



October 23, 2017

Wisconsin Department of Natural Resources

Attn: Mr. Matt Thompson  
1300 West Clairemont Avenue  
Eau Claire, WI 54701



**Subject:**

Update Report  
Pioneer Bank – Former Judges Cleaners  
701 S Central Avenue  
Marshfield, WI, 54449  
BRRTS #02-72-522339

**Dear Mr. Thompson:**

On behalf of Mr. Pat Schreiner, REI Engineering, Inc. (REI) hereby submits one copy of the above referenced report.

If upon review of this report you have any comments, questions and/or require additional information please contact our office at (715) 675-9784.

Sincerely,  
REI Engineering, Inc.

Brian J. Bailey  
Environmental Scientist

Enclosure (A/S)

cc: Mr. Pat Schreiner, 108 E 4<sup>th</sup> Street, Marshfield, WI 54449



**RESPONSIVE. EFFICIENT. INNOVATIVE.**

4080 N. 20th Avenue Wausau, WI 54401  
715-675-9784 REIengineering.com



**REI**

**CIVIL & ENVIRONMENTAL  
ENGINEERING, SURVEYING**

**UPDATE REPORT  
PIONEER BANK / FORMER JUDGES  
CLEANERS**

**701 SOUTH CENTRAL AVENUE  
MARSHFIELD, WI  
BRRTS #02-72-522339**

**REI PROJECT #5403**



**COMPREHENSIVE  
SERVICES WITH  
PRACTICAL  
SOLUTIONS**



**UPDATE REPORT**

**PIONEER BANK / FORMER JUDGES CLEANERS  
701 SOUTH CENTRAL AVENUE  
MARSHFIELD, WI  
BRRTS #02-72-522339**

**REI PROJECT #5403**

**PREPARED FOR:**

**Mr. Pat Schreiner  
108 E 4th Street  
Marshfield, WI 54449**

**OCTOBER 2017**



**UPDATE REPORT**

**PIONEER BANK / FORMER JUDGES CLEANERS  
701 SOUTH CENTRAL AVENUE  
MARSHFIELD, WI  
BRRTS #02-72-522339**


**REI PROJECT #5403**

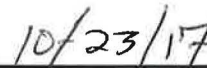
The recommendations contained in this report represent our professional opinions. These opinions are based on the information obtained from our study of the site and were arrived at in accordance with accepted hydrogeologic and engineering practices at this time and location. Other than this, no warranty is implied or warranted.

I, David N. Larsen, hereby certify that I am a registered Professional Geologist in the State of Wisconsin as defined in the Wisconsin Statutes Chapter 470.01. I am also a hydrogeologist as that term is defined in s. NR 712.03 (3), Wis. Adm. Code, and that, to the best of my knowledge, all of the 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."



"I, Brian J. Bailey, 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 of the 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."

  
Brian J. Bailey

  
Date



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## **UPDATE REPORT**

### **PIONEER BANK / FORMER JUDGES CLEANERS 701 SOUTH CENTRAL AVENUE MARSHFIELD, WI BRRTS #02-72-522339**

#### **REI PROJECT #5403**

#### **1.0 INTRODUCTION**

##### **1.1 Purpose**

The Pioneer Bank / Former Judges Cleaners property is located at 701 South Central Avenue in the NW  $\frac{1}{4}$  of the SW  $\frac{1}{4}$  of Section 08, Township 25 North, Range 03 East, City of Marshfield, Wood, County, Wisconsin (Figure 1). Figure 2 presents the site layout with relevant historic and recent sample point locations identified. This report presents the results of a limited scope of work. The approved scope of work included the installation of either eight (8) groundwater profile samples at a shallow and deep location and/or the installation of temporary Geoprobe wells at a shallow and deep location on the property directly adjacent, south of the subject property. The purpose is to collect groundwater samples and further define the down gradient CVOC plume associated with the Former Judges Cleaners release.

#### **2.0 SUMMARY OF ACTIVITIES**

##### **2.1 Groundwater Profile/Geoprobe Temporary Wells**

REI personnel were on site on September 1, 2017 to advance eight (8) groundwater profile samples or temporary wells dependent upon underlying geological conditions and groundwater recharge rate within the borehole. Geiss Soils & Samples, LLC., Merrill, WI was subcontracted to complete the drilling work. Multiple attempts were made to utilize groundwater profile sampler technology, however, the subsurface did not yield enough water to collect the required groundwater samples. This technology was abandoned and temporary Geoprobe wells were installed. Only one (1) of the groundwater profile samplers was successful (GP-1S) and the other seven (7) borings were converted into temporary wells. Figure 2 presents the

locations of Geoprobe borings GP-1S, GP-1D, GP-2S, GP-2D, GP-3S, GP-3D, GP-4S and GP-4D.

One shallow boring and one deep boring was advanced at each location. The objective was to create ten (10) feet of elevation difference between the well bottoms of the shallow and deep boring. However, refusal was encountered in the deeper borings limiting the achievable depth with the Geoprobe rig. The shallow borings were advanced approximately fourteen (14) feet bls and the deeper borings were approximately twenty-one to twenty-two (21-22) feet bls. Soil Boring Logs and Well Construction Forms are included in Appendix A. Photos of site conditions are included in Appendix B. Methods and procedures are presented in Appendix C.

One (1) inch temporary PVC wells were installed in the Geoprobe borings GP-1D through GP-4D. A return trip was made to collect groundwater samples on September 8, 2017, once sufficient recharge was available in the temporary wells. These wells were left in place for potential future sampling events. Well locations are along the southern boundary of the directly adjacent property to the south at the address 735 South Central Avenue, Marshfield, WI. (Figure 2)

## **2.2 Temporary Well Sampling Results**

REI personnel returned to the site to sample the temporary wells on September 8, 2017. Sufficient recharge was available in the temporary wells to collect a grab sample. Groundwater samples were collected and submitted to a State certified laboratory for chemical analysis of VOC compounds. Sample results are summarized in Table 1. Copies of the complete analytical chemistry reports are presented in Appendix D.

All sample results were below laboratory detection limits, except for GP-3S. Sample GP-3S exceeded the ch NR 140 Enforcement Standard for benzene. However, no detections were identified that would indicate the presence of CVOCs in any of the samples.

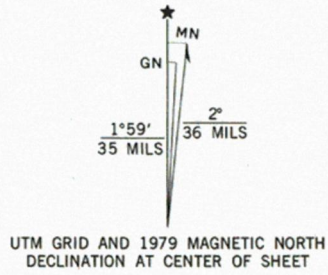
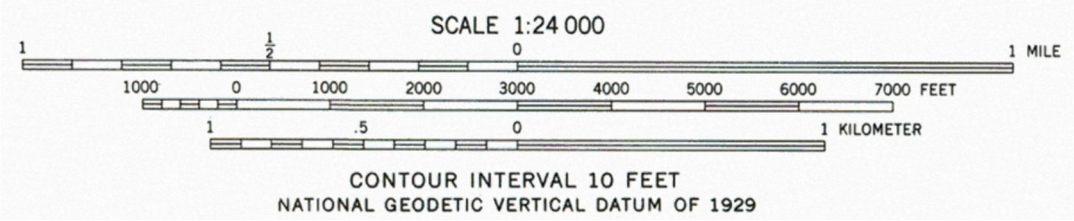
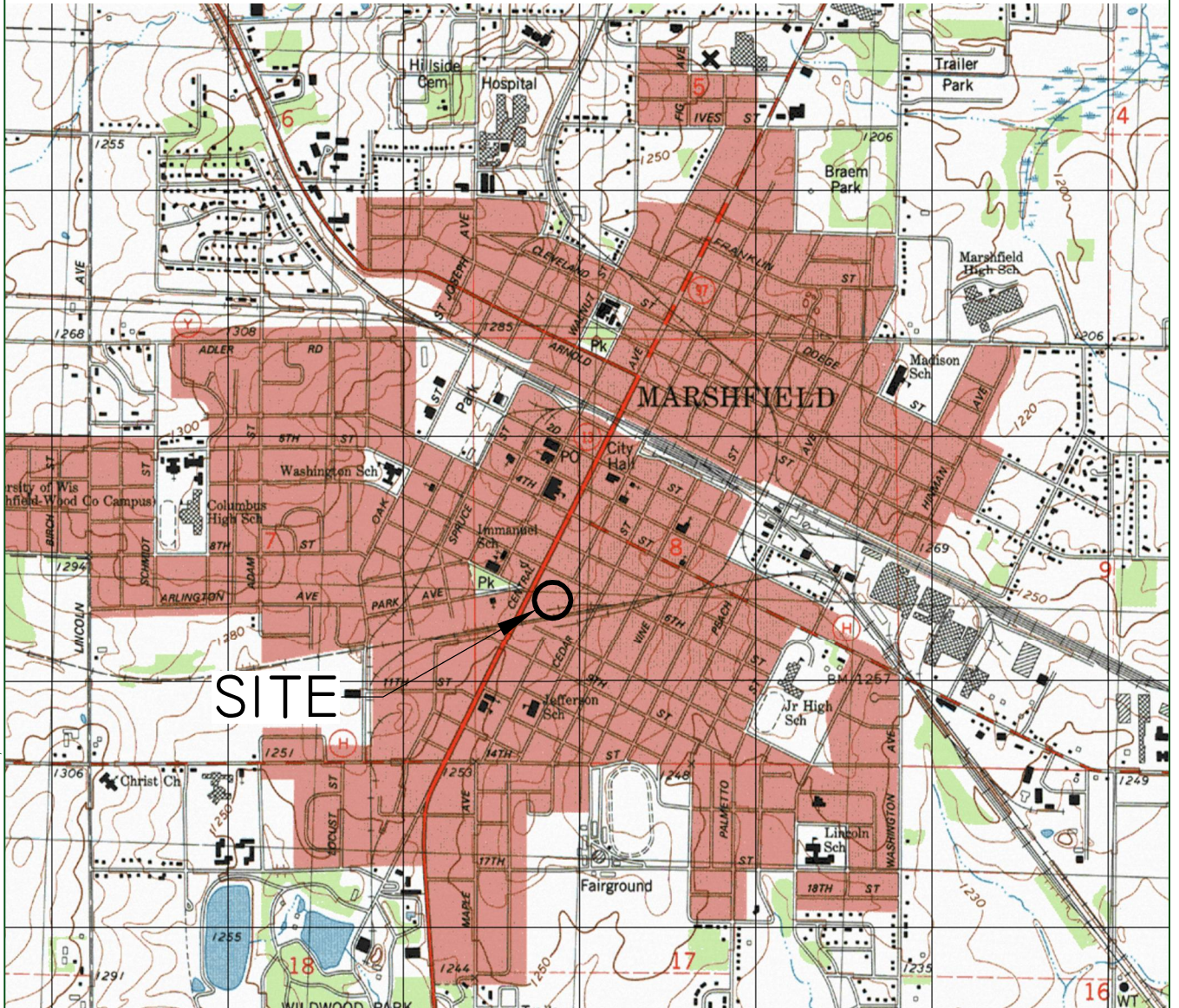


### **3.0 CONCLUSION**

The presence of chlorinated impacted groundwater was not identified in any of the Geoprobe temporary wells at either the shallow or deeper locations. The chlorinated impacted groundwater does not extend to these sample locations. The groundwater plume may be diving below the deeper temporary wells. This is unlikely given the distance away from the area on the property where CVOCs have been identified. No further groundwater investigative work is recommended to the south.



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**MARSHFIELD, WIS.**  
NW/4 MARSHFIELD 15' QUADRANGLE  
N4437.5-W9007.5/7.5

1979  
REI Engineering, INC.

PIONEER BANK  
701 SOUTH CENTRAL AVENUE  
MARSHFIELD, WISCONSIN

FIGURE 1 : SITE VICINITY MAP		DATE:
PROJECT NO.	DRAWN BY:	2/24/2017
5403	TAW	



DRAWING FILE: P:\15400-5499\5403 - PIONEER BANK DERF\DWG\5403-SITE.DWG LAYOUT: SITE PLOTTED: SEP 25, 2017 - 6:19PM PLOTTED BY: NATHANP



**LEGEND**

0 40  
SCALE: 1" = 40'

- PIEZOMETER
- MONITORING WELL
- MONITORING WELL (GONE)
- GEOPROBE SOIL BORING
- SUB-SLAB VAPOR SAMPLE
- APPROXIMATE PROPERTY LINE



*REI Engineering, INC.*

**PIONEER BANK  
701 SOUTH CENTRAL AVENUE  
MARSHFIELD, WISCONSIN**

**FIGURE 3 : GEOPROBE / TEMP WELL LOCATIONS**

PROJECT NO.	DRAWN BY:	DATE:
5403	NAP	09/11/17

## **APPENDIX A**

# **SOIL BORING LOGS AND WELL CONSTRUCTION FORMS**







Route To:  Watershed/Wastewater  Waste Management   
 Remediation/Redevelopment  Other

Facility/Project Name Pioneer Bank		License/Permit/Monitoring Number 02-72-522339		Boring Number GP-1D	
Boring Drilled By: Name of crew chief (first, last) and Firm Geiss Soil and Samples, LLC			Date Drilling Started 9/1/17	Date Drilling Completed 9/1/17	Drilling Method Geoprobe
WI Unique Well No.	DNR Well ID No.	Common Well Name GP-1D	Final Static Water Level	Surface Elevation 0	Borehole Diameter 2 in. <span style="float:right">2-1D</span>
Local Grid Origin <input type="checkbox"/> (estimated) <input type="checkbox"/> or Boring Location <input checked="" type="checkbox"/>			Lat	Local Grid Location	
State Plane			Long	N <input type="checkbox"/> E <input type="checkbox"/> S <input type="checkbox"/> W <input type="checkbox"/>	
Facility ID 772061180		County Wood	County Code 71	Civil Town/City/or Village Marshfield	

Sample			Blow Counts	Depth In Feet	Soil/ Rock Description And Geologic Origin For Each Major Unit	U.S.C.S.	Graphic	Well	PID/FID	Soil Properties					RQD/ Comments
Number	Type	Length Att. & Recovered (in)								Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	
				1	BLIND DRILL Blind Drill to 21' BLS										
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				21		EOB End of boring @ 21' BLS									
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				24											
				25											

I hereby certify that the information on this form is true and the correct to the best of my knowledge

Signature *Bob Barty / REI* Firm **REI Engineering, Inc.**  
4080 North 20th Avenue, Wausau, WI

This form is authorized by Chapters 281,283,289,292,293,295, and 299, Wis. Stats. Completion of this form is mandatory. Failure to file this form may result in forfeiture of between \$10 and \$25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. NOTE: See instructions for more information, including where the completed form should be sent.



Route To:  Watershed/Wastewater  Waste Management   
 Remediation/Redevelopment  Other

Facility/Project Name Pioneer Bank		License/Permit/Monitoring Number 02-72-522339		Boring Number GP-2D	
Boring Drilled By: Name of crew chief (first, last) and Firm Geiss Soil and Samples, LLC			Date Drilling Started 9/1/17	Date Drilling Completed 9/1/17	Drilling Method Geoprobe
WI Unique Well No.	DNR Well ID No.	Common Well Name GP-2D	Final Static Water Level	Surface Elevation 0	Borehole Diameter 2 in. -2D
Local Grid Origin <input type="checkbox"/> (estimated) <input type="checkbox"/> or Boring Location <input checked="" type="checkbox"/>			Lat	Local Grid Location N <input type="checkbox"/> E <input type="checkbox"/> S <input type="checkbox"/> W <input type="checkbox"/>	
Facility ID 772061180		County Wood	County Code 71	Civil Town/City/or Village Marshfield	

Sample		Depth In Feet	Soil/ Rock Description And Geologic Origin For Each Major Unit	U.S.C.S.	Graphic	Well	PID/FID	Soil Properties					ROD/ Comments
Number	Type Length Art. & Recovered (in)							Blow Counts	Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	
		1	BLIND DRILL Blind Drill to 22' BLS										
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		23	EOB End of boring @ 22' BLS										
		24											
		25											

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Signature  Firm REI Engineering, Inc.  
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Route To:  Watershed/Wastewater  Waste Management   
 Remediation/Redevelopment  Other

Facility/Project Name Pioneer Bank		License/Permit/Monitoring Number 02-72-522339		Boring Number GP-3S	
Boring Drilled By: Name of crew chief (first, last) and Firm Geiss Soil and Samples, LLC			Date Drilling Started 9/1/17	Date Drilling Completed 9/1/17	Drilling Method Geoprobe
WI Unique Well No.	DNR Well ID No.	Common Well Name GP-3S	Final Static Water Level	Surface Elevation 0	Borehole Diameter 2 in. <span style="float: right;">-3S</span>
Local Grid Origin <input type="checkbox"/> (estimated) <input type="checkbox"/> or Boring Location <input checked="" type="checkbox"/> State Plane			Lat	Local Grid Location N <input type="checkbox"/> E <input type="checkbox"/> S <input type="checkbox"/> W <input type="checkbox"/>	
Facility ID 772061180		County Wood	County Code 71	Civil Town/City/or Village Marshfield	

Sample		Depth In Feet	Soil/ Rock Description And Geologic Origin For Each Major Unit	U.S.C.S.	Graphic	Well	PID/FID	Soil Properties					ROD/ Comments
Number	Type Length Att. & Recovered (in)							Blow Counts	Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	
		1	BLIND DRILL Blind Drill to 14' BLS										
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Route To:  Watershed/Wastewater  Waste Management   
 Remediation/Redevelopment  Other

Facility/Project Name Pioneer Bank		License/Permit/Monitoring Number 02-72-522339		Boring Number GP-3D	
Boring Drilled By: Name of crew chief (first, last) and Firm Geiss Soil and Samples, LLC			Date Drilling Started 9/1/17	Date Drilling Completed 9/1/17	Drilling Method Geoprobe
WI Unique Well No.	DNR Well ID No.	Common Well Name GP-3D	Final Static Water Level	Surface Elevation 0	Borehole Diameter 2 in. <span style="float: right;">-3D</span>
Local Grid Origin <input type="checkbox"/> (estimated) <input type="checkbox"/> or Boring Location <input checked="" type="checkbox"/> State Plane			Lat	Local Grid Location N <input type="checkbox"/> E <input type="checkbox"/> S <input type="checkbox"/> W <input type="checkbox"/>	
Facility ID 772061180		County Wood	County Code 71	Civil Town/City/or Village Marshfield	

Sample				Depth In Feet	Soil/ Rock Description And Geologic Origin For Each Major Unit	U.S.C.S.	Graphic	Well	PID/FID	Soil Properties					ROD/ Comments	
Number	Type	Length Att. & Recovered (in)	Blow Counts							Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200		
				1	BLIND DRILL Blind Drill to 21' BLS											
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Route To:  Watershed/Wastewater  Waste Management   
 Remediation/Redevelopment  Other

Facility/Project Name Pioneer Bank		License/Permit/Monitoring Number 02-72-522339		Boring Number GP-4S	
Boring Drilled By: Name of crew chief (first, last) and Firm Geiss Soil and Samples, LLC			Date Drilling Started 9/1/17	Date Drilling Completed 9/1/17	Drilling Method Geoprobe
WI Unique Well No.	DNR Well ID No.	Common Well Name GP-4S	Final Static Water Level	Surface Elevation 0	Borehole Diameter 2 in.
Local Grid Origin <input type="checkbox"/> (estimated) <input type="checkbox"/> or Boring Location <input checked="" type="checkbox"/> State Plane			Lat Long	Local Grid Location N <input type="checkbox"/> E <input type="checkbox"/> S <input type="checkbox"/> W <input type="checkbox"/>	
Facility ID 772061180		County Wood	County Code 71	Civil Town/City/or Village Marshfield	

Sample				Depth In Feet	Soil/ Rock Description And Geologic Origin For Each Major Unit	U.S.C.S.	Graphic	Well	PID/FID	Soil Properties					ROD/ Comments	
Number	Type	Length Att. & Recovered (in)	Blow Counts							Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200		
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Route To:  Watershed/Wastewater  Waste Management   
 Remediation/Redevelopment  Other

Facility/Project Name Pioneer Bank		License/Permit/Monitoring Number 02-72-522339		Boring Number GP-4D	
Boring Drilled By: Name of crew chief (first, last) and Firm Geiss Soil and Samples, LLC			Date Drilling Started 9/1/17	Date Drilling Completed 9/1/17	Drilling Method Geoprobe
WI Unique Well No.	DNR Well ID No.	Common Well Name GP-4D	Final Static Water Level	Surface Elevation 0	Borehole Diameter 2 in. '4D
Local Grid Origin <input type="checkbox"/> (estimated) <input type="checkbox"/> or Boring Location <input checked="" type="checkbox"/> State Plane			Lat Long	Local Grid Location N <input type="checkbox"/> E <input type="checkbox"/> S <input type="checkbox"/> W <input type="checkbox"/>	
Facility ID 772061180		County Wood	County Code 71	Civil Town/City/or Village Marshfield	

Sample				Depth In Feet	Soil/ Rock Description And Geologic Origin For Each Major Unit	U.S.C.S.	Graphic	Well	PID/FID	Soil Properties					ROD/ Comments
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**Notice:** Completion of this report is required by chs. 160, 281, 283, 289, 291-293, 295, and 299, Wis. Stats., and chs. NR 141 and 812, Wis. Adm. Code. In accordance with chs. 281, 289, 291-293, 295, and 299, Wis. Stats., failure to file this form may result in a forfeiture of between \$10-25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. Return form to the appropriate DNR office and bureau. See instructions on reverse for more information.

**Verification Only of Fill and Seal**

**Route to DNR Bureau:**

Drinking Water       Watershed/Wastewater       Remediation/Redevelopment

Waste Management       Other: \_\_\_\_\_

**1. Well Location Information**      **2. Facility / Owner Information**

County Marathon	WI Unique Well # of Removed Well GP-1S	Hicap #	Facility Name Pioneer Bank
Latitude / Longitude (see instructions) _____ N _____ W	Format Code <input type="checkbox"/> DD <input type="checkbox"/> DDM	Method Code <input type="checkbox"/> GPS008 <input type="checkbox"/> SCR002 <input type="checkbox"/> OTH001	Facility ID (FID or PWS) 772061180
1/4 / 1/4 or Gov't Lot #	Section	Township N	Range <input type="checkbox"/> E <input type="checkbox"/> W
Well Street Address 701 South Central Avenue	Present Well Owner Pioneer Bank		
Well City, Village or Town Marshfield	Well ZIP Code 54449	Mailing Address of Present Owner 701 South Central Avenue	
Subdivision Name	Lot #	City of Present Owner Marshfield	State WI
			ZIP Code 54449

**3. Filled & Sealed Well / Drillhole / Borehole Information**      **4. Pump, Liner, Screen, Casing & Sealing Material**

Reason for Removal from Service Temporary Geoprobe	WI Unique Well # of Replacement Well GP-1S	<input type="checkbox"/> Pump and piping removed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/> Liner(s) removed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/> Liner(s) perforated? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/> Screen removed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/> Casing left in place? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/> Was casing cut off below surface? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input checked="" type="checkbox"/> Did sealing material rise to surface? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/> Did material settle after 24 hours? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A If yes, was hole retopped? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/> If bentonite chips were used, were they hydrated with water from a known safe source? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
<input type="checkbox"/> Monitoring Well	Original Construction Date (mm/dd/yyyy) 9/1/17	<b>Required Method of Placing Sealing Material</b> <input type="checkbox"/> Conductor Pipe-Gravity <input type="checkbox"/> Conductor Pipe-Pumped <input checked="" type="checkbox"/> Screened & Poured (Bentonite Chips) <input type="checkbox"/> Other (Explain): _____	
<input type="checkbox"/> Water Well	If a Well Construction Report is available, please attach.	<b>Sealing Materials</b> <input type="checkbox"/> Neat Cement Grout <input type="checkbox"/> Concrete <input type="checkbox"/> Sand-Cement (Concrete) Grout <input checked="" type="checkbox"/> Bentonite Chips	
<input checked="" type="checkbox"/> Borehole / Drillhole		<b>For Monitoring Wells and Monitoring Well Boreholes Only:</b> <input type="checkbox"/> Bentonite Chips <input type="checkbox"/> Bentonite - Cement Grout <input type="checkbox"/> Granular Bentonite <input type="checkbox"/> Bentonite - Sand Slurry	
Construction Type: <input type="checkbox"/> Drilled <input type="checkbox"/> Driven (Sandpoint) <input type="checkbox"/> Dug <input checked="" type="checkbox"/> Other (specify): Geoprobe	Formation Type: <input checked="" type="checkbox"/> Unconsolidated Formation <input type="checkbox"/> Bedrock	Total Well Depth From Ground Surface (ft.) 14'	Casing Diameter (in.) 2"
Lower Drillhole Diameter (in.)	Casing Depth (ft.)	Was well annular space grouted? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown	
If yes, to what depth (feet)?	Depth to Water (feet)		

**5. Material Used to Fill Well / Drillhole**

	From (ft.)	To (ft.)	No. Yards, Sacks Sealant or Volume (circle one)	Mix Ratio or Mud Weight
3/8" bentonite Chips	Surface	12'	1/5	

**6. Comments**

**7. Supervision of Work**

Name of Person or Firm Doing Filling & Sealing Geiss Soil & Sample, REI Engineering	License #	Date of Filling & Sealing or Verification (mm/dd/yyyy) 9/1/17	<b>DNR Use Only</b>	
			Date Received	Noted By
Street or Route 4080 N. 20th Avenue	Telephone Number ( 715 ) 675-9784	Comments		
City Wausau	State WI	ZIP Code 54401	Signature of Person Doing Work 	Date Signed 10/4/17

Route To Solid Waste  Haz. Waste  Wastewater   
Env. Response & Repair  Underground Tanks  Other

<b>Facility/Project Name</b> Pioneer Bank- Four Judges Cleaners	<b>Local Grid Location of Well</b> Feet S. ___ Feet W. ___ Feet N. ___ Feet E. ___	<b>Well Name</b> GP-1D
<b>Facility License Permit or Monitoring Number</b> BRRTS# 02-72-522339	<b>Grid Origin Location</b>	<b>Wls. Unique Well Number</b> _____ <b>DNR Well Number</b> _____
<b>Type of Well</b> Water Table Observation Well <input checked="" type="checkbox"/> 11 Piezometer <input type="checkbox"/> 12	<b>Section Location of Waste/Source</b> <input type="checkbox"/> E <input type="checkbox"/> W	<b>Date Well Installed</b> 9/1/17
<b>Distance Well Is From Waste/Source Boundary</b> Ft. _____	<b>Location of Well Relative to Waste/Source</b> u <input type="checkbox"/> Upgradient s <input type="checkbox"/> Sidegradient d <input type="checkbox"/> Downgradient n <input type="checkbox"/> Not Known	<b>Well Installed By (Person's Name and Firm)</b> Geiss Soil and Samples, LLC
<b>Is Well A Point of Enforcement Std. Application</b> <input type="checkbox"/> Yes <input type="checkbox"/> No		

A. Protective pipe, top elevation _____ ft. MSL	1. Cap and lock? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No																		
B. Well casing, top elevation _____ ft. MSL	2. Protective cover pipe: a. Inside diameter: _____ in. b. Length: _____ ft. c. Material: Steel <input type="checkbox"/> 04 Other <input type="checkbox"/>																		
C. Land surface elevation _____ ft. MSL	d. Additional protection? <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, describe: _____																		
D. Surface seal, bottom <u>1</u> ft. MSL or _____ ft.	3. Surface seal: Bentonite <input type="checkbox"/> 30 Concrete <input checked="" type="checkbox"/> 01 Other <input type="checkbox"/>																		
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E. Bentonite seal, top _____ ft. MSL or <u>1</u> ft.	4. Material between well casing and protective pipe: Bentonite <input checked="" type="checkbox"/> 30 Annular space seal <input type="checkbox"/> Other <input type="checkbox"/>																		
F. Fine sand, top _____ ft. MSL or <u>12</u> ft.	5. Annular space seal: a. Granular Bentonite <input checked="" type="checkbox"/> 33 b. _____ Lbs/gal mud weight Bentonite-sand slurry <input type="checkbox"/> 35 c. _____ Lbs/gal mud weight Bentonite slurry <input type="checkbox"/> 31 d. _____ % Bentonite Bentonite-cement grout <input type="checkbox"/> 50 e. <u>1</u> ft <sup>3</sup> Volume added for any of the above f. How installed: Tremie <input type="checkbox"/> 01 Tremie pumped <input type="checkbox"/> 02 Gravity <input checked="" type="checkbox"/> 08																		
G. Filter pack, top _____ ft. MSL or <u>14</u> ft.	6. Bentonite seal: a. Bentonite Granules <input type="checkbox"/> 33 b. <input type="checkbox"/> 1/4 in. <input checked="" type="checkbox"/> 3/8 in. <input type="checkbox"/> 1/2 in. Bentonite pellets <input checked="" type="checkbox"/> 32 c. _____ Other <input type="checkbox"/>																		
H. Screen joint, top _____ ft. MSL or <u>16</u> ft.	7. Fine sand material Manufacturer, product name and mesh size a. #15 b. Volume added _____ ft <sup>3</sup>																		
I. Well bottom _____ ft. MSL or <u>21</u> ft.	8. Filter pack material: Manufacturer, product name and mesh size a. #40 b. Volume added _____ ft <sup>3</sup>																		
J. Filter pack, bottom _____ ft. MSL or <u>21</u> ft.	9. Well casing: Flush threaded PVC schedule 40 <input checked="" type="checkbox"/> 23 Flush threaded PVC schedule 80 <input type="checkbox"/> 24 Other <input type="checkbox"/>																		
K. Borehole, bottom _____ ft. MSL or <u>21</u> ft.	10. Screen material: PVC a. Screen type: Factory cut <input checked="" type="checkbox"/> 11 Continuous slot <input type="checkbox"/> 01 Other <input type="checkbox"/>																		
L. Borehole, diameter <u>2.25</u> in.	b. Manufacturer <u>Johnson Screen</u> c. Slot size: <u>0.10</u> in. d. Slotted length: <u>5</u> ft.																		
M. O.D. well casing <u>1.375</u> in.	11. Backfill material (below filter Pack): None <input checked="" type="checkbox"/> 14 Other <input type="checkbox"/>																		
N. I.D. well casing <u>1</u> in.																			

I hereby certify that the information on this form is true and correct to the best of my knowledge

Signature

*A. J. [Signature]* REI

Firm

REI Engineering, Inc.  
4080 N. 20th Ave.  
Wausau, WI 54401

Please complete both sides of this form and return to the appropriate DNR office listed at the top of this form as required by chs. 144, 147 and 160 Wis. Stats. and ch. NR 141, Wis. Ad. Code. In accordance with ch. 144 Wis. Stats., failure to file this form may result in a forfeiture of not less than \$10, nor more than \$5000 for each day of violation. In accordance with ch. 147 Wis. Stats., failure to file this form may result in a forfeiture of not more than \$10,000 for each day of violation. NOTE: Shaded areas are for DNR use only. see instructions for more information including where the completed form should be sent.



Route To Solid Waste  Haz. Waste  Wastewater   
Env. Response & Repair  Underground Tanks  Other

<b>Facility/Project Name</b> Pioneer Bank- Four Judges Cleaners	<b>Local Grid Location of Well</b> _____ Feet S. ___ Feet W. ___ Feet N. ___ Feet E. ___	<b>Well Name</b> GP-2S
<b>Facility License Permit or Monitoring Number</b> BRRTS# 02-72-522339	<b>Grid Origin Location</b>	<b>Wis. Unique Well Number</b> _____ <b>DNR Well Number</b> _____
<b>Type of Well</b> Water Table Observation Well <input checked="" type="checkbox"/> 11 Piezometer <input type="checkbox"/> 12	<b>Section Location of Waste/Source</b> <input type="checkbox"/> E <input type="checkbox"/> W	<b>Date Well Installed</b> 9/1/17
<b>Distance Well Is From Waste/Source Boundary</b> Ft. _____	<b>Location of Well Relative to Waste/Source</b> u <input type="checkbox"/> Upgradient s <input type="checkbox"/> Sidegradient d <input type="checkbox"/> Downgradient n <input type="checkbox"/> Not Known	<b>Well Installed By (Person's Name and Firm)</b> Geiss Soil and Samples, LLC
<b>Is Well A Point of Enforcement Std. Application</b> <input type="checkbox"/> Yes <input type="checkbox"/> No		

A. Protective pipe, top elevation \_\_\_\_\_ ft. MSL  
B. Well casing, top elevation \_\_\_\_\_ ft. MSL  
C. Land surface elevation \_\_\_\_\_ ft. MSL  
D. Surface seal, bottom 1 ft. MSL or \_\_\_\_\_ ft.

12. USCS Classification of soil near screen:

GP <input type="checkbox"/>	GM <input type="checkbox"/>	GC <input type="checkbox"/>	GW <input type="checkbox"/>	SW <input type="checkbox"/>	SP <input type="checkbox"/>
SM <input type="checkbox"/>	SC <input type="checkbox"/>	ML <input type="checkbox"/>	MH <input type="checkbox"/>	CL <input checked="" type="checkbox"/>	CH <input type="checkbox"/>
Bedrock <input type="checkbox"/>					

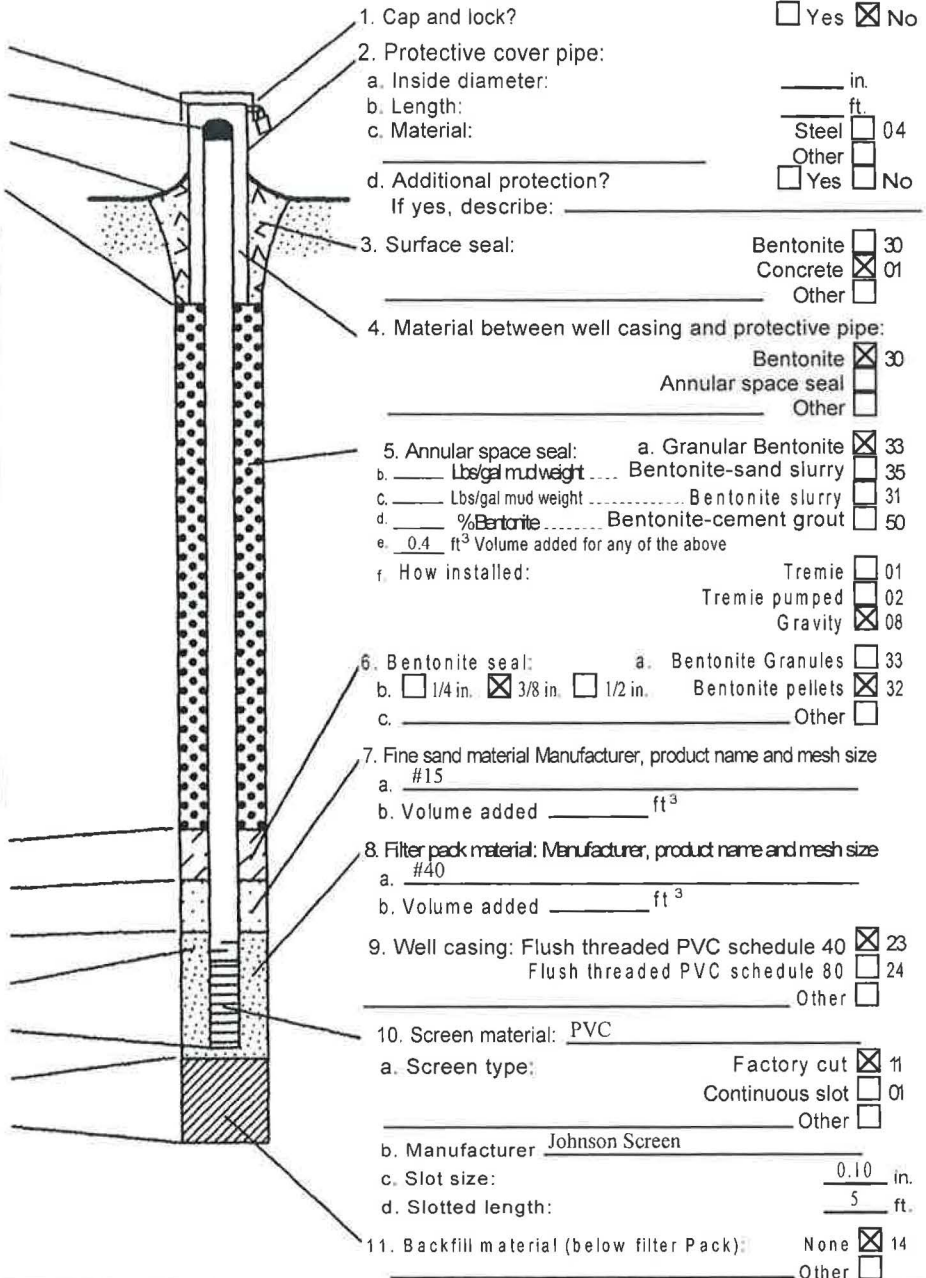
13. Sieve analysis attached?  Yes  No

14. Drilling method used Rotary  50  
Hollow Stem Auger  41  
Geoprobe  Other

15. Drilling fluid used: Water  02 Air  01  
Drilling Mud  03 None  99

16. Drilling additives used?  Yes  No  
Describe \_\_\_\_\_

17. Source of water (attach analysis):  
\_\_\_\_\_



E. Bentonite seal, top \_\_\_\_\_ ft. MSL or 1 ft.  
F. Fine sand, top \_\_\_\_\_ ft. MSL or 5 ft.  
G. Filter pack, top \_\_\_\_\_ ft. MSL or 7 ft.  
H. Screen joint, top \_\_\_\_\_ ft. MSL or 9 ft.  
I. Well bottom \_\_\_\_\_ ft. MSL or 14 ft.  
J. Filter pack, bottom \_\_\_\_\_ ft. MSL or 14 ft.  
K. Borehole, bottom \_\_\_\_\_ ft. MSL or 14 ft.  
L. Borehole, diameter 2.25 in.  
M. O.D. well casing 1.375 in.  
N. I.D. well casing 1 in.

I hereby certify that the information on this form is true and correct to the best of my knowledge

Signature [Signature] Firm REI Engineering, Inc.  
4080 N. 20th Ave.  
Wausau, WI 54407

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Route To Solid Waste  Haz. Waste  Wastewater   
Env. Response & Repair  Underground Tanks  Other

<b>Facility/Project Name</b> Pioneer Bank- Four Judges Cleaners	<b>Local Grid Location of Well</b> _____ Feet S. ___ Feet W. ___ Feet N. ___ Feet E. _____	<b>Well Name</b> GP-2D
<b>Facility License Permit or Monitoring Number</b> BRRTS# 02-72-522339	<b>Grid Origin Location</b>	<b>Wls. Unique Well Number</b> _____ <b>DNR Well Number</b> _____
<b>Type of Well</b> Water Table Observation Well <input checked="" type="checkbox"/> 11 Piezometer <input type="checkbox"/> 12	<b>Section Location of Waste/Source</b> <input type="checkbox"/> E <input type="checkbox"/> W	<b>Date Well Installed</b> 9/1/17
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<b>Is Well A Point of Enforcement Std. Application</b> <input type="checkbox"/> Yes <input type="checkbox"/> No		

A. Protective pipe, top elevation \_\_\_\_\_ ft. MSL

B. Well casing, top elevation \_\_\_\_\_ ft. MSL

C. Land surface elevation \_\_\_\_\_ ft. MSL

D. Surface seal, bottom 1 ft. MSL or \_\_\_\_\_ ft.

12. USCS Classification of soil near screen:

GP  GM  GC  GW  SW  SP   
SM  SC  ML  MH  CL  CH   
Bedrock

13. Sieve analysis attached?  Yes  No

14. Drilling method used Rotary  50  
Hollow Stem Auger  41  
Geoprobe  Other

15. Drilling fluid used: Water  02 Air  01  
Drilling Mud  03 None  99

16. Drilling additives used?  Yes  No  
Describe \_\_\_\_\_

17. Source of water (attach analysis):  
\_\_\_\_\_

1. Cap and lock?  Yes  No

2. Protective cover pipe:  
a. Inside diameter: \_\_\_\_\_ in.  
b. Length: \_\_\_\_\_ ft.  
c. Material: Steel  04  
Other   
d. Additional protection?  Yes  No  
If yes, describe: \_\_\_\_\_

3. Surface seal: Bentonite  30  
Concrete  01  
Other

4. Material between well casing and protective pipe:  
Bentonite  30  
Annular space seal   
Other

5. Annular space seal:  
a. Granular Bentonite  33  
b. \_\_\_\_\_ Lbs/gal mud weight Bentonite-sand slurry  35  
c. \_\_\_\_\_ Lbs/gal mud weight Bentonite slurry  31  
d. \_\_\_\_\_ %Bentonite Bentonite-cement grout  50  
e. 1 ft<sup>3</sup> Volume added for any of the above  
f. How installed: Tremie  01  
Tremie pumped  02  
Gravity  08

6. Bentonite seal:  
a. Bentonite Granules  33  
b.  1/4 in.  3/8 in.  1/2 in. Bentonite pellets  32  
c. \_\_\_\_\_ Other

7. Fine sand material Manufacturer, product name and mesh size  
a. #15  
b. Volume added \_\_\_\_\_ ft<sup>3</sup>

8. Filter pack material: Manufacturer, product name and mesh size  
a. #40  
b. Volume added \_\_\_\_\_ ft<sup>3</sup>

9. Well casing: Flush threaded PVC schedule 40  23  
Flush threaded PVC schedule 80  24  
Other

10. Screen material: PVC  
a. Screen type: Factory cut  11  
Continuous slot  01  
Other   
b. Manufacturer Johnson Screen  
c. Slot size: 0.10 in.  
d. Slotted length: 5 ft.

11. Backfill material (below filter Pack): None  14  
Other

E. Bentonite seal, top \_\_\_\_\_ ft. MSL or 1 ft.

F. Fine sand, top \_\_\_\_\_ ft. MSL or 13 ft.

G. Filter pack, top \_\_\_\_\_ ft. MSL or 15 ft.

H. Screen joint, top \_\_\_\_\_ ft. MSL or 17 ft.

I. Well bottom \_\_\_\_\_ ft. MSL or 22 ft.

J. Filter pack, bottom \_\_\_\_\_ ft. MSL or 22 ft.

K. Borehole, bottom \_\_\_\_\_ ft. MSL or 22 ft.

L. Borehole, diameter 2.25 in.

M. O.D. well casing 1.375 in.

N. I.D. well casing 1 in.

I hereby certify that the information on this form is true and correct to the best of my knowledge

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Route To Solid Waste  Haz. Waste  Wastewater   
Env. Response & Repair  Underground Tanks  Other

<b>Facility/Project Name</b> Pioneer Bank- Four Judges Cleaners	<b>Local Grid Location of Well</b> _____ Feet S. ___ Feet W. ___ Feet N. ___ Feet E. ___	<b>Well Name</b> GP-3S
<b>Facility License Permit or Monitoring Number</b> BRRTS# 02-72-522339	<b>Grid Origin Location</b>	<b>Wis. Unique Well Number</b> _____ <b>DNR Well Number</b> _____
<b>Type of Well</b> Water Table Observation Well <input checked="" type="checkbox"/> 11 Piezometer <input type="checkbox"/> 12	<b>Section Location of Waste/Source</b> <input type="checkbox"/> E <input type="checkbox"/> W	<b>Date Well Installed</b> 9/1/17
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<b>Is Well A Point of Enforcement Std. Application</b> <input type="checkbox"/> Yes <input type="checkbox"/> No		

A. Protective pipe, top elevation _____ ft. MSL		1. Cap and lock? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No																									
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I. Well bottom _____ ft. MSL or _____ ft.	10. Screen material: PVC a. Screen type: Factory cut <input checked="" type="checkbox"/> 11 Continuous slot <input type="checkbox"/> 01 Other <input type="checkbox"/>																										
J. Filter pack, bottom _____ ft. MSL or _____ ft.	b. Manufacturer Johnson Screen c. Slot size: _____ 0.10 in. d. Slotted length: _____ 5 ft.																										
K. Borehole, bottom _____ ft. MSL or _____ ft.	11. Backfill material (below filter Pack): None <input checked="" type="checkbox"/> 14 Other <input type="checkbox"/>																										
L. Borehole, diameter _____ 2.25 in.																											
M. O.D. well casing _____ 1.375 in.																											
N. I.D. well casing _____ 1 in.																											

I hereby certify that the information on this form is true and correct to the best of my knowledge

Signature REI Firm REI Engineering, Inc.  
4080 N. 20th Ave.  
Wausau, WI 54401

Please complete both sides of this form and return to the appropriate DNR office listed at the top of this form as required by chs. 144, 147 and 160 Wis. Stats. and ch. NR 141, Wis. Ad. Code. In accordance with ch. 144 Wis. Stats., failure to file this form may result in a forfeiture of not less than \$10, nor more than \$5000 for each day of violation. In accordance with ch. 147 Wis. Stats., failure to file this form may result in a forfeiture of not more than \$10,000 for each day of violation. NOTE: Shaded areas are for DNR use only. see instructions for more information including where the completed form should be sent.

Route To Solid Waste  Haz. Waste  Wastewater   
Env. Response & Repair  Underground Tanks  Other

<b>Facility/Project Name</b> Pioneer Bank- Four Judges Cleaners	<b>Local Grid Location of Well</b> _____ Feet S. ___ Feet W. ___ Feet N. ___ Feet E. ___	<b>Well Name</b> GP-3D
<b>Facility License Permit or Monitoring Number</b> BRRTS# 02-72-522339	<b>Grid Origin Location</b>	<b>Wis. Unique Well Number</b> _____ <b>DNR Well Number</b> _____
<b>Type of Well</b> Water Table Observation Well <input checked="" type="checkbox"/> 11 Piezometer <input type="checkbox"/> 12	<b>Section Location of Waste/Source</b> <input type="checkbox"/> E <input type="checkbox"/> W	<b>Date Well Installed</b> 9/1/17
<b>Distance Well Is From Waste/Source Boundary</b> Ft. _____	<b>Location of Well Relative to Waste/Source</b> u <input type="checkbox"/> Upgradient s <input type="checkbox"/> Sidegradient d <input type="checkbox"/> Downgradient n <input type="checkbox"/> Not Known	<b>Well Installed By (Person's Name and Firm)</b> Geiss Soil and Samples, LLC
<b>Is Well A Point of Enforcement Std. Application</b> <input type="checkbox"/> Yes <input type="checkbox"/> No		

A. Protective pipe, top elevation \_\_\_\_\_ ft. MSL  
B. Well casing, top elevation \_\_\_\_\_ ft. MSL  
C. Land surface elevation \_\_\_\_\_ ft. MSL  
D. Surface seal, bottom 1 ft. MSL or \_\_\_\_\_ ft.

12. USCS Classification of soil near screen:

GP <input type="checkbox"/>	GM <input type="checkbox"/>	GC <input type="checkbox"/>	GW <input type="checkbox"/>	SW <input type="checkbox"/>	SP <input type="checkbox"/>
SM <input type="checkbox"/>	SC <input type="checkbox"/>	ML <input type="checkbox"/>	MH <input type="checkbox"/>	CL <input checked="" type="checkbox"/>	CH <input type="checkbox"/>
Bedrock <input type="checkbox"/>					

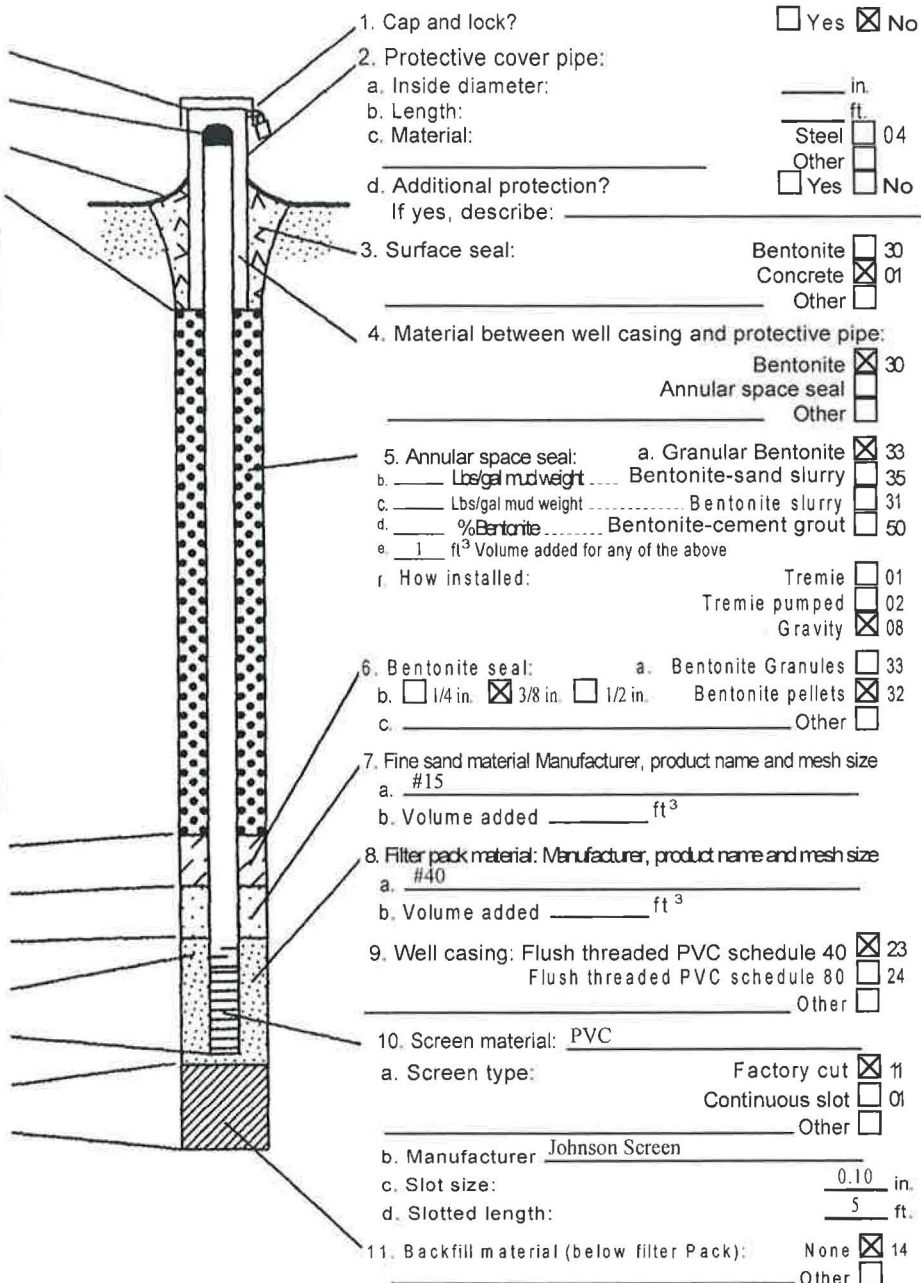
13. Sieve analysis attached?  Yes  No

14. Drilling method used Rotary  50  
Hollow Stem Auger  41  
Geoprobe  Other

15. Drilling fluid used: Water  02 Air  01  
Drilling Mud  03 None  99

16. Drilling additives used?  Yes  No  
Describe \_\_\_\_\_

17. Source of water (attach analysis):  
\_\_\_\_\_



E. Bentonite seal, top \_\_\_\_\_ ft. MSL or 1 ft.  
F. Fine sand, top \_\_\_\_\_ ft. MSL or 12 ft.  
G. Filter pack, top \_\_\_\_\_ ft. MSL or 14 ft.  
H. Screen joint, top \_\_\_\_\_ ft. MSL or 16 ft.  
I. Well bottom \_\_\_\_\_ ft. MSL or 21 ft.  
J. Filter pack, bottom \_\_\_\_\_ ft. MSL or 21 ft.  
K. Borehole, bottom \_\_\_\_\_ ft. MSL or 21 ft.  
L. Borehole, diameter 2.25 in.  
M. O.D. well casing 1.375 in.  
N. I.D. well casing 1 in.

I hereby certify that the information on this form is true and correct to the best of my knowledge

Signature [Signature] Firm REI Engineering, Inc.  
4080 N. 20th Ave.  
Wausau, WI 54401

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Route To Solid Waste  Haz. Waste  Wastewater   
Env. Response & Repair  Underground Tanks  Other

<b>Facility/Project Name</b> Pioneer Bank- Four Judges Cleaners	<b>Local Grid Location of Well</b> ____ Feet S. ____ Feet W. ____ Feet N. ____ Feet E.	<b>Well Name</b> GP-4S
<b>Facility License Permit or Monitoring Number</b> BRRTS# 02-72-522339	<b>Grid Origin Location</b>	<b>Ws. Unique Well Number</b> _____ <b>DNR Well Number</b> _____
<b>Type of Well</b> Water Table Observation Well <input checked="" type="checkbox"/> 11 Piezometer <input type="checkbox"/> 12	<b>Section Location of Waste/Source</b> <input type="checkbox"/> E <input type="checkbox"/> W	<b>Date Well Installed</b> 9/1/17
<b>Distance Well Is From Waste/Source Boundary</b> Ft. _____	<b>Location of Well Relative to Waste/Source</b> u <input type="checkbox"/> Upgradient s <input type="checkbox"/> Sidegradient d <input type="checkbox"/> Downgradient n <input type="checkbox"/> Not Known	<b>Well Installed By (Person's Name and Firm)</b> Geiss Soil and Samples, LLC
<b>Is Well A Point of Enforcement Std. Application</b> <input type="checkbox"/> Yes <input type="checkbox"/> No		

A. Protective pipe, top elevation \_\_\_\_\_ ft. MSL  
B. Well casing, top elevation \_\_\_\_\_ ft. MSL  
C. Land surface elevation \_\_\_\_\_ ft. MSL  
D. Surface seal, bottom 1 ft. MSL or \_\_\_\_\_ ft.

12. USCS Classification of soil near screen:

GP <input type="checkbox"/>	GM <input type="checkbox"/>	GC <input type="checkbox"/>	GW <input type="checkbox"/>	SW <input type="checkbox"/>	SP <input type="checkbox"/>
SM <input type="checkbox"/>	SC <input type="checkbox"/>	ML <input type="checkbox"/>	MH <input type="checkbox"/>	CL <input checked="" type="checkbox"/>	CH <input type="checkbox"/>
Bedrock <input type="checkbox"/>					

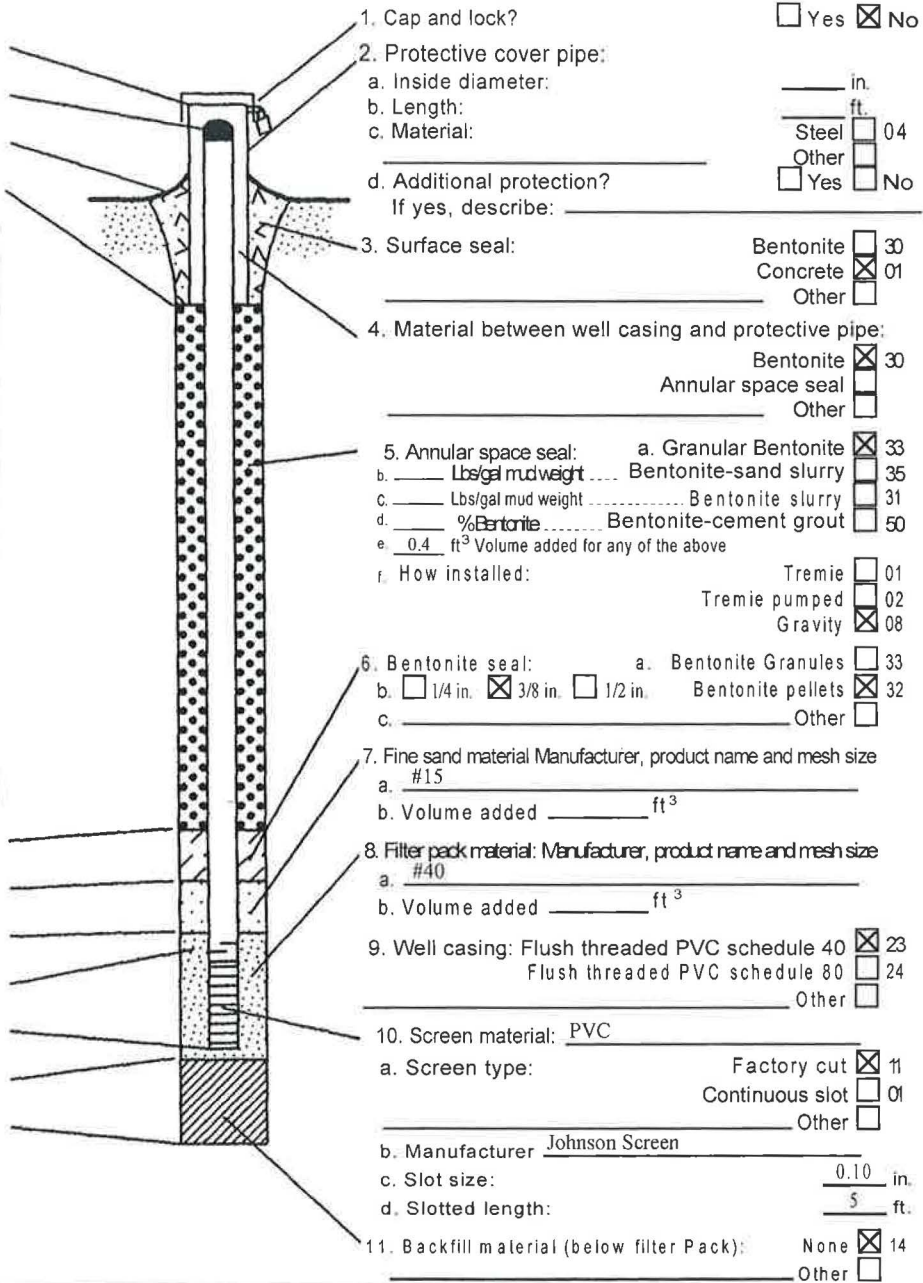
13. Sieve analysis attached?  Yes  No

14. Drilling method used Rotary  50  
Hollow Stem Auger  41  
Geoprobe  Other

15. Drilling fluid used: Water  02 Air  01  
Drilling Mud  03 None  99

16. Drilling additives used?  Yes  No  
Describe \_\_\_\_\_

17. Source of water (attach analysis):  
\_\_\_\_\_



E. Bentonite seal, top \_\_\_\_\_ ft. MSL or 1 ft.  
F. Fine sand, top \_\_\_\_\_ ft. MSL or 5 ft.  
G. Filter pack, top \_\_\_\_\_ ft. MSL or 7 ft.  
H. Screen joint, top \_\_\_\_\_ ft. MSL or 9 ft.  
I. Well bottom \_\_\_\_\_ ft. MSL or 14 ft.  
J. Filter pack, bottom \_\_\_\_\_ ft. MSL or 14 ft.  
K. Borehole, bottom \_\_\_\_\_ ft. MSL or 14 ft.  
L. Borehole, diameter 2.25 in.  
M. O.D. well casing 1.375 in.  
N. I.D. well casing 1 in.

I hereby certify that the information on this form is true and correct to the best of my knowledge

Signature [Signature] Firm REI Engineering, Inc.  
4080 N. 20th Ave.  
Wausau, WI 54401

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Route To Solid Waste  Haz. Waste  Wastewater   
Env. Response & Repair  Underground Tanks  Other

<b>Facility/Project Name</b> Pioneer Bank- Four Judges Cleaners	<b>Local Grid Location of Well</b> ____ Feet S. ____ Feet W. ____ Feet N. ____ Feet E.	<b>Well Name</b> GP-4D
<b>Facility License Permit or Monitoring Number</b> BRRTS# 02-72-522339	<b>Grid Origin Location</b>	<b>Ws. Unique Well Number</b> _____ <b>DNR Well Number</b> _____
<b>Type of Well</b> Water Table Observation Well <input checked="" type="checkbox"/> If Piezometer <input type="checkbox"/> If	<b>Section Location of Waste/Source</b> <input type="checkbox"/> E <input type="checkbox"/> W	<b>Date Well Installed</b> 9/1/17
<b>Distance Well Is From Waste/Source Boundary</b> Ft. _____	<b>Location of Well Relative to Waste/Source</b> u <input type="checkbox"/> Upgradient s <input type="checkbox"/> Sidegradient d <input type="checkbox"/> Downgradient n <input type="checkbox"/> Not Known	<b>Well Installed By (Person's Name and Firm)</b> Geiss Soil and Samples, LLC
<b>Is Well A Point of Enforcement Std. Application</b> <input type="checkbox"/> Yes <input type="checkbox"/> No		

A. Protective pipe, top elevation _____ ft. MSL		1. Cap and lock? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No																		
B. Well casing, top elevation _____ ft. MSL		2. Protective cover pipe: a. Inside diameter: _____ in. b. Length: _____ ft. c. Material: Steel <input type="checkbox"/> 04 Other <input type="checkbox"/> d. Additional protection? <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, describe: _____																		
C. Land surface elevation _____ ft. MSL		3. Surface seal: Bentonite <input type="checkbox"/> 30 Concrete <input checked="" type="checkbox"/> 01 Other <input type="checkbox"/>																		
D. Surface seal, bottom _____ 1 _____ ft. MSL or _____ ft.		4. Material between well casing and protective pipe: Bentonite <input checked="" type="checkbox"/> 30 Annular space seal <input type="checkbox"/> Other <input type="checkbox"/>																		
<table border="1"> <tr> <td colspan="3">12. USCS Classification of soil near screen:</td> </tr> <tr> <td>GP <input type="checkbox"/></td> <td>GM <input type="checkbox"/></td> <td>GC <input type="checkbox"/></td> </tr> <tr> <td>GW <input type="checkbox"/></td> <td>SW <input type="checkbox"/></td> <td>SP <input type="checkbox"/></td> </tr> <tr> <td>SM <input type="checkbox"/></td> <td>SC <input type="checkbox"/></td> <td>ML <input type="checkbox"/></td> </tr> <tr> <td>MH <input type="checkbox"/></td> <td>CL <input checked="" type="checkbox"/></td> <td>CH <input type="checkbox"/></td> </tr> <tr> <td colspan="3">Bedrock <input type="checkbox"/></td> </tr> </table>			12. USCS Classification of soil near screen:			GP <input type="checkbox"/>	GM <input type="checkbox"/>	GC <input type="checkbox"/>	GW <input type="checkbox"/>	SW <input type="checkbox"/>	SP <input type="checkbox"/>	SM <input type="checkbox"/>	SC <input type="checkbox"/>	ML <input type="checkbox"/>	MH <input type="checkbox"/>	CL <input checked="" type="checkbox"/>	CH <input type="checkbox"/>	Bedrock <input type="checkbox"/>		
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Bedrock <input type="checkbox"/>																				
13. Sieve analysis attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No																				
14. Drilling method used Rotary <input type="checkbox"/> 50 Hollow Stem Auger <input type="checkbox"/> 41 Geoprobe <input checked="" type="checkbox"/> Other																				
15. Drilling fluid used: Water <input type="checkbox"/> 02 Air <input type="checkbox"/> 01 Drilling Mud <input type="checkbox"/> 03 None <input checked="" type="checkbox"/> 99																				
16. Drilling additives used? <input type="checkbox"/> Yes <input type="checkbox"/> No Describe _____																				
17. Source of water (attach analysis): _____																				
E. Bentonite seal, top _____ ft. MSL or _____ 1 _____ ft.		5. Annular space seal: a. Granular Bentonite <input checked="" type="checkbox"/> 33 b. _____ Lbs/gal mud weight Bentonite-sand slurry <input type="checkbox"/> 35 c. _____ Lbs/gal mud weight Bentonite slurry <input type="checkbox"/> 31 d. _____ % Bentonite Bentonite-cement grout <input type="checkbox"/> 50 e. _____ 1 _____ ft <sup>3</sup> Volume added for any of the above f. How installed: Tremie <input type="checkbox"/> 01 Tremie pumped <input type="checkbox"/> 02 Gravity <input checked="" type="checkbox"/> 08																		
F. Fine sand, top _____ ft. MSL or _____ 13 _____ ft.		6. Bentonite seal: a. Bentonite Granules <input type="checkbox"/> 33 b. <input type="checkbox"/> 1/4 in. <input checked="" type="checkbox"/> 3/8 in. <input type="checkbox"/> 1/2 in. Bentonite pellets <input checked="" type="checkbox"/> 32 c. _____ Other <input type="checkbox"/>																		
G. Filter pack, top _____ ft. MSL or _____ 15 _____ ft.		7. Fine sand material Manufacturer, product name and mesh size a. #15 b. Volume added _____ ft <sup>3</sup>																		
H. Screen joint, top _____ ft. MSL or _____ 17 _____ ft.		8. Filter pack material: Manufacturer, product name and mesh size a. #40 b. Volume added _____ ft <sup>3</sup>																		
I. Well bottom _____ ft. MSL or _____ 22 _____ ft.		9. Well casing: Flush threaded PVC schedule 40 <input checked="" type="checkbox"/> 23 Flush threaded PVC schedule 80 <input type="checkbox"/> 24 Other <input type="checkbox"/>																		
J. Filter pack, bottom _____ ft. MSL or _____ 22 _____ ft.		10. Screen material: PVC a. Screen type: Factory cut <input checked="" type="checkbox"/> 11 Continuous slot <input type="checkbox"/> 01 Other <input type="checkbox"/>																		
K. Borehole, bottom _____ ft. MSL or _____ 22 _____ ft.		b. Manufacturer Johnson Screen c. Slot size: _____ 0.10 in. d. Slotted length: _____ 5 ft.																		
L. Borehole, diameter _____ 2.25 in.		11. Backfill material (below filter Pack): None <input checked="" type="checkbox"/> 14 Other <input type="checkbox"/>																		
M. O.D. well casing _____ 1.375 in.																				
N. I.D. well casing _____ 1 in.																				

I hereby certify that the information on this form is true and correct to the best of my knowledge

Signature 	Firm REI Engineering, Inc. 4080 N. 20th Ave. Wausau, WI 54401
---------------	--

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## **APPENDIX B**

## **PHOTO LOG**

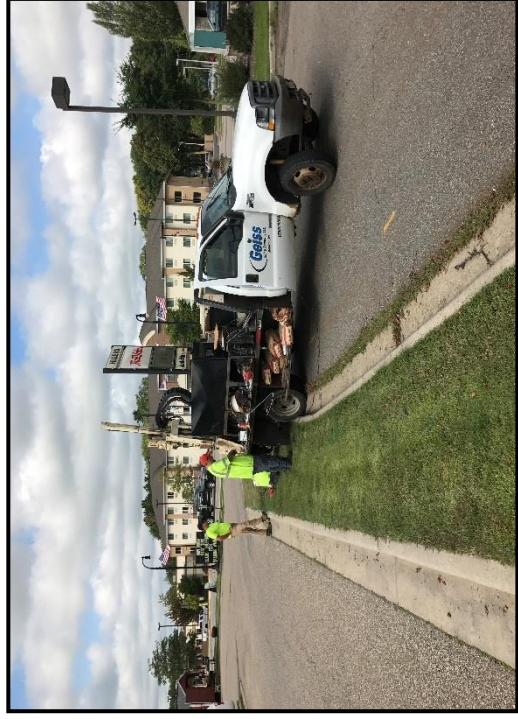




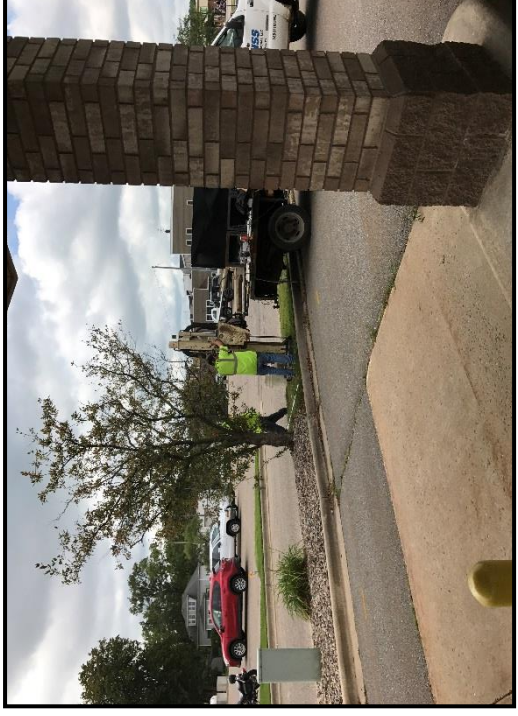
Installing Geoprobe Temp Wells (9-1-17)



Installing Geoprobe Temp Wells (9-1-17)



Installing Geoprobe Temp Wells (9-1-17)



Installing Geoprobe Temp Wells (9-1-17)





Geoprobe Temp Wells (GP-4S & GP-4D)



Sampling Geoprobe Temp Wells (9-8-17)

Pioneer Bank

701 South Central Avenue, Marshfield, WI

Photographs

REI No. 5403

## **APPENDIX C**

### **METHODS AND PROCEDURES**





# **METHODS AND PROCEDURES**

## **FOR**

### **GEOPROBE WATER SAMPLING**

#### **GROUNDWATER PROFILER**

The geoprobe rods are connected to a covered stainless steel, 2-foot screen and driven to the appropriate depth. Internal rods are inserted in the hollow rods, and the cover is unscrewed and released, exposing the screen.

#### **PURGING, SAMPLING AND CHAIN OF CUSTODY**

Disposable ¼" polyethylene tubing is inserted to the screen and connected to a peristaltic pump. The water is pumped slowly until sediment free. Purge water is containerized for proper disposal.

Water samples are collected directly from the tubing. If the well is purged dry, it is allowed to recharge and then sampled. Samples are labeled and placed in a cooler to be preserved at approximately 4 degrees C. Samples are accompanied by Chain of Custody records.

Upon completion of a sample, a chain of custody log is initiated. The chain of custody record includes the following information: project name, work order number, shipped by, shipped to, sampling point, location, field ID number, date and time taken, sample type, number of containers, analysis required, sampler (s) signature (s), etc. As few people as possible handle the samples.

#### **DECONTAMINATION**

Sampling equipment is decontaminated prior to sampling. The geoprobe rods and screen are washed between holes using distilled water and Alconox cleaning detergent. Latex gloves are worn during all sample collection procedures and are changed between the collection of each of the water samples from each monitoring well.

**APPENDIX D**

**GROUNDWATER LABORATORY  
ANALYTICAL REPORT**



September 11, 2017

Brian Bailey  
REI Engineering  
4080 North 20th Ave  
Wausau, WI 54401

RE: Project: 5403 FORMER JUDGES  
Pace Project No.: 40156260

Dear Brian Bailey:

Enclosed are the analytical results for sample(s) received by the laboratory on September 07, 2017. 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,



Brian Basten  
brian.basten@pacelabs.com  
(920)469-2436  
Project Manager

Enclosures



## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## CERTIFICATIONS

Project: 5403 FORMER JUDGES

Pace Project No.: 40156260

---

### 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

---

## REPORT OF LABORATORY ANALYSIS

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without the written consent of Pace Analytical Services, LLC.



### SAMPLE SUMMARY

Project: 5403 FORMER JUDGES  
Pace Project No.: 40156260

---

<b>Lab ID</b>	<b>Sample ID</b>	<b>Matrix</b>	<b>Date Collected</b>	<b>Date Received</b>
40156260001	GP-15	Water	09/01/17 09:10	09/07/17 08:15

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### SAMPLE ANALYTE COUNT

Project: 5403 FORMER JUDGES

Pace Project No.: 40156260

---

<b>Lab ID</b>	<b>Sample ID</b>	<b>Method</b>	<b>Analysts</b>	<b>Analytes Reported</b>
40156260001	GP-15	EPA 8260	LAP	64

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS

Project: 5403 FORMER JUDGES

Pace Project No.: 40156260

**Sample: GP-15**      **Lab ID: 40156260001**      Collected: 09/01/17 09:10      Received: 09/07/17 08:15      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b> Analytical Method: EPA 8260									
1,1,1,2-Tetrachloroethane	<0.18	ug/L	1.0	0.18	1		09/08/17 15:34	630-20-6	
1,1,1-Trichloroethane	<0.50	ug/L	1.0	0.50	1		09/08/17 15:34	71-55-6	
1,1,2,2-Tetrachloroethane	<0.25	ug/L	1.0	0.25	1		09/08/17 15:34	79-34-5	
1,1,2-Trichloroethane	<0.20	ug/L	1.0	0.20	1		09/08/17 15:34	79-00-5	
1,1-Dichloroethane	<0.24	ug/L	1.0	0.24	1		09/08/17 15:34	75-34-3	
1,1-Dichloroethene	<0.41	ug/L	1.0	0.41	1		09/08/17 15:34	75-35-4	
1,1-Dichloropropene	<0.44	ug/L	1.0	0.44	1		09/08/17 15:34	563-58-6	
1,2,3-Trichlorobenzene	<2.1	ug/L	5.0	2.1	1		09/08/17 15:34	87-61-6	
1,2,3-Trichloropropane	<0.50	ug/L	1.0	0.50	1		09/08/17 15:34	96-18-4	
1,2,4-Trichlorobenzene	<2.2	ug/L	5.0	2.2	1		09/08/17 15:34	120-82-1	
1,2,4-Trimethylbenzene	<0.50	ug/L	1.0	0.50	1		09/08/17 15:34	95-63-6	
1,2-Dibromo-3-chloropropane	<2.2	ug/L	5.0	2.2	1		09/08/17 15:34	96-12-8	
1,2-Dibromoethane (EDB)	<0.18	ug/L	1.0	0.18	1		09/08/17 15:34	106-93-4	
1,2-Dichlorobenzene	<0.50	ug/L	1.0	0.50	1		09/08/17 15:34	95-50-1	
1,2-Dichloroethane	<0.17	ug/L	1.0	0.17	1		09/08/17 15:34	107-06-2	
1,2-Dichloropropane	<0.23	ug/L	1.0	0.23	1		09/08/17 15:34	78-87-5	
1,3,5-Trimethylbenzene	<0.50	ug/L	1.0	0.50	1		09/08/17 15:34	108-67-8	
1,3-Dichlorobenzene	<0.50	ug/L	1.0	0.50	1		09/08/17 15:34	541-73-1	
1,3-Dichloropropane	<0.50	ug/L	1.0	0.50	1		09/08/17 15:34	142-28-9	
1,4-Dichlorobenzene	<0.50	ug/L	1.0	0.50	1		09/08/17 15:34	106-46-7	
2,2-Dichloropropane	<0.48	ug/L	1.0	0.48	1		09/08/17 15:34	594-20-7	
2-Chlorotoluene	<0.50	ug/L	1.0	0.50	1		09/08/17 15:34	95-49-8	
4-Chlorotoluene	<0.21	ug/L	1.0	0.21	1		09/08/17 15:34	106-43-4	
Benzene	<0.50	ug/L	1.0	0.50	1		09/08/17 15:34	71-43-2	
Bromobenzene	<0.23	ug/L	1.0	0.23	1		09/08/17 15:34	108-86-1	
Bromochloromethane	<0.34	ug/L	1.0	0.34	1		09/08/17 15:34	74-97-5	
Bromodichloromethane	<0.50	ug/L	1.0	0.50	1		09/08/17 15:34	75-27-4	
Bromoform	<0.50	ug/L	1.0	0.50	1		09/08/17 15:34	75-25-2	
Bromomethane	<2.4	ug/L	5.0	2.4	1		09/08/17 15:34	74-83-9	
Carbon tetrachloride	<0.50	ug/L	1.0	0.50	1		09/08/17 15:34	56-23-5	
Chlorobenzene	<0.50	ug/L	1.0	0.50	1		09/08/17 15:34	108-90-7	
Chloroethane	<0.37	ug/L	1.0	0.37	1		09/08/17 15:34	75-00-3	
Chloroform	<2.5	ug/L	5.0	2.5	1		09/08/17 15:34	67-66-3	
Chloromethane	<0.50	ug/L	1.0	0.50	1		09/08/17 15:34	74-87-3	
Dibromochloromethane	<0.50	ug/L	1.0	0.50	1		09/08/17 15:34	124-48-1	
Dibromomethane	<0.43	ug/L	1.0	0.43	1		09/08/17 15:34	74-95-3	
Dichlorodifluoromethane	<0.22	ug/L	1.0	0.22	1		09/08/17 15:34	75-71-8	
Diisopropyl ether	<0.50	ug/L	1.0	0.50	1		09/08/17 15:34	108-20-3	
Ethylbenzene	<0.50	ug/L	1.0	0.50	1		09/08/17 15:34	100-41-4	
Hexachloro-1,3-butadiene	<2.1	ug/L	5.0	2.1	1		09/08/17 15:34	87-68-3	
Isopropylbenzene (Cumene)	<0.14	ug/L	1.0	0.14	1		09/08/17 15:34	98-82-8	
Methyl-tert-butyl ether	<0.17	ug/L	1.0	0.17	1		09/08/17 15:34	1634-04-4	
Methylene Chloride	<0.23	ug/L	1.0	0.23	1		09/08/17 15:34	75-09-2	
Naphthalene	<2.5	ug/L	5.0	2.5	1		09/08/17 15:34	91-20-3	
Styrene	<0.50	ug/L	1.0	0.50	1		09/08/17 15:34	100-42-5	
Tetrachloroethene	<0.50	ug/L	1.0	0.50	1		09/08/17 15:34	127-18-4	

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### ANALYTICAL RESULTS

Project: 5403 FORMER JUDGES

Pace Project No.: 40156260

**Sample: GP-15**      **Lab ID: 40156260001**      Collected: 09/01/17 09:10      Received: 09/07/17 08:15      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>									
Analytical Method: EPA 8260									
Toluene	<0.50	ug/L	1.0	0.50	1		09/08/17 15:34	108-88-3	
Trichloroethene	<0.33	ug/L	1.0	0.33	1		09/08/17 15:34	79-01-6	
Trichlorofluoromethane	<0.18	ug/L	1.0	0.18	1		09/08/17 15:34	75-69-4	
Vinyl chloride	<0.18	ug/L	1.0	0.18	1		09/08/17 15:34	75-01-4	
cis-1,2-Dichloroethene	<0.26	ug/L	1.0	0.26	1		09/08/17 15:34	156-59-2	
cis-1,3-Dichloropropene	<0.50	ug/L	1.0	0.50	1		09/08/17 15:34	10061-01-5	
m&p-Xylene	<1.0	ug/L	2.0	1.0	1		09/08/17 15:34	179601-23-1	
n-Butylbenzene	<0.50	ug/L	1.0	0.50	1		09/08/17 15:34	104-51-8	
n-Propylbenzene	<0.50	ug/L	1.0	0.50	1		09/08/17 15:34	103-65-1	
o-Xylene	<0.50	ug/L	1.0	0.50	1		09/08/17 15:34	95-47-6	
p-Isopropyltoluene	<0.50	ug/L	1.0	0.50	1		09/08/17 15:34	99-87-6	
sec-Butylbenzene	<2.2	ug/L	5.0	2.2	1		09/08/17 15:34	135-98-8	
tert-Butylbenzene	<0.18	ug/L	1.0	0.18	1		09/08/17 15:34	98-06-6	
trans-1,2-Dichloroethene	<0.26	ug/L	1.0	0.26	1		09/08/17 15:34	156-60-5	
trans-1,3-Dichloropropene	<0.23	ug/L	1.0	0.23	1		09/08/17 15:34	10061-02-6	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	85	%	61-130		1		09/08/17 15:34	460-00-4	
Dibromofluoromethane (S)	100	%	67-130		1		09/08/17 15:34	1868-53-7	
Toluene-d8 (S)	98	%	70-130		1		09/08/17 15:34	2037-26-5	

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### QUALITY CONTROL DATA

Project: 5403 FORMER JUDGES  
Pace Project No.: 40156260

QC Batch: 267015 Analysis Method: EPA 8260  
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV  
Associated Lab Samples: 40156260001

METHOD BLANK: 1568885 Matrix: Water  
Associated Lab Samples: 40156260001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	<0.18	1.0	09/08/17 09:31	
1,1,1-Trichloroethane	ug/L	<0.50	1.0	09/08/17 09:31	
1,1,2,2-Tetrachloroethane	ug/L	<0.25	1.0	09/08/17 09:31	
1,1,2-Trichloroethane	ug/L	<0.20	1.0	09/08/17 09:31	
1,1-Dichloroethane	ug/L	<0.24	1.0	09/08/17 09:31	
1,1-Dichloroethene	ug/L	<0.41	1.0	09/08/17 09:31	
1,1-Dichloropropene	ug/L	<0.44	1.0	09/08/17 09:31	
1,2,3-Trichlorobenzene	ug/L	<2.1	5.0	09/08/17 09:31	
1,2,3-Trichloropropane	ug/L	<0.50	1.0	09/08/17 09:31	
1,2,4-Trichlorobenzene	ug/L	<2.2	5.0	09/08/17 09:31	
1,2,4-Trimethylbenzene	ug/L	<0.50	1.0	09/08/17 09:31	
1,2-Dibromo-3-chloropropane	ug/L	<2.2	5.0	09/08/17 09:31	
1,2-Dibromoethane (EDB)	ug/L	<0.18	1.0	09/08/17 09:31	
1,2-Dichlorobenzene	ug/L	<0.50	1.0	09/08/17 09:31	
1,2-Dichloroethane	ug/L	<0.17	1.0	09/08/17 09:31	
1,2-Dichloropropane	ug/L	<0.23	1.0	09/08/17 09:31	
1,3,5-Trimethylbenzene	ug/L	<0.50	1.0	09/08/17 09:31	
1,3-Dichlorobenzene	ug/L	<0.50	1.0	09/08/17 09:31	
1,3-Dichloropropane	ug/L	<0.50	1.0	09/08/17 09:31	
1,4-Dichlorobenzene	ug/L	<0.50	1.0	09/08/17 09:31	
2,2-Dichloropropane	ug/L	<0.48	1.0	09/08/17 09:31	
2-Chlorotoluene	ug/L	<0.50	1.0	09/08/17 09:31	
4-Chlorotoluene	ug/L	<0.21	1.0	09/08/17 09:31	
Benzene	ug/L	<0.50	1.0	09/08/17 09:31	
Bromobenzene	ug/L	<0.23	1.0	09/08/17 09:31	
Bromochloromethane	ug/L	<0.34	1.0	09/08/17 09:31	
Bromodichloromethane	ug/L	<0.50	1.0	09/08/17 09:31	
Bromoform	ug/L	<0.50	1.0	09/08/17 09:31	
Bromomethane	ug/L	<2.4	5.0	09/08/17 09:31	
Carbon tetrachloride	ug/L	<0.50	1.0	09/08/17 09:31	
Chlorobenzene	ug/L	<0.50	1.0	09/08/17 09:31	
Chloroethane	ug/L	<0.37	1.0	09/08/17 09:31	
Chloroform	ug/L	<2.5	5.0	09/08/17 09:31	
Chloromethane	ug/L	<0.50	1.0	09/08/17 09:31	
cis-1,2-Dichloroethene	ug/L	<0.26	1.0	09/08/17 09:31	
cis-1,3-Dichloropropene	ug/L	<0.50	1.0	09/08/17 09:31	
Dibromochloromethane	ug/L	<0.50	1.0	09/08/17 09:31	
Dibromomethane	ug/L	<0.43	1.0	09/08/17 09:31	
Dichlorodifluoromethane	ug/L	<0.22	1.0	09/08/17 09:31	
Diisopropyl ether	ug/L	<0.50	1.0	09/08/17 09:31	
Ethylbenzene	ug/L	<0.50	1.0	09/08/17 09:31	

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### QUALITY CONTROL DATA

Project: 5403 FORMER JUDGES  
Pace Project No.: 40156260

METHOD BLANK: 1568885 Matrix: Water  
Associated Lab Samples: 40156260001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Hexachloro-1,3-butadiene	ug/L	<2.1	5.0	09/08/17 09:31	
Isopropylbenzene (Cumene)	ug/L	<0.14	1.0	09/08/17 09:31	
m&p-Xylene	ug/L	<1.0	2.0	09/08/17 09:31	
Methyl-tert-butyl ether	ug/L	<0.17	1.0	09/08/17 09:31	
Methylene Chloride	ug/L	<0.23	1.0	09/08/17 09:31	
n-Butylbenzene	ug/L	<0.50	1.0	09/08/17 09:31	
n-Propylbenzene	ug/L	<0.50	1.0	09/08/17 09:31	
Naphthalene	ug/L	<2.5	5.0	09/08/17 09:31	
o-Xylene	ug/L	<0.50	1.0	09/08/17 09:31	
p-Isopropyltoluene	ug/L	<0.50	1.0	09/08/17 09:31	
sec-Butylbenzene	ug/L	<2.2	5.0	09/08/17 09:31	
Styrene	ug/L	<0.50	1.0	09/08/17 09:31	
tert-Butylbenzene	ug/L	<0.18	1.0	09/08/17 09:31	
Tetrachloroethene	ug/L	<0.50	1.0	09/08/17 09:31	
Toluene	ug/L	<0.50	1.0	09/08/17 09:31	
trans-1,2-Dichloroethene	ug/L	<0.26	1.0	09/08/17 09:31	
trans-1,3-Dichloropropene	ug/L	<0.23	1.0	09/08/17 09:31	
Trichloroethene	ug/L	<0.33	1.0	09/08/17 09:31	
Trichlorofluoromethane	ug/L	<0.18	1.0	09/08/17 09:31	
Vinyl chloride	ug/L	<0.18	1.0	09/08/17 09:31	
4-Bromofluorobenzene (S)	%	95	61-130	09/08/17 09:31	
Dibromofluoromethane (S)	%	99	67-130	09/08/17 09:31	
Toluene-d8 (S)	%	100	70-130	09/08/17 09:31	

LABORATORY CONTROL SAMPLE: 1568886

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	50	56.6	113	70-130	
1,1,2,2-Tetrachloroethane	ug/L	50	52.0	104	70-130	
1,1,2-Trichloroethane	ug/L	50	49.4	99	70-130	
1,1-Dichloroethane	ug/L	50	55.5	111	71-132	
1,1-Dichloroethene	ug/L	50	50.6	101	75-130	
1,2,4-Trichlorobenzene	ug/L	50	51.0	102	70-130	
1,2-Dibromo-3-chloropropane	ug/L	50	42.5	85	63-123	
1,2-Dibromoethane (EDB)	ug/L	50	52.6	105	70-130	
1,2-Dichlorobenzene	ug/L	50	59.0	118	70-130	
1,2-Dichloroethane	ug/L	50	57.1	114	70-131	
1,2-Dichloropropane	ug/L	50	52.1	104	80-120	
1,3-Dichlorobenzene	ug/L	50	60.7	121	70-130	
1,4-Dichlorobenzene	ug/L	50	57.1	114	70-130	
Benzene	ug/L	50	54.5	109	73-145	
Bromodichloromethane	ug/L	50	56.1	112	70-130	
Bromoform	ug/L	50	45.1	90	67-130	
Bromomethane	ug/L	50	35.3	71	26-128	

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### QUALITY CONTROL DATA

Project: 5403 FORMER JUDGES

Pace Project No.: 40156260

LABORATORY CONTROL SAMPLE: 1568886

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Carbon tetrachloride	ug/L	50	59.6	119	70-133	
Chlorobenzene	ug/L	50	56.0	112	70-130	
Chloroethane	ug/L	50	43.8	88	58-120	
Chloroform	ug/L	50	57.2	114	80-121	
Chloromethane	ug/L	50	32.0	64	40-127	
cis-1,2-Dichloroethene	ug/L	50	57.2	114	70-130	
cis-1,3-Dichloropropene	ug/L	50	48.2	96	70-130	
Dibromochloromethane	ug/L	50	54.3	109	70-130	
Dichlorodifluoromethane	ug/L	50	22.3	45	20-135	
Ethylbenzene	ug/L	50	56.8	114	87-129	
Isopropylbenzene (Cumene)	ug/L	50	58.2	116	70-130	
m&p-Xylene	ug/L	100	114	114	70-130	
Methyl-tert-butyl ether	ug/L	50	52.1	104	66-143	
Methylene Chloride	ug/L	50	52.2	104	70-130	
o-Xylene	ug/L	50	57.4	115	70-130	
Styrene	ug/L	50	52.9	106	70-130	
Tetrachloroethene	ug/L	50	52.8	106	70-130	
Toluene	ug/L	50	54.8	110	82-130	
trans-1,2-Dichloroethene	ug/L	50	54.8	110	75-132	
trans-1,3-Dichloropropene	ug/L	50	44.7	89	70-130	
Trichloroethene	ug/L	50	56.6	113	70-130	
Trichlorofluoromethane	ug/L	50	54.2	108	76-133	
Vinyl chloride	ug/L	50	37.2	74	57-136	
4-Bromofluorobenzene (S)	%			97	61-130	
Dibromofluoromethane (S)	%			102	67-130	
Toluene-d8 (S)	%			95	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1568942 1568943

Parameter	Units	40156254005		MSD		MS		MSD		% Rec Limits	RPD	Max RPD	Qual
		Result	MS Spike Conc.	MSD Spike Conc.	Result	MSD Result	% Rec	% Rec					
1,1,1-Trichloroethane	ug/L	<0.50	50	50	53.8	55.7	108	111	70-134	4	20		
1,1,2,2-Tetrachloroethane	ug/L	<0.25	50	50	48.1	49.4	96	99	70-130	3	20		
1,1,2-Trichloroethane	ug/L	<0.20	50	50	49.2	51.2	98	102	70-130	4	20		
1,1-Dichloroethane	ug/L	<0.24	50	50	49.9	54.6	100	109	71-133	9	20		
1,1-Dichloroethene	ug/L	<0.41	50	50	46.3	48.0	93	96	75-136	4	20		
1,2,4-Trichlorobenzene	ug/L	<2.2	50	50	47.1	47.6	94	95	70-130	1	20		
1,2-Dibromo-3-chloropropane	ug/L	<2.2	50	50	39.4	44.4	79	89	63-123	12	20		
1,2-Dibromoethane (EDB)	ug/L	<0.18	50	50	49.5	51.3	99	103	70-130	4	20		
1,2-Dichlorobenzene	ug/L	<0.50	50	50	55.1	54.6	110	109	70-130	1	20		
1,2-Dichloroethane	ug/L	<0.17	50	50	52.7	55.6	105	111	70-131	5	20		
1,2-Dichloropropane	ug/L	<0.23	50	50	52.2	53.0	104	106	80-120	1	20		
1,3-Dichlorobenzene	ug/L	<0.50	50	50	55.1	56.8	110	114	70-130	3	20		
1,4-Dichlorobenzene	ug/L	<0.50	50	50	53.4	53.0	107	106	70-130	1	20		

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### QUALITY CONTROL DATA

Project: 5403 FORMER JUDGES

Pace Project No.: 40156260

Parameter	Units	MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1568942		1568943		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	RPD	Qual
		40156254005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result								
Benzene	ug/L	<0.50	50	50	51.5	53.9	103	108	73-145	5	20		
Bromodichloromethane	ug/L	<0.50	50	50	52.3	54.8	105	110	70-130	5	20		
Bromoform	ug/L	<0.50	50	50	44.7	47.3	89	95	67-130	6	20		
Bromomethane	ug/L	<2.4	50	50	33.0	37.5	66	75	26-129	13	20		
Carbon tetrachloride	ug/L	<0.50	50	50	54.2	58.1	108	116	70-134	7	20		
Chlorobenzene	ug/L	<0.50	50	50	54.0	55.9	108	112	70-130	3	20		
Chloroethane	ug/L	<0.37	50	50	36.4	40.2	73	80	58-120	10	20		
Chloroform	ug/L	<2.5	50	50	51.5	54.0	103	108	80-121	5	20		
Chloromethane	ug/L	<0.50	50	50	25.5	26.2	51	52	40-128	3	20		
cis-1,2-Dichloroethene	ug/L	<0.26	50	50	52.5	55.0	105	110	70-130	5	20		
cis-1,3-Dichloropropene	ug/L	<0.50	50	50	46.4	46.7	93	93	70-130	1	20		
Dibromochloromethane	ug/L	<0.50	50	50	50.7	54.0	101	108	70-130	6	20		
Dichlorodifluoromethane	ug/L	<0.22	50	50	18.5	19.5	37	39	20-146	5	20		
Ethylbenzene	ug/L	<0.50	50	50	54.6	55.9	109	112	87-129	2	20		
Isopropylbenzene (Cumene)	ug/L	<0.14	50	50	55.4	57.8	111	116	70-130	4	20		
m&p-Xylene	ug/L	<1.0	100	100	108	111	108	111	70-130	3	20		
Methyl-tert-butyl ether	ug/L	<0.17	50	50	49.6	51.7	99	103	66-143	4	20		
Methylene Chloride	ug/L	<0.23	50	50	45.6	49.8	91	100	70-130	9	20		
o-Xylene	ug/L	<0.50	50	50	55.9	55.3	112	111	70-130	1	20		
Styrene	ug/L	<0.50	50	50	49.0	51.6	98	103	70-130	5	20		
Tetrachloroethene	ug/L	<0.50	50	50	50.4	54.9	101	110	70-130	9	20		
Toluene	ug/L	<0.50	50	50	52.0	53.9	104	108	82-131	4	20		
trans-1,2-Dichloroethene	ug/L	<0.26	50	50	51.3	51.0	103	102	75-135	1	20		
trans-1,3-Dichloropropene	ug/L	<0.23	50	50	43.2	46.6	86	93	70-130	8	20		
Trichloroethene	ug/L	<0.33	50	50	55.6	55.8	111	112	70-130	0	20		
Trichlorofluoromethane	ug/L	<0.18	50	50	46.4	48.7	93	97	76-150	5	20		
Vinyl chloride	ug/L	0.69J	50	50	31.5	34.3	62	67	56-143	8	20		
4-Bromofluorobenzene (S)	%						99	99	61-130				
Dibromofluoromethane (S)	%						99	103	67-130				
Toluene-d8 (S)	%						97	97	70-130				

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## QUALIFIERS

Project: 5403 FORMER JUDGES  
Pace Project No.: 40156260

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### DEFINITIONS

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

ND - Not Detected at or above LOD.

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

LOD - Limit of Detection adjusted for dilution factor 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.

## REPORT OF LABORATORY ANALYSIS

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### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 5403 FORMER JUDGES

Pace Project No.: 40156260

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<b>Lab ID</b>	<b>Sample ID</b>	<b>QC Batch Method</b>	<b>QC Batch</b>	<b>Analytical Method</b>	<b>Analytical Batch</b>
40156260001	GP-15	EPA 8260	267015		

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### REPORT OF LABORATORY ANALYSIS

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Sample Condition Upon Receipt

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

Project #: WO#: 40156260

Client Name: REI

Courier: Fed Ex UPS Client Pace Other:

Tracking #: 1479602-1



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

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

Packing Material: Bubble Wrap Bubble Bags None Other

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

Cooler Temperature Uncorr: I/Corr: PSI Biological Tissue is Frozen: yes no

Temp Blank Present: yes no

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

Person examining contents:
Date: 9/7/17
Initials: KS

Comments:

Table with 15 rows of inspection items and checkboxes. Includes items like Chain of Custody Present, Sufficient Volume, Containers Intact, etc. Handwritten notes include 'NO ms/msd' and 'RMV 9/7/17'.

Client Notification/ Resolution:
Person Contacted: Date/Time:
Comments/ Resolution:

Project Manager Review: Date: 9-7-17



September 13, 2017

Brian Bailey  
REI Engineering  
4080 North 20th Ave  
Wausau, WI 54401

RE: Project: 5403 FORMER JUDGES  
Pace Project No.: 40156443

Dear Brian Bailey:

Enclosed are the analytical results for sample(s) received by the laboratory on September 09, 2017. 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,



Brian Basten  
brian.basten@pacelabs.com  
(920)469-2436  
Project Manager

Enclosures



## REPORT OF LABORATORY ANALYSIS

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## CERTIFICATIONS

Project: 5403 FORMER JUDGES

Pace Project No.: 40156443

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### Green Bay Certification IDs

1241 Bellevue Street, Green Bay, WI 54302

Florida/NELAP Certification #: E87948

Illinois Certification #: 200050

Kentucky UST Certification #: 82

Louisiana Certification #: 04168

Minnesota Certification #: 055-999-334

New York Certification #: 12064

North Dakota Certification #: R-150

Virginia VELAP ID: 460263

South Carolina Certification #: 83006001

Texas Certification #: T104704529-14-1

Wisconsin Certification #: 405132750

Wisconsin DATCP Certification #: 105-444

USDA Soil Permit #: P330-16-00157

Federal Fish & Wildlife Permit #: LE51774A-0

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## REPORT OF LABORATORY ANALYSIS

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## SAMPLE SUMMARY

Project: 5403 FORMER JUDGES

Pace Project No.: 40156443

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40156443001	GP-1D	Water	09/08/17 13:40	09/09/17 08:00
40156443002	GP-2S	Water	09/08/17 13:50	09/09/17 08:00
40156443003	GP-2D	Water	09/08/17 14:00	09/09/17 08:00
40156443004	GP-3S	Water	09/08/17 14:05	09/09/17 08:00
40156443005	GP-3D	Water	09/08/17 14:10	09/09/17 08:00
40156443006	GP-4S	Water	09/08/17 14:35	09/09/17 08:00
40156443007	GP-4D	Water	09/08/17 14:30	09/09/17 08:00

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### SAMPLE ANALYTE COUNT

Project: 5403 FORMER JUDGES

Pace Project No.: 40156443

Lab ID	Sample ID	Method	Analysts	Analytes Reported
40156443001	GP-1D	EPA 8260	HNW	64
40156443002	GP-2S	EPA 8260	LAP	64
40156443003	GP-2D	EPA 8260	HNW	64
40156443004	GP-3S	EPA 8260	HNW	64
40156443005	GP-3D	EPA 8260	HNW	64
40156443006	GP-4S	EPA 8260	HNW	64
40156443007	GP-4D	EPA 8260	HNW	64

### REPORT OF LABORATORY ANALYSIS

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### ANALYTICAL RESULTS

Project: 5403 FORMER JUDGES

Pace Project No.: 40156443

**Sample: GP-1D**      **Lab ID: 40156443001**      Collected: 09/08/17 13:40      Received: 09/09/17 08:00      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b> Analytical Method: EPA 8260									
1,1,1,2-Tetrachloroethane	<0.18	ug/L	1.0	0.18	1		09/11/17 19:49	630-20-6	
1,1,1-Trichloroethane	<0.50	ug/L	1.0	0.50	1		09/11/17 19:49	71-55-6	
1,1,2,2-Tetrachloroethane	<0.25	ug/L	1.0	0.25	1		09/11/17 19:49	79-34-5	
1,1,2-Trichloroethane	<0.20	ug/L	1.0	0.20	1		09/11/17 19:49	79-00-5	
1,1-Dichloroethane	<0.24	ug/L	1.0	0.24	1		09/11/17 19:49	75-34-3	
1,1-Dichloroethene	<0.41	ug/L	1.0	0.41	1		09/11/17 19:49	75-35-4	
1,1-Dichloropropene	<0.44	ug/L	1.0	0.44	1		09/11/17 19:49	563-58-6	
1,2,3-Trichlorobenzene	<2.1	ug/L	5.0	2.1	1		09/11/17 19:49	87-61-6	
1,2,3-Trichloropropane	<0.50	ug/L	1.0	0.50	1		09/11/17 19:49	96-18-4	
1,2,4-Trichlorobenzene	<2.2	ug/L	5.0	2.2	1		09/11/17 19:49	120-82-1	
1,2,4-Trimethylbenzene	<0.50	ug/L	1.0	0.50	1		09/11/17 19:49	95-63-6	
1,2-Dibromo-3-chloropropane	<2.2	ug/L	5.0	2.2	1		09/11/17 19:49	96-12-8	
1,2-Dibromoethane (EDB)	<0.18	ug/L	1.0	0.18	1		09/11/17 19:49	106-93-4	
1,2-Dichlorobenzene	<0.50	ug/L	1.0	0.50	1		09/11/17 19:49	95-50-1	
1,2-Dichloroethane	<0.17	ug/L	1.0	0.17	1		09/11/17 19:49	107-06-2	
1,2-Dichloropropane	<0.23	ug/L	1.0	0.23	1		09/11/17 19:49	78-87-5	
1,3,5-Trimethylbenzene	<0.50	ug/L	1.0	0.50	1		09/11/17 19:49	108-67-8	
1,3-Dichlorobenzene	<0.50	ug/L	1.0	0.50	1		09/11/17 19:49	541-73-1	
1,3-Dichloropropane	<0.50	ug/L	1.0	0.50	1		09/11/17 19:49	142-28-9	
1,4-Dichlorobenzene	<0.50	ug/L	1.0	0.50	1		09/11/17 19:49	106-46-7	
2,2-Dichloropropane	<0.48	ug/L	1.0	0.48	1		09/11/17 19:49	594-20-7	
2-Chlorotoluene	<0.50	ug/L	1.0	0.50	1		09/11/17 19:49	95-49-8	
4-Chlorotoluene	<0.21	ug/L	1.0	0.21	1		09/11/17 19:49	106-43-4	
Benzene	<0.50	ug/L	1.0	0.50	1		09/11/17 19:49	71-43-2	
Bromobenzene	<0.23	ug/L	1.0	0.23	1		09/11/17 19:49	108-86-1	
Bromochloromethane	<0.34	ug/L	1.0	0.34	1		09/11/17 19:49	74-97-5	
Bromodichloromethane	<0.50	ug/L	1.0	0.50	1		09/11/17 19:49	75-27-4	
Bromoform	<0.50	ug/L	1.0	0.50	1		09/11/17 19:49	75-25-2	
Bromomethane	<2.4	ug/L	5.0	2.4	1		09/11/17 19:49	74-83-9	
Carbon tetrachloride	<0.50	ug/L	1.0	0.50	1		09/11/17 19:49	56-23-5	
Chlorobenzene	<0.50	ug/L	1.0	0.50	1		09/11/17 19:49	108-90-7	
Chloroethane	<0.37	ug/L	1.0	0.37	1		09/11/17 19:49	75-00-3	
Chloroform	<2.5	ug/L	5.0	2.5	1		09/11/17 19:49	67-66-3	
Chloromethane	<0.50	ug/L	1.0	0.50	1		09/11/17 19:49	74-87-3	
Dibromochloromethane	<0.50	ug/L	1.0	0.50	1		09/11/17 19:49	124-48-1	
Dibromomethane	<0.43	ug/L	1.0	0.43	1		09/11/17 19:49	74-95-3	
Dichlorodifluoromethane	<0.22	ug/L	1.0	0.22	1		09/11/17 19:49	75-71-8	
Diisopropyl ether	<0.50	ug/L	1.0	0.50	1		09/11/17 19:49	108-20-3	
Ethylbenzene	<0.50	ug/L	1.0	0.50	1		09/11/17 19:49	100-41-4	
Hexachloro-1,3-butadiene	<2.1	ug/L	5.0	2.1	1		09/11/17 19:49	87-68-3	
Isopropylbenzene (Cumene)	<0.14	ug/L	1.0	0.14	1		09/11/17 19:49	98-82-8	
Methyl-tert-butyl ether	<0.17	ug/L	1.0	0.17	1		09/11/17 19:49	1634-04-4	
Methylene Chloride	<0.23	ug/L	1.0	0.23	1		09/11/17 19:49	75-09-2	
Naphthalene	<2.5	ug/L	5.0	2.5	1		09/11/17 19:49	91-20-3	
Styrene	<0.50	ug/L	1.0	0.50	1		09/11/17 19:49	100-42-5	
Tetrachloroethene	<0.50	ug/L	1.0	0.50	1		09/11/17 19:49	127-18-4	

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### ANALYTICAL RESULTS

Project: 5403 FORMER JUDGES

Pace Project No.: 40156443

**Sample: GP-1D**      **Lab ID: 40156443001**      Collected: 09/08/17 13:40      Received: 09/09/17 08:00      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b> Analytical Method: EPA 8260									
Toluene	<0.50	ug/L	1.0	0.50	1		09/11/17 19:49	108-88-3	
Trichloroethene	<0.33	ug/L	1.0	0.33	1		09/11/17 19:49	79-01-6	
Trichlorofluoromethane	<0.18	ug/L	1.0	0.18	1		09/11/17 19:49	75-69-4	
Vinyl chloride	<0.18	ug/L	1.0	0.18	1		09/11/17 19:49	75-01-4	
cis-1,2-Dichloroethene	<0.26	ug/L	1.0	0.26	1		09/11/17 19:49	156-59-2	
cis-1,3-Dichloropropene	<0.50	ug/L	1.0	0.50	1		09/11/17 19:49	10061-01-5	
m&p-Xylene	<1.0	ug/L	2.0	1.0	1		09/11/17 19:49	179601-23-1	
n-Butylbenzene	<0.50	ug/L	1.0	0.50	1		09/11/17 19:49	104-51-8	
n-Propylbenzene	<0.50	ug/L	1.0	0.50	1		09/11/17 19:49	103-65-1	
o-Xylene	<0.50	ug/L	1.0	0.50	1		09/11/17 19:49	95-47-6	
p-Isopropyltoluene	<0.50	ug/L	1.0	0.50	1		09/11/17 19:49	99-87-6	
sec-Butylbenzene	<2.2	ug/L	5.0	2.2	1		09/11/17 19:49	135-98-8	
tert-Butylbenzene	<0.18	ug/L	1.0	0.18	1		09/11/17 19:49	98-06-6	
trans-1,2-Dichloroethene	<0.26	ug/L	1.0	0.26	1		09/11/17 19:49	156-60-5	
trans-1,3-Dichloropropene	<0.23	ug/L	1.0	0.23	1		09/11/17 19:49	10061-02-6	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	92	%	61-130		1		09/11/17 19:49	460-00-4	
Dibromofluoromethane (S)	113	%	67-130		1		09/11/17 19:49	1868-53-7	
Toluene-d8 (S)	95	%	70-130		1		09/11/17 19:49	2037-26-5	

**Sample: GP-2S**      **Lab ID: 40156443002**      Collected: 09/08/17 13:50      Received: 09/09/17 08:00      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b> Analytical Method: EPA 8260									
1,1,1,2-Tetrachloroethane	<0.18	ug/L	1.0	0.18	1		09/12/17 17:15	630-20-6	
1,1,1-Trichloroethane	<0.50	ug/L	1.0	0.50	1		09/12/17 17:15	71-55-6	
1,1,1,2,2-Tetrachloroethane	<0.25	ug/L	1.0	0.25	1		09/12/17 17:15	79-34-5	
1,1,2-Trichloroethane	<0.20	ug/L	1.0	0.20	1		09/12/17 17:15	79-00-5	
1,1-Dichloroethane	<0.24	ug/L	1.0	0.24	1		09/12/17 17:15	75-34-3	
1,1-Dichloroethene	<0.41	ug/L	1.0	0.41	1		09/12/17 17:15	75-35-4	
1,1-Dichloropropene	<0.44	ug/L	1.0	0.44	1		09/12/17 17:15	563-58-6	
1,2,3-Trichlorobenzene	<2.1	ug/L	5.0	2.1	1		09/12/17 17:15	87-61-6	
1,2,3-Trichloropropane	<0.50	ug/L	1.0	0.50	1		09/12/17 17:15	96-18-4	
1,2,4-Trichlorobenzene	<2.2	ug/L	5.0	2.2	1		09/12/17 17:15	120-82-1	
1,2,4-Trimethylbenzene	<0.50	ug/L	1.0	0.50	1		09/12/17 17:15	95-63-6	
1,2-Dibromo-3-chloropropane	<2.2	ug/L	5.0	2.2	1		09/12/17 17:15	96-12-8	
1,2-Dibromoethane (EDB)	<0.18	ug/L	1.0	0.18	1		09/12/17 17:15	106-93-4	
1,2-Dichlorobenzene	<0.50	ug/L	1.0	0.50	1		09/12/17 17:15	95-50-1	
1,2-Dichloroethane	<0.17	ug/L	1.0	0.17	1		09/12/17 17:15	107-06-2	
1,2-Dichloropropane	<0.23	ug/L	1.0	0.23	1		09/12/17 17:15	78-87-5	
1,3,5-Trimethylbenzene	<0.50	ug/L	1.0	0.50	1		09/12/17 17:15	108-67-8	
1,3-Dichlorobenzene	<0.50	ug/L	1.0	0.50	1		09/12/17 17:15	541-73-1	
1,3-Dichloropropane	<0.50	ug/L	1.0	0.50	1		09/12/17 17:15	142-28-9	

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### ANALYTICAL RESULTS

Project: 5403 FORMER JUDGES

Pace Project No.: 40156443

**Sample: GP-2S**      **Lab ID: 40156443002**      Collected: 09/08/17 13:50      Received: 09/09/17 08:00      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b> Analytical Method: EPA 8260									
1,4-Dichlorobenzene	<0.50	ug/L	1.0	0.50	1		09/12/17 17:15	106-46-7	
2,2-Dichloropropane	<0.48	ug/L	1.0	0.48	1		09/12/17 17:15	594-20-7	
2-Chlorotoluene	<0.50	ug/L	1.0	0.50	1		09/12/17 17:15	95-49-8	
4-Chlorotoluene	<0.21	ug/L	1.0	0.21	1		09/12/17 17:15	106-43-4	
Benzene	<0.50	ug/L	1.0	0.50	1		09/12/17 17:15	71-43-2	
Bromobenzene	<0.23	ug/L	1.0	0.23	1		09/12/17 17:15	108-86-1	
Bromochloromethane	<0.34	ug/L	1.0	0.34	1		09/12/17 17:15	74-97-5	
Bromodichloromethane	<0.50	ug/L	1.0	0.50	1		09/12/17 17:15	75-27-4	
Bromoform	<0.50	ug/L	1.0	0.50	1		09/12/17 17:15	75-25-2	
Bromomethane	<2.4	ug/L	5.0	2.4	1		09/12/17 17:15	74-83-9	
Carbon tetrachloride	<0.50	ug/L	1.0	0.50	1		09/12/17 17:15	56-23-5	
Chlorobenzene	<0.50	ug/L	1.0	0.50	1		09/12/17 17:15	108-90-7	
Chloroethane	<0.37	ug/L	1.0	0.37	1		09/12/17 17:15	75-00-3	
Chloroform	<2.5	ug/L	5.0	2.5	1		09/12/17 17:15	67-66-3	
Chloromethane	<0.50	ug/L	1.0	0.50	1		09/12/17 17:15	74-87-3	
Dibromochloromethane	<0.50	ug/L	1.0	0.50	1		09/12/17 17:15	124-48-1	
Dibromomethane	<0.43	ug/L	1.0	0.43	1		09/12/17 17:15	74-95-3	
Dichlorodifluoromethane	<0.22	ug/L	1.0	0.22	1		09/12/17 17:15	75-71-8	
Diisopropyl ether	<0.50	ug/L	1.0	0.50	1		09/12/17 17:15	108-20-3	
Ethylbenzene	<0.50	ug/L	1.0	0.50	1		09/12/17 17:15	100-41-4	
Hexachloro-1,3-butadiene	<2.1	ug/L	5.0	2.1	1		09/12/17 17:15	87-68-3	
Isopropylbenzene (Cumene)	<0.14	ug/L	1.0	0.14	1		09/12/17 17:15	98-82-8	
Methyl-tert-butyl ether	<0.17	ug/L	1.0	0.17	1		09/12/17 17:15	1634-04-4	
Methylene Chloride	<0.23	ug/L	1.0	0.23	1		09/12/17 17:15	75-09-2	
Naphthalene	<2.5	ug/L	5.0	2.5	1		09/12/17 17:15	91-20-3	
Styrene	<0.50	ug/L	1.0	0.50	1		09/12/17 17:15	100-42-5	
Tetrachloroethene	<0.50	ug/L	1.0	0.50	1		09/12/17 17:15	127-18-4	
Toluene	<0.50	ug/L	1.0	0.50	1		09/12/17 17:15	108-88-3	
Trichloroethene	<0.33	ug/L	1.0	0.33	1		09/12/17 17:15	79-01-6	
Trichlorofluoromethane	<0.18	ug/L	1.0	0.18	1		09/12/17 17:15	75-69-4	
Vinyl chloride	<0.18	ug/L	1.0	0.18	1		09/12/17 17:15	75-01-4	
cis-1,2-Dichloroethene	<0.26	ug/L	1.0	0.26	1		09/12/17 17:15	156-59-2	
cis-1,3-Dichloropropene	<0.50	ug/L	1.0	0.50	1		09/12/17 17:15	10061-01-5	
m&p-Xylene	<1.0	ug/L	2.0	1.0	1		09/12/17 17:15	179601-23-1	
n-Butylbenzene	<0.50	ug/L	1.0	0.50	1		09/12/17 17:15	104-51-8	
n-Propylbenzene	<0.50	ug/L	1.0	0.50	1		09/12/17 17:15	103-65-1	
o-Xylene	<0.50	ug/L	1.0	0.50	1		09/12/17 17:15	95-47-6	
p-Isopropyltoluene	<0.50	ug/L	1.0	0.50	1		09/12/17 17:15	99-87-6	
sec-Butylbenzene	<2.2	ug/L	5.0	2.2	1		09/12/17 17:15	135-98-8	
tert-Butylbenzene	<0.18	ug/L	1.0	0.18	1		09/12/17 17:15	98-06-6	
trans-1,2-Dichloroethene	<0.26	ug/L	1.0	0.26	1		09/12/17 17:15	156-60-5	
trans-1,3-Dichloropropene	<0.23	ug/L	1.0	0.23	1		09/12/17 17:15	10061-02-6	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	90	%	61-130		1		09/12/17 17:15	460-00-4	
Dibromofluoromethane (S)	106	%	67-130		1		09/12/17 17:15	1868-53-7	
Toluene-d8 (S)	99	%	70-130		1		09/12/17 17:15	2037-26-5	

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### ANALYTICAL RESULTS

Project: 5403 FORMER JUDGES

Pace Project No.: 40156443

**Sample: GP-2D**      **Lab ID: 40156443003**      Collected: 09/08/17 14:00      Received: 09/09/17 08:00      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b> Analytical Method: EPA 8260									
1,1,1,2-Tetrachloroethane	<0.18	ug/L	1.0	0.18	1		09/11/17 18:44	630-20-6	
1,1,1-Trichloroethane	<0.50	ug/L	1.0	0.50	1		09/11/17 18:44	71-55-6	
1,1,2,2-Tetrachloroethane	<0.25	ug/L	1.0	0.25	1		09/11/17 18:44	79-34-5	
1,1,2-Trichloroethane	<0.20	ug/L	1.0	0.20	1		09/11/17 18:44	79-00-5	
1,1-Dichloroethane	<0.24	ug/L	1.0	0.24	1		09/11/17 18:44	75-34-3	
1,1-Dichloroethene	<0.41	ug/L	1.0	0.41	1		09/11/17 18:44	75-35-4	
1,1-Dichloropropene	<0.44	ug/L	1.0	0.44	1		09/11/17 18:44	563-58-6	
1,2,3-Trichlorobenzene	<2.1	ug/L	5.0	2.1	1		09/11/17 18:44	87-61-6	
1,2,3-Trichloropropane	<0.50	ug/L	1.0	0.50	1		09/11/17 18:44	96-18-4	
1,2,4-Trichlorobenzene	<2.2	ug/L	5.0	2.2	1		09/11/17 18:44	120-82-1	
1,2,4-Trimethylbenzene	<0.50	ug/L	1.0	0.50	1		09/11/17 18:44	95-63-6	
1,2-Dibromo-3-chloropropane	<2.2	ug/L	5.0	2.2	1		09/11/17 18:44	96-12-8	
1,2-Dibromoethane (EDB)	<0.18	ug/L	1.0	0.18	1		09/11/17 18:44	106-93-4	
1,2-Dichlorobenzene	<0.50	ug/L	1.0	0.50	1		09/11/17 18:44	95-50-1	
1,2-Dichloroethane	<0.17	ug/L	1.0	0.17	1		09/11/17 18:44	107-06-2	
1,2-Dichloropropane	<0.23	ug/L	1.0	0.23	1		09/11/17 18:44	78-87-5	
1,3,5-Trimethylbenzene	<0.50	ug/L	1.0	0.50	1		09/11/17 18:44	108-67-8	
1,3-Dichlorobenzene	<0.50	ug/L	1.0	0.50	1		09/11/17 18:44	541-73-1	
1,3-Dichloropropane	<0.50	ug/L	1.0	0.50	1		09/11/17 18:44	142-28-9	
1,4-Dichlorobenzene	<0.50	ug/L	1.0	0.50	1		09/11/17 18:44	106-46-7	
2,2-Dichloropropane	<0.48	ug/L	1.0	0.48	1		09/11/17 18:44	594-20-7	
2-Chlorotoluene	<0.50	ug/L	1.0	0.50	1		09/11/17 18:44	95-49-8	
4-Chlorotoluene	<0.21	ug/L	1.0	0.21	1		09/11/17 18:44	106-43-4	
Benzene	<0.50	ug/L	1.0	0.50	1		09/11/17 18:44	71-43-2	
Bromobenzene	<0.23	ug/L	1.0	0.23	1		09/11/17 18:44	108-86-1	
Bromochloromethane	<0.34	ug/L	1.0	0.34	1		09/11/17 18:44	74-97-5	
Bromodichloromethane	<0.50	ug/L	1.0	0.50	1		09/11/17 18:44	75-27-4	
Bromoform	<0.50	ug/L	1.0	0.50	1		09/11/17 18:44	75-25-2	
Bromomethane	<2.4	ug/L	5.0	2.4	1		09/11/17 18:44	74-83-9	
Carbon tetrachloride	<0.50	ug/L	1.0	0.50	1		09/11/17 18:44	56-23-5	
Chlorobenzene	<0.50	ug/L	1.0	0.50	1		09/11/17 18:44	108-90-7	
Chloroethane	<0.37	ug/L	1.0	0.37	1		09/11/17 18:44	75-00-3	
Chloroform	<2.5	ug/L	5.0	2.5	1		09/11/17 18:44	67-66-3	
Chloromethane	<0.50	ug/L	1.0	0.50	1		09/11/17 18:44	74-87-3	
Dibromochloromethane	<0.50	ug/L	1.0	0.50	1		09/11/17 18:44	124-48-1	
Dibromomethane	<0.43	ug/L	1.0	0.43	1		09/11/17 18:44	74-95-3	
Dichlorodifluoromethane	<0.22	ug/L	1.0	0.22	1		09/11/17 18:44	75-71-8	
Diisopropyl ether	<0.50	ug/L	1.0	0.50	1		09/11/17 18:44	108-20-3	
Ethylbenzene	<0.50	ug/L	1.0	0.50	1		09/11/17 18:44	100-41-4	
Hexachloro-1,3-butadiene	<2.1	ug/L	5.0	2.1	1		09/11/17 18:44	87-68-3	
Isopropylbenzene (Cumene)	<0.14	ug/L	1.0	0.14	1		09/11/17 18:44	98-82-8	
Methyl-tert-butyl ether	<0.17	ug/L	1.0	0.17	1		09/11/17 18:44	1634-04-4	
Methylene Chloride	<0.23	ug/L	1.0	0.23	1		09/11/17 18:44	75-09-2	
Naphthalene	<2.5	ug/L	5.0	2.5	1		09/11/17 18:44	91-20-3	
Styrene	<0.50	ug/L	1.0	0.50	1		09/11/17 18:44	100-42-5	
Tetrachloroethene	<0.50	ug/L	1.0	0.50	1		09/11/17 18:44	127-18-4	

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### ANALYTICAL RESULTS

Project: 5403 FORMER JUDGES

Pace Project No.: 40156443

**Sample: GP-2D**      **Lab ID: 40156443003**      Collected: 09/08/17 14:00      Received: 09/09/17 08:00      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b> Analytical Method: EPA 8260									
Toluene	<0.50	ug/L	1.0	0.50	1		09/11/17 18:44	108-88-3	
Trichloroethene	<0.33	ug/L	1.0	0.33	1		09/11/17 18:44	79-01-6	
Trichlorofluoromethane	<0.18	ug/L	1.0	0.18	1		09/11/17 18:44	75-69-4	
Vinyl chloride	<0.18	ug/L	1.0	0.18	1		09/11/17 18:44	75-01-4	
cis-1,2-Dichloroethene	<0.26	ug/L	1.0	0.26	1		09/11/17 18:44	156-59-2	
cis-1,3-Dichloropropene	<0.50	ug/L	1.0	0.50	1		09/11/17 18:44	10061-01-5	
m&p-Xylene	<1.0	ug/L	2.0	1.0	1		09/11/17 18:44	179601-23-1	
n-Butylbenzene	<0.50	ug/L	1.0	0.50	1		09/11/17 18:44	104-51-8	
n-Propylbenzene	<0.50	ug/L	1.0	0.50	1		09/11/17 18:44	103-65-1	
o-Xylene	<0.50	ug/L	1.0	0.50	1		09/11/17 18:44	95-47-6	
p-Isopropyltoluene	<0.50	ug/L	1.0	0.50	1		09/11/17 18:44	99-87-6	
sec-Butylbenzene	<2.2	ug/L	5.0	2.2	1		09/11/17 18:44	135-98-8	
tert-Butylbenzene	<0.18	ug/L	1.0	0.18	1		09/11/17 18:44	98-06-6	
trans-1,2-Dichloroethene	<0.26	ug/L	1.0	0.26	1		09/11/17 18:44	156-60-5	
trans-1,3-Dichloropropene	<0.23	ug/L	1.0	0.23	1		09/11/17 18:44	10061-02-6	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	97	%	61-130		1		09/11/17 18:44	460-00-4	
Dibromofluoromethane (S)	98	%	67-130		1		09/11/17 18:44	1868-53-7	
Toluene-d8 (S)	110	%	70-130		1		09/11/17 18:44	2037-26-5	

**Sample: GP-3S**      **Lab ID: 40156443004**      Collected: 09/08/17 14:05      Received: 09/09/17 08:00      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b> Analytical Method: EPA 8260									
1,1,1,2-Tetrachloroethane	<0.18	ug/L	1.0	0.18	1		09/11/17 19:06	630-20-6	
1,1,1-Trichloroethane	<0.50	ug/L	1.0	0.50	1		09/11/17 19:06	71-55-6	
1,1,1,2,2-Tetrachloroethane	<0.25	ug/L	1.0	0.25	1		09/11/17 19:06	79-34-5	
1,1,2-Trichloroethane	<0.20	ug/L	1.0	0.20	1		09/11/17 19:06	79-00-5	
1,1-Dichloroethane	<0.24	ug/L	1.0	0.24	1		09/11/17 19:06	75-34-3	
1,1-Dichloroethene	<0.41	ug/L	1.0	0.41	1		09/11/17 19:06	75-35-4	
1,1-Dichloropropene	<0.44	ug/L	1.0	0.44	1		09/11/17 19:06	563-58-6	
1,2,3-Trichlorobenzene	<2.1	ug/L	5.0	2.1	1		09/11/17 19:06	87-61-6	
1,2,3-Trichloropropane	<0.50	ug/L	1.0	0.50	1		09/11/17 19:06	96-18-4	
1,2,4-Trichlorobenzene	<2.2	ug/L	5.0	2.2	1		09/11/17 19:06	120-82-1	
1,2,4-Trimethylbenzene	<0.50	ug/L	1.0	0.50	1		09/11/17 19:06	95-63-6	
1,2-Dibromo-3-chloropropane	<2.2	ug/L	5.0	2.2	1		09/11/17 19:06	96-12-8	
1,2-Dibromoethane (EDB)	<0.18	ug/L	1.0	0.18	1		09/11/17 19:06	106-93-4	
1,2-Dichlorobenzene	<0.50	ug/L	1.0	0.50	1		09/11/17 19:06	95-50-1	
1,2-Dichloroethane	<0.17	ug/L	1.0	0.17	1		09/11/17 19:06	107-06-2	
1,2-Dichloropropane	<0.23	ug/L	1.0	0.23	1		09/11/17 19:06	78-87-5	
1,3,5-Trimethylbenzene	<0.50	ug/L	1.0	0.50	1		09/11/17 19:06	108-67-8	
1,3-Dichlorobenzene	<0.50	ug/L	1.0	0.50	1		09/11/17 19:06	541-73-1	
1,3-Dichloropropane	<0.50	ug/L	1.0	0.50	1		09/11/17 19:06	142-28-9	

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## ANALYTICAL RESULTS

Project: 5403 FORMER JUDGES

Pace Project No.: 40156443

Sample: GP-3S Lab ID: 40156443004 Collected: 09/08/17 14:05 Received: 09/09/17 08:00 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>		Analytical Method: EPA 8260							
1,4-Dichlorobenzene	<0.50	ug/L	1.0	0.50	1		09/11/17 19:06	106-46-7	
2,2-Dichloropropane	<0.48	ug/L	1.0	0.48	1		09/11/17 19:06	594-20-7	
2-Chlorotoluene	<0.50	ug/L	1.0	0.50	1		09/11/17 19:06	95-49-8	
4-Chlorotoluene	<0.21	ug/L	1.0	0.21	1		09/11/17 19:06	106-43-4	
Benzene	6.8	ug/L	1.0	0.50	1		09/11/17 19:06	71-43-2	
Bromobenzene	<0.23	ug/L	1.0	0.23	1		09/11/17 19:06	108-86-1	
Bromochloromethane	<0.34	ug/L	1.0	0.34	1		09/11/17 19:06	74-97-5	
Bromodichloromethane	<0.50	ug/L	1.0	0.50	1		09/11/17 19:06	75-27-4	
Bromoform	<0.50	ug/L	1.0	0.50	1		09/11/17 19:06	75-25-2	
Bromomethane	<2.4	ug/L	5.0	2.4	1		09/11/17 19:06	74-83-9	
Carbon tetrachloride	<0.50	ug/L	1.0	0.50	1		09/11/17 19:06	56-23-5	
Chlorobenzene	<0.50	ug/L	1.0	0.50	1		09/11/17 19:06	108-90-7	
Chloroethane	<0.37	ug/L	1.0	0.37	1		09/11/17 19:06	75-00-3	
Chloroform	<2.5	ug/L	5.0	2.5	1		09/11/17 19:06	67-66-3	
Chloromethane	1.2	ug/L	1.0	0.50	1		09/11/17 19:06	74-87-3	
Dibromochloromethane	<0.50	ug/L	1.0	0.50	1		09/11/17 19:06	124-48-1	
Dibromomethane	<0.43	ug/L	1.0	0.43	1		09/11/17 19:06	74-95-3	
Dichlorodifluoromethane	<0.22	ug/L	1.0	0.22	1		09/11/17 19:06	75-71-8	
Diisopropyl ether	<0.50	ug/L	1.0	0.50	1		09/11/17 19:06	108-20-3	
Ethylbenzene	<0.50	ug/L	1.0	0.50	1		09/11/17 19:06	100-41-4	
Hexachloro-1,3-butadiene	<2.1	ug/L	5.0	2.1	1		09/11/17 19:06	87-68-3	
Isopropylbenzene (Cumene)	<0.14	ug/L	1.0	0.14	1		09/11/17 19:06	98-82-8	
Methyl-tert-butyl ether	<0.17	ug/L	1.0	0.17	1		09/11/17 19:06	1634-04-4	
Methylene Chloride	<0.23	ug/L	1.0	0.23	1		09/11/17 19:06	75-09-2	
Naphthalene	<2.5	ug/L	5.0	2.5	1		09/11/17 19:06	91-20-3	
Styrene	<0.50	ug/L	1.0	0.50	1		09/11/17 19:06	100-42-5	
Tetrachloroethene	<0.50	ug/L	1.0	0.50	1		09/11/17 19:06	127-18-4	
Toluene	<0.50	ug/L	1.0	0.50	1		09/11/17 19:06	108-88-3	
Trichloroethene	<0.33	ug/L	1.0	0.33	1		09/11/17 19:06	79-01-6	
Trichlorofluoromethane	<0.18	ug/L	1.0	0.18	1		09/11/17 19:06	75-69-4	
Vinyl chloride	<0.18	ug/L	1.0	0.18	1		09/11/17 19:06	75-01-4	
cis-1,2-Dichloroethene	<0.26	ug/L	1.0	0.26	1		09/11/17 19:06	156-59-2	
cis-1,3-Dichloropropene	<0.50	ug/L	1.0	0.50	1		09/11/17 19:06	10061-01-5	
m&p-Xylene	<1.0	ug/L	2.0	1.0	1		09/11/17 19:06	179601-23-1	
n-Butylbenzene	<0.50	ug/L	1.0	0.50	1		09/11/17 19:06	104-51-8	
n-Propylbenzene	<0.50	ug/L	1.0	0.50	1		09/11/17 19:06	103-65-1	
o-Xylene	<0.50	ug/L	1.0	0.50	1		09/11/17 19:06	95-47-6	
p-Isopropyltoluene	<0.50	ug/L	1.0	0.50	1		09/11/17 19:06	99-87-6	
sec-Butylbenzene	<2.2	ug/L	5.0	2.2	1		09/11/17 19:06	135-98-8	
tert-Butylbenzene	<0.18	ug/L	1.0	0.18	1		09/11/17 19:06	98-06-6	
trans-1,2-Dichloroethene	<0.26	ug/L	1.0	0.26	1		09/11/17 19:06	156-60-5	
trans-1,3-Dichloropropene	<0.23	ug/L	1.0	0.23	1		09/11/17 19:06	10061-02-6	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	99	%	61-130		1		09/11/17 19:06	460-00-4	
Dibromofluoromethane (S)	98	%	67-130		1		09/11/17 19:06	1868-53-7	
Toluene-d8 (S)	110	%	70-130		1		09/11/17 19:06	2037-26-5	

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## ANALYTICAL RESULTS

Project: 5403 FORMER JUDGES

Pace Project No.: 40156443

Sample: GP-3D Lab ID: 40156443005 Collected: 09/08/17 14:10 Received: 09/09/17 08:00 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>		Analytical Method: EPA 8260							
1,1,1,2-Tetrachloroethane	<0.18	ug/L	1.0	0.18	1		09/11/17 19:28	630-20-6	
1,1,1-Trichloroethane	<0.50	ug/L	1.0	0.50	1		09/11/17 19:28	71-55-6	
1,1,2,2-Tetrachloroethane	<0.25	ug/L	1.0	0.25	1		09/11/17 19:28	79-34-5	
1,1,2-Trichloroethane	<0.20	ug/L	1.0	0.20	1		09/11/17 19:28	79-00-5	
1,1-Dichloroethane	<0.24	ug/L	1.0	0.24	1		09/11/17 19:28	75-34-3	
1,1-Dichloroethene	<0.41	ug/L	1.0	0.41	1		09/11/17 19:28	75-35-4	
1,1-Dichloropropene	<0.44	ug/L	1.0	0.44	1		09/11/17 19:28	563-58-6	
1,2,3-Trichlorobenzene	<2.1	ug/L	5.0	2.1	1		09/11/17 19:28	87-61-6	
1,2,3-Trichloropropane	<0.50	ug/L	1.0	0.50	1		09/11/17 19:28	96-18-4	
1,2,4-Trichlorobenzene	<2.2	ug/L	5.0	2.2	1		09/11/17 19:28	120-82-1	
1,2,4-Trimethylbenzene	<0.50	ug/L	1.0	0.50	1		09/11/17 19:28	95-63-6	
1,2-Dibromo-3-chloropropane	<2.2	ug/L	5.0	2.2	1		09/11/17 19:28	96-12-8	
1,2-Dibromoethane (EDB)	<0.18	ug/L	1.0	0.18	1		09/11/17 19:28	106-93-4	
1,2-Dichlorobenzene	<0.50	ug/L	1.0	0.50	1		09/11/17 19:28	95-50-1	
1,2-Dichloroethane	<0.17	ug/L	1.0	0.17	1		09/11/17 19:28	107-06-2	
1,2-Dichloropropane	<0.23	ug/L	1.0	0.23	1		09/11/17 19:28	78-87-5	
1,3,5-Trimethylbenzene	<0.50	ug/L	1.0	0.50	1		09/11/17 19:28	108-67-8	
1,3-Dichlorobenzene	<0.50	ug/L	1.0	0.50	1		09/11/17 19:28	541-73-1	
1,3-Dichloropropane	<0.50	ug/L	1.0	0.50	1		09/11/17 19:28	142-28-9	
1,4-Dichlorobenzene	<0.50	ug/L	1.0	0.50	1		09/11/17 19:28	106-46-7	
2,2-Dichloropropane	<0.48	ug/L	1.0	0.48	1		09/11/17 19:28	594-20-7	
2-Chlorotoluene	<0.50	ug/L	1.0	0.50	1		09/11/17 19:28	95-49-8	
4-Chlorotoluene	<0.21	ug/L	1.0	0.21	1		09/11/17 19:28	106-43-4	
Benzene	<0.50	ug/L	1.0	0.50	1		09/11/17 19:28	71-43-2	
Bromobenzene	<0.23	ug/L	1.0	0.23	1		09/11/17 19:28	108-86-1	
Bromochloromethane	<0.34	ug/L	1.0	0.34	1		09/11/17 19:28	74-97-5	
Bromodichloromethane	<0.50	ug/L	1.0	0.50	1		09/11/17 19:28	75-27-4	
Bromoform	<0.50	ug/L	1.0	0.50	1		09/11/17 19:28	75-25-2	
Bromomethane	<2.4	ug/L	5.0	2.4	1		09/11/17 19:28	74-83-9	
Carbon tetrachloride	<0.50	ug/L	1.0	0.50	1		09/11/17 19:28	56-23-5	
Chlorobenzene	<0.50	ug/L	1.0	0.50	1		09/11/17 19:28	108-90-7	
Chloroethane	<0.37	ug/L	1.0	0.37	1		09/11/17 19:28	75-00-3	
Chloroform	<2.5	ug/L	5.0	2.5	1		09/11/17 19:28	67-66-3	
Chloromethane	<0.50	ug/L	1.0	0.50	1		09/11/17 19:28	74-87-3	
Dibromochloromethane	<0.50	ug/L	1.0	0.50	1		09/11/17 19:28	124-48-1	
Dibromomethane	<0.43	ug/L	1.0	0.43	1		09/11/17 19:28	74-95-3	
Dichlorodifluoromethane	0.51J	ug/L	1.0	0.22	1		09/11/17 19:28	75-71-8	
Diisopropyl ether	<0.50	ug/L	1.0	0.50	1		09/11/17 19:28	108-20-3	
Ethylbenzene	<0.50	ug/L	1.0	0.50	1		09/11/17 19:28	100-41-4	
Hexachloro-1,3-butadiene	<2.1	ug/L	5.0	2.1	1		09/11/17 19:28	87-68-3	
Isopropylbenzene (Cumene)	<0.14	ug/L	1.0	0.14	1		09/11/17 19:28	98-82-8	
Methyl-tert-butyl ether	<0.17	ug/L	1.0	0.17	1		09/11/17 19:28	1634-04-4	
Methylene Chloride	<0.23	ug/L	1.0	0.23	1		09/11/17 19:28	75-09-2	
Naphthalene	<2.5	ug/L	5.0	2.5	1		09/11/17 19:28	91-20-3	
Styrene	<0.50	ug/L	1.0	0.50	1		09/11/17 19:28	100-42-5	
Tetrachloroethene	<0.50	ug/L	1.0	0.50	1		09/11/17 19:28	127-18-4	

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### ANALYTICAL RESULTS

Project: 5403 FORMER JUDGES

Pace Project No.: 40156443

**Sample: GP-3D**      **Lab ID: 40156443005**      Collected: 09/08/17 14:10      Received: 09/09/17 08:00      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b> Analytical Method: EPA 8260									
Toluene	<0.50	ug/L	1.0	0.50	1		09/11/17 19:28	108-88-3	
Trichloroethene	<0.33	ug/L	1.0	0.33	1		09/11/17 19:28	79-01-6	
Trichlorofluoromethane	<0.18	ug/L	1.0	0.18	1		09/11/17 19:28	75-69-4	
Vinyl chloride	<0.18	ug/L	1.0	0.18	1		09/11/17 19:28	75-01-4	
cis-1,2-Dichloroethene	<0.26	ug/L	1.0	0.26	1		09/11/17 19:28	156-59-2	
cis-1,3-Dichloropropene	<0.50	ug/L	1.0	0.50	1		09/11/17 19:28	10061-01-5	
m&p-Xylene	<1.0	ug/L	2.0	1.0	1		09/11/17 19:28	179601-23-1	
n-Butylbenzene	<0.50	ug/L	1.0	0.50	1		09/11/17 19:28	104-51-8	
n-Propylbenzene	<0.50	ug/L	1.0	0.50	1		09/11/17 19:28	103-65-1	
o-Xylene	<0.50	ug/L	1.0	0.50	1		09/11/17 19:28	95-47-6	
p-Isopropyltoluene	<0.50	ug/L	1.0	0.50	1		09/11/17 19:28	99-87-6	
sec-Butylbenzene	<2.2	ug/L	5.0	2.2	1		09/11/17 19:28	135-98-8	
tert-Butylbenzene	<0.18	ug/L	1.0	0.18	1		09/11/17 19:28	98-06-6	
trans-1,2-Dichloroethene	<0.26	ug/L	1.0	0.26	1		09/11/17 19:28	156-60-5	
trans-1,3-Dichloropropene	<0.23	ug/L	1.0	0.23	1		09/11/17 19:28	10061-02-6	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	99	%	61-130		1		09/11/17 19:28	460-00-4	
Dibromofluoromethane (S)	96	%	67-130		1		09/11/17 19:28	1868-53-7	
Toluene-d8 (S)	112	%	70-130		1		09/11/17 19:28	2037-26-5	

**Sample: GP-4S**      **Lab ID: 40156443006**      Collected: 09/08/17 14:35      Received: 09/09/17 08:00      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b> Analytical Method: EPA 8260									
1,1,1,2-Tetrachloroethane	<0.18	ug/L	1.0	0.18	1		09/11/17 19:50	630-20-6	
1,1,1-Trichloroethane	<0.50	ug/L	1.0	0.50	1		09/11/17 19:50	71-55-6	
1,1,1,2,2-Tetrachloroethane	<0.25	ug/L	1.0	0.25	1		09/11/17 19:50	79-34-5	
1,1,2-Trichloroethane	<0.20	ug/L	1.0	0.20	1		09/11/17 19:50	79-00-5	
1,1-Dichloroethane	<0.24	ug/L	1.0	0.24	1		09/11/17 19:50	75-34-3	
1,1-Dichloroethene	<0.41	ug/L	1.0	0.41	1		09/11/17 19:50	75-35-4	
1,1-Dichloropropene	<0.44	ug/L	1.0	0.44	1		09/11/17 19:50	563-58-6	
1,2,3-Trichlorobenzene	<2.1	ug/L	5.0	2.1	1		09/11/17 19:50	87-61-6	
1,2,3-Trichloropropane	<0.50	ug/L	1.0	0.50	1		09/11/17 19:50	96-18-4	
1,2,4-Trichlorobenzene	<2.2	ug/L	5.0	2.2	1		09/11/17 19:50	120-82-1	
1,2,4-Trimethylbenzene	<0.50	ug/L	1.0	0.50	1		09/11/17 19:50	95-63-6	
1,2-Dibromo-3-chloropropane	<2.2	ug/L	5.0	2.2	1		09/11/17 19:50	96-12-8	
1,2-Dibromoethane (EDB)	<0.18	ug/L	1.0	0.18	1		09/11/17 19:50	106-93-4	
1,2-Dichlorobenzene	<0.50	ug/L	1.0	0.50	1		09/11/17 19:50	95-50-1	
1,2-Dichloroethane	<0.17	ug/L	1.0	0.17	1		09/11/17 19:50	107-06-2	
1,2-Dichloropropane	<0.23	ug/L	1.0	0.23	1		09/11/17 19:50	78-87-5	
1,3,5-Trimethylbenzene	<0.50	ug/L	1.0	0.50	1		09/11/17 19:50	108-67-8	
1,3-Dichlorobenzene	<0.50	ug/L	1.0	0.50	1		09/11/17 19:50	541-73-1	
1,3-Dichloropropane	<0.50	ug/L	1.0	0.50	1		09/11/17 19:50	142-28-9	

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### ANALYTICAL RESULTS

Project: 5403 FORMER JUDGES

Pace Project No.: 40156443

**Sample: GP-4S**      **Lab ID: 40156443006**      Collected: 09/08/17 14:35      Received: 09/09/17 08:00      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b> Analytical Method: EPA 8260									
1,4-Dichlorobenzene	<0.50	ug/L	1.0	0.50	1		09/11/17 19:50	106-46-7	
2,2-Dichloropropane	<0.48	ug/L	1.0	0.48	1		09/11/17 19:50	594-20-7	
2-Chlorotoluene	<0.50	ug/L	1.0	0.50	1		09/11/17 19:50	95-49-8	
4-Chlorotoluene	<0.21	ug/L	1.0	0.21	1		09/11/17 19:50	106-43-4	
Benzene	<0.50	ug/L	1.0	0.50	1		09/11/17 19:50	71-43-2	
Bromobenzene	<0.23	ug/L	1.0	0.23	1		09/11/17 19:50	108-86-1	
Bromochloromethane	<0.34	ug/L	1.0	0.34	1		09/11/17 19:50	74-97-5	
Bromodichloromethane	<0.50	ug/L	1.0	0.50	1		09/11/17 19:50	75-27-4	
Bromoform	<0.50	ug/L	1.0	0.50	1		09/11/17 19:50	75-25-2	
Bromomethane	<2.4	ug/L	5.0	2.4	1		09/11/17 19:50	74-83-9	
Carbon tetrachloride	<0.50	ug/L	1.0	0.50	1		09/11/17 19:50	56-23-5	
Chlorobenzene	<0.50	ug/L	1.0	0.50	1		09/11/17 19:50	108-90-7	
Chloroethane	<0.37	ug/L	1.0	0.37	1		09/11/17 19:50	75-00-3	
Chloroform	<2.5	ug/L	5.0	2.5	1		09/11/17 19:50	67-66-3	
Chloromethane	<0.50	ug/L	1.0	0.50	1		09/11/17 19:50	74-87-3	
Dibromochloromethane	<0.50	ug/L	1.0	0.50	1		09/11/17 19:50	124-48-1	
Dibromomethane	<0.43	ug/L	1.0	0.43	1		09/11/17 19:50	74-95-3	
Dichlorodifluoromethane	<0.22	ug/L	1.0	0.22	1		09/11/17 19:50	75-71-8	
Diisopropyl ether	<0.50	ug/L	1.0	0.50	1		09/11/17 19:50	108-20-3	
Ethylbenzene	<0.50	ug/L	1.0	0.50	1		09/11/17 19:50	100-41-4	
Hexachloro-1,3-butadiene	<2.1	ug/L	5.0	2.1	1		09/11/17 19:50	87-68-3	
Isopropylbenzene (Cumene)	<0.14	ug/L	1.0	0.14	1		09/11/17 19:50	98-82-8	
Methyl-tert-butyl ether	<0.17	ug/L	1.0	0.17	1		09/11/17 19:50	1634-04-4	
Methylene Chloride	<0.23	ug/L	1.0	0.23	1		09/11/17 19:50	75-09-2	
Naphthalene	<2.5	ug/L	5.0	2.5	1		09/11/17 19:50	91-20-3	
Styrene	<0.50	ug/L	1.0	0.50	1		09/11/17 19:50	100-42-5	
Tetrachloroethene	<0.50	ug/L	1.0	0.50	1		09/11/17 19:50	127-18-4	
Toluene	1.4	ug/L	1.0	0.50	1		09/11/17 19:50	108-88-3	
Trichloroethene	<0.33	ug/L	1.0	0.33	1		09/11/17 19:50	79-01-6	
Trichlorofluoromethane	<0.18	ug/L	1.0	0.18	1		09/11/17 19:50	75-69-4	
Vinyl chloride	<0.18	ug/L	1.0	0.18	1		09/11/17 19:50	75-01-4	
cis-1,2-Dichloroethene	<0.26	ug/L	1.0	0.26	1		09/11/17 19:50	156-59-2	
cis-1,3-Dichloropropene	<0.50	ug/L	1.0	0.50	1		09/11/17 19:50	10061-01-5	
m&p-Xylene	1.0J	ug/L	2.0	1.0	1		09/11/17 19:50	179601-23-1	
n-Butylbenzene	<0.50	ug/L	1.0	0.50	1		09/11/17 19:50	104-51-8	
n-Propylbenzene	<0.50	ug/L	1.0	0.50	1		09/11/17 19:50	103-65-1	
o-Xylene	0.52J	ug/L	1.0	0.50	1		09/11/17 19:50	95-47-6	
p-Isopropyltoluene	<0.50	ug/L	1.0	0.50	1		09/11/17 19:50	99-87-6	
sec-Butylbenzene	<2.2	ug/L	5.0	2.2	1		09/11/17 19:50	135-98-8	
tert-Butylbenzene	<0.18	ug/L	1.0	0.18	1		09/11/17 19:50	98-06-6	
trans-1,2-Dichloroethene	<0.26	ug/L	1.0	0.26	1		09/11/17 19:50	156-60-5	
trans-1,3-Dichloropropene	<0.23	ug/L	1.0	0.23	1		09/11/17 19:50	10061-02-6	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	97	%	61-130		1		09/11/17 19:50	460-00-4	
Dibromofluoromethane (S)	97	%	67-130		1		09/11/17 19:50	1868-53-7	
Toluene-d8 (S)	109	%	70-130		1		09/11/17 19:50	2037-26-5	

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### ANALYTICAL RESULTS

Project: 5403 FORMER JUDGES  
Pace Project No.: 40156443

**Sample: GP-4D**      **Lab ID: 40156443007**      Collected: 09/08/17 14:30      Received: 09/09/17 08:00      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b> Analytical Method: EPA 8260									
1,1,1,2-Tetrachloroethane	<0.18	ug/L	1.0	0.18	1		09/11/17 20:13	630-20-6	
1,1,1-Trichloroethane	<0.50	ug/L	1.0	0.50	1		09/11/17 20:13	71-55-6	
1,1,2,2-Tetrachloroethane	<0.25	ug/L	1.0	0.25	1		09/11/17 20:13	79-34-5	
1,1,2-Trichloroethane	<0.20	ug/L	1.0	0.20	1		09/11/17 20:13	79-00-5	
1,1-Dichloroethane	<0.24	ug/L	1.0	0.24	1		09/11/17 20:13	75-34-3	
1,1-Dichloroethene	<0.41	ug/L	1.0	0.41	1		09/11/17 20:13	75-35-4	
1,1-Dichloropropene	<0.44	ug/L	1.0	0.44	1		09/11/17 20:13	563-58-6	
1,2,3-Trichlorobenzene	<2.1	ug/L	5.0	2.1	1		09/11/17 20:13	87-61-6	
1,2,3-Trichloropropane	<0.50	ug/L	1.0	0.50	1		09/11/17 20:13	96-18-4	
1,2,4-Trichlorobenzene	<2.2	ug/L	5.0	2.2	1		09/11/17 20:13	120-82-1	
1,2,4-Trimethylbenzene	<0.50	ug/L	1.0	0.50	1		09/11/17 20:13	95-63-6	
1,2-Dibromo-3-chloropropane	<2.2	ug/L	5.0	2.2	1		09/11/17 20:13	96-12-8	
1,2-Dibromoethane (EDB)	<0.18	ug/L	1.0	0.18	1		09/11/17 20:13	106-93-4	
1,2-Dichlorobenzene	<0.50	ug/L	1.0	0.50	1		09/11/17 20:13	95-50-1	
1,2-Dichloroethane	<0.17	ug/L	1.0	0.17	1		09/11/17 20:13	107-06-2	
1,2-Dichloropropane	<0.23	ug/L	1.0	0.23	1		09/11/17 20:13	78-87-5	
1,3,5-Trimethylbenzene	<0.50	ug/L	1.0	0.50	1		09/11/17 20:13	108-67-8	
1,3-Dichlorobenzene	<0.50	ug/L	1.0	0.50	1		09/11/17 20:13	541-73-1	
1,3-Dichloropropane	<0.50	ug/L	1.0	0.50	1		09/11/17 20:13	142-28-9	
1,4-Dichlorobenzene	<0.50	ug/L	1.0	0.50	1		09/11/17 20:13	106-46-7	
2,2-Dichloropropane	<0.48	ug/L	1.0	0.48	1		09/11/17 20:13	594-20-7	
2-Chlorotoluene	<0.50	ug/L	1.0	0.50	1		09/11/17 20:13	95-49-8	
4-Chlorotoluene	<0.21	ug/L	1.0	0.21	1		09/11/17 20:13	106-43-4	
Benzene	<0.50	ug/L	1.0	0.50	1		09/11/17 20:13	71-43-2	
Bromobenzene	<0.23	ug/L	1.0	0.23	1		09/11/17 20:13	108-86-1	
Bromochloromethane	<0.34	ug/L	1.0	0.34	1		09/11/17 20:13	74-97-5	
Bromodichloromethane	<0.50	ug/L	1.0	0.50	1		09/11/17 20:13	75-27-4	
Bromoform	<0.50	ug/L	1.0	0.50	1		09/11/17 20:13	75-25-2	
Bromomethane	<2.4	ug/L	5.0	2.4	1		09/11/17 20:13	74-83-9	
Carbon tetrachloride	<0.50	ug/L	1.0	0.50	1		09/11/17 20:13	56-23-5	
Chlorobenzene	<0.50	ug/L	1.0	0.50	1		09/11/17 20:13	108-90-7	
Chloroethane	<0.37	ug/L	1.0	0.37	1		09/11/17 20:13	75-00-3	
Chloroform	<2.5	ug/L	5.0	2.5	1		09/11/17 20:13	67-66-3	
Chloromethane	<0.50	ug/L	1.0	0.50	1		09/11/17 20:13	74-87-3	
Dibromochloromethane	<0.50	ug/L	1.0	0.50	1		09/11/17 20:13	124-48-1	
Dibromomethane	<0.43	ug/L	1.0	0.43	1		09/11/17 20:13	74-95-3	
Dichlorodifluoromethane	<0.22	ug/L	1.0	0.22	1		09/11/17 20:13	75-71-8	
Diisopropyl ether	<0.50	ug/L	1.0	0.50	1		09/11/17 20:13	108-20-3	
Ethylbenzene	<0.50	ug/L	1.0	0.50	1		09/11/17 20:13	100-41-4	
Hexachloro-1,3-butadiene	<2.1	ug/L	5.0	2.1	1		09/11/17 20:13	87-68-3	
Isopropylbenzene (Cumene)	<0.14	ug/L	1.0	0.14	1		09/11/17 20:13	98-82-8	
Methyl-tert-butyl ether	<0.17	ug/L	1.0	0.17	1		09/11/17 20:13	1634-04-4	
Methylene Chloride	<0.23	ug/L	1.0	0.23	1		09/11/17 20:13	75-09-2	
Naphthalene	<2.5	ug/L	5.0	2.5	1		09/11/17 20:13	91-20-3	
Styrene	<0.50	ug/L	1.0	0.50	1		09/11/17 20:13	100-42-5	
Tetrachloroethene	<0.50	ug/L	1.0	0.50	1		09/11/17 20:13	127-18-4	

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## ANALYTICAL RESULTS

Project: 5403 FORMER JUDGES

Pace Project No.: 40156443

**Sample: GP-4D**      **Lab ID: 40156443007**      Collected: 09/08/17 14:30      Received: 09/09/17 08:00      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>		Analytical Method: EPA 8260							
Toluene	<0.50	ug/L	1.0	0.50	1		09/11/17 20:13	108-88-3	
Trichloroethene	<0.33	ug/L	1.0	0.33	1		09/11/17 20:13	79-01-6	
Trichlorofluoromethane	<0.18	ug/L	1.0	0.18	1		09/11/17 20:13	75-69-4	
Vinyl chloride	<0.18	ug/L	1.0	0.18	1		09/11/17 20:13	75-01-4	
cis-1,2-Dichloroethene	<0.26	ug/L	1.0	0.26	1		09/11/17 20:13	156-59-2	
cis-1,3-Dichloropropene	<0.50	ug/L	1.0	0.50	1		09/11/17 20:13	10061-01-5	
m&p-Xylene	<1.0	ug/L	2.0	1.0	1		09/11/17 20:13	179601-23-1	
n-Butylbenzene	<0.50	ug/L	1.0	0.50	1		09/11/17 20:13	104-51-8	
n-Propylbenzene	<0.50	ug/L	1.0	0.50	1		09/11/17 20:13	103-65-1	
o-Xylene	<0.50	ug/L	1.0	0.50	1		09/11/17 20:13	95-47-6	
p-Isopropyltoluene	<0.50	ug/L	1.0	0.50	1		09/11/17 20:13	99-87-6	
sec-Butylbenzene	<2.2	ug/L	5.0	2.2	1		09/11/17 20:13	135-98-8	
tert-Butylbenzene	<0.18	ug/L	1.0	0.18	1		09/11/17 20:13	98-06-6	
trans-1,2-Dichloroethene	<0.26	ug/L	1.0	0.26	1		09/11/17 20:13	156-60-5	
trans-1,3-Dichloropropene	<0.23	ug/L	1.0	0.23	1		09/11/17 20:13	10061-02-6	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	98	%	61-130		1		09/11/17 20:13	460-00-4	
Dibromofluoromethane (S)	98	%	67-130		1		09/11/17 20:13	1868-53-7	
Toluene-d8 (S)	112	%	70-130		1		09/11/17 20:13	2037-26-5	

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### QUALITY CONTROL DATA

Project: 5403 FORMER JUDGES  
Pace Project No.: 40156443

QC Batch: 267177 Analysis Method: EPA 8260  
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV  
Associated Lab Samples: 40156443001

METHOD BLANK: 1570080 Matrix: Water  
Associated Lab Samples: 40156443001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	<0.18	1.0	09/11/17 09:15	
1,1,1-Trichloroethane	ug/L	<0.50	1.0	09/11/17 09:15	
1,1,2,2-Tetrachloroethane	ug/L	<0.25	1.0	09/11/17 09:15	
1,1,2-Trichloroethane	ug/L	<0.20	1.0	09/11/17 09:15	
1,1-Dichloroethane	ug/L	<0.24	1.0	09/11/17 09:15	
1,1-Dichloroethene	ug/L	<0.41	1.0	09/11/17 09:15	
1,1-Dichloropropene	ug/L	<0.44	1.0	09/11/17 09:15	
1,2,3-Trichlorobenzene	ug/L	<2.1	5.0	09/11/17 09:15	
1,2,3-Trichloropropane	ug/L	<0.50	1.0	09/11/17 09:15	
1,2,4-Trichlorobenzene	ug/L	<2.2	5.0	09/11/17 09:15	
1,2,4-Trimethylbenzene	ug/L	<0.50	1.0	09/11/17 09:15	
1,2-Dibromo-3-chloropropane	ug/L	<2.2	5.0	09/11/17 09:15	
1,2-Dibromoethane (EDB)	ug/L	<0.18	1.0	09/11/17 09:15	
1,2-Dichlorobenzene	ug/L	<0.50	1.0	09/11/17 09:15	
1,2-Dichloroethane	ug/L	<0.17	1.0	09/11/17 09:15	
1,2-Dichloropropane	ug/L	<0.23	1.0	09/11/17 09:15	
1,3,5-Trimethylbenzene	ug/L	<0.50	1.0	09/11/17 09:15	
1,3-Dichlorobenzene	ug/L	<0.50	1.0	09/11/17 09:15	
1,3-Dichloropropane	ug/L	<0.50	1.0	09/11/17 09:15	
1,4-Dichlorobenzene	ug/L	<0.50	1.0	09/11/17 09:15	
2,2-Dichloropropane	ug/L	<0.48	1.0	09/11/17 09:15	
2-Chlorotoluene	ug/L	<0.50	1.0	09/11/17 09:15	
4-Chlorotoluene	ug/L	<0.21	1.0	09/11/17 09:15	
Benzene	ug/L	<0.50	1.0	09/11/17 09:15	
Bromobenzene	ug/L	<0.23	1.0	09/11/17 09:15	
Bromochloromethane	ug/L	<0.34	1.0	09/11/17 09:15	
Bromodichloromethane	ug/L	<0.50	1.0	09/11/17 09:15	
Bromoform	ug/L	<0.50	1.0	09/11/17 09:15	
Bromomethane	ug/L	<2.4	5.0	09/11/17 09:15	
Carbon tetrachloride	ug/L	<0.50	1.0	09/11/17 09:15	
Chlorobenzene	ug/L	<0.50	1.0	09/11/17 09:15	
Chloroethane	ug/L	<0.37	1.0	09/11/17 09:15	
Chloroform	ug/L	<2.5	5.0	09/11/17 09:15	
Chloromethane	ug/L	<0.50	1.0	09/11/17 09:15	
cis-1,2-Dichloroethene	ug/L	<0.26	1.0	09/11/17 09:15	
cis-1,3-Dichloropropene	ug/L	<0.50	1.0	09/11/17 09:15	
Dibromochloromethane	ug/L	<0.50	1.0	09/11/17 09:15	
Dibromomethane	ug/L	<0.43	1.0	09/11/17 09:15	
Dichlorodifluoromethane	ug/L	<0.22	1.0	09/11/17 09:15	
Diisopropyl ether	ug/L	<0.50	1.0	09/11/17 09:15	
Ethylbenzene	ug/L	<0.50	1.0	09/11/17 09:15	

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### REPORT OF LABORATORY ANALYSIS

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### QUALITY CONTROL DATA

Project: 5403 FORMER JUDGES  
Pace Project No.: 40156443

METHOD BLANK: 1570080

Matrix: Water

Associated Lab Samples: 40156443001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Hexachloro-1,3-butadiene	ug/L	<2.1	5.0	09/11/17 09:15	
Isopropylbenzene (Cumene)	ug/L	<0.14	1.0	09/11/17 09:15	
m&p-Xylene	ug/L	<1.0	2.0	09/11/17 09:15	
Methyl-tert-butyl ether	ug/L	<0.17	1.0	09/11/17 09:15	
Methylene Chloride	ug/L	<0.23	1.0	09/11/17 09:15	
n-Butylbenzene	ug/L	<0.50	1.0	09/11/17 09:15	
n-Propylbenzene	ug/L	<0.50	1.0	09/11/17 09:15	
Naphthalene	ug/L	<2.5	5.0	09/11/17 09:15	
o-Xylene	ug/L	<0.50	1.0	09/11/17 09:15	
p-Isopropyltoluene	ug/L	<0.50	1.0	09/11/17 09:15	
sec-Butylbenzene	ug/L	<2.2	5.0	09/11/17 09:15	
Styrene	ug/L	<0.50	1.0	09/11/17 09:15	
tert-Butylbenzene	ug/L	<0.18	1.0	09/11/17 09:15	
Tetrachloroethene	ug/L	<0.50	1.0	09/11/17 09:15	
Toluene	ug/L	<0.50	1.0	09/11/17 09:15	
trans-1,2-Dichloroethene	ug/L	<0.26	1.0	09/11/17 09:15	
trans-1,3-Dichloropropene	ug/L	<0.23	1.0	09/11/17 09:15	
Trichloroethene	ug/L	<0.33	1.0	09/11/17 09:15	
Trichlorofluoromethane	ug/L	<0.18	1.0	09/11/17 09:15	
Vinyl chloride	ug/L	<0.18	1.0	09/11/17 09:15	
4-Bromofluorobenzene (S)	%	93	61-130	09/11/17 09:15	
Dibromofluoromethane (S)	%	110	67-130	09/11/17 09:15	
Toluene-d8 (S)	%	96	70-130	09/11/17 09:15	

LABORATORY CONTROL SAMPLE: 1570081

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	50	54.7	109	70-130	
1,1,2,2-Tetrachloroethane	ug/L	50	49.5	99	70-130	
1,1,2-Trichloroethane	ug/L	50	52.1	104	70-130	
1,1-Dichloroethane	ug/L	50	57.6	115	71-132	
1,1-Dichloroethene	ug/L	50	48.1	96	75-130	
1,2,4-Trichlorobenzene	ug/L	50	48.3	97	70-130	
1,2-Dibromo-3-chloropropane	ug/L	50	46.7	93	63-123	
1,2-Dibromoethane (EDB)	ug/L	50	53.2	106	70-130	
1,2-Dichlorobenzene	ug/L	50	51.7	103	70-130	
1,2-Dichloroethane	ug/L	50	56.8	114	70-131	
1,2-Dichloropropane	ug/L	50	53.8	108	80-120	
1,3-Dichlorobenzene	ug/L	50	51.7	103	70-130	
1,4-Dichlorobenzene	ug/L	50	53.0	106	70-130	
Benzene	ug/L	50	49.7	99	73-145	
Bromodichloromethane	ug/L	50	53.9	108	70-130	
Bromoform	ug/L	50	56.6	113	67-130	
Bromomethane	ug/L	50	46.1	92	26-128	

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### QUALITY CONTROL DATA

Project: 5403 FORMER JUDGES  
Pace Project No.: 40156443

LABORATORY CONTROL SAMPLE: 1570081

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Carbon tetrachloride	ug/L	50	59.7	119	70-133	
Chlorobenzene	ug/L	50	54.4	109	70-130	
Chloroethane	ug/L	50	45.8	92	58-120	
Chloroform	ug/L	50	54.2	108	80-121	
Chloromethane	ug/L	50	32.0	64	40-127	
cis-1,2-Dichloroethene	ug/L	50	51.1	102	70-130	
cis-1,3-Dichloropropene	ug/L	50	47.3	95	70-130	
Dibromochloromethane	ug/L	50	55.7	111	70-130	
Dichlorodifluoromethane	ug/L	50	19.8	40	20-135	
Ethylbenzene	ug/L	50	51.6	103	87-129	
Isopropylbenzene (Cumene)	ug/L	50	52.7	105	70-130	
m&p-Xylene	ug/L	100	106	106	70-130	
Methyl-tert-butyl ether	ug/L	50	53.8	108	66-143	
Methylene Chloride	ug/L	50	51.9	104	70-130	
o-Xylene	ug/L	50	52.2	104	70-130	
Styrene	ug/L	50	52.3	105	70-130	
Tetrachloroethene	ug/L	50	56.0	112	70-130	
Toluene	ug/L	50	50.8	102	82-130	
trans-1,2-Dichloroethene	ug/L	50	53.1	106	75-132	
trans-1,3-Dichloropropene	ug/L	50	45.9	92	70-130	
Trichloroethene	ug/L	50	54.6	109	70-130	
Trichlorofluoromethane	ug/L	50	58.6	117	76-133	
Vinyl chloride	ug/L	50	38.5	77	57-136	
4-Bromofluorobenzene (S)	%			98	61-130	
Dibromofluoromethane (S)	%			110	67-130	
Toluene-d8 (S)	%			96	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1570119 1570120

Parameter	Units	40156442006		MSD		MSD		% Rec	% Rec	% Rec	Max RPD	Qual
		Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result						
1,1,1-Trichloroethane	ug/L	<0.50	50	50	52.1	52.9	104	106	70-134	2	20	
1,1,2,2-Tetrachloroethane	ug/L	<0.25	50	50	48.9	49.5	98	99	70-130	1	20	
1,1,2-Trichloroethane	ug/L	<0.20	50	50	51.2	51.9	102	104	70-130	1	20	
1,1-Dichloroethane	ug/L	<0.24	50	50	56.3	56.5	113	113	71-133	0	20	
1,1-Dichloroethene	ug/L	<0.41	50	50	48.2	49.0	96	98	75-136	2	20	
1,2,4-Trichlorobenzene	ug/L	<2.2	50	50	48.2	48.8	96	98	70-130	1	20	
1,2-Dibromo-3-chloropropane	ug/L	<2.2	50	50	46.9	48.2	94	96	63-123	3	20	
1,2-Dibromoethane (EDB)	ug/L	<0.18	50	50	53.1	53.6	106	107	70-130	1	20	
1,2-Dichlorobenzene	ug/L	<0.50	50	50	50.5	50.6	101	101	70-130	0	20	
1,2-Dichloroethane	ug/L	<0.17	50	50	55.3	55.7	111	111	70-131	1	20	
1,2-Dichloropropane	ug/L	<0.23	50	50	50.9	51.0	102	102	80-120	0	20	
1,3-Dichlorobenzene	ug/L	<0.50	50	50	50.6	50.7	101	101	70-130	0	20	
1,4-Dichlorobenzene	ug/L	<0.50	50	50	51.8	51.9	104	104	70-130	0	20	

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### QUALITY CONTROL DATA

Project: 5403 FORMER JUDGES

Pace Project No.: 40156443

MATRIX SPIKE & MATRIX SPIKE DUPLICATE:		1570119		1570120									
Parameter	Units	40156442006	MS	MSD	MS	MSD	MS	MSD	% Rec	Max	RPD	RPD	Qual
		Result	Spike Conc.	Spike Conc.	Result	Result	% Rec	% Rec	Limits				
Benzene	ug/L	<0.50	50	50	48.4	48.7	97	97	73-145	1	20		
Bromodichloromethane	ug/L	<0.50	50	50	51.4	51.8	103	104	70-130	1	20		
Bromoform	ug/L	<0.50	50	50	54.9	55.4	110	111	67-130	1	20		
Bromomethane	ug/L	<2.4	50	50	51.7	54.2	103	108	26-129	5	20		
Carbon tetrachloride	ug/L	<0.50	50	50	56.4	57.9	113	116	70-134	3	20		
Chlorobenzene	ug/L	<0.50	50	50	53.0	53.2	106	106	70-130	0	20		
Chloroethane	ug/L	<0.37	50	50	44.9	45.9	90	92	58-120	2	20		
Chloroform	ug/L	<2.5	50	50	52.4	52.7	105	105	80-121	1	20		
Chloromethane	ug/L	<0.50	50	50	38.8	39.9	78	80	40-128	3	20		
cis-1,2-Dichloroethene	ug/L	<0.26	50	50	47.4	46.1	95	92	70-130	3	20		
cis-1,3-Dichloropropene	ug/L	<0.50	50	50	46.4	46.9	93	94	70-130	1	20		
Dibromochloromethane	ug/L	<0.50	50	50	54.4	54.5	109	109	70-130	0	20		
Dichlorodifluoromethane	ug/L	<0.22	50	50	33.8	34.4	68	69	20-146	2	20		
Ethylbenzene	ug/L	<0.50	50	50	50.4	50.8	101	102	87-129	1	20		
Isopropylbenzene (Cumene)	ug/L	<0.14	50	50	51.7	51.8	103	104	70-130	0	20		
m&p-Xylene	ug/L	<1.0	100	100	104	104	104	104	70-130	1	20		
Methyl-tert-butyl ether	ug/L	<0.17	50	50	51.6	52.3	103	105	66-143	1	20		
Methylene Chloride	ug/L	<0.23	50	50	50.7	51.2	101	102	70-130	1	20		
o-Xylene	ug/L	<0.50	50	50	50.8	51.2	102	102	70-130	1	20		
Styrene	ug/L	<0.50	50	50	51.0	51.3	102	103	70-130	1	20		
Tetrachloroethene	ug/L	<0.50	50	50	54.4	55.1	109	110	70-130	1	20		
Toluene	ug/L	<0.50	50	50	49.5	50.0	99	100	82-131	1	20		
trans-1,2-Dichloroethene	ug/L	<0.26	50	50	52.0	52.7	104	105	75-135	1	20		
trans-1,3-Dichloropropene	ug/L	<0.23	50	50	44.5	45.2	89	90	70-130	2	20		
Trichloroethene	ug/L	<0.33	50	50	52.3	52.7	105	105	70-130	1	20		
Trichlorofluoromethane	ug/L	<0.18	50	50	56.7	57.8	113	116	76-150	2	20		
Vinyl chloride	ug/L	<0.18	50	50	39.9	40.7	80	81	56-143	2	20		
4-Bromofluorobenzene (S)	%						98	99	61-130				
Dibromofluoromethane (S)	%						108	109	67-130				
Toluene-d8 (S)	%						97	95	70-130				

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### QUALITY CONTROL DATA

Project: 5403 FORMER JUDGES  
Pace Project No.: 40156443

QC Batch: 267180 Analysis Method: EPA 8260  
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV  
Associated Lab Samples: 40156443003, 40156443004, 40156443005, 40156443006, 40156443007

METHOD BLANK: 1570088 Matrix: Water  
Associated Lab Samples: 40156443003, 40156443004, 40156443005, 40156443006, 40156443007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	<0.18	1.0	09/11/17 10:20	
1,1,1-Trichloroethane	ug/L	<0.50	1.0	09/11/17 10:20	
1,1,2,2-Tetrachloroethane	ug/L	<0.25	1.0	09/11/17 10:20	
1,1,2-Trichloroethane	ug/L	<0.20	1.0	09/11/17 10:20	
1,1-Dichloroethane	ug/L	<0.24	1.0	09/11/17 10:20	
1,1-Dichloroethene	ug/L	<0.41	1.0	09/11/17 10:20	
1,1-Dichloropropene	ug/L	<0.44	1.0	09/11/17 10:20	
1,2,3-Trichlorobenzene	ug/L	<2.1	5.0	09/11/17 10:20	
1,2,3-Trichloropropane	ug/L	<0.50	1.0	09/11/17 10:20	
1,2,4-Trichlorobenzene	ug/L	<2.2	5.0	09/11/17 10:20	
1,2,4-Trimethylbenzene	ug/L	<0.50	1.0	09/11/17 10:20	
1,2-Dibromo-3-chloropropane	ug/L	<2.2	5.0	09/11/17 10:20	
1,2-Dibromoethane (EDB)	ug/L	<0.18	1.0	09/11/17 10:20	
1,2-Dichlorobenzene	ug/L	<0.50	1.0	09/11/17 10:20	
1,2-Dichloroethane	ug/L	<0.17	1.0	09/11/17 10:20	
1,2-Dichloropropane	ug/L	<0.23	1.0	09/11/17 10:20	
1,3,5-Trimethylbenzene	ug/L	<0.50	1.0	09/11/17 10:20	
1,3-Dichlorobenzene	ug/L	<0.50	1.0	09/11/17 10:20	
1,3-Dichloropropane	ug/L	<0.50	1.0	09/11/17 10:20	
1,4-Dichlorobenzene	ug/L	<0.50	1.0	09/11/17 10:20	
2,2-Dichloropropane	ug/L	<0.48	1.0	09/11/17 10:20	
2-Chlorotoluene	ug/L	<0.50	1.0	09/11/17 10:20	
4-Chlorotoluene	ug/L	<0.21	1.0	09/11/17 10:20	
Benzene	ug/L	<0.50	1.0	09/11/17 10:20	
Bromobenzene	ug/L	<0.23	1.0	09/11/17 10:20	
Bromochloromethane	ug/L	<0.34	1.0	09/11/17 10:20	
Bromodichloromethane	ug/L	<0.50	1.0	09/11/17 10:20	
Bromoform	ug/L	<0.50	1.0	09/11/17 10:20	
Bromomethane	ug/L	<2.4	5.0	09/11/17 10:20	
Carbon tetrachloride	ug/L	<0.50	1.0	09/11/17 10:20	
Chlorobenzene	ug/L	<0.50	1.0	09/11/17 10:20	
Chloroethane	ug/L	<0.37	1.0	09/11/17 10:20	
Chloroform	ug/L	<2.5	5.0	09/11/17 10:20	
Chloromethane	ug/L	<0.50	1.0	09/11/17 10:20	
cis-1,2-Dichloroethene	ug/L	<0.26	1.0	09/11/17 10:20	
cis-1,3-Dichloropropene	ug/L	<0.50	1.0	09/11/17 10:20	
Dibromochloromethane	ug/L	<0.50	1.0	09/11/17 10:20	
Dibromomethane	ug/L	<0.43	1.0	09/11/17 10:20	
Dichlorodifluoromethane	ug/L	<0.22	1.0	09/11/17 10:20	
Diisopropyl ether	ug/L	<0.50	1.0	09/11/17 10:20	
Ethylbenzene	ug/L	<0.50	1.0	09/11/17 10:20	

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### QUALITY CONTROL DATA

Project: 5403 FORMER JUDGES

Pace Project No.: 40156443

METHOD BLANK: 1570088

Matrix: Water

Associated Lab Samples: 40156443003, 40156443004, 40156443005, 40156443006, 40156443007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Hexachloro-1,3-butadiene	ug/L	<2.1	5.0	09/11/17 10:20	
Isopropylbenzene (Cumene)	ug/L	<0.14	1.0	09/11/17 10:20	
m&p-Xylene	ug/L	<1.0	2.0	09/11/17 10:20	
Methyl-tert-butyl ether	ug/L	<0.17	1.0	09/11/17 10:20	
Methylene Chloride	ug/L	0.24J	1.0	09/11/17 10:20	
n-Butylbenzene	ug/L	<0.50	1.0	09/11/17 10:20	
n-Propylbenzene	ug/L	<0.50	1.0	09/11/17 10:20	
Naphthalene	ug/L	<2.5	5.0	09/11/17 10:20	
o-Xylene	ug/L	<0.50	1.0	09/11/17 10:20	
p-Isopropyltoluene	ug/L	<0.50	1.0	09/11/17 10:20	
sec-Butylbenzene	ug/L	<2.2	5.0	09/11/17 10:20	
Styrene	ug/L	<0.50	1.0	09/11/17 10:20	
tert-Butylbenzene	ug/L	<0.18	1.0	09/11/17 10:20	
Tetrachloroethene	ug/L	<0.50	1.0	09/11/17 10:20	
Toluene	ug/L	<0.50	1.0	09/11/17 10:20	
trans-1,2-Dichloroethene	ug/L	<0.26	1.0	09/11/17 10:20	
trans-1,3-Dichloropropene	ug/L	<0.23	1.0	09/11/17 10:20	
Trichloroethene	ug/L	<0.33	1.0	09/11/17 10:20	
Trichlorofluoromethane	ug/L	<0.18	1.0	09/11/17 10:20	
Vinyl chloride	ug/L	<0.18	1.0	09/11/17 10:20	
4-Bromofluorobenzene (S)	%	98	61-130	09/11/17 10:20	
Dibromofluoromethane (S)	%	95	67-130	09/11/17 10:20	
Toluene-d8 (S)	%	108	70-130	09/11/17 10:20	

LABORATORY CONTROL SAMPLE: 1570089

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	16.0	80	70-130	
1,1,2,2-Tetrachloroethane	ug/L	20	21.9	109	70-130	
1,1,2-Trichloroethane	ug/L	20	20.8	104	70-130	
1,1-Dichloroethane	ug/L	20	20.4	102	71-132	
1,1-Dichloroethene	ug/L	20	17.4	87	75-130	
1,2,4-Trichlorobenzene	ug/L	20	18.6	93	70-130	
1,2-Dibromo-3-chloropropane	ug/L	20	18.4	92	63-123	
1,2-Dibromoethane (EDB)	ug/L	20	18.8	94	70-130	
1,2-Dichlorobenzene	ug/L	20	19.7	98	70-130	
1,2-Dichloroethane	ug/L	20	20.1	100	70-131	
1,2-Dichloropropane	ug/L	20	19.1	96	80-120	
1,3-Dichlorobenzene	ug/L	20	19.1	95	70-130	
1,4-Dichlorobenzene	ug/L	20	19.9	100	70-130	
Benzene	ug/L	20	18.2	91	73-145	
Bromodichloromethane	ug/L	20	17.4	87	70-130	
Bromoform	ug/L	20	16.0	80	67-130	
Bromomethane	ug/L	20	9.6	48	26-128	

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### QUALITY CONTROL DATA

Project: 5403 FORMER JUDGES  
Pace Project No.: 40156443

LABORATORY CONTROL SAMPLE: 1570089

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Carbon tetrachloride	ug/L	20	13.9	70	70-133	
Chlorobenzene	ug/L	20	19.7	99	70-130	
Chloroethane	ug/L	20	16.7	83	58-120	
Chloroform	ug/L	20	17.5	87	80-121	
Chloromethane	ug/L	20	12.5	63	40-127	
cis-1,2-Dichloroethene	ug/L	20	16.9	85	70-130	
cis-1,3-Dichloropropene	ug/L	20	18.8	94	70-130	
Dibromochloromethane	ug/L	20	15.4	77	70-130	
Dichlorodifluoromethane	ug/L	20	12.2	61	20-135	
Ethylbenzene	ug/L	20	20.0	100	87-129	
Isopropylbenzene (Cumene)	ug/L	20	19.4	97	70-130	
m&p-Xylene	ug/L	40	39.7	99	70-130	
Methyl-tert-butyl ether	ug/L	20	20.7	103	66-143	
Methylene Chloride	ug/L	20	19.7	99	70-130	
o-Xylene	ug/L	20	19.4	97	70-130	
Styrene	ug/L	20	19.9	100	70-130	
Tetrachloroethene	ug/L	20	16.4	82	70-130	
Toluene	ug/L	20	19.9	100	82-130	
trans-1,2-Dichloroethene	ug/L	20	20.1	100	75-132	
trans-1,3-Dichloropropene	ug/L	20	17.2	86	70-130	
Trichloroethene	ug/L	20	17.7	88	70-130	
Trichlorofluoromethane	ug/L	20	15.7	79	76-133	
Vinyl chloride	ug/L	20	14.7	74	57-136	
4-Bromofluorobenzene (S)	%			104	61-130	
Dibromofluoromethane (S)	%			94	67-130	
Toluene-d8 (S)	%			109	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1570121 1570122

Parameter	Units	40156453001		MSD		MS		MSD		% Rec Limits	RPD	Max RPD	Qual
		Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec					
1,1,1-Trichloroethane	ug/L	<0.50	50	50	46.4	46.6	93	93	70-134	1	20		
1,1,2,2-Tetrachloroethane	ug/L	<0.25	50	50	53.3	53.8	107	108	70-130	1	20		
1,1,2-Trichloroethane	ug/L	<0.20	50	50	51.9	51.3	104	103	70-130	1	20		
1,1-Dichloroethane	ug/L	<0.24	50	50	53.9	54.4	108	109	71-133	1	20		
1,1-Dichloroethene	ug/L	<0.41	50	50	50.8	51.9	102	104	75-136	2	20		
1,2,4-Trichlorobenzene	ug/L	<2.2	50	50	47.7	48.4	95	97	70-130	2	20		
1,2-Dibromo-3-chloropropane	ug/L	<2.2	50	50	50.6	52.4	101	105	63-123	3	20		
1,2-Dibromoethane (EDB)	ug/L	<0.18	50	50	49.5	50.0	99	100	70-130	1	20		
1,2-Dichlorobenzene	ug/L	<0.50	50	50	49.9	50.4	100	101	70-130	1	20		
1,2-Dichloroethane	ug/L	<0.17	50	50	51.7	52.7	103	105	70-131	2	20		
1,2-Dichloropropane	ug/L	<0.23	50	50	48.9	49.0	98	98	80-120	0	20		
1,3-Dichlorobenzene	ug/L	<0.50	50	50	48.7	49.5	97	99	70-130	2	20		
1,4-Dichlorobenzene	ug/L	<0.50	50	50	49.3	49.6	99	99	70-130	1	20		

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### QUALITY CONTROL DATA

Project: 5403 FORMER JUDGES

Pace Project No.: 40156443

Parameter	Units	MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1570121		1570122		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
		40156453001 Result	MS Spike Conc.	MSD Spike Conc.								
Benzene	ug/L	14.1	50	50	64.6	64.8	101	101	73-145	0	20	
Bromodichloromethane	ug/L	<0.50	50	50	47.0	48.7	94	97	70-130	4	20	
Bromoform	ug/L	<0.50	50	50	39.0	40.2	78	80	67-130	3	20	
Bromomethane	ug/L	<2.4	50	50	26.8	27.5	54	55	26-129	3	20	
Carbon tetrachloride	ug/L	<0.50	50	50	39.4	40.8	79	82	70-134	4	20	
Chlorobenzene	ug/L	<0.50	50	50	50.0	50.1	100	100	70-130	0	20	
Chloroethane	ug/L	<0.37	50	50	48.0	46.5	96	93	58-120	3	20	
Chloroform	ug/L	<2.5	50	50	45.4	46.0	91	92	80-121	1	20	
Chloromethane	ug/L	<0.50	50	50	35.6	36.0	71	72	40-128	1	20	
cis-1,2-Dichloroethene	ug/L	<0.26	50	50	44.3	45.6	89	91	70-130	3	20	
cis-1,3-Dichloropropene	ug/L	<0.50	50	50	50.4	50.9	101	102	70-130	1	20	
Dibromochloromethane	ug/L	<0.50	50	50	40.0	40.9	80	82	70-130	2	20	
Dichlorodifluoromethane	ug/L	<0.22	50	50	35.9	36.2	72	72	20-146	1	20	
Ethylbenzene	ug/L	<0.50	50	50	53.3	53.7	106	107	87-129	1	20	
Isopropylbenzene (Cumene)	ug/L	0.44J	50	50	54.1	54.0	107	107	70-130	0	20	
m&p-Xylene	ug/L	<1.0	100	100	107	107	106	106	70-130	0	20	
Methyl-tert-butyl ether	ug/L	<0.17	50	50	53.0	53.2	106	106	66-143	1	20	
Methylene Chloride	ug/L	<0.23	50	50	48.6	48.8	97	98	70-130	1	20	
o-Xylene	ug/L	<0.50	50	50	51.5	51.9	103	104	70-130	1	20	
Styrene	ug/L	<0.50	50	50	53.5	53.8	107	108	70-130	1	20	
Tetrachloroethene	ug/L	<0.50	50	50	44.1	44.6	88	89	70-130	1	20	
Toluene	ug/L	<0.50	50	50	51.3	51.2	103	102	82-131	0	20	
trans-1,2-Dichloroethene	ug/L	<0.26	50	50	54.1	55.0	108	110	75-135	2	20	
trans-1,3-Dichloropropene	ug/L	<0.23	50	50	45.6	46.1	91	92	70-130	1	20	
Trichloroethene	ug/L	<0.33	50	50	46.4	47.2	93	94	70-130	2	20	
Trichlorofluoromethane	ug/L	<0.18	50	50	46.7	47.3	93	95	76-150	1	20	
Vinyl chloride	ug/L	<0.18	50	50	43.2	43.3	86	87	56-143	0	20	
4-Bromofluorobenzene (S)	%						105	105	61-130			
Dibromofluoromethane (S)	%						96	97	67-130			
Toluene-d8 (S)	%						108	105	70-130			

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### QUALITY CONTROL DATA

Project: 5403 FORMER JUDGES  
Pace Project No.: 40156443

QC Batch: 267315 Analysis Method: EPA 8260  
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV  
Associated Lab Samples: 40156443002

METHOD BLANK: 1570610 Matrix: Water  
Associated Lab Samples: 40156443002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	<0.18	1.0	09/12/17 07:47	
1,1,1-Trichloroethane	ug/L	<0.50	1.0	09/12/17 07:47	
1,1,2,2-Tetrachloroethane	ug/L	<0.25	1.0	09/12/17 07:47	
1,1,2-Trichloroethane	ug/L	<0.20	1.0	09/12/17 07:47	
1,1-Dichloroethane	ug/L	<0.24	1.0	09/12/17 07:47	
1,1-Dichloroethene	ug/L	<0.41	1.0	09/12/17 07:47	
1,1-Dichloropropene	ug/L	<0.44	1.0	09/12/17 07:47	
1,2,3-Trichlorobenzene	ug/L	<2.1	5.0	09/12/17 07:47	
1,2,3-Trichloropropane	ug/L	<0.50	1.0	09/12/17 07:47	
1,2,4-Trichlorobenzene	ug/L	<2.2	5.0	09/12/17 07:47	
1,2,4-Trimethylbenzene	ug/L	<0.50	1.0	09/12/17 07:47	
1,2-Dibromo-3-chloropropane	ug/L	<2.2	5.0	09/12/17 07:47	
1,2-Dibromoethane (EDB)	ug/L	<0.18	1.0	09/12/17 07:47	
1,2-Dichlorobenzene	ug/L	<0.50	1.0	09/12/17 07:47	
1,2-Dichloroethane	ug/L	<0.17	1.0	09/12/17 07:47	
1,2-Dichloropropane	ug/L	<0.23	1.0	09/12/17 07:47	
1,3,5-Trimethylbenzene	ug/L	<0.50	1.0	09/12/17 07:47	
1,3-Dichlorobenzene	ug/L	<0.50	1.0	09/12/17 07:47	
1,3-Dichloropropane	ug/L	<0.50	1.0	09/12/17 07:47	
1,4-Dichlorobenzene	ug/L	<0.50	1.0	09/12/17 07:47	
2,2-Dichloropropane	ug/L	<0.48	1.0	09/12/17 07:47	
2-Chlorotoluene	ug/L	<0.50	1.0	09/12/17 07:47	
4-Chlorotoluene	ug/L	<0.21	1.0	09/12/17 07:47	
Benzene	ug/L	<0.50	1.0	09/12/17 07:47	
Bromobenzene	ug/L	<0.23	1.0	09/12/17 07:47	
Bromochloromethane	ug/L	<0.34	1.0	09/12/17 07:47	
Bromodichloromethane	ug/L	<0.50	1.0	09/12/17 07:47	
Bromoform	ug/L	<0.50	1.0	09/12/17 07:47	
Bromomethane	ug/L	<2.4	5.0	09/12/17 07:47	
Carbon tetrachloride	ug/L	<0.50	1.0	09/12/17 07:47	
Chlorobenzene	ug/L	<0.50	1.0	09/12/17 07:47	
Chloroethane	ug/L	<0.37	1.0	09/12/17 07:47	
Chloroform	ug/L	<2.5	5.0	09/12/17 07:47	
Chloromethane	ug/L	<0.50	1.0	09/12/17 07:47	
cis-1,2-Dichloroethene	ug/L	<0.26	1.0	09/12/17 07:47	
cis-1,3-Dichloropropene	ug/L	<0.50	1.0	09/12/17 07:47	
Dibromochloromethane	ug/L	<0.50	1.0	09/12/17 07:47	
Dibromomethane	ug/L	<0.43	1.0	09/12/17 07:47	
Dichlorodifluoromethane	ug/L	<0.22	1.0	09/12/17 07:47	
Diisopropyl ether	ug/L	<0.50	1.0	09/12/17 07:47	
Ethylbenzene	ug/L	<0.50	1.0	09/12/17 07:47	

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### QUALITY CONTROL DATA

Project: 5403 FORMER JUDGES

Pace Project No.: 40156443

METHOD BLANK: 1570610

Matrix: Water

Associated Lab Samples: 40156443002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Hexachloro-1,3-butadiene	ug/L	<2.1	5.0	09/12/17 07:47	
Isopropylbenzene (Cumene)	ug/L	<0.14	1.0	09/12/17 07:47	
m&p-Xylene	ug/L	<1.0	2.0	09/12/17 07:47	
Methyl-tert-butyl ether	ug/L	<0.17	1.0	09/12/17 07:47	
Methylene Chloride	ug/L	<0.23	1.0	09/12/17 07:47	
n-Butylbenzene	ug/L	<0.50	1.0	09/12/17 07:47	
n-Propylbenzene	ug/L	<0.50	1.0	09/12/17 07:47	
Naphthalene	ug/L	<2.5	5.0	09/12/17 07:47	
o-Xylene	ug/L	<0.50	1.0	09/12/17 07:47	
p-Isopropyltoluene	ug/L	<0.50	1.0	09/12/17 07:47	
sec-Butylbenzene	ug/L	<2.2	5.0	09/12/17 07:47	
Styrene	ug/L	<0.50	1.0	09/12/17 07:47	
tert-Butylbenzene	ug/L	<0.18	1.0	09/12/17 07:47	
Tetrachloroethene	ug/L	<0.50	1.0	09/12/17 07:47	
Toluene	ug/L	<0.50	1.0	09/12/17 07:47	
trans-1,2-Dichloroethene	ug/L	<0.26	1.0	09/12/17 07:47	
trans-1,3-Dichloropropene	ug/L	<0.23	1.0	09/12/17 07:47	
Trichloroethene	ug/L	<0.33	1.0	09/12/17 07:47	
Trichlorofluoromethane	ug/L	<0.18	1.0	09/12/17 07:47	
Vinyl chloride	ug/L	<0.18	1.0	09/12/17 07:47	
4-Bromofluorobenzene (S)	%	92	61-130	09/12/17 07:47	
Dibromofluoromethane (S)	%	105	67-130	09/12/17 07:47	
Toluene-d8 (S)	%	98	70-130	09/12/17 07:47	

LABORATORY CONTROL SAMPLE: 1570611

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	20	22.0	110	70-130	
1,1,1-Trichloroethane	ug/L	20	20.0	100	70-130	
1,1,2,2-Tetrachloroethane	ug/L	20	20.3	102	70-130	
1,1,2-Trichloroethane	ug/L	20	20.3	101	70-130	
1,1-Dichloroethane	ug/L	20	20.9	104	71-132	
1,1-Dichloroethene	ug/L	20	20.6	103	75-130	
1,1-Dichloropropene	ug/L	20	21.1	106	70-130	
1,2,3-Trichlorobenzene	ug/L	20	19.2	96	70-130	
1,2,3-Trichloropropane	ug/L	20	20.5	102	70-130	
1,2,4-Trichlorobenzene	ug/L	20	17.9	89	70-130	
1,2,4-Trimethylbenzene	ug/L	20	19.6	98	70-130	
1,2-Dibromo-3-chloropropane	ug/L	20	18.0	90	63-123	
1,2-Dibromoethane (EDB)	ug/L	20	22.0	110	70-130	
1,2-Dichlorobenzene	ug/L	20	22.1	110	70-130	
1,2-Dichloroethane	ug/L	20	21.4	107	70-131	
1,2-Dichloropropane	ug/L	20	20.4	102	80-120	
1,3,5-Trimethylbenzene	ug/L	20	19.8	99	70-130	

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### QUALITY CONTROL DATA

Project: 5403 FORMER JUDGES

Pace Project No.: 40156443

LABORATORY CONTROL SAMPLE: 1570611

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,3-Dichlorobenzene	ug/L	20	22.2	111	70-130	
1,3-Dichloropropane	ug/L	20	20.9	105	70-130	
1,4-Dichlorobenzene	ug/L	20	21.1	105	70-130	
2,2-Dichloropropane	ug/L	20	19.1	95	70-130	
2-Chlorotoluene	ug/L	20	19.5	98	70-130	
4-Chlorotoluene	ug/L	20	21.8	109	70-130	
Benzene	ug/L	20	20.7	104	73-145	
Bromobenzene	ug/L	20	19.3	96	70-130	
Bromochloromethane	ug/L	20	21.4	107	70-130	
Bromodichloromethane	ug/L	20	20.8	104	70-130	
Bromoform	ug/L	20	20.3	101	67-130	
Bromomethane	ug/L	20	20.3	102	26-128	
Carbon tetrachloride	ug/L	20	21.4	107	70-133	
Chlorobenzene	ug/L	20	21.4	107	70-130	
Chloroethane	ug/L	20	20.1	100	58-120	
Chloroform	ug/L	20	20.9	105	80-121	
Chloromethane	ug/L	20	19.0	95	40-127	
cis-1,2-Dichloroethene	ug/L	20	21.5	108	70-130	
cis-1,3-Dichloropropene	ug/L	20	18.2	91	70-130	
Dibromochloromethane	ug/L	20	20.5	103	70-130	
Dibromomethane	ug/L	20	22.1	110	70-130	
Dichlorodifluoromethane	ug/L	20	19.5	97	20-135	
Diisopropyl ether	ug/L	20	20.2	101	70-130	
Ethylbenzene	ug/L	20	20.2	101	87-129	
Hexachloro-1,3-butadiene	ug/L	20	18.6	93	70-130	
Isopropylbenzene (Cumene)	ug/L	20	20.5	102	70-130	
m&p-Xylene	ug/L	40	41.5	104	70-130	
Methyl-tert-butyl ether	ug/L	20	22.4	112	66-143	
Methylene Chloride	ug/L	20	21.0	105	70-130	
n-Butylbenzene	ug/L	20	19.9	99	70-130	
n-Propylbenzene	ug/L	20	20.1	100	70-130	
Naphthalene	ug/L	20	18.9	95	70-130	
o-Xylene	ug/L	20	20.6	103	70-130	
p-Isopropyltoluene	ug/L	20	19.1	96	70-130	
sec-Butylbenzene	ug/L	20	19.5	98	70-130	
Styrene	ug/L	20	18.8	94	70-130	
tert-Butylbenzene	ug/L	20	19.5	97	70-130	
Tetrachloroethene	ug/L	20	19.4	97	70-130	
Toluene	ug/L	20	20.1	101	82-130	
trans-1,2-Dichloroethene	ug/L	20	20.7	104	75-132	
trans-1,3-Dichloropropene	ug/L	20	17.7	89	70-130	
Trichloroethene	ug/L	20	20.3	101	70-130	
Trichlorofluoromethane	ug/L	20	22.3	111	76-133	
Vinyl chloride	ug/L	20	19.0	95	57-136	
4-Bromofluorobenzene (S)	%			99	61-130	
Dibromofluoromethane (S)	%			103	67-130	
Toluene-d8 (S)	%			98	70-130	

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## QUALIFIERS

Project: 5403 FORMER JUDGES

Pace Project No.: 40156443

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### DEFINITIONS

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

ND - Not Detected at or above LOD.

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

LOD - Limit of Detection adjusted for dilution factor 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.

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### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 5403 FORMER JUDGES

Pace Project No.: 40156443

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40156443001	GP-1D	EPA 8260	267177		
40156443002	GP-2S	EPA 8260	267315		
40156443003	GP-2D	EPA 8260	267180		
40156443004	GP-3S	EPA 8260	267180		
40156443005	GP-3D	EPA 8260	267180		
40156443006	GP-4S	EPA 8260	267180		
40156443007	GP-4D	EPA 8260	267180		

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Sample Condition Upon Receipt

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

Client Name: REI

Project #: WO#: 40156443



Courier: Fed Ex UPS Client Pace Other: Walco

Tracking #: 1482425-1

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

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

Packing Material: Bubble Wrap Bubble Bags None Other

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

Cooler Temperature Uncorr: Ret ICorr: Biological Tissue is Frozen: yes no

Temp Blank Present: yes no

Temp should be above freezing to 6°C.

Biota Samples may be received at ≤ 0°C.

Person examining contents:

Date: 9/9/17

Initials: SP

Comments:

Table with 15 rows for Chain of Custody Present, Chain of Custody Filled Out, Chain of Custody Relinquished, Sampler Name & Signature on COC, Samples Arrived within Hold Time, Short Hold Time Analysis (<72hr), Rush Turn Around Time Requested, Sufficient Volume, Correct Containers Used, Containers Intact, Filtered volume received for Dissolved tests, Sample Labels match COC, All containers needing preservation have been checked, All containers needing preservation are found to be in compliance with EPA recommendation, Headspace in VOA Vials (>6mm), Trip Blank Present, Trip Blank Custody Seals Present, Pace Trip Blank Lot #.

Client Notification/ Resolution:

If checked, see attached form for additional comments

Person Contacted: Date/Time:

Comments/ Resolution:

Project Manager Review:

Handwritten signature

Date: 9-11-17