

# Technical Assistance, Environmental Liability Clarification or Post-Closure Modification Request

Form 4400-237 (R 12/18)

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## Section 2. Property Information

Property Name Hayton Area Remediation Project - OU4/Upper		FID No. (if known) WID006116529	
BRRTS No. (if known) 02-08-281506	Parcel Identification Number NA		
Street Address	City New Holstein	State WI	ZIP Code 53061
County Calumet	Municipality where the Property is located <input checked="" type="radio"/> City <input type="radio"/> Town <input type="radio"/> Village of New Holstein	Property is composed of: <input type="radio"/> Single tax parcel <input type="radio"/> Multiple tax parcels	Property Size Acres

1. Is a response needed by a specific date? (e.g., Property closing date) Note: Most requests are completed within 60 days. Please plan accordingly.

No  Yes

Date requested by: \_\_\_\_\_

Reason:

2. Is the "Requester" enrolled as a Voluntary Party in the Voluntary Party Liability Exemption (VPLE) program?

No. **Include the fee that is required for your request in Section 3, 4 or 5.**

Yes. **Do not include a separate fee.** This request will be billed separately through the VPLE Program.

**Fill out the information in Section 3, 4 or 5 which corresponds with the type of request:**

**Section 3. Technical Assistance or Post-Closure Modifications;**

**Section 4. Liability Clarification; or Section 5. Specialized Agreement.**

## Section 3. Request for Technical Assistance or Post-Closure Modification

Select the type of technical assistance requested: [Numbers in brackets are for WI DNR Use]

- No Further Action Letter (NFA) (Immediate Actions) - NR 708.09, [183] - **Include a fee of \$350.** Use for a written response to an immediate action after a discharge of a hazardous substance occurs. Generally, these are for a one-time spill event.
- Review of Site Investigation Work Plan - NR 716.09, [135] - **Include a fee of \$700.**
- Review of Site Investigation Report - NR 716.15, [137] - **Include a fee of \$1050.**
- Approval of a Site-Specific Soil Cleanup Standard - NR 720.10 or 12, [67] - **Include a fee of \$1050.**
- Review of a Remedial Action Options Report - NR 722.13, [143] - **Include a fee of \$1050.**
- Review of a Remedial Action Design Report - NR 724.09, [148] - **Include a fee of \$1050.**
- Review of a Remedial Action Documentation Report - NR 724.15, [152] - **Include a fee of \$350**
- Review of a Long-term Monitoring Plan - NR 724.17, [25] - **Include a fee of \$425.**
- Review of an Operation and Maintenance Plan - NR 724.13, [192] - **Include a fee of \$425.**

Other Technical Assistance - s. 292.55, Wis. Stats. [97] (For request to build on an abandoned landfill use Form 4400-226)

- Schedule a Technical Assistance Meeting - **Include a fee of \$700.**
- Hazardous Waste Determination - **Include a fee of \$700.**
- Other Technical Assistance - **Include a fee of \$700.** Explain your request in an attachment.

Post-Closure Modifications - NR 727, [181]

- Post-Closure Modifications: Modification to Property boundaries and/or continuing obligations of a closed site or Property; sites may be on the GIS Registry. This also includes removal of a site or Property from the GIS Registry. **Include a fee of \$1050, and:**
  - Include a fee of \$300 for sites with residual soil contamination; and
  - Include a fee of \$350 for sites with residual groundwater contamination, monitoring wells or for vapor intrusion continuing obligations.

Attach a description of the changes you are proposing, and documentation as to why the changes are needed (if the change to a Property, site or continuing obligation will result in revised maps, maintenance plans or photographs, those documents may be submitted later in the approval process, on a case-by-case basis).

Technical Assistance, Environmental Liability  
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Skip Sections 4 and 5 if the technical assistance you are requesting is listed above and complete Sections 6 and 7 of this form.

**Section 5. Request for a Specialized Agreement**

Select the type of agreement needed. Include the appropriate draft agreements and supporting materials. Complete Sections 6 and 7 of this form. More information and model draft agreements are available at: [dnr.wi.gov/topic/Brownfields/lgu.html#tabx4](http://dnr.wi.gov/topic/Brownfields/lgu.html#tabx4).

- Tax cancellation agreement - s. 75.105(2)(d), Wis. Stats. [654]
  - ❖ Include a fee of \$700, and the information listed below:
    - (1) Phase I and II Environmental Site Assessment Reports,
    - (2) a copy of the Property deed with the correct legal description.
- Agreement for assignment of tax foreclosure judgement - s.75.106, Wis. Stats. [666]
  - ❖ Include a fee of \$700, and the information listed below:
    - (1) Phase I and II Environmental Site Assessment Reports,
    - (2) a copy of the Property deed with the correct legal description.
- Negotiated agreement - Enforceable contract for non-emergency remediation - s. 292.11(7)(d) and (e), Wis. Stats. [630]
  - ❖ Include a fee of \$1400, and the information listed below:
    - (1) a draft schedule for remediation; and,
    - (2) the name, mailing address, phone and email for each party to the agreement.

**Section 6. Other Information Submitted**

Identify all materials that are included with this request.

Send both a paper copy of the signed form and all reports and supporting materials, and an electronic copy of the form and all reports, including Environmental Site Assessment Reports, and supporting materials on a compact disk.

Include one copy of any document from any state agency files that you want the Department to review as part of this request. The person submitting this request is responsible for contacting other state agencies to obtain appropriate reports or information.

- Phase I Environmental Site Assessment Report - Date: \_\_\_\_\_
- Phase II Environmental Site Assessment Report - Date: \_\_\_\_\_
- Legal Description of Property (required for all liability requests and specialized agreements)
- Map of the Property (required for all liability requests and specialized agreements)
  - Analytical results of the following sampled media: Select all that apply and include date of collection.
  - Groundwater     Soil     Sediment     Other medium - Describe: \_\_\_\_\_
  - Date of Collection: \_\_\_\_\_
- A copy of the closure letter and submittal materials
- Draft tax cancellation agreement
- Draft agreement for assignment of tax foreclosure judgment
- Other report(s) or information - Describe: OU4/Upper Closure Documentation Sampling Results Report

For Property with newly identified discharges of hazardous substances only: Has a notification of a discharge of a hazardous substance been sent to the DNR as required by s. NR 706.05(1)(b), Wis. Adm. Code?

- Yes - Date (if known): \_\_\_\_\_
- No

Note: The Notification for Hazardous Substance Discharge (non-emergency) form is available at:

[dnr.wi.gov/files/PDF/forms/4400/4400-225.pdf](http://dnr.wi.gov/files/PDF/forms/4400/4400-225.pdf).

**Section 7. Certification by the Person who completed this form**

- I am the person submitting this request (requester)
- I prepared this request for: Tecumseh Products Company  
Requester Name

I certify that I am familiar with the information submitted on this request, and that the information on and included with this request is true, accurate and complete to the best of my knowledge. I also certify I have the legal authority and the applicant's permission to make this request.



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December 19, 2018

Mr. Bill Fitzpatrick  
Water Resources Engineer  
State of Wisconsin  
Department of Natural Resources  
101 S. Webster Street  
Madison, WI 53703

**Subject: Hayton Area Remediation Project (HARP)  
OU3/Lower Closure Documentation Sampling Results Report- Two  
Additional Sampling Events  
OU4/Upper Closure Documentation Sampling Results Report**

Dear Bill:

Enclosed please find the *OU3/Lower Closure Documentation Sampling Results Report – Two Additional Sampling Events* and the *OU4/ Upper Closure Documentation Sampling Results Report*. These reports present the results of the Spring 2018 and November 2018 sediment samples collected in OU3/Lower Reaches M through P and the November 2018 sediment samples collected in OU4/Upper.

The sampling results indicate the remediation actions were successful in OU3 and OU4/Upper. Starting in November 2017, three rounds of closure documentation samples have been collected in OU3/Lower Reaches M through P. Results reveal a decreasing trend observed over the sampling events and a calculated surface-area weighted average concentration (SWAC) all within "Tier 2" of the Three Tier Closure Process. The results indicate a continuous decline measuring 34% in SWAC in one year, over the 3-round sampling period.

The results in OU4/Upper have a calculated surface-area weighted average concentration (SWAC) of 0.88 mg/kg, which is below 1 mg/kg within the "Tier 1" of the Three Tier Closure Process.

Pursuant to Sec. III (I) of the Negotiated Agreement (Agreement), Tecumseh successfully completed the post-removal closure sampling of OU3/Lower (Reaches M-P) and OU4/Upper. Consistent with The Three Tier Closure Process of Exhibit D of the Agreement, these sampling results indicate no further action letters issued by the Department pursuant to Sec. (IV)(B) of the Agreement are now required.

Mr. Bill Fitzpatrick  
State of Wisconsin  
December 19, 2018  
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In addition, pursuant to Sec. (IV)(B) of the Agreement, a no further action letter for OU3, Reaches K-L was to have been issued by the Department by no later than December 13, 2018. Please issue that letter forthwith.

If you have any questions, please contact me at (312) 800-5910.

Sincerely,



A handwritten signature in black ink, appearing to read "CH", with a long horizontal flourish extending to the right.

Chris Harvey, PE

Enclosure: OU3/Lower Closure Documentation Sampling Results Report- Two  
Additional Sampling Events  
OU4/Upper Closure Documentation Sampling Results Report

cc: Darsi Foss/WDNR - Madison  
S. Jason Smith/Tecumseh Products Co.-Paris,TN (electronic copy)  
Curtis Toll/Greenberg Traurig LLP- Philadelphia (electronic copy)  
Jean Greensley/USEPA - Chicago  
Marc Faecher/TRC- New Providence, NJ (electronic copy)  
Ronald Bock/TRC -Irvine (electronic copy)  
Stacy McAnulty/TRC- Madison (electronic copy)  
David Crass/Michael Best & Friedrich LLP - Madison

# OU4/Upper Closure Documentation Sampling Results Report



**Hayton Area Remediation Project**  
December 2018

Prepared by:



Chicago, Illinois

# **OU4/Upper Closure Documentation Sampling Results Report**

**Prepared by:**



**230 West Monroe Street, Suite 630  
Chicago, Illinois 60606**

**TRC Project No. 107927**

**December 2018**

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## LIST OF ACRONYMS AND ABBREVIATIONS

DI	Deionized Water
GPS	Global Positioning System
HARP	Hayton Area Remediation Project
IDW	Investigation Derived Waste
LPDE	Low-Density Polyethylene
OUs	Operable Units
PCB	Polychlorinated Biphenyl
PPE	Personal Protective Equipment
PRV	Post Remedial Verification
PVC	Polyvinyl Chloride
QC	Quality Control
RALs	Remedial Action Levels
SWAC	Surface-Area Weighted Average Concentration
TRC	TRC Environmental Corporation
USCS	Unified Soil Classification System
USEPA	United States Environmental Protection Agency
WDNR	Wisconsin Department of Natural Resources

## 1.0 INTRODUCTION

### 1.1 Background

The Hayton Area Remediation Project (HARP) is located in Calumet County, Wisconsin, and has been divided into four operable units (OUs). An overview of HARP and the OUs is shown in Figure 1. The Site includes HARP and areas downstream of the dam at the Hayton Millpond where hazardous substances attributable to the former Tecumseh manufacturing facility may have migrated (WDNR, 2018). This report deals solely with OU4/Upper of HARP and does not address the Site as a whole.

In November 2018, WDNR, Tecumseh and TRC Environmental Corporation (TRC) executed a Negotiated Agreement (BRRTS #02-08-281506) (Agreement) to cover the remaining known response actions and containing a schedule to conduct non-emergency actions under Wis. Stats. Section 292.11(3) (WDNR, 2018). This Agreement terminated the 2004 Consent Order for HARP.

OU4/Upper was previously characterized for polychlorinated biphenols (PCBs) during multiple sampling events that preceded and followed sediment and soil removal activities. Remediation of sediments and soils was completed in OU4/Upper in 2017 through a portion of Reach S, the terminus of OU4/Upper. All of the above-referenced work was performed under the oversight and approval of Wisconsin Department of Natural Resources (WDNR) and the United States Environmental Protection Agency (USEPA).

Targeted overbank soil excavation zones were established based on an Remediation Action Level (RAL) of 5 mg/kg (TRC, 2018). The bank soil areas were excavated to achieve the established RALs, backfilled with clean soil, and stabilized with vegetative matting and seeding to restore the bank areas and wetlands.

Targeted in-channel sediment removal areas were established to advance risk reduction considering the goal of minimization of high quality wetland disruption (TRC, 2018). Sediment removal areas were selected to remove locations with elevated PCBs and to maximize net environmental benefit and cost effectiveness if the sediment zone was near a proposed staging area or would not likely cause additional wetland impacts (TRC, 2018). The targeted in-channel sediment in OU4/Upper was excavated in the dry to hardpan (e.g., native clay), after flow diversion and dewatering sections of the stream.

Results from post remediation verification (PRV) samples were consistent with the implementation of a successful remediation program in OU4/Upper. In addition, extensive sediment and overbank soil removal activities have been completed in upstream OU's, and post-remediation sediment sampling results indicate a very low risk of exposure to PCBs

throughout OUs 1 through OU3. No further action letters have either been received or are due pursuant to the Agreement for all upstream OUs.

To confirm the effectiveness of remediation activities and to evaluate closure of OU4/Upper, post-remediation soft sediment samples were collected in OU4/Upper and evaluated consistent with the Three-Tier Closure Process agreed to among the parties (TRC, 2011; WDNR, 2012; Exhibit D, Negotiated Agreement, 2018). The purpose of this sampling was to provide additional data regarding residual PCB concentrations in soft sediment and to demonstrate that the closure of OU4/Upper is appropriate at this time pursuant to the Three-Tier Closure Process.

## 1.2 Purpose and Scope

In April 2018, TRC submitted its “Operable Unit 4/Upper Remedial Documentation Report” (TRC, 2018). The purpose of that report was to document the methods used to characterize and confirm the complete removal of targeted soft sediments containing PCBs and the removal of bank soils with PCB concentrations above the RAL in OU4/Upper.

On March 3, 2016, TRC submitted the *Remedial Action Scope of Work for OU4/Upper (Revision 5) and Response to Comments* (OU4/Upper Plan) (TRC, 2016), which proposed post-remediation sediment sampling locations in sediment depositional areas. In a letter dated April 8, 2016, the WDNR provided conditional approval of the OU4/U Plan.

The post-remediation closure sediment samples from OU4/Upper were collected on November 13 and 14, 2018 following heavy rain events in accordance with the methods described in the WDNR-approved OU4/Upper Plan and under the oversight of the WDNR.

The HARP Three-Tier Closure Process focuses on evaluating the risk reduction achieved by the remediation and is based on a surface-area weighted average concentration (SWAC) for PCBs within the applicable OU/Reach (TRC, 2011; WDNR, 2012; Exhibit D, Negotiated Agreement, 2018). The calculated SWAC for OU4/Upper confirmed that only low-level residual concentrations of PCBs are present and are within the “Tier 1” criteria.

The balance of this report presents the results of the November 2018 sediment sampling; quantifies the SWAC of PCBs in these Reaches; and provides recommendations in accordance with the Three-Tier Closure Process.

The report is organized as follows:

- Section 1 describes the background, purpose and scope of the investigation

- Section 2 describes the field and analytical methods
- Section 3 presents the investigation results
- Section 4 provides conclusions and recommendations
- Section 5 lists the references

## 2.0 FIELD AND ANALYTICAL METHODS

Field and analytical methods were completed in accordance with the methods described in the OU4/Upper Plan (TRC, 2016).

### 2.1 Field Locations

During the closure documentation sampling of OU4/Upper on November 13 and 14, 2018, each of the transect locations was located in the field using a high-resolution global positioning system (GPS) unit, which was pre-programmed with the approved sample location coordinates. The GPS unit was used in the field to navigate to and to get as close as practicable to the approved sample coordinates. The estimated level of accuracy was within 3 feet (+/-) based on the GPS unit (with sub-foot to sub-meter accuracy). During the sample activities, WDNR and TRC conducted a field reconnaissance of each targeted area and selected ten specific locations for sediment core collection. The core samples were collected from the thicker deposits of soft sediment that were found by probing the creek bottom at least three locations across the transect (left, center and right), conservatively biasing the sample results for purposes of a representative SWAC.

Once the location was determined in the creek with the WDNR, a sediment sample was collected. The final sample locations were located using the high-resolution GPS unit. The sediment sample locations are identified on the sediment core logs (Appendix A) and are shown on Figure 2.

In November 2018, TRC accessed the soft sediment sampling locations and collected the sediment samples in OU4/Upper from a shallow draft row boat. The boat was operated with a battery-powered trolling motor and canoe paddles.

### 2.2 Sediment Core Collection

Sediment cores were collected using a new, clean, 4-foot long, 2-inch diameter clear Polyvinyl Chloride (PVC) tube, pre-marked in depth increments of 0.1 feet. At each sampling location, the tube was lowered through the water column until it contacted the sediment surface, and the water depth, estimated to the nearest 0.05 foot, was recorded in the field notebook. The core tube was then pushed by hand into the soft sediment until refusal was encountered and the new water level on the tube was recorded. The penetration depth (i.e., soft sediment thickness) was calculated as the difference between the two water level measurements. General notes regarding the conditions of refusal (e.g., the presence of coarse material or a hard surface) were recorded in the field notebook.

To retrieve the sediment sample, the top of the tube was capped and the core tube gently extracted from the sediment. Upon retrieval, the bottom of the sample tube was immediately capped and sealed. The recovery length at the time of retrieval (to the nearest

0.05 foot) was recorded in the field notebook. The location of the collected sediment core was recorded at the time of sampling using the GPS unit.

After the sample was collected, each of the core tubes was cut down to a transportable length (approximately 1.5 feet, or to just above the standing water surface), and re-capped. The core tubes were then placed on ice in a cooler, kept in an upright position, and transported to the TRC Madison office for sample processing.

### **2.3 Sample Processing and Laboratory Analysis**

The WDNR was invited to observe the processing of all collected samples. Standing water in the core tubes above the sediment surface was removed using a suction pump equipped with low-density polyethylene (LDPE) tubing. New, clean tubing was used to remove water from each sample core. After removing the 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). Sediment core logs are included in Appendix A.

During the November 2018 sampling event, the soft sediment core sample thickness that was recovered at the ten sampling locations ranged from 3.6 to 14.4 inches. In accordance with the OU4/U Plan (TRC, 2016), the top 6 inches of sediment was removed from the core tube for sample processing. The full thickness of soft sediment was composited and sampled from sample location S01 since it had less than 6 inches of recovery. The soft sediment was placed in a stainless-steel bowl and thoroughly homogenized. The homogenized sediment was placed in a 4-ounce clear, glass laboratory sample container, placed on ice, and transported to Pace Analytical Services, Inc., for PCB analysis (EPA 8082).

### **2.4 Quality Assurance/Quality Control**

Quality assurance and quality control samples were collected during sample processing of the OU4/Upper samples in general accordance with the OU4/Upper Plan (TRC, 2016). An equipment blank consisting of analyte-free water was collected and submitted to the laboratory to check for procedural contamination that may cause sample contamination. Equipment blanks are collected following the decontamination of non-dedicated sampling equipment. One equipment blank, consisting of rinsate water from a stainless-steel mixing bowl, was submitted for laboratory analysis. In addition, one duplicate sample was submitted for laboratory analysis.

All non-dedicated, non-disposable field equipment was decontaminated as described in Subsection 2.5.

## 2.5 Equipment Decontamination

For the sediment sampling in the field, TRC used dedicated and disposable sampling equipment and supplies.

For sample processing, TRC used non-dedicated and non-disposable equipment, including stainless steel bowls and spatula. In accordance with the OU4/U Plan and consistent with the QUAPP (TRC, 2017), all non-dedicated and non-disposable sampling equipment was decontaminated prior to its initial use, between sample processing, and at the end of sample processing using the following steps:

- Wash the equipment in a non-phosphate detergent and potable water solution.
- Triple-rinse with deionized (DI) water.
- Air dry the equipment on a clean plastic sheet.

Investigation derived waste (IDW) was containerized in plastic bags, and managed as described in Subsection 2.6.

## 2.6 Investigation Derived Waste (IDW) Management

IDW was properly managed or disposed. Used personal protective equipment (PPE), disposable sampling equipment (e.g., used core tubes and tubing), IDW and general uncontaminated debris or waste materials produced during the field work were collected in sealed plastic bags, and transported to the TRC office dumpster. This waste was disposed of by a commercial disposal contractor.

### **3.0 INVESTIGATION RESULTS**

#### **3.1 Sediment Type and Distribution**

Each of the sediment cores was described according to the USCS and detailed core logs were prepared. The sediment core logs are included in Appendix A. The sediment encountered during this investigation was primarily soft organic silt with varying amounts of fine sand and fibrous plant material, with occasional zones of clayey silt or silty lean clay. The sediments were typically soft to very soft, wet, and dark gray in color.

Table 1 summarizes the physical field measurements (water depth and soft sediment thickness) collected during the November 2018 sediment sampling event. The water depths measured at the sampling locations varied from 0.6 to 3.7 feet. Soft sediment was encountered at all ten of the selected sample locations, with soft sediment thicknesses ranging from 0.7 to 2.6 feet. The soft sediment core lengths recovered at the ten sampling locations ranged from 3.6 to 14.4 inches; all of the cores except for sample location S01 recovered 6 inches or more of soft sediment.

#### **3.2 Individual Sediment Sample Analytical Results**

Table 2 presents a summary of the laboratory analytical results for each individual sediment sample. Laboratory data sheets are included in Appendix B. Figure 2 shows the sample locations and total PCB concentration associated with each sample. The sample results ranged between 0.344 mg/kg and 1.77 mg/kg. Six of the sample results were below 1 mg/kg and all the sample results were below 2 mg/kg. The distribution of results confirms low level residual PCBs with no identified “hot spots”. The core sampling method did not “dilute” any sample results or otherwise bias the results toward closure. At all sample locations, only soft, fine-grained organic-rich sediments were sampled and analyzed. The analytical results and SWAC evaluation are discussed further in Subsection 3.3.

One equipment blank was collected from the sample processing equipment during the processing of the OU4/Upper sediment samples. No PCBs were detected in the equipment blank, indicating proper equipment decontamination procedures in the field.

One duplicate sample (OU4-IC-S04-L) was collected from the OU4/Upper sediment samples. The field duplicate sample relative percent difference (RPD) of 12.2% was within the Quality Control (QC) target limits of 50%.

#### **3.3 Surface-Area Weighted Average Concentration (SWAC)**

SWAC is a method of computing an area-weighted concentration to evaluate risk and exposure associated with a particular constituent of concern. The SWAC approach has been used to evaluate the risks posed by sediment in the stream channel and to confirm



closure for OU1, OU2 and OU3. The methodology for the calculation is presented in the OU4/Upper Plan (TRC, 2016).

Using the actual stream widths (as requested by WDNR), the SWAC calculated for the OU4/Upper was 0.88 mg/kg in November 2018 and is below the Tier 1 criterion of 1.0 mg/kg. The SWAC calculations are shown on Figure 2.

The OU4/Upper SWAC sampling was performed a year after remedy completion, and after storm events and/or spring runoff that would rework the stream bed. The November 2018 sampling event was collected after fall rain events, which is reflected in the rainfall record (NOAA, 2018). As a result, the surficial sediment concentrations reflect the effects of mixing and re-deposition during and after high flow events. Further, only soft, organic-rich fine-grained sediments were sampled at these locations, which tend to absorb PCBs and as such reflect “worst case” concentrations. Therefore, the SWAC results are biased high and reflect a worst-case or conservative condition.

## 4.0 CONCLUSIONS AND RECOMMENDATIONS

### 4.1 Conclusions

In summary, significant risk reduction has been achieved and to the extent practicable within OU4/Upper. In addition, extensive habitat restoration, preservation and enhancement both in-channel and along the bank areas is successful.

The OU4/Upper SWAC results are characterized by low-level residual concentrations of PCBs in the bioactive sediment layer. The results also confirm that the low-level residual concentrations of PCBs are within Tier 1 of the Three-Tier Closure Process criteria (TRC, 2011; WDNR, 2012; Exhibit D, Negotiated Agreement, 2018).

A SWAC in this Tier 1 range indicates a very low risk of exposure to PCBs in the bioactive sediment layer throughout OU4/Upper and warrants closure, without further remedial actions. The SWAC confirms that significant risk reduction has been achieved by the remedial activities completed in HARP OU1 through OU4/Upper. Furthermore, the samples collected for the SWAC analysis contained only fine-grained, organic-rich silt and were sampled following significant rain events sufficient to rework the depositional bed. These results and the record demonstrate that:

- The removal of PCB-impacted sediments and overbank material was successfully completed in OU4/Upper, in accordance with the WDNR and USEPA approved Scopes of Work and Addenda.
- PRV sample results demonstrated successful removal to project RALs.
- Habitat restoration of OU4/Upper was implemented with successful vegetative stabilization of the floodplain and bank areas.
- The OU4/Upper remedial action has been conducted to the extent practicable, as the term is defined in 292.11(3), Wis. Stats and NR 700.03(45), Wis. Admin. Code and as referenced in the project Consent Order.
- OU1 (closed), OU2 (closed), and OU3 – Reaches H, I, and J (closed) and K through P (pending closure request) do not serve as on-going sources to OU4/Upper.
- OU4/Upper does not serve as an on-going source of concern to the downstream reaches of Pine Creek. No “hot spots” or areas of uncharacteristically high PCB concentrations were identified during the closure documentation sampling. The closure documentation sampling confirms the thoroughness of the removal actions in the subject Reaches and upstream.

- Given the above, additional natural recovery will occur over time.
- No discrete locations require additional investigation, since only low-level residual PCB concentrations are evident throughout OU4/Upper.
- Additional removal within OU4/Upper is not necessary and furthermore would not provide a net environmental benefit (i.e., the trade-off between a small reduction in PCB concentrations as compared to the loss of restored habitat).

## 4.2 Recommendations

The results of the closure documentation sampling support the finding that closure of OU4/Upper is appropriate. Based on these results and field observations, TRC recommends OU4/Upper be closed in accordance with the Tier 1 criteria. Pursuant to Sec. III (I) of the Agreement, Tecumseh successfully completed the post-removal closure sampling of OU4/Upper (WDNR, 2018). Consistent with The Three Tier Closure Process of Exhibit D of the Agreement, results indicate a no further action letter issued by the Department pursuant to Sec. (IV)(B) of the Agreement is now required (WDNR, 2018).

## 5.0 REFERENCES

- NOAA. 2018. *National Oceanic and Atmospheric Administration. National Climatic Data Center. Data Station ID: GHCND:USC00471568 (Chilton, WI).* <http://www.ncdc.noaa.gov/cdo-web/datasets>. December 2018.
- TRC. 2011. *Proposed Site Execution and Closure Process. HARP.* TRC Environmental Corporation. Chicago, IL. August 2011.
- TRC. 2016. *Remedial Action Scope of Work for OU4/Upper (Revision 5) and Response to Comments.* HARP. March 3, 2016.
- TRC. 2017. *Quality Assurance Project Plan. Hayton Area Remediation Project, Operable Unit 3/Lower and Operable Unit 4. Chilton, Calumet County, Wisconsin.* Revision 3. TRC Environmental Corporation. October 2017.
- TRC. 2018. *Operable Unit 4/Upper Remedial Documentation Report. HARP.* TRC Environmental Corporation. Chicago, IL. April 5, 2018.
- WDNR, Tecumseh Products, and TRC. 2004. Consent Order No. 2004-COEE-010; Facility ID No. WID006116529.
- WDNR 2012. Letter from WDNR to TRC, *Hayton Area Remediation Project Path to Closure.* August 2, 2012.
- WDNR. 2016. Letter from WDNR to TRC. *Conditional Approval – Remedial Action Scope of Work for OU4/Upper. HARP.* April 8, 2016.
- WDNR, Tecumseh Products and TRC. 2018. Negotiated Agreement; BRRTS #02-08-281506.

## TABLES

Table 1  
Physical Field Measurements - OU4/Upper Reaches Q - S

SAMPLE LOCATION	IN-CHANNEL AREA <sup>(1)</sup>	NOVEMBER 13-14, 2018		
		WATER DEPTH (ft)	SEDIMENT THICKNESS (ft)	CORE RECOVERY (inches, at processing)
S01	Left	3.1	0.7	3.6
S02	Left	2.7	1.1	8.4
S03	Left	2.0	1.4	10.8
S04	Left	1.1	2.2	9.6
S05	Left	1.5	1.6	11.4
S06	Left	0.6	2.5	12.6
S07	Right	1.3	2.6	14.4
S08	Right	1.8	1.3	10.2
S09	Right	1.5	1.2	10.8
S10	Right	3.7	0.7	9.6

Footnotes:

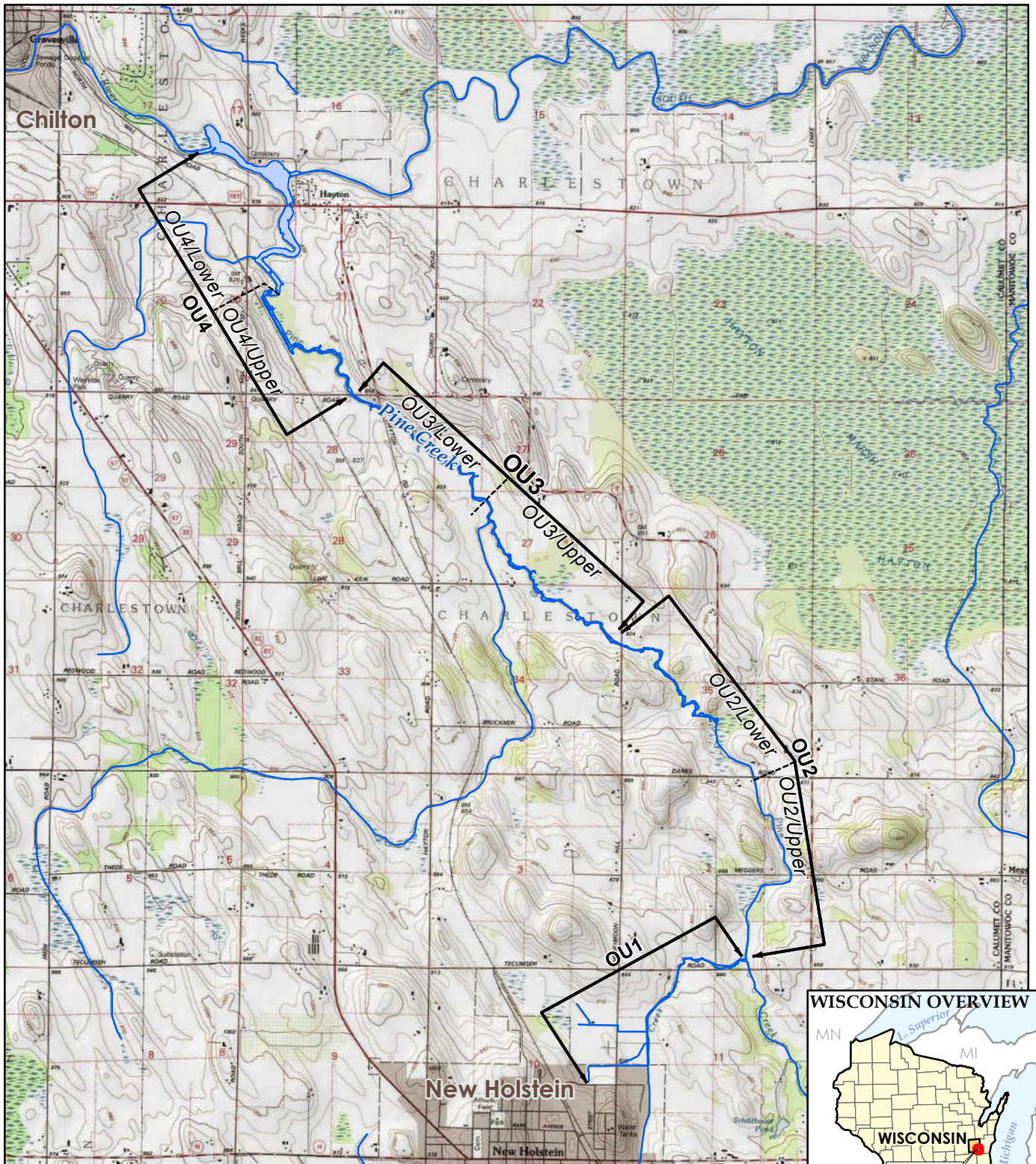
<sup>(1)</sup> General area of creek cross-section where the sediment core was collected, relative to downstream flow direction (i.e., looking downstream).

Table 2  
Summary of Sediment Analytical Results - OU4/Upper Reaches Q - S

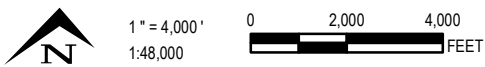
SAMPLE LOCATION	SAMPLE ID	SAMPLE DATE	TOTAL PCB CONCENTRATION (mg/kg)
S01	OU4-IC-S01-L	11/13/2018	0.621
S02	OU4-IC-S02-L	11/13/2018	1.210
S03	OU4-IC-S03-L	11/14/2018	1.770
S04	OU4-IC-S04-L	11/14/2018	1.610
S05	OU4-IC-S05-L	11/14/2018	1.030
S06	OU4-IC-S06-L	11/14/2018	0.457
S07	OU4-IC-S07-R	11/14/2018	0.344
S08	OU4-IC-S08-R	11/14/2018	0.470
S09	OU4-IC-S09-R	11/14/2018	0.459
S10	OU4-IC-S10-R	11/14/2018	0.774

## FIGURES





BASE MAP FROM USGS 7.5 MINUTE TOPOGRAPHIC QUADRANGLE SERIES (1992-1993).



230 West Monroe St.  
 Suite 630  
 Chicago, IL 60606  
 Phone: 312.578.0870

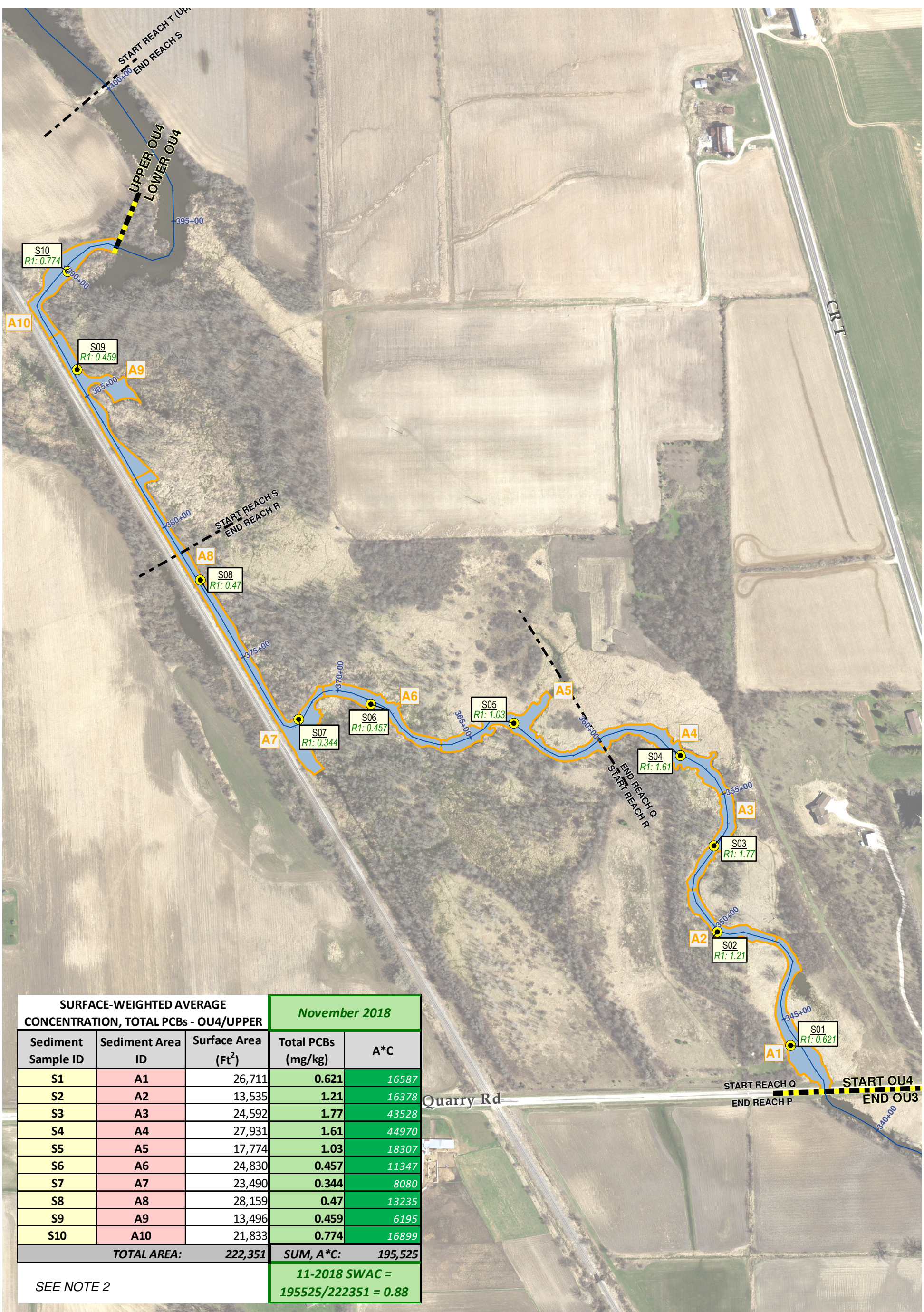
**HARP OU4/UPPER  
 CLOSURE DOCUMENTATION**

**SITE LOCATION MAP**

DRAWN BY:	J. PAPEZ
APPROVED BY:	C. HARVEY
PROJECT NO:	107927-9300
FILE NO.	197927-9300-033Aslm.mxd
DATE:	DECEMBER 2018



Coordinate System: NAD 1983 StatePlane Wisconsin South FIPS 4803 Feet (Foot US)  
 Map Rotation: 0  
 Printed By: JPAPPEZ on 12/11/2018, 11:36:41 AM  
 Path: E:\Tecomseh\HARP\2012\_107927\009300\197927-9300-035A.mxd



SURFACE-WEIGHTED AVERAGE CONCENTRATION, TOTAL PCBs - OU4/UPPER			November 2018	
Sediment Sample ID	Sediment Area ID	Surface Area (Ft <sup>2</sup> )	Total PCBs (mg/kg)	A*C
S1	A1	26,711	0.621	16587
S2	A2	13,535	1.21	16378
S3	A3	24,592	1.77	43528
S4	A4	27,931	1.61	44970
S5	A5	17,774	1.03	18307
S6	A6	24,830	0.457	11347
S7	A7	23,490	0.344	8080
S8	A8	28,159	0.47	13235
S9	A9	13,496	0.459	6195
S10	A10	21,833	0.774	16899
<b>TOTAL AREA:</b>		<b>222,351</b>	<b>SUM, A*C:</b>	<b>195,525</b>
SEE NOTE 2			<b>11-2018 SWAC = 195525/222351 = 0.88</b>	

**LEGEND**

- SEDIMENT SAMPLING/TRANSECT LOCATION LABEL FORMAT
  - SWAC SEDIMENT ANALYSIS AREA
- SAMPLE ID**  
 NOVEMBER 2018 PCB RESULT [mg/kg]

**NOTES**

1. BASE MAP IMAGERY PROVIDED BY CALUMET COUNTY PLANNING, ZONING, & LAND INFORMATION DEPARTMENT, 2014.
2. AREAS USED FOR SWAC CALCULATION ARE BASED ON VISUAL INTERPRETATION OF THE WATER SURFACE IN THE RIVER, THESE MEASUREMENTS ARE APPROXIMATE.



708 Heartland Trail  
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 www.trcsolutions.com

DRAWN BY: j. papez  
 CHECKED BY: b. wachholz  
 APPROVED BY: c. harvey  
 DATE: DECEMBER 2018

SCALE: 1:3,600  
 1" = 300'  
 DATE PRINTED:

<b>HARP OU4/UPPER</b>		<b>CALUMET COUNTY, WI</b>	
<b>OU4/UPPER CLOSURE DOCUMENTATION</b>			
<b>NOVEMBER 2018</b>			
PROJ. NO. 107927-9300	DWG. NAME 197927-9300-035A.mxd	<b>FIGURE 2</b>	



**APPENDIX A**  
**SEDIMENT CORE LOGS**



# SEDIMENT CORE LOG

**BORING NO. OU4 S-01L Nov 2018**

Facility/Project Name: <b>Hayton Area Remediation Project Closure Documentation</b>		Date Drilling Started: <b>11/13/18</b>	Date Drilling Completed: <b>11/13/18</b>	Project Number: <b>107927.0000</b>	
Drilling Firm: <b>TRC Environmental Corp.</b>	Drilling Method: <b>Push tube</b>	Surface Elev. (ft) <b>---</b>	TOC Elevation (ft) <b>---</b>	Total Depth (in bgs) <b>3.6</b>	Borehole Dia. (in) <b>2</b>
Boring Location: <b>Pine Creek, Reach Q</b>		Personnel Logged By - <b>M. Westover</b> Driller - <b>M. Westover/B. Wachholz</b>		Drilling Equipment: <b>2" PVC Core Tube</b>	
State Plane N: <b>737670.07</b> E: <b>2465197.08</b>		Water Level Observations: While Drilling:      Date/Time After Drilling:      Date/Time			
Civil Town/City/or Village: <b>New Holstein</b>	County: <b>Calumet</b>	State: <b>Wisconsin</b>	Depth (ft bgs) Depth (ft bgs)		

SAMPLE	LITHOLOGIC DESCRIPTION	USCS	GRAPHIC LOG	COMMENTS
NUMBER AND TYPE				
RECOVERY (%)				
BLOW COUNTS				
DEPTH IN INCHES				
<b>CS</b>	<p><b>ORGANIC SILT (OL)</b>, and plant material, trace very fine sand, non-cohesive, sloppy.</p>	OL		<p>0 to 3.6 interval collected for analytical sample.</p>
	<p><b>End of core at 3.6 inches.</b> Original S01 location had no recovery on R and L banks; 0.3 ft clay recovery in center. Moved transect to the north.</p> <p>At alternate S01 transect, collected analytical sample from L bank vs. center due to less plant material present (more sediment).</p>			<p>Recovery (feet): L: 0.3 C: 0.3 R: None</p>

SOIL CORE LOG (INCHES) W/PHOTO\_HARP\_HAYTONWI\_169240.GPJ\_107927.0000\_12/12/18



# SEDIMENT CORE LOG

**BORING NO. OU4 S-02L Nov 2018**

Facility/Project Name: <b>Hayton Area Remediation Project Closure Documentation</b>		Date Drilling Started: <b>11/13/18</b>	Date Drilling Completed: <b>11/13/18</b>	Project Number: <b>107927.0000</b>	
Drilling Firm: <b>TRC Environmental Corp.</b>	Drilling Method: <b>Push tube</b>	Surface Elev. (ft) <b>---</b>	TOC Elevation (ft) <b>---</b>	Total Depth (in bgs) <b>8.4</b>	Borehole Dia. (in) <b>2</b>
Boring Location: <b>Pine Creek, Reach Q</b>		Personnel Logged By - <b>M. Westover</b> Driller - <b>M. Westover/B. Wachholz</b>		Drilling Equipment: <b>2" PVC Core Tube</b>	
State Plane N: <b>738043.06</b> E: <b>2464956.56</b>					
Civil Town/City/or Village: <b>New Holstein</b>	County: <b>Calumet</b>	State: <b>Wisconsin</b>	Water Level Observations: While Drilling:      Date/Time After Drilling:      Date/Time		
			Depth (ft bgs) Depth (ft bgs)		

SAMPLE	NUMBER AND TYPE	RECOVERY (%)	BLOW COUNTS	DEPTH IN INCHES	LITHOLOGIC DESCRIPTION	USCS	GRAPHIC LOG	COMMENTS
	CS			2 4 6 8 10 12 14	<p><b>ORGANIC SILT (OL)</b>, trace very fine sand, 10YR 3/1 very dark gray, non-cohesive, loose.</p> <p style="text-align: center;"><b>End of core at 8.4 inches.</b></p>	OL		<p>0 to 6 interval collected for analytical sample.</p> <p>Recovery (feet): L: 0.7 C: 0.5 R: 0.65</p>

SOIL CORE LOG (INCHES) W/PHOTO\_HARP\_HAYTONWI\_169240.GPJ\_107927.0000\_12/12/18



# SEDIMENT CORE LOG

**BORING NO. OU4 S-03L Nov 2018**

Facility/Project Name: <b>Hayton Area Remediation Project Closure Documentation</b>		Date Drilling Started: <b>11/14/18</b>	Date Drilling Completed: <b>11/14/18</b>	Project Number: <b>107927.0000</b>	
Drilling Firm: <b>TRC Environmental Corp.</b>	Drilling Method: <b>Push tube</b>	Surface Elev. (ft) <b>---</b>	TOC Elevation (ft) <b>---</b>	Total Depth (in bgs) <b>10.8</b>	Borehole Dia. (in) <b>2</b>
Boring Location: <b>Pine Creek, Reach Q</b>		Personnel Logged By - <b>M. Westover</b> Driller - <b>M. Westover/B. Wachholz</b>		Drilling Equipment: <b>2" PVC Core Tube</b>	
State Plane N: <b>738326.75</b> E: <b>2464945.47</b>					
Civil Town/City/or Village: <b>New Holstein</b>	County: <b>Calumet</b>	State: <b>Wisconsin</b>	Water Level Observations: While Drilling:      Date/Time After Drilling:      Date/Time		
			Depth (ft bgs) Depth (ft bgs)		

SAMPLE	LITHOLOGIC DESCRIPTION	USCS	GRAPHIC LOG	COMMENTS
NUMBER AND TYPE				
RECOVERY (%)				
BLOW COUNTS				
DEPTH IN INCHES				
CS	<p><b>ORGANIC SILT (OL)</b>, with decaying leaves and bark, trace fine sand, 10YR 3/1 very dark gray, non-cohesive, loose.</p> <p style="text-align: center;">2</p> <p style="text-align: center;">4</p> <p style="text-align: center;">6</p> <p style="text-align: center;">8</p> <p style="text-align: center;">10</p> <p style="text-align: center;">12</p> <p style="text-align: center;">14</p>	OL		<p>0 to 6 interval collected for analytical sample.</p> <p>Recovery (feet): L: 0.9 C: 0.75 R: 0.5</p>
	<p><b>End of core at 10.8 inches.</b> No clay observed in sample from R bank.</p>			

SOIL CORE LOG (INCHES) W/PHOTO\_HARP\_HAYTONWI\_169240.GPJ\_107927.0000\_12/12/18



**SEDIMENT CORE LOG**

**BORING NO. OU4 S-04L Nov 2018**

Facility/Project Name: <b>Hayton Area Remediation Project Closure Documentation</b>		Date Drilling Started: <b>11/14/18</b>	Date Drilling Completed: <b>11/14/18</b>	Project Number: <b>107927.0000</b>	
Drilling Firm: <b>TRC Environmental Corp.</b>	Drilling Method: <b>Push tube</b>	Surface Elev. (ft) <b>---</b>	TOC Elevation (ft) <b>---</b>	Total Depth (in bgs) <b>9.6</b>	Borehole Dia. (in) <b>2</b>
Boring Location: <b>Pine Creek, Reach R</b>		Personnel Logged By - <b>M. Westover</b> Driller - <b>M. Westover/B. Wachholz</b>		Drilling Equipment: <b>2" PVC Core Tube</b>	
State Plane N: <b>738623.13</b> E: <b>2464835.03</b>		Water Level Observations: While Drilling:      Date/Time After Drilling:      Date/Time			
Civil Town/City/or Village: <b>New Holstein</b>	County: <b>Calumet</b>	State: <b>Wisconsin</b>	Depth (ft bgs) Depth (ft bgs)		

SAMPLE		BLOW COUNTS	DEPTH IN INCHES	LITHOLOGIC DESCRIPTION	USCS	GRAPHIC LOG	COMMENTS
NUMBER AND TYPE	RECOVERY (%)						
CS			0	<b>ORGANIC SILT (OL)</b> , trace fine sand, 10YR 3/1 very dark gray, non-cohesive, loose.	OL		0 to 6 interval collected for analytical sample.
			2				Duplicate sample collected
			4				
			6				Recovery (feet): L: 0.8 C: 0.45 R: 0.8
			8				
			10	<b>End of core at 9.6 inches.</b> Sample from R bank has only 0.3 feet OL as at L bank sample; rest of core is dark brown peaty material with few white shells.			
			12				
			14				

SOIL CORE LOG (INCHES) W/PHOTO\_HARP\_HAYTONWI\_169240.GPJ\_107927.0000\_12/12/18



# SEDIMENT CORE LOG

**BORING NO. OU4 S-05C Nov 2018**

Facility/Project Name: <b>Hayton Area Remediation Project Closure Documentation</b>		Date Drilling Started: <b>11/14/18</b>	Date Drilling Completed: <b>11/14/18</b>	Project Number: <b>107927.0000</b>	
Drilling Firm: <b>TRC Environmental Corp.</b>	Drilling Method: <b>Push tube</b>	Surface Elev. (ft) <b>---</b>	TOC Elevation (ft) <b>---</b>	Total Depth (in bgs) <b>11.4</b>	Borehole Dia. (in) <b>2</b>
Boring Location: Pine Creek, Reach R		Personnel Logged By - M. Westover Driller - M. Westover/B. Wachholz		Drilling Equipment: <b>2" PVC Core Tube</b>	
State Plane N: 738729.68 E: 2464287.71					
Civil Town/City/or Village: <b>New Holstein</b>	County: <b>Calumet</b>	State: <b>Wisconsin</b>	Water Level Observations: While Drilling:      Date/Time After Drilling:      Date/Time		
			Depth (ft bgs) Depth (ft bgs)		

SAMPLE	NUMBER AND TYPE	RECOVERY (%)	BLOW COUNTS	DEPTH IN INCHES	LITHOLOGIC DESCRIPTION	USCS	GRAPHIC LOG	COMMENTS
	CS			2	<b>ORGANIC SILT (OL)</b> , trace fine sand, 10YR 3/1 very dark gray, non-cohesive, loose, occasional small white shells.		OL	0 to 6 interval collected for analytical sample.
				4				
				6	Same as above, becoming more cohesive at 0.5 feet, non-plastic, soft.			Recovery (feet): L: 0.9 C: 0.95 R: 1.1
				8				
				10				
				12	<b>End of core at 11.4 inches.</b> Sample from R bank contains clay starting at approximately 0.55 feet; therefore sample from C selected for analysis.			
				14				

SOIL CORE LOG (INCHES) W/PHOTO HARP\_HAYTONWI\_169240.GPJ\_107927.0000\_12/12/18

Signature:	Firm: TRC Environmental Corp. 708 Heartland Trail, Suite 3000 Madison, WI 53717	(608) 826-3600 Fax (608) 826-3941
------------	--	--------------------------------------





# SEDIMENT CORE LOG

**BORING NO. OU4 S-06L Nov 2018**

Facility/Project Name: <b>Hayton Area Remediation Project Closure Documentation</b>		Date Drilling Started: <b>11/14/18</b>	Date Drilling Completed: <b>11/14/18</b>	Project Number: <b>107927.0000</b>	
Drilling Firm: <b>TRC Environmental Corp.</b>	Drilling Method: <b>Push tube</b>	Surface Elev. (ft) <b>---</b>	TOC Elevation (ft) <b>---</b>	Total Depth (in bgs) <b>12.6</b>	Borehole Dia. (in) <b>2</b>
Boring Location: <b>Pine Creek, Reach R</b>		Personnel Logged By - <b>M. Westover</b> Driller - <b>M. Westover/B. Wachholz</b>		Drilling Equipment: <b>2" PVC Core Tube</b>	
State Plane N: <b>738792.09</b> E: <b>2463818.94</b>		Water Level Observations:			
Civil Town/City/or Village: <b>New Holstein</b>	County: <b>Calumet</b>	State: <b>Wisconsin</b>	While Drilling: Date/Time	After Drilling: Date/Time	Depth (ft bgs) Depth (ft bgs)

SAMPLE	NUMBER AND TYPE	RECOVERY (%)	BLOW COUNTS	DEPTH IN INCHES	LITHOLOGIC DESCRIPTION	USCS	GRAPHIC LOG	COMMENTS
	CS			2	<p><b>ORGANIC SILT (OL)</b>, trace fine sand, 10YR 3/1 very dark gray, non-cohesive, loose.</p>		OL	<p>0 to 6 interval collected for analytical sample.</p>
				4	<p>Same as above, becoming cohesive, non-plastic, soft, occasional pieces of decaying wood.</p>			<p>Recovery (feet): L: 1.05 C: 0.85 R: 0.8</p>
				6				
				8				
				10				
				12				
				14	<p><b>End of core at 12.6 inches.</b> Center sample a bit sandier; small shells.</p>			

SOIL CORE LOG (INCHES) W/PHOTO HARP\_HAYTONWI\_169240.GPJ\_107927.0000\_12/12/18



**SEDIMENT CORE LOG**

**BORING NO. OU4 S-07R Nov 2018**

Facility/Project Name: <b>Hayton Area Remediation Project Closure Documentation</b>		Date Drilling Started: <b>11/14/18</b>	Date Drilling Completed: <b>11/14/18</b>	Project Number: <b>107927.0000</b>	
Drilling Firm: <b>TRC Environmental Corp.</b>	Drilling Method: <b>Push tube</b>	Surface Elev. (ft) <b>---</b>	TOC Elevation (ft) <b>---</b>	Total Depth (in bgs) <b>14.4</b>	Borehole Dia. (in) <b>2</b>
Boring Location: <b>Pine Creek, Reach R</b>		Personnel Logged By - <b>M. Westover</b> Driller - <b>M. Westover/B. Wachholz</b>		Drilling Equipment: <b>2" PVC Core Tube</b>	
State Plane N: <b>738742.81</b> E: <b>2463581.89</b>		Water Level Observations: While Drilling:      Date/Time After Drilling:      Date/Time			
Civil Town/City/or Village: <b>New Holstein</b>	County: <b>Calumet</b>	State: <b>Wisconsin</b>	Depth (ft bgs) Depth (ft bgs)		

SAMPLE	NUMBER AND TYPE	RECOVERY (%)	BLOW COUNTS	DEPTH IN INCHES	LITHOLOGIC DESCRIPTION	USCS	GRAPHIC LOG	COMMENTS
				0	<b>ORGANIC SILT (OL)</b> , trace fine sand, 10YR 3/1 very dark gray, non-cohesive, loose, little decaying plant fibers and roots.			0 to 6 interval collected for analytical sample.
				2				
				4				
				6				
				8	Same as above, becomes more cohesive, non-plastic, soft, fewer recognizable plant parts.			
				10				
				12				
				14	Gray silty clay in base of tube.			
				14.4	<b>End of core at 14.4 inches.</b> No clay observed at L or C samples; C sample only upper 0.3 feet is non-cohesive.			

Recovery (feet):  
L: 0.95  
C: 0.7  
R: 1.2

SOIL CORE LOG (INCHES) W/PHOTO HARP\_HAYTONWI\_169240.GPJ\_107927.0000\_12/12/18



# SEDIMENT CORE LOG

**BORING NO. OU4 S-08R Nov 2018**

Facility/Project Name: <b>Hayton Area Remediation Project Closure Documentation</b>		Date Drilling Started: <b>11/14/18</b>	Date Drilling Completed: <b>11/14/18</b>	Project Number: <b>107927.0000</b>	
Drilling Firm: <b>TRC Environmental Corp.</b>	Drilling Method: <b>Push tube</b>	Surface Elev. (ft) <b>---</b>	TOC Elevation (ft) <b>---</b>	Total Depth (in bgs) <b>10.2</b>	Borehole Dia. (in) <b>2</b>
Boring Location: <b>Pine Creek, Reach R</b>		Personnel Logged By - <b>M. Westover</b> Driller - <b>M. Westover/B. Wachholz</b>		Drilling Equipment: <b>2" PVC Core Tube</b>	
State Plane N: <b>739200.94</b> E: <b>2463258.88</b>		Water Level Observations:			
Civil Town/City/or Village: <b>New Holstein</b>	County: <b>Calumet</b>	State: <b>Wisconsin</b>	While Drilling: Date/Time	After Drilling: Date/Time	Depth (ft bgs) Depth (ft bgs)

SAMPLE	NUMBER AND TYPE	RECOVERY (%)	BLOW COUNTS	DEPTH IN INCHES	LITHOLOGIC DESCRIPTION	USCS	GRAPHIC LOG	COMMENTS
	CS			2	<b>ORGANIC SILT (OL)</b> , trace fine sand, 10YR 3/1 very dark gray, decaying twigs, bark, and plant fibers, non-cohesive, loose.	OL		0 to 6 interval collected for analytical sample.
				4				
				6				Recovery (feet): L: 0.55 C: 0.65 R: 0.85
				8	Same as above, becomes mixed with gray clay at 0.65 feet (reworked)			
				10	<b>SILTY LEAN CLAY (CL)</b> , gray.	CL		
				12	<b>End of core at 10.2 inches.</b> Both R and C have same soft sediment recovery; C non-cohesive to 0.3 feet, then becoming sandy with some coarse sand at base. L similar to C.			
				14				

SOIL CORE LOG (INCHES) W/PHOTO\_HARP\_HAYTONWI\_169240.GPJ\_107927.0000\_12/12/18



# SEDIMENT CORE LOG

**BORING NO. OU4 S-09R Nov 2018**

Facility/Project Name: <b>Hayton Area Remediation Project Closure Documentation</b>		Date Drilling Started: <b>11/14/18</b>	Date Drilling Completed: <b>11/14/18</b>	Project Number: <b>107927.0000</b>
Drilling Firm: <b>TRC Environmental Corp.</b>	Drilling Method: <b>Push tube</b>	Surface Elev. (ft) <b>---</b>	TOC Elevation (ft) <b>---</b>	Total Depth (in bgs) <b>10.8</b>
Boring Location: <b>Pine Creek, Reach S</b>		Personnel Logged By - <b>M. Westover</b> Driller - <b>M. Westover/B. Wachholz</b>		Drilling Equipment: <b>2" PVC Core Tube</b>
State Plane N: <b>739891.73</b> E: <b>2462854.32</b>		Water Level Observations: While Drilling:      Date/Time After Drilling:      Date/Time		
Civil Town/City/or Village: <b>New Holstein</b>	County: <b>Calumet</b>	State: <b>Wisconsin</b>	Depth (ft bgs) Depth (ft bgs)	

SAMPLE	NUMBER AND TYPE	RECOVERY (%)	BLOW COUNTS	DEPTH IN INCHES	LITHOLOGIC DESCRIPTION	USCS	GRAPHIC LOG	COMMENTS
	CS			2 4 6 8 10 12 14	<p><b>ORGANIC SILT (OL)</b>, trace fine sand, 10YR 3/1 very dark gray, non-cohesive, loose, decaying plant material throughout.</p> <p>Same as above, becoming mixed with brown silty lean clay at 0.65 feet.</p> <p><b>End of core at 10.8 inches.</b> L and C cores, organic silt becomes mixed with clay around 0.5 feet.</p>	OL		<p>0 to 6 interval collected for analytical sample.</p> <p>Recovery (feet): L: 0.65 C: 0.7 R: 0.9</p>

SOIL CORE LOG (INCHES) W/PHOTO\_HARP\_HAYTONWI\_169240.GPJ\_107927.0000\_12/12/18



# SEDIMENT CORE LOG

**BORING NO. OU4 S-10R Nov 2018**

Facility/Project Name: <b>Hayton Area Remediation Project Closure Documentation</b>		Date Drilling Started: <b>11/14/18</b>	Date Drilling Completed: <b>11/14/18</b>	Project Number: <b>107927.0000</b>	
Drilling Firm: <b>TRC Environmental Corp.</b>	Drilling Method: <b>Push tube</b>	Surface Elev. (ft) <b>---</b>	TOC Elevation (ft) <b>---</b>	Total Depth (in bgs) <b>9.6</b>	Borehole Dia. (in) <b>2</b>
Boring Location: <b>Pine Creek, Reach S</b>		Personnel Logged By - <b>M. Westover</b> Driller - <b>M. Westover/B. Wachholz</b>		Drilling Equipment: <b>2" PVC Core Tube</b>	
State Plane N: <b>740214.87</b> E: <b>2462823.41</b>		Water Level Observations: While Drilling:      Date/Time After Drilling:      Date/Time			
Civil Town/City/or Village: <b>New Holstein</b>	County: <b>Calumet</b>	State: <b>Wisconsin</b>	Depth (ft bgs) Depth (ft bgs)		

SAMPLE	LITHOLOGIC DESCRIPTION	USCS	GRAPHIC LOG	COMMENTS
NUMBER AND TYPE				
RECOVERY (%)				
BLOW COUNTS				
DEPTH IN INCHES				
CS	<p><b>ORGANIC SILT (OL)</b>, trace fine sand, 10YR 3/1 very dark gray, non-cohesive, loose, decaying plant material throughout.</p> <p style="text-align: center;">2</p> <p style="text-align: center;">4</p> <p style="text-align: center;">6</p> <p style="text-align: center;">8</p> <p style="text-align: center;">10</p> <p style="text-align: center;">12</p> <p style="text-align: center;">14</p>	OL		<p>0 to 6 interval collected for analytical sample.</p> <p>Recovery (feet): L: 0.4 C: 0.4 R: 0.8</p>
	<p><b>End of core at 9.6 inches.</b> L sample contains only 0.3 feet soft sediment over clay.</p>			

SOIL CORE LOG (INCHES) W/PHOTO\_HARP\_HAYTONWI\_169240.GPJ\_107927.0000\_12/12/18

Signature:	Firm: <b>TRC Environmental Corp.</b> 708 Heartland Trail, Suite 3000 Madison, WI 53717	(608) 826-3600 Fax (608) 826-3941
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**APPENDIX B**  
**LABORATORY REPORTS**

December 05, 2018

Chris Harvey  
TRC Environmental  
230 W. Monroe St  
Suite 630  
Chicago, IL 60606

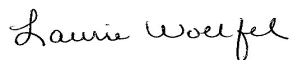
RE: Project: 107927.0000.100 9300 HARP  
Pace Project No.: 40179971

Dear Chris Harvey:

Enclosed are the analytical results for sample(s) received by the laboratory on November 20, 2018. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,



Laurie Woelfel  
laurie.woelfel@pacelabs.com  
(920)469-2436  
Project Manager

Enclosures

cc: Tanner Hess, TRC  
Ted O'Connell, TRC - Madison  
Jesse Papez, TRC - Madison  
Peggy Popp, TRC - Madison  
James Robinson, TRC Environmental  
Ben Wachholz, TRC  
Meredith Westover, TRC Environmental



## REPORT OF LABORATORY ANALYSIS

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## CERTIFICATIONS

Project: 107927.0000.100 9300 HARP

Pace Project No.: 40179971

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### Green Bay Certification IDs

1241 Bellevue Street, Green Bay, WI 54302

Florida/NELAP Certification #: E87948

Illinois Certification #: 200050

Kentucky UST Certification #: 82

Louisiana Certification #: 04168

Minnesota Certification #: 055-999-334

New York Certification #: 12064

North Dakota Certification #: R-150

Virginia VELAP ID: 460263

South Carolina Certification #: 83006001

Texas Certification #: T104704529-14-1

Wisconsin Certification #: 405132750

Wisconsin DATCP Certification #: 105-444

USDA Soil Permit #: P330-16-00157

Federal Fish & Wildlife Permit #: LE51774A-0

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## REPORT OF LABORATORY ANALYSIS

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## SAMPLE SUMMARY

Project: 107927.0000.100 9300 HARP  
Pace Project No.: 40179971

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40179971001	OU4-IC-S06-L	Solid	11/17/18 11:00	11/20/18 09:15
40179971002	OU4-IC-S07-R	Solid	11/17/18 11:10	11/20/18 09:15
40179971003	OU4-IC-S08-R	Solid	11/17/18 11:20	11/20/18 09:15
40179971004	OU4-IC-S09-R	Solid	11/17/18 11:30	11/20/18 09:15
40179971005	OU4-IC-S10-R	Solid	11/17/18 11:40	11/20/18 09:15
40179971006	OU4-IC-S01-L	Solid	11/16/18 16:00	11/20/18 09:15
40179971007	OU4-IC-S02-L	Solid	11/16/18 16:10	11/20/18 09:15
40179971008	OU4-IC-S03-L	Solid	11/16/18 16:20	11/20/18 09:15
40179971009	OU4-IC-S04-L	Solid	11/16/18 16:30	11/20/18 09:15
40179971010	OU4-IC-S05-C	Solid	11/16/18 16:40	11/20/18 09:15
40179971011	OU4-IC-DUP01	Solid	11/16/18 00:00	11/20/18 09:15
40179971012	OU4-FB01	Water	11/17/18 12:10	11/20/18 09:15

## REPORT OF LABORATORY ANALYSIS

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### SAMPLE ANALYTE COUNT

Project: 107927.0000.100 9300 HARP

Pace Project No.: 40179971

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
40179971001	OU4-IC-S06-L	EPA 8082	BDS	10	PASI-G
		ASTM D2974-87	TEL	1	PASI-G
40179971002	OU4-IC-S07-R	EPA 8082	BDS	10	PASI-G
		ASTM D2974-87	TEL	1	PASI-G
40179971003	OU4-IC-S08-R	EPA 8082	BDS	10	PASI-G
		ASTM D2974-87	TEL	1	PASI-G
40179971004	OU4-IC-S09-R	EPA 8082	BLM	10	PASI-G
		ASTM D2974-87	TEL	1	PASI-G
40179971005	OU4-IC-S10-R	EPA 8082	BLM	10	PASI-G
		ASTM D2974-87	SKW	1	PASI-G
40179971006	OU4-IC-S01-L	EPA 8082	BLM	10	PASI-G
		ASTM D2974-87	SKW	1	PASI-G
40179971007	OU4-IC-S02-L	EPA 8082	BLM	10	PASI-G
		ASTM D2974-87	SKW	1	PASI-G
40179971008	OU4-IC-S03-L	EPA 8082	BLM	10	PASI-G
		ASTM D2974-87	SKW	1	PASI-G
40179971009	OU4-IC-S04-L	EPA 8082	BLM	10	PASI-G
		ASTM D2974-87	SKW	1	PASI-G
40179971010	OU4-IC-S05-C	EPA 8082	BLM	10	PASI-G
		ASTM D2974-87	SKW	1	PASI-G
40179971011	OU4-IC-DUP01	EPA 8082	BLM	10	PASI-G
		ASTM D2974-87	SKW	1	PASI-G
40179971012	OU4-FB01	EPA 8082	BDS	10	PASI-G

### REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: 107927.0000.100 9300 HARP

Pace Project No.: 40179971

**Sample: OU4-IC-S06-L**      **Lab ID: 40179971001**      Collected: 11/17/18 11:00      Received: 11/20/18 09:15      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
<b>8082 GCS PCB</b>									
Analytical Method: EPA 8082    Preparation Method: EPA 3541									
PCB-1016 (Aroclor 1016)	<30.4	ug/kg	60.9	30.4	1	11/26/18 14:06	11/27/18 19:33	12674-11-2	
PCB-1221 (Aroclor 1221)	<30.4	ug/kg	60.9	30.4	1	11/26/18 14:06	11/27/18 19:33	11104-28-2	
PCB-1232 (Aroclor 1232)	<30.4	ug/kg	60.9	30.4	1	11/26/18 14:06	11/27/18 19:33	11141-16-5	
PCB-1242 (Aroclor 1242)	<30.4	ug/kg	60.9	30.4	1	11/26/18 14:06	11/27/18 19:33	53469-21-9	
PCB-1248 (Aroclor 1248)	<30.4	ug/kg	60.9	30.4	1	11/26/18 14:06	11/27/18 19:33	12672-29-6	
PCB-1254 (Aroclor 1254)	369	ug/kg	60.9	30.4	1	11/26/18 14:06	11/27/18 19:33	11097-69-1	
PCB-1260 (Aroclor 1260)	87.2	ug/kg	60.9	30.4	1	11/26/18 14:06	11/27/18 19:33	11096-82-5	
PCB, Total	457	ug/kg	60.9	30.4	1	11/26/18 14:06	11/27/18 19:33	1336-36-3	
<b>Surrogates</b>									
Tetrachloro-m-xylene (S)	79	%	56-98		1	11/26/18 14:06	11/27/18 19:33	877-09-8	
Decachlorobiphenyl (S)	69	%	49-104		1	11/26/18 14:06	11/27/18 19:33	2051-24-3	
<b>Percent Moisture</b>									
Analytical Method: ASTM D2974-87									
Percent Moisture	17.9	%	0.10	0.10	1		11/27/18 10:46		

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: 107927.0000.100 9300 HARP

Pace Project No.: 40179971

**Sample: OU4-IC-S07-R**      **Lab ID: 40179971002**      Collected: 11/17/18 11:10      Received: 11/20/18 09:15      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
<b>8082 GCS PCB</b>									
Analytical Method: EPA 8082    Preparation Method: EPA 3541									
PCB-1016 (Aroclor 1016)	<33.7	ug/kg	67.4	33.7	1	11/26/18 14:06	11/27/18 19:55	12674-11-2	
PCB-1221 (Aroclor 1221)	<33.7	ug/kg	67.4	33.7	1	11/26/18 14:06	11/27/18 19:55	11104-28-2	
PCB-1232 (Aroclor 1232)	<33.7	ug/kg	67.4	33.7	1	11/26/18 14:06	11/27/18 19:55	11141-16-5	
PCB-1242 (Aroclor 1242)	<33.7	ug/kg	67.4	33.7	1	11/26/18 14:06	11/27/18 19:55	53469-21-9	
PCB-1248 (Aroclor 1248)	<33.7	ug/kg	67.4	33.7	1	11/26/18 14:06	11/27/18 19:55	12672-29-6	
PCB-1254 (Aroclor 1254)	281	ug/kg	67.4	33.7	1	11/26/18 14:06	11/27/18 19:55	11097-69-1	
PCB-1260 (Aroclor 1260)	62.6J	ug/kg	67.4	33.7	1	11/26/18 14:06	11/27/18 19:55	11096-82-5	
PCB, Total	344	ug/kg	67.4	33.7	1	11/26/18 14:06	11/27/18 19:55	1336-36-3	
<b>Surrogates</b>									
Tetrachloro-m-xylene (S)	76	%	56-98		1	11/26/18 14:06	11/27/18 19:55	877-09-8	
Decachlorobiphenyl (S)	66	%	49-104		1	11/26/18 14:06	11/27/18 19:55	2051-24-3	
<b>Percent Moisture</b>									
Analytical Method: ASTM D2974-87									
Percent Moisture	25.8	%	0.10	0.10	1		11/27/18 10:46		

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## ANALYTICAL RESULTS

Project: 107927.0000.100 9300 HARP

Pace Project No.: 40179971

**Sample: OU4-IC-S08-R**      **Lab ID: 40179971003**      Collected: 11/17/18 11:20      Received: 11/20/18 09:15      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
<b>8082 GCS PCB</b>									
Analytical Method: EPA 8082    Preparation Method: EPA 3541									
PCB-1016 (Aroclor 1016)	<28.5	ug/kg	57.0	28.5	1	11/26/18 14:06	11/27/18 20:17	12674-11-2	
PCB-1221 (Aroclor 1221)	<28.5	ug/kg	57.0	28.5	1	11/26/18 14:06	11/27/18 20:17	11104-28-2	
PCB-1232 (Aroclor 1232)	<28.5	ug/kg	57.0	28.5	1	11/26/18 14:06	11/27/18 20:17	11141-16-5	
PCB-1242 (Aroclor 1242)	124	ug/kg	57.0	28.5	1	11/26/18 14:06	11/27/18 20:17	53469-21-9	
PCB-1248 (Aroclor 1248)	<28.5	ug/kg	57.0	28.5	1	11/26/18 14:06	11/27/18 20:17	12672-29-6	
PCB-1254 (Aroclor 1254)	267	ug/kg	57.0	28.5	1	11/26/18 14:06	11/27/18 20:17	11097-69-1	
PCB-1260 (Aroclor 1260)	79.8	ug/kg	57.0	28.5	1	11/26/18 14:06	11/27/18 20:17	11096-82-5	
PCB, Total	470	ug/kg	57.0	28.5	1	11/26/18 14:06	11/27/18 20:17	1336-36-3	
<b>Surrogates</b>									
Tetrachloro-m-xylene (S)	71	%	56-98		1	11/26/18 14:06	11/27/18 20:17	877-09-8	
Decachlorobiphenyl (S)	62	%	49-104		1	11/26/18 14:06	11/27/18 20:17	2051-24-3	
<b>Percent Moisture</b>									
Analytical Method: ASTM D2974-87									
Percent Moisture	12.3	%	0.10	0.10	1		11/27/18 10:46		

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## ANALYTICAL RESULTS

Project: 107927.0000.100 9300 HARP

Pace Project No.: 40179971

**Sample: OU4-IC-S09-R**      **Lab ID: 40179971004**      Collected: 11/17/18 11:30      Received: 11/20/18 09:15      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
<b>8082 GCS PCB</b>									
Analytical Method: EPA 8082    Preparation Method: EPA 3541									
PCB-1016 (Aroclor 1016)	<27.0	ug/kg	54.1	27.0	1	11/26/18 18:37	11/27/18 13:43	12674-11-2	
PCB-1221 (Aroclor 1221)	<27.0	ug/kg	54.1	27.0	1	11/26/18 18:37	11/27/18 13:43	11104-28-2	
PCB-1232 (Aroclor 1232)	<27.0	ug/kg	54.1	27.0	1	11/26/18 18:37	11/27/18 13:43	11141-16-5	
PCB-1242 (Aroclor 1242)	<27.0	ug/kg	54.1	27.0	1	11/26/18 18:37	11/27/18 13:43	53469-21-9	
PCB-1248 (Aroclor 1248)	<27.0	ug/kg	54.1	27.0	1	11/26/18 18:37	11/27/18 13:43	12672-29-6	
PCB-1254 (Aroclor 1254)	368	ug/kg	54.1	27.0	1	11/26/18 18:37	11/27/18 13:43	11097-69-1	
PCB-1260 (Aroclor 1260)	90.5	ug/kg	54.1	27.0	1	11/26/18 18:37	11/27/18 13:43	11096-82-5	
PCB, Total	459	ug/kg	54.1	27.0	1	11/26/18 18:37	11/27/18 13:43	1336-36-3	
<b>Surrogates</b>									
Tetrachloro-m-xylene (S)	56	%	56-98		1	11/26/18 18:37	11/27/18 13:43	877-09-8	
Decachlorobiphenyl (S)	53	%	49-104		1	11/26/18 18:37	11/27/18 13:43	2051-24-3	
<b>Percent Moisture</b>									
Analytical Method: ASTM D2974-87									
Percent Moisture	7.6	%	0.10	0.10	1		11/27/18 10:46		

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## ANALYTICAL RESULTS

Project: 107927.0000.100 9300 HARP

Pace Project No.: 40179971

**Sample: OU4-IC-S10-R**      **Lab ID: 40179971005**      Collected: 11/17/18 11:40      Received: 11/20/18 09:15      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
<b>8082 GCS PCB</b>									
Analytical Method: EPA 8082 Preparation Method: EPA 3541									
PCB-1016 (Aroclor 1016)	<78.4	ug/kg	157	78.4	1	11/26/18 18:37	11/27/18 14:01	12674-11-2	
PCB-1221 (Aroclor 1221)	<78.4	ug/kg	157	78.4	1	11/26/18 18:37	11/27/18 14:01	11104-28-2	
PCB-1232 (Aroclor 1232)	<78.4	ug/kg	157	78.4	1	11/26/18 18:37	11/27/18 14:01	11141-16-5	
PCB-1242 (Aroclor 1242)	<78.4	ug/kg	157	78.4	1	11/26/18 18:37	11/27/18 14:01	53469-21-9	
PCB-1248 (Aroclor 1248)	<78.4	ug/kg	157	78.4	1	11/26/18 18:37	11/27/18 14:01	12672-29-6	
PCB-1254 (Aroclor 1254)	629	ug/kg	157	78.4	1	11/26/18 18:37	11/27/18 14:01	11097-69-1	
PCB-1260 (Aroclor 1260)	145J	ug/kg	157	78.4	1	11/26/18 18:37	11/27/18 14:01	11096-82-5	
PCB, Total	774	ug/kg	157	78.4	1	11/26/18 18:37	11/27/18 14:01	1336-36-3	
<b>Surrogates</b>									
Tetrachloro-m-xylene (S)	62	%	56-98		1	11/26/18 18:37	11/27/18 14:01	877-09-8	
Decachlorobiphenyl (S)	59	%	49-104		1	11/26/18 18:37	11/27/18 14:01	2051-24-3	
<b>Percent Moisture</b>									
Analytical Method: ASTM D2974-87									
Percent Moisture	68.1	%	0.10	0.10	1		11/26/18 14:25		

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: 107927.0000.100 9300 HARP  
Pace Project No.: 40179971

**Sample: OU4-IC-S01-L**      **Lab ID: 40179971006**      Collected: 11/16/18 16:00      Received: 11/20/18 09:15      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
<b>8082 GCS PCB</b>									
Analytical Method: EPA 8082    Preparation Method: EPA 3541									
PCB-1016 (Aroclor 1016)	<58.9	ug/kg	118	58.9	1	11/26/18 18:37	11/27/18 14:19	12674-11-2	
PCB-1221 (Aroclor 1221)	<58.9	ug/kg	118	58.9	1	11/26/18 18:37	11/27/18 14:19	11104-28-2	
PCB-1232 (Aroclor 1232)	<58.9	ug/kg	118	58.9	1	11/26/18 18:37	11/27/18 14:19	11141-16-5	
PCB-1242 (Aroclor 1242)	<58.9	ug/kg	118	58.9	1	11/26/18 18:37	11/27/18 14:19	53469-21-9	
PCB-1248 (Aroclor 1248)	<58.9	ug/kg	118	58.9	1	11/26/18 18:37	11/27/18 14:19	12672-29-6	
PCB-1254 (Aroclor 1254)	509	ug/kg	118	58.9	1	11/26/18 18:37	11/27/18 14:19	11097-69-1	
PCB-1260 (Aroclor 1260)	112J	ug/kg	118	58.9	1	11/26/18 18:37	11/27/18 14:19	11096-82-5	
PCB, Total	621	ug/kg	118	58.9	1	11/26/18 18:37	11/27/18 14:19	1336-36-3	
<b>Surrogates</b>									
Tetrachloro-m-xylene (S)	62	%	56-98		1	11/26/18 18:37	11/27/18 14:19	877-09-8	
Decachlorobiphenyl (S)	57	%	49-104		1	11/26/18 18:37	11/27/18 14:19	2051-24-3	
<b>Percent Moisture</b>									
Analytical Method: ASTM D2974-87									
Percent Moisture	57.6	%	0.10	0.10	1		11/26/18 14:25		

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## ANALYTICAL RESULTS

Project: 107927.0000.100 9300 HARP

Pace Project No.: 40179971

**Sample: OU4-IC-S02-L**      **Lab ID: 40179971007**      Collected: 11/16/18 16:10      Received: 11/20/18 09:15      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
<b>8082 GCS PCB</b>									
Analytical Method: EPA 8082    Preparation Method: EPA 3541									
PCB-1016 (Aroclor 1016)	<72.4	ug/kg	145	72.4	1	11/26/18 18:37	11/27/18 14:38	12674-11-2	
PCB-1221 (Aroclor 1221)	<72.4	ug/kg	145	72.4	1	11/26/18 18:37	11/27/18 14:38	11104-28-2	
PCB-1232 (Aroclor 1232)	<72.4	ug/kg	145	72.4	1	11/26/18 18:37	11/27/18 14:38	11141-16-5	
PCB-1242 (Aroclor 1242)	<72.4	ug/kg	145	72.4	1	11/26/18 18:37	11/27/18 14:38	53469-21-9	
PCB-1248 (Aroclor 1248)	<72.4	ug/kg	145	72.4	1	11/26/18 18:37	11/27/18 14:38	12672-29-6	
PCB-1254 (Aroclor 1254)	972	ug/kg	145	72.4	1	11/26/18 18:37	11/27/18 14:38	11097-69-1	
PCB-1260 (Aroclor 1260)	236	ug/kg	145	72.4	1	11/26/18 18:37	11/27/18 14:38	11096-82-5	
PCB, Total	1210	ug/kg	145	72.4	1	11/26/18 18:37	11/27/18 14:38	1336-36-3	
<b>Surrogates</b>									
Tetrachloro-m-xylene (S)	64	%	56-98		1	11/26/18 18:37	11/27/18 14:38	877-09-8	
Decachlorobiphenyl (S)	58	%	49-104		1	11/26/18 18:37	11/27/18 14:38	2051-24-3	
<b>Percent Moisture</b>									
Analytical Method: ASTM D2974-87									
Percent Moisture	65.5	%	0.10	0.10	1		11/26/18 14:26		

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: 107927.0000.100 9300 HARP

Pace Project No.: 40179971

**Sample: OU4-IC-S03-L**      **Lab ID: 40179971008**      Collected: 11/16/18 16:20      Received: 11/20/18 09:15      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
<b>8082 GCS PCB</b>									
Analytical Method: EPA 8082 Preparation Method: EPA 3541									
PCB-1016 (Aroclor 1016)	<73.6	ug/kg	147	73.6	1	11/26/18 18:37	11/27/18 14:56	12674-11-2	
PCB-1221 (Aroclor 1221)	<73.6	ug/kg	147	73.6	1	11/26/18 18:37	11/27/18 14:56	11104-28-2	
PCB-1232 (Aroclor 1232)	<73.6	ug/kg	147	73.6	1	11/26/18 18:37	11/27/18 14:56	11141-16-5	
PCB-1242 (Aroclor 1242)	458	ug/kg	147	73.6	1	11/26/18 18:37	11/27/18 14:56	53469-21-9	
PCB-1248 (Aroclor 1248)	<73.6	ug/kg	147	73.6	1	11/26/18 18:37	11/27/18 14:56	12672-29-6	
PCB-1254 (Aroclor 1254)	1010	ug/kg	147	73.6	1	11/26/18 18:37	11/27/18 14:56	11097-69-1	
PCB-1260 (Aroclor 1260)	306	ug/kg	147	73.6	1	11/26/18 18:37	11/27/18 14:56	11096-82-5	
PCB, Total	1770	ug/kg	147	73.6	1	11/26/18 18:37	11/27/18 14:56	1336-36-3	
<b>Surrogates</b>									
Tetrachloro-m-xylene (S)	63	%	56-98		1	11/26/18 18:37	11/27/18 14:56	877-09-8	
Decachlorobiphenyl (S)	60	%	49-104		1	11/26/18 18:37	11/27/18 14:56	2051-24-3	
<b>Percent Moisture</b>									
Analytical Method: ASTM D2974-87									
Percent Moisture	66.1	%	0.10	0.10	1		11/26/18 14:26		

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## ANALYTICAL RESULTS

Project: 107927.0000.100 9300 HARP

Pace Project No.: 40179971

**Sample: OU4-IC-S04-L**      **Lab ID: 40179971009**      Collected: 11/16/18 16:30      Received: 11/20/18 09:15      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
<b>8082 GCS PCB</b>									
Analytical Method: EPA 8082    Preparation Method: EPA 3541									
PCB-1016 (Aroclor 1016)	<64.6	ug/kg	129	64.6	1	11/26/18 18:37	11/27/18 15:14	12674-11-2	
PCB-1221 (Aroclor 1221)	<64.6	ug/kg	129	64.6	1	11/26/18 18:37	11/27/18 15:14	11104-28-2	
PCB-1232 (Aroclor 1232)	<64.6	ug/kg	129	64.6	1	11/26/18 18:37	11/27/18 15:14	11141-16-5	
PCB-1242 (Aroclor 1242)	<64.6	ug/kg	129	64.6	1	11/26/18 18:37	11/27/18 15:14	53469-21-9	
PCB-1248 (Aroclor 1248)	<64.6	ug/kg	129	64.6	1	11/26/18 18:37	11/27/18 15:14	12672-29-6	
PCB-1254 (Aroclor 1254)	1310	ug/kg	129	64.6	1	11/26/18 18:37	11/27/18 15:14	11097-69-1	
PCB-1260 (Aroclor 1260)	308	ug/kg	129	64.6	1	11/26/18 18:37	11/27/18 15:14	11096-82-5	
PCB, Total	1610	ug/kg	129	64.6	1	11/26/18 18:37	11/27/18 15:14	1336-36-3	
<b>Surrogates</b>									
Tetrachloro-m-xylene (S)	56	%	56-98		1	11/26/18 18:37	11/27/18 15:14	877-09-8	
Decachlorobiphenyl (S)	54	%	49-104		1	11/26/18 18:37	11/27/18 15:14	2051-24-3	
<b>Percent Moisture</b>									
Analytical Method: ASTM D2974-87									
Percent Moisture	61.3	%	0.10	0.10	1		11/26/18 14:26		

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## ANALYTICAL RESULTS

Project: 107927.0000.100 9300 HARP

Pace Project No.: 40179971

**Sample: OU4-IC-S05-C**      **Lab ID: 40179971010**      Collected: 11/16/18 16:40      Received: 11/20/18 09:15      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
<b>8082 GCS PCB</b>									
Analytical Method: EPA 8082    Preparation Method: EPA 3541									
PCB-1016 (Aroclor 1016)	<56.4	ug/kg	113	56.4	1	11/26/18 18:37	11/27/18 15:32	12674-11-2	
PCB-1221 (Aroclor 1221)	<56.4	ug/kg	113	56.4	1	11/26/18 18:37	11/27/18 15:32	11104-28-2	
PCB-1232 (Aroclor 1232)	<56.4	ug/kg	113	56.4	1	11/26/18 18:37	11/27/18 15:32	11141-16-5	
PCB-1242 (Aroclor 1242)	<56.4	ug/kg	113	56.4	1	11/26/18 18:37	11/27/18 15:32	53469-21-9	
PCB-1248 (Aroclor 1248)	<56.4	ug/kg	113	56.4	1	11/26/18 18:37	11/27/18 15:32	12672-29-6	
PCB-1254 (Aroclor 1254)	847	ug/kg	113	56.4	1	11/26/18 18:37	11/27/18 15:32	11097-69-1	
PCB-1260 (Aroclor 1260)	183	ug/kg	113	56.4	1	11/26/18 18:37	11/27/18 15:32	11096-82-5	
PCB, Total	1030	ug/kg	113	56.4	1	11/26/18 18:37	11/27/18 15:32	1336-36-3	
<b>Surrogates</b>									
Tetrachloro-m-xylene (S)	62	%	56-98		1	11/26/18 18:37	11/27/18 15:32	877-09-8	
Decachlorobiphenyl (S)	57	%	49-104		1	11/26/18 18:37	11/27/18 15:32	2051-24-3	
<b>Percent Moisture</b>									
Analytical Method: ASTM D2974-87									
Percent Moisture	55.7	%	0.10	0.10	1		11/26/18 15:01		

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## ANALYTICAL RESULTS

Project: 107927.0000.100 9300 HARP

Pace Project No.: 40179971

**Sample: OU4-IC-DUP01**      **Lab ID: 40179971011**      Collected: 11/16/18 00:00      Received: 11/20/18 09:15      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
<b>8082 GCS PCB</b>									
Analytical Method: EPA 8082    Preparation Method: EPA 3541									
PCB-1016 (Aroclor 1016)	<128	ug/kg	256	128	2	11/26/18 18:37	11/27/18 15:51	12674-11-2	
PCB-1221 (Aroclor 1221)	<128	ug/kg	256	128	2	11/26/18 18:37	11/27/18 15:51	11104-28-2	
PCB-1232 (Aroclor 1232)	<128	ug/kg	256	128	2	11/26/18 18:37	11/27/18 15:51	11141-16-5	
PCB-1242 (Aroclor 1242)	<128	ug/kg	256	128	2	11/26/18 18:37	11/27/18 15:51	53469-21-9	
PCB-1248 (Aroclor 1248)	<128	ug/kg	256	128	2	11/26/18 18:37	11/27/18 15:51	12672-29-6	
PCB-1254 (Aroclor 1254)	1490	ug/kg	256	128	2	11/26/18 18:37	11/27/18 15:51	11097-69-1	
PCB-1260 (Aroclor 1260)	326	ug/kg	256	128	2	11/26/18 18:37	11/27/18 15:51	11096-82-5	
PCB, Total	1820	ug/kg	256	128	2	11/26/18 18:37	11/27/18 15:51	1336-36-3	
<b>Surrogates</b>									
Tetrachloro-m-xylene (S)	58	%	56-98		2	11/26/18 18:37	11/27/18 15:51	877-09-8	
Decachlorobiphenyl (S)	53	%	49-104		2	11/26/18 18:37	11/27/18 15:51	2051-24-3	
<b>Percent Moisture</b>									
Analytical Method: ASTM D2974-87									
Percent Moisture	60.9	%	0.10	0.10	1		11/26/18 15:01		

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### ANALYTICAL RESULTS

Project: 107927.0000.100 9300 HARP

Pace Project No.: 40179971

**Sample: OU4-FB01**      **Lab ID: 40179971012**      Collected: 11/17/18 12:10      Received: 11/20/18 09:15      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8082 GCS PCB</b>									
Analytical Method: EPA 8082    Preparation Method: EPA 3510									
PCB-1016 (Aroclor 1016)	<0.24	ug/L	0.48	0.24	1	11/27/18 08:15	11/28/18 11:17	12674-11-2	
PCB-1221 (Aroclor 1221)	<0.24	ug/L	0.48	0.24	1	11/27/18 08:15	11/28/18 11:17	11104-28-2	
PCB-1232 (Aroclor 1232)	<0.24	ug/L	0.48	0.24	1	11/27/18 08:15	11/28/18 11:17	11141-16-5	
PCB-1242 (Aroclor 1242)	<0.24	ug/L	0.48	0.24	1	11/27/18 08:15	11/28/18 11:17	53469-21-9	
PCB-1248 (Aroclor 1248)	<0.24	ug/L	0.48	0.24	1	11/27/18 08:15	11/28/18 11:17	12672-29-6	
PCB-1254 (Aroclor 1254)	<0.24	ug/L	0.48	0.24	1	11/27/18 08:15	11/28/18 11:17	11097-69-1	
PCB-1260 (Aroclor 1260)	<0.24	ug/L	0.48	0.24	1	11/27/18 08:15	11/28/18 11:17	11096-82-5	
PCB, Total	<0.24	ug/L	0.48	0.24	1	11/27/18 08:15	11/28/18 11:17	1336-36-3	
<b>Surrogates</b>									
Tetrachloro-m-xylene (S)	87	%	44-121		1	11/27/18 08:15	11/28/18 11:17	877-09-8	
Decachlorobiphenyl (S)	40	%	10-119		1	11/27/18 08:15	11/28/18 11:17	2051-24-3	

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### QUALITY CONTROL DATA

Project: 107927.0000.100 9300 HARP  
Pace Project No.: 40179971

QC Batch: 307557 Analysis Method: EPA 8082  
QC Batch Method: EPA 3541 Analysis Description: 8082 GCS PCB  
Associated Lab Samples: 40179971001, 40179971002, 40179971003

METHOD BLANK: 1797836 Matrix: Solid  
Associated Lab Samples: 40179971001, 40179971002, 40179971003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
PCB-1016 (Aroclor 1016)	ug/kg	<25.0	50.0	11/27/18 11:13	
PCB-1221 (Aroclor 1221)	ug/kg	<25.0	50.0	11/27/18 11:13	
PCB-1232 (Aroclor 1232)	ug/kg	<25.0	50.0	11/27/18 11:13	
PCB-1242 (Aroclor 1242)	ug/kg	<25.0	50.0	11/27/18 11:13	
PCB-1248 (Aroclor 1248)	ug/kg	<25.0	50.0	11/27/18 11:13	
PCB-1254 (Aroclor 1254)	ug/kg	<25.0	50.0	11/27/18 11:13	
PCB-1260 (Aroclor 1260)	ug/kg	<25.0	50.0	11/27/18 11:13	
Decachlorobiphenyl (S)	%	79	49-104	11/27/18 11:13	
Tetrachloro-m-xylene (S)	%	82	56-98	11/27/18 11:13	

LABORATORY CONTROL SAMPLE: 1797837

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	379	76	61-105	
Decachlorobiphenyl (S)	%			80	49-104	
Tetrachloro-m-xylene (S)	%			82	56-98	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1797838 1797839

Parameter	Units	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		40179875006	Spike Conc.	Spike Conc.	Result						
PCB-1016 (Aroclor 1016)	ug/kg	<0.029 mg/kg			<29.3	<29.3					20
PCB-1221 (Aroclor 1221)	ug/kg	<0.029 mg/kg			<29.3	<29.3					20
PCB-1232 (Aroclor 1232)	ug/kg	<0.029 mg/kg			<29.3	<29.3					20
PCB-1242 (Aroclor 1242)	ug/kg	<0.029 mg/kg			<29.3	<29.3					20
PCB-1248 (Aroclor 1248)	ug/kg	0.12 mg/kg			130	137			6		20
PCB-1254 (Aroclor 1254)	ug/kg	<0.029 mg/kg			<29.3	<29.3					20

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### QUALITY CONTROL DATA

Project: 107927.0000.100 9300 HARP

Pace Project No.: 40179971

Parameter	Units	MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1797838		1797839		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	RPD	Qual
		40179875006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result										
PCB-1260 (Aroclor 1260)	ug/kg	<0.029 mg/kg	585	585	424	440	73	75	35-125	4	20				
Decachlorobiphenyl (S)	%							74	77	49-104					
Tetrachloro-m-xylene (S)	%							82	86	56-98					

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### QUALITY CONTROL DATA

Project: 107927.0000.100 9300 HARP  
Pace Project No.: 40179971

QC Batch: 307592 Analysis Method: EPA 8082  
QC Batch Method: EPA 3541 Analysis Description: 8082 GCS PCB  
Associated Lab Samples: 40179971004, 40179971005, 40179971006, 40179971007, 40179971008, 40179971009, 40179971010, 40179971011

METHOD BLANK: 1797948 Matrix: Solid  
Associated Lab Samples: 40179971004, 40179971005, 40179971006, 40179971007, 40179971008, 40179971009, 40179971010, 40179971011

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
PCB-1016 (Aroclor 1016)	ug/kg	<25.0	50.0	11/27/18 11:34	
PCB-1221 (Aroclor 1221)	ug/kg	<25.0	50.0	11/27/18 11:34	
PCB-1232 (Aroclor 1232)	ug/kg	<25.0	50.0	11/27/18 11:34	
PCB-1242 (Aroclor 1242)	ug/kg	<25.0	50.0	11/27/18 11:34	
PCB-1248 (Aroclor 1248)	ug/kg	<25.0	50.0	11/27/18 11:34	
PCB-1254 (Aroclor 1254)	ug/kg	<25.0	50.0	11/27/18 11:34	
PCB-1260 (Aroclor 1260)	ug/kg	<25.0	50.0	11/27/18 11:34	
Decachlorobiphenyl (S)	%	75	49-104	11/27/18 11:34	
Tetrachloro-m-xylene (S)	%	77	56-98	11/27/18 11:34	

LABORATORY CONTROL SAMPLE: 1797949

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	396	79	61-105	
Decachlorobiphenyl (S)	%			73	49-104	
Tetrachloro-m-xylene (S)	%			74	56-98	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1797950 1797951

Parameter	Units	1797950		1797951		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		40180066001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result						
PCB-1016 (Aroclor 1016)	ug/kg	<40.6			<40.6	<40.6					20
PCB-1221 (Aroclor 1221)	ug/kg	<40.6			<40.6	<40.6					20
PCB-1232 (Aroclor 1232)	ug/kg	<40.6			<40.6	<40.6					20
PCB-1242 (Aroclor 1242)	ug/kg	700			904	803			12		20
PCB-1248 (Aroclor 1248)	ug/kg	<40.6			<40.6	<40.6					20
PCB-1254 (Aroclor 1254)	ug/kg	<40.6			<40.6	<40.6					20
PCB-1260 (Aroclor 1260)	ug/kg	<40.6	813	813	710	554	87	68	35-125	25	20
Decachlorobiphenyl (S)	%						61	55	49-104		
Tetrachloro-m-xylene (S)	%						65	60	56-98		

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### QUALITY CONTROL DATA

Project: 107927.0000.100 9300 HARP  
Pace Project No.: 40179971

QC Batch: 307615 Analysis Method: EPA 8082  
QC Batch Method: EPA 3510 Analysis Description: 8082 GCS PCB  
Associated Lab Samples: 40179971012

METHOD BLANK: 1798044 Matrix: Water  
Associated Lab Samples: 40179971012

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
PCB-1016 (Aroclor 1016)	ug/L	<0.12	0.25	11/28/18 08:20	
PCB-1221 (Aroclor 1221)	ug/L	<0.12	0.25	11/28/18 08:20	
PCB-1232 (Aroclor 1232)	ug/L	<0.12	0.25	11/28/18 08:20	
PCB-1242 (Aroclor 1242)	ug/L	<0.12	0.25	11/28/18 08:20	
PCB-1248 (Aroclor 1248)	ug/L	<0.12	0.25	11/28/18 08:20	
PCB-1254 (Aroclor 1254)	ug/L	<0.12	0.25	11/28/18 08:20	
PCB-1260 (Aroclor 1260)	ug/L	<0.12	0.25	11/28/18 08:20	
Decachlorobiphenyl (S)	%	73	10-119	11/28/18 08:20	
Tetrachloro-m-xylene (S)	%	87	44-121	11/28/18 08:20	

LABORATORY CONTROL SAMPLE & LCSD: 1798045

Parameter	Units	1798045		1798046		% Rec Limits	RPD	Max RPD	Qualifiers
		Spike Conc.	LCS Result	LCSD Result	LCS % Rec				
PCB-1016 (Aroclor 1016)	ug/L		<0.12	<0.12				20	
PCB-1221 (Aroclor 1221)	ug/L		<0.12	<0.12				20	
PCB-1232 (Aroclor 1232)	ug/L		<0.12	<0.12				20	
PCB-1242 (Aroclor 1242)	ug/L		<0.12	<0.12				20	
PCB-1248 (Aroclor 1248)	ug/L		<0.12	<0.12				20	
PCB-1254 (Aroclor 1254)	ug/L		<0.12	<0.12				20	
PCB-1260 (Aroclor 1260)	ug/L	2.5	2.1	2.1	84	86	63-116	1	20
Decachlorobiphenyl (S)	%				59	70	10-119		
Tetrachloro-m-xylene (S)	%				91	88	44-121		

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### QUALITY CONTROL DATA

Project: 107927.0000.100 9300 HARP  
Pace Project No.: 40179971

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QC Batch: 307573 Analysis Method: ASTM D2974-87  
QC Batch Method: ASTM D2974-87 Analysis Description: Dry Weight/Percent Moisture  
Associated Lab Samples: 40179971005, 40179971006, 40179971007, 40179971008, 40179971009

---

SAMPLE DUPLICATE: 1797895

Parameter	Units	40179961016 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	14.9	15.2	2	10	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

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### QUALITY CONTROL DATA

Project: 107927.0000.100 9300 HARP

Pace Project No.: 40179971

---

QC Batch:	307577	Analysis Method:	ASTM D2974-87
QC Batch Method:	ASTM D2974-87	Analysis Description:	Dry Weight/Percent Moisture
Associated Lab Samples:	40179971010, 40179971011		

---

SAMPLE DUPLICATE: 1797899

Parameter	Units	40179980002 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	17.2	15.6	9	10	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

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**QUALITY CONTROL DATA**

Project: 107927.0000.100 9300 HARP

Pace Project No.: 40179971

---

QC Batch:	307652	Analysis Method:	ASTM D2974-87
QC Batch Method:	ASTM D2974-87	Analysis Description:	Dry Weight/Percent Moisture
Associated Lab Samples:	40179971001, 40179971002, 40179971003, 40179971004		

---

SAMPLE DUPLICATE: 1798242

Parameter	Units	40180072005 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	4.5	4.6	2	10	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

**REPORT OF LABORATORY ANALYSIS**

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## QUALIFIERS

Project: 107927.0000.100 9300 HARP

Pace Project No.: 40179971

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### 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, percent moisture, initial weight and final volume.

LOQ - Limit of Quantitation adjusted for dilution factor, percent moisture, initial weight and final volume.

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

### BATCH QUALIFIERS

Batch: 307703

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

## REPORT OF LABORATORY ANALYSIS

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### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 107927.0000.100 9300 HARP

Pace Project No.: 40179971

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40179971001	OU4-IC-S06-L	EPA 3541	307557	EPA 8082	307578
40179971002	OU4-IC-S07-R	EPA 3541	307557	EPA 8082	307578
40179971003	OU4-IC-S08-R	EPA 3541	307557	EPA 8082	307578
40179971004	OU4-IC-S09-R	EPA 3541	307592	EPA 8082	307593
40179971005	OU4-IC-S10-R	EPA 3541	307592	EPA 8082	307593
40179971006	OU4-IC-S01-L	EPA 3541	307592	EPA 8082	307593
40179971007	OU4-IC-S02-L	EPA 3541	307592	EPA 8082	307593
40179971008	OU4-IC-S03-L	EPA 3541	307592	EPA 8082	307593
40179971009	OU4-IC-S04-L	EPA 3541	307592	EPA 8082	307593
40179971010	OU4-IC-S05-C	EPA 3541	307592	EPA 8082	307593
40179971011	OU4-IC-DUP01	EPA 3541	307592	EPA 8082	307593
40179971012	OU4-FB01	EPA 3510	307615	EPA 8082	307703
40179971001	OU4-IC-S06-L	ASTM D2974-87	307652		
40179971002	OU4-IC-S07-R	ASTM D2974-87	307652		
40179971003	OU4-IC-S08-R	ASTM D2974-87	307652		
40179971004	OU4-IC-S09-R	ASTM D2974-87	307652		
40179971005	OU4-IC-S10-R	ASTM D2974-87	307573		
40179971006	OU4-IC-S01-L	ASTM D2974-87	307573		
40179971007	OU4-IC-S02-L	ASTM D2974-87	307573		
40179971008	OU4-IC-S03-L	ASTM D2974-87	307573		
40179971009	OU4-IC-S04-L	ASTM D2974-87	307573		
40179971010	OU4-IC-S05-C	ASTM D2974-87	307577		
40179971011	OU4-IC-DUP01	ASTM D2974-87	307577		

### REPORT OF LABORATORY ANALYSIS

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



### 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, WI*

Project Contact: *M. Westover*

Phone: *609 358 5035*

Project Number: *107927.0000, 100 9300*

Project Name: *HARP*

Project State: *WI*

Sampled By (Print): *Meredith Westover*

Sampled By (Sign): *[Signature]*

PO #: \_\_\_\_\_ Regulatory Program: \_\_\_\_\_

FILTERED? (YES/NO)  
 PRESERVATION (CODE)\*

Y/N	Pick Letter	Analyses Requested	COLLECTION			MATRIX	Matrix Codes
			DATE	TIME			
<i>NA</i>	<i>A</i>	<i>PCBs</i>	<i>11/7/18</i>	<i>1100</i>		<i>SED</i>	
				<i>1110</i>			<i>X</i>
					<i>1120</i>		<i>X</i>
					<i>1130</i>		<i>X</i>
				<i>V</i>	<i>1140</i>		<i>X</i>
				<i>11/16/18</i>	<i>1600</i>		<i>X</i>
					<i>1610</i>		<i>X</i>
					<i>1620</i>		<i>X</i>
					<i>1630</i>		<i>X</i>
					<i>1640</i>		<i>X</i>
							<i>X</i>
				<i>11/17/18</i>	<i>1210</i>	<i>OCW</i>	<i>X</i>

Quote #: \_\_\_\_\_

Mail To Contact: *TRC*

Mail To Company: \_\_\_\_\_

Mail To Address: *Madison, WI*

Invoice To Contact: \_\_\_\_\_

Invoice To Company: *TRC*

Invoice To Address: *Windsor CT*

Invoice To Phone: \_\_\_\_\_

CLIENT COMMENTS	LAB COMMENTS (Lab Use Only)	Profile #

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		MATRIX
		DATE	TIME	
<i>001</i>	<i>0U4-IC-S06-L</i>	<i>11/7/18</i>	<i>1100</i>	<i>SED</i>
<i>002</i>	<i>0U4-IC-S07-R</i>		<i>1110</i>	
<i>003</i>	<i>0U4-IC-S08-R</i>		<i>1120</i>	
<i>004</i>	<i>0U4-IC-S09-R</i>		<i>1130</i>	
<i>005</i>	<i>0U4-IC-S10-R</i>	<i>V</i>	<i>1140</i>	
<i>006</i>	<i>0U4-IC-S01-L</i>	<i>11/16/18</i>	<i>1600</i>	
<i>007</i>	<i>0U4-IC-S02-L</i>		<i>1610</i>	
<i>008</i>	<i>0U4-IC-S03-L</i>		<i>1620</i>	
<i>009</i>	<i>0U4-IC-S04-L</i>		<i>1630</i>	
<i>010</i>	<i>0U4-IC-S05-C</i>		<i>1640</i>	
<i>011</i>	<i>0U4-IC-DUP01</i>	<i>V</i>		
<i>012</i>	<i>0U4-FB01</i>	<i>11/17/18</i>	<i>1210</i>	<i>OCW</i>

Rush Turnaround Time Requested - Prelims (Rush TAT subject to approval/surcharge) Date Needed:	Relinquished By: <i>[Signature]</i> Date/Time: <i>11/19/18 0800</i>	Received By: _____ Date/Time: _____	PACE Project No. <i>40179971</i>		
	Transmit Prelim Rush Results by (complete what you want): <i>wa/tco</i>	Relinquished By: <i>Wa/tco</i> Date/Time: <i>11/20/18 0915</i>		Received By: <i>[Signature] Pace</i> Date/Time: <i>11/20/18 0915</i>	Receipt Temp = <i>ROI</i> °C
	Email #1:	Relinquished By: _____ Date/Time: _____		Received By: _____ Date/Time: _____	Sample Receipt pH OK / Adjusted
	Email #2:	Relinquished By: _____ Date/Time: _____		Received By: _____ Date/Time: _____	Cooler Custody Seal Present / Not Present Intact / Not Intact
	Telephone:	Relinquished By: _____ Date/Time: _____		Received By: _____ Date/Time: _____	

Fax: \_\_\_\_\_

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

### Sample Preservation Receipt Form

Client Name: TRC Project # 40179971

Page 2 of 2

All containers needing preservation have been checked and noted below:  Yes  No  N/A

Lab Lot# of pH paper:

Lab Std #ID of preservation (if pH adjusted):

Initial when completed:

Date/Time:

Pace Lab #	Glass							Plastic						Vials					Jars			General			VOA Vials (>6mm) *	H2SO4 pH ≤2	NaOH+Zn Act pH ≥9	NaOH pH ≥12	HNO3 pH ≤2	pH after adjusted	Volume (mL)						
	AG1U	AG1H	AG4S	AG4U	AG5U	AG2S	BG3U	BP1U	BP2N	BP2Z	BP3U	BP3C	BP3N	BP3S	DG9A	DG9T	VG9U	VG9H	VG9M	VG9D	JGFU	WGFU	WPFU	SP5T								ZPLC	GN				
001																																					2.5 / 5 / 10
002																																					2.5 / 5 / 10
003																																					2.5 / 5 / 10
004																																					2.5 / 5 / 10
005																																					2.5 / 5 / 10
006																																					2.5 / 5 / 10
007																																					2.5 / 5 / 10
008																																					2.5 / 5 / 10
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017																																					2.5 / 5 / 10
018																																					2.5 / 5 / 10
019																																					2.5 / 5 / 10
020																																					2.5 / 5 / 10

Exceptions to preservation check: VOA, Coliform, TOC, TOX, TOH, O&G, WI DRO, Phenolics, Other: \_\_\_\_\_ Headspace in VOA Vials (>6mm) :  Yes  No  N/A \*If yes look in headspace column

<b>AG1U</b> 1 liter amber glass <b>AG1H</b> 1 liter amber glass HCL <b>AG4S</b> 125 mL amber glass H2SO4 <b>AG4U</b> 120 mL amber glass unpres <b>AG5U</b> 100 mL amber glass unpres <b>AG2S</b> 500 mL amber glass H2SO4 <b>BG3U</b> 250 mL clear glass unpres	<b>BP1U</b> 1 liter plastic unpres <b>BP2N</b> 500 mL plastic HNO3 <b>BP2Z</b> 500 mL plastic NaOH, Znact <b>BP3U</b> 250 mL plastic unpres <b>BP3C</b> 250 mL plastic NaOH <b>BP3N</b> 250 mL plastic HNO3 <b>BP3S</b> 250 mL plastic H2SO4	<b>DG9A</b> 40 mL amber ascorbic <b>DG9T</b> 40 mL amber Na Thio <b>VG9U</b> 40 mL clear vial unpres <b>VG9H</b> 40 mL clear vial HCL <b>VG9M</b> 40 mL clear vial MeOH <b>VG9D</b> 40 mL clear vial DI	<b>JGFU</b> 4 oz amber jar unpres <b>WGFU</b> 4 oz clear jar unpres <b>WPFU</b> 4 oz plastic jar unpres  <b>SP5T</b> 120 mL plastic Na Thiosulfate <b>ZPLC</b> ziploc bag <b>GN:</b>
---	--	--	--

**Sample Condition Upon Receipt Form (SCUR)**

**Client Name:** TRC

Project #: \_\_\_\_\_

**WO#: 40179971**

**Courier:**  CS Logistics  Fed Ex  Speedee  UPS  Waltco  
 Client  Pace Other: \_\_\_\_\_



**Tracking #:** 1889096-1

**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** SR - NA **Type of Ice:**  Wet  Blue Dry None  Samples on ice, cooling process has begun

**Cooler Temperature** Uncorr: ROI / Corr: \_\_\_\_\_

**Temp Blank Present:**  yes  no **Biological Tissue is Frozen:**  yes  no

**Person examining contents:**  
Date: 11-20-18  
Initials: TK

Temp should be above freezing to 6°C.  
Biota Samples may be received at ≤ 0°C.

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody Filled Out:	<input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	2. <u>11/20/18</u>
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3. <u>no 70 #</u>
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4. <u>11/20/18</u>
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	5.
- VOA Samples frozen upon receipt	<input type="checkbox"/> Yes <input type="checkbox"/> No	Date/Time:
<b>Short Hold Time Analysis (&lt;72hr):</b>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	6.
<b>Rush Turn Around Time Requested:</b>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	7.
Sufficient Volume:		8.
For Analysis: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No MS/MSD: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A		
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	9.
-Pace Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
-Pace IR Containers Used:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	10.
Filtered volume received for Dissolved tests	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Sample Labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	12.
-Includes date/time/ID/Analysis Matrix: <u>S, W</u>		
Trip Blank Present:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	13.
Trip Blank Custody Seals Present	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> 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:** UKW

**Date:** 11/21/18

(Please Print Clearly)

UPPER MIDWEST REGION

Company Name: TPL  
 Branch/Location: Madison, WI  
 Project Contact: M. Westover  
 Phone: 608 358 5035  
 Project Number: 107927.0000 100 9300  
 Project Name: HARP  
 Project State: WI  
 Sampled By (Print): Meredith Westover  
 Sampled By (Sign): [Signature]  
 PO #: \_\_\_\_\_ Regulatory Program: \_\_\_\_\_



MN: 612-607-1700 WI: 920-469-2436

40179971

### 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

FILTERED?  
(YES/NO)  
 PRESERVATION  
(CODE)\*

Y/N	Pick Letter	Analyses Requested	COLLECTION		MATRIX	
			DATE	TIME		
NA	A	PCBs	11/17/10	1100	SED	
				1110		
				1120		
				1130		
				1140		
				11/16/10	1600	
				1610		
				1620		
				1630		
				1640		
				11/17/10	1210	OCW

Quote #: \_\_\_\_\_  
 Mail To Contact: TPL  
 Mail To Company: \_\_\_\_\_  
 Mail To Address: Madison, WI  
 Invoice To Contact: \_\_\_\_\_  
 Invoice To Company: TPL  
 Invoice To Address: Windsor CT  
 Invoice To Phone: \_\_\_\_\_  
 CLIENT COMMENTS: \_\_\_\_\_ LAB COMMENTS (Lab Use Only): \_\_\_\_\_ Profile #: \_\_\_\_\_

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		MATRIX
		DATE	TIME	
001	OU4-IC-S06-L	11/17/10	1100	SED
002	OU4-IC-S07-R		1110	
003	OU4-IC-S08-R		1120	
004	OU4-IC-S09-R		1130	
005	OU4-IC-S10-R		1140	
006	OU4-IC-S01-L	11/16/10	1600	
007	OU4-IC-S02-L		1610	
008	OU4-IC-S03-L		1620	
009	OU4-IC-S04-L		1630	
010	OU4-IC-S05-C		1640	
011	OU4-IC-DUP01			
012	OU4-FB01	11/17/10	1210	OCW

Rush Turnaround Time Requested - Prelims (Rush TAT subject to approval/surcharge) Date Needed:	Relinquished By: <u>[Signature]</u> to Coagles (wait for Coagles) 11/19/10 800	Date/Time: 11/19/10 800	Received By: _____	Date/Time: _____	PACE Project No. <u>40179971</u>
	Transmit Prelim Rush Results by (complete what you want):	Relinquished By: <u>Waltco</u>	Date/Time: 11/20/10 0915	Received By: <u>[Signature]</u> Pace	
Email #1:	Relinquished By:	Date/Time:	Received By:	Date/Time:	Receipt Temp = <u>ROI</u> °C
Email #2:	Relinquished By:	Date/Time:	Received By:	Date/Time:	Sample Receipt pH OK / Adjusted
Telephone:	Relinquished By:	Date/Time:	Received By:	Date/Time:	Cooler Custody Seal Present / Not Present
Fax:	Relinquished By:	Date/Time:	Received By:	Date/Time:	Intact / Not Intact
Samples on HOLD are subject to special pricing and release of liability					



### Sample Preservation Receipt Form

Client Name: TRC

Project # 40179971

All containers needing preservation have been checked and noted below:  Yes  No  N/A

Lab Lot# of pH paper:

Lab Std #ID of preservation (if pH adjusted):

Initial when completed:

Date/Time:

Pace Lab #	Glass							Plastic						Vials				Jars			General			VOA Vials (>6mm) *	H2SO4 pH ≤2	NaOH+Zn Act pH ≥9	NaOH pH ≥12	HNO3 pH ≤2	pH after adjusted	Volume (mL)								
	AG1U	AG1H	AG4S	AG4U	AG5U	AG2S	BG3U	BP1U	BP2N	BP2Z	BP3U	BP3C	BP3N	BP3S	DG9A	DG9T	VG9U	VG9H	VG9M	VG9D	JGFU	WGFU	WPFU								SP5T	ZPLC	GN					
001																																						2.5 / 5 / 10
002																																						2.5 / 5 / 10
003																																						2.5 / 5 / 10
004																																						2.5 / 5 / 10
005																																						2.5 / 5 / 10
006																																						2.5 / 5 / 10
007																																						2.5 / 5 / 10
008																																						2.5 / 5 / 10
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015																																						2.5 / 5 / 10
016																																						2.5 / 5 / 10
017																																						2.5 / 5 / 10
018																																						2.5 / 5 / 10
019																																						2.5 / 5 / 10
020																																						2.5 / 5 / 10

Exceptions to preservation check: VOA, Coliform, TOC, TOX, TOH, O&G, WI DRO, Phenolics, Other: \_\_\_\_\_ Headspace in VOA Vials (>6mm) :  Yes  No  N/A \*If yes look in headspace column

<b>AG1U</b>	1 liter amber glass	<b>BP1U</b>	1 liter plastic unpres	<b>DG9A</b>	40 mL amber ascorbic	<b>JGFU</b>	4 oz amber jar unpres
<b>AG1H</b>	1 liter amber glass HCL	<b>BP2N</b>	500 mL plastic HNO3	<b>DG9T</b>	40 mL amber Na Thio	<b>WGFU</b>	4 oz clear jar unpres
<b>AG4S</b>	125 mL amber glass H2SO4	<b>BP2Z</b>	500 mL plastic NaOH, Znact	<b>VG9U</b>	40 mL clear vial unpres	<b>WPFU</b>	4 oz plastic jar unpres
<b>AG4U</b>	120 mL amber glass unpres	<b>BP3U</b>	250 mL plastic unpres	<b>VG9H</b>	40 mL clear vial HCL		
<b>AG5U</b>	100 mL amber glass unpres	<b>BP3C</b>	250 mL plastic NaOH	<b>VG9M</b>	40 mL clear vial MeOH	<b>SP5T</b>	120 mL plastic Na Thiosulfate
<b>AG2S</b>	500 mL amber glass H2SO4	<b>BP3N</b>	250 mL plastic HNO3	<b>VG9D</b>	40 mL clear vial DI	<b>ZPLC</b>	ziploc bag
<b>BG3U</b>	250 mL clear glass unpres	<b>BP3S</b>	250 mL plastic H2SO4			<b>GN:</b>	





1241 Bellevue Street, Green Bay, WI 54302

Document Name:  
Sample Condition Upon Receipt (SCUR)

Document No.:  
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Issuing Authority:  
Pace Green Bay Quality Office

### Sample Condition Upon Receipt Form (SCUR)

Project #:

Client Name: TRC

WO#: **40179971**



Courier:  CS Logistics  Fed Ex  Speedee  UPS  Waltco  
 Client  Pace Other: \_\_\_\_\_

Tracking #: 1889096-1

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 SR - NA Type of Ice:  Wet  Blue  Dry  None  Samples on ice, cooling process has begun

Cooler Temperature Uncorr: ROI / Corr: \_\_\_\_\_

Temp Blank Present:  yes  no Biological Tissue is Frozen:  yes  no

Person examining contents:  
Date: 11-20-18  
Initials: TK

Temp should be above freezing to 6°C.  
Biota Samples may be received at ≤ 0°C.

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody Filled Out:	<input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	2. <u>no 20 #</u>
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3. <u>11/20/18</u>
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	5.
- VOA Samples frozen upon receipt	<input type="checkbox"/> Yes <input type="checkbox"/> No	Date/Time:
Short Hold Time Analysis (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	6.
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	7.
Sufficient Volume:		8.
For Analysis: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No MS/MSD: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A		
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	9.
-Pace Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
-Pace IR Containers Used:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	10.
Filtered volume received for Dissolved tests	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Sample Labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	12.
-Includes date/time/ID/Analysis Matrix: <u>S, W</u>		
Trip Blank Present:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	13.
Trip Blank Custody Seals Present	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> 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: UKW

Date: 11/21/18