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October 7, 2015

Mr. Kevin McKnight
Hydrogeologist
Remediation and Redevelopment Program
Wisconsin Department of Natural Resources
625 East County Road Y, Suite 700
Oshkosh, WI 54901

RE: Results Reporting
South Branch of the Manitowoc River Reconnaissance Study
Calumet County, Chilton, Wisconsin

Dear Mr. McKnight:

On behalf of Tecumseh Products Company (Tecumseh), this letter presents the findings of a reconnaissance study conducted in August 2015 downstream of the Hayton Millpond Dam in the South Branch of the Manitowoc River. The reconnaissance study was conducted at the request of the Wisconsin Department of Natural Resources (WDNR) in their letter dated January 15, 2015. The methods and means used in this reconnaissance study were established in a Sampling and Analysis Plan (SAP) that was previously submitted to WDNR in April, 2012 and since amended to include an additional two transects as requested by WDNR in their letter dated July 1, 2013 (Conditional Approval Letter). Implementation of that earlier study had been postponed pending ongoing remedial activities occurring upstream of the dam. This reconnaissance study supplements results from a WDNR-conducted sampling event completed on July 31, 2014 within the same Reconnaissance Study Area (RSA).

Site Investigation

The RSA extends from the Hayton Millpond Dam to approximately 1 mile downstream in the South Branch of the Manitowoc River. Refer to Figure 1 for a topographic map delineating the RSA. Seven transects, each with three sample locations (right, left, and center of the channel looking downstream) were selected for the reconnaissance investigation. The transect locations were defined in the SAP and later revised based on WDNR's requests in the Conditional Approval Letter. The seven proposed transect locations targeted stream sections likely to have soft sediment accumulation (i.e. slow moving sections and stream bends).

On August 18, 2015, TRC collected sediment samples at each of the seven transect locations with oversight from a WDNR representative. Each of the targeted sampling locations were initially

located in the field using a high-resolution GPS unit pre-programmed with the transect coordinates. Once a sampling transect was located, TRC and WDNR probed sediment within the creek to find adequate soft sediment for sampling. At locations where initial attempts to recover sediment were unsuccessful, coring was repeated within the nearby vicinity (<10 feet) until an adequate amount of soft sediment could be retained. All sampling locations were approved by WDNR during the investigation. The sampling locations were biased towards areas with soft sediment accumulation and did not include fast flowing portions of the river or areas dominated by coarse sand or gravel.

Sediment samples were collected using new, clean, 4-foot long, 2-inch diameter PVC tubes, pre-marked with depth increments of 0.1 feet. At each sampling location, the tube was lowered through the water column until it contacted the sediment surface, at which point the water depth was estimated to the nearest 0.1 foot. The core tube was then pushed by hand into the soft sediment until refusal was encountered and the water depth was again estimated to the nearest 0.1 foot to determine the core penetration depth (or soft sediment thickness). In order to extract a sediment sample, the top of the core tube was capped and the core was gently extracted from sediment. Upon retrieval, the bottom of the sediment core tube was immediately capped and sealed. After samples were collected, core tubes were cut down to a transportable length (approximately 1.5 feet), kept upright and placed on ice in a cooler, and transported to the TRC office in Madison, Wisconsin for sample processing. All field measurements as well as general sampling notes were recorded in a field notebook. A summary of the field measurements are included in Table 1.

Nomenclature for sample locations in the RSA used the following naming system:

In-channel samples had the prefix “IC” following the Transect ID and were identified by transect numbers (1 – 7 beginning nearest the Hayton Millpond Dam).

> For samples collected on the left side of the river, the following ID was given (where x represents the transect number):
>
> MRx-IC-00xL
>
> For samples collected on the right side of the river, the following ID was given (where x represents the transect number):
>
> MRx-IC-50xR
>
> For samples collected in the center of the river, the following ID was given (where x represents the transect number)
>
> MRx-IC-90xC

In the case of one sample location (MR4-IC-004L) an additional suffix was used to identify two discrete sample intervals from a sediment core in which two differing horizons of soft sediment were identified.

Sample Processing and Laboratory Analysis

All core tubes were processed and sampled on August 19, 2015, as per the SAP. Prior to sampling, standing water within core tubes above the sediment surface was removed using a peristaltic pump with clean tubing for each sediment core. Care was taken to preserve fine, suspended material present at the top of the core. After removing standing water, the core tubes were cut lengthwise and the sediment core was split to allow for visual logging and sample preparation. A detailed visual description of each core was prepared in accordance with the Unified Soil Classification System (USCS). The sediment core logs are included in Appendix A; representative photos of the sediment cores are included in Appendix B.

Adequate soft sediment for sample collection was recovered at 20 of the 21 sampling locations. Only soft sediment (not gravel or clay) was removed from the core tube for sample processing. In cores where discernable layers were identified within soft sediment, care was taken to collect discrete samples representing each zone. In cores without discernable soft sediment layers, all soft sediment was collected for sampling. Soft sediment sampling zones ranged in thickness from the top 1.8 inches to 12.0 inches of sediment within the core tubes.

Sediment for each sample was placed in a stainless steel bowl and thoroughly homogenized prior to being containerized, placed on ice, and transported to Pace Analytical Services, Inc., a WDNR accredited laboratory, for analyses of PCBs and Total Organic Carbon (TOC). The analytical results from the investigation are summarized in Table 2. The laboratory data sheets are included in Appendix C. Figure 2 provides a visual representation of the results and includes the results collected during WDNR's 2014 investigation for reference.

Quality assurance and quality control samples were collected in accordance with the SAP. A blind field duplicate was collected to evaluate sampling precision and was prepared by splitting the homogenized sample material into two separate containers. The duplicate sample was selected by field personnel and recorded in the field notebook; the duplicate sample identifier does not included the location of the primary sample (making it "blind" to the laboratory). The blind field duplicate submitted to the lab was from the right (facing downstream) side of Transect 3. The blind field duplicate was identified as MR-IC-DUP01 and was split from primary sample MR3-IC-503R. The relative percent difference for detected PCBs between these samples was 6.13%, indicating no issues with laboratory precision or sampling methods.

A field blank sample, consisting of analyte-free water was collected and submitted to the laboratory to verify the success of decontamination procedures between sampling. The field blank, consisted of rinsate water from a stainless steel mixing bowl that was used to homogenize samples. The field blank registered below laboratory reporting limits for both PCBs and TOC and is identified as MR-IC-FB01 on the laboratory data sheets in Appendix C.

PCB Results and SWAC Calculation

The total PCB concentrations from the August 18, 2015 sampling event range from non-detect with a 0.0286 mg/kg reporting limit (MR1-IC-901C) to 3.67 mg/kg (MR3-IC-003L). Only 5 of 20 samples had total PCB concentrations above 1 mg/kg, and only 2 samples had PCB concentrations above 2 mg/kg. The distribution and range of results indicates low levels of PCBs below the Hayton Millpond Dam. The sampling methodology did not "dilute" any sample results or otherwise bias the results.

The SWAC approach has been used at numerous sediment remediation sites in the U.S. and Wisconsin. The SWAC represents the area of exposure across a river or creek system and is the widely accepted methodology used to evaluate potential risk and risk reduction achieved after site remediation.

To calculate a SWAC for the reconnaissance study, the average total PCB concentration of each transect associated with an individual stream segment was multiplied by the stream segment's surface area. The stream segment bounds were defined as the mid-points between adjacent transects. The quotients of the average total PCB concentration per segment and the segment's surface area were then summed for the entire RSA and divided by the total stream surface area within the RSA to produce a SWAC. Using this methodology, a SWAC of 0.53 mg/kg was calculated for the RSA. Figure 3 illustrates the sample locations, SWAC segments, and the data associated with generating the SWAC. This SWAC is biased high as sampling areas were focused on portions of the stream having the greatest sediment accumulation and the sample cores did not include any native material (stone and or clay).

The SWAC confirms the effectiveness of the upstream HARP remediation program, the protectiveness of the dam, that there is no on-going source of contamination, and that there is little PCB-associated risk downstream of the dam.

Conclusion

Although not relevant to the SWAC calculation, it is important to note that the individual sampling results show that PCB concentrations found within the RSA fall within a fairly narrow range, between not detected (with a reporting limit of 0.0286) and 3.67 mg/kg, with the majority of individual samples falling well below 1 mg/kg. The SWAC (0.53 mg/kg) indicates a very low risk of exposure to PCBs in the bioactive sediment layer.

Further, the individual sample results were from locations identified by the WDNR as the preferential areas of soft sediment accumulation within the river, with a bias toward sampling the thickest deposits of soft sediment. The low-level individual sample results demonstrate that soft sediment downstream of the Hayton Millpond dam does not present an ongoing source or risk.

Please do not hesitate to contact me at (312) 800-5910 if you have any questions regarding this reconnaissance study.

Sincerely,

TRC

Chris Harvey, PE

Enclosures:

Figure 1. Site Location Map
Figure 2. Transect Locations
Figure 3. SWAC Calculations

Table 1. Sediment Sampling Field Measurements
Table 2. Analytical Results Summary

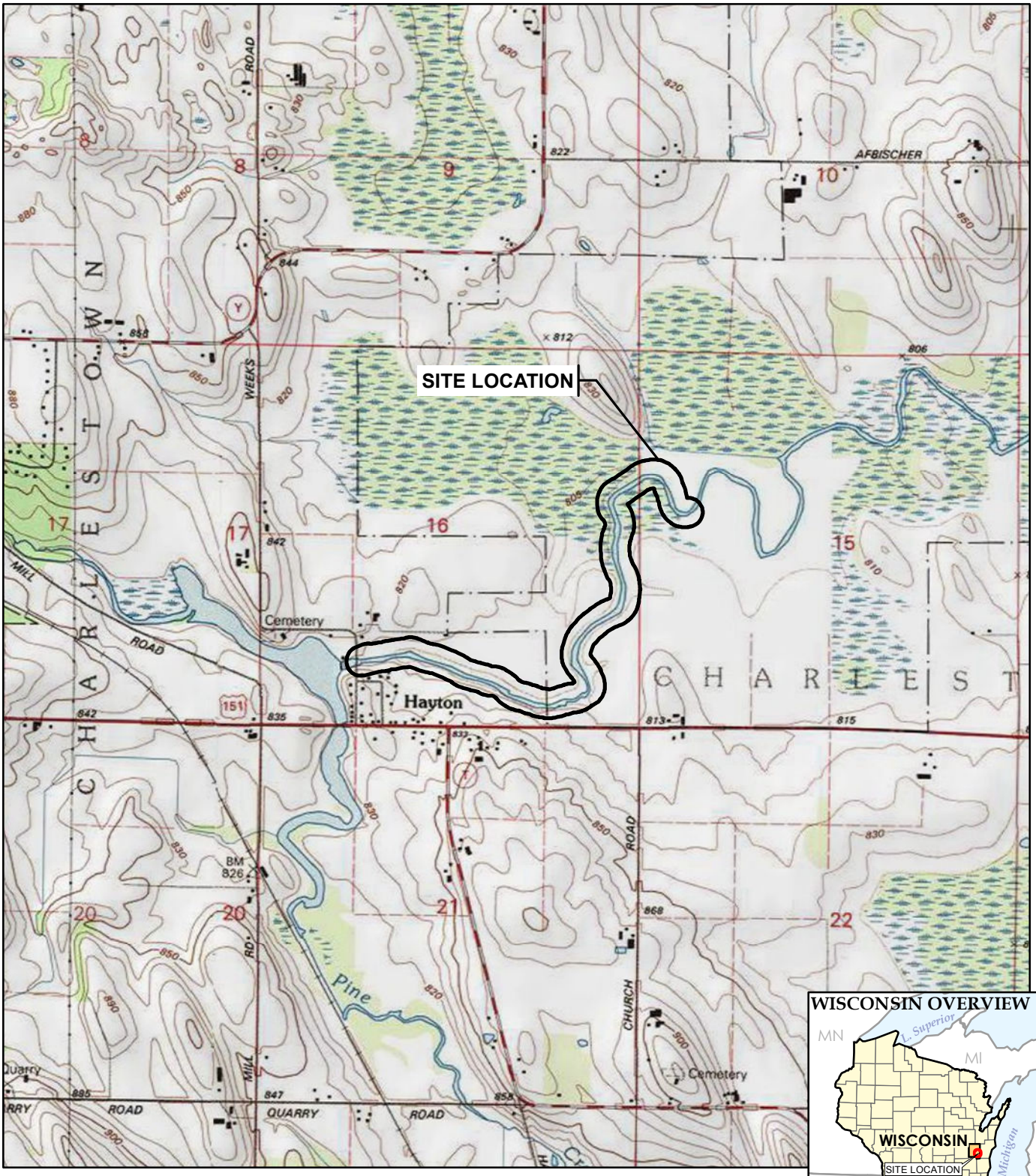
Appendix A Sediment Core Logs
Appendix B Sediment Core Photos
Appendix C Laboratory Data Sheets

cc: William Fitzpatrick, PE, PG /WDNR
Jason Smith / Tecumseh
Curtis Toll, JD / Greenberg Traurig
Marc Faecher / TRC
Ron Bock / TRC
Stacy McAnulty, PE / TRC

FIGURES

Saved By: BRHODE on 10/6/2015, 10:23:20 AM

TRC - GIS



BASE MAP FROM USGS 7.5 MINUTE TOPOGRAPHIC QUADRANGLE SERIES.

N

1 " = 2,000 '
1:24,000

0 2,000 4,000
FEET

E:\Tecumseh\HARP\2012_192003\192003-007slm.mxd

TRC

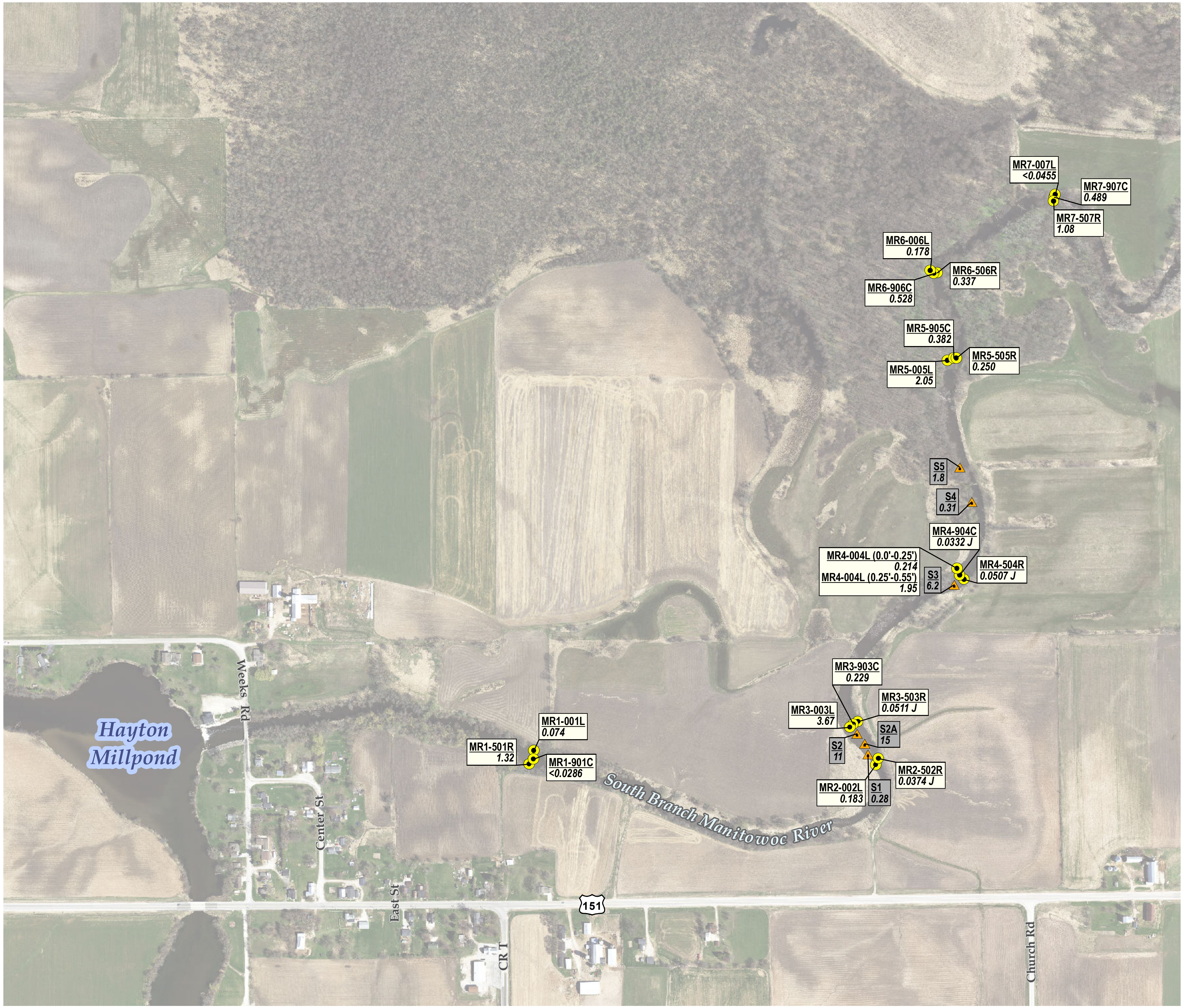
708 Heartland Trail
Suite 3000
Madison, WI 53717
Phone: 608.826.3600

SOUTH BRANCH OF THE MANITOWOC RIVER RECONNAISSANCE STUDY

SITE LOCATION MAP

DRAWN BY:	RHODE B
APPROVED BY:	HARVEY C
PROJECT NO:	192003
FILE NO.	192003-007slm.mxd
DATE:	OCTOBER 2015

FIGURE 1



LEGEND

- TRC SEDIMENT SAMPLING/TRANSECT LOCATION (AUGUST 2015)
- WDNR SEDIMENT SAMPLING/TRANSECT LOCATION (JULY 2014)

TRC SAMPLE: LABEL FORMAT

SAMPLE ID
AUG. 2015 PCB RESULT [mg/kg]

WDNR SAMPLE: LABEL FORMAT

SAMPLE ID
JULY 2014 PCB RESULT [mg/kg]

NOTES

1. BASE MAP IMAGERY FROM CALUMET COUNTY, 2014.

N

0 500 1,000 Feet

1 " = 500 '
1:6,000

PROJECT:	SOUTH BRANCH OF THE MANITOWOC RIVER RECONNAISSANCE STUDY
SHEET TITLE:	TRANSECT SAMPLING LOCATIONS

DRAWN BY: RHODE B	SCALE: 1: 6,000	PROJ. NO. 192003	
CHECKED BY: ROBINSON J		FILE NO. 192003-005.mxd	
APPROVED BY: HARVEY C	DATE PRINTED:	FIGURE 2	
DATE: OCTOBER 2015			

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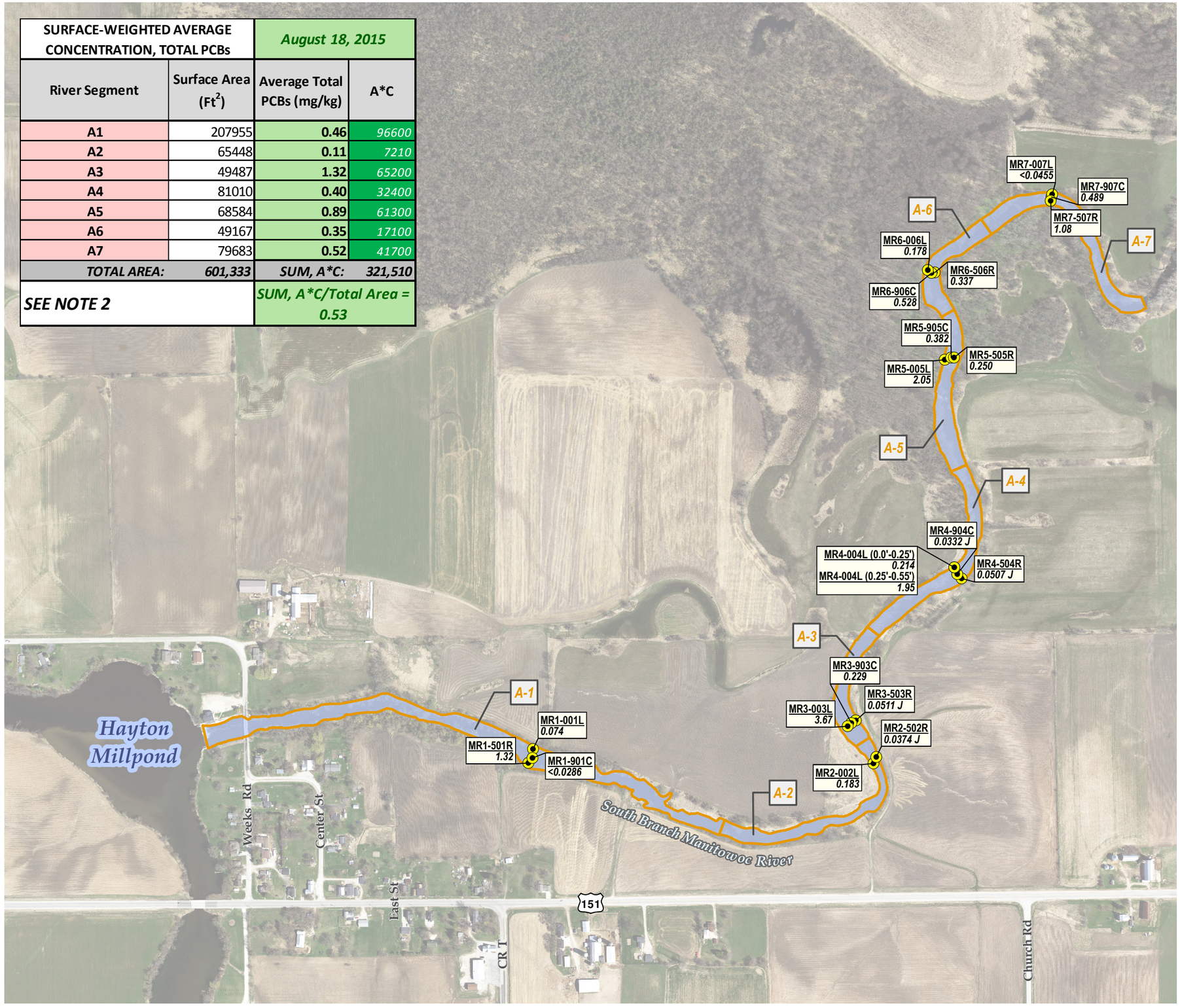
TRC - GIS
Coordinate System: NAD 1983 HARN WISCRS Calumet County Feet (Foot US)
Map Rotation: 0
Printed By: BRHODE on never, never
Path: E:\Tecumseh\HARP\2012_192003\192003-005.mxd

SURFACE-WEIGHTED AVERAGE CONCENTRATION, TOTAL PCBs		August 18, 2015	
River Segment	Surface Area (Ft^2)	Average Total PCBs (mg/kg)	A*C
A1	207955	0.46	96600
A2	65448	0.11	7210
A3	49487	1.32	65200
A4	81010	0.40	32400
A5	68584	0.89	61300
A6	49167	0.35	17100
A7	79683	0.52	41700
TOTAL AREA:	601,333	SUM, A*C:	321,510
SEE NOTE 2		SUM, A*C/Total Area = 0.53	



LEGEND

- TRC SEDIMENT SAMPLING/TRANSECT LOCATION (AUGUST 2015)
- SWAC ANALYSIS AREA

TRC SAMPLE: LABEL FORMAT

SAMPLE ID
AUG. 2015 PCB RESULT [mg/kg]

NOTES

1. BASE MAP IMAGERY FROM CALUMET COUNTY, 2014.
2. STREAM EXTENTS WERE DIGITIZED USING 2014 HIGH-RESOLUTION CALUMET COUNTY AERIAL PHOTOGRAPHY, LOCATIONS AND EXTENTS ARE APPROXIMATE.

N

0 500 1,000 Feet

1 " = 500 '
1:6,000

PROJECT:
SOUTH BRANCH OF THE MONITOWOC RIVER RECONNAISSANCE STUDY

SHEET TITLE:
SWAC CALCULATIONS

DRAWN BY:	RHODE B	SCALE:	PROJ. NO. 192003
CHECKED BY:	ROBINSON J	1: 6,000	FILE NO. 192003-006.mxd
APPROVED BY:	HARVEY C	DATE PRINTED:	**FIGURE 3**
DATE:	OCTOBER 2015		

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TRC - GIS
Coordinate System: NAD 1983 HARN WISCRS Calumet County Feet (Foot US)
Map Rotation: 0
Printed By: BRHODE on 10/6/2015, 10:28:05 AM
Path: E:\Tecumseh\HARP\2012_192003\192003-006.mxd

TABLES

Table 1. Sediment Sampling Field Measurements
South Branch of the Manitowoc River
Reconnaissance Study
Sampling Date: 8/18/2015

Sample Location	In Channel Area	Water Depth (feet)	Sediment Core Push Depth (feet)	Sediment Core Penetration Depth (feet)	Core Recovery (inches, at processing)
MR1-IC-001L	Left	0.8	1.1	0.3	3.6
MR1-IC-501R	Right	0.6	1.3	0.7	3.6
MR1-IC-901C	Center	0.8	1.4	0.6	6.0
MR2-IC-002L	Left	0.1	0.8	0.7	3.6
MR2-IC-502R	Right	1.6	2.0	0.4	4.8
MR2-IC-902C	Center	1.2	1.6	0.4	0.1
MR3-IC-003L	Left	0.2	1.2	1.0	8.4
MR3-IC-503R	Right	1.2	2.5	1.3	12.0
MR3-IC-903C	Center	1.6	2.7	1.1	6.0
MR4-IC-004L	Left	0.4	1.2	0.8	6.6
MR4-IC-504R	Right	0.2	1.1	0.9	5.4
MR4-IC-904C	Center	1.1	1.4	0.3	1.8
MR5-IC-005L	Left	0.5	1.7	1.2	7.8
MR5-IC-505R	Right	0.4	1.4	1.0	7.2
MR5-IC-905C	Center	0.5	1.8	1.3	10.8
MR6-IC-006L	Left	1.0	2.2	1.2	10.2
MR6-IC-506R	Right	0.5	1.7	1.2	9.6
MR6-IC-906C	Center	2.4	3.2	0.8	7.2
MR7-IC-007L	Left	1.5	2.4	0.9	9.6
MR7-IC-507R	Right	0.6	1.6	1.0	9.6
MR7-IC-907C	Center	2.0	3.4	1.4	8.4

Notes:

Gray row denotes no sample collected

Light blue row denotes multiple discrete samples collected within core

Table 2. Analytical Results Summary
South Branch of the Manitowoc River
Reconnaissance Study
Sampling Date: 8/18/2015

Sample ID	In Channel Area	Recovered Sediment Depth Range (inches)	TOC (mg/kg)	Total PCBs (mg/kg)
MR1-IC-001L	Left	0.0-3.6	54,700	0.074
MR1-IC-501R	Right	0.0-3.6	41,100	1.32
MR1-IC-901C	Center	0.0-6.0	38,600	< 0.0286
MR2-IC-002L	Left	0.0-3.6	39,600	0.183
MR2-IC-502R	Right	0.0-4.8	37,500	J 0.0374
MR3-IC-003L	Left	0.0-8.4	47,400	3.67
MR3-IC-503R*	Right	0.0-12.0	39,600	J 0.0511
MR-IC-DUP-01*	Right	0.0-12.0	36,500	0.0452
MR3-IC-903C	Center	0.0-6.0	57,500	0.229
MR4-IC-004L 0.0-0.25	Left	0.0-3.0	47,200	0.214
MR4-IC-004L 0.25-0.55	Left	3.0-6.6	53,300	1.95
MR4-IC-504R	Right	0-5.4	25,800	J 0.0507
MR4-IC-904C	Center	0-1.8	41,700	J 0.0332
MR5-IC-005L	Left	0.0-7.8	41,000	2.05
MR5-IC-505R	Right	0.0-7.2	39,200	0.25
MR5-IC-905C	Center	0.0-10.8	49,600	0.382
MR6-IC-006L	Left	0.0-10.2	68,900	0.178
MR6-IC-506R	Right	0.0-9.6	30,400	0.337
MR6-IC-906C	Center	0.0-7.2	39,700	0.582
MR7-IC-007L	Left	0.0-9.6	70,700	< 0.0455
MR7-IC-507R	Right	0.0-9.6	64,000	1.08
MR7-IC-907C	Center	0.0-8.4	54,000	0.489

Notes:

** = Duplicate Sample was collected at MR3-IC-503R*

J = Laboratory estimated result

< = Analyte was not detected at or above laboratory detection limit

APPENDIX A

SEDIMENT CORE LOGS

SEDIMENT CORE LOG

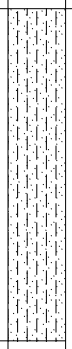
BORING NO. MR1-IC-001L

Facility/Project Name:	Date Drilling Started:	Date Drilling Completed:	Project Number:
Hayton Area Remediation Project Reconnaissance Study	8/18/15	8/18/15	192003.0001.0000

Drilling Firm:	Drilling Method:	Surface Elev. (ft)	TOC Elevation (ft)	Total Depth (in bgs)	Borehole Dia. (in)
TRC Environmental Corp.	Push tube	---	---	3.6	2

Boring Location: South Branch Manitowoc River State Plane N: 743519.02 E: 2465035.96	Personnel Logged By - M. Westover Driller - M. Westover	Drilling Equipment: 2" PVC Core Tube

Civil Town/City/or Village:	County:	State:	Water Level Observations:
New Holstein	Calumet	Wisconsin	While Drilling: Date/Time Depth (ft bgs) After Drilling: Date/Time Depth (ft bgs)

SAMPLE NUMBER AND TYPE	SAMPLE RECOVERY (%)	BLOW COUNTS	DEPTH IN INCHES	LITHOLOGIC DESCRIPTION	USCS	GRAPHIC LOG	COMMENTS
			0	**SILTY SAND (SM),** few to little fines, few fine gravel, few decaying twigs, non-cohesive, grayish brown, wet.	SM		Entire core collected for analytical sample.
			4	**End of core at 3.6 inches.**			

SOIL CORE LOG (INCHES) W/PHOTO 169240_HARP.GPJ 192003.0001.0000 9/11/15

Signature:	Firm: TRC Environmental Corp. 708 Heartland Trail Suite 3000 53717	608.826.3600 Fax 608.826.3941

SEDIMENT CORE LOG

BORING NO. MR1-IC-501R

Facility/Project Name:	Date Drilling Started:	Date Drilling Completed:	Project Number:
Hayton Area Remediation Project Reconnaissance Study	8/18/15	8/18/15	192003.0001.0000

Drilling Firm:	Drilling Method:	Surface Elev. (ft)	TOC Elevation (ft)	Total Depth (in bgs)	Borehole Dia. (in)
TRC Environmental Corp.	Push tube	---	---	3.6	2

Boring Location: South Branch Manitowoc River State Plane N: 743448.97 E: 2465013.90	Personnel Logged By - M. Westover Driller - M. Westover	Drilling Equipment: 2" PVC Core Tube

Civil Town/City/or Village:	County:	State:	Water Level Observations:
New Holstein	Calumet	Wisconsin	While Drilling: Date/Time Depth (ft bgs) After Drilling: Date/Time Depth (ft bgs)

SAMPLE NUMBER AND TYPE	SAMPLE RECOVERY (%)	BLOW COUNTS	DEPTH IN INCHES	LITHOLOGIC DESCRIPTION	USCS	GRAPHIC LOG	COMMENTS
			0	**SANDY SILT (ML),** some fine sand, little organics (decaying plant matter, thin roots), grayish brown, wet, very soft to loose.	ML		Entire core collected for analytical sample.
			4	**End of core at 3.6 inches.**			

SOIL CORE LOG (INCHES) W/PHOTO 169240_HARP.GPJ 192003.0001.0000 9/11/15

Signature:	Firm: TRC Environmental Corp. 708 Heartland Trail Suite 3000 53717	608.826.3600 Fax 608.826.3941

SEDIMENT CORE LOG

BORING NO. MR1-IC-901C

Facility/Project Name:	Date Drilling Started:	Date Drilling Completed:	Project Number:
Hayton Area Remediation Project Reconnaissance Study	8/18/15	8/18/15	192003.0001.0000

Drilling Firm:	Drilling Method:	Surface Elev. (ft)	TOC Elevation (ft)	Total Depth (in bgs)	Borehole Dia. (in)
TRC Environmental Corp.	Push tube	---	---	6.0	2

Boring Location: South Branch Manitowoc River State Plane N: 743474.30 E: 2465034.51	Personnel Logged By - M. Westover Driller - M. Westover	Drilling Equipment: 2" PVC Core Tube

Civil Town/City/or Village:	County:	State:	Water Level Observations:
New Holstein	Calumet	Wisconsin	While Drilling: Date/Time Depth (ft bgs) After Drilling: Date/Time Depth (ft bgs)

SAMPLE NUMBER AND TYPE	SAMPLE RECOVERY (%)	BLOW COUNTS	DEPTH IN INCHES	LITHOLOGIC DESCRIPTION	USCS	GRAPHIC LOG	COMMENTS
			0	**POORLY GRADED GRAVEL (GP),** fine to medium gravel, few fine sand.	GP		Sample represents zone from 3.6" to 6", large pieces of gravel removed (lab cannot analyze).
			4	**SILTY SAND (SM),** few to little fines, few fine to medium gravel, dark grayish brown, wet, loose.	SM		
			6	**End of core at 6 inches.**			
			8				
			10				
			12				

SOIL CORE LOG (INCHES) W/PHOTO 169240_HARP.GPJ 192003.0001.0000 9/11/15

Signature:	Firm: TRC Environmental Corp. 708 Heartland Trail Suite 3000 53717	608.826.3600 Fax 608.826.3941

SEDIMENT CORE LOG

BORING NO. MR2-IC-002L

Facility/Project Name:	Date Drilling Started:	Date Drilling Completed:	Project Number:
Hayton Area Remediation Project Reconnaissance Study	8/18/15	8/18/15	192003.0001.0000

Drilling Firm:	Drilling Method:	Surface Elev. (ft)	TOC Elevation (ft)	Total Depth (in bgs)	Borehole Dia. (in)
TRC Environmental Corp.	Push tube	---	---	3.6	2

Boring Location: South Branch Manitowoc River State Plane N: 743477.28 E: 2466754.54	Personnel Logged By - M. Westover Driller - M. Westover	Drilling Equipment: 2" PVC Core Tube

Civil Town/City/or Village:	County:	State:	Water Level Observations:
New Holstein	Calumet	Wisconsin	While Drilling: Date/Time Depth (ft bgs) After Drilling: Date/Time Depth (ft bgs)

SAMPLE NUMBER AND TYPE	SAMPLE RECOVERY (%)	BLOW COUNTS	DEPTH IN INCHES	LITHOLOGIC DESCRIPTION	USCS	GRAPHIC LOG	COMMENTS
			0	**SILTY SAND (SM),** few to little fines, few fine shell fragments throughout, few decaying plant parts (roots), non-cohesive, brownish gray, wet.	SM		Entire core collected for analytical sample.
			2	Trace fine gravel and few fines at base of sample tube.			
				End of core at 3.6 inches.			
			4				
			6				
			8				
			10				
			12				

SOIL CORE LOG (INCHES) W/PHOTO 169240_HARP.GPJ 192003.0001.0000 9/11/15

Signature:	Firm: TRC Environmental Corp. 708 Heartland Trail Suite 3000 53717	608.826.3600 Fax 608.826.3941

SEDIMENT CORE LOG

BORING NO. MR2-IC-502R

Facility/Project Name:	Date Drilling Started:	Date Drilling Completed:	Project Number:
Hayton Area Remediation Project Reconnaissance Study	8/18/15	8/18/15	192003.0001.0000

Drilling Firm:	Drilling Method:	Surface Elev. (ft)	TOC Elevation (ft)	Total Depth (in bgs)	Borehole Dia. (in)
TRC Environmental Corp.	Push tube	---	---	4.8	2

Boring Location: South Branch Manitowoc River State Plane N: 743510.13 E: 2466768.04	Personnel Logged By - M. Westover Driller - M. Westover	Drilling Equipment: 2" PVC Core Tube

Civil Town/City/or Village:	County:	State:	Water Level Observations:
New Holstein	Calumet	Wisconsin	While Drilling: Date/Time Depth (ft bgs) After Drilling: Date/Time Depth (ft bgs)

SAMPLE NUMBER AND TYPE	SAMPLE RECOVERY (%)	BLOW COUNTS	DEPTH IN INCHES	LITHOLOGIC DESCRIPTION	USCS	GRAPHIC LOG	COMMENTS
			0	**POORLY GRADED GRAVEL (GP),** trace medium to coarse sand.	GP		Sample represents zone from 3.6" to 4.2", large pieces of gravel removed (lab cannot analyze). Clay below 4.2 inches is underlying soil.
			4	**WELL GRADED SAND (SW),** fine to coarse sand, few silt.	SW		
				SILTY LEAN CLAY (CL), trace fine sand, plastic, brown, stiff. (Underlying soil)	CL-ML		
				End of core at 4.8 inches.			

SOIL CORE LOG (INCHES) W/PHOTO 169240_HARP.GPJ 192003.0001.0000 9/11/15

Signature:	Firm: TRC Environmental Corp. 708 Heartland Trail Suite 3000 53717	608.826.3600 Fax 608.826.3941

SEDIMENT CORE LOG

BORING NO. MR2-IC-902C

Facility/Project Name:	Date Drilling Started:	Date Drilling Completed:	Project Number:
Hayton Area Remediation Project Reconnaissance Study	8/18/15	8/18/15	192003.0001.0000

Drilling Firm:	Drilling Method:	Surface Elev. (ft)	TOC Elevation (ft)	Total Depth (in bgs)	Borehole Dia. (in)
TRC Environmental Corp.	Push tube	---	---	0.1	2

Boring Location: South Branch Manitowoc River State Plane N: 743497.08 E: 2466756.41	Personnel Logged By - M. Westover Driller - M. Westover	Drilling Equipment: 2" PVC Core Tube

Civil Town/City/or Village:	County:	State:	Water Level Observations:
New Holstein	Calumet	Wisconsin	While Drilling: Date/Time Depth (ft bgs) After Drilling: Date/Time Depth (ft bgs)

SAMPLE NUMBER AND TYPE	SAMPLE RECOVERY (%)	BLOW COUNTS	DEPTH IN INCHES	LITHOLOGIC DESCRIPTION	USCS	GRAPHIC LOG	COMMENTS
			0	No sample. Only top "fluff" layer retained at time of sampling (see field notes). Thin layer (<0.01 ft) of silty sand in tube cap after settling.	SM		No sample collected, not enough material retained.
			2				
			4				
			6				
			8				
			10				
			12				

SOIL CORE LOG (INCHES) W/PHOTO 169240_HARP.GPJ 192003.0001.0000 9/11/15

Signature:	Firm: TRC Environmental Corp. 708 Heartland Trail Suite 3000 53717	608.826.3600 Fax 608.826.3941

SEDIMENT CORE LOG

BORING NO. MR3-IC-003L

Facility/Project Name:	Date Drilling Started:	Date Drilling Completed:	Project Number:
Hayton Area Remediation Project Reconnaissance Study	8/18/15	8/18/15	192003.0001.0000

Drilling Firm:	Drilling Method:	Surface Elev. (ft)	TOC Elevation (ft)	Total Depth (in bgs)	Borehole Dia. (in)
TRC Environmental Corp.	Push tube	---	---	8.4	2

Boring Location: South Branch Manitowoc River State Plane N: 743663.09 E: 2466621.51	Personnel Logged By - M. Westover Driller - M. Westover	Drilling Equipment: 2" PVC Core Tube

Civil Town/City/or Village:	County:	State:	Water Level Observations:
New Holstein	Calumet	Wisconsin	While Drilling: Date/Time Depth (ft bgs) After Drilling: Date/Time Depth (ft bgs)

SAMPLE NUMBER AND TYPE	SAMPLE RECOVERY (%)	BLOW COUNTS	DEPTH IN INCHES	LITHOLOGIC DESCRIPTION	USCS	GRAPHIC LOG	COMMENTS
			0	**SILTY SAND (SM),** few to little fines, mixing with decaying plant material at base of interval (leaves, twigs), grayish brown, loose.	SM		Entire core collected for analytical sample.
			4	**SANDY SILT (ML),** few to little fine sand, decaying organic material present, slightly cohesive, grayish brown, wet, very soft.	ML		
			8	**End of core at 8.4 inches.**			

SOIL CORE LOG (INCHES) W/PHOTO 169240_HARP.GPJ 192003.0001.0000 9/11/15

Signature:	Firm: TRC Environmental Corp. 708 Heartland Trail Suite 3000 53717	608.826.3600 Fax 608.826.3941

SEDIMENT CORE LOG

BORING NO. MR3-IC-503R

Facility/Project Name:	Date Drilling Started:	Date Drilling Completed:	Project Number:
Hayton Area Remediation Project Reconnaissance Study	8/18/15	8/18/15	192003.0001.0000

Drilling Firm:	Drilling Method:	Surface Elev. (ft)	TOC Elevation (ft)	Total Depth (in bgs)	Borehole Dia. (in)
TRC Environmental Corp.	Push tube	---	---	12.0	2

Boring Location: South Branch Manitowoc River State Plane N: 743692.47 E: 2466661.51	Personnel Logged By - M. Westover Driller - M. Westover	Drilling Equipment: 2" PVC Core Tube

Civil Town/City/or Village:	County:	State:	Water Level Observations:
New Holstein	Calumet	Wisconsin	While Drilling: Date/Time Depth (ft bgs) After Drilling: Date/Time Depth (ft bgs)

SAMPLE NUMBER AND TYPE	SAMPLE RECOVERY (%)	BLOW COUNTS	DEPTH IN INCHES	LITHOLOGIC DESCRIPTION	USCS	GRAPHIC LOG	COMMENTS
			0	**SILTY SAND (SM),** fine sand, few to some silt (variable with depth), non-cohesive to slightly cohesive, decaying plant material throughout (upper portion more leaves/twigs, lower more roots), few shell fragments in upper inch.	SM		Entire core collected for analytical sample. Duplicate "MR-IC-DUP01" collected.
			2				
			4				
			6				
			8				
			10				
			12	**End of core at 12 inches.**			

SOIL CORE LOG (INCHES) W/PHOTO 169240_HARP.GPJ 192003.0001.0000 9/11/15

Signature:	Firm: TRC Environmental Corp. 708 Heartland Trail Suite 3000 53717	608.826.3600 Fax 608.826.3941

SEDIMENT CORE LOG

BORING NO. MR3-IC-903C

Facility/Project Name:	Date Drilling Started:	Date Drilling Completed:	Project Number:
Hayton Area Remediation Project Reconnaissance Study	8/18/15	8/18/15	192003.0001.0000

Drilling Firm:	Drilling Method:	Surface Elev. (ft)	TOC Elevation (ft)	Total Depth (in bgs)	Borehole Dia. (in)
TRC Environmental Corp.	Push tube	---	---	6.0	2

Boring Location: South Branch Manitowoc River State Plane N: 743678.84 E: 2466639.04	Personnel Logged By - M. Westover Driller - M. Westover	Drilling Equipment: 2" PVC Core Tube

Civil Town/City/or Village:	County:	State:	Water Level Observations:
New Holstein	Calumet	Wisconsin	While Drilling: Date/Time Depth (ft bgs) After Drilling: Date/Time Depth (ft bgs)

SAMPLE NUMBER AND TYPE	SAMPLE RECOVERY (%)	BLOW COUNTS	DEPTH IN INCHES	LITHOLOGIC DESCRIPTION	USCS	GRAPHIC LOG	COMMENTS
			0	**SILTY SAND WITH GRAVEL (SM),** few to little fines, few to little fine gravel, trace decaying plant material (sticks), non-cohesive, grayish brown, wet.	SM		Entire core collected for analytical sample.
			6	**End of core at 6 inches.**			

SOIL CORE LOG (INCHES) W/PHOTO 169240_HARP.GPJ 192003.0001.0000 9/11/15

Signature:	Firm: TRC Environmental Corp. 708 Heartland Trail Suite 3000 53717	608.826.3600 Fax 608.826.3941

SEDIMENT CORE LOG

BORING NO. MR4-IC-004L

Facility/Project Name:	Date Drilling Started:	Date Drilling Completed:	Project Number:
Hayton Area Remediation Project Reconnaissance Study	8/18/15	8/18/15	192003.0001.0000

Drilling Firm:	Drilling Method:	Surface Elev. (ft)	TOC Elevation (ft)	Total Depth (in bgs)	Borehole Dia. (in)
TRC Environmental Corp.	Push tube	---	---	6.6	2

Boring Location: South Branch Manitowoc River State Plane N: 744472.14 E: 2467145.42	Personnel Logged By - M. Westover Driller - M. Westover	Drilling Equipment: 2" PVC Core Tube

Civil Town/City/or Village:	County:	State:	Water Level Observations:
New Holstein	Calumet	Wisconsin	While Drilling: Date/Time Depth (ft bgs) After Drilling: Date/Time Depth (ft bgs)

SAMPLE NUMBER AND TYPE	SAMPLE RECOVERY (%)	BLOW COUNTS	DEPTH IN INCHES	LITHOLOGIC DESCRIPTION	USCS	GRAPHIC LOG	COMMENTS
			0	**POORLY GRADED SAND (SP),** trace fines, trace fine gravel, decaying leaves and twigs, non-cohesive, gray, wet.	SP		Core split into two samples: "MR4-IC-004L 0.0 0.25" "MR4-IC-004L 0.25 0.55" (depth intervals in feet for sample ID)
			2				
			4	**SILT WITH SAND (ML),** few fine sand, occasional gravel, occasional decaying plant fibers, cohesive, soft.	ML		
			6				
			8	**End of core at 6.6 inches.**			
			10				
			12				

SOIL CORE LOG (INCHES) W/PHOTO 169240_HARP.GPJ 192003.0001.0000 9/11/15

Signature:	Firm: TRC Environmental Corp. 708 Heartland Trail Suite 3000 53717	608.826.3600 Fax 608.826.3941

SEDIMENT CORE LOG

BORING NO. MR4-IC-504R

Facility/Project Name:	Date Drilling Started:	Date Drilling Completed:	Project Number:
Hayton Area Remediation Project Reconnaissance Study	8/18/15	8/18/15	192003.0001.0000

Drilling Firm:	Drilling Method:	Surface Elev. (ft)	TOC Elevation (ft)	Total Depth (in bgs)	Borehole Dia. (in)
TRC Environmental Corp.	Push tube	---	---	5.4	2

Boring Location: South Branch Manitowoc River State Plane N: 744417.24 E: 2467182.59	Personnel Logged By - M. Westover Driller - M. Westover	Drilling Equipment: 2" PVC Core Tube

Civil Town/City/or Village:	County:	State:	Water Level Observations:
New Holstein	Calumet	Wisconsin	While Drilling: Date/Time Depth (ft bgs) After Drilling: Date/Time Depth (ft bgs)

SAMPLE NUMBER AND TYPE	SAMPLE RECOVERY (%)	BLOW COUNTS	DEPTH IN INCHES	LITHOLOGIC DESCRIPTION	USCS	GRAPHIC LOG	COMMENTS
			0	**SANDY SILT (ML),** little fines, organics, non-cohesive, grayish brown.	ML		Entire core collected for analytical sample.
			2	**SILT WITH SAND (ML),** few fine sand, slightly cohesive, grayish brown, wet, soft, becoming clayey with depth.	ML		
			4				
			6	**End of core at 5.4 inches.**			
			8				
			10				
			12				

SOIL CORE LOG (INCHES) W/PHOTO 169240_HARP.GPJ 192003.0001.0000 9/11/15

Signature:	Firm: TRC Environmental Corp. 708 Heartland Trail Suite 3000 53717	608.826.3600 Fax 608.826.3941

SEDIMENT CORE LOG

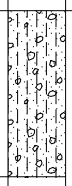
BORING NO. MR4-IC-904C

Facility/Project Name:	Date Drilling Started:	Date Drilling Completed:	Project Number:
Hayton Area Remediation Project Reconnaissance Study	8/18/15	8/18/15	192003.0001.0000

Drilling Firm:	Drilling Method:	Surface Elev. (ft)	TOC Elevation (ft)	Total Depth (in bgs)	Borehole Dia. (in)
TRC Environmental Corp.	Push tube	---	---	1.8	2

Boring Location: South Branch Manitowoc River State Plane N: 744438.42 E: 2467160.58	Personnel Logged By - M. Westover Driller - M. Westover	Drilling Equipment: 2" PVC Core Tube

Civil Town/City/or Village:	County:	State:	Water Level Observations:
New Holstein	Calumet	Wisconsin	While Drilling: Date/Time Depth (ft bgs) After Drilling: Date/Time Depth (ft bgs)

SAMPLE NUMBER AND TYPE	SAMPLE RECOVERY (%)	BLOW COUNTS	DEPTH IN INCHES	LITHOLOGIC DESCRIPTION	USCS	GRAPHIC LOG	COMMENTS
				SILTY SAND WITH GRAVEL (SM), few to little fines, few fine gravel, occasional decaying sticks/twigs.	SM		Entire core collected for analytical sample.
			2	**End of core at 1.8 inches.**			
			4				
			6				
			8				
			10				
			12				

SOIL CORE LOG (INCHES) W/PHOTO 169240_HARP.GPJ 192003.0001.0000 9/11/15

Signature:	Firm: TRC Environmental Corp. 708 Heartland Trail Suite 3000 53717	608.826.3600 Fax 608.826.3941

SEDIMENT CORE LOG

BORING NO. MR5-IC-005L

Facility/Project Name:	Date Drilling Started:	Date Drilling Completed:	Project Number:
Hayton Area Remediation Project Reconnaissance Study	8/18/15	8/18/15	192003.0001.0000

Drilling Firm:	Drilling Method:	Surface Elev. (ft)	TOC Elevation (ft)	Total Depth (in bgs)	Borehole Dia. (in)
TRC Environmental Corp.	Push tube	---	---	7.8	2

Boring Location: South Branch Manitowoc River State Plane N: 745515.73 E: 2467078.20	Personnel Logged By - M. Westover Driller - M. Westover	Drilling Equipment: 2" PVC Core Tube

Civil Town/City/or Village:	County:	State:	Water Level Observations:
New Holstein	Calumet	Wisconsin	While Drilling: Date/Time Depth (ft bgs) After Drilling: Date/Time Depth (ft bgs)

SAMPLE NUMBER AND TYPE	SAMPLE RECOVERY (%)	BLOW COUNTS	DEPTH IN INCHES	LITHOLOGIC DESCRIPTION	USCS	GRAPHIC LOG	COMMENTS
			0	**SILTY SAND (SM),** little to some fines, fine to medium sand, occasional siltier (sandy silt) zones, non-cohesive, grayish brown, wet.	SM		Entire core collected for analytical sample.
			2				
			4				
			6				
			8	**End of core at 7.8 inches.**			
			10				
			12				

SOIL CORE LOG (INCHES) W/PHOTO 169240_HARP.GPJ 192003.0001.0000 9/11/15

Signature:	Firm: TRC Environmental Corp. 708 Heartland Trail Suite 3000 53717	608.826.3600 Fax 608.826.3941

SEDIMENT CORE LOG

BORING NO. MR5-IC-505R

Facility/Project Name:	Date Drilling Started:	Date Drilling Completed:	Project Number:
Hayton Area Remediation Project Reconnaissance Study	8/18/15	8/18/15	192003.0001.0000

Drilling Firm:	Drilling Method:	Surface Elev. (ft)	TOC Elevation (ft)	Total Depth (in bgs)	Borehole Dia. (in)
TRC Environmental Corp.	Push tube	---	---	7.2	2

Boring Location: South Branch Manitowoc River State Plane N: 745527.71 E: 2467124.43	Personnel Logged By - M. Westover Driller - M. Westover	Drilling Equipment: 2" PVC Core Tube

Civil Town/City/or Village:	County:	State:	Water Level Observations:
New Holstein	Calumet	Wisconsin	While Drilling: Date/Time Depth (ft bgs) After Drilling: Date/Time Depth (ft bgs)

SAMPLE NUMBER AND TYPE	SAMPLE RECOVERY (%)	BLOW COUNTS	DEPTH IN INCHES	LITHOLOGIC DESCRIPTION	USCS	GRAPHIC LOG	COMMENTS
			0	**SANDY SILT (ML),** few to little fine sand, occasional coarse sand, few shell fragments, organic rich, slightly cohesive to non-cohesive, grayish brown, wet, soft.	ML		Entire core collected for analytical sample.
			2				
			4				
			6	Trace coarse sand and gravel at base of core.			
				End of core at 7.2 inches.			
			8				
			10				
			12				

SOIL CORE LOG (INCHES) W/PHOTO 169240_HARP.GPJ 192003.0001.0000 9/11/15

Signature:	Firm: TRC Environmental Corp. 708 Heartland Trail Suite 3000 53717	608.826.3600 Fax 608.826.3941

SEDIMENT CORE LOG

BORING NO. MR5-IC-905C

Facility/Project Name:	Date Drilling Started:	Date Drilling Completed:	Project Number:
Hayton Area Remediation Project Reconnaissance Study	8/18/15	8/18/15	192003.0001.0000

Drilling Firm:	Drilling Method:	Surface Elev. (ft)	TOC Elevation (ft)	Total Depth (in bgs)	Borehole Dia. (in)
TRC Environmental Corp.	Push tube	---	---	10.8	2

Boring Location: South Branch Manitowoc River State Plane N: 745527.60 E: 2467110.57	Personnel Logged By - M. Westover Driller - M. Westover	Drilling Equipment: 2" PVC Core Tube

Civil Town/City/or Village:	County:	State:	Water Level Observations:
New Holstein	Calumet	Wisconsin	While Drilling: Date/Time Depth (ft bgs) After Drilling: Date/Time Depth (ft bgs)

SAMPLE NUMBER AND TYPE	SAMPLE RECOVERY (%)	BLOW COUNTS	DEPTH IN INCHES	LITHOLOGIC DESCRIPTION	USCS	GRAPHIC LOG	COMMENTS
			0	**SILTY SAND (SM),** fine to medium sand, occasional coarse sand, few to little fines, non-cohesive, grayish brown, wet.	SM		Entire core collected for analytical sample.
			2				
			4	Same as above, more medium to coarse sand, color change to dark brownish gray.			
			6				
			8				
			10				
			10.8	**End of core at 10.8 inches.**			
			12				

SOIL CORE LOG (INCHES) W/PHOTO 169240_HARP.GPJ 192003.0001.0000 9/11/15

Signature:	Firm: TRC Environmental Corp. 708 Heartland Trail Suite 3000 53717	608.826.3600 Fax 608.826.3941

SEDIMENT CORE LOG

BORING NO. MR6-IC-006L

Facility/Project Name:	Date Drilling Started:	Date Drilling Completed:	Project Number:
Hayton Area Remediation Project Reconnaissance Study	8/18/15	8/18/15	192003.0001.0000

Drilling Firm:	Drilling Method:	Surface Elev. (ft)	TOC Elevation (ft)	Total Depth (in bgs)	Borehole Dia. (in)
TRC Environmental Corp.	Push tube	---	---	10.2	2

Boring Location: South Branch Manitowoc River State Plane N: 745965.71 E: 2466983.81	Personnel Logged By - M. Westover Driller - M. Westover	Drilling Equipment: 2" PVC Core Tube

Civil Town/City/or Village:	County:	State:	Water Level Observations:
New Holstein	Calumet	Wisconsin	While Drilling: Date/Time Depth (ft bgs) After Drilling: Date/Time Depth (ft bgs)

SAMPLE NUMBER AND TYPE	SAMPLE RECOVERY (%)	BLOW COUNTS	DEPTH IN INCHES	LITHOLOGIC DESCRIPTION	USCS	GRAPHIC LOG	COMMENTS
			0	**ORGANIC SILT (OL),** few to little fine sand, few decaying twigs and leaves, non-cohesive, brownish gray, wet, loose.	OL		Entire core collected for analytical sample.
			2	Same as above, but trace to few fine sand, less decaying plant material, occasional shell fragments, cohesive, brown, soft.			
			4				
			6				
			8				
			10				
			10	**End of core at 10.2 inches.**			
			12				

SOIL CORE LOG (INCHES) W/PHOTO 169240_HARP.GPJ 192003.0001.0000 9/11/15

Signature:	Firm: TRC Environmental Corp. 708 Heartland Trail Suite 3000 53717	608.826.3600 Fax 608.826.3941

SEDIMENT CORE LOG

BORING NO. MR6-IC-506R

Facility/Project Name:	Date Drilling Started:	Date Drilling Completed:	Project Number:
Hayton Area Remediation Project Reconnaissance Study	8/18/15	8/18/15	192003.0001.0000

Drilling Firm:	Drilling Method:	Surface Elev. (ft)	TOC Elevation (ft)	Total Depth (in bgs)	Borehole Dia. (in)
TRC Environmental Corp.	Push tube	---	---	9.6	2

Boring Location: South Branch Manitowoc River State Plane N: 745953.94 E: 2467019.48	Personnel Logged By - M. Westover Driller - M. Westover	Drilling Equipment: 2" PVC Core Tube

Civil Town/City/or Village:	County:	State:	Water Level Observations:
New Holstein	Calumet	Wisconsin	While Drilling: Date/Time Depth (ft bgs) After Drilling: Date/Time Depth (ft bgs)

SAMPLE NUMBER AND TYPE	SAMPLE RECOVERY (%)	BLOW COUNTS	DEPTH IN INCHES	LITHOLOGIC DESCRIPTION	USCS	GRAPHIC LOG	COMMENTS
			0	**SILTY SAND (SM),** few to little fines, few shell fragments, occasional decaying twigs, occasional coarse sand, non-cohesive, grayish brown.	SM		Entire core collected for analytical sample.
			2				
			4				
			6				
			8				
			10	**End of core at 9.6 inches.**			
			12				

SOIL CORE LOG (INCHES) W/PHOTO 169240_HARP.GPJ 192003.0001.0000 9/11/15

Signature:	Firm: TRC Environmental Corp. 708 Heartland Trail Suite 3000 53717	608.826.3600 Fax 608.826.3941

SEDIMENT CORE LOG

BORING NO. MR6-IC-906C

Facility/Project Name:	Date Drilling Started:	Date Drilling Completed:	Project Number:
Hayton Area Remediation Project Reconnaissance Study	8/18/15	8/18/15	192003.0001.0000

Drilling Firm:	Drilling Method:	Surface Elev. (ft)	TOC Elevation (ft)	Total Depth (in bgs)	Borehole Dia. (in)
TRC Environmental Corp.	Push tube	---	---	7.2	2

Boring Location: South Branch Manitowoc River State Plane N: 745951.40 E: 2467003.00	Personnel Logged By - M. Westover Driller - M. Westover	Drilling Equipment: 2" PVC Core Tube

Civil Town/City/or Village:	County:	State:	Water Level Observations:
New Holstein	Calumet	Wisconsin	While Drilling: Date/Time Depth (ft bgs) After Drilling: Date/Time Depth (ft bgs)

SAMPLE NUMBER AND TYPE	SAMPLE RECOVERY (%)	BLOW COUNTS	DEPTH IN INCHES	LITHOLOGIC DESCRIPTION	USCS	GRAPHIC LOG	COMMENTS
			0–7.2	**ORGANIC SILT (OL),** few fine sand, occasional coarse sand, occasional shell fragments, few pieces of decaying organic material (twigs), non-cohesive to slightly cohesive, grayish brown, wet, loose.	OL		Entire core collected for analytical sample.
			7.2	**End of core at 7.2 inches.**			

SOIL CORE LOG (INCHES) W/PHOTO 169240_HARP.GPJ 192003.0001.0000 9/11/15

Signature:	Firm: TRC Environmental Corp. 708 Heartland Trail Suite 3000 53717	608.826.3600 Fax 608.826.3941

SEDIMENT CORE LOG

BORING NO. MR7-IC-007L

Facility/Project Name:	Date Drilling Started:	Date Drilling Completed:	Project Number:
Hayton Area Remediation Project Reconnaissance Study	8/18/15	8/18/15	192003.0001.0000

Drilling Firm:	Drilling Method:	Surface Elev. (ft)	TOC Elevation (ft)	Total Depth (in bgs)	Borehole Dia. (in)
TRC Environmental Corp.	Push tube	---	---	9.6	2

Boring Location: South Branch Manitowoc River State Plane N: 746358.06 E: 2467604.65	Personnel Logged By - M. Westover Driller - M. Westover	Drilling Equipment: 2" PVC Core Tube

Civil Town/City/or Village:	County:	State:	Water Level Observations:
New Holstein	Calumet	Wisconsin	While Drilling: Date/Time Depth (ft bgs) After Drilling: Date/Time Depth (ft bgs)

SAMPLE NUMBER AND TYPE	SAMPLE RECOVERY (%)	BLOW COUNTS	DEPTH IN INCHES	LITHOLOGIC DESCRIPTION	USCS	GRAPHIC LOG	COMMENTS
			0	**ORGANIC SILT (OL),** few to little fine sand, few shell fragments, occasional decaying plant material, cohesive, grayish brown, soft.	OL		Entire core collected for analytical sample.
			10	**End of core at 9.6 inches.**			

SOIL CORE LOG (INCHES) W/PHOTO 169240_HARP.GPJ 192003.0001.0000 9/11/15

Signature:	Firm: TRC Environmental Corp. 708 Heartland Trail Suite 3000 53717	608.826.3600 Fax 608.826.3941

SEDIMENT CORE LOG

BORING NO. MR7-IC-507R

Facility/Project Name:	Date Drilling Started:	Date Drilling Completed:	Project Number:
Hayton Area Remediation Project Reconnaissance Study	8/18/15	8/18/15	192003.0001.0000

Drilling Firm:	Drilling Method:	Surface Elev. (ft)	TOC Elevation (ft)	Total Depth (in bgs)	Borehole Dia. (in)
TRC Environmental Corp.	Push tube	---	---	9.6	2

Boring Location: South Branch Manitowoc River State Plane N: 746325.50 E: 2467598.06	Personnel Logged By - M. Westover Driller - M. Westover	Drilling Equipment: 2" PVC Core Tube

Civil Town/City/or Village:	County:	State:	Water Level Observations:
New Holstein	Calumet	Wisconsin	While Drilling: Date/Time Depth (ft bgs) After Drilling: Date/Time Depth (ft bgs)

SAMPLE NUMBER AND TYPE	SAMPLE RECOVERY (%)	BLOW COUNTS	DEPTH IN INCHES	LITHOLOGIC DESCRIPTION	USCS	GRAPHIC LOG	COMMENTS
			0	**ORGANIC SILT (OL),** trace to few fine sand, occasional shell fragments, occasional decaying twigs, slightly cohesive, grayish brown, soft.	OL		Entire core collected for analytical sample.
			2				
			4				
			6				
			8	Same as above, becoming sandy last 0.1 foot.			
			10	**End of core at 9.6 inches.**			
			12				

SOIL CORE LOG (INCHES) W/PHOTO 169240_HARP.GPJ 192003.0001.0000 9/11/15

Signature:	Firm: TRC Environmental Corp. 708 Heartland Trail Suite 3000 53717	608.826.3600 Fax 608.826.3941

SEDIMENT CORE LOG

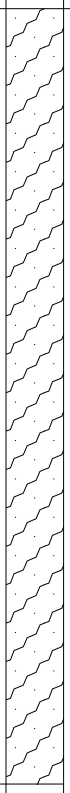
BORING NO. MR7-IC-907C

Facility/Project Name:	Date Drilling Started:	Date Drilling Completed:	Project Number:
Hayton Area Remediation Project Reconnaissance Study	8/18/15	8/18/15	192003.0001.0000

Drilling Firm:	Drilling Method:	Surface Elev. (ft)	TOC Elevation (ft)	Total Depth (in bgs)	Borehole Dia. (in)
TRC Environmental Corp.	Push tube	---	---	8.4	2

Boring Location: South Branch Manitowoc River State Plane N: 746344.99 E: 2467601.22	Personnel Logged By - M. Westover Driller - M. Westover	Drilling Equipment: 2" PVC Core Tube

Civil Town/City/or Village:	County:	State:	Water Level Observations:
New Holstein	Calumet	Wisconsin	While Drilling: Date/Time Depth (ft bgs) After Drilling: Date/Time Depth (ft bgs)

SAMPLE NUMBER AND TYPE	SAMPLE RECOVERY (%)	BLOW COUNTS	DEPTH IN INCHES	LITHOLOGIC DESCRIPTION	USCS	GRAPHIC LOG	COMMENTS
			0	**ORGANIC SILT (OL),** trace to few fine sand, few shell fragments, upper 0.05 foot is fluffy, rest is slightly cohesive, occasional fiberous plant material, grayish brown, soft.	OL		Entire core collected for analytical sample.
			2				
			4				
			6				
			8	**End of core at 8.4 inches.**			
			10				
			12				

SOIL CORE LOG (INCHES) W/PHOTO 169240_HARP.GPJ 192003.0001.0000 9/11/15

Signature:	Firm: TRC Environmental Corp. 708 Heartland Trail Suite 3000 53717	608.826.3600 Fax 608.826.3941

APPENDIX B

SEDIMENT CORE PHOTOS

Appendix B
Sediment Core Photos

Photo 1: View of sediment core MR1-IC-001L.

Photo 2: View of sediment core MR1-IC-501R.

Proj. No.	Photographs Taken By:	Page No.	Client:	Site Name	
192003	James Robinson	1 of 13	Tecumseh	South Branch of the Manitowoc River	TRC

Appendix B
Sediment Core Photos

Photo 3: View of sediment core MR1-IC-901C.

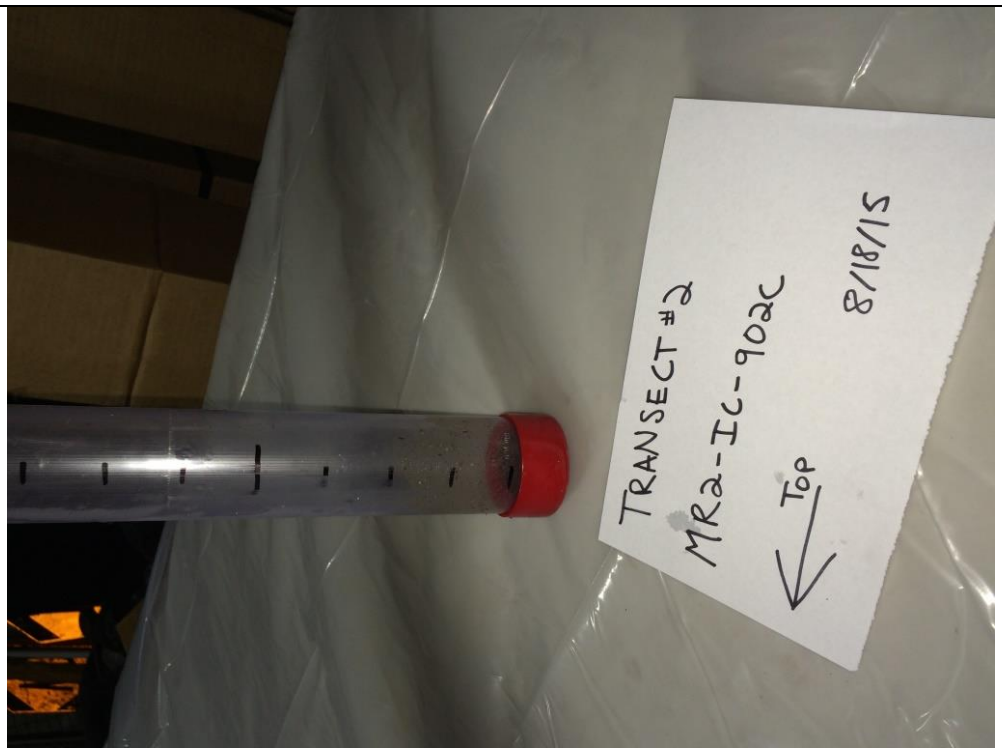


Photo 4: View of sediment core MR2-IC-902C. No sample was collected as only a thin <0.01 ft layer of silty sand was retained in the tube after settling.

Appendix B
Sediment Core Photos

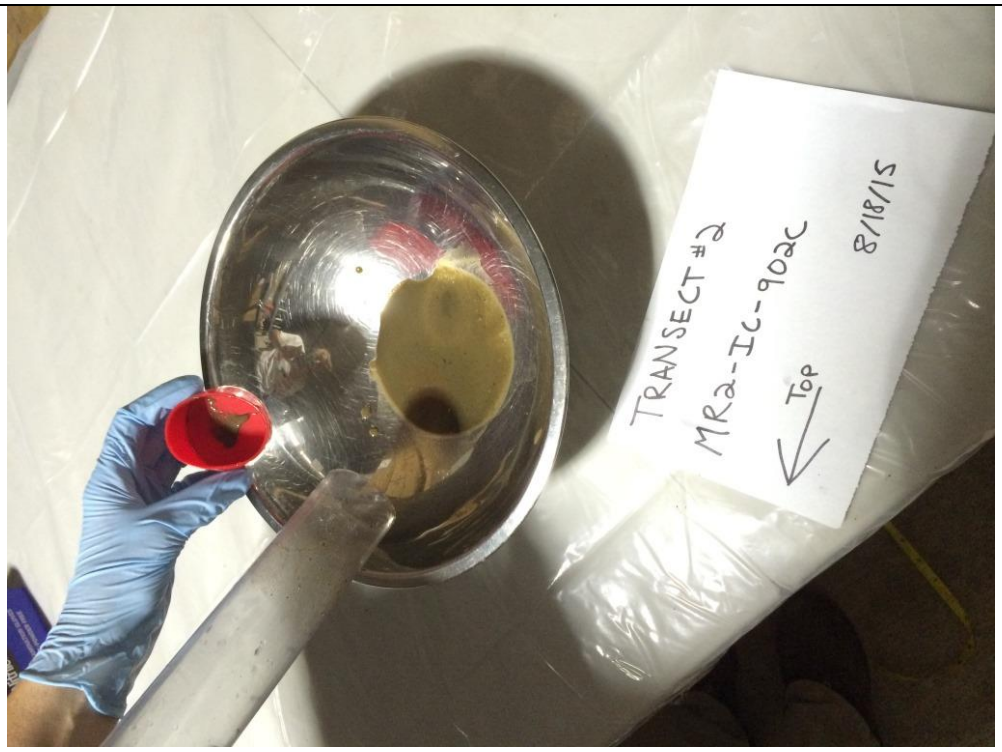


Photo 5: View of sediment from core MR2-IC-902C. No sample was collected due to the small amount of sediment that was retained in the tube.

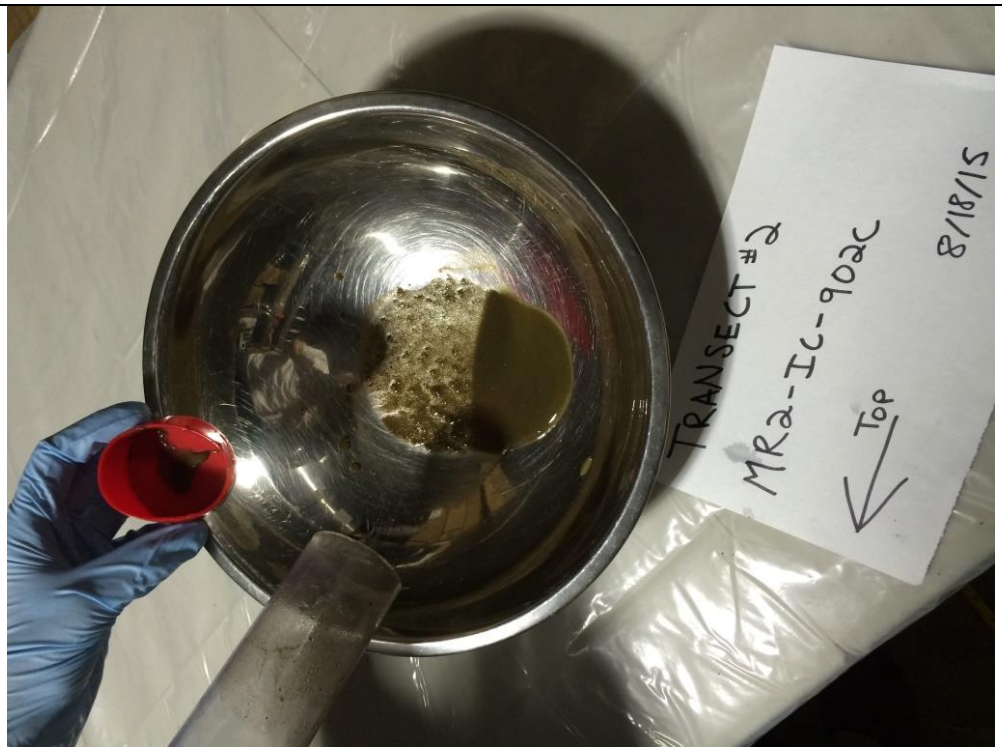


Photo 6: View of sediment from core MR2-IC-902C. No sample was collected due to the small amount of sediment that was retained in the tube.

Appendix B
Sediment Core Photos

Photo 7: View of sediment core MR2-IC-502R.

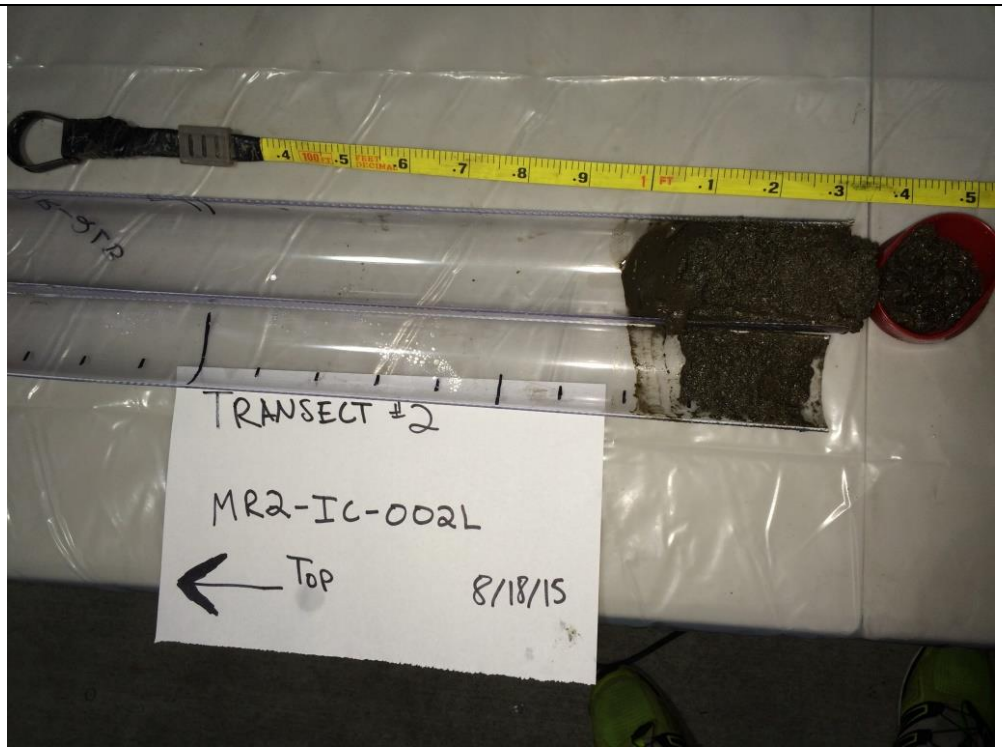


Photo 8: View of sediment core MR2-IC-002L.

Appendix B
Sediment Core Photos

Photo 9: View of sediment from core MR2-IC-502R. The sediment shown is coarse gravel from the 0.0" – 3.6" interval which was not included in the sample.

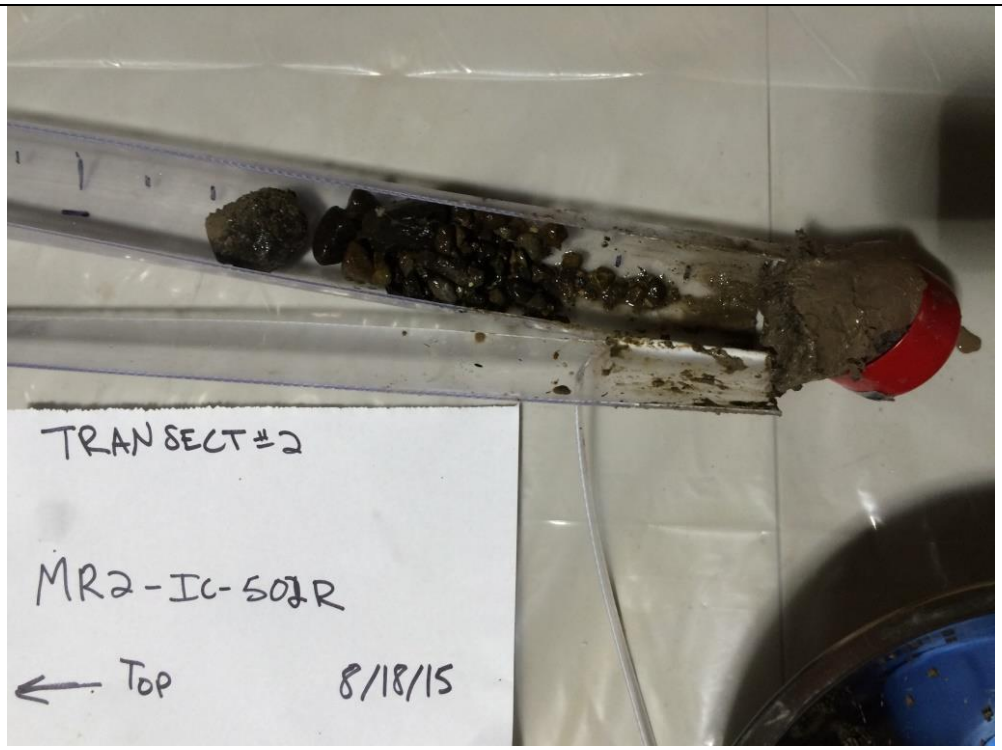


Photo 10: View of sediment core MR2-IC-502R.

Appendix B
Sediment Core Photos

Photo 11: View of sediment core MR3-IC-003L.

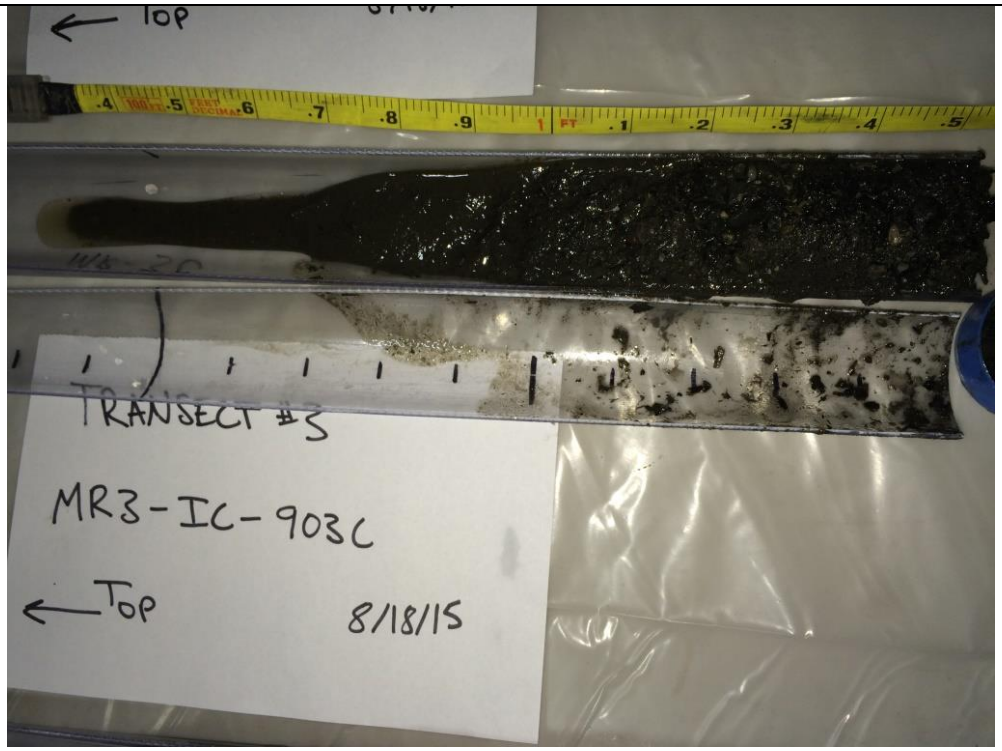


Photo 12: View of sediment core MR3-IC-903C.

Appendix B
Sediment Core Photos

Photo 13: View of sediment core MR3-IC-503R.

Photo 14: View of sediment core MR4-IC-004L.

Appendix B
Sediment Core Photos

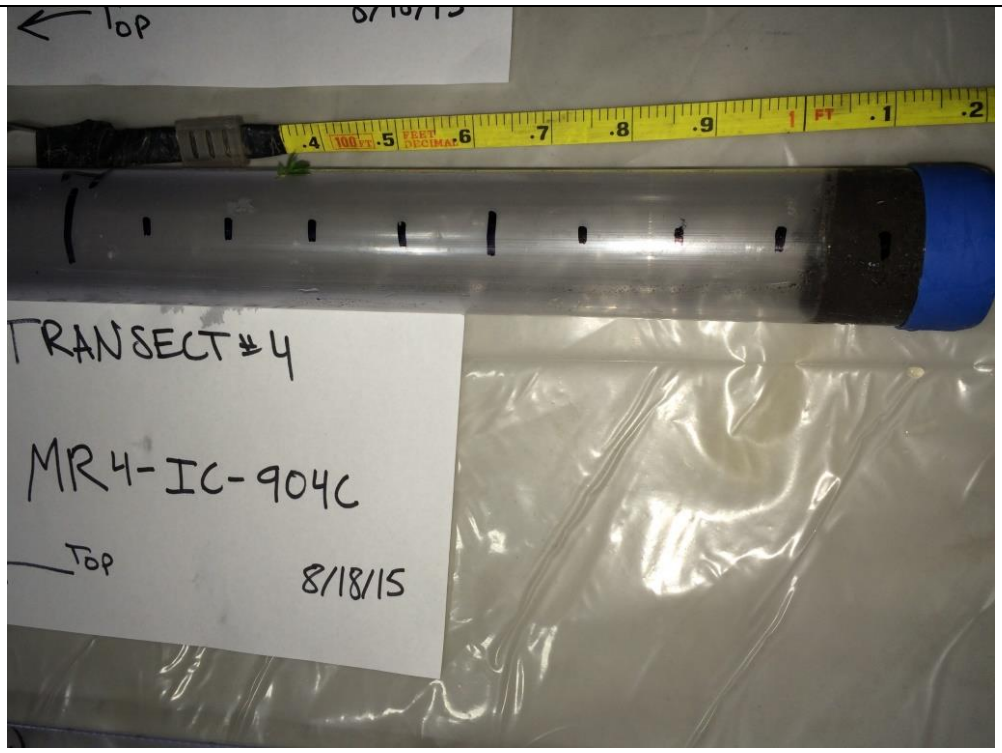


Photo 15: View of sediment core MR4-IC-904C.

Photo 16: View of sediment core MR4-IC-504R.

Appendix B
Sediment Core Photos

Photo 17: View of sediment core MR5-IC-005L.

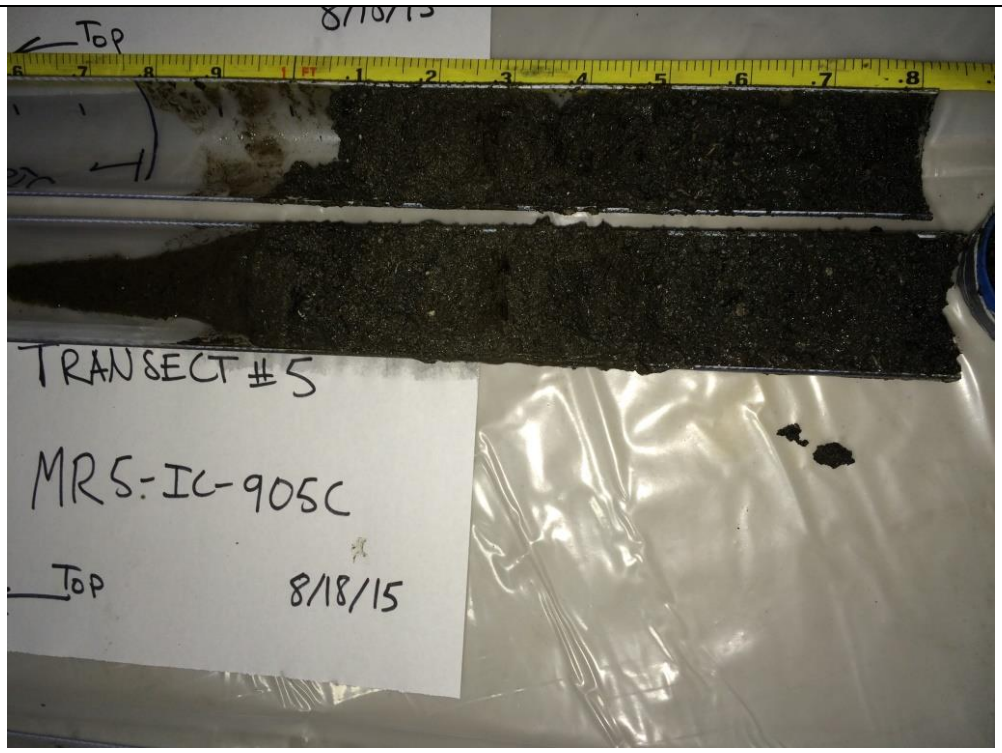


Photo 18: View of sediment core MR5-IC-905C.

Appendix B
Sediment Core Photos

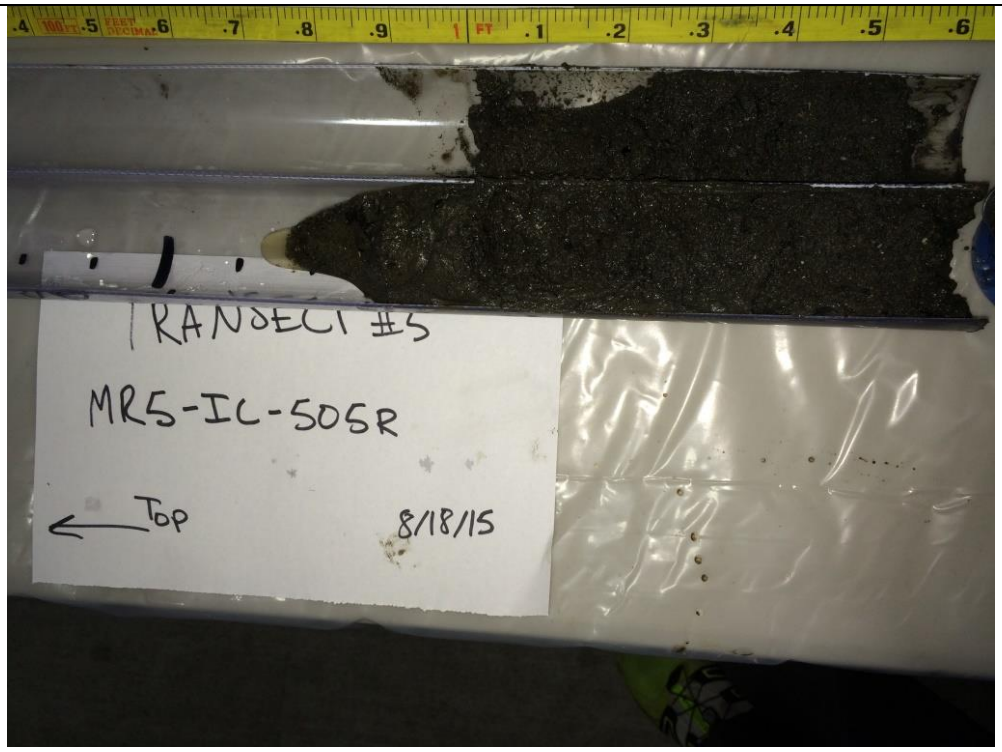


Photo 19: View of sediment core MR5-IC-505R.

Photo 20: View of sediment core MR6-IC-506R.

Appendix B
Sediment Core Photos

Photo 21: View of sediment core MR6-IC-906C.

Photo 22: View of sediment core MR6-IC-006L.

Appendix B
Sediment Core Photos

Photo 23: View of sediment core MR7-IC-007L.

Photo 24: View of sediment core MR7-IC-907C.

Appendix B
Sediment Core Photos

Photo 25: View of sediment core MR7-IC-507R.

APPENDIX C

LABORATORY DATA SHEETS

Pace Analytical Services, Inc.
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

September 10, 2015

Chris Harvey
TRC Environmental
230 W. Monroe St
Suite 2370
Chicago, IL 60606

RE: Project: 192003.0001.00 HARP DOWNSTREAM
Pace Project No.: 40119998

Dear Chris Harvey:
Enclosed are the analytical results for sample(s) received by the laboratory on August 21, 2015. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

Some analyses have been subcontracted outside of the Pace Network. The subcontracted laboratory report has been attached.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Laurie Woelfel

Laurie Woelfel
laurie.woelfel@pacelabs.com
Project Manager

Enclosures

cc: Stacy McAnulty, TRC Environmental
Mac Olsen, TRC
Jesse Papez, TRC - Madison
Peggy Popp, TRC - Madison
James Robinson, TRC Environmental
Meredith Westover, TRC Environmental

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

CERTIFICATIONS

Project: 192003.0001.00 HARP DOWNSTREAM
Pace Project No.: 40119998

Green Bay Certification IDs
1241 Bellevue Street, Green Bay, WI 54302
Florida/NELAP Certification #: E87948
Illinois Certification #: 200050
Kentucky Certification #: 82
Louisiana Certification #: 04168
Minnesota Certification #: 055-999-334
North Dakota Certification #: R-150
South Carolina Certification #: 83006001
Texas Certification #: T104704529-14-1
US Dept of Agriculture #: S-76505
Wisconsin Certification #: 405132750

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

SAMPLE SUMMARY

Project: 192003.0001.00 HARP DOWNSTREAM
Pace Project No.: 40119998

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40119998001	**MR7-IC-007L**	Solid	08/18/15 10:50	08/21/15 09:10
40119998002	**MR7-IC-907C**	Solid	08/18/15 11:00	08/21/15 09:10
40119998003	**MR7-IC-507R**	Solid	08/18/15 11:15	08/21/15 09:10
40119998004	**MR6-IC-506R**	Solid	08/18/15 11:35	08/21/15 09:10
40119998005	**MR6-IC-906C**	Solid	08/18/15 11:45	08/21/15 09:10
40119998006	**MR6-IC-006L**	Solid	08/18/15 11:50	08/21/15 09:10
40119998007	**MR5-IC-005L**	Solid	08/18/15 12:00	08/21/15 09:10
40119998008	**MR5-IC-905C**	Solid	08/18/15 12:10	08/21/15 09:10
40119998009	**MR5-IC-505R**	Solid	08/18/15 12:20	08/21/15 09:10
40119998010	**MR4-IC-504R**	Solid	08/18/15 13:35	08/21/15 09:10
40119998011	**MR4-IC-904C**	Solid	08/18/15 13:40	08/21/15 09:10
40119998012	**MR4-IC-004L 0.0-0.25**	Solid	08/18/15 13:50	08/21/15 09:10
40119998013	**MR4-IC-004L 0.25-0.55**	Solid	08/18/15 13:50	08/21/15 09:10
40119998014	**MR3-IC-503R**	Solid	08/18/15 14:20	08/21/15 09:10
40119998015	**MR3-IC-903C**	Solid	08/18/15 14:25	08/21/15 09:10
40119998016	**MR3-IC-003L**	Solid	08/18/15 15:10	08/21/15 09:10
40119998017	**MR2-IC-002L**	Solid	08/18/15 15:25	08/21/15 09:10
40119998018	**MR2-IC-502R**	Solid	08/18/15 15:35	08/21/15 09:10
40119998019	**MR1-IC-501R**	Solid	08/18/15 16:05	08/21/15 09:10
40119998020	**MR1-IC-001L**	Solid	08/18/15 16:10	08/21/15 09:10
40119998021	**MR1-IC-901C**	Solid	08/18/15 16:15	08/21/15 09:10
40119998022	**MR-IC-DUP01**	Solid	08/18/15 00:00	08/21/15 09:10
40119998023	**MR-IC-FB01**	Water	08/19/15 16:30	08/21/15 09:10

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

SAMPLE ANALYTE COUNT

Project: 192003.0001.00 HARP DOWNSTREAM
Pace Project No.: 40119998

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
40119998001	**MR7-IC-007L**	EPA 8082	BDS	10	PASI-G
		ASTM D2974-87	EMM	1	PASI-G
40119998002	**MR7-IC-907C**	EPA 8082	BDS	10	PASI-G
		ASTM D2974-87	CMP	1	PASI-G
40119998003	**MR7-IC-507R**	EPA 8082	BDS	10	PASI-G
		ASTM D2974-87	CMP	1	PASI-G
40119998004	**MR6-IC-506R**	EPA 8082	BDS	10	PASI-G
		ASTM D2974-87	CMP	1	PASI-G
40119998005	**MR6-IC-906C**	EPA 8082	BDS	10	PASI-G
		ASTM D2974-87	CMP	1	PASI-G
40119998006	**MR6-IC-006L**	EPA 8082	BDS	10	PASI-G
		ASTM D2974-87	CMP	1	PASI-G
40119998007	**MR5-IC-005L**	EPA 8082	BDS	10	PASI-G
		ASTM D2974-87	CMP	1	PASI-G
40119998008	**MR5-IC-905C**	EPA 8082	BDS	10	PASI-G
		ASTM D2974-87	CMP	1	PASI-G
40119998009	**MR5-IC-505R**	EPA 8082	BDS	10	PASI-G
		ASTM D2974-87	CMP	1	PASI-G
40119998010	**MR4-IC-504R**	EPA 8082	BDS	10	PASI-G
		ASTM D2974-87	CMP	1	PASI-G
40119998011	**MR4-IC-904C**	EPA 8082	BDS	10	PASI-G
		ASTM D2974-87	CMP	1	PASI-G
40119998012	**MR4-IC-004L 0.0-0.25**	EPA 8082	BDS	10	PASI-G
		ASTM D2974-87	CMP	1	PASI-G
40119998013	**MR4-IC-004L 0.25-0.55**	EPA 8082	BDS	10	PASI-G
		ASTM D2974-87	CMP	1	PASI-G
40119998014	**MR3-IC-503R**	EPA 8082	BDS	10	PASI-G
		ASTM D2974-87	CMP	1	PASI-G
40119998015	**MR3-IC-903C**	EPA 8082	BDS	10	PASI-G
		ASTM D2974-87	CMP	1	PASI-G
40119998016	**MR3-IC-003L**	EPA 8082	BDS	10	PASI-G
		ASTM D2974-87	CMP	1	PASI-G
40119998017	**MR2-IC-002L**	EPA 8082	BDS	10	PASI-G
		ASTM D2974-87	CMP	1	PASI-G
40119998018	**MR2-IC-502R**	EPA 8082	BLM	10	PASI-G
		ASTM D2974-87	CMP	1	PASI-G
40119998019	**MR1-IC-501R**	EPA 8082	BLM	10	PASI-G

Pace Analytical Services, Inc.
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(920)469-2436

SAMPLE ANALYTE COUNT

Project: 192003.0001.00 HARP DOWNSTREAM
Pace Project No.: 40119998

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		ASTM D2974-87	CMP	1	PASI-G
40119998020	**MR1-IC-001L**	EPA 8082	BLM	10	PASI-G
		ASTM D2974-87	CMP	1	PASI-G
40119998021	**MR1-IC-901C**	EPA 8082	BLM	10	PASI-G
		ASTM D2974-87	CMP	1	PASI-G
40119998022	**MR-IC-DUP01**	EPA 8082	BLM	10	PASI-G
		ASTM D2974-87	CMP	1	PASI-G
40119998023	**MR-IC-FB01**	EPA 8082	BDS	10	PASI-G
		SM 5310C	TJJ	1	PASI-G

Pace Analytical Services, Inc.
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: 192003.0001.00 HARP DOWNSTREAM
Pace Project No.: 40119998

Sample: MR7-IC-007L **Lab ID: 40119998001** Collected: 08/18/15 10:50 Received: 08/21/15 09:10 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB	Analytical Method: EPA 8082 Preparation Method: EPA 3541								
PCB-1016 (Aroclor 1016)	**<45.5**	ug/kg	91.0	45.5	1	08/24/15 13:43	08/25/15 11:59	12674-11-2	
PCB-1221 (Aroclor 1221)	**<45.5**	ug/kg	91.0	45.5	1	08/24/15 13:43	08/25/15 11:59	11104-28-2	
PCB-1232 (Aroclor 1232)	**<45.5**	ug/kg	91.0	45.5	1	08/24/15 13:43	08/25/15 11:59	11141-16-5	
PCB-1242 (Aroclor 1242)	**<45.5**	ug/kg	91.0	45.5	1	08/24/15 13:43	08/25/15 11:59	53469-21-9	
PCB-1248 (Aroclor 1248)	**<45.5**	ug/kg	91.0	45.5	1	08/24/15 13:43	08/25/15 11:59	12672-29-6	
PCB-1254 (Aroclor 1254)	**<45.5**	ug/kg	91.0	45.5	1	08/24/15 13:43	08/25/15 11:59	11097-69-1	
PCB-1260 (Aroclor 1260)	**<45.5**	ug/kg	91.0	45.5	1	08/24/15 13:43	08/25/15 11:59	11096-82-5	
PCB, Total	**<45.5**	ug/kg	91.0	45.5	1	08/24/15 13:43	08/25/15 11:59	1336-36-3	
Surrogates									
Tetrachloro-m-xylene (S)	187	%	46-130		2	08/24/15 13:43	08/25/15 16:49	877-09-8	S3
Decachlorobiphenyl (S)	176	%	39-130		2	08/24/15 13:43	08/25/15 16:49	2051-24-3	S3
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**45.0**	%	0.10	0.10	1		08/25/15 12:28		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: 192003.0001.00 HARP DOWNSTREAM
Pace Project No.: 40119998

Sample: MR7-IC-907C **Lab ID: 40119998002** Collected: 08/18/15 11:00 Received: 08/21/15 09:10 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB	Analytical Method: EPA 8082 Preparation Method: EPA 3541								
PCB-1016 (Aroclor 1016)	**<45.5**	ug/kg	91.0	45.5	1	08/24/15 13:43	08/25/15 12:17	12674-11-2	
PCB-1221 (Aroclor 1221)	**<45.5**	ug/kg	91.0	45.5	1	08/24/15 13:43	08/25/15 12:17	11104-28-2	
PCB-1232 (Aroclor 1232)	**<45.5**	ug/kg	91.0	45.5	1	08/24/15 13:43	08/25/15 12:17	11141-16-5	
PCB-1242 (Aroclor 1242)	**<45.5**	ug/kg	91.0	45.5	1	08/24/15 13:43	08/25/15 12:17	53469-21-9	
PCB-1248 (Aroclor 1248)	**<45.5**	ug/kg	91.0	45.5	1	08/24/15 13:43	08/25/15 12:17	12672-29-6	
PCB-1254 (Aroclor 1254)	**489**	ug/kg	91.0	45.5	1	08/24/15 13:43	08/25/15 12:17	11097-69-1	
PCB-1260 (Aroclor 1260)	**<45.5**	ug/kg	91.0	45.5	1	08/24/15 13:43	08/25/15 12:17	11096-82-5	
PCB, Total	**489**	ug/kg	91.0	45.5	1	08/24/15 13:43	08/25/15 12:17	1336-36-3	
Surrogates									
Tetrachloro-m-xylene (S)	96	%	46-130		1	08/24/15 13:43	08/25/15 12:17	877-09-8	
Decachlorobiphenyl (S)	84	%	39-130		1	08/24/15 13:43	08/25/15 12:17	2051-24-3	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**45.0**	%	0.10	0.10	1		08/25/15 14:19		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: 192003.0001.00 HARP DOWNSTREAM
Pace Project No.: 40119998

Sample: MR7-IC-507R **Lab ID: 40119998003** Collected: 08/18/15 11:15 Received: 08/21/15 09:10 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB	Analytical Method: EPA 8082 Preparation Method: EPA 3541								
PCB-1016 (Aroclor 1016)	**<46.6**	ug/kg	93.2	46.6	1	08/24/15 13:43	08/25/15 12:35	12674-11-2	
PCB-1221 (Aroclor 1221)	**<46.6**	ug/kg	93.2	46.6	1	08/24/15 13:43	08/25/15 12:35	11104-28-2	
PCB-1232 (Aroclor 1232)	**<46.6**	ug/kg	93.2	46.6	1	08/24/15 13:43	08/25/15 12:35	11141-16-5	
PCB-1242 (Aroclor 1242)	**<46.6**	ug/kg	93.2	46.6	1	08/24/15 13:43	08/25/15 12:35	53469-21-9	
PCB-1248 (Aroclor 1248)	**<46.6**	ug/kg	93.2	46.6	1	08/24/15 13:43	08/25/15 12:35	12672-29-6	
PCB-1254 (Aroclor 1254)	**1080**	ug/kg	93.2	46.6	1	08/24/15 13:43	08/25/15 12:35	11097-69-1	
PCB-1260 (Aroclor 1260)	**<46.6**	ug/kg	93.2	46.6	1	08/24/15 13:43	08/25/15 12:35	11096-82-5	
PCB, Total	**1080**	ug/kg	93.2	46.6	1	08/24/15 13:43	08/25/15 12:35	1336-36-3	
Surrogates									
Tetrachloro-m-xylene (S)	87	%	46-130		1	08/24/15 13:43	08/25/15 12:35	877-09-8	
Decachlorobiphenyl (S)	80	%	39-130		1	08/24/15 13:43	08/25/15 12:35	2051-24-3	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**46.3**	%	0.10	0.10	1		08/25/15 14:19		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: 192003.0001.00 HARP DOWNSTREAM
Pace Project No.: 40119998

Sample: MR6-IC-506R **Lab ID: 40119998004** Collected: 08/18/15 11:35 Received: 08/21/15 09:10 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB	Analytical Method: EPA 8082 Preparation Method: EPA 3541								
PCB-1016 (Aroclor 1016)	**<34.5**	ug/kg	68.9	34.5	1	08/24/15 13:43	08/25/15 12:53	12674-11-2	
PCB-1221 (Aroclor 1221)	**<34.5**	ug/kg	68.9	34.5	1	08/24/15 13:43	08/25/15 12:53	11104-28-2	
PCB-1232 (Aroclor 1232)	**<34.5**	ug/kg	68.9	34.5	1	08/24/15 13:43	08/25/15 12:53	11141-16-5	
PCB-1242 (Aroclor 1242)	**<34.5**	ug/kg	68.9	34.5	1	08/24/15 13:43	08/25/15 12:53	53469-21-9	
PCB-1248 (Aroclor 1248)	**<34.5**	ug/kg	68.9	34.5	1	08/24/15 13:43	08/25/15 12:53	12672-29-6	
PCB-1254 (Aroclor 1254)	**337**	ug/kg	68.9	34.5	1	08/24/15 13:43	08/25/15 12:53	11097-69-1	
PCB-1260 (Aroclor 1260)	**<34.5**	ug/kg	68.9	34.5	1	08/24/15 13:43	08/25/15 12:53	11096-82-5	
PCB, Total	**337**	ug/kg	68.9	34.5	1	08/24/15 13:43	08/25/15 12:53	1336-36-3	
Surrogates									
Tetrachloro-m-xylene (S)	93	%	46-130		1	08/24/15 13:43	08/25/15 12:53	877-09-8	
Decachlorobiphenyl (S)	92	%	39-130		1	08/24/15 13:43	08/25/15 12:53	2051-24-3	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**27.4**	%	0.10	0.10	1		08/25/15 14:19		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 192003.0001.00 HARP DOWNSTREAM
Pace Project No.: 40119998

Sample: MR6-IC-906C **Lab ID: 40119998005** Collected: 08/18/15 11:45 Received: 08/21/15 09:10 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB	Analytical Method: EPA 8082 Preparation Method: EPA 3541								
PCB-1016 (Aroclor 1016)	**<48.7**	ug/kg	97.5	48.7	1	08/24/15 13:43	08/25/15 13:11	12674-11-2	
PCB-1221 (Aroclor 1221)	**<48.7**	ug/kg	97.5	48.7	1	08/24/15 13:43	08/25/15 13:11	11104-28-2	
PCB-1232 (Aroclor 1232)	**<48.7**	ug/kg	97.5	48.7	1	08/24/15 13:43	08/25/15 13:11	11141-16-5	
PCB-1242 (Aroclor 1242)	**<48.7**	ug/kg	97.5	48.7	1	08/24/15 13:43	08/25/15 13:11	53469-21-9	
PCB-1248 (Aroclor 1248)	**<48.7**	ug/kg	97.5	48.7	1	08/24/15 13:43	08/25/15 13:11	12672-29-6	
PCB-1254 (Aroclor 1254)	**528**	ug/kg	97.5	48.7	1	08/24/15 13:43	08/25/15 13:11	11097-69-1	
PCB-1260 (Aroclor 1260)	**<48.7**	ug/kg	97.5	48.7	1	08/24/15 13:43	08/25/15 13:11	11096-82-5	
PCB, Total	**528**	ug/kg	97.5	48.7	1	08/24/15 13:43	08/25/15 13:11	1336-36-3	
Surrogates									
Tetrachloro-m-xylene (S)	91	%	46-130		1	08/24/15 13:43	08/25/15 13:11	877-09-8	
Decachlorobiphenyl (S)	81	%	39-130		1	08/24/15 13:43	08/25/15 13:11	2051-24-3	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**48.7**	%	0.10	0.10	1		08/25/15 14:19		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 192003.0001.00 HARP DOWNSTREAM
Pace Project No.: 40119998

Sample: MR6-IC-006L **Lab ID: 40119998006** Collected: 08/18/15 11:50 Received: 08/21/15 09:10 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB	Analytical Method: EPA 8082 Preparation Method: EPA 3541								
PCB-1016 (Aroclor 1016)	**<46.1**	ug/kg	92.1	46.1	1	08/24/15 13:43	08/25/15 13:28	12674-11-2	
PCB-1221 (Aroclor 1221)	**<46.1**	ug/kg	92.1	46.1	1	08/24/15 13:43	08/25/15 13:28	11104-28-2	
PCB-1232 (Aroclor 1232)	**<46.1**	ug/kg	92.1	46.1	1	08/24/15 13:43	08/25/15 13:28	11141-16-5	
PCB-1242 (Aroclor 1242)	**<46.1**	ug/kg	92.1	46.1	1	08/24/15 13:43	08/25/15 13:28	53469-21-9	
PCB-1248 (Aroclor 1248)	**<46.1**	ug/kg	92.1	46.1	1	08/24/15 13:43	08/25/15 13:28	12672-29-6	
PCB-1254 (Aroclor 1254)	**178**	ug/kg	92.1	46.1	1	08/24/15 13:43	08/25/15 13:28	11097-69-1	
PCB-1260 (Aroclor 1260)	**<46.1**	ug/kg	92.1	46.1	1	08/24/15 13:43	08/25/15 13:28	11096-82-5	
PCB, Total	**178**	ug/kg	92.1	46.1	1	08/24/15 13:43	08/25/15 13:28	1336-36-3	
Surrogates									
Tetrachloro-m-xylene (S)	91	%	46-130		1	08/24/15 13:43	08/25/15 13:28	877-09-8	
Decachlorobiphenyl (S)	90	%	39-130		1	08/24/15 13:43	08/25/15 13:28	2051-24-3	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**45.7**	%	0.10	0.10	1		08/25/15 14:19		

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ANALYTICAL RESULTS

Project: 192003.0001.00 HARP DOWNSTREAM
Pace Project No.: 40119998

Sample: MR5-IC-005L **Lab ID: 40119998007** Collected: 08/18/15 12:00 Received: 08/21/15 09:10 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB	Analytical Method: EPA 8082 Preparation Method: EPA 3541								
PCB-1016 (Aroclor 1016)	**<78.3**	ug/kg	157	78.3	2	08/24/15 13:43	08/25/15 17:07	12674-11-2	
PCB-1221 (Aroclor 1221)	**<78.3**	ug/kg	157	78.3	2	08/24/15 13:43	08/25/15 17:07	11104-28-2	
PCB-1232 (Aroclor 1232)	**<78.3**	ug/kg	157	78.3	2	08/24/15 13:43	08/25/15 17:07	11141-16-5	
PCB-1242 (Aroclor 1242)	**<78.3**	ug/kg	157	78.3	2	08/24/15 13:43	08/25/15 17:07	53469-21-9	
PCB-1248 (Aroclor 1248)	**<78.3**	ug/kg	157	78.3	2	08/24/15 13:43	08/25/15 17:07	12672-29-6	
PCB-1254 (Aroclor 1254)	**2050**	ug/kg	157	78.3	2	08/24/15 13:43	08/25/15 17:07	11097-69-1	
PCB-1260 (Aroclor 1260)	**<78.3**	ug/kg	157	78.3	2	08/24/15 13:43	08/25/15 17:07	11096-82-5	
PCB, Total	**2050**	ug/kg	157	78.3	2	08/24/15 13:43	08/25/15 17:07	1336-36-3	
Surrogates									
Tetrachloro-m-xylene (S)	90	%	46-130		2	08/24/15 13:43	08/25/15 17:07	877-09-8	
Decachlorobiphenyl (S)	88	%	39-130		2	08/24/15 13:43	08/25/15 17:07	2051-24-3	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**36.1**	%	0.10	0.10	1		08/25/15 14:57		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 192003.0001.00 HARP DOWNSTREAM
Pace Project No.: 40119998

Sample: MR5-IC-905C **Lab ID: 40119998008** Collected: 08/18/15 12:10 Received: 08/21/15 09:10 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB	Analytical Method: EPA 8082 Preparation Method: EPA 3541								
PCB-1016 (Aroclor 1016)	**<33.3**	ug/kg	66.5	33.3	1	08/24/15 13:43	08/25/15 17:24	12674-11-2	
PCB-1221 (Aroclor 1221)	**<33.3**	ug/kg	66.5	33.3	1	08/24/15 13:43	08/25/15 17:24	11104-28-2	
PCB-1232 (Aroclor 1232)	**<33.3**	ug/kg	66.5	33.3	1	08/24/15 13:43	08/25/15 17:24	11141-16-5	
PCB-1242 (Aroclor 1242)	**<33.3**	ug/kg	66.5	33.3	1	08/24/15 13:43	08/25/15 17:24	53469-21-9	
PCB-1248 (Aroclor 1248)	**<33.3**	ug/kg	66.5	33.3	1	08/24/15 13:43	08/25/15 17:24	12672-29-6	
PCB-1254 (Aroclor 1254)	**382**	ug/kg	66.5	33.3	1	08/24/15 13:43	08/25/15 17:24	11097-69-1	
PCB-1260 (Aroclor 1260)	**<33.3**	ug/kg	66.5	33.3	1	08/24/15 13:43	08/25/15 17:24	11096-82-5	
PCB, Total	**382**	ug/kg	66.5	33.3	1	08/24/15 13:43	08/25/15 17:24	1336-36-3	
Surrogates									
Tetrachloro-m-xylene (S)	88	%	46-130		1	08/24/15 13:43	08/25/15 17:24	877-09-8	
Decachlorobiphenyl (S)	89	%	39-130		1	08/24/15 13:43	08/25/15 17:24	2051-24-3	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**24.8**	%	0.10	0.10	1		08/25/15 14:57		

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ANALYTICAL RESULTS

Project: 192003.0001.00 HARP DOWNSTREAM
Pace Project No.: 40119998

Sample: MR5-IC-505R **Lab ID: 40119998009** Collected: 08/18/15 12:20 Received: 08/21/15 09:10 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB	Analytical Method: EPA 8082 Preparation Method: EPA 3541								
PCB-1016 (Aroclor 1016)	**<40.5**	ug/kg	81.0	40.5	1	08/24/15 13:43	08/25/15 17:42	12674-11-2	
PCB-1221 (Aroclor 1221)	**<40.5**	ug/kg	81.0	40.5	1	08/24/15 13:43	08/25/15 17:42	11104-28-2	
PCB-1232 (Aroclor 1232)	**<40.5**	ug/kg	81.0	40.5	1	08/24/15 13:43	08/25/15 17:42	11141-16-5	
PCB-1242 (Aroclor 1242)	**<40.5**	ug/kg	81.0	40.5	1	08/24/15 13:43	08/25/15 17:42	53469-21-9	
PCB-1248 (Aroclor 1248)	**<40.5**	ug/kg	81.0	40.5	1	08/24/15 13:43	08/25/15 17:42	12672-29-6	
PCB-1254 (Aroclor 1254)	**250**	ug/kg	81.0	40.5	1	08/24/15 13:43	08/25/15 17:42	11097-69-1	
PCB-1260 (Aroclor 1260)	**<40.5**	ug/kg	81.0	40.5	1	08/24/15 13:43	08/25/15 17:42	11096-82-5	
PCB, Total	**250**	ug/kg	81.0	40.5	1	08/24/15 13:43	08/25/15 17:42	1336-36-3	
Surrogates									
Tetrachloro-m-xylene (S)	95	%	46-130		1	08/24/15 13:43	08/25/15 17:42	877-09-8	
Decachlorobiphenyl (S)	92	%	39-130		1	08/24/15 13:43	08/25/15 17:42	2051-24-3	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**38.3**	%	0.10	0.10	1		08/25/15 14:57		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 192003.0001.00 HARP DOWNSTREAM
Pace Project No.: 40119998

Sample: MR4-IC-504R **Lab ID: 40119998010** Collected: 08/18/15 13:35 Received: 08/21/15 09:10 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB	Analytical Method: EPA 8082 Preparation Method: EPA 3541								
PCB-1016 (Aroclor 1016)	**<38.6**	ug/kg	77.1	38.6	1	08/24/15 13:43	08/25/15 18:00	12674-11-2	
PCB-1221 (Aroclor 1221)	**<38.6**	ug/kg	77.1	38.6	1	08/24/15 13:43	08/25/15 18:00	11104-28-2	
PCB-1232 (Aroclor 1232)	**<38.6**	ug/kg	77.1	38.6	1	08/24/15 13:43	08/25/15 18:00	11141-16-5	
PCB-1242 (Aroclor 1242)	**<38.6**	ug/kg	77.1	38.6	1	08/24/15 13:43	08/25/15 18:00	53469-21-9	
PCB-1248 (Aroclor 1248)	**<38.6**	ug/kg	77.1	38.6	1	08/24/15 13:43	08/25/15 18:00	12672-29-6	
PCB-1254 (Aroclor 1254)	**50.7J**	ug/kg	77.1	38.6	1	08/24/15 13:43	08/25/15 18:00	11097-69-1	
PCB-1260 (Aroclor 1260)	**<38.6**	ug/kg	77.1	38.6	1	08/24/15 13:43	08/25/15 18:00	11096-82-5	
PCB, Total	**50.7J**	ug/kg	77.1	38.6	1	08/24/15 13:43	08/25/15 18:00	1336-36-3	
Surrogates									
Tetrachloro-m-xylene (S)	96	%	46-130		1	08/24/15 13:43	08/25/15 18:00	877-09-8	
Decachlorobiphenyl (S)	93	%	39-130		1	08/24/15 13:43	08/25/15 18:00	2051-24-3	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**35.2**	%	0.10	0.10	1		08/25/15 14:57		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 192003.0001.00 HARP DOWNSTREAM
Pace Project No.: 40119998

Sample: MR4-IC-904C **Lab ID: 40119998011** Collected: 08/18/15 13:40 Received: 08/21/15 09:10 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB	Analytical Method: EPA 8082 Preparation Method: EPA 3541								
PCB-1016 (Aroclor 1016)	**<33.2**	ug/kg	66.3	33.2	1	08/24/15 13:43	08/25/15 18:18	12674-11-2	
PCB-1221 (Aroclor 1221)	**<33.2**	ug/kg	66.3	33.2	1	08/24/15 13:43	08/25/15 18:18	11104-28-2	
PCB-1232 (Aroclor 1232)	**<33.2**	ug/kg	66.3	33.2	1	08/24/15 13:43	08/25/15 18:18	11141-16-5	
PCB-1242 (Aroclor 1242)	**<33.2**	ug/kg	66.3	33.2	1	08/24/15 13:43	08/25/15 18:18	53469-21-9	
PCB-1248 (Aroclor 1248)	**<33.2**	ug/kg	66.3	33.2	1	08/24/15 13:43	08/25/15 18:18	12672-29-6	
PCB-1254 (Aroclor 1254)	**33.2J**	ug/kg	66.3	33.2	1	08/24/15 13:43	08/25/15 18:18	11097-69-1	
PCB-1260 (Aroclor 1260)	**<33.2**	ug/kg	66.3	33.2	1	08/24/15 13:43	08/25/15 18:18	11096-82-5	
PCB, Total	**33.2J**	ug/kg	66.3	33.2	1	08/24/15 13:43	08/25/15 18:18	1336-36-3	
Surrogates									
Tetrachloro-m-xylene (S)	96	%	46-130		1	08/24/15 13:43	08/25/15 18:18	877-09-8	
Decachlorobiphenyl (S)	93	%	39-130		1	08/24/15 13:43	08/25/15 18:18	2051-24-3	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**24.6**	%	0.10	0.10	1		08/25/15 14:57		

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ANALYTICAL RESULTS

Project: 192003.0001.00 HARP DOWNSTREAM
Pace Project No.: 40119998

Sample: MR4-IC-004L 0.0-0.25 **Lab ID: 40119998012** Collected: 08/18/15 13:50 Received: 08/21/15 09:10 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB	Analytical Method: EPA 8082 Preparation Method: EPA 3541								
PCB-1016 (Aroclor 1016)	**<31.7**	ug/kg	63.3	31.7	1	08/24/15 13:43	08/25/15 18:36	12674-11-2	
PCB-1221 (Aroclor 1221)	**<31.7**	ug/kg	63.3	31.7	1	08/24/15 13:43	08/25/15 18:36	11104-28-2	
PCB-1232 (Aroclor 1232)	**<31.7**	ug/kg	63.3	31.7	1	08/24/15 13:43	08/25/15 18:36	11141-16-5	
PCB-1242 (Aroclor 1242)	**<31.7**	ug/kg	63.3	31.7	1	08/24/15 13:43	08/25/15 18:36	53469-21-9	
PCB-1248 (Aroclor 1248)	**<31.7**	ug/kg	63.3	31.7	1	08/24/15 13:43	08/25/15 18:36	12672-29-6	
PCB-1254 (Aroclor 1254)	**214**	ug/kg	63.3	31.7	1	08/24/15 13:43	08/25/15 18:36	11097-69-1	
PCB-1260 (Aroclor 1260)	**<31.7**	ug/kg	63.3	31.7	1	08/24/15 13:43	08/25/15 18:36	11096-82-5	
PCB, Total	**214**	ug/kg	63.3	31.7	1	08/24/15 13:43	08/25/15 18:36	1336-36-3	
Surrogates									
Tetrachloro-m-xylene (S)	90	%	46-130		1	08/24/15 13:43	08/25/15 18:36	877-09-8	
Decachlorobiphenyl (S)	90	%	39-130		1	08/24/15 13:43	08/25/15 18:36	2051-24-3	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**21.0**	%	0.10	0.10	1		08/25/15 14:57		

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ANALYTICAL RESULTS

Project: 192003.0001.00 HARP DOWNSTREAM
Pace Project No.: 40119998

Sample: MR4-IC-004L 0.25-0.55 **Lab ID: 40119998013** Collected: 08/18/15 13:50 Received: 08/21/15 09:10 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB	Analytical Method: EPA 8082 Preparation Method: EPA 3541								
PCB-1016 (Aroclor 1016)	**<66.1**	ug/kg	132	66.1	2	08/24/15 13:43	08/25/15 18:53	12674-11-2	
PCB-1221 (Aroclor 1221)	**<66.1**	ug/kg	132	66.1	2	08/24/15 13:43	08/25/15 18:53	11104-28-2	
PCB-1232 (Aroclor 1232)	**<66.1**	ug/kg	132	66.1	2	08/24/15 13:43	08/25/15 18:53	11141-16-5	
PCB-1242 (Aroclor 1242)	**<66.1**	ug/kg	132	66.1	2	08/24/15 13:43	08/25/15 18:53	53469-21-9	
PCB-1248 (Aroclor 1248)	**<66.1**	ug/kg	132	66.1	2	08/24/15 13:43	08/25/15 18:53	12672-29-6	
PCB-1254 (Aroclor 1254)	**1950**	ug/kg	132	66.1	2	08/24/15 13:43	08/25/15 18:53	11097-69-1	
PCB-1260 (Aroclor 1260)	**<66.1**	ug/kg	132	66.1	2	08/24/15 13:43	08/25/15 18:53	11096-82-5	
PCB, Total	**1950**	ug/kg	132	66.1	2	08/24/15 13:43	08/25/15 18:53	1336-36-3	
Surrogates									
Tetrachloro-m-xylene (S)	92	%	46-130		2	08/24/15 13:43	08/25/15 18:53	877-09-8	
Decachlorobiphenyl (S)	89	%	39-130		2	08/24/15 13:43	08/25/15 18:53	2051-24-3	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**24.4**	%	0.10	0.10	1		08/25/15 14:57		

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ANALYTICAL RESULTS

Project: 192003.0001.00 HARP DOWNSTREAM
Pace Project No.: 40119998

Sample: MR3-IC-503R **Lab ID: 40119998014** Collected: 08/18/15 14:20 Received: 08/21/15 09:10 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB	Analytical Method: EPA 8082 Preparation Method: EPA 3541								
PCB-1016 (Aroclor 1016)	**<36.0**	ug/kg	71.9	36.0	1	08/24/15 13:43	08/25/15 19:11	12674-11-2	
PCB-1221 (Aroclor 1221)	**<36.0**	ug/kg	71.9	36.0	1	08/24/15 13:43	08/25/15 19:11	11104-28-2	
PCB-1232 (Aroclor 1232)	**<36.0**	ug/kg	71.9	36.0	1	08/24/15 13:43	08/25/15 19:11	11141-16-5	
PCB-1242 (Aroclor 1242)	**<36.0**	ug/kg	71.9	36.0	1	08/24/15 13:43	08/25/15 19:11	53469-21-9	
PCB-1248 (Aroclor 1248)	**<36.0**	ug/kg	71.9	36.0	1	08/24/15 13:43	08/25/15 19:11	12672-29-6	
PCB-1254 (Aroclor 1254)	**51.1J**	ug/kg	71.9	36.0	1	08/24/15 13:43	08/25/15 19:11	11097-69-1	
PCB-1260 (Aroclor 1260)	**<36.0**	ug/kg	71.9	36.0	1	08/24/15 13:43	08/25/15 19:11	11096-82-5	
PCB, Total	**51.1J**	ug/kg	71.9	36.0	1	08/24/15 13:43	08/25/15 19:11	1336-36-3	
Surrogates									
Tetrachloro-m-xylene (S)	96	%	46-130		1	08/24/15 13:43	08/25/15 19:11	877-09-8	
Decachlorobiphenyl (S)	95	%	39-130		1	08/24/15 13:43	08/25/15 19:11	2051-24-3	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**30.5**	%	0.10	0.10	1		08/25/15 14:57		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 192003.0001.00 HARP DOWNSTREAM
Pace Project No.: 40119998

Sample: MR3-IC-903C **Lab ID: 40119998015** Collected: 08/18/15 14:25 Received: 08/21/15 09:10 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB	Analytical Method: EPA 8082 Preparation Method: EPA 3541								
PCB-1016 (Aroclor 1016)	**<31.4**	ug/kg	62.7	31.4	1	08/24/15 13:43	08/25/15 19:29	12674-11-2	
PCB-1221 (Aroclor 1221)	**<31.4**	ug/kg	62.7	31.4	1	08/24/15 13:43	08/25/15 19:29	11104-28-2	
PCB-1232 (Aroclor 1232)	**<31.4**	ug/kg	62.7	31.4	1	08/24/15 13:43	08/25/15 19:29	11141-16-5	
PCB-1242 (Aroclor 1242)	**<31.4**	ug/kg	62.7	31.4	1	08/24/15 13:43	08/25/15 19:29	53469-21-9	
PCB-1248 (Aroclor 1248)	**<31.4**	ug/kg	62.7	31.4	1	08/24/15 13:43	08/25/15 19:29	12672-29-6	
PCB-1254 (Aroclor 1254)	**229**	ug/kg	62.7	31.4	1	08/24/15 13:43	08/25/15 19:29	11097-69-1	
PCB-1260 (Aroclor 1260)	**<31.4**	ug/kg	62.7	31.4	1	08/24/15 13:43	08/25/15 19:29	11096-82-5	
PCB, Total	**229**	ug/kg	62.7	31.4	1	08/24/15 13:43	08/25/15 19:29	1336-36-3	
Surrogates									
Tetrachloro-m-xylene (S)	94	%	46-130		1	08/24/15 13:43	08/25/15 19:29	877-09-8	
Decachlorobiphenyl (S)	91	%	39-130		1	08/24/15 13:43	08/25/15 19:29	2051-24-3	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**20.3**	%	0.10	0.10	1		08/25/15 14:58		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 192003.0001.00 HARP DOWNSTREAM
Pace Project No.: 40119998

Sample: MR3-IC-003L **Lab ID: 40119998016** Collected: 08/18/15 15:10 Received: 08/21/15 09:10 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB	Analytical Method: EPA 8082 Preparation Method: EPA 3541								
PCB-1016 (Aroclor 1016)	**<121**	ug/kg	242	121	3	08/24/15 13:43	08/25/15 19:47	12674-11-2	
PCB-1221 (Aroclor 1221)	**<121**	ug/kg	242	121	3	08/24/15 13:43	08/25/15 19:47	11104-28-2	
PCB-1232 (Aroclor 1232)	**<121**	ug/kg	242	121	3	08/24/15 13:43	08/25/15 19:47	11141-16-5	
PCB-1242 (Aroclor 1242)	**1140**	ug/kg	242	121	3	08/24/15 13:43	08/25/15 19:47	53469-21-9	
PCB-1248 (Aroclor 1248)	**<121**	ug/kg	242	121	3	08/24/15 13:43	08/25/15 19:47	12672-29-6	
PCB-1254 (Aroclor 1254)	**1990**	ug/kg	242	121	3	08/24/15 13:43	08/25/15 19:47	11097-69-1	
PCB-1260 (Aroclor 1260)	**545**	ug/kg	242	121	3	08/24/15 13:43	08/25/15 19:47	11096-82-5	
PCB, Total	**3670**	ug/kg	242	121	3	08/24/15 13:43	08/25/15 19:47	1336-36-3	
Surrogates									
Tetrachloro-m-xylene (S)	91	%	46-130		3	08/24/15 13:43	08/25/15 19:47	877-09-8	
Decachlorobiphenyl (S)	89	%	39-130		3	08/24/15 13:43	08/25/15 19:47	2051-24-3	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**38.1**	%	0.10	0.10	1		08/25/15 14:58		

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ANALYTICAL RESULTS

Project: 192003.0001.00 HARP DOWNSTREAM
Pace Project No.: 40119998

Sample: MR2-IC-002L **Lab ID: 40119998017** Collected: 08/18/15 15:25 Received: 08/21/15 09:10 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB	Analytical Method: EPA 8082 Preparation Method: EPA 3541								
PCB-1016 (Aroclor 1016)	**<33.1**	ug/kg	66.3	33.1	1	08/24/15 13:43	08/25/15 20:05	12674-11-2	
PCB-1221 (Aroclor 1221)	**<33.1**	ug/kg	66.3	33.1	1	08/24/15 13:43	08/25/15 20:05	11104-28-2	
PCB-1232 (Aroclor 1232)	**<33.1**	ug/kg	66.3	33.1	1	08/24/15 13:43	08/25/15 20:05	11141-16-5	
PCB-1242 (Aroclor 1242)	**<33.1**	ug/kg	66.3	33.1	1	08/24/15 13:43	08/25/15 20:05	53469-21-9	
PCB-1248 (Aroclor 1248)	**<33.1**	ug/kg	66.3	33.1	1	08/24/15 13:43	08/25/15 20:05	12672-29-6	
PCB-1254 (Aroclor 1254)	**183**	ug/kg	66.3	33.1	1	08/24/15 13:43	08/25/15 20:05	11097-69-1	
PCB-1260 (Aroclor 1260)	**<33.1**	ug/kg	66.3	33.1	1	08/24/15 13:43	08/25/15 20:05	11096-82-5	
PCB, Total	**183**	ug/kg	66.3	33.1	1	08/24/15 13:43	08/25/15 20:05	1336-36-3	
Surrogates									
Tetrachloro-m-xylene (S)	94	%	46-130		1	08/24/15 13:43	08/25/15 20:05	877-09-8	
Decachlorobiphenyl (S)	92	%	39-130		1	08/24/15 13:43	08/25/15 20:05	2051-24-3	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**24.5**	%	0.10	0.10	1		08/25/15 14:58		

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ANALYTICAL RESULTS

Project: 192003.0001.00 HARP DOWNSTREAM
Pace Project No.: 40119998

Sample: MR2-IC-502R **Lab ID: 40119998018** Collected: 08/18/15 15:35 Received: 08/21/15 09:10 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB	Analytical Method: EPA 8082 Preparation Method: EPA 3541								
PCB-1016 (Aroclor 1016)	**<29.9**	ug/kg	59.8	29.9	1	08/25/15 10:44	08/26/15 15:54	12674-11-2	
PCB-1221 (Aroclor 1221)	**<29.9**	ug/kg	59.8	29.9	1	08/25/15 10:44	08/26/15 15:54	11104-28-2	
PCB-1232 (Aroclor 1232)	**<29.9**	ug/kg	59.8	29.9	1	08/25/15 10:44	08/26/15 15:54	11141-16-5	
PCB-1242 (Aroclor 1242)	**<29.9**	ug/kg	59.8	29.9	1	08/25/15 10:44	08/26/15 15:54	53469-21-9	
PCB-1248 (Aroclor 1248)	**<29.9**	ug/kg	59.8	29.9	1	08/25/15 10:44	08/26/15 15:54	12672-29-6	
PCB-1254 (Aroclor 1254)	**37.4J**	ug/kg	59.8	29.9	1	08/25/15 10:44	08/26/15 15:54	11097-69-1	
PCB-1260 (Aroclor 1260)	**<29.9**	ug/kg	59.8	29.9	1	08/25/15 10:44	08/26/15 15:54	11096-82-5	
PCB, Total	**37.4J**	ug/kg	59.8	29.9	1	08/25/15 10:44	08/26/15 15:54	1336-36-3	
Surrogates									
Tetrachloro-m-xylene (S)	81	%	46-130		1	08/25/15 10:44	08/26/15 15:54	877-09-8	
Decachlorobiphenyl (S)	93	%	39-130		1	08/25/15 10:44	08/26/15 15:54	2051-24-3	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**16.4**	%	0.10	0.10	1		08/25/15 14:58		

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ANALYTICAL RESULTS

Project: 192003.0001.00 HARP DOWNSTREAM
Pace Project No.: 40119998

Sample: MR1-IC-501R **Lab ID: 40119998019** Collected: 08/18/15 16:05 Received: 08/21/15 09:10 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB	Analytical Method: EPA 8082 Preparation Method: EPA 3541								
PCB-1016 (Aroclor 1016)	**<47.4**	ug/kg	94.8	47.4	1	08/25/15 10:44	08/26/15 16:11	12674-11-2	
PCB-1221 (Aroclor 1221)	**<47.4**	ug/kg	94.8	47.4	1	08/25/15 10:44	08/26/15 16:11	11104-28-2	
PCB-1232 (Aroclor 1232)	**<47.4**	ug/kg	94.8	47.4	1	08/25/15 10:44	08/26/15 16:11	11141-16-5	
PCB-1242 (Aroclor 1242)	**<47.4**	ug/kg	94.8	47.4	1	08/25/15 10:44	08/26/15 16:11	53469-21-9	
PCB-1248 (Aroclor 1248)	**<47.4**	ug/kg	94.8	47.4	1	08/25/15 10:44	08/26/15 16:11	12672-29-6	
PCB-1254 (Aroclor 1254)	**1320**	ug/kg	94.8	47.4	1	08/25/15 10:44	08/26/15 16:11	11097-69-1	
PCB-1260 (Aroclor 1260)	**<47.4**	ug/kg	94.8	47.4	1	08/25/15 10:44	08/26/15 16:11	11096-82-5	
PCB, Total	**1320**	ug/kg	94.8	47.4	1	08/25/15 10:44	08/26/15 16:11	1336-36-3	
Surrogates									
Tetrachloro-m-xylene (S)	79	%	46-130		1	08/25/15 10:44	08/26/15 16:11	877-09-8	
Decachlorobiphenyl (S)	79	%	39-130		1	08/25/15 10:44	08/26/15 16:11	2051-24-3	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**47.2**	%	0.10	0.10	1		08/25/15 14:58		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 192003.0001.00 HARP DOWNSTREAM
Pace Project No.: 40119998

Sample: MR1-IC-001L **Lab ID: 40119998020** Collected: 08/18/15 16:10 Received: 08/21/15 09:10 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB	Analytical Method: EPA 8082 Preparation Method: EPA 3541								
PCB-1016 (Aroclor 1016)	**<34.7**	ug/kg	69.3	34.7	1	08/25/15 10:44	08/26/15 16:29	12674-11-2	
PCB-1221 (Aroclor 1221)	**<34.7**	ug/kg	69.3	34.7	1	08/25/15 10:44	08/26/15 16:29	11104-28-2	
PCB-1232 (Aroclor 1232)	**<34.7**	ug/kg	69.3	34.7	1	08/25/15 10:44	08/26/15 16:29	11141-16-5	
PCB-1242 (Aroclor 1242)	**<34.7**	ug/kg	69.3	34.7	1	08/25/15 10:44	08/26/15 16:29	53469-21-9	
PCB-1248 (Aroclor 1248)	**<34.7**	ug/kg	69.3	34.7	1	08/25/15 10:44	08/26/15 16:29	12672-29-6	
PCB-1254 (Aroclor 1254)	**74.0**	ug/kg	69.3	34.7	1	08/25/15 10:44	08/26/15 16:29	11097-69-1	
PCB-1260 (Aroclor 1260)	**<34.7**	ug/kg	69.3	34.7	1	08/25/15 10:44	08/26/15 16:29	11096-82-5	
PCB, Total	**74.0**	ug/kg	69.3	34.7	1	08/25/15 10:44	08/26/15 16:29	1336-36-3	
Surrogates									
Tetrachloro-m-xylene (S)	77	%	46-130		1	08/25/15 10:44	08/26/15 16:29	877-09-8	
Decachlorobiphenyl (S)	76	%	39-130		1	08/25/15 10:44	08/26/15 16:29	2051-24-3	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**27.9**	%	0.10	0.10	1		08/25/15 14:58		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 192003.0001.00 HARP DOWNSTREAM
Pace Project No.: 40119998

Sample: MR1-IC-901C **Lab ID: 40119998021** Collected: 08/18/15 16:15 Received: 08/21/15 09:10 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB	Analytical Method: EPA 8082 Preparation Method: EPA 3541								
PCB-1016 (Aroclor 1016)	**<28.6**	ug/kg	57.2	28.6	1	08/25/15 10:44	08/26/15 16:46	12674-11-2	
PCB-1221 (Aroclor 1221)	**<28.6**	ug/kg	57.2	28.6	1	08/25/15 10:44	08/26/15 16:46	11104-28-2	
PCB-1232 (Aroclor 1232)	**<28.6**	ug/kg	57.2	28.6	1	08/25/15 10:44	08/26/15 16:46	11141-16-5	
PCB-1242 (Aroclor 1242)	**<28.6**	ug/kg	57.2	28.6	1	08/25/15 10:44	08/26/15 16:46	53469-21-9	
PCB-1248 (Aroclor 1248)	**<28.6**	ug/kg	57.2	28.6	1	08/25/15 10:44	08/26/15 16:46	12672-29-6	
PCB-1254 (Aroclor 1254)	**<28.6**	ug/kg	57.2	28.6	1	08/25/15 10:44	08/26/15 16:46	11097-69-1	
PCB-1260 (Aroclor 1260)	**<28.6**	ug/kg	57.2	28.6	1	08/25/15 10:44	08/26/15 16:46	11096-82-5	
PCB, Total	**<28.6**	ug/kg	57.2	28.6	1	08/25/15 10:44	08/26/15 16:46	1336-36-3	
Surrogates									
Tetrachloro-m-xylene (S)	80	%	46-130		1	08/25/15 10:44	08/26/15 16:46	877-09-8	
Decachlorobiphenyl (S)	86	%	39-130		1	08/25/15 10:44	08/26/15 16:46	2051-24-3	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**12.6**	%	0.10	0.10	1		08/25/15 14:58		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 192003.0001.00 HARP DOWNSTREAM
Pace Project No.: 40119998

Sample: MR-IC-DUP01 **Lab ID: 40119998022** Collected: 08/18/15 00:00 Received: 08/21/15 09:10 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB	Analytical Method: EPA 8082 Preparation Method: EPA 3541								
PCB-1016 (Aroclor 1016)	**<36.2**	ug/kg	72.3	36.2	1	08/25/15 10:44	08/26/15 17:04	12674-11-2	
PCB-1221 (Aroclor 1221)	**<36.2**	ug/kg	72.3	36.2	1	08/25/15 10:44	08/26/15 17:04	11104-28-2	
PCB-1232 (Aroclor 1232)	**<36.2**	ug/kg	72.3	36.2	1	08/25/15 10:44	08/26/15 17:04	11141-16-5	
PCB-1242 (Aroclor 1242)	**<36.2**	ug/kg	72.3	36.2	1	08/25/15 10:44	08/26/15 17:04	53469-21-9	
PCB-1248 (Aroclor 1248)	**<36.2**	ug/kg	72.3	36.2	1	08/25/15 10:44	08/26/15 17:04	12672-29-6	
PCB-1254 (Aroclor 1254)	**45.2J**	ug/kg	72.3	36.2	1	08/25/15 10:44	08/26/15 17:04	11097-69-1	
PCB-1260 (Aroclor 1260)	**<36.2**	ug/kg	72.3	36.2	1	08/25/15 10:44	08/26/15 17:04	11096-82-5	
PCB, Total	**45.2J**	ug/kg	72.3	36.2	1	08/25/15 10:44	08/26/15 17:04	1336-36-3	
Surrogates									
Tetrachloro-m-xylene (S)	80	%	46-130		1	08/25/15 10:44	08/26/15 17:04	877-09-8	
Decachlorobiphenyl (S)	84	%	39-130		1	08/25/15 10:44	08/26/15 17:04	2051-24-3	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**30.8**	%	0.10	0.10	1		08/25/15 14:58		

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ANALYTICAL RESULTS

Project: 192003.0001.00 HARP DOWNSTREAM
Pace Project No.: 40119998

Sample: MR-IC-FB01 **Lab ID: 40119998023** Collected: 08/19/15 16:30 Received: 08/21/15 09:10 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB	Analytical Method: EPA 8082 Preparation Method: EPA 3510								
PCB-1016 (Aroclor 1016)	**<0.25**	ug/L	0.49	0.25	1	08/25/15 08:00	08/26/15 16:59	12674-11-2	
PCB-1221 (Aroclor 1221)	**<0.25**	ug/L	0.49	0.25	1	08/25/15 08:00	08/26/15 16:59	11104-28-2	
PCB-1232 (Aroclor 1232)	**<0.25**	ug/L	0.49	0.25	1	08/25/15 08:00	08/26/15 16:59	11141-16-5	
PCB-1242 (Aroclor 1242)	**<0.25**	ug/L	0.49	0.25	1	08/25/15 08:00	08/26/15 16:59	53469-21-9	
PCB-1248 (Aroclor 1248)	**<0.25**	ug/L	0.49	0.25	1	08/25/15 08:00	08/26/15 16:59	12672-29-6	
PCB-1254 (Aroclor 1254)	**<0.25**	ug/L	0.49	0.25	1	08/25/15 08:00	08/26/15 16:59	11097-69-1	
PCB-1260 (Aroclor 1260)	**<0.25**	ug/L	0.49	0.25	1	08/25/15 08:00	08/26/15 16:59	11096-82-5	
PCB, Total	**<0.25**	ug/L	0.49	0.25	1	08/25/15 08:00	08/26/15 16:59	1336-36-3	
Surrogates									
Tetrachloro-m-xylene (S)	100	%	55-130		1	08/25/15 08:00	08/26/15 16:59	877-09-8	
Decachlorobiphenyl (S)	93	%	34-130		1	08/25/15 08:00	08/26/15 16:59	2051-24-3	
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	**<0.17**	mg/L	0.50	0.17	1		08/26/15 21:05	7440-44-0	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 192003.0001.00 HARP DOWNSTREAM
Pace Project No.: 40119998

QC Batch: OEXT/27772 Analysis Method: EPA 8082
QC Batch Method: EPA 3541 Analysis Description: 8082 GCS PCB
Associated Lab Samples: 40119998001, 40119998002, 40119998003, 40119998004, 40119998005, 40119998006, 40119998007, 40119998008, 40119998009, 40119998010, 40119998011, 40119998012, 40119998013, 40119998014, 40119998015, 40119998016, 40119998017

METHOD BLANK: 1210487 Matrix: Solid
Associated Lab Samples: 40119998001, 40119998002, 40119998003, 40119998004, 40119998005, 40119998006, 40119998007, 40119998008, 40119998009, 40119998010, 40119998011, 40119998012, 40119998013, 40119998014, 40119998015, 40119998016, 40119998017

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
PCB-1016 (Aroclor 1016)	ug/kg	<25.0	50.0	08/25/15 09:19	
PCB-1221 (Aroclor 1221)	ug/kg	<25.0	50.0	08/25/15 09:19	
PCB-1232 (Aroclor 1232)	ug/kg	<25.0	50.0	08/25/15 09:19	
PCB-1242 (Aroclor 1242)	ug/kg	<25.0	50.0	08/25/15 09:19	
PCB-1248 (Aroclor 1248)	ug/kg	<25.0	50.0	08/25/15 09:19	
PCB-1254 (Aroclor 1254)	ug/kg	<25.0	50.0	08/25/15 09:19	
PCB-1260 (Aroclor 1260)	ug/kg	<25.0	50.0	08/25/15 09:19	
Decachlorobiphenyl (S)	%	100	39-130	08/25/15 09:19	
Tetrachloro-m-xylene (S)	%	94	46-130	08/25/15 09:19	

LABORATORY CONTROL SAMPLE: 1210488

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
PCB-1016 (Aroclor 1016)	ug/kg		<25.0			
PCB-1221 (Aroclor 1221)	ug/kg		<25.0			
PCB-1232 (Aroclor 1232)	ug/kg		<25.0			
PCB-1242 (Aroclor 1242)	ug/kg		<25.0			
PCB-1248 (Aroclor 1248)	ug/kg		<25.0			
PCB-1254 (Aroclor 1254)	ug/kg		<25.0			
PCB-1260 (Aroclor 1260)	ug/kg	500	434	87	63-130	
Decachlorobiphenyl (S)	%			105	39-130	
Tetrachloro-m-xylene (S)	%			98	46-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1210489 1210490

Parameter	Units	40119998006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
PCB-1016 (Aroclor 1016)	ug/kg	<46.1			<46.1	<46.1					20	
PCB-1221 (Aroclor 1221)	ug/kg	<46.1			<46.1	<46.1					20	
PCB-1232 (Aroclor 1232)	ug/kg	<46.1			<46.1	<46.1					20	
PCB-1242 (Aroclor 1242)	ug/kg	<46.1			<46.1	<46.1					20	
PCB-1248 (Aroclor 1248)	ug/kg	<46.1			<46.1	<46.1					20	
PCB-1254 (Aroclor 1254)	ug/kg	178			<46.1	<46.1					20	
PCB-1260 (Aroclor 1260)	ug/kg	<46.1	921	921	774	755	84	82	38-130	2	20	
Decachlorobiphenyl (S)	%						91	94	39-130			

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 192003.0001.00 HARP DOWNSTREAM
Pace Project No.: 40119998

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1210489 1210490

Parameter	Units	40119998006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Tetrachloro-m-xylene (S)	%						92	98	46-130			

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 192003.0001.00 HARP DOWNSTREAM
Pace Project No.: 40119998

QC Batch: OEXT/27786 Analysis Method: EPA 8082
QC Batch Method: EPA 3541 Analysis Description: 8082 GCS PCB
Associated Lab Samples: 40119998018, 40119998019, 40119998020, 40119998021, 40119998022

METHOD BLANK: 1210873 Matrix: Solid
Associated Lab Samples: 40119998018, 40119998019, 40119998020, 40119998021, 40119998022

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
PCB-1016 (Aroclor 1016)	ug/kg	<25.0	50.0	08/26/15 08:40	
PCB-1221 (Aroclor 1221)	ug/kg	<25.0	50.0	08/26/15 08:40	
PCB-1232 (Aroclor 1232)	ug/kg	<25.0	50.0	08/26/15 08:40	
PCB-1242 (Aroclor 1242)	ug/kg	<25.0	50.0	08/26/15 08:40	
PCB-1248 (Aroclor 1248)	ug/kg	<25.0	50.0	08/26/15 08:40	
PCB-1254 (Aroclor 1254)	ug/kg	<25.0	50.0	08/26/15 08:40	
PCB-1260 (Aroclor 1260)	ug/kg	<25.0	50.0	08/26/15 08:40	
Decachlorobiphenyl (S)	%	87	39-130	08/26/15 08:40	
Tetrachloro-m-xylene (S)	%	79	46-130	08/26/15 08:40	

LABORATORY CONTROL SAMPLE: 1210874

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
PCB-1016 (Aroclor 1016)	ug/kg		<25.0			
PCB-1221 (Aroclor 1221)	ug/kg		<25.0			
PCB-1232 (Aroclor 1232)	ug/kg		<25.0			
PCB-1242 (Aroclor 1242)	ug/kg		<25.0			
PCB-1248 (Aroclor 1248)	ug/kg		<25.0			
PCB-1254 (Aroclor 1254)	ug/kg		<25.0			
PCB-1260 (Aroclor 1260)	ug/kg	500	383	77	63-130	
Decachlorobiphenyl (S)	%			96	39-130	
Tetrachloro-m-xylene (S)	%			85	46-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1211117 1211118

Parameter	Units	40120041001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
PCB-1016 (Aroclor 1016)	ug/kg	<31.1			<31.1	<31.1					20	
PCB-1221 (Aroclor 1221)	ug/kg	<31.1			<31.1	<31.1					20	
PCB-1232 (Aroclor 1232)	ug/kg	<31.1			<31.1	<31.1					20	
PCB-1242 (Aroclor 1242)	ug/kg	673			669	711				6	20	
PCB-1248 (Aroclor 1248)	ug/kg	<31.1			<31.1	<31.1					20	
PCB-1254 (Aroclor 1254)	ug/kg	<31.1			<31.1	<31.1					20	
PCB-1260 (Aroclor 1260)	ug/kg	57.4J	621	621	402	384	55	53	38-130	5	20	
Decachlorobiphenyl (S)	%						77	73	39-130			
Tetrachloro-m-xylene (S)	%						74	68	46-130			

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 192003.0001.00 HARP DOWNSTREAM
Pace Project No.: 40119998

QC Batch: OEXT/27776
QC Batch Method: EPA 3510
Analysis Method: EPA 8082
Analysis Description: 8082 GCS PCB
Associated Lab Samples: 40119998023

METHOD BLANK: 1210617
Matrix: Water
Associated Lab Samples: 40119998023

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
PCB-1016 (Aroclor 1016)	ug/L	<0.12	0.25	08/26/15 10:48	
PCB-1221 (Aroclor 1221)	ug/L	<0.12	0.25	08/26/15 10:48	
PCB-1232 (Aroclor 1232)	ug/L	<0.12	0.25	08/26/15 10:48	
PCB-1242 (Aroclor 1242)	ug/L	<0.12	0.25	08/26/15 10:48	
PCB-1248 (Aroclor 1248)	ug/L	<0.12	0.25	08/26/15 10:48	
PCB-1254 (Aroclor 1254)	ug/L	<0.12	0.25	08/26/15 10:48	
PCB-1260 (Aroclor 1260)	ug/L	<0.12	0.25	08/26/15 10:48	
Decachlorobiphenyl (S)	%	81	34-130	08/26/15 10:48	
Tetrachloro-m-xylene (S)	%	69	55-130	08/26/15 10:48	

LABORATORY CONTROL SAMPLE: 1210618

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
PCB-1016 (Aroclor 1016)	ug/L		<0.12			
PCB-1221 (Aroclor 1221)	ug/L		<0.12			
PCB-1232 (Aroclor 1232)	ug/L		<0.12			
PCB-1242 (Aroclor 1242)	ug/L		<0.12			
PCB-1248 (Aroclor 1248)	ug/L		<0.12			
PCB-1254 (Aroclor 1254)	ug/L		<0.12			
PCB-1260 (Aroclor 1260)	ug/L	2.5	2.2	86	63-130	
Decachlorobiphenyl (S)	%			101	34-130	
Tetrachloro-m-xylene (S)	%			82	55-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1210619 1210620

Parameter	Units	40119981001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
PCB-1016 (Aroclor 1016)	ug/L	<0.24			<0.24	<0.25					50	
PCB-1221 (Aroclor 1221)	ug/L	<0.24			<0.24	<0.25					50	
PCB-1232 (Aroclor 1232)	ug/L	<0.24			<0.24	<0.25					50	
PCB-1242 (Aroclor 1242)	ug/L	<0.24			<0.24	<0.25					50	
PCB-1248 (Aroclor 1248)	ug/L	<0.24			<0.24	<0.25					50	
PCB-1254 (Aroclor 1254)	ug/L	<0.24			<0.24	<0.25					50	
PCB-1260 (Aroclor 1260)	ug/L	<0.24	4.9	5	4.2	4.1	87	83	34-130	2	50	
Decachlorobiphenyl (S)	%						95	94	34-130			
Tetrachloro-m-xylene (S)	%						97	101	55-130			

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 192003.0001.00 HARP DOWNSTREAM
Pace Project No.: 40119998

QC Batch: PMST/11678
QC Batch Method: ASTM D2974-87
Analysis Method: ASTM D2974-87
Analysis Description: Dry Weight/Percent Moisture
Associated Lab Samples: 40119998001

SAMPLE DUPLICATE: 1210995

Parameter	Units	40120061001 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	6.9	6.8	1	10	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 192003.0001.00 HARP DOWNSTREAM
Pace Project No.: 40119998

QC Batch: PMST/11679 Analysis Method: ASTM D2974-87
QC Batch Method: ASTM D2974-87 Analysis Description: Dry Weight/Percent Moisture
Associated Lab Samples: 40119998002, 40119998003, 40119998004, 40119998005, 40119998006

SAMPLE DUPLICATE: 1211050

Parameter	Units	40120061002 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	7.2	7.1	1	10	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 192003.0001.00 HARP DOWNSTREAM
Pace Project No.: 40119998

QC Batch: PMST/11680 Analysis Method: ASTM D2974-87
QC Batch Method: ASTM D2974-87 Analysis Description: Dry Weight/Percent Moisture
Associated Lab Samples: 40119998007, 40119998008, 40119998009, 40119998010, 40119998011, 40119998012, 40119998013, 40119998014, 40119998015, 40119998016, 40119998017, 40119998018, 40119998019, 40119998020, 40119998021, 40119998022

SAMPLE DUPLICATE: 1211085

Parameter	Units	40120061003 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	5.7	5.9	3	10	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 192003.0001.00 HARP DOWNSTREAM
Pace Project No.: 40119998

QC Batch: WETA/29987 Analysis Method: SM 5310C
QC Batch Method: SM 5310C Analysis Description: 5310C Total Organic Carbon
Associated Lab Samples: 40119998023

METHOD BLANK: 1210336 Matrix: Water
Associated Lab Samples: 40119998023

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Organic Carbon	mg/L	<0.17	0.50	08/26/15 20:27	

LABORATORY CONTROL SAMPLE: 1210337

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Organic Carbon	mg/L	2.5	2.5	98	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1210338 1210339

Parameter	Units	40120049001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Total Organic Carbon	mg/L	1.5	2.5	2.5	3.5	3.6	82	86	80-120	3	20	

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REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: 192003.0001.00 HARP DOWNSTREAM
Pace Project No.: 40119998

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above LOD.

J - Estimated concentration at or above the LOD and below the LOQ.

LOD - Limit of Detection adjusted for dilution factor and percent moisture.

LOQ - Limit of Quantitation adjusted for dilution factor and percent moisture.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected at or above the adjusted LOD.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI-G	Pace Analytical Services - Green Bay

ANALYTE QUALIFIERS

S3	Surrogate recovery exceeded laboratory control limits. Analyte presence below reporting limits in associated samples. Results unaffected by high bias.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 192003.0001.00 HARP DOWNSTREAM
Pace Project No.: 40119998

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40119998001	**MR7-IC-007L**	EPA 3541	OEXT/27772	EPA 8082	GCSV/13351
40119998002	**MR7-IC-907C**	EPA 3541	OEXT/27772	EPA 8082	GCSV/13351
40119998003	**MR7-IC-507R**	EPA 3541	OEXT/27772	EPA 8082	GCSV/13351
40119998004	**MR6-IC-506R**	EPA 3541	OEXT/27772	EPA 8082	GCSV/13351
40119998005	**MR6-IC-906C**	EPA 3541	OEXT/27772	EPA 8082	GCSV/13351
40119998006	**MR6-IC-006L**	EPA 3541	OEXT/27772	EPA 8082	GCSV/13351
40119998007	**MR5-IC-005L**	EPA 3541	OEXT/27772	EPA 8082	GCSV/13351
40119998008	**MR5-IC-905C**	EPA 3541	OEXT/27772	EPA 8082	GCSV/13351
40119998009	**MR5-IC-505R**	EPA 3541	OEXT/27772	EPA 8082	GCSV/13351
40119998010	**MR4-IC-504R**	EPA 3541	OEXT/27772	EPA 8082	GCSV/13351
40119998011	**MR4-IC-904C**	EPA 3541	OEXT/27772	EPA 8082	GCSV/13351
40119998012	**MR4-IC-004L 0.0-0.25**	EPA 3541	OEXT/27772	EPA 8082	GCSV/13351
40119998013	**MR4-IC-004L 0.25-0.55**	EPA 3541	OEXT/27772	EPA 8082	GCSV/13351
40119998014	**MR3-IC-503R**	EPA 3541	OEXT/27772	EPA 8082	GCSV/13351
40119998015	**MR3-IC-903C**	EPA 3541	OEXT/27772	EPA 8082	GCSV/13351
40119998016	**MR3-IC-003L**	EPA 3541	OEXT/27772	EPA 8082	GCSV/13351
40119998017	**MR2-IC-002L**	EPA 3541	OEXT/27772	EPA 8082	GCSV/13351
40119998018	**MR2-IC-502R**	EPA 3541	OEXT/27786	EPA 8082	GCSV/13354
40119998019	**MR1-IC-501R**	EPA 3541	OEXT/27786	EPA 8082	GCSV/13354
40119998020	**MR1-IC-001L**	EPA 3541	OEXT/27786	EPA 8082	GCSV/13354
40119998021	**MR1-IC-901C**	EPA 3541	OEXT/27786	EPA 8082	GCSV/13354
40119998022	**MR-IC-DUP01**	EPA 3541	OEXT/27786	EPA 8082	GCSV/13354
40119998023	**MR-IC-FB01**	EPA 3510	OEXT/27776	EPA 8082	GCSV/13359
40119998001	**MR7-IC-007L**	ASTM D2974-87	PMST/11678		
40119998002	**MR7-IC-907C**	ASTM D2974-87	PMST/11679		
40119998003	**MR7-IC-507R**	ASTM D2974-87	PMST/11679		
40119998004	**MR6-IC-506R**	ASTM D2974-87	PMST/11679		
40119998005	**MR6-IC-906C**	ASTM D2974-87	PMST/11679		
40119998006	**MR6-IC-006L**	ASTM D2974-87	PMST/11679		
40119998007	**MR5-IC-005L**	ASTM D2974-87	PMST/11680		
40119998008	**MR5-IC-905C**	ASTM D2974-87	PMST/11680		
40119998009	**MR5-IC-505R**	ASTM D2974-87	PMST/11680		
40119998010	**MR4-IC-504R**	ASTM D2974-87	PMST/11680		
40119998011	**MR4-IC-904C**	ASTM D2974-87	PMST/11680		
40119998012	**MR4-IC-004L 0.0-0.25**	ASTM D2974-87	PMST/11680		
40119998013	**MR4-IC-004L 0.25-0.55**	ASTM D2974-87	PMST/11680		
40119998014	**MR3-IC-503R**	ASTM D2974-87	PMST/11680		
40119998015	**MR3-IC-903C**	ASTM D2974-87	PMST/11680		
40119998016	**MR3-IC-003L**	ASTM D2974-87	PMST/11680		
40119998017	**MR2-IC-002L**	ASTM D2974-87	PMST/11680		
40119998018	**MR2-IC-502R**	ASTM D2974-87	PMST/11680		
40119998019	**MR1-IC-501R**	ASTM D2974-87	PMST/11680		
40119998020	**MR1-IC-001L**	ASTM D2974-87	PMST/11680		
40119998021	**MR1-IC-901C**	ASTM D2974-87	PMST/11680		
40119998022	**MR-IC-DUP01**	ASTM D2974-87	PMST/11680		
40119998023	**MR-IC-FB01**	SM 5310C	WETA/29987		

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 192003.0001.00 HARP DOWNSTREAM
Pace Project No.: 40119998

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch

(Please Print Clearly)

Company Name:	TRC
Branch/Location:	Madison
Project Contact:	M. Westover
Phone:	608 358 5035
Project Number:	192003.0001.0000
Project Name:	HARP-Downstream
Project State:	WI
Sampled By (Print):	M. Westover J. Robinson
Sampled By (Sign):	
PO #:	
Regulatory Program:	

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SKW

40119998

*Preservation Codes
A=None B=HCL C=H2SO4 D=HNO3 E=DI Water F=Methanol G=NaOH
H=Sodium Bisulfate Solution I=Sodium Thiosulfate J=Other

Quote #:	
Mail To Contact:	M. Westover
Mail To Company:	TRC
Mail To Address:	Madison
Invoice To Contact:	
Invoice To Company:	TRC
Invoice To Address:	Windsor, CT
Invoice To Phone:	

Data Package Options (billable)
☐ EPA Level III
☐ EPA Level IV

MS/MSD
☐ On your sample (billable)
☐ NOT needed on your sample

Matrix Codes
A = Air, B = Biota, C = Charcoal, O = Oil, S = Soil, Sl = Sludge
W = Water, DW = Drinking Water, GW = Ground Water, SW = Surface Water, WW = Waste Water, WP = Wipe

FILTERED? (YES/NO): Y/N — NA, NA, NA
PRESERVATION (CODE)*: Pick Letter — A, A

PACE LAB #	CLIENT FIELD ID	COLLECTION DATE	COLLECTION TIME	MATRIX	PCBs	TOC	CLIENT COMMENTS	LAB COMMENTS (Lab Use Only)	Profile #
001	MR7-IC-007L	8/18/15	1050	S	X	X	2 jars	2-4oz AG	
002	MR7-IC-907C	↓	1100	S	X	X	2 jars	↓	
003	MR7-IC-507R		1115	S	X	X	2 jars		
004	MR6-IC-506R		1135	S	X	X	2 jars		
005	MR6-IC-906C		1145	S	X	X	1 jar	1-4oz AG	
006	MR6-IC-006L		1150	S	X	X	2 jars		
007	MR5-IC-005L		1200	S	X	X	2 jars		
008	MR5-IC-905C		1210	S	X	X	2 jars	↓	
009	MR5-IC-505R		1220	S	X	X	1 jar	1-4oz AG	
010	MR4-IC-504R		1335	S	X	X	1 jar	↓	
011	MR4-IC-904C		1340	S	X	X	1 jar		
012	MR4-IC-004L 0-0.25		1350	S	X	X	1 jar		
013	MR4-IC-004L 0.25-0.5	↓	1350	S	X	X	1 jar	↓	

Rush Turnaround Time Requested - Prelims
(Rush TAT subject to approval/surcharge)
Date Needed:

Transmit Prelim Rush Results by (complete what you want):

Email #1:	
Email #2:	
Telephone:	
Fax:	

Samples on HOLD are subject to special pricing and release of liability

Relinquished By:	Date/Time:	Received By:	Date/Time:
[signature] to Lanier	8/20/15 1000		
Waltco	8/21/15 0910	[signature] RL	8/21/15 0910

PACE Project No. 40119998
Receipt Temp = ROI °C
Sample Receipt pH OK / Adjusted
Cooler Custody Seal: Present / Not Present (Present circled); Intact / Not Intact (Intact circled)

Version 6.0 06/14/06

C019a(27Jun2006)

ORIGINAL

UPPER MIDWEST REGION
MN: 612-607-1700 WI: 920-469-2436

40119998

Pace Analytical®
www.pacelabs.com

CHAIN OF CUSTODY

*Preservation Codes
A=None B=HCL C=H2SO4 D=HNO3 E=DI Water F=Methanol G=NaOH
H=Sodium Bisulfate Solution I=Sodium Thiosulfate J=Other

(Please Print Clearly)	
Company Name:	TRC
Branch/Location:	Madison
Project Contact:	M. Westover
Phone:	608 358 5035
Project Number:	192003.0001.0000
Project Name:	HARP - Downstream
Project State:	WI
Sampled By (Print):	M. Westover / K. Robinson
Sampled By (Sign):	
PO #:	Regulatory Program:

Quote #:	
Mail To Contact:	
Mail To Company:	
Mail To Address:	
Invoice To Contact:	
Invoice To Company:	
Invoice To Address:	
Invoice To Phone:	

Data Package Options (billable)
☐ EPA Level III
☐ EPA Level IV

MS/MSD
☐ On your sample (billable)
☐ NOT needed on your sample

Matrix Codes

A = Air	W = Water
B = Biota	DW = Drinking Water
C = Charcoal	GW = Ground Water
O = Oil	SW = Surface Water
S = Soil	WW = Waste Water
SI = Sludge	WP = Wipe

PACE LAB #	CLIENT FIELD ID	COLLECTION DATE	COLLECTION TIME	MATRIX	FILTERED? (YES/NO) Y/N	FILTERED? (YES/NO) Y/N	FILTERED? (YES/NO) Y/N	FILTERED? (YES/NO) Y/N	CLIENT COMMENTS	LAB COMMENTS (Lab Use Only)	Profile #
	PRESERVATION (CODE)*				NA	NA	N	N			
	Analyses Requested				PCBs	TOC	PCBs	TOC			
014	MR3-IC-503R	8/18/15	1420	S	X	X			1 jar	1-4oz AG	
015	MR3-IC-903C		1425	S	X	X			1 jar	↓	
016	MR3-IC-003L		1510	S	X	X			2 jars	2-4oz AG	
017	MR3-IC-002L	↓	1525	S	X	X			1 jar	1-4oz AG	
	~~MR3-IC-902C~~		~~1530~~						No Sample		
018	MR3-IC-502R	8/18/15	1535	S	X	X			1 jar Very Low Volume - Prioritize PCB		
019	MR1-IC-501R		1605	S	X	X			1 jar	↓	
020	MR1-IC-001L		1610	S	X	X			2 jars	2-4oz AG	
021	MR1-IC-901C		1615	S	X	X			1 jar	1-4oz AG	
022	MR-IC-DUP01	↓	—	S	X	X			1 jar	↓	
023	MR-IC-FB01	8/19/15	1630	W	~~X~~	~~X~~	X	X		1-1LAG[A] 1-125mlAG[C]	

Rush Turnaround Time Requested - Prelims
(Rush TAT subject to approval/surcharge)
Date Needed:

Transmit Prelim Rush Results by (complete what you want):

Email #1:	
Email #2:	
Telephone:	
Fax:	

Samples on HOLD are subject to special pricing and release of liability

Relinquished By:	Date/Time:	Received By:	Date/Time:
to carrier	8/20/15 1000		
Walter	8/21/15 0910	Cary PL	8/21/15 0910

PACE Project No.
40119998

Receipt Temp = ROI °C

Sample Receipt pH
OK / Adjusted

Cooler Custody Seal
(Present) / Not Present
(Intact) / Not Intact

Version 6.0 06/14/06

C019a(27Jun2006)

ORIGINAL

Sample Condition Upon Receipt

Pace Analytical Services, Inc.
1241 Bellevue Street, Suite 9
Green Bay, WI 54302

Pace Analytical™

Project #: WO#: 40119998

40119998

Client Name: TRC

Courier: ☐ Fed Ex ☐ UPS ☐ Client ☐ Pace Other: Walco

Tracking #: 852110-1

Custody Seal on Cooler/Box Present: ☒ yes ☐ no Seals intact: ☒ yes ☐ no

Custody Seal on Samples Present: ☐ yes ☒ no Seals intact: ☐ yes ☐ no

Packing Material: ☐ Bubble Wrap ☒ Bubble Bags ☐ None ☐ Other

Thermometer Used N/A **Type of Ice:** (Wet) Blue Dry None ☒ Samples on ice, cooling process has begun

Cooler Temperature Uncorr: RoI /Corr: **Biological Tissue is Frozen:** ☐ yes ☐ no

Temp Blank Present: ☐ yes ☒ no

Person examining contents:
Date: 8/21/15
Initials: CR

Temp should be above freezing to 6°C for all sample except Biota.
Frozen Biota Samples should be received ≤ 0°C.

				Comments:
Chain of Custody Present:	☒Yes	☐No	☐N/A	1.
Chain of Custody Filled Out:	☒Yes	☐No	☐N/A	2.
Chain of Custody Relinquished:	☒Yes	☐No	☐N/A	3.
Sampler Name & Signature on COC:	☒Yes	☐No	☐N/A	4.
Samples Arrived within Hold Time:	☒Yes	☐No	☐N/A	5.
- VOA Samples frozen upon receipt	☐Yes	☐No		Date/Time:
Short Hold Time Analysis (<72hr):	☐Yes	☒No	☐N/A	6.
Rush Turn Around Time Requested:	☐Yes	☒No	☐N/A	7.
Sufficient Volume:	☒Yes	☐No	☐N/A	8.
Correct Containers Used:	☒Yes	☐No	☐N/A	9.
-Pace Containers Used:	☒Yes	☐No	☐N/A	
-Pace IR Containers Used:	☐Yes	☒No	☐N/A	
Containers Intact:	☒Yes	☐No	☐N/A	10.
Filtered volume received for Dissolved tests	☐Yes	☐No	☒N/A	11.
Sample Labels match COC:	☒Yes	☐No	☐N/A	12.
-Includes date/time/ID/Analysis Matrix: S+W				
All containers needing preservation have been checked. (Non-Compliance noted in 13.)	☐Yes	☐No	☒N/A	13. ☐ HNO3 ☐ H2SO4 ☐ NaOH ☐ NaOH +ZnAct
All containers needing preservation are found to be in compliance with EPA recommendation. (HNO3, H2SO4 ≤2; NaOH+ZnAct ≥9, NaOH ≥12)	☐Yes	☐No	☒N/A	
exceptions: VOA, coliform, (TOC) TOX, TOH, O&G, WIDROW, Phenolics, OTHER:	☒Yes	☐No		Initial when completed / Lab Std #ID of preservative / Date/ Time:
Headspace in VOA Vials (>6mm):	☐Yes	☐No	☒N/A	14.
Trip Blank Present:	☐Yes	☐No	☒N/A	15.
Trip Blank Custody Seals Present	☐Yes	☐No	☒N/A	
Pace Trip Blank Lot # (if purchased):				

Client Notification/ Resolution: If checked, see attached form for additional comments ☐

Person Contacted: Date/Time:

Comments/ Resolution:

Project Manager Review: LW **Date:** 8/24/15