-1.0/2.0	10/9/2012	60.9		2572134.381	644613.676	43.74592745	-87.71538718	1	2	576.47	-1.53	14.1	562.37	6.8	3.8		
S	T19-1	SR-T19-1-2.0/3.0	10/9/2012	0.767		2572134.381	644613.676	43.74592745	-87.71538718	2	3	576.47	-1.53	14.1	562.37	6.8	3.8		
	T19-1	SR-T19-1-3.0/3.8	10/9/2012	0.154		2572134.381	644613.676	43.74592745	-87.71538718	3	3.8	576.47	-1.53	14.1	562.37	6.8	3.8		
	T19-2	SR-T19-2-0.0/1.0	10/8/2012	220		2572148.41	644575.365	43.74582134	-87.71533808	0	1	576.59	-1.41	14.7	561.89	6.3	2.6		
	T19-2	SR-T19-2-1.0/2.0	10/8/2012	45.6		2572148.41	644575.365	43.74582134	-87.71533808	1	2	576.59	-1.41	14.7	561.89	6.3	2.6		
S	T19-2	SR-T19-2-2.0/2.6	10/8/2012	2.5		2572148.41	644575.365	43.74582134	-87.71533808	2	2.6	576.59	-1.41	14.7	561.89	6.3	2.6		
	T19-3	SR-T19-3-0.0/1.0	10/8/2012	109		2572168.181	644553.083	43.74575874	-87.71526560	0	1	576.57	-1.43	14.3	562.27	8	3.4		
	T19-3	SR-T19-3-1.0/2.0	10/8/2012	29.4		2572168.181	644553.083	43.74575874	-87.71526560	1	2	576.57	-1.43	14.3	562.27	8	3.4		
S	T19-3	SR-T19-3-2.0/3.4	10/8/2012	0.219		2572168.181	644553.083	43.74575874	-87.71526560	2	3.4	576.57	-1.43	14.3	562.27	8	3.4		
S	T20-C	SR-T20-C-0.0/1.0	10/4/2012	10.2			Composite of T20-1, T20-2, T20-3			0	1								
	T20-1					2572240.365	644487.925	43.74557463	-87.71499929			577.09	-0.91	13.7	563.39	7.2	3.8		
	T20-2					2572238.898	644468.655	43.74552189	-87.71500684			577.01	-0.99	14.7	562.31	4.3	3.3		
	T20-3					2572270.146	644453.226	43.74547723	-87.71489023			576.98	-1.02	13.9	563.08	7.2	5.2		
S	T21-C	SR-T21-C-0.0/1.0	10/5/2012	14.3			Composite of T21-1, T21-2, T21-3			0	1								
	T21-1					2572324.938	644341.94	43.74516792	-87.71469450			577.01	-0.99	12.3	564.71	8.5	3		
	T21-2					2572351.002	644369.948	43.74524277	-87.71459300			576.94	-1.06	11.4	565.54	9.4	4.4	7	563.54
	T21-3					2572376.704	644350.288	43.74518692	-87.71449782			576.93	-1.07	11.3	565.63	12.5	4.8		
	T23-C	SR-T23-C-0.0/1.0	10/1/2012	57.3			Composite of T23-1, T23-2, T23-3, T23-4			0	1								
	T23-1					2572412.898	644212.033	43.74480505	-87.71437524			576.89	-1.11	17	559.89	1	0.4		
	T23-2					2572491.017	644226.335	43.74483840	-87.71407825			576.97	-1.03	16.5	560.47	1.5	0.5		
	T23-3					2572514.762	644159.759	43.74465403	-87.71399533			576.99	-1.01	15.5	561.49	2.5	2.7		
	T23-4					2572572.947	644215.205	43.74480171	-87.71376948			576.88	-1.12	15.7	561.18	2.8	2.1		
	T23-1	SR-T23-1-0.0/0.8	10/1/2012	24.5		2572412.898	644212.033	43.74480505	-87.71437524	0	0.8	576.89	-1.11	17	559.89	1	0.4		
	T23-1-B	SR-T23-1-1.0/2.0	10/4/2012	0.419		2572395.402	644212.011	43.74480630	-87.71444143	1	2	576.97	-1.03	15.9	561.07	8.1	5.2		
	T23-1-B	SR-T23-1-2.0/3.0	10/4/2012	38.3		2572395.402	644212.011	43.74480630	-87.71444143	2	3	576.97	-1.03	15.9	561.07	8.1	5.2		
	T23-1-B	SR-T23-1-3.0/4.0	10/4/2012	30		2572395.402	644212.011	43.74480630	-87.71444143	3	4	576.97	-1.03	15.9	561.07	8.1	5.2		

TABLE 1

Field Measurement and Analytical Data Summary—Confirmation Samples

Sheboygan River GLLA Remedial Design Cleanup Validation Report

	Location ID	Sample ID	Sample Date	Total PCBs[1] (mg/kg)	Total of 13 PAHs[2] (mg/kg)	Northing (WI SPS)	Easting (WI SPS)	Latitude (NAD83)	Longitude (NAD83)	Sample Interval Top (ft)	Sample Interval Bottom (ft)	Water Elevation (NAVD88)	Tide Elevation (ft from LWD)	Water Depth (ft)	Sediment Surface Elevation (NAVD88)	Core Penetration (ft)	Core Recovery (ft)	Sediment Thickness (ft)	Native Sediment Elevation (NAVD88)
S	T23-2	SR-T23-2-0.0/0.5	10/1/2012	5.63		2572491.017	644226.335	43.74483840	-87.71407825	0	0.5	576.97	-1.03	16.5	560.47	1.5	0.5		
	T23-2-B	SR-T23-2-1.0/2.0	10/4/2012	0.0341 U		2572467.282	644233.229	43.74485909	-87.71416732	1	2	576.93	-1.07	14.6	562.33	9.4	5.7		
	T23-2-B	SR-T23-2-2.0/3.0	10/4/2012	0.0351 U		2572467.282	644233.229	43.74485909	-87.71416732	2	3	576.93	-1.07	14.6	562.33	9.4	5.7		
	T23-2-B	SR-T23-2-3.0/4.0	10/4/2012	0.0288 U		2572467.282	644233.229	43.74485909	-87.71416732	3	4	576.93	-1.07	14.6	562.33	9.4	5.7		
	T23-3	SR-T23-3-0.0/1.0	10/1/2012	111		2572514.762	644159.759	43.74465403	-87.71399533	0	1	576.99	-1.01	15.5	561.49	2.5	2.7		
	T23-3	SR-T23-3-1.0/2.0	10/1/2012	31.5		2572514.762	644159.759	43.74465403	-87.71399533	1	2	576.99	-1.01	15.5	561.49	2.5	2.7		
S	T23-3	SR-T23-3-2.0/2.7	10/1/2012	18.3		2572514.762	644159.759	43.74465403	-87.71399533	2	2.7	576.99	-1.01	15.5	561.49	2.5	2.7		
	T23-3-B	SR-T23-3-3.0/4.0	10/4/2012	0.184		2572503.187	644175.149	43.74469711	-87.71403752	3	4	577.01	-0.99	15.6	561.41	8.4	4.9		
	T23-4	SR-T23-4-0.0/1.0	10/1/2012	37.9		2572572.947	644215.205	43.74480171	-87.71376948	0	1	576.88	-1.12	15.7	561.18	2.8	2.1		
	T23-4	SR-T23-4-1.0/2.1	10/1/2012	28.2		2572572.947	644215.205	43.74480171	-87.71376948	1	2.1	576.88	-1.12	15.7	561.18	2.8	2.1		
S	T23-4-B	SR-T23-4-2.0/3.2	10/4/2012	0.104 J		2572561.729	644212.176	43.74479425	-87.71381223	2	3.2	576.92	-1.08	15.5	561.42	8.4	3.2		
S	T26-C	SR-T26-C-0.0/1.0	10/5/2012	41.4		Composite of T26-1, T26-2, T26-3				0	1								
	T26-1					2572496.246	644053.064	43.74436282	-87.71407644			576.98	-1.02	14.4	562.58	6.4	3.5		
	T26-2					2572502.538	644045.877	43.74434264	-87.71405339			576.85	-1.15	15.2	561.65	5.5	3		
	T26-3					2572527.832	644051.001	43.74435479	-87.71395717			577.04	-0.96	13.7	563.34	7.2	4.2		

Notes:

mg/kg = milligrams per kilogram; ft = feet; WI SPS = Wisconsin State Plane Coordinate System South; NAD83 = North American Datum 1983; NAVD88 = North American Vertical Datum 1988; LWD = Low Water Datum (578.0 feet at Lake Michigan)

[1] Total polychlorinated biphenyls (PCBs) include summing the detected values of four Aroclors 1242, 1248, 1254, and 1260. Non-detects reported to the method detection limit.

[2] Total of 13 polycyclic aromatic hydrocarbons (PAHs) is the sum of the following 13 compounds: acenapthene, acenaphthylene, anthracene, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, fluoranthene, fluorene, naphthalene, phenanthrene, and pyrene. If all compounds were reported as non-detect, the sum of the method detection limits is reported as total

[3] Core CS065B was recollected as CS065B-1.

[4] Core CS065C was recollected as CS065C-1.

S = Indicates the sample is representative of the post-dredge sediment surface.

Gray shading represents sediment sample locations that were removed during dredge activities.

	5 to <10 mg/kg PCB
	10 to <25 mg/kg PCB
	26 to <50 mg/kg PCB
	≥ 50 mg/kg PCB

	18 to <45 mg/kg PAH-13
	45 to <100 mg/kg PAH-13
	100 to <129 mg/kg PAH-13
	≥ 129 mg/kg PAH-13

TABLE 2
Field Measurement and Analytical Data Summary—Shoreline Samples
Sheboygan River GLLA Remedial Design Cleanup Validation Report

	Location ID	Sample ID	Sample Date	Total PCBs[1] (mg/kg)	Total of 13 PAHs[2] (mg/kg)	Northing (WI SPS)	Easting (WI SPS)	Latitude (NAD83)	Longitude (NAD83)	Sample Interval Top (ft)	Sample Interval Bottom (ft)	Water Elevation (NAVD88)	Tide Elevation (ft from LWD)	Water Depth (ft)	Sediment Surface Elevation (NAVD88)	Core Penetration (ft)	Core Recovery (ft)	Sediment Thickness (ft)	Native Sediment Elevation (NAVD88)
S	S12	SR-S12-0.0/2.0	12/12/2012	0.741	0.6005 U	2569922.68	647903.58	43.75511563	-87.72341392	0	2	576.4	-1.6	1.1	575.3	7.2	3.6		
	S12	SR-S12-2.0/3.6	12/12/2012	0.0296 U	0.5864 U	2569922.68	647903.58	43.75511563	-87.72341392	2	3.6	576.4	-1.6	1.1	575.3	7.2	3.6		
S	S14	SR-S14-0.0/0.9	11/29/2012	1.4	0.3505	2570127.933	647930.347	43.75517366	-87.72263459	0	0.9	576.09	-1.91	1.5	574.59	6.8	1.8	5.9	573.69
S	S15	SR-S15-0.0/2.0	11/28/2012	1.17	0.1198	2570605.331	647696.028	43.75449529	-87.72085261	0	2	576.11	-1.89	1.1	575.01	8.1	4.5	6.5	572.11
	S15	SR-S15-2.0/2.9	11/28/2012	0.0437 J	0.5855 U	2570605.331	647696.028	43.75449529	-87.72085261	2	2.9	576.11	-1.89	1.1	575.01	8.1	4.5	6.5	572.11
S	S16	SR-S16-0.0/2.0	11/29/2012	0.525	0.6005 U	2570717.828	647521.886	43.75400929	-87.72044500	0	2	576.16	-1.84	0.9	575.26	8.6	3.4		
	S16	SR-S16-2.0/3.4	11/29/2012	0.0298 U	0.5761 U	2570717.828	647521.886	43.75400929	-87.72044500	2	3.4	576.16	-1.84	0.9	575.26	8.6	3.4		
S	S19A	SR-S19A-0.0/2.0	11/28/2012	0.075 J	0.6295 U	2570967.509	646980.068	43.75250468	-87.71955644	0	2	576.22	-1.78	2.9	573.32	7	4.6		
	S19A	SR-S19A-2.0/4.6	11/28/2012	0.0314 U	0.579 U	2570967.509	646980.068	43.75250468	-87.71955644	2	4.6	576.22	-1.78	2.9	573.32	7	4.6		
S	S19B	SR-S19B-0.0/2.0	11/28/2012	2.19	4.9336	2571130.632	647083.158	43.75277515	-87.71892862	0	2	576.16	-1.84	3.5	572.66	9.6	4.9	9.4	567.96
	S19B	SR-S19B-2.0/4.7	11/28/2012	0.031 U	4.6625	2571130.632	647083.158	43.75277515	-87.71892862	2	4.7	576.16	-1.84	3.5	572.66	9.6	4.9	9.4	567.96
S	S22	SR-S22-0.0/2.0	11/7/2012	0.0505 J	75.271	2571264.098	646955.503	43.75241505	-87.71843690	0	2	576.65	-1.35	2	574.65	10.5	3.6	9.8	571.75
	S22	SR-S22-2.0/3.6	11/7/2012	0.0395 U	24.105	2571264.098	646955.503	43.75241505	-87.71843690	2	3.6	576.65	-1.35	2	574.65	10.5	3.6	9.8	571.75
S	S24	SR-S24-0.0/2.0	10/12/2012	0.0587 J	43.776	2571328.436	646873.521	43.75218540	-87.71820198	0	2	576.51	-1.49	2.5	574.01	10.3	6		
	S24	SR-S24-2.0/6.0	10/12/2012	0.0333 U	9.4	2571328.436	646873.521	43.75218540	-87.71820198	2	6	576.51	-1.49	2.5	574.01	10.3	6		
S	S30	SR-S30-0.0/2.0	10/12/2012	0.807	9.679 J	2571572.204	646608.551	43.75144044	-87.71730719	0	2	576.37	-1.63	10.4	565.97	5.7	2.9	4.6	564.17
	S30	SR-S30-2.0/2.9	10/12/2012	0.0339 U	1.7418	2571572.204	646608.551	43.75144044	-87.71730719	2	2.9	576.37	-1.63	10.4	565.97	5.7	2.9	4.6	564.17
S	S31	SR-S31-0.0/2.0	10/11/2012	0.237	0.6396 U	2571412.376	646493.957	43.75113818	-87.71792372	0	2	576.39	-1.61	2.3	574.09	6.7	5	4.2	571.59
	S31	SR-S31-2.0/5.0	10/11/2012	0.0351 U	0.7089 U	2571412.376	646493.957	43.75113818	-87.71792372	2	5	576.39	-1.61	2.3	574.09	6.7	5	4.2	571.59
S	S32	SR-S32-0.0/2.0	11/7/2012	0.21	2.4306	2571558.376	646451.85	43.75101174	-87.71737574	0	2	576.78	-1.22	2	574.78	10	5.4	6.8	572.58
	S32	SR-S32-2.0/4.0	11/7/2012	0.0291 U	0.5807 U	2571558.376	646451.85	43.75101174	-87.71737574	2	3	576.78	-1.22	2	574.78	10	5.4	6.8	572.58
S	S33	SR-S33-0.0/2.0	10/11/2012	0.117 J	0.5619 U	2571451.809	646406.709	43.75089595	-87.71778358	0	2	576.18	-1.82	2.2	573.98	6.7	4.5	4.3	571.88
	S33	SR-S33-2.0/4.5	10/11/2012	0.0358 U	0.6698 U	2571451.809	646406.709	43.75089595	-87.71778358	2	4.5	576.18	-1.82	2.2	573.98	6.7	4.5	4.3	571.88
S	S34	SR-S34-0.0/2.0	10/11/2012	0.153	2.1824	2571614.78	646364.238	43.75076724	-87.71717143	0	2	576.29	-1.71	1.9	574.39	6.9	5	5.3	570.99
	S34	SR-S34-2.0/5.0	10/11/2012	0.0293 U	0.5948 U	2571614.78	646364.238	43.75076724	-87.71717143	2	5	576.29	-1.71	1.9	574.39	6.9	5	5.3	570.99
S	S36	SR-S36-0.0/2.0	10/11/2012	1.11	7.3638	2571654.741	646257.505	43.75047153	-87.71703131	0	2	576.25	-1.75	1.9	574.35	7.8	5.6		
	S36	SR-S36-2.0/5.6	10/11/2012	0.0288 U	0.1465	2571654.741	646257.505	43.75047153	-87.71703131	2	5.6	576.25	-1.75	1.9	574.35	7.8	5.6		
S	S37	SR-S37-0.0/2.0	10/11/2012	0.0296 U	0.5565 U	2571574.895	646209.506	43.75034590	-87.71733835	0	2	576.42	-1.58	1.5	574.92	7.4	5.1	5.4	571.82
	S37	SR-S37-2.0/5.1	10/11/2012	0.0345 U	0.6564 U	2571574.895	646209.506	43.75034590	-87.71733835	2	5.1	576.42	-1.58	1.5	574.92	7.4	5.1	5.4	571.82
S	S39	SR-S39-0.0/2.0	11/29/2012	11.3	0.2525	2571499.317	646068.876	43.74996591	-87.71763884	0	2	576.16	-1.84	6.1	570.06	7.7	4.8		
	S39	SR-S39-2.0/4.8	11/29/2012	0.186	0.5828 U	2571499.317	646068.876	43.74996591	-87.71763884	2	4.8	576.16	-1.84	6.1	570.06	7.7	4.8		
S	S43	SR-S43-0.0/2.0	10/12/2012	2.48	33.946	2571846.139	645959.122	43.74963887	-87.71633814	0	2	576.4	-1.6	3.3	573.1	8.6	5.7		
	S43	SR-S43-2.0/5.7	10/12/2012	0.0346 U	216.81	2571846.139	645959.122	43.74963887	-87.71633814	2	5.7	576.4	-1.6	3.3	573.1	8.6	5.7		
S	S44	SR-S44-0.0/2.0	10/12/2012	1.21	78.063	2571579.052	645904.614	43.74950945	-87.71735420	0	2	576.49	-1.51	2.5	573.99	6.6	2.9		
	S44	SR-S44-2.0/2.9	10/12/2012	4.1	0.6199	2571579.052	645904.614	43.74950945	-87.71735420	2	2.9	576.49	-1.51	2.5	573.99	6.6	2.9		
S	S45	SR-S45-0.0/1.9	11/29/2012	24.1	11.591	2571883.231	645846.333	43.74932677	-87.71620951	0	1.9	576.18	-1.82	3.4	572.78	8.8	3.7	7	570.88
S	S46	SR-S46-0.0/2.0	11/9/2012	11.7	6.83 J	2571624.261	645785.869	43.74918040	-87.71719547	0	2	576.67	-1.33	4	572.67	11	4.6		
	S46	SR-S46-2.0/4.6	11/9/2012	0.308	0.1323	2571624.261	645785.869	43.74918040	-87.71719547	2	4.6	576.67	-1.33	4	572.67	11	4.6		
S	S47	SR-S47-0.0/1.6	11/10/2012	0.613	18.469	2571923.805	645741.082	43.74903508	-87.71606692	0	1.6	576.52	-1.48	5	571.52	5	3.2	3.4	569.92
S	S48	SR-S48-0.0/2.1	11/9/2012	9.5	0.1548 J	2571664.355	645679.895	43.74888677	-87.71705477	0	2.1	576.5	-1.5	3	573.5	7	2.1		
S	S49	SR-S49-0.0/1.7	11/29/2012	0.386	10.898	2571942.438	645656.609	43.74880202	-87.71600518	0	1.7	576.22	-1.78	3.9	572.32	5	2.9	3.8	570.62
S	S50	SR-S50-0.0/2.0	11/9/2012	0.0811 J	0.4473	2571716.178	645562.79	43.74856173	-87.71687086	0	2	576.63	-1.37	7	569.63	8.1	4.4		
	S50	SR-S50-2.0/4.4	11/9/2012	0.0341 U	0.6462 U	2571716.178	645562.79	43.74856173	-87.71687086	2	4.4	576.63	-1.37	7	569.63	8.1	4.4		
S	S51	SR-S51-0.0/2.0	11/10/2012	0.547	2.5617	2571964.706	645501.669	43.74837544	-87.71593700	0	2	576.62	-1.38	1.9	574.72	4.3	2.7	3.6	572.72
S	S52	SR-S52-0.0/2.0	11/9/2012	36.6	8.0345	2571761.875	645417.124	43.74815882	-87.71671308	0	2	576.57	-1.43	1.9	574.67	9.1	3.7		
	S52	SR-S52-2.0/3.7	11/9/2012	8.25	0.8111	2571761.875	645417.124	43.74815882	-87.71671308	2	3.7	576.57	-1.43	1.9	574.67	9.1	3.7		
S	S53	SR-S53-0.0/2.4	11/10/2012	0.879	10.4314	2571997.779	645325.462	43.74788972	-87.71583015	0	2.4	576.54	-1.46	2.6	573.94	8.2	4	6.6	571.54
S	S54	SR-S54-0.0/2.0	10/12/2012	7.92	0.1444	2571794.827	645300.838	43.74783744	-87.71660047	0	2	576.36	-1.64	1.5	574.86	7.4	3.5		
	S54	SR-S54-2.0/3.5	10/12/2012	0.0534 J	0.5724 U	2571794.827	645300.838	43.74783744	-87.71660047	2	3.5	576.36	-1.64	1.5	574.86	7.4	3.5		
S	S55	SR-S55-0.0/2.0	10/12/2012	3.85	0.3155	2571831.15	645200.939	43.74756075	-87.71647341	0	2	576.46	-1.54	3.5	572.96	9.6	5.2	8.7	568.66
	S55	SR-S55-2.0/5.2	10/12/2012	0.116 J	0.1169	2571831.15	645200.939	43.74756075	-87.71647341	2	5.2	576.46	-1.54	3.5	572.96	9.6	5.2	8.7	568.66
S	S56	SR-S56-0.0/1.4	11/10/2012	0.433	1.074	2572054.753	645181.789	43.74749143	-87.71562951	0	1.4	576.61	-1.39	4.1	572.51	4.9	2	4.3	571.11
S	S57	SR-S57-0.0/2.0	10/11/2012	37.9	0.2912	2571866.649	645108.694	43.74730511	-87.71634868	0	2	576.39	-1.61	4	572.39	8.6	3.5		
	S57	SR-S57-2.0/3.5	10/11/2012	4.34	1.2542	2571866.649	645108.694	43.74730511	-87.71634868	2	3.5	576.39	-1.61	4	572.39	8.6	3.5		
S	S57A	SR-S57A-0.0/2.0	10/11/2012	3.61	0.2515	2571893.2	645022.795	43.74706755	-87.71625714	0	2	576.31	-1.69	5.3	571.01	7.4	3.5	6.7	568.21
	S57A	SR-S57A-2.0/3.5	10/11/2012	1.77	0.1926	2571893.2	645022.795	43.74706755	-87.71625714	2	3.5	576.31	-1.69	5.3	571.01	7.4	3.5	6.7	568.21
S	S58	SR-S58-0.0/2.1	11/10/2012	0.042 J	0.0222	2572081.223	645106.897	43.74728406	-87.71553714	0	2.1	576.51	-1.49	1.4	575.11	7.1	4.3	4.9	573.01

TABLE 2
Field Measurement and Analytical Data Summary—Shoreline Samples
Sheboygan River GLLA Remedial Design Cleanup Validation Report

	Location ID	Sample ID	Sample Date	Total PCBs[1] (mg/kg)	Total of 13 PAHs[2] (mg/kg)	Northing (WI SPS)	Easting (WI SPS)	Latitude (NAD83)	Longitude (NAD83)	Sample Interval Top (ft)	Sample Interval Bottom (ft)	Water Elevation (NAVD88)	Tide Elevation (ft from LWD)	Water Depth (ft)	Sediment Surface Elevation (NAVD88)	Core Penetration (ft)	Core Recovery (ft)	Sediment Thickness (ft)	Native Sediment Elevation (NAVD88)
S	S59	SR-S59-0.0/2.0	11/9/2012	0.0357 U	2.3592	2572091.102	645022.573	43.74705207	-87.71550851	0	2	576.49	-1.51	1.6	574.89	7	5.3	4.5	572.09
	S59	SR-S59-2.0/2.8	11/9/2012	0.0262 U	0.1597	2572091.102	645022.573	43.74705207	-87.71550851	2	2.8	576.49	-1.51	1.6	574.89	7	5.3	4.5	572.09
S	S60	SR-S60-0.0/2.0	11/29/2012	0.116 J	2.3971	2572119.892	644929.303	43.74679412	-87.71540927	0	2	576.22	-1.78	3.2	573.02	7.6	3.2		
	S60	SR-S60-2.0/3.2	11/29/2012	0.0284 U	0.577 U	2572119.892	644929.303	43.74679412	-87.71540927	2	3.2	576.22	-1.78	3.2	573.02	7.6	3.2		
S	S61	SR-S61-0.0/2.0	10/11/2012	1.14	1.3124	2571918.93	644945.825	43.74685453	-87.71616778	0	2	576.25	-1.75	3.9	572.35	8.4	5.3		
	S61	SR-S61-2.0/5.3	10/11/2012	6.23	1.7485	2571918.93	644945.825	43.74685453	-87.71616778	2	5.3	576.25	-1.75	3.9	572.35	8.4	5.3		
S	S61A	SR-S61A-0.0/2.0	10/11/2012	1.19	32.769	2571943.086	644849.969	43.74658984	-87.71608633	0	2	576.29	-1.71	3.9	572.39	9	4.9		
	S61A	SR-S61A-2.0/4.9	10/11/2012	17.9	11.253	2571943.086	644849.969	43.74658984	-87.71608633	2	4.9	576.29	-1.71	3.9	572.39	9	4.9		
S	S62	SR-S62-0.0/2.1	11/29/2012	0.0311 U	2.0587	2572162.206	644827.563	43.74651193	-87.71525974	0	2.1	576.33	-1.67	3.1	573.23	6.8	4.9	4	571.13
S	S63	SR-S63-0.0/2.0	10/11/2012	6.31	0.5822 J	2571999.165	644731.049	43.74625950	-87.71588652	0	2	576.35	-1.65	5.9	570.45	10.9	4.7		
	S63	SR-S63-2.0/4.7	10/11/2012	48.9	4.819	2571999.165	644731.049	43.74625950	-87.71588652	2	4.7	576.35	-1.65	5.9	570.45	10.9	4.7		
S	S64	SR-S64-0.0/2.0	11/29/2012	0.963	57.087	2572284.155	644570.865	43.74579879	-87.71482504	0	2	576.26	-1.74	2.1	574.16	10.7	4.4		
	S64	SR-S64-2.0/4.4	11/29/2012	0.0347 U	97.7	2572284.155	644570.865	43.74579879	-87.71482504	2	4.4	576.26	-1.74	2.1	574.16	10.7	4.4		
S	S66	SR-S66-0.0/2.0	10/11/2012	0.209	43.445	2572254.255	644606.538	43.74589887	-87.71493445	0	2	576.39	-1.61	2.1	574.29	6.8	3.5		
	S66	SR-S66-2.0/3.5	10/11/2012	0.0293 U	1.7033	2572254.255	644606.538	43.74589887	-87.71493445	2	3.5	576.39	-1.61	2.1	574.29	6.8	3.5		
S	S67	SR-S67-0.0/2.0	10/10/2012	1.97	1.1434	2572059.252	644528.204	43.74569870	-87.71568024	0	2	576.34	-1.66	5	571.34	7.8	3.7		
	S67	SR-S67-2.0/3.7	10/10/2012	119	0.2225	2572059.252	644528.204	43.74569870	-87.71568024	2	3.7	576.34	-1.66	5	571.34	7.8	3.7		
S	S69	SR-S69-0.0/2.0	10/10/2012	11.1	1.1334	2572105.975	644386.946	43.74530780	-87.71551814	0	2	576.49	-1.51	2.1	574.39	8.7	4		
	S69	SR-S69-2.0/4.0	10/10/2012	2.76	21.775	2572105.975	644386.946	43.74530780	-87.71551814	2	4	576.49	-1.51	2.1	574.39	8.7	4		
S	S70	SR-S70-0.0/2.0	11/29/2012	1.45	58.775	2572383.166	644441.861	43.74543757	-87.71446388	0	2	576.15	-1.85	7.9	568.25	6.8	2.6		
	S70	SR-S70-2.0/2.6	11/29/2012	0.0366 U	19.01	2572383.166	644441.861	43.74543757	-87.71446388	2	2.6	576.15	-1.85	7.9	568.25	6.8	2.6		
S	S71	SR-S71-0.0/2.0	10/10/2012	6.36	0.68 J	2572168.472	644269.193	43.74498018	-87.71529393	0	2	576.37	-1.63	3.6	572.77	9.3	5.4		
	S71	SR-S71-2.0/5.4	10/10/2012	0.038 U	11.182	2572168.472	644269.193	43.74498018	-87.71529393	2	5.4	576.37	-1.63	3.6	572.77	9.3	5.4		
S	S72	SR-S72-0.0/1.9	11/29/2012	2.89	96.145	2572460.627	644381.49	43.74526618	-87.71417712	0	1.9	576.26	-1.74	8.1	568.16	6.4	1.9		
S	S73	SR-S73-0.0/2.0	10/10/2012	0.535	54.49	2572243.397	644171.799	43.74470745	-87.71502060	0	2	576.4	-1.6	5.2	571.2	8.9	4.6	7.1	568.4
	S73	SR-S73-2.0/4.6	10/10/2012	0.0327 U	1.9819	2572243.397	644171.799	43.74470745	-87.71502060	2	4.6	576.4	-1.6	5.2	571.2	8.9	4.6	7.1	568.4
S	S75	SR-S75-0.0/2.0	10/10/2012	12.1	2.1237	2572338.368	644081.847	43.74445363	-87.71467067	0	2	576.47	-1.53	4.9	571.57	8.3	3.4	6.9	569.57
	S75	SR-S75-2.0/3.4	10/10/2012	18.3	0.6028	2572338.368	644081.847	43.74445363	-87.71467067	2	3.4	576.47	-1.53	4.9	571.57	8.3	3.4	6.9	569.57
S	S77	SR-S77-0.0/2.0	10/10/2012	37.5	14.061	2572467.85	644024.191	43.74428578	-87.71418685	0	2	576.37	-1.63	9.2	567.17	8.1	3.7		
	S77	SR-S77-2.0/3.7	10/10/2012	0.0839 J	32.291	2572467.85	644024.191	43.74428578	-87.71418685	2	3.7	576.37	-1.63	9.2	567.17	8.1	3.7		
S	S80	SR-S80-0.0/2.0	11/29/2012	0.0633 J	92.147	2572729.484	644225.184	43.74481731	-87.71317630	0	2	576.19	-1.81	3.1	573.09	10	5.2		
	S80	SR-S80-2.0/5.2	11/29/2012	0.0363 U	15.188	2572729.484	644225.184	43.74481731	-87.71317630	2	5.2	576.19	-1.81	3.1	573.09	10	5.2		
	SD-1	SR-SD-1-0.0/1.0	10/15/2012	1.04		2569374.068	647117.873	43.75300197	-87.72557067	0	1					2	2		
	SD-2	SR-SD-2-0.0/1.0	10/15/2012	1.48		2569352.732	647170.116	43.75314684	-87.72564600	0	1					2	2		
	SD-3	SR-SD-3-0.0/1.0	10/15/2012	2.44		2569347.905	647249.156	43.75336396	-87.72565610	0	1					2	2		
	SD-4	SR-SD-4-0.0/1.0	10/15/2012	2.14		2569341.826	647324.596	43.75357130	-87.72567131	0	1					2	2		
	SD-5	SR-SD-5-0.0/1.0	10/15/2012	1.21		2569342.127	647387.448	43.75374364	-87.72566369	0	1					2	2		
	SD-6	SR-SD-6-0.0/1.0	10/15/2012	3.16		2569334.104	647439.723	43.75388760	-87.72568865	0	1					2	2		
	SD-7	SR-SD-7-0.0/1.0	10/15/2012	6.66		2569331.047	647495.208	43.75404000	-87.72569449	0	1					2	2		

Notes:

mg/kg = milligrams per kilogram; ft = feet; WI SPS = Wisconsin State Plane Coordinate System South; NAD83 = North American Datum 1983; NAVD88 = North American Vertical Datum 1988; LWD = Low Water Datum (578.0 @ Lake Michigan)

[1] Total polychlorinated biphenyls (PCBs) include summing the detected values of four Aroclors 1242, 1248, 1254, and 1260. Non-detects reported to the method detection limit.

[2] Total of 13 polycyclic aromatic hydrocarbons (PAHs) is the sum of the following 13 compounds: acenapthene, acenaphthylene, anthracene, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, fluoranthene, fluorene, naphthalene, phenanthrene, and pyrene. If all compounds were reported as non-detect, the sum of the method detection limits is reported as total.

S = Indicates the sample is representative of the post-dredge sediment surface.

Grey shading represents sediment sample locations that were removed during dredge activities.

	5 to <10 mg/kg PCB
	10 to <25 mg/kg PCB
	26 to <50 mg/kg PCB
	≥ 50 mg/kg PCB

	18 to <45 mg/kg PAH-13
	45 to <100 mg/kg PAH-13
	100 to <129 mg/kg PAH-13
	≥ 129 mg/kg PAH-13

TABLE 3

Dredge Quantity and Tonnage Summary

Sheboygan River GLLA Remedial Design Cleanup Validation Report

	August		September		October		November		December		Project Total	
	Cubic Yards	**Tons**	**Cubic Yards**	**Tons**	**Cubic Yards**	**Tons**	**Cubic Yards**	**Tons**	**Cubic Yards**	**Tons**	**Cubic Yards**	**Tons**
Subtotal TSCA	*0*	*0*	*3,392*	*3,871*	*3,405*	*7,335*	*0*	*327*	*349*	*2,108*	*7,146*	*13,641*
Area 1	0	--	0	--	0	--	0	--	349	--	349	--
Area 2	0	--	0	--	0	--	0	--	0	--	0	--
Area 3	0	--	3,392	--	3,405	--	0	--	0	--	6,797	--
Subtotal Non-TSCA	*8,332*	*4,607*	*41,840*	*58,723*	*33,805*	*54,100*	*39,398*	*69,442*	*7,146*	*25,703*	*130,521*	*212,575*
Area 1	0	--	0	--	0	--	282	--	6,998	--	7,280	--
Area 2	0	--	1,357	--	13,102	--	23,494	--	148	--	38,101	--
Area 3	8,332	--	40,483	--	20,703	--	15,622	--	0	--	85,140	--
Subtotal Redredge TSCA	*0*	--	*0*	--	*1,000*	--	*447*	--	-	--	*1,447*	--
Area 1	0	--	0	--	0	--	0	--	0	--	0	--
Area 2	0	--	0	--	0	--	0	--	0	--	0	--
Area 3	0	--	0	--	1,000	--	447	--	0	--	1,447	--
Subtotal Redredge Non-TSCA	*0*	--	*0*	--	*0*	--	*4,204*	--	*3,557*	--	*7,761*	--
Area 1	0	--	0	--	0	--	0	--	0	--	0	--
Area 2	0	--	0	--	0	--	1,408	--	3,557	--	4,965	--
Area 3	0	--	0	--	0	--	2,796	--	0	--	2,796	--
Debris	--	*0*	--	*125*	--	*83*	--	*591*	--	*342*	--	*1,141*
Grid 40 Re-dredge (May 2013)	--	--	--	--	--	--	--	--	--	--	*350*	--
Field Order No. 3 (14th St. Bridge)	--	--	--	--	--	--	--	--	--	--	*597*	--
TOTAL	**8,332**	**4,607**	**45,232**	**62,719**	**38,210**	**61,518**	**44,049**	**70,360**	**11,052**	**28,153**	**147,822**	**227,357**

Notes:

"--" - Indicates value not available

TSCA = Toxic Substances Control Act

TABLE 4

Post-dredge Sediment Surface Surface-weighted Average Concentration Data

Sheboygan River GLLA Remedial Action Cleanup Validation Report

Post-Dredge SWAC Values				Post-Dredge SWAC with Proposed Sand Cover			
	PCB SWAC (mg/kg)	PAH SWAC (mg/kg)	Area (ft^2)		PCB SWAC (mg/kg)	PAH SWAC (mg/kg)	Sand Cover Area (ft^2)
Project Reach	**2.67**	**8.65**	**1,618,165**	**Project Reach**	**1.09**	**2.98**	
Dredge Area	**3.11**	**10.60**	**1,034,982**	**Dredge Area**	**0.65**	**1.73**	**376,856**
-Area 1	*0.91*	*2.00*		*-Area 1*	*0.91*	*2.00*	*-*
-Area 2	*1.05*	*11.11*		*-Area 2*	*0.38*	*0.65*	*111,696*
-Area 3	*5.00*	*12.25*		*-Area 3*	*0.77*	*2.40*	*265,160*

Proposed number of grids with sand: 26

Grid ID	PCB Avg (mg/kg)	PAH-13 Avg (mg/kg)	Square Footage	Sand Cover	Revised PCB[a]	Revised PAH-13[b]	Sand Cover Area (ft^2)
CS001	0.028	0.062	5,497		0.028	0.062	0
CS002	0.451	0.056	13,352		0.451	0.056	0
CS003	1.520	0.240	9,627		1.520	0.240	0
CS004	2.580	0.658	9,935		2.580	0.658	0
CS005	0.345	0.049	10,172		0.345	0.049	0
CS006	0.932	0.164	12,551		0.932	0.164	0
CS007	0.050	0.295	11,207		0.050	0.295	0
CS008	0.446	0.579	7,954		0.446	0.579	0
CS009	0.052	0.281	7,134		0.052	0.281	0
CS010	0.594	26.700	7,744		0.594	26.700	0
CS011	0.407	0.797	9,290		0.407	0.797	0
CS012	0.524	1.164	8,931		0.524	1.164	0
CS013	2.860	0.367	12,604		2.860	0.367	0
CS014	0.182	0.558	11,153		0.182	0.558	0
CS015	0.186	0.246	7,739		0.186	0.246	0
CS016	0.152	0.267	6,441		0.152	0.267	0
CS017	0.546	2.031	16,275		0.546	2.031	0
CS018	0.030	0.284	17,423		0.030	0.284	0
CS019	0.015	0.416	13,761		0.015	0.416	0
CS020	0.444	0.847	12,986		0.444	0.847	0
CS021	0.335	0.294	9,188		0.335	0.294	0
CS022	0.563	3.693	11,858		0.563	3.693	0
CS023	1.790	0.942	10,709		1.790	0.942	0
CS024	0.085	1.555	14,125		0.085	1.555	0
CS025	0.050	0.308	12,464		0.050	0.308	0
CS026	0.670	2.525	17,950		0.670	2.525	0
CS027	1.510	0.569	15,307		1.510	0.569	0
CS028	1.494	120.292	17,804	X	0.024	0.078	17,804
CS029	11.400	0.644	17,031	X	0.024	0.078	17,031
CS030	0.015	8.087	14,237	X	0.024	0.078	14,237
CS031	0.017	0.332	16,094		0.017	0.332	0
CS032	0.052	16.045	11,820	X	0.024	0.078	11,820
CS033	0.373	0.321	14,350		0.373	0.321	0
CS034	0.339	14.432	13,621	X	0.024	0.078	13,621
CS035	0.876	0.318	14,145		0.876	0.318	0
CS036	1.510	66.286	14,036	X	0.024	0.078	14,036
CS037	1.060	0.387	16,386		1.060	0.387	0

TABLE 4

Post-dredge Sediment Surface Surface-weighted Average Concentration Data

Sheboygan River GLLA Remedial Action Cleanup Validation Report

Post-Dredge SWAC Values				Post-Dredge SWAC with Proposed Sand Cover			
	PCB SWAC (mg/kg)	PAH SWAC (mg/kg)	Area (ft^2)		PCB SWAC (mg/kg)	PAH SWAC (mg/kg)	Sand Cover Area (ft^2)
Project Reach	**2.67**	**8.65**	**1,618,165**	**Project Reach**	**1.09**	**2.98**	
Dredge Area	**3.11**	**10.60**	**1,034,982**	**Dredge Area**	**0.65**	**1.73**	**376,856**
-Area 1	*0.91*	*2.00*		*-Area 1*	*0.91*	*2.00*	*-*
-Area 2	*1.05*	*11.11*		*-Area 2*	*0.38*	*0.65*	*111,696*
-Area 3	*5.00*	*12.25*		*-Area 3*	*0.77*	*2.40*	*265,160*

Proposed number of grids with sand: 26

Grid ID	PCB Avg (mg/kg)	PAH-13 Avg (mg/kg)	Square Footage	Sand Cover	Revised PCB[a]	Revised PAH-13[b]	Sand Cover Area (ft^2)
CS038	0.286	15.051	12,020	X	0.024	0.078	12020
CS039	0.874	0.522	16,168		0.874	0.522	0
CS040		6.703	11,127	X	0.024	0.078	11127
CS041	5.300	14.435	7,039	X	0.024	0.078	7039
CS042	2.208	2.601	8,653		2.208	2.601	0
CS043	0.848	11.689	13,203		0.848	11.689	0
CS044	4.640	1.957	20,458		4.640	1.957	0
CS045	0.314	15.146	12,703		0.314	15.146	0
CS046	0.019	13.438	13,094		0.019	13.438	0
CS047	1.230	6.153	14,513		1.230	6.153	0
CS048	0.289	8.165	12,868		0.289	8.165	0
CS049	1.590	39.718	14,418	X	0.024	0.078	14,418
CS050	1.230	24.554	18,520	X	0.024	0.078	18,520
CS051	0.496	0.841	11,014		0.496	0.841	0
CS052	12.570	6.941	16,581	X	0.024	0.078	16,581
CS053	1.570	0.119	13,305		1.570	0.119	0
CS054	5.350	4.840	10,734	X	0.024	0.078	10,734
CS055	36.800	1.207	10,411	X	0.024	0.078	10,411
CS056	2.000	5.164	7,928		2.000	5.164	0
CS057	2.235	6.261	16,109		2.235	6.261	0
CS058	0.015	0.018	7,251		0.015	0.018	0
CS059	0.372	0.286	7,893		0.372	0.286	0
CS060	0.892	0.795	7,581		0.892	0.795	0
CS061	15.076	0.404	18,797	X	0.024	0.078	18,797
CS062	0.276	0.368	10,834		0.276	0.368	0
CS063	7.015	5.807	10,506	X	0.024	0.078	10,506
CS064	0.094	0.057	10,624		0.094	0.057	0
CS065	1.516	92.550	13,288	X	0.024	0.078	13,288
CS066	0.132	0.317	10,740		0.132	0.317	0
CS067	1.110		16,388		1.110	0.000	0
CS068	5.457	3.280	14,789	X	0.024	0.078	14,789
CS069	14.100	1.844	20,660	X	0.024	0.078	20,660
CS070	7.945	30.153	12,644	X	0.024	0.078	12,644
CS071	7.433	26.676	16,641	X	0.024	0.078	16,641
CS072	0.094	26.615	13,398	X	0.024	0.078	13,398
CS073	4.010	1.670	16,794		4.010	1.670	0
CS074	2.824	25.496	15,938	X	0.024	0.078	15,938

TABLE 4

Post-dredge Sediment Surface Surface-weighted Average Concentration Data

Sheboygan River GLLA Remedial Action Cleanup Validation Report

Post-Dredge SWAC Values				Post-Dredge SWAC with Proposed Sand Cover			
	PCB SWAC (mg/kg)	**PAH SWAC (mg/kg)**	**Area (ft^2)**		**PCB SWAC (mg/kg)**	**PAH SWAC (mg/kg)**	**Sand Cover Area (ft^2)**
Project Reach	**2.67**	**8.65**	**1,618,165**	**Project Reach**	**1.09**	**2.98**	
Dredge Area	**3.11**	**10.60**	**1,034,982**	**Dredge Area**	**0.65**	**1.73**	**376,856**
-Area 1	*0.91*	*2.00*		*-Area 1*	*0.91*	*2.00*	*-*
-Area 2	*1.05*	*11.11*		*-Area 2*	*0.38*	*0.65*	*111,696*
-Area 3	*5.00*	*12.25*		*-Area 3*	*0.77*	*2.40*	*265,160*

Proposed number of grids with sand: 26

Grid ID	PCB Avg (mg/kg)	PAH-13 Avg (mg/kg)	Square Footage	Sand Cover	Revised PCB[a]	Revised PAH-13[b]	Sand Cover Area (ft^2)
CS075	4.980	46.228	19875	X	0.024	0.078	19875
CS076	6.141	10.432	13733	X	0.024	0.078	13,733
CS077	21.425	1.317	17188	X	0.024	0.078	17,188
CS078	3.130	5.038	12230		3.130	5.038	0
CS079	0.491	7.718	15868		0.491	7.718	0
CS080	2.410	14.656	6664		2.410	14.656	0
CS081	1.690	2.122	10891		1.690	2.122	0
Non-Dredge Area:	1.886	5.187	582,856.96		1.886	5.187	0

Notes:

mg/kg = milligrams per kilogram; ft^2 = square feet

[a] The laboratory method detection limit (MDL) for Total PCBs is 0.024 mg/kg; this value was used to represent the Total PCB concentration for sand cover.

[b] The sum of MDLs for the 13 PAH compounds is 0.078 mg/kg; this value was used to represent the Total PAH-13 concentration for sand cover.

	5 to <10 mg/kg PCB
	10 to <25 mg/kg PCB
	26 to <50 mg/kg PCB

	18 to <45 mg/kg PAH-13
	45 to <100 mg/kg PAH-13
	100 to <129 mg/kg PAH-13

TABLE 5
Sand Placement Bucket Test Summary
Sheboygan River GLLA Remedial Action Cleanup Validation Report

Date	Time	Test Number	Location		Measurement in Inches	
			X	Y	Port	Starboard
29-May-13	1430	1	n/a	n/a	5	
	1700	2	n/a	n/a	4.5	6.5
	1820	3	n/a	n/a	6	5
30-May-13	830	4	2571277	646542		6.75
	945	5	2571262	646563	4	4
	1050	6	2571246	646584	6	6
	1232	7	2571347	646532	6	6
	1508	8	2571338	646589	7	5
	1650	9	2571310	646627	7	5
31-May-13	830	10	n/a	n/a	5	6.5
	904	11	2571806	646023	--	--
	1029	12	2571800	646049	--	--
	1045	13	n/a	n/a	6	5
	1230	14	n/a	n/a	5	5
	1321	15	2571733	646032	--	--
	1323	16	2571731	646031	--	--
	1411	17	2571763	646026	--	--
	1428	18	2571688	646027	--	--
	1500	19	n/a	n/a	6.5	6
01-Jun-13	853	20	2571788	646083	5	5
	1008	21	2571776	646115	5	5
	1512	22	2571732	646083	5	6
02-Jun-13	1015	23	2571693	646213	--	--
	1140	24	2571668	646099	6.5	5.5
	1329	25	2571657	646141	5	6
	1545	26	2571676	646197	7	6
03-Jun-13	853	27	2571658	646253	5.5	5
	1126	28	2571578	646414		5
	1320	29	n/a	n/a	5	7
	1445	30	2571635	646327		6.5
	1627	31	2571625	646360	5	6.5
04-Jun-13	935	32	n/a	n/a	6	5
	1330	33	n/a	n/a		5
	1430	34	2571449	646539	--	--
	1830	35	n/a	n/a		6

TABLE 5
Sand Placement Bucket Test Summary
Sheboygan River GLLA Remedial Action Cleanup Validation Report

Date	Time	Test Number	Location		Measurement in Inches	
			X	Y	Port	Starboard
05-Jun-13	844	36	2571444	646612	5	6
	1015	37	n/a	n/a	5	6.5
	1310	38	2571386	646685	6.5	6
	1456	39	2571386	646611	6	6
	1655	40	2571354	646646	6	6
06-Jun-13	925	41	n/a	n/a	6	5
	1215	42	n/a	n/a	6	6
	1633	43	2571665	646445	5	6
07-Jun-13	930	44	n/a	n/a	6	5
	1050	45	n/a	n/a	5	5
10-Jun-13	1145	46	n/a	n/a	5	5
	1340	47	n/a	n/a	5	5
11-Jun-13	1615	48	n/a	n/a	5	6.5
	1715	49	n/a	n/a	5	5
12-Jun-13	1335	50	2572151	644670	5	5
	1703	51	2572434	644065	6	6
13-Jun-13	1036	52	2572530	644051	7	6
	1316	53	2572392	644072	--	--
	1437	54	2572359	644101	5	5
	1617	55	2572321	644129	5	5
14-Jun-13	1203	56	2571711	645624	6	6.5
	1335	57	n/a	n/a	6	6
	1616	58	n/a	n/a	5	6
15-Jun-13	849	59	2571769	645648	5	5
	1049	60	2571793	645587	6.5	6
	1514	61	2571826	645664	6	5
17-Jun-13	925	62	n/a	n/a	6.5	6.5
	1235	63	n/a	n/a	5	6
	1511	64	2571893	645613	5	5
	1730	65	n/a	n/a	5.5	6.5
	1841	66	2571800	645469	5.5	5

TABLE 5
Sand Placement Bucket Test Summary
Sheboygan River GLLA Remedial Action Cleanup Validation Report

Date	Time	Test Number	Location		Measurement in Inches	
			X	Y	Port	Starboard
18-Jun-13	858	67	2571787	645419	5	5
	1027	68	2571805	645382	5	5
	1146	69	2571817	645347	5	6
	1305	70	2571843	645323	5	5
	1307	71	2571830	645301	--	--
	1416	72	2571838	645268	5	5
	1543	73	2571846	645225	6	5
	1716	74	2571863	645174	6	5
	1841	75	2571800	645469	--	--
19-Jun-13	1219	76	2572046	644632	5	5
	1410	77	2572030	644698	5.5	5
	1610	78	2572014	644741	6	5.5
	1734	79	2571992	644789	5	6.5
20-Jun-13	842	80	2571968	644850	5	5
	1024	81	2571956	644875	6	5
	1303	82	2571945	644919	6	5
	1416	83	2571933	644953	5	5
	1515	84	2571926	644987	5	5
21-Jun-13	917	85	n/a	n/a	5	5
	1025	86	n/a	n/a	5	5
	1146	87	n/a	n/a	6	6
24-Jun-13	1212	88	n/a	n/a	6	6
	1310	89	n/a	n/a	5	5.5
	1440	90	n/a	n/a	6	6.5
	1620	91	n/a	n/a	6	5
25-Jun-13	805	92	n/a	n/a	6	6
	1000	93	n/a	n/a	6	5.5
	1119	94	n/a	n/a	5	5
	1212	95	2571903	645335	--	--
	1310	96	2571914	645306	5	5
	1440	97	2571930	645247	5	6
	1622	98	2571944	645205	--	
	1724	99	n/a	n/a	5	5

TABLE 5
Sand Placement Bucket Test Summary
Sheboygan River GLLA Remedial Action Cleanup Validation Report

Date	Time	Test Number	Location		Measurement in Inches	
			X	Y	Port	Starboard
26-Jun-13	902	100	n/a	n/a	5	5
	1015	101	n/a	n/a	5	6
	1340	102	2572172	644442	5	5
	1342	103	2572117	644698	--	--
	1515	104	n/a	n/a	5	5
	1710	105	2572232	644352	6	6
	1830	106	n/a	n/a	5	5
27-Jun-13	909	107	n/a	n/a	7	6
	1054	108	2572361	644193	5	5
	1223	109	2572395	644165	5	5
	1603	110	2572431	644135	7	5
	1820	111	2572473	644103	5	5
28-Jun-13	851	112	2572211	644489	5	5
	1010	113	2572232	644448	5	5
	1157	114	2572261	644394	6	5
	1315	115	2572281	644360	5	5.5
	1518	116	2572307	644322	7	6
	1735	117	2572398	644226	6	6
29-Jun-13	741	118	2572431	644196	5	5.5
	904	119	2572464	644172	5	6
	1022	120	2572500	644147	5.5	6.5
	1135	121	2572527	644121	6	6
	1351	122	2572271	644494	6.5	6
	1459	123	2572285	644459	5	6
	1609	124	n/a	n/a	5	6
	1745	125	2572328	644385	5	5
30-Jun-13	811	126	2572347	644348	6	6.5
	935	127	2572378	644314	5	6
	1132	128	2572411	644282	5	6
	1314	129	2572461	644246	5.5	6
	1444	130	2572490	644214	5.5	5.5
	1615	131	2572534	644183	5	6.5

TABLE 5
Sand Placement Bucket Test Summary
Sheboygan River GLLA Remedial Action Cleanup Validation Report

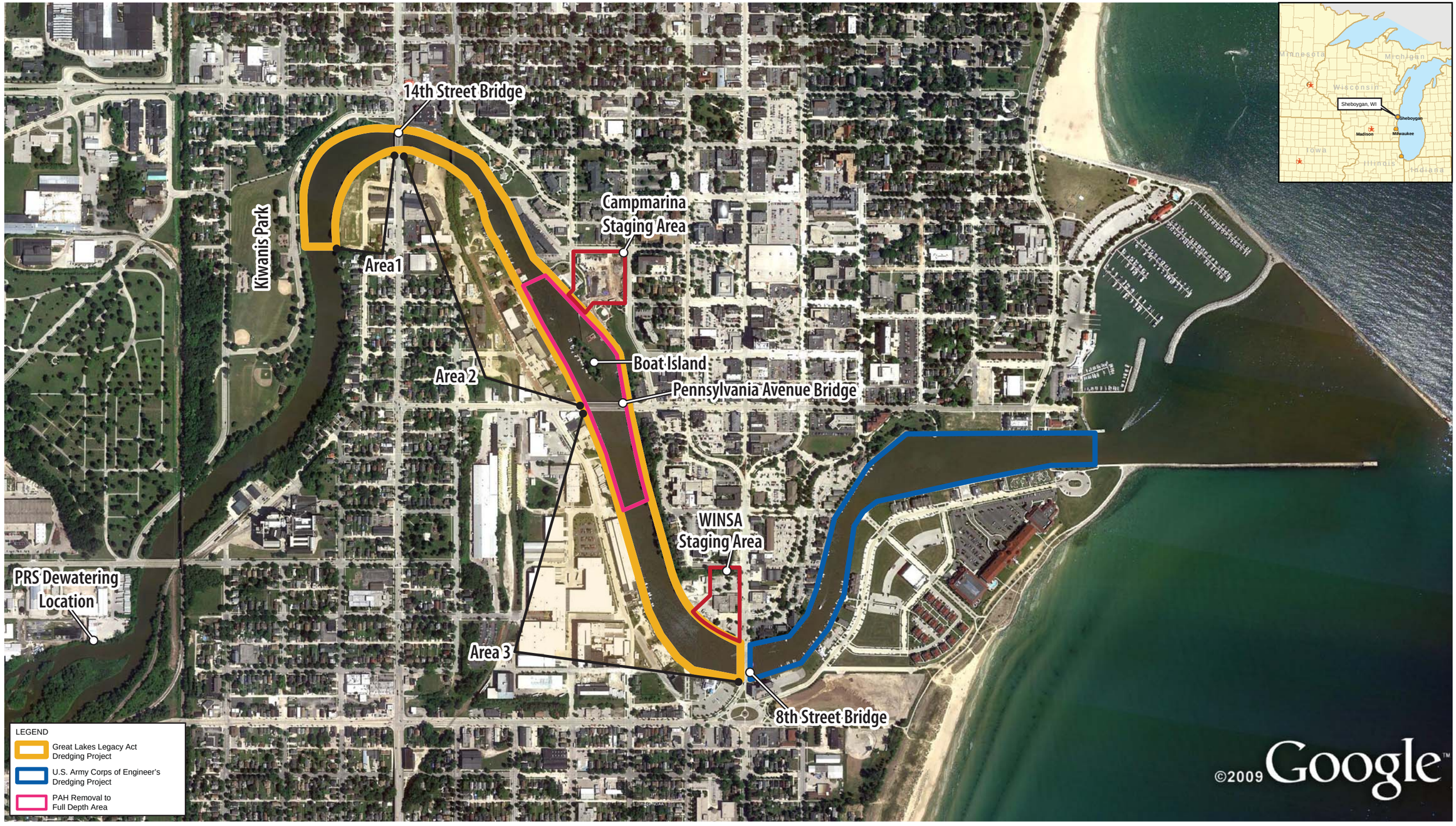
Date	Time	Test Number	Location		Measurement in Inches	
			X	Y	Port	Starboard
01-Jul-13	1157	132	2572599	644197	5	5
	1332	133	2572559	644224	5	5
	1507	134	2572500	644222	6	5.5
	1617	135	2572472	644248	6	5
	1741	136	2572437	644270	6	5
02-Jul-13	731	137	2572436	644332	6.5	6.5
	847	138	2572376	644335	6.5	6
	1013	139	2572352	644362	6	6
	1202	140	2572601	644210	5.5	5.5
	1307	141	2572597	644267	6	5.5
	1428	142	2572533	644263	6	6
	1532	143	n/a	n/a	6	6.5
	1637	144	2572479	644303	6.5	6
	1741	145	n/a	n/a	6	6
03-Jul-13	752	146	n/a	n/a	5.5	6.5
	856	147	n/a	n/a	6	5
	1003	148	n/a	n/a	6	6
08-Jul-13	1236	149	2572317	644431	6.5	5
	1421	150	2572310	644493	5	5
	1601	151	2572280	644520	6.5	5
09-Jul-13	948	152	n/a	n/a	6	5
	1109	153	n/a	n/a	6	6
	1244	154	n/a	n/a	5.5	5
	1354	155	n/a	n/a	5	5.5
	1505	156	n/a	n/a	6	5
10-Jul-13	1036	157	n/a	n/a	5.5	5

Notes:

'--' = Indicates location were no bucket test was performed. Location was collected to mark barge location or inadvertantly collected by operator.

n/a = Cooridates of bucket test locations not available and not shown on Figure 7

Figures



North

0 600 1,200

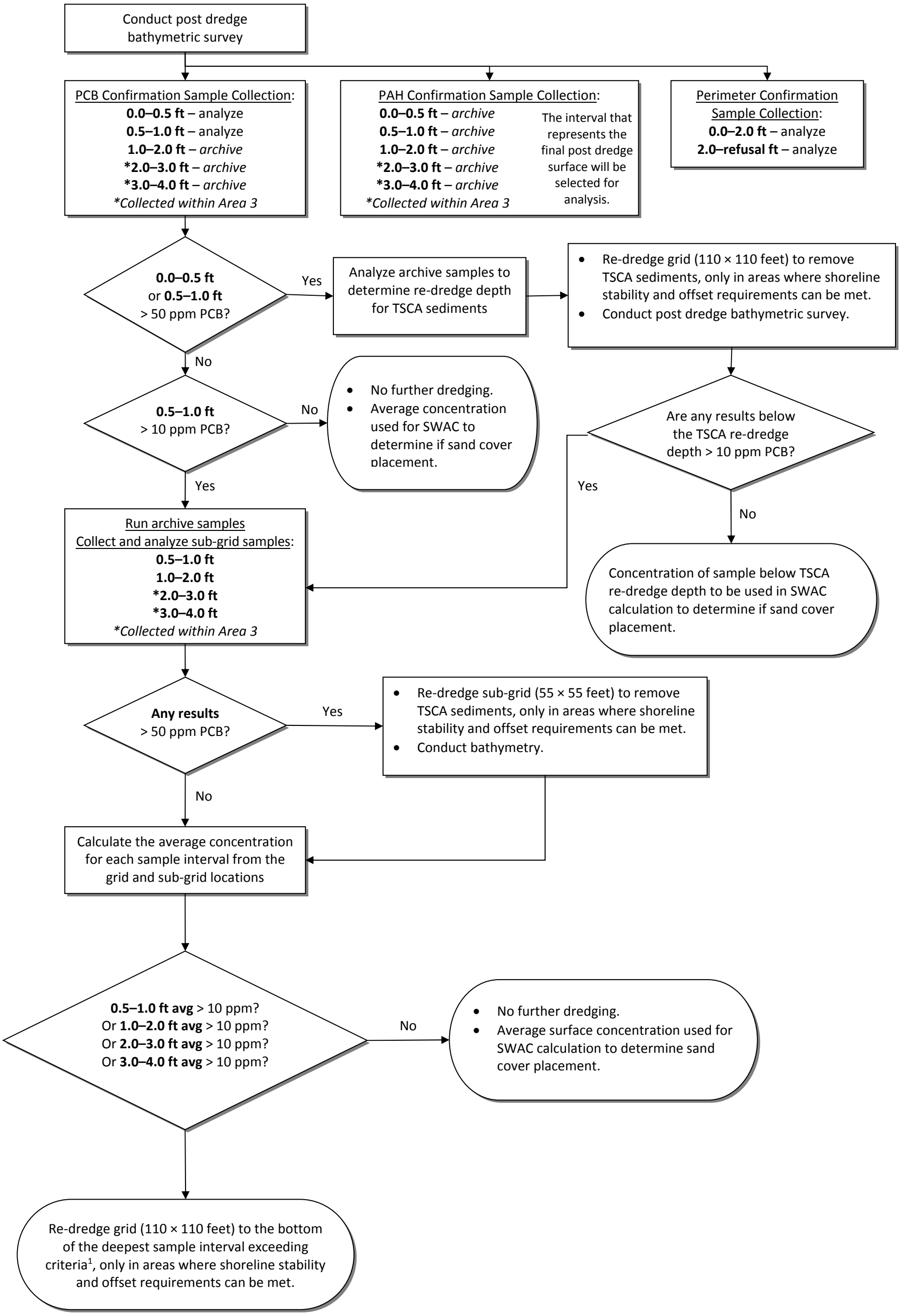
Approximate scale in feet

Figure 1
Site Map
Sheboygan River GLNPO
Sediment Remediation – Basis of Design
Sheboygan, WI

CH2MHILL

FIGURE 2

Post-dredge Confirmation Sampling Flow Chart



Notes:
Decisions are subject to change based on field conditions, the site manager will be notified and deviations will be documented.
[1] If there is not a sample interval that represents the sediment surface after redredge occurs, a surface sample will be collected and used for SWAC calculation.

GENERAL SHEET NOTES

1. BATHYMETRY ELEVATIONS REPRESENT POST DREDGE CONDITIONS AS SURVEYED ON DEC 21, 2012. ELEVATIONS ARE FEET BELOW LAKE MICHIGAN LOW WATER DATUM (LWD)

KIWANIS PARK
KIWANIS PARK ROAD
N 15TH STREET
N 14TH STREET
WISCONSIN AVENUE
UPSTREAM PROJECT LIMIT
MATCH LINE STA 26+00

CS001 CS002 CS003 CS004 CS005 CS006 CS007 CS008B CS009 CS010 CS011 CS012 CS013 CS014
S12 S14
SD-1 SD-2 SD-3 SD-4 SD-5 SD-6 SD-7
T01-1 T01-2 T01-3 T02-1 T02-2 T02-3 T03-1 T03-2 T03-3 T04-1 T04-2 T04-3 T05-1 T05-2 T05-3
1 2 3 4 5 6 7 8 9 10 11 12 13 14

10+00 11+00 12+00 13+00 14+00 15+00 16+00 17+00 18+00 19+00 20+00 21+00 22+00 23+00 24+00 25+00 26+00

LEGEND

- CS001 — GRID SAMPLE LOCATION
- CS001A — SUB-GRID SAMPLE LOCATION
- S07 — SHORELINE SAMPLE LOCATION
- T01-1 — TSCA SAMPLE LOCATION
- SD-1 — AREA 1 SHORE DELINEATION SAMPLE LOCATION
- 14 — DREDGE MANAGEMENT UNIT NUMBER
- NO DREDGE AREA

N
0 50 100 150
1"= 50'

NO.	DATE	REVISION	BY	APVD
DSGN	C.NICKEL	DR D.SCHAUER	CHK H.RADDEMANN	APVD

LOWER RIVER AND INNER HARBOR OF
THE SHEBOYGAN RIVER AREA OF CONCERN
US ENVIRONMENTAL PROTECTION AGENCY
SHEBOYGAN, WISCONSIN

CH2MHILL®

CIVIL

REMEDIAL ACTION
SAMPLE LOCATIONS
STATION 10+00 TO STATION 26+00

VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING.
0 1"

DATE	MARCH 2013
PROJ	437752
DWG	FIGURE 3.1
SHEET	1 of 5

FIGURE 3

FILENAME: 005-F-039_437752.dgn PLOT DATE: 2013\07\25 PLOT TIME: 10:46:31 AM

GENERAL SHEET NOTES

1. BATHYMETRY ELEVATIONS REPRESENT POST DREDGE CONDITIONS AS SURVEYED ON DEC 21, 2012. ELEVATIONS ARE FEET BELOW LAKE MICHIGAN LOW WATER DATUM (LWD)

MATCH LINE STA 26+00

MATCH LINE STA 40+00

RAILROAD

N 14TH STREET

WISCONSIN AVENUE

N COMMERCE STREET

N 13TH STREET

LEGEND

- CS001 — GRID SAMPLE LOCATION
- CS001A — SUB-GRID SAMPLE LOCATION
- S07 — SHORELINE SAMPLE LOCATION
- 14 — DREDGE MANAGEMENT UNIT NUMBER
- NO DREDGE AREA

0 50 100 150
1"= 50'

NO.	DATE	REVISION	BY	APVD
DSGN	C.NICKEL	DR D.SCHAUER	CHK H.RADDEMANN	APVD

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SHEBOYGAN, WISCONSIN

CH2MHILL®

CIVIL

REMEDIAL ACTION
SAMPLE LOCATIONS
STATION 26+00 TO STATION 40+00

VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING.
0 1"

DATE	MARCH 2013
PROJ	43775
DWG	FIGURE 3.2
SHEET	2 of 5

FIGURE 3

FILENAME: 005-F-040_43775.dgn PLOT DATE: 2013\07\25 PLOT TIME: 10:50:10 AM

GENERAL SHEET NOTES

1. BATHYMETRY ELEVATIONS REPRESENT POST DREDGE CONDITIONS AS SURVEYED ON DEC 21, 2012. ELEVATIONS ARE FEET BELOW LAKE MICHIGAN LOW WATER DATUM (LWD)

MATCH LINE STA 40+00

MATCH LINE STA 52+00

S22 S24 S30 S31 S32 S33 S34 S36 S37 S39 S43 S44

CS022 CS023 CS024 CS025 CS026 CS027 CS028A CS028B CS028-1 CS029 CS030A CS030B CS030-1 CS030TL CS030RE CS030 CS030C CS030D CS031 CS032A CS032-1 CS032RE CS032TL CS032 CS032B CS032C CS032D CS033 CS034A CS034 CS034B CS034-1 CS034C CS034D CS035 CS036A CS036 CS036B CS036-1 CS036C CS036D CS037 CS038A CS038 CS038B CS038-1 CS038C CS038D CS039 CS040A CS040B CS040 CS040-1 CS040-2 CS040C CS040D CS041 CS042 CS042A CS042B CS043 CS044 DS040-1A DS040-2 DS040-3 DS040-4 DS040-2

22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44

40+00 41+00 42+00 43+00 44+00 45+00 46+00 47+00 48+00 49+00 50+00 51+00 52+00

N COMMERCE STREET

PENNSYLVANIA AVENUE

S COMMERCE STREET

CENTER STREET

LEGEND

- CS001 — GRID SAMPLE LOCATION
- CS01B — SUB-GRID SAMPLE LOCATION
- S07 — SHORELINE SAMPLE LOCATION
- 14 — DREDGE MANAGEMENT UNIT NUMBER
- NO DREDGE AREA

N

0 50 100 150

1"= 50'

NO.	DATE	DSGN	DR	CHK	APVD	BY	REVISION
		C.NICKEL	D.SCHAUER	H RADDEMANN	APVD		

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SHEBOYGAN, WISCONSIN

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REMEDIAL ACTION
SAMPLE LOCATIONS
STATION 40+00 TO STATION 52+00

FIGURE 3

VERIFY SCALE

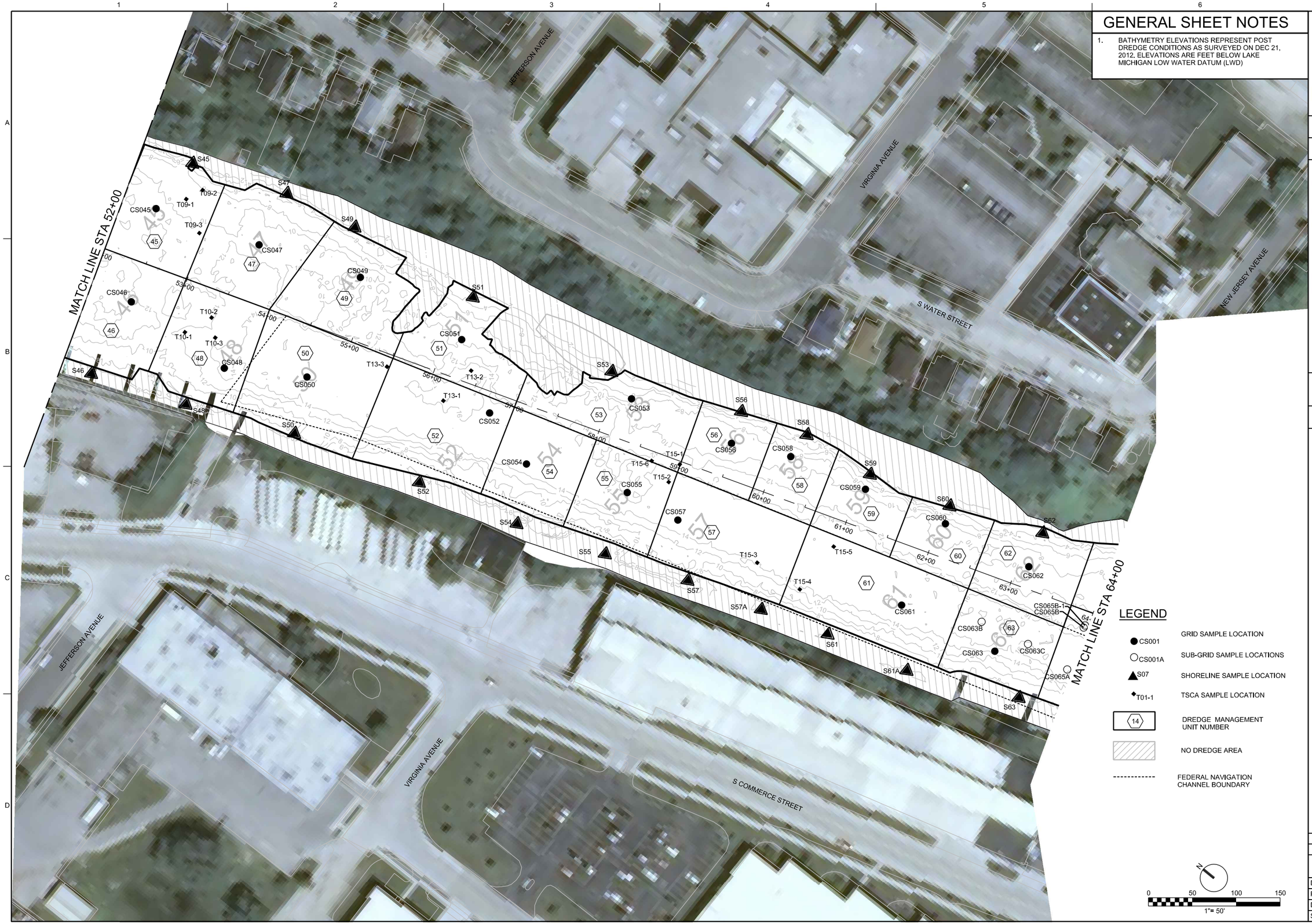
BAR IS ONE INCH ON ORIGINAL DRAWING.
0 1"

DATE	MARCH 2013
PROJ	437752
DWG	FIGURE 3.3
SHEET	3 of 5

FILENAME: 005-F-041_437752.dgn PLOT DATE: 2013\07\25 PLOT TIME: 10:51:58 AM

GENERAL SHEET NOTES

1. BATHYMETRY ELEVATIONS REPRESENT POST DREDGE CONDITIONS AS SURVEYED ON DEC 21, 2012. ELEVATIONS ARE FEET BELOW LAKE MICHIGAN LOW WATER DATUM (LWD)



LEGEND

- CS001 — GRID SAMPLE LOCATION
- CS001A — SUB-GRID SAMPLE LOCATIONS
- S07 — SHORELINE SAMPLE LOCATION
- T01-1 — TSCA SAMPLE LOCATION
- 14 — DREDGE MANAGEMENT UNIT NUMBER
- NO DREDGE AREA
- FEDERAL NAVIGATION CHANNEL BOUNDARY

0 50 100 150
1"= 50'

NO.	DATE	REVISION	BY	APVD
DSGN	C.NICKEL	DR D.SCHAUER	CHK H.RADDEMANN	APVD

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THE SHEBOYGAN RIVER AREA OF CONCERN
US ENVIRONMENTAL PROTECTION AGENCY
SHEBOYGAN, WISCONSIN

CH2MHILL®

CIVIL

REMEDIAL ACTION
SAMPLE LOCATIONS
STATION 52+00 TO STATION 64+00

FIGURE 3

VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING.
0 1"

DATE	MARCH 2013
PROJ	437752
DWG	FIGURE 3.4
SHEET	4 of 5

FILENAME: 005-F-042_437752.dgn PLOT DATE: 2013\07\25 PLOT TIME: 10:56:59 AM

GENERAL SHEET NOTES

1. BATHYMETRY ELEVATIONS REPRESENT POST DREDGE CONDITIONS AS SURVEYED ON DEC 21, 2012. ELEVATIONS ARE FEET BELOW LAKE MICHIGAN LOW WATER DATUM (LWD)

NEW JERSEY AVENUE

S 8TH STREET

DOWN STREAM PROJECT LIMIT

STA 64+00

MATCH LINE

S COMMERCE STREET

MARYLAND AVENUE

ILLINOIS AVENUE

CS064 CS065 CS065C-1 CS065C CS065D CS066 CS067 CS067A CS068 CS069 CS070 CS071 CS071A CS071B CS071C CS071D CS072 CS073 CS074 CS075 CS076 CS078 CS079 CS080 CS081

S64 S66 S67 S69 S70 S71 S72 S73 S75 S77 S80

T19-1 T19-2 T19-3 T20-1 T20-2 T20-3 T21-1 T21-2 T21-3 T23-1 T23-1-B T23-2 T23-2-B T23-3 T23-3-B T23-4 T23-4-B T26-1 T26-2 T26-3

64+00 65+00 66+00 67+00 68+00 69+00 70+00 71+00 72+00 73+00 74+00 75+00 76+00

LEGEND

- CS001 — GRID SAMPLE LOCATION
- CS001A — SUB-GRID SAMPLE LOCATIONS
- S07 — SHORELINE SAMPLE LOCATION
- T01-1 — TSCA SAMPLE LOCATION
- 14 — DREDGE MANAGEMENT UNIT NUMBER
- NO DREDGE AREA
- FEDERAL NAVIGATION CHANNEL BOUNDARY

N

0 50 100 150

1"= 50'

NO.	DATE	REVISION	BY	APVD
DSGN	C.NICKEL	DR D.SCHAUER	CHK H.RADDEMANN	APVD

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SHEBOYGAN, WISCONSIN

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CIVIL

REMEDIAL ACTION
SAMPLE LOCATIONS
STATION 64+00 TO STATION 75+00

VERIFY SCALE

BAR IS ONE INCH ON ORIGINAL DRAWING.
0 1"

DATE	MARCH 2013
PROJ	437752
DWG	FIGURE 3.5
SHEET	5 of 5

FIGURE 3

FILENAME: 005-F-043_437752.dgn PLOT DATE: 2013\07\25 PLOT TIME: 10:58:28 AM

GENERAL SHEET NOTES

1. BATHYMETRY ELEVATIONS REPRESENT POST DREDGE CONDITIONS AS SURVEYED ON DEC 21, 2012. ELEVATIONS ARE FEET BELOW LAKE MICHIGAN LOW WATER DATUM (LWD)
2. SAMPLE CONCENTRATIONS REPRESENT UPPERMOST POST DREDGE INTERVAL.

KIWANIS PARK
KIWANIS PARK ROAD
N 15TH STREET
N 14TH STREET
WISCONSIN AVENUE
UPSTREAM PROJECT LIMIT
MATCH LINE STA 26+00

CS001 0.0276 J
CS002 0.887
T01-1◆ T01-2◆ T01-3◆ T01-C 0.0312 U COMPOSITE OF T01-1, T01-2, T01-3
CS003 1.52
CS004 2.58
CS005 0.345
CS006 0.932
CS007 0.05 J
CS008B 0.446
CS009 0.0522 J
CS010 0.594
CS011 0.407
CS012 0.524
CS013 2.86
CS014 0.182
S12 0.741
S14 1.4

10+00 11+00 12+00 13+00 14+00 15+00 16+00 17+00 18+00 19+00 20+00 21+00 22+00 23+00 24+00 25+00 26+00

LEGEND
DMU PCB CONCENTRATION (ppm)

- <1
- 1-5
- 5-10
- 10-25
- 26 - <50
- = OR > 50

LEGEND

- CS001 GRID SAMPLE LOCATION
- CS001A SUB-GRID SAMPLE LOCATION
- S07 SHORELINE SAMPLE LOCATION
- 14 DREDGE MANAGEMENT UNIT NUMBER
- NO DREDGE AREA

N
0 50 100 150
1"= 50'

NO.	DATE	DR	REVISION	CHK	BY
DSGN	C.NICKEL	D.SCHAUER		H RADDEMANN	APVD

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SHEBOYGAN, WISCONSIN

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POST DREDGE PCB SAMPLE AND DMU SWAC CONCENTRATIONS STATION 10+00 TO STATION 26+00

FIGURE 4

VERIFY SCALE	
BAR IS ONE INCH ON ORIGINAL DRAWING. 0 1"	
DATE	MARCH 2013
PROJ	437752
DWG	FIGURE 4.1
SHEET	1 of 5

FILENAME: 005-F-029_437752.dgn PLOT DATE: 2013\03\21 PLOT TIME: 1:58:56 PM

GENERAL SHEET NOTES

1. BATHYMETRY ELEVATIONS REPRESENT POST DREDGE CONDITIONS AS SURVEYED ON DEC 21, 2012. ELEVATIONS ARE FEET BELOW LAKE MICHIGAN LOW WATER DATUM (LWD)
2. SAMPLE CONCENTRATIONS REPRESENT UPPERMOST POST DREDGE INTERVAL.

MATCH LINE STA 26+00

CS015
0.186

S15
1.17

CS016
0.152

S16
0.525

CS017
0.546

CS018
0.0303 J

CS019
0.0304 U

S19B
2.19

CS020
0.444

S19A
0.075 J

CS021
0.335

MATCH LINE STA 40+00

RAILROAD

N COMMERCE STREET

N 14TH STREET

WISCONSIN AVENUE

N 13TH STREET

LEGEND

DMU PCB CONCENTRATION (ppm)

- <1
- 1-5
- 5-10
- 10-25
- 26- <50
- = OR > 50

LEGEND

- CS001 — GRID SAMPLE LOCATION
- CS001A — SUB-GRID SAMPLE LOCATION
- S07 — SHORELINE SAMPLE LOCATION
- 14 — DREDGE MANAGEMENT UNIT NUMBER
- NO DREDGE AREA

0 50 100 150
1"= 50'

NO.	DATE	DSGN	DR	CHK	APVD	BY	REVISION
		C.NICKEL	D.SCHAUER	H.RADDEMANN	APVD		

LOWER RIVER AND INNER HARBOR OF THE SHEBOYGAN RIVER AREA OF CONCERN
US ENVIRONMENTAL PROTECTION AGENCY
SHEBOYGAN, WISCONSIN

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POST DREDGE PCB SAMPLE AND DMU SWAC CONCENTRATIONS STATION 26+00 TO STATION 40+00

VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING.
0 1"

DATE	MARCH 2013
PROJ	43775
DWG	FIGURE 4.2
SHEET	2 of 5

FIGURE 4

FILENAME: 005-F-030_43775.dgn PLOT DATE: 2013\03\21 PLOT TIME: 2:00:22 PM

GENERAL SHEET NOTES

1. BATHYMETRY ELEVATIONS REPRESENT POST DREDGE CONDITIONS AS SURVEYED ON DEC 21, 2012. ELEVATIONS ARE FEET BELOW LAKE MICHIGAN LOW WATER DATUM (LWD)
2. SAMPLE CONCENTRATIONS REPRESENT UPPERMOST POST DREDGE INTERVAL.

MATCH LINE STA 40+00

MATCH LINE STA 52+00

S22 0.0505
S24 0.0587 J
S30 0.807
CS022 0.563
CS024 0.0845 J
CS026 0.67
CS028A 4.31
CS028-1 0.067 J
CS028B 0.106 J
CS030-1 0.0293 U
CS032-1 0.0521 J
CS034-1 0.339
S32 0.21
S34 0.153
CS036-1 1.51 J
S36 1.11
CS038-1 0.286
CS040-1 0.512 J
CS041 5.3
S43 2.48
CS043 0.848
CS023 1.79
CS025 0.0503 J
CS027 1.15
CS029 11.4
CS031 0.0334 U
CS033 0.373
CS035 0.876
CS037 1.06
S37 0.0296 U
S31 0.237
S33 0.117 J
CS039 0.874
CS042B 4.19
CS042 1.94
CS042A 0.493
S39 11.3
CS044 4.64
S44 1.21

41+00 42+00 43+00 44+00 45+00 46+00 47+00 48+00 49+00 50+00 51+00

N COMMERCE STREET
S COMMERCE STREET
PENNSYLVANIA AVENUE
CENTER STREET

LEGEND

DMU PCB CONCENTRATION (ppm)

- <1
- 1-5
- 5-10
- 10-25
- 26- <50
- = OR > 50

LEGEND

- CS001 — GRID SAMPLE LOCATION
- CS01B — SUB-GRID SAMPLE LOCATION
- S07 — SHORELINE SAMPLE LOCATION
- 14 — DREDGE MANAGEMENT UNIT NUMBER
- NO DREDGE AREA

N

0 50 100 150
1"= 50'

NO.	DATE	DSGN	DR	CHK	APVD	BY	APVD
		C.NICKEL	D.SCHAUER	H.RADDEMANN			

REVISION

LOWER RIVER AND INNER HARBOR OF THE SHEBOYGAN RIVER AREA OF CONCERN
US ENVIRONMENTAL PROTECTION AGENCY
SHEBOYGAN, WISCONSIN

CH2MHILL®

CIVIL

POST DREDGE PCB SAMPLE AND DMU SWAC CONCENTRATIONS STATION 40+00 TO STATION 52+00

VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING.
0 1"

DATE	MARCH 2013
PROJ	437752
DWG	FIGURE 4.3
SHEET	3 of 5

FIGURE 4

FILENAME: 005-F-031_437752.dgn PLOT DATE: 2013\03\21 PLOT TIME: 2:02:25 PM

GENERAL SHEET NOTES

1. BATHYMETRY ELEVATIONS REPRESENT POST DREDGE CONDITIONS AS SURVEYED ON DEC 21, 2012. ELEVATIONS ARE FEET BELOW LAKE MICHIGAN LOW WATER DATUM (LWD)
2. SAMPLE CONCENTRATIONS REPRESENT UPPERMOST POST DREDGE INTERVAL.

MATCH LINE STA 52+00

MATCH LINE STA 64+00

JEFFERSON AVENUE

VIRGINIA AVENUE

S WATER STREET

NEW JERSEY AVENUE

S COMMERCE STREET

S45 24.1
CS045 0.314
S47 0.613
CS047 1.23
S49 0.386
CS049 1.59
S51 0.547
CS051 0.496
S53 0.879
CS053 1.57
S56 0.433
CS056 2
S58 0.042 J
CS058 0.0294 U
S59 0.0357 U
CS059 0.372
S60 0.166 J
CS060 0.892
S62 0.0311 U
CS062 0.276
CS063B 15.4
CS063 0.534
CS063C 5.11
CS063B-1 0.0302 U
CS065 4.87
S63 6.31
S61A 1.19
S61 1.14
CS061 43.2
T15-5 0.909
T15-4 1.12
T15-3 3.17
CS057 1.3
S57A 3.61
S57 37.9
S55 3.85
CS055 36.8
S54 7.92
CS054 5.35
CS052 18.8
T13-C 6.34 COMPOSITE OF T13-1, T13-2, T13-3
T13-1
T13-2
T13-3
S52 36.6
S50 0.0811 J
CS050 1.23
S48 9.5
CS048 0.289
CS046 0.0378 U
S46 11.7
45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64

53+00 54+00 55+00 56+00 57+00 58+00 59+00 60+00 61+00 62+00 63+00

LEGEND

DMU PCB CONCENTRATION (ppm)

- <1
- 1-5
- 5-10
- 10-25
- 26- <50
- = OR > 50

LEGEND

- CS001 — GRID SAMPLE LOCATION
- CS001A — SUB-GRID SAMPLE LOCATIONS
- S07 — SHORELINE SAMPLE LOCATION
- 14 — DREDGE MANAGEMENT UNIT NUMBER
- T01-1 — TSCA SAMAPLE LOCATION
- NO DREDGE AREA
- FEDERAL NAVIGATION CHANNEL BOUNDARY

0 50 100 150
1"= 50'

NO.	DATE	DSGN	DR	CHK	APVD	BY	REVISION
		C.NICKEL	D.SCHAUER	H.RADDEMANN	APVD		

CH2MHILL®

CIVIL

POST DREDGE PCB SAMPLE AND DMU SWAC CONCENTRATIONS STATION 52+00 TO STATION 64+00

LOWER RIVER AND INNER HARBOR OF THE SHEBOYGAN RIVER AREA OF CONCERN
US ENVIRONMENTAL PROTECTION AGENCY
SHEBOYGAN, WISCONSIN

VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING.
0 1"

DATE	MARCH 2013
PROJ	437752
DWG	FIGURE 4.4
SHEET	4 of 5

FIGURE 4

FILENAME: 005-F-032_437752.dgn PLOT DATE: 2013\03\21 PLOT TIME: 2:03:57 PM

GENERAL SHEET NOTES

1. BATHYMETRY ELEVATIONS REPRESENT POST DREDGE CONDITIONS AS SURVEYED ON DEC 21, 2012. ELEVATIONS ARE FEET BELOW LAKE MICHIGAN LOW WATER DATUM (LWD)
2. SAMPLE CONCENTRATIONS REPRESENT UPPERMOST POST DREDGE INTERVAL.

NEW JERSEY AVENUE
S 8TH STREET
DOWN STREAM PROJECT LIMIT
MATCH LINE STA 64+00
S COMMERCE STREET
MARYLAND AVENUE
ILLINOIS AVENUE

CS064 0.094 J
CS065 0.029 U
CS065C-1 2.54
CS065D 0.138 J
CS066 0.132 J
CS067A 0.955
CS068 0.713
CS069 14.1
CS070 1.59
CS071 0.353
CS071A 1.8
CS071B 17.6
CS071C 4.61
CS071D 12.8
CS072 0.0937 J
CS073 4.01
CS074 0.0369 U
CS075 4.98
CS076 0.0401 U
CS077 1.45
CS078 3.13
CS079 0.491
CS080 2.41
CS081 1.69

S64 0.963
S66 0.209
S67 1.97
S69 11.1
S70 1.45
S71 6.36
S72 2.89
S73 0.535
S75 12.1
S77 37.5
S80 0.0633 J

T19-1 0.767
T19-2 2.5
T19-3 0.219
T20-1
T20-2
T20-3
T20-C 10.2 COMPOSITE OF T20-1, T20-2, T20-3
T21-1
T21-2
T21-3
T21-C 14.3 COMPOSITE OF T21-1, T21-2, T21-3
T23-2 5.63
T23-3 18.3
T23-4-B 0.104 J
T26-1
T26-2
T26-3
T26-C 41.4 Composite of T26-1, T26-2, T26-3

64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81
64+00, 65+00, 66+00, 67+00, 68+00, 69+00, 70+00, 71+00, 72+00, 73+00, 74+00, 75+00, 76+00

LEGEND

DMU PCB CONCENTRATIONS (ppm)

- <1
- 1-5
- 5-10
- 10-25
- 26- <50
- = OR > 50

LEGEND

- CS001 — GRID SAMPLE LOCATION
- CS001A — SUB-GRID SAMPLE LOCATIONS
- S07 — SHORELINE SAMPLE LOCATION
- 14 — DREDGE MANAGEMENT UNIT NUMBER
- T01-1 — TSCA SAMAPLE LOCATION
- NO DREDGE AREA
- FEDERAL NAVIGATION CHANNEL BOUNDARY

N

0 50 100 150
1"= 50'

NO.	DATE	DSGN	DR	CHK	APVD
		C NICKEL	D SCHAUER	H RADDEMANN	APVD

REVISION BY

LOWER RIVER AND INNER HARBOR OF THE SHEBOYGAN RIVER AREA OF CONCERN
US ENVIRONMENTAL PROTECTION AGENCY
SHEBOYGAN, WISCONSIN

CH2MHILL®

CIVIL

POST DREDGE PCB SAMPLE AND DMU SWAC CONCENTRATIONS STATION 64+00 TO STATION 75+00

VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING.
0 1"

DATE	MARCH 2013
PROJ	437752
DWG	FIGURE 4.5
SHEET	5 of 5

FIGURE 4

FILENAME: 005-F-033_437752.dgn PLOT DATE: 2013\03\21 PLOT TIME: 2:05:50 PM

GENERAL SHEET NOTES

1. BATHYMETRY ELEVATIONS REPRESENT POST DREDGE CONDITIONS AS SURVEYED ON DEC 21, 2012. ELEVATIONS ARE FEET BELOW LAKE MICHIGAN LOW WATER DATUM (LWD)
2. SAMPLE CONCENTRATIONS REPRESENT UPPERMOST POST DREDGE INTERVAL.

KIWANIS PARK
KIWANIS PARK ROAD
N 15TH STREET
N 14TH STREET
WISCONSIN AVENUE
UPSTREAM PROJECT LIMIT
MATCH LINE STA 26+00

CS001 0.0615
CS002 0.0564
CS003 0.2398
CS004 0.658
CS005 0.049
CS006 0.1642
CS007 0.5901 U
CS008 0.5785 J
CS009 0.5611 U
CS010 26.7
CS011 0.7967
CS012 1.1644
CS013 0.3671
CS014 0.5579
S12 0.6005 U
S14 0.3505

10+00 11+00 12+00 13+00 14+00 15+00 16+00 17+00 18+00 19+00 20+00 21+00 22+00 23+00 24+00 25+00 26+00

LEGEND
DMU PAH CONCENTRATIONS (ppm)

- < 18
- 18-45
- 45-100
- 100- <129
- = OR > 129

LEGEND

- CS001 — GRID SAMPLE LOCATION
- CS001A — SUB-GRID SAMPLE LOCATION
- S07 — SHORELINE SAMPLE LOCATION
- T01-1 — TSCA SAMAPLE LOCATION
- 14 — DREDGE MANAGEMENT UNIT NUMBER
- NO DREDGE AREA

N

0 50 100 150
1"= 50'

NO.	DATE	REVISION	DR	CHK	APVD
DSGN	C.NICKEL	D.SCHAUER		H RADDEMANN	APVD

BY

LOWER RIVER AND INNER HARBOR OF
THE SHEBOYGAN RIVER AREA OF CONCERN
US ENVIRONMENTAL PROTECTION AGENCY
SHEBOYGAN, WISCONSIN

CH2MHILL®

CIVIL

POST DREDGE
DMU PAH SWAC CONCENTRATIONS
STATION 10+00 TO STATION 26+00

VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING. 0 1"

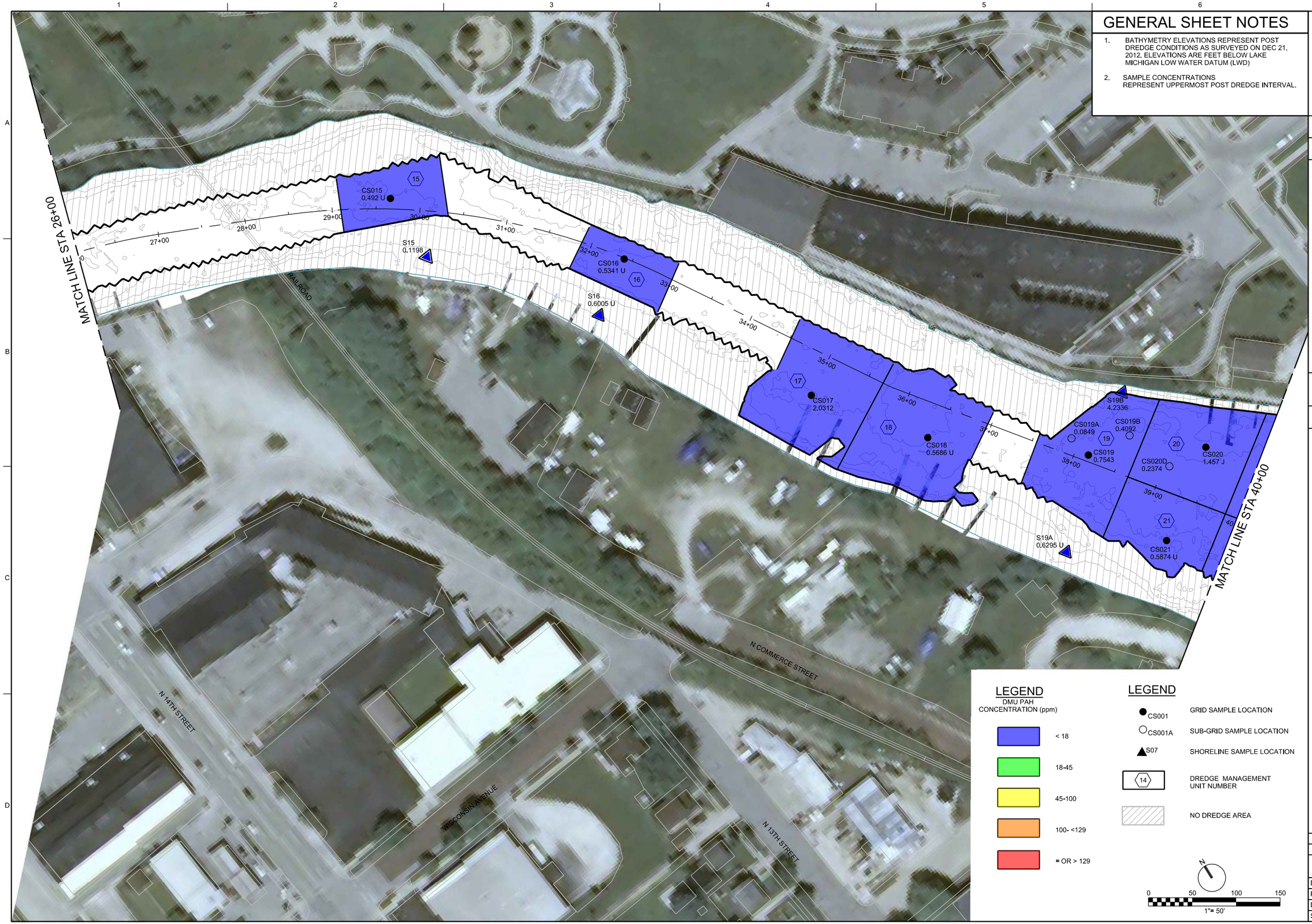
DATE	MARCH 2013
PROJ	437752
DWG	FIGURE 5.1
SHEET	1 of 5

FIGURE 5

FILENAME: 005-F-019_437752.dgn PLOT DATE: 2013\03\21 PLOT TIME: 1:50:34 PM

GENERAL SHEET NOTES

1. BATHYMETRY ELEVATIONS REPRESENT POST DREDGE CONDITIONS AS SURVEYED ON DEC 21, 2012. ELEVATIONS ARE FEET BELOW LAKE MICHIGAN LOW WATER DATUM (LWD)
2. SAMPLE CONCENTRATIONS REPRESENT UPPERMOST POST DREDGE INTERVAL.



LEGEND

DMU PAH CONCENTRATION (ppm)

- < 18
- 18-45
- 45-100
- 100- <129
- = OR > 129

LEGEND

- CS001 — GRID SAMPLE LOCATION
- CS001A — SUB-GRID SAMPLE LOCATION
- S07 — SHORELINE SAMPLE LOCATION
- 14 — DREDGE MANAGEMENT UNIT NUMBER
- NO DREDGE AREA

0 50 100 150
1"= 50'

NO.	DATE	REVISION	BY	APVD
DSGN	C.NICKEL	DR	D.SCHAUER	CHK	H RADDEMANN	APVD

LOWER RIVER AND INNER HARBOR OF
THE SHEBOYGAN RIVER AREA OF CONCERN
US ENVIRONMENTAL PROTECTION AGENCY
SHEBOYGAN, WISCONSIN

CH2MHILL®

CIVIL

POST DREDGE
DMU PAH SWAC CONCENTRATIONS
STATION 26+00 TO STATION 40+00

VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING.
0 1"

DATE	MARCH 2013
PROJ	43775
DWG	FIGURE 5.2
SHEET	2 of 5

FIGURE 5

FILENAME: 005-F-020_437752.dgn PLOT DATE: 2013\03\21 PLOT TIME: 1:51:50 PM

GENERAL SHEET NOTES

1. BATHYMETRY ELEVATIONS REPRESENT POST DREDGE CONDITIONS AS SURVEYED ON DEC 21, 2012. ELEVATIONS ARE FEET BELOW LAKE MICHIGAN LOW WATER DATUM (LWD)
2. SAMPLE CONCENTRATIONS REPRESENT UPPERMOST POST DREDGE INTERVAL.

MATCH LINE STA 40+00

MATCH LINE STA 52+00

S22 75.271
S24 43.776
S30 9.679 J
S31 0.6396 U
S32 2.4306
S33 0.5619 U
S34 2.1824
S36 7.3638
S37 0.5565 U
S39 0.2525
S43 33.946
S44 78.063

CS022 3.693
CS023 0.9422
CS024 1.5545
CS025 0.6155 U
CS026 2.525
CS027 0.5692
CS028A 280.6
CS028B 79.18
CS028-1 1.0956
CS029 0.6438
CS030-1 0.8613
CS030C 21.146
CS030D 2.2547
CS031 0.6649 U
CS032-1 3.0813 J
CS032 CS032C 1.8834
CS032D 43.171
CS033 0.6145 U
CS034-1 14.432
CS035 0.636 U
CS036-1 127.11
CS036D 68.023
CS036C 3.7245 J
CS037 0.7736 U
CS038-1 7.4083
CS038D 3.993
CS038C 33.753
CS039 0.5217
CS040-1A 795.2
CS040-4 48.299
CS040-2 0.5157
CS040-3 22.016
CS040-1 0.045 J
CS040D 7.3577
CS040C 5.641
CS041 14.435
CS042B 3.6
CS042 2.737
CS042A 1.4646
CS043 11.689
CS044 1.9571

22 24 26 28 30 32 34 36 38 40 23 25 27 29 31 33 35 37 39 42 41 43 44

41+00 42+00 43+00 44+00 45+00 46+00 47+00 48+00 49+00 50+00 51+00 52+00

N COMMERCE STREET
S COMMERCE STREET
PENNSYLVANIA AVENUE
CENTER STREET

LEGEND
DMU PAH CONCENTRATION (ppm)

- < 18
- 18-45
- 45-100
- 100- <129
- = OR > 129

LEGEND

- CS001 — GRID SAMPLE LOCATION
- CS01B — SUB-GRID SAMPLE LOCATION
- S07 — SHORELINE SAMPLE LOCATION
- 14 — DREDGE MANAGEMENT UNIT NUMBER
- NO DREDGE AREA

0 50 100 150
1"= 50'

NO.	DATE	REVISION	BY	APVD
DSGN	C.NICKEL	DR D.SCHAUER	CHK H.RADDEMANN	APVD

LOWER RIVER AND INNER HARBOR OF
THE SHEBOYGAN RIVER AREA OF CONCERN
US ENVIRONMENTAL PROTECTION AGENCY
SHEBOYGAN, WISCONSIN

CH2MHILL®

CIVIL

POST DREDGE DMU PAH SWAC CONCENTRATIONS STATION 40+00 TO STATION 52+00

VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING.
0 1"

DATE	MARCH 2013
PROJ	437752
DWG	FIGURE 5.3
SHEET	3 of 5

FIGURE 5

FILENAME: 005-F-021_437752.dgn PLOT DATE: 2013\03\21 PLOT TIME: 1:54:43 PM

GENERAL SHEET NOTES

1. BATHYMETRY ELEVATIONS REPRESENT POST DREDGE CONDITIONS AS SURVEYED ON DEC 21, 2012. ELEVATIONS ARE FEET BELOW LAKE MICHIGAN LOW WATER DATUM (LWD)
2. SAMPLE CONCENTRATIONS REPRESENT UPPERMOST POST DREDGE INTERVAL.

MATCH LINE STA 52+00

MATCH LINE STA 64+00

JEFFERSON AVENUE

VIRGINIA AVENUE

S WATER STREET

NEW JERSEY AVENUE

S COMMERCE STREET

S45 11.591
S47 18.469
S49 10.898
CS045 15.146
CS047 6.153
CS049 39.718
CS046 13.4378
S46 6.83 J
CS048 8.1653 J
S48 0.1548 J
CS050 24.554
S50 0.4473
S51 2.5617
CS051 0.8413
S52 8.0345
CS052 6.9409
S53 10.4314
CS053 0.1191
S54 0.1444
CS054 4.84
S55 0.3155
CS055 1.2069
S56 1.074
CS056 5.164
S57 0.2912
CS057 6.2611
S58 0.0222
CS058 0.0179
S59 2.3592
CS059 0.2856
S60 2.3971
CS060 0.7951
S57A 0.2515
CS061 0.4036
S61 1.3124
S61A 32.769
S62 2.0587
CS062 0.3681
CS063 5.807
S63 0.5822 J

45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64

53+00 54+00 55+00 56+00 57+00 58+00 59+00 60+00 61+00 62+00 63+00

LEGEND

DMU PAH CONCENTRATION (ppm)

- < 18
- 18-45
- 45-100
- 100- <129
- = OR > 129

LEGEND

- CS001 — GRID SAMPLE LOCATION
- CS001A — SUB-GRID SAMPLE LOCATIONS
- S07 — SHORELINE SAMPLE LOCATION
- 14 — DREDGE MANAGEMENT UNIT NUMBER
- T01-1 — TSCA SAMAPLE LOCATION
- NO DREDGE AREA
- FEDERAL NAVIGATION CHANNEL BOUNDARY

N

0 50 100 150

1"= 50'

NO.	DATE	REVISION	BY
DSGN	C.NICKEL	DR D.SCHAUER	CHK H RADDEMANN	APVD

CH2MHILL®

LOWER RIVER AND INNER HARBOR OF THE SHEBOYGAN RIVER AREA OF CONCERN
US ENVIRONMENTAL PROTECTION AGENCY
SHEBOYGAN, WISCONSIN

CIVIL

POST DREDGE DMU PAH SWAC CONCENTRATIONS STATION 52+00 TO STATION 64+00

VERIFY SCALE

BAR IS ONE INCH ON ORIGINAL DRAWING.
0 1"

DATE	MARCH 2013
PROJ	437752
DWG	FIGURE 5.4
SHEET	4 of 5

FIGURE 5

FILENAME: 005-F-022_437752.dgn PLOT DATE: 2013\03\21 PLOT TIME: 1:55:58 PM

GENERAL SHEET NOTES

1. BATHYMETRY ELEVATIONS REPRESENT POST DREDGE CONDITIONS AS SURVEYED ON DEC 21, 2012. ELEVATIONS ARE FEET BELOW LAKE MICHIGAN LOW WATER DATUM (LWD)
2. SAMPLE CONCENTRATIONS REPRESENT UPPERMOST POST DREDGE INTERVAL.

NEW JERSEY AVENUE

S 8TH STREET

DOWN STREAM PROJECT LIMIT

MATCHLINE STA 64+00

S COMMERCE STREET

MARYLAND AVENUE

ILLINOIS AVENUE

CS064 0.0572 — 64
S64 57.087
S66 43.445
CS066 0.3171 — 66
CS065 92.55 — 65
67
CS067 1.1434
68
CS068 3.2803
69
CS069 1.8436
S69 1.1334
70
S70 58.775
CS070 30.153
71
CS071 26.676
S71 0.6874
72
S72 96.145
CS072 26.615
73
CS073 1.6699
S73 54.49
74
CS074 25.496
75
CS075 46.228
S75 2.1237
76
CS076 10.432
77
CS077 1.3173
S77 14.061
78
CS078 5.038
79
CS079 7.7179
80
CS080 14.656
S80 92.147
81
CS081 2.1217

64+00 65+00 66+00 67+00 68+00 69+00 70+00 71+00 72+00 73+00 74+00 75+00 76+00

T23-3

LEGEND

LEGEND
DMU PAH CONCENTRATION (ppm)

- < 18
- 18-45
- 45-100
- 100- <129
- = OR > 129

- CS001 — GRID SAMPLE LOCATION
- CS001A — SUB-GRID SAMPLE LOCATIONS
- S07 — SHORELINE SAMPLE LOCATION
- 14 — DREDGE MANAGEMENT UNIT NUMBER
- T01-1 — TSCA SAMAPLE LOCATION
- NO DREDGE AREA
- FEDERAL NAVIGATION CHANNEL BOUNDARY

N

0 50 100 150
1"= 50'

NO.	DATE	REVISION	DR	CHK	BY
DSGN	C NICKEL	D SCHAUER	H RADDEMANN	APVD	APVD

CH2MHILL®

LOWER RIVER AND INNER HARBOR OF THE SHEBOYGAN RIVER AREA OF CONCERN
US ENVIRONMENTAL PROTECTION AGENCY
SHEBOYGAN, WISCONSIN

CIVIL

POST DREDGE DMU PAH SWAC CONCENTRATIONS STATION 64+00 TO STATION 75+00

VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING.
0 1"

DATE	MARCH 2013
PROJ	437752
DWG	FIGURE 5.5
SHEET	5 of 5

FIGURE 5

FILENAME: 005-F-023_437752.dgn PLOT DATE: 2013\03\21 PLOT TIME: 1:57:13 PM

GENERAL SHEET NOTES

1. BATHYMETRY ELEVATIONS REPRESENT POST DREDGE CONDITIONS AS SURVEYED ON DEC 21, 2012. ELEVATIONS ARE FEET BELOW LAKE MICHIGAN LOW WATER DATUM (LWD)
2. A 0.5 FOOT THICK SAND COVER IS PROPOSED IN AREAS AS SHOWN. THEREFORE ELEVATIONS SHOWN WITHIN SAND COVER AREAS WILL BE RAISED APPROXIMATELY 0.5 FEET ONCE SAND PLACEMENT OCCURS IN THE DESIGNATED AREAS.

STORM SEWER

STORM SEWER

UNDERGROUND UTILITY LINE TO BOAT ISLAND

MATCH LINE STA 40+00

MATCH LINE STA 52+00

41+00 42+00 43+00 44+00 45+00 46+00 47+00 48+00 49+00 50+00 51+00

N COMMERCE STREET

PENNSYLVANIA AVENUE

S COMMERCE STREET

CENTER STREET

LEGEND

- 14 — DREDGE MANAGEMENT UNIT BOUNDARY AND NUMBER
- PROPOSED SAND COVER PLACEMENT AREA
- NO DREDGE AREA

N

0 50 100 150

1"= 50'

NO.	DATE	REVISION	BY	APVD
DSGN	H RADDEMANN	DR D.SCHAUER	CHK H RADDEMANN	APVD

LOWER RIVER AND INNER HARBOR OF THE SHEBOYGAN RIVER AREA OF CONCERN
US ENVIRONMENTAL PROTECTION AGENCY
SHEBOYGAN, WISCONSIN

CH2MHILL®

CIVIL

PROPOSED SAND COVER PLACEMENT
STATION 40+00 TO STATION 52+00

VERIFY SCALE

BAR IS ONE INCH ON ORIGINAL DRAWING. 0 1"

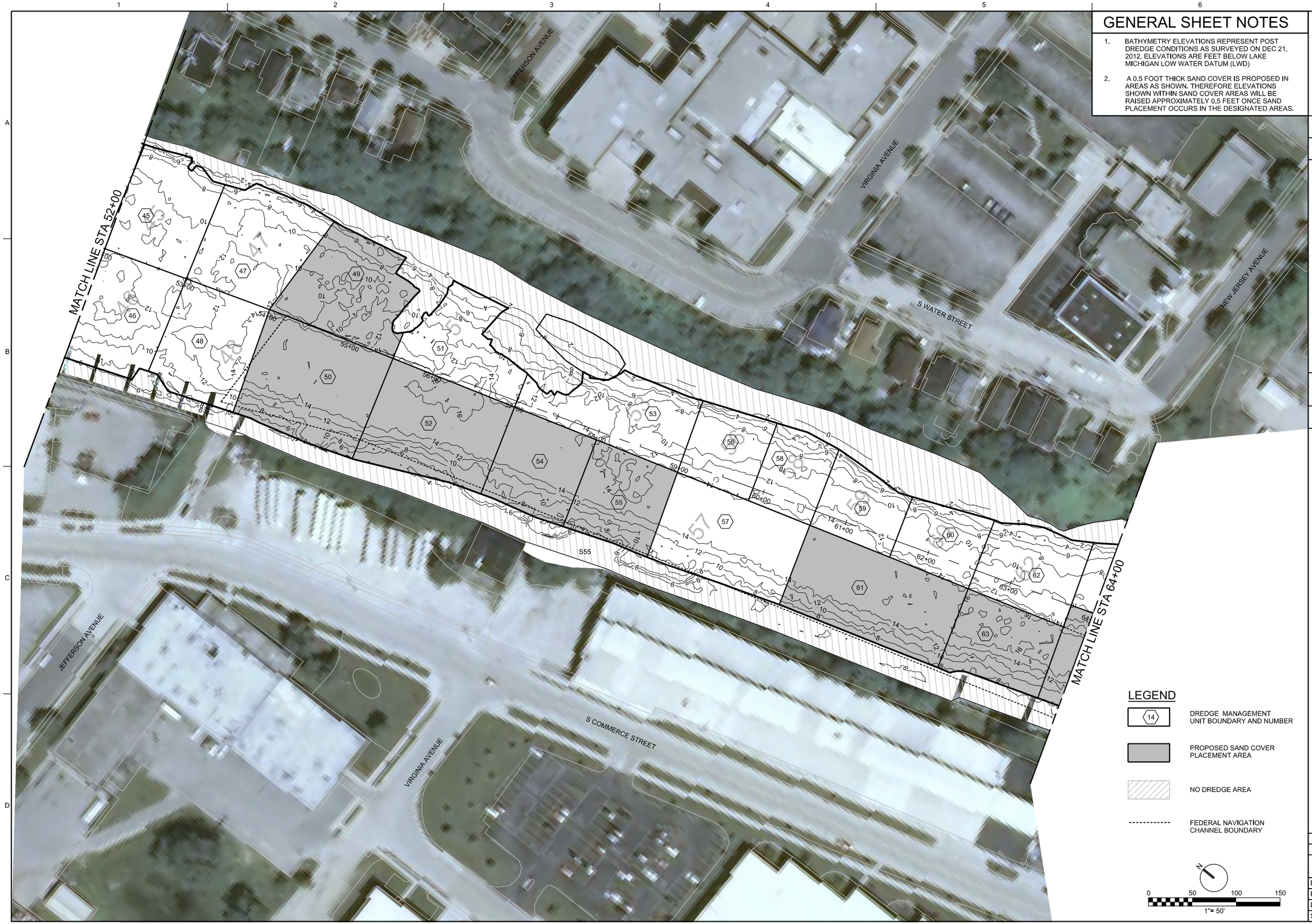
DATE	AUGUST 2013
PROJ	437752
DWG	FIGURE-6
SHEET	1 of 3

FIGURE 6

FILENAME: 005-F-001_437752.dgn PLOT DATE: 2013\08\02 PLOT TIME: 3:56:45 PM

GENERAL SHEET NOTES

1. BATHYMETRY ELEVATIONS REPRESENT POST DREDGE CONDITIONS AS SURVEYED ON DEC 21, 2012. ELEVATIONS ARE FEET BELOW LAKE MICHIGAN LOW WATER DATUM (LWD)
2. A 0.5 FOOT THICK SAND COVER IS PROPOSED IN AREAS AS SHOWN. THEREFORE ELEVATIONS SHOWN WITHIN SAND COVER AREAS WILL BE RAISED APPROXIMATELY 0.5 FEET ONCE SAND PLACEMENT OCCURS IN THE DESIGNATED AREAS.



LEGEND

- 14 — DREDGE MANAGEMENT UNIT BOUNDARY AND NUMBER
- PROPOSED SAND COVER PLACEMENT AREA
- NO DREDGE AREA
- FEDERAL NAVIGATION CHANNEL BOUNDARY

N

0 50 100 150

1"= 50'

NO.	DATE	REVISION	BY	APVD
DSGN	H RADDEMANN	DR D.SCHAUER	CHK H RADDEMANN	APVD

LOWER RIVER AND INNER HARBOR OF
THE SHEBOYGAN RIVER AREA OF CONCERN
US ENVIRONMENTAL PROTECTION AGENCY
SHEBOYGAN, WISCONSIN

CH2MHILL®

CIVIL

PROPOSED SAND COVER PLACEMENT
STATION 52+00 TO STATION 64+00

VERIFY SCALE

BAR IS ONE INCH ON ORIGINAL DRAWING.
0 1"

DATE	AUGUST 2013
PROJ	437752
DWG	FIGURE-6
SHEET	2 of 3

FIGURE 6

FILENAME: 005-F-002_437752.dgn PLOT DATE: 2013\08\02 PLOT TIME: 3:58:08 PM

GENERAL SHEET NOTES

1. BATHYMETRY ELEVATIONS REPRESENT POST DREDGE CONDITIONS AS SURVEYED ON DEC 21, 2012. ELEVATIONS ARE FEET BELOW LAKE MICHIGAN LOW WATER DATUM (LWD)
2. A 0.5 FOOT THICK SAND COVER IS PROPOSED IN AREAS AS SHOWN. THEREFORE ELEVATIONS SHOWN WITHIN SAND COVER AREAS WILL BE RAISED APPROXIMATELY 0.5 FEET ONCE SAND PLACEMENT OCCURS IN THE DESIGNATED AREAS.

NEW JERSEY AVENUE
S 8TH STREET
DOWN STREAM PROJECT LIMIT
COMM
OH ELECTRIC
UNDERGROUND ELECTRIC
MATCH LINE STA 64+00
S COMMERCE STREET
MARYLAND AVENUE
ILLINOIS AVENUE

LEGEND

- 14 — DREDGE MANAGEMENT UNIT BOUNDARY AND NUMBER
- PROPOSED SAND COVER PLACEMENT AREA
- NO DREDGE AREA
- FEDERAL NAVIGATION CHANNEL BOUNDARY

0 50 100 150
1"= 50'

NO.	DATE	REVISION	BY	APVD
DSGN	H RADDEMANN	DR D.SCHAUER	CHK H RADDEMANN	APVD

LOWER RIVER AND INNER HARBOR OF
THE SHEBOYGAN RIVER AREA OF CONCERN
US ENVIRONMENTAL PROTECTION AGENCY
SHEBOYGAN, WISCONSIN

CH2MHILL®

CIVIL

PROPOSED SAND COVER PLACEMENT
STATION 64+00 TO STATION 75+00

VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING.
0 1"

DATE	AUGUST 2013
PROJ	437752
DWG	FIGURE-6
SHEET	3 of 3

FIGURE 6

FILENAME: 005-F-003_437752.dgn PLOT DATE: 2013\08\02 PLOT TIME: 4:00:40 PM

UPLAND OPERABLE UNIT
CAMP MARINA MGP SITE

N WATER ST.
WISCONSIN AVE.
CENTER AVE.
US POST OFFICE
MANHOLE
STORM SEWER, MAIN
ELECTRIC, UG-MAIN
Electric Line
SAN. SEWER, MAIN
Sanitary Sewer
Storm Sewer
24" Storm Sewer
CATCH BASIN
PENNSYLVANIA AVE.
COMMERCE ST.
MATCH LINE 52+00
40+00
41+00
42+00
43+00
44+00
45+00
46+00
47+00
48+00
49+00
50+00
51+00
52

NOTES:
Drawing shows Clamvision "bites" or coverage of sand areas

Utility survey conducted and provided by American Surveying and Engineering. Data collected on June 29, 2012. Figure 3 of CH2M HILL's Basis of Design Report was referenced for utility depths. Depths not verified.

Alliant Energy's buried electric line near STA 66+00 located by Daar Engineering Inc.

Legend:
- Sand Cover Mark
- Proposed Sand Cover Boundary

DRAFT-NOT FOR CONSTRUCTION

Horizontal Scale
0' 50' 100' 150' 200'

RYBA MARINE CONSTRUCTION CO.
CHEBOYGAN, MI

NO.	DATE	REVISION	BY	APPR.

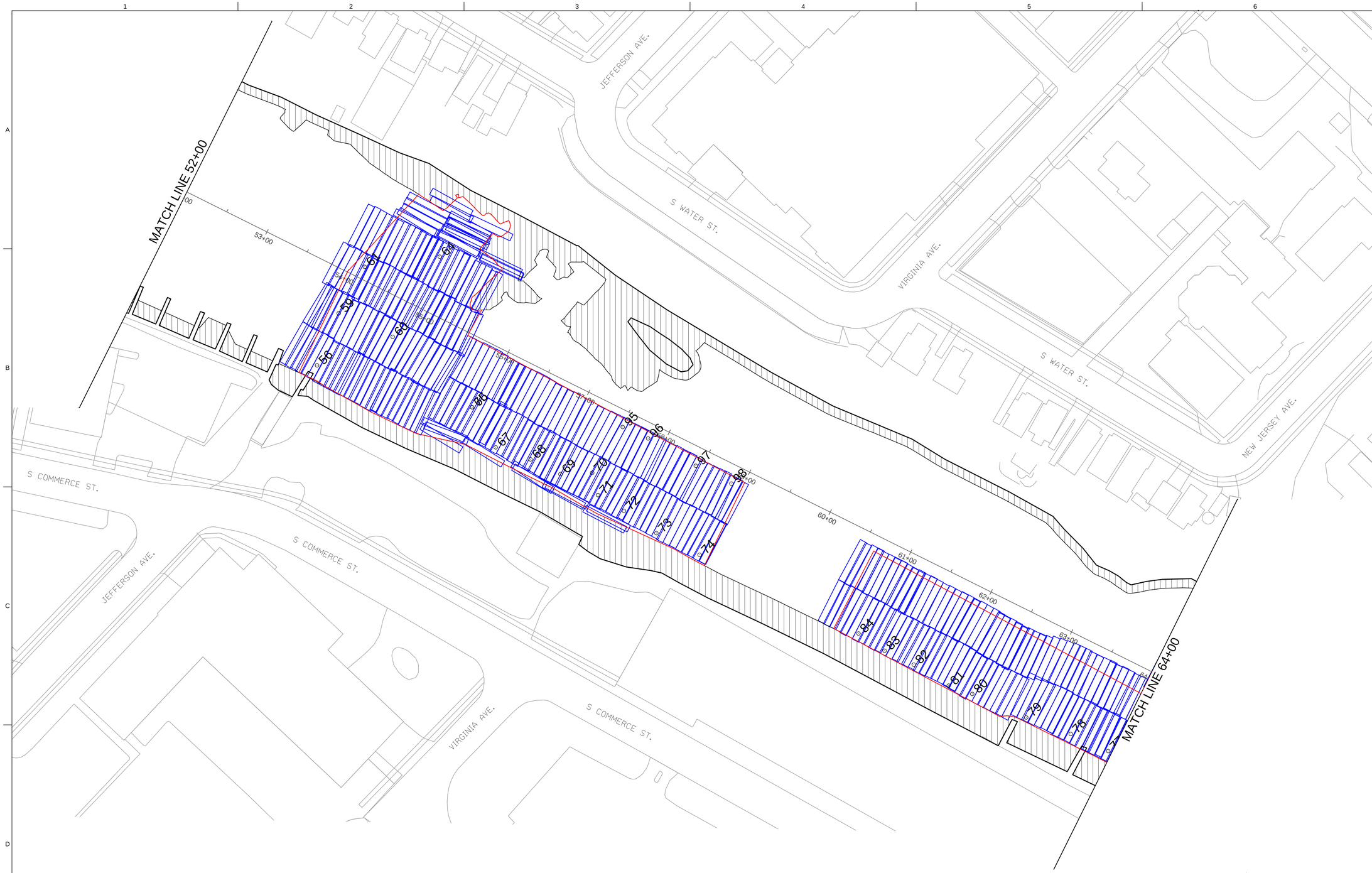
RYBA-TERRA CONTRACTING

RYBA-TERRA CONTRACTING, A JOINT VENTURE
5787 STADIUM DRIVE
KALAMAZOO, MI 49009
(269) 375-9595

SAND COVER COVERAGE
STATION 40+00 TO STATION 52+00

SHEET NUMBER:
1
1 OF 3

FIGURE 7



NOTES:
Drawing shows Clamvision "bites" or coverage of sand areas

Utility survey conducted and provided by American Surveying and Engineering. Data collected on June 29, 2012. Figure 3 of CH2M HILL's Basis of Design Report was referenced for utility depths. Depths not verified.

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0' 50' 100' 150' 200'

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NO.	DATE	REVISION	BY	APPR.

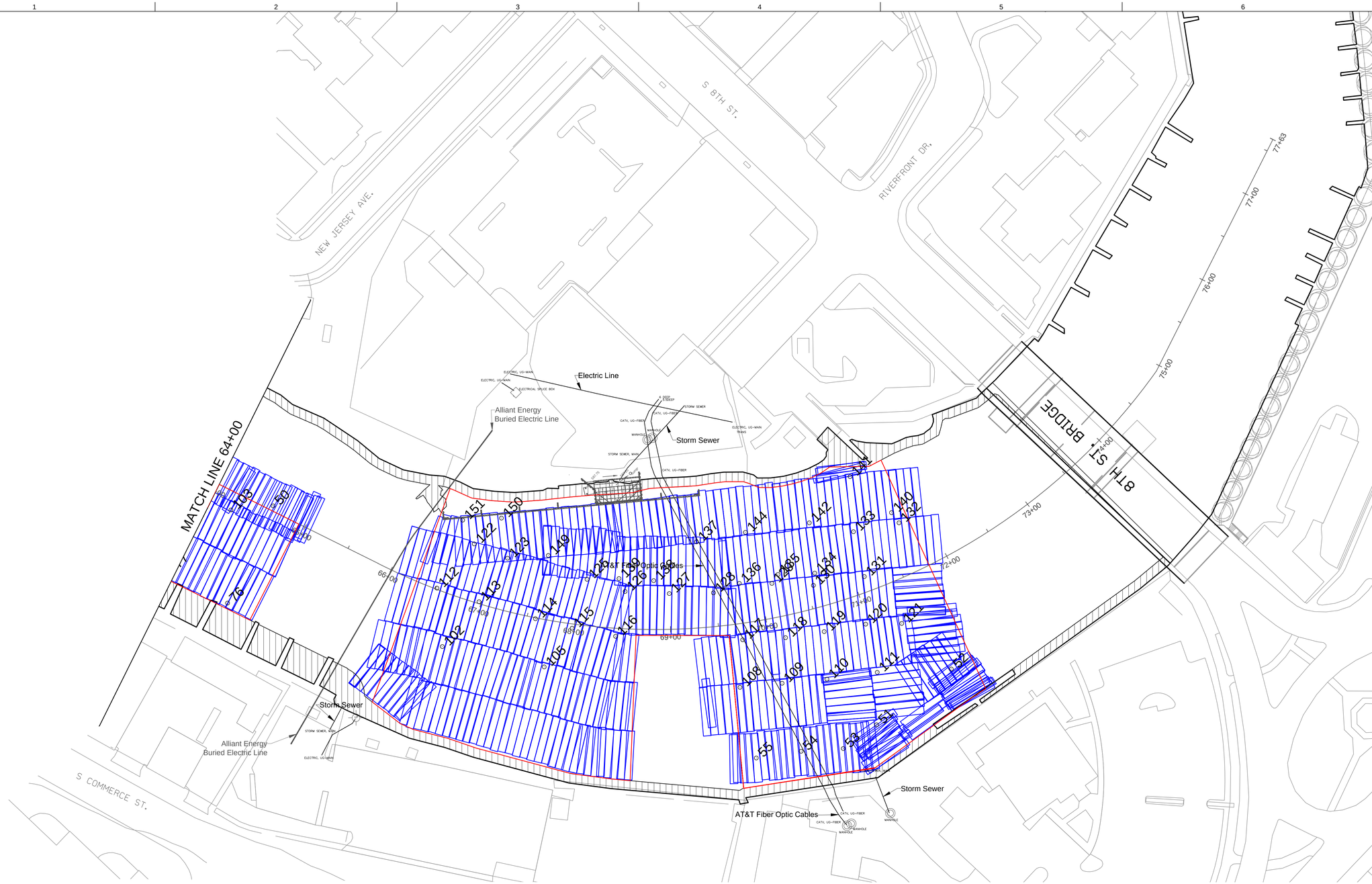
RYBA-TERRA CONTRACTING

RYBA-TERRA CONTRACTING, A JOINT VENTURE
5787 STADIUM DRIVE
KALAMAZOO, MI 49009
(269) 375-9595

SAND COVER COVERAGE
STATION 52+00 TO STATION 64+00

SHEET NUMBER:
2
2 OF 3

FIGURE 7



NOTES:
Drawing shows Clamvision "bites" or coverage of sand areas

Utility survey conducted and provided by American Surveying and Engineering. Data collected on June 29, 2012. Figure 3 of CH2M HILL's Basis of Design Report was referenced for utility depths. Depths not verified.

Alliant Energy's buried electric line near STA 66+00 located by Daar Engineering Inc.

Legend:
- Sand Cover Mark
- Proposed Sand Cover Boundary

DRAFT-NOT FOR CONSTRUCTION

Horizontal Scale
0' 50' 100' 150' 200'

RYBA MARINE CONSTRUCTION CO. CHEBOYGAN, MI

NO.	DATE	REVISION	BY	APPR.
	1/15/2013	RECORD DOCUMENTS		

RYBA-TERRA CONTRACTING

RYBA-TERRA CONTRACTING, A JOINT VENTURE
5787 STADIUM DRIVE
KALAMAZOO, MI 49009
(269) 375-9595

SAND COVER COVERAGE
STATION 64+00 TO STATION 75+00

SHEET NUMBER: 3

3 OF 3

FIGURE 7

Appendix A
Sediment Core Logs

Included on CD.

SEDIMENT CORE LOG ACRONYMS

SHEBOYGAN RIVER
GREAT LAKES LEGACY ACT
REMEDIAL ACTION

Grain Size		Color	Softness/Density	Plasticity/Sorting	Organic Matter	Odor	Other
Clay		LBr- Light Brown	VS - Very Soft	NP - Non-Plastic	TOM - Trace Organic Matter	VSlOd - Very Slight Odor	TS - Trace Shells
Silt		Br - Brown	S - Soft	SP - Slight Plasticity	LOM - Little Organic Matter	SlOd - Slight Odor	LS - Little Shells
		MBr - Medium Brown	F - Firm	MP - Medium Plasticity	SOM - Some Organic Matter	MOd - Moderate Odor	SS - Some Shells
		LRBr - Light Reddish Brown	ST - Stiff	HP - High Plasticity	% OM - Percent Organic Matter	StOd - Strong Odor	SF - Shell Fragments
		RBr - Reddish Brown	VST - Very Stiff			VStOd - Very Strong Odor	TSF - Trace Shell Fragments
		LGBr - Light Greyish Brown	H - Hard				LSF - Little Shell Fragments
		GBr - Greyish Brown					SSF - Some Shell Fragments
Sand	VFGS - Very Fine Grained Sand	MGBr - Medium Greyish Brown	VL - Very Loose	PS - Poorly Sorted			TSASF - Trace Shells and Shell Fragments
	TVFGS - Trace Very Fine Grained Sand	DGBr - Dark Greyish Brown	L - Loose	WS - Well Sorted			LSASF - Little Shells and Shell Fragments
	FGS - Fine Grained Sand	VLG - Very Light Grey	M - Medium	WG - Well Graded			SSASF - Some Shells and Shell Fragments
	TFGS - Trace Fine Grained Sand	LG - Light Grey	D - Dense				SA - Same As
	LFGS - Little Fine Grained Sand	G - Grey	VD - Very Dense				SAA - Same As Above
	SFGS - Some Fine Grained Sand	MG - Medium Grey					TSCA - Toxic Substances Control Act Impacted Material
	FMGS - Fine to Medium Grained Sand	DG - Dark Grey					mm - millimeter
	MGS - Medium Grained Sand	VDG - Very Dark Grey					NR- Not Recorded
	MCGS - Medium to Coarse Grained Sand	DGBl - Dark Greyish Black					EOC - End of Core
	SMCGS - Some Medium to Coarse Grained Sand	Bl - Black					
	CGS - Coarse Grained Sand	PSS - Possible Staining and Sheen					
	TCGS - Trace Coarse Grained Sand						
Gravel	TG - Trace Gravel						
	TSAG - Trace Sand and Gravel						
	TFG - Trace Fine Gravel						
	LFG - Little Fine Gravel						
	SFG - Some Fine Gravel						
	FMG - Fine to Medium Gravel						
	TMG - Trace Medium Gravel						
	SMG - Some Medium Gravel						
	TMCG - Trace Medium to Coarse Gravel						
	SMCG - Some Medium to Coarse Gravel						
	TLG - Trace Large Gravel						
	SLG - Some Large Gravel						
	TCG -Trace Coarse Gravel						
	CSAG - Coarse Sand and Gravel						
	TC - Trace Cobble						

SEDIMENT CORE LOG

SAMPLE LOCATION: **CS001**

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	12/19/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	0.3
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	3.3
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	11.2
LOGGER:	Kim Whitlock	TIDE ELEVATION (FT):	-1.70
LOG DATE:	12/19/2012 START: 2010 END: 2050	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
		0.0-0.4: MCGS with TMG, MG, L, PS, SSASF	PID = 0.5 ppm SR-CS001-0.0/0.5 @ 2040
0.5		0.4-0.7: Silt with TFGS, MG, S, SP, TSASF	PID = 0.4 ppm SR-CS001-0.5/1.0 @ 2043
1		0.7-1.3: SA 0.0-0.4	PID = 0.4 ppm
		1.3-2.1: Silt with some FMGS, MGBr, S, SP, TSASF	SR-CS001-1.0/2.0 @ 2045
2		2.1-2.5: Silt with FGS and TMG @ 2.5 except MCGS sand lens with TFG @ 2.2, DGBr, S, SP, TSASF	PID = 0.5 ppm
	2.6	2.5-2.6: Clay, RBr, F, HP (native material) EOC @ 2.6'	
3			

NOTES:

GPS COORDINATES:

647135.04 FT N

2569391.65 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: **CS002**

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	12/19/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	0.5
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	3.2
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	11.3
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.80
LOG DATE:	12/19/2012 START: 950 END: 1030	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
		0.0-0.5: MCGS with TMG, DG, L, PS, TOM, SlOd	PID = 0.4 ppm SR-CS002-0.0/0.5 @ 1015
0.5		0.5-2.9: Silt with laminations, MGBr, S, NP grading to SP towards bottom, TOM	PID = 0.1 ppm SR-CS002-0.5/1.0 @ 1018
1			PID = 0.1 ppm
			SR-CS002-1.0/2.0 @ 1022
2			PID = 0.1 ppm
	3.0	2.9-3.0: Clay, MGBr, S, MP	
3		EOC @ 3.0'	

NOTES:

GPS COORDINATES:

647244.96 FT N

2569363.04 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: **CS003**

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	12/12/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	0.2
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	4.3
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	11.4
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.80
LOG DATE:	12/12/2012 START: 1000 END: 1020	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
0		0.0-0.6: MCGS with TCG, DG, M, PS, TOM @ top, SlOd, TSASF	PID = 0.3 ppm SR-CS003-0.0/0.6 @ 1015
0.5		EOC @ 0.6'	
1			
	0.6		

NOTES: Three attempts to capture sediment. Initially hit a rock/gravel layer towards top that was difficult to penetrate, then hit softer material that could be penetrated, followed by another hard layer that could not be penetrated.

GPS COORDINATES:

647355.15 FT N

2569386.60 FT E

TechLaw

SEDIMENT CORE LOG

SAMPLE LOCATION: **CS004**

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	12/19/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	0.9
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	5.1
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	13.7
LOGGER:	Kim Whitlock	TIDE ELEVATION (FT):	-1.70
LOG DATE:	12/19/2012 START: 1945 END: 2010	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
		0.0-0.5: FGS with some silt and TFG, DGBr, VL, PS, SOM, SlOd, TSF	PID = 0.4 ppm SR-CS004-0.0/0.5 @ 2000
0.5		0.5-1.1: MCGS with TFG, LGBr, L, PS	PID = 0.2 ppm SR-CS004-0.5/1.0 @ 2005
1		1.1-2.2: Silt with TVFGS except FMGS @ 2.2, LGBr, S, SP, TOM	PID = 0.3 ppm
			SR-CS004-1.0/2.0 @ 2008
2		EOC @ 2.2'	
	2.2		

NOTES:

GPS COORDINATES:

647452.33 FT N

2569360.05 FT E

TechLaw

SEDIMENT CORE LOG

SAMPLE LOCATION: **CS005**

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	12/12/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	0.7
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	3.1
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	9.9
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.80
LOG DATE:	12/12/2012 START: 1505 END: 1530	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
0.5		0.0-2.1: MCGS with TFG, MGBr except DGBr from 0.3-0.4, L, PS, TSASF	PID = 0.7 ppm SR-CS005-0.0/0.5 @ 1518
1			PID = 0.2 ppm SR-CS005-0.5/1.0 @ 1520
			PID = 0.1 ppm
2		EOC @ 2.1'	SR-CS005-1.0/2.0 @ 1523
	2.1		
3			
4			

NOTES:

GPS COORDINATES:

647575.49 FT N

2569371.23 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: **CS006**

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	12/19/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	0.1
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	2.1
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	8.4
LOGGER:	Kim Whitlock	TIDE ELEVATION (FT):	-1.70
LOG DATE:	12/19/2012 START: 1920 END: 1940	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
0.5	0.8	0.0-0.4: Silt with SFGS, DG, VS, NP, SOM 0.4-0.8: MCGS with TMG, MG, L, PS, TSASF EOC @ 0.8'	PID = 0.4 ppm SR-CS006-0.0/0.8 @ 1935 PID = 0.4 ppm
1			

NOTES:

GPS COORDINATES:

647737.61 FT N

2569429.12 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: **CS007**

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	12/10/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	0.8
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	5.2
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	11.4
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.30
LOG DATE:	12/10/2012 START: 1130 END: 1200	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
0.5	3.8	0.0-0.2: FMGS with TMG, DG, L, PS, TOM, SlOd 0.2-0.4: Silt, DGBr, S, SP, TOM 0.4-1.3: FMGS with TMG, LGBr, M, PS	PID = 0.0 ppm SR-CS007-0.0/0.5 @ 1153 PID = 0.1 ppm SR-CS007-0.5/1.0 @ 1155
1		1.3-2.0: Silt, DGBr, F, SP, SOM	PID = 0.0 ppm
2		2.0-3.4: NR	SR-CS007-1.0/2.0 @ 1157 PID = 0.0 ppm
3		3.4-3.8: Clay, RBr, ST, HP (native material) EOC @ 3.8'	PID = 0.1 ppm
4			

NOTES:

GPS COORDINATES:

647928.01 FT N

2569563.05 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: **CS008B**

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	12/10/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	0.5
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	6.8
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	13.5
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.50
LOG DATE:	12/11/2012 START: 1040 END: 1120	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
		0.0-0.4: MCGS, DG, L, PS, SlOd, TSASF	PID = 0.0 ppm SR-CS008B-0.0/0.5 @ 1057
0.5		0.4-1.4: CSAG, DG, L, PS, TSASF	PID = 0.0 ppm SR-CS008B-0.5/1.0 @ 1103
1			PID = 0.0 ppm
		1.4-4.1: Clay, DG with some MBr mottling, F, MP, TOM	SR-CS008B-1.0/2.0 @ 1059
2			PID = 0.3 ppm
	4.1		
3			PID = 0.1 ppm
4		EOC @ 4.1'	

NOTES: Duplicate core collected at this location
SR-CS008B-0.0/0.5 @ 1110
SR-CS008B-0.5/1.0 @ 1115

GPS COORDINATES:
647947.60 FT N
2569657.70 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: **CS009**

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	12/10/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	0.2
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	4.2
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	10.8
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.32
LOG DATE:	12/10/2012 START: 1205 END: 1230	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
0.5		0.0-0.8: FMGS, DG, L, PS, TOM, SlOd, TSASF	PID = 0.1 ppm SR-CS009-0.0/0.5 @ 1220
1		0.8-2.0: MCGS with TMG, LGBr, L, PS, TSASF	PID = 0.1 ppm SR-CS009-0.5/1.0 @ 1222
2			PID = 0.1 ppm SR-CS009-1.0/2.0 @ 1225
3	4.0	2.0-4.0: NR	PID = 0.1 ppm
4		EOC @ 4.0'	PID = 0.2 ppm

NOTES:

GPS COORDINATES:

647850.37 FT N

2569646.66 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: **CS010**

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	12/10/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	1.0
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	4.9
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	11.5
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.40
LOG DATE:	12/10/2012 START: 1615 END:	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
		0.0-1.1: MCGS with TMG, MGBr, L, PS	PID = 0.2 ppm SR-CS010-0.0/0.5 @ 1627
0.5			PID = 0.1 ppm SR-CS010-0.5/1.0 @ 1630
1		1.1-1.7: Silt, MGBr, S, NP, 25% OM	PID = 0.2 ppm
		1.7-2.0: FMGS with TMG, MGBr, L, PS	SR-CS010-1.0/2.0 @ 1633
2		2.0-2.4: NR	PID = 0.1 ppm
		EOC @ 2.4'	
	2.4		
3			

NOTES:

GPS COORDINATES:

647893.35 FT N

2569709.99 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: **CS011**

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	12/10/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	0.9
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	5.0
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	13.0
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.50
LOG DATE:	12/10/2012 START: 1545 END: 1610	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
0.5	4.5	0.0-3.6: MCGS with SMCG, MGBr, M, PS, TSASF; except from 1.3-1.6, silt, MGBr, S, SP, SOM	PID = 0.2 ppm SR-CS011-0.0/0.5 @ 1605
1			PID = 0.3 ppm SR-CS011-0.5/1.0 @ 1607
2			PID = 0.3 ppm SR-CS011-1.0/2.0 @ 1608
3			PID = 0.2 ppm
4		3.6-4.5: NR	PID = 0.2 ppm
		EOC @ 4.5'	PID = 0.2 ppm

NOTES:

GPS COORDINATES:

647954.87 FT N

2569808.24 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: CS012

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	12/10/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	0.4
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	5.6
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	10.8
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.50
LOG DATE:	12/10/2012 START: 1640 END: 1655	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
0.5	0.8	0.0-0.8: CSAG, MGBr, L, PS, TOM @ top, SlOd @ top EOC @ 0.8'	PID = 0.2 ppm SR-CS012-0.0/0.8 @ 1650
1			

NOTES:

GPS COORDINATES:

647971.52 FT N

2569903.85 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: **CS013**

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	12/10/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	0.2
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	6.1
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	10.9
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.50
LOG DATE:	12/10/2012 START: 1650 END: 1700	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
0.5	0.7	0.0-0.3: FGS, DG, L, PS, TOM, SlOd 0.3-0.7: CSAG, DG, L, PS EOC @ 0.7'	PID = 0.1 ppm SR-CS013-0.0/0.7 @ 1700
1			

NOTES:

GPS COORDINATES:

647982.61 FT N

2570007.13 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: CS014

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	11/29/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	0.7
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	4.4
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	10.5
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.46
LOG DATE:	11/29/2012 START: 1700 END: 1725	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
0		0.0-0.9: MCGS, DGBr, M, PS, TOM	PID = 0.1 ppm SR-CS014-0.0/0.5 @ 1710
0.5			PID = 0.1 ppm SR-CS014-0.5/1.0 @ 1715
1		0.9-1.2: Silt, DGBr, S, SP, SOM, SlOd 1.2-2.7: MCGS with TMG, DGBr, L, PS, TOM	PID = 0.3 ppm SR-CS014-1.0/2.0 @ 1720
2			PID = 1.0 ppm
3	3.9	2.7-3.3: FGS with SMCG, RBr, M, PS, TOM 3.3-3.9: Clay with TMG, RBr, VST, MP (native material)	PID = 0.1 ppm
4		EOC @ 3.9'	

NOTES:

GPS COORDINATES:

647976.27 FT N

2570120.55 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: CS015

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	11/27/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	0.7
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	6.8
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	13.1
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.66
LOG DATE:	11/27/2012 START: 1050 END: 1110	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
0.5		0.0-1.1: MCGS with TMG, DG, L, PS, TOM, SlOd, TSASF	PID = 0.2 ppm SR-CS015-0.0/0.5 @ 1105
1			PID = 0.2 ppm SR-CS015-0.5/1.1 @ 1107
2		1.1-2.4: Clay with TMG, RBr, VST, HP (native material)	PID = 0.2 ppm
3	2.4	EOC @ 2.4'	PID = 0.1 ppm
4			

NOTES:

GPS COORDINATES:

647780.97 FT N

2570612.68 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: **CS016**

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	11/27/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	0.5
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	6.0
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	11.3
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.66
LOG DATE:	11/27/2012 START: 1110 END: 1145	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
0.5		0.0-2.0: MCGS with TMG, DGBr, L, PS, TOM, SlOd, TSASF	PID = 0.2 ppm SR-CS016-0.0/0.5 @ 1130
			PID = 0.2 ppm SR-CS016-0.5/1.0 @ 1135
1			PID = 0.1 ppm
			SR-CS016-1.0/2.0 @ 1137
2		2.0-3.2: NR	PID = 0.2 ppm
	3.4		
3		3.2-3.4: Clay, RBr, VST, MP (native material)	
4		EOC @ 3.4'	

NOTES:

GPS COORDINATES:

647553.91 FT N

2570774.93 FT E

TechLaw

SEDIMENT CORE LOG

SAMPLE LOCATION: **CS017**

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	11/27/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	1.0
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	4.8
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	11.7
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.64
LOG DATE:	11/27/2012 START: 1625 END: 1655	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
		0.0-1.0: Silt with TMG, DGBr, S, SP, TOM, SlOd	PID = 0.1 ppm SR-CS017-0.0/0.5 @ 1645
0.5			PID = 0.4 ppm SR-CS017-0.5/1.0 @ 1650
1		1.0-2.0: FMGS, DGBr, M, PS, TOM, SlOd, TSF	PID = 0.1 ppm
			SR-CS017-1.0/2.0 @ 1648
2		2.0-3.3: NR	PID = 0.2 ppm
	3.3		
3		EOC @ 3.3'	
4			

NOTES:

GPS COORDINATES:

647301.00 FT N

2570849.60 FT E

TechLaw

SEDIMENT CORE LOG

SAMPLE LOCATION: **CS018**

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	11/27/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	1.0
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	6.2
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	13.9
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.68
LOG DATE:	11/27/2012 START: 1530 END: 1615	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
0	6.0	0.0- 1.2: FGS, DG, L, PS, TOM, SlOd,TSASF	PID = 0.1 ppm SR-CS018-0.0/0.5 @ 1605
0.5			PID = 0.0 ppm SR-CS018-0.5/1.0 @ 1607
1		1.2-1.4: Silt, DG, S, NP, TOM, SlOd	PID = 0.1 ppm
		1.4-2.4: FGS, DG (PSS from 1.9-2.1), M, PS, TOM, MOd, TSASF	SR-CS018-1.0/2.0 @ 1610
2			PID = 0.1 ppm
		2.4-3.0 : Silt, DG, S, SP, TOM, SlOd	
3		3.0-6.0: NR	PID = 0.1 ppm
4			PID = 0.0 ppm
5		EOC @ 6.0'	

NOTES:

GPS COORDINATES:

647181.22 FT N

2570923.49 FT E

TechLaw

SEDIMENT CORE LOG

SAMPLE LOCATION: **CS019**

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	11/19/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	0.7
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	6.5
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	11.5
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.40
LOG DATE:	11/19/2012 START: 1625 END: 1705	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
0.5		0.0-1.8: FMGS with TMG, DG, M, PS, TOM, SlOd, SSASF	PID = 0.3 ppm SR-CS019-0.0/0.5 @ 1650
			PID = 0.2 ppm SR-CS019-0.5/1.0 @ 1655
1			PID = 0.3 ppm
		1.8-2.2: Silt, Bl (PSS), S, SP, TOM, StOd	SR-CS019-1.0/2.0 @ 1702
2		2.2-3.2: NR	PID = 0.2 ppm
	3.7		
3		3.2-3.7: Clay, RBr, ST, MP (native material)	
		EOC @ 3.7'	
4			

NOTES:

GPS COORDINATES:

647050.33 FT N

2571053.65 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: CS019A

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	11/27/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	1.0
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	6.3
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	13.2
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.79
LOG DATE:	11/27/2012 START: 1245 END: 1350	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
		0.0-2.1: MCGS, DG, L, PS, TOM, TSASF, SlOd	PID = 0.2 ppm SR-CS019A-0.0/0.5 @ 1338
0.5			PID = 0.2 ppm SR-CS019A-0.5/1.0 @ 1343
1			PID = 0.1 ppm
			SR-CS019A-1.0/2.0 @ 1346
2		2.1-3.0: Silt, DGBl (PSS), S, SP, TOM, MOd	PID = 2.7 ppm
	4.0		SR-CS019A-2.0/3.0 @ 1348
3		3.0-3.4: FGS, DG, L, PS, TOM, SlOd	PID = 1.3 ppm
		3.4-3.9: FMGS with TMG, DG, L, PS, TOM, SlOd	
		3.9-4.0: FGS, RBr, M, WS	SR-CS019A-3.0/4.0 @ 1344
4		EOC @ 4.0'	

NOTES:

GPS COORDINATES:

647080.32 FT N

2571052.54 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: CS019B

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	11/27/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	0.3
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	8.2
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	12.9
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.59
LOG DATE:	11/27/2012 START: 1450 END: 1530	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
0		0.0-1.8: MCGS with TMG, DG, L, PS, TOM, SlOd, TSASF	PID = 0.1 ppm SR-CS019B-0.0/0.5 @ 1518
0.5			PID = 0.1 ppm SR-CS019B-0.5/1.0 @ 1520
1			PID = 0.1 ppm
		1.8-2.5: Silt, DGBl (PSS), S, NP, TOM, MOd	SR-CS019B-1.0/2.0 @ 1522
2			PID = 0.6 ppm
	3.3	2.5-3.3: MCGS, DG, L, PS, TSASF	SR-CS019B-2.0/3.0 @ 1524
3			PID = 0.1 ppm
		EOC @ 3.3'	
4			

NOTES:

GPS COORDINATES:

647040.29 FT N

2571104.36 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: **CS020**

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	11/19/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	0.3
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	6.3
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	13.0
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.35
LOG DATE:	11/19/2012 START: 1455 END: 1605	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
		0.0-0.3: Silt, DGBr, VS, NP, TOM, SlOd	PID = 0.9 ppm SR-CS020-0.0/0.5 @ 1550
0.5		0.3-0.8: MCGS, DGBl (PSS), VL, PS, TOM, SlOd	PID = 0.8 ppm SR-CS020-0.5/1.0 @ 1557
		0.8-0.9: Silt, DGBl (PSS), S, NP, MOd	
1		0.9-1.6: MCGS, MBr, M, PS, SlOd, TSASF	PID = 1.9 ppm
		1.6-2.5: Silt, DGBl (PSS), S, NP, SOM, SlOd	SR-CS020-1.0/2.0 @ 1605
2			PID = 1.3 ppm
		2.5-2.7: FMGS, MBr, L, PS, SlOd	
	4.6	2.7-3.3: Silt, DGBl (PSS), S, SP, TOM, MOd	
3			PID = 1.0 ppm
		3.3-4.0: FMGS, LGBr, L, PS, TOM, SlOd, TSF	
4		4.0-4.6: NR	PID = 1.1 ppm
		EOC @ 4.6'	

NOTES: Duplicate core collected at this location
SR-CS020-0.0/0.5R @ 1555
SR-CS020-0.5/1.0R @ 1602

GPS COORDINATES:
646976.15 FT N
2571164.04 FT E

TechLaw

SEDIMENT CORE LOG

SAMPLE LOCATION: **CS020D**

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	11/27/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	1.6
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	6.9
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	11.8
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.72
LOG DATE:	11/27/2012 START: 1355 END: 1445	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
0		0.0-0.2: FMGS, DGBr, L, PS, TOM, SlOd	PID = 0.6 ppm
		0.2-0.5: Silt, DGBr, S, SP, TOM, SlOd	SR-CS020D-0.0/0.5 @ 1437
0.5		0.5-0.7:FMGS with TMG, DGBr, L, PS, TSASF	PID = 0.2 ppm
		0.7-2.0: FGS, DGBr from 0.7-1.2, DG from 1.2-2.0, M, PS, TOM, MOd, TSASF	SR-CS020D-0.5/1.0 @ 1440
1			PID = 0.1 ppm
			SR-CS020D-1.0/2.2 @ 1442
2		2.0-2.2: Silt, DG, F, NP, TOM, SlOd	PID = 0.1 ppm
		2.2-2.5: Clay, RBr, VST, HP (native material)	
		EOC @ 2.5'	
	2.5		
3			
4			

NOTES:

GPS COORDINATES:

646985.12 FT N

2571119.02 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: **CS021**

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	11/19/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	0.5
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	6.3
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	10.6
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.50
LOG DATE:	11/20/2012 START: 845 END: 930	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
0		0.0-2.2: MCGS with TCG, MGBr, L, PS, TOM, TSASF	PID = 0.1 ppm SR-CS021-0.0/0.5 @ 0919
0.5			PID = 0.0 ppm SR-CS021-0.5/1.0 @ 0922
1			PID = 0.1 ppm
			SR-CS021-1.0/2.0 @ 0927
2		2.2-3.3: Silt with VFGS, DGBr, S, NP, 15% OM	PID = 0.1 ppm
	3.3		
3		EOC @ 3.3'	
4			

NOTES:

GPS COORDINATES:

646919.37 FT N

2571062.18 FT E

TechLaw

SEDIMENT CORE LOG

SAMPLE LOCATION: **CS022**

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	11/20/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	0.7
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	9.1
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	13.2
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.31
LOG DATE:	11/20/2012 START: 1245 END: 1315	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
0.5		0.0-0.9: FMGS with silt, DGBr, L, PS, TOM, SlOd	PID = 0.6 ppm SR-CS022-0.0/0.5 @ 1302
1		0.9-1.3: Silt, DGBr @ 0.9-1.1, DGBl (PSS) @ 1.1-1.3, S, SP, SOM, MOd	PID = 0.8 ppm SR-CS022-0.5/1.0 @ 1308
2	1.7	1.3-1.7: FGS, DGBr, L, PS, TOM, SlOd EOC @1.7'	PID = 1.5 ppm SR-CS022-1.0/1.7 @ 1313
3			
4			

NOTES:

GPS COORDINATES:

646902.05 FT N

2571217.98 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: CS023

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	11/20/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	0.4
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	6.6
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	13.0
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.47
LOG DATE:	11/20/2012 START: 1200 END: 1240	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
		0.0-0.5: Silt, DGBr, VS, NP, TOM, SlOd	PID = 0.1 ppm SR-CS023-0.0/0.5 @ 1227
0.5		0.5-0.8: FGS, DG, L, PS, TOM, SlOd	PID = 0.2 ppm SR-CS023-0.5/1.0 @ 1231
		0.8-2.3: MCGS with TMG, DG, L, PS	PID = 0.1 ppm
1			
			SR-CS023-1.0/2.0 @ 1235
2		EOC @ 2.3'	PID = 0.1 ppm
	2.3		
3			
4			

NOTES:

GPS COORDINATES:

646846.16 FT N

2571098.52 FT E

TechLaw

SEDIMENT CORE LOG

SAMPLE LOCATION: **CS024**

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	11/20/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	0.2
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	8.8
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	13.0
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.39
LOG DATE:	11/20/2012 START: 1100 END: 1130	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
0.5		0.0-0.3: Silt, LGBr, VS, SP, TOM, TSASF 0.3-0.4: MGS, DGBl (PSS), L, PS, SlOd 0.4-2.0: Silt, LGBr, S, SP, TOM, TSASF	PID = 0.3 ppm SR-CS024-0.0/0.5 @ 1115
1			PID = 0.2 ppm SR-CS024-0.5/1.0 @ 1120
2			PID = 0.1 ppm SR-CS024-1.0/2.0 @ 1125
3	3.1	2.0-3.1: NR EOC @ 3.1'	PID = 0.2 ppm PID = 0.1 ppm
4			

NOTES:

GPS COORDINATES:

646818.69 FT N

2571267.01 FT E

TechLaw

SEDIMENT CORE LOG

SAMPLE LOCATION: **CS025**

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	11/20/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	0.7
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	6.9
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	13.0
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.30
LOG DATE:	11/20/2012 START: 1650 END: 1730	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
0.5	4.3	0.0-0.1: CSAG, DG, Bl, PS 0.1-2.0: Silt, MBr, S, SP, TOM, SlOd	PID = 0.2 ppm SR-CS025-0.0/0.5 @ 1718
1			PID = 0.3 ppm SR-CS025-0.5/1.0 @ 1720
2			PID = 0.4 ppm SR-CS025-1.0/2.0 @ 1725
3		2.0-3.4: NR	PID = 0.3 ppm
4		3.4-4.3: Clay, LGBr, F, MP (native material) EOC @ 4.3'	PID = 0.1 ppm

NOTES:

GPS COORDINATES:

646745.18 FT N

2571174.61 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: **CS026**

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	11/20/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	0.5
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	8.6
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	13.0
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.33
LOG DATE:	11/20/2012 START: 1850 END: 1930	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
0.5	4.0	0.0-0.4: FMGS with TMG, DGBl (PSS), L, PS, TOM, MOd	PID = 0.5 ppm SR-CS026-0.0/0.5 @ 1910
		0.4-0.7: VFGS, LGBr, M, WS	
1		0.7-2.0: Clay with interbedded sand layers, clay: light bluish grey, F, MP, sand: LGBr, M, PS	PID = 0.2 ppm SR-CS026-0.5/1.0 @ 1915
			PID = 0.1 ppm
2			SR-CS026-1.0/2.0 @ 1918
		2.0-4.0: NR	PID = 0.1 ppm
3			PID = 0.1 ppm
		EOC @ 4.0'	
4			

NOTES:

GPS COORDINATES:

646734.22 FT N

2571334.53 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: **CS027**

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	11/20/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	0.7
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	7.4
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	13.0
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.41
LOG DATE:	11/20/2012 START: 1615 END: 1645	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
0.5		0.0-0.2: Silt, MBr, VS, NP, TOM, SlOd 0.2-1.5: MCGS with TMG, MGBr, L, PS, TOM, SlOd	PID = 0.2 ppm SR-CS027-0.0/0.5 @ 1630
1			PID = 0.2 ppm SR-CS027-0.5/1.0 @ 1635
2		1.5-2.0: Silt, MGBr, S, SP, TOM	PID = 0.3 ppm SR-CS027-1.0/2.0 @ 1640
3	3.9	2.0-3.9: NR	PID = 0.2 ppm PID = 0.1 ppm
4		EOC @ 3.9'	

NOTES:

GPS COORDINATES:

646662.59 FT N

2571239.11 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: CS028-1

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	12/11/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	0.4
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	10.1
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	13.9
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.50
LOG DATE:	12/12/2012 START: 1020 END: 1140	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
0		0.0-1.2: FGS with TMG, MG, M, PS, TOM, SlOd, TSASF	PID = 0.1 ppm SR-CS028-1-0.0/0.5 @ 1115
0.5			PID = 0.8 ppm SR-CS028-1-0.5/1.0 @ 1120
1		1.2-1.4: Silt, Bl (PSS), S, SP, TOM, StOd	PID = 4.2 ppm
		1.4-1.8: FGS, DG, M, WS, TOM, MOd, TSF	
		1.8-2.2: Silt, DG, S, NP, TOM, MOd	
2		2.2-2.6: MCGS with TMG, DG, M, PS, SlOd, TSASF	PID = 0.6 ppm
	3.1	2.6-3.1: Clay, LGBr, ST, HP (native material)	
3		EOC @ 3.1'	
4			

NOTES: Duplicate core collected at this location
SR-CS028-1-0.0/0.5R @ 1135
SR-CS028-1-0.5/1.0R @ 1137

GPS COORDINATES:
646679.96 FT N
2571439.69 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: **CS028A**

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	11/20/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	0.9
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	7.5
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	14.0
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.44
LOG DATE:	11/20/2012 START: 1500 END: 1550	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
0		0.0-0.2: FMGS, DG, L, PS, TOM, SlOd, LS 0.2-0.8: Silt, DGBl (PSS), S, SP, TOM, MOd	PID = 2.0 ppm SR-CS028A-0.0/0.5 @ 1543
0.5			PID = 3.3 ppm SR-CS028A-0.5/1.0 @ 1547
1		0.8-1.9: FGS, DGBl (PSS) @ 0.8-1.2, DG from 1.2-1.9, M, PS, TOM, StOd, TSASF	PID = 3.0 ppm
2		1.9-2.2: Silt, DGBl (PSS), S, SP, TOM, MOd 2.2-3.8: NR	SR-CS028A-1.0/2.0 @ 1548 PID = 1.8 ppm
3	3.8	EOC @ 3.8'	PID = 1.5 ppm
4			

NOTES:

GPS COORDINATES:

6466686.89 FT N

2571422.36 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: CS028B

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	11/20/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	0.3
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	9.1
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	13.0
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.36
LOG DATE:	11/20/2012 START: 1555 END: 1610	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
		0.0-1.4: FGS, MGBr, M, PS, TOM, SlOd @ bottom, SSASF from 0.0-0.8	PID = 0.7 ppm SR-CS028B-0.0/0.5 @ 1605
0.5			PID = 0.9 ppm SR-CS028B-0.5/1.0 @ 1607
1			PID = 1.0 ppm
		1.4-1.7: Silt, DGBr, S, SP, TOM, MOd, TSASF	
		EOC @ 1.7'	SR-CS028B-1.0/1.7 @ 1608
2			
	1.7		

NOTES:

GPS COORDINATES:

646659.30 FT N

2571471.20 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: **CS029**

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	11/20/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	0.4
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	6.1
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	14.0
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.35
LOG DATE:	11/20/2012 START: 1730 END: 1800	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
0.5		0.0-1.2: Silt with MGS, DGBr, S, SP, TOM, SlOd	PID = 0.2 ppm SR-CS029-0.0/0.5 @ 1748
			PID = 0.1 ppm SR-CS029-0.5/1.0 @ 1752
1			PID = 0.9 ppm
		1.2-2.0: VFGS, DGBr, L, PS, SOM, MOd	SR-CS029-1.0/2.0 @ 1753
2		2.0-3.8: NR	PID = 0.3 ppm
	3.8		
3			PID = 0.4 ppm
		EOC @ 3.8'	
4			

NOTES:

GPS COORDINATES:

646560.61 FT N

2571293.16 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: **CS030**

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	10/25/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	0.3
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	10.1
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	16.8
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.09
LOG DATE:	10/26/2012 START: 1015 END: 1110	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
		0.0-0.4: FGS with TMG, LGBr, L, PS, TOM, SlOd	PID = 0.9 ppm SR-CS030-0.0/0.5 @ 1102
0.5		0.4-0.8: Clay, LGBr, F, MP, SlOd	PID = ppm SR-CS030-0.5/1.0 @ 1103
1		0.8-1.2: FGS, LGBr, D, WS, SlOd	PID = 0.2 ppm
		1.2-1.7: Clay, LGBr, F, MP, SlOd	
		1.7-3.7: FGS, CGS from 2.6-2.9 with TMG, LGBr, D, PS	SR-CS030-1.0/2.0 @ 1105
2			PID = 0.2 ppm
	4.9		SR-CS030-2.0/3.0 @ 1108
3			PID = 0.3 ppm
		3.7-4.0: Silty clay, LGBr, F, MP	SR-CS030-3.0/4.0 @ 1111
4		4.0-4.9: NR	PID = 0.7 ppm
		EOC @ 4.9'	
5			

NOTES:

GPS COORDINATES:

646573.28 FT N

2571506.23 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: CS030-1

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	12/11/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	0.5
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	12.8
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	16.9
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.50
LOG DATE:	12/12/2012 START: 910 END: 935	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
0		0.0-1.0: FGS, LRBr, M, WS, TOM @ 1.0	PID = 0.7 ppm SR-CS030-1-0.0/0.5 @ 0926
0.5			PID = 1.0 ppm SR-CS030-1-0.5/1.0 @ 0932
1		1.0-3.3: NR	PID = 0.8 ppm
2			PID = 0.1 ppm
	3.3		
3		EOC @ 3.3'	PID = 0.1 ppm
4			

NOTES:

GPS COORDINATES:

646585.15 FT N

2571510.15 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: **CS031**

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	11/20/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	0.3
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	7.5
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	13.5
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.45
LOG DATE:	11/20/2012 START: 1925 END: 1942	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
0		0.0-0.3: Silt, MGBr, S, SP, SOM, SlOd	PID = 0.3 ppm SR-CS031-0.0/0.5 @ 1935
		0.3-0.6: FMGS, MGBr, M, PS, TOM, SlOd	
0.5		0.6-2.0: Silt, LGBr, F, SP, TOM, TSASF	PID = 0.2 ppm SR-CS031-0.5/1.0 @ 1938
1			PID = 0.2 ppm
			SR-CS031-1.0/2.0 @ 1940
2		2.0-3.9: NR	PID = 0.2 ppm
	3.9		
3			PID = 0.3 ppm
		EOC @ 3.9'	
4			

NOTES:

GPS COORDINATES:

646468.93 FT N

2571343.53 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: CS032

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	10/25/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	0.3
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	9.1
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	16.9
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.01
LOG DATE:	10/26/2012 START: 1120 END: 1210	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
0		0.0-0.6: MCGS with TMG, DG, L, PS, MOd	PID = 1.9 ppm SR-CS032-0.0/0.5 @ 1152
0.5		0.6-1.7: Silt, DG, S, SP, TOM, SlOd	PID = 1.1 ppm SR-CS032-0.5/1.0 @ 1155
1			PID = 0.8 ppm
		1.7-2.5: MCGS with TMG, DG, M, PS, SlOd	SR-CS032-1.0/2.0 @ 1159
2			PID = 0.5 ppm
	5.7	2.5-4.1: FGS at top - finer with depth - VFGS in middle and silt at bottom, LGBr, D, SlOd	SR-CS032-2.0/3.0 @ 1200
3			PID = 0.4 ppm
			SR-CS032-3.0/4.0 @ 1201 SR-CS032-3.0/4.0R @ 1205
4		4.1-4.6: MCGS, LGBr, M, PS, SlOd	PID = 0.4 ppm
		4.6-5.7: Clay, LGBr, DG @ 5.4-5.7, F, MP (native material)	
5		EOC @ 5.7'	

NOTES:

GPS COORDINATES:

646484.95 FT N

2571592.83 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: CS032-1

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	12/11/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	0.3
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	13.3
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	17.0
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.70
LOG DATE:	12/12/2012 START: 1650 END: 1745	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
		0.0-0.5: FGS with TMG, LGBr, L, PS, TOM, SlOd	PID = 0.4 ppm SR-CS032-1-0.0/0.5 @ 1715
0.5		0.5-2.5: Silt with laminations, LGBr, ST, SP, TOM	PID = 0.2 ppm SR-CS032-1-0.5/1.0 @ 1721
1			PID = 0.1 ppm
2			
	2.5	EOC @ 2.5'	
3			
4			

NOTES: Duplicate core collected at this location
SR-CS0326-1-0.0/0.5R @ 1734
SR-CS032-1-0.5/1.0R @ 1738

GPS COORDINATES:
646489.05 FT N
2571596.19 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: **CS033**

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	11/20/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	0.3
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	7.8
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	13.9
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.36
LOG DATE:	11/20/2012 START: 1825 END: 1845	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
0.5		0.0-0.1: CSAG, DG, VL, PS, SlOd, TSASF 0.1-2.0: Silt, MGBr, F, SP, TOM, TSASF	PID = 0.2 ppm SR-CS033-0.0/0.5 @ 1840
1			PID = 0.2 ppm SR-CS033-0.5/1.0 @ 1842
2	4.0	2.0-4.0: NR	PID = 0.1 ppm SR-CS033-1.0/2.0 @ 1845
3			PID = 0.1 ppm PID = 0.2 ppm
4		EOC @ 4.0'	

NOTES:

GPS COORDINATES:

646352.29 FT N

2571389.87 FT E

SEDIMENT CORE LOG

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SAMPLE LOCATION: **CS034-1**

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	12/11/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	0.1
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	12.4
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	16.6
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.50
LOG DATE:	12/12/2012 START: 1205 END: 1240	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
0		0.0-0.2: FMGS, DGBr, L, PS, TOM, MOd	PID = 9.3 ppm SR-CS034-1-0.0/0.5 @ 1230
0.5		0.2-0.9: Silt, DGBr, S, SP, TOM, MOd, TSASF	PID = 10.4 ppm SR-CS034-1-0.5/1.0 @ 1235
1		0.9-1.6: MCGS with TMG, DGBr, L, PS, TOM, MOd, TSASF	PID = 4.8 ppm
2		1.6-2.9: Clay, MG with DGBr laminations, ST, MP, TOM, SlOd	PID = 0.8 ppm
3	2.9	EOC @ 2.9'	
4			

NOTES:

GPS COORDINATES:

646401.27	FT N
2571663.64	FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: **CS035**

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	11/20/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	0.3
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	6.1
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	9.3
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.34
LOG DATE:	11/20/2012 START: 1945 END:	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
		0.0-0.5: FMGS, DG, L, PS, SOM, SlOd, TSASF	PID = 0.2 ppm SR-CS035-0.0/0.5 @ 1955
0.5		0.5-0.8: Silt, LGBr, S, SP, 50% OM (wood)	PID = 0.2 ppm SR-CS035-0.5/1.0 @ 1958
		0.8-1.3: Silt with VFGS, LGBr, S, SP, TSASF	
1			PID = 0.1 ppm
		1.3-1.6: Clay, LGBr, S, MP	
		EOC @ 1.6'	SR-CS035-1.0/1.6 @ 2000
2			
	1.6		

NOTES:

GPS COORDINATES:

646263.05 FT N

2571449.47 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: CS036-1

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	12/11/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	0.8
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	13.0
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	17.0
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.50
LOG DATE:	12/12/2012 START: 815 END: 855	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
0.5	3.5	0.0-0.3: Silt, DGBr, VS, NP, TOM, MOd 0.3-2.2: FMGS, DGBr with sheen from 0.3-0.5 and PSS from 1.1-1.4, L, PS, TOM, MOd, TSASF	PID = 11.0 ppm SR-CS036-1-0.0/0.5 @ 0835 PID = 5.4 ppm SR-CS036-1-0.5/1.0 @ 0837
1			PID = 6.2 ppm
2		2.2-3.5: Clay, RBr, VST, HP (native material)	PID = 2.8 ppm
3		EOC @ 3.5'	PID = 0.4 ppm
4			

NOTES: Duplicate core collected at this location
SR-CS036-1-0.0/0.5R @ 0850
SR-CS036-1-0.5/1.0R @ 0852

GPS COORDINATES:
646281.79 FT N
2571709.09 FT E

TechLaw

SEDIMENT CORE LOG

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SAMPLE LOCATION: **CS037**

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	11/20/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	1.0
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	7.0
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	15.0
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.42
LOG DATE:	11/20/2012 START: 1800 END: 1825	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
0		0.0-0.1: FGS, DGBr, L, PS, TOM, SlOd	PID = 0.7 ppm
		0.1-0.3: Silt with TMG, LGBr, VS, SP, TOM, SlOd	SR-CS037-0.0/0.5 @ 1815
0.5		0.3-0.6: FGS, LGBr, M, PS, TSASF	PID = 0.4 ppm
		0.6-2.0: Silt, LGBr, F, SP, TOM, TSASF	SR-CS037-0.5/1.0 @ 1822
1			PID = 0.4 ppm
			SR-CS037-1.0/2.0 @ 1820
2		2.0-4.3: NR	PID = 0.3 ppm
	4.3		
3			PID = 0.4 ppm
4		EOC @ 4.3'	

NOTES:

GPS COORDINATES:

646161.81 FT N

2571512.54 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: CS038-1

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	12/11/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	0.3
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	14.5
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	17.1
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.70
LOG DATE:	12/12/2012 START: 1540 END: 1605	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
0.5		0.0-0.1: Silt, MGBr, S, NP, TOM, MOd 0.1-0.4: FGS, MGBr with sheen, M, PS, TOM, MOd	PID = 2.0 ppm SR-CS038-1-0.0/0.5 @ 1600
1		0.4-2.4: Silt with laminations, MGBr, F, SP, SOM, wood present from 1.9-2.3, TSASF	PID = 0.5 ppm SR-CS038-1-0.5/1.0 @ 1603
2			PID = 0.2 ppm
3	2.4	EOC @ 2.4'	PID = 0.1 ppm
4			

NOTES:

GPS COORDINATES:

646162.93 FT N

2571736.75 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: **CS039**

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	11/19/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	1.1
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	7.8
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	14.5
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.21
LOG DATE:	11/20/2012 START: 945 END: 1045	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
0		0.0-1.4: FMGS with TMG, MGBr, M, PS, TOM, SlOd, TSASF	PID = 0.8 ppm SR-CS039-0.0/0.5 @ 1022
0.5			PID = 0.4 ppm SR-CS039-0.5/1.0 @ 1032
1		1.4-3.8: Silt, MGBr, S, SP, SOM, TSASF	PID = 0.2 ppm
2			SR-CS039-1.0/2.0 @ 1042 PID = 0.1 ppm
3	3.8	EOC @ 3.8'	PID = 0.2 ppm
4			

NOTES: Core tube stopped on woody debris
Duplicate core collected for QC purposes
SR-CS039-0.0/0.5R @ 1027
SR-CS039-0.5/1.0R @ 1037
duplicate core noted to contain 0.3-1.4: Silt, MGBr, S, SP, SOM, TSASF

GPS COORDINATES:
FT N
FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: CS040-1

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	12/11/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	0.4
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	11.6
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	14.6
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.80
LOG DATE:	12/12/2012 START: 1305 END: 1435	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
0.5	2.5	0.0-0.3: MGS with TMG, DG with staining and sheen, M, PS, TOM, VStOd, free product observed 0.3-0.5: Silt, Bl with staining and sheen, S, NP, SOM, VStOd, free product observed	PID = 65.1 ppm SR-CS040-1-0.0/0.5 @ 1415
1		0.5-0.9: FGS, DGBl with staining and sheen, M, WS, TOM, VStOd, free product observed 0.9-1.1: MCGS, DG, L, PS, StOd	PID = 54.2 ppm SR-CS040-1-0.5/1.0 @ 1417
2		1.1-1.4: FGS, DGBr with staining and sheen @ 1.3-1.4, L, WS, VStOd, free product observed 1.4-1.6: Silt, DGBl with staining and sheen, S, NP, VStOd, free product observed 1.6-2.0: Silt with SFGS, RBr, ST, NP, MOd	PID = 72.9 ppm SR-CS040-1-1.0/2.0 @ 1425
3		2.0-2.5: VFGS with silt and TMG, RBr, D, PS EOC @ 2.5'	PID = 9.5 ppm SR-CS040-1-2.0/2.5 @ 1430

NOTES:
- Sheen and naphthalene smell observed during core collection
- Duplicate core collected at this location; processed on 12/13/12 so that EPA could observe product in core - contained similar materials with more visible product
- SR-CS040-1-0.0/0.5R @ 1105 on 12/13/12
- SR-CS040-1-0.5/1.0R @ 1110 on 12/13/12
- SR-CS040-1-1.0/1.6R @ 1115 on 12/13/12 *interval modified per WDNR's request

GPS COORDINATES:

646071.36	FT N
2571750.36	FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: CS041

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	11/5/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	0.5
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	6.0
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	5.8
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.17
LOG DATE:	11/6/2012 START: 800 END: 850	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
		0.0-0.5: Silt with TMCG, DG, VS, NP, TOM, SlOd	PID = 0.1 ppm SR-CS041-0.0/0.5 @ 0829
0.5		0.5-1.0: MCGS, DG, L, PS, SOM, SlOd	PID = 0.2 ppm SR-CS041-0.5/1.0 @ 0831
1		1.0-1.3: Clay, LGBr, F, MP, SlOd	PID = 0.1 ppm
		1.3-2.7: FMGS, MGBr, M, PS, SlOd, SSASF	SR-CS041-1.0/2.0 @ 0834
2			PID = 1.7 ppm
	2.8	2.7-2.8: SA 1.0-1.3 EOC @ 2.8'	SR-CS041-2.0/2.8 @ 0836
3			
4			

NOTES: Sediment core taken under Pennsylvania Avenue bridge, no GPS coordinates collected. Instead, on-site surveyor marked out location position in a few spots and core was collected approximately 29 feet from inside of East concrete abutment and 31 feet from South edge of bridge. Also, naphthalene smell observed at bottom of core by boat crew during core collection.

GPS COORDINATES:

N/A	FT N
N/A	FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: **CS042**

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	11/28/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	1.2
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	2.7
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	13.1
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.83
LOG DATE:	11/28/2012 START: 1050 END: 1125	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
0		0.0-0.6: Silt with TMG, DGBr, VS, NP, TOM, SlOd	PID = 0.1 ppm SR-CS042-0.0/0.5 @ 1107
0.5		0.6-1.1: MCGS with TMG, DG, L, PS, TOM, SlOd, TSASF	PID = 0.1 ppm SR-CS042-0.5/1.0 @ 1113
1		1.1-3.8: Silt, DGBr, F, NP, TOM, TSASF	PID = 0.1 ppm
			SR-CS042-1.0/2.0 @ 1115
2			PID = 0.0 ppm
	3.8		SR-CS042-2.0/3.0 @ 1122
3			PID = 0.1 ppm
		EOC @ 3.8'	SR-CS042-3.0/3.8 @ 1124
4			

NOTES: GPS coordinates not available since located under Pennsylvania Ave. Bridge.
Located 31 feet NE from SW bridge abutment, and 12 feet south of north edge of bridge

GPS COORDINATES:

N/A	FT N
N/A	FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: **CS042A**

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	11/28/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	0.3
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	4.5
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	11.8
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.81
LOG DATE:	11/28/2012 START: 1215 END: 1235	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
0		0.0-1.6: FMGS with TMG, DG, M, PS, TOM, rocks at bottom of core	PID = 0.0 ppm SR-CS042A-0.0/0.5 @ 1225
0.5			PID = 0.0 ppm SR-CS042A-0.5/1.0 @ 1227
1			PID = 0.0 ppm
		EOC @ 1.6'	
2	1.6		SR-CS042A-1.0/1.6 @ 1230

NOTES: GPS coordinates not available since located under Pennsylvania Ave. Bridge. Located east side of western-most bridge abutment under bridge - approximately 68' from GPS location (centered under bridge)

GPS COORDINATES:

N/A	FT N
N/A	FT E

TechLaw

SEDIMENT CORE LOG

SAMPLE LOCATION: **CS042B**

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	11/28/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	1.5
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	2.7
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	13.0
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.76
LOG DATE:	11/28/2012 START: 1140 END: 1215	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
0.5		0.0-0.2: Silt with TMG, DG, VS, NP, TOM, SlOd 0.2-0.4: MCGS with TMG, DG, L, PS, TOM, SlOd 0.4-3.7: Silt with laminations, DG, F, SP, TOM, TSASF	PID = 0.2 ppm SR-CS042B-0.0/0.5 @ 1200
1			PID = 0.2 ppm SR-CS042B-0.5/1.0 @ 1203
2			PID = 0.1 ppm SR-CS042B-1.0/2.0 @ 1205
3	3.7		PID = 0.0 ppm SR-CS042B-2.0/3.0 @ 1208
4		EOC @ 3.7'	PID = 0.0 ppm SR-CS042B-3.0/3.7 @ 1210

NOTES: GPS coordinates not available since located under Pennsylvania Ave. Bridge. Located 25 feet west of center Pennsylvania Ave. bridge abutment and centered under bridge.

GPS COORDINATES:

N/A	FT N
N/A	FT E

TechLaw

SEDIMENT CORE LOG

SAMPLE LOCATION: **CS043**

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	11/5/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	2.0
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	9.9
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	16.4
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.17
LOG DATE:	11/6/2012 START: 900 END: 1000	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
		0.0-2.0: Silt with TFS, DG, S, SP, MOd	PID = 0.4 ppm SR-CS043-0.0/0.5 @ 0934
0.5			PID = 0.4 ppm SR-CS043-0.5/1.0 @ 0939
1			PID = 0.5 ppm
			SR-CS043-1.0/2.0 @ 0943
2		2.0-2.3: MCGS, LGBr, M, PS, SlOd	PID = 0.1 ppm
		2.3-3.9: Clay, LGBr, ST, HP, (native material)	
	3.9		SR-CS043-2.0/3.0 @ 0953
3			PID = 0.1 ppm
		EOC @ 3.9'	SR-CS043-3.0/3.9 @ 0957
4			

NOTES:

GPS COORDINATES:

645942.29 FT N

2571790.71 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: **CS044**

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	11/8/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	0.5
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	9.5
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	17.0
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.37
LOG DATE:	11/8/2012 START: 1350 END: 1435	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
		0.0-0.6: MCGS, DGBl (PSS), L, PS, TOM, MOd	PID = 0.3 ppm SR-CS044-0.0/0.5 @ 1420
0.5		0.6-1.1: Silt, DGBr, S, NP, TOM, SlOd	PID = 0.3 ppm SR-CS044-0.5/1.0 @ 1430
1		1.1-2.1: FMGS, DG, L, PS, TOM, SlOd	PID = 0.2 ppm SR-CS044-1.0/2.0 @ 1431
2		2.1-2.3: Silt, DG, S, NP, MOd	PID = 0.1 ppm
	4.3	2.3-4.0: MCGS, MGBr, M, PS, TSASF	SR-CS044-2.0/3.0 @ 1427
3			PID = 0.2 ppm SR-CS044-3.0/4.0 @ 1422
4		4.0-4.3: NR	PID = 0.1 ppm
		EOC @ 4.3'	

NOTES:

GPS COORDINATES:

645879.01 FT N

2571643.66 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: **CS045**

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	11/5/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	0.5
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	9.8
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	16.0
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.18
LOG DATE:	11/6/2012 START: 1005 END: 1050	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
0.5		0.0-1.9: FMGS, MG, M, PS, TOM @ top, SlOd, TSASF	PID = 0.6 ppm SR-CS045-0.0/0.5 @ 1026
			PID = 0.6 ppm SR-CS045-0.5/1.0 @ 1031
1			PID = 0.6 ppm
2		1.9-4.1: Clay, LGBr, VST, MP, mottling from 2.5-2.9 (native material)	SR-CS045-1.0/2.0 @ 1036
			PID = 0.2 ppm
	4.1		SR-CS045-2.0/3.0 @ 1045
3			PID = 0.2 ppm
4		EOC @ 4.1'	SR-CS045-3.0/4.0 @ 1050

NOTES:

GPS COORDINATES:

645845.93 FT N

2571816.52 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: CS046

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	11/8/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	0.7
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	12.0
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	20.0
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.41
LOG DATE:	11/8/2012 START: 1010 END: 1105	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
0		0.0-0.2: MCGS, DG, L, PS, SlOd, TSASF	PID = 4.0 ppm
		0.2-0.5: Silt, DGBl, S, NP, 50% OM (hair-like substance), MOd	SR-CS046-0.0/0.5 @ 1045
0.5		0.5-1.6: Silt with TSAG @ 1.1-1.2, MBr @ 0.5-0.7, DGBl @ 0.7-1.3 (possible staining), DG @ 1.3-1.6, S, SP, TOM, MOd	PID = 5.8 ppm SR-CS046-0.5/1.0 @ 1050
1			PID = 1.1 ppm
		1.6-4.0: FMGS, DGBl @ 1.6-2.1 (possible staining), DG @ 2.1-2.5, MBr @ 2.5-2.7, DGBl @ 2.7-2.8 (PSS), MGBr @ 2.8-4.0, L, PS, TOM, MOd; except from 3.4-3.7, silt, MGBr, S, SP, SlOd	SR-CS046-1.0/2.0 @ 1057
2			PID = 0.8 ppm
	4.8		SR-CS046-2.0/3.0 @ 1100
3			PID = 0.5 ppm
			SR-CS046-3.0/4.0 @ 1102
4		4.0-4.8: NR	PID = 0.9 ppm
		EOC @ 4.8'	
5			

NOTES:

GPS COORDINATES:

645803.35 FT N

2571714.27 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: **CS047**

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	11/6/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	0.7
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	9.5
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	15.5
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.13
LOG DATE:	11/6/2012 START: 1145 END: 1220	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
0.5	3.9	0.0-0.6: Silt with SFGS, DG with black staining from 0.4-0.6, VS, NP, TOM, MOd, LS	PID = 0.3 ppm SR-CS047-0.0/0.5 @ 1207
		0.6-1.4: FMGS, LGBr with black staining from 0.6-0.9, M, PS, TOM, MOd, TSF	PID = 0.2 ppm SR-CS047-0.5/1.0 @ 1210
1			PID = 0.1 ppm
		1.4-1.8: Silt, LGBr, ST, NP, SlOd	
			SR-CS047-1.0/2.0 @ 1211
2		1.8-3.9: VFGS with increasing coarseness to bottom, LGBr, D, WS	PID = 0.1 ppm
			SR-CS047-2.0/3.0 @ 1215
3			PID = 0.1 ppm
		EOC @ 3.9'	SR-CS047-3.0/3.9 @ 1216
4			

NOTES:

GPS COORDINATES:

645730.00 FT N

2571858.03 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: **CS048**

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	11/8/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	0.5
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	13.0
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	21.0
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.41
LOG DATE:	11/8/2012 START: 1110 END: 1200	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
0		0.0-0.6: VFGS, LGBr, M, WS, TOM @ top, SlOd, TS	PID = 0.2 ppm SR-CS048-0.0/0.5 @ 1137
0.5		0.6-1.0: MCGS with TG, LGBr, M, PS, SlOd, TSASF	PID = 0.1 ppm SR-CS048-0.5/1.0 @ 1144
1		1.0-4.0: Silt, LGBr, S, SP, TOM, LS; except from 3.1-3.3, FMGS, LGBr, L, PS	PID = 0.2 ppm SR-CS048-1.0/2.0 @ 1150
2			PID = 0.1 ppm SR-CS048-2.0/3.0 @ 1151
3	5.0		PID = 0.2 ppm SR-CS048-3.0/4.0 @ 1155
4		4.0-5.0: NR	PID = 0.2 ppm
5		EOC @ 5.0'	

NOTES: Collocated core collected at this location for duplicate sample collection
SR-CS048-0.0/0.5R @ 1138
SR-CS048-0.5/1.0R @ 1143

GPS COORDINATES:
645672.97 FT N
2571724.12 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: **CS049**

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	11/6/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	0.7
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	9.1
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	17.0
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.25
LOG DATE:	11/6/2012 START: 1225 END: 1255	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
		0.0-1.5: MCGS with TG, DG, M, PS, TOM, SlOd, SSASF	PID = 1.0 ppm SR-CS049-0.0/0.5 @ 1241
0.5			PID = 0.3 ppm SR-CS049-0.5/1.0 @ 1246
1			PID = 0.2 ppm
		1.5-2.0: Silt, LGBr, F, NP	
		2.0-2.7: Clay, LGBr, ST, MP	SR-CS049-1.0/2.0 @ 1250
2			PID = 0.2 ppm
	4.4	2.7-3.0: VFS, LGBr, D, WS	SR-CS049-2.0/3.0 @ 1251
		3.0-4.4: Clay, LGBr, VST, HP (native material)	
3			PID = 0.3 ppm
			SR-CS049-3.0/4.0 @ 1253
4			PID = 0.2 ppm
		EOC @ 4.4'	

NOTES:

GPS COORDINATES:

645616.08 FT N

2571900.12 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: CS050

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	11/8/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	0.5
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	12.9
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	21.0
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.44
LOG DATE:	11/8/2012 START: 1250 END: 1342	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
0.5	5.3	0.0-3.6: FMGS, DG (PSS @ 0.7-0.9, 2.2-2.3, 2.6-2.8, and 3.4-3.5), M, PS, TOM, MOd	PID = 0.9 ppm SR-CS050-0.0/0.5 @ 1330
1			PID = 7.5 ppm SR-CS050-0.5/1.0 @ 1333
2			PID = 3.5 ppm SR-CS050-1.0/2.0 @ 1335
3			PID = 11.7 ppm SR-CS050-2.0/3.0 @ 1337
4		3.6-4.0: Clay, DG, F, MP, TOM, MOd 4.0-5.3: NR	PID = 8.6 ppm SR-CS050-3.0/4.0 @ 1340 PID = 2.4 ppm
5		EOC @ 5.3'	

NOTES:

GPS COORDINATES:

645593.28	FT N
2571775.32	FT E

TechLaw

SEDIMENT CORE LOG

SAMPLE LOCATION: **CS051**

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	11/8/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	1.5
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	9.0
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	17.0
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.29
LOG DATE:	11/9/2012 START: 810 END: 910	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
		0.0-0.1: MCGS with TG, DG, VL, PS, TOM, SlOd	PID = 0.1 ppm
		0.1-0.4: Silt, DG, S, SP, SlOd	SR-CS051-0.0/0.5 @ 0840
		0.4-0.5: SA 0.0-0.1	
0.5		0.5-1.1: Clay, DG, S, MP, TOM, SlOd, TSASF	PID = 0.4 ppm
			SR-CS051-0.5/1.0 @ 0844
1		1.1-1.6: Silt with TFGS, DGBl, S, SP, TOM, SlOd	PID = 0.1 ppm
		1.6-2.3: Silt, RBr, ST, MP, TOM	SR-CS051-1.0/2.0 @ 0850
2			
		2.3-2.5: Clay, DGBl, F, MP, TOM, SlOd	PID = 0.1 ppm
		2.5-2.7: Clay with MCGS, MBr, F, MP	
	3.7	2.7-3.7: Clay, RBr, F, MP, TOM; except from 3.3-3.5, SA 2.5-2.7 (native material)	SR-CS051-2.0/3.0 @ 0900
3			PID = 0.1 ppm
		EOC @3.7'	SR-CS051-3.0/3.7 @ 0910
4			

NOTES:

GPS COORDINATES:

645482.05 FT N

257917.47 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: CS052

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	11/6/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	0.7
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	14.5
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	21.0
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.27
LOG DATE:	11/6/2012 START: 1455 END: 1540	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
0.5		0.0-2.1: MCGS with TG, DG, L, PS, TOM @ top, SlOd, TSASF	PID = 0.6 ppm SR-CS052-0.0/0.5 @ 1515
			PID = 0.6 ppm SR-CS052-0.5/1.0 @ 1519
1			PID = 0.5 ppm
			SR-CS052-1.0/2.0 @ 1523
2		2.1-4.3: Clay, DG, S, MP, MOd; except from 3.2-3.4, VFGS, DG, L, PS, MOd, TSASF	PID = 0.7 ppm
	4.3		SR-CS052-2.0/3.0 @ 1528 SR-CS052-2.0/3.0R @ 1530
3			PID = 0.4 ppm
			SR-CS052-3.0/4.0 @ 1535
4		EOC @ 4.3'	

NOTES:

GPS COORDINATES:

645485.38 FT N

2571872.44 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: CS053

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	11/8/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	0.3
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	7.5
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	14.5
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.40
LOG DATE:	11/8/2012 START: 1600 END: 1640	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
0.5	3.6	0.0-0.3: MCGS with TG, MG, L, PS, SlOd, TOM, SSASF 0.3-1.1: Clay, RBr, S, MP, 15% OM	PID = 0.2 ppm SR-CS053-0.0/0.5 @ 1632
1			PID = 0.1 ppm SR-CS053-0.5/1.4 @ 1638
2		1.1-1.4: MCGS with TG, RBr, L, PS, TOM 1.4-3.6: Clay with TG, RBr, F, MP, TOM except SOM @ 2.2-2.5 (native material)	PID = 0.0 ppm PID = 0.1 ppm
3			PID = 0.0 ppm
4		EOC @ 3.6'	

NOTES:

GPS COORDINATES:

645290.42 FT N

2571986.03 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: CS054

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	11/7/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	0.7
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	13.5
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	21.0
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.13
LOG DATE:	11/8/2012 START: 820 END: 915	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
0		0.0-0.2: Silt, DGBr, VS, NP, TOM, SlOd, TS	PID = 0.4 ppm SR-CS054-0.0/0.5 @ 0900
0.5		0.2-1.9: MGS, DG (possible sheen), M, WS, MOd, LS	PID = 0.8 ppm SR-CS054-0.5/1.0 @ 0903
1			PID = 4.1 ppm
2		1.9-4.4: Silt, DG, S, SP, SlOd	SR-CS054-1.0/2.0 @ 0907
3	4.4		PID = 2.0 ppm SR-CS054-2.0/3.0 @ 0910
4			PID = 1.1 ppm SR-CS054-3.0/4.0 @ 0912 SR-CS054-3.0/4.0R @ 0914
		EOC @ 4.4'	PID = 0.9 ppm

NOTES:

GPS COORDINATES:

645335.10 FT N

2571853.31 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: **CS055**

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	11/7/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	1.5
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	12.0
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	23.0
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.27
LOG DATE:	11/8/2012 START: 925 END: 1005	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
0		0.0-0.4: Silt, DG, VS, NP, TOM, SlOd, TS	PID = 0.1 ppm SR-CS055-0.0/0.5 @ 0943
0.5		0.4-0.6: MCGS, DG, L, PS, SlOd	
		0.6-2.2: FGS, DG (possible sheen @ bottom), M, WS, SlOd	PID = 0.4 ppm SR-CS055-0.5/1.0 @ 0948
1			PID = 0.4 ppm
			SR-CS055-1.0/2.0 @ 0953
2		2.2-3.7: Silt, DG, S, SP, TOM, SlOd, TS	PID = 0.5 ppm
	4.4		SR-CS055-2.0/3.0 @ 0955
3			PID = 0.2 ppm
		3.7-4.4: VFGS, DG (possible sheen), M, WS, TOM, MOd	SR-CS055-3.0/4.0 @ 1000
4			PID = 0.8 ppm
		EOC @ 4.4'	

NOTES:

GPS COORDINATES:

645225.74 FT N

2571900.61 FT E

TechLaw

SEDIMENT CORE LOG

PAGE 1 OF 1

SAMPLE LOCATION: **CS056**

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	11/8/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	0.5
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	8.9
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	15.0
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.35
LOG DATE:	11/9/2012 START: 730 END: 800	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
0.5		0.0-0.3: Silt, DG, VS, NP, TOM, SlOd	PID = 0.1 ppm SR-CS056-0.0/0.7 @ 0755
		0.3-0.7: MCGS with TG, DG, VL, PS, SlOd, TSASF	
		0.7-3.2: Clay with TG, RBr, ST, HP, TOM (native material)	PID = 0.0 ppm
1			PID = 0.1 ppm
2			PID = 0.0 ppm
	3.2		
3		EOC @ 3.2'	PID = 0.1 ppm

NOTES:

GPS COORDINATES:

645170.25 FT N

2572017.23 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: **CS057**

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	11/8/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	1.0
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	13.5
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	21.0
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.43
LOG DATE:	11/8/2012 START: 1500 END: 1545	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
0		0.0-3.0: MCGS, DG, M, PS, TOM, TSASF, MOd	PID = 0.4 ppm SR-CS057-0.0/0.5 @ 1530
0.5			PID = 0.7 ppm SR-CS057-0.5/1.0 @ 1535
1			PID = 1.3 ppm
2			SR-CS057-1.0/2.0 @ 1540 PID = 2.4 ppm
	4.7		SR-CS057-2.0/3.0 @ 1541
3		3.0-4.0: Silt, DGBr, F, SP, SlOd	PID = 1.2 ppm
			SR-CS057-3.0/4.0 @ 1531
4		4.0-4.7: NR	PID = 0.6 ppm
		EOC @ 4.7'	

NOTES:

GPS COORDINATES:

645161.48 FT N

2571912.64 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: CS058

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	10/23/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	0.3
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	9.1
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	10.6
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-0.74
LOG DATE:	10/24/2012 START: 1000 END: 1024	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
0.5	1.5	0.0-1.5: Clay, LGBr, H, HP, (native material) EOC @ 1.5'	PID = 0.2 ppm SR-CS058-0.0/0.5 @ 1020 PID = 0.2 ppm SR-CS058-0.5/1.0 @ 1022 PID = 0.2 ppm SR-CS058-1.0/1.5 @ 1023
1			
2			

NOTES:

GPS COORDINATES:

645105.91 FT N

2572048.60 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: **CS059**

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	10/24/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	0.3
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	9.5
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	12.3
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-0.89
LOG DATE:	10/24/2012 START: 1550 END: 1620	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
		0.0-0.5: FMGS, DG, L, PS, TOM, SlOd	PID = 0.2 ppm SR-CS059-0.0/0.5 @ 1613
0.5		0.5-2.6: Clay, LGBr, F, MP (native material)	PID = 0.2 ppm SR-CS059-0.5/1.0 @ 1614
1			PID = 0.3 ppm
			SR-CS059-1.0/2.0 @ 1618
2			PID = 0.2 ppm
	2.6	EOC @ 2.6'	SR-CS059-2.0/2.6 @ 1618
3			

NOTES:

GPS COORDINATES:

645018.29 FT N

257073.70 FT E

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SEDIMENT CORE LOG

SAMPLE LOCATION: **CS060**

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	10/24/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	0.1
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	9.1
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	12.5
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-0.83
LOG DATE:	10/24/2012 START: 1620 END: 1645	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
0		0.0-0.9: Clay, DG, S, MP	PID = 0.2 ppm SR-CS060-0.0/0.5 @ 1635
0.5			PID = 0.2 ppm SR-CS060-0.5/1.0 @ 1642
1		0.9-2.4: VFGS with TMG @ top, LGBr, M, WS	PID = 0.2 ppm
2			SR-CS060-1.0/2.4 @ 1640
		EOC @ 2.4'	
	2.4		
3			
4			

NOTES:

GPS COORDINATES:

644923.86 FT N

2572101.87 FT E

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SEDIMENT CORE LOG

SAMPLE LOCATION: **CS061**

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	11/9/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	1.1
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	13.3
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	22.0
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.47
LOG DATE:	11/9/2012 START: 1430 END: 1535	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
0		0.0-1.7: Silt, DG, S, SP, TOM, MOd	PID = 0.3 ppm SR-CS061-0.0/0.5 @ 1510
0.5			PID = 0.3 ppm SR-CS061-0.5/1.0 @ 1518
1			PID = 0.9 ppm
		1.7-2.9: FMGS, DGBl (PSS), M, PS, TOM, MOd; except large wood core @ 2.5-2.8	SR-CS061-1.0/2.0 @ 1524
2			PID = 2.4 ppm
	4.8		SR-CS061-2.0/3.0 @ 1525
3		2.9-3.6: Silt, DG, S, SP, MOd	PID = 2.6 ppm
		3.6-4.8: FGS, DGBr, M, PS, TOM, MOd, TSASF; except from 4.1-4.3, SA 2.9-3.6	SR-CS061-3.0/4.0 @ 1531
4			PID = 7.1 ppm
		EOC @ 4.8'	

NOTES:

GPS COORDINATES:

644904.97 FT N

2571995.04 FT E

TechLaw

SEDIMENT CORE LOG

SAMPLE LOCATION: **CS062**

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	10/24/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	0.1
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	8.8
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	13.8
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-0.85
LOG DATE:	10/24/2012 START: 1650 END: 1750	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
		0.0-0.5: MCGS with TMG, DG, L, TOM, SlOd	PID = 0.2 ppm SR-CS062-0.0/0.5 @ 1743
0.5		0.5-3.1: Clay, LGBr, ST, MP (native material)	PID = 0.2 ppm SR-CS062-0.5/1.0 @ 1745
1			PID = 0.2 ppm
			SR-CS062-1.0/2.0 @ 1746
2			PID= 0.2 ppm
	3.1		SR-CS062-2.0/3.1 @ 1748
3		EOC @ 3.1'	
4			

NOTES:

GPS COORDINATES:

644820.22 FT N

2572121.10 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: **CS063**

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	10/24/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	0.1
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	13.7
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	22.5
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-0.88
LOG DATE:	10/24/2012 START: 1750 END: 1815	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
0		0.0-0.7: MCGS, DG, L, PS, TOM, SlOd, TSASF	PID = 0.9 ppm SR-CS063-0.0/0.5 @ 1810
0.5		0.7-4.0: Silt, DG, S, SP, TOM, SlOd	PID = 3.4 ppm SR-CS063-0.5/1.0 @ 1814
1			PID = 1.1 ppm
2			SR-CS063-1.0/2.0 @ 1818
	4.9		PID= 3.8 ppm
3			SR-CS063-2.0/3.0 @ 1816
			PID= 3.4 ppm
4		4.0-4.9: NR	SR-CS063-3.0/4.0 @ 1812
			PID= 4.6 ppm
5		EOC @ 4.9'	

NOTES:

GPS COORDINATES:

644786.20 FT N

2572022.76 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: CS063B

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	11/5/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	2.2
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	14.0
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	22.5
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.14
LOG DATE:	11/5/2012 START: 1425 END: 1450	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
0.5		0.0-0.3: Silt with TG, DG, VS, NP, TOM, MOd 0.3-1.3: Silt, DG, S, SP, SlOd	PID = 0.1 ppm SR-CS063B-0.0/0.5 @ 1445
1			PID = 0.2 ppm SR-CS063B-0.5/1.0 @ 1450
2		1.3-2.0: FMGS, DG, L, TOM, MOd (potential sheen) 2.0-2.9: Clay, DG @ 2.0-2.3, LGBr @ 2.3-2.9, F, MP, TOM, MOd	PID = 0.2 ppm SR-CS063B-1.0/2.0 @ 1447 SR-CS063B-1.0/2.0R @ 1444 PID = 0.2 ppm
3	3.4	2.9-3.4: FMGS with TMCG, DG, D, PS, SlOd	SR-CS063B-2.0/3.4 @ 1443
4		EOC @ 3.4'	PID = 0.3 ppm

NOTES:

GPS COORDINATES:

644818.69 FT N

257038.88 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: **CS063C**

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	11/5/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	0.5
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	13.7
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	21.5
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.18
LOG DATE:	11/5/2012 START: 1515 END: 1545	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
0		0.0-0.3: MCGS, DG, VL, PS, TOM, MOd	PID = 1.2 ppm SR-CS063C-0.0/0.5 @ 1540
0.5		0.3-2.7: Clay, DG, S, MP, TOM, SlOd	PID = 1.2 ppm SR-CS063C-0.5/1.0 @ 1542
1			PID = 0.8 ppm
2			SR-CS063C-1.0/2.0 @ 1544
			PID = 0.9 ppm
	3.7	2.7-3.7: FMGS, DG, L, PS, TOM, MOd (possible sheen)	SR-CS063C-2.0/3.0 @ 1539
3			PID = 2.0 ppm
		EOC @ 3.7'	SR-CS063C-3.0/3.7 @ 1535
4			

NOTES:

GPS COORDINATES:

644761.53 FT N

2572051.45 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: CS064

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	10/24/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	0.1
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	7.4
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	12.4
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-0.81
LOG DATE:	10/24/2012 START: 1825 END: 1850	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
0		0.0-1.0: Clay, LGBr, S, SP, SlOd	PID = 0.3 ppm SR-CS064-0.0/0.5 @ 1845
0.5			PID = 0.3 ppm SR-CS064-0.5/1.0 @ 1853
1		1.0-1.5: Clay, DG, S, MP, TOM, SlOd	PID = 0.2 ppm
		1.5-3.4: Clay, LGBr, F, MP, TOM (native material)	SR-CS064-1.0/2.0 @ 1855
2			PID= 0.3 ppm
	3.4		SR-CS064-2.0/3.4 @ 1848
3		EOC @ 3.4'	
4			

NOTES:

GPS COORDINATES:

644725.36 FT N

2572187.62 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: CS065

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	10/9/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	1.5
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	12.5
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	21.8
LOGGER:	Kim Whitlock	TIDE ELEVATION (FT):	-1.43
LOG DATE:	10/10/2012 START: 740 END: 1050	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
		0.0-0.5: Silt with TFGS, DG, VS, NP, TOM	PID = 0.2 ppm SR-CS065-0.0/0.5 @ 1034
0.5		0.5-2.4: Silt with sand lenses @ 1.2 (CGS) and 2.0-2.2 (FGS), DG, S, MP, TOM	PID = 0.2 ppm SR-CS065-0.5/1.0 @ 1036
1			PID = 0.3 ppm
			SR-CS065-1.0/2.0 @ 1040
2			PID = 0.7 ppm
		2.4-3.1: MGS with TFG, DG with possible staining @ 2.5-2.6, VL, PS, StOd (petroleum-like), LSASF	
	4.3		SR-CS065-2.0/3.0 @ 1043
3		3.1-3.7: Silty clay with TFGS, LG, S, HP, TOM, TS	PID = 0.4 ppm
		3.7-4.3: Silty clay, LG, S, HP (native material)	SR-CS065-3.0/4.0 @ 1047
4		EOC @ 4.3'	

NOTES:

GPS COORDINATES:

644691.43 FT N

2572094.30 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: **CS065A**

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	10/23/12
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	0.5
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	15.1
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	22.1
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-0.91
LOG DATE:	10/23/2012 START: 1545 END: 1625	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
0.5	3.8	0.0-3.0: Silt, DG with oily sheen from 2.5-2.8, S, SP, TOM @ top, MOd	PID = 0.4 ppm SR-CS065A-0.0/0.5 @ 1609
			PID = 0.6 ppm SR-CS065A-0.5/1.0 @ 1616
1			PID = 0.4 ppm
2			SR-CS065A-1.0/2.0 @ 1620
			PID = 1.6 ppm
			SR-CS065A-2.0/3.0 @ 1623
3		3.0-3.8: FGS, DG, L, PS, MOd, wood piece from 3.6-3.8	PID = 3.2 ppm
		EOC @ 3.8'	SR-CS065A-3.0/3.8 @ 1625
4			

NOTES:

GPS COORDINATES:

644708.82 FT N

2572058.67 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: CS065B

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	10/23/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	0.8
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	13.2
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	18.6
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-0.94
LOG DATE:	10/24/2012 START: 735 END: 810	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
0.5		0.0-2.8: Silt, DG, VS, SP, TOM @ top, SlOd; except from 1.0-1.2, FGS, DG, L, PS, SlOd	PID = 0.3 ppm SR-CS065B-0.0/0.5 @ 0755
1			PID = 0.3 ppm SR-CS065B-0.5/1.0 @ 0759
2			PID = 0.7 ppm SR-CS065B-1.0/2.0 @ 0803
3	2.8	EOC @ 2.8'	PID = 0.4 ppm SR-CS065B-2.0/2.8 @ 0805

NOTES:

GPS COORDINATES:

644726.61 FT N

2572106.13 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: **CS065B-1**

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	11/19/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	0.9
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	9.2
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	23.0
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.26
LOG DATE:	11/19/2012 START: 1130 END: 1215	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
0	5.9	0.0-0.4: Silt, DG, VS, NP, TOM, SlOd	PID = 0.1 ppm
		0.4-1.3: MCGS, DG, L, PS, TOM, SlOd	SR-CS065B-1-0.0/0.5 @ 1158
0.5			PID = 0.2 ppm
			SR-CS065B-1-0.5/1.0 @ 1202
1			PID = 0.3 ppm
		1.3-2.0: Silt, DG, VS, NP, TOM, SlOd	
			SR-CS065B-1-1.0/2.0 @ 1205
2		2.0-3.0: FMGS with silt, DG, L, PS, TOM, MOd	PID = 1.2 ppm
			SR-CS065B-1-2.0/3.0 @ 1210
3		3.0-4.0: VFGS, LGBr except DGBl (possible staining) @ 3.1-3.2, M, WS, SlOd	PID = 0.4 ppm
			SR-CS065B-1-3.0/4.0 @ 1215
4		4.0-5.9: NR	
5		EOC @ 5.9'	

NOTES:

GPS COORDINATES:

644724.25 FT N

2572110.86 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: CS065C

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	10/23/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	0.8
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	13.5
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	20.8
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-0.92
LOG DATE:	10/24/2012 START: 815 END: 915	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
0.5	3.9	0.0-3.9: Silt, DG, S, SP, TOM @ top, SlOd; except from 2.1-2.5, FGS, DG, L, PS, SOM, MOd	PID = 0.4 ppm SR-CS065C-0.0/0.5 @ 0847
1			PID = 0.6 ppm SR-CS065C-0.5/1.0 @ 0850
2			PID = 1.0 ppm SR-CS065C-1.0/2.0 @ 0855
3			PID = 0.4 ppm SR-CS065C-2.0/3.0 @ 0900 SR-CS065C-2.0/3.0R @ 0901
4		EOC @ 3.9'	PID = 0.9 ppm SR-CS065C-3.0/3.9 @ 0905

NOTES:

GPS COORDINATES:

644659.91 FT N

2572123.49 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: CS065C-1

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	11/19/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	0.5
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	9.2
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	20.0
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.36
LOG DATE:	11/19/2012 START: 1040 END: 1125	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
0		0.0-0.2: FMGS, DG, L, PS, TOM, SlOd	PID = 0.2 ppm SR-CS065C-1-0.0/0.5 @ 1108
0.5		0.2-0.7: Silt, DG, S, NP, SOM, SlOd	
		0.7-1.2: VFGS, DG, L, PS, SOM, SlOd	PID = 0.3 ppm SR-CS065C-1-0.5/1.0 @ 1111
1		1.2-3.8: Silt, DG, SP, SOM, SlOd	PID = 0.4 ppm
			SR-CS065C-1-1.0/2.0 @ 1115
2			PID = 1.0 ppm
	4.5		SR-CS065C-1-2.0/3.0 @ 1120
3			PID = 3.7 ppm
		3.8-4.5: FMGS, DGBl (PSS), L, PS, TOM, StOd, TSASF	SR-CS065C-1-3.0/4.0 @ 1125
4		EOC @ 4.5'	

NOTES: During core collection, hydrocarbon sheen observed on water surface and sediment at the bottom of core smelled like hydrocarbon.

GPS COORDINATES:
644668.04 FT N
2572132.23 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: **CS065D**

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	10/23/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	1.0
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	14.1
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	21.8
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-0.81
LOG DATE:	10/24/2012 START: 920 END: 1000	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
0	5.0	0.0-4.0: Silt, DG, S, SP, SOM, SlOd; except from 1.7-1.8, 2.6-2.8, and 3.4-3.6, FGS, DG, L, PS, TOM, SlOd	PID = 0.2 ppm SR-CS065D-0.0/0.5 @ 0950
0.5			PID = 0.4 ppm SR-CS065D-0.5/1.0 @ 0952
1			PID = 0.5 ppm
2			SR-CS065D-1.0/2.0 @0954
			PID = 2.2 ppm
3			SR-CS065D-2.0/3.0 @0956
			PID = 1.8 ppm
4		4.0-5.0: NR	SR-CS065D-3.0/4.0 @0958
			PID = 1.5 ppm
5		EOC @ 5.0'	

NOTES:

GPS COORDINATES:

644645.76 FT N

2572082.02 FT E

TechLaw

SEDIMENT CORE LOG

SAMPLE LOCATION: **CS066**

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	10/23/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	0.3
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	9.0
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	17.2
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-0.98
LOG DATE:	10/24/2012 START: 1345 END: 1420	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
0		0.0-2.0: Clay, DG, S, MP, TOM, SlOd; except from 1.0-1.2, FGS, DG, L, PS, SlOd	PID = 0.3 ppm SR-CS066-0.0/0.5 @ 1406
0.5			PID = 0.2 ppm SR-CS066-0.5/1.0 @ 1408
1			PID = 0.3 ppm
			SR-CS066-1.0/2.0 @ 1409
2		2.0-4.0: FGS, DG, M, SlOd; except from 2.5-3.3, SA 0.0-2.0	PID = 0.2 ppm
	5.3		SR-CS066-2.0/3.0 @ 1413
3			PID = 0.2 ppm
		4.0-5.3: NR	SR-CS066-3.0/4.0 @ 1414
4			PID = 0.2 ppm
5		EOC @ 5.3'	

NOTES:

GPS COORDINATES:

644596.81 FT N

2572232.42 FT E

TechLaw

SEDIMENT CORE LOG

SAMPLE LOCATION: **CS067**

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	10/24/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	0.5
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	10.6
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	17.9
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-0.85
LOG DATE:	10/24/2012 START: 1430 END: 1500	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
0		0.0-1.9: Silt, DG, S, SP, SOM, SlOd	PID = 0.9 ppm SR-CS067-0.0/0.5 @ 1453
0.5			PID = 0.6 ppm SR-CS067-0.5/1.0 @ 1456
1			PID = 1.4 ppm
2		1.9-3.6: FMGS, DG, L, PS, SlOd, SSASF	SR-CS067-1.0/2.0 @ 1459
	5.1		PID = 0.5 ppm SR-CS067-2.0/3.0 @ 1501
3			PID = 1.0 ppm
		3.6-4.0: SA 0.0-1.9	SR-CS067-3.0/4.0 @ 1454
4		4.0-5.1: NR	PID = 1.0 ppm
5		EOC @ 5.1'	

NOTES:

GPS COORDINATES:

644497.45 FT N

2572104.18 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: **CS067A**

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	11/5/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	1.2
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	8.3
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	16.8
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.14
LOG DATE:	11/5/2012 START: 1300 END: 1424	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
0		0.0-0.2: FMGS, DG, VL, PS, SlOd	PID = 0.1 ppm SR-CS067A-0.0/0.5 @ 1412
0.5		0.2-1.0: Silt, DG, S, SP, SlOd	PID = 0.2 ppm SR-CS067A-0.5/1.0 @ 1421
1		1.0-1.4: FGS, DG, M, PS, 50% OM @ bottom, SlOd	PID = 0.3 ppm
		1.4-4.3: Silt with trace sand @ 3.0-3.3, DG, S, SP, SlOd; except from 1.9-2.2, MCGS, L, PS, SlOd	SR-CS067-1.0/2.0 @ 1410
2			PID = 0.4 ppm
	4.4		SR-CS067A-2.0/3.0 @ 1424
3			PID = 0.3 ppm
			SR-CS067A-3.0/4.0 @ 1405
4			PID = 0.2 ppm
		EOC @ 4.4'	

NOTES: SR-CS067A-0.5/1.0R @ 1420

GPS COORDINATES:

644588.57 FT N

2572072.14 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: CS068

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	10/3/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	1.5
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	9.2
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	15.5
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-0.96
LOG DATE:	10/4/2012 START: 1020 END: 1100	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
		0.0-0.5: Clayey silt with SFGS, DGBr, S, SP, SF	PID = 1.5 ppm SR-CS068-0.0/0.5 @ 1050
0.5		0.5-2.1: Clay and silt, DGBr, S, MP, SOM, fibrous material and wood pieces present	PID = 1.7 ppm SR-CS068-0.5/1.0 @ 1054
1			PID = 1.0 ppm
			SR-CS068-1.0/2.0 @ 1058
2		2.1-2.7: Sand with silt, FG @ 2.1 to CG at 2.7, DGBr, L, PS, WG, coarse grains are sub-angular with SF	PID = 0.9 ppm
	3.0	2.7-3.0: Clay and silt, DGBr, S, MP (native material)	SR-CS068-2.0/3.0 @ 1105
3		EOC @ 3.0'	

NOTES: Second core collected at this location for QC purposes
SR-CS068-0.5/1.0R @ 1120

GPS COORDINATES:
644473.47 FT N
2572290.51 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: CS069

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	10/3/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	0.4
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	13.8
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	24.0
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.05
LOG DATE:	10/3/2012 START: 1630 END: 1710	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
0		0.0-0.2: MGS, DGBr, L, PS, WG, SOM, SlOd, SSASF, woody and fibrous material at bottom	PID = 3.7 ppm SR-CS069-0.0/0.5 @ 1656
0.5		0.2-0.7: Silt, DGBr, S, SP, SlOd	
		0.7-1.2: Silt with some VFGS, DGBr, S, NP, TOM, SlOd	PID = 5.4 ppm SR-CS069-0.5/1.0 @ 1700
1		1.2-1.5: SA 0.2-0.7	PID = 4.7 ppm
		1.5-2.7: Silt, DGBr, S, SP, SlOd	SR-CS069-1.0/2.0 @ 1705
2			PID = 2.4 ppm
	4.9	2.7-3.0: MCGS, DGBr, M, PS, WG, SlOd, LSF	SR-CS069-2.0/3.0 @ 1707
3		3.0-3.8: Silt with FGS, DGBr, S, NP	PID = 0.5 ppm
		3.8-3.9: Woody debris/organics	SR-CS069-3.0/4.0 @ 1709
		3.9-4.9: Silt with MGS, DGBr, S, SP	
4			PID = 3.2 ppm
5		EOC @ 4.9'	

NOTES:

GPS COORDINATES:

644426.65 FT N

2572187.74 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: CS070

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	10/3/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	0.6
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	9.2
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	16.1
LOGGER:	Kim Whitlock	TIDE ELEVATION (FT):	-1.05
LOG DATE:	10/4/2012 START: 735 END: 840	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
0		0.0-0.1: FGS, DGBr with sheen, VL, PS, MOd	PID = 1.2 ppm
		0.1-0.2: Silt with LFGS, DGBr with some sheen, VS, NP, MOd (petroleum-like)	SR-CS070-0.0/0.5 @ 0827
0.5		0.2-0.6: Silt, DGBr, S, NP, SlOd	PID = 1.5 ppm
		0.6-1.0: FGS, DGBl with staining, L, PS, TSASF, SlOd (petroleum-like)	SR-CS070-0.5/1.0 @ 0831
1		1.0-1.4: Silt with SFGS, DGBl with staining, S, NP, SOM, large woody debris, shells, StOd (petroleum-like)	PID = 3.8 ppm
		1.4-1.7: MGS, DGBr, L, PS, SOM, SSASF, SlOd (petroleum-like)	
		1.7-2.2: Silt, sand lens @ 2.0 with SF, GBr, S, NP, TOM, SlOd	SR-CS070-1.0/2.0 @ 0835
2		2.2-2.6: CGS with FMG, GBr, L, PS, WG, SOM, SSASF	PID = 0.3 ppm
	4.5	2.6-3.1: Silt with TFGS, GBr, F, LOM, TS, some woody debris, large wood chunk, except lots of woody debris and very firm @ 3.0-3.1	SR-CS070-2.0/3.0 @ 0838
3		3.1-4.1: Silty clay with TVFGS, LGBr, F, MP, SOM, woody debris, TSF (native material)	PID = 0.6 ppm
		4.1-4.5: VFGS with silt, LGBr, M, PS, TOM, TS	SR-CS070-3.0/4.0 @ 0840
4		EOC @ 4.5'	PID = 0.5 ppm
5			

NOTES:

GPS COORDINATES:

644403.76 FT N

2572345.90 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: CS071

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	10/3/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	1.3
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	14.4
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	24.0
LOGGER:	Kim Whitlock	TIDE ELEVATION (FT):	-1.01
LOG DATE:	10/4/2012 START: 902 END: 955	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
		0.0-0.4: Silt, GBr, VS, NP, LOM, SlOd, TS	PID = 0.7 ppm SR-CS071-0.0/0.5 @ 0930
0.5		0.4-1.6: Silt, GBr, VS, NP	PID = 0.4 ppm SR-CS071-0.5/1.0 @ 0934
1			PID = 1.0 ppm
		1.6-2.8: Silt with SFGS, GBr, S, NP, SOM	SR-CS071-1.0/2.0 @ 0940
2			PID = 0.5 ppm
	3.8	2.8-3.6: Silt with TFGS, GBr, S, NP, TOM, wood and fibrous material	SR-CS071-2.0/3.0 @ 0943
3			PID = 0.6 ppm
		3.6-3.8: Silt with LFGS, GBr, S, NP, SOM, wood fibers EOC @ 3.8'	SR-CS071-3.0/3.8 @ 0948
4			

NOTES:

GPS COORDINATES:

644323.72 FT N

2572256.71 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: CS071A

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	10/9/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	0.2
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	13.7
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	21.9
LOGGER:	Kim Whitlock	TIDE ELEVATION (FT):	-1.56
LOG DATE:	10/9/2012 START: 1455 END: 1546	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
0	5.8	0.0-1.4: MCGS, DG, L, PS, 30% OM, SlOd, SSASF	PID = 1.3 ppm SR-CS071A-0.0/0.5 @ 1529
0.5			PID = 5.3 ppm SR-CS071A-0.5/1.0 @ 1532
1		1.4-1.8: Silt, DG, VS, NP, TOM, MOd, TS	PID = 5.5 ppm SR-CS071A-1.0/2.0 @ 1536
		1.8-2.3: FGS, DG, M, PS, SOM, SlOd, SSASF, woody debris, fibrous material	SR-CS071A-1.0/2.0R @ 1538
2		2.3-2.8: SA 1.4-1.8, except no odor	PID = 3.1 ppm
		2.8-3.5: SA 1.8-2.3, except possible staining @ 3.4, large woody debris	SR-CS071A-2.0/3.0 @ 1542
3		3.5-4.0: SA 2.3-2.8, except S	PID = 4.3 ppm SR-CS071A-3.0/4.0 @ 1546
4		4.0-5.8: NR	
5		EOC @ 5.8'	

NOTES:

GPS COORDINATES:

644304.78 FT N

2572204.26 FT E

TechLaw

SEDIMENT CORE LOG

SAMPLE LOCATION: **CS071B**

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	10/9/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	0.6
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	13.9
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	20.8
LOGGER:	Kim Whitlock	TIDE ELEVATION (FT):	-1.58
LOG DATE:	10/9/2012 START: 1555 END: 1628	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
0		0.0-0.6: Silt with TMGS, DG, VS, NP, LOM, SlOd, TSASF	PID = 0.7 ppm SR-CS071B-0.0/0.5 @ 1615
0.5		0.6-2.1: FMGS, DG, L, LOM, MOd (petroleum-like), SSASF, medium woody debris	PID = 3.5 ppm SR-CS071B-0.5/1.0 @ 1617
1			PID = 8.4 ppm
2			SR-CS071B-1.0/2.0 @ 1620
		2.1-4.0: Silt, DG, S, MP, 40% OM, MOd, fibrous material, leaves, trace plastic @ 2.5	PID = 3.8 ppm SR-CS071B-2.0/3.0 @ 1623 SR-CS071B-2.0/3.0R @ 1625
3	5.7		PID = 2.7 ppm
4		4.0-5.7: NR	SR-CS071B-3.0/4.0 @ 1628
5		EOC @ 5.7'	

NOTES:

GPS COORDINATES:

644360.89 FT N

2572258.04 FT E

TechLaw

SEDIMENT CORE LOG

SAMPLE LOCATION: **CS071C**

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	10/9/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	0.1
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	3.6
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	22.0
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.55
LOG DATE:	10/9/2012 START: 1645 END: 1745	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
0.5	5.9	0.0-1.2: FMGS with silt, DG, M, PS, SlOd, SSASF, woody organic debris from 0.0-0.3	PID = 2.8 ppm SR-CS071C-0.0/0.5 @ 1720
1			PID = 1.8 ppm SR-CS071C-0.5/1.0 @ 1724
2		1.2-4.0: Silt, DG, S, SP, SOM and leaves @ 1.7-1.9, 2.4-2.7, and 3.7-4.0, SlOd	PID = 2.7 ppm SR-CS071C-1.0/2.0 @ 1728
3			PID = 2.0 ppm SR-CS071C-2.0/3.0 @ 1733
4		4.0-5.9: NR	PID = 2.4 ppm SR-CS071C-3.0/4.0 @ 1737 SR-CS071C-3.0/4.0R @ 1738
5		EOC @ 5.9'	

NOTES:

GPS COORDINATES:

644319.47 FT N

2572298.45 FT E

TechLaw

SEDIMENT CORE LOG

SAMPLE LOCATION: **CS071D**

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	10/9/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	0.8
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	12.6
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	21.9
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.47
LOG DATE:	10/9/2012 START: 1750 END: 1830	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
0		0.0-3.1: FMGS with silt, DG, M, PS, OM from 1.5-1.9, SlOd, SSASF	PID = 0.5 ppm SR-CS071D-0.0/0.5 @ 1812
0.5			PID = 8.9 ppm SR-CS071D-0.5/1.0 @ 1815
1			PID = 12.5 ppm
2			SR-CS071D-1.0/2.0 @ 1820
	4.8		PID = 3.1 ppm
3		3.1-3.5: Silty clay, DG, VS, SP, TOM, SlOd	SR-CS071D-2.0/3.0 @ 1823
		3.5-4.0: SA 0.0-3.1	PID = 1.0 ppm
4		4.0-4.8: NR	SR-CS071D-3.0/4.0 @ 1818
		EOC @ 4.8'	
5			

NOTES:

GPS COORDINATES:

644262.74	FT N
2572234.43	FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: **CS072**

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	10/3/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	0.2
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	8.9
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	14.2
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.03
LOG DATE:	10/3/2012 START: 1715 END: 1755	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
		0.0-0.5: Silt, DGBr, S, NP, SlOd	PID = 7.4 ppm SR-CS072-0.0/0.5 @ 1735
0.5		0.5-1.2: MGS with some gravel and silt, DGBr, L, PS, WG, SlOd	PID = 1.4 ppm SR-CS072-0.5/1.0 @ 1739
1		1.2-1.8: Clay and silt, DGBr, S, SP, SlOd	PID = 2.4 ppm
		1.8-2.5: MGS with some gravel, DGBr, L, PS, WG, SSASF	SR-CS072-1.0/2.0 @ 1745
2			PID = 1.3 ppm
	5.2	2.5-4.2: Silt with more clay towards bottom, DGBr, S, SP with increasing plasticity towards bottom (native material)	SR-CS072-2.0/3.0 @ 1750
3			PID = 0.4 ppm
			SR-CS072-3.0/4.0 @ 1755
4		4.2-5.2: FGS with increasing amounts of silt towards bottom, DGBr, L, PS, WG, SSASF	PID = 0.0 ppm
5		EOC @ 5.2'	

NOTES:

GPS COORDINATES:

644330.60 FT N

2572412.21 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: CS073

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	10/2/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	0.3
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	13.8
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	20.1
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.08
LOG DATE:	10/3/2012 START: 1530 END: 1630	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
		0.0-0.6: FGS with silt and TFG, DGBr, VL, PS, WG, SlOd, TS	PID = 3.0 ppm SR-CS073-0.0/0.5 @ 1607
0.5		0.6-0.9: MGS with silt, DGBr, L, PS, WG, MOd (petroleum-like), SSASF	PID = 22.5 ppm
		0.9-1.4: Silt with FGS, DGBr, S, NP, SlOd, TS	SR-CS073-0.5/1.0 @ 1612
1		1.4-1.5: Clayey silt, DGBr, VS, SP	PID = 6.8 ppm
		1.5-1.8: SA 0.9-1.4	
		1.8-2.2: SA 1.4-1.5, except S	
		2.2-2.4: SA 0.9-1.4	SR-CS073-1.0/2.0 @ 1615
2		2.4-2.6: SA 1.4-1.5, except S	PID = 1.1 ppm
		2.6-2.9: Silt with prevalent fibrous OM, S, DGBr, NP, SlOd	
	3.5	2.9-3.5: SA 0.9-1.4	SR-CS073-2.0/3.0 @ 1620
3		EOC @ 3.5'	PID = 1.7 ppm
			SR-CS073-3.0/3.5 @ 1619
4			

NOTES:

GPS COORDINATES:

644236.89	FT N
2572314.07	FT E

SEDIMENT CORE LOG

PAGE 1 OF 1

SAMPLE LOCATION: **CS074**

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	10/24/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	0.3
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	9.8
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	18.2
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-0.83
LOG DATE:	10/25/2012 START: 915 END: 950	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
		0.0-4.7: Clay, DG, S, MP, 20% OM, MOd	PID = 1.0 ppm SR-CS074-0.0/0.5 @ 0940
0.5			PID = 1.2 ppm SR-CS074-0.5/1.0 @ 0942
1			PID = 1.1 ppm
			SR-CS074-1.0/2.0 @ 0944
2			PID = 3.1 ppm
	4.7		SR-CS074-2.0/3.0 @ 0946
3			PID = 1.9 ppm
			SR-CS074-3.0/4.0 @ 0948
4			PID = 1.0 ppm
		EOC @ 4.7'	

NOTES:

GPS COORDINATES:

644277.36 FT N

2572494.24 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: CS075

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	10/2/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	0.3
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	15.1
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	22.8
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-0.73
LOG DATE:	10/3/2012 START: 1200 END: 1300	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
		0.0-0.4: MGS, DGBr, L, PS, WG, SlOd, SF	PID = 8.0 ppm SR-CS075-0.0/0.5 @ 1240
0.5		0.4-0.7: FGS, DGBr, M, PS, WG, SlOd, SF	
		0.7-0.8: FGS, DGBr, M, PS, WG, SOM, SlOd, woody organics prevalent	PID = 2.3 ppm SR-CS075-0.5/1.0 @ 1245
1		0.8-1.2: Clayey silt, DGBr, S, SP 1.2-1.9: FGS very thinly bedded with silt, DGBr, S (silt) to M (sand), fibrous OM present @ 1.7-1.8, TS, plastic layer @ 1.6	PID = 4.2 ppm
		1.9-2.2: Silt, DGBr, S, NP	SR-CS075-1.0/2.0 @ 1247
2		2.2-2.5: Fibrous organics with silt, DGBr, F, SlOd	PID = 1.2 ppm
		2.5-2.8: Silt and clay, DGBr, S, SP	
	4.3	2.8-3.5: FGS, DGBr, L, PS, WG, fibrous OM @ 3.2-3.4	SR-CS075-2.0/3.0 @ 1255
3			PID = 1.4 ppm
		3.5-4.3: Clayey silt, DGBr, S, SP	SR-CS075-3.0/4.0 @ 1300
4		EOC @ 4.3'	

NOTES:

GPS COORDINATES:

644159.53 FT N

2572391.91 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: **CS076**

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	10/24/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	0.6
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	8.2
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	16.8
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-0.88
LOG DATE:	10/24/2012 START: 1510 END: 1545	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
0		0.0-2.5: Silt, DG, S, SP, TOM, SlOd; except from 1.6-1.8, and 2.4-2.5, FMGS, DG, L, PS, SlOd, SSASF	PID = 0.4 ppm SR-CS076-0.0/0.5 @ 1527
0.5			PID = 0.6 ppm SR-CS076-0.5/1.0 @ 1535
1			PID = 0.6 ppm
			SR-CS076-1.0/2.0 @ 1540
2			PID = 0.4 ppm
		2.5-4.0: Clay, LGBr, S, MP, TOM, LS (native material)	
	5.0		SR-CS076-2.0/3.0 @ 1537
3			PID = 0.4 ppm
			SR-CS076-3.0/4.0 @ 1530
4		4.0-5.0: NR	PID = 0.6 ppm
		EOC @ 5.0'	

NOTES:

GPS COORDINATES:

644249.95 FT N

2572612.18 FT E

TechLaw

SEDIMENT CORE LOG

SAMPLE LOCATION: **CS077**

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	10/2/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	2.7
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	12.0
EQUIPMENT:	Vibracore	WATER AND SED PENETRATION (FT):	16.3
LOGGER:	Kim Whitlock	TIDE ELEVATION (FT):	-1.04
LOG DATE:	10/3/2012 START: 1050 END: 1205	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
		0.0-0.2: Silt with SFGS, DGBr, VS, NP, SOM, SlOd, wood/fibrous material	PID = 6.1 ppm SR-CS077-0.0/0.5 @ 1147
0.5		0.2-1.0: Silt, DGBr, S, NP, SOM, SlOd	PID = 2.2 ppm SR-CS077-0.5/1.0 @ 1150
1		1.0-1.3: MGS, DGBr, L, PS, WG, SlOd, LSASF	PID = 2.7 ppm
		1.3-2.9: SA 0.2-1.0	SR-CS077-1.0/2.0 @ 1152
2			PID = 2.8 ppm
	3.5	2.9-3.1: Silt with SFGS, DGBr, F, NP, TOM @ 2.9, SlOd	SR-CS077-2.0/3.0 @ 1154
3		3.1-3.5: Silt, DGBr, S, NP, TOM, SlOd	PID = 2.5 ppm
		EOC @ 3.5'	SR-CS077-3.0/3.5 @ 1158
4			

NOTES:

GPS COORDINATES:

644087.98 FT N

2572496.66 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: CS078

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	10/10/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	0.9
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	8.1
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	19.1
LOGGER:	Kim Whitlock	TIDE ELEVATION (FT):	-1.54
LOG DATE:	10/10/2012 START: 1100 END: 1227	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
		0.0-0.5: Silt with FGS lens @ 0.2-0.3, DG, VS, NP, LOM, SlOd	PID = 1.1 ppm SR-CS078-0.0/0.5 @ 1218
0.5		0.5-0.9: Silt, DG, S, NP, SOM, fibrous material	PID = 0.5 ppm SR-CS078-0.5/1.0 @ 1219
1		0.9-1.8: SAA, except with TFG, 50% OM including leaves, fibrous material, woody debris, SlOd	PID = 1.2 ppm
			SR-CS078-1.0/2.0 @ 1221
2		1.8-4.0: Silt with FGS lens @ 3.3, DG, S, MP, 25% OM, fibrous material, except 75% OM and woody debris @ 3.7-4.0 , SlOd	PID = 0.8 ppm
	5.9		SR-CS078-2.0/3.0 @ 1225
3			PID = 0.7 ppm
			SR-CS078-3.0/4.0 @ 1227
4		4.0-5.9: NR	
5		EOC @ 5.9'	

NOTES: SR-CS078-0.5/1.0R @ 1234
Second core collocated and collected for QC purposes, core material looks the same, duplicate collected from 0.5 to 1.0 and homogenized seperately from original core.

GPS COORDINATES:
644184.66 FT N
2572652.45 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: **CS079**

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	10/2/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	2.7
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	7.4
EQUIPMENT:	Vibracore	WATER AND SED PENETRATION (FT):	13.1
LOGGER:	Kim Whitlock	TIDE ELEVATION (FT):	-0.98
LOG DATE:	10/3/2012 START: 928 END: 1040	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
0		0.0-0.5: Silt with some VFGS, DGBr, VS, NP, SOM, SlOd, LS	PID = 2.2 ppm SR-CS079-0.0/0.5 @ 1018
0.5		0.5-1.3: Silt with TFGS, DGBr, S, NP, SOM, SlOd, woody debris	PID = 0.6 ppm SR-CS079-0.5/1.0 @ 1021
1		1.3-3.5: Silt, DGBr, S, NP, SOM	PID = 0.6 ppm
2			SR-CS079-1.0/2.0 @ 1027 PID = 1.3 ppm
	3.5		SR-CS079-2.0/3.0 @ 1029
3		EOC @ 3.5'	PID = 0.8 ppm
4			SR-CS079-3.0/3.5 @ 1039

NOTES: Two cores collected at CS079, but core labeled as CS079B utilized since it had greater recovery

GPS COORDINATES:

644068.78 FT N

2572635.37 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: **CS080**

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	10/10/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	0.3
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	8.6
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	18.9
LOGGER:	Kim Whitlock	TIDE ELEVATION (FT):	-1.62
LOG DATE:	10/10/2012 START: 1240 END: 1320	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
0		0.0-0.7: Silt, DG, S, NP, 70% OM, leaves and woody debris, SlOd	PID = 0.9 ppm SR-CS080-0.0/0.5 @ 1304
0.5		0.7-2.6: Silt, DG, S, SP, 50% OM @ 1.5-2.0, SlOd	PID = 0.5 ppm SR-CS080-0.5/1.0 @ 1308
1			PID = 1.7 ppm
2			SR-CS080-1.0/2.0 @ 1311
	5.8	2.6-4.2: FGS, DG, M, PS, 70% OM @ 3.0-3.3, SlOd, TSF	PID = 1.3 ppm SR-CS080-2.0/3.0 @ 1314
3			PID = 0.7 ppm
4		EOC @ 4.2'	SR-CS080-3.0/4.2 @ 1317

NOTES:

GPS COORDINATES:

644156.60 FT N

2572737.05 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: CS081

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	10/3/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	1.2
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	8.9
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	19.3
LOGGER:	Kim Whitlock	TIDE ELEVATION (FT):	-1.02
LOG DATE:	10/3/2012 START: 1800 END: 1855	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
0		0.0-0.4: Silt with TFGS, DGBr, VS, NP, TOM	PID = 0.0 ppm SR-CS081-0.0/0.5 @ 1837
0.5		0.4-1.4: FGS with some silt, DGBr, M, PS, LS; except at 1.4, silt, Bl, VS, 50% OM with fibrous debris, SlOd	PID = 0.0 ppm SR-CS081-0.5/1.0 @ 1842
1			PID = 1.7 ppm
		1.4-2.2: Silt, DG, VS, NP, MOd (petroleum-like), TS	SR-CS081-1.0/2.0 @ 1845
2			PID = 1.2 ppm
		2.2-2.9: Silt with TFG, DGBr, VS, MOd (petroleum-like), TS	SR-CS081-2.0/3.0 @ 1846
	4.7		
3		2.9-4.1: MCGS with TFG @ 3.5, GBr, L, SOM @ 3.8, SlOd, SSASF	PID = 0.6 ppm SR-CS081-3.0/4.0 @ 1850
4		4.1-4.7: Clay, LGBr, S, HP, TS (native material)	PID = 0.5 ppm
		EOC @ 4.7'	
5			

NOTES:

GPS COORDINATES:

644026.39 FT N

2572732.97 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: DS040-1A

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	12/19/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	0.2
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	11.5
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	15.4
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.80
LOG DATE:	12/19/2012 START: 1420 END: 1445	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
0		0.0-0.4: FMGS with TMG, DG, L, PS, TOM, MOd	PID = 48.6 ppm SR-DS040-1A- 0.0/0.5 @ 1440
0.5		0.4-0.6: Silt, DGBr with sheen, S, NP, SOM, StOd	
		0.6-1.0: FMGS with CSAG at top, LGBr, L, PS, TOM, SlOd	PID = 19.8 ppm SR-DS040-1A- 0.5/1.0 @ 1442
1		EOC @ 1.0'	
	1.0		

NOTES:

GPS COORDINATES:

646079.50	FT N
2571795.63	FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: DS040-2

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	12/19/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	0.8
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	7.6
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	15.0
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.80
LOG DATE:	12/19/2012 START: 1455 END: 1545	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
		0.0-0.6: Silt, DGBr, S, NP, TOM, SlOd	PID = 2.2 ppm SR-DS040-2-0.0/0.5 @ 1528
0.5		0.6-0.9: FGS with some silt, DGBl with staining and sheen, L, PS, TOM, MOd	PID = 9.1 ppm SR-DS040-2-0.5/1.0 @ 1533
1		0.9-1.7: Silt, DGBr except DGBl with staining and sheen at 0.9-1.0 and 1.5-1.6, S, SP, TOM, MOd except StOd at stained intervals	PID = 25.5 ppm
		1.7-2.0: CSAG with some silt, Bl with staining and sheen, M, PS, TOM, VStOd	SR-DS040-2-1.0/2.0 @ 1538
2		2.0-2.2: FGS, MBr, D, WS, MOd	PID = 3.0 ppm
		2.2-3.0: Silt, MBr, VST, NP	
	3.0		SR-DS040-2-2.0/3.0 @ 1542
3		EOC @ 3.0'	

NOTES: Too close to Pennsylvania Ave. bridge to obtain GPS data - had to collect coordinates from back of boat

Little sheen and low odor volatiles (naphthalene-like) present during core collection

GPS COORDINATES:

646061.61 FT N

2571765.63 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: DS040-3

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	12/19/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	1.3
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	10.6
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	14.7
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.70
LOG DATE:	12/19/2012 START: 1550 END: 1625	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
0.5	1.5	0.0-1.5: FGS with some silt, DGBr except DGBl with staining and sheen at 0.0-0.3 and 0.5-1.1, L, PS, TOM, MOd except StOd at stained intervals, TSASF	PID = 15.2 ppm SR-DS040-3-0.0/0.5 @ 1618
1			PID = 22.3 ppm SR-DS040-3-0.5/1.0 @ 1622
2		EOC @ 1.5'	PID = 8.6 ppm SR-DS040-3-1.0/1.5 @ 1625
3			
4			

NOTES:

GPS COORDINATES:

646075.06	FT N
2571740.86	FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: DS040-4

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	12/19/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	0.2
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	12.1
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	15.7
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.70
LOG DATE:	12/19/2012 START: 1630 END: 1800	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
0.5		0.0-0.3: FGS with TMG, DGBl with staining and sheen, L, PS, TOM, StOd, LS, free product present 0.3-1.5: Clay, RBr, F, MP	PID = 33.2 ppm SR-DS040-4-0.0/0.3 @ 1748
1			PID = 4.0 ppm SR-DS040-4-0.5/1.5 @ 1750
2	2.1	1.5-1.7: Silt, MGBr, F, SP, TOM 1.7-2.1: FMGS, MGBr, M, PS, TOM (wood at bottom) EOC @ 2.1'	PID = 1.1 ppm SR-DS040-4-0.5/1.5R @ 1758 SR-DS040-4-1.5/2.1 @ 1754
3			
4			

NOTES: Globules of free product noted on surface of water when core cut open

GPS COORDINATES:

6460950.40	FT N
2571747.64	FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: S12

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	12/11/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	0.1
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	1.1
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	8.3
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.60
LOG DATE:	12/12/2012 START: 745 END: 810	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
		0.0-0.1: Silt, DGBr, VS, NP, TOM, SlOd 0.1-1.1: CSAG, DG, L, PS, TOM, SlOd, TSASF	PID = 0.1 ppm SR-S12-0.0/2.0 @ 0805
1		1.1-2.0: VFGS, MBr, M, PS, SOM, SlOd	PID = 0.0 ppm
2		2.0-3.2: MCGS with TMG, MBr, M, PS	PID = 0.0 ppm
	3.6		SR-S12-2.0/3.6 @ 0806
3		3.2-3.5: FMGS, MBr, M, PS, SSASF 3.5-3.6: Silt, MBr, S, SP EOC @ 3.6'	PID = 0.1 ppm
4			

NOTES:

GPS COORDINATES:

647902.64 FT N

2569922.76 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: S14

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	11/28/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	0.7
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	1.5
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	8.3
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.91
LOG DATE:	11/29/2012 START: 720 END: 750	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
		0.0- 0.4 : MGS with silt, DG, L, PS, SOM, SlOd,	PID = 0.1 ppm SR-S14-0.0/0.9 @ 0745
		0.4-0.9 : MCGS, with TMG, MG, L, PS, TSF	
1		0.9-1.8 : Clay, RBr, F, MP, (native materal)	PID = 0.0 ppm
		EOC @ 1.8'	
2	1.8		

NOTES:

GPS COORDINATES:

647930.32 FT N

2570126.15 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: S15

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	11/28/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	3.1
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	1.1
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	9.2
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.89
LOG DATE:	11/28/2012 START: 1400 END: 1450	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
0		0.0-0.5: Silt, DGBr, VS, NP, 10% OM, SlOd	PID = 0.1 ppm SR-S15-0.0/2.0 @ 1430 SR-S15-0.0/2.0R @ 1431
		0.5-0.9: Silt, DGBr, S, NP, 50% OM, SlOd	
1		0.9-2.9: FMGS with TMG, DG, L, PS, TOM, SlOd, SSASF	PID = 0.1 ppm
2			PID = 0.0 ppm
	4.5	2.9-4.5: Clay, RBr, ST from 2.9-3.7 and VST from 3.7-4.5, MP (native material)	SR-S15-2.0/2.9 @ 1445
3			PID = 0.0 ppm
4			PID = 0.0 ppm
		EOC @ 4.5'	

NOTES:

GPS COORDINATES:

647696.97 FT N

2570604.36 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: **S16**

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	11/28/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	2.2
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	0.9
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	9.5
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.84
LOG DATE:	11/29/2012 START: 830 END: 910	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
0		0.0-0.7 : Silt with FGS, DGBr, VS, NP, SOM, SlOd	PID = 0.0 ppm SR-S16-0.0/2.0 @ 0904
		0.7-1.3 : MCGS with TMG, MGBr, L, PS, SOM, SlOd	
1			PID = 0.0 ppm
		1.3-3.2 : FMGS with TMG, MGBr, M, PS, TOM, TSASF	
2			PID = 0.0 ppm SR-S16-2.0/3.4 @ 0906 SR-S16-2.0/3.4R @ 0907 (PCBs only)
	3.4		
3		3.2-3.4 :Silt, DG, S, SP, SlOd	PID = 0.0 ppm
		EOC @ 3.4'	
4			

NOTES:

GPS COORDINATES:

647522.77 FT N

2570717.61 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: **S19A**

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	11/28/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	0.3
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	2.9
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	9.9
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.78
LOG DATE:	11/28/2012 START: 1645 END: 1720	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
0		0.0-1.2: MCGS, DG, L, PS, TOM, TSASF	PID = 0.1 ppm SR-S19A-0.0/2.0 @ 1710 SR-S19A-0.0/2.0R @ 1711 (PCBs only)
1		1.2-1.8: Silt, DGBr, S, SP, 50% OM, SlOd	PID = 0.1 ppm
		1.8-3.3: MCGS with TMCG, DGBr, M, PS, TOM, SlOd	
2			PID = 0.0 ppm
	4.6		SR-S19A-2.0/4.6 @ 1713
3			PID = 0.1 ppm
		3.3-4.6: Silt with laminations, DGBr, F, SP, TSASF	
4			PID = 0.2 ppm
		EOC @ 4.6'	

NOTES:

GPS COORDINATES:

646982.98 FT N

2570966.99 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: S19B

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	11/28/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	2.0
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	3.5
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	13.1
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.84
LOG DATE:	11/28/2012 START: 1600 END: 1640	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
0	4.9	0.0-0.3: Silt with TMCG, DG, VS, NP, TOM, SlOd 0.3-2.1: MCGS, DG except DGBl (PSS) from 0.5-0.8, L, PS, TOM, SlOd except MOd from 0.5-0.8, TSASF	PID = 0.4 ppm SR-S19B-0.0/2.0 @ 1630
1			PID = 0.2 ppm
2		2.1-2.6: Silt, DG, S, NP, 50% OM, wood and hair-like substance, StOd 2.6-4.7: FMGS, DG except DGBl (PSS) from 2.6-2.9, 3.1-3.5, and 4.4-4.7, L, PS, SOM, StOd, TSASF	PID = 0.9 ppm SR-S19B-2.0/4.7 @ 1635 SR-S19B-2.0/4.7R @ 1637
3			PID = 0.3 ppm
4		4.7-4.9: Clay, RBr, VST, MP (native material) EOC @ 4.9'	PID = 0.2 ppm

NOTES:

GPS COORDINATES:

647083.15 FT N

2571129.67 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: S22

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	11/6/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	1.0
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	2.0
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	12.5
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.35
LOG DATE:	11/7/2012 START: 800 END: 850	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
		0.0-1.1: Silt with TFGS @ top, DGBl (PSS), VS, NP, TOM, StOd	PID = 15.7 ppm SR-S22-0.0/2.0 @ 0845 SR-S22-0.0/2.0R @ 0846
1		1.1-1.4: MCGS with TG, DG, L, PS, MOd	PID = 2.4 ppm
		1.4-1.7: Silt, Bl (PSS), VS, NP, 50% OM (hair-like substance), StOd	
		1.7-2.1: FGS, MGBr, M, WS, MOd	
2		2.1-2.9: Silt with TFGS, DGBl (PSS), S, NP, SOM, StOd	PID = 1.4 ppm
	3.6	2.9-3.6: Clay, RBr, VST, HP, dark grey hair-like organic matter layer @ 3.6 (native material)	SR-S22-2.0/3.6 @ 0842
3			PID = 0.2 ppm
		EOC @ 3.6'	
4			

NOTES:

GPS COORDINATES:

646955.39	FT N
2571262.54	FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: S24

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	10/11/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	0.9
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	2.5
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	12.8
LOGGER:	Kim Whitlock	TIDE ELEVATION (FT):	-1.49
LOG DATE:	10/12/2012 START: 723 END: 825	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
	6.0	0.0-1.1: Silt, VDG, black staining, VS, NP, StOd, dark black staining from 0.7 to 0.8 with TOM	PID = 1.4 ppm SR-S24-0.0/2.0 @ 0815
1		1.1-1.5: Silt, LG, VS, NP, LOM, leaves, StOd (petroleum-like)	PID = 6.5 ppm
		1.5-2.1: SAA with some MGS, VStOd	
2		2.1-2.8: Sand (CGS to 2.5, FGS 2.5 to 2.8) with TFG, G, oil coated and some oil pooling @ 2.1-2.3, L, PS, SOM, VStOd (petroleum like), SSASF	PID = 7.5 ppm SR-S24-2.0/6.0 @ 0820 SR-S24-2.0/6.0R @ 0823
		2.8-3.3: Silt, VDG, black staining throughout, S to VS, NP, sulfur odor @ 3.1 to 3.3 and black hairs or fibers, petroleum-like odor from 2.8 to 3.1	
3		3.3-3.8: MCGS with TFG and some pebbles, Br, L, PS, SSASF	PID = 1.7 ppm
		3.8-4.0: SA 1.1 - 1.5, except with black hairs and sulfur odor	
		4.0-4.6: FGS with some silt, LG, L, PS, LOM, SSASF	
4		4.6-6.0: Silt with TFGS and TMG, DG, S, SP, TOM, TSASF	PID = 1.2 ppm
5		EOC @ 6.0'	PID = 0.8 ppm

NOTES:

GPS COORDINATES:

646872.84 FT N

2571328.99 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: S30

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	10/11/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	2.4
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	10.4
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	16.1
LOGGER:	Kim Whitlock	TIDE ELEVATION (FT):	-1.63
LOG DATE:	10/12/2012 START: 1150 END: 1245	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
0	2.9	0.0-0.7: Silt with TLG @ 0.6, DG, VS, NP, TOM	PID = 25.4 ppm SR-S30-0.0/2.0 @ 1240 SR-S30-0.0/2.0R @ 1241
1		0.7-1.0: Silt with TFGS, G, VS, NP, TOM, VStOd (naphthalene-like odor) 1.0-1.6: Silt with SFGS and laminations, VLG, VS, TOM, StOd	PID = 30.7 ppm
2		1.6-1.8: Silt with TCGS, Bl with staining throughout, S, NP, VStOd (naphthalene-like odor) 1.8-2.9: Clay, striated (LG, DG, and Br), ST, MP, SOM, woody debris, large rock at base of core (native material)	PID = 1.3 ppm
3		EOC @ 2.9'	SR-S30-2.0/2.9 @ 1243
4			

NOTES: Rocky bottom and naphthalene smell observed during core collection

GPS COORDINATES:

646608.35	FT N
2571571.71	FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: S31

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	10/11/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	0.5
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	2.3
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	9.0
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.61
LOG DATE:	10/11/2012 START: 1420 END: 1442	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
0	5.0	0.0-0.8: MGS, DG, M, PS, LOM, SlOd, wood pieces @ 0.8, SSASF	PID = 14.8 ppm SR-S31-0.0/2.0 @ 1438
1		0.8-1.2: Silt, DG, S, SP, SlOd 1.2-1.7: FGS, DG, M, PS, SlOd, SSASF	PID = 2.3 ppm
2		1.7-2.5: SA 0.0-0.8, except with TFG	PID = 0.7 ppm
3		2.5-5.0: Clay, LG, F, MP, TS (native material)	SR-S31-2.0/5.0 @ 1441 PID = 0.4 ppm
4			PID = 0.2 ppm
5		EOC @ 5.0'	

NOTES:

GPS COORDINATES:

646493.30	FT N
2571411.72	FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: S32

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	11/6/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	1.5
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	2.0
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	12.0
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.22
LOG DATE:	11/6/2012 START: 855 END: 1005	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
0		0.0-0.6: FGS, DG, M, TOM, SlOd, TSASF	PID = 0.6 ppm SR-S32-0.0/2.0 @ 1002
		0.6-1.3: Silt, MGBr, S, NP, SlOd, TSASF	
1		1.3-2.2: FMGS with TMG, MGBr, M, PS, TSASF	PID = 0.3 ppm
2		2.2-5.4: Interbedded silt and clay, LGBr and LBr, F, SP to MP; except from 3.1-3.5, VFGS, LBr, M, WS (native material)	PID = 0.2 ppm SR-S32-2.0/4.0 @ 1000
3	5.4		PID = 0.6 ppm
4			PID = 0.2 ppm
5		EOC @ 5.4'	

NOTES:

GPS COORDINATES:

646453.27 FT N

2571556.87 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: **S33**

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	10/11/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	0.3
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	2.2
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	8.9
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.82
LOG DATE:	10/11/2012 START: 1516 END: 1547	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
0	4.5	0.0-2.1: Sand with TFG, DG and LG, L, PS, TOM, SlOd, SSASF; except from 1.4-1.8, silt, DG, S, SP, SlOd	PID = 1.0 ppm SR-S33-0.0/2.0 @ 1544
1			PID = 0.4 ppm
2		2.1-4.5: Clay, MG, F, MP (native material)	PID = 0.3 ppm SR-S33-2.0/4.5 @ 1546
3			PID = 0.2 ppm
4		EOC @ 4.5'	PID = 0.4 ppm

NOTES:

GPS COORDINATES:

646405.35 FT N

2571450.04 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: S34

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	10/11/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	0.9
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	1.9
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	8.8
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.71
LOG DATE:	10/11/2012 START: 1450 END: 1517	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
0	5.0	0.0-0.6: Silt with TFG, DG, S, SP, SlOd	PID = 0.8 ppm SR-S34-0.0/2.0 @ 1515
		0.6-3.4: FMGS with TFG, DG, M, PS, SlOd, SSASF	
1			PID = 0.7 ppm
2			PID = 0.3 ppm
			SR-S34-2.0/5.0 @ 1517
3			PID = 0.4 ppm
		3.4-5.0: Clay, LG, ST, MP; except from 4.1-4.3, SA 0.6-3.4 (native material)	
4			PID = 0.3 ppm
5		EOC @ 5.0'	

NOTES:

GPS COORDINATES:

646364.35 FT N

2571614.47 FT E

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SEDIMENT CORE LOG

SAMPLE LOCATION: **S36**

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	10/11/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	0.8
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	1.9
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	9.7
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.75
LOG DATE:	10/11/2012 START: 1245 END: 1330	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
0	5.6	0.0-0.9: Silt, DG, S, NP, TOM, SlOd	PID = 1.9 ppm SR-S36-0.0/2.0 @ 1322
1		0.9-2.3: Piece of wood	PID = 1.0 ppm
2		2.3-3.6: Gravelly sand, MG, L, PS	PID = 0.4 ppm SR-S36-2.0/5.6 @ 1324
3		3.6-5.6: Clay increasing coarseness to silt then FGS, LG, F to M, MP with decreasing plasticity to NP	PID = 1.0 ppm
4			PID = 0.1 ppm
5		EOC @ 5.6'	PID = 0.2 ppm

NOTES:

GPS COORDINATES:

646257.16 FT N

2571655.01 FT E

TechLaw

SEDIMENT CORE LOG

SAMPLE LOCATION: **S37**

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	10/11/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	0.3
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	1.5
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	8.9
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.58
LOG DATE:	10/11/2012 START: 1335 END: 1415	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
0	5.1	0.0-0.5: Silt, DG, S, NP	PID = 0.6 ppm SR-S37-0.0/2.0 @ 1403
		0.5-3.1: CGS except FGS @ 2.2-2.8, DG and LG, L, PS, SSASF	
1			PID = 0.7 ppm
2			PID = 0.2 ppm SR-S37-2.0/5.1 @ 1407
3		3.1-5.1: Clay, LG, F, MP, TS (native material)	PID = 0.2 ppm
4			PID = 0.1 ppm
5		EOC @ 5.1'	

NOTES:

GPS COORDINATES:

646210.17 FT N

2571574.47 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: **S39**

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	11/28/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	0.8
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	6.1
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	13.8
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.84
LOG DATE:	11/29/2012 START: 755 END: 825	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
0	4.8	0.0-0.4 : Silt, DG, VS, NP, TOM, SlOd	PID = 0.0 ppm SR-S39-0.0/2.0 @ 0816 SR-S39-0.0/2.0R @ 0817 (PCBs only)
1		0.4-1.6 : Silt, DGBr, S, SP, TOM, SlOd, TSASF	PID = 0.0 ppm
2		1.6-4.8 : FMGS with TMG, MGBr, M, PS, TOM, TSASF	PID = 0.0 ppm SR-S39-2.0/4.8 @ 0820
3			PID = 0.0 ppm
4		EOC @ 4.8'	PID = 0.0 ppm

NOTES:

GPS COORDINATES:

646068.27 FT N

2571498.12 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: S43

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	10/11/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	0.2
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	3.3
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	11.9
LOGGER:	Kim Whitlock	TIDE ELEVATION (FT):	-1.60
LOG DATE:	10/12/2012 START: 830 END: 915	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
0		0.0-2.0: FMGS with SLG and TC, DG, M, PS, SOM	PID = 0.6 ppm SR-S43-0.0/2.0 @ 0910
1			PID = 0.7 ppm
2		2.0-2.6: Silt with TFGS, DG, VS, MP, TOM, MOd, little black hairs, TSF	PID = 2.0 ppm
	5.7	2.6-5.7: Interbedded sand and silt, FGS at 3.2- 3.4, 3.7, 4.0-4.2, 4.6, 5.0-5.3, DG, StOd; sand layers: with TFG, L, PS, SSASF; silt: S, SP, SOM, black hairs	SR-S43-2.0/5.7 @ 0913
3			PID = 0.7 ppm
4			PID = 0.3 ppm
5		EOC @ 5.7'	PID = 0.1 ppm

NOTES:

GPS COORDINATES:

645960.21 FT N

2571845.87 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: S44

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	10/11/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	1.3
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	2.5
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	9.1
LOGGER:	Kim Whitlock	TIDE ELEVATION (FT):	-1.51
LOG DATE:	10/12/2012 START: 1030 END: 1100	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
		0.0-1.1: MGS with SFG and TMG, G, L, WS	PID = 0.7 ppm SR-S44-0.0/2.0 @ 1050
1		1.1-2.5: Silt, DG, VS, NP, SOM, leaves, fibrous material @ 2.2	PID = 0.2 ppm
2			PID = 0.3 ppm
	2.9	2.5-2.9: FGS, G, L, WS, SSASF	SR-S44-2.0/2.9 @ 1052
3		EOC @ 2.9'	

NOTES:

GPS COORDINATES:

645905.50 FT N

2571578.05 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: S45

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	11/28/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	1.6
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	3.4
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	12.2
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.82
LOG DATE:	11/29/2012 START: 1005 END: 1030	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
0	3.7	0.0-0.3: Silt, DGBr, VS, NP, TOM, SlOd	PID = 1.4 ppm
		0.3-1.3: Silt, DGBl (PSS), S, SP, TOM, MOd	SR-S45-0.0/1.9 @ 1025
1		1.3-1.9: MCGS, MG, M, PS	PID = 0.6 ppm
		1.9-3.7: Clay, RBr, VST, HP (native material)	
2			PID = 0.2 ppm
3			PID = 0.2 ppm
		EOC @ 3.7'	
4			

NOTES:

GPS COORDINATES:

645848.17 FT N

2571881.53 FT E

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SEDIMENT CORE LOG

SAMPLE LOCATION: **S46**

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	11/8/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	1.3
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	4.0
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	15.0
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.33
LOG DATE:	11/9/2012 START: 940 END: 1025	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
1	4.6	0.0-2.5: Silt with TG @ top, DGBr, S, SP, TOM, MOd; except from 1.8-1.9, MCGS, DGBl, L, PS, MOd	PID = 0.2 ppm SR-S46-0.0/2.0 @ 1002 SR-S46-0.0/2.0R @ 1004
2			PID = 0.7 ppm
3		2.5-2.7: MCGS with TG, Bl (PSS), L, PS, MOd 2.7-4.6: Silt with laminations, LGBr, F, SP, TOM, TSASF; except from 4.2-4.3, FGS, LGBr, L, WS	PID = 0.7 ppm SR-S46-2.0/4.6 @ 1020 PID = 0.4 ppm
4		4.0-4.6: NR	PID = 0.3 ppm
5		EOC @ 4.6'	

NOTES:

GPS COORDINATES:

645784.59 FT N

2571622.78 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: S47

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	11/9/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	2.0
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	5.0
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	10.0
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.48
LOG DATE:	11/10/2012 START: 1045 END: 1110	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
0		0.0-1.1: Silt with FMGS, DG, F, NP, TOM, SlOd	PID = 0.2 ppm SR-S47-0.0/1.6 @ 1107 SR-S47-0.0/1.6R @ 1108
1		1.1-1.3: Silt, MBr, S, SP, SlOd 1.3-1.6: FMGS, DGBr, L, PS, TOM, SlOd 1.6-3.2: Clay, RBr, VST, HP (native material)	PID = 0.1 ppm
2			PID = 0.1 ppm
	3.2		
3		EOC @ 3.2'	PID = 0.1 ppm
4			

NOTES:

GPS COORDINATES:

645743.48 FT N

2571922.81 FT E

TechLaw

SEDIMENT CORE LOG

SAMPLE LOCATION: **S48**

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	11/8/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	-1.5
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	3.0
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	10.0
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.50
LOG DATE:	11/9/2012 START: 1115 END: 1143	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
		0.0-0.2: MCGS with TG, DGBr, VL, PS, TOM, MOd	PID = 0.4 ppm SR-S48-0.0/2.1 @ 1138 SR-S48-0.0/2.1R @ 1139
1		0.2-1.4: Silt, DGBr @ 0.3-0.9, DGBl @ 0.9-1.4 (possible staining), S, SP, TOM, MOd; except from 0.5-0.6, SA 0.0-0.2	
		1.4-2.0: Clay, LGBr with DGBl laminations, S, MP, SlOd, TSASF	PID = 0.3 ppm
2		2.0-2.1: FGS, LGBr, L, PS, 50% OM, large chunks of woody debris, SlOd EOC @ 2.1'	
	2.1		

NOTES:

GPS COORDINATES:

645681.89 FT N

2571663.05 FT E

TechLaw

SEDIMENT CORE LOG

SAMPLE LOCATION: **S49**

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	11/29/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	1.7
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	3.9
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	8.9
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.78
LOG DATE:	11/29/2012 START: 1800 END: 1820	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
		0.0-0.6: Silt with TMG, DGBr, VS, NP, TOM, MOd, TS	PID = 0.6 ppm SR-S49-0.0/1.7 @ 1815
		0.6-0.8: MCGS, DGBl (PSS), L, PS, TOM, MOd	
		0.8-1.1: Silt, DGBr, S, SP, TOM, SlOd	
1		1.1-1.4: Silt, RBr, S, SP, TOM	PID = 0.4 ppm
		1.4-1.7: TMCG, MG, L, PS	
		1.7-2.9: Clay, RBr, VST, HP (native material)	
2			PID = 0.1 ppm
	2.9	EOC @ 2.9'	
3			

NOTES:

GPS COORDINATES:

645656.55 FT N

2571942.11 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: **S50**

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	11/8/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	1.0
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	7.0
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	15.1
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.37
LOG DATE:	11/9/2012 START: 1030 END: 1110	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
		0.0-1.5: Silt, LGBr, F, SP, TOM, SlOd, TSASF; except from 0.3-0.4, VFGS, Bl (possible staining), L, WS, TOM, MOd	PID = 0.4 ppm SR-S50-0.0/2.0 @ 1057
1			PID = 0.2 ppm
		1.5-1.9: FMGS, DGBl (possible staining), L, PS, MOd, TSASF	
		1.9-3.0: Clay, LGBr, F, MP, TSF	
2			PID = 0.1 ppm SR-S50-2.0/4.4 @ 1107 SR-S50-2.0/4.4R @ 1108
	4.4		
3		3.0-3.1: FGS, LGBr, M, WS, TOM 3.1-4.4: Silt with laminations, LGBr, S, SP, TSF	PID = 0.2 ppm
4			PID = 0.3 ppm
		EOC @ 4.4'	

NOTES:

GPS COORDINATES:

645562.87 FT N

2571715.25 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: S51

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	11/9/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	0.9
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	1.9
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	6.2
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.38
LOG DATE:	11/10/2012 START: 1130 END: 1150	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
		0.0-0.2: Silt, DGBr, VS, NP, 50% OM, MOd	PID = 0.2 ppm SR-S51-0.0/2.0 @ 1146
		0.2-0.8: FMGS, DGBl @ 0.2-0.5 (PSS), MBr @ 0.5-0.8, L, PS, TOM, MOd	
		0.8-1.1: Silt, MBr, S, NP, SlOd	
1		1.1-2.0: CSAG, MG, L, PS, TOM	PID = 0.2 ppm
		2.0-2.7: Clay, RBr, H, HP (native material)	
2			PID = 0.1 ppm
		EOC @ 2.7'	
	2.7		
3			

NOTES:

GPS COORDINATES:

645500.96 FT N

2571963.70 FT E

TechLaw

SEDIMENT CORE LOG

SAMPLE LOCATION: **S52**

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	11/9/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	1.5
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	1.9
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	11.0
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.43
LOG DATE:	11/9/2012 START: 1545 END: 1605	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
0		0.0-1.1: MCGS with TG, DGBr except DGBl @ 0.3-0.6 (PSS), M, PS, TOM, MOd	PID = 0.2 ppm SR-S52-0.0/2.0 @ 1557
1		1.1-2.3: Silt, DGBr except DGBl @ 1.8-2.1 (PSS), S, SP, TOM, MOd	PID = 1.1 ppm
2		2.3-2.7: FMGS, DGBl (PSS), L, PS, MOd	PID = 0.5 ppm
	3.7	2.7-3.2: Clay, LGBr, F, MP, TSF	SR-S52-2.0/3.7 @ 1600
3		3.2-3.7: FMGS, MGBr, M, PS	PID = 0.3 ppm
		EOC @ 3.7'	
4			

NOTES:

GPS COORDINATES:

645417.78 FT N

2571760.66 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: S53

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	11/9/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	0.9
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	2.6
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	10.8
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.46
LOG DATE:	11/10/2012 START: 1000 END: 1040	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
		0.0-0.5: Silt with TG, DGBl (PSS), VS, NP, TOM, MOd	PID = 0.1 ppm
		0.5-2.4: CSAG, DGBl @ top grades to LGBr towards bottom, L, PS, TOM, MOd @ top (no odor below DGBl)	SR-S53-0.0/2.4 @ 1038
1			PID = 0.2 ppm
2			PID = 0.1 ppm
	4.0	2.4-3.8: Clay with 10% FMG, RBr, ST, HP (native material)	
3			PID = 0.2 ppm
		3.8-4.0: CSAG with clay, RBr, M, PS (native material)	
4		EOC @ 4.0'	

NOTES:

GPS COORDINATES:

645326.00 FT N

2571998.82 FT E

TechLaw

SEDIMENT CORE LOG

SAMPLE LOCATION: S54

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	10/11/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	2.1
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	1.5
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	8.9
LOGGER:	Kim Whitlock	TIDE ELEVATION (FT):	-1.64
LOG DATE:	10/12/2012 START: 1105 END: 1145	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
		0.0-0.4: FGS with silt, DG, VL, PS, TSASF, large chunk of asphalt	PID = 0.5 ppm
		0.4-1.2: Silt, DG, VS, MP, TOM	SR-S54-0.0/2.0 @ 1140
1		1.2-2.0: FGS, DG, VL, WS, TSF	PID = 0.5 ppm
2		2.0-2.9: MCGS with LFG, VL silty sand @ 2.0-2.1, LG, D, PS, TSF	PID = 0.3 ppm
	3.5		SR-S54-2.0/3.5 @ 1142
3		2.9-3.5: VFGS with clay, LG, D, PS	PID = 0.3 ppm
		EOC @ 3.5'	
4			

NOTES:

GPS COORDINATES:

645302.21 FT N

2571793.43 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: S55

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	10/11/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	0.5
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	3.5
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	13.1
LOGGER:	Kim Whitlock	TIDE ELEVATION (FT):	-1.54
LOG DATE:	10/12/2012 START: 920 END: 1020	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
1	5.2	0.0-1.5: Silt, DGBl, VS, NP, SOM, SS, woody debris	PID = 0.8 ppm SR-S55-0.0/2.0 @ 1010
			PID = 0.9 ppm
2		1.5-2.8: MGS @ 1.5-2.0, CGS and pebbles @ 2.0-2.8, TMG @ 2.7, DG, L, WS	PID = 1.2 ppm
3		2.8-3.7: FGS with silt and SFG, DGBl with sheen @ 3.3-3.5, L, PS, 30% OM, SSASF, leaves, woody debris	SR-S55-2.0/5.2 @ 1017
			PID = 0.7 ppm
4		3.7-4.1: Silt, DG, S, SP, TSF, trace asphalt 4.1-4.3: Sand with silt, DG, L, PS, Trace asphalt	PID = 0.4 ppm
5		4.3-5.2: Clay, LG, F, MP, SF (native material) EOC @ 5.2'	PID = 0.4 ppm

NOTES:

GPS COORDINATES:

645201.09 FT N

2571828.95 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: **S56**

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	11/9/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	0.6
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	4.1
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	9.0
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.39
LOG DATE:	11/10/2012 START: 1155 END: 1225	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
		0.0-0.3: Silt, DGBr, VS, NP, TOM, MOd	PID = 0.2 ppm SR-S56-0.0/1.4 @ 1220
		0.3-0.4: Wood	
		0.4-1.4: CSAG, MG, L, PS, TOM	
1			PID = 0.0 ppm
		1.4-2.0: Clay with cobble @ 1.6-1.8, RBr, VST, HP (native material)	
2		EOC @ 2.0'	
	2.0		
4			

NOTES:

GPS COORDINATES:

645182.61 FT N

2572052.60 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: S57

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	10/10/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	2.0
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	4.0
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	12.6
LOGGER:	C. Dellaria	TIDE ELEVATION (FT):	-1.61
LOG DATE:	10/11/2012 START: 1015 END: 1051	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
		0.0-1.9: Silt, DG, S, NP, TOM, SlOd	PID = 0.8 ppm SR-S57-0.0/2.0 @ 1050
1			PID = 1.3 ppm
		1.9-2.6: Sand, DGBl, M, PS, TOM, MOd, TSASF	
2			PID = 0.4 ppm
		2.6-3.5: Silt, DG, S, SP, SlOd	
	3.5		SR-S57-2.0/3.5 @ 1047
3			PID = 0.3 ppm
		EOC @ 3.5'	
4			

NOTES:

GPS COORDINATES:

645108.40 FT N

2571865.76 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: S57A

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	10/10/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	1.1
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	5.3
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	12.7
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.69
LOG DATE:	10/11/2012 START: 1053 END: 1125	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
		0.0-0.5: Sand with TFG, DG, VL, SOM, SlOd	PID = 0.4 ppm SR-S57A-0.0/2.0 @ 1119
		0.5-0.9: Wood	
1		0.9-2.8: Sand, DG, M, SlOd, TSASF	PID = 1.7 ppm
2			PID = 1.4 ppm
	3.5	2.8-3.5: Clay, LG, F, HP, SlOd (native material)	SR-S57A-2.0/3.5 @ 1118
3			PID = 1.5 ppm
		EOC @ 3.5'	
4			

NOTES:

GPS COORDINATES:

645023.24 FT N

2571893.05 FT E

TechLaw

SEDIMENT CORE LOG

PAGE 1 OF 1

SAMPLE LOCATION: **S58**

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	11/9/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	1.4
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	1.4
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	8.5
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.49
LOG DATE:	11/10/2012 START: 925 END: 1000	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
0		0.0-0.3: Silt, DGBl (PSS), VS, NP, TOM, MOd, LS	PID = 0.5 ppm
		0.3-1.3: FGS with TG @ top, LGBr, M, PS, TOM, SlOd	SR-S58-0.0/2.1 @ 0952
1			PID = 0.1 ppm
		1.3-1.8: Silt, DGBr, F, SP	
		1.8-2.1: CSAG, DGBr, M, PS	
2		2.1-4.3: Clay with TG, RBr, VST, HP (native material)	PID = 0.1 ppm
	4.3		
3			PID = 0.1 ppm
4			PID = 0.0 ppm
		EOC @ 4.3'	
5			

NOTES:

GPS COORDINATES:

645107.32 FT N

2572079.33 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: S59

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	11/9/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	1.4
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	1.6
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	8.6
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.51
LOG DATE:	11/9/2012 START: 1330 END: 1415	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
0		0.0-0.7: Silt, DGBl (PSS), S, SP, TOM, MOd	PID = 0.2 ppm SR-S59-0.0/2.0 @ 1410
		0.7-0.9: MCGS, DG, L, PS, SlOd	
1		0.9-1.5: Silt, DGBr, S, SP, TOM (wood), MOd	PID = 0.1 ppm
		1.5-2.8: CSAG, MGBr, L, PS, TOM, SlOd	
2			PID = 0.2 ppm
		2.8-5.3: Clay, RBr, ST, MP (native material)	SR-S59-2.0/2.8 @ 1412
	5.3		
3			PID = 0.1 ppm
4			PID = 0.1 ppm
5		EOC @ 5.3'	

NOTES:

GPS COORDINATES:

645022.85 FT N

2572091.09 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: S60

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	11/29/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	1.0
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	3.2
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	10.8
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.78
LOG DATE:	11/29/2012 START: 1730 END: 1800	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
		0.0-1.0: Silt with SMCGS, DGBr, S, SP, TOM, SlOd, TSASF	PID = 0.2 ppm SR-S60-0.0/2.0 @ 1750
1		1.0-2.0: MCGS with TMG, MGBr, L, PS, TSASF	PID = 0.1 ppm
2		2.0-3.2: FMGS, MG, M, PS, TOM, SSASF from 2.8-3.2	PID = 0.1 ppm
	3.2		SR-S60-2.0/3.2 @ 1755
3		EOC @ 3.2'	

NOTES:

GPS COORDINATES:

644931.61 FT N

2572118.05 FT E

TechLaw

SEDIMENT CORE LOG

SAMPLE LOCATION: **S61**

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	10/10/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	2.4
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	3.9
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	12.3
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.75
LOG DATE:	10/11/2012 START: 824 END: 856	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
0		0.0-0.4: Silt, DG, VS, NP, TOM, SlOd	PID = 0.6 ppm SR-S61-0.0/2.0 @ 0847
		0.4-3.4: MCGS with TFG, DG and LG, M, WS, SlOd	
1			PID = 0.4 ppm
2			PID = 0.4 ppm SR-S61-2.0/5.3 @ 0853 SR-S61-2.0/5.3R @ 0854
	5.3		
3			PID = 0.5 ppm
		3.4-4.3: FGS, DG, M, WS, SlOd, TSF	
4		4.3-5.3: Silt, DG, S, NP, SlOd	PID = 1.0 ppm
5		EOC @ 5.3'	

NOTES:

GPS COORDINATES:

644944.49 FT N

2571916.53 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: S61A

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	10/10/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	0.3
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	3.9
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	12.9
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.71
LOG DATE:	10/11/2012 START: 900 END: 938	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
0		0.0-2.5: Sand with TFG, DG and LG, L, WS, SlOd, SSASF	PID = 2.1 ppm SR-S61A-0.0/2.0 @ 0936 SR-S61A-0.0/2.0R @ 0935
1			PID = 1.5 ppm
2			PID = 1.1 ppm
3	4.9	2.5-3.5: Sand with TFG, DG and LG, L, PS, SlOd, TSASF	SR-S61A-2.0/5.3 @ 0933
		3.5-4.1: Silt, DG, S, TOM, SlOd	PID = 0.7 ppm
4		4.1-4.9: SA 0.0-2.5	PID = 1.1 ppm
5		EOC @ 4.9'	

NOTES:

GPS COORDINATES:

644848.78 FT N

2571942.43 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: S62

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	11/29/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	0.7
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	3.1
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	9.9
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.67
LOG DATE:	11/29/2012 START: 1200 END: 1240	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
0	4.9	0.0-1.1: Silt, DGBr, S, SP, TOM, SlOd	PID = 0.1 ppm SR-S62-0.0/2.1 @ 1235
1		1.1-1.6: MCGS, DGBr, M, PS, TOM	PID = 0.2 ppm
		1.6-2.1: FGS, RBr, D, WS	
2		2.1-4.9: Clay, RBr, VST, HP; except from 3.7-3.8, 3.9-4.0, 4.3-4.5, SAA (native material)	PID = 0.1 ppm
3			PID = 0.1 ppm
4			PID = 0.1 ppm
		EOC @ 4.9'	

NOTES:

GPS COORDINATES:

644828.77 FT N

257162.52 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: S63

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	10/10/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	2.2
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	5.9
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	16.8
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.65
LOG DATE:	10/11/2012 START: 944 END: 1013	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
1	4.7	0.0-4.7: Silt, DG, S, SP, TOM, SlOd, TS @ 0.0-0.3; except from 2.9-3.3, FMGS, DG, L, SlOd, TSF EOC @ 4.7'	PID = 0.7 ppm SR-S63-0.0/2.0 @ 1009 PID = 0.9 ppm PID = 1.1 ppm SR-S63-2.0/4.7 @ 1007 SR-S63-2.0/4.7R @ 1011 PID = 1.0 ppm PID = 1.4 ppm
2			
3			
4			

NOTES:

GPS COORDINATES:

644731.10 FT N

2571999.18 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: S64

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	11/29/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	1.0
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	2.1
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	12.8
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.74
LOG DATE:	11/29/2012 START: 1305 END: 1400	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
		0.0-1.1: Silt, DGBr except DGBl (PSS) from 0.6-0.7 and 0.9-1.0, S, SP, TOM, StOd at stained intervals	PID = 0.7 ppm SR-S64-0.0/2.0 @ 1355
1		1.1-1.4: FMGS, DGBr except DGBl (PSS) from 1.3-1.4, M, PS, TOM, StOd at stained interval	PID = 4.7 ppm
		1.4-2.0: Silt, DGBr, S, NP, TOM, MOd	
2		2.0-2.8: MCGS, DGBr, M, PS, TOM, SlOd	PID = 1.5 ppm
	4.4	2.8-3.5: Silt, DBr, S, SP, TOM, SlOd	SR-S64-2.0/4.4 @ 1400
3			PID = 0.8 ppm
		3.5-3.8: SA 2.0-2.8	
		3.8-4.4: Silt, MGBr except DGBl (PSS) from 4.2-4.4, S, SP, SOM including hair-like substance and leaves, MOd (chemical-like) at stained interval	
4		EOC @ 4.4'	PID = 4.8 ppm

NOTES:

GPS COORDINATES:

644570.82 FT N

2572283.35 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: S66

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	10/10/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	1.4
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	2.1
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	8.9
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.61
LOG DATE:	10/11/2012 START: 719 END: 810	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
0	3.5	0.0-0.5: Silt, DG, S, NP, SlOd	PID = 3.0 ppm SR-S66-0.0/2.0 @ 0804
1		0.5-1.9: Sand, DG, M, PS, TOM, SlOd, TSF	PID = 3.8 ppm
2		1.9-3.5: Sand, MG, D, SlOd, TSF	PID = 0.3 ppm SR-S66-2.0/3.5 @ 0809
3		EOC @ 3.5'	PID = 0.9 ppm
4			

NOTES:

GPS COORDINATES:

644606.09 FT N

2572254.98 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: S67

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	10/9/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	3.5
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	5.0
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	12.8
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.66
LOG DATE:	10/10/2012 START: 1325 END: 1410	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
0	3.7	0.0-3.7: Silt, DG, S, SP, SlOd; except @ 2.0-2.2, FMGS, L, PS	PID = 0.1 ppm SR-S67-0.0/2.0 @ 1405
1			PID = 0.2 ppm
2			PID = 0.3 ppm SR-S67-2.0/3.7 @ 1410
3		EOC @ 3.7'	PID = 0.4 ppm
4			

NOTES:

GPS COORDINATES:

644538.48 FT N

2572060.30 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: S69

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	10/9/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	4.7
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	2.1
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	10.8
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.51
LOG DATE:	10/10/2012 START: 1750 END: 1830	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
0		0.0-2.0: Silt, DG, VS, SP, TOM, SlOd	PID = 0.1 ppm
1			SR-S69-0.0/2.0 @ 1822
			PID = 0.2 ppm
2		2.0-2.5: Sand, DG, M, PS, TOM, SlOd	PID = 0.3 ppm
	4.0	2.5-4.0: Silt, DG from 3.1-4.0, MG from 2.5-3.1, S, SP, TOM, SlOd	SR-S69-2.0/4.0 @ 1822
3			PID = 0.8 ppm
4		EOC @ 4.0'	

NOTES:

GPS COORDINATES:

644384.15 FT N

2572105.73 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: S70

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	11/29.12
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	3.5
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	7.9
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	14.7
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.85
LOG DATE:	11/29/2012 START: 1815 END: 1835	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
		0.0-0.7: MCGS with some silt, DGBr, L, PS, TOM, SlOd	PID = 1.9 ppm
		0.7-1.7: FGS with some silt, DGBl (PSS), M, PS, TOM, MOd	SR-S70-0.0/2.0 @ 1830
1			PID = 3.0 ppm
		1.7-2.6: Silt, DGBl (PSS), S, SP, TOM, MOd	
2			PID = 2.2 ppm
		EOC @ 2.6'	
	2.6		SR-S70-2.0/2.6 @ 1835
3			

NOTES:

GPS COORDINATES:

644442.71 FT N

2572383.77 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: S71

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	10/9/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	1.2
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	3.6
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	12.9
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.63
LOG DATE:	10/10/2012 START: 1608 END: 1700	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
0	5.4	0.0-0.8: Gravelly sand, DG, L, PS, TOM, SlOd	PID = 0.1 ppm SR-S71-0.0/2.0 @ 1651 SR-S71-0.0/2.0R @ 1654
1		0.8-3.3: Silt, DG, S, SP, SlOd	PID = 1.4 ppm
2			PID = 0.9 ppm
3			SR-S71-2.0/5.4 @ 1658 PID = 0.4 ppm
		3.3-4.7: Interbedded potentially organic hair-like substance, Br, fibrous, SlOd, interbedded w/clay, MBr, F, MP, SlOd; potential hair zones @ 3.3-3.4, 3.6-3.8, 4.1-4.3, and 4.5-4.7	
4			PID = 0.2 ppm
		4.7-5.4: Silty clay with increasing sand towards bottom, MBr, F, MP, SlOd	
5		EOC @ 5.4'	

NOTES:

GPS COORDINATES:

644269.13 FT N

2572166.78 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: S72

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	11/29/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	3.3
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	8.1
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	14.5
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.74
LOG DATE:	11/29/2012 START: 1840 END: 1855	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
1	1.9	0.0-1.9: Silt, DGBr except DGBl (PSS) from 1.3-1.6, S, SP, TOM, MOd except StOd at stained interval EOC @ 1.9'	PID = 0.7 ppm SR-S72-0.0/1.9 @ 1850 PID = 5.2 ppm
2			

NOTES:

GPS COORDINATES:

644382.46 FT N

2572460.05 FT E

TechLaw

SEDIMENT CORE LOG

SAMPLE LOCATION: **S73**

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	10/10/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	1.6
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	5.2
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	14.1
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.60
LOG DATE:	10/10/2012 START: 1710 END: 1740	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
0	4.6	0.0-2.4: Silt, DG, S, TOM, SlOd	PID = 0.3 ppm SR-S73-0.0/2.0 @ 1734
1			PID = 2.6 ppm
2		2.4-2.8: Sand, DG, M, LOM, SlOd	PID = 1.1 ppm
		2.8-4.6: Clay, LG, F, HP, SlOd, TSF (native material)	SR-S73-2.0/4.6 @ 1740
3			PID = 0.3 ppm
4		EOC @ 4.6'	PID = 0.1 ppm

NOTES:

GPS COORDINATES:

644171.46 FT N

2572242.43 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: S75

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	10/9/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	3.7
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	4.9
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	13.2
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.53
LOG DATE:	10/10/2012 START: 1420 END: 1510	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
		0.0-2.0: Silt, DG, S, SP, TOM, SlOd	PID = 0.2 ppm SR-S75-0.0/2.0 @ 1502
1			PID = 0.3 ppm
2		2.0-3.4: Clay, LG, F, HP, SlOd, TS, wood piece from 3.0-3.2 (native material)	PID = 0.2 ppm SR-S75-2.0/3.4 @ 1510
	3.4		
3		EOC @ 3.4'	PID = 0.1 ppm
4			

NOTES:

GPS COORDINATES:

644381.67 FT N

2572096.55 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: S77

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	10/9/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	1.5
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	9.2
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	17.3
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.63
LOG DATE:	10/10/2012 START: 1530 END: 1602	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
1	3.7	0.0-3.7: Silt, DG, S, SP, TOM, woody debris from 3.4 - 3.7, SlOd; except from 1.4-1.7, FGS, DG, L, PS	PID = 0.3 ppm SR-S75-0.0/2.0 @ 1554
2			PID = 1.3 ppm
3			PID = 0.5 ppm SR-S75-2.0/3.7 @ 1602
4		EOC @ 3.7'	PID = 1.3 ppm

NOTES:

GPS COORDINATES:

644024.34 FT N

2572466.81 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: **S80**

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	11/28/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	5.5
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	3.1
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	13.1
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.81
LOG DATE:	11/29/2012 START: 915 END: 1000	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
1	5.2	0.0-3.6: Silt, DGBr except DGBl (PSS) from 0.0-0.4, 0.8-1.0, 1.3-1.6, 1.9-2.4, and 2.6-3.1, S, SP, TOM, StOd @ stained intervals	PID = 4.7 ppm SR-S80-0.0/2.0 @ 0950
2			PID = 5.1 ppm
3			PID = 11.3 ppm SR-S80-2.0/5.2 @ 0953
4		3.6-5.0: Silt with laminations, DGBr except DGBl (PSS) from 3.7-3.8 and 4.2-4.3, S, TOM, MOd @ stained intervals	PID = 1.4 ppm
5		5.0-5.2: MCGS with TMG, MG, L, PS, SlOd EOC @ 5.2'	PID = 1.7 ppm

NOTES:

GPS COORDINATES:

644227.89	FT N
2572727.02	FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: T01-1

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	11/7/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	1.0
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	1.0
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	13.0
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.20
LOG DATE:	11/7/2012 START: 1500 END: 1545	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
0		0.0-3.7: TSCA	
3.7		3.7-5.6: Silt, MG @ 3.7-4.1, MG with Bl laminations @ 4.1-4.4, LGBr @ 4.4-5.1, MG @ 5.1-5.6, S, SP, SOM @ 4.1-4.4, SlOd	PID = 0.1 ppm SR-T01-1-3.7/4.7 @ 1518
4.7			PID = 0.0 ppm
	6.7	5.6-6.7: Clay with TG, RBr, ST, HP (native material)	SR-T01-1-4.7/5.7 @ 1525
5.7			PID = 0.0 ppm
		EOC @ 6.7'	SR-T01-1-5.7/6.7 @ 1535
6.7			

NOTES:

GPS COORDINATES:

647167.79 FT N

2569382.45 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: T01-2

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	11/7/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	1.0
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	1.0
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	16.0
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.17
LOG DATE:	11/7/2012 START: 1550 END: 1620	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
0		0.0-5.3: TSCA	
5.3		5.3-6.6: Silt, LGBr with Bl laminations @ 5.3-5.8, DG @ 5.8-6.6, S, SP	PID = 0.1 ppm SR-T01-2-5.3/6.3 @ 1608
6.3		6.6-7.3: Clay, RBr, ST, HP (native material)	PID = 0.5 ppm
	7.3	EOC @ 7.3'	SR-T01-2-6.3/7.3 @ 1615
7.3			

NOTES:

GPS COORDINATES:

647197.72 FT N

2569366.96 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: T01-3

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	11/7/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	0.7
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	1.0
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	13.5
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.17
LOG DATE:	11/7/2012 START: 1625 END: 1655	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
0		0.0-4.9: TSCA	
4.9		4.9-6.0: Silt, LGBr with Bl laminations @ 4.9-5.7, DG @ 5.7-6.0, S, SP	PID = 0.2 ppm
5.9		6.0-6.8: Clay, RBr, ST, HP (native material)	SR-T01-3-4.9/5.9 @ 1645 PID = 0.4 ppm
	6.8	EOC @ 6.8'	SR-T01-3-5.9/6.8 @ 1647
6.9			

NOTES: Homogenized top foot interval from all T01 cores and collected SR-T01-C @ 1648

GPS COORDINATES:

647226.29 FT N

2569399.25 FT E

TechLaw

SEDIMENT CORE LOG

SAMPLE LOCATION: **T02-1**

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	10/24/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	1.0
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	3.2
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	11.9
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-0.99
LOG DATE:	10/25/2012 START: 950 END: 1045	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
		0.0-0.85: TSCA	PID = 0.3 ppm
		0.85-1.1: FGS with TMG, DG, L, PS, SlOd	SR-T02-1-0.85-1.85 @ 1033
1		1.1-1.6: Silt, DG, S, PS, TOM, SlOd	PID = 0.2 ppm
		1.6-2.3: SA 0.85-1.1, except MG in color	SR-T02-1-1.85/2.85 @ 1035
2			PID = 0.3 ppm
		2.3-5.4: Silt and clay, LGBr, S, MP, SOM, SlOd	SR-T02-1-2.85/3.85 @ 1039
	5.4		SR-T02-1-2.85/3.85R @ 1040
3			PID = 0.2 ppm
			SR-T02-1-3.85/4.85 @ 1041
4			PID = 0.2 ppm
5		EOC @ 5.4'	

NOTES:

GPS COORDINATES:

647286.79 FT N

2569405.44 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: **T02-2**

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	10/24/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	0.9
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	3.1
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	11.7
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-0.96
LOG DATE:	10/24/2012 START: 1050 END: 1115	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
		0.0-0.97: TSCA	
1		0.97-1.2: FMGS with TMG, DG, L, PS, MOd	PID = 0.2 ppm
		1.2-3.97: Silt, LGBr, S, SP, SOM	SR-T02-2-0.97/1.97 @ 1105
2			PID = 0.2 ppm
	3.97		SR-T02-2-1.97/2.97 @ 1108
3			PID = 0.2 ppm
		EOC @ 3.97'	SR-T02-2-2.97/3.97 @ 1110
4			

NOTES:

GPS COORDINATES:

647273.64 FT N

2569407.26 FT E

TechLaw

SEDIMENT CORE LOG

SAMPLE LOCATION: **T02-3**

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	10/24/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	1.1
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	3.5
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	11.8
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-0.96
LOG DATE:	10/25/2012 START: 1120 END: 1200	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
1	4.95	0.0-0.28: TSCA 0.28-0.6: Silt, DG, VS, NP, SlOd 0.6-2.2: FMGS with TMG, DG, L, PS, TOM, MOd	PID = 0.2 ppm SR-T02-3-0.28/1.28 @ 1148
2			PID = 0.1 ppm SR-T02-3-1.28/2.28 @ 1140
3		2.2-4.95: Clay, LGBr, F, MP, wood pieces from 2.7-3.0, SlOd (native material)	PID = 0.2 ppm SR-T02-3-2.28/3.28 @ 1147
4			PID = 0.3 ppm SR-T02-3-3.28/4.28 @ 1145
5		EOC @ 4.95'	

NOTES:

GPS COORDINATES:

647285.20 FT N

2569415.62 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: T03-1

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	10/25/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	1.0
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	1.0
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	9.8
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-0.97
LOG DATE:	10/25/2012 START: 1450 END: 1510	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
		0.0-1.9: TSCA	
1			
2		1.9-2.8: CSAG, DG, L, PS, MOd	PID = 0.3 ppm
	4.3	2.8-4.3: Silt, DG, S, SP, SlOd	SR-T03-1-1.9/2.9 @ 1505
3			PID = 0.2 ppm
			SR-T03-1-2.9/3.9 @ 1507
4		EOC @ 4.3'	

NOTES:

GPS COORDINATES:

647328.57 FT N

2569349.18 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: **T03-2**

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	10/25/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	1.5
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	1.7
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	10.1
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-0.93
LOG DATE:	10/25/2012 START: 1515 END: 1555	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
0		0.0-0.75: TSCA	PID = 0.4 ppm
		0.75-1.75: FMGS, DG, L, PS, MOd	SR-T03-2-0.75/1.75 @ 1545
1			PID = 0.3 ppm
		1.75-2.3: Silty clay, DG, S, MP, SlOd	SR-T03-2-1.75/2.75 @ 1547
2		2.3-2.7: FGS with TMG at top, DG, M, PS, SlOd, TSASF	PID = 0.2 ppm
	5.3	2.7-5.3: Silty clay, DG @ top to LGBr @ bottom, S, MP, SlOd	SR-T03-2-2.75/3.75 @ 1549
3			PID = 0.2 ppm
			SR-T03-2-3.75/4.75 @ 1551
4			PID = 0.2 ppm
5		EOC @ 5.3'	

NOTES:

GPS COORDINATES:

647307.25 FT N

2569356.33 FT E

TechLaw

SEDIMENT CORE LOG

SAMPLE LOCATION: **T03-3**

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	10/25/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	1.7
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	1.9
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	10.0
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.08
LOG DATE:	10/25/2012 START: 1600 END: 1630	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
0		0.0-0.62: TSCA	PID = 0.3 ppm
		0.62-1.4: Silt, DG, VS, MP, TOM, MOd	SR-T03-3-0.62/1.62 @ 1627
1			PID = 0.1 ppm
		1.4-2.7: CGS with TMG, DG, M, SlOd, LS	SR-T03-3-1.62/2.62 @ 1619
2			PID = 0.1 ppm
	5.1	2.7-5.1: Clay, LGBr, S, SP, TOM, SlOd (native material)	SR-T03-3-2.62/3.62 @ 1623
3			PID = 0.1 ppm
			SR-T03-3-3.62/5.0 @ 1625
4			
5		EOC @ 5.1'	

NOTES:

GPS COORDINATES:

647325.92 FT N

2569371.30 FT E

TechLaw

SEDIMENT CORE LOG

PAGE 1 OF 1

SAMPLE LOCATION: **T04-1**

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	10/25/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	1.2
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	1.2
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	9.4
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-0.94
LOG DATE:	10/25/2012 START: 1631 END: 1655	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
		0.0-1.95: TSCA	
1			PID = 0.1 ppm
		1.95-2.3: CGS with TMG, DG, L, PS, MOd	SR-T04-1-1.95/2.95@ 1647
2			PID = 0.1 ppm
		2.3-3.2: Silt, LGBr, S, SP, SlOd	
	4.5		SR-T04-1-2.95/3.95@ 1648
3			PID = 0.1 ppm
		3.2-4.1: MGS, LGBr, L, PS	
			SR-T04-1-3.95/4.5@ 1650
4		4.1-4.5: SA 2.3-3.2	
		EOC @ 4.5'	

NOTES:

GPS COORDINATES:

647495.12 FT N

2569346.42 FT E

TechLaw

SEDIMENT CORE LOG

SAMPLE LOCATION: **T04-2**

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	10/25/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	1.2
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	1.8
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	10.2
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.07
LOG DATE:	10/25/2012 START: 1700 END: 1725	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
0	4.9	0.0-0.87: TSCA	PID = 0.2 ppm
1		0.87-3.6: MCGS with TMG, DG, L, PS, SlOd, SSASF	SR-T04-1-0.87/1.87 @ 1718 PID = 0.2 ppm
2			SR-T04-1-1.87/2.87 @ 1720 PID = 0.2 ppm
3			SR-T04-1-2.87/3.87 @ 1717 PID = 0.1 ppm
4		3.6-4.9: Silty clay, LGBr, S, MP	SR-T04-1-3.87/4.9 @ 1715
		EOC @ 4.9'	

NOTES:

GPS COORDINATES:

647507.05 FT N

2569359.45 FT E

TechLaw

SEDIMENT CORE LOG

SAMPLE LOCATION: **T04-3**

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	10/25/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	1.1
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	1.7
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	10.3
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-0.98
LOG DATE:	10/25/2012 START: 1730 END: 1800	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
0	5.1	0.0-0.99: TSCA	PID = 0.2 ppm SR-T04-3-0.99/1.99 @ 1751
1		0.99-3.7: MCGS with TMG, DG, L, PS, MOd, TSASF; except from 1.8-2.2 and 2.4-2.7, silt, DG, VS, SP, SlOd	PID = 0.1 ppm SR-T04-3-1.99/2.99 @ 1747
2			PID = 0.1 ppm SR-T04-3-2.99/3.99 @ 1749
3		3.7-5.1: Silty clay, LGBr, S, MP, TOM, SlOd	PID = 0.2 ppm SR-T04-3-3.99/5.1 @ 1750
4			
5		EOC @ 5.1'	

NOTES:

GPS COORDINATES:

647544.69 FT N

2569361.39 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: T05-1

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	10/25/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	0.9
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	0.9
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	8.8
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.09
LOG DATE:	10/26/2012 START: 810 END: 840	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
		0.0-1.97: TSCA	
1			PID = 0.0 ppm
			SR-T05-1-1.97/2.4 @ 0835
2		1.97-2.4: Silt, DG, S, SP, SlOd, wood @ 2.4	
	2.4		
		EOC @ 2.4'	
3			
4			

NOTES:

GPS COORDINATES:

647690.05 FT N

2569372.35 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: **T05-2**

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	10/25/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	0.8
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	3.1
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	9.9
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-0.99
LOG DATE:	10/26/2012 START: 850 END: 915	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
0	4.0	0.0-0.8: Silty sand, DG, VL, TOM, SlOd	PID = 0.2 ppm
1		0.8-4.0: FMGS with TMG, DG, L, PS, SlOd, SSASF; except from 1.6-2.1, silt, DG, VS, NP, SlOd; and from 2.8-3.2, FGS, DG, L, PS, 50%OM, SlOd	SR-T05-2-0.0/1.0 @ 0906 PID = 0.2 ppm
2			SR-T05-2-1.0/2.0 @ 0908 PID = 0.2 ppm
3			SR-T05-2-2.0/3.0 @ 0910 PID = 0.2 ppm
4		EOC @ 4.0'	SR-T05-2-3.0/4.0 @ 0912

NOTES:

GPS COORDINATES:

647710.02 FT N

2569408.40 FT E

TechLaw

SEDIMENT CORE LOG

SAMPLE LOCATION: **T05-3**

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	10/25/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	0.3
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	2.1
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	9.8
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-0.94
LOG DATE:	10/26/2012 START: 915 END: 1005	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
0	5.0	0.0-1.0: Silt, DG, VS, SP, SlOd	PID = 0.2 ppm SR-T05-3-0.0/1.0 @ 0952 SR-T05-3-0.0/1.0R @ 0953
1		1.0-4.0: MCGS with TMG, DG @ Top, MG after 2.0, L, PS, SlOd; except from 2.2-3.0, silty clay, MGBr, S, MP, SlOd	PID = 0.1 ppm SR-T05-3-1.0/2.0 @ 0957
2			PID = 0.2 ppm SR-T05-3-2.0/3.0 @ 0959
3			PID = 0.1 ppm SR-T05-3-3.0/4.0 @ 1001
4		4.0-5.0: NR	PID = 0.2 ppm
5		EOC @ 5.0'	

NOTES: SR-T05-C collected at 0955

GPS COORDINATES:

647739.40 FT N

2569385.52 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: T09-1

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	10/22/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	0.3
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	5.9
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	13.8
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.02
LOG DATE:	10/22/2012 START: 1415 END: 1516	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
1	4.4	0.0-0.5: FMGS, DG, L, PS, SlOd 0.5-4.4: Clay, LGBr, F, MP (native material)	PID = 0.2 ppm SR-T09-1-0.0/1.0 @ 1505
2			PID = 0.2 ppm SR-T09-1-1.0/2.0 @ 1510
3			PID = 0.3 ppm SR-T09-1-2.0/3.0 @ 1516
4			PID = 0.2 ppm SR-T09-1-3.0/4.0 @ 1507
		EOC @ 4.4'	

NOTES: SR-T09-C-0.0/1.0 @1511
SR-T09-C-0.0/1.0R @1515

GPS COORDINATES:
645830.61 FT N
2571848.37 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: T09-2

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	10/22/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	0.8
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	7.1
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	11.3
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.08
LOG DATE:	10/22/2012 START: 1310 END: 1405	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
		0.0-0.8: Silt, DG, VS, SP, TOM, SlOd	PID = 0.5 ppm
		0.8-1.3: FMGS with TMCG, DGBl, L, PS, SlOd	SR-T09-2-0.0/1.0 @ 1351
1			
		1.3-2.9: Clay, LGBr, VST, MP (native material)	PID = 0.5 ppm
			SR-T09-2-1.0/2.0 @ 1405
2			
			PID = 0.2 ppm
	2.9		SR-T09-2-2.0/2.9 @ 1357
3		EOC @ 2.9'	

NOTES:

GPS COORDINATES:

645819.00 FT N

2571866.19 FT E

TechLaw

SEDIMENT CORE LOG

SAMPLE LOCATION: **T09-3**

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	10/22/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	0.5
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	7.5
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	16.5
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.16
LOG DATE:	10/22/2012 START: 12:20 END: 1305	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
0	5.3	0.0-0.4: Silt, DG, VS, NP, SlOd	PID = 0.5 ppm
		0.4-3.4: FMGS, DG, L, PS, TOM, SlOd, SSASF	SR-T09-3-0.0/1.0 @ 1306
1			PID = 0.5 ppm
			SR-T09-3-1.0/2.0 @ 1310
2			PID = 1.0 ppm
			SR-T09-3-2.0/3.0 @ 1308
			SR-T09-3-2.0/3.0R @ 1311
3			PID = 2.0 ppm
		3.4- 5.3: Clay, DG, F, MP, TOM, SlOd; except from 3.8-4.3, FMGS with TMCG, DG, L, SlOd	SR-T09-3-3.0/4.0 @ 1304
4			PID = 1.0 ppm
5		EOC @ 5.3'	

NOTES: Oily sheen observed in bubbles during sediment core collection

GPS COORDINATES:

645791.72 FT N

2571825.42 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: T10-1

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	10/22/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	0.8
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	9.8
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	17.1
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-0.98
LOG DATE:	10/22/2012 START: 1520 END: 1554	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
0		0.0-0.7: FMGS with TMG, DG, L, PS, SlOd	PID = 1.3 ppm
		0.7-2.3: FGS, DG, L, PS, MOd, SOM from 1.2-1.5	SR-T10-1-0.0/1.0 @ 1547
1			PID = 5.0 ppm
			SR-T10-1-1.0/2.0 @ 1552
2		2.3-2.6: Silt, DG, S, SP, MOd	PID = 2.8 ppm
	5.3	2.6-4.6: FMGS with TMG, DG, L, PS, SlOd	SR-T10-1-2.0/3.0 @ 1553
3			PID = 1.6 ppm
			SR-T10-1-3.0/4.0 @ 1548
4			PID = 0.9 ppm
		4.6-5.3: NR	
5		EOC @ 5.3'	

NOTES:

GPS COORDINATES:

645732.55 FT N

2571728.15 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: **T10-2**

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	10/22/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	0.1
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	10.9
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	16.9
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.02
LOG DATE:	10/22/2012 START: 1555 END: 1624	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
1	4.0	0.0-1.5: FGS, DG, M, PS, TOM, MOd, TSF	PID = 4.6 ppm SR-T10-2-0.0/1.0 @ 1621
		1.5-2.0: Clay, DG, S, MP, SOM, SlOd	PID = 5.5 ppm SR-T10-2-1.0/2.0 @ 1620
2		2.0-4.0: FGS with TMG, DG, M, PS, SOM, MOd; except from 2.6-3.0, SA 1.5-2.0	PID = 2.8 ppm SR-T10-2-2.0/3.0 @ 1621
3			PID = 2.4 ppm SR-T10-2-3.0/4.0 @ 1622
4		EOC @ 4.0'	

NOTES:

GPS COORDINATES:

645719.86 FT N

2571759.28 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: T10-3

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	10/22/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	0.1
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	11.4
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	18.1
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.21
LOG DATE:	10/22/2012 START: 1555 END: 1624	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
0		0.0-0.5: FMGS, DG, L, PS, TOM, SlOd	PID = 1.2 ppm
		0.5-1.2: Clay, DG, S, MP, SlOd	SR-T10-3-0.0/1.0 @ 1643
1		1.2-2.4: FMGS, DG, M, PS, MOd, TSASF	PID = 1.2 ppm
			SR-T10-3-1.0/2.0 @ 1641
2		2.4-4.5: Clay, DG, F, MP, SlOd	PID = 1.8 ppm
	4.5		SR-T10-3-2.0/3.0 @ 1645 SR-T10-3-2.0/3.0R @ 1645
3			PID = 1.1 ppm
			SR-T10-3-3.0/4.0 @ 1642
4		EOC @ 4.5'	

NOTES: Very heavy petroleum sheen when pulling anchor during core collection

SR-T10-C-0.0/1.0 @ 1644

GPS COORDINATES:

645701.64 FT N

2571743.02 FT E

TechLaw

SEDIMENT CORE LOG

SAMPLE LOCATION: **T13-1**

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	10/22/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	0.2
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	15.5
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	21.8
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.22
LOG DATE:	10/23/2012 START: 850 END: 930	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
		0.0-1.1: FMGS, DG, L, PS, MOd, SSASF	PID = 0.5 ppm
			SR-T13-1-0.0/1.0 @ 0919
1		1.1-3.0: Clay, DG, S, MP, SlOd	PID = 0.4 ppm
			SR-T13-1-1.0/2.0 @ 0917
2			PID = 0.4 ppm
	3.7		SR-T13-1-2.0/3.0 @ 0915
3		3.0-3.7: FGS, DG, M, PS, SlOd, TSASF	PID = 0.7 ppm
		EOC @ 3.7'	SR-T13-1-3.0/3.7 @ 0912
4			

NOTES:

GPS COORDINATES:

645453.84 FT N

2571849.00 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: T13-2

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	10/23/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	0.3
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	15.3
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	23.8
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.07
LOG DATE:	10/23/2012 START: 1048 END: 1117	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
0		0.0-1.2: FGS, DG, M, PS, SlOd, TSASF	PID = 0.9 ppm
1		1.2-2.2: Silt, DG, S, SP, SlOd	SR-T13-2-0.0/1.0 @ 1110 PID = 0.5 ppm
2		2.2-4.5: FMGS with TMG, DG, M, PS, SlOd	SR-T13-2-1.0/2.0 @ 1112 PID = 0.4 ppm
3	4.8		SR-T13-2-2.0/3.0 @ 1114 PID = 0.3 ppm
4		4.5-4.8: Clay, LGBr, F, MP (native material) EOC @ 4.8'	SR-T13-2-3.0/4.0 @ 1116
5			

NOTES:

GPS COORDINATES:

645451.18 FT N

2571898.20 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: **T13-3**

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	10/23/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	0.5
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	14.5
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	21.9
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-0.95
LOG DATE:	10/23/2012 START: 1450 END: 1531	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
1	4.9	0.0-3.2: FMGS with TMG, DG, L, PS, SlOd; except from 2.1-2.4, clay, DG, S, MP, MOd	PID = 0.6 ppm SR-T13-3-0.0/1.0 @ 1520
2			PID = 0.5 ppm SR-T13-3-1.0/2.0 @ 1524
3			PID = 0.8 ppm SR-T13-3-2.0/3.0 @ 1527
4		3.2-4.9: Clay, DG, F, MP, SlOd	PID = 1.6 ppm SR-T13-3-3.0/4.0 @ 1529
5		EOC @ 4.9'	PID = 0.8 ppm

NOTES: SR-T13-C-0.0/1.0 @ 1530

GPS COORDINATES:

645530.10 FT N

2571841.69 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: T15-1

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	10/23/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	0.5
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	12.0
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	19.80
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-0.91
LOG DATE:	10/23/2012 START: 1300 END: 1315	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
0		0.0-1.2: FMGS with TMG, DG, M, PS, finer @ bottom	PID = 0.9 ppm
1			SR-T15-1-0.0/1.0 @ 1313
		1.2-3.0: Clay, DG, S, MP	PID = 0.6 ppm
2			SR-T15-1-1.0/2.0 @ 1314
	3.0		PID = 1.3 ppm
3		EOC @ 3.0'	SR-T15-1-2.0/3.0 @ 1315

NOTES:

GPS COORDINATES:

645200.92 FT N

2571964.38 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: T15-2

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	10/23/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	0.2
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	12.1
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	19.9
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-0.95
LOG DATE:	10/23/2012 START: 1120 END: 1153	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
1		0.0-1.9: FMGS with TMG, DG, M, PS, SOM @1.8, MOd	PID = 0.9 ppm SR-T15-2-0.0/1.0 @ 1146
2		1.8-2.7: Silt, DG, F, SP, MOd	PID = 0.8 ppm SR-T15-2-1.0/2.0 @ 1148
3	4.7	2.7-3.3: FMGS, DG, M, PS, SlOd	PID = 0.9 ppm SR-T15-2-2.0/3.0 @ 1151
4		3.3-4.7: Clay, LGBr, F, MP, (native material)	PID = 0.3 ppm SR-T15-2-3.0/4.0 @ 1153
5		EOC @ 4.7'	PID = 0.3 ppm

NOTES:

GPS COORDINATES:

645197.79 FT N

2571941.11 FT E

TechLaw

SEDIMENT CORE LOG

SAMPLE LOCATION: **T15-3**

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	10/8/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	0.7
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	11.3
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	18.8
LOGGER:	Kim Whitlock	TIDE ELEVATION (FT):	-1.51
LOG DATE:	10/9/2012 START: 850 END: 926	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
		0.0-0.9: Silt with TCGS, DG, VS, NP, TOM	PID = 0.9 ppm
			SR-T15-3-0.0/1.0 @ 0917
1		0.9-2.7: FMGS, DG, M, PS, SOM, SSASF, large woody debris @ 1.8	PID = 0.4 ppm
			SR-T15-3-1.0/2.0 @ 0920
2			PID = 1.3 ppm
	4.2	2.7-4.2: Silt with 1 mm FGS lens @ 3.5, DG, S, SP	SR-T15-3-2.0/3.0 @ 0922
3			PID = 0.9 ppm
			SR-T15-3-3.0/4.0 @ 0926
4		EOC @ 4.2'	PID = 1.0 ppm

NOTES:

GPS COORDINATES:

645062.22 FT N

2571934.11 FT E

TechLaw

SEDIMENT CORE LOG

SAMPLE LOCATION: **T15-4**

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	10/8/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	1.9
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	10.1
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	19.1
LOGGER:	Kim Whitlock	TIDE ELEVATION (FT):	-1.55
LOG DATE:	10/9/2012 START: 930 END: 1005	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
0		0.0-0.3: Silt with TFGS, DG, VS, NP, 50% OM, woody debris	PID = 0.2 ppm
		0.3-1.8: Silt, DG, S, NP, SOM	SR-T15-4-0.0/1.0 @ 0953
1			PID = 0.7 ppm
		1.8-2.4: FGS, DG, L, PS, TOM, TS	SR-T15-4-1.0/2.0 @ 0956
2			PID = 0.7 ppm
		2.4-3.0: SA 0.3-1.8	
	3.4		SR-T15-4-2.0/3.4 @ 1000
3		3.0-3.4: SA 1.8-2.4	PID = 0.4 ppm
		EOC @ 3.4'	
4			

NOTES:

GPS COORDINATES:

645004.65 FT N

2571935.95 FT E

TechLaw

SEDIMENT CORE LOG

SAMPLE LOCATION: **T15-5**

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	10/8/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	1.9
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	11.4
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	18.9
LOGGER:	Kim Whitlock	TIDE ELEVATION (FT):	-1.42
LOG DATE:	10/9/2012 START: 1008 END: 1050	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
1		0.0-1.9: Silt with 1 mm CGS lenses @ 1.2 and 1.4, DG, VS, NP, TOM, TS	PID = 0.7 ppm SR-T15-5-0.0/1.0 @ 1031
2		1.9-2.7: FGS, DG, L, PS, SOM, SlOd, large woody debris, TSF	PID = 0.7 ppm SR-T15-5-1.0/2.0 @ 1034
3	3.7	2.7-3.7: SA 0.0-1.9 except S	PID = 0.5 ppm SR-T15-5-2.0/3.0 @ 1044
4		EOC @ 3.7'	PID = 0.3 ppm SR-T15-5-3.0/3.7 @ 1048

NOTES: SR-T15-C-0.0/1.0 @ 1050

GPS COORDINATES:

645003.93 FT N

2571998.51 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: T15-6

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	10/23/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	0.3
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	12.2
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	18.7
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-0.81
LOG DATE:	10/23/2012 START: 1345 END: 1440	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
		0.0-0.8: MCGS with TMG, DG, L, PS, SlOd	PID = 0.6 ppm
		0.8-2.0: Silt, DG, S, SP, SlOd	SR-T15-6-0.0/1.0 @ 1430
1			PID = 0.5 ppm
			SR-T15-6-1.0/2.0 @ 1433
2		2.0-2.7: FMGS, DG, M, PS, SlOd, TSASF	PID = 0.8 ppm
	3.9	2.7-3.5: SA 0.8-2.0	SR-T15-6-2.0/3.0 @ 1432
3			PID = 0.4 ppm
		3.5-3.9: SA 2.0-2.7	
		EOC @ 3.9'	SR-T15-6-3.0/3.9 @ 1431
4			

NOTES: SR-T15-C-0.0/1.0 @ 1438

GPS COORDINATES:

645226.25 FT N

2571946.97 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: **T19-1**

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	10/8/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	1.3
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	14.1
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	20.9
LOGGER:	Kim Whitlock	TIDE ELEVATION (FT):	-1.53
LOG DATE:	10/9/2012 START: 750 END: 845	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
1	3.8	0.0-1.8: Silt, DG, VS, NP, SOM, woody debris	PID = 0.8 ppm SR-T19-1-0.0/1.0 @ 0826
2		1.8-3.8: Interbedded sand and silt: MCGS, DG, L, PS, LOM, SlOd, TS; silt with TFG @ 3.6, DG, S, SP, LOM, SlOd, trace piece of apoxy/silicone @ 3.5	PID = 1.0 ppm SR-T19-1-1.0/2.0 @ 0828 PID = 1.5 ppm SR-T19-1-2.0/3.0 @ 0831
3		EOC @ 3.8'	PID = 1.5 ppm SR-T19-1-3.0/3.8 @ 0835
4			

NOTES: SR-T19-C-0.0/1.0 @ 0840
Composite sample collected by halving homogenized material from top foot of each core, combining and homogenizing in a separate aluminum pan, and placing in 4 oz. amber glass jar

GPS COORDINATES:
644594.10 FT N
2572131.35 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: T19-2

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	10/8/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	0.5
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	14.7
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	21.0
LOGGER:	Kim Whitlock	TIDE ELEVATION (FT):	-1.41
LOG DATE:	10/8/2012 START: 1425 END: 1500	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
0		0.0-0.4: Silt, DGBr, VS, NP, 70% OM, woody debris	PID = 1.4 ppm
		0.4-2.3: Silt, DGBr, S, SP, SOM, woody debris	SR-T19-2-0.0/1.0 @ 1450
1			PID = 1.4 ppm
			SR-T19-2-1.0/2.0 @ 1454
2		2.3-2.6: FGS with some silt and little pebbles, DGBr, L, SOM, SlOd, LS, woody debris	PID = 1.8 ppm
	2.6	EOC @ 2.6'	SR-T19-2-2.0/2.6 @ 1456
3			
4			

NOTES:

GPS COORDINATES:

644575.57 FT N

2572149.25 FT E

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SEDIMENT CORE LOG

SAMPLE LOCATION: **T19-3**

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	10/8/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	1.2
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	14.3
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	22.3
LOGGER:	Kim Whitlock	TIDE ELEVATION (FT):	-1.43
LOG DATE:	10/8/2012 START: 1500 END: 1545	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
1	3.4	0.0-1.5: Silt, DG, VS, SP, TOM	PID = 1.0 ppm SR-T19-3-0.0/1.0 @ 1528
		1.5-1.9: CGS with small pebbles, DG, L, PS, TS	PID = 1.7 ppm
2		1.9-2.9: SA 0.0-1.5, except with TFGS, large woody debris @ 2.9	SR-T19-3-1.0/2.0 @ 1531 PID = 1.4 ppm
3		2.9-3.4: CGS with SMG, LG, M, PS, SlOd, trace metal	SR-T19-3-2.0/3.4 @ 1539 PID = 0.9 ppm
4		EOC @ 3.4'	

NOTES:

GPS COORDINATES:

644553.87 FT N

2572166.87 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: T20-1

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	10/4/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	0.4
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	13.7
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	20.9
LOGGER:	Kim Whitlock	TIDE ELEVATION (FT):	-0.91
LOG DATE:	10/4/2012 START: 1433 END: 1525	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
1	3.8	0.0-0.1: Silt with LFGS, GBr, VS, NP, TOM 0.1-0.3: Silt, GBr, VS, NP, TOM, SlOd 0.3-0.5: SA 0.0-0.1 0.5-1.1: Silt, GBr, S, NP, TOM, TS	PID = 1.6 ppm SR-T20-1-0.0/1.0 @ 1511
2		1.1-3.8: Silt with TFGS, GBr, S, NP, LOM, SF, large woody debris and TS at 1.8-2.0	PID = 0.6 ppm SR-T20-1-1.0/2.0 @ 1513
3			PID = 0.5 ppm SR-T20-1-2.0/3.0 @ 1515
4		EOC @ 3.8'	PID = 0.5 ppm SR-T20-1-3.0/3.8 @ 1518

NOTES: Each foot interval homogenized in aluminum pan. For the 0.0-1.0 composite at T-20, the material from this interval in each core was quartered, and one quarter was placed in a separate pan for the composite and set aside.

GPS COORDINATES:
644483.81 FT N
2572244.77 FT E

TechLaw

SEDIMENT CORE LOG

SAMPLE LOCATION: **T20-2**

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	10/3/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	0.5
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	14.7
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	19.0
LOGGER:	Kim Whitlock	TIDE ELEVATION (FT):	-0.99
LOG DATE:	10/4/2012 START: 1528 END: 1610	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
1		0.0-0.1: Silt with SFGS, DGBr, VS, NP, LOM, SlOd, TSF 0.1-2.4: Silt with 1mm FGS lenses from 0.1-1.0, DGBr, S, NP, SOM, SlOd, woody fibrous material	PID = 2.7 ppm SR-T20-2-0.0/1.0 @ 1558
2			PID = 1.6 ppm SR-T20-2-1.0/2.0 @ 1602
3	3.3	2.4-3.3: Sand with some silt, LGBr, L, PS, VSlOd, SSASF EOC @ 3.3'	PID = 1.2 ppm SR-T20-2-2.0/3.3 @ 1606
4			

NOTES: Refer to sediment core log for T20-1 for composite collection procedures from top interval

GPS COORDINATES:

644468.59 FT N

2572238.75 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: **T20-3**

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	10/4/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	0.6
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	13.9
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	21.1
LOGGER:	Kim Whitlock	TIDE ELEVATION (FT):	-1.02
LOG DATE:	10/4/2012 START: 1620 END: 1730	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
		0.0-0.3: Silt, GBr, VS, NP, SlOd	PID = 1.0 ppm
		0.3-1.2: FGS, GBr, M, PS, TOM, VSlOd, SSASF	SR-T20-3-0.0/1.0 @ 1708
1		1.2-2.1: Silt, GBr, S, MP, VSlOd, TSF	PID = 0.6 ppm
			SR-T20-3-1.0/2.0 @ 1712
2		2.1-3.6: Silt with some VFGS, GBr, S, NP, TOM, TSASF	PID = 0.9 ppm
	5.2		SR-T20-3-2.0/3.0 @ 1715
3			PID = 0.8 ppm
		3.6-4.5: Silt, GBr, S, MP, TOM, TS	SR-T20-3-3.0/4.0 @ 1717
4			PID = 0.8 ppm
		4.5-4.8: SA 2.1-3.6	
		4.8-5.2: SA 3.6-4.5	
5		EOC @ 5.2'	

NOTES: Refer to sediment core log for T20-1 for composite collection procedures from top interval.

SR-T20-C-0.0/1.0 @ 1710

GPS COORDINATES:

644452.27 FT N

2572268.94 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: **T21-1**

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	10/4/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	0.6
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	12.3
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	20.8
LOGGER:	Kim Whitlock	TIDE ELEVATION (FT):	-0.99
LOG DATE:	10/5/2012 START: 810 END: 840	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
		0.0-0.3: MGS with silt, DGBr, VS, L, PS, SlOd, LSF	PID = 0.7 ppm
		0.3-2.4: Silt, DGBr, S, SP, TOM, SlOd from 0.3-1.0	SR-T21-1-0.0/1.0 @ 0828
1			PID = 0.8 ppm
			SR-T21-1-1.0/2.0 @ 0831
2			PID = 1.3 ppm
		2.4-3.0: FGS with silt and FMG, DGBr, L, PS, SOM, MOd (petroleum-like), LS, woody debris	
	3.0		SR-T21-1-2.0/3.0 @ 0835
3		EOC @ 3.0'	

NOTES:

GPS COORDINATES:

644343.19 FT N

2572324.85 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: **T21-2**

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	10/4/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	0.1
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	11.4
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	20.8
LOGGER:	Kim Whitlock	TIDE ELEVATION (FT):	-1.06
LOG DATE:	10/5/2012 START: 840 END: 910	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
		0.0-1.0: FGS with silt and TMG, DGBl, L, PS, SOM, StOd (petroleum-like), SSASF	PID = 1.1 ppm
1		1.0-1.5: Silt with FGS and TMCG, LGBr, S, NP, MOd (petroleum-like), LS	SR-T21-2-0.0/1.0 @ 0902 PID = 2.4 ppm
		1.5-2.0: FMGS, LGBr, M, PS, TOM, SlOd, TSASF	
2		2.0-3.3: Silty clay with TFGS, LGBr, F, MP, SlOd, TSF (native material)	SR-T21-2-1.0/2.0 @ 0905 PID = 1.1 ppm
	4.4		
3		3.3-4.0: SA 1.5-2.0, except L	SR-T21-2-2.0/3.0 @ 0908 PID = 0.9 ppm
		4.0-4.4: SA 2.0-3.3, except no odor	SR-T21-2-3.0/4.0 @ 0910
4		EOC @ 4.4'	PID = 0.9 ppm
5			

NOTES: Composite from 0.0-1.0 for T21 collected by homogenizing 0.0-1.0 interval from each core, splitting volume in half, placing half in composite pan and set aside to be homogenized with 0.0-1.0 from all cores at T21.

GPS COORDINATES:
644369.70 FT N
2572350.07 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: **T21-3**

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	10/4/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	0.3
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	11.3
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	23.8
LOGGER:	Kim Whitlock	TIDE ELEVATION (FT):	-1.07
LOG DATE:	10/5/2012 START: 928 END: 1015	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
1	4.8	0.0-1.3: FGS with some silt and TFG, DGBl, L, PS, MOd (petroleum-like), SSASF	PID = 1.0 ppm SR-T21-3-0.0/1.0 @ 1000
2		1.3-4.8: Interbedded silt and sand layers; silty clay, MGBr, S, HP; FGS, MGBr, L, PS, TOM, TSASF from 1.7-1.9, 2.2-2.5, 3.4-3.8, 4.2-4.5, and 4.6-4.8	PID = 1.1 ppm SR-T21-3-1.0/2.0 @ 1005
3			PID = 1.1 ppm SR-T21-3-2.0/3.0 @ 1008
4			PID = 1.1 ppm SR-T21-3-3.0/4.0 @ 1010
5		EOC @ 4.8'	PID = 0.8 ppm

NOTES: SR-T21-C-0.0/1.0 @ 1002
SR-T21-C-0.0/1.0R @ 1003

GPS COORDINATES:
644350.77 FT N
2572377.63 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: **T23-1**

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	10/2/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	0.8
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	15.9
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	24.0
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.03
LOG DATE:	10/4/2012 START: 1744 END: 1810	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
0		0.0-0.2: Silt with TFGS, DGBr, VS, NP, SlOd	PID = 0.1 ppm
		0.2-2.3: MCGS (increasing coarseness towards bottom), DGBr, L, PS, WG, SlOd, SSASF from 1.5-2.3	
1			PID = 1.1 ppm
			SR-T23-1-1.0/2.0 @ 1752
2		2.3-3.6: Clay, DGBr, S, MP, SlOd	PID = 1.1 ppm
	5.2		SR-T23-1-2.0/3.0 @ 1806
3			PID = 1.1 ppm
		3.6-3.9: 100% OM, wood and leaves	
		3.9-4.2: FGS, DGBr, M, PS, WG	SR-T23-1-3.0/4.0 @ 1810
4		4.2-4.4: Piece of wood present	
		4.4-5.2: NR	
5		EOC @ 5.2'	

NOTES: Top interval not sampled as this core was used to delineate depth of TSCA

GPS COORDINATES:

644212.70 FT N

2572395.20 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: T23-1

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	10/1/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	0.8
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	17.0
EQUIPMENT:	Vibracore	WATER AND SED PENETRATION (FT):	18.0
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.11
LOG DATE:	10/1/2012 START: 1930 END: 1950	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
1	0.4	0.0-0.4: Silt with SFGS, DG, VS, NP, SOM, SlOd EOC @ 0.4'	PID = 0.0 ppm SR-T23-1-0.0/0.8 @ 1945

NOTES:

GPS COORDINATES:

644206.91 FT N

2572396.94 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: T23-2

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	10/2/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	0.4
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	14.6
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	24.0
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.07
LOG DATE:	10/4/2012 START: 1820 END: 1900	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
		0.0-1.0: MGS with silt and TFG, DGBr, L, PS, WG, SF	PID = 1.9 ppm
1		1.0-1.8: Clay, DGBr, S, MP, SlOd	PID = 1.4 ppm
		1.8-2.0: MGS with silt, DGBr, L, PS, WG, SlOd, SF	SR-T23-2-1.0/2.0 @ 1836
2		2.0-2.6: SA 1.0-1.8	PID = 1.6 ppm
		2.6-4.8: CSAG, DGBr, L, PS, WG, SlOd, SSF	SR-T23-2-2.0/3.0 @ 1850
3	5.7		PID = 0.5 ppm
			SR-T23-2-3.0/4.0 @ 1853
4			
		4.8-5.7: NR	
5		EOC @ 5.7'	

NOTES: Top interval not sampled as this core was used to delineate depth of TSCA

GPS COORDINATES:

644234.58 FT N

2572467.72 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: T23-2

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	10/1/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	0.4
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	16.5
EQUIPMENT:	Vibracore	WATER AND SED PENETRATION (FT):	18.0
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.03
LOG DATE:	10/1/2012 START: 1950 END: 2020	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
1	0.5	0.0-0.5: Silt with FGS, DG, VS, NP, SOM, SlOd (petroleum-like), wood pieces, rock present EOC @ 0.5'	PID = 4.5 ppm SR-T23-2-0.0/0.5 @ 2005
2			
3			
4			

NOTES:

GPS COORDINATES:

644225.55 FT N

2572491.67 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: T23-3

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	10/2/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	0.9
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	15.6
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	24.0
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-0.99
LOG DATE:	10/4/2012 START: 1900 END: 1910	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
		0.0-3.0: NR - refer to vibracore log for sediment description at this location	
1			
2			
	4.9		
3		3.0-4.0: Clay, DGBr, S, MP	PID = 1.7 ppm
			SR-T23-3-3.0/4.0 @ 1904
4		4.0-4.9: NR	
		EOC @ 4.9'	

NOTES: Top 3 intervals not sampled since samples were previously collected with the vibracore at this location

GPS COORDINATES:
644176.79 FT N
2572501.60 FT E

TechLaw

SEDIMENT CORE LOG

SAMPLE LOCATION: **T23-3**

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	10/1/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	1.1
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	15.5
EQUIPMENT:	Vibracore	WATER AND SED PENETRATION (FT):	18.0
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.01
LOG DATE:	10/1/2012 START: 2020 END: 2100	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
		0.0-1.7: Silty clay, DG, VS at top to S towards bottom, SP	PID = 0.0 ppm
			SR-T23-3-0.0/1.0 @ 2040
1			PID = 0.0 ppm
		1.7-2.2: MCGS, DG, M, PS, SS	SR-T23-3-1.0/2.0 @ 2045
2			PID = 0.0 ppm
		2.2-2.7: Silty clay, DG, S, SP, fine fibrous plant matter noted at bottom	
		EOC @ 2.7'	
	2.7		SR-T23-3-2.0/2.7 @ 2048
3			

NOTES:

GPS COORDINATES:

644160.45 FT N

2572511.72 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: T23-4

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	10/4/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	1.5
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	15.5
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	23.9
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.08
LOG DATE:	10/4/2012 START: 1910 END: 1925	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
1		0.0-2.0: NR - refer to vibracore log for sediment description at this location	
2		2.0-3.2: Silty clay, DGBr, S, SP	PID = 2.8 ppm
	3.2		SR-T23-4-2.0/3.2 @ 1920
3		EOC @ 3.2'	

NOTES: Top 2 intervals not sampled since samples were previously collected with the vibracore at this location

GPS COORDINATES:
644213.90 FT N
2572559.57 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: T23-4

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	10/1/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	1.2
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	15.7
EQUIPMENT:	Vibracore	WATER AND SED PENETRATION (FT):	18.5
LOGGER:	Christie Dellaria	TIDE ELEVATION (FT):	-1.12
LOG DATE:	10/1/2012 START: 2100 END: 2130	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
0		0.0-1.3: Silty clay, DG, S, SP, thin fibrous OM	PID = 5.8 ppm
1			SR-T23-4-0.0/1.0 @ 2125
		1.3-1.5: FGS, DG, L, PS, WG 1.5-2.1: Clay, DG, S, HP	PID = 2.9 ppm
2			SR-T23-4-1.0/2.1 @ 2128
		EOC @ 2.1'	
	2.1		

NOTES: SR-T23-C-0.0/1.0 @ 2120

GPS COORDINATES:

644215.60 FT N

2572571.28 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: T26-1

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	10/4/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	1.2
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	14.4
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	20.8
LOGGER:	Kim Whitlock	TIDE ELEVATION (FT):	-1.02
LOG DATE:	10/5/2012 START: 1030 END: 1047	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
1	3.5	0.0-1.2: Silt, DGBr, VS, NP	PID = 2.0 ppm SR-T26-1-0.0/1.0 @ 1042
		1.2-2.3: FGS with TFG, DGBr, L, PS, SOM, SlOd, TSASF, woody debris	PID = 2.0 ppm SR-T26-1-1.0/2.0 @ 1044
2		2.3-3.3: SA 0.0-1.2 with TOM and TS	PID = 1.0 ppm SR-T26-1-2.0/3.0 @ 1046
3		3.3-3.5: SA 1.2-2.3 EOC @ 3.5'	PID = 1.4 ppm SR-T26-1-3.0/3.5 @ 1047
4			

NOTES:

GPS COORDINATES:

644054.76 FT N

2572495.87 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: T26-2

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	10/4/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	0.7
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	15.2
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	20.7
LOGGER:	Kim Whitlock	TIDE ELEVATION (FT):	-1.15
LOG DATE:	10/5/2012 START: 1048 END: 1114	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
		0.0-1.0: Silt, DGBr, VS, NP, SlOd	PID = 1.4 ppm SR-T26-2-0.0/1.0 @ 1107
1		1.0-1.5: FGS, DGBr, VL, PS, SOM, SSASF	PID = 2.5 ppm
		1.5-3.0: Silt, DGBr, S, MP	SR-T26-2-1.0/2.0 @ 1110 SR-T26-2-1.0/2.0R @ 1112
2			PID = 1.1 ppm
	3.0		SR-T26-2-2.0/3.0 @ 1114
3		EOC @ 3.0'	

NOTES:

GPS COORDINATES:

644044.72 FT N

2572502.08 FT E

SEDIMENT CORE LOG

SAMPLE LOCATION: **T26-3**

PROJECT:	Sheboygan River Legacy Act Remedial Action	CORE COLLECTION DATE:	10/4/2012
PROJECT #:	03061.1.01.06.00.00	PUSH PROBE PENETRATION DEPTH (FT):	1.3
CONTRACTOR:	Great Lakes Environmental Center	WATER DEPTH (FT):	13.7
EQUIPMENT:	Manual Core	WATER AND SED PENETRATION (FT):	20.9
LOGGER:	Kim Whitlock	TIDE ELEVATION (FT):	-0.96
LOG DATE:	10/5/2012 START: 1114 END: 1145	REFUSAL? (Y/N):	Y

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	SEDIMENT DESCRIPTION SEDIMENT TEXTURE, COLOR, DENSITY OR CONSISTENCY, & STRUCTURE	COMMENTS SAMPLE ID, QA/QC, ETC.
1	4.2	0.0-1.9: Silt, DGBr, VS, NP, TOM	PID = 1.1 ppm SR-T26-3-0.0/1.0 @ 1135
2		1.9-3.0: FGS, DGBr with slight sheen @ 2.5, L, PS, SOM, SlOd (petroleum-like), TSASF	PID = 1.1 ppm SR-T26-3-1.0/2.0 @ 1137
3		3.0-4.2: SA 0.0-1.9 except S	PID = 4.7 ppm SR-T26-3-2.0/3.0 @ 1139 PID = 2.2 ppm SR-T26-3-3.0/4.0 @ 1141
4		EOC @ 4.2'	

NOTES: SR-T26-C-0.0/1.0 @ 1137

GPS COORDINATES:

644051.66 FT N

2572527.27 FT E

Appendix B
Sediment Core Collection Photographs

Included on CD.

Appendix C
Sediment Core Processing Photographs

Included on CD.

Appendix D
Data Quality Evaluation

Data Quality Evaluation
Lower River and Inner Harbor of the Sheboygan River
Sheboygan, Wisconsin
Remedial Action, GLAES Contract
Task Order No. 0006 / Contract No. EP-R5-11-09

PREPARED FOR: U.S. Environmental Protection Agency

PREPARED BY: Adrienne Korpela/CH2M HILL

DATE: January 11, 2013

The data quality evaluation technical memorandum assesses the data quality of analytical results for samples collected during the remedial action performed at the Sheboygan River Area of Concern in Sheboygan, Wisconsin; specifically the Lower River reach from 0.25-mile upstream of the 14th Street Bridge to the Inner Harbor at the 8th Street Bridge. Sampling was conducted by the Great Lakes National Program Office (GLNPO) Cleanup Services dredging contractor, RybaTerra Joint Venture, between October 1 and December 19, 2012, and by Natural Resource Technology, a contractor to GLNPO project partner Integrys, between October 24 and 26, 2012. The samples were analyzed by Pace Analytical Services, Inc., in Green Bay, Wisconsin.

Analytical Data

As part of the quality assurance process outlined in the site-specific quality assurance project plan (QAPP) (CH2M HILL 2012), quality control (QC) samples were collected in the field to complement the assessment of overall data quality and usability. The QC samples consisted of field duplicates and aliquots for laboratory matrix spike/matrix spike duplicates. The following are the analytical laboratory analyses for samples collected:

- 397 sediment samples and 42 field duplicate samples from 186 locations were analyzed for polychlorinated biphenyl (PCB) Aroclors by U.S. Environmental Protection Agency (USEPA) method SW-846 3541/ 8082A.
- 320 sediment samples and 36 field duplicate samples from 175 locations were analyzed for polycyclic aromatic hydrocarbons (PAHs) by USEPA method SW-846 3546/ 8270C SIM.

CH2M HILL reviewed the data packages for completeness. The completeness checklist is shown in Table 1. The data were validated at the Stage 2A validation level as described in *Guidance for Labeling Externally Validated Laboratory Analytical Data for Superfund Use* (USEPA 2009). Individual method requirements and guidelines from the QAPP (CH2M HILL 2012) and *USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review* (USEPA 2008) were used in this assessment. The assessment of data included a review of the following:

- Chain-of-custody documentation
- Holding times and sample receipt conditions
- Field duplicate precision
- Surrogate spike recoveries for organic analyses
- Method blank contamination
- Laboratory control sample (LCS) precision and accuracy
- Matrix spike (MS)/matrix spike duplicate (MSD) precision and accuracy

Standard data qualifiers were added as a means of classifying the data as to their conformance to quality assurance/QC requirements. The data qualifiers are defined as follows:

[U] Undetected. The sample target was analyzed for, but was not detected above the level of the associated limit of detection or quantitation.

[J] Estimated. This qualifier was appended when the data indicated the presence of a specific target analyte but was below the stated reporting (or quantitation) limit, and/or when quality control statistics alluded to an analytical bias.

[UJ] Estimated. The component was analyzed for, but was not detected at a level equal to or greater than the level of detection. This flag is used when QC measurements indicate a possible low bias in the analytical data.

The analytical results were within project control limits, except where noted in the following subsections.

Chain of Custody

Required procedures were followed and were free of errors.

Holding Time, Preservation, and Sample Receipt

All acceptance criteria were met. Archive sediment samples were stored frozen at the laboratory. Holding time stops accumulating at the time the sample freezes, and begins accumulating again at the time the sample thaws.

Field Duplicates

Field duplicates were collected and analyzed as required, and precision criteria were generally met. The field duplicate results are summarized in Table 2.

When the relative percent difference (RPD) between the detected sample and the field duplicate sample results exceeded 50 percent for sediment, the sample results were qualified. Detected concentrations were qualified as estimated and flagged “J” in the field duplicate pair. Nondetected results were qualified as estimated and flagged “UJ” if one of the sample results in the field duplicate pair was reported as detected.

Surrogates

Surrogates were added as required, and generally, acceptance criteria were met.

When samples required a 15x dilution or greater, surrogate spike recoveries were sometimes below the lower control limits. The associated sample results were not qualified due to sample dilution.

In SDG 4072174, one PAH surrogate was recovered above the upper control limit, indicating a potential high sample bias. The associated sample results were nondetect and were not qualified.

Method Blanks

Method blanks were analyzed at the required frequency and were free of contamination.

Laboratory Control Samples

LCSs were analyzed as required, and generally, accuracy criteria were met.

In SDG 4068744, the PAH compound chrysene was recovered below the lower control limit in one LCS. The detected chrysene results in the associated samples were qualified as estimated and flagged “J”.

Matrix Spikes/Matrix Spike Duplicates

MS/MSD samples were analyzed as required, and generally, accuracy and precision criteria were met. When MS/MSDs were recovered outside of control limits due to sample dilution of 5x or greater, sample data were not qualified.

In SDG 4068743, several PAH analytes in the MS/MSD were recovered below the lower control limits and the RPD exceeded acceptance criteria. When the concentration of the parent sample was less than 4x the spike concentration, the results in the parent sample (all detected) were qualified as estimated and flagged "J".

In SDG 4068744, several PAH analytes were recovered below the lower control limits in the MS/MSD, indicating a potential low sample bias. When the concentration of the parent sample was less than 4x the spike concentration, the results in the parent sample (all detected) were qualified as estimated and flagged "J".

In SDG 4068828, the RPD for PCB Arcoclor-1260 exceeded acceptance criteria. The results in the parent sample were nondetect and were not qualified.

In SDG 4069525, the MS/MSD RPD for several PAH analytes exceeded acceptance criteria. The results were qualified as an estimated detect and flagged "J" in the parent samples. Nondetected results were not qualified.

In SDG 4069581, the RPD for PCB Arcoclor-1260 exceeded acceptance criteria. The results in the parent sample were nondetect and were not qualified.

In SDG 4069582, several PAH analytes in the MS/MSD were recovered below the lower control limits and the RPD exceeded acceptance criteria. The results in the parent sample (all detected) were qualified as estimated and flagged "J".

Conclusions

The evaluation of the field duplicates, surrogates, method blanks, LCS, and MS/MSD data indicates possible bias due to applicable QC statistics. However, the accuracy and precision were generally acceptable, and the data set completeness was deemed as 100 percent usable and can be used in the project decision making process with qualification.

Overall Assessment

The final activity in the data quality evaluation is an assessment of whether the data meet the data quality objectives. The goal of the assessment was to demonstrate that a sufficient number of representative samples were collected, and the resulting analytical data can be used to support the decision making process. The following summary highlights the data evaluation findings for the above-defined events:

1. The completeness objective of 90 percent was met for all method/analyte combinations.
2. The precision and accuracy of the data, as measured by field and laboratory QC indicators, indicate that the data quality objectives were met.

The PCB and PAH data summaries are in Tables 3 and 4.

Reference Cited

CH2M HILL. 2012. *Supplemental Quality Assurance Project Plan, Lower River and Inner Harbor of the Sheboygan River, Remedial Action, Sheboygan, Wisconsin.* September. Revision 1 January 3013.

USEPA. 2008. *Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review*. June.

USEPA. 2009. *Guidance for Labeling Externally Validated Laboratory Analytical Data for Superfund Use*. OSWER No. 9200.1-85 EPA 540-R-08-005. January.

Tables

TABLE D-1
Completeness Checklist

Form	Completeness Check Items	4068086	4068164	4068205	4068266	4068267	4068268	4068269	4068406	4068494	4068555	4068613	4068653	4068654	4068659
	Laboratory name and signatures (QA manager)	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
	Case Narrative	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
	Number of Samples *(and field duplicates)*	1	4	4	4+1	4	2	2	18+1	3	2	9	16+3	10+1	3
	Documentation of laboratory method deviations	8082	8082	8082	8082	8082	8082	8082	8082	8082	8082	8270	8082	8082	8082
	Definitions of laboratory qualifiers	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
	Chain-of-Custody	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
	Sample condition upon receipt, and storage records	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
	Sample identification cross-reference sheet (lab and client ID's)	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
	Identification of QC samples (field and lab)	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
1	Sample results with lab and client ID (including field QC samples: field duplicates)	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
1	Field Duplicate Precision	NA	NA	NA	OK	NA	NA	NA	OK	NA	NA	NA	OK	OK	NA
2	Surrogate recovery summary (w/applicable control limits) *Surrogate Limits*	☑ ☑ OK ☐ No ☐ DL	☑ ☑ OK ☐ No ☐ DL	☑ ☑ OK ☐ No ☐ DL	☑ ☑ OK ☐ No ☐ DL	☑ ☑ OK ☐ No ☐ DL	☑ ☑ OK ☐ No ☐ DL	☑ ☑ OK ☐ No ☐ DL	☑ ☑ OK ☐ No ☐ DL	☑ ☑ OK ☐ No ☐ DL	☑ ☑ OK ☐ No ☐ DL	☑ ☑ OK ☐ No ☐ DL	☑ ☑ OK ☐ No ☐ DL	☑ ☑ OK ☐ No ☐ DL	☑ ☑ OK ☐ No ☑ DL
3	*LCS and MS/MSD spike compound abbv*	1260	1260	1260	1260	1242	1242	1260	1260	1242	1260	PAH-13	1260	1260	1260
3	LCS summary (including spike added, percent recovery, and applicable control limits) *LCS Limits*	☑ ☑ OK ☐ No ☐ DL	☑ ☑ OK ☐ No ☐ DL	☑ ☑ OK ☐ No ☐ DL	☑ ☑ OK ☐ No ☐ DL	☑ ☑ OK ☐ No ☐ DL	☑ ☑ OK ☐ No ☐ DL	☑ ☑ OK ☐ No ☐ DL	☑ ☑ OK ☐ No ☐ DL	☑ ☑ OK ☐ No ☐ DL	☑ ☑ OK ☐ No ☐ DL	☑ ☑ OK ☐ No ☐ DL	☑ ☑ OK ☐ No ☐ DL	☑ ☑ OK ☐ No ☐ DL	☑ ☑ OK ☐ No ☐ DL
3	MS/MSD summary (including spike added, percent recovery, and applicable control limits) *MS/MSD Limits*	☑ ☐ OK ☐ No ☑ DL	☑ ☑ OK ☐ No ☐ DL	☑ ☑ batch ☑ OK ☐ No ☐ DL	☑ ☑ batch ☑ OK ☐ No ☐ DL	☑ ☑ batch ☐ OK ☐ No ☑ DL	☑ ☑ batch ☐ OK ☐ No ☑ DL	☑ ☑ batch ☑ OK ☐ No ☐ DL	☑ ☑ OK ☐ No ☑ DL	☑ ☑ batch ☐ OK ☐ No ☑ DL	☑ ☑ batch ☑ OK ☐ No ☐ DL	☑ ☑ batch ☑ OK ☐ No ☐ DL	☑ ☑ OK ☐ No ☐ DL	☑ ☐ OK ☐ No ☑ DL	☑ ☑ batch ☐ OK ☑ No ☐ DL
4	Method blank summary *Method Blank Limits*	☑ ☑ OK ☐ No	☑ ☑ OK ☐ No	☑ ☑ OK ☐ No	☑ ☑ OK ☐ No	☑ ☑ OK ☐ No	☑ ☑ OK ☐ No	☑ ☑ OK ☐ No	☑ ☑ OK ☐ No	☑ ☑ OK ☐ No	☑ ☑ OK ☐ No	☑ ☑ OK ☐ No	☑ ☑ OK ☐ No	☑ ☑ OK ☐ No	☑ ☑ OK ☐ No
5	Instrument tuning summary *(PAH only)*	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☑	☐	☐	☐
6	Initial calibration summary (including concentration levels of standards, retention times, response or calibration factors, and linearity demonstration)	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
7	Continuing calibration summary (instrument/column ID, retention times and windows, response or calibration factors, percent difference/drift-as appropriate to method)	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
8	Internal standard summary (including initial calibrations and analytical sequence) *(PAH only)*	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☑	☐	☐	☐
	Raw data including QC samples (copies of laboratory notebook, records, prep sheets)	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
	Electronic data deliverables (all required fields complete)	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑

Notes:
LCS = Laboratory Control Sample; MS/MSD = Matrix Spike/Matrix Spike Duplicate
8082 = Analysis performed by USEPA method SW-846 8082A.
8270 = Analysis performed by USEPA method SW-846 8270C SIM.
NA = Not Applicable; DL = Diluted out
1242 = PCB Aroclor 1242; 1260 = PCB Aroclor 1260
PAH-13 = 13 Polycyclic aromatic hydrocarbon compounds analyzed
PAH-19 = 19 Polycyclic aromatic hydrocarbon compounds analyzed
Batch = Batch quality control sample analyzed in the sample delivery group.

TABLE D-1
Completeness Checklist

Form	Completeness Check Items	4068741		4068743		4068744		4068826	4068828	4068833		4068838		4068840	4068921	
	Laboratory name and signatures (QA manager)	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
	Case Narrative	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
	Number of Samples *(and field duplicates)*	7 + 2	7 + 2	10 + 1	10 + 1	8+1	8+1	19+1	2	9+1	9+1	11	9	2	2+1	2+1
	Documentation of laboratory method deviations	8082	8270	8082	8270	8082	8270	8082	8082	8082	8270	8082	8270	8270	8082	8270
	Definitions of laboratory qualifiers	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
	Chain-of-Custody	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
	Sample condition upon receipt, and storage records	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
	Sample identification cross-reference sheet (lab and client ID's)	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
	Identification of QC samples (field and lab)	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
1	Sample results with lab and client ID (including field QC samples: field duplicates)	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
1	Field Duplicate Precision	OK	OK	No	No	No	No	OK	NA	OK	OK	NA	NA	NA	OK	No
2	Surrogate recovery summary (w/applicable control limits)	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
	Surrogate Limits	☑ OK ☐ No ☑ DL	☑ OK ☐ No ☐ DL	☑ OK ☐ No ☑ DL	☑ OK ☐ No ☐ DL	☑ OK ☐ No ☑ DL	☑ OK ☐ No ☐ DL	☑ OK ☐ No ☑ DL	☑ OK ☐ No ☑ DL	☑ OK ☐ No ☐ DL	☑ OK ☐ No ☐ DL	☑ OK ☐ No ☑ DL	☑ OK ☐ No ☐ DL	☑ OK ☐ No ☐ DL	☑ OK ☐ No ☐ DL	☑ OK ☐ No ☐ DL
3	*LCS and MS/MSD spike compound abbv*	1260	PAH-13	1260	PAH-13	1260	PAH-13	1260	1260	1260	PAH-13	1260	PAH-13	PAH-13	1254	PAH-13
3	LCS summary (including spike added, percent recovery, and applicable control limits)	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
	LCS Limits	☑ OK ☐ No ☐ DL	☑ OK ☐ No ☐ DL	☑ OK ☐ No ☐ DL	☑ OK ☐ No ☐ DL	☑ OK ☐ No ☐ DL	☑ OK ☑ No ☐ DL	☑ OK ☐ No ☐ DL	☑ OK ☐ No ☐ DL	☑ OK ☐ No ☐ DL	☑ OK ☐ No ☐ DL	☑ OK ☐ No ☐ DL	☑ OK ☐ No ☐ DL	☑ OK ☐ No ☐ DL	☑ OK ☐ No ☐ DL	☑ OK ☐ No ☐ DL
3	MS/MSD summary (including spike added, percent recovery, and applicable control limits)	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑ batch	☑ batch	☑ batch
	MS/MSD Limits	☑ OK ☐ No ☐ DL	☑ OK ☐ No ☐ DL	☑ OK ☐ No ☐ DL	☑ OK ☑ No ☐ DL	☑ OK ☐ No ☐ DL	☐ OK ☑ No ☐ DL	☑ OK ☐ No ☐ DL	☐ OK ☑ No ☐ DL	☑ OK ☐ No ☐ DL	☑ OK ☑ No ☐ DL	☑ OK ☐ No ☐ DL	☑ OK ☑ No ☐ DL	☐ OK ☑ No ☐ DL	☑ OK ☐ No ☐ DL	☐ OK ☑ No ☐ DL
4	Method blank summary	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
	Method Blank Limits	☑ OK ☐ No	☑ OK ☐ No	☑ OK ☐ No	☑ OK ☐ No	☑ OK ☐ No	☑ OK ☐ No	☑ OK ☐ No	☑ OK ☐ No	☑ OK ☐ No	☑ OK ☐ No	☑ OK ☐ No	☑ OK ☐ No	☑ OK ☐ No	☑ OK ☐ No	☑ OK ☐ No
5	Instrument tuning summary *(PAH only)*	☐	☑	☐	☑	☐	☑	☐	☐	☐	☑	☐	☑	☑	☐	☑
6	Initial calibration summary (including concentration levels of standards, retention times, response or calibration factors, and linearity demonstration)	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
7	Continuing calibration summary (instrument/column ID, retention times and windows, response or calibration factors, percent difference/drift-as appropriate to method)	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
8	Internal standard summary (including initial calibrations and analytical sequence) *(PAH only)*	☐	☑	☐	☑	☐	☑	☐	☐	☐	☑	☐	☑	☑	☐	☑
	Raw data including QC samples (copies of laboratory notebook, records, prep sheets)	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
	Electronic data deliverables (all required fields complete)	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑

Notes:
LCS = Laboratory Control Sample; MS/MSD = Matrix Spike/Matrix Spike Duplicate
8082 = Analysis performed by USEPA method SW-846 8082A.
8270 = Analysis performed by USEPA method SW-846 8270C SIM.
NA = Not Applicable; DL = Diluted out
1242 = PCB Aroclor 1242; 1260 = PCB Aroclor 1260
PAH-13 = 13 Polycyclic aromatic hydrocarbon compounds analyzed
PAH-19 = 19 Polycyclic aromatic hydrocarbon compounds analyzed
Batch = Batch quality control sample analyzed in the sample delivery group.

TABLE D-1
Completeness Checklist

Form	Completeness Check Items	4068929	4068969	4069041	4069394	4069468	4069484	4069486	4069525	4069579	4069581	4069582	4069602	4069633	4069634	4069636
	Laboratory name and signatures (QA manager)	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
	Case Narrative	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
	Number of Samples *(and field duplicates)*	2	7	2	2+1	4 + 2	18 + 1	5	15	18	10 +1	37+ 3	19 + 3	2	4 +2	3
	Documentation of laboratory method deviations	8270	8082	8082	8082	8270	8082	8082	8270	8082	8082	8270	8270	8082	8082	8270
	Definitions of laboratory qualifiers	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
	Chain-of-Custody	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
	Sample condition upon receipt, and storage records	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
	Sample identification cross-reference sheet (lab and client ID's)	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
	Identification of QC samples (field and lab)	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
1	Sample results with lab and client ID (including field QC samples: field duplicates)	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
1	Field Duplicate Precision	NA	NA	NA	OK	No	No	NA	NA	NA	OK	No	No	NA	No	NA
2	Surrogate recovery summary (w/applicable control limits)	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
	Surrogate Limits	☑ **OK** ☐ No ☐ DL	☑ OK ☐ No ☑ DL	☐ OK ☐ No ☑ DL	☑ OK ☐ No ☑ DL	☑ OK ☐ No ☐ DL	☑ OK ☐ No ☑ DL	☑ OK ☐ No ☑ DL	☑ OK ☐ No ☐ DL	☑ OK ☐ No ☑ DL	☑ OK ☐ No ☐ DL	☑ OK ☐ No ☑ DL	☑ OK ☐ No ☑ DL	☑ OK ☐ No ☐ DL	☑ OK ☐ No ☐ DL	☑ OK ☐ No ☐ DL
3	*LCS and MS/MSD spike compound abbv*	PAH-13	1254	1260	1260	PAH-19	1260	1260	PAH-19	1260	1260	PAH-19/13	PAH-19	1260	1260	PAH-19
3	LCS summary (including spike added, percent recovery, and applicable control limits)	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
	LCS Limits	☑ OK ☐ No ☐ DL	☑ OK ☐ No ☐ DL	☑ OK ☐ No ☐ DL	☑ OK ☐ No ☐ DL	☑ OK ☐ No ☐ DL	☑ OK ☐ No ☐ DL	☑ OK ☐ No ☐ DL	☑ OK ☐ No ☐ DL	☑ OK ☐ No ☐ DL	☑ OK ☐ No ☐ DL	☑ OK ☐ No ☐ DL	☑ OK ☐ No ☐ DL	☑ OK ☐ No ☐ DL	☑ OK ☐ No ☐ DL	☑ OK ☐ No ☐ DL
3	MS/MSD summary (including spike added, percent recovery, and applicable control limits)	☑ batch	☑ batch	☑	☑ batch	☑ batch	☑	☑	☑	☑	☑	☑	☑	☑ batch	☑ batch	☑ batch
	MS/MSD Limits	☐ OK ☑ No ☐ **DL**	☐ OK ☑ No ☐ **DL**	☐ OK ☐ No ☑ **DL**	☑ OK ☐ No ☐ **DL**	☑ OK ☐ No ☐ **DL**	☑ OK ☐ No ☐ **DL**	☑ OK ☐ No ☐ **DL**	☐ OK ☑ No ☐ **DL**	☑ OK ☐ No ☐ **DL**	☑ OK ☑ No ☐ **DL**	☐ OK ☑ No ☑ **DL**	☐ OK ☐ No ☑ **DL**	☑ OK ☐ No ☐ **DL**	☑ OK ☐ No ☐ **DL**	☐ OK ☐ No ☑ **DL**
4	Method blank summary	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
	Method Blank Limits	☑ OK ☐ No	☑ OK ☐ No	☑ OK ☐ No	☑ OK ☐ No	☑ OK ☐ No	☑ OK ☐ No	☑ OK ☐ No	☑ OK ☐ No	☑ OK ☐ No	☑ OK ☐ No	☑ OK ☐ No	☑ OK ☐ No	☑ OK ☐ No	☑ OK ☐ No	☑ OK ☐ No
5	Instrument tuning summary *(PAH only)*	☑	☐	☐	☐	☑	☐	☐	☑	☐	☐	☑	☑	☐	☐	☑
6	Initial calibration summary (including concentration levels of standards, retention times, response or calibration factors, and linearity demonstration)	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
7	Continuing calibration summary (instrument/column ID, retention times and windows, response or calibration factors, percent difference/drift-as appropriate to method)	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
8	Internal standard summary (including initial calibrations and analytical sequence) *(PAH only)*	☑	☐	☐	☐	☑	☐	☐	☑	☐	☐	☑	☑	☐	☐	☑
	Raw data including QC samples (copies of laboratory notebook, records, prep sheets)	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
	Electronic data deliverables (all required fields complete)	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑

Notes:
LCS = Laboratory Control Sample; MS/MSD = Matrix Spike/Matrix Spike Duplicate
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PAH-19 = 19 Polycyclic aromatic hydrocarbon compounds analyzed
Batch = Batch quality control sample analyzed in the sample delivery group.

TABLE D-1
Completeness Checklist

Form	Completeness Check Items	4069706	4069901	4070046	4070106		4070187	4070195		4070278		4070371		4070375		4070408
	Laboratory name and signatures (QA manager)	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
	Case Narrative	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
	Number of Samples *(and field duplicates)*	6	8	10 +1	24 + 2	10	2	4 + 1	4 + 1	9 + 2	4 + 2	11	4	5 + 3	5 + 3	2
	Documentation of laboratory method deviations	8082	8270	8270	8082	8270	8082	8082	8270	8082	8270	8082	8270	8082	8270	8082
	Definitions of laboratory qualifiers	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
	Chain-of-Custody	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
	Sample condition upon receipt, and storage records	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
	Sample identification cross-reference sheet (lab and client ID's)	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
	Identification of QC samples (field and lab)	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
1	Sample results with lab and client ID (including field QC samples: field duplicates)	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
1	Field Duplicate Precision	NA	NA	OK	No	NA	NA	OK	OK	OK	No	NA	NA	No	No	NA
2	<u>Surrogate recovery summary</u> (w/applicable control limits)	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
	Surrogate Limits	☑ OK ☐ No ☑ DL	☑ OK ☐ No ☐ DL	☑ OK ☐ No ☐ DL	☑ OK ☐ No ☑ DL	☑ OK ☐ No ☐ DL	☑ OK ☐ No ☑ DL	☑ OK ☐ No ☐ DL	☑ OK ☐ No ☐ DL	☑ OK ☐ No ☐ DL	☑ OK ☐ No ☐ DL	☑ OK ☐ No ☐ DL	☑ OK ☐ No ☐ DL	☑ OK ☐ No ☑ DL	☑ OK ☐ No ☐ DL	☑ OK ☐ No ☑ DL
3	*LCS and MS/MSD spike compound abbv*	1260	PAH-13	PAH-19	1260	PAH-13	1260	1260	PAH-13	1260	PAH-13	1260	PAH-13	1260	PAH-13	1260
3	<u>LCS summary</u> (including spike added, percent recovery, and applicable control limits)	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
	LCS Limits	☑ OK ☐ No ☐ DL	☑ OK ☐ No ☐ DL	☑ OK ☐ No ☐ DL	☑ OK ☐ No ☐ DL	☑ OK ☐ No ☐ DL	☑ OK ☐ No ☐ DL	☑ OK ☐ No ☐ DL	☑ OK ☐ No ☐ DL	☑ OK ☐ No ☐ DL	☑ OK ☐ No ☐ DL	☑ OK ☐ No ☐ DL	☑ OK ☐ No ☐ DL	☑ OK ☐ No ☐ DL	☑ OK ☐ No ☐ DL	☑ OK ☐ No ☐ DL
3	<u>MS/MSD summary</u> (including spike added, percent recovery, and applicable control limits)	☑	☑	☑	☑	☑ batch	☑	☑ batch	☑ batch	☑	☑ batch	☑	☑ batch	☑ batch	☑ batch	☑ batch
	MS/MSD Limits	☐ OK ☐ No ☑ **DL**	☑ OK ☐ No ☐ **DL**	☑ OK ☐ No ☐ **DL**	☑ OK ☐ No ☐ **DL**	☑ OK ☐ No ☐ **DL**	☐ OK ☐ No ☑ **DL**	☑ OK ☐ No ☐ **DL**	☐ OK ☐ No ☑ **DL**	☑ OK ☐ No ☐ **DL**	☐ OK ☐ No ☑ **DL**	☑ OK ☐ No ☐ **DL**	☐ OK ☑ No ☐ **DL**	☑ OK ☐ No ☐ **DL**	☑ OK ☐ No ☐ **DL**	☑ OK ☐ No ☐ **DL**
4	<u>Method blank summary</u>	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
	Method Blank Limits	☑ OK ☐ No	☑ OK ☐ No	☑ OK ☐ No	☑ OK ☐ No	☑ OK ☐ No	☑ OK ☐ No	☑ OK ☐ No	☑ OK ☐ No	☑ OK ☐ No	☑ OK ☐ No	☑ OK ☐ No	☑ OK ☐ No	☑ OK ☐ No	☑ OK ☐ No	☑ OK ☐ No
5	Instrument tuning summary *(PAH only)*	☐	☑	☑	☐	☑	☐	☐	☑	☐	☑	☐	☑	☐	☑	☐
6	Initial calibration summary (including concentration levels of standards, retention times, response or calibration factors, and linearity demonstration)	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
7	Continuing calibration summary (instrument/column ID, retention times and windows, response or calibration factors, percent difference/drift-as appropriate to method)	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
8	Internal standard summary (including initial calibrations and analytical sequence) *(PAH only)*	☐	☑	☑	☐	☑	☐	☐	☑	☐	☑	☐	☑	☐	☑	☐
	Raw data including QC samples (copies of laboratory notebook, records, prep sheets)	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
	Electronic data deliverables (all required fields complete)	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑

Notes:
LCS = Laboratory Control Sample; MS/MSD = Matrix Spike/Matrix Spike Duplicate
8082 = Analysis performed by USEPA method SW-846 8082A.
8270 = Analysis performed by USEPA method SW-846 8270C SIM.
NA = Not Applicable; DL = Diluted out
1242 = PCB Aroclor 1242; 1260 = PCB Aroclor 1260
PAH-13 = 13 Polycyclic aromatic hydrocarbon compounds analyzed
PAH-19 = 19 Polycyclic aromatic hydrocarbon compounds analyzed
Batch = Batch quality control sample analyzed in the sample delivery group.

TABLE D-1
Completeness Checklist

Form	Completeness Check Items	4070415		4070448		4070509	4070589	4070844	4070900		4070902	4070992		4070993	4071072
	Laboratory name and signatures (QA manager)	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
	Case Narrative	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
	Number of Samples *(and field duplicates)*	4	4	5 + 1	5 + 1	2	11	10	10 + 4	10 + 4	1	24	24	1	4
	Documentation of laboratory method deviations	8082	8270	8082	8270	8082	8270	8082	8082	8270	8270	8082	8270	8270	8082
	Definitions of laboratory qualifiers	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
	Chain-of-Custody	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
	Sample condition upon receipt, and storage records	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
	Sample identification cross-reference sheet (lab and client ID's)	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
	Identification of QC samples (field and lab)	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
1	Sample results with lab and client ID (including field QC samples: field duplicates)	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
1	Field Duplicate Precision	NA	NA	OK	OK	NA	NA	NA	OK	No	NA	NA	NA	NA	NA
2	Surrogate recovery summary (w/applicable control limits) *Surrogate Limits*	☑ ☑ OK ☐ No ☑ DL	☑ ☑ OK ☐ No ☐ DL	☑ ☑ OK ☐ No ☐ DL	☑ ☑ OK ☐ No ☐ DL	☑ ☑ OK ☐ No ☑ DL	☑ ☑ OK ☐ No ☐ DL	☑ ☑ OK ☐ No ☑ DL	☑ ☑ OK ☐ No ☐ DL	☑ ☑ OK ☐ No ☐ DL	☑ ☑ OK ☐ No ☐ DL	☑ ☑ OK ☐ No ☑ DL	☑ ☑ OK ☐ No ☐ DL	☑ ☑ OK ☐ No ☐ DL	☑ ☑ OK ☐ No ☐ DL
3	*LCS and MS/MSD spike compound abbv*	1260	PAH-13	1260	PAH-13	1260	PAH-13	1260	1260	PAH-13	PAH-13	1260	PAH-13	PAH-13	1260
3	LCS summary (including spike added, percent recovery, and applicable control limits) *LCS Limits*	☑ ☑ OK ☐ No ☐ DL	☑ ☑ OK ☐ No ☐ DL	☑ ☑ OK ☐ No ☐ DL	☑ ☑ OK ☐ No ☐ DL	☑ ☑ OK ☐ No ☐ DL	☑ ☑ OK ☐ No ☐ DL	☑ ☑ OK ☐ No ☐ DL	☑ ☑ OK ☐ No ☐ DL	☑ ☑ OK ☐ No ☐ DL	☑ ☑ OK ☐ No ☐ DL	☑ ☑ OK ☐ No ☐ DL	☑ ☑ OK ☐ No ☐ DL	☑ ☑ OK ☐ No ☐ DL	☑ ☑ OK ☐ No ☐ DL
3	MS/MSD summary (including spike added, percent recovery, and applicable control limits) *MS/MSD Limits*	☑ batch ☑ OK ☐ No ☐ DL	☑ batch ☑ OK ☐ No ☐ DL	☑ ☑ OK ☐ No ☐ DL	☑ batch ☑ OK ☐ No ☐ DL	☑ batch ☐ OK ☐ No ☑ DL	☑ batch ☑ OK ☐ No ☐ DL	☑ ☑ OK ☐ No ☐ DL	☑ ☑ OK ☐ No ☐ DL	☑ ☐ OK ☐ No ☑ DL	☑ batch ☑ OK ☐ No ☐ DL	☑ ☑ OK ☐ No ☐ DL	☑ ☑ OK ☐ No ☐ DL	☑ batch ☑ OK ☐ No ☐ DL	☑ ☑ OK ☐ No ☐ DL
4	Method blank summary *Method Blank Limits*	☑ ☑ OK ☐ No	☑ ☑ OK ☐ No	☑ ☑ OK ☐ No	☑ ☑ OK ☐ No	☑ ☑ OK ☐ No	☑ ☑ OK ☐ No	☑ ☑ OK ☐ No	☑ ☑ OK ☐ No	☑ ☑ OK ☐ No	☑ ☑ OK ☐ No	☑ ☑ OK ☐ No	☑ ☑ OK ☐ No	☑ ☑ OK ☐ No	☑ ☑ OK ☐ No
5	Instrument tuning summary *(PAH only)*	☐	☑	☐	☑	☐	☑	☐	☐	☑	☑	☐	☑	☑	☐
6	Initial calibration summary (including concentration levels of standards, retention times, response or calibration factors, and linearity demonstration)	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
7	Continuing calibration summary (instrument/column ID, retention times and windows, response or calibration factors, percent difference/drift-as appropriate to method)	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
8	Internal standard summary (including initial calibrations and analytical sequence) *(PAH only)*	☐	☑	☐	☑	☐	☑	☐	☐	☑	☑	☐	☑	☑	☐
	Raw data including QC samples (copies of laboratory notebook, records, prep sheets)	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
	Electronic data deliverables (all required fields complete)	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑

Notes:
LCS = Laboratory Control Sample; MS/MSD = Matrix Spike/Matrix Spike Duplicate
8082 = Analysis performed by USEPA method SW-846 8082A.
8270 = Analysis performed by USEPA method SW-846 8270C SIM.
NA = Not Applicable; DL = Diluted out
1242 = PCB Aroclor 1242; 1260 = PCB Aroclor 1260
PAH-13 = 13 Polycyclic aromatic hydrocarbon compounds analyzed
PAH-19 = 19 Polycyclic aromatic hydrocarbon compounds analyzed
Batch = Batch quality control sample analyzed in the sample delivery group.

TABLE D-1
Completeness Checklist

Form	Completeness Check Items	4071133		4071220		4071269	4071270		4071438	4071440	4071701	4071756	4071757	4071811	4071812	
	Laboratory name and signatures (QA manager)	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
	Case Narrative	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
	Number of Samples *(and field duplicates)*	10	18	14 + 5	14 + 2	2	9	9	1	5	4	8 + 2	1	1	6 + 2	6 + 2
	Documentation of laboratory method deviations	8082	8270	8082	8270	8082	8082	8270	8082	8270	8082	8082	8270	8082	8082	8270
	Definitions of laboratory qualifiers	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
	Chain-of-Custody	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
	Sample condition upon receipt, and storage records	☑	☑	☑	☐	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
	Sample identification cross-reference sheet (lab and client ID's)	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
	Identification of QC samples (field and lab)	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
1	Sample results with lab and client ID (including field QC samples: field duplicates)	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
1	Field Duplicate Precision	NA	NA	OK	No	NA	NA	NA	NA	NA	NA	OK	NA	NA	No	No
2	Surrogate recovery summary (w/applicable control limits)	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
	Surrogate Limits	☑ OK ☐ No ☐ DL	☑ OK ☐ No ☐ DL	☑ OK ☐ No ☑ DL	☑ OK ☐ No ☐ DL	☑ OK ☐ No ☐ DL	☑ OK ☐ No ☐ DL	☑ OK ☐ No ☐ DL	☑ OK ☐ No ☐ DL	☑ OK ☐ No ☐ DL	☑ OK ☐ No ☐ DL	☑ OK ☐ No ☐ DL	☑ OK ☐ No ☐ DL	☑ OK ☐ No ☐ DL	☑ OK ☐ No ☑ DL	☑ OK ☐ No ☐ DL
3	*LCS and MS/MSD spike compound abbv*	1260	PAH-13	1260	PAH-13	1260	1260	PAH-13	1260	PAH-13	1260	1260	PAH-13	1260	1260	PAH-13
3	LCS summary (including spike added, percent recovery, and applicable control limits)	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
	LCS Limits	☑ OK ☐ No ☐ DL	☑ OK ☐ No ☐ DL	☑ OK ☐ No ☐ DL	☑ OK ☐ No ☐ DL	☑ OK ☐ No ☐ DL	☑ OK ☐ No ☐ DL	☑ OK ☐ No ☐ DL	☑ OK ☐ No ☐ DL	☑ OK ☐ No ☐ DL	☑ OK ☐ No ☐ DL	☑ OK ☐ No ☐ DL	☑ OK ☐ No ☐ DL	☑ OK ☐ No ☐ DL	☑ OK ☐ No ☐ DL	☑ OK ☐ No ☐ DL
3	MS/MSD summary (including spike added, percent recovery, and applicable control limits)	☑	☑	☑	☑ batch	☑	☑	☑ batch	☑ batch	☑ batch	☑ batch	☑	☑ batch	☑	☑ batch	☑ batch
	MS/MSD Limits	☑ OK ☐ No ☐ DL	☑ OK ☐ No ☐ DL	☑ OK ☐ No ☐ DL	☑ OK ☐ No ☐ DL	☑ OK ☐ No ☐ DL	☑ OK ☐ No ☐ DL	☑ OK ☑ No ☐ DL	☑ OK ☐ No ☐ DL	☑ OK ☐ No ☐ DL	☑ OK ☐ No ☐ DL	☑ OK ☐ No ☐ DL	☐ OK ☐ No ☑ DL	☑ OK ☐ No ☐ DL	☑ OK ☐ No ☐ DL	☑ OK ☐ No ☐ DL
4	Method blank summary	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
	Method Blank Limits	☑ OK ☐ No	☑ OK ☐ No	☑ OK ☐ No	☑ OK ☐ No	☑ OK ☐ No	☑ OK ☐ No	☑ OK ☐ No	☑ OK ☐ No	☑ OK ☐ No	☑ OK ☐ No	☑ OK ☐ No	☑ OK ☐ No	☑ OK ☐ No	☑ OK ☐ No	☑ OK ☐ No
5	Instrument tuning summary *(PAH only)*	☐	☑	☐	☑	☐	☐	☑	☐	☑	☐	☐	☑	☐	☐	☑
6	Initial calibration summary (including concentration levels of standards, retention times, response or calibration factors, and linearity demonstration)	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
7	Continuing calibration summary (instrument/column ID, retention times and windows, response or calibration factors, percent difference/drift-as appropriate to method)	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
8	Internal standard summary (including initial calibrations and analytical sequence) *(PAH only)*	☐	☑	☐	☑	☐	☐	☑	☐	☑	☐	☐	☑	☐	☐	☑
	Raw data including QC samples (copies of laboratory notebook, records, prep sheets)	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
	Electronic data deliverables (all required fields complete)	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑

Notes:
LCS = Laboratory Control Sample; MS/MSD = Matrix Spike/Matrix Spike Duplicate
8082 = Analysis performed by USEPA method SW-846 8082A.
8270 = Analysis performed by USEPA method SW-846 8270C SIM.
NA = Not Applicable; DL = Diluted out
1242 = PCB Aroclor 1242; 1260 = PCB Aroclor 1260
PAH-13 = 13 Polycyclic aromatic hydrocarbon compounds analyzed
PAH-19 = 19 Polycyclic aromatic hydrocarbon compounds analyzed
Batch = Batch quality control sample analyzed in the sample delivery group.

TABLE D-1
Completeness Checklist

Form	Completeness Check Items	4071817	4071818		4071819	4071867	4071871	4071872	4071932	4072129	4072156	4072174	4072175	4072176	4072360
	Laboratory name and signatures (QA manager)	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
	Case Narrative	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
	Number of Samples *(and field duplicates)*	2	1	1	3	0 + 3	2 + 2	2 + 1	8 + 1	2	1	12+1	5	1	3
	Documentation of laboratory method deviations	8082	8082	8270	8270	8270	8082	8270	8270	8082	8270	8270	8082	8270	8270
	Definitions of laboratory qualifiers	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
	Chain-of-Custody	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
	Sample condition upon receipt, and storage records	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
	Sample identification cross-reference sheet (lab and client ID's)	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
	Identification of QC samples (field and lab)	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
1	Sample results with lab and client ID (including field QC samples: field duplicates)	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
1	Field Duplicate Precision	NA	No	No	No	No	No	No	No	NA	NA	No	NA	NA	NA
2	Surrogate recovery summary (w/applicable control limits)	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
	Surrogate Limits	☑ OK ☐ No ☐ DL	☑ OK ☐ No ☐ DL	☑ OK ☐ No ☐ DL	☑ OK ☐ No ☐ DL	☑ OK ☐ No ☑ DL	☑ OK ☐ No ☐ DL	☑ OK ☐ No ☐ DL	☑ OK ☐ No ☐ DL	☑ OK ☐ No ☐ DL	☑ OK ☐ No ☐ DL	☑ OK ☑ No ☑ DL	☑ OK ☐ No ☐ DL	☐ OK ☐ No ☐ DL	☑ OK ☐ No ☐ DL
3	*LCS and MS/MSD spike compound abbv*	1260	1260	PAH-13	PAH-13	PAH-13	1260	PAH-13	PAH-13	1260	PAH-19	PAH-19	1260	PAH-13	PAH-13
3	LCS summary (including spike added, percent recovery, and applicable control limits)	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
	LCS Limits	☑ OK ☐ No ☐ DL	☑ OK ☐ No ☐ DL	☑ OK ☐ No ☐ DL	☑ OK ☐ No ☐ DL	☑ OK ☐ No ☐ DL	☑ OK ☐ No ☐ DL	☑ OK ☐ No ☐ DL	☑ OK ☐ No ☐ DL	☑ OK ☐ No ☐ DL	☑ OK ☐ No ☐ DL	☑ OK ☐ No ☐ DL	☑ OK ☐ No ☐ DL	☑ OK ☐ No ☐ DL	☑ OK ☐ No ☐ DL
3	MS/MSD summary (including spike added, percent recovery, and applicable control limits)	☑	☑ batch	☑ batch	☑ batch	☑ batch	☑ batch	☑ batch	☑ batch	☑	☑ batch	☑	☑	☑ batch	☑ batch
	MS/MSD Limits	☑ OK ☐ No ☐ DL	☑ OK ☐ No ☐ DL	☐ OK ☑ No ☐ DL	☐ OK ☑ No ☐ DL	☐ OK ☑ No ☐ DL	☑ OK ☐ No ☐ DL	☐ OK ☑ No ☐ DL	☐ OK ☑ No ☐ DL	☑ OK ☐ No ☐ DL	☐ OK ☐ No ☑ DL	☐ OK ☐ No ☑ DL	☑ OK ☐ No ☐ DL	☑ OK ☐ No ☐ DL	☑ OK ☐ No ☐ DL
4	Method blank summary	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
	Method Blank Limits	☑ OK ☐ No	☑ OK ☐ No	☑ OK ☐ No	☑ OK ☐ No	☑ OK ☐ No	☑ OK ☐ No	☑ OK ☐ No	☑ OK ☐ No	☑ OK ☐ No	☑ OK ☐ No	☑ OK ☐ No	☑ OK ☐ No	☑ OK ☐ No	☑ OK ☐ No
5	Instrument tuning summary *(PAH only)*	☐	☐	☑	☑	☑	☐	☑	☑	☐	☑	☑	☐	☑	☑
6	Initial calibration summary (including concentration levels of standards, retention times, response or calibration factors, and linearity demonstration)	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
7	Continuing calibration summary (instrument/column ID, retention times and windows, response or calibration factors, percent difference/drift-as appropriate to method)	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
8	Internal standard summary (including initial calibrations and analytical sequence) *(PAH only)*	☐	☐	☑	☑	☑	☐	☑	☑	☐	☑	☑	☐	☑	☑
	Raw data including QC samples (copies of laboratory notebook, records, prep sheets)	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
	Electronic data deliverables (all required fields complete)	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑

Notes:
LCS = Laboratory Control Sample; MS/MSD = Matrix Spike/Matrix Spike Duplicate
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PAH-19 = 19 Polycyclic aromatic hydrocarbon compounds analyzed
Batch = Batch quality control sample analyzed in the sample delivery group.

TABLE D-2
Field Duplicate Precision

Analyte	Units	SR-CS008B-0.0/0.5 12/11/2012	SR-CS008B-0.0/0.5R 12/11/2012	RPD	SR-CS008B-0.5/1.0 12/11/2012	SR-CS008B-0.5/1.0R 12/11/2012	RPD	SR-CS020-0.0/0.5 11/19/2012	SR-CS020-0.0/0.5R 11/19/2012	RPD	SR-CS020-0.5/1.0 11/19/2012	SR-CS020-0.5/1.0R 11/19/2012	RPD	SR-CS028-1-0.0/0.5 12/12/2012	SR-CS028-1-0.0/0.5R 12/12/2012	RPD
Polycyclic Aromatic Hydrocarbons	**DF:**	**1**	**1**					**1**	**1**		**4**	**1**		**1**	**1**	
1-METHYLNAPHTHALENE	µg/kg															
2-METHYLNAPHTHALENE	µg/kg															
ACENAPHTHENE	µg/kg	61.1 U	58.3 U	4.7				74.5 U	74.1 U	0.5	934 J	112 J J	157.2	79.8 J	94.6 J	17.0
ACENAPHTHYLENE	µg/kg	61.1 U	58.3 U	4.7				74.5 U	74.1 U	0.5	452 J J	57.1 U UJ	155.1	63.6 U	63.4 U	0.3
ANTHRACENE	µg/kg	12.5 U	20.4 J	48.0				68.7 J J	18.5 J J	115.1	4550 J	161 J	186.3	89.5 J	95.8 J	6.8
BENZO(A)ANTHRACENE	µg/kg	61.1 U	90.9 J	39.2				128 J J	74.1 U UJ	53.3	3000 J	163 J	179.4	79.9 J J	142 J	56.0
BENZO(A)PYRENE	µg/kg	61.1 U	92.3 J	40.7				149 J J	74.1 U UJ	67.1	2710 J	163 J	177.3	63.7 J J	155 J	83.5
BENZO(B)FLUORANTHENE	µg/kg	17.6 U UJ	78.9 J J	127.0				111 J J	41.7 J J	90.8	1340 J	111 J J	169.4	38.9 J J	82 J J	71.3
BENZO(G,H,I)PERYLENE	µg/kg															
BENZO(K)FLUORANTHENE	µg/kg	61.1 U	91.5 J	39.8				114 J	74.1 U	42.4	1720 J	142 J	169.5	64.2 J J	138 J	73.0
BENZO_E_PYRENE	µg/kg															
CHRYSENE	µg/kg	13.9 U UJ	107 J J	154.0				151 J	50 J J	100.5	2990 J	179 J	177.4	82.6 J J	159 J	63.2
DIBENZ(A,H)ANTHRACENE	µg/kg															
FLUORANTHENE	µg/kg	61.1 U UJ	253 J	122.2				245 J	103 J J	81.6	6310 J	498 J	170.7	180	278	42.8
FLUORENE	µg/kg	61.1 U	58.3 U	4.7				74.5 U	74.1 U	0.5	927 J	91.9 J J	163.9	63.6 U	63.4 U	0.3
INDENO(1,2,3-C,D)PYRENE	µg/kg															
NAPHTHALENE	µg/kg	498 J	22 U UJ	183.1				47.3 J J	27.9 U UJ	51.6	184 J J	64.9 J J	95.7	30 J	26 J	14.3
PHENANTHRENE	µg/kg	80.5 J	133	49.2				211 J	83.4 J J	86.7	7600 J	616 J	170.0	214	259	19.0
PYRENE	µg/kg	61.1 U UJ	171 J	94.7				232 J	80.1 J J	97.3	7380 J	439 J	177.5	173	256	38.7
TOTAL PAH	µg/kg															
TOTAL PAH-13	µg/kg	578.5 J	1038 J	56.9				1457 J	376.7 J	117.8	40097 J	2740.8 J	174.4	1095.6	1685.4	42.4
Polychlorinated Biphenyls	**DF:**	**1**	**1**		**1**	**1**		**1**	**1**		**1**	**1**		**1**	**1**	
PCB, TOTAL	µg/kg	446	317	33.8	31.7 J	26.8 U	16.8	444	326	30.6	29.2 U	26.9 U	8.2	67 J J	29.6 U UJ	77.4
PCB-1242 (AROCHLOR 1242)	µg/kg	303	210	36.3	31.7 J	26.8 U	16.8	303	199	41.4	29.2 U	26.9 U	8.2	67 J J	29.6 U UJ	77.4
PCB-1248 (AROCHLOR 1248)	µg/kg	28.8 U	28.1 U	2.5	26.6 U	26.8 U	0.7	39.8 U	39 U	2.0	29.2 U	26.9 U	8.2	29.9 U	29.6 U	1.0
PCB-1254 (AROCHLOR 1254)	µg/kg	144	107 J	29.5	26.6 U	26.8 U	0.7	141 J	126 J	11.2	29.2 U	26.9 U	8.2	29.9 U	29.6 U	1.0
PCB-1260 (AROCHLOR 1260)	µg/kg	28.8 U	28.1 U	2.5	26.6 U	26.8 U	0.7	39.8 U	39 U	2.0	29.2 U	26.9 U	8.2	29.9 U	29.6 U	1.0

Notes:
DF = Dilution Factor
RPD = Relative Percent Difference
µg/kg = microgram per kilogram
J = The associated value is an estimated quantity.
U= Not detected above the method detection limit (MDL).
UJ= Not detected above the MDL and quality control measurements indicated a possible low bias.
Shaded values indicate exceedance of precision criteria.

TABLE D-2
Field Duplicate Precision

Analyte	Units	SR-CS030A-0.5/1.2 10/24/2012	SR-CS030A-0.5/1.2R 10/24/2012	RPD	SR-CS032-1-0.0/0.5 12/12/2012	SR-CS032-1-0.0/0.5R 12/12/2012	RPD	SR-CS032A-0.5/1.2 10/24/2012	SR-CS032A-0.5/1.2R 10/24/2012	RPD	SR-CS032TL-3.0/4.0 10/26/2012	SR-CS032TL-3.0/4.0R 10/26/2012	RPD	SR-CS034B-0.0/0.5 10/24/2012	SR-CS034B-0.0/0.5R 10/24/2012	RPD
Polycyclic Aromatic Hydrocarbons	**DF:**	**125**	**200**		**1**	**1**		**20**	**160**		**1**	**1**		**62.5**	**40**	
1-METHYLNAPHTHALENE	µg/kg	192000 J	343000 J	56.4				10200 J	221000 J	182.4	56.8 U	69.4 J	20.0	49800	30800	47.1
2-METHYLNAPHTHALENE	µg/kg	321000 J	594000 J	59.7				16900 J	373000 J	182.7	35.9 J J	69.4 J J	63.6	51100	36600	33.1
ACENAPHTHENE	µg/kg	231000	346000	39.9	347 J	1290 J	115.2	9640 J	250000 J	185.1	62.2 U	61.9 U	0.5	78400	48800	46.5
ACENAPHTHYLENE	µg/kg	19600 J	22900 J	15.5	63.4 U UJ	111 J J	54.6	1890 U UJ	21000 J J	167.0	62.2 U	61.9 U	0.5	6080 J J	2880 U UJ	71.4
ANTHRACENE	µg/kg	206000	317000	42.4	255 J	697 J	92.9	3850 J	224000 J	193.2	12.7 U	12.7 U	0.0	76100 J	34900 J	74.2
BENZO(A)ANTHRACENE	µg/kg	100000	127000	23.8	130 J	507 J	118.4	1980 J J	105000 J	192.6	62.2 U	61.9 U	0.5	33600 J	16100 J	70.4
BENZO(A)PYRENE	µg/kg	75800	98200	25.7	101 J J	470 J	129.2	1890 U UJ	80300 J	190.8	62.2 U	61.9 U	0.5	31100 J	13900 J	76.4
BENZO(B)FLUORANTHENE	µg/kg	37300	48700	26.5	56 J J	309 J	138.6	916 J J	51700 J	193.0	17.9 U	17.9 U	0.0	20600 J	7750 J	90.7
BENZO(G,H,I)PERYLENE	µg/kg	24500 J	33900 J	32.2				1890 U UJ	28400 J J	175.0	62.2 U	61.9 U	0.5	16700 J	6320 J	90.2
BENZO(K)FLUORANTHENE	µg/kg	51600	68100	27.6	85.3 J J	363 J	123.9	1890 U UJ	45800 J	184.1	62.2 U	61.9 U	0.5	23200 J	9880 J	80.5
BENZO_E_PYRENE	µg/kg	38300	49500	25.5				1890 U UJ	40700 J	182.2	62.2 U	61.9 U	0.5	16600 J	7260 J	78.3
CHRYSENE	µg/kg	86200	115000	28.6	114 J J	404 J	112.0	1660 J J	93000 J	193.0	14.1 U	14.1 U	0.0	32400 J	14800 J	74.6
DIBENZ(A,H)ANTHRACENE	µg/kg	12500 U	21000 U	50.7				1890 U	15500 U	156.5	62.2 U	61.9 U	0.5	4390 U	2880 U	41.5
FLUORANTHENE	µg/kg	225000	298000	27.9	380 J	1500 J	119.1	4630 J	233000 J	192.2	62.2 U	61.9 U	0.5	98100 J	41100 J	81.9
FLUORENE	µg/kg	155000	217000	33.3	192 J	771 J	120.2	4320 J	163000 J	189.7	62.2 U	61.9 U	0.5	48000 J	27400 J	54.6
INDENO(1,2,3-C,D)PYRENE	µg/kg	20800 J	30300 J	37.2				1890 U UJ	25200 J J	172.1	62.2 U	61.9 U	0.5	12900 J	5240 J J	84.5
NAPHTHALENE	µg/kg	390000 J	715000 J	58.8	396 J	1320 J	107.7	67600 J	450000 J	147.8	23.4 U	30.4 J	26.0	151000	92200	48.4
PHENANTHRENE	µg/kg	552000	725000	27.1	704 J	2730 J	118.0	11400 J	580000 J	192.3	15.9 U	15.8 U	0.6	180000 J	96300 J	60.6
PYRENE	µg/kg	235000	311000	27.8	321 J	1150 J	112.7	4100 J	243000 J	193.4	62.2 U	61.9 U	0.5	79600 J	39500 J	67.3
TOTAL PAH	µg/kg	2930000	4420000	40.5				142000 J	3200000 J	183.0	107 J	242 J	77.4	993000 J	526000 J	61.5
TOTAL PAH-13	µg/kg	2364500	3408900	36.2	3081.3 J	11622 J	116.2	110096 J	2539800 J	183.4	581.6 U UJ	30.4 J	180.1	858180 J	442630 J	63.9
Polychlorinated Biphenyls	**DF:**				**1**	**1**										
PCB, TOTAL	µg/kg				52.1 J J	113 J J	73.8									
PCB-1242 (AROCHLOR 1242)	µg/kg				52.1 J J	113 J J	73.8									
PCB-1248 (AROCHLOR 1248)	µg/kg				29.4 U	30 U	2.0									
PCB-1254 (AROCHLOR 1254)	µg/kg				29.4 U	30 U	2.0									
PCB-1260 (AROCHLOR 1260)	µg/kg				29.4 U	30 U	2.0									

Notes:
DF = Dilution Factor
RPD = Relative Percent Difference
µg/kg = microgram per kilogram
J = The associated value is an estimated quantity.
U= Not detected above the method detection limit (MDL)
UJ= Not detected above the MDL and quality control measurements indicated a possible low bias.
Shaded values indicate exceedance of precision criteria.

TABLE D-2
Field Duplicate Precision

Analyte	Units	SR-CS036-0.5/1.4 10/25/2012	SR-CS036-0.5/1.4R 10/25/2012	RPD	SR-CS036-1-0.0/0.5 12/12/2012	SR-CS036-1-0.0/0.5R 12/12/2012	RPD	SR-CS036C-0.0/0.7 10/25/2012	SR-CS036C-0.0/0.7R 10/25/2012	RPD	SR-CS039-0.0/0.5 11/20/2012	SR-CS039-0.0/0.5R 11/20/2012	RPD	SR-CS039-0.5/1.0 11/20/2012	SR-CS039-0.5/1.0R 11/20/2012	RPD
Polycyclic Aromatic Hydrocarbons	**DF:**	**1**	**1**		**8**	**4**		**1**	**1**		**1**	**1**		**1**	**1**	
1-METHYLNAPHTHALENE	µg/kg	290 J	643 J	75.7				156 J	74.8 J J	70.4						
2-METHYLNAPHTHALENE	µg/kg	142	192	29.9				181 J	80.1 J J	77.3						
ACENAPHTHENE	µg/kg	1760	2320	27.5	9830	6140	46.2	292 J	144 J	67.9	65.3 U	72.3 U	10.2	69.7 U	84.6 U	19.3
ACENAPHTHYLENE	µg/kg	109 J	139	24.2	1160 J	1040	10.9	56.6 U	56.9 U	0.5	65.3 U	72.3 U	10.2	69.7 U	84.6 U	19.3
ANTHRACENE	µg/kg	1450	2290	44.9	8110	7880	2.9	437 J	145 J	100.3	91.8 J	67.3 J	30.8	41.9 J	30.3 J	32.1
BENZO(A)ANTHRACENE	µg/kg	1330	1610	19.0	5670	4490	23.2	206 J	85.2 J J	83.0	65.3 U	72.3 U	10.2	69.7 U	84.6 U	19.3
BENZO(A)PYRENE	µg/kg	1560	1890	19.1	6040	4600	27.1	155 J	58.1 J J	90.9	65.3 U	72.3 U	10.2	69.7 U	84.6 U	19.3
BENZO(B)FLUORANTHENE	µg/kg	1400	1650	16.4	3580	3080	15.0	100 J J	44.9 J J	76.1	24.5 J	32.1 J	26.9	21.3 J	24.4 U	13.6
BENZO(G,H,I)PERYLENE	µg/kg	919	1100	17.9				60.2 J	56.9 U	5.6						
BENZO(K)FLUORANTHENE	µg/kg	1000	1180	16.5	4890	3240	40.6	99.5 J J	56.9 U UJ	54.5	65.3 U	72.3 U	10.2	69.7 U	84.6 U	19.3
BENZO_E_PYRENE	µg/kg	859	1020	17.1				83.2 J	56.9 U	37.5						
CHRYSENE	µg/kg	1340	1650	20.7	5500	4490	20.2	208 J	77.6 J J	91.3	47.4 J	57.6 J	19.4	38.2 J	37.6 J	1.6
DIBENZ(A,H)ANTHRACENE	µg/kg	261	343	27.2				56.6 U	56.9 U	0.5						
FLUORANTHENE	µg/kg	3300	4450	29.7	15400	11900	25.6	419 J	164 J	87.5	103 J	120 J	15.2	86.9 J	84.6 U	2.7
FLUORENE	µg/kg	731 J	1340 J	58.8	5530	3910	34.3	248 J	95.6 J J	88.7	65.3 U	72.3 U	10.2	69.7 U	84.6 U	19.3
INDENO(1,2,3-C,D)PYRENE	µg/kg	813	970	17.6				56.6 U	56.9 U	0.5						
NAPHTHALENE	µg/kg	1450	2060	34.8	25200 J	11300 J	76.2	121 J	71.3 J J	51.7	24.6 U UJ	88.1 J J	112.7	33.8 J	31.9 U	5.8
PHENANTHRENE	µg/kg	3050 J	5810 J	62.3	24100	18200	27.9	965 J	349 J	93.8	153	186	19.5	152 J	64.9 J J	80.3
PYRENE	µg/kg	2290	3180	32.5	12100	9700	22.0	474 J	172 J	93.5	102 J	115 J	12.0	83.3 J	84.6 U	1.5
TOTAL PAH	µg/kg	23200	32800	34.3				4220 J	1660 J	87.1						
TOTAL PAH-13	µg/kg	20770	29569	35.0	127110	89970	34.2	3724.5 J	1406.7 J	90.3	521.7	666.1	24.3	457.4 J	132.8 J	110.0
Polychlorinated Biphenyls	**DF:**	**1**	**1**		**3**	**20**					**1**	**1**		**1**	**1**	
PCB, TOTAL	µg/kg	31.8 U	32.1 U	0.9	1510 J	5760 J	116.9				874	776	11.9	594 J	39.3 U UJ	175.2
PCB-1242 (AROCHLOR 1242)	µg/kg	31.8 U	32.1 U	0.9	1210 J	4710 J	118.2				690	636	8.1	485 J	39.3 U UJ	170.0
PCB-1248 (AROCHLOR 1248)	µg/kg	31.8 U	32.1 U	0.9	117 U	996 U	158.0				30.2 U	37.3 U	21.0	31.8 U	39.3 U	21.1
PCB-1254 (AROCHLOR 1254)	µg/kg	31.8 U	32.1 U	0.9	300 J J	1050 J J	111.1				184	140 J	27.2	109 J J	39.3 U UJ	94.0
PCB-1260 (AROCHLOR 1260)	µg/kg	31.8 U	32.1 U	0.9	117 U	996 U	158.0				30.2 U	37.3 U	21.0	31.8 U	39.3 U	21.1

Notes:
DF = Dilution Factor
RPD = Relative Percent Difference
µg/kg = microgram per kilogram
J = The associated value is an estimated quantity.
U= Not detected above the method detection limit (MDL)
UJ= Not detected above the MDL and quality control measurements indicated a possible low bias.
Shaded values indicate exceedance of precision criteria.

TABLE D-2
Field Duplicate Precision

Analyte	Units	SR-CS040-1-0.0/0.5 12/12/2012	SR-CS040-1-0.0/0.5R 12/13/2012	RPD	SR-CS040-1-0.5/1.0 12/12/2012	SR-CS040-1-0.5/1.0R 12/13/2012	RPD	SR-CS040-1-1.0/2.0 12/12/2012	SR-CS040-1-1.0/1.6R 12/13/2012	RPD	SR-CS040B-2.0/3.2 10/25/2012	SR-CS040B-2.0/3.2R 10/25/2012	RPD	SR-CS040C-0.5/1.0 10/25/2012	SR-CS040C-0.5/1.0R 10/25/2012	RPD
Polycyclic Aromatic Hydrocarbons	**DF:**	**1**	**20**		**80**	**100**		**20**	**200**		**62.5**	**62.5**		**1**	**2**	
1-METHYLNAPHTHALENE	µg/kg										61500	91500	39.2	602	513	16.0
2-METHYLNAPHTHALENE	µg/kg										95000	147000	43.0	815	678	18.4
ACENAPHTHENE	µg/kg	67.4 U UJ	38200 J	199.3	65800 J	124000 J	61.3	16300 J	146000 J	159.8	98600	143000	36.8	916	823	10.7
ACENAPHTHYLENE	µg/kg	67.4 U UJ	2950 J	191.1	5070 U	8310 J	48.4	1220 U	12800 U	165.2	4880 U	5880 J	18.6	107 J J	203 J J	61.9
ANTHRACENE	µg/kg	13.8 U UJ	26700 J	199.8	46500	74600	46.4	11600 J	76700 J	147.5	105000	111000	5.6	409	680	49.8
BENZO(A)ANTHRACENE	µg/kg	67.4 U UJ	14100 J	198.1	25400	41300	47.7	6190 J	47700 J	154.1	33800	34100	0.9	588 J	1120 J	62.3
BENZO(A)PYRENE	µg/kg	67.4 U UJ	11800 J	197.7	20800 J	34900 J	50.6	5880 J	43000 J	151.9	23900	25700	7.3	573 J	1090 J	62.2
BENZO(B)FLUORANTHENE	µg/kg	19.4 U UJ	8700 J	199.1	12200	20100	48.9	3490 J	24400 J J	149.9	11800	11800	0.0	462 J	788 J	52.2
BENZO(G,H,I)PERYLENE	µg/kg										7670 J	9120 J	17.3	294 J	538 J	58.7
BENZO(K)FLUORANTHENE	µg/kg	67.4 U UJ	8640 J	196.9	15500 J	27300 J	55.1	4770 J	34500 J	151.4	17000	19700	14.7	427 J	892 J	70.5
BENZO_E_PYRENE	µg/kg										11800	13000	9.7	324 J	608 J	60.9
CHRYSENE	µg/kg	21.5 J J	13500 J	199.4	23800	37300	44.2	6180 J	42200 J	148.9	31700	32100	1.3	571 J	1030 J	57.3
DIBENZ(A,H)ANTHRACENE	µg/kg										4880 U	4800 U	1.7	93.9 J J	179 J J	62.4
FLUORANTHENE	µg/kg	67.4 U UJ	40600 J	199.3	64500 J	111000 J	53.0	19000 J	129000 J	148.6	87000	86100	1.0	1180 J	2350 J	66.3
FLUORENE	µg/kg	67.4 U UJ	21900 J	198.8	42400 J	74200 J	54.5	7800 J	74000 J	161.9	74400	100000	29.4	443	460	3.8
INDENO(1,2,3-C,D)PYRENE	µg/kg										6370 J	8090 J	23.8	277 J	494 J	56.3
NAPHTHALENE	µg/kg	25.4 U UJ	101000 J	199.9	108000 J	248000 J	78.7	55000 J	423000 J	154.0	95400	147000	42.6	748	642	15.3
PHENANTHRENE	µg/kg	23.5 J J	81100 J	199.9	155000 J	259000 J	50.2	34100 J	272000 J	155.4	237000	274000	14.5	1380	2130	42.7
PYRENE	µg/kg	67.4 U UJ	33600 J	199.2	62800	101000	46.6	14700 J	118000 J	155.7	86000	84700	1.5	987 J	1730 J	54.7
TOTAL PAH	µg/kg										1080000	1330000	20.7	10900	16300	39.7
TOTAL PAH-13	µg/kg	45 J	402790 J	200.0	642700 J	1161010 J	57.5	185010 J	1430500 J	154.2	901600	1075080	17.6	8791	13938	45.3
Polychlorinated Biphenyls	**DF:**	**1**	**3**													
PCB, TOTAL	µg/kg	512 J	1430 J	94.5												
PCB-1242 (AROCHLOR 1242)	µg/kg	396 J	1160 J	98.2												
PCB-1248 (AROCHLOR 1248)	µg/kg	32.9 U	89.5 U	92.5												
PCB-1254 (AROCHLOR 1254)	µg/kg	115 J J	270 J J	80.5												
PCB-1260 (AROCHLOR 1260)	µg/kg	32.9 U	89.5 U	92.5												

Notes:
DF = Dilution Factor
RPD = Relative Percent Difference
µg/kg = microgram per kilogram
J = The associated value is an estimated quantity.
U= Not detected above the method detection limit (MDL)
UJ= Not detected above the MDL and quality control measurements indicated a possible low bias.
Shaded values indicate exceedance of precision criteria.

TABLE D-2
Field Duplicate Precision

Analyte	Units	SR-CS040D-1.0/1.8 10/25/2012	SR-CS040D-1.0/1.8R 10/25/2012	RPD	SR-CS048-0.0/0.5 11/8/2012	SR-CS048-0.0/0.5R 11/8/2012	RPD	SR-CS048-0.5/1.0 11/8/2012	SR-CS048-0.5/1.0R 11/8/2012	RPD	SR-CS063B-1.0/2.0 11/5/2012	SR-CS063B-1.0/2.0R 11/5/2012	RPD	SR-CS065C-2.0/3.0 10/24/2012	SR-CS065C-2.0/3.0R 10/24/2012	RPD
Polycyclic Aromatic Hydrocarbons	**DF:**	**25**	**20**		**4**	**1**		**1**	**1**							
1-METHYLNAPHTHALENE	µg/kg	2360	1850	24.2												
2-METHYLNAPHTHALENE	µg/kg	3740	2870	26.3												
ACENAPHTHENE	µg/kg	4310	3640	16.9	1170 J	477 J	84.2	113 J	328 J	97.5						
ACENAPHTHYLENE	µg/kg	302 J	294 J	2.7	55.3 J	33.2	49.9	10 U	64.2 U	146.1						
ANTHRACENE	µg/kg	2920	2950	1.0	629 J	158 J	119.7	21.3 J	89.9 J J	123.4						
BENZO(A)ANTHRACENE	µg/kg	1680	1820	8.0	419 J	134 J	103.1	37 J	86.2 J J	79.9						
BENZO(A)PYRENE	µg/kg	1640	1850	12.0	436 J	164 J	90.7	49.8 J	94 J J	61.5						
BENZO(B)FLUORANTHENE	µg/kg	1130	1440	24.1	310 J	98.7 J	103.4	28.8 J	54.2 J J	61.2						
BENZO(G,H,I)PERYLENE	µg/kg	940	1020	8.2												
BENZO(K)FLUORANTHENE	µg/kg	1150	1210	5.1	296 J	102 J	97.5	27.5 J	64.2 U UJ	80.0						
BENZO_E_PYRENE	µg/kg	901	1010	11.4												
CHRYSENE	µg/kg	1570	1650	5.0	451 J	134 J	108.4	39.9 J	91.3 J J	78.4						
DIBENZ(A,H)ANTHRACENE	µg/kg	278 J	291 J	4.6												
FLUORANTHENE	µg/kg	4080	4460	8.9	970 J	265 J	114.2	57 J	204 J	112.6						
FLUORENE	µg/kg	2370	2200	7.4	399 J	112 J	112.3	15.4 J J	64.2 U UJ	122.6						
INDENO(1,2,3-C,D)PYRENE	µg/kg	810	898	10.3												
NAPHTHALENE	µg/kg	5240	4040	25.9	382 J	147 J	88.8	11.3 J J	24.2 U UJ	72.7						
PHENANTHRENE	µg/kg	8090	8540	5.4	1710 J	460 J	115.2	52 J	225 J	124.9						
PYRENE	µg/kg	3630	3500	3.6	938 J	283 J	107.3	76.6 J	256 J	107.9						
TOTAL PAH	µg/kg	46200	44500	3.7												
TOTAL PAH-13	µg/kg	38112	37594	1.4	8165.3 J	2567.9 J	104.3	529.6 J	1428.6 J	91.8						
Polychlorinated Biphenyls	**DF:**				**1**	**1**		**1**	**1**		**30**	**20**		**3**	**5**	
PCB, TOTAL	µg/kg				289	291	0.7	28.4 U	31.1 U	9.1	15400	16500	6.9	1350	1960	36.9
PCB-1242 (AROCHLOR 1242)	µg/kg				245	257	4.8	28.4 U	31.1 U	9.1	12500	12000	4.1	605	850	33.7
PCB-1248 (AROCHLOR 1248)	µg/kg				33.3 U	32.9 U	1.2	28.4 U	31.1 U	9.1	1120 U	757 U	38.7	118 U	192 U	47.7
PCB-1254 (AROCHLOR 1254)	µg/kg				43.4 J	33.8 J	24.9	28.4 U	31.1 U	9.1	2860 J	3570	22.1	608 J	1110 J	58.4
PCB-1260 (AROCHLOR 1260)	µg/kg				33.3 U	32.9 U	1.2	28.4 U	31.1 U	9.1	1120 U	881 J	23.9	139 J	192 U	32.0

Notes:
DF = Dilution Factor
RPD = Relative Percent Difference
µg/kg = microgram per kilogram
J = The associated value is an estimated quantity.
U= Not detected above the method detection limit (MDL)
UJ= Not detected above the MDL and quality control measurements indicated a possible low bias.
Shaded values indicate exceedance of precision criteria.

TABLE D-2
Field Duplicate Precision

Analyte	Units	SR-CS067A-0.5/1.0 11/5/2012		SR-CS067A-0.5/1.0R 11/5/2012		RPD	SR-CS068-0.5/1.0 10/4/2012		SR-CS068-0.5/1.0R 10/4/2012		RPD	SR-CS071A-1.0/2.0 10/9/2012		SR-CS071A-1.0/2.0R 10/9/2012		RPD	SR-CS071B-2.0/3.0 10/9/2012		SR-CS071B-2.0/3.0R 10/9/2012		RPD	SR-CS071C-3.0/4.0 10/9/2012		SR-CS071C-3.0/4.0R 10/9/2012		RPD	SR-CS078-0.5/1.0 10/10/2012		SR-CS078-0.5/1.0R 10/10/2012		RPD
Polycyclic Aromatic Hydrocarbons	**DF:**																																	
1-METHYLNAPHTHALENE	µg/kg																																	
2-METHYLNAPHTHALENE	µg/kg																																	
ACENAPHTHENE	µg/kg																																	
ACENAPHTHYLENE	µg/kg																																	
ANTHRACENE	µg/kg																																	
BENZO(A)ANTHRACENE	µg/kg																																	
BENZO(A)PYRENE	µg/kg																																	
BENZO(B)FLUORANTHENE	µg/kg																																	
BENZO(G,H,I)PERYLENE	µg/kg																																	
BENZO(K)FLUORANTHENE	µg/kg																																	
BENZO_E_PYRENE	µg/kg																																	
CHRYSENE	µg/kg																																	
DIBENZ(A,H)ANTHRACENE	µg/kg																																	
FLUORANTHENE	µg/kg																																	
FLUORENE	µg/kg																																	
INDENO(1,2,3-C,D)PYRENE	µg/kg																																	
NAPHTHALENE	µg/kg																																	
PHENANTHRENE	µg/kg																																	
PYRENE	µg/kg																																	
TOTAL PAH	µg/kg																																	
TOTAL PAH-13	µg/kg																																	
Polychlorinated Biphenyls	**DF:**	**10**		**3**			**1**		**1**			**20**		**20**			**100**		**50**			**15**		**10**			**10**		**5**					
PCB, TOTAL	µg/kg	3680	J	1900	J	63.8	34.6	U	36.7	U	5.9	8100		12300		41.2	29600		19200		42.6	4610		5790		22.7	4600		4040		13.0			
PCB-1242 (AROCHLOR 1242)	µg/kg	2250	J	1190	J	61.6	34.6	U	36.7	U	5.9	6410		10100		44.7	24100		15800		41.6	2730		3370		21.0	3310		3060		7.8			
PCB-1248 (AROCHLOR 1248)	µg/kg	480	U	142	U	108.7	34.6	U	36.7	U	5.9	659	U	668	U	1.4	4070	U	1940	U	70.9	635	U	440	U	36.3	433	U	211	U	68.9			
PCB-1254 (AROCHLOR 1254)	µg/kg	1430	J J	706	J	67.8	34.6	U	36.7	U	5.9	1690	J	2200	J	26.2	5490	J	3450	J	45.6	1880	J	2420		25.1	1290	J	986		26.7			
PCB-1260 (AROCHLOR 1260)	µg/kg	480	U	142	U	108.7	34.6	U	36.7	U	5.9	659	U	668	U	1.4	4070	U	1940	U	70.9	635	U	440	U	36.3	433	U	211	U	68.9			

Notes:
DF = Dilution Factor
RPD = Relative Percent Difference
µg/kg = microgram per kilogram
J = The associated value is an estimated quantity.
U= Not detected above the method detection limit (MDL)
UJ= Not detected above the MDL and quality control measurements indicated a possible low bias.
Shaded values indicate exceedance of precision criteria.

TABLE D-2
Field Duplicate Precision

Analyte	Units	SR-DS040-4-0.5/1.5 12/19/2012	SR-DS040-4-0.5/1.5R 12/19/2012	RPD	SR-S15-0.0/2.0 11/28/2012	SR-S15-0.0/2.0R 11/28/2012	RPD	SR-S16-2.0/3.4 11/29/2012	SR-S16-2.0/3.4R 11/29/2012	RPD	SR-S19A-0.0/2.0 11/28/2012	SR-S19A-0.0/2.0R 11/28/2012	RPD	SR-S19B-2.0/4.7 11/28/2012	SR-S19B-2.0/4.7R 11/28/2012	RPD
Polycyclic Aromatic Hydrocarbons	**DF:**	**1**	**1**		**1**	**1**		**1**			**1**			**1**	**1**	
1-METHYLNAPHTHALENE	µg/kg	35.2 J	9.5 U UJ	115.0												
2-METHYLNAPHTHALENE	µg/kg	62.4 J	1.9 U UJ	188.2												
ACENAPHTHENE	µg/kg	43.8 J	10.4 U UJ	123.2	95.8 U	84.7 U	12.3	61.6 U			67.3 U			173 J	93.3 J J	59.9
ACENAPHTHYLENE	µg/kg	10.4 U	10.4 U	0.0	95.8 U	84.7 U	12.3	61.6 U			67.3 U			64 U	62.9 U	1.7
ANTHRACENE	µg/kg	9.4 J J	2.1 U UJ	127.0	19.6 U	17.4 U	11.9	12.6 U			13.8 U			250 J	148 J	51.3
BENZO(A)ANTHRACENE	µg/kg	10.4 U	10.4 U	0.0	95.8 U	84.7 U	12.3	61.6 U			67.3 U			346	228	41.1
BENZO(A)PYRENE	µg/kg	10.4 U	10.4 U	0.0	95.8 U	84.7 U	12.3	61.6 U			67.3 U			354	247	35.6
BENZO(B)FLUORANTHENE	µg/kg	3 U	3 U	0.0	39.3 J	29.8 J	27.5	17.8 U			19.4 U			287	210	31.0
BENZO(G,H,I)PERYLENE	µg/kg	10.4 U	10.4 U	0.0												
BENZO(K)FLUORANTHENE	µg/kg	10.4 U	10.4 U	0.0	95.8 U	84.7 U	12.3	61.6 U			67.3 U			254	173	37.9
BENZO_E_PYRENE	µg/kg	10.4 U	10.4 U	0.0												
CHRYSENE	µg/kg	3.6 J	2.4 U	40.0	40.2 J	32.4 J	21.5	14 U			15.3 U			383	243	44.7
DIBENZ(A,H)ANTHRACENE	µg/kg	10.4 U	10.4 U	0.0												
FLUORANTHENE	µg/kg	10.8 J	10.4 U	3.8	95.8 U	84.7 U	12.3	61.6 U			67.3 U			894	568	44.6
FLUORENE	µg/kg	15.4 J	10.4 U	38.8	95.8 U	84.7 U	12.3	61.6 U			67.3 U			118 J J	69.1 J J	52.3
INDENO(1,2,3-C,D)PYRENE	µg/kg	10.4 U	10.4 U	0.0												
NAPHTHALENE	µg/kg	281 J	3.9 U UJ	194.5	36.1 U	31.9 U	12.4	23.2 U			25.4 U			89.5 J	67.3 J	28.3
PHENANTHRENE	µg/kg	29.4 J	2.6 U UJ	167.5	40.3 J	40.9 J	1.5	15.7 U			17.2 U			805 J	470 J	52.5
PYRENE	µg/kg	10.4 U	10.4 U	0.0	95.8 U	84.7 U	12.3	61.6 U			67.3 U			709	428	49.4
TOTAL PAH	µg/kg	512 J	4.10E-09 J	200.0												
TOTAL PAH-13	µg/kg	393.4 J	97.2 U UJ	120.8	119.8	103.1	15.0	576.1 U			629.5 U			4662.5	2944.7	45.2
Polychlorinated Biphenyls	**DF:**				**1**	**1**		**1**	**1**		**1**	**1**		**1**	**1**	
PCB, TOTAL	µg/kg				1170	982	17.5	29.8 U	30.8 U	3.3	75 J	56.2 J	28.7	31 U	29.1 U	6.3
PCB-1242 (AROCHLOR 1242)	µg/kg				807	750	7.3	29.8 U	30.8 U	3.3	75 J	56.2 J	28.7	31 U	29.1 U	6.3
PCB-1248 (AROCHLOR 1248)	µg/kg				38.3 U	36.2 U	5.6	29.8 U	30.8 U	3.3	31.9 U	32.5 U	1.9	31 U	29.1 U	6.3
PCB-1254 (AROCHLOR 1254)	µg/kg				318	232	31.3	29.8 U	30.8 U	3.3	31.9 U	32.5 U	1.9	31 U	29.1 U	6.3
PCB-1260 (AROCHLOR 1260)	µg/kg				43 J	36.2 U	17.2	29.8 U	30.8 U	3.3	31.9 U	32.5 U	1.9	31 U	29.1 U	6.3

Notes:
DF = Dilution Factor
RPD = Relative Percent Difference
µg/kg = microgram per kilogram
J = The associated value is an estimated quantity.
U= Not detected above the method detection limit (MDL)
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TABLE D-2
Field Duplicate Precision

Analyte	Units	SR-S22-0.0/2.0 11/7/2012	SR-S22-0.0/2.0R 11/7/2012	RPD	SR-S24-2.0/6.0 10/12/2012	SR-S24-2.0/6.0R 10/12/2012	RPD	SR-S30-0.0/2.0 10/12/2012	SR-S30-0.0/2.0R 10/12/2012	RPD	SR-S39-0.0/2.0 11/29/2012	SR-S39-0.0/2.0R 11/29/2012	RPD	SR-S46-0.0/2.0 11/9/2012	SR-S46-0.0/2.0R 11/9/2012	RPD
Polycyclic Aromatic Hydrocarbons	**DF:**	**5**	**5**		**1**	**1**		**8**	**8**		**1**			**1**	**1**	
1-METHYLNAPHTHALENE	µg/kg															
2-METHYLNAPHTHALENE	µg/kg															
ACENAPHTHENE	µg/kg	8050	7180	11.4	949	919	3.2	908 J	2040 J	76.8	82.4 U			385 J	129 J J	99.6
ACENAPHTHYLENE	µg/kg	721 J	774 J	7.1	104 J	99.5 J	4.4	100 U UJ	241 J	82.7	82.4 U			77.4 U	82.8 U	6.7
ANTHRACENE	µg/kg	6580	6260	5.0	839	826	1.6	713 J	1680 J	80.8	19.5 J			816 J	267 J	101.4
BENZO(A)ANTHRACENE	µg/kg	4010	4120	2.7	436	410	6.1	315 J	704 J	76.3	82.4 U			382 J	142 J J	91.6
BENZO(A)PYRENE	µg/kg	3390	3850	12.7	379	353	7.1	258 J	595 J	79.0	82.4 U			294 J	107 J J	93.3
BENZO(B)FLUORANTHENE	µg/kg	2370	2690	12.6	232	216	7.1	151 J J	418 J	93.8	34.7 J			136 J J	63.2 J J	73.1
BENZO(G,H,I)PERYLENE	µg/kg															
BENZO(K)FLUORANTHENE	µg/kg	2300	2880	22.4	240	211	12.9	193 J J	393 J	68.3	82.4 U			208 J	82.8 U UJ	86.1
BENZO_E_PYRENE	µg/kg															
CHRYSENE	µg/kg	3870	4350	11.7	438	403	8.3	286 J	642 J	76.7	41.6 J			417 J	144 J J	97.3
DIBENZ(A,H)ANTHRACENE	µg/kg															
FLUORANTHENE	µg/kg	8630	9770	12.4	1040	1010	2.9	730 J	1820 J	85.5	88.7 J			816 J	289 J	95.4
FLUORENE	µg/kg	4920	4590	6.9	543	503	7.6	514 J	1200 J	80.0	82.4 U			382 J	115 J J	107.4
INDENO(1,2,3-C,D)PYRENE	µg/kg															
NAPHTHALENE	µg/kg	4740	4520	4.8	860	801	7.1	3290 J	5760 J	54.6	31.1 U			74 J J	31.2 U UJ	81.4
PHENANTHRENE	µg/kg	16800	17000	1.2	2210	2430	9.5	1640 J	3860 J	80.7	68 J			1860 J	620 J	100.0
PYRENE	µg/kg	8890	9180	3.2	1130	1160	2.6	681 J	1690 J	85.1	82.4 U			1060 J	342 J	102.4
TOTAL PAH	µg/kg															
TOTAL PAH-13	µg/kg	75271	77164	2.5	9400	9341.5	0.6	9679 J	21043 J	74.0	252.5			6830 J	2218.2 J	101.9
Polychlorinated Biphenyls	**DF:**	**1**	**1**		**1**	**1**		**1**	**1**		**20**	**20**		**20**	**20**	
PCB, TOTAL	µg/kg	50.5 J	40.2 J	22.7	33.3 U	31 U	7.2	807	647	22.0	11300	7270	43.4	11700	19100	48.1
PCB-1242 (AROCHLOR 1242)	µg/kg	50.5 J	40.2 J	22.7	33.3 U	31 U	7.2	632	508	21.8	11300	7270	43.4	10700	17500	48.2
PCB-1248 (AROCHLOR 1248)	µg/kg	36.8 U	36.6 U	0.5	33.3 U	31 U	7.2	35.2 U	35.7 U	1.4	791 U	746 U	5.9	803 U	1100 U	31.2
PCB-1254 (AROCHLOR 1254)	µg/kg	36.8 U	36.6 U	0.5	33.3 U	31 U	7.2	175	140 J	22.2	791 U	746 U	5.9	969 J J	1650 J J	52.0
PCB-1260 (AROCHLOR 1260)	µg/kg	36.8 U	36.6 U	0.5	33.3 U	31 U	7.2	35.2 U	35.7 U	1.4	791 U	746 U	5.9	803 U	1100 U	31.2

Notes:
DF = Dilution Factor
RPD = Relative Percent Difference
µg/kg = microgram per kilogram
J = The associated value is an estimated quantity.
U= Not detected above the method detection limit (MDL)
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TABLE D-2
Field Duplicate Precision

Analyte	Units	SR-S47-0.0/1.6 11/10/2012	SR-S47-0.0/1.6R 11/10/2012	RPD	SR-S48-0.0/2.1 11/9/2012	SR-S48-0.0/2.1R 11/9/2012	RPD	SR-S50-2.0/4.4 11/9/2012	SR-S50-2.0/4.4R 11/9/2012	RPD	SR-S61-2.0/5.3 10/11/2012	SR-S61-2.0/5.3R 10/11/2012	RPD	SR-S61A-0.0/2.0 10/11/2012	SR-S61A-0.0/2.0R 10/11/2012	RPD
Polycyclic Aromatic Hydrocarbons	**DF:**	**1**	**1**		**1**	**1**		**1**	**1**		**1**	**1**		**3.33**	**20**	
1-METHYLNAPHTHALENE	µg/kg															
2-METHYLNAPHTHALENE	µg/kg															
ACENAPHTHENE	µg/kg	579	348	49.8	71.6 U	79.3 U	10.2	69.1 U	70.6 U	2.1	185	183	1.1	1930 J	592 J	106.1
ACENAPHTHYLENE	µg/kg	323	525	47.6	71.6 U	79.3 U	10.2	69.1 U	70.6 U	2.1	65.1 U	61.2 U	6.2	305 J	194 U	44.5
ANTHRACENE	µg/kg	662	826	22.0	21.2 J J	51.9 J J	84.0	14.2 U	14.5 U	2.1	76.9 J	110 J	35.4	2000 J	3510 J	54.8
BENZO(A)ANTHRACENE	µg/kg	1790	2700	40.5	71.6 U	95.5 J	28.6	69.1 U	70.6 U	2.1	141	186	27.5	2310	1670	32.2
BENZO(A)PYRENE	µg/kg	2250	3340	39.0	71.6 U	83.6 J	15.5	69.1 U	70.6 U	2.1	160	209	26.6	2210	1630	30.2
BENZO(B)FLUORANTHENE	µg/kg	1650	2650	46.5	21.8 J J	64.6 J J	99.1	19.9 U	20.4 U	2.5	137	152	10.4	1780	1250	35.0
BENZO(G,H,I)PERYLENE	µg/kg															
BENZO(K)FLUORANTHENE	µg/kg	1550	2420	43.8	71.6 U	79.3 U	10.2	69.1 U	70.6 U	2.1	99.3 J	145	37.4	1520 J	1190	24.4
BENZO_E_PYRENE	µg/kg															
CHRYSENE	µg/kg	1890	3030	46.3	33.6 J J	98.2 J J	98.0	15.7 U	16 U	1.9	130	173	28.4	2090	3060	37.7
DIBENZ(A,H)ANTHRACENE	µg/kg															
FLUORANTHENE	µg/kg	3030	3890	24.9	71.6 U UJ	190 J	90.5	69.1 U	70.6 U	2.1	224	318	34.7	5450	4150	27.1
FLUORENE	µg/kg	354	261	30.2	71.6 U	79.3 U	10.2	69.1 U	70.6 U	2.1	84 J	93.4 J	10.6	1700 J	571 J	99.4
INDENO(1,2,3-C,D)PYRENE	µg/kg															
NAPHTHALENE	µg/kg	141	107 J	27.4	27 U	43.6 J	47.0	26 U	26.6 U	2.3	41.3 J	42.9 J	3.8	594 J	575	3.3
PHENANTHRENE	µg/kg	1040	1440	32.3	78.2 J J	184 J	80.7	17.6 U	18 U	2.2	269	407	40.8	6240 J	3270 J	62.5
PYRENE	µg/kg	3210	4060	23.4	71.6 U UJ	167 J	80.0	69.1 U	70.6 U	2.1	201	299	39.2	4640	3230	35.8
TOTAL PAH	µg/kg															
TOTAL PAH-13	µg/kg	18469	25597	32.4	154.8 J	978.4 J	145.4	646.2 U	660.3 U	2.2	1748.5	2318.3	28.0	32769	24698	28.1
Polychlorinated Biphenyls	**DF:**	**1**	**1**		**15**	**20**		**1**	**1**		**20**	**10**		**2**	**2**	
PCB, TOTAL	µg/kg	613	661	7.5	9500	12100	24.1	34.1 U	34.7 U	1.7	6230	4180	39.4	1190	1200	0.8
PCB-1242 (AROCHLOR 1242)	µg/kg	444	477	7.2	8460	10800	24.3	34.1 U	34.7 U	1.7	5040	3420	38.3	1060	1040	1.9
PCB-1248 (AROCHLOR 1248)	µg/kg	33.3 U	32.5 U	2.4	600 U	799 U	28.4	34.1 U	34.7 U	1.7	657 U	312 U	71.2	57.2 U	56.2 U	1.8
PCB-1254 (AROCHLOR 1254)	µg/kg	169	184	8.5	1050 J	1300 J	21.3	34.1 U	34.7 U	1.7	1190 J	758 J	44.4	134 J	155 J	14.5
PCB-1260 (AROCHLOR 1260)	µg/kg	33.3 U	32.5 U	2.4	600 U	799 U	28.4	34.1 U	34.7 U	1.7	657 U	312 U	71.2	57.2 U	56.2 U	1.8

Notes:
DF = Dilution Factor
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TABLE D-2
Field Duplicate Precision

Analyte	Units	SR-S63-0.0/2.0 10/11/2012	SR-S63-0.0/2.0R 10/11/2012	RPD	SR-S71-0.0/2.0 10/10/2012	SR-S71-0.0/2.0R 10/10/2012	RPD	SR-T02-C 10/25/2012	SR-T02-CR 10/25/2012	RPD	SR-T04-C 10/25/2012	SR-T04-CR 10/25/2012	RPD	SR-T09-C-0.0/1.0 10/22/2012	SR-T09-C-0.0/1.0R 10/22/2012	RPD
Polycyclic Aromatic Hydrocarbons	**DF:**	**1**	**1**		**1**	**20**										
1-METHYLNAPHTHALENE	µg/kg															
2-METHYLNAPHTHALENE	µg/kg															
ACENAPHTHENE	µg/kg	96.1 U	86.7 U	10.3	77.8 U UJ	4130 J	192.6									
ACENAPHTHYLENE	µg/kg	96.1 U	86.7 U	10.3	77.8 U	527 U	148.5									
ANTHRACENE	µg/kg	24.5 J J	52.8 J J	73.2	28.8 J J	7450 J	198.5									
BENZO(A)ANTHRACENE	µg/kg	96.1 U UJ	252 J	89.6	77.8 U UJ	2810 J	189.2									
BENZO(A)PYRENE	µg/kg	96.1 U UJ	318 J	107.2	77.8 U UJ	2160 J	186.1									
BENZO(B)FLUORANTHENE	µg/kg	76.3 J J	409 J	137.1	61.9 J J	1230 J	180.8									
BENZO(G,H,I)PERYLENE	µg/kg															
BENZO(K)FLUORANTHENE	µg/kg	96.1 U UJ	262 J	92.7	77.8 U UJ	1520 J	180.5									
BENZO_E_PYRENE	µg/kg															
CHRYSENE	µg/kg	80.5 J J	401 J	133.1	80.5 J J	2750 J	188.6									
DIBENZ(A,H)ANTHRACENE	µg/kg															
FLUORANTHENE	µg/kg	160 J J	881 J	138.5	148 J J	6350 J	190.9									
FLUORENE	µg/kg	96.1 U	86.7 U	10.3	77.8 U UJ	3530 J	191.4									
INDENO(1,2,3-C,D)PYRENE	µg/kg															
NAPHTHALENE	µg/kg	36.2 U	41.4 J	13.4	29.8 J J	1730 J	193.2									
PHENANTHRENE	µg/kg	97.9 J J	584 J	142.6	170 J	15200 J	195.6									
PYRENE	µg/kg	143 J J	696 J	131.8	161 J	8000 J	192.1									
TOTAL PAH	µg/kg															
TOTAL PAH-13	µg/kg	582.2 J	3897.2 J	148.0	680 J	56860 J	195.3									
Polychlorinated Biphenyls	**DF:**	**10**	**10**		**10**	**4**		**5**	**10**		**1**	**1**		**20**	**20**	
PCB, TOTAL	µg/kg	6310	6970	9.9	6360	4190	41.1	3140	3410	8.2	530	730	31.7	12600	12300	2.4
PCB-1242 (AROCHLOR 1242)	µg/kg	4530	4960	9.1	5490	3670	39.7	2690	2920	8.2	467	621	28.3	11300	11000	2.7
PCB-1248 (AROCHLOR 1248)	µg/kg	406 U	424 U	4.3	384 U	149 U	88.2	162 U	324 U	66.7	28.3 U	28.7 U	1.4	676 U	664 U	1.8
PCB-1254 (AROCHLOR 1254)	µg/kg	1790	2020	12.1	873 J J	515 J J	51.6	453 J	489 J	7.6	63.2 J J	109 J J	53.2	1230 J	1270 J	3.2
PCB-1260 (AROCHLOR 1260)	µg/kg	406 U	424 U	4.3	384 U	149 U	88.2	162 U	324 U	66.7	28.3 U	28.7 U	1.4	676 U	664 U	1.8

Notes:
DF = Dilution Factor
RPD = Relative Percent Difference
µg/kg = microgram per kilogram
J = The associated value is an estimated quantity.
U= Not detected above the method detection limit (MDL)
UJ= Not detected above the MDL and quality control measurements indicated a possible low bias.
Shaded values indicate exceedance of precision criteria.

TABLE D-2
Field Duplicate Precision

Analyte	Units	SR-T15-5-2.0/3.0 10/9/2012	SR-T15-5-2.0/3.0R 10/9/2012	RPD	SR-T21-C-0.0/1.0 10/5/2012	SR-T21-C-0.0/1.0R 10/5/2012	RPD
Polycyclic Aromatic Hydrocarbons	**DF:**						
1-METHYLNAPHTHALENE	µg/kg						
2-METHYLNAPHTHALENE	µg/kg						
ACENAPHTHENE	µg/kg						
ACENAPHTHYLENE	µg/kg						
ANTHRACENE	µg/kg						
BENZO(A)ANTHRACENE	µg/kg						
BENZO(A)PYRENE	µg/kg						
BENZO(B)FLUORANTHENE	µg/kg						
BENZO(G,H,I)PERYLENE	µg/kg						
BENZO(K)FLUORANTHENE	µg/kg						
BENZO_E_PYRENE	µg/kg						
CHRYSENE	µg/kg						
DIBENZ(A,H)ANTHRACENE	µg/kg						
FLUORANTHENE	µg/kg						
FLUORENE	µg/kg						
INDENO(1,2,3-C,D)PYRENE	µg/kg						
NAPHTHALENE	µg/kg						
PHENANTHRENE	µg/kg						
PYRENE	µg/kg						
TOTAL PAH	µg/kg						
TOTAL PAH-13	µg/kg						
Polychlorinated Biphenyls	**DF:**	**2**	**2**		**30**	**20**	
PCB, TOTAL	µg/kg	909	1090	18.1	14300	9800	37.3
PCB-1242 (AROCHLOR 1242)	µg/kg	470	626	28.5	11700	7860	39.3
PCB-1248 (AROCHLOR 1248)	µg/kg	71 U	71.6 U	0.8	1020 U	677 U	40.4
PCB-1254 (AROCHLOR 1254)	µg/kg	439	460	4.7	2660 J	1940 J	31.3
PCB-1260 (AROCHLOR 1260)	µg/kg	71 U	71.6 U	0.8	1020 U	677 U	40.4

Notes:
DF = Dilution Factor
RPD = Relative Percent Difference
µg/kg = microgram per kilogram
J = The associated value is an estimated quantity.
U= Not detected above the method detection limit (MDL)
UJ= Not detected above the MDL and quality control measurements indicated a possible low bias.
Shaded values indicate exceedance of precision criteria.

TABLE D-3
Analytical Results - PCBs

Sample ID	Sample Date	SDG	PCB-1242 (µg/kg)	PCB-1248 (µg/kg)	PCB-1254 (µg/kg)	PCB-1260 (µg/kg)	PCB, TOTAL (µg/kg)
SR-CS001-0.0/0.5	12/19/2012	4072175	27.6 J	27.3 U	27.3 U	27.3 U	27.6 J
SR-CS001-0.5/1.0	12/19/2012	4072175	27.9 U	27.9 U	27.9 U	27.9 U	27.9 U
SR-CS002-0.0/0.5	12/19/2012	4072129	815	27.9 U	72.6 J	27.9 U	887
SR-CS002-0.5/1.0	12/19/2012	4072129	25.1 U	25.1 U	25.1 U	25.1 U	25.1 U
SR-CS003-0.0/0.6	12/12/2012	4071811	1380	59.7 U	146 J	59.7 U	1520
SR-CS004-0.0/0.5	12/19/2012	4072175	2270	120 U	316 J	120 U	2580
SR-CS004-0.5/1.0	12/19/2012	4072175	516	27.6 U	90.5 J	27.6 U	606
SR-CS005-0.0/0.5	12/12/2012	4071817	290	29.1 U	55 J	29.1 U	345
SR-CS005-0.5/1.0	12/12/2012	4071817	29.2 U	29.2 U	29.2 U	29.2 U	29.2 U
SR-CS006-0.0/0.8	12/19/2012	4072175	762	60.5 U	171 J	60.5 U	932
SR-CS007-0.0/0.5	12/10/2012	4071701	50 J	30.5 U	30.5 U	30.5 U	50 J
SR-CS007-0.5/1.0	12/10/2012	4071701	26.5 U	26.5 U	26.5 U	26.5 U	26.5 U
SR-CS008B-0.0/0.5	12/11/2012	4071756	303	28.8 U	144	28.8 U	446
SR-CS008B-0.0/0.5R	12/11/2012	4071756	210	28.1 U	107 J	28.1 U	317
SR-CS008B-0.5/1.0	12/11/2012	4071756	31.7 J	26.6 U	26.6 U	26.6 U	31.7 J
SR-CS008B-0.5/1.0R	12/11/2012	4071756	26.8 U	26.8 U	26.8 U	26.8 U	26.8 U
SR-CS009-0.0/0.5	12/10/2012	4071701	52.2 J	28 U	28 U	28 U	52.2 J
SR-CS009-0.5/1.0	12/10/2012	4071701	27 U	27 U	27 U	27 U	27 U
SR-CS010-0.0/0.5	12/10/2012	4071756	524	27.5 U	69.6 J	27.5 U	594
SR-CS010-0.5/1.0	12/10/2012	4071756	40.8 J	27.2 U	27.2 U	27.2 U	40.8 J
SR-CS011-0.0/0.5	12/10/2012	4071756	322	26.6 U	85.3 J	26.6 U	407
SR-CS011-0.5/1.0	12/10/2012	4071756	26.8 U	26.8 U	26.8 U	26.8 U	26.8 U
SR-CS012-0.0/0.8	12/10/2012	4071756	444	27.8 U	80.8 J	27.8 U	524
SR-CS013-0.0/0.7	12/10/2012	4071756	2270	293 U	584 J	293 U	2860
SR-CS014-0.0/0.5	11/29/2012	4071269	100 J	28.5 U	82.2 J	28.5 U	182
SR-CS014-0.5/1.0	11/29/2012	4071269	252	28.7 U	143	28.7 U	395
SR-CS015-0.0/0.5	11/27/2012	4071072	133	26.8 U	53.5 J	26.8 U	186
SR-CS015-0.5/1.1	11/27/2012	4071072	28 U	28 U	28 U	28 U	28 U
SR-CS016-0.0/0.5	11/27/2012	4071072	109 J	28.4 U	42.3 J	28.4 U	152
SR-CS016-0.5/1.0	11/27/2012	4071072	84.7 J	27.9 U	39.7 J	27.9 U	124
SR-CS017-0.0/0.5	11/27/2012	4071133	475	36.3 U	71.2 J	36.3 U	546
SR-CS017-0.5/1.0	11/27/2012	4071133	36.2 U	36.2 U	36.2 U	36.2 U	36.2 U
SR-CS018-0.0/0.5	11/27/2012	4071133	30.3 J	28.7 U	28.7 U	28.7 U	30.3 J
SR-CS018-0.5/1.0	11/27/2012	4071133	28.9 U	28.9 U	28.9 U	28.9 U	28.9 U
SR-CS019-0.0/0.5	11/19/2012	4070900	449	28.7 U	144	28.7 U	594
SR-CS019-0.5/1.0	11/19/2012	4070900	30.1 U	30.1 U	30.1 U	30.1 U	30.1 U
SR-CS019-1.0/2.0	11/19/2012	4070902	30.4 U	30.4 U	30.4 U	30.4 U	30.4 U
SR-CS020-0.0/0.5	11/19/2012	4070900	303	39.8 U	141 J	39.8 U	444
SR-CS020-0.0/0.5R	11/19/2012	4070900	199	39 U	126 J	39 U	326
SR-CS020-0.5/1.0	11/19/2012	4070900	29.2 U	29.2 U	29.2 U	29.2 U	29.2 U
SR-CS020-0.5/1.0R	11/19/2012	4070900	26.9 U	26.9 U	26.9 U	26.9 U	26.9 U
SR-CS021-0.0/0.5	11/20/2012	4070900	290	29.6 U	45.3 J	29.6 U	335
SR-CS021-0.5/1.0	11/20/2012	4070900	158	27.4 U	27.4 U	27.4 U	158
SR-CS022-0.0/0.5	11/20/2012	4070992	428	36.7 U	135 J	36.7 U	563
SR-CS022-0.5/1.0	11/20/2012	4070992	248	35.5 U	78.4 J	35.5 U	326
SR-CS023-0.0/0.5	11/20/2012	4070992	1160	62.4 U	557	69 J	1790
SR-CS023-0.5/1.0	11/20/2012	4070992	294	30.7 U	71.6 J	30.7 U	366
SR-CS024-0.0/0.5	11/20/2012	4070900	84.5 J	30.2 U	30.2 U	30.2 U	84.5 J
SR-CS024-0.5/1.0	11/20/2012	4070900	29.2 U	29.2 U	29.2 U	29.2 U	29.2 U
SR-CS025-0.0/0.5	11/20/2012	4070992	50.3 J	30.5 U	30.5 U	30.5 U	50.3 J
SR-CS025-0.5/1.0	11/20/2012	4070992	32.5 U	32.5 U	32.5 U	32.5 U	32.5 U
SR-CS026-0.0/0.5	11/20/2012	4070992	571	31.3 U	99.5 J	31.3 U	670
SR-CS026-0.5/1.0	11/20/2012	4070992	29.8 U	29.8 U	29.8 U	29.8 U	29.8 U
SR-CS027-0.0/0.5	11/20/2012	4070992	1210	42.2 U	257	48.6 J	1510
SR-CS027-0.5/1.0	11/20/2012	4070992	259	28.3 U	30.4 J	28.3 U	290
SR-CS028-1-0.0/0.5	12/12/2012	4071812	67 J	29.9 U	29.9 U	29.9 U	67 J
SR-CS028-1-0.0/0.5R	12/12/2012	4071812	29.6 UJ	29.6 U	29.6 U	29.6 U	29.6 UJ
SR-CS028A-0.0/0.5	11/20/2012	4070992	3890	183 U	419 J	183 U	4310
SR-CS028A-0.5/1.0	11/20/2012	4070992	254	40.9 U	40.9 U	40.9 U	254
SR-CS028B-0.0/0.5	11/20/2012	4070992	106 J	30.8 U	30.8 U	30.8 U	106 J

TABLE D-3
Analytical Results - PCBs

Sample ID	Sample Date	SDG	PCB-1242 (µg/kg)	PCB-1248 (µg/kg)	PCB-1254 (µg/kg)	PCB-1260 (µg/kg)	PCB, TOTAL (µg/kg)
SR-CS028B-0.5/1.0	11/20/2012	4070992	29.1 U	29.1 U	29.1 U	29.1 U	29.1 U
SR-CS029-0.0/0.5	11/20/2012	4070992	10400	840 U	1080 J	840 U	11400
SR-CS029-0.5/1.0	11/20/2012	4070992	3530	168 U	337 J	168 U	3870
SR-CS030-0.0/0.5	10/24/2012	4069581	43 J	28.8 U	28.8 U	28.8 U	43 J
SR-CS030-0.5/0.8	10/24/2012	4069581	28.6 U	28.6 U	28.6 U	28.6 U	28.6 U
SR-CS030-1-0.0/0.5	12/12/2012	4071812	29.3 U	29.3 U	29.3 U	29.3 U	29.3 U
SR-CS031-0.0/0.5	11/20/2012	4070992	33.4 U	33.4 U	33.4 U	33.4 U	33.4 U
SR-CS031-0.5/1.0	11/20/2012	4070992	33 U	33 U	33 U	33 U	33 U
SR-CS032-0.0/0.5	10/24/2012	4069581	405	35.1 U	79 J	35.1 U	484
SR-CS032-0.5/1.1	10/24/2012	4069581	29.2 U	29.2 U	29.2 U	29.2 U	29.2 U
SR-CS032-1-0.0/0.5	12/12/2012	4071871	52.1 J	29.4 U	29.4 U	29.4 U	52.1 J
SR-CS032-1-0.0/0.5R	12/12/2012	4071871	113 J	30 U	30 U	30 U	113 J
SR-CS033-0.0/0.5	11/20/2012	4070992	301	33.9 U	72.9 J	33.9 U	373
SR-CS033-0.5/1.0	11/20/2012	4070992	33.4 U	33.4 U	33.4 U	33.4 U	33.4 U
SR-CS034-0.0/0.5	10/24/2012	4069581	1500	106 U	406 J	106 U	1900
SR-CS034-0.5/1.0	10/24/2012	4069581	77.7 J	32.1 U	33.8 J	32.1 U	112 J
SR-CS034-1-0.0/0.5	12/12/2012	4071812	272	31.5 U	67 J	31.5 U	339
SR-CS035-0.0/0.5	11/20/2012	4070992	765	32.4 U	110 J	32.4 U	876
SR-CS035-0.5/1.0	11/20/2012	4070992	123 J	38.2 U	38.2 U	38.2 U	123 J
SR-CS036-0.0/0.5	10/25/2012	4069581	173	31.4 U	47.9 J	31.4 U	221
SR-CS036-0.5/1.4	10/25/2012	4069581	31.8 U	31.8 U	31.8 U	31.8 U	31.8 U
SR-CS036-0.5/1.4R	10/25/2012	4069581	32.1 U	32.1 U	32.1 U	32.1 U	32.1 U
SR-CS036-1-0.0/0.5	12/12/2012	4071812	1210 J	117 U	300 J	117 U	1510 J
SR-CS036-1-0.0/0.5R	12/12/2012	4071812	4710 J	996 U	1050 J	996 U	5760 J
SR-CS037-0.0/0.5	11/20/2012	4070992	899	38 U	158 J	38 U	1060
SR-CS037-0.5/1.0	11/20/2012	4070992	38.9 J	33.5 U	33.5 U	33.5 U	38.9 J
SR-CS038-0.0/0.5	10/25/2012	4069581	565	66.5 U	127 J	66.5 U	692
SR-CS038-0.5/1.0	10/25/2012	4069581	719	68.5 U	145 J	68.5 U	864
SR-CS038-1-0.0/0.5	12/12/2012	4071871	227	30.9 U	58.8 J	30.9 U	286
SR-CS039-0.0/0.5	11/20/2012	4070900	690	30.2 U	184	30.2 U	874
SR-CS039-0.0/0.5R	11/20/2012	4070900	636	37.3 U	140 J	37.3 U	776
SR-CS039-0.5/1.0	11/20/2012	4070900	485 J	31.8 U	109 J	31.8 U	594 J
SR-CS039-0.5/1.0R	11/20/2012	4070900	39.3 UJ	39.3 U	39.3 UJ	39.3 U	39.3 UJ
SR-CS040-0.0/0.5	10/25/2012	4069633	1860	98.1 U	236 J	98.1 U	2090
SR-CS040-0.5/1.0	10/25/2012	4069633	162	32.1 U	32.1 U	32.1 U	162
SR-CS040-1-0.0/0.5	12/12/2012	4071818	396 J	32.9 U	115 J	32.9 U	512 J
SR-CS040-1-0.0/0.5R	12/13/2012	4071871	1160 J	89.5 U	270 J	89.5 U	1430 J
SR-CS041-0.0/0.5	11/6/2012	4070106	4230	359 U	1080 J	359 U	5300
SR-CS041-0.5/1.0	11/6/2012	4070106	545	62.6 U	149 J	62.6 U	694
SR-CS042-0.0/0.5	11/28/2012	4071133	1460	85.1 U	477	85.1 U	1940
SR-CS042-0.5/1.0	11/28/2012	4071133	2290	91.8 U	380 J	91.8 U	2670
SR-CS042A-0.0/0.5	11/28/2012	4071133	336	28.7 U	157	28.7 U	493
SR-CS042A-0.5/1.0	11/28/2012	4071133	122	28.2 U	84.2 J	28.2 U	206
SR-CS042B-0.0/0.5	11/28/2012	4071133	3250	355 U	939 J	355 U	4190
SR-CS042B-0.5/1.0	11/28/2012	4071133	141 J	38.5 U	51.5 J	38.5 U	192
SR-CS043-0.0/0.5	11/6/2012	4070106	476	40.6 U	192	180	848
SR-CS043-0.5/1.0	11/6/2012	4070106	41.2 U	41.2 U	57.8 J	41.2 U	57.8 J
SR-CS044-0.0/0.5	11/8/2012	4070371	4130	303 U	508 J	303 U	4640
SR-CS044-0.5/1.0	11/8/2012	4070371	56.2 J	30.6 U	30.6 U	30.6 U	56.2 J
SR-CS045-0.0/0.5	11/6/2012	4070106	266	31.3 U	47.7 J	31.3 U	314
SR-CS045-0.5/1.0	11/6/2012	4070106	32.8 U	32.8 U	32.8 U	32.8 U	32.8 U
SR-CS046-0.0/0.5	11/8/2012	4070278	37.8 U	37.8 U	37.8 U	37.8 U	37.8 U
SR-CS046-0.5/1.0	11/8/2012	4070278	37.5 U	37.5 U	37.5 U	37.5 U	37.5 U
SR-CS047-0.0/0.5	11/6/2012	4070106	934	103 U	291 J	103 U	1230
SR-CS047-0.5/1.0	11/6/2012	4070106	97.8 J	31.2 U	31.2 U	31.2 U	97.8 J
SR-CS048-0.0/0.5	11/8/2012	4070278	245	33.3 U	43.4 J	33.3 U	289
SR-CS048-0.0/0.5R	11/8/2012	4070278	257	32.9 U	33.8 J	32.9 U	291
SR-CS048-0.5/1.0	11/8/2012	4070278	28.4 U	28.4 U	28.4 U	28.4 U	28.4 U
SR-CS048-0.5/1.0R	11/8/2012	4070278	31.1 U	31.1 U	31.1 U	31.1 U	31.1 U
SR-CS049-0.0/0.5	11/6/2012	4070106	1430	120 U	165 J	120 U	1590

TABLE D-3
Analytical Results - PCBs

Sample ID	Sample Date	SDG	PCB-1242 (µg/kg)	PCB-1248 (µg/kg)	PCB-1254 (µg/kg)	PCB-1260 (µg/kg)	PCB, TOTAL (µg/kg)
SR-CS049-0.5/1.0	11/6/2012	4070106	70 J	28.1 U	28.1 U	28.1 U	70 J
SR-CS050-0.0/0.5	11/8/2012	4070371	1050	149 U	177 J	149 U	1230
SR-CS050-0.5/1.0	11/8/2012	4070371	131 J	32 U	36.9 J	32 U	168
SR-CS051-0.0/0.5	11/9/2012	4070371	496	63.4 U	63.4 U	63.4 U	496
SR-CS051-0.5/1.0	11/9/2012	4070371	34.2 U	34.2 U	34.2 U	34.2 U	34.2 U
SR-CS052-0.0/0.5	11/7/2012	4070187	17200	962 U	1620 J	962 U	18800
SR-CS052-0.5/1.0	11/7/2012	4070187	693	108 U	111 J	108 U	804
SR-CS053-0.0/0.5	11/8/2012	4070371	1570	285 U	285 U	285 U	1570
SR-CS053-0.5/1.4	11/8/2012	4070371	29 U	29 U	29 U	29 U	29 U
SR-CS054-0.0/0.5	11/8/2012	4070278	4520	559 U	829 J	559 U	5350
SR-CS054-0.5/1.0	11/8/2012	4070278	188	29.6 U	50.1 J	29.6 U	238
SR-CS055-0.0/0.5	11/8/2012	4070278	28500	2040 U	8220 J	2040 U	36800
SR-CS055-0.5/1.0	11/8/2012	4070278	1190	150 U	502 J	150 U	1690
SR-CS056-0.0/0.7	11/9/2012	4070371	1690	163 U	315 J	163 U	2000
SR-CS057-0.0/0.5	11/8/2012	4070371	1100	89.3 U	204 J	89.3 U	1300
SR-CS057-0.5/1.0	11/8/2012	4070371	116 J	28.6 U	39.1 J	28.6 U	155
SR-CS058-0.0/0.5	10/24/2012	4069484	29.4 U	29.4 U	29.4 U	29.4 U	29.4 U
SR-CS058-0.5/1.0	10/24/2012	4069484	28.9 U	28.9 U	28.9 U	28.9 U	28.9 U
SR-CS059-0.0/0.5	10/24/2012	4069579	291	28.1 U	81.7 J	28.1 U	372
SR-CS059-0.5/1.0	10/24/2012	4069579	28.1 U	28.1 U	28.1 U	28.1 U	28.1 U
SR-CS060-0.0/0.5	10/24/2012	4069579	711	62.2 U	181 J	62.2 U	892
SR-CS060-0.5/1.0	10/24/2012	4069579	84.7 J	29.8 U	35.3 J	29.8 U	120 J
SR-CS061-0.0/0.5	11/9/2012	4070408	33300	2420 U	9920 J	2420 U	43200
SR-CS061-0.5/1.0	11/9/2012	4070408	5800	649 U	2840	649 U	8640
SR-CS062-0.0/0.5	10/24/2012	4069579	206	27.7 U	70.6 J	27.7 U	276
SR-CS062-0.5/1.0	10/24/2012	4069579	28.8 U	28.8 U	28.8 U	28.8 U	28.8 U
SR-CS063-0.0/0.5	10/24/2012	4069579	1740	143 U	442 J	143 U	2180
SR-CS063-0.5/1.0	10/24/2012	4069579	20500	1650 U	4710 J	1650 U	25200
SR-CS063-1.0/2.0	10/24/2012	4069584	25300	2220 U	8070 J	2220 U	33400
SR-CS063-2.0/3.0	10/24/2012	4069584	288	36.5 U	172	73.6 J	534
SR-CS063-3.0/4.0	10/24/2012	4069584	37.3 U	37.3 U	38.1 J	37.3 U	38.1 J
SR-CS063B-0.0/0.5	11/5/2012	4070106	17100	759 U	2850 J	759 U	20000
SR-CS063B-0.5/1.0	11/5/2012	4070106	29900	1380 U	8790	2280 J	41000
SR-CS063B-1.0/2.0	11/5/2012	4070106	12500	1120 U	2860 J	1120 U	15400
SR-CS063B-1.0/2.0R	11/5/2012	4070106	12000	757 U	3570	881 J	16500
SR-CS063B-2.0/3.4	11/5/2012	4070106	139	32.1 U	54.7 J	32.1 U	193
SR-CS063C-0.0/0.5	11/5/2012	4070106	31100	1960 U	7440 J	1960 U	38500
SR-CS063C-0.5/1.0	11/5/2012	4070106	22800	1280 U	8170	1440 J	32400
SR-CS063C-1.0/2.0	11/5/2012	4070106	3940	435 U	1160 J	435 U	5110
SR-CS063C-2.0/3.0	11/5/2012	4070106	85.2 J	32.5 U	39.2 J	32.5 U	124 J
SR-CS063C-3.0/3.7	11/5/2012	4070106	141	30.8 U	33.3 J	30.8 U	174
SR-CS064-0.0/0.5	10/24/2012	4069579	94 J	29.3 U	29.3 U	29.3 U	94 J
SR-CS064-0.5/1.0	10/24/2012	4069579	28.7 U	28.7 U	28.7 U	28.7 U	28.7 U
SR-CS065-0.0/0.5	10/10/2012	4068653	79900	9660 U	9660 U	9660 U	79900
SR-CS065-0.5/1.0	10/10/2012	4068653	80000	4810 U	7110 J	4810 U	87100
SR-CS065-1.0/2.0	10/10/2012	4068659	36100	4400 U	8760 J	4400 U	44800
SR-CS065-2.0/3.0	10/10/2012	4068659	29 U	29 U	29 U	29 U	29 U
SR-CS065-3.0/4.0	10/10/2012	4068659	348	34.6 U	170	44.4 J	562
SR-CS065A-0.0/0.5	10/23/2012	4069484	48300	2920 U	6960 J	2920 U	55300
SR-CS065A-0.0/0.5-RE1	10/23/2012	4070509	53000	2920 U	7480 J	2920 U	60500
SR-CS065A-0.0/0.5-RE2	10/23/2012	4070509	59300	2920 U	8610 J	2920 U	67900
SR-CS065A-0.5/1.0	10/23/2012	4069484	3300	433 U	1570 J	433 U	4870
SR-CS065A-1.0/2.0	10/23/2012	4069484	195	41.1 U	146 J	80.4 J	421
SR-CS065A-2.0/3.0	10/23/2012	4069484	78.2 J	35.9 U	50.6 J	35.9 U	129 J
SR-CS065A-3.0/3.8	10/23/2012	4069484	77.5 J	30.8 U	40.9 J	30.8 U	118 J
SR-CS065B-0.0/0.5	10/24/2012	4069484	64700	4860 U	8250 J	4860 U	73000
SR-CS065B-0.5/1.0	10/24/2012	4069484	85800	5070 U	13300 J	5070 U	99100
SR-CS065B-1.0/2.0	10/24/2012	4069484	42600	4560 U	11000 J	4560 U	53600
SR-CS065B-1-0.0/0.5	11/19/2012	4070844	17300	1210 U	4410 J	1210 U	21700
SR-CS065B-1-0.5/1.0	11/19/2012	4070844	4890	283 U	877 J	283 U	5770

TABLE D-3
Analytical Results - PCBs

Sample ID	Sample Date	SDG	PCB-1242 (µg/kg)	PCB-1248 (µg/kg)	PCB-1254 (µg/kg)	PCB-1260 (µg/kg)	PCB, TOTAL (µg/kg)
SR-CS065B-1-1.0/2.0	11/19/2012	4070844	333	42 U	299	119 J	751
SR-CS065B-1-2.0/3.0	11/19/2012	4070844	52.2 J	34.9 U	68.3 J	38.7 J	159
SR-CS065B-1-3.0/4.0	11/19/2012	4070844	30.2 U	30.2 U	30.2 U	30.2 U	30.2 U
SR-CS065B-2.0/2.8	10/24/2012	4069484	969	87.9 U	426	145 J	1540
SR-CS065C-0.0/0.5	10/24/2012	4069484	18600	1350 U	4640 J	1350 U	23200
SR-CS065C-0.5/1.0	10/24/2012	4069484	72100	4700 U	8200 J	4700 U	80300
SR-CS065C-1.0/2.0	10/24/2012	4069484	101000	4560 U	12600 J	4560 U	114000
SR-CS065C-1-0.0/0.5	11/19/2012	4070844	9300	758 U	2300 J	758 U	11600
SR-CS065C-1-0.5/1.0	11/19/2012	4070844	8400	728 U	2720 J	728 U	11100
SR-CS065C-1-1.0/2.0	11/19/2012	4070844	103000	8610 U	28900 J	8610 U	132000
SR-CS065C-1-2.0/3.0	11/19/2012	4070844	119000	9270 U	14700 J	9270 U	134000
SR-CS065C-1-3.0/4.0	11/19/2012	4070844	2100	203 U	446 J	203 U	2540
SR-CS065C-2.0/3.0	10/24/2012	4069484	605	118 U	608 J	139 J	1350
SR-CS065C-2.0/3.0R	10/24/2012	4069484	850	192 U	1110 J	192 U	1960
SR-CS065C-3.0/3.9	10/24/2012	4069484	100 J	41.4 U	131 J	58.9 J	290
SR-CS065D-0.0/0.5	10/24/2012	4069484	14700	1350 U	3070 J	1350 U	17800
SR-CS065D-0.5/1.0	10/24/2012	4069484	29800	2110 U	6130 J	2110 U	35900
SR-CS065D-1.0/2.0	10/24/2012	4069484	61.1 J	45.3 U	76.9 J	45.3 U	138 J
SR-CS065D-2.0/3.0	10/24/2012	4069486	36.6 U	36.6 U	36.6 U	36.6 U	36.6 U
SR-CS065D-3.0/4.0	10/24/2012	4069486	1680	132 U	320 J	132 U	2000
SR-CS066-0.0/0.5	10/24/2012	4069579	94.1 J	34.3 U	38.1 J	34.3 U	132 J
SR-CS066-0.5/1.0	10/24/2012	4069579	34.6 U	34.6 U	34.6 U	34.6 U	34.6 U
SR-CS067-0.0/0.5	10/24/2012	4069579	5420	587 U	2860	587 U	8280
SR-CS067-0.5/1.0	10/24/2012	4069579	17600	1170 U	5400	1170 U	23000
SR-CS067-1.0/2.0	10/24/2012	4069584	1300	137 U	206 J	137 U	1510
SR-CS067-2.0/3.0	10/24/2012	4069584	93300	4530 U	16000 J	4530 U	109000
SR-CS067-3.0/4.0	10/24/2012	4069584	25700	1630 U	5750 J	1630 U	31500
SR-CS067A-0.0/0.5	11/5/2012	4070106	583	76.3 U	372	76.3 U	955
SR-CS067A-0.5/1.0	11/5/2012	4070106	2250 J	480 U	1430 J	480 U	3680 J
SR-CS067A-0.5/1.0R	11/5/2012	4070106	1190 J	142 U	706 J	142 U	1900 J
SR-CS067A-1.0/2.0	11/5/2012	4070106	25500	1190 U	2770 J	1190 U	28300
SR-CS067A-2.0/3.0	11/5/2012	4070106	4110	404 U	1220 J	404 U	5320
SR-CS067A-3.0/4.0	11/5/2012	4070106	40.8 U	40.8 U	103 J	40.8 U	103 J
SR-CS068-0.0/0.5	10/4/2012	4068266	582	33.2 U	131 J	33.2 U	713
SR-CS068-0.5/1.0	10/4/2012	4068266	34.6 U	34.6 U	34.6 U	34.6 U	34.6 U
SR-CS068-0.5/1.0R	10/4/2012	4068266	36.7 U	36.7 U	36.7 U	36.7 U	36.7 U
SR-CS069-0.0/0.5	10/3/2012	4068267	12000	664 U	2060 J	664 U	14100
SR-CS069-0.5/1.0	10/3/2012	4068267	6900	596 U	1440 J	596 U	8350
SR-CS070-0.0/0.5	10/4/2012	4068266	1390	104 U	202 J	104 U	1590
SR-CS070-0.5/1.0	10/4/2012	4068266	48.1 J	31.1 U	31.1 U	31.1 U	48.1 J
SR-CS071-0.0/0.5	10/4/2012	4068268	43400	2520 U	8480 J	2520 U	51900
SR-CS071-0.0/0.5-RE1	10/4/2012	4069041	69600	2520 U	11900	2520 U	81500
SR-CS071-0.0/0.5-RE2	10/4/2012	4069041	49800	2530 U	9060 J	2530 U	58900
SR-CS071-0.5/1.0	10/4/2012	4068268	37000	2340 U	2340 U	2340 U	37000
SR-CS071-1.0/2.0	10/4/2012	4068268	41200	4560 U	4560 U	4560 U	41200
SR-CS071-2.0/3.0	10/4/2012	4068268	173	38.3 U	181	38.3 U	353
SR-CS071-3.0/4.0	10/4/2012	4068268	33.3 U	33.3 U	33.3 U	33.3 U	33.3 U
SR-CS071A-0.0/0.5	10/9/2012	4068653	1430	115 U	367 J	115 U	1800
SR-CS071A-0.5/1.0	10/9/2012	4068653	3650	305 U	1210 J	305 U	4860
SR-CS071A-1.0/2.0	10/9/2012	4068653	6410	659 U	1690 J	659 U	8100
SR-CS071A-1.0/2.0R	10/9/2012	4068653	10100	668 U	2200 J	668 U	12300
SR-CS071A-2.0/3.0	10/9/2012	4068653	20200	1860 U	4910 J	1860 U	25100
SR-CS071A-3.0/4.0	10/9/2012	4068653	21500	1790 U	4860 J	1790 U	26400
SR-CS071B-0.0/0.5	10/9/2012	4068653	15600	1330 U	5280 J	1330 U	20800
SR-CS071B-0.5/1.0	10/9/2012	4068653	4250	320 U	1040 J	320 U	5290
SR-CS071B-1.0/2.0	10/9/2012	4068653	1400	120 U	414 J	120 U	1810
SR-CS071B-2.0/3.0	10/9/2012	4068653	24100	4070 U	5490 J	4070 U	29600
SR-CS071B-2.0/3.0R	10/9/2012	4068653	15800	1940 U	3450 J	1940 U	19200
SR-CS071B-3.0/4.0	10/9/2012	4068653	14800	1330 U	2800 J	1330 U	17600
SR-CS071C-0.0/0.5	10/9/2012	4068653	27200	3700 U	4920 J	3700 U	32100

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Analytical Results - PCBs

Sample ID	Sample Date	SDG	PCB-1242 (µg/kg)	PCB-1248 (µg/kg)	PCB-1254 (µg/kg)	PCB-1260 (µg/kg)	PCB, TOTAL (µg/kg)
SR-CS071C-0.5/1.0	10/9/2012	4068653	5730	611 U	1160 J	611 U	6890
SR-CS071C-1.0/2.0	10/9/2012	4068653	23600	4070 U	4670 J	4070 U	28300
SR-CS071C-2.0/3.0	10/9/2012	4068653	26800	4410 U	4860 J	4410 U	31700
SR-CS071C-3.0/4.0	10/9/2012	4068653	2730	635 U	1880 J	635 U	4610
SR-CS071C-3.0/4.0R	10/9/2012	4068653	3370	440 U	2420	440 U	5790
SR-CS071D-0.0/0.5	10/9/2012	4068654	10600	758 U	2160 J	758 U	12800
SR-CS071D-0.5/1.0	10/9/2012	4068654	2310	166 U	636 J	166 U	2950
SR-CS071D-1.0/2.0	10/9/2012	4068654	6130	673 U	1570 J	673 U	7710
SR-CS071D-2.0/3.0	10/9/2012	4068654	3880	310 U	817 J	310 U	4700
SR-CS071D-3.0/4.0	10/9/2012	4068654	6740	718 U	1500 J	718 U	8240
SR-CS072-0.0/0.5	10/3/2012	4068267	93.7 J	33.4 U	33.4 U	33.4 U	93.7 J
SR-CS072-0.5/1.0	10/3/2012	4068267	65.9 J	28.6 U	28.6 U	28.6 U	65.9 J
SR-CS073-0.0/0.5	10/3/2012	4068205	3510	294 U	505 J	294 U	4010
SR-CS073-0.5/1.0	10/3/2012	4068205	1480	118 U	417 J	118 U	1900
SR-CS074-0.0/0.5	10/25/2012	4069579	36.9 U	36.9 U	36.9 U	36.9 U	36.9 U
SR-CS074-0.5/1.0	10/25/2012	4069579	38.5 U	38.5 U	38.5 U	38.5 U	38.5 U
SR-CS075-0.0/0.5	10/3/2012	4068205	4410	290 U	576 J	290 U	4980
SR-CS075-0.5/1.0	10/3/2012	4068205	8800	524 U	1700 J	524 U	10500
SR-CS076-0.0/0.5	10/24/2012	4069579	40.1 U	40.1 U	40.1 U	40.1 U	40.1 U
SR-CS076-0.5/1.0	10/24/2012	4069579	37 U	37 U	37 U	37 U	37 U
SR-CS077-0.0/0.5	10/3/2012	4068164	925	89 U	520	89 U	1450
SR-CS077-0.5/1.0	10/3/2012	4068164	507	45.5 U	369	45.5 U	876
SR-CS078-0.0/0.5	10/10/2012	4068654	2240	161 U	894	161 U	3130
SR-CS078-0.5/1.0	10/10/2012	4068654	3310	433 U	1290 J	433 U	4600
SR-CS078-0.5/1.0R	10/10/2012	4068654	3060	211 U	986	211 U	4040
SR-CS079-0.0/0.5	10/3/2012	4068164	262	42.1 U	229	42.1 U	491
SR-CS079-0.5/1.0	10/3/2012	4068164	178 J	42.2 U	172 J	42.2 U	349
SR-CS080-0.0/0.5	10/10/2012	4068654	1520	103 U	888	103 U	2410
SR-CS080-0.5/1.0	10/10/2012	4068654	1810	103 U	830	103 U	2640
SR-CS081-0.0/0.5	10/3/2012	4068269	1250	139 U	440 J	139 U	1690
SR-CS081-0.5/1.0	10/3/2012	4068269	574	59.9 U	238 J	59.9 U	812
SR-S12-0.0/2.0	12/12/2012	4071812	615	63 U	127 J	63 U	741
SR-S12-2.0/3.6	12/12/2012	4071812	29.6 U	29.6 U	29.6 U	29.6 U	29.6 U
SR-S14-0.0/0.9	11/29/2012	4071220	1140	56.7 U	258	56.7 U	1400
SR-S15-0.0/2.0	11/28/2012	4071220	807	38.3 U	318	43 J	1170
SR-S15-0.0/2.0R	11/28/2012	4071220	750	36.2 U	232	36.2 U	982
SR-S15-2.0/2.9	11/28/2012	4071220	43.7 J	30.2 U	30.2 U	30.2 U	43.7 J
SR-S16-0.0/2.0	11/29/2012	4071220	328	35.3 U	198	35.3 U	525
SR-S16-2.0/3.4	11/29/2012	4071220	29.8 U	29.8 U	29.8 U	29.8 U	29.8 U
SR-S16-2.0/3.4R	11/29/2012	4071220	30.8 U	30.8 U	30.8 U	30.8 U	30.8 U
SR-S19A-0.0/2.0	11/28/2012	4071220	75 J	31.9 U	31.9 U	31.9 U	75 J
SR-S19A-0.0/2.0R	11/28/2012	4071220	56.2 J	32.5 U	32.5 U	32.5 U	56.2 J
SR-S19A-2.0/4.6	11/28/2012	4071220	31.4 U	31.4 U	31.4 U	31.4 U	31.4 U
SR-S19B-0.0/2.0	11/28/2012	4071220	1980	114 U	205 J	114 U	2190
SR-S19B-2.0/4.7	11/28/2012	4071220	31 U	31 U	31 U	31 U	31 U
SR-S19B-2.0/4.7R	11/28/2012	4071220	29.1 U	29.1 U	29.1 U	29.1 U	29.1 U
SR-S22-0.0/2.0	11/7/2012	4070195	50.5 J	36.8 U	36.8 U	36.8 U	50.5 J
SR-S22-0.0/2.0R	11/7/2012	4070195	40.2 J	36.6 U	36.6 U	36.6 U	40.2 J
SR-S22-2.0/3.6	11/7/2012	4070195	39.5 U	39.5 U	39.5 U	39.5 U	39.5 U
SR-S24-0.0/2.0	10/12/2012	4068833	58.7 J	45.1 U	45.1 U	45.1 U	58.7 J
SR-S24-2.0/6.0	10/12/2012	4068833	33.3 U	33.3 U	33.3 U	33.3 U	33.3 U
SR-S24-2.0/6.0R	10/12/2012	4068833	31 U	31 U	31 U	31 U	31 U
SR-S30-0.0/2.0	10/12/2012	4068921	632	35.2 U	175	35.2 U	807
SR-S30-0.0/2.0R	10/12/2012	4068921	508	35.7 U	140 J	35.7 U	647
SR-S30-2.0/2.9	10/12/2012	4068921	33.9 U	33.9 U	33.9 U	33.9 U	33.9 U
SR-S31-0.0/2.0	10/11/2012	4068833	140	31.2 U	96.8 J	31.2 U	237
SR-S31-2.0/5.0	10/11/2012	4068833	35.1 U	35.1 U	35.1 U	35.1 U	35.1 U
SR-S32-0.0/2.0	11/7/2012	4070195	151	31.8 U	59.2 J	31.8 U	210
SR-S32-2.0/4.0	11/7/2012	4070195	29.1 U	29.1 U	29.1 U	29.1 U	29.1 U
SR-S33-0.0/2.0	10/11/2012	4068833	47.1 J	30.2 U	69.7 J	30.2 U	117 J

TABLE D-3
Analytical Results - PCBs

Sample ID	Sample Date	SDG	PCB-1242 (µg/kg)	PCB-1248 (µg/kg)	PCB-1254 (µg/kg)	PCB-1260 (µg/kg)	PCB, TOTAL (µg/kg)
SR-S33-2.0/4.5	10/11/2012	4068833	35.8 U	35.8 U	35.8 U	35.8 U	35.8 U
SR-S34-0.0/2.0	10/11/2012	4068833	106 J	29.8 U	47.2 J	29.8 U	153
SR-S34-2.0/5.0	10/11/2012	4068833	29.3 U	29.3 U	29.3 U	29.3 U	29.3 U
SR-S36-0.0/2.0	10/11/2012	4068833	626	35.8 U	438	45 J	1110
SR-S36-2.0/5.6	10/11/2012	4068838	28.8 U	28.8 U	28.8 U	28.8 U	28.8 U
SR-S37-0.0/2.0	10/11/2012	4068838	29.6 U	29.6 U	29.6 U	29.6 U	29.6 U
SR-S37-2.0/5.1	10/11/2012	4068838	34.5 U	34.5 U	34.5 U	34.5 U	34.5 U
SR-S39-0.0/2.0	11/29/2012	4071220	11300	791 U	791 U	791 U	11300
SR-S39-0.0/2.0R	11/29/2012	4071220	7270	746 U	746 U	746 U	7270
SR-S39-2.0/4.8	11/29/2012	4071220	186	29.4 U	29.4 U	29.4 U	186
SR-S43-0.0/2.0	10/12/2012	4068838	1990	150 U	486 J	150 U	2480
SR-S43-2.0/5.7	10/12/2012	4068838	34.6 U	34.6 U	34.6 U	34.6 U	34.6 U
SR-S44-0.0/2.0	10/12/2012	4068838	612	33.2 U	555	45.2 J	1210
SR-S44-2.0/2.9	10/12/2012	4068838	3000	337 U	1110 J	337 U	4100
SR-S45-0.0/1.9	11/29/2012	4071220	19800	1760 U	4290 J	1760 U	24100
SR-S46-0.0/2.0	11/9/2012	4070375	10700	803 U	969 J	803 U	11700
SR-S46-0.0/2.0R	11/9/2012	4070375	17500	1100 U	1650 J	1100 U	19100
SR-S46-2.0/4.6	11/9/2012	4070375	270	36.4 U	38.1 J	36.4 U	308
SR-S47-0.0/1.6	11/10/2012	4070448	444	33.3 U	169	33.3 U	613
SR-S47-0.0/1.6R	11/10/2012	4070448	477	32.5 U	184	32.5 U	661
SR-S48-0.0/2.1	11/9/2012	4070375	8460	600 U	1050 J	600 U	9500
SR-S48-0.0/2.1R	11/9/2012	4070375	10800	799 U	1300 J	799 U	12100
SR-S49-0.0/1.7	11/29/2012	4071270	273	33.6 U	113 J	33.6 U	386
SR-S50-0.0/2.0	11/9/2012	4070375	81.1 J	36.3 U	36.3 U	36.3 U	81.1 J
SR-S50-2.0/4.4	11/9/2012	4070375	34.1 U	34.1 U	34.1 U	34.1 U	34.1 U
SR-S50-2.0/4.4R	11/9/2012	4070375	34.7 U	34.7 U	34.7 U	34.7 U	34.7 U
SR-S51-0.0/2.0	11/10/2012	4070448	447	27.5 U	101 J	27.5 U	547
SR-S52-0.0/2.0	11/9/2012	4070415	28300	3530 U	8340 J	3530 U	36600
SR-S52-2.0/3.7	11/9/2012	4070415	5450	677 U	2810 J	677 U	8250
SR-S53-0.0/2.4	11/10/2012	4070448	733	57.4 U	147 J	57.4 U	879
SR-S54-0.0/2.0	10/12/2012	4068838	6880	544 U	1040 J	544 U	7920
SR-S54-2.0/3.5	10/12/2012	4068838	53.4 J	29.9 U	29.9 U	29.9 U	53.4 J
SR-S55-0.0/2.0	10/12/2012	4068838	3850	295 U	295 U	295 U	3850
SR-S55-2.0/5.2	10/12/2012	4068838	64.9 J	30.9 U	50.8 J	30.9 U	116 J
SR-S56-0.0/1.4	11/10/2012	4070448	339	28.2 U	93.9 J	28.2 U	433
SR-S57-0.0/2.0	10/11/2012	4068741	33500	2200 U	4360 J	2200 U	37900
SR-S57-2.0/3.5	10/11/2012	4068741	3260	180 U	880	194 J	4340
SR-S57A-0.0/2.0	10/11/2012	4068741	3320	156 U	295 J	156 U	3610
SR-S57A-2.0/3.5	10/11/2012	4068741	1600	60.4 U	170 J	60.4 U	1770
SR-S58-0.0/2.1	11/10/2012	4070448	42 J	30.3 U	30.3 U	30.3 U	42 J
SR-S59-0.0/2.0	11/9/2012	4070415	35.7 U	35.7 U	35.7 U	35.7 U	35.7 U
SR-S59-2.0/2.8	11/9/2012	4070415	26.2 U	26.2 U	26.2 U	26.2 U	26.2 U
SR-S60-0.0/2.0	11/29/2012	4071270	77 J	29.3 U	38.8 J	29.3 U	116 J
SR-S60-2.0/3.2	11/29/2012	4071270	28.4 U	28.4 U	28.4 U	28.4 U	28.4 U
SR-S61-0.0/2.0	10/11/2012	4068741	1020	57.8 U	122 J	57.8 U	1140
SR-S61-2.0/5.3	10/11/2012	4068741	5040	657 U	1190 J	657 U	6230
SR-S61-2.0/5.3R	10/11/2012	4068741	3420	312 U	758 J	312 U	4180
SR-S61A-0.0/2.0	10/11/2012	4068741	1060	57.2 U	134 J	57.2 U	1190
SR-S61A-0.0/2.0R	10/11/2012	4068741	1040	56.2 U	155 J	56.2 U	1200
SR-S61A-2.0/4.9	10/11/2012	4068741	14000	771 U	3940	771 U	17900
SR-S62-0.0/2.1	11/29/2012	4071270	31.1 U	31.1 U	31.1 U	31.1 U	31.1 U
SR-S63-0.0/2.0	10/11/2012	4068743	4530	406 U	1790	406 U	6310
SR-S63-0.0/2.0R	10/11/2012	4068743	4960	424 U	2020	424 U	6970
SR-S63-2.0/4.7	10/11/2012	4068743	37700	1950 U	11200	1950 U	48900
SR-S64-0.0/2.0	11/29/2012	4071270	830	74.2 U	133 J	74.2 U	963
SR-S64-2.0/4.4	11/29/2012	4071270	34.7 U	34.7 U	34.7 U	34.7 U	34.7 U
SR-S66-0.0/2.0	10/11/2012	4068743	133 J	32.3 U	75.7 J	32.3 U	209
SR-S66-2.0/3.5	10/11/2012	4068743	29.3 U	29.3 U	29.3 U	29.3 U	29.3 U
SR-S67-0.0/2.0	10/10/2012	4068743	1010	86.9 U	959	86.9 U	1970
SR-S67-2.0/3.7	10/10/2012	4068743	96500	4210 U	22300	4210 U	119000

TABLE D-3
Analytical Results - PCBs

Sample ID	Sample Date	SDG	PCB-1242 (µg/kg)	PCB-1248 (µg/kg)	PCB-1254 (µg/kg)	PCB-1260 (µg/kg)	PCB, TOTAL (µg/kg)
SR-S69-0.0/2.0	10/10/2012	4068743	7200	834 U	3010 J	857 J	11100
SR-S69-2.0/4.0	10/10/2012	4068743	2230	145 U	528 J	145 U	2760
SR-S70-0.0/2.0	11/29/2012	4071270	1190	99.5 U	255 J	99.5 U	1450
SR-S70-2.0/2.6	11/29/2012	4071270	36.6 U	36.6 U	36.6 U	36.6 U	36.6 U
SR-S71-0.0/2.0	10/10/2012	4068743	5490	384 U	873 J	384 U	6360
SR-S71-0.0/2.0R	10/10/2012	4068744	3670	149 U	515 J	149 U	4190
SR-S71-2.0/5.4	10/10/2012	4068744	38 U	38 U	38 U	38 U	38 U
SR-S72-0.0/1.9	11/29/2012	4071270	2150	350 U	739 J	350 U	2890
SR-S73-0.0/2.0	10/10/2012	4068744	338	38 U	197	38 U	535
SR-S73-2.0/4.6	10/10/2012	4068744	32.7 U	32.7 U	32.7 U	32.7 U	32.7 U
SR-S75-0.0/2.0	10/10/2012	4068744	10600	840 U	1510 J	840 U	12100
SR-S75-2.0/3.4	10/10/2012	4068744	16100	1100 U	2220 J	1100 U	18300
SR-S77-0.0/2.0	10/10/2012	4068744	32300	2150 U	5240 J	2150 U	37500
SR-S77-2.0/3.7	10/10/2012	4068744	83.9 J	36.5 U	36.5 U	36.5 U	83.9 J
SR-S80-0.0/2.0	11/29/2012	4071220	63.3 J	42.1 U	42.1 U	42.1 U	63.3 J
SR-S80-2.0/5.2	11/29/2012	4071220	36.3 U	36.3 U	36.3 U	36.3 U	36.3 U
SR-SD-1-0.0/1.0	10/15/2012	4068969	601	58.9 U	442	58.9 U	1040
SR-SD-2-0.0/1.0	10/15/2012	4068969	1110	84.3 U	377	84.3 U	1480
SR-SD-3-0.0/1.0	10/15/2012	4068969	1340	125 U	1100	125 U	2440
SR-SD-4-0.0/1.0	10/15/2012	4068969	1470	150 U	665	150 U	2140
SR-SD-5-0.0/1.0	10/15/2012	4068969	692	59.4 U	518	59.4 U	1210
SR-SD-6-0.0/1.0	10/15/2012	4068969	2180	313 U	978 J	313 U	3160
SR-SD-7-0.0/1.0	10/15/2012	4068969	5390	686 U	1270 J	686 U	6660
SR-T01-C	11/7/2012	4070278	31.2 U	31.2 U	31.2 U	31.2 U	31.2 U
SR-T02-C	10/25/2012	4069634	2690	162 U	453 J	162 U	3140
SR-T02-CR	10/25/2012	4069634	2920	324 U	489 J	324 U	3410
SR-T03-C	10/25/2012	4069634	4370	317 U	549 J	317 U	4920
SR-T04-C	10/25/2012	4069634	467	28.3 U	63.2 J	28.3 U	530
SR-T04-CR	10/25/2012	4069634	621	28.7 U	109 J	28.7 U	730
SR-T05-C	10/26/2012	4069634	179	34.4 U	94 J	34.4 U	273
SR-T09-C-0.0/1.0	10/22/2012	4069394	11300	676 U	1230 J	676 U	12600
SR-T09-C-0.0/1.0R	10/22/2012	4069394	11000	664 U	1270 J	664 U	12300
SR-T10-C-0.0/1.0	10/22/2012	4069394	2380	161 U	275 J	161 U	2660
SR-T13-C-0.0/1.0	10/23/2012	4069486	5190	438 U	1150 J	438 U	6340
SR-T15-3-0.0/1.0	10/9/2012	4068826	73700	4240 U	6650 J	4240 U	80300
SR-T15-3-1.0/2.0	10/9/2012	4068826	2690	155 U	480 J	155 U	3170
SR-T15-3-2.0/3.0	10/9/2012	4068826	39.3 J	33.2 U	72.5 J	33.2 U	112 J
SR-T15-3-3.0/4.0	10/9/2012	4068826	40 U	40 U	77.9 J	40 U	77.9 J
SR-T15-4-0.0/1.0	10/9/2012	4068826	54600	4730 U	14100 J	4730 U	68700
SR-T15-4-1.0/2.0	10/9/2012	4068826	88900	4430 U	7840 J	4430 U	96700
SR-T15-4-2.0/3.4	10/9/2012	4068826	864	66 U	254 J	66 U	1120
SR-T15-5-0.0/1.0	10/9/2012	4068826	165000	9730 U	13800 J	9730 U	179000
SR-T15-5-1.0/2.0	10/9/2012	4068826	23400	1990 U	5270 J	1990 U	28600
SR-T15-5-2.0/3.0	10/9/2012	4068826	470	71 U	439	71 U	909
SR-T15-5-2.0/3.0R	10/9/2012	4068826	626	71.6 U	460	71.6 U	1090
SR-T15-5-3.0/3.7	10/9/2012	4068826	114 J	43.3 U	130 J	57 J	300
SR-T15A-C-0.0/1.0	10/23/2012	4069486	6270	573 U	2330 J	573 U	8590
SR-T15B-C-0.0/1.0	10/9/2012	4068555	68100	4640 U	7340 J	4640 U	75500
SR-T19-1-0.0/1.0	10/9/2012	4068826	97800	4860 U	10600 J	4860 U	108000
SR-T19-1-1.0/2.0	10/9/2012	4068826	55900	2170 U	4950 J	2170 U	60900
SR-T19-1-2.0/3.0	10/9/2012	4068826	620	33.7 U	147	33.7 U	767
SR-T19-1-3.0/3.8	10/9/2012	4068826	111 J	31.5 U	42.6 J	31.5 U	154
SR-T19-2-0.0/1.0	10/8/2012	4068826	198000	9890 U	22700 J	9890 U	220000
SR-T19-2-1.0/2.0	10/8/2012	4068826	40100	2320 U	5480 J	2320 U	45600
SR-T19-2-2.0/2.6	10/8/2012	4068826	2030	185 U	467 J	185 U	2500
SR-T19-3-0.0/1.0	10/8/2012	4068826	97700	4740 U	11400 J	4740 U	109000
SR-T19-3-1.0/2.0	10/8/2012	4068828	27000	1740 U	2410 J	1740 U	29400
SR-T19-3-2.0/3.4	10/8/2012	4068828	161	31.1 U	58.4 J	31.1 U	219
SR-T19-C-0.0/1.0	10/9/2012	4068555	147000	9960 U	16400 J	9960 U	163000
SR-T20-C-0.0/1.0	10/4/2012	4068406	8280	841 U	1960 J	841 U	10200

TABLE D-3
Analytical Results - PCBs

Sample ID	Sample Date	SDG	PCB-1242 (µg/kg)	PCB-1248 (µg/kg)	PCB-1254 (µg/kg)	PCB-1260 (µg/kg)	PCB, TOTAL (µg/kg)
SR-T21-C-0.0/1.0	10/5/2012	4068406	11700	1020 U	2660 J	1020 U	14300
SR-T21-C-0.0/1.0R	10/5/2012	4068406	7860	677 U	1940 J	677 U	9800
SR-T23-1-0.0/0.8	10/1/2012	4068406	20100	1360 U	4350 J	1360 U	24500
SR-T23-1-1.0/2.0	10/4/2012	4068406	329	29.6 U	89.6 J	29.6 U	419
SR-T23-1-2.0/3.0	10/4/2012	4068406	32200	4020 U	6110 J	4020 U	38300
SR-T23-1-3.0/4.0	10/4/2012	4068406	23900	4560 U	6090 J	4560 U	30000
SR-T23-2-0.0/0.5	10/1/2012	4068406	4610	376 U	1020 J	376 U	5630
SR-T23-2-1.0/2.0	10/4/2012	4068406	34.1 U	34.1 U	34.1 U	34.1 U	34.1 U
SR-T23-2-2.0/3.0	10/4/2012	4068406	35.1 U	35.1 U	35.1 U	35.1 U	35.1 U
SR-T23-2-3.0/4.0	10/4/2012	4068406	28.8 U	28.8 U	28.8 U	28.8 U	28.8 U
SR-T23-3-0.0/1.0	10/1/2012	4068406	98800	9770 U	12000 J	9770 U	111000
SR-T23-3-1.0/2.0	10/1/2012	4068406	31500	4040 U	4040 U	4040 U	31500
SR-T23-3-2.0/2.7	10/1/2012	4068406	14200	1260 U	4090 J	1260 U	18300
SR-T23-3-3.0/4.0	10/4/2012	4068406	38.1 U	38.1 U	120 J	64.5 J	184
SR-T23-4-0.0/1.0	10/1/2012	4068406	31200	4380 U	6720 J	4380 U	37900
SR-T23-4-1.0/2.1	10/1/2012	4068406	23100	4250 U	5110 J	4250 U	28200
SR-T23-4-2.0/3.2	10/4/2012	4068406	56.7 J	33.7 U	46.9 J	33.7 U	104 J
SR-T23-C-0.0/1.0	10/1/2012	4068086	50300	4340 U	7030 J	4340 U	57300
SR-T26-C-0.0/1.0	10/5/2012	4068406	36100	2430 U	5310 J	2430 U	41400

µg/kg = micrograms per kilogram

TABLE D-4
Analytical Results - PAHs

Sample ID	Sample Date	SDG	1-Methylnaph-thalene (µg/kg)	2-Methylnaph-thalene (µg/kg)	Acenaph-thene (µg/kg)	Acenaph-thylene (µg/kg)	Anthracene (µg/kg)	Benzo(a)-anthracene (µg/kg)	Benzo(a)-pyrene (µg/kg)	Benzo(b)-fluoranthene (µg/kg)	Benzo(g,h,i)-perylene (µg/kg)	Benzo(k)-fluoranthene (µg/kg)	Benzo(e)-pyrene (µg/kg)	Chrysene (µg/kg)	Dibenz(a,h)-anthracene (µg/kg)	Fluoranthene (µg/kg)	Fluorene (µg/kg)	Indeno(1,2,3-c,d)pyrene (µg/kg)	Naphthalene (µg/kg)	Phenan-threne (µg/kg)	Pyrene (µg/kg)	Total PAH (lab reported) (µg/kg)	TOTAL PAH- 13 (µg/kg)
SR-CS001-0.0/0.5	12/19/2012	4072177			59.8 U	59.8 U	14.2 J	59.8 U	59.8 U	17.3 U		59.8 U		15.8 J		59.8 U	59.8 U		22.6 U	31.5 J	59.8 U		61.5
SR-CS002-0.0/0.5	12/19/2012	4072135			58.9 U	58.9 U	12.6 J	58.9 U	58.9 U	17 U		58.9 U		20.2 J		58.9 U	58.9 U		22.2 U	23.6 J	58.9 U		56.4
SR-CS003-0.0/0.6	12/12/2012	4071813			61.2 U	61.2 U	12.9 J	61.2 U	61.2 U	24.4 J		61.2 U		34.4 J		70.5 J	61.2 U		51.6 J	46 J	61.2 U		239.8
SR-CS004-0.0/0.5	12/19/2012	4072177			73.6 U	73.6 U	33.2 J	78 J	85.8 J	48.2 J		75.9 J		82.1 J		109 J	73.6 U		27.7 U	70 J	75.8 J		658
SR-CS005-0.0/0.5	12/12/2012	4071819			62.6 U	62.6 U	12.8 U	62.6 U	62.6 U	18.1 U		62.6 U		22.2 J		62.6 U	62.6 U		23.6 U	26.8 J	62.6 U		49
SR-CS006-0.0/0.8	12/19/2012	4072176			62.2 U	62.2 U	15.7 J	62.2 U	62.2 U	17.9 U		62.2 U		35.9 J		62.7 J	62.2 U		23.4 U	49.9 J	62.2 U		164.2
SR-CS007-0.0/0.5	12/10/2012	4071702			63.1 U	63.1 U	12.9 U	63.1 U	63.1 U	18.2 U		63.1 U		14.3 U		63.1 U	63.1 U		23.8 U	16.1 U	63.1 U		590.1 U
SR-CS008B-0.0/0.5	12/11/2012	4071757			61.1 U	61.1 U	12.5 U	61.1 U	61.1 U	17.6 UJ		61.1 U		13.9 UJ		61.1 UJ	61.1 U		498 J	80.5 J	61.1 UJ		578.5 J
SR-CS008B-0.0/0.5R	12/11/2012	4071757			58.3 U	58.3 U	20.4 J	90.9 J	92.3 J	78.9 J		91.5 J		107 J		253 J	58.3 U		22 UJ	133	171 J		1038 J
SR-CS009-0.0/0.5	12/10/2012	4071702			60 U	60 U	12.3 U	60 U	60 U	17.3 U		60 U		13.6 U		60 U	60 U		22.6 U	15.3 U	60 U		561.1 U
SR-CS010-0.0/0.5	12/10/2012	4071757			1180 U	1180 U	243 U	1180 U	1180 U	342 U		1180 U		269 U		1180 U	1180 U		26700	302 U	1180 U		26700
SR-CS011-0.0/0.5	12/10/2012	4071757			56.7 U	56.7 U	86.4 J	56.7 U	56.7 U	22.7 J		56.7 U		43.6 J		167	56.7 U		117	244	116		796.7
SR-CS012-0.0/0.8	12/10/2012	4071757			58 U	58 U	170	87.9 J	68.3 J	43.6 J		68.9 J		86.2 J		214	58 U		32.5 J	246	147		1164.4
SR-CS013-0.0/0.7	12/10/2012	4071757			62.9 U	62.9 U	19 J	62.9 U	62.9 U	41 J		62.9 U		55.9 J		108 J	62.9 U		23.7 U	64.3 J	78.9 J		367.1
SR-CS014-0.0/0.5	11/29/2012	4071271			60.2 U	60.2 U	12.3 U	60.2 U	60.2 U	56.5 J		64.3 J		75.4 J		172	60.2 U		22.7 U	67.7 J	122		557.9
SR-CS015-0.0/0.5	11/27/2012	4071073			52.6 U	52.6 U	10.8 U	52.6 U	52.6 U	15.2 U		52.6 U		12 U		52.6 U	52.6 U		19.8 U	13.4 U	52.6 U		492 U
SR-CS016-0.0/0.5	11/27/2012	4071073			57.1 U	57.1 U	11.7 U	57.1 U	57.1 U	16.5 U		57.1 U		13 U		57.1 U	57.1 U		21.5 U	14.6 U	57.1 U		534.1 U
SR-CS017-0.0/0.5	11/27/2012	4071135			72.5 U	72.5 U	98.2 J	168	165	110 J		158		185		435	72.5 U		27.3 U	382	330		2031.2
SR-CS018-0.0/0.5	11/27/2012	4071135			60.8 U	60.8 U	12.5 U	60.8 U	60.8 U	17.5 U		60.8 U		13.8 U		60.8 U	60.8 U		22.9 U	15.5 U	60.8 U		568.6 U
SR-CS019-0.0/0.5	11/19/2012	4070900			58.7 U	58.7 U	12.3 J	58.7 U	58.7 U	28.1 J		58.7 U		37.9 J		67.1 J	58.7 U		22.1 U	31 J	62.4 J		238.8
SR-CS019-0.5/1.0	11/19/2012	4070900			39500	6260 U	76800	85200	83900	62000		72300		86000		195000	41900		62900	202000	150000		1157500
SR-CS019-1.0/2.0	11/19/2012	4070902			65.9 U	65.9 U	58.7 J	75.7 J	69.7 J	53 J		65.9 U		80.2 J		134	65.9 U		24.8 U	137	146		754.3
SR-CS019A-0.0/0.5	11/27/2012	4071133			63.2 U	63.2 U	13 U	63.2 U	63.2 U	19.6 J		63.2 U		28.6 J		63.2 U	63.2 U		23.8 U	36.7 J	63.2 U		84.9
SR-CS019A-0.5/1.0	11/27/2012	4071133			58.6 U	58.6 U	23.1 J	58.6 U	71.3 J	66.6 J		81.5 J		100 J		222	58.6 U		22.1 U	162	177		903.5
SR-CS019A-1.0/2.0	11/27/2012	4071133			58.5 U	58.5 U	12 U	58.5 U	58.5 U	16.9 U		58.5 U		13.3 U		58.5 U	58.5 U		22 U	14.9 U	58.5 U		547.1 U
SR-CS019A-2.0/3.0	11/27/2012	4071133			313	111 J	538	371	336	239		229		421		914	252		742	1560	1060		7086
SR-CS019A-3.0/4.0	11/27/2012	4071133			105 J	63.6 U	19.4 J	63.6 U	63.6 U	27.8 J		63.6 U		45.3 J		73.8 J	63.6 U		37.9 J	40.1 J	95.1 J		444.4
SR-CS019B-0.0/0.5	11/27/2012	4071133			60.5 U	60.5 U	37.1 J	60.5 U	60.5 U	26.6 J		60.5 U		40.6 J		85.2 J	60.5 U		43 J	89.8 J	86.9 J		409.2
SR-CS019B-0.5/1.0	11/27/2012	4071133			54.7 U	54.7 U	11.2 U	54.7 U	54.7 U	15.8 U		54.7 U		12.4 U		54.7 U	54.7 U		20.6 U	14 U	54.7 U		511.6 U
SR-CS019B-1.0/2.0	11/27/2012	4071133			83.5 J	68.3 U	140	126 J	145	82.2 J		114 J		147		320	68.3 U		80.1 J	405	345		1987.8
SR-CS019B-2.0/3.0	11/27/2012	4071133			122 J	83.6 U	180	175	156 J	125 J		124 J		201		514	99.3 J		376	568	488		3128.3
SR-CS020-0.0/0.5	11/19/2012	4070900			74.5 U	74.5 U	68.7 J	128 J	149 J	111 J		114 J		151 J		245 J	74.5 U		47.3 J	211 J	232 J		1457 J
SR-CS020-0.0/0.5R	11/19/2012	4070900			74.1 U	74.1 U	18.5 J	74.1 UJ	74.1 UJ	41.7 J		74.1 U		50 J		103 J	74.1 U		27.9 UJ	83.4 J	80.1 J		376.7 J
SR-CS020-0.5/1.0	11/19/2012	4070900			934 J	452 J	4550 J	3000 J	2710 J	1340 J		1720 J		2990 J		6310 J	927 J		184 J	7600 J	7380 J		40097 J
SR-CS020-0.5/1.0R	11/19/2012	4070900			112 J	57.1 UJ	161 J	163 J	163 J	111 J		142 J		179 J		498 J	91.9 J		64.9 J	616 J	439 J		2740.8 J
SR-CS020D-0.0/0.5	11/27/2012	4071133			72.9 U	72.9 U	18.5 J	72.9 U	72.9 U	29.5 J		72.9 U		38 J		77.5 J	72.9 U		27.5 U	73.9 J	72.9 U		237.4
SR-CS020D-0.5/1.0	11/27/2012	4071133			61.3 J	60.5 U	60.8 J	68.8 J	60.5 U	38 J		60.5 U		61.6 J		160	60.5 U		30 J	211	139		830.5
SR-CS020D-1.0/2.2	11/27/2012	4071133			61.5 U	61.5 U	35.3 J	61.5 U	61.5 U	22.3 J		61.5 U		47.6 J		97 J	61.5 U		23.8 J	121 J	129		476
SR-CS021-0.0/0.5	11/20/2012	4070900			62.8 U	62.8 U	12.9 U	62.8 U	62.8 U	18.1 U		62.8 U		14.3 U		62.8 U	62.8 U		23.7 U	16 U	62.8 U		587.4 U
SR-CS021-0.5/1.0	11/20/2012	4070900			55.9 U	55.9 U	11.4 U	55.9 U	55.9 U	16.1 U		55.9 U		12.7 U		55.9 U	55.9 U		21.1 U	14.3 U	55.9 U		522.8 U
SR-CS022-0.0/0.5	11/20/2012	4070992			250	81.4 U	247	237	285	281		149 J		271		492	141 J		243	623	474		3693
SR-CS022-0.5/1.0	11/20/2012	4070992			384	72.6 U	519	315	362	324		212		404		857	217		301	1310	821		6026
SR-CS023-0.0/0.5	11/20/2012	4070992			126 U	126 U	71 J	126 U	126 U	76.7 J		126 U		102 J		235 J	126 U		47.5 J	212 J	198 J		942.2
SR-CS023-0.5/1.0	11/20/2012	4070992			63.7 U	63.7 U	210	514	551	519		364		537		1060	63.7 U		24 U	302	791		4848
SR-CS024-0.0/0.5	11/20/2012	4070900			110 J	63.9 U	115 J	123 J	118 J	69.9 J		95.7 J		136		250	63.9 U		24.9 J	259	253		1554.5
SR-CS024-0.5/1.0	11/20/2012	4070900			62.3 U	62.3 U	19.3 J	62.3 U	62.3 U	18 U		62.3 U		14.2 U		62.3 U	62.3 U		23.5 U	36.6 J	62.3 U		55.9
SR-CS025-0.0/0.5	11/20/2012	4070992			65.8 U	65.8 U	13.5 U	65.8 U	65.8 U	19 U		65.8 U		15 U		65.8 U	65.8 U		24.8 U	16.8 U	65.8 U		615.5 U
SR-CS025-0.5/1.0	11/20/2012	4070992			68.3 U	68.3 U	14 U	68.3 U	68.3 U	19.7 U		68.3 U		15.5 U		68.3 U	68.3 U		25.7 U	17.4 U	68.3 U		638.7 U
SR-CS026-0.0/0.5	11/20/2012	4070992			197	70.4 U	280	128 J	108 J	101 J		70.4 U		137 J		329	146		148	583	368		2525
SR-CS026-0.5/1.0	11/20/2012	4070992			63.8 U	63.8 U	13.5 J	63.8 U	63.8 U	18.4 U		63.8 U		14.5 U		63.8 U	63.8 U		24 U	28.4 J	63.8 U		41.9
SR-CS027-0.0/0.5	11/20/2012	4070992			84.8 U	84.8 U	61.7 J	84.8 U	84.8 U	62.3 J		84.8 U		71.2 J		126 J	84.8 U		33 J	101 J	114 J		569.2
SR-CS027-0.5/1.0	11/20/2012	4070992			60.3 U	60.3 U	12.4 U	60.3 U	60.3 U	17.4 U		60.3 U		13.7 U		60.3 U	60.3 U		22.7 U	15.4 U	60.3 U		564 U
SR-CS028-1-0.0/0.5	12/12/2012	4071812			79.8 J	63.6 U	89.5 J	79.9 J	63.7 J	38.9 J		64.2 J		82.6 J		180	63.6 U		30 J	214	173		1095.6
SR-CS028-1-0.0/0.5R	12/12/2012	4071812			94.6 J	63.4 U	95.8 J	142 J	155 J	82 J		138 J		159 J		278	63.4 U		26 J	259	256		1685.4
SR-CS028A-0.0/0.5	11/20/2012	4070992			25300	1560 U	32200	12000	10600	8220		4680		11700		32000	17500		17300	72200	36900		280600
SR-CS028A-0.5/1.0	11/20/2012	4070992			51900	4260 U	73800	24900	23000	16000		11900		24600		68800	36300		32200	150000	75900		589300
SR-CS028A-1.0/2.0	11/20/2012	4070993			2400	161	1380	887	950	636		628		948		1530	1230		4350	3460	1670		20230
SR-CS028B-0.0/0.5	11/20/2012	4070992			1910	513 U	4040	6210	5530	5700		4590		6930		16300	1680		1090	13800	11400		79180
SR-CS028B-0.5/1.0	11/20/2012	4070992			440	108 J	287	448	509	488		394		568		1310	168		189	1080	1080		7069
SR-CS029-0.0/0.5	11/20/2012	4070992			85.8 U	85.8 U	80.7 J	85.8 U	85.8 U	34.9 J		85.8 U		56.3 J		111 J	85.8 U		42.9 J	195	123 J		643.8
SR-CS029-0.5/1.0	11/20/2012	4070992			335	71.8 U	588	275	212	162		127 J		320		640	262		207	1280	760		5168
SR-CS030-0.0/0.5	10/24/2012	4069525	484	550	421	60.2 U	86.8 J	70.2 J	60.2 U	44.5 J	60.2 U	60.2 U	60.2 U	57.1 J	60.2 U	174	144	60.2 U	569	317	134	3230	2017.6
SR-CS030-0.5/0.8	10/24/2012	4069525	665	744	532	60.4 U	53 J	60.4 U	60.4 U	25.7 J	60.4 U	60.4 U	60.4 U	31.4 J	60.4 U	94.6 J	125	60.4 U	295	192	70.7 J	2950	1419.4
SR-CS030-1-0.0/0.5	12/12/2012	4071812			181	61.9 U	93.2 J	61.9 U	61.9 U	17.9 U		61.9 U		29.7 J		74.2 J	86.2 J		26.4 J	306	64.6 J		861.3
SR-CS030A-0.0/0.5	10/24/2012	4069468	42500	69800	67900	5170 J	71500	30500	25600	13500	11000	17500	13000	27400	3260 U	70900	45000	8590	100000	154000	74000	838000	702970
SR-CS030A-0.5/1.2	10/24/2012	4069468	192000 J	321000 J	231000	19600 J	206000	100000	75800	37300	24500 J	51600	38300	86200	12500 U	225000	155000	20800 J	390000 J	552000	235000	2930000	2364500
SR-CS030A-0.5/1.2R	10/24/2012	4069468	343000 J	594000 J	346000	22900 J	317000	127000	98200	48700	33900 J	68100	49500	115000	21000 U	298000	217000	30300 J	715000 J	725000	311000	4420000	3408900
SR-CS030B-0.0/0.5	10/24/2012	4069525	53200	81200	96300	5080 J	62700	28800	24300	14400	10600	15800	12700	25700	2900 J	70800	49600	9160	94900	170000	68200	883000	726580
SR-CS030B-0.5/0.8	10/24/2012	4069525	9580	13300	18700	1200 J	15000	7820	6730	3950	3180	4950	3550	7150	1120 U	19400	9910	2640	11200	37600	16600	190000	160210
SR-CS030C-0.0/0.5	10/24/2012	4069525	701	1150	1510	344	1470	1140	1070	791	547	811	586	1070	187	3150	1090	480	2370	4090	2240	24200	21146
SR-CS030C-0.5/0.8	10/24/2012	4069525	1420	2270	2890	294	2250	1200	1070	753	483	657	554	1160	153	3110	1910	406	3350	5690	2970	32000	27304
SR-CS030D-0.0/0.5	10/26/2012	4069636	68.3	95	136	32.9	141	148	140	103	80.3	116	98.3	162	27.5	354	91.8	64.9	170	374	286	2590	2254.7

TABLE D-4
Analytical Results - PAHs

Sample ID	Sample Date	SDG	1-Methylnaph-thalene (µg/kg)	2-Methylnaph-thalene (µg/kg)	Acenaph-thene (µg/kg)	Acenaph-thylene (µg/kg)	Anthracene (µg/kg)	Benzo(a)-anthracene (µg/kg)	Benzo(a)-pyrene (µg/kg)	Benzo(b)-fluoranthene (µg/kg)	Benzo(g,h,i)-perylene (µg/kg)	Benzo(k)-fluoranthene (µg/kg)	Benzo(e)-pyrene (µg/kg)	Chrysene (µg/kg)	Dibenz(a,h)-anthracene (µg/kg)	Fluoranthene (µg/kg)	Fluorene (µg/kg)	Indeno(1,2,3-c,d)pyrene (µg/kg)	Naphthalene (µg/kg)	Phenan-threne (µg/kg)	Pyrene (µg/kg)	Total PAH (lab reported) (µg/kg)	TOTAL PAH- 13 (µg/kg)
SR-CS030D-0.5/1.0	10/26/2012	4069636	9.3 U	9.7 J	24.3	10.2 U	38.3	65.7	65.3	66.6	41.3	49.4	43.6	68	15.4 J	153	18.8 J	34	25.8	128	116	928	819.2
SR-CS030D-1.0/1.8	10/26/2012	4069636	10.6 U	4.9 J	11.6 U	11.6 U	2.4 U	11.6 U	11.6 U	3.3 U	11.6 U	11.6 U	11.6 U	2.6 U	11.6 U	11.6 U	11.6 U	11.6 U	6.1 J	3.5 J	11.6 U	23.5	9.6
SR-CS030RE-0.0/0.5	10/25/2012	4069602	5020	8550	9150	1470	4740	3330	2830	1800	1420 J	2410	1520	2710	726 U	9450	6230	1260 J	30600	17600	7200	116000	99520
SR-CS030RE-0.5/1.0	10/25/2012	4069602	405	385	540	59.1 U	103 J	59.1 U	59.1 U	17.1 U	59.1 U	59.1 U	59.1 U	26.9 J	59.1 U	108 J	231	59.1 U	322	500	84.8 J	2820	1915.7
SR-CS030RE-1.0/1.7	10/25/2012	4069602	348	267	415	62.1 U	13.6 J	62.1 U	62.1 U	17.9 U	62.1 U	62.1 U	62.1 U	14.1 U	62.1 U	62.1 U	144	62.1 U	27.1 J	118 J	62.1 U	1330	717.7
SR-CS030TL-0.0/0.5	10/26/2012	4070046	154	178	167	61.2 U	14.7 J	61.2 U	61.2 U	17.7 U	61.2 U	61.2 U	61.2 U	13.9 U	61.2 U	61.2 U	61.5 J	61.2 U	97.7 J	82.6 J	61.2 U	815	423.5
SR-CS030TL-0.5/1.0	10/26/2012	4070046	190	206	144	60.7 U	12.4 U	60.7 U	60.7 U	17.5 U	60.7 U	60.7 U	60.7 U	13.8 U	60.7 U	60.7 U	60.7 U	60.7 U	33 J	34.4 J	60.7 U	710	211.4
SR-CS030TL-1.0/2.0	10/26/2012	4070046	138	101 J	80.8 J	60.2 U	12.3 U	60.2 U	60.2 U	17.4 U	60.2 U	60.2 U	60.2 U	13.7 U	60.2 U	60.2 U	60.2 U	60.2 U	28.9 J	35.5 J	60.2 U	436	145.2
SR-CS030TL-2.0/3.0	10/26/2012	4070046	134	86.1 J	166	58.8 U	31.9 J	58.8 U	58.8 U	17 U	58.8 U	58.8 U	58.8 U	13.4 U	58.8 U	58.8 U	58.8 U	58.8 U	22.2 U	150	58.8 U	675	347.9
SR-CS030TL-3.0/4.0	10/26/2012	4070046	117 J	74.5 J	113 J	62.6 U	12.8 U	62.6 U	62.6 U	18.1 U	62.6 U	62.6 U	62.6 U	14.2 U	62.6 U	62.6 U	62.6 U	62.6 U	37.4 J	48.7 J	62.6 U	435	199.1
SR-CS031-0.0/0.5	11/20/2012	4070992			71.1 U	71.1 U	14.6 U	71.1 U	71.1 U	20.5 U		71.1 U		16.1 U		71.1 U	71.1 U		26.8 U	18.1 U	71.1 U		664.9 U
SR-CS031-0.5/1.0	11/20/2012	4070992			69.8 U	69.8 U	14.3 U	69.8 U	69.8 U	20.1 U		69.8 U		15.9 U		69.8 U	69.8 U		26.3 U	17.8 U	69.8 U		652.8 U
SR-CS032-0.0/0.5	10/24/2012	4069525	8640	13200	10500	1490 U	11800	5730	4200	2440 J	1870 J	2580 J	2330 J	5500	1490 U	13100	6520	1490 U	6490	32300	15400	143000	116560
SR-CS032-0.5/1.1	10/24/2012	4069525	790	1160	1040	180	543	695	1360	949	838	903	757	837	237	1230	504	689	767	1680	1030	15400	11718
SR-CS032-1-0.0/0.5	12/12/2012	4071872			347 J	63.4 UJ	255 J	130 J	101 J	56 J		85.3 J		114 J		380 J	192 J		396 J	704 J	321 J		3081.3 J
SR-CS032-1-0.0/0.5R	12/12/2012	4071872			1290 J	111 J	697 J	507 J	470 J	309 J		363 J		404 J		1500 J	771 J		1320 J	2730 J	1150 J		11622 J
SR-CS032A-0.0/0.5	10/24/2012	4069468	17800	28300	22700	2150 J	13100	5750	4610	3310 J	2000 J	3180 J	2460 J	5130	1870 U	14400	12600	1870 U	76300	34300	13200	261000	210730
SR-CS032A-0.5/1.2	10/24/2012	4069468	10200 J	16900 J	9640 J	1890 UJ	3850 J	1980 J	1890 UJ	916 J	1890 UJ	1890 UJ	1890 UJ	1660 J	1890 U	4630 J	4320 J	1890 UJ	67600 J	11400 J	4100 J	142000 J	110096 J
SR-CS032A-0.5/1.2R	10/24/2012	4069468	221000 J	373000 J	250000 J	21000 J	224000 J	105000 J	80300 J	51700 J	28400 J	45800 J	40700 J	93000 J	15500 U	233000 J	163000 J	25200 J	450000 J	580000 J	243000 J	3200000 J	2539800 J
SR-CS032B-0.0/0.5	10/24/2012	4069525	17300	29500	23800	2410 J	15900	7390	5950	4560	2700 J	4080	3200 J	6760	1740 U	18600	14000	2470 J	59100	42000	16900	274000	221450
SR-CS032B-0.5/1.1	10/24/2012	4069525	19000	31500	29300	2130 J	18700	8960	7350	4340	3530	6090	3930	9610	1630 U	22000	16100	2920 J	61300	49100	19700	313000	254680
SR-CS032C-0.0/0.6	10/24/2012	4069525	228	307	268	57.8 U	138	85.1 J	59 J	39.7 J	57.8 U	57.8 U	57.8 U	76.6 J	57.8 U	229	148	57.8 U	230	408	202	2550	1883.4
SR-CS032D-0.0/0.3	10/24/2012	4069525	1930	3000	3600	881	3380	2360	2140	1550	990	1540	1150	2190	348 J	5210	2470	876	4980	8360	4510	50300	43171
SR-CS032D-0.3/0.7	10/24/2012	4069525	231	252	292 J	72.3 U	14.8 U	72.3 U	72.3 U	20.8 U	72.3 U	72.3 U	72.3 U	16.4 U	72.3 U	72.3 U	81.5 J	72.3 U	107 J	51.4 J	72.3 U	1080	531.9
SR-CS032RE-0.0/0.5	10/25/2012	4069602	28900	44500	37600	1190 U	3640	1370 J	1190 U	531 J	1190 U	1190 U	1190 U	1120 J	1190 U	4220	15100	1190 U	5270	16500	3710	165000	89061
SR-CS032RE-0.5/1.0	10/25/2012	4069602	6080	9130	7710	801 J	7410	3310	2740	1490	1200	1750	1510	3200	418 U	7210	4620	907	5330	20400	9210	92800	75181
SR-CS032RE-1.0/1.5	10/25/2012	4069602	5170	8890	5800	224 U	504	224 U	224 U	128 J	224 U	224 U	224 U	167 J	224 U	388 J	2280	224 U	4840	2750	327 J	32000	17184
SR-CS032TL-0.0/0.5	10/26/2012	4070046	805	1320	1030	87.1 J	538	316	276	224	131	196	150	278	60.1 U	836	569	124	1740	1690	713	10900	8493.1
SR-CS032TL-0.5/1.0	10/26/2012	4070046	761	1150	631	76.2 U	189	104 J	80.3 J	59.5 J	76.2 U	76.2 U	76.2 U	83.2 J	76.2 U	241	253	76.2 U	817	594	221	5350	3273
SR-CS032TL-1.0/2.0	10/26/2012	4070046	519	845	843	70.8 U	551	392	429	365	255	298	238	323	71.5 J	1060	425	223	265	1600	778	9280	7329
SR-CS032TL-2.0/3.0	10/26/2012	4070046	154	206	199	60.1 U	44.7 J	60.1 U	60.1 U	17.3 U	60.1 U	60.1 U	60.1 U	22.6 J	60.1 U	88.8 J	63.7 J	60.1 U	30.7 J	151	66.8 J	1130	667.3
SR-CS032TL-3.0/4.0	10/26/2012	4070046	56.8 U	35.9 J	62.2 U	62.2 U	12.7 U	62.2 U	62.2 U	17.9 U	62.2 U	62.2 U	62.2 U	14.1 U	62.2 U	62.2 U	62.2 U	62.2 U	23.4 U	15.9 U	62.2 U	107 J	581.6 UJ
SR-CS032TL-3.0/4.0R	10/26/2012	4070046	69.4 J	69.4 J	61.9 U	61.9 U	12.7 U	61.9 U	61.9 U	17.9 U	61.9 U	61.9 U	61.9 U	14.1 U	61.9 U	61.9 U	61.9 U	61.9 U	30.4 J	15.8 U	61.9 U	242 J	30.4 J
SR-CS033-0.0/0.5	11/20/2012	4070992			68.6 U	68.6 U	14 U	68.6 U	68.6 U	19.8 U		68.6 U		15.6 U		68.6 U	68.6 U		25.8 U	17.5 U	68.6 U		641.5 U
SR-CS033-0.5/1.0	11/20/2012	4070992			71.3 U	71.3 U	14.6 U	71.3 U	71.3 U	20.6 U		71.3 U		16.2 U		71.3 U	71.3 U		26.9 U	18.2 U	71.3 U		666.9 U
SR-CS034-0.0/0.5	10/24/2012	4069582	32000	52700	87600	4980 U	60100	28900	27300	23400	13500	16900	14700	27000	4980 U	86400	41100	11400	227000	156000	64300	964000	846000
SR-CS034-0.5/1.0	10/24/2012	4069582	29200	52000	81000	11600 U	47500	27900	23500	17600 J	12500 J	18500 J	12800 J	24500	11600 U	83200	39500	11600 U	311000	134000	59800	979000	868000
SR-CS034-1.0/2.0	10/24/2012	4069582	22700	45300	67100	2880 U	38100	20800	19300	14700	10300	14400	10600	20300	2880 U	64400	30300	8580	264000	111000	49000	804000	713400
SR-CS034-1-0.0/0.5	12/12/2012	4071812			1430	116 J	1030	614	692	413		548		606		1610	683		2820	2610	1260		14432
SR-CS034A-0.0/0.5	10/24/2012	4069582	4570	7040	8290	1290	7010	3880	3370	2150	1700	2530	1810	3680	529 U	9430	4980	1410	21900	17000	8530	109000	94040
SR-CS034A-0.5/1.0	10/24/2012	4069582	14500	21000	26200	2720 J	23900	11200	10100	5670	4720	7650	5260	11300	1970 U	27900	15600	3920 J	55900	53800	25800	323000	277740
SR-CS034A-1.0/2.0	10/24/2012	4069582	10200	15900	21500	2590	19600	8990	8150	5460	4070	5660	4250	8700	1180 J	26400	13500	3380	47100	45200	23800	271000	236650
SR-CS034B-0.0/0.5	10/24/2012	4069582	49800	51100	78400	6080 J	76100 J	33600 J	31100 J	20600 J	16700 J	23200 J	16600 J	32400 J	4390 U	98100 J	48000 J	12900 J	151000	180000 J	79600 J	993000 J	858180 J
SR-CS034B-0.0/0.5R	10/24/2012	4069582	30800	36600	48800	2880 UJ	34900 J	16100 J	13900 J	7750 J	6320 J	9880 J	7260 J	14800 J	2880 U	41100 J	27400 J	5240 J	92200	96300 J	39500 J	526000 J	442630 J
SR-CS034B-0.5/1.0	10/24/2012	4069582	19400	28000	30100	2480 U	17100	8880	7360	5370	3580 J	4550 J	4010 J	8070	2480 U	22000	15300	2900 J	68700	47600	20800	312000	255830
SR-CS034B-1.0/1.5	10/24/2012	4069582	8830	14700	16000	830 U	8120	4260	4280	3130	2250	2840	2260	4000	830 U	11400	7700	1820	43800	24300	9300	168000	139130
SR-CS034C-0.0/0.5	10/24/2012	4069582	31700	47500	38300	2520 U	40300	16200	12000	5930	4130 J	8300	5930	16000	2520 U	34600	26600	3480 J	19800	96100	39500	444000	353630
SR-CS034C-0.5/1.0	10/24/2012	4069582	11900	18800	15400	1020 J	13700	6160	4390	2050	1510 J	3000	2200	5890	923 U	13200	11200	1240 J	8980	35700	15100	170000	135790
SR-CS034D-0.0/0.5	10/24/2012	4069525	1530	2500	2670	135	1910	938	847	628	449	618	478	899	131 J	3180	1510	356	5590	5860	2660	32400	27445
SR-CS034D-0.5/1.4	10/24/2012	4069525	3710	5800	9830	723 J	10800	6920	8050	6260	4780	5440	4430	7250	1200 J	16000	5600	4030	18700	25600	13100	154000	134273
SR-CS035-0.0/0.5	11/20/2012	4070992			68 U	68 U	13.9 U	68 U	68 U	19.6 U		68 U		15.5 U		68 U	68 U		25.6 U	17.4 U	68 U		636 U
SR-CS035-0.5/1.0	11/20/2012	4070992			82.8 U	82.8 U	17 U	82.8 U	82.8 U	23.9 U		82.8 U		18.8 U		82.8 U	82.8 U		31.2 U	21.1 U	82.8 U		774.4 U
SR-CS036-0.0/0.5	10/25/2012	4069582	23500	28200	49500	11800	43800	24300	23700	16400	12800	18700	12700	24500	4220 U	75600	32000	11300	176000	124000	54400	754000	674700
SR-CS036-0.5/1.4	10/25/2012	4069582	290 J	142	1760	109 J	1450	1330	1560	1400	919	1000	859	1340	261	3300	731 J	813	1450	3050 J	2290	23200	20770
SR-CS036-0.5/1.4R	10/25/2012	4069582	643 J	192	2320	139	2290	1610	1890	1650	1100	1180	1020	1650	343	4450	1340 J	970	2060	5810 J	3180	32800	29569
SR-CS036-1-0.0/0.5	12/12/2012	4071812			9830	1160 J	8110	5670	6040	3580		4890		5500		15400	5530		25200 J	24100	12100		127110
SR-CS036-1-0.0/0.5R	12/12/2012	4071812			6140	1040	7880	4490	4600	3080		3240		4490		11900	3910		11300 J	18200	9700		89970
SR-CS036-1-0.5/1.0	12/12/2012	4071813	716	1250	1810	264 U	1920	1840	2530	1730	1370	1820	1290	2050	438 J	3800	948	1300	8160	4150	2690	38700	33448
SR-CS036A-0.0/0.5	10/24/2012	4069582	6410	5090	11600	1490	8980	4670	4010	2670	1930	2770	2130	4290	543 J	10500	7580	1600	11700	22200	10400	118000	102860
SR-CS036A-0.5/1.4	10/24/2012	4069582	4860	1210	10900	1730	8660	4130	3980	2550	1990	2710	2130	3990	528 J	11700	5900	1660	3230	21900	10200	102000	91580
SR-CS036B-0.0/0.3	10/25/2012	4069582	20800	34300	39000	2130 U	28600	14900	13300	7950	5970	9280	7080	14300	2130 U	36300	20600	5130	75400	77400	33600	440000	370630
SR-CS036B-0.3/0.7	10/25/2012	4069582	950	1630	1150	61 U	293	94.4 J	69.2 J	50.8 J	61 U	61 U	61 U	76.6 J	61 U	279	503	61 U	5850	1210	240	12500	9816
SR-CS036C-0.0/0.7	10/25/2012	4069582	156 J	181 J	292 J	56.6 U	437 J	206 J	155 J	100 J	60.2 J	99.5 J	83.2 J	208 J	56.6 U	419 J	248 J	56.6 U	121 J	965 J	474 J	4220 J	3724.5 J
SR-CS036C-0.0/0.7R	10/25/2012	4069582	74.8 J	80.1 J	144 J	56.9 U	145 J	85.2 J	58.1 J	44.9 J	56.9 U	56.9 UJ	56.9 U	77.6 J	56.9 U	164 J	95.6 J	56.9 U	71.3 J	349 J	172 J	1660 J	1406.7 J
SR-CS036D-0.0/0.5	10/25/2012	4069582	4070	5830	6820	613 J	7020	3250	2450	1740	967 J	1410	1320	3090	576 U	7230	4740	777 J	5200	16700	7760	80000	68023
SR-CS036D-0.5/1.0	10/25/2012	4069582	2450	3460	4130	341 J	4520	2040	1760	1010	799	1240	929	1980	315 U	4890	2760	663	3900	10700	5360	52200	44631
SR-CS036D-1.0/1.9	10/25/2012	4069582	2170	2880	4290	264 U	2760	1180	1040	867	480 J	646	563	1180	264 U	4080	2340	415 J	8240	8610	3500	45000	38733
SR-CS037-0.0/0.5	11/20/2012	4070992			82.7 U	82.7 U	17 U	82.7 U	82.7 U	23.9 U		82.7 U		18.8 U		82.7 U	82.7 U		31.2 U	21.1 U	82.7 U		773.6 U
SR-CS037-0.5/1.0	11/20/2012	4070992			71.5 U	71.5 U	14.7 U	71.5 U	71.5 U	20.6 U		71.5 U		16.3 U		71.5 U	71.5 U		27 U	18.3 U	71.5 U		668.9 U
SR-CS038-0.0/0.5	10/25/2012	4069582	2180	3480	3890	288 J	2510	1630	1520	1240	770	910	797	1460	287 U	3680	2220	677	9270	7230	3670	46900	39518
SR-CS038-0.5/1.0	10/25/2012	4069582	2760	4460	4680 J	250 J	3120 J	1480 J	1330	827	605	947	705	1300	236 U	3780 J	2540 J	507	10000 J	8480 J	3180 J	50500	41914
SR-CS038-1.0/1.7	10/25/2012	4069582	11600	18700	22700	2740	20600	10600	9780	5790	4510	7230	5150	10200	1360 J	24200	13800	3920	41700	46700	22900	279000	238940

TABLE D-4
Analytical Results - PAHs

Sample ID	Sample Date	SDG	1-Methylnaph-thalene (µg/kg)	2-Methylnaph-thalene (µg/kg)	Acenaph-thene (µg/kg)	Acenaph-thylene (µg/kg)	Anthracene (µg/kg)	Benzo(a)-anthracene (µg/kg)	Benzo(a)-pyrene (µg/kg)	Benzo(b)-fluoranthene (µg/kg)	Benzo(g,h,i)-perylene (µg/kg)	Benzo(k)-fluoranthene (µg/kg)	Benzo(e)-pyrene (µg/kg)	Chrysene (µg/kg)	Dibenz(a,h)-anthracene (µg/kg)	Fluoranthene (µg/kg)	Fluorene (µg/kg)	Indeno(1,2,3-c,d)pyrene (µg/kg)	Naphthalene (µg/kg)	Phenan-threne (µg/kg)	Pyrene (µg/kg)	Total PAH (lab reported) (µg/kg)	TOTAL PAH- 13 (µg/kg)
SR-CS038-1-0.0/0.5	12/12/2012	4071872			790	70.3 J	748	332	295	171		218		331		847	397		1120	1310	779		7408.3
SR-CS038A-0.0/0.5	10/25/2012	4069582	3980	6280	7420	501 J	7090	5100	4840	4100	2610	3210	2800	4930	867	15400	4290	2190	13600	22100	13500	122000	106081
SR-CS038A-0.5/1.0	10/25/2012	4069582	971	1500	1260	200 U	543	216 J	200 U	129 J	200 U	200 U	200 U	192 J	200 U	544	441	200 U	7050	1740	726	15800	12841
SR-CS038B-0.0/0.5	10/25/2012	4069582	67.5 J	88.6 J	63 U	63 U	23.9 J	63 U	63 U	18.2 U	63 U	63 U	63 U	14.3 U	63 U	63 U	63 U	63 U	3070	76.2 J	63 U	3490	3170.1
SR-CS038C-0.0/0.5	10/25/2012	4069582	2340	3490	3360	237 U	2840	960	794	557	404 J	442 J	457 J	950	237 U	4000	1970	289 J	5910	8650	3320	40600	33753
SR-CS038C-0.5/1.0	10/25/2012	4069582	56.8 U	11.7 U	62.2 U	62.2 U	12.7 U	62.2 U	62.2 U	18 U	62.2 U	62.2 U	62.2 U	14.1 U	62.2 U	62.2 U	62.2 U	62.2 U	23.5 U	15.9 U	62.2 U	42.6	581.8 U
SR-CS038D-0.0/0.5	10/25/2012	4069582	175	272	294	64 U	389	221	187	136	83.8 J	120 J	99.2 J	215	64 U	524	215	69.6 J	291	918	483	4650	3993
SR-CS038D-0.5/1.0	10/25/2012	4069582	57.6 U	11.8 U	63.2 U	63.2 U	12.9 U	63.2 U	63.2 U	18.2 U	63.2 U	63.2 U	63.2 U	14.4 U	63.2 U	63.2 U	63.2 U	63.2 U	23.8 U	16.1 U	63.2 U	15.5	591 U
SR-CS038D-1.0/2.0	10/25/2012	4069582	56 U	11.5 U	61.4 U	61.4 U	12.6 U	61.4 U	61.4 U	17.7 U	61.4 U	61.4 U	61.4 U	14 U	61.4 U	61.4 U	61.4 U	61.4 U	23.1 U	15.7 U	61.4 U	42.9	574.3 U
SR-CS038D-2.0/2.6	10/25/2012	4069582	72.5 J	13 J	63.1 U	63.1 U	59.9 J	63.1 U	63.1 U	18.2 U	63.1 U	63.1 U	63.1 U	14.3 U	63.1 U	63.1 U	76.9 J	63.1 U	39.4 J	122 J	63.1 U	511	298.2
SR-CS039-0.0/0.5	11/20/2012	4070900			65.3 U	65.3 U	91.8 J	65.3 U	65.3 U	24.5 J		65.3 U		47.4 J		103 J	65.3 U		24.6 UJ	153	102 J		521.7
SR-CS039-0.0/0.5R	11/20/2012	4070900			72.3 U	72.3 U	67.3 J	72.3 U	72.3 U	32.1 J		72.3 U		57.6 J		120 J	72.3 U		88.1 J	186	115 J		666.1
SR-CS039-0.5/1.0	11/20/2012	4070900			69.7 U	69.7 U	41.9 J	69.7 U	69.7 U	21.3 J		69.7 U		38.2 J		86.9 J	69.7 U		33.8 J	152 J	83.3 J		457.4 J
SR-CS039-0.5/1.0R	11/20/2012	4070900			84.6 U	84.6 U	30.3 J	84.6 U	84.6 U	24.4 U		84.6 U		37.6 J		84.6 U	84.6 U		31.9 U	64.9 J	84.6 U		132.8 J
SR-CS040-0.0/0.5	10/25/2012	4069602	156000	251000	213000	19700 J	145000	82800	69500	40800	32200	57400	36400	75900	12300 U	196000	126000	28000	640000	400000	173000	2720000	2239100
SR-CS040-0.5/1.0	10/25/2012	4069602	670000	1080000	789000	82700 J	581000	231000	182000	131000	78000 J	120000 J	92200 J	223000	64400 U	562000	492000	69900 J	2680000	1350000	508000	9850000	7931700
SR-CS040-1.0/1.8	10/25/2012	4069602	74700	123000	108000	7880 U	98800	30100	20100	12500 J	7880 U	11700 J	9190 J	27100	7880 U	64600	76200	7880 U	278000	214000	80000	1240000	1021100
SR-CS040-1-0.0/0.5	12/12/2012	4071818			67.4 UJ	67.4 UJ	13.8 UJ	67.4 UJ	67.4 UJ	19.4 UJ		67.4 UJ		21.5 J		67.4 UJ	67.4 UJ		25.4 UJ	23.5 J	67.4 UJ		45 J
SR-CS040-1-0.0/0.5R	12/13/2012	4071867			38200 J	2950 J	26700 J	14100 J	11800 J	8700 J		8640 J		13500 J		40600 J	21900 J		101000 J	81100 J	33600 J		402790 J
SR-CS040-1-0.5/1.0	12/12/2012	4071819			65800 J	5070 U	46500	25400	20800 J	12200		15500 J		23800		64500 J	42400 J		108000 J	155000 J	62800		642700 J
SR-CS040-1-0.5/1.0R	12/13/2012	4071867			124000 J	8310 J	74600	41300	34900 J	20100		27300 J		37300		111000 J	74200 J		248000 J	259000 J	101000		1161010 J
SR-CS040-1-1.0/1.6R	12/13/2012	4071867			146000 J	12800 U	76700 J	47700 J	43000 J	24400 J		34500 J		42200 J		129000 J	74000 J		423000 J	272000 J	118000 J		1430500 J
SR-CS040-1-1.0/2.0	12/12/2012	4071819			16300 J	1220 U	11600 J	6190 J	5880 J	3490 J		4770 J		6180 J		19000 J	7800 J		55000 J	34100 J	14700 J		185010 J
SR-CS040-1-2.0/2.5	12/12/2012	4071819			156	57.8 U	135	75.8 J	60.3 J	34.6 J		57.8 U		68.9 J		186	85.9 J		1620	352	161		2935.5
SR-CS040A-0.0/0.5	10/25/2012	4069582	17200	27300	32800	2250 J	23200	11800	9770	8040	4680	5660	5260	10100	2120 U	31700	19300	3930 J	63000	67200	24600	364000	309420
SR-CS040A-0.5/1.0	10/25/2012	4069582	90900	145000	144000	16100 U	110000	48000	39100	23600 J	16700 J	23300 J	21000 J	46200	16100 U	121000	70600	16100 U	576000	305000	125000	1910000	1631800
SR-CS040A-1.0/1.7	10/25/2012	4069582	24200	39200	47100	4230 U	37600	20400	18700	11600	9860	14200	10100	21500	4230 U	55800	26700	7750 J	156000	107000	46500	650000	563100
SR-CS040A-1.7/2.1	10/25/2012	4069582	1580	2840	3270	306 U	1110	479 J	357 J	244 J	306 U	306 U	306 U	389 J	306 U	1830	1360	306 U	15200	3880	1410	34700	29529
SR-CS040B-0.0/0.5	10/25/2012	4069602	405	450	736	72.4 U	953	734	637	532	402	457	392	756	129 J	1700	557	316	537	2730	1510	13600	11839
SR-CS040B-0.5/1.0	10/25/2012	4069602	2620	2840	3870	196 J	1010	898	862	696	440	627	517	871	150 J	1950	1810	378	401	3970	1770	25400	18931
SR-CS040B-1.0/2.0	10/25/2012	4069602	8640	12400	8420	411 J	3800	1560	1220	1050	640	867	753	1590	311 U	4230	4810	528 J	6800	11600	4960	73800	51318
SR-CS040B-2.0/3.2	10/25/2012	4069602	61500	95000	98600	4880 U	105000	33800	23900	11800	7670 J	17000	11800	31700	4880 U	87000	74400	6370 J	95400	237000	86000	1080000	901600
SR-CS040B-2.0/3.2R	10/25/2012	4069602	91500	147000	143000	5880 J	111000	34100	25700	11800	9120 J	19700	13000	32100	4800 U	86100	100000	8090 J	147000	274000	84700	1330000	1075080
SR-CS040C-0.0/0.5	10/25/2012	4069602	514	659	799	68.6 U	456	229	196	160	96.2 J	140	112 J	225	68.6 U	637	446	85.6 J	383	1420	550	7070	5641
SR-CS040C-0.5/1.0	10/25/2012	4069602	815	916	107 J	409	588 J	573 J	462 J	294 J	427 J	324 J	571 J	93.9 J	1180 J	443	277 J	748	1380	987 J	10900	8791	
SR-CS040C-0.5/1.0R	10/25/2012	4069602	513	678	823	203 J	680	1120 J	1090 J	788 J	538 J	892 J	608 J	1030 J	179 J	2350 J	460	494 J	642	2130	1730 J	16300	13938
SR-CS040C-1.0/1.6	10/25/2012	4069602	103 J	156	190	61.7 U	212	232	275	176	149	234	148	225	61.7 U	542	154	132	165	716	423	4170	3544
SR-CS040D-0.0/0.5	10/25/2012	4069602	680	1090	1020	62.1 U	491	182	139	89.7 J	81.4 J	104 J	81 J	181	62.1 U	650	481	62.1 U	1780	1660	580	9330	7357.7
SR-CS040D-0.5/1.0	10/25/2012	4069602	1940	2970	3270	186	1920	1230	1260	800	766	853	707	1250	244	3110	1680	635	4630	6110	2870	35700	29169
SR-CS040D-1.0/1.8	10/25/2012	4069602	2360	3740	4310	302 J	2920	1680	1640	1130	940	1150	901	1570	278 J	4080	2370	810	5240	8090	3630	46200	38112
SR-CS040D-1.0/1.8R	10/25/2012	4069602	1850	2870	3640	294 J	2950	1820	1850	1440	1020	1210	1010	1650	291 J	4460	2200	898	4040	8540	3500	44500	37594
SR-CS041-0.0/0.5	11/6/2012	4070106			923	138 J	1140	873	898	679		629		769		1980	676		1030	2870	1830		14435
SR-CS041-0.5/1.0	11/6/2012	4070106			1370	273 U	2190	1880	1740	1290		1360		1860		5360	1370		562	7890	4340		31212
SR-CS042-0.0/0.5	11/28/2012	4071133			157 J	89.6 U	248	186	169 J	112 J		122 J		189		384	111 J		157 J	517	385		2737
SR-CS042-0.5/1.0	11/28/2012	4071133			64.4 U	64.4 U	45.7 J	64.4 U	64.4 U	25.5 J		64.4 U		46 J		74.2 J	64.4 U		36.5 J	98.1 J	71.3 J		397.3
SR-CS042A-0.0/0.5	11/28/2012	4071133			83.4 J	60.7 U	144	113 J	99.6 J	68.8 J		72 J		108 J		225	60.7 U		64.8 J	280	206		1464.6
SR-CS042A-0.5/1.0	11/28/2012	4071133			59.2 U	59.2 U	12.1 U	59.2 U	59.2 U	17.1 U		59.2 U		13.5 U		59.2 U	59.2 U		22.3 U	18.4 J	59.2 U		18.4
SR-CS042B-0.0/0.5	11/28/2012	4071133			179	76.2 U	379	229	198	140 J		154		225		510	151 J		194	770	471		3600
SR-CS042B-0.5/1.0	11/28/2012	4071133			81.7 U	81.7 U	52.6 J	81.7 U	81.7 U	23.6 U		81.7 U		30.9 J		81.7 U	81.7 U		30.8 U	136 J	81.7 U		219.5
SR-CS043-0.0/0.5	11/6/2012	4070106			840	132 J	807	671	685	483		553		671		1470	567		1200	2170	1440		11689
SR-CS043-0.5/1.0	11/6/2012	4070106			236	151 J	413	586	567	542		418		602		1140	251		531	1100	1070		7607
SR-CS044-0.0/0.5	11/8/2012	4070371			170	65 U	124 J	115 J	88.6 J	56.6 J		67.8 J		98.2 J		220	99.9 J		307	395	215		1957.1
SR-CS044-0.5/1.0	11/8/2012	4070371			66.9 U	66.9 U	42.1 J	66.9 U	66.9 U	43.3 J		66.9 U		68.9 J		144	66.9 U		64.4 J	108 J	138		608.7
SR-CS045-0.0/0.5	11/6/2012	4070106			2570	128 J	1090	587	617	429		467		537		1890	1140		551	3660	1480		15146
SR-CS045-0.5/1.0	11/6/2012	4070106			6860	261 U	2650	1390	1540	1120		1180		1370		5030	2860		772	10400	4260		39432
SR-CS046-0.0/0.5	11/8/2012	4070278			1510	78.8 J	708	373	346	251		224		335		983	708		4740	2240	941		13437.8
SR-CS046-0.5/1.0	11/8/2012	4070278			5940	290 U	2730	1580	1450	955		1080		1370		4350	2840		14200	8590	3860		48945
SR-CS047-0.0/0.5	11/6/2012	4070106			506	75.2 U	533	376	353	219		267		354		847	317		266	1220	895		6153
SR-CS047-0.5/1.0	11/6/2012	4070106			196	63.3 U	94.6 J	66.1 J	63.3 U	35.2 J		63.3 U		53.5 J		115 J	63.3 U		50.4 J	246	121 J		977.8
SR-CS048-0.0/0.5	11/8/2012	4070278			1170 J	55.3 J	629 J	419 J	436 J	310 J		296 J		451 J		970 J	399 J		382 J	1710 J	938 J		8165.3 J
SR-CS048-0.0/0.5R	11/8/2012	4070278			477 J	33.2	158 J	134 J	164 J	98.7 J		102 J		134 J		265 J	112 J		147 J	460 J	283 J		2567.9 J
SR-CS048-0.5/1.0	11/8/2012	4070278			113 J	10 U	21.3 J	37 J	49.8 J	28.8 J		27.5 J		39.9 J		57 J	15.4 J		11.3 J	52 J	76.6 J		529.6 J
SR-CS048-0.5/1.0R	11/8/2012	4070278			328 J	64.2 U	89.9 J	86.2 J	94 J	54.2 J		64.2 UJ		91.3 J		204 J	64.2 UJ		24.2 UJ	225 J	256 J		1428.6 J
SR-CS049-0.0/0.5	11/6/2012	4070106			1840	668	3040	3210	2980	2150		2210		2700		7000	1810		1320	4170	6620		39718
SR-CS049-0.5/1.0	11/6/2012	4070106			136	59.1 U	224	199	150	104 J		108 J		158		588	99.3 J		26.7 J	323	574		2690
SR-CS050-0.0/0.5	11/8/2012	4070371			2080	292	2460	1520	1490	1140		951		1540		2970	1430		191	5460	3030		24554
SR-CS050-0.5/1.0	11/8/2012	4070371			5340	410 J	4830	2980	2730	1800		1950		2650		6310	3360		356 J	12400	6460		51576
SR-CS051-0.0/0.5	11/9/2012	4070377			132	65.9 U	34.5 J	84.9 J	80.9 J	43.4 J		65.9 U		74 J		128 J	72.6 J		24.8 U	63 J	128 J		841.3
SR-CS052-0.0/0.5	11/7/2012	4070189			248	92.9 J	622	520	561	347		445		534		1120	234		176	1060	981		6940.9
SR-CS053-0.0/0.5	11/8/2012	4070377			60.9 J	58.3 U	11.9 U	58.3 U	58.3 U	16.8 U		58.3 U		23.4 J		58.3 U	58.3 U		22 U	34.8 J	58.3 U		119.1
SR-CS054-0.0/0.5	11/8/2012	4070280			353	69.8 U	408	325	355	233		247		371		600	235		221	917	575		4840
SR-CS055-0.0/0.5	11/8/2012	4070280			86.2 U	86.2 U	84.6 J	108 J	101 J	74.3 J		86.2 U		99.8 J		209	86.2 U		75.2 J	250	205		1206.9

TABLE D-4
Analytical Results - PAHs

Sample ID	Sample Date	SDG	1-Methylnaph-thalene (µg/kg)	2-Methylnaph-thalene (µg/kg)	Acenaph-thene (µg/kg)	Acenaph-thylene (µg/kg)	Anthracene (µg/kg)	Benzo(a)-anthracene (µg/kg)	Benzo(a)-pyrene (µg/kg)	Benzo(b)-fluoranthene (µg/kg)	Benzo(g,h,i)-perylene (µg/kg)	Benzo(k)-fluoranthene (µg/kg)	Benzo(e)-pyrene (µg/kg)	Chrysene (µg/kg)	Dibenz(a,h)-anthracene (µg/kg)	Fluoranthene (µg/kg)	Fluorene (µg/kg)	Indeno(1,2,3-c,d)pyrene (µg/kg)	Naphthalene (µg/kg)	Phenan-threne (µg/kg)	Pyrene (µg/kg)	Total PAH (lab reported) (µg/kg)	TOTAL PAH- 13 (µg/kg)
SR-CS056-0.0/0.7	11/9/2012	4070377			294	81 J	460	340	381	230		245		371		729	202		171	869	791		5164
SR-CS057-0.0/0.5	11/8/2012	4070377			211	62.6 J	366	438	463	318		363		393		1110	193		74.5 J	1280	989		6261.1
SR-CS058-0.0/0.5	10/24/2012	4069479			10.4 U	10.4 U	2.4 J	10.4 U	10.4 U	3 U		10.4 U		6.4 J		10.4 U	10.4 U		3.9 U	9.1 J	10.4 U		17.9
SR-CS059-0.0/0.5	10/24/2012	4069584			58.5 U	58.5 U	29.9 J	58.5 U	58.5 U	46.9 J		58.5 U		33.2 J		61.7 J	58.5 U		22 U	52.5 J	61.4 J		285.6
SR-CS060-0.0/0.5	10/24/2012	4069584			65.3 U	65.3 U	83.6 J	76.2 J	65.3 U	50.6 J		65.3 U		68.2 J		152	65.3 U		50.5 J	154	160		795.1
SR-CS061-0.0/0.5	11/9/2012	4070414			98.1 U	98.1 U	30.7 J	98.1 U	98.1 U	39 J		98.1 U		54.5 J		100 J	98.1 U		90.4 J	89 J	98.1 U		403.6
SR-CS062-0.0/0.5	10/24/2012	4069584			56.5 U	56.5 U	36.8 J	56.5 U	56.5 U	30.9 J		56.5 U		46.1 J		92.8 J	56.5 U		21.3 U	71.2 J	90.3 J		368.1
SR-CS063-2.0/3.0	10/24/2012	4069584			540	75.8 U	552	282	257	150 J		184		305		715	339		375	1310	798		5807
SR-CS064-0.0/0.5	10/24/2012	4069584			59 U	59 U	15.8 J	59 U	59 U	17 U		59 U		13.4 U		59 U	59 U		22.2 U	41.4 J	59 U		57.2
SR-CS065-2.0/3.0	10/10/2012	4068659			8810	1370 U	7130	5260	4620	2780		3580		5130		12800	6120		1520 J	23100	11700		92550
SR-CS066-0.0/0.5	10/24/2012	4069584			178	72.3 U	28.1 J	72.3 U	72.3 U	20.8 U		72.3 U		16.4 U		72.3 U	72.3 U		27.2 U	111 J	72.3 U		317.1
SR-CS068-0.0/0.5	10/4/2012	4068266			403	35.3	207	164	217	125		120		167		316	169		245	595	517		3280.3
SR-CS069-0.0/0.5	10/3/2012	4068267			208	18.3 J	113	102	99.8	69.9		71.1		95.7		213	115		84.8	409	244		1843.6
SR-CS070-0.0/0.5	10/4/2012	4068266			3120	213	2220	1350	1150	760		710		1160		3000	1740		4760	6470	3500		30153
SR-CS071-2.0/3.0	10/4/2012	4068268			2540	386	1780	1430	1480	940		1110		1440		3240	1530		1980	5490	3330		26676
SR-CS072-0.0/0.5	10/3/2012	4068267			1730	165	2400	2010	2140	1580		1500		2020		3160	1210		530	4850	3320		26615
SR-CS073-0.0/0.5	10/3/2012	4068205			154	62.3 U	103 J	106 J	116 J	85 J		79.1 J		101 J		227	82.9 J		45.9 J	345	225		1669.9
SR-CS074-0.0/0.5	10/25/2012	4069584			2180	309	1780	996	1140	811		710		1110		2360	1200		5150	5100	2650		25496
SR-CS075-0.0/0.5	10/3/2012	4068205			4160	398 J	2960	2780	2540	1820		1800		2710		5620	2650		2340	10400	6050		46228
SR-CS076-0.0/0.5	10/24/2012	4069584			771	87.7 U	538	600	655	525		512		632		1550	420		869	2000	1360		10432
SR-CS077-0.0/0.5	10/3/2012	4068164			22.5 J	15.9 U	44.6	97.7	103	92.7		105		120		252	24.2 J		35.6	201	219		1317.3
SR-CS078-0.0/0.5	10/10/2012	4068659			239	76.6 U	221	341	376	303		298		352		741	150 J		580	820	617		5038
SR-CS079-0.0/0.5	10/3/2012	4068164			66.6	52.1 J	476	697	726	616		523		696		1490	93.7		59.5	942	1280		7717.9
SR-CS080-0.0/0.5	10/10/2012	4068659			234 J	122 U	433	277	256	171 J		234 J		297		643	515		9810	1240	546		14656
SR-CS081-0.0/0.5	10/3/2012	4068269			97.3 U	97.3 U	116 J	208	225	198		149 J		214		333	97.3 U		57.7 J	221	400		2121.7
SR-DS040-1A-0.0/0.5	12/19/2012	4072174	27400	48700	57100	12800 U	48900	30400	31900	17200 J	15000 J	27600	16000 J	32000	12800 U	97200	37600	13700 J	192000	148000	75300	911000	795200
SR-DS040-1A-0.5/1.0	12/19/2012	4072174	546	900	1010	103 U	792	485	529	269	284	456	284	509	103 U	1550	600	245	3780	2510	1170	15800	13660
SR-DS040-2-0.0/0.5	12/19/2012	4072174	23.5 J	27.8 J	26.3 J	16.5 U	26.4 J	35.1	33.6	20.4 J	18.2 J	34.9	21.9 J	42	16.5 U	81.1	18.9 J	16.5 U	53.2	77.9	65.9	614	515.7
SR-DS040-2-0.5/1.0	12/19/2012	4072174	962	1490	1300	74.9 J	793	524	495	309	219	367	247	516	73.6 J	1300	777	213	2910	2420	1110	15900	12895.9
SR-DS040-2-1.0/2.0	12/19/2012	4072174	7440	12600	11800	981	10800	4750	4270	2250	1760	3110	2150	4980	534 J	12900	7470	1590	35900	27400	11700	162000	138311
SR-DS040-2-2.0/3.0	12/19/2012	4072174	154	272	283	47.9 U	285	146	131	73.1 J	56.5 J	99.7	64.4 J	136	47.9 U	429	198	51 J	1250	782	330	4730	4142.8
SR-DS040-3-0.0/0.5	12/19/2012	4072174	1090	1840	1900	205 U	1730	827	814	426	396 J	610	381 J	849	205 U	2190	1200	347 J	5400	4190	1880	26000	22016
SR-DS040-3-0.5/1.0	12/19/2012	4072174	4420	7600	8470	400 U	7120	3790	3700	2180	1810	2660	1830	4010	400 U	10300	4410	1590	26700	16300	8680	114000	98320
SR-DS040-3-1.0/1.5	12/19/2012	4072174	223	392	522	38.6 U	416	221	235	147	124	159	118	220	38.6 U	700	280	109	1300	1180	523	6800	5903
SR-DS040-4-0.0/0.3	12/19/2012	4072174	3110	5050	5440	298 J	3580	1780	1770	921	814	1290	904	1820	224 U	4620	2970	714	10000	9700	4110	58200	48299
SR-DS040-4-0.5/1.5	12/19/2012	4072174	35.2 J	62.4 J	43.8 J	10.4 U	9.4 J	10.4 U	10.4 U	3 U	10.4 U	10.4 U	10.4 U	3.6 J	10.4 U	10.8 J	15.4 J	10.4 U	281 J	29.4 J	10.4 U	512 J	393.4 J
SR-DS040-4-0.5/1.5R	12/19/2012	4072174	9.5 UJ	1.9 UJ	10.4 UJ	10.4 U	2.1 UJ	10.4 U	10.4 U	3 U	10.4 U	10.4 U	10.4 U	2.4 U	10.4 U	10.4 U	10.4 U	10.4 U	3.9 UJ	2.6 UJ	10.4 U	4.10E-09 J	97.2 UJ
SR-DS040-4-1.5/2.1	12/19/2012	4072174	9.8 U	14.4 J	16.6 J	10.8 U	16.3 J	10.8 U	10.8 U	3.1 U	10.8 U	10.8 U	10.8 U	7.8 J	10.8 U	20.4 J	10.8 U	10.8 U	34.8	39.9	16.9 J	214	152.7
SR-S12-0.0/2.0	12/12/2012	4071812			64.2 U	64.2 U	13.2 U	64.2 U	64.2 U	18.5 U		64.2 U		14.6 U		64.2 U	64.2 U		24.2 U	16.4 U	64.2 U		600.5 U
SR-S12-2.0/3.6	12/12/2012	4071812			62.7 U	62.7 U	12.8 U	62.7 U	62.7 U	18.1 U		62.7 U		14.3 U		62.7 U	62.7 U		23.6 U	16 U	62.7 U		586.4 U
SR-S14-0.0/0.9	11/29/2012	4071220			61.6 U	61.6 U	12.7 J	61.6 U	61.6 U	43.9 J		61.6 U		49.3 J		112 J	61.6 U		23.2 U	52.8 J	79.8 J		350.5
SR-S15-0.0/2.0	11/28/2012	4071220			95.8 U	95.8 U	19.6 U	95.8 U	95.8 U	39.3 J		95.8 U		40.2 J		95.8 U	95.8 U		36.1 U	40.3 J	95.8 U		119.8
SR-S15-0.0/2.0R	11/28/2012	4071220			84.7 U	84.7 U	17.4 U	84.7 U	84.7 U	29.8 J		84.7 U		32.4 J		84.7 U	84.7 U		31.9 U	40.9 J	84.7 U		103.1
SR-S15-2.0/2.9	11/28/2012	4071220			62.6 U	62.6 U	12.8 U	62.6 U	62.6 U	18.1 U		62.6 U		14.2 U		62.6 U	62.6 U		23.6 U	16 U	62.6 U		585.5 U
SR-S16-0.0/2.0	11/29/2012	4071220			64.2 U	64.2 U	13.2 U	64.2 U	64.2 U	18.5 U		64.2 U		14.6 U		64.2 U	64.2 U		24.2 U	16.4 U	64.2 U		600.5 U
SR-S16-2.0/3.4	11/29/2012	4071220			61.6 U	61.6 U	12.6 U	61.6 U	61.6 U	17.8 U		61.6 U		14 U		61.6 U	61.6 U		23.2 U	15.7 U	61.6 U		576.1 U
SR-S19A-0.0/2.0	11/28/2012	4071220			67.3 U	67.3 U	13.8 U	67.3 U	67.3 U	19.4 U		67.3 U		15.3 U		67.3 U	67.3 U		25.4 U	17.2 U	67.3 U		629.5 U
SR-S19A-2.0/4.6	11/28/2012	4071220			61.9 U	61.9 U	12.7 U	61.9 U	61.9 U	17.9 U		61.9 U		14.1 U		61.9 U	61.9 U		23.3 U	15.8 U	61.9 U		579 U
SR-S19B-0.0/2.0	11/28/2012	4071220			277	60.3 U	335	389	434	314		310		418		875	176		52.6 J	654	699		4933.6
SR-S19B-2.0/4.7	11/28/2012	4071220			173 J	64 U	250 J	346	354	287		254		383		894	118 J		89.5 J	805 J	709		4662.5
SR-S19B-2.0/4.7R	11/28/2012	4071220			93.3 J	62.9 U	148 J	228	247	210		173		243		568	69.1 J		67.3 J	470 J	428		2944.7
SR-S22-0.0/2.0	11/7/2012	4070195			8050	721 J	6580	4010	3390	2370		2300		3870		8630	4920		4740	16800	8890		75271
SR-S22-0.0/2.0R	11/7/2012	4070195			7180	774 J	6260	4120	3850	2690		2880		4350		9770	4590		4520	17000	9180		77164
SR-S22-2.0/3.6	11/7/2012	4070195			897	146 U	865	2160	1790	1100		839		3290		3060	763		521	4440	4380		24105
SR-S24-0.0/2.0	10/12/2012	4068833			4320	376	4080	1810	1590	1180		1060		1880		4300	3040		6440	9430	4270		43776
SR-S24-2.0/6.0	10/12/2012	4068833			949	104 J	839	436	379	232		240		438		1040	543		860	2210	1130		9400
SR-S24-2.0/6.0R	10/12/2012	4068833			919	99.5 J	826	410	353	216		211		403		1010	503		801	2430	1160		9341.5
SR-S30-0.0/2.0	10/12/2012	4068921			908 J	100 UJ	713 J	315 J	258 J	151 J		193 J		286 J		730 J	514 J		3290 J	1640 J	681 J		9679 J
SR-S30-0.0/2.0R	10/12/2012	4068921			2040 J	241 J	1680 J	704 J	595 J	418 J		393 J		642 J		1820 J	1200 J		5760 J	3860 J	1690 J		21043 J
SR-S30-2.0/2.9	10/12/2012	4068921			169	16.2 J	136	50.5	41.8	53.8		41.8		48.1		131	99.6		514	314	126		1741.8
SR-S31-0.0/2.0	10/11/2012	4068833			68.4 U	68.4 U	14 U	68.4 U	68.4 U	19.7 U		68.4 U		15.5 U		68.4 U	68.4 U		25.8 U	17.4 U	68.4 U		639.6 U
SR-S31-2.0/5.0	10/11/2012	4068833			75.8 U	75.8 U	15.5 U	75.8 U	75.8 U	21.9 U		75.8 U		17.2 U		75.8 U	75.8 U		28.6 U	19.3 U	75.8 U		708.9 U
SR-S32-0.0/2.0	11/7/2012	4070195			224	66.4 U	218	139	123 J	102 J		92.6 J		121 J		307	152		172	501	279		2430.6
SR-S32-2.0/4.0	11/7/2012	4070195			62.1 U	62.1 U	12.7 U	62.1 U	62.1 U	17.9 U		62.1 U		14.1 U		62.1 U	62.1 U		23.4 U	15.8 U	62.1 U		580.7 U
SR-S33-0.0/2.0	10/11/2012	4068833			60.1 U	60.1 U	12.3 U	60.1 U	60.1 U	17.3 U		60.1 U		13.6 U		60.1 U	60.1 U		22.6 U	15.3 U	60.1 U		561.9 U
SR-S33-2.0/4.5	10/11/2012	4068833			71.6 U	71.6 U	14.7 U	71.6 U	71.6 U	20.7 U		71.6 U		16.3 U		71.6 U	71.6 U		27 U	18.3 U	71.6 U		669.8 U
SR-S34-0.0/2.0	10/11/2012	4068833			157	62.3 U	202	148	137	84.7 J		105 J		146		320	113 J		95.7 J	378	296		2182.4
SR-S34-2.0/5.0	10/11/2012	4068833			63.6 U	63.6 U	13 U	63.6 U	63.6 U	18.3 U		63.6 U		14.5 U		63.6 U	63.6 U		24 U	16.2 U	63.6 U		594.8 U
SR-S36-0.0/2.0	10/11/2012	4068833			877	92.8 J	510	338	336	244		224		345		679	465		1470	1140	643		7363.8
SR-S36-2.0/5.6	10/11/2012	4068838			66.5 U	66.5 U	13.6 U	66.5 U	66.5 U	19.2 U		66.5 U		15.1 U		66.5 U	66.5 U		119 J	27.5 J	66.5 U		146.5
SR-S37-0.0/2.0	10/11/2012	4068838			59.5 U	59.5 U	12.2 U	59.5 U	59.5 U	17.2 U		59.5 U		13.5 U		59.5 U	59.5 U		22.4 U	15.2 U	59.5 U		556.5 U
SR-S37-2.0/5.1	10/11/2012	4068838			70.2 U	70.2 U	14.4 U	70.2 U	70.2 U	20.2 U		70.2 U		15.9 U		70.2 U	70.2 U		26.4 U	17.9 U	70.2 U		656.4 U

TABLE D-4
Analytical Results - PAHs

Sample ID	Sample Date	SDG	1-Methylnaph-thalene (µg/kg)	2-Methylnaph-thalene (µg/kg)	Acenaph-thene (µg/kg)	Acenaph-thylene (µg/kg)	Anthracene (µg/kg)	Benzo(a)-anthracene (µg/kg)	Benzo(a)-pyrene (µg/kg)	Benzo(b)-fluoranthene (µg/kg)	Benzo(g,h,i)-perylene (µg/kg)	Benzo(k)-fluoranthene (µg/kg)	Benzo(e)-pyrene (µg/kg)	Chrysene (µg/kg)	Dibenz(a,h)-anthracene (µg/kg)	Fluoranthene (µg/kg)	Fluorene (µg/kg)	Indeno(1,2,3-c,d)pyrene (µg/kg)	Naphthalene (µg/kg)	Phenan-threne (µg/kg)	Pyrene (µg/kg)	Total PAH (lab reported) (µg/kg)	TOTAL PAH- 13 (µg/kg)
SR-S39-0.0/2.0	11/29/2012	4071220			82.4 U	82.4 U	19.5 J	82.4 U	82.4 U	34.7 J		82.4 U		41.6 J		88.7 J	82.4 U		31.1 U	68 J	82.4 U		252.5
SR-S39-2.0/4.8	11/29/2012	4071220			62.3 U	62.3 U	12.8 U	62.3 U	62.3 U	18 U		62.3 U		14.2 U		62.3 U	62.3 U		23.5 U	15.9 U	62.3 U		582.8 U
SR-S43-0.0/2.0	10/12/2012	4068838			1820	320	2490	2570	2670	1830		2110		2580		5750	1210		476	5490	4630		33946
SR-S43-2.0/5.7	10/12/2012	4068838			12900	1550 U	14300	13000	12900	11500		8810		12900		36100	9190		7810	50500	26900		216810
SR-S44-0.0/2.0	10/12/2012	4068838			5060	1050	8140	4760	3550	2850		2360		4350		10400	4860		783	19300	10600		78063
SR-S44-2.0/2.9	10/12/2012	4068838			75.2 U	75.2 U	25.5 J	75.2 U	75.2 U	58 J		75.2 U		78.9 J		182	75.2 U		31.5 J	107 J	137 J		619.9
SR-S45-0.0/1.9	11/29/2012	4071220			414	140 J	580	1020	1310	889		942		1120		1840	255		181	1400	1500		11591
SR-S46-0.0/2.0	11/9/2012	4070375			385 J	77.4 U	816 J	382 J	294 J	136 J		208 J		417 J		816 J	382 J		74 J	1860 J	1060 J		6830 J
SR-S46-0.0/2.0R	11/9/2012	4070375			129 J	82.8 U	267 J	142 J	107 J	63.2 J		82.8 UJ		144 J		289 J	115 J		31.2 UJ	620 J	342 J		2218.2 J
SR-S46-2.0/4.6	11/9/2012	4070375			68.7 U	68.7 U	23.8 J	68.7 U	68.7 U	19.8 U		68.7 U		21.8 J		68.7 U	68.7 U		25.9 U	86.7 J	68.7 U		132.3
SR-S47-0.0/1.6	11/10/2012	4070448			579	323	662	1790	2250	1650		1550		1890		3030	354		141	1040	3210		18469
SR-S47-0.0/1.6R	11/10/2012	4070448			348	525	826	2700	3340	2650		2420		3030		3890	261		107 J	1440	4060		25597
SR-S48-0.0/2.1	11/9/2012	4070375			71.6 U	71.6 U	21.2 J	71.6 U	71.6 U	21.8 J		71.6 U		33.6 J		71.6 UJ	71.6 U		27 U	78.2 J	71.6 UJ		154.8 J
SR-S48-0.0/2.1R	11/9/2012	4070375			79.3 U	79.3 U	51.9 J	95.5 J	83.6 J	64.6 J		79.3 U		98.2 J		190 J	79.3 U		43.6 J	184 J	167 J		978.4 J
SR-S49-0.0/1.7	11/29/2012	4071270			598	110 J	877	657	696	365		481		671		1850	374		189	2180	1850		10898
SR-S50-0.0/2.0	11/9/2012	4070375			74.6 U	74.6 U	36.1 J	74.6 U	74.6 U	39.3 J		74.6 U		69.8 J		139 J	74.6 U		28.1 U	62.1 J	101 J		447.3
SR-S50-2.0/4.4	11/9/2012	4070375			69.1 U	69.1 U	14.2 U	69.1 U	69.1 U	19.9 U		69.1 U		15.7 U		69.1 U	69.1 U		26 U	17.6 U	69.1 U		646.2 U
SR-S50-2.0/4.4R	11/9/2012	4070375			70.6 U	70.6 U	14.5 U	70.6 U	70.6 U	20.4 U		70.6 U		16 U		70.6 U	70.6 U		26.6 U	18 U	70.6 U		660.3 U
SR-S51-0.0/2.0	11/10/2012	4070448			62.7 U	62.7 U	89.5 J	270	304	205		228		272		482	62.7 U		40.2 J	166	505		2561.7
SR-S52-0.0/2.0	11/9/2012	4070415			199	68.9 U	392	653	677	596		572		688		1540	182		85.5 J	1240	1210		8034.5
SR-S52-2.0/3.7	11/9/2012	4070415			223	68 U	55.2 J	68 U	68 U	31.1 J		68 U		36.2 J		85 J	76.8 J		25.6 U	228	75.8 J		811.1
SR-S53-0.0/2.4	11/10/2012	4070448			341	140	448	1070	1240	918		877		1090		1490	232		95.4 J	1170	1320		10431.4
SR-S54-0.0/2.0	10/12/2012	4068840			13.1 U	13.1 U	4.3 J	14.4 J	14.8 J	15.1 J		13.1 U		17.4 J		32	13.1 U		4.9 U	20.7 J	25.7 J		144.4
SR-S54-2.0/3.5	10/12/2012	4068838			61.2 U	61.2 U	12.5 U	61.2 U	61.2 U	17.7 U		61.2 U		13.9 U		61.2 U	61.2 U		23.1 U	15.6 U	61.2 U		572.4 U
SR-S55-0.0/2.0	10/12/2012	4068840			31.9	10.1 U	14.3 J	22.7	27.6	19.2 J		22.1		24.8		40	17.2 J		13 J	46	36.7		315.5
SR-S55-2.0/5.2	10/12/2012	4068838			19.3 J	11.1 U	5.7 J	12.8 J	11.1 U	6.3 J		11.1 U		11.9 J		19.2 J	11.1 U		4.7 J	18 J	19 J		116.9
SR-S56-0.0/1.4	11/10/2012	4070448			65.7 U	65.7 U	68.3 J	99.5 J	116 J	84.6 J		86.2 J		107 J		175	65.7 U		36.4 J	143	158		1074
SR-S57-0.0/2.0	10/11/2012	4068741			88.1 U	88.1 U	18 U	88.1 U	88.1 U	49.8 J		88.1 U		56.3 J		108 J	88.1 U		33.2 U	77.1 J	88.1 U		291.2
SR-S57-2.0/3.5	10/11/2012	4068741			96.1	12.6 U	84.2	64.5	50.2	40.4		32.4		66.2		197	66.1		40.1	322	195		1254.2
SR-S57A-0.0/2.0	10/11/2012	4068741			72.8 U	72.8 U	18.8 J	72.8 U	72.8 U	23 J		72.8 U		27.6 J		75.1 J	72.8 U		27.4 U	107 J	72.8 U		251.5
SR-S57A-2.0/3.5	10/11/2012	4068741			66.3 J	63.6 U	15.2 J	63.6 U	63.6 U	18.3 U		63.6 U		16.8 J		63.6 U	63.6 U		23.9 U	94.3 J	63.6 U		192.6
SR-S58-0.0/2.1	11/10/2012	4070448			65.8 U	65.8 U	13.5 U	65.8 U	65.8 U	19 U		65.8 U		15 U		65.8 U	65.8 U		24.8 U	22.2 J	65.8 U		22.2
SR-S59-0.0/2.0	11/9/2012	4070415			106 J	66.9 U	155	196	214	135		166		208		394	66.9 U		41.2 J	380	364		2359.2
SR-S59-2.0/2.8	11/9/2012	4070415			9.5 U	9.5 U	11.9 J	17.9 J	12.9 J	10.6 J		10.8 J		16 J		34.2	9.5 U		3.6 U	20	25.4		159.7
SR-S60-0.0/2.0	11/29/2012	4071270			112 J	62.4 U	150	206	279	135		199		233		319	62.4 U		31.1 J	340	393		2397.1
SR-S60-2.0/3.2	11/29/2012	4071270			61.7 U	61.7 U	12.6 U	61.7 U	61.7 U	17.8 U		61.7 U		14 U		61.7 U	61.7 U		23.3 U	15.7 U	61.7 U		577 U
SR-S61-0.0/2.0	10/11/2012	4068741			24.8	13.6 J	101	121	125	112		83.5		122		247	19.7		21.8	127	194		1312.4
SR-S61-2.0/5.3	10/11/2012	4068741			185	65.1 U	76.9 J	141	160	137		99.3 J		130		224	84 J		41.3 J	269	201		1748.5
SR-S61-2.0/5.3R	10/11/2012	4068741			183	61.2 U	110 J	186	209	152		145		173		318	93.4 J		42.9 J	407	299		2318.3
SR-S61A-0.0/2.0	10/11/2012	4068741			1930 J	305 J	2000 J	2310	2210	1780		1520 J		2090		5450	1700 J		594 J	6240 J	4640		32769
SR-S61A-0.0/2.0R	10/11/2012	4068741			592 J	194 U	3510 J	1670	1630	1250		1190		3060		4150	571 J		575	3270 J	3230		24698
SR-S61A-2.0/4.9	10/11/2012	4068741			294	125 J	1030	1110	1260	848		848		1370		1550	203		165	1030	1420		11253
SR-S62-0.0/2.1	11/29/2012	4071270			66.7 J	65.7 U	127 J	191	219	101 J		146		210		303	65.7 U		34 J	256	405		2058.7
SR-S63-0.0/2.0	10/11/2012	4068743			96.1 U	96.1 U	24.5 J	96.1 UJ	96.1 UJ	76.3 J		96.1 UJ		80.5 J		160 J	96.1 U		36.2 U	97.9 J	143 J		582.2 J
SR-S63-0.0/2.0R	10/11/2012	4068743			86.7 U	86.7 U	52.8 J	252 J	318 J	409 J		262 J		401 J		881 J	86.7 U		41.4 J	584 J	696 J		3897.2 J
SR-S63-2.0/4.7	10/11/2012	4068743			319	79.9 U	300	355	376	234		301		352		689	204		248	782	659		4819
SR-S64-0.0/2.0	11/29/2012	4071270			4090	537 J	5190	3300	3070	1850		2070		3210		7440	3280		3110	13100	6840		57087
SR-S64-2.0/4.4	11/29/2012	4071270			11200	2020	7930	3970	3890	2080		2180		4310		8200	5820		12400	23600	10100		97700
SR-S66-0.0/2.0	10/11/2012	4068743			2960	420 J	4730	2670	2250	1510		1420		2690		5800	2510		745	9720	6020		43445
SR-S66-2.0/3.5	10/11/2012	4068743			180	25.6	101	99.4	120	84.8		70.4		103		214	99		53.1	336	217		1703.3
SR-S67-0.0/2.0	10/10/2012	4068743			90.3 U	90.3 U	28.6 J	102 J	104 J	98.8 J		105 J		120 J		246	90.3 U		34 U	153 J	186		1143.4
SR-S67-2.0/3.7	10/10/2012	4068743			98 U	98 U	20.1 U	98 U	98 U	39.4 J		98 U		55.8 J		98 U	98 U		44.6 J	82.7 J	98 U		222.5
SR-S69-0.0/2.0	10/10/2012	4068743			84 U	84 U	32.7 J	91.4 J	125 J	140 J		95.3 J		112 J		139 J	84 U		187	95 J	116 J		1133.4
SR-S69-2.0/4.0	10/10/2012	4068743			1100	181	1670	1420	1360	1040		970		1460		3380	724		1350	4090	3030		21775
SR-S70-0.0/2.0	11/29/2012	4071270			5630	605 J	4930	2910	3140	1690		2020		2900		6090	3470		5720	13000	6670		58775
SR-S70-2.0/2.6	11/29/2012	4071270			1290	76.2 U	1120	929	942	709		727		974		2910	659		3060	3410	2280		19010
SR-S71-0.0/2.0	10/10/2012	4068743			77.8 UJ	77.8 U	28.8 J	77.8 UJ	77.8 UJ	61.9 J		77.8 UJ		80.5 J		148 J	77.8 UJ		29.8 J	170 J	161 J		680 J
SR-S71-0.0/2.0R	10/10/2012	4068744			4130 J	527 U	7450 J	2810 J	2160 J	1230 J		1520 J		2750 J		6350 J	3530 J		1730 J	15200 J	8000 J		56860 J
SR-S71-2.0/5.4	10/10/2012	4068744			912	84 J	599	450	421	291		341		501 J		1240	463		2570	2040	1270		11182
SR-S72-0.0/1.9	11/29/2012	4071270			6780	695 J	8440	6480	5480	3530		4390		6030		13500	4250		8870	16100	11600		96145
SR-S73-0.0/2.0	10/10/2012	4068744			2640	570 U	6810	2980	2430	1450		1730		2920 J		6610	2930		1340	14800	7850		54490
SR-S73-2.0/4.6	10/10/2012	4068744			132	23.5 U	100	134	167	98		104		141 J		249	58.9		174	336	288		1981.9
SR-S75-0.0/2.0	10/10/2012	4068744			34 J	31.7 U	77	173	197	193		140		199 J		350	44.7 J		108	268	340		2123.7
SR-S75-2.0/3.4	10/10/2012	4068744			29.4 J	25.1 U	27.5 J	26.4 J	25.1 U	19.1 J		25.1 U		25.1 J		58.8	32.9 J		209	115	59.6		602.8
SR-S77-0.0/2.0	10/10/2012	4068744			800	211	1070	996	1230	850		726		1080 J		1460	541		807	2500	1790		14061
SR-S77-2.0/3.7	10/10/2012	4068744			1310 J	141 J	2110 J	1960 J	1930	1590 J		1370 J		1940 J		4940	1130 J		2670 J	6730	4470		32291
SR-S80-0.0/2.0	11/29/2012	4071220			6260	727 J	11700	4290	3600	1900		2460		4720		9670	6180		8240	22100	10300		92147
SR-S80-2.0/5.2	11/29/2012	4071220			1570	147 J	1240	653	685	380		412		690		1390	911		2600	3100	1410		15188

µg/kg = micrograms per kilogram

Appendix E
Design Modification Dredge Files

Included on CD.

Appendix F
Analytical Data Packages

Included on CD.

Appendix G
Sediment Sampling Deviation Summary

TechLaw

03061-EP-131

MEMO

To:	Mr. Darrell Nicholas, RTJV Project Manager Ms. Regina Bayer, CH2M Hill Project Manager
From:	Ms. Kim Whitlock, TechLaw Field Team Leader
Subject:	Summary of Sediment Sampling Field Deviations; Sheboygan River Legacy Act Remedial Action; October – December 2012
Task Order:	RTJV Contract No. 000001; TechLaw Project No. 03061; GLNPOCS Contract; Summary of Sediment Sampling Field Deviations, October – December 2012; Task 6
Date:	February 1, 2013

Sediment core and sample collection activities for the Sheboygan River Legacy Act Remedial Action were conducted by TechLaw and its subcontractor, Great Lakes Environmental Center (GLEC). The following list of items summarizes all field deviations from Ryba Terra – A Joint Venture (RTJV)'s Quality Assurance Project Plan (QAPP) and Sampling and Analysis Plan (SAP) and CH2M Hill's Supplemental QAPP related to sediment core collection and subsequent sediment sampling activities:

- On October 2, 2012, a meeting between the U.S. Environmental Protection Agency (EPA), CH2M Hill, Wisconsin Department of Natural Resources (WDNR), RTJV, and TechLaw was held to discuss sediment recovery issues with vibracore sampling techniques. At the conclusion of the call, it was decided that TechLaw and GLEC will adjust the sediment core collection approach as follows:
    - Use a push probe to initially determine the depth of manual penetration into sediments. If the probe can be manually inserted to two feet or greater, TechLaw/GLEC will proceed with the vibracore at this location. If less than two feet, TechLaw/GLEC will proceed with the two-inch manual coring device.
    - Once TechLaw/GLEC begins sample collection at an area (i.e., Dredge Management Unit [DMU], or Toxic Substances Control Act [TSCA] area) with one of these sampling approaches, that same approach will be used for all locations in that area.
    - TechLaw/GLEC will record the depth of manual penetration with the push probe.

- After the first of week of sediment core collection, vibracore techniques were abandoned due to poor recovery issues, delays in switching between coring methods, etc. It was recommended that the two-inch manual coring device be used exclusively, which was approved by EPA on October 5, 2012. Beginning October 8, 2012, GLEC collected all remaining cores using a two-inch manual coring device that was driven to refusal using a slam bar operated by two individuals.

- On October 10, 2012, sediment core collection was attempted at shoreline locations S64 and S66, but could not initially be collected since these locations were approximately 30 feet on land from the water's edge. TechLaw discussed this issue with EPA and Mr. Darrell Nicholas, RTJV. EPA and RTJV concluded that TechLaw/GLEC could proceed with collection of shoreline sediment cores within 10 feet of the shore. After this decision was made, GLEC was able to collect shoreline sediment core S66. However, shoreline sediment core S64 could not be located within 10 feet of shore due to concrete obstructions and low water depths. TechLaw postponed shoreline sediment core collection at S64 until further direction was obtained.

- TSCA Areas 1-5 were sampled prior to dredging to delineate vertical extent of contamination. Eight-foot and six-foot core tubes were used at TSCA Area 1 and TSCA Areas 2- 5, respectively. GLEC collected cores through the TSCA material, and TechLaw processed the cores in the following manner:
    - Total length of the core was recorded.
    - The top interval on the sediment core log was recorded as TSCA and was recorded to the depth specified by CH2M Hill based on their model (e.g., 0.85 feet [ft] below sediment surface [bss]).
    - Sample intervals were recorded as 0.85-1.85, 1.85-2.85, 2.85-3.85, and 3.85-4.85 ft bss. The photoionization detector (PID) readings were also recorded from the same intervals. For the composite sample, since each individual core potentially had a different first interval (e.g., at TSCA Area 2, the top interval at each of the three cores was 0.85-1.85, 0.97-1.97, and 0.28-1.28), TechLaw did not associate a depth interval for the composite sample, per CH2M Hill's clarification.

- Per clarification from CH2M Hill, the sediment core collected on November 6, 2012 for primary grid location CS052 was collected at the global positioning system (GPS) coordinates for CS052B to avoid the side-slope of the river.

- On November 7, 2012, a conference call was held with EPA, CH2M Hill, RTJV, and TechLaw to discuss sediment sampling. The following decisions were made during the call:
    - Primary grid sample for DMU 44 (i.e., CS044) will be shifted and collected at the location for CS044D.
    - Native clay will not be sampled if silt/sand is present in the core, and native clay will be sampled from the top interval if the core is comprised entirely of native clay.
    - Processing of TSCA Area 1 cores were discussed since GLEC's first attempt at sample location T01-1 did not have enough recovery. However, sufficient recovery was achieved after additional attempts and TSCA Area 1 cores were processed in the same manner as cores collected at TSCA Areas 2-5.

- On November 19, 2012, samples from subgrid locations CS065B and CS065C were recollected and labeled as CS065B-1 and CS065C-1, respectively. Recollection of these

cores was necessary to avoid side slopes of the river. These cores were collected for PCB analysis only.

- On November 21, 2012, TechLaw, GLEC, and CH2M Hill went out on the Sheboygan River to inaccessible shoreline locations (e.g., S19A, S39, S45, S49, S64, and S80) to determine offset locations. TechLaw subsequently provided GPS coordinates for the newly proposed shoreline sediment core locations to EPA, WDNR, CH2M Hill, and RTJV. No issues were raised with the proposed offsets and GLEC proceeded with collection of shoreline sediment cores at these new locations.

- On November 26, 2012, EPA requested that the location of CS042 be adjusted so that the sediment core would be collected from an area where dredging occurred. Additionally, EPA requested that subgrid sediment cores CS042A and CS042B be collected along with CS042.

- GPS coordinates could not be collected at CS041, CS042, CS042A, CS042B, or DS040-2 due to bridges overhead. The on-site surveyor provided assistance in locating the targeted positions and hard measurements were collected underneath the bridges for each of these locations.

- Per EPA's request on November 27, 2012, additional sediment core locations (i.e., CS019A, CS019B, and CS020D) were added to the sample priority list. These sediment cores were collected and processed as soon as possible after receipt of EPA's request. Additionally, these sediment cores were only collected for PAH analysis. If recovery was observed greater than two feet at these three sediment cores, an additional sample interval (i.e., 2.0 to 3.0 feet) was collected for PAHs. At CS019A, TechLaw observed that the 2.0-3.0 foot (ft) interval appeared impacted, but the 3.0-4.0 ft interval did not appear impacted. TechLaw sent an email to EPA and CH2M Hill to determine if the 3.0-4.0 ft interval at CS019A should be sampled. Per EPA's direction, TechLaw proceeded with collection of the 3.0-4.0 ft interval at CS019A for PAHs.

- TechLaw requested that the location for CS013 be offset directly west of the 14th Street bridge since GLEC would be unable to sample underneath the bridge due to the low bridge height. EPA subsequently approved this request via e-mail on December 6, 2012.

- Per discussions with Mr. Darrell Nicholas on December 10, 2012, GLEC collected sediment cores at DMU grids near Kiwanis Park once 75% completion was achieved within a DMU and dredging operations would not influence sampling locations.

- Multiple attempts to recover a sediment core at CS008 were made, but were unsuccessful. This location contained large rocks/gravel; therefore, sediment cores were collected at CS008A and CS008B per discussions with CH2M Hill. Since core recovery at CS008B was significantly greater than at CS008A, TechLaw processed CS008B to represent the primary grid sample within DMU 8.

- On December 12, 2012, TechLaw processed the sediment core from CS040-1 and observed free product inside the core. Per discussions with CH2M Hill, TechLaw sampled the entire sediment core for PCBs and PAHs instead of only sampling the intervals in the top foot. A duplicate sediment core was also collected at CS040-1 for quality control (QC) purposes, but was not processed so that it could be available for observation by EPA on December 13, 2012.

- Sediment core CS003 was not collected or processed until the afternoon of December 12, 2012. To expedite receipt of results, TechLaw couriered this sample, along with other samples collected in the afternoon, in a sealed cooler to Pace Analytical in Green Bay, Wisconsin.

- On December 13, 2012, TechLaw opened the duplicate sediment core from CS040-1 to allow EPA, WDNR, and CH2M Hill personnel to view the core impacted with free product. WDNR requested that the interval from 1.0-1.6 ft be collected, rather than from 1.0-2.0 ft, to avoid mixing in any of the material that was not impacted with product. TechLaw processed the duplicate sediment core to collect samples from 0.0-0.5, 0.5-1.0, and 1.0-1.6 ft.

- During sediment core processing of DS040-4, native clay material was encountered at 0.3 ft bss, with silt and sand layers beneath the clay. TechLaw consulted with CH2M Hill on how to proceed with sample collection in this core due to the presence of silt/sand below clay. It was decided that sample collection would occur from 0.0-0.3 ft bss to capture free product impacted sands, 0.5-1.5 ft bss to avoid cross-contamination of the clay layer with the product above, and 1.5-2.1 ft bss to determine concentration of contaminants in the silt/sand.

If you have any questions related to the field deviations discussed above, please contact Ms. Kim Whitlock at 312-345-8930.

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