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Prepared for:
City of Kenosha
Kenosha, WI

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June 2019

Semi-Annual Operation and Monitoring Report, July - December 2018

Former Kenosha Engine Plant, Kenosha, Wisconsin

WDNR FID 230004500, BRRTS# 02-30-000327

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June 7, 2019

Mr. Paul Grittner
Wisconsin Department of Natural Resources
Remediation and Redevelopment Program
141 NW Barstow St., Room 180
Waukesha, WI 53188

Subject: Semi-Annual Operation and Monitoring Report, July-December 2018
Former Kenosha Engine Plant, Kenosha, Wisconsin
WDNR FID 230004500, BRRTS# 02-30-000327

Dear Mr. Grittner,

AECOM is transmitting the attached Semi-Annual Remediation Site Progress and Operation, Maintenance, Monitoring and Optimization Report (Form 4400-194) for the former Kenosha Engine Plant (KEP) for the time period July 2018 through December 2018 on behalf of the City of Kenosha.

AECOM continues operation, maintenance, and monitoring (OM&M) of three groundwater remediation systems at the KEP.

The three systems are:

- Sump 6
- Central System: Sumps 18 & 23
- Southern System: Sumps 7 & 17R

Figure 1 depicts sump locations and perimeter groundwater monitoring well locations. Treated groundwater is discharged to the Kenosha Water Utility sanitary system at three different locations near the boundary of the KEP. During this operational period remedial systems have been maintained for continued operation. A review of the current conditions of each of the systems and the measures taken during the reporting period to restore/improve operations are provided below.

System Description and Operational Status

AECOM maintained the operational status of each of the three groundwater remediation systems located at the KEP during the period from July through December 2018. The system component(s) encountered the following operational breakdowns during the period and have been restored back into working order:

- Sump 6 – The system has been functioning normally except for the following intermittent interruptions;
    - On November 5th a replacement pump was installed in Sump 6 as a result of normal wear and use.

- Central System – The system has been functioning normally except for the following intermittent interruptions;

    - On August 3rd, the system was restarted after the completion of one year of groundwater monitoring following the ERD groundwater pilot test conducted in the general vicinity of the Central System.

    - On August 28th a power failure occurred shutting off the air compressor, the compressor was restated on August 31st.

- Southern System – The system has been operating normally.

The conditions of the system components were reviewed on January 4, 2019 and are summarized here:

Sump 6

- Pump – Depth to water and depth to bottom were adequate for continued groundwater removal.
- System is operating.

Central System: Sumps 18 and 23

- Pump – Depth to water and depth to bottom were adequate for continued groundwater removal.
- System is operating.

Southern System: Sumps 7, 15 and 17R

- Pumps – Depth to water and depth to bottom were adequate for continued groundwater removal. Sump 15 was abandoned on September 13, 2018 during the Phase II Soil Remediation project. The Sump 15 discharge and electrical lines were located in a berm that was partially removed with a contaminated soil excavation conducted as part of Phase I of the KEP soil remediation and the piping was above grade and unprotected. Additionally, AECOM's review of Sump 15 indicated that Sump 15 was not controlling the southern boundary plume but was drawing the central plume from under former Building 53 to the southeast. Thus, Sump 15's removal from the southern remediation system was approved by WDNR.
- System is operating.

Evaluation of Current Monitoring Data

A water table contour map (Figure 2) and a potentiometric map of the deeper groundwater (Figure 3, as measured by KEP piezometers at a depth of approximately 25 feet bgs) for October 2018 are attached. Capture zones for the Southern System (Sumps 7 and 17R) are illustrated by the 614 foot contour located adjacent to the system building. The capture zone for Central System (Sumps 18 and 23) is illustrated by the 618 foot contour located around the system building. The capture zone for Sump 6 is illustrated by the 615 foot contour located around the system building.

Influent (pre-treatment) groundwater samples are collected from each individual sump and effluent (post-treatment) samples are collected from each treatment system. The samples are analyzed for volatile organic compounds (VOCs), diesel range organics (DRO) and gasoline range organics (GRO) in conformance with the Kenosha Water Utility discharge permit. Tables 1 and 2 provide a summary of influent and effluent samples (detected VOCs, DRO and GRO) collected, with the most recent results from October 2018 shown for four operating sumps (Sumps 6, 18, 7, and 17R).

After reviewing the influent concentrations for each sump, generally one contaminant was dominant (as evidenced by its exceedance of the NR 140 Wisconsin Administrative Code groundwater quality Enforcement Standard [ES]) in its concentration over time. The individual contaminants and their trends by sump are:

Sump 6

- Sump 6 – Trichloroethene
  The influent TCE cis-1,2-dichloroethene and vinyl chloride concentrations are present above their respective ES. The detected methylene chloride concentration was above the ES, but is likely a laboratory introduced anomaly.

Central System

- Sump 18 – Benzene
  The influent benzene concentration exceeds the ES. Cis-1,2-dichloroethene and vinyl chloride also exceed the ES. The detected methylene chloride concentration was above the ES but is likely a laboratory introduced anomaly.

Southern System

- Sump 7 – Vinyl Chloride
  Only the influent vinyl chloride concentration exceeds the ES.

- Sump 17R – Trichloroethene
  The influent TCE, cis-1,2-dichloroethene and vinyl chloride concentrations exceed their respective ES.

The effluent results are tabulated on Table 2. The removal efficiency for any individual analyte was generally 90% or higher, most often, 98 to 99%. The analyte concentrations were below the required discharge permit limit established by the Kenosha Water Utility for discharge to the sanitary sewer. The systems are operating in compliance with discharge requirements.

Table 3 presents a summary of the operational data collected for July through December of 2018 and provides a tabulation of the total groundwater flow through each system.

Plan for Repair, Replacement and Optimization

Sump 6 – The groundwater extraction pump was replaced during the operational period. Biofouling reduction on the pump inlet screen and flow meter are planned during the next operational period to extend the life of the pump and ensure treatment flow is recorded.

Central System – The capture zone from Sump 18 appears to be sufficient at the current time. If the capture zone needs to be increased Sump 23 will be used for additional plume capture. Biofouling reduction on the pump inlet screen and flow meter are planned during the next operational period to ensure treatment flow is recorded.

Southern System – Biofouling reduction on the pump inlet screen and flow meter are planned during the next operational period to ensure treatment flow is recorded.

Optimization of the three operating groundwater recovery systems will continue in spring of 2019 with regular monitoring of flow and evaluation of nearby groundwater elevations for the control of the hydraulic gradient with the least amount of pumping required.

Closing

WDNR form 4400-194 Remediation Site Progress, and Operation, Maintenance, Monitoring & Optimization Report is attached as well as supporting tables and figures as required. The Kenosha Engine Plant groundwater remediation system effectively reduces contaminant concentration in compliance with the wastewater discharge permits.

Yours sincerely,

AECOM Technical Services, Inc.

Lanette L. Altenbach, P.G., C.P.G.
Senior Hydrogeologist
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Kevin L. Brehm, P.E.
Associate Vice President
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Attachments

WDNR form 4400-194 Remediation site Progress, and Operation, Maintenance, Monitoring & Optimization Report
Table 1 – Influent Summary (Detected VOCs, DRO and GRO)
Table 2 – Effluent Summary
Table 3 – Operational Summary
Figure 1 – Monitoring Well Location Map (October 2018)
Figure 2 – Potentiometric Surface in Water Table Wells (October 2018)
Figure 3 – Potentiometric Surface in Piezometers (October 2018)

Pace Analytical – Laboratory Report (Pace Project ID 40177227

Cc: Shelly Billingsley MBA, P.E., Director of Public Works, City of Kenosha
Katie Karow, Director of Wastewater Treatment, Kenosha Water Utility

State of Wisconsin
Department of Natural Resources
PO Box 7921, Madison WI 53707-7921
dnr.wi.gov

Remediation Site Operation, Maintenance, Monitoring & Optimization Report

Form 4400-194 (R 11/14)

GENERAL INSTRUCTIONS, PURPOSE AND APPLICABILITY OF THIS FORM: Completion of this form is required under s. NR 724.13(3), Wis. Adm. Code. A narrative report or letter containing the equivalent information required in this form may be submitted in lieu of the actual form. Failure to submit this form as required is a violation of s. NR 724.13(3), Wis. Adm. Code, and is subject to the penalties in s. 292.99, Wis. Stats. This form must be submitted every six months for soil or groundwater remediation projects that report operation and maintenance progress in accordance with s. NR 724.13(3), Wis. Adm. Code.

Note: Long-term monitoring results submitted in accordance with s. NR 724.17(3), Wis. Adm. Code are required to be submitted within 10 business days of receiving sampling results and are not required to be submitted using this form. However, portions of this form require monitoring data summary information that may be based on information previously submitted in accordance with s. NR 724.17(3), Wis. Adm. Code.

Note: Responsible parties should check with the State Project Manager assigned to the site to determine if this form is required to be submitted at sites responded to under the Federal Comprehensive Environmental Response and Compensation Act (commonly known as Superfund) or an equivalent State lead Superfund response.

Note: Responsible parties should check with the State Project Manager assigned to the site to determine if any of the information required in this form may be omitted or changed and obtain prior written approval for any omissions or changes.

Submittal of this form is not a substitute for reporting required by Department programs such as Waste Water or Air Management. Personally identifiable information on this form is not intended to be used for any other purpose than tracking progress of the remediation by the Bureau for Remediation and Redevelopment.

Personal information collected will be used for administrative purposes and may be provided to requesters to the extent required by Wisconsin's Open Records Law (ss. 19.31-19.39, Wis. Stats.). Unless otherwise noted, all citations refer to Wisconsin Administrative Code.

Note: There is a separate semi-annual report required under s. NR 700.11(1), Wis. Adm. Code. Reporting under that provision is through an internet-based form:

http://dnr.wi.gov/topic/Brownfields/documents/regs/NR700progreport.pdf

Section GI - General Site Information

A. General Information

1. Site name

Kenosha Engine Plant

2. Reporting period from:	To:	Days in period:
07/01/2018	12/31/2018	184

3. Regulatory agency (enter DNR, DATCP and/or other)	4. BRRTS ID No. (2 digit program-2 digit county-6 digit site specific)
DNR	02-30-000327

5. Site location

Region	County	Address
Southeast Region	Kenosha	5555 30th Avenue

Municipality name ● City ○ Town ○ Village	Township	Range ○E ○W	Section	¼	¼ ¼
City of Kenosha	N				

6. Responsible party	7. Consultant
Name: City of Kenosha	☐ Select if the following information has changed since the last submittal
Mailing address: 625 52nd Street, Kenosha, WI 53140	Company name: AECOM
Phone number: (262) 653-4000	Mailing address: 1555 N. RiverCenter Dr, Suite 214, Milwaukee, WI 53212
	Phone number: (414) 944-6080

8. Contaminants
VOCs

9. Soil types (USCS or USDA)
Sand, silty sand, silt, clay

10. Hydraulic conductivity(cm/sec):	11. Average linear velocity of groundwater (ft/yr)
10-2 to 10-4	1.3 to 1700

12. If soil is treated ex situ, is the treatment location off site? ○ Yes ○ No

If yes, give location: Region	County

Municipality name ○ City ○ Town ○ Village	Township	Range ○E ○W	Section	¼	¼ ¼
	N				

B. Remediation Method

Only submit sections that apply to an individual site. Check all that apply:

- [x] Groundwater extraction (submit a completed Section GW-1).
- [ ] Free product recovery (submit a completed Section GW-1).
- [ ] In situ air sparging (submit a completed Section GW-2).
- [ ] Groundwater natural attenuation (submit a completed Section GW-3).
- [ ] Other groundwater remediation method (submit a completed Section GW-4).
- [ ] Soil venting (including soil vapor extraction building venting and bioventing submit a completed Section IS-1).
- [ ] Soil natural attenuation (submit a completed Section IS-2).
- [ ] Other in situ soil remediation method (submit a completed Section IS-3).
- [ ] Biopiles (submit a completed Section ES-1).
- [ ] Landspreading/thinspreading of petroleum contaminated soil (submit a completed Section ES-2).
- [ ] Other ex situ remediation method (submit a completed Section ES-3).
- [ ] Site is a landfill (submit a completed Section LF-1).

C. General Effectiveness Evaluation for All Active Systems

If the remediation is active (not natural attentuation), complete this subsection.

1. Is the system operating at design rates and specifications? ◉ Yes ○ No
   If the answer is no, explain whether or not modifications are necessary to achieve the goal that was previously established in design.

2. Are modifications to the system warranted to improve effectiveness ○ Yes ◉ No
   If yes, explain:

3. Is natural attenuation an effective low cost option at this time? ○ Yes ◉ No
4. Is closure sampling warranted at this time? ○ Yes ◉ No
5. Are there any modifications that can be made to the remediation to improve cost effectiveness? ◉ Yes ○ No
   If yes, explain:
   The pumping rates of the systems have been modified seasonally to achieve optimalgroundwate rcapture without excessive wear on the groundwater extraction systems.

D. Economic and Cost Data to Date

1. Total investigation cost: _____
2. Implementation costs (design, capital and installation costs, excluding investigation costs: _____
3. Total costs during the previous reporting period: _____
4. Total costs during this reporting period: _____
5. Total anticipated costs for the next reporting period: _____
6. Are any unusual or one-time costs listed in the reporting periods covered by D.3., D.4. or D.5. above? ○ Yes ◉ No
   If yes, explain:

7. If closure is anticipated within 12 months, estimated costs for project closeout: _____

E. Name(s), Signature(s) and Date of Person(s) Submitting Form

Legibly print name, date and sign. Only persons qualified to submit reports under ch. NR 712 Wis. Adm. Code are to sign this form for sites with any ongoing active remediation, monitoring or an investigation. Other persons may sign this form for sites with no response activities during the six month reporting period.

Registered Professional Engineers:

I hereby certify that I am a registered professional engineer in the State of Wisconsin, registered in accordance with the requirements of ch. A-E 4, Wis. Adm. Code; that this document has been prepared in accordance with the rules of Professional Conduct in ch. A-E 8, Wis. Adm. Code; and that, to the best of my knowledge, all information contained in this document is correct and the document was prepared in compliance with all applicable requirements in chs. NR 700 to 726, Wis. Adm. Code.

Print name	Title
Kevin L. Brehm, P.E.	Associate Vice President
Signature	Date
Kevin L. Brehm	6/6/19

Hydrogeologists:

I hereby certify that I am a hydrogeologist as that term is defined in s. NR 712.03(1), Wis. Adm. Code, and that, to the best of my knowledge, all information contained in this document is correct and the document was prepared in compliance with all applicable requirements in chs. NR 700 to 726, Wis. Adm. Code.

Print name	Title
Lanette Altenbach, PG	Senior Hydrogeologist/Project Manager II
Signature	Date
Lanette Altenbach	6-6-19

Scientists:

I hereby certify that I am a scientist as that term is defined in s. NR 712.03(3), Wis. Adm. Code, and that, to the best of my knowledge, all information contained in this document is correct and the document was prepared in compliance with all applicable requirements in chs. NR 700 to 726, Wis. Adm. Code.

Print name	Title
Signature	Date

Other Persons:

Print name	Title
Signature	Date

Professional Seal(s), if applicable:

Section GW-1, Groundwater Pump and Treat Systems and Free Product Recovery Systems

A. Groundwater Extraction System Operation:

1. Total number of groundwater extraction wells or trenches available: 5 and the number in use during period: 4

2. Number of days of operation (only list the number of days the system actually operated, if unknown explain:
   Sump 6 (Northern System) - 184 days
   Sumps 18 & 23 (Central System) - 147 days, system restarted on August 3, 2018 following the completion of the groundwater pilot study for ERD.
   Sumps 7 & 17R (Southern System) - 184 days

3. System utilization in percent (days of operation divided by reporting time period multiplied by 100). If < 80%, explain:
   Sump 6 (Northern System) - 100%
   Sumps 18 & 23 (Central System) - 97%
   Sumps 7 & 17R (Southern System) - 100%

4. Quantity of groundwater extracted during this time period: 2,105,435.64 gallons

5. Average groundwater extraction rate: 8 gpm

6. Quantity of dissolved phase contaminants removed during this time period in pounds: _____ lbs

B. Free Product Recovery System Operation

1. Is free product (nonaqueous phase liquid) being recovered at this site? ○ Yes ◉ No
   If yes, explain:

2. Quantity of free product extracted during this time period (enter none if none): _____ gallons

3. Average free product extraction rate: _____ gpm

C. System Effectiveness Evaluation

1. Is a contaminated groundwater plume fully contained in the capture zone? ◉ Yes ○ No
   If no, explain:

2. If free product is present, is the free product fully contained in capture zone? ◉ Yes ○ No
   If no, explain:

3. If free product is present in any wells at the site, but free product was not recovered during reporting period, explain:
   Free product is trapped within the saturated zone at concentrations not recoverable as evidenced by little to no free product recovery in the oil/water separators associated with each treatment unit.

4. If free product is not present, determine the single contaminant that requires the greatest percent reduction to achieve ch. NR 140 ES and PAL. Perform this calculation for all contaminants that were present at the site that have ch. NR 140 standards. Use the highest contaminant concentration measured in any sampling points during reporting period. If free product is present, write "FREE PRODUCT" in C.4.a.

   a. Contaminant: _____

   b. Percent reduction necessary to reach ch. NR 140 ES and PAL: _____ %

   c. Maximum contaminant concentration level in any monitoring well of that contaminant: _____ µg/L

   d. Maximum contaminant concentration level in any extraction well of that contaminant: _____ µg/L

e. If the maximum concentration in a monitoring well is more that one order of magnitude above the concentration measured in an extraction well, explain why the extracted groundwater contamination levels are significantly less than the levels at other locations within the aquifer.

D. Additional Attachments

Attach the following to this form:

- Most recent report to the DNR Wastewater Program, if applicable.
- Groundwater contour map with capture zone indicated.
- Groundwater contaminant distribution map (may be combined with contour map).
- Graph of cumulative contaminant removal, if both free product recovery and ground water extraction are used, provide separate graphs.
- Time versus groundwater contaminant concentration graphs for the contaminant listed in C.4.a. (above), as follows:
  - Graph of contaminant concentrations versus time for each extraction well in use during the period.
  - Graph of contaminant concentrations versus time for the monitoring well with the greatest level of contamination.
- Groundwater contaminant chemistry table.
- Groundwater elevations table.
- System operational data table.

Table 1
Influent Summary
KEP Groundwater Remediation Systems
Kenosha, Wisconsin

Well Location	Sample Date	Benzene (ug/L)	1,1-Dichloro-ethane (ug/L)	Chloro-ethane (ug/L)	1,2-Dichloro-ethane (ug/L)	1,1-Dichloro-ethene (ug/L)	1,1,1-Trichloro-ethane (ug/L)	cis-1,2-Dichloro-ethene (ug/L)	trans-1,2-Dichloro-ethene (ug/L)	Ethyl-benzene (ug/L)	Methylene Chloride (ug/L)	Naphthalene (ug/L)	n-Propyl-benzene (ug/L)	Tetra-chloro-ethene (ug/L)	Toluene (ug/L)	Trichloro-ethene (ug/L)	1,2,4-Trimethyl benzene (ug/L)	1,3,5-Trimethyl benzene (ug/L)	Vinyl chloride (ug/L)	Xylene Totals (ug/L)	Gasoline Range Organics (ug/L)	Diesel Range Organics (mg/L)
Northern System																						
Sump 6	1/18/11	<2.2	5.4	<4.8	<3.7	<3.2	<3.7	**600**	*39*	ND	<5.5	<4	<2.3	<4.8	<2.2	**540**	<2	<1.6	**26**	<4	330	0.35
	3/24/11	<29	<29	<29	<29	<29	<29	**410**	*36*	ND	<29	<29	<29	<29	<29	**830**	<29	<29	**19**	<57	410	0.37
	6/13/11	<1	3.3	<5	<2.5	<2.5	<2.5	**280**	17	ND	<5	<1.3	<2.5	<2.5	<2.5	**370**	<1	<1	**6.7**	<2.5	190	0.47
	9/19/11	<1	6.1	<5	<2.5	*2.8*	<2.5	**680**	*46*	ND	<5	<1.3	<2.5	<2.5	<2.5	**330**	<1	<1	**31**	<2.5	180	0.23
	1/15/12	<0.2	13	3.2	<0.5	*3.1*	0.78	**410**	*47*	ND	*1.1*	0.52	<0.5	<0.5	<0.5	**750**	0.39	<0.2	**66**	0.58	410	1.2
	3/15/12	<1	8.2	<5	<2.5	*3.7*	<2.5	**620**	*49*	ND	<5	<1.3	<2.5	<2.5	<2.5	**890**	<1	<1	**23**	<2.5	470	0.39
	6/21/12	<0.074	8.3	<0.34	<0.28	*3.8*	1.8	**610**	*51*	ND	<0.68	<0.16	<0.13	<0.17	<0.11	**770**	<0.14	<0.18	**32**	<0.068	420	0.22
	9/17/12	<0.15	9.6	<0.68	<0.56	*4.3*	1	**700**	*53*	ND	<1.4	<0.32	<0.26	<0.34	<0.22	**780**	<0.28	<0.36	**49**	<0.14	490	0.24
	12/21/12	<0.074	15	3.9	<0.28	0.64	<0.2	**160**	6.8	ND	<0.68	<0.16	<0.13	<0.17	<0.11	**60**	<0.14	<0.18	**36**	<0.068	79	0.51
	3/26/13	<0.074	6.1	0.84	<0.28	*3*	<0.2	**420**	*47*	ND	<0.68	<0.16	<0.13	<0.17	<0.11	**1,000**	<0.14	<0.18	**12**	<0.068	490	0.7
	6/11/13	<0.074	7.5	<0.34	<0.28	*4*	<0.2	**590**	*59*	ND	<0.68	<0.16	<0.13	<0.17	<0.11	**540**	<0.14	<0.18	**30**	<0.068	380	0.25
	9/24/13	<0.37	<0.95	<1.7	<1.4	<1.6	<1	**580**	*54*	ND	<3.4	<0.8	<0.65	<0.85	<0.55	**1,600**	<0.7	<0.9	**31**	<0.34	630	0.43
	12/20/13	<0.074	4.1	<0.34	<0.28	*2*	<0.2	**330**	*26*	ND	<0.68	<0.16	<0.13	<0.17	<0.11	**220**	<0.14	<0.18	**38**	<0.068	190	0.17
	1/6/15	<2.5	6.8	<1.9	<0.84	*3.5*	<2.5	**568**	*58.2*	ND	<1.2	<12.5	<2.5	<2.5	<2.5	**712**	<2.5	<2.5	**25**	<7.5	388	0.15
	3/6/15	<5.0	5.4 J	ND	<1.7	<4.1	ND	**363**	35.4	<5.0	ND	<25.0	<5.0	<5.0	<5.0	**930**	<5.0	<5.0	**17**	<15.0	342	0.35
	9/24/15	Discharge line blocked - not operating at the time of sample collection																				
	3/9/16	<5.0	3.2 J	ND	<1.7	<4.1	ND	**439**	*43.5*	<5.0	ND	<25.0	<5.0	<5.0	<5.0	**1,010**	<5.0	<5.0	**17.3**	<15.0	413	0.22
	9/7/16	<5.0	5.0 J	<3.7	<1.7	<4.1	<5.0	**733**	*57.6*	<5.0	<2.3	<25.0	<5.0	<5.0	<5.0	**931**	<5.0	<5.0	**38.1**	<15.0	539	0.047J
	3/7/17	<5.0	4.4 J	<3.7	<1.7	<4.1	<5.0	**537**	*54.9*	<5.0	<2.3	<25.0	<5.0	<5.0	<5.0	**950**	<5.0	<5.0	**24.1**	<15.0	480	0.14
	10/5/17	<5.0	5.2 J	<3.7	<1.7	<4.1	<5.0	**653**	*50.3*	<5.0	<2.3	<25.0	<5.0	<5.0	<5.0	**990**	<5.0	<5.0	**21.9**	<15.0	490	0.026J
	3/9/18	<5.0	5.1J	<3.7	<1.7	<4.1	<5.0	**483**	*49.3*	<5.0	<2.3	<25.0	<5.0	<5.0	<5.0	**782**	<5.0	<5.0	**17.2**	<15.0	380	0.047J
	10/5/18	<2.5	7.8 J	<13.4	<2.8	*2.7 J*	<2.4	**466**	*45.1*	<2.2	**6.3 J**	<11.8	<8.1	<3.3	<1.7	**979**	<8.4	<8.7	**12**	<15.0	410	0.38
Central System																						
Sump 18	3/28/11	**22**	39	<6.7	ND	*2*	31	**240**	<6.7	4.6	11 B	6.2	3	<6.7	<6.7	<6.7	11	8	**23**	44	390	1.1
	6/14/11	**510**	*620*	<50	ND	<25	**370**	**4,800**	*31*	84	<50	*28*	<25	<25	*450*	<10	86	27	**1,100**	350	4300	1.9
	9/23/11	**74**	80	<2	ND	<1	*61*	**160**	4	35	<2	*17*	5.8	*1.2*	110	*1.6*	69	22	**120**	150	910	130
	1/24/12	**330**	*620*	43	ND	*5*	*150*	**3,300**	*22*	55	**42**	*21*	4.9	<2	*270*	*1.2*	80	28	**1,000**	310	3200	1.8
	3/21/12	**910**	**1500**	*140*	ND	<25	**370**	**9,300**	*64*	110	**210**	*35*	<25	<25	*660*	<10	130	40	**940**	*530*	8600	2.1
	6/21/12	**270**	*780*	42	ND	**13**	**330**	**5,600**	*41*	19	**85**	*13*	<1.3	<1.7	140	**5**	24	24	**3,000**	170	3100	2.6
	9/17/12	**150**	**900**	70	ND	<6.2	*170*	**5,000**	*32*	<2.6	**150**	<3.2	<2.6	<3.4	7.2	**5.5**	<2.8	31	**1,100**	77	3100	4.1
	12/27/12	**11**	45	<0.34	ND	<0.31	28	**120**	<0.25	8.2	<0.68	6.2	2	*0.71*	18	0.48	28	11	**11**	49	760	110
	3/25/13	*0.7*	1.7	<0.34	ND	<0.31	2.1	1	<0.25	6	<0.68	5.4	2.9	<0.17	4.2	<0.19	33	8.3	<0.1	19	380	23
	6/10/13	**150**	*350*	20	ND	*3.9*	*87*	**2,300**	14	13	**26**	5.2	<0.65	<0.85	79	<0.95	15	5.9	**260**	62	1600	1
	9/24/13	**570**	**970**	<3.4	ND	**18**	**470**	**5,500**	*43*	79	**76**	*29*	<1.3	<1.7	*370*	**7.1**	73	17	**1,600**	310	4600	3
	12/20/13	**270**	*720*	47	ND	**9.1**	*180*	**3,200**	*24*	41	**53**	*16*	3.4	*0.52*	*170*	*1.1*	43	11	**820**	180	3	1
	9/11/15	0.56 J	4.2	ND	<0.17	<0.41	ND	5	<0.26	<0.5	ND	<2.5	<0.50	<0.50	<0.50	0.36 J	<0.50	<0.50	**0.81 J**	<1.5	37.5 J	<0.081
	3/9/16	**357**	*735*	ND	<4.2	<10.3	ND	**3,180**	*44*	78	ND	<62.5	<12.5	<12.5	*287*	<8.3	45.3	12.6 J	**2,720**	342	3240	2.2
	9/7/16	**277**	*738*	37.1	<4.2	<10.3	137	**2,110**	*40.1*	45.9	**37.5**	<62.5	<12.5	<12.5	134	**23.0 J**	24.2 J	<12.5	**1,950**	201	2530	1.4
	3/7/17	**241**	*444*	60.1	<4.2	<10.3	137	**1,670**	*31.6*	61.3	**24.1J**	<62.5	<12.5	<12.5	*178*	**14.8 J**	42.8	<12.5	**1,480**	286	2700	1.3
	10/5/17	System shut off during time of sampling.																				
	3/9/18	System shut off during time of sampling.																				
	10/5/18	**134**	*696*	19.7 J	<2.8	*3.2 J*	*169*	**529**	14.2 J	34.4	**8.7 J**	<11.8	<8.1	<3.3	*191*	<2.6	29.6	<8.7	**163**	231	1500	0.41
PAL[A]		0.5	85	80	0.5	0.7	40	7	20	140	0.5	10	NE	0.5	160	0.5	96*	96*	0.02	400	NE	NE
ES[B]		5	850	400	5	7	200	70	100	700	5	100	NE	5	800	5	480*	480*	0.2	2,000	NE	NE

Table 1
Influent Summary
KEP Groundwater Remediation Systems
Kenosha, Wisconsin

Well Location	Sample Date	Benzene (ug/L)	1,1-Dichloro-ethane (ug/L)	Chloro-ethane (ug/L)	1,2-Dichloro-ethane (ug/L)	1,1-Dichloro-ethene (ug/L)	1,1,1-Trichloro-ethane (ug/L)	cis-1,2-Dichloro-ethene (ug/L)	trans-1,2-Dichloro-ethene (ug/L)	Ethyl-benzene (ug/L)	Methylene Chloride (ug/L)	Naphthalene (ug/L)	n-Propyl-benzene (ug/L)	Tetra-chloro-ethene (ug/L)	Toluene (ug/L)	Trichloro-ethene (ug/L)	1,2,4-Trimethyl benzene (ug/L)	1,3,5-Trimethyl benzene (ug/L)	Vinyl chloride (ug/L)	Xylene Totals (ug/L)	Gasoline Range Organics (ug/L)	Diesel Range Organics (mg/L)
Southern System																						
Sump 7	1/19/11	<0.13	<0.15	0.31	ND	<0.19	<0.22	*9.1*	0.4	<0.17	<0.33	ND	ND	ND	<0.13	0.29	<0.12	<0.096	**3.1**	<0.14	NT	NT
	3/24/11	<1	<1	<1	ND	<1	<1	6.2	0.39	<1	<1	ND	ND	ND	<1	0.43	<1	<1	**2.8**	<2	ND	3.3
	6/13/11	<0.2	<0.5	<1	ND	<0.5	<0.5	*16*	1.2	<0.5	<1	ND	ND	ND	<0.5	*2.6*	<0.2	<0.2	**2.6**	<0.5	ND	3.3
	9/19/11	<0.2	<0.5	<1	ND	<0.5	<0.5	*17*	1.2	<0.5	<1	ND	ND	ND	<0.5	*2*	<0.2	<0.2	**2.8**	<0.5	ND	14
	1/5/12	<0.20	<0.50	<1.0	ND	<0.50	<0.50	*12*	1.1	<0.50	<1.0	ND	ND	ND	<0.50	0.35 J	0.20 J	<0.20	**3.3**	<0.50	24	2.5
	3/20/12	<0.2	<0.5	<1	ND	<0.5	<0.5	*8.8*	1.1	<0.5	<1	ND	ND	ND	<0.5	<0.2	<0.2	<0.2	**2.6**	<0.5	11	2.1
	6/22/12	<0.074	<0.19	<0.34	ND	<0.31	<0.20	*8.3*	0.96	<0.13	<0.68	ND	ND	ND	<0.11	<0.19	<0.14	<0.18	**2.7**	<0.068	<6.9	1.7
	9/18/12	<0.074	<0.19	<0.34	ND	<0.31	<0.2	*7*	0.93	<0.13	<0.68	ND	ND	ND	<11	<0.19	<0.14	<0.18	**2**	<0.068	16	2.3
	12/27/12	<0.074	<0.19	<0.34	ND	<0.31	<0.2	6.7	0.87	<0.13	<0.68	ND	ND	ND	<0.11	<0.19	<0.14	<0.18	**1.3**	<0.068	<8.8	4
	3/26/13	<0.074	<0.19	<0.34	ND	<0.31	<0.2	4.4	<0.25	<0.13	<0.68	ND	ND	ND	<0.11	0.43	<0.14	<0.18	<0.1	<0.068	13	5
	6/11/13	<0.074	<0.19	<0.34	ND	<0.31	<0.2	*12*	2	<0.13	<0.68	ND	ND	ND	<0.11	<0.19	<0.14	<0.18	**2.9**	<0.068	16	2.4
	9/23/13	<0.074	<0.19	<0.34	ND	<0.31	<0.2	*8.7*	1.5	<0.13	<0.68	ND	ND	ND	<0.11	0.3	<0.14	<0.18	**1.5**	<0.068	24	9.2
	12/20/13	<0.074	<0.19	<0.34	ND	<0.31	<0.2	*7.9*	1.2	<0.13	<0.68	ND	ND	ND	<0.11	0.42	<0.14	<0.18	**1.3**	<0.068	<8.8	2
	6/19/14	<0.50	<0.24	<0.37	<0.17	<0.41	<0.50	6.3	1.1	<0.50	<0.23	<2.5	<0.50	<0.50	<0.50	0.45 J	<0.50	<0.50	<0.18	<1.5	NT	NT
	9/5/14	<0.50	<0.24	<0.37	<0.17	<0.41	ND	*10.1*	2.2	<0.50	<0.23	<2.5	<0.50	<0.50	<0.50	<0.33	<0.50	<0.50	**1.5**	<1.5	<29.6	3.1
	12/3/14	<0.50	0.32 J	ND	<0.17	<0.41	ND	*8.9*	1.9	<0.50	<0.23	<2.5	<0.50	<0.50	<0.50	*0.71 J*	<0.50	<0.50	**1.6**	<1.5	<29.6	2.6
	9/9/15	<0.50	<0.24	ND	<0.17	<0.41	ND	*9*	2.2	<0.50	<0.23	<2.5	<0.50	<0.50	<0.50	<0.33	<0.50	<0.50	**1.2**	<1.5	29.9 J	0.36
	3/9/16	<0.50	0.31 J	ND	<0.17	<0.41	ND	*10.4*	2.6	<0.50	<0.23	<2.5	<0.50	<0.50	<0.50	<0.33	<0.50	<0.50	**2.3**	<1.5	<29.6	1.1
	9/7/16	<0.50	<0.24	<0.50	<0.17	<0.41	<0.50	*9*	2.1	<0.50	<0.23	<2.5	<0.50	<0.50	<0.50	<0.33	<0.50	<0.50	**3.8**	<1.5	<29.6	5.4
	3/7/17	<0.50	<0.24	<0.37	<0.17	<0.41	<0.50	5.6	0.76 J	<0.50	<0.23	<2.5	<0.50	<0.50	<0.50	*0.86 J*	<0.50	<0.50	**1.2**	<1.5	<30	29.2
	10/5/17	Pump inoperable and not sampled.																				
	3/9/18	<0.50	<0.24	<0.37	<0.17	<0.41	<0.50	5.8	1.4	<0.50	<0.23	<2.5	<0.50	<0.50	<0.50	<0.33	<0.50	<0.50	**1.1**	<1.5	<30	4.6
	10/5/18	<0.25	<0.27	<1.3	<0.28	<0.24	<0.24	5.6	1.4 J	<0.22	<0.58	<1.2	<0.81	<0.33	<0.17	<0.26	<0.84	<0.87	**1.5**	<1.5	<36	2.0
Sump 17R	1/19/11	ND	<6	<12	ND	<7.6	<8.8	**1100**	*98*	ND	<13	<9.6	ND	ND	<5.2	**340**	<4.8	ND	**24**	ND	NT	NT
	3/24/11	ND	<18	<18	ND	<18	<18	**300**	*35*	ND	<18	<18	ND	ND	<18	**70**	<18	ND	<18	ND	150	0.62
	6/13/11	ND	5.4	<5	ND	<2.5	<2.5	**370**	*34*	ND	<5	<1.3	ND	ND	<2.5	**160**	<1	ND	**1.3**	ND	80	1.2
	9/19/11	ND	3.1	<2	ND	<1	<1	**190**	14	ND	<2	<0.5	ND	ND	<1	**25**	<0.4	ND	**13**	ND	66	2
	1/5/12	ND	5.6	<1.0	ND	0.59	<0.50	**270**	*30*	ND	<1.0	<0.25	ND	ND	<0.50	**110**	<0.20	ND	**1.2**	ND	130	1.6
	3/20/12	ND	7.1	<2	ND	<1	<1	**500**	*39*	ND	<2	<0.5	ND	ND	<1	**150**	<0.4	ND	**1.8**	ND	260	1.1
	6/22/12	ND	6.3	<0.34	ND	*1.2*	<0.20	**700**	*38*	ND	<0.68	<0.16	ND	ND	<0.11	**180**	<0.14	ND	**2.9**	ND	270	1.8
	9/18/12	ND	3.8	<0.34	ND	<0.31	<0.2	**180**	*20*	ND	<0.68	<0.16	ND	ND	<0.11	**35**	<0.14	ND	**17**	ND	79	1.7
	12/27/12	ND	6.4	<0.34	ND	*1.2*	<0.2	**400**	*59*	ND	<0.68	<0.16	ND	ND	<0.11	**45**	<0.14	ND	**55**	ND	170	2.3
	3/26/13	ND	2	<0.34	ND	<0.31	<0.2	**190**	15	ND	<0.68	<0.16	ND	ND	<0.11	**69**	<0.14	ND	**3.5**	ND	100	1.5
	6/11/13	ND	5.3	<0.34	ND	*0.91*	<0.2	**380**	*33*	ND	<0.68	<0.16	ND	ND	<0.11	**120**	<0.14	ND	**6.6**	ND	220	0.88
	9/23/13	ND	5.4	<0.34	ND	*1.8*	<0.25	**620**	*37*	ND	<0.68	<0.16	ND	ND	<0.11	**38**	<0.14	ND	**36**	ND	290	1.9
	12/20/13	ND	8.6	<0.34	ND	*1.9*	<0.2	**970**	*79*	ND	<0.68	<0.16	ND	ND	<0.11	**91**	<0.14	ND	**200**	ND	360	2.4
	6/19/14	<2.5	5.7	<1.9	<0.84	2.2 J	<2.5	**702**	*38.1*	<2.5	<1.2	<12.5	<2.5	<2.5	<2.5	**103**	<2.5	<2.5	<0.88	<7.5	NT	NT
	9/5/14	<1.2	5.4	ND	<0.42	<1	ND	**331**	*20*	<1.2	ND	<6.2	<1.2	<1.2	<1.2	**45.4**	<1.2	<1.2	**38**	<3.8	137	2.1
	12/3/14	<2.5	4.6 J	ND	<0.84	<2.1	ND	**236**	*22.9*	<2.5	<1.2	<12.5	<2.5	<2.5	<2.5	**57.7**	<2.5	<2.5	**17.6**	<7.5	132	0.78
	9/9/15	<2.5	<0.24	ND	<0.84	<2.1	ND	4.8	1.2	<2.5	<1.2	<12.5	<2.5	<2.5	<2.5	*0.53 J*	<2.5	<2.5	**0.71 J**	<7.5	34.2 J	67
	3/9/16	<5.0	6 J	ND	<1.7	<4.1	ND	**982**	72.3	<5.0	ND	<25.0	<5.0	<5.0	<5.0	**80.3**	<5.0	<5.0	**148**	<15.0	373	0.87
	9/7/16	<1.2	5.5	<0.94	<0.42	<1.0	<1.2	**370**	24	<1.2	<0.58	<6.2	<1.2	<1.2	<1.2	**35.1**	<1.2	<1.2	**143**	<3.8	143	2.2
	3/7/17	<1.2	6.6	<0.94	<0.42	*1.6 J*	<1.2	**423**	37.3	<1.2	<0.58	<6.2	<1.2	<1.2	<1.2	**85.2**	<1.2	<1.2	**39.2**	<3.8	180	0.86
	10/5/17	<1.2	4.6	<0.94	<0.42	<1.0	<1.2	**235**	10.6	<1.2	<0.58	<6.2	<1.2	<1.2	<1.2	**18.8**	<1.2	<1.2	**107**	<3.8	58	0.62
	3/9/18	<0.50	2.9	<0.37	<0.17	*0.70J*	<0.50	**184**	15.6	<0.50	<0.23	<2.5	<0.50	<0.50	<0.50	**16.2**	<0.50	<0.50	**47**	<1.5	61	1.7
	10/5/18	<0.25	3.2	<1.3	<0.28	0.58 J	<0.24	**137**	5.5	<0.22	<0.58	<1.2	<0.81	<0.33	<0.17	**16.6**	<0.84	<0.87	**17.1**	<1.5	38 J	2.2
PAL[A]		0.5	85	80	0.5	0.7	40	7	20	140	0.5	10	NE	0.5	160	0.5	96*	96*	0.02	400	NE	NE
ES[B]		5	850	400	5	7	200	70	100	700	5	100	NE	5	800	5	480*	480*	0.2	2,000	NE	NE

Notes:
ug/L = micrograms per liter *PAL & ES are for combined isomers <2.5 - not detected at the detection limit shown ND - not previously detected J=Estimated concentration at or above the limit of detection and below the limit of quantitation
PAL - Preventive Action Limit, Wisconsin Administrative Code NR 140.10 Table 1, February 2017 exceedances are *underlined italics*. ES - Enforcement Standard, Wisconsin Administrative Code NR 140.10 Table 1, February 2017, exceedances are **bold**.

Table 2
Effluent Summary KEP Groundwater Remediation Systems
Kenosha, Wisconsin

Well Location	Sample Date	1,1-Dichloroethene (ug/L)	1,1-Dichloroethane (ug/L)	trans-1,2-Dichloroethene (ug/L)	1,2,4-Trimethylbenzene (ug/L)	1,1,1-Trichloroethane (ug/L)	Benzene (ug/L)	cis-1,2-Dichloroethene (ug/L)	Ethylbenzene (ug/L)	Methyl tert-butyl ether (ug/L)	Naphthalene (ug/L)	Toluene (ug/L)	Trichloroethene (ug/L)	Vinyl chloride (ug/L)	Xylenes, Total (ug/L)	Gasoline Range Organics (ug/L)	Diesel Range Organics (mg/L)
Sump 6																	
	9/28/2011	ND	ND	1.9 J	ND	ND	ND	*42*	ND	ND	ND	ND	**18**	**0.81 J**	ND	<10	0.22 B
	3/26/2012	*1.5 J*	4.6	24	ND	ND	ND	**320**	ND	ND	ND	ND	**430**	**8.5**	ND	240	0.35
	7/9/2012	ND	1.7	7.8	ND	ND	ND	**140**	ND	ND	ND	ND	**160**	**3.4**	ND	95	0.18
	10/2/2012	ND	2.8	13	ND	ND	ND	**290**	ND	ND	ND	ND	**280**	**8.8**	ND	170	0.23
	4/4/2013	ND	1.6	9.3	ND	ND	ND	**130**	ND	ND	ND	ND	**230**	**1.5**	ND	110	0.25
	6/25/2013	ND	ND	1.1	ND	ND	ND	*19*	ND	ND	ND	ND	**13**	ND	ND	14 J	0.23
	10/10/2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**8.8**	ND	ND	<8.8	0.36
	1/8/2014	0.54 J	1.9	9.8	ND	ND	ND	**200**	ND	ND	ND	ND	**110**	**8.9**	ND	96	0.16
	3/6/2015	<0.41	<0.24	<0.26	<0.50	ND	<0.50	0.53 J	<0.50	<0.17	<2.5	<0.50	*1.2*	<0.18	<1.5	<29.6	0.3
	3/9/2016	<0.41	<0.24	2.0	<0.50	ND	<0.50	*29.3*	<0.50	<0.17	<2.5	<0.50	**56.5**	**0.55 J**	<1.5	<29.6	0.17
	9/7/2016	<0.41	<0.24	1.5	<0.50	<0.50	<0.50	*43.2*	<0.50	0.48 J	<2.5	<0.50	**27.8**	<0.18	<1.5	<29.6	0.17
	3/7/2017	<0.41	0.94J	8.7	<0.50	<0.50	<0.50	**138**	<0.50	0.71 J	<2.5	<0.50	**175**	**2.4**	<1.5	85	0.26
	10/5/2017	0.47 J	1.8	12.5	<0.50	<0.50	<0.50	**234**	<0.50	1.0	<2.5	<0.50	**296**	**4.2**	<1.5	120	0.037 J
	3/9/2018	<0.41	<0.24	<0.26	<0.50	<0.50	<0.50	1.1	<0.50	<0.17	<2.5	<0.50	*1.2*	<0.18	<1.5	<30	0.16
	10/5/2018	<0.24	<0.27	<1.1	<0.84	<0.24	<0.25	2.1	<0.22	<1.2	<1.2	<0.17	*1.8*	<0.17	<1.5	<36	0.70
Sump 18/23																	
	3/30/2012	ND	ND	ND	ND	ND	*0.62 J*	5.8	ND	ND	0.56 J	ND	ND	**0.30 J**	ND	26 J	2.5
	7/9/2012	ND	ND	ND	ND	ND	0.28 J	4.1	ND	ND	ND	ND	ND	**0.56**	ND	<6.9	1.6
	10/2/2012	ND	ND	ND	ND	ND	ND	2.8	ND	ND	ND	ND	ND	**0.34 J**	ND	<6.9	2.3
	4/4/2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<8.8	0.85
	6/24/2013	ND	ND	ND	ND	ND	1.1	5.5	ND	ND	ND	ND	ND	**0.89**	ND	<8.8	0.87
	10/10/2013	ND	1.1	ND	ND	ND	*0.75*	ND	ND	ND	ND	0.26 J	ND	**0.76**	ND	<8.8	1.4
	1/8/2014	ND	2	ND	ND	ND	*0.76*	12	ND	ND	ND	0.36 J	ND	**0.61**	0.32 J	10 J	0.92
	9/11/2015	<0.41	<0.24	<0.26	<0.50	ND	<0.50	0.59 J	<0.50	<0.17	<2.5	<0.50	<0.33	<0.18	<1.50	<29.6	0.14 J
	3/9/2016	<0.41	25.9	0.97 J	1.6	ND	8.9	**134**	1.7	<0.17	3.1 J	7.1	<0.33	**22.7**	10.3	123	1.3
	9/7/2016	<0.41	15.1	<0.26	<0.50	1.1	2.6	*53.9*	<0.50	<0.17	<2.5	0.73 J	<0.33	**6.2**	<1.5	29.9 J	1.2
	3/7/2017	<0.41	17.1	0.76 J	1.1	3.2	**5**	**77**	1	<0.17	<2.5	3.9	0.48 J	**15.1**	6.5	75	1.3
	10/5/2017	System off per localized groundwater treatment study, no sample collected.															
	3/9/2018	System off per localized groundwater treatment study, no sample collected.															
	10/5/2018	<0.24	21.2	<1.1	<0.84	2.9	*2.8*	*20.2*	0.39 J	<1.2	2.2 J	2.9 J	<0.26	**1.4**	4.5	37 J	0.26

Table 2
Effluent Summary KEP Groundwater Remediation Systems
Kenosha, Wisconsin

Well Location	Sample Date	1,1-Dichloro ethene (ug/L)	1,1-Dichloro ethane (ug/L)	trans-1,2-Dichloro ethene (ug/L)	1,2,4-Trimethyl benzene (ug/L)	1,1,1-Trichloro-ethane (ug/L)	Benzene (ug/L)	cis-1,2-Dichloro ethene (ug/L)	Ethyl benzene (ug/L)	Methyl tert-butyl ether (ug/L)	Naphthalene (ug/L)	Toluene (ug/L)	Trichloro ethene (ug/L)	Vinyl chloride (ug/L)	Xylenes, Total (ug/L)	Gasoline Range Organics (ug/L)	Diesel Range Organics (mg/L)
Sump 7/15/17R																	
	9/28/2011	ND	ND	ND	ND	ND	ND	0.82 J	ND	ND	ND	ND	ND	**0.21 J**	ND	47 J	1.5 B
	3/30/2012	ND	ND	ND	ND	ND	ND	2.3	ND	ND	ND	ND	*0.62 J*	ND	ND	<10	1.2
	7/11/2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<6.9	2.2
	9/28/2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<6.9	1.7
	4/4/2013	ND	ND	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	<8.8	0.71
	6/25/2013	ND	ND	ND	ND	ND	ND	2.3	ND	ND	ND	ND	ND	ND	ND	<8.8	2.3
	10/10/2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<8.8	3.5
	1/8/2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<8.8	1.2
	6/19/2014	<0.41	0.91 J	0.83 J	<0.50	ND	<0.50	*22.7*	<0.50	<0.17	<2.5	<0.50	*0.94 J*	**1.7**	<1.5	<29.6	3.1
	9/5/2014	<0.41	0.35 J	2	<0.50	ND	<0.50	*28.4*	<0.50	<0.17	<2.5	<0.50	*2.0*	**0.69 J**	<1.5	31.8 J	1.3
	12/3/2014	<0.41	<0.24	<0.26	<0.50	ND	<0.50	<0.26	<0.50	<0.17	<2.5	<0.50	<0.33	<0.18	<1.5	<29.6	1.4
	9/9/2015	<0.41	<0.24	<0.26	<0.50	ND	<0.50	<0.26	<0.50	<0.17	<2.5	<0.50	<0.33	<0.18	<1.5	<29.6	0.32
	3/9/2016	<0.41	<0.24	<0.26	<0.50	ND	<0.50	<0.26	<0.50	<0.17	<2.5	<0.50	<0.33	<0.18	<1.5	<29.6	1.8
	9/7/2016	<0.41	<0.24	<0.26	<0.50	0.5	<0.50	<0.26	<0.50	<0.17	<2.5	<0.50	<0.33	<0.18	<1.5	<29.6	0.54
	3/7/2017	<0.41	<0.24	<0.26	<0.50	<0.50	<0.50	<0.26	<0.50	<0.17	<2.5	<0.50	<0.33	<0.18	<1.5	<30	0.68
	10/5/2017	<0.41	<0.24	<0.26	<0.50	<0.50	<0.50	5.1	<0.50	<0.17	<2.5	<0.50	0.40 J	<0.18	<1.5	<30	0.97
	3/9/2018	<0.41	<0.24	0.45J	<0.50	<0.50	<0.50	6.6	<0.50	<0.17	<2.5	<0.50	0.42 J	**0.91 J**	<1.5	<30	1.1
	10/5/2018	<0.24	<0.27	<1.1	<0.84	<0.24	<0.25	1.4	<0.22	<1.2	<1.2	<0.17	<0.26	**0.20 J**	<1.5	<36	1.5
PAL[A]		0.7	85	20	96*	40	0.5	7	140	12	10	160	0.5	0.02	400	NE	NE
ES[B]		7	850	100	480*	200	5	70	700	60	100	800	5	0.2	2,000	NE	NE

ug/L = micrograms per liter NE= Not Established J=Estimated concentration at or above the limit of detection and below the limit of quantitation <2.5 - not detected at the detection limit shown

PAL - Preventive Action Limit, Wisconsin Administrative Code NR 140.10 Table 1, February 2017 exceedances are *underlined italics*.

ES - Enforcement Standard, Wisconsin Administrative Code NR 140.10 Table 1, February 2017, exceedances are **bold**.

Table 3
Remedial Systems Operational Data
Kenosha Engine Plant
5555 30th Ave Kenosha, Wisconsin

Sump	Date	Flow Meter Reading	Total Flow	Permits Limit Achieved by Effluent?		
				GRO	DRO	VOC's
6	8/6/2018	4,382,722.20	199,556.40	Yes	Yes	Yes
	8/31/2018	4,531,891.10	149,168.90			
	10/5/2018	4,763,907.50	232,016.40			
	11/2/2018	4,823,115.30	59,207.80			
	12/7/2018	5,027,754.50	204,639.20			
	1/4/2019*	5,167,411.30	139,656.80			
18	8/6/2018	3,432,257.80	13,809.94	Yes	Yes	Yes
	8/31/2018	3,486,489.85	54,232.05			
	10/5/2018	3,664,190.35	177,700.50			
	11/2/2018	3,773,583.55	109,393.20			
	12/7/2018	3,848,708.65	75,125.10			
	1/4/2019*	3,909,481.15	60,772.50			
23	8/6/2018	4,238,580.10	0.00	Pump not in operation during semi-annual period. No effluent sample.		
	8/31/2018	4,238,580.10	0.00			
	10/5/2018	4,238,580.10	0.00			
	11/2/2018	4,238,580.10	0.00			
	12/7/2018	4,238,580.10	0.00			
	1/4/2019*	4,238,580.10	0.00			
7	8/6/2018	394,294.70	27,526.76	Yes	Yes	Yes
	8/31/2018	412,032.56	17,737.86			
	10/5/2018	431,761.59	19,729.03			
	11/2/2018	449,312.07	17,550.48			
	12/7/2018	469,017.41	19,705.34			
	1/4/2019*	485,976.63	16,959.22			
15	8/6/2018	39,702.13	0.00	Pump not in operation during semi-annual period. No effluent sample. Additionally Sump abandoned on September 13, 2018 and will not be included on future reports.		
	8/31/2018	39,702.13	0.00			
	10/5/2018	39,702.13	0.00			
	11/2/2018	39,702.13	0.00			
	12/7/2018	39,702.13	0.00			
	1/4/2019*	39,702.13	0.00			
17R	8/6/2018	1,398,313.64	197,340.21	Yes	Yes	Yes
	8/31/2018	1,552,657.40	154,343.76			
	10/5/2018	1,626,856.92	74,199.52			
	11/2/2018	1,634,990.55	8,133.63			
	12/7/2018	1,647,033.58	12,043.03			
	1/4/2019*	1,711,921.59	64,888.01			

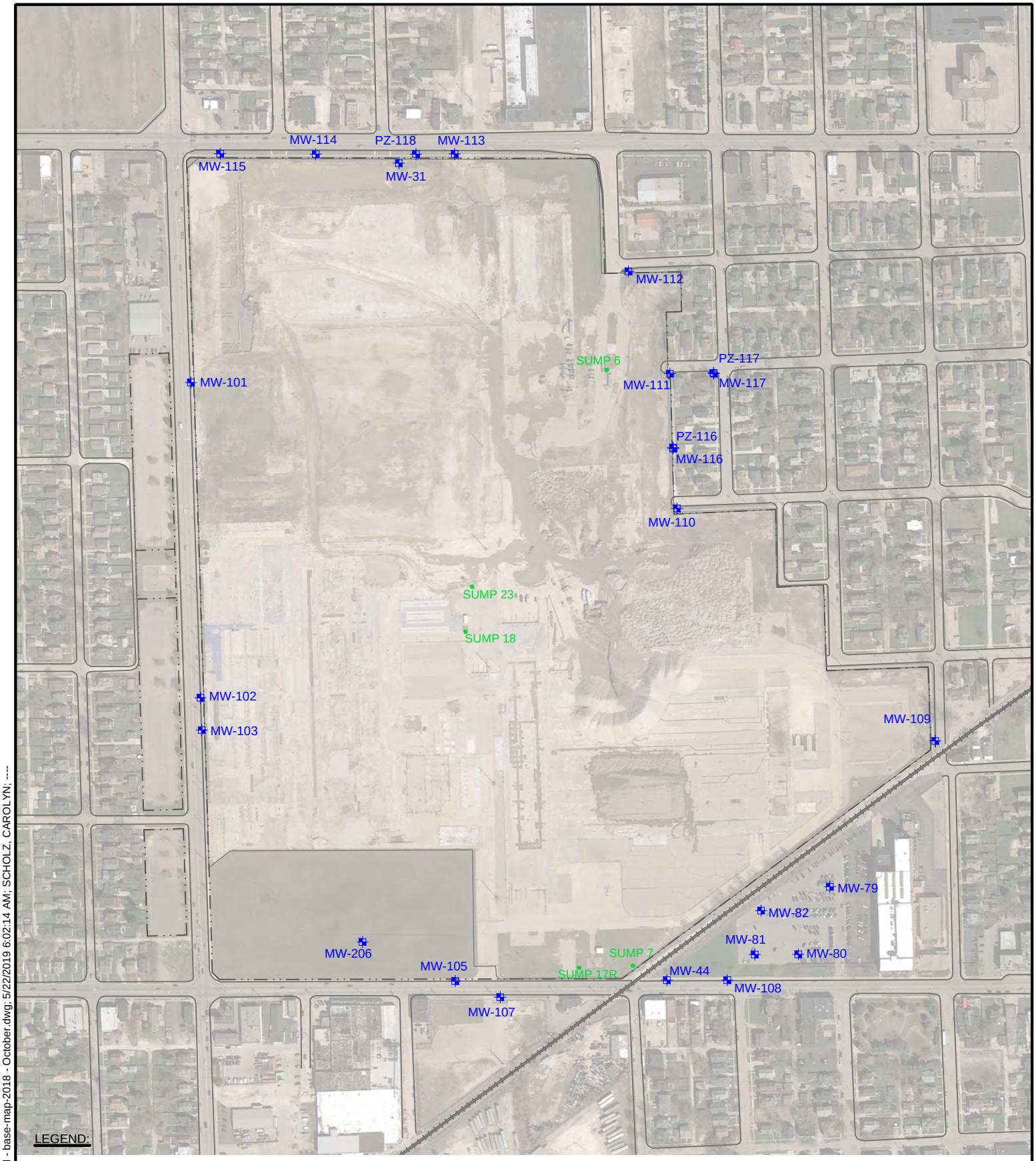
Notes:

1) Total flow is difference of current month flow reading minus prior month flow reading, unless otherwise noted.

2) No meter on effluent discharge at any of the systems

3) Total flow covers the time period from 7/6/2016 to 1/8/2018.

* Date of flow meter readings collected during next semi-annual reporting period (January through July 2019).

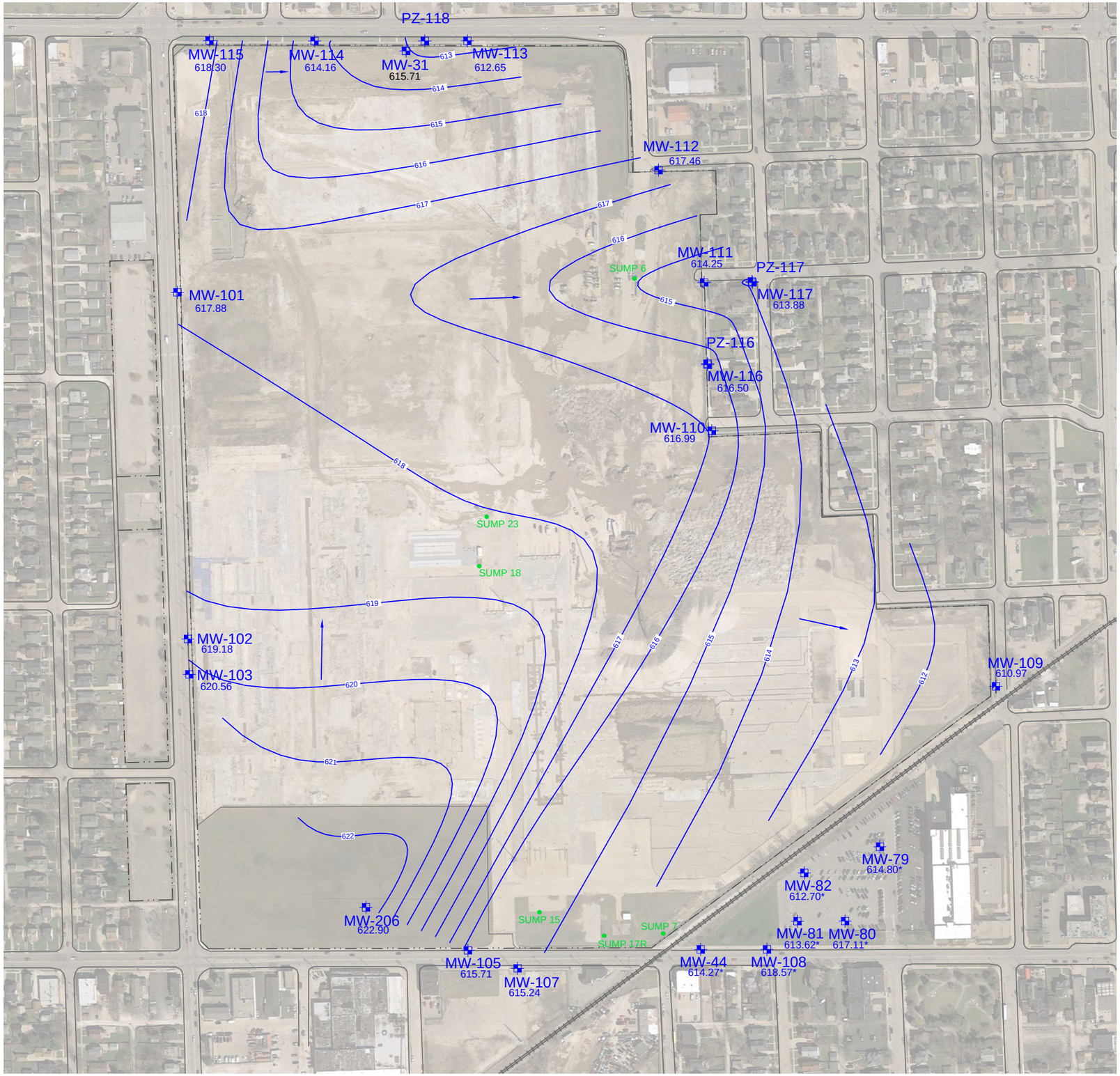


AECOM
1555 RiverCenter Dr
Milwaukee, WI 53212
414.944.6080
www.aecom.com

SUMP AND PERIMETER MONITORING WELL LOCATIONS
KENOSHA ENGINE PLANT
CITY OF KENOSHA
KENOSHA, WISCONSIN

Drawn :	JSM	11/1/2018
Checked:	SAE	11/1/12018
Approved:	LLA	11/1/2018
PROJECT NUMBER	60605022	
FIGURE NUMBER	1	

P:\60485212\900_Work\CADD\KEP - O&M - base-map-2018 - October.dwg; 5/22/2019 6:02:14 AM; SCHOLZ, CAROLYN; ----



LEGEND

- APPROXIMATE SITE BOUNDARY
- RAILROAD
- EXISTING FENCE
- PERIMETER MONITORING WELL LOCATIONS
- 617 WATER TABLE CONTOURS
- * WELLS LOCATED SOUTHEAST OF THE RAILROAD TRACKS (SOUTHEAST OF KEP) ARE UNDER THE INFLUANCE OF THE SOUTHERN GROUNDWATER RECOVERY SYSTEM AND ARE NOT INCLUDED IN THE CONTOURS BECAUSE WATER LEVELS ADJACENT TO THE RECOVERY SYSTEM WERE NOT MEASURED.

NOTES

1. AERIAL PHOTOGRAPH FROM GOOGLE EARTH PRO, IMAGE DATED 4/6/2017; DOWNLOADED ON 6/5/2017.
2. MW-31 NOT USED FOR CONTOUR MAP

0' 300' 600'

SCALE

AECOM
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Milwaukee, WI 53212
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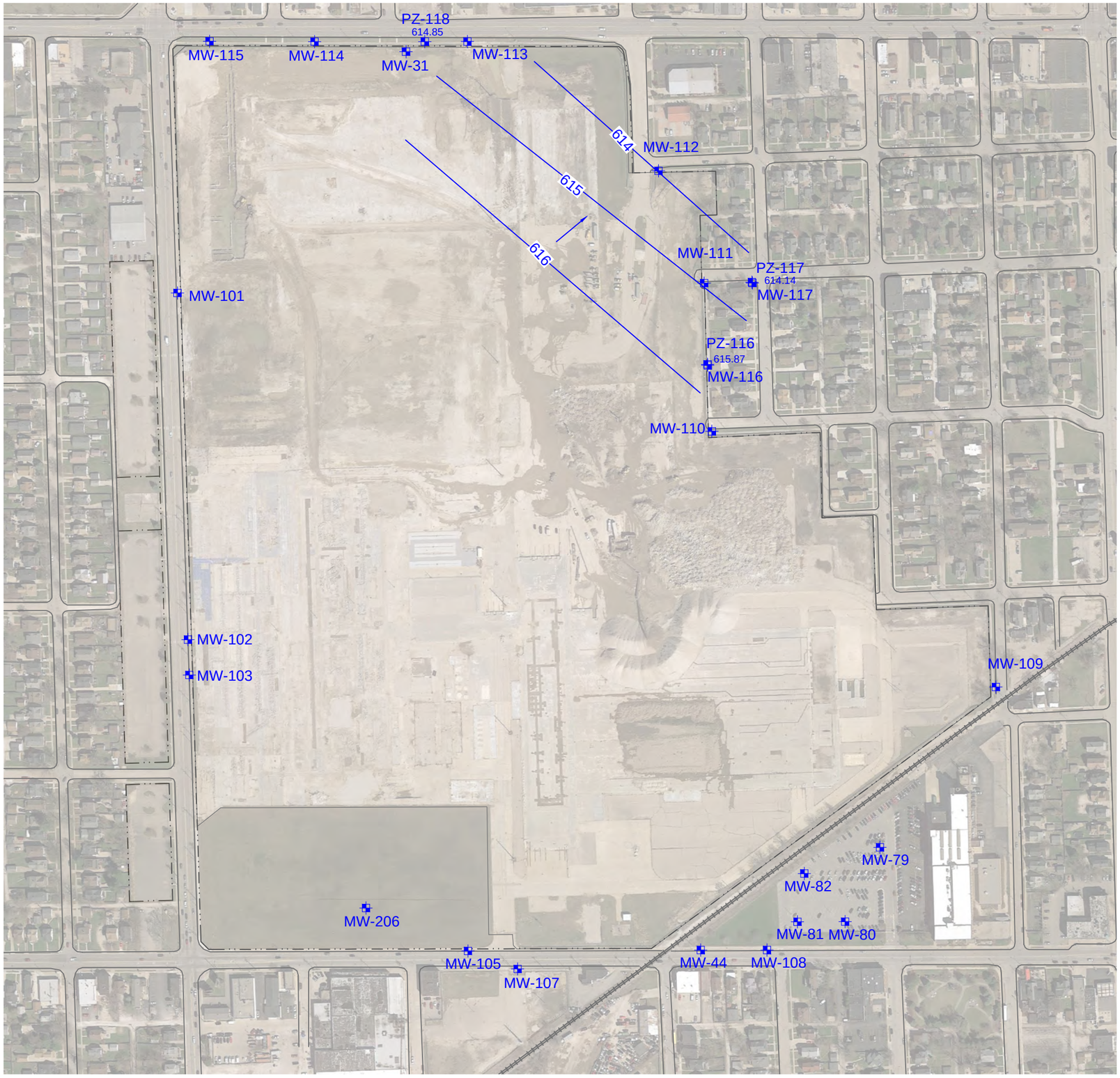
POTENTIOMETRIC SURFACE
PERIMETER WATER TABLE MONITORING WELLS - OCTOBER 2018
KENOSHA ENGINE PLANT
CITY OF KENOSHA
KENOSHA, WISCONSIN

Drawn :	JSM	10/29/2018
Checked:	SAE	10/29/2018
Approved:	LLA	10/29/2018
PROJECT NUMBER	60485212	
FIGURE NUMBER	2	



LEGEND

- APPROXIMATE SITE BOUNDARY
- RAILROAD
- EXISTING FENCE
- PERIMETER PIEZOMETER LOCATIONS
- 617 WATER TABLE CONTOURS

NOTES

1. AERIAL PHOTOGRAPH FROM GOOGLE EARTH PRO, IMAGE DATED 4/6/2017; DOWNLOADED ON 6/5/2017.

0' 300' 600'

SCALE

AECOM
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Milwaukee, WI 53212
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POTENTIOMETRIC SURFACE
PERIMETER PIEZOMETERS - OCTOBER 2018
KENOSHA ENGINE PLANT
CITY OF KENOSHA
KENOSHA, WISCONSIN

Drawn :	JSM	10/29/2018
Checked:	SAE	10/29/2018
Approved:	LLA	10/29/2018
PROJECT NUMBER	60485212	
FIGURE NUMBER	3	

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

October 15, 2018

Lanette Altenbach
AECOM, Inc.
1555 N River Center Drive
Suite 214
Milwaukee, WI 53212

RE: Project: 60485212.3 KEP O&M ACTIVITIES
Pace Project No.: 40177227

Dear Lanette Altenbach:
Enclosed are the analytical results for sample(s) received by the laboratory on October 06, 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,

Christopher Hyska
christopher.hyska@pacelabs.com
(920)469-2436
Project Manager

Enclosures

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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CERTIFICATIONS

Project: 60485212.3 KEP O&M ACTIVITIES
Pace Project No.: 40177227

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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SAMPLE SUMMARY

Project: 60485212.3 KEP O&M ACTIVITIES
Pace Project No.: 40177227

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40177227001	**SUMP 6 IN**	Water	10/05/18 08:55	10/06/18 10:10
40177227002	**SUMP 6 EFF**	Water	10/05/18 09:15	10/06/18 10:10
40177227003	**SUMP 7 IN**	Water	10/05/18 10:55	10/06/18 10:10
40177227004	**SUMP 17R IN**	Water	10/05/18 11:10	10/06/18 10:10
40177227005	**SUMP 7/17R EFF**	Water	10/05/18 11:30	10/06/18 10:10
40177227006	**TRIP BLANK**	Water	10/05/18 08:30	10/06/18 10:10
40177227007	**SUMP 18 IN**	Water	10/05/18 10:05	10/06/18 10:10
40177227008	**SUMP 18 EFF**	Water	10/05/18 10:15	10/06/18 10:10

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SAMPLE ANALYTE COUNT

Project: 60485212.3 KEP O&M ACTIVITIES
Pace Project No.: 40177227

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
40177227001	**SUMP 6 IN**	WI MOD DRO	CAH	1	PASI-G
		WI MOD GRO	ALD	1	PASI-G
		EPA 8260	HNW	63	PASI-G
40177227002	**SUMP 6 EFF**	WI MOD DRO	CAH	1	PASI-G
		WI MOD GRO	ALD	1	PASI-G
		EPA 8260	HNW	63	PASI-G
40177227003	**SUMP 7 IN**	WI MOD DRO	CAH	1	PASI-G
		WI MOD GRO	ALD	1	PASI-G
		EPA 8260	HNW	63	PASI-G
40177227004	**SUMP 17R IN**	WI MOD DRO	CAH	1	PASI-G
		WI MOD GRO	ALD	1	PASI-G
		EPA 8260	HNW	63	PASI-G
40177227005	**SUMP 7/17R EFF**	WI MOD DRO	CAH	1	PASI-G
		WI MOD GRO	ALD	2	PASI-G
		EPA 8260	HNW	63	PASI-G
40177227006	**TRIP BLANK**	EPA 8260	HNW	63	PASI-G
40177227007	**SUMP 18 IN**	WI MOD DRO	CAH	1	PASI-G
		WI MOD GRO	ALD	1	PASI-G
		EPA 8260	HNW	63	PASI-G
40177227008	**SUMP 18 EFF**	WI MOD DRO	CAH	1	PASI-G
		WI MOD GRO	ALD	1	PASI-G
		EPA 8260	HNW	63	PASI-G

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SUMMARY OF DETECTION

Project: 60485212.3 KEP O&M ACTIVITIES
Pace Project No.: 40177227

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
40177227001	**SUMP 6 IN**					
WI MOD DRO	Diesel Range Organics	0.38	mg/L	0.049	10/15/18 09:12	DC
WI MOD GRO	Gasoline Range Organics	0.41	mg/L	0.12	10/08/18 14:50	G-
EPA 8260	1,1-Dichloroethane	7.8J	ug/L	10.0	10/09/18 23:45	
EPA 8260	1,1-Dichloroethene	2.7J	ug/L	10.0	10/09/18 23:45	
EPA 8260	cis-1,2-Dichloroethene	466	ug/L	10.0	10/09/18 23:45	
EPA 8260	trans-1,2-Dichloroethene	45.1	ug/L	36.4	10/09/18 23:45	
EPA 8260	Methylene Chloride	6.3J	ug/L	50.0	10/09/18 23:45	
EPA 8260	Trichloroethene	979	ug/L	10.0	10/09/18 23:45	
EPA 8260	Vinyl chloride	12.0	ug/L	10.0	10/09/18 23:45	
40177227002	**SUMP 6 EFF**					
WI MOD DRO	Diesel Range Organics	0.70	mg/L	0.051	10/15/18 09:21	DC
EPA 8260	cis-1,2-Dichloroethene	2.1	ug/L	1.0	10/09/18 22:38	
EPA 8260	Trichloroethene	1.8	ug/L	1.0	10/09/18 22:38	
40177227003	**SUMP 7 IN**					
WI MOD DRO	Diesel Range Organics	2.0	mg/L	0.099	10/15/18 11:47	DC
EPA 8260	cis-1,2-Dichloroethene	5.6	ug/L	1.0	10/10/18 09:39	
EPA 8260	trans-1,2-Dichloroethene	1.4J	ug/L	3.6	10/10/18 09:39	
EPA 8260	Vinyl chloride	1.5	ug/L	1.0	10/10/18 09:39	
40177227004	**SUMP 17R IN**					
WI MOD DRO	Diesel Range Organics	2.2	mg/L	0.099	10/15/18 11:56	DC
WI MOD GRO	Gasoline Range Organics	0.038J	mg/L	0.12	10/10/18 16:01	
EPA 8260	1,1-Dichloroethane	3.2	ug/L	1.0	10/10/18 10:01	
EPA 8260	1,1-Dichloroethene	0.58J	ug/L	1.0	10/10/18 10:01	
EPA 8260	cis-1,2-Dichloroethene	137	ug/L	1.0	10/10/18 10:01	
EPA 8260	trans-1,2-Dichloroethene	5.5	ug/L	3.6	10/10/18 10:01	
EPA 8260	Trichloroethene	16.6	ug/L	1.0	10/10/18 10:01	
EPA 8260	Vinyl chloride	17.1	ug/L	1.0	10/10/18 10:01	
40177227005	**SUMP 7/17R EFF**					
WI MOD DRO	Diesel Range Organics	1.5	mg/L	0.049	10/15/18 09:48	DC
EPA 8260	cis-1,2-Dichloroethene	1.4	ug/L	1.0	10/09/18 23:01	
EPA 8260	Vinyl chloride	0.20J	ug/L	1.0	10/09/18 23:01	
40177227007	**SUMP 18 IN**					
WI MOD DRO	Diesel Range Organics	0.41	mg/L	0.052	10/15/18 09:58	DC
WI MOD GRO	Gasoline Range Organics	1.5	mg/L	0.24	10/10/18 16:52	G-
EPA 8260	Benzene	134	ug/L	10.0	10/10/18 10:24	
EPA 8260	Chloroethane	19.7J	ug/L	50.0	10/10/18 10:24	
EPA 8260	1,1-Dichloroethane	696	ug/L	10.0	10/10/18 10:24	
EPA 8260	1,1-Dichloroethene	3.2J	ug/L	10.0	10/10/18 10:24	
EPA 8260	cis-1,2-Dichloroethene	529	ug/L	10.0	10/10/18 10:24	
EPA 8260	trans-1,2-Dichloroethene	14.2J	ug/L	36.4	10/10/18 10:24	
EPA 8260	Ethylbenzene	34.4	ug/L	10.0	10/10/18 10:24	
EPA 8260	Methylene Chloride	8.7J	ug/L	50.0	10/10/18 10:24	
EPA 8260	Toluene	191	ug/L	50.0	10/10/18 10:24	
EPA 8260	1,1,1-Trichloroethane	169	ug/L	10.0	10/10/18 10:24	

REPORT OF LABORATORY ANALYSIS

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

SUMMARY OF DETECTION

Project: 60485212.3 KEP O&M ACTIVITIES
Pace Project No.: 40177227

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
40177227007	**SUMP 18 IN**					
EPA 8260	1,2,4-Trimethylbenzene	29.6	ug/L	28.0	10/10/18 10:24	
EPA 8260	Vinyl chloride	163	ug/L	10.0	10/10/18 10:24	
EPA 8260	Xylene (Total)	231	ug/L	30.0	10/10/18 10:24	
40177227008	**SUMP 18 EFF**					
WI MOD DRO	Diesel Range Organics	0.26	mg/L	0.049	10/15/18 10:07	DC
WI MOD GRO	Gasoline Range Organics	0.037J	mg/L	0.12	10/10/18 18:08	
EPA 8260	Benzene	2.8	ug/L	1.0	10/09/18 23:23	
EPA 8260	1,1-Dichloroethane	21.2	ug/L	1.0	10/09/18 23:23	
EPA 8260	cis-1,2-Dichloroethene	20.2	ug/L	1.0	10/09/18 23:23	
EPA 8260	Ethylbenzene	0.39J	ug/L	1.0	10/09/18 23:23	
EPA 8260	Naphthalene	2.2J	ug/L	5.0	10/09/18 23:23	
EPA 8260	Toluene	2.9J	ug/L	5.0	10/09/18 23:23	
EPA 8260	1,1,1-Trichloroethane	2.9	ug/L	1.0	10/09/18 23:23	
EPA 8260	Vinyl chloride	1.4	ug/L	1.0	10/09/18 23:23	
EPA 8260	Xylene (Total)	4.5	ug/L	3.0	10/09/18 23:23	

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ANALYTICAL RESULTS

Project: 60485212.3 KEP O&M ACTIVITIES
Pace Project No.: 40177227

Sample: SUMP 6 IN **Lab ID: 40177227001** Collected: 10/05/18 08:55 Received: 10/06/18 10:10 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIDRO GCS	Analytical Method: WI MOD DRO Preparation Method: WI MOD DRO								
Diesel Range Organics	**0.38**	mg/L	0.049	0.015	1	10/10/18 10:50	10/15/18 09:12		DC
WIGRO GCV	Analytical Method: WI MOD GRO								
Gasoline Range Organics	**0.41**	mg/L	0.12	0.036	1		10/08/18 14:50		G-
8260 MSV	Analytical Method: EPA 8260								
Benzene	**<2.5**	ug/L	10.0	2.5	10		10/09/18 23:45	71-43-2	
Bromobenzene	**<2.4**	ug/L	10.0	2.4	10		10/09/18 23:45	108-86-1	
Bromochloromethane	**<3.6**	ug/L	50.0	3.6	10		10/09/18 23:45	74-97-5	
Bromodichloromethane	**<3.6**	ug/L	12.1	3.6	10		10/09/18 23:45	75-27-4	
Bromoform	**<39.7**	ug/L	132	39.7	10		10/09/18 23:45	75-25-2	
Bromomethane	**<9.7**	ug/L	50.0	9.7	10		10/09/18 23:45	74-83-9	
n-Butylbenzene	**<7.1**	ug/L	23.6	7.1	10		10/09/18 23:45	104-51-8	
sec-Butylbenzene	**<8.5**	ug/L	50.0	8.5	10		10/09/18 23:45	135-98-8	
tert-Butylbenzene	**<3.0**	ug/L	10.1	3.0	10		10/09/18 23:45	98-06-6	
Carbon tetrachloride	**<1.7**	ug/L	10.0	1.7	10		10/09/18 23:45	56-23-5	
Chlorobenzene	**<7.1**	ug/L	23.7	7.1	10		10/09/18 23:45	108-90-7	
Chloroethane	**<13.4**	ug/L	50.0	13.4	10		10/09/18 23:45	75-00-3	
Chloroform	**<12.7**	ug/L	50.0	12.7	10		10/09/18 23:45	67-66-3	
Chloromethane	**<21.9**	ug/L	73.0	21.9	10		10/09/18 23:45	74-87-3	
2-Chlorotoluene	**<9.3**	ug/L	50.0	9.3	10		10/09/18 23:45	95-49-8	
4-Chlorotoluene	**<7.6**	ug/L	25.2	7.6	10		10/09/18 23:45	106-43-4	
1,2-Dibromo-3-chloropropane	**<17.6**	ug/L	58.8	17.6	10		10/09/18 23:45	96-12-8	
Dibromochloromethane	**<26.0**	ug/L	86.7	26.0	10		10/09/18 23:45	124-48-1	
1,2-Dibromoethane (EDB)	**<8.3**	ug/L	27.6	8.3	10		10/09/18 23:45	106-93-4	
Dibromomethane	**<9.4**	ug/L	31.2	9.4	10		10/09/18 23:45	74-95-3	
1,2-Dichlorobenzene	**<7.1**	ug/L	23.5	7.1	10		10/09/18 23:45	95-50-1	
1,3-Dichlorobenzene	**<6.3**	ug/L	20.9	6.3	10		10/09/18 23:45	541-73-1	
1,4-Dichlorobenzene	**<9.4**	ug/L	31.5	9.4	10		10/09/18 23:45	106-46-7	
Dichlorodifluoromethane	**<5.0**	ug/L	50.0	5.0	10		10/09/18 23:45	75-71-8	
1,1-Dichloroethane	**7.8J**	ug/L	10.0	2.7	10		10/09/18 23:45	75-34-3	
1,2-Dichloroethane	**<2.8**	ug/L	10.0	2.8	10		10/09/18 23:45	107-06-2	
1,1-Dichloroethene	**2.7J**	ug/L	10.0	2.4	10		10/09/18 23:45	75-35-4	
cis-1,2-Dichloroethene	**466**	ug/L	10.0	2.7	10		10/09/18 23:45	156-59-2	
trans-1,2-Dichloroethene	**45.1**	ug/L	36.4	10.9	10		10/09/18 23:45	156-60-5	
1,2-Dichloropropane	**<2.8**	ug/L	10.0	2.8	10		10/09/18 23:45	78-87-5	
1,3-Dichloropropane	**<8.3**	ug/L	27.5	8.3	10		10/09/18 23:45	142-28-9	
2,2-Dichloropropane	**<22.7**	ug/L	75.5	22.7	10		10/09/18 23:45	594-20-7	
1,1-Dichloropropene	**<5.4**	ug/L	18.0	5.4	10		10/09/18 23:45	563-58-6	
cis-1,3-Dichloropropene	**<36.3**	ug/L	121	36.3	10		10/09/18 23:45	10061-01-5	
trans-1,3-Dichloropropene	**<43.7**	ug/L	146	43.7	10		10/09/18 23:45	10061-02-6	
Diisopropyl ether	**<18.9**	ug/L	62.9	18.9	10		10/09/18 23:45	108-20-3	
Ethylbenzene	**<2.2**	ug/L	10.0	2.2	10		10/09/18 23:45	100-41-4	
Hexachloro-1,3-butadiene	**<11.8**	ug/L	50.0	11.8	10		10/09/18 23:45	87-68-3	
Isopropylbenzene (Cumene)	**<3.9**	ug/L	50.0	3.9	10		10/09/18 23:45	98-82-8	
p-Isopropyltoluene	**<8.0**	ug/L	26.7	8.0	10		10/09/18 23:45	99-87-6	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: 60485212.3 KEP O&M ACTIVITIES
Pace Project No.: 40177227

Sample: SUMP 6 IN **Lab ID: 40177227001** Collected: 10/05/18 08:55 Received: 10/06/18 10:10 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
Methylene Chloride	**6.3J**	ug/L	50.0	5.8	10		10/09/18 23:45	75-09-2	
Methyl-tert-butyl ether	**<12.5**	ug/L	41.5	12.5	10		10/09/18 23:45	1634-04-4	
Naphthalene	**<11.8**	ug/L	50.0	11.8	10		10/09/18 23:45	91-20-3	
n-Propylbenzene	**<8.1**	ug/L	50.0	8.1	10		10/09/18 23:45	103-65-1	
Styrene	**<4.7**	ug/L	15.5	4.7	10		10/09/18 23:45	100-42-5	
1,1,1,2-Tetrachloroethane	**<2.7**	ug/L	10.0	2.7	10		10/09/18 23:45	630-20-6	
1,1,2,2-Tetrachloroethane	**<2.8**	ug/L	10.0	2.8	10		10/09/18 23:45	79-34-5	
Tetrachloroethene	**<3.3**	ug/L	10.9	3.3	10		10/09/18 23:45	127-18-4	
Toluene	**<1.7**	ug/L	50.0	1.7	10		10/09/18 23:45	108-88-3	
1,2,3-Trichlorobenzene	**<6.3**	ug/L	50.0	6.3	10		10/09/18 23:45	87-61-6	
1,2,4-Trichlorobenzene	**<9.5**	ug/L	50.0	9.5	10		10/09/18 23:45	120-82-1	
1,1,1-Trichloroethane	**<2.4**	ug/L	10.0	2.4	10		10/09/18 23:45	71-55-6	
1,1,2-Trichloroethane	**<5.5**	ug/L	50.0	5.5	10		10/09/18 23:45	79-00-5	
Trichloroethene	**979**	ug/L	10.0	2.6	10		10/09/18 23:45	79-01-6	
Trichlorofluoromethane	**<2.1**	ug/L	10.0	2.1	10		10/09/18 23:45	75-69-4	
1,2,3-Trichloropropane	**<5.9**	ug/L	50.0	5.9	10		10/09/18 23:45	96-18-4	
1,2,4-Trimethylbenzene	**<8.4**	ug/L	28.0	8.4	10		10/09/18 23:45	95-63-6	
1,3,5-Trimethylbenzene	**<8.7**	ug/L	29.1	8.7	10		10/09/18 23:45	108-67-8	
Vinyl chloride	**12.0**	ug/L	10.0	1.7	10		10/09/18 23:45	75-01-4	
Xylene (Total)	**<15.0**	ug/L	30.0	15.0	10		10/09/18 23:45	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	95	%	70-130		10		10/09/18 23:45	460-00-4	
Dibromofluoromethane (S)	108	%	70-130		10		10/09/18 23:45	1868-53-7	
Toluene-d8 (S)	93	%	70-130		10		10/09/18 23:45	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
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ANALYTICAL RESULTS

Project: 60485212.3 KEP O&M ACTIVITIES
Pace Project No.: 40177227

Sample: SUMP 6 EFF **Lab ID: 40177227002** Collected: 10/05/18 09:15 Received: 10/06/18 10:10 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIDRO GCS	Analytical Method: WI MOD DRO Preparation Method: WI MOD DRO								
Diesel Range Organics	**0.70**	mg/L	0.051	0.015	1	10/10/18 10:50	10/15/18 09:21		DC
WIGRO GCV	Analytical Method: WI MOD GRO								
Gasoline Range Organics	**<0.036**	mg/L	0.12	0.036	1		10/08/18 10:34		
8260 MSV	Analytical Method: EPA 8260								
Benzene	**<0.25**	ug/L	1.0	0.25	1		10/09/18 22:38	71-43-2	
Bromobenzene	**<0.24**	ug/L	1.0	0.24	1		10/09/18 22:38	108-86-1	
Bromochloromethane	**<0.36**	ug/L	5.0	0.36	1		10/09/18 22:38	74-97-5	
Bromodichloromethane	**<0.36**	ug/L	1.2	0.36	1		10/09/18 22:38	75-27-4	
Bromoform	**<4.0**	ug/L	13.2	4.0	1		10/09/18 22:38	75-25-2	
Bromomethane	**<0.97**	ug/L	5.0	0.97	1		10/09/18 22:38	74-83-9	
n-Butylbenzene	**<0.71**	ug/L	2.4	0.71	1		10/09/18 22:38	104-51-8	
sec-Butylbenzene	**<0.85**	ug/L	5.0	0.85	1		10/09/18 22:38	135-98-8	
tert-Butylbenzene	**<0.30**	ug/L	1.0	0.30	1		10/09/18 22:38	98-06-6	
Carbon tetrachloride	**<0.17**	ug/L	1.0	0.17	1		10/09/18 22:38	56-23-5	
Chlorobenzene	**<0.71**	ug/L	2.4	0.71	1		10/09/18 22:38	108-90-7	
Chloroethane	**<1.3**	ug/L	5.0	1.3	1		10/09/18 22:38	75-00-3	
Chloroform	**<1.3**	ug/L	5.0	1.3	1		10/09/18 22:38	67-66-3	
Chloromethane	**<2.2**	ug/L	7.3	2.2	1		10/09/18 22:38	74-87-3	
2-Chlorotoluene	**<0.93**	ug/L	5.0	0.93	1		10/09/18 22:38	95-49-8	
4-Chlorotoluene	**<0.76**	ug/L	2.5	0.76	1		10/09/18 22:38	106-43-4	
1,2-Dibromo-3-chloropropane	**<1.8**	ug/L	5.9	1.8	1		10/09/18 22:38	96-12-8	
Dibromochloromethane	**<2.6**	ug/L	8.7	2.6	1		10/09/18 22:38	124-48-1	
1,2-Dibromoethane (EDB)	**<0.83**	ug/L	2.8	0.83	1		10/09/18 22:38	106-93-4	
Dibromomethane	**<0.94**	ug/L	3.1	0.94	1		10/09/18 22:38	74-95-3	
1,2-Dichlorobenzene	**<0.71**	ug/L	2.4	0.71	1		10/09/18 22:38	95-50-1	
1,3-Dichlorobenzene	**<0.63**	ug/L	2.1	0.63	1		10/09/18 22:38	541-73-1	
1,4-Dichlorobenzene	**<0.94**	ug/L	3.1	0.94	1		10/09/18 22:38	106-46-7	
Dichlorodifluoromethane	**<0.50**	ug/L	5.0	0.50	1		10/09/18 22:38	75-71-8	
1,1-Dichloroethane	**<0.27**	ug/L	1.0	0.27	1		10/09/18 22:38	75-34-3	
1,2-Dichloroethane	**<0.28**	ug/L	1.0	0.28	1		10/09/18 22:38	107-06-2	
1,1-Dichloroethene	**<0.24**	ug/L	1.0	0.24	1		10/09/18 22:38	75-35-4	
cis-1,2-Dichloroethene	**2.1**	ug/L	1.0	0.27	1		10/09/18 22:38	156-59-2	
trans-1,2-Dichloroethene	**<1.1**	ug/L	3.6	1.1	1		10/09/18 22:38	156-60-5	
1,2-Dichloropropane	**<0.28**	ug/L	1.0	0.28	1		10/09/18 22:38	78-87-5	
1,3-Dichloropropane	**<0.83**	ug/L	2.8	0.83	1		10/09/18 22:38	142-28-9	
2,2-Dichloropropane	**<2.3**	ug/L	7.6	2.3	1		10/09/18 22:38	594-20-7	
1,1-Dichloropropene	**<0.54**	ug/L	1.8	0.54	1		10/09/18 22:38	563-58-6	
cis-1,3-Dichloropropene	**<3.6**	ug/L	12.1	3.6	1		10/09/18 22:38	10061-01-5	
trans-1,3-Dichloropropene	**<4.4**	ug/L	14.6	4.4	1		10/09/18 22:38	10061-02-6	
Diisopropyl ether	**<1.9**	ug/L	6.3	1.9	1		10/09/18 22:38	108-20-3	
Ethylbenzene	**<0.22**	ug/L	1.0	0.22	1		10/09/18 22:38	100-41-4	
Hexachloro-1,3-butadiene	**<1.2**	ug/L	5.0	1.2	1		10/09/18 22:38	87-68-3	
Isopropylbenzene (Cumene)	**<0.39**	ug/L	5.0	0.39	1		10/09/18 22:38	98-82-8	
p-Isopropyltoluene	**<0.80**	ug/L	2.7	0.80	1		10/09/18 22:38	99-87-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: 60485212.3 KEP O&M ACTIVITIES
Pace Project No.: 40177227

Sample: SUMP 6 EFF **Lab ID: 40177227002** Collected: 10/05/18 09:15 Received: 10/06/18 10:10 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
Methylene Chloride	**<0.58**	ug/L	5.0	0.58	1		10/09/18 22:38	75-09-2	
Methyl-tert-butyl ether	**<1.2**	ug/L	4.2	1.2	1		10/09/18 22:38	1634-04-4	
Naphthalene	**<1.2**	ug/L	5.0	1.2	1		10/09/18 22:38	91-20-3	
n-Propylbenzene	**<0.81**	ug/L	5.0	0.81	1		10/09/18 22:38	103-65-1	
Styrene	**<0.47**	ug/L	1.6	0.47	1		10/09/18 22:38	100-42-5	
1,1,1,2-Tetrachloroethane	**<0.27**	ug/L	1.0	0.27	1		10/09/18 22:38	630-20-6	
1,1,2,2-Tetrachloroethane	**<0.28**	ug/L	1.0	0.28	1		10/09/18 22:38	79-34-5	
Tetrachloroethene	**<0.33**	ug/L	1.1	0.33	1		10/09/18 22:38	127-18-4	
Toluene	**<0.17**	ug/L	5.0	0.17	1		10/09/18 22:38	108-88-3	
1,2,3-Trichlorobenzene	**<0.63**	ug/L	5.0	0.63	1		10/09/18 22:38	87-61-6	
1,2,4-Trichlorobenzene	**<0.95**	ug/L	5.0	0.95	1		10/09/18 22:38	120-82-1	
1,1,1-Trichloroethane	**<0.24**	ug/L	1.0	0.24	1		10/09/18 22:38	71-55-6	
1,1,2-Trichloroethane	**<0.55**	ug/L	5.0	0.55	1		10/09/18 22:38	79-00-5	
Trichloroethene	**1.8**	ug/L	1.0	0.26	1		10/09/18 22:38	79-01-6	
Trichlorofluoromethane	**<0.21**	ug/L	1.0	0.21	1		10/09/18 22:38	75-69-4	
1,2,3-Trichloropropane	**<0.59**	ug/L	5.0	0.59	1		10/09/18 22:38	96-18-4	
1,2,4-Trimethylbenzene	**<0.84**	ug/L	2.8	0.84	1		10/09/18 22:38	95-63-6	
1,3,5-Trimethylbenzene	**<0.87**	ug/L	2.9	0.87	1		10/09/18 22:38	108-67-8	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		10/09/18 22:38	75-01-4	
Xylene (Total)	**<1.5**	ug/L	3.0	1.5	1		10/09/18 22:38	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	95	%	70-130		1		10/09/18 22:38	460-00-4	
Dibromofluoromethane (S)	106	%	70-130		1		10/09/18 22:38	1868-53-7	
Toluene-d8 (S)	92	%	70-130		1		10/09/18 22:38	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
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ANALYTICAL RESULTS

Project: 60485212.3 KEP O&M ACTIVITIES
Pace Project No.: 40177227

Sample: SUMP 7 IN **Lab ID: 40177227003** Collected: 10/05/18 10:55 Received: 10/06/18 10:10 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIDRO GCS	Analytical Method: WI MOD DRO Preparation Method: WI MOD DRO								
Diesel Range Organics	**2.0**	mg/L	0.099	0.030	2	10/10/18 10:50	10/15/18 11:47		DC
WIGRO GCV	Analytical Method: WI MOD GRO								
Gasoline Range Organics	**<0.036**	mg/L	0.12	0.036	1		10/10/18 11:02		
8260 MSV	Analytical Method: EPA 8260								
Benzene	**<0.25**	ug/L	1.0	0.25	1		10/10/18 09:39	71-43-2	
Bromobenzene	**<0.24**	ug/L	1.0	0.24	1		10/10/18 09:39	108-86-1	
Bromochloromethane	**<0.36**	ug/L	5.0	0.36	1		10/10/18 09:39	74-97-5	
Bromodichloromethane	**<0.36**	ug/L	1.2	0.36	1		10/10/18 09:39	75-27-4	
Bromoform	**<4.0**	ug/L	13.2	4.0	1		10/10/18 09:39	75-25-2	
Bromomethane	**<0.97**	ug/L	5.0	0.97	1		10/10/18 09:39	74-83-9	
n-Butylbenzene	**<0.71**	ug/L	2.4	0.71	1		10/10/18 09:39	104-51-8	
sec-Butylbenzene	**<0.85**	ug/L	5.0	0.85	1		10/10/18 09:39	135-98-8	
tert-Butylbenzene	**<0.30**	ug/L	1.0	0.30	1		10/10/18 09:39	98-06-6	
Carbon tetrachloride	**<0.17**	ug/L	1.0	0.17	1		10/10/18 09:39	56-23-5	
Chlorobenzene	**<0.71**	ug/L	2.4	0.71	1		10/10/18 09:39	108-90-7	
Chloroethane	**<1.3**	ug/L	5.0	1.3	1		10/10/18 09:39	75-00-3	
Chloroform	**<1.3**	ug/L	5.0	1.3	1		10/10/18 09:39	67-66-3	
Chloromethane	**<2.2**	ug/L	7.3	2.2	1		10/10/18 09:39	74-87-3	
2-Chlorotoluene	**<0.93**	ug/L	5.0	0.93	1		10/10/18 09:39	95-49-8	
4-Chlorotoluene	**<0.76**	ug/L	2.5	0.76	1		10/10/18 09:39	106-43-4	
1,2-Dibromo-3-chloropropane	**<1.8**	ug/L	5.9	1.8	1		10/10/18 09:39	96-12-8	
Dibromochloromethane	**<2.6**	ug/L	8.7	2.6	1		10/10/18 09:39	124-48-1	
1,2-Dibromoethane (EDB)	**<0.83**	ug/L	2.8	0.83	1		10/10/18 09:39	106-93-4	
Dibromomethane	**<0.94**	ug/L	3.1	0.94	1		10/10/18 09:39	74-95-3	
1,2-Dichlorobenzene	**<0.71**	ug/L	2.4	0.71	1		10/10/18 09:39	95-50-1	
1,3-Dichlorobenzene	**<0.63**	ug/L	2.1	0.63	1		10/10/18 09:39	541-73-1	
1,4-Dichlorobenzene	**<0.94**	ug/L	3.1	0.94	1		10/10/18 09:39	106-46-7	
Dichlorodifluoromethane	**<0.50**	ug/L	5.0	0.50	1		10/10/18 09:39	75-71-8	
1,1-Dichloroethane	**<0.27**	ug/L	1.0	0.27	1		10/10/18 09:39	75-34-3	
1,2-Dichloroethane	**<0.28**	ug/L	1.0	0.28	1		10/10/18 09:39	107-06-2	
1,1-Dichloroethene	**<0.24**	ug/L	1.0	0.24	1		10/10/18 09:39	75-35-4	
cis-1,2-Dichloroethene	**5.6**	ug/L	1.0	0.27	1		10/10/18 09:39	156-59-2	
trans-1,2-Dichloroethene	**1.4J**	ug/L	3.6	1.1	1		10/10/18 09:39	156-60-5	
1,2-Dichloropropane	**<0.28**	ug/L	1.0	0.28	1		10/10/18 09:39	78-87-5	
1,3-Dichloropropane	**<0.83**	ug/L	2.8	0.83	1		10/10/18 09:39	142-28-9	
2,2-Dichloropropane	**<2.3**	ug/L	7.6	2.3	1		10/10/18 09:39	594-20-7	
1,1-Dichloropropene	**<0.54**	ug/L	1.8	0.54	1		10/10/18 09:39	563-58-6	
cis-1,3-Dichloropropene	**<3.6**	ug/L	12.1	3.6	1		10/10/18 09:39	10061-01-5	
trans-1,3-Dichloropropene	**<4.4**	ug/L	14.6	4.4	1		10/10/18 09:39	10061-02-6	
Diisopropyl ether	**<1.9**	ug/L	6.3	1.9	1		10/10/18 09:39	108-20-3	
Ethylbenzene	**<0.22**	ug/L	1.0	0.22	1		10/10/18 09:39	100-41-4	
Hexachloro-1,3-butadiene	**<1.2**	ug/L	5.0	1.2	1		10/10/18 09:39	87-68-3	
Isopropylbenzene (Cumene)	**<0.39**	ug/L	5.0	0.39	1		10/10/18 09:39	98-82-8	
p-Isopropyltoluene	**<0.80**	ug/L	2.7	0.80	1		10/10/18 09:39	99-87-6	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: 60485212.3 KEP O&M ACTIVITIES
Pace Project No.: 40177227

Sample: SUMP 7 IN **Lab ID: 40177227003** Collected: 10/05/18 10:55 Received: 10/06/18 10:10 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
Methylene Chloride	**<0.58**	ug/L	5.0	0.58	1		10/10/18 09:39	75-09-2	
Methyl-tert-butyl ether	**<1.2**	ug/L	4.2	1.2	1		10/10/18 09:39	1634-04-4	
Naphthalene	**<1.2**	ug/L	5.0	1.2	1		10/10/18 09:39	91-20-3	
n-Propylbenzene	**<0.81**	ug/L	5.0	0.81	1		10/10/18 09:39	103-65-1	
Styrene	**<0.47**	ug/L	1.6	0.47	1		10/10/18 09:39	100-42-5	
1,1,1,2-Tetrachloroethane	**<0.27**	ug/L	1.0	0.27	1		10/10/18 09:39	630-20-6	
1,1,2,2-Tetrachloroethane	**<0.28**	ug/L	1.0	0.28	1		10/10/18 09:39	79-34-5	
Tetrachloroethene	**<0.33**	ug/L	1.1	0.33	1		10/10/18 09:39	127-18-4	
Toluene	**<0.17**	ug/L	5.0	0.17	1		10/10/18 09:39	108-88-3	
1,2,3-Trichlorobenzene	**<0.63**	ug/L	5.0	0.63	1		10/10/18 09:39	87-61-6	
1,2,4-Trichlorobenzene	**<0.95**	ug/L	5.0	0.95	1		10/10/18 09:39	120-82-1	
1,1,1-Trichloroethane	**<0.24**	ug/L	1.0	0.24	1		10/10/18 09:39	71-55-6	
1,1,2-Trichloroethane	**<0.55**	ug/L	5.0	0.55	1		10/10/18 09:39	79-00-5	
Trichloroethene	**<0.26**	ug/L	1.0	0.26	1		10/10/18 09:39	79-01-6	
Trichlorofluoromethane	**<0.21**	ug/L	1.0	0.21	1		10/10/18 09:39	75-69-4	
1,2,3-Trichloropropane	**<0.59**	ug/L	5.0	0.59	1		10/10/18 09:39	96-18-4	
1,2,4-Trimethylbenzene	**<0.84**	ug/L	2.8	0.84	1		10/10/18 09:39	95-63-6	
1,3,5-Trimethylbenzene	**<0.87**	ug/L	2.9	0.87	1		10/10/18 09:39	108-67-8	
Vinyl chloride	**1.5**	ug/L	1.0	0.17	1		10/10/18 09:39	75-01-4	
Xylene (Total)	**<1.5**	ug/L	3.0	1.5	1		10/10/18 09:39	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	92	%	70-130		1		10/10/18 09:39	460-00-4	
Dibromofluoromethane (S)	98	%	70-130		1		10/10/18 09:39	1868-53-7	
Toluene-d8 (S)	98	%	70-130		1		10/10/18 09:39	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
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ANALYTICAL RESULTS

Project: 60485212.3 KEP O&M ACTIVITIES
Pace Project No.: 40177227

Sample: SUMP 17R IN **Lab ID: 40177227004** Collected: 10/05/18 11:10 Received: 10/06/18 10:10 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIDRO GCS	Analytical Method: WI MOD DRO Preparation Method: WI MOD DRO								
Diesel Range Organics	**2.2**	mg/L	0.099	0.030	2	10/10/18 10:50	10/15/18 11:56		DC
WIGRO GCV	Analytical Method: WI MOD GRO								
Gasoline Range Organics	**0.038J**	mg/L	0.12	0.036	1		10/10/18 16:01		
8260 MSV	Analytical Method: EPA 8260								
Benzene	**<0.25**	ug/L	1.0	0.25	1		10/10/18 10:01	71-43-2	
Bromobenzene	**<0.24**	ug/L	1.0	0.24	1		10/10/18 10:01	108-86-1	
Bromochloromethane	**<0.36**	ug/L	5.0	0.36	1		10/10/18 10:01	74-97-5	
Bromodichloromethane	**<0.36**	ug/L	1.2	0.36	1		10/10/18 10:01	75-27-4	
Bromoform	**<4.0**	ug/L	13.2	4.0	1		10/10/18 10:01	75-25-2	
Bromomethane	**<0.97**	ug/L	5.0	0.97	1		10/10/18 10:01	74-83-9	
n-Butylbenzene	**<0.71**	ug/L	2.4	0.71	1		10/10/18 10:01	104-51-8	
sec-Butylbenzene	**<0.85**	ug/L	5.0	0.85	1		10/10/18 10:01	135-98-8	
tert-Butylbenzene	**<0.30**	ug/L	1.0	0.30	1		10/10/18 10:01	98-06-6	
Carbon tetrachloride	**<0.17**	ug/L	1.0	0.17	1		10/10/18 10:01	56-23-5	
Chlorobenzene	**<0.71**	ug/L	2.4	0.71	1		10/10/18 10:01	108-90-7	
Chloroethane	**<1.3**	ug/L	5.0	1.3	1		10/10/18 10:01	75-00-3	
Chloroform	**<1.3**	ug/L	5.0	1.3	1		10/10/18 10:01	67-66-3	
Chloromethane	**<2.2**	ug/L	7.3	2.2	1		10/10/18 10:01	74-87-3	
2-Chlorotoluene	**<0.93**	ug/L	5.0	0.93	1		10/10/18 10:01	95-49-8	
4-Chlorotoluene	**<0.76**	ug/L	2.5	0.76	1		10/10/18 10:01	106-43-4	
1,2-Dibromo-3-chloropropane	**<1.8**	ug/L	5.9	1.8	1		10/10/18 10:01	96-12-8	
Dibromochloromethane	**<2.6**	ug/L	8.7	2.6	1		10/10/18 10:01	124-48-1	
1,2-Dibromoethane (EDB)	**<0.83**	ug/L	2.8	0.83	1		10/10/18 10:01	106-93-4	
Dibromomethane	**<0.94**	ug/L	3.1	0.94	1		10/10/18 10:01	74-95-3	
1,2-Dichlorobenzene	**<0.71**	ug/L	2.4	0.71	1		10/10/18 10:01	95-50-1	
1,3-Dichlorobenzene	**<0.63**	ug/L	2.1	0.63	1		10/10/18 10:01	541-73-1	
1,4-Dichlorobenzene	**<0.94**	ug/L	3.1	0.94	1		10/10/18 10:01	106-46-7	
Dichlorodifluoromethane	**<0.50**	ug/L	5.0	0.50	1		10/10/18 10:01	75-71-8	
1,1-Dichloroethane	**3.2**	ug/L	1.0	0.27	1		10/10/18 10:01	75-34-3	
1,2-Dichloroethane	**<0.28**	ug/L	1.0	0.28	1		10/10/18 10:01	107-06-2	
1,1-Dichloroethene	**0.58J**	ug/L	1.0	0.24	1		10/10/18 10:01	75-35-4	
cis-1,2-Dichloroethene	**137**	ug/L	1.0	0.27	1		10/10/18 10:01	156-59-2	
trans-1,2-Dichloroethene	**5.5**	ug/L	3.6	1.1	1		10/10/18 10:01	156-60-5	
1,2-Dichloropropane	**<0.28**	ug/L	1.0	0.28	1		10/10/18 10:01	78-87-5	
1,3-Dichloropropane	**<0.83**	ug/L	2.8	0.83	1		10/10/18 10:01	142-28-9	
2,2-Dichloropropane	**<2.3**	ug/L	7.6	2.3	1		10/10/18 10:01	594-20-7	
1,1-Dichloropropene	**<0.54**	ug/L	1.8	0.54	1		10/10/18 10:01	563-58-6	
cis-1,3-Dichloropropene	**<3.6**	ug/L	12.1	3.6	1		10/10/18 10:01	10061-01-5	
trans-1,3-Dichloropropene	**<4.4**	ug/L	14.6	4.4	1		10/10/18 10:01	10061-02-6	
Diisopropyl ether	**<1.9**	ug/L	6.3	1.9	1		10/10/18 10:01	108-20-3	
Ethylbenzene	**<0.22**	ug/L	1.0	0.22	1		10/10/18 10:01	100-41-4	
Hexachloro-1,3-butadiene	**<1.2**	ug/L	5.0	1.2	1		10/10/18 10:01	87-68-3	
Isopropylbenzene (Cumene)	**<0.39**	ug/L	5.0	0.39	1		10/10/18 10:01	98-82-8	
p-Isopropyltoluene	**<0.80**	ug/L	2.7	0.80	1		10/10/18 10:01	99-87-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: 60485212.3 KEP O&M ACTIVITIES
Pace Project No.: 40177227

Sample: SUMP 17R IN **Lab ID: 40177227004** Collected: 10/05/18 11:10 Received: 10/06/18 10:10 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
Methylene Chloride	**<0.58**	ug/L	5.0	0.58	1		10/10/18 10:01	75-09-2	
Methyl-tert-butyl ether	**<1.2**	ug/L	4.2	1.2	1		10/10/18 10:01	1634-04-4	
Naphthalene	**<1.2**	ug/L	5.0	1.2	1		10/10/18 10:01	91-20-3	
n-Propylbenzene	**<0.81**	ug/L	5.0	0.81	1		10/10/18 10:01	103-65-1	
Styrene	**<0.47**	ug/L	1.6	0.47	1		10/10/18 10:01	100-42-5	
1,1,1,2-Tetrachloroethane	**<0.27**	ug/L	1.0	0.27	1		10/10/18 10:01	630-20-6	
1,1,2,2-Tetrachloroethane	**<0.28**	ug/L	1.0	0.28	1		10/10/18 10:01	79-34-5	
Tetrachloroethene	**<0.33**	ug/L	1.1	0.33	1		10/10/18 10:01	127-18-4	
Toluene	**<0.17**	ug/L	5.0	0.17	1		10/10/18 10:01	108-88-3	
1,2,3-Trichlorobenzene	**<0.63**	ug/L	5.0	0.63	1		10/10/18 10:01	87-61-6	
1,2,4-Trichlorobenzene	**<0.95**	ug/L	5.0	0.95	1		10/10/18 10:01	120-82-1	
1,1,1-Trichloroethane	**<0.24**	ug/L	1.0	0.24	1		10/10/18 10:01	71-55-6	
1,1,2-Trichloroethane	**<0.55**	ug/L	5.0	0.55	1		10/10/18 10:01	79-00-5	
Trichloroethene	**16.6**	ug/L	1.0	0.26	1		10/10/18 10:01	79-01-6	
Trichlorofluoromethane	**<0.21**	ug/L	1.0	0.21	1		10/10/18 10:01	75-69-4	
1,2,3-Trichloropropane	**<0.59**	ug/L	5.0	0.59	1		10/10/18 10:01	96-18-4	
1,2,4-Trimethylbenzene	**<0.84**	ug/L	2.8	0.84	1		10/10/18 10:01	95-63-6	
1,3,5-Trimethylbenzene	**<0.87**	ug/L	2.9	0.87	1		10/10/18 10:01	108-67-8	
Vinyl chloride	**17.1**	ug/L	1.0	0.17	1		10/10/18 10:01	75-01-4	
Xylene (Total)	**<1.5**	ug/L	3.0	1.5	1		10/10/18 10:01	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	92	%	70-130		1		10/10/18 10:01	460-00-4	
Dibromofluoromethane (S)	98	%	70-130		1		10/10/18 10:01	1868-53-7	
Toluene-d8 (S)	99	%	70-130		1		10/10/18 10:01	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: 60485212.3 KEP O&M ACTIVITIES
Pace Project No.: 40177227

Sample: SUMP 7/17R EFF **Lab ID: 40177227005** Collected: 10/05/18 11:30 Received: 10/06/18 10:10 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIDRO GCS	Analytical Method: WI MOD DRO Preparation Method: WI MOD DRO								
Diesel Range Organics	**1.5**	mg/L	0.049	0.015	1	10/10/18 10:50	10/15/18 09:48		DC
WIGRO GCV	Analytical Method: WI MOD GRO								
Gasoline Range Organics	**<0.036**	mg/L	0.12	0.036	1		10/10/18 11:28		
Surrogates									
a,a,a-Trifluorotoluene (S)	100	%	80-120		1		10/10/18 11:28	98-08-8	
8260 MSV	Analytical Method: EPA 8260								
Benzene	**<0.25**	ug/L	1.0	0.25	1		10/09/18 23:01	71-43-2	
Bromobenzene	**<0.24**	ug/L	1.0	0.24	1		10/09/18 23:01	108-86-1	
Bromochloromethane	**<0.36**	ug/L	5.0	0.36	1		10/09/18 23:01	74-97-5	
Bromodichloromethane	**<0.36**	ug/L	1.2	0.36	1		10/09/18 23:01	75-27-4	
Bromoform	**<4.0**	ug/L	13.2	4.0	1		10/09/18 23:01	75-25-2	
Bromomethane	**<0.97**	ug/L	5.0	0.97	1		10/09/18 23:01	74-83-9	
n-Butylbenzene	**<0.71**	ug/L	2.4	0.71	1		10/09/18 23:01	104-51-8	
sec-Butylbenzene	**<0.85**	ug/L	5.0	0.85	1		10/09/18 23:01	135-98-8	
tert-Butylbenzene	**<0.30**	ug/L	1.0	0.30	1		10/09/18 23:01	98-06-6	
Carbon tetrachloride	**<0.17**	ug/L	1.0	0.17	1		10/09/18 23:01	56-23-5	
Chlorobenzene	**<0.71**	ug/L	2.4	0.71	1		10/09/18 23:01	108-90-7	
Chloroethane	**<1.3**	ug/L	5.0	1.3	1		10/09/18 23:01	75-00-3	
Chloroform	**<1.3**	ug/L	5.0	1.3	1		10/09/18 23:01	67-66-3	
Chloromethane	**<2.2**	ug/L	7.3	2.2	1		10/09/18 23:01	74-87-3	
2-Chlorotoluene	**<0.93**	ug/L	5.0	0.93	1		10/09/18 23:01	95-49-8	
4-Chlorotoluene	**<0.76**	ug/L	2.5	0.76	1		10/09/18 23:01	106-43-4	
1,2-Dibromo-3-chloropropane	**<1.8**	ug/L	5.9	1.8	1		10/09/18 23:01	96-12-8	
Dibromochloromethane	**<2.6**	ug/L	8.7	2.6	1		10/09/18 23:01	124-48-1	
1,2-Dibromoethane (EDB)	**<0.83**	ug/L	2.8	0.83	1		10/09/18 23:01	106-93-4	
Dibromomethane	**<0.94**	ug/L	3.1	0.94	1		10/09/18 23:01	74-95-3	
1,2-Dichlorobenzene	**<0.71**	ug/L	2.4	0.71	1		10/09/18 23:01	95-50-1	
1,3-Dichlorobenzene	**<0.63**	ug/L	2.1	0.63	1		10/09/18 23:01	541-73-1	
1,4-Dichlorobenzene	**<0.94**	ug/L	3.1	0.94	1		10/09/18 23:01	106-46-7	
Dichlorodifluoromethane	**<0.50**	ug/L	5.0	0.50	1		10/09/18 23:01	75-71-8	
1,1-Dichloroethane	**<0.27**	ug/L	1.0	0.27	1		10/09/18 23:01	75-34-3	
1,2-Dichloroethane	**<0.28**	ug/L	1.0	0.28	1		10/09/18 23:01	107-06-2	
1,1-Dichloroethene	**<0.24**	ug/L	1.0	0.24	1		10/09/18 23:01	75-35-4	
cis-1,2-Dichloroethene	**1.4**	ug/L	1.0	0.27	1		10/09/18 23:01	156-59-2	
trans-1,2-Dichloroethene	**<1.1**	ug/L	3.6	1.1	1		10/09/18 23:01	156-60-5	
1,2-Dichloropropane	**<0.28**	ug/L	1.0	0.28	1		10/09/18 23:01	78-87-5	
1,3-Dichloropropane	**<0.83**	ug/L	2.8	0.83	1		10/09/18 23:01	142-28-9	
2,2-Dichloropropane	**<2.3**	ug/L	7.6	2.3	1		10/09/18 23:01	594-20-7	
1,1-Dichloropropene	**<0.54**	ug/L	1.8	0.54	1		10/09/18 23:01	563-58-6	
cis-1,3-Dichloropropene	**<3.6**	ug/L	12.1	3.6	1		10/09/18 23:01	10061-01-5	
trans-1,3-Dichloropropene	**<4.4**	ug/L	14.6	4.4	1		10/09/18 23:01	10061-02-6	
Diisopropyl ether	**<1.9**	ug/L	6.3	1.9	1		10/09/18 23:01	108-20-3	
Ethylbenzene	**<0.22**	ug/L	1.0	0.22	1		10/09/18 23:01	100-41-4	
Hexachloro-1,3-butadiene	**<1.2**	ug/L	5.0	1.2	1		10/09/18 23:01	87-68-3	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: 60485212.3 KEP O&M ACTIVITIES
Pace Project No.: 40177227

Sample: SUMP 7/17R EFF **Lab ID: 40177227005** Collected: 10/05/18 11:30 Received: 10/06/18 10:10 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
Isopropylbenzene (Cumene)	**<0.39**	ug/L	5.0	0.39	1		10/09/18 23:01	98-82-8	
p-Isopropyltoluene	**<0.80**	ug/L	2.7	0.80	1		10/09/18 23:01	99-87-6	
Methylene Chloride	**<0.58**	ug/L	5.0	0.58	1		10/09/18 23:01	75-09-2	
Methyl-tert-butyl ether	**<1.2**	ug/L	4.2	1.2	1		10/09/18 23:01	1634-04-4	
Naphthalene	**<1.2**	ug/L	5.0	1.2	1		10/09/18 23:01	91-20-3	
n-Propylbenzene	**<0.81**	ug/L	5.0	0.81	1		10/09/18 23:01	103-65-1	
Styrene	**<0.47**	ug/L	1.6	0.47	1		10/09/18 23:01	100-42-5	
1,1,1,2-Tetrachloroethane	**<0.27**	ug/L	1.0	0.27	1		10/09/18 23:01	630-20-6	
1,1,2,2-Tetrachloroethane	**<0.28**	ug/L	1.0	0.28	1		10/09/18 23:01	79-34-5	
Tetrachloroethene	**<0.33**	ug/L	1.1	0.33	1		10/09/18 23:01	127-18-4	
Toluene	**<0.17**	ug/L	5.0	0.17	1		10/09/18 23:01	108-88-3	
1,2,3-Trichlorobenzene	**<0.63**	ug/L	5.0	0.63	1		10/09/18 23:01	87-61-6	
1,2,4-Trichlorobenzene	**<0.95**	ug/L	5.0	0.95	1		10/09/18 23:01	120-82-1	
1,1,1-Trichloroethane	**<0.24**	ug/L	1.0	0.24	1		10/09/18 23:01	71-55-6	
1,1,2-Trichloroethane	**<0.55**	ug/L	5.0	0.55	1		10/09/18 23:01	79-00-5	
Trichloroethene	**<0.26**	ug/L	1.0	0.26	1		10/09/18 23:01	79-01-6	
Trichlorofluoromethane	**<0.21**	ug/L	1.0	0.21	1		10/09/18 23:01	75-69-4	
1,2,3-Trichloropropane	**<0.59**	ug/L	5.0	0.59	1		10/09/18 23:01	96-18-4	
1,2,4-Trimethylbenzene	**<0.84**	ug/L	2.8	0.84	1		10/09/18 23:01	95-63-6	
1,3,5-Trimethylbenzene	**<0.87**	ug/L	2.9	0.87	1		10/09/18 23:01	108-67-8	
Vinyl chloride	**0.20J**	ug/L	1.0	0.17	1		10/09/18 23:01	75-01-4	
Xylene (Total)	**<1.5**	ug/L	3.0	1.5	1		10/09/18 23:01	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	94	%	70-130		1		10/09/18 23:01	460-00-4	
Dibromofluoromethane (S)	106	%	70-130		1		10/09/18 23:01	1868-53-7	
Toluene-d8 (S)	92	%	70-130		1		10/09/18 23:01	2037-26-5	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: 60485212.3 KEP O&M ACTIVITIES
Pace Project No.: 40177227

Sample: TRIP BLANK **Lab ID: 40177227006** Collected: 10/05/18 08:30 Received: 10/06/18 10:10 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
Benzene	**<0.25**	ug/L	1.0	0.25	1		10/09/18 18:31	71-43-2	
Bromobenzene	**<0.24**	ug/L	1.0	0.24	1		10/09/18 18:31	108-86-1	
Bromochloromethane	**<0.36**	ug/L	5.0	0.36	1		10/09/18 18:31	74-97-5	
Bromodichloromethane	**<0.36**	ug/L	1.2	0.36	1		10/09/18 18:31	75-27-4	
Bromoform	**<4.0**	ug/L	13.2	4.0	1		10/09/18 18:31	75-25-2	
Bromomethane	**<0.97**	ug/L	5.0	0.97	1		10/09/18 18:31	74-83-9	
n-Butylbenzene	**<0.71**	ug/L	2.4	0.71	1		10/09/18 18:31	104-51-8	
sec-Butylbenzene	**<0.85**	ug/L	5.0	0.85	1		10/09/18 18:31	135-98-8	
tert-Butylbenzene	**<0.30**	ug/L	1.0	0.30	1		10/09/18 18:31	98-06-6	
Carbon tetrachloride	**<0.17**	ug/L	1.0	0.17	1		10/09/18 18:31	56-23-5	
Chlorobenzene	**<0.71**	ug/L	2.4	0.71	1		10/09/18 18:31	108-90-7	
Chloroethane	**<1.3**	ug/L	5.0	1.3	1		10/09/18 18:31	75-00-3	
Chloroform	**<1.3**	ug/L	5.0	1.3	1		10/09/18 18:31	67-66-3	
Chloromethane	**<2.2**	ug/L	7.3	2.2	1		10/09/18 18:31	74-87-3	
2-Chlorotoluene	**<0.93**	ug/L	5.0	0.93	1		10/09/18 18:31	95-49-8	
4-Chlorotoluene	**<0.76**	ug/L	2.5	0.76	1		10/09/18 18:31	106-43-4	
1,2-Dibromo-3-chloropropane	**<1.8**	ug/L	5.9	1.8	1		10/09/18 18:31	96-12-8	
Dibromochloromethane	**<2.6**	ug/L	8.7	2.6	1		10/09/18 18:31	124-48-1	
1,2-Dibromoethane (EDB)	**<0.83**	ug/L	2.8	0.83	1		10/09/18 18:31	106-93-4	
Dibromomethane	**<0.94**	ug/L	3.1	0.94	1		10/09/18 18:31	74-95-3	
1,2-Dichlorobenzene	**<0.71**	ug/L	2.4	0.71	1		10/09/18 18:31	95-50-1	
1,3-Dichlorobenzene	**<0.63**	ug/L	2.1	0.63	1		10/09/18 18:31	541-73-1	
1,4-Dichlorobenzene	**<0.94**	ug/L	3.1	0.94	1		10/09/18 18:31	106-46-7	
Dichlorodifluoromethane	**<0.50**	ug/L	5.0	0.50	1		10/09/18 18:31	75-71-8	
1,1-Dichloroethane	**<0.27**	ug/L	1.0	0.27	1		10/09/18 18:31	75-34-3	
1,2-Dichloroethane	**<0.28**	ug/L	1.0	0.28	1		10/09/18 18:31	107-06-2	
1,1-Dichloroethene	**<0.24**	ug/L	1.0	0.24	1		10/09/18 18:31	75-35-4	
cis-1,2-Dichloroethene	**<0.27**	ug/L	1.0	0.27	1		10/09/18 18:31	156-59-2	
trans-1,2-Dichloroethene	**<1.1**	ug/L	3.6	1.1	1		10/09/18 18:31	156-60-5	
1,2-Dichloropropane	**<0.28**	ug/L	1.0	0.28	1		10/09/18 18:31	78-87-5	
1,3-Dichloropropane	**<0.83**	ug/L	2.8	0.83	1		10/09/18 18:31	142-28-9	
2,2-Dichloropropane	**<2.3**	ug/L	7.6	2.3	1		10/09/18 18:31	594-20-7	
1,1-Dichloropropene	**<0.54**	ug/L	1.8	0.54	1		10/09/18 18:31	563-58-6	
cis-1,3-Dichloropropene	**<3.6**	ug/L	12.1	3.6	1		10/09/18 18:31	10061-01-5	
trans-1,3-Dichloropropene	**<4.4**	ug/L	14.6	4.4	1		10/09/18 18:31	10061-02-6	
Diisopropyl ether	**<1.9**	ug/L	6.3	1.9	1		10/09/18 18:31	108-20-3	
Ethylbenzene	**<0.22**	ug/L	1.0	0.22	1		10/09/18 18:31	100-41-4	
Hexachloro-1,3-butadiene	**<1.2**	ug/L	5.0	1.2	1		10/09/18 18:31	87-68-3	
Isopropylbenzene (Cumene)	**<0.39**	ug/L	5.0	0.39	1		10/09/18 18:31	98-82-8	
p-Isopropyltoluene	**<0.80**	ug/L	2.7	0.80	1		10/09/18 18:31	99-87-6	
Methylene Chloride	**<0.58**	ug/L	5.0	0.58	1		10/09/18 18:31	75-09-2	
Methyl-tert-butyl ether	**<1.2**	ug/L	4.2	1.2	1		10/09/18 18:31	1634-04-4	
Naphthalene	**<1.2**	ug/L	5.0	1.2	1		10/09/18 18:31	91-20-3	
n-Propylbenzene	**<0.81**	ug/L	5.0	0.81	1		10/09/18 18:31	103-65-1	
Styrene	**<0.47**	ug/L	1.6	0.47	1		10/09/18 18:31	100-42-5	
1,1,1,2-Tetrachloroethane	**<0.27**	ug/L	1.0	0.27	1		10/09/18 18:31	630-20-6	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: 60485212.3 KEP O&M ACTIVITIES
Pace Project No.: 40177227

Sample: TRIP BLANK **Lab ID: 40177227006** Collected: 10/05/18 08:30 Received: 10/06/18 10:10 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
1,1,2,2-Tetrachloroethane	**<0.28**	ug/L	1.0	0.28	1		10/09/18 18:31	79-34-5	
Tetrachloroethene	**<0.33**	ug/L	1.1	0.33	1		10/09/18 18:31	127-18-4	
Toluene	**<0.17**	ug/L	5.0	0.17	1		10/09/18 18:31	108-88-3	
1,2,3-Trichlorobenzene	**<0.63**	ug/L	5.0	0.63	1		10/09/18 18:31	87-61-6	
1,2,4-Trichlorobenzene	**<0.95**	ug/L	5.0	0.95	1		10/09/18 18:31	120-82-1	
1,1,1-Trichloroethane	**<0.24**	ug/L	1.0	0.24	1		10/09/18 18:31	71-55-6	
1,1,2-Trichloroethane	**<0.55**	ug/L	5.0	0.55	1		10/09/18 18:31	79-00-5	
Trichloroethene	**<0.26**	ug/L	1.0	0.26	1		10/09/18 18:31	79-01-6	
Trichlorofluoromethane	**<0.21**	ug/L	1.0	0.21	1		10/09/18 18:31	75-69-4	
1,2,3-Trichloropropane	**<0.59**	ug/L	5.0	0.59	1		10/09/18 18:31	96-18-4	
1,2,4-Trimethylbenzene	**<0.84**	ug/L	2.8	0.84	1		10/09/18 18:31	95-63-6	
1,3,5-Trimethylbenzene	**<0.87**	ug/L	2.9	0.87	1		10/09/18 18:31	108-67-8	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		10/09/18 18:31	75-01-4	
Xylene (Total)	**<1.5**	ug/L	3.0	1.5	1		10/09/18 18:31	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	96	%	70-130		1		10/09/18 18:31	460-00-4	
Dibromofluoromethane (S)	106	%	70-130		1		10/09/18 18:31	1868-53-7	
Toluene-d8 (S)	92	%	70-130		1		10/09/18 18:31	2037-26-5	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: 60485212.3 KEP O&M ACTIVITIES
Pace Project No.: 40177227

Sample: SUMP 18 IN **Lab ID: 40177227007** Collected: 10/05/18 10:05 Received: 10/06/18 10:10 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIDRO GCS	Analytical Method: WI MOD DRO Preparation Method: WI MOD DRO								
Diesel Range Organics	**0.41**	mg/L	0.052	0.015	1	10/10/18 10:50	10/15/18 09:58		DC
WIGRO GCV	Analytical Method: WI MOD GRO								
Gasoline Range Organics	**1.5**	mg/L	0.24	0.073	2		10/10/18 16:52		G-
8260 MSV	Analytical Method: EPA 8260								
Benzene	**134**	ug/L	10.0	2.5	10		10/10/18 10:24	71-43-2	
Bromobenzene	**<2.4**	ug/L	10.0	2.4	10		10/10/18 10:24	108-86-1	
Bromochloromethane	**<3.6**	ug/L	50.0	3.6	10		10/10/18 10:24	74-97-5	
Bromodichloromethane	**<3.6**	ug/L	12.1	3.6	10		10/10/18 10:24	75-27-4	
Bromoform	**<39.7**	ug/L	132	39.7	10		10/10/18 10:24	75-25-2	
Bromomethane	**<9.7**	ug/L	50.0	9.7	10		10/10/18 10:24	74-83-9	
n-Butylbenzene	**<7.1**	ug/L	23.6	7.1	10		10/10/18 10:24	104-51-8	
sec-Butylbenzene	**<8.5**	ug/L	50.0	8.5	10		10/10/18 10:24	135-98-8	
tert-Butylbenzene	**<3.0**	ug/L	10.1	3.0	10		10/10/18 10:24	98-06-6	
Carbon tetrachloride	**<1.7**	ug/L	10.0	1.7	10		10/10/18 10:24	56-23-5	
Chlorobenzene	**<7.1**	ug/L	23.7	7.1	10		10/10/18 10:24	108-90-7	
Chloroethane	**19.7J**	ug/L	50.0	13.4	10		10/10/18 10:24	75-00-3	
Chloroform	**<12.7**	ug/L	50.0	12.7	10		10/10/18 10:24	67-66-3	
Chloromethane	**<21.9**	ug/L	73.0	21.9	10		10/10/18 10:24	74-87-3	
2-Chlorotoluene	**<9.3**	ug/L	50.0	9.3	10		10/10/18 10:24	95-49-8	
4-Chlorotoluene	**<7.6**	ug/L	25.2	7.6	10		10/10/18 10:24	106-43-4	
1,2-Dibromo-3-chloropropane	**<17.6**	ug/L	58.8	17.6	10		10/10/18 10:24	96-12-8	
Dibromochloromethane	**<26.0**	ug/L	86.7	26.0	10		10/10/18 10:24	124-48-1	
1,2-Dibromoethane (EDB)	**<8.3**	ug/L	27.6	8.3	10		10/10/18 10:24	106-93-4	
Dibromomethane	**<9.4**	ug/L	31.2	9.4	10		10/10/18 10:24	74-95-3	
1,2-Dichlorobenzene	**<7.1**	ug/L	23.5	7.1	10		10/10/18 10:24	95-50-1	
1,3-Dichlorobenzene	**<6.3**	ug/L	20.9	6.3	10		10/10/18 10:24	541-73-1	
1,4-Dichlorobenzene	**<9.4**	ug/L	31.5	9.4	10		10/10/18 10:24	106-46-7	
Dichlorodifluoromethane	**<5.0**	ug/L	50.0	5.0	10		10/10/18 10:24	75-71-8	
1,1-Dichloroethane	**696**	ug/L	10.0	2.7	10		10/10/18 10:24	75-34-3	
1,2-Dichloroethane	**<2.8**	ug/L	10.0	2.8	10		10/10/18 10:24	107-06-2	
1,1-Dichloroethene	**3.2J**	ug/L	10.0	2.4	10		10/10/18 10:24	75-35-4	
cis-1,2-Dichloroethene	**529**	ug/L	10.0	2.7	10		10/10/18 10:24	156-59-2	
trans-1,2-Dichloroethene	**14.2J**	ug/L	36.4	10.9	10		10/10/18 10:24	156-60-5	
1,2-Dichloropropane	**<2.8**	ug/L	10.0	2.8	10		10/10/18 10:24	78-87-5	
1,3-Dichloropropane	**<8.3**	ug/L	27.5	8.3	10		10/10/18 10:24	142-28-9	
2,2-Dichloropropane	**<22.7**	ug/L	75.5	22.7	10		10/10/18 10:24	594-20-7	
1,1-Dichloropropene	**<5.4**	ug/L	18.0	5.4	10		10/10/18 10:24	563-58-6	
cis-1,3-Dichloropropene	**<36.3**	ug/L	121	36.3	10		10/10/18 10:24	10061-01-5	
trans-1,3-Dichloropropene	**<43.7**	ug/L	146	43.7	10		10/10/18 10:24	10061-02-6	
Diisopropyl ether	**<18.9**	ug/L	62.9	18.9	10		10/10/18 10:24	108-20-3	
Ethylbenzene	**34.4**	ug/L	10.0	2.2	10		10/10/18 10:24	100-41-4	
Hexachloro-1,3-butadiene	**<11.8**	ug/L	50.0	11.8	10		10/10/18 10:24	87-68-3	
Isopropylbenzene (Cumene)	**<3.9**	ug/L	50.0	3.9	10		10/10/18 10:24	98-82-8	
p-Isopropyltoluene	**<8.0**	ug/L	26.7	8.0	10		10/10/18 10:24	99-87-6	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: 60485212.3 KEP O&M ACTIVITIES
Pace Project No.: 40177227

Sample: SUMP 18 IN **Lab ID: 40177227007** Collected: 10/05/18 10:05 Received: 10/06/18 10:10 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
Methylene Chloride	**8.7J**	ug/L	50.0	5.8	10		10/10/18 10:24	75-09-2	
Methyl-tert-butyl ether	**<12.5**	ug/L	41.5	12.5	10		10/10/18 10:24	1634-04-4	
Naphthalene	**<11.8**	ug/L	50.0	11.8	10		10/10/18 10:24	91-20-3	
n-Propylbenzene	**<8.1**	ug/L	50.0	8.1	10		10/10/18 10:24	103-65-1	
Styrene	**<4.7**	ug/L	15.5	4.7	10		10/10/18 10:24	100-42-5	
1,1,1,2-Tetrachloroethane	**<2.7**	ug/L	10.0	2.7	10		10/10/18 10:24	630-20-6	
1,1,2,2-Tetrachloroethane	**<2.8**	ug/L	10.0	2.8	10		10/10/18 10:24	79-34-5	
Tetrachloroethene	**<3.3**	ug/L	10.9	3.3	10		10/10/18 10:24	127-18-4	
Toluene	**191**	ug/L	50.0	1.7	10		10/10/18 10:24	108-88-3	
1,2,3-Trichlorobenzene	**<6.3**	ug/L	50.0	6.3	10		10/10/18 10:24	87-61-6	
1,2,4-Trichlorobenzene	**<9.5**	ug/L	50.0	9.5	10		10/10/18 10:24	120-82-1	
1,1,1-Trichloroethane	**169**	ug/L	10.0	2.4	10		10/10/18 10:24	71-55-6	
1,1,2-Trichloroethane	**<5.5**	ug/L	50.0	5.5	10		10/10/18 10:24	79-00-5	
Trichloroethene	**<2.6**	ug/L	10.0	2.6	10		10/10/18 10:24	79-01-6	
Trichlorofluoromethane	**<2.1**	ug/L	10.0	2.1	10		10/10/18 10:24	75-69-4	
1,2,3-Trichloropropane	**<5.9**	ug/L	50.0	5.9	10		10/10/18 10:24	96-18-4	
1,2,4-Trimethylbenzene	**29.6**	ug/L	28.0	8.4	10		10/10/18 10:24	95-63-6	
1,3,5-Trimethylbenzene	**<8.7**	ug/L	29.1	8.7	10		10/10/18 10:24	108-67-8	
Vinyl chloride	**163**	ug/L	10.0	1.7	10		10/10/18 10:24	75-01-4	
Xylene (Total)	**231**	ug/L	30.0	15.0	10		10/10/18 10:24	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	94	%	70-130		10		10/10/18 10:24	460-00-4	
Dibromofluoromethane (S)	99	%	70-130		10		10/10/18 10:24	1868-53-7	
Toluene-d8 (S)	97	%	70-130		10		10/10/18 10:24	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: 60485212.3 KEP O&M ACTIVITIES
Pace Project No.: 40177227

Sample: SUMP 18 EFF **Lab ID: 40177227008** Collected: 10/05/18 10:15 Received: 10/06/18 10:10 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIDRO GCS	Analytical Method: WI MOD DRO Preparation Method: WI MOD DRO								
Diesel Range Organics	**0.26**	mg/L	0.049	0.015	1	10/10/18 10:50	10/15/18 10:07		DC
WIGRO GCV	Analytical Method: WI MOD GRO								
Gasoline Range Organics	**0.037J**	mg/L	0.12	0.036	1		10/10/18 18:08		
8260 MSV	Analytical Method: EPA 8260								
Benzene	**2.8**	ug/L	1.0	0.25	1		10/09/18 23:23	71-43-2	
Bromobenzene	**<0.24**	ug/L	1.0	0.24	1		10/09/18 23:23	108-86-1	
Bromochloromethane	**<0.36**	ug/L	5.0	0.36	1		10/09/18 23:23	74-97-5	
Bromodichloromethane	**<0.36**	ug/L	1.2	0.36	1		10/09/18 23:23	75-27-4	
Bromoform	**<4.0**	ug/L	13.2	4.0	1		10/09/18 23:23	75-25-2	
Bromomethane	**<0.97**	ug/L	5.0	0.97	1		10/09/18 23:23	74-83-9	
n-Butylbenzene	**<0.71**	ug/L	2.4	0.71	1		10/09/18 23:23	104-51-8	
sec-Butylbenzene	**<0.85**	ug/L	5.0	0.85	1		10/09/18 23:23	135-98-8	
tert-Butylbenzene	**<0.30**	ug/L	1.0	0.30	1		10/09/18 23:23	98-06-6	
Carbon tetrachloride	**<0.17**	ug/L	1.0	0.17	1		10/09/18 23:23	56-23-5	
Chlorobenzene	**<0.71**	ug/L	2.4	0.71	1		10/09/18 23:23	108-90-7	
Chloroethane	**<1.3**	ug/L	5.0	1.3	1		10/09/18 23:23	75-00-3	
Chloroform	**<1.3**	ug/L	5.0	1.3	1		10/09/18 23:23	67-66-3	
Chloromethane	**<2.2**	ug/L	7.3	2.2	1		10/09/18 23:23	74-87-3	
2-Chlorotoluene	**<0.93**	ug/L	5.0	0.93	1		10/09/18 23:23	95-49-8	
4-Chlorotoluene	**<0.76**	ug/L	2.5	0.76	1		10/09/18 23:23	106-43-4	
1,2-Dibromo-3-chloropropane	**<1.8**	ug/L	5.9	1.8	1		10/09/18 23:23	96-12-8	
Dibromochloromethane	**<2.6**	ug/L	8.7	2.6	1		10/09/18 23:23	124-48-1	
1,2-Dibromoethane (EDB)	**<0.83**	ug/L	2.8	0.83	1		10/09/18 23:23	106-93-4	
Dibromomethane	**<0.94**	ug/L	3.1	0.94	1		10/09/18 23:23	74-95-3	
1,2-Dichlorobenzene	**<0.71**	ug/L	2.4	0.71	1		10/09/18 23:23	95-50-1	
1,3-Dichlorobenzene	**<0.63**	ug/L	2.1	0.63	1		10/09/18 23:23	541-73-1	
1,4-Dichlorobenzene	**<0.94**	ug/L	3.1	0.94	1		10/09/18 23:23	106-46-7	
Dichlorodifluoromethane	**<0.50**	ug/L	5.0	0.50	1		10/09/18 23:23	75-71-8	
1,1-Dichloroethane	**21.2**	ug/L	1.0	0.27	1		10/09/18 23:23	75-34-3	
1,2-Dichloroethane	**<0.28**	ug/L	1.0	0.28	1		10/09/18 23:23	107-06-2	
1,1-Dichloroethene	**<0.24**	ug/L	1.0	0.24	1		10/09/18 23:23	75-35-4	
cis-1,2-Dichloroethene	**20.2**	ug/L	1.0	0.27	1		10/09/18 23:23	156-59-2	
trans-1,2-Dichloroethene	**<1.1**	ug/L	3.6	1.1	1		10/09/18 23:23	156-60-5	
1,2-Dichloropropane	**<0.28**	ug/L	1.0	0.28	1		10/09/18 23:23	78-87-5	
1,3-Dichloropropane	**<0.83**	ug/L	2.8	0.83	1		10/09/18 23:23	142-28-9	
2,2-Dichloropropane	**<2.3**	ug/L	7.6	2.3	1		10/09/18 23:23	594-20-7	
1,1-Dichloropropene	**<0.54**	ug/L	1.8	0.54	1		10/09/18 23:23	563-58-6	
cis-1,3-Dichloropropene	**<3.6**	ug/L	12.1	3.6	1		10/09/18 23:23	10061-01-5	
trans-1,3-Dichloropropene	**<4.4**	ug/L	14.6	4.4	1		10/09/18 23:23	10061-02-6	
Diisopropyl ether	**<1.9**	ug/L	6.3	1.9	1		10/09/18 23:23	108-20-3	
Ethylbenzene	**0.39J**	ug/L	1.0	0.22	1		10/09/18 23:23	100-41-4	
Hexachloro-1,3-butadiene	**<1.2**	ug/L	5.0	1.2	1		10/09/18 23:23	87-68-3	
Isopropylbenzene (Cumene)	**<0.39**	ug/L	5.0	0.39	1		10/09/18 23:23	98-82-8	
p-Isopropyltoluene	**<0.80**	ug/L	2.7	0.80	1		10/09/18 23:23	99-87-6	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: 60485212.3 KEP O&M ACTIVITIES
Pace Project No.: 40177227

Sample: SUMP 18 EFF **Lab ID: 40177227008** Collected: 10/05/18 10:15 Received: 10/06/18 10:10 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
Methylene Chloride	**<0.58**	ug/L	5.0	0.58	1		10/09/18 23:23	75-09-2	
Methyl-tert-butyl ether	**<1.2**	ug/L	4.2	1.2	1		10/09/18 23:23	1634-04-4	
Naphthalene	**2.2J**	ug/L	5.0	1.2	1		10/09/18 23:23	91-20-3	
n-Propylbenzene	**<0.81**	ug/L	5.0	0.81	1		10/09/18 23:23	103-65-1	
Styrene	**<0.47**	ug/L	1.6	0.47	1		10/09/18 23:23	100-42-5	
1,1,1,2-Tetrachloroethane	**<0.27**	ug/L	1.0	0.27	1		10/09/18 23:23	630-20-6	
1,1,2,2-Tetrachloroethane	**<0.28**	ug/L	1.0	0.28	1		10/09/18 23:23	79-34-5	
Tetrachloroethene	**<0.33**	ug/L	1.1	0.33	1		10/09/18 23:23	127-18-4	
Toluene	**2.9J**	ug/L	5.0	0.17	1		10/09/18 23:23	108-88-3	
1,2,3-Trichlorobenzene	**<0.63**	ug/L	5.0	0.63	1		10/09/18 23:23	87-61-6	
1,2,4-Trichlorobenzene	**<0.95**	ug/L	5.0	0.95	1		10/09/18 23:23	120-82-1	
1,1,1-Trichloroethane	**2.9**	ug/L	1.0	0.24	1		10/09/18 23:23	71-55-6	
1,1,2-Trichloroethane	**<0.55**	ug/L	5.0	0.55	1		10/09/18 23:23	79-00-5	
Trichloroethene	**<0.26**	ug/L	1.0	0.26	1		10/09/18 23:23	79-01-6	
Trichlorofluoromethane	**<0.21**	ug/L	1.0	0.21	1		10/09/18 23:23	75-69-4	
1,2,3-Trichloropropane	**<0.59**	ug/L	5.0	0.59	1		10/09/18 23:23	96-18-4	
1,2,4-Trimethylbenzene	**<0.84**	ug/L	2.8	0.84	1		10/09/18 23:23	95-63-6	
1,3,5-Trimethylbenzene	**<0.87**	ug/L	2.9	0.87	1		10/09/18 23:23	108-67-8	
Vinyl chloride	**1.4**	ug/L	1.0	0.17	1		10/09/18 23:23	75-01-4	
Xylene (Total)	**4.5**	ug/L	3.0	1.5	1		10/09/18 23:23	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	96	%	70-130		1		10/09/18 23:23	460-00-4	
Dibromofluoromethane (S)	107	%	70-130		1		10/09/18 23:23	1868-53-7	
Toluene-d8 (S)	91	%	70-130		1		10/09/18 23:23	2037-26-5	

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: 60485212.3 KEP O&M ACTIVITIES
Pace Project No.: 40177227

QC Batch: 302392 Analysis Method: WI MOD GRO
QC Batch Method: WI MOD GRO Analysis Description: WIGRO GCV Water
Associated Lab Samples: 40177227001, 40177227002

METHOD BLANK: 1766760 Matrix: Water
Associated Lab Samples: 40177227001, 40177227002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Gasoline Range Organics	mg/L	<0.036	0.12	10/08/18 08:01	
a,a,a-Trifluorotoluene (S)	%	99	80-120	10/08/18 08:01	

LABORATORY CONTROL SAMPLE & LCSD: 1766761 1766762

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Gasoline Range Organics	mg/L	.2	0.20	0.20	102	101	80-120	1	20	
a,a,a-Trifluorotoluene (S)	%				100	100	80-120			

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1766973 1766974

Parameter	Units	40177035001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
a,a,a-Trifluorotoluene (S)	%						97	96	80-120			

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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QUALITY CONTROL DATA

Project: 60485212.3 KEP O&M ACTIVITIES
Pace Project No.: 40177227

QC Batch: 302692 Analysis Method: WI MOD GRO
QC Batch Method: WI MOD GRO Analysis Description: WIGRO GCV Water
Associated Lab Samples: 40177227003, 40177227004, 40177227005, 40177227007, 40177227008

METHOD BLANK: 1768057 Matrix: Water
Associated Lab Samples: 40177227003, 40177227004, 40177227005, 40177227007, 40177227008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Gasoline Range Organics	mg/L	<0.036	0.12	10/10/18 09:45	
a,a,a-Trifluorotoluene (S)	%	100	80-120	10/10/18 09:45	

LABORATORY CONTROL SAMPLE & LCSD: 1768058 1768059

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Gasoline Range Organics	mg/L	.2	0.20	0.19	98	94	80-120	4	20	
a,a,a-Trifluorotoluene (S)	%				101	103	80-120			

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1768386 1768387

Parameter	Units	40177227005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
a,a,a-Trifluorotoluene (S)	%						102	101	80-120			

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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(920)469-2436

QUALITY CONTROL DATA

Project: 60485212.3 KEP O&M ACTIVITIES
Pace Project No.: 40177227

QC Batch: 302413 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV
Associated Lab Samples: 40177227001, 40177227002, 40177227003, 40177227004, 40177227005, 40177227006, 40177227007, 40177227008

METHOD BLANK: 1766834 Matrix: Water
Associated Lab Samples: 40177227001, 40177227002, 40177227003, 40177227004, 40177227005, 40177227006, 40177227007, 40177227008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	<0.27	1.0	10/09/18 16:17	
1,1,1-Trichloroethane	ug/L	<0.24	1.0	10/09/18 16:17	
1,1,2,2-Tetrachloroethane	ug/L	<0.28	1.0	10/09/18 16:17	
1,1,2-Trichloroethane	ug/L	<0.55	5.0	10/09/18 16:17	
1,1-Dichloroethane	ug/L	<0.27	1.0	10/09/18 16:17	
1,1-Dichloroethene	ug/L	<0.24	1.0	10/09/18 16:17	
1,1-Dichloropropene	ug/L	<0.54	1.8	10/09/18 16:17	
1,2,3-Trichlorobenzene	ug/L	<0.63	5.0	10/09/18 16:17	
1,2,3-Trichloropropane	ug/L	<0.59	5.0	10/09/18 16:17	
1,2,4-Trichlorobenzene	ug/L	<0.95	5.0	10/09/18 16:17	
1,2,4-Trimethylbenzene	ug/L	<0.84	2.8	10/09/18 16:17	
1,2-Dibromo-3-chloropropane	ug/L	<1.8	5.9	10/09/18 16:17	
1,2-Dibromoethane (EDB)	ug/L	<0.83	2.8	10/09/18 16:17	
1,2-Dichlorobenzene	ug/L	<0.71	2.4	10/09/18 16:17	
1,2-Dichloroethane	ug/L	<0.28	1.0	10/09/18 16:17	
1,2-Dichloropropane	ug/L	<0.28	1.0	10/09/18 16:17	
1,3,5-Trimethylbenzene	ug/L	<0.87	2.9	10/09/18 16:17	
1,3-Dichlorobenzene	ug/L	<0.63	2.1	10/09/18 16:17	
1,3-Dichloropropane	ug/L	<0.83	2.8	10/09/18 16:17	
1,4-Dichlorobenzene	ug/L	<0.94	3.1	10/09/18 16:17	
2,2-Dichloropropane	ug/L	<2.3	7.6	10/09/18 16:17	
2-Chlorotoluene	ug/L	<0.93	5.0	10/09/18 16:17	
4-Chlorotoluene	ug/L	<0.76	2.5	10/09/18 16:17	
Benzene	ug/L	<0.25	1.0	10/09/18 16:17	
Bromobenzene	ug/L	<0.24	1.0	10/09/18 16:17	
Bromochloromethane	ug/L	<0.36	5.0	10/09/18 16:17	
Bromodichloromethane	ug/L	<0.36	1.2	10/09/18 16:17	
Bromoform	ug/L	<4.0	13.2	10/09/18 16:17	
Bromomethane	ug/L	<0.97	5.0	10/09/18 16:17	
Carbon tetrachloride	ug/L	<0.17	1.0	10/09/18 16:17	
Chlorobenzene	ug/L	<0.71	2.4	10/09/18 16:17	
Chloroethane	ug/L	<1.3	5.0	10/09/18 16:17	
Chloroform	ug/L	<1.3	5.0	10/09/18 16:17	
Chloromethane	ug/L	<2.2	7.3	10/09/18 16:17	
cis-1,2-Dichloroethene	ug/L	<0.27	1.0	10/09/18 16:17	
cis-1,3-Dichloropropene	ug/L	<3.6	12.1	10/09/18 16:17	
Dibromochloromethane	ug/L	<2.6	8.7	10/09/18 16:17	
Dibromomethane	ug/L	<0.94	3.1	10/09/18 16:17	
Dichlorodifluoromethane	ug/L	<0.50	5.0	10/09/18 16:17	
Diisopropyl ether	ug/L	<1.9	6.3	10/09/18 16:17	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: 60485212.3 KEP O&M ACTIVITIES
Pace Project No.: 40177227

METHOD BLANK: 1766834 Matrix: Water

Associated Lab Samples: 40177227001, 40177227002, 40177227003, 40177227004, 40177227005, 40177227006, 40177227007, 40177227008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Ethylbenzene	ug/L	<0.22	1.0	10/09/18 16:17	
Hexachloro-1,3-butadiene	ug/L	<1.2	5.0	10/09/18 16:17	
Isopropylbenzene (Cumene)	ug/L	<0.39	5.0	10/09/18 16:17	
Methyl-tert-butyl ether	ug/L	<1.2	4.2	10/09/18 16:17	
Methylene Chloride	ug/L	<0.58	5.0	10/09/18 16:17	
n-Butylbenzene	ug/L	<0.71	2.4	10/09/18 16:17	
n-Propylbenzene	ug/L	<0.81	5.0	10/09/18 16:17	
Naphthalene	ug/L	<1.2	5.0	10/09/18 16:17	
p-Isopropyltoluene	ug/L	<0.80	2.7	10/09/18 16:17	
sec-Butylbenzene	ug/L	<0.85	5.0	10/09/18 16:17	
Styrene	ug/L	<0.47	1.6	10/09/18 16:17	
tert-Butylbenzene	ug/L	<0.30	1.0	10/09/18 16:17	
Tetrachloroethene	ug/L	<0.33	1.1	10/09/18 16:17	
Toluene	ug/L	<0.17	5.0	10/09/18 16:17	
trans-1,2-Dichloroethene	ug/L	<1.1	3.6	10/09/18 16:17	
trans-1,3-Dichloropropene	ug/L	<4.4	14.6	10/09/18 16:17	
Trichloroethene	ug/L	<0.26	1.0	10/09/18 16:17	
Trichlorofluoromethane	ug/L	<0.21	1.0	10/09/18 16:17	
Vinyl chloride	ug/L	<0.17	1.0	10/09/18 16:17	
Xylene (Total)	ug/L	<1.5	3.0	10/09/18 16:17	
4-Bromofluorobenzene (S)	%	95	70-130	10/09/18 16:17	
Dibromofluoromethane (S)	%	105	70-130	10/09/18 16:17	
Toluene-d8 (S)	%	94	70-130	10/09/18 16:17	

LABORATORY CONTROL SAMPLE: 1766835

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	50	59.6	119	70-133	
1,1,2,2-Tetrachloroethane	ug/L	50	49.8	100	67-130	
1,1,2-Trichloroethane	ug/L	50	50.1	100	70-130	
1,1-Dichloroethane	ug/L	50	56.5	113	70-134	
1,1-Dichloroethene	ug/L	50	54.3	109	75-132	
1,2,4-Trichlorobenzene	ug/L	50	49.1	98	68-130	
1,2-Dibromo-3-chloropropane	ug/L	50	46.2	92	60-126	
1,2-Dibromoethane (EDB)	ug/L	50	51.1	102	70-130	
1,2-Dichlorobenzene	ug/L	50	48.2	96	70-130	
1,2-Dichloroethane	ug/L	50	57.6	115	73-134	
1,2-Dichloropropane	ug/L	50	53.1	106	79-128	
1,3-Dichlorobenzene	ug/L	50	48.1	96	70-130	
1,4-Dichlorobenzene	ug/L	50	48.1	96	70-130	
Benzene	ug/L	50	55.9	112	69-137	
Bromodichloromethane	ug/L	50	55.0	110	70-130	
Bromoform	ug/L	50	53.2	106	64-133	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: 60485212.3 KEP O&M ACTIVITIES
Pace Project No.: 40177227

LABORATORY CONTROL SAMPLE: 1766835

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Bromomethane	ug/L	50	38.1	76	29-123	
Carbon tetrachloride	ug/L	50	59.4	119	73-142	
Chlorobenzene	ug/L	50	50.6	101	70-130	
Chloroethane	ug/L	50	49.1	98	59-133	
Chloroform	ug/L	50	53.4	107	80-129	
Chloromethane	ug/L	50	43.3	87	27-125	
cis-1,2-Dichloroethene	ug/L	50	55.6	111	70-134	
cis-1,3-Dichloropropene	ug/L	50	53.5	107	70-130	
Dibromochloromethane	ug/L	50	52.0	104	70-130	
Dichlorodifluoromethane	ug/L	50	42.4	85	12-127	
Ethylbenzene	ug/L	50	53.2	106	86-127	
Isopropylbenzene (Cumene)	ug/L	50	55.3	111	70-130	
Methyl-tert-butyl ether	ug/L	50	53.3	107	65-136	
Methylene Chloride	ug/L	50	50.6	101	72-133	
Styrene	ug/L	50	55.7	111	70-130	
Tetrachloroethene	ug/L	50	53.3	107	70-130	
Toluene	ug/L	50	51.1	102	84-124	
trans-1,2-Dichloroethene	ug/L	50	55.3	111	70-133	
trans-1,3-Dichloropropene	ug/L	50	46.4	93	67-130	
Trichloroethene	ug/L	50	56.0	112	70-130	
Trichlorofluoromethane	ug/L	50	58.9	118	69-147	
Vinyl chloride	ug/L	50	49.5	99	48-134	
Xylene (Total)	ug/L	150	162	108	70-130	
4-Bromofluorobenzene (S)	%			104	70-130	
Dibromofluoromethane (S)	%			105	70-130	
Toluene-d8 (S)	%			93	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1767056 1767057

Parameter	Units	40177171002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1-Trichloroethane	ug/L	<0.24	50	50	58.3	58.2	117	116	70-136	0	20	
1,1,2,2-Tetrachloroethane	ug/L	<0.28	50	50	48.6	48.8	97	98	67-133	0	20	
1,1,2-Trichloroethane	ug/L	<0.55	50	50	49.2	49.1	98	98	70-130	0	20	
1,1-Dichloroethane	ug/L	<0.27	50	50	55.3	56.7	111	113	70-139	3	20	
1,1-Dichloroethene	ug/L	<0.24	50	50	54.2	54.9	108	110	72-137	1	20	
1,2,4-Trichlorobenzene	ug/L	<0.95	50	50	47.7	48.1	95	96	68-130	1	20	
1,2-Dibromo-3-chloropropane	ug/L	<1.8	50	50	47.3	47.3	95	95	60-130	0	21	
1,2-Dibromoethane (EDB)	ug/L	<0.83	50	50	51.0	51.0	102	102	70-130	0	20	
1,2-Dichlorobenzene	ug/L	<0.71	50	50	47.8	48.3	96	97	70-130	1	20	
1,2-Dichloroethane	ug/L	<0.28	50	50	56.8	56.5	114	113	71-137	1	20	
1,2-Dichloropropane	ug/L	<0.28	50	50	52.8	52.7	106	105	78-130	0	20	
1,3-Dichlorobenzene	ug/L	<0.63	50	50	47.0	47.3	94	95	70-130	1	20	
1,4-Dichlorobenzene	ug/L	<0.94	50	50	47.0	47.6	94	95	70-130	1	20	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: 60485212.3 KEP O&M ACTIVITIES
Pace Project No.: 40177227

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1767056 1767057

Parameter	Units	40177171002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Benzene	ug/L	<0.25	50	50	55.1	55.0	110	110	66-143	0	20	
Bromodichloromethane	ug/L	<0.36	50	50	55.2	54.7	110	109	70-130	1	20	
Bromoform	ug/L	<4.0	50	50	53.2	53.5	106	107	64-134	1	20	
Bromomethane	ug/L	<0.97	50	50	42.9	46.4	86	93	29-136	8	25	
Carbon tetrachloride	ug/L	<0.17	50	50	59.0	59.5	118	119	73-142	1	20	
Chlorobenzene	ug/L	<0.71	50	50	50.0	50.9	100	102	70-130	2	20	
Chloroethane	ug/L	<1.3	50	50	50.1	49.4	100	99	58-138	1	20	
Chloroform	ug/L	<1.3	50	50	52.1	53.2	104	106	80-131	2	20	
Chloromethane	ug/L	<2.2	50	50	44.9	44.8	90	90	24-125	0	20	
cis-1,2-Dichloroethene	ug/L	<0.27	50	50	54.3	55.4	109	111	68-137	2	22	
cis-1,3-Dichloropropene	ug/L	<3.6	50	50	53.6	52.7	107	105	70-130	2	20	
Dibromochloromethane	ug/L	<2.6	50	50	51.4	51.4	103	103	70-131	0	20	
Dichlorodifluoromethane	ug/L	<0.50	50	50	42.8	42.4	86	85	10-127	1	20	
Ethylbenzene	ug/L	<0.22	50	50	52.9	52.9	106	106	81-136	0	20	
Isopropylbenzene (Cumene)	ug/L	<0.39	50	50	54.7	54.8	109	110	70-132	0	20	
Methyl-tert-butyl ether	ug/L	<1.2	50	50	52.7	52.6	105	105	58-142	0	23	
Methylene Chloride	ug/L	<0.58	50	50	51.0	51.0	102	102	69-137	0	20	
Styrene	ug/L	<0.47	50	50	54.4	55.2	109	110	70-130	1	20	
Tetrachloroethene	ug/L	<0.33	50	50	52.4	52.3	105	105	70-132	0	20	
Toluene	ug/L	<0.17	50	50	50.4	50.4	101	101	81-130	0	20	
trans-1,2-Dichloroethene	ug/L	<1.1	50	50	55.0	54.7	110	109	70-136	1	20	
trans-1,3-Dichloropropene	ug/L	<4.4	50	50	46.5	46.2	93	92	67-130	1	20	
Trichloroethene	ug/L	<0.26	50	50	55.5	55.3	111	111	70-131	0	20	
Trichlorofluoromethane	ug/L	<0.21	50	50	58.1	58.9	116	118	66-150	1	20	
Vinyl chloride	ug/L	<0.17	50	50	50.6	51.5	101	103	46-134	2	20	
Xylene (Total)	ug/L	<1.5	150	150	160	164	107	109	70-134	2	20	
4-Bromofluorobenzene (S)	%						105	106	70-130			
Dibromofluoromethane (S)	%						106	106	70-130			
Toluene-d8 (S)	%						93	94	70-130			

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: 60485212.3 KEP O&M ACTIVITIES
Pace Project No.: 40177227

QC Batch: 302702 Analysis Method: WI MOD DRO
QC Batch Method: WI MOD DRO Analysis Description: WIDRO GCS
Associated Lab Samples: 40177227001, 40177227002, 40177227003, 40177227004, 40177227005, 40177227007, 40177227008

METHOD BLANK: 1768091 Matrix: Water
Associated Lab Samples: 40177227001, 40177227002, 40177227003, 40177227004, 40177227005, 40177227007, 40177227008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Diesel Range Organics	mg/L	<0.015	0.052	10/15/18 09:03	

LABORATORY CONTROL SAMPLE & LCSD: 1768092 1768093

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Diesel Range Organics	mg/L	1	0.96	1.0	96	100	75-115	4	20	

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REPORT OF LABORATORY ANALYSIS

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

QUALIFIERS

Project: 60485212.3 KEP O&M ACTIVITIES
Pace Project No.: 40177227

DEFINITIONS

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

ND - Not Detected at or above LOD.

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

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

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

TNI - The NELAC Institute.

LABORATORIES

PASI-G	Pace Analytical Services - Green Bay

ANALYTE QUALIFIERS

DC	Chromatographic pattern inconsistent with typical Diesel Fuel.
G-	Early peaks present outside the GRO window.

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 60485212.3 KEP O&M ACTIVITIES
Pace Project No.: 40177227

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40177227001	**SUMP 6 IN**	WI MOD DRO	302702	WI MOD DRO	302824
40177227002	**SUMP 6 EFF**	WI MOD DRO	302702	WI MOD DRO	302824
40177227003	**SUMP 7 IN**	WI MOD DRO	302702	WI MOD DRO	302824
40177227004	**SUMP 17R IN**	WI MOD DRO	302702	WI MOD DRO	302824
40177227005	**SUMP 7/17R EFF**	WI MOD DRO	302702	WI MOD DRO	302824
40177227007	**SUMP 18 IN**	WI MOD DRO	302702	WI MOD DRO	302824
40177227008	**SUMP 18 EFF**	WI MOD DRO	302702	WI MOD DRO	302824
40177227001	**SUMP 6 IN**	WI MOD GRO	302392		
40177227002	**SUMP 6 EFF**	WI MOD GRO	302392		
40177227003	**SUMP 7 IN**	WI MOD GRO	302692		
40177227004	**SUMP 17R IN**	WI MOD GRO	302692		
40177227005	**SUMP 7/17R EFF**	WI MOD GRO	302692		
40177227007	**SUMP 18 IN**	WI MOD GRO	302692		
40177227008	**SUMP 18 EFF**	WI MOD GRO	302692		
40177227001	**SUMP 6 IN**	EPA 8260	302413		
40177227002	**SUMP 6 EFF**	EPA 8260	302413		
40177227003	**SUMP 7 IN**	EPA 8260	302413		
40177227004	**SUMP 17R IN**	EPA 8260	302413		
40177227005	**SUMP 7/17R EFF**	EPA 8260	302413		
40177227006	**TRIP BLANK**	EPA 8260	302413		
40177227007	**SUMP 18 IN**	EPA 8260	302413		
40177227008	**SUMP 18 EFF**	EPA 8260	302413		

Pace Analytical
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

40177222

Page: 1 of 1

Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information:
Company: AECOM - Milw	Report To: Lanette Altenbach	Attention: Accounts Payable/Finance Department
Address: 1555 N. River Center Dr., Suite 214	Copy To:	Company Name: City of Kenosha
Milwaukee, WI 53212		Address: 652 52nd St., Kenosha, WI 53140
Email To: Lanette.Altenbach@aecom.com	Purchase Order No.:	Pace Quote Reference:
Phone: 414-577-1363 Fax:	Project Name: KEP O&M Activities	Pace Project Manager: Chris Hyska
Requested Due Date/TAT: Standard	Project Number: 60485212.3	Pace Profile #: (2430) Kenosha work

REGULATORY AGENCY

__NPDES X GROUND WATER __DRINKING WATER

__UST __RCRA OTHER____

SITE LOCATION __GA __IL __IN __MI __NC __OH __SC X WI OTHER____

Section D Required Client Information

SAMPLE ID

One Character per box.
(A-Z, 0-9 / ,-)
Samples IDs MUST BE UNIQUE

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOLID/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

ITEM #	SAMPLE ID	MATRIX CODE	SAMPLE TYPE G=GRAB C=COMP	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	#OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test: VOCs 8260	GRO by WIGRO	DRO by WIDRO	Residual Chlorine (Y/N)	Pace Project Number / Lab I.D.
1	SUMP 6 IN	WT	G			10/5/18	0855		8				8					X	X	X		001
2	SUMP 6 EFF	WT	G			10/5/18	0915		8				8					X	X	X		002
3	SUMP 7 IN	WT	G			10/5/18	1055		8				8					X	X	X		003
4	SUMP 17R IN	WT	G			10/5/18	1110		8				8					X	X	X		004
5	SUMP 7/17R EFF	WT	G			10/5/18	1130		8				8					X	X	X		005
6	Trip Blank	WT	G			10/5/18	0830		2				2					X				006
7	SUMP 18 IN	WT	G			10/5/18	1005		8				8					X	X	X		007
8	SUMP 18 EFF	WT	G			10/5/18	1015		8				8					X	X	X		008
9		WT																				~~009~~ JM 10/6/18
10		WT																				
11		WT																				
12		WT																				

Filtered (Y/N): N N N

Requested Ana

Additional Comments:

Analysis Per Contract
KEP Semi-Annual System Sampling.

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
Zach Albert / AECOM	10/5/18	1600			
FEDEX	10/6/18	1010	pace	10/6/18	1010

SAMPLE CONDITIONS

Temp in °C	Received on Ice Y/N	Custody Sealed Cooler Y/N	Samples Intact Y/N
KD	Y/N	Y/N	Y/N
	Y/N	Y/N	Y/N
	Y/N	Y/N	Y/N

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: ZACH ALBERT / STACIE ALBERT

SIGNATURE of SAMPLER: Zach Albert / Stacie Albert

DATE Signed (MM / DD / YY): 10/05/18

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

Sample Preservation Receipt Form

Client Name: AECOM Project # 40177227

All containers needing preservation have been checked and noted below: □Yes □No ☒N/A Initial when completed: Date/ Time:

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

	Glass							Plastic							Vials						Jars			General							
Pace Lab #	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	VOA Vials (>6mm) *	H2SO4 pH ≤2	NaOH+Zn Act pH ≥9	NaOH pH ≥12	HNO3 pH ≤2	pH after adjusted	Volume (mL)
001	2	2																6									—						2.5 / 5 / 10
002	2	2																6															2.5 / 5 / 10
003	2	2																6															2.5 / 5 / 10
004	2	2																6															2.5 / 5 / 10
005	2	2																6															2.5 / 5 / 10
006																		2									1						2.5 / 5 / 10
007	2	2																6									—						2.5 / 5 / 10
008	2	2																6									1						2.5 / 5 / 10
009		10/6/18 AL																															2.5 / 5 / 10
010																																	2.5 / 5 / 10
011																																	2.5 / 5 / 10
012																																	2.5 / 5 / 10
013																																	2.5 / 5 / 10
014																																	2.5 / 5 / 10
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**

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

Pace Analytical 1241 Bellevue Street, Green Bay, WI 54302	Document Name: Sample Condition Upon Receipt (SCUR)	Document Revised: 25Apr2018
	Document No.: F-GB-C-031-Rev.07	Issuing Authority: Pace Green Bay Quality Office

Sample Condition Upon Receipt Form (SCUR)

Project #:

WO# : 40177227

40177227

Client Name: Aecom

Courier: ☐ CS Logistics ☑ Fed Ex ☐ Speedee ☐ UPS ☐ Waltco
☐ Client ☐ Pace Other:

Tracking #: 7831 1066 3320, 7831 1066 3331

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 1/17 **Type of Ice:** Wet Blue Dry None ☒ Samples on ice, cooling process has begun

Cooler Temperature Uncorr: 2.01 /Corr:

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

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

Person examining contents:
Date: 10/6/18
Initials: JH

Chain of Custody Present:	☑Yes ☐No ☐N/A	1.
Chain of Custody Filled Out:	☑Yes ☐No ☐N/A	2.
Chain of Custody Relinquished:	☑Yes ☐No ☐N/A	3.
Sampler Name & Signature on COC:	☑Yes ☐No ☐N/A	4.
Samples Arrived within Hold Time:	☑Yes ☐No	5.
- VOA Samples frozen upon receipt	☐Yes ☐No	Date/Time:
Short Hold Time Analysis (<72hr):	☐Yes ☑No	6.
Rush Turn Around Time Requested:	☐Yes ☑No	7.
Sufficient Volume: For Analysis: ☑Yes ☐No MS/MSD: ☐Yes ☑No ☐N/A		8.
Correct Containers Used:	☑Yes ☐No	9.
-Pace Containers Used:	☑Yes ☐No ☐N/A	
-Pace IR Containers Used:	☐Yes ☐No ☑N/A	
Containers Intact:	☑Yes ☐No	10.
Filtered volume received for Dissolved tests	☐Yes ☐No ☑N/A	11.
Sample Labels match COC: -Includes date/time/ID/Analysis Matrix: W	☑Yes ☐No ☐N/A	12.
Trip Blank Present:	☑Yes ☐No ☐N/A	13.
Trip Blank Custody Seals Present	☑Yes ☐No ☐N/A	
Pace Trip Blank Lot # (if purchased): 2107		

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

Person Contacted: Date/Time:

Comments/ Resolution:

Project Manager Review: Date: 10/8/18