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March 19, 2024

Ms. Demaree Collier
Remedial Project Manager
USEPA Region 5
77 West Jackson Boulevard
Chicago, IL 60604

Subject: Transmittal of Data
Residential, Plume Monitoring, and Sentinel Wells
Lemberger Landfill Sites
Third Quarter 2023

Dear Ms. Collier:

On behalf of the Lemberger Site Remediation Group (LSRG), and in accordance with the Environmental Monitoring Plan (EMP), Revision 5 (February 2021), and the subsequent monitoring program revisions as approved by the United States Environmental Protection Agency (USEPA) and the Wisconsin Department of Natural Resources (WDNR), TRC Environmental Corporation (TRC) is submitting the following data:

- Attachment 1: Data Validation Comments and Qualified Form 1s For All Wells
- Attachment 2: Table of Wisconsin Administrative Code Chapter NR 140 Groundwater Quality Standards (Enforcement Standards [ESs], Preventive Action Limits [PALs], Maximum Contaminant Levels [MCLs], and Secondary Maximum Contaminant Levels [SMCLs]) for the Pertinent Parameters
- Attachment 3: Tabular Summary of Analytical Results at Each Residential Well
- Attachment 4: Original Laboratory Data Sheets for Residential Wells
- Attachment 5: Residential Well Location Map with Owner/Occupant Addresses
- Attachment 6: Tabular Summary of Analytical Results at Each Monitoring Well
- Attachment 7: Laboratory Data Qualifiers for Monitoring Wells
- Attachment 8: Tabular Summary of Groundwater Standard Exceedances at Plume Monitoring Wells

A CD containing field and laboratory data in an approved WDNR format has been attached to the copies provided to the WDNR and the USEPA, for their use. Groundwater samples were collected during October 2023, in accordance with the February 2021 EMP, Revision 5.

All of but one the residential wells specified in the third quarter monitoring program were sampled during this event. Residential well GR-13 was not sampled due to an inoperable pump. No groundwater quality standard exceedances were found among the residential wells sampled during this quarter.

The residential well volatile organic compound (VOC) samples were collected without a hydrochloric acid (HCl) preservative. We are collecting unpreserved samples due to ongoing problems with false-positive chloromethane detections sourced to the HCl preservative. The laboratory analyzed the

samples within 7 days of collection, which is consistent with an older approved VOC sampling methodology.

Please call if you have questions.

Sincerely,

TRC

Kristopher D. Krause, P.E.
Senior Project Manager

Meredith Westover, P.G.
Senior Hydrogeologist

Attachments

cc: B.J. LeRoy – WDNR
Brian Potts – Husch Blackwell
Kristin Jones – Newell Rubbermaid
Troy Adams – Manitowoc Public Utilities
Scott Karbon – Manitowoc Public Utilities
James Wallner – Red Arrow Products
James Cook – The Manitowoc Company, Inc.
Dan Koski – City of Manitowoc
Jane Rhode – City of Manitowoc
Eric Nycz – City of Manitowoc
Felicie Chaume – The Manitowoc Company, Inc.
Dominique Sorel – SS. Papadopulos & Associates, Inc.
John Lang – EHS Support, LLC
Tom Sullivan – EHS Support, LLC
GEMS Data Submittal Contact (w/diskette)

Attachment 1

Data Validation Comments and Qualified Form 1s For All Wells

Memorandum

To: Meredith Westover

From: David DiGena-Segal (Data Reviewer)
Elizabeth Denly (Peer Reviewer)

Date: February 19, 2024

Subject: Data Validation Report
VOC Groundwater Samples/Plume Wells: 3rd Quarter 2023
Lemberger Landfill and Lemberger Transport and Recycling/Franklin, Wisconsin
Laboratory Project Numbers 40270181 (Revised 02/19/2024), 40270527, 40270530, 40270533 (Revised (02/19/2024)

SUMMARY

Limited validation (level III) was performed on the data for 29 groundwater samples, two field duplicates, two field blanks, and three trip blanks collected at the Lemberger Landfill and Lemberger Transport and Recycling Site in Franklin, Wisconsin. The samples were collected October 21-22 and 27-30, 2023. Samples were submitted to Pace Analytical Services, LLC in Green Bay, Wisconsin for analysis. The samples were analyzed for volatile organic compounds (VOCs) using SW-846 methods 8260B and 8260D. The laboratory reported the results under laboratory project numbers 40270181, 40270527, 40270530, and 40270533.

The sample results were assessed using the *USEPA National Functional Guidelines for Organic Superfund Methods Data Review (EPA-540-R-20-005),* November 2020 and the project-specific quality assurance project plan (QAPP), dated October 2022, Revision 0.

In general, the data are valid as reported and may be used for decision-making purposes. The following issues were noted which may have a minor impact on the data usability:

- Select results were reported which were below the lowest calibration standard and quantitation limit (QL); these results were qualified by the laboratory as estimated (J).
- Samples RM-212D and RM-214D had headspace in the vials used for analysis; all results in these samples were qualified as estimated with a potential low bias (J-/UJ). It should be noted that the positive result for vinyl chloride in sample RM-214D were also qualified as estimated (J) due to detection below the QL; the overall qualification for vinyl chloride in sample RM-214D was J.
- Samples TB-001 (10/22/23), TB-001 (10/30/23), and RM-306D were improperly preserved; all results were qualified as estimated with a potential low bias (J-/UJ). It should be noted that select results in samples TB-001 (10/22/23) and RM-306D were also qualified as estimated (J) due to detection below the QL; the overall qualification for these results in these samples was J.
- Potential uncertainty exists for the nondetect results for select VOCs in select samples due to continuing calibration nonconformances. These results were qualified as estimated (UJ).

SAMPLES

Samples included in this review are listed below.

Laboratory Project Number 40270181: collected 10/21-22/23

- RM-005D
- RM-101D
- RM-211D
- RM-212D
- RM-401XD
- RM-404XXD
- TB-001 (10/22/23)

Laboratory Project Number 40270527: collected 10/29/23

- OW-104F
- RM-007D
- RM-007XD
- RM-007XXD
- RM-102D
- FDUP-002[1]
- TB-001 (10/29/23)

[1] Field duplicate of RM-007XD

Laboratory Project Number 40270530: collected 10/30/23

- RM-008D
- RM-203D
- RM-204D
- RM-402XD
- RM-402XXD
- FDUP-003[1]
- FB-002
- TB-001 (10/30/23)

[1] Field duplicate of RM-204D

Laboratory Project Number 40270533: collected 10/27-28/23

- RM-202D
- RM-208D
- RM-208XD
- RM-213D
- RM-213XD
- RM-214D
- RM-303D
- RM-306D
- RM-307D
- FB-003

REVIEW ELEMENTS

Sample data were reviewed for the following parameters:

- Agreement of analyses conducted with chain-of-custody (COC) requests
- Data completeness
- Holding times and sample preservation
- Gas chromatography/mass spectrometry (GC/MS) tunes
- Initial and continuing calibrations
- Blanks
- Surrogate spike recoveries
- Matrix spike/matrix spike duplicate (MS/MSD) results
- Laboratory control sample (LCS) results
- Internal standard performance
- Field duplicate results

- Quantitation limits and sample results

DISCUSSION

Agreement of Analyses Conducted with Chain-of-Custody Requests

The sample reports were checked to verify that the results corresponded to analytical requests as designated on the COC. The samples in SDG 40270181 were analyzed for VOCs using SW-846 Method 8260B; according to the QAPP, the samples should have been analyzed for VOCs using SW-846 Method 8260D. No validation actions were taken based on this issue.

Data Completeness

The data package was found to be complete as received from the laboratory with the following exceptions.

- The laboratory only spiked a subset of the VOCs which were reported in the samples in the LCS and MS/MSD analyses. Thus, accuracy and/or precision could not be evaluated for select VOCs.
- The sample receipt log for sample RM-212D in SDG 40270181 indicated that two of the three vials contained headspace. However, upon further questioning of the laboratory during validation, it was discovered that all three vials for this sample contained headspace. The laboratory updated the narrative and submitted a revised data package.
- The narratives provided in SDG 40270533 were conflicting in regard to the pH of sample RM-214D. This sample was properly preserved. The laboratory updated the narrative to remove the conflict and submitted a revised data package.
- The narrative associated with SDG 40270181 contained an incorrect statement in reference to an MS analysis performed on sample RM-212D. The laboratory updated the narrative to remove this statement and submitted a revised data package.

No validation actions were taken on the basis of this issue.

Holding Times and Sample Preservation

All holding time and sample preservation criteria were met with the following exceptions.

Samples RM-212D and RM-214D had headspace observed upon receipt by the laboratory. The positive and nondetect results for all VOCs in samples RM-212D and RM-214D were qualified as estimated (J-/UJ) with a potential low bias due to the headspace. It should be noted that the positive result for vinyl chloride in sample RM-214D was also qualified as estimated (J) due to detection below the QL; the overall qualification for vinyl chloride was J in sample RM-214D.

Samples TB-001 (10/22/23), TB-001 (10/30/23), and RM-306D had a pH >2. The positive and nondetect results for all VOCs in samples TB-001 (10/22/23), TB-001 (10/30/23), and RM-306D were qualified as estimated (J-/UJ) with a potential low bias due to a lack of preservation and analysis greater than seven days after collection. It should be noted that the positive result for carbon disulfide in sample TB-001 (10/22/23) and the positive result for cis-1,2-dichloroethene in sample RM-306D were also qualified as estimated (J) due to detection below the QL; the overall qualification for these compounds was J in samples TB-001 (10/22/23) and RM-306D.

Samples were received by the laboratory between four to seven days after collection. Samples were stored in coolers, on ice, in a locked former treatment building at the site until delivery to the laboratory. No validation actions were required on this basis since the samples were kept on ice prior to delivery to the laboratory and were received on ice and at acceptable cooler temperatures by the laboratory.

GC/MS Tunes

The frequency and abundance of all bromofluorobenzene tunes were within the acceptance criteria.

Initial and Continuing Calibrations

The percent relative standard deviations and relative response factors (RRFs) for all target compounds were within the laboratory acceptance criteria in the initial calibrations.

All RRFs were within the acceptance criteria in the initial calibration verification (ICV) and continuing calibrations (CCs); the ICV was used as a continuing calibration standard when samples were analyzed directly after the initial calibration. The following table summarizes the percent differences (%Ds) which were outside of the laboratory acceptance criteria in the CCs, the associated samples and validation actions.

CC	Analyte	%D	Associated Samples	Validation Actions
40MSVB 11/08/23 @09:41	Bromoform	32.6008	All samples in SDG 40270527 and samples FB-003, RM-208XD, RM-213D, RM-202D, RM-213XD, RM-303D	The nondetect results for the listed VOCs were qualified as estimated (UJ) in the associated samples. It should be noted that the nondetect results for xylene (total) were qualified as estimated (UJ) in these samples due to the m&p-xylene %D.
	Dibromochloromethane	23.0062		
	Styrene	35.9285		
	m&p-Xylene	21.2031		
40MSVB 11/08/23 @09:09	Bromomethane	20.1160	All samples in SDG 40270530 and samples RM-306D, and RM-307D	The nondetect results for the listed VOCs were qualified as estimated (UJ) in the associated samples.
	Carbon tetrachloride	23.4191		
	Chloroethane	21.2177		
	1,2-Dichloroethane	21.3913		
	Styrene	34.3901		
	1,1,2,2-Tetrachloroethane	20.8150		
40MSVB 11/09/23 @07:58	Bromoform	39.2766	RM-214D, RM-208D	The nondetect results for the listed VOCs were qualified as estimated (UJ) in the associated samples.
	Carbon tetrachloride	24.5160		
	Dibromochloromethane	28.8561		
	Styrene	28.3253		
	1,1,2-Trichloroethane	25.7191		

Blanks

Target analytes were not detected in the method blanks.

Carbon disulfide (0.78 J µg/L) was detected in the trip blank, TB-001 (10/22/23), associated with all samples in SDG 40270181. Qualification of the data was not required since carbon disulfide was not detected in the associated samples.

Toluene (0.51 J µg/L) was detected in the field blank, FB-003, associated with all samples in SDG 40270533. Qualification of the data was not required since toluene was not detected in the associated samples.

Surrogate Spike Recoveries

The percent recoveries (%Rs) of the surrogates were within the laboratory acceptance criteria for all samples.

MS/MSD Results

MS/MSD analyses were performed on samples RM-007XXD and RM-402XD. All criteria were met.

Note that the laboratory only spiked a subset of the VOCs which were reported in the samples in the MS/MSDs; thus, accuracy and precision could not be evaluated for the following VOCs (which were not spiked) in the MS/MSD analyses: acetone, 2-butanone, 2-hexanone, and 4-methyl-2-pentanone. No validation action was taken on this basis.

LCS Results

An LCS was performed on each day of analysis. The %R of styrene (134%) was above the acceptance criteria (70-130%) in LCS 2639491 associated with all samples in SDG 40270527 and samples FB-003, RM-208XD, RM-213D, RM-202D, RM-213XD, RM-303D. The %Rs of carbon tetrachloride (136%) and styrene (134%) were above the acceptance criteria (70-130%) in LCS 2642159 associated with samples RM-214D and RM-208D. Qualification of the data was not required since styrene and/or carbon tetrachloride were not detected in the associated samples.

Note that the laboratory only spiked a subset of the VOCs that were reported in the samples in the LCSs. Thus, accuracy could not be evaluated for the following VOCs (which were not spiked) in the LCS analyses: acetone, 2-butanone, 2-hexanone, and 4-methyl-2-pentanone. No validation action was taken on this basis.

Internal Standard Performance

Internal standards were within the method acceptance criteria in all sample analyses.

Field Duplicate Results

The samples listed below were submitted as the field duplicate pairs with this data set.

- RM-007XD and FDUP-002
- RM-204D and FDUP-003

The relative percent difference (RPD) is not applicable for comparison of results if either concentration is <5x the QL; comparison in this case is based on the absolute difference (AbsD) between the results. The acceptance limits for field duplicates in aqueous media is ≤30% for the RPD and ≤QL for the AbsD. For analytes that are detected in one sample and nondetect in the other, the QL is used to represent the nondetect result in the AbsD calculation. The following tables summarize the detected results, the RPD or AbsD values (as applicable) for the detected analytes in the field duplicate pairs, and the resulting validation actions. As shown in the tables, criteria were met for all detected analytes.

Analyte	QL (µg/L)	RM-007XD (µg/L)	FDUP-002 (µg/L)	RPD (%) or AbsD (µg/L)	Validation Actions
1,1-Dichloroethane	1.0	125	145	RPD: 14.8	None. All criteria were met.
1,1-Dichloroethene	1.0	22.9	25.3	RPD: 10.0	
cis-1,2-Dichloroethene	1.0	51.6	59.9	RPD: 14.9	
Tetrachloroethene	1.0	1.9	1.8	AbsD: 0.1	
1,1,1-Trichloroethane	1.0	154	174	RPD: 12.2	
Trichloroethene	1.0	29.6	34.8	RPD: 16.1	
Criteria: RPD ≤ 30%; AbsD ≤ QL					

Analyte	QL (µg/L)	RM-204D (µg/L)	FDUP-003 (µg/L)	RPD (%) or AbsD (µg/L)	Validation Actions
1,1-Dichloroethane	1.0	6.3	6.7	RPD: 6.2	None. All criteria were met.
1,1-Dichloroethene	1.0	1.0	0.89 J	AbsD: 0.11	
cis-1,2-Dichloroethene	1.0	1.8	1.6	AbsD: 0.2	
1,1,1-Trichloroethane	1.0	11.2	11.5	RPD: 2.6	
Trichloroethene	1.0	1.7	1.7	AbsD: 0.0	
Criteria: RPD ≤ 30%; AbsD ≤ QL					

Quantitation Limits and Sample Results

The following table summarizes the dilutions performed on the samples in this data set; QLs were elevated accordingly by the laboratory.

Sample ID	Dilution	Reason for Dilution
RM-007D	2.5-fold	Dilutions were performed due to the concentrations of target analytes which would have come close to exceeding the calibration range if analyzed undiluted.
RM-303D	2-fold	

Select results were reported which were below the lowest calibration standard level and QL (or limit of quantitation [LOQ]). These results were qualified as estimated (J) by the laboratory.

The laboratory's limit of detection (LOD) for select VOCs was above one or both of the project action limits specified in the QAPP; the affected VOCs, project action limits, and current laboratory LODs are summarized in the table below.

Analyte	Affected Samples	WAC Chapter NR 140 PAL (µg/L)	WAC Chapter NR 140 ES (µg/L)	Laboratory LOD (µg/L)
1,1,2,2-Tetrachloroethane	All samples in this data set	0.02	0.2	0.38
Bromodichloromethane		0.06	0.6*	0.42
Bromomethane		1	10*	1.2
cis-1,3-Dichloropropene		0.04	0.4*	0.24
trans-1,3-Dichloropropene		0.04	0.4*	0.27
Vinyl chloride		0.02	0.2*	0.17
* Laboratory LOD is below the action limit.				

QUALIFIED FORM 1s

SAMPLE NO.

RM-404XXD

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay
Contract: 525156.0000 PH4 LEMBERGER LF P
Date Received: 10/27/2023 06:32
Matrix: Water SDG No.: 40270181
Date Extracted: 11/02/2023 21:34
Lab Sample ID: 40270181001
Date Analyzed: 11/02/2023 21:34
Lab File ID: 11022023D.B\11022341.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 40MSVB Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<8.6	U
71-43-2	Benzene	<0.30	U
75-27-4	Bromodichloromethane	<0.42	U
75-25-2	Bromoform	<0.43	U
74-83-9	Bromomethane	<1.2	U
78-93-3	2-Butanone (MEK)	<6.5	U
75-15-0	Carbon disulfide	<0.65	U
56-23-5	Carbon tetrachloride	<0.37	U
108-90-7	Chlorobenzene	<0.86	U
75-00-3	Chloroethane	<1.4	U
67-66-3	Chloroform	<0.50	U
74-87-3	Chloromethane	<1.6	U
124-48-1	Dibromochloromethane	<2.6	U
75-34-3	1,1-Dichloroethane	1.0	
107-06-2	1,2-Dichloroethane	<0.29	U
75-35-4	1,1-Dichloroethene	<0.58	U
156-59-2	cis-1,2-Dichloroethene	0.74	J
156-60-5	trans-1,2-Dichloroethene	<0.53	U
78-87-5	1,2-Dichloropropane	<0.45	U
10061-01-5	cis-1,3-Dichloropropene	<0.24	U
10061-02-6	trans-1,3-Dichloropropene	<0.27	U
100-41-4	Ethylbenzene	<0.33	U
591-78-6	2-Hexanone	<6.3	U
75-09-2	Methylene Chloride	<0.32	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<6.0	U
100-42-5	Styrene	<0.36	U
79-34-5	1,1,2,2-Tetrachloroethane	<0.38	U
127-18-4	Tetrachloroethene	<0.41	U
108-88-3	Toluene	<0.29	U
71-55-6	1,1,1-Trichloroethane	1.9	
79-00-5	1,1,2-Trichloroethane	<0.34	U
79-01-6	Trichloroethene	0.86	J
75-01-4	Vinyl chloride	<0.17	U
1330-20-7	Xylene (Total)	<1.0	U

SAMPLE NO.

RM-212D

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay
Contract: 525156.0000 PH4 LEMBERGER LF P
Date Received: 10/27/2023 06:32
Matrix: Water SDG No.: 40270181
Date Extracted: 11/02/2023 21:13
Lab Sample ID: 40270181002
Date Analyzed: 11/02/2023 21:13
Lab File ID: 11022023D.B\11022340.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 40MSVB Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<8.6	~~U~~ UJ
71-43-2	Benzene	<0.30	~~U~~
75-27-4	Bromodichloromethane	<0.42	~~U~~
75-25-2	Bromoform	<0.43	~~U~~
74-83-9	Bromomethane	<1.2	~~U~~
78-93-3	2-Butanone (MEK)	<6.5	~~U~~
75-15-0	Carbon disulfide	<0.65	~~U~~
56-23-5	Carbon tetrachloride	<0.37	~~U~~
108-90-7	Chlorobenzene	<0.86	~~U~~
75-00-3	Chloroethane	<1.4	~~U~~
67-66-3	Chloroform	<0.50	~~U~~
74-87-3	Chloromethane	<1.6	~~U~~
124-48-1	Dibromochloromethane	<2.6	~~U~~
75-34-3	1,1-Dichloroethane	<0.30	~~U~~
107-06-2	1,2-Dichloroethane	<0.29	~~U~~
75-35-4	1,1-Dichloroethene	<0.58	~~U~~
156-59-2	cis-1,2-Dichloroethene	<0.47	~~U~~
156-60-5	trans-1,2-Dichloroethene	<0.53	~~U~~
78-87-5	1,2-Dichloropropane	<0.45	~~U~~
10061-01-5	cis-1,3-Dichloropropene	<0.24	~~U~~
10061-02-6	trans-1,3-Dichloropropene	<0.27	~~U~~
100-41-4	Ethylbenzene	<0.33	~~U~~
591-78-6	2-Hexanone	<6.3	~~U~~
75-09-2	Methylene Chloride	<0.32	~~U~~
108-10-1	4-Methyl-2-pentanone (MIBK)	<6.0	~~U~~
100-42-5	Styrene	<0.36	~~U~~
79-34-5	1,1,2,2-Tetrachloroethane	<0.38	~~U~~
127-18-4	Tetrachloroethene	<0.41	~~U~~
108-88-3	Toluene	<0.29	~~U~~
71-55-6	1,1,1-Trichloroethane	<0.30	~~U~~
79-00-5	1,1,2-Trichloroethane	<0.34	~~U~~
79-01-6	Trichloroethene	<0.32	~~U~~
75-01-4	Vinyl chloride	<0.17	~~U~~
1330-20-7	Xylene (Total)	<1.0	~~U~~

SAMPLE NO.

RM-211D

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay
Contract: 525156.0000 PH4 LEMBERGER LF P
Date Received: 10/27/2023 06:32
Matrix: Water SDG No.: 40270181
Date Extracted: 11/02/2023 21:55
Lab Sample ID: 40270181003
Date Analyzed: 11/02/2023 21:55
Lab File ID: 11022023D.B\11022342.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 40MSVB Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<8.6	U
71-43-2	Benzene	<0.30	U
75-27-4	Bromodichloromethane	<0.42	U
75-25-2	Bromoform	<0.43	U
74-83-9	Bromomethane	<1.2	U
78-93-3	2-Butanone (MEK)	<6.5	U
75-15-0	Carbon disulfide	<0.65	U
56-23-5	Carbon tetrachloride	<0.37	U
108-90-7	Chlorobenzene	<0.86	U
75-00-3	Chloroethane	<1.4	U
67-66-3	Chloroform	<0.50	U
74-87-3	Chloromethane	<1.6	U
124-48-1	Dibromochloromethane	<2.6	U
75-34-3	1,1-Dichloroethane	<0.30	U
107-06-2	1,2-Dichloroethane	<0.29	U
75-35-4	1,1-Dichloroethene	<0.58	U
156-59-2	cis-1,2-Dichloroethene	<0.47	U
156-60-5	trans-1,2-Dichloroethene	<0.53	U
78-87-5	1,2-Dichloropropane	<0.45	U
10061-01-5	cis-1,3-Dichloropropene	<0.24	U
10061-02-6	trans-1,3-Dichloropropene	<0.27	U
100-41-4	Ethylbenzene	<0.33	U
591-78-6	2-Hexanone	<6.3	U
75-09-2	Methylene Chloride	<0.32	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<6.0	U
100-42-5	Styrene	<0.36	U
79-34-5	1,1,2,2-Tetrachloroethane	<0.38	U
127-18-4	Tetrachloroethene	<0.41	U
108-88-3	Toluene	<0.29	U
71-55-6	1,1,1-Trichloroethane	0.43	J
79-00-5	1,1,2-Trichloroethane	<0.34	U
79-01-6	Trichloroethene	<0.32	U
75-01-4	Vinyl chloride	<0.17	U
1330-20-7	Xylene (Total)	<1.0	U

SAMPLE NO.

RM-101D

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay
Contract: 525156.0000 PH4 LEMBERGER LF P
Date Received: 10/27/2023 06:32
Matrix: Water SDG No.: 40270181
Date Extracted: 11/02/2023 22:16
Lab Sample ID: 40270181004
Date Analyzed: 11/02/2023 22:16
Lab File ID: 11022023D.B\11022343.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 40MSVB Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<8.6	U
71-43-2	Benzene	<0.30	U
75-27-4	Bromodichloromethane	<0.42	U
75-25-2	Bromoform	<0.43	U
74-83-9	Bromomethane	<1.2	U
78-93-3	2-Butanone (MEK)	<6.5	U
75-15-0	Carbon disulfide	<0.65	U
56-23-5	Carbon tetrachloride	<0.37	U
108-90-7	Chlorobenzene	<0.86	U
75-00-3	Chloroethane	<1.4	U
67-66-3	Chloroform	<0.50	U
74-87-3	Chloromethane	<1.6	U
124-48-1	Dibromochloromethane	<2.6	U
75-34-3	1,1-Dichloroethane	1.8	
107-06-2	1,2-Dichloroethane	<0.29	U
75-35-4	1,1-Dichloroethene	<0.58	U
156-59-2	cis-1,2-Dichloroethene	0.47	J
156-60-5	trans-1,2-Dichloroethene	<0.53	U
78-87-5	1,2-Dichloropropane	<0.45	U
10061-01-5	cis-1,3-Dichloropropene	<0.24	U
10061-02-6	trans-1,3-Dichloropropene	<0.27	U
100-41-4	Ethylbenzene	<0.33	U
591-78-6	2-Hexanone	<6.3	U
75-09-2	Methylene Chloride	<0.32	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<6.0	U
100-42-5	Styrene	<0.36	U
79-34-5	1,1,2,2-Tetrachloroethane	<0.38	U
127-18-4	Tetrachloroethene	<0.41	U
108-88-3	Toluene	<0.29	U
71-55-6	1,1,1-Trichloroethane	1.5	
79-00-5	1,1,2-Trichloroethane	<0.34	U
79-01-6	Trichloroethene	0.81	J
75-01-4	Vinyl chloride	<0.17	U
1330-20-7	Xylene (Total)	<1.0	U

SAMPLE NO.

RM-401XD

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay
Contract: 525156.0000 PH4 LEMBERGER LF P
Date Received: 10/27/2023 06:32
Matrix: Water SDG No.: 40270181
Date Extracted: 11/03/2023 00:20
Lab Sample ID: 40270181005
Date Analyzed: 11/03/2023 00:20
Lab File ID: 11022023D.B\11022349.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 40MSVB Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<8.6	U
71-43-2	Benzene	<0.30	U
75-27-4	Bromodichloromethane	<0.42	U
75-25-2	Bromoform	<0.43	U
74-83-9	Bromomethane	<1.2	U
78-93-3	2-Butanone (MEK)	<6.5	U
75-15-0	Carbon disulfide	<0.65	U
56-23-5	Carbon tetrachloride	<0.37	U
108-90-7	Chlorobenzene	<0.86	U
75-00-3	Chloroethane	<1.4	U
67-66-3	Chloroform	<0.50	U
74-87-3	Chloromethane	<1.6	U
124-48-1	Dibromochloromethane	<2.6	U
75-34-3	1,1-Dichloroethane	7.7	
107-06-2	1,2-Dichloroethane	<0.29	U
75-35-4	1,1-Dichloroethene	2.4	
156-59-2	cis-1,2-Dichloroethene	4.8	
156-60-5	trans-1,2-Dichloroethene	<0.53	U
78-87-5	1,2-Dichloropropane	<0.45	U
10061-01-5	cis-1,3-Dichloropropene	<0.24	U
10061-02-6	trans-1,3-Dichloropropene	<0.27	U
100-41-4	Ethylbenzene	<0.33	U
591-78-6	2-Hexanone	<6.3	U
75-09-2	Methylene Chloride	<0.32	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<6.0	U
100-42-5	Styrene	<0.36	U
79-34-5	1,1,2,2-Tetrachloroethane	<0.38	U
127-18-4	Tetrachloroethene	<0.41	U
108-88-3	Toluene	<0.29	U
71-55-6	1,1,1-Trichloroethane	10.1	
79-00-5	1,1,2-Trichloroethane	<0.34	U
79-01-6	Trichloroethene	2.1	
75-01-4	Vinyl chloride	<0.17	U
1330-20-7	Xylene (Total)	<1.0	U

SAMPLE NO.

RM-005D

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay
Contract: 525156.0000 PH4 LEMBERGER LF P
Date Received: 10/27/2023 06:32
Matrix: Water SDG No.: 40270181
Date Extracted: 11/03/2023 00:41
Lab Sample ID: 40270181006
Date Analyzed: 11/03/2023 00:41
Lab File ID: 11022023D.B\11022350.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 40MSVB Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<8.6	U
71-43-2	Benzene	<0.30	U
75-27-4	Bromodichloromethane	<0.42	U
75-25-2	Bromoform	<0.43	U
74-83-9	Bromomethane	<1.2	U
78-93-3	2-Butanone (MEK)	<6.5	U
75-15-0	Carbon disulfide	<0.65	U
56-23-5	Carbon tetrachloride	<0.37	U
108-90-7	Chlorobenzene	<0.86	U
75-00-3	Chloroethane	<1.4	U
67-66-3	Chloroform	<0.50	U
74-87-3	Chloromethane	<1.6	U
124-48-1	Dibromochloromethane	<2.6	U
75-34-3	1,1-Dichloroethane	10.8	
107-06-2	1,2-Dichloroethane	<0.29	U
75-35-4	1,1-Dichloroethene	2.7	
156-59-2	cis-1,2-Dichloroethene	6.5	
156-60-5	trans-1,2-Dichloroethene	<0.53	U
78-87-5	1,2-Dichloropropane	<0.45	U
10061-01-5	cis-1,3-Dichloropropene	<0.24	U
10061-02-6	trans-1,3-Dichloropropene	<0.27	U
100-41-4	Ethylbenzene	<0.33	U
591-78-6	2-Hexanone	<6.3	U
75-09-2	Methylene Chloride	<0.32	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<6.0	U
100-42-5	Styrene	<0.36	U
79-34-5	1,1,2,2-Tetrachloroethane	<0.38	U
127-18-4	Tetrachloroethene	<0.41	U
108-88-3	Toluene	<0.29	U
71-55-6	1,1,1-Trichloroethane	13.2	
79-00-5	1,1,2-Trichloroethane	<0.34	U
79-01-6	Trichloroethene	2.6	
75-01-4	Vinyl chloride	<0.17	U
1330-20-7	Xylene (Total)	<1.0	U

SAMPLE NO.

TB-001

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay
Contract: 525156.0000 PH4 LEMBERGER LF P
Date Received: 10/27/2023 06:32
Matrix: Water SDG No.: 40270181
Date Extracted: 11/02/2023 20:11
Lab Sample ID: 40270181007
Date Analyzed: 11/02/2023 20:11
Lab File ID: 11022023D.B\11022337.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 40MSVB Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<8.6	~~U~~ UJ
71-43-2	Benzene	<0.30	~~U~~
75-27-4	Bromodichloromethane	<0.42	~~U~~
75-25-2	Bromoform	<0.43	~~U~~
74-83-9	Bromomethane	<1.2	~~U~~
78-93-3	2-Butanone (MEK)	<6.5	~~U~~
75-15-0	Carbon disulfide	0.78	~~J~~ J
56-23-5	Carbon tetrachloride	<0.37	~~U~~ UJ
108-90-7	Chlorobenzene	<0.86	~~U~~
75-00-3	Chloroethane	<1.4	~~U~~
67-66-3	Chloroform	<0.50	~~U~~
74-87-3	Chloromethane	<1.6	~~U~~
124-48-1	Dibromochloromethane	<2.6	~~U~~
75-34-3	1,1-Dichloroethane	<0.30	~~U~~
107-06-2	1,2-Dichloroethane	<0.29	~~U~~
75-35-4	1,1-Dichloroethene	<0.58	~~U~~
156-59-2	cis-1,2-Dichloroethene	<0.47	~~U~~
156-60-5	trans-1,2-Dichloroethene	<0.53	~~U~~
78-87-5	1,2-Dichloropropane	<0.45	~~U~~
10061-01-5	cis-1,3-Dichloropropene	<0.24	~~U~~
10061-02-6	trans-1,3-Dichloropropene	<0.27	~~U~~
100-41-4	Ethylbenzene	<0.33	~~U~~
591-78-6	2-Hexanone	<6.3	~~U~~
75-09-2	Methylene Chloride	<0.32	~~U~~
108-10-1	4-Methyl-2-pentanone (MIBK)	<6.0	~~U~~
100-42-5	Styrene	<0.36	~~U~~
79-34-5	1,1,2,2-Tetrachloroethane	<0.38	~~U~~
127-18-4	Tetrachloroethene	<0.41	~~U~~
108-88-3	Toluene	<0.29	~~U~~
71-55-6	1,1,1-Trichloroethane	<0.30	~~U~~
79-00-5	1,1,2-Trichloroethane	<0.34	~~U~~
79-01-6	Trichloroethene	<0.32	~~U~~
75-01-4	Vinyl chloride	<0.17	~~U~~
1330-20-7	Xylene (Total)	<1.0	~~U~~

SAMPLE NO.

RM-102D

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay
Contract: 525156.0000PH4 LEMBERGER LF PL
Date Received: 11/03/2023 07:30
Matrix: Water SDG No.: 40270527
Date Extracted: 11/08/2023 16:56
Lab Sample ID: 40270527001
Date Analyzed: 11/08/2023 16:56
Lab File ID: 11082023D.B\11082324.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 40MSVB Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<8.6	U
71-43-2	Benzene	<0.30	U
75-27-4	Bromodichloromethane	<0.42	U
75-25-2	Bromoform	<0.43	~~U~~ UJ
74-83-9	Bromomethane	<1.2	U
78-93-3	2-Butanone (MEK)	<6.5	U
75-15-0	Carbon disulfide	<0.65	U
56-23-5	Carbon tetrachloride	<0.37	U
108-90-7	Chlorobenzene	<0.86	U
75-00-3	Chloroethane	<1.4	U
67-66-3	Chloroform	<0.50	U
74-87-3	Chloromethane	<1.6	U
124-48-1	Dibromochloromethane	<2.6	~~U~~ UJ
75-34-3	1,1-Dichloroethane	<0.30	U
107-06-2	1,2-Dichloroethane	<0.29	U
75-35-4	1,1-Dichloroethene	<0.58	U
156-59-2	cis-1,2-Dichloroethene	<0.47	U
156-60-5	trans-1,2-Dichloroethene	<0.53	U
78-87-5	1,2-Dichloropropane	<0.45	U
10061-01-5	cis-1,3-Dichloropropene	<0.24	U
10061-02-6	trans-1,3-Dichloropropene	<0.27	U
100-41-4	Ethylbenzene	<0.33	U
591-78-6	2-Hexanone	<6.3	U
75-09-2	Methylene Chloride	<0.32	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<6.0	U
100-42-5	Styrene	<0.36	~~U~~ UJ
79-34-5	1,1,2,2-Tetrachloroethane	<0.38	U
127-18-4	Tetrachloroethene	<0.41	U
108-88-3	Toluene	<0.29	U
71-55-6	1,1,1-Trichloroethane	<0.30	U
79-00-5	1,1,2-Trichloroethane	<0.34	U
79-01-6	Trichloroethene	<0.32	U
75-01-4	Vinyl chloride	<0.17	U
1330-20-7	Xylene (Total)	<1.0	~~U~~ UJ

SAMPLE NO.

RM-007XXD

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay
Contract: 525156.0000PH4 LEMBERGER LF PL
Date Received: 11/03/2023 07:30
Matrix: Water SDG No.: 40270527
Date Extracted: 11/08/2023 14:10
Lab Sample ID: 40270527002
Date Analyzed: 11/08/2023 14:10
Lab File ID: 11082023D.B\11082316.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 40MSVB Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<8.6	U
71-43-2	Benzene	<0.30	U
75-27-4	Bromodichloromethane	<0.42	U
75-25-2	Bromoform	<0.43	~~U~~ UJ
74-83-9	Bromomethane	<1.2	U
78-93-3	2-Butanone (MEK)	<6.5	U
75-15-0	Carbon disulfide	<0.65	U
56-23-5	Carbon tetrachloride	<0.37	U
108-90-7	Chlorobenzene	<0.86	U
75-00-3	Chloroethane	<1.4	U
67-66-3	Chloroform	<0.50	U
74-87-3	Chloromethane	<1.6	U
124-48-1	Dibromochloromethane	<2.6	~~U~~ UJ
75-34-3	1,1-Dichloroethane	<0.30	U
107-06-2	1,2-Dichloroethane	<0.29	U
75-35-4	1,1-Dichloroethene	<0.58	U
156-59-2	cis-1,2-Dichloroethene	<0.47	U
156-60-5	trans-1,2-Dichloroethene	<0.53	U
78-87-5	1,2-Dichloropropane	<0.45	U
10061-01-5	cis-1,3-Dichloropropene	<0.24	U
10061-02-6	trans-1,3-Dichloropropene	<0.27	U
100-41-4	Ethylbenzene	<0.33	U
591-78-6	2-Hexanone	<6.3	U
75-09-2	Methylene Chloride	<0.32	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<6.0	U
100-42-5	Styrene	<0.36	~~U~~ UJ
79-34-5	1,1,2,2-Tetrachloroethane	<0.38	U
127-18-4	Tetrachloroethene	<0.41	U
108-88-3	Toluene	<0.29	U
71-55-6	1,1,1-Trichloroethane	<0.30	U
79-00-5	1,1,2-Trichloroethane	<0.34	U
79-01-6	Trichloroethene	<0.32	U
75-01-4	Vinyl chloride	<0.17	U
1330-20-7	Xylene (Total)	<1.0	~~U~~ UJ

SAMPLE NO.

RM-007D

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay
Contract: 525156.0000PH4 LEMBERGER LF PL
Date Received: 11/03/2023 07:30
Matrix: Water SDG No.: 40270527
Date Extracted: 11/08/2023 19:21
Lab Sample ID: 40270527003
Date Analyzed: 11/08/2023 19:21
Lab File ID: 11082023D.B\11082331.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 2.5
Instrument: 40MSVB Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<21.6	U
71-43-2	Benzene	<0.74	U
75-27-4	Bromodichloromethane	<1.0	U
75-25-2	Bromoform	<1.1	~~U~~ UJ
74-83-9	Bromomethane	<3.0	U
78-93-3	2-Butanone (MEK)	<16.3	U
75-15-0	Carbon disulfide	<1.6	U
56-23-5	Carbon tetrachloride	<0.92	U
108-90-7	Chlorobenzene	<2.1	U
75-00-3	Chloroethane	<3.4	U
67-66-3	Chloroform	<1.3	U
74-87-3	Chloromethane	<4.1	U
124-48-1	Dibromochloromethane	<6.6	~~U~~ UJ
75-34-3	1,1-Dichloroethane	129	
107-06-2	1,2-Dichloroethane	<0.73	U
75-35-4	1,1-Dichloroethene	17.0	
156-59-2	cis-1,2-Dichloroethene	43.5	
156-60-5	trans-1,2-Dichloroethene	<1.3	U
78-87-5	1,2-Dichloropropane	<1.1	U
10061-01-5	cis-1,3-Dichloropropene	<0.59	U
10061-02-6	trans-1,3-Dichloropropene	<0.66	U
100-41-4	Ethylbenzene	<0.81	U
591-78-6	2-Hexanone	<15.7	U
75-09-2	Methylene Chloride	<0.80	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<14.9	U
100-42-5	Styrene	<0.89	~~U~~ UJ
79-34-5	1,1,2,2-Tetrachloroethane	<0.94	U
127-18-4	Tetrachloroethene	1.8	J
108-88-3	Toluene	<0.72	U
71-55-6	1,1,1-Trichloroethane	140	
79-00-5	1,1,2-Trichloroethane	<0.86	U
79-01-6	Trichloroethene	28.5	
75-01-4	Vinyl chloride	<0.44	U
1330-20-7	Xylene (Total)	<2.6	~~U~~ UJ

SAMPLE NO.

RM-007XD

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay
Contract: 525156.0000PH4 LEMBERGER LF PL
Date Received: 11/03/2023 07:30
Matrix: Water SDG No.: 40270527
Date Extracted: 11/08/2023 19:00
Lab Sample ID: 40270527004
Date Analyzed: 11/08/2023 19:00
Lab File ID: 11082023D.B\11082330.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 40MSVB Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<8.6	U
71-43-2	Benzene	<0.30	U
75-27-4	Bromodichloromethane	<0.42	U
75-25-2	Bromoform	<0.43	~~U~~ UJ
74-83-9	Bromomethane	<1.2	U
78-93-3	2-Butanone (MEK)	<6.5	U
75-15-0	Carbon disulfide	<0.65	U
56-23-5	Carbon tetrachloride	<0.37	U
108-90-7	Chlorobenzene	<0.86	U
75-00-3	Chloroethane	<1.4	U
67-66-3	Chloroform	<0.50	U
74-87-3	Chloromethane	<1.6	U
124-48-1	Dibromochloromethane	<2.6	~~U~~ UJ
75-34-3	1,1-Dichloroethane	125	
107-06-2	1,2-Dichloroethane	<0.29	U
75-35-4	1,1-Dichloroethene	22.9	
156-59-2	cis-1,2-Dichloroethene	51.6	
156-60-5	trans-1,2-Dichloroethene	<0.53	U
78-87-5	1,2-Dichloropropane	<0.45	U
10061-01-5	cis-1,3-Dichloropropene	<0.24	U
10061-02-6	trans-1,3-Dichloropropene	<0.27	U
100-41-4	Ethylbenzene	<0.33	U
591-78-6	2-Hexanone	<6.3	U
75-09-2	Methylene Chloride	<0.32	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<6.0	U
100-42-5	Styrene	<0.36	~~U~~ UJ
79-34-5	1,1,2,2-Tetrachloroethane	<0.38	U
127-18-4	Tetrachloroethene	1.9	
108-88-3	Toluene	<0.29	U
71-55-6	1,1,1-Trichloroethane	154	
79-00-5	1,1,2-Trichloroethane	<0.34	U
79-01-6	Trichloroethene	29.6	
75-01-4	Vinyl chloride	<0.17	U
1330-20-7	Xylene (Total)	<1.0	~~U~~ UJ

SAMPLE NO.

OW-104F

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay
Contract: 525156.0000PH4 LEMBERGER LF PL
Date Received: 11/03/2023 07:30
Matrix: Water SDG No.: 40270527
Date Extracted: 11/08/2023 17:17
Lab Sample ID: 40270527005
Date Analyzed: 11/08/2023 17:17
Lab File ID: 11082023D.B\11082325.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 40MSVB Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<8.6	U
71-43-2	Benzene	<0.30	U
75-27-4	Bromodichloromethane	<0.42	U
75-25-2	Bromoform	<0.43	~~U~~ UJ
74-83-9	Bromomethane	<1.2	U
78-93-3	2-Butanone (MEK)	<6.5	U
75-15-0	Carbon disulfide	<0.65	U
56-23-5	Carbon tetrachloride	<0.37	U
108-90-7	Chlorobenzene	<0.86	U
75-00-3	Chloroethane	<1.4	U
67-66-3	Chloroform	<0.50	U
74-87-3	Chloromethane	<1.6	U
124-48-1	Dibromochloromethane	<2.6	~~U~~ UJ
75-34-3	1,1-Dichloroethane	2.2	
107-06-2	1,2-Dichloroethane	<0.29	U
75-35-4	1,1-Dichloroethene	0.92	J
156-59-2	cis-1,2-Dichloroethene	1.7	
156-60-5	trans-1,2-Dichloroethene	<0.53	U
78-87-5	1,2-Dichloropropane	<0.45	U
10061-01-5	cis-1,3-Dichloropropene	<0.24	U
10061-02-6	trans-1,3-Dichloropropene	<0.27	U
100-41-4	Ethylbenzene	<0.33	U
591-78-6	2-Hexanone	<6.3	U
75-09-2	Methylene Chloride	<0.32	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<6.0	U
100-42-5	Styrene	<0.36	~~U~~ UJ
79-34-5	1,1,2,2-Tetrachloroethane	<0.38	U
127-18-4	Tetrachloroethene	<0.41	U
108-88-3	Toluene	<0.29	U
71-55-6	1,1,1-Trichloroethane	3.6	
79-00-5	1,1,2-Trichloroethane	<0.34	U
79-01-6	Trichloroethene	1.8	
75-01-4	Vinyl chloride	<0.17	U
1330-20-7	Xylene (Total)	<1.0	~~U~~ UJ

SAMPLE NO.

FDUP-002

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay

Contract: 525156.0000PH4 LEMBERGER LF PL

Date Received: 11/03/2023 07:30

Matrix: Water SDG No.: 40270527

Date Extracted: 11/08/2023 17:37

Lab Sample ID: 40270527006

Date Analyzed: 11/08/2023 17:37

Lab File ID: 11082023D.B\11082326.D

Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1

Instrument: 40MSVB Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<8.6	U
71-43-2	Benzene	<0.30	U
75-27-4	Bromodichloromethane	<0.42	U
75-25-2	Bromoform	<0.43	~~U~~ UJ
74-83-9	Bromomethane	<1.2	U
78-93-3	2-Butanone (MEK)	<6.5	U
75-15-0	Carbon disulfide	<0.65	U
56-23-5	Carbon tetrachloride	<0.37	U
108-90-7	Chlorobenzene	<0.86	U
75-00-3	Chloroethane	<1.4	U
67-66-3	Chloroform	<0.50	U
74-87-3	Chloromethane	<1.6	U
124-48-1	Dibromochloromethane	<2.6	~~U~~ UJ
75-34-3	1,1-Dichloroethane	145	
107-06-2	1,2-Dichloroethane	<0.29	U
75-35-4	1,1-Dichloroethene	25.3	
156-59-2	cis-1,2-Dichloroethene	59.9	
156-60-5	trans-1,2-Dichloroethene	<0.53	U
78-87-5	1,2-Dichloropropane	<0.45	U
10061-01-5	cis-1,3-Dichloropropene	<0.24	U
10061-02-6	trans-1,3-Dichloropropene	<0.27	U
100-41-4	Ethylbenzene	<0.33	U
591-78-6	2-Hexanone	<6.3	U
75-09-2	Methylene Chloride	<0.32	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<6.0	U
100-42-5	Styrene	<0.36	~~U~~ UJ
79-34-5	1,1,2,2-Tetrachloroethane	<0.38	U
127-18-4	Tetrachloroethene	1.8	
108-88-3	Toluene	<0.29	U
71-55-6	1,1,1-Trichloroethane	174	
79-00-5	1,1,2-Trichloroethane	<0.34	U
79-01-6	Trichloroethene	34.8	
75-01-4	Vinyl chloride	<0.17	U
1330-20-7	Xylene (Total)	<1.0	~~U~~ UJ

SAMPLE NO.

TB-001

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay
Contract: 525156.0000PH4 LEMBERGER LF PL
Date Received: 11/03/2023 07:30
Matrix: Water SDG No.: 40270527
Date Extracted: 11/08/2023 13:29
Lab Sample ID: 40270527007
Date Analyzed: 11/08/2023 13:29
Lab File ID: 11082023D.B\11082314.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 40MSVB Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<8.6	U
71-43-2	Benzene	<0.30	U
75-27-4	Bromodichloromethane	<0.42	U
75-25-2	Bromoform	<0.43	~~U~~ UJ
74-83-9	Bromomethane	<1.2	U
78-93-3	2-Butanone (MEK)	<6.5	U
75-15-0	Carbon disulfide	<0.65	U
56-23-5	Carbon tetrachloride	<0.37	U
108-90-7	Chlorobenzene	<0.86	U
75-00-3	Chloroethane	<1.4	U
67-66-3	Chloroform	<0.50	U
74-87-3	Chloromethane	<1.6	U
124-48-1	Dibromochloromethane	<2.6	~~U~~ UJ
75-34-3	1,1-Dichloroethane	<0.30	U
107-06-2	1,2-Dichloroethane	<0.29	U
75-35-4	1,1-Dichloroethene	<0.58	U
156-59-2	cis-1,2-Dichloroethene	<0.47	U
156-60-5	trans-1,2-Dichloroethene	<0.53	U
78-87-5	1,2-Dichloropropane	<0.45	U
10061-01-5	cis-1,3-Dichloropropene	<0.24	U
10061-02-6	trans-1,3-Dichloropropene	<0.27	U
100-41-4	Ethylbenzene	<0.33	U
591-78-6	2-Hexanone	<6.3	U
75-09-2	Methylene Chloride	<0.32	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<6.0	U
100-42-5	Styrene	<0.36	~~U~~ UJ
79-34-5	1,1,2,2-Tetrachloroethane	<0.38	U
127-18-4	Tetrachloroethene	<0.41	U
108-88-3	Toluene	<0.29	U
71-55-6	1,1,1-Trichloroethane	<0.30	U
79-00-5	1,1,2-Trichloroethane	<0.34	U
79-01-6	Trichloroethene	<0.32	U
75-01-4	Vinyl chloride	<0.17	U
1330-20-7	Xylene (Total)	<1.0	~~U~~ UJ

SAMPLE NO.

RM-203D

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay
Contract: 525156.0000PH4 LEMBERGER LF-PL
Date Received: 11/03/2023 07:30
Matrix: Water SDG No.: 40270530
Date Extracted: 11/08/2023 16:53
Lab Sample ID: 40270530001
Date Analyzed: 11/08/2023 16:53
Lab File ID: 11082023D.B\11082327.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 40MSV8 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<8.6	U
71-43-2	Benzene	<0.30	U
75-27-4	Bromodichloromethane	<0.42	U
75-25-2	Bromoform	<0.43	U
74-83-9	Bromomethane	<1.2	~~U~~ UJ
78-93-3	2-Butanone (MEK)	<6.5	U
75-15-0	Carbon disulfide	<0.65	U
56-23-5	Carbon tetrachloride	<0.37	~~U~~ UJ
108-90-7	Chlorobenzene	<0.86	U
75-00-3	Chloroethane	<1.4	~~U~~ UJ
67-66-3	Chloroform	<0.50	U
74-87-3	Chloromethane	<1.6	U
124-48-1	Dibromochloromethane	<2.6	U
75-34-3	1,1-Dichloroethane	<0.30	U
107-06-2	1,2-Dichloroethane	<0.29	~~U~~ UJ
75-35-4	1,1-Dichloroethene	<0.58	U
156-59-2	cis-1,2-Dichloroethene	<0.47	U
156-60-5	trans-1,2-Dichloroethene	<0.53	U
78-87-5	1,2-Dichloropropane	<0.45	U
10061-01-5	cis-1,3-Dichloropropene	<0.24	U
10061-02-6	trans-1,3-Dichloropropene	<0.27	U
100-41-4	Ethylbenzene	<0.33	U
591-78-6	2-Hexanone	<6.3	U
75-09-2	Methylene Chloride	<0.32	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<6.0	U
100-42-5	Styrene	<0.36	~~U~~ UJ
79-34-5	1,1,2,2-Tetrachloroethane	<0.38	~~U~~ UJ
127-18-4	Tetrachloroethene	<0.41	U
108-88-3	Toluene	<0.29	U
71-55-6	1,1,1-Trichloroethane	0.66	J
79-00-5	1,1,2-Trichloroethane	<0.34	U
79-01-6	Trichloroethene	<0.32	U
75-01-4	Vinyl chloride	<0.17	U
1330-20-7	Xylene (Total)	<1.0	U

SAMPLE NO.

RM-204D

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay
Contract: 525156.0000PH4 LEMBERGER LF-PL
Date Received: 11/03/2023 07:30
Matrix: Water SDG No.: 40270530
Date Extracted: 11/08/2023 17:12
Lab Sample ID: 40270530002
Date Analyzed: 11/08/2023 17:12
Lab File ID: 11082023D.B\11082328.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 40MSV8 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<8.6	U
71-43-2	Benzene	<0.30	U
75-27-4	Bromodichloromethane	<0.42	U
75-25-2	Bromoform	<0.43	U
74-83-9	Bromomethane	<1.2	~~U~~ UJ
78-93-3	2-Butanone (MEK)	<6.5	U
75-15-0	Carbon disulfide	<0.65	U
56-23-5	Carbon tetrachloride	<0.37	~~U~~ UJ
108-90-7	Chlorobenzene	<0.86	U
75-00-3	Chloroethane	<1.4	~~U~~ UJ
67-66-3	Chloroform	<0.50	U
74-87-3	Chloromethane	<1.6	U
124-48-1	Dibromochloromethane	<2.6	U
75-34-3	1,1-Dichloroethane	6.3	
107-06-2	1,2-Dichloroethane	<0.29	~~U~~ UJ
75-35-4	1,1-Dichloroethene	1.0	
156-59-2	cis-1,2-Dichloroethene	1.8	
156-60-5	trans-1,2-Dichloroethene	<0.53	U
78-87-5	1,2-Dichloropropane	<0.45	U
10061-01-5	cis-1,3-Dichloropropene	<0.24	U
10061-02-6	trans-1,3-Dichloropropene	<0.27	U
100-41-4	Ethylbenzene	<0.33	U
591-78-6	2-Hexanone	<6.3	U
75-09-2	Methylene Chloride	<0.32	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<6.0	U
100-42-5	Styrene	<0.36	~~U~~ UJ
79-34-5	1,1,2,2-Tetrachloroethane	<0.38	~~U~~ UJ
127-18-4	Tetrachloroethene	<0.41	U
108-88-3	Toluene	<0.29	U
71-55-6	1,1,1-Trichloroethane	11.2	
79-00-5	1,1,2-Trichloroethane	<0.34	U
79-01-6	Trichloroethene	1.7	
75-01-4	Vinyl chloride	<0.17	U
1330-20-7	Xylene (Total)	<1.0	U

SAMPLE NO.

RM-008D

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay
Contract: 525156.0000PH4 LEMBERGER LF-PL
Date Received: 11/03/2023 07:30
Matrix: Water SDG No.: 40270530
Date Extracted: 11/08/2023 17:31
Lab Sample ID: 40270530003
Date Analyzed: 11/08/2023 17:31
Lab File ID: 11082023D.B\11082329.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 40MSV8 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<8.6	U
71-43-2	Benzene	<0.30	U
75-27-4	Bromodichloromethane	<0.42	U
75-25-2	Bromoform	<0.43	U
74-83-9	Bromomethane	<1.2	~~U~~ UJ
78-93-3	2-Butanone (MEK)	<6.5	U
75-15-0	Carbon disulfide	<0.65	U
56-23-5	Carbon tetrachloride	<0.37	~~U~~ UJ
108-90-7	Chlorobenzene	<0.86	U
75-00-3	Chloroethane	<1.4	~~U~~ UJ
67-66-3	Chloroform	<0.50	U
74-87-3	Chloromethane	<1.6	U
124-48-1	Dibromochloromethane	<2.6	U
75-34-3	1,1-Dichloroethane	11.7	
107-06-2	1,2-Dichloroethane	<0.29	~~U~~ UJ
75-35-4	1,1-Dichloroethene	1.3	
156-59-2	cis-1,2-Dichloroethene	7.2	
156-60-5	trans-1,2-Dichloroethene	<0.53	U
78-87-5	1,2-Dichloropropane	<0.45	U
10061-01-5	cis-1,3-Dichloropropene	<0.24	U
10061-02-6	trans-1,3-Dichloropropene	<0.27	U
100-41-4	Ethylbenzene	<0.33	U
591-78-6	2-Hexanone	<6.3	U
75-09-2	Methylene Chloride	<0.32	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<6.0	U
100-42-5	Styrene	<0.36	~~U~~ UJ
79-34-5	1,1,2,2-Tetrachloroethane	<0.38	~~U~~ UJ
127-18-4	Tetrachloroethene	<0.41	U
108-88-3	Toluene	<0.29	U
71-55-6	1,1,1-Trichloroethane	24.4	
79-00-5	1,1,2-Trichloroethane	<0.34	U
79-01-6	Trichloroethene	5.2	
75-01-4	Vinyl chloride	<0.17	U
1330-20-7	Xylene (Total)	<1.0	U

SAMPLE NO.

RM-402XD

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay

Contract: 525156.0000PH4 LEMBERGER LF-PL

Date Received: 11/03/2023 07:30

Matrix: Water SDG No.: 40270530

Date Extracted: 11/08/2023 16:14

Lab Sample ID: 40270530004

Date Analyzed: 11/08/2023 16:14

Lab File ID: 11082023D.B\11082325.D

Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1

Instrument: 40MSV8 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<8.6	U
71-43-2	Benzene	<0.30	U
75-27-4	Bromodichloromethane	<0.42	U
75-25-2	Bromoform	<0.43	U
74-83-9	Bromomethane	<1.2	~~U~~ UJ
78-93-3	2-Butanone (MEK)	<6.5	U
75-15-0	Carbon disulfide	<0.65	U
56-23-5	Carbon tetrachloride	<0.37	~~U~~ UJ
108-90-7	Chlorobenzene	<0.86	U
75-00-3	Chloroethane	<1.4	~~U~~ UJ
67-66-3	Chloroform	<0.50	U
74-87-3	Chloromethane	<1.6	U
124-48-1	Dibromochloromethane	<2.6	U
75-34-3	1,1-Dichloroethane	37.9	
107-06-2	1,2-Dichloroethane	<0.29	~~U~~ UJ
75-35-4	1,1-Dichloroethene	19.6	
156-59-2	cis-1,2-Dichloroethene	17.4	
156-60-5	trans-1,2-Dichloroethene	<0.53	U
78-87-5	1,2-Dichloropropane	<0.45	U
10061-01-5	cis-1,3-Dichloropropene	<0.24	U
10061-02-6	trans-1,3-Dichloropropene	<0.27	U
100-41-4	Ethylbenzene	<0.33	U
591-78-6	2-Hexanone	<6.3	U
75-09-2	Methylene Chloride	<0.32	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<6.0	U
100-42-5	Styrene	<0.36	~~U~~ UJ
79-34-5	1,1,2,2-Tetrachloroethane	<0.38	~~U~~ UJ
127-18-4	Tetrachloroethene	0.65	J
108-88-3	Toluene	<0.29	U
71-55-6	1,1,1-Trichloroethane	97.2	
79-00-5	1,1,2-Trichloroethane	<0.34	U
79-01-6	Trichloroethene	10.7	
75-01-4	Vinyl chloride	<0.17	U
1330-20-7	Xylene (Total)	<1.0	U

SAMPLE NO.

RM-402XXD

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay
Contract: 525156.0000PH4 LEMBERGER LF-PL
Date Received: 11/03/2023 07:30
Matrix: Water SDG No.: 40270530
Date Extracted: 11/08/2023 17:51
Lab Sample ID: 40270530005
Date Analyzed: 11/08/2023 17:51
Lab File ID: 11082023D.B\11082330.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 40MSV8 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<8.6	U
71-43-2	Benzene	<0.30	U
75-27-4	Bromodichloromethane	<0.42	U
75-25-2	Bromoform	<0.43	U
74-83-9	Bromomethane	<1.2	~~U~~ UJ
78-93-3	2-Butanone (MEK)	<6.5	U
75-15-0	Carbon disulfide	<0.65	U
56-23-5	Carbon tetrachloride	<0.37	~~U~~ UJ
108-90-7	Chlorobenzene	<0.86	U
75-00-3	Chloroethane	<1.4	~~U~~ UJ
67-66-3	Chloroform	<0.50	U
74-87-3	Chloromethane	<1.6	U
124-48-1	Dibromochloromethane	<2.6	U
75-34-3	1,1-Dichloroethane	13.4	
107-06-2	1,2-Dichloroethane	<0.29	~~U~~ UJ
75-35-4	1,1-Dichloroethene	2.9	
156-59-2	cis-1,2-Dichloroethene	6.9	
156-60-5	trans-1,2-Dichloroethene	<0.53	U
78-87-5	1,2-Dichloropropane	<0.45	U
10061-01-5	cis-1,3-Dichloropropene	<0.24	U
10061-02-6	trans-1,3-Dichloropropene	<0.27	U
100-41-4	Ethylbenzene	<0.33	U
591-78-6	2-Hexanone	<6.3	U
75-09-2	Methylene Chloride	<0.32	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<6.0	U
100-42-5	Styrene	<0.36	~~U~~ UJ
79-34-5	1,1,2,2-Tetrachloroethane	<0.38	~~U~~ UJ
127-18-4	Tetrachloroethene	<0.41	U
108-88-3	Toluene	<0.29	U
71-55-6	1,1,1-Trichloroethane	22.0	
79-00-5	1,1,2-Trichloroethane	<0.34	U
79-01-6	Trichloroethene	5.4	
75-01-4	Vinyl chloride	<0.17	U
1330-20-7	Xylene (Total)	<1.0	U

SAMPLE NO.

FDUP-003

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay

Contract: 525156.0000PH4 LEMBERGER LF-PL

Date Received: 11/03/2023 07:30

Matrix: Water SDG No.: 40270530

Date Extracted: 11/08/2023 18:10

Lab Sample ID: 40270530006

Date Analyzed: 11/08/2023 18:10

Lab File ID: 11082023D.B\11082331.D

Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1

Instrument: 40MSV8 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<8.6	U
71-43-2	Benzene	<0.30	U
75-27-4	Bromodichloromethane	<0.42	U
75-25-2	Bromoform	<0.43	U
74-83-9	Bromomethane	<1.2	~~U~~ UJ
78-93-3	2-Butanone (MEK)	<6.5	U
75-15-0	Carbon disulfide	<0.65	U
56-23-5	Carbon tetrachloride	<0.37	~~U~~ UJ
108-90-7	Chlorobenzene	<0.86	U
75-00-3	Chloroethane	<1.4	~~U~~ UJ
67-66-3	Chloroform	<0.50	U
74-87-3	Chloromethane	<1.6	U
124-48-1	Dibromochloromethane	<2.6	U
75-34-3	1,1-Dichloroethane	6.7	
107-06-2	1,2-Dichloroethane	<0.29	~~U~~ UJ
75-35-4	1,1-Dichloroethene	0.89	J
156-59-2	cis-1,2-Dichloroethene	1.6	
156-60-5	trans-1,2-Dichloroethene	<0.53	U
78-87-5	1,2-Dichloropropane	<0.45	U
10061-01-5	cis-1,3-Dichloropropene	<0.24	U
10061-02-6	trans-1,3-Dichloropropene	<0.27	U
100-41-4	Ethylbenzene	<0.33	U
591-78-6	2-Hexanone	<6.3	U
75-09-2	Methylene Chloride	<0.32	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<6.0	U
100-42-5	Styrene	<0.36	~~U~~ UJ
79-34-5	1,1,2,2-Tetrachloroethane	<0.38	~~U~~ UJ
127-18-4	Tetrachloroethene	<0.41	U
108-88-3	Toluene	<0.29	U
71-55-6	1,1,1-Trichloroethane	11.5	
79-00-5	1,1,2-Trichloroethane	<0.34	U
79-01-6	Trichloroethene	1.7	
75-01-4	Vinyl chloride	<0.17	U
1330-20-7	Xylene (Total)	<1.0	U

SAMPLE NO.

FB-002

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay
Contract: 525156.0000PH4 LEMBERGER LF-PL
Date Received: 11/03/2023 07:30
Matrix: Water SDG No.: 40270530
Date Extracted: 11/08/2023 13:59
Lab Sample ID: 40270530007
Date Analyzed: 11/08/2023 13:59
Lab File ID: 11082023D.B\11082318.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 40MSV8 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<8.6	U
71-43-2	Benzene	<0.30	U
75-27-4	Bromodichloromethane	<0.42	U
75-25-2	Bromoform	<0.43	U
74-83-9	Bromomethane	<1.2	~~U~~ UJ
78-93-3	2-Butanone (MEK)	<6.5	U
75-15-0	Carbon disulfide	<0.65	U
56-23-5	Carbon tetrachloride	<0.37	~~U~~ UJ
108-90-7	Chlorobenzene	<0.86	U
75-00-3	Chloroethane	<1.4	~~U~~ UJ
67-66-3	Chloroform	<0.50	U
74-87-3	Chloromethane	<1.6	U
124-48-1	Dibromochloromethane	<2.6	U
75-34-3	1,1-Dichloroethane	<0.30	U
107-06-2	1,2-Dichloroethane	<0.29	~~U~~ UJ
75-35-4	1,1-Dichloroethene	<0.58	U
156-59-2	cis-1,2-Dichloroethene	<0.47	U
156-60-5	trans-1,2-Dichloroethene	<0.53	U
78-87-5	1,2-Dichloropropane	<0.45	U
10061-01-5	cis-1,3-Dichloropropene	<0.24	U
10061-02-6	trans-1,3-Dichloropropene	<0.27	U
100-41-4	Ethylbenzene	<0.33	U
591-78-6	2-Hexanone	<6.3	U
75-09-2	Methylene Chloride	<0.32	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<6.0	U
100-42-5	Styrene	<0.36	~~U~~ UJ
79-34-5	1,1,2,2-Tetrachloroethane	<0.38	~~U~~ UJ
127-18-4	Tetrachloroethene	<0.41	U
108-88-3	Toluene	0.40	J
71-55-6	1,1,1-Trichloroethane	<0.30	U
79-00-5	1,1,2-Trichloroethane	<0.34	U
79-01-6	Trichloroethene	<0.32	U
75-01-4	Vinyl chloride	<0.17	U
1330-20-7	Xylene (Total)	<1.0	U

SAMPLE NO.

TB-001

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay
Contract: 525156.0000PH4 LEMBERGER LF-PL
Date Received: 11/03/2023 07:30
Matrix: Water SDG No.: 40270530
Date Extracted: 11/08/2023 14:18
Lab Sample ID: 40270530008
Date Analyzed: 11/08/2023 14:18
Lab File ID: 11082023D.B\11082319.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 40MSV8 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<8.6	~~U~~ UJ
71-43-2	Benzene	<0.30	~~U~~
75-27-4	Bromodichloromethane	<0.42	~~U~~
75-25-2	Bromoform	<0.43	~~U~~
74-83-9	Bromomethane	<1.2	~~U~~
78-93-3	2-Butanone (MEK)	<6.5	~~U~~
75-15-0	Carbon disulfide	<0.65	~~U~~
56-23-5	Carbon tetrachloride	<0.37	~~U~~
108-90-7	Chlorobenzene	<0.86	~~U~~
75-00-3	Chloroethane	<1.4	~~U~~
67-66-3	Chloroform	<0.50	~~U~~
74-87-3	Chloromethane	<1.6	~~U~~
124-48-1	Dibromochloromethane	<2.6	~~U~~
75-34-3	1,1-Dichloroethane	<0.30	~~U~~
107-06-2	1,2-Dichloroethane	<0.29	~~U~~
75-35-4	1,1-Dichloroethene	<0.58	~~U~~
156-59-2	cis-1,2-Dichloroethene	<0.47	~~U~~
156-60-5	trans-1,2-Dichloroethene	<0.53	~~U~~
78-87-5	1,2-Dichloropropane	<0.45	~~U~~
10061-01-5	cis-1,3-Dichloropropene	<0.24	~~U~~
10061-02-6	trans-1,3-Dichloropropene	<0.27	~~U~~
100-41-4	Ethylbenzene	<0.33	~~U~~
591-78-6	2-Hexanone	<6.3	~~U~~
75-09-2	Methylene Chloride	<0.32	~~U~~
108-10-1	4-Methyl-2-pentanone (MIBK)	<6.0	~~U~~
100-42-5	Styrene	<0.36	~~U~~
79-34-5	1,1,2,2-Tetrachloroethane	<0.38	~~U~~
127-18-4	Tetrachloroethene	<0.41	~~U~~
108-88-3	Toluene	<0.29	~~U~~
71-55-6	1,1,1-Trichloroethane	<0.30	~~U~~
79-00-5	1,1,2-Trichloroethane	<0.34	~~U~~
79-01-6	Trichloroethene	<0.32	~~U~~
75-01-4	Vinyl chloride	<0.17	~~U~~
1330-20-7	Xylene (Total)	<1.0	~~U~~

SAMPLE NO.

RM-306D

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay

Contract: 525156.0000PH4 LEMBERGER LF-PL

Date Received: 11/03/2023 07:30

Matrix: Water SDG No.: 40270533

Date Extracted: 11/08/2023 18:30

Lab Sample ID: 40270533001

Date Analyzed: 11/08/2023 18:30

Lab File ID: 11082023D.B\11082332.D

Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1

Instrument: 40MSV8 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<8.6	~~U~~ UJ
71-43-2	Benzene	<0.30	~~U~~
75-27-4	Bromodichloromethane	<0.42	~~U~~
75-25-2	Bromoform	<0.43	~~U~~
74-83-9	Bromomethane	<1.2	~~U~~
78-93-3	2-Butanone (MEK)	<6.5	~~U~~
75-15-0	Carbon disulfide	<0.65	~~U~~
56-23-5	Carbon tetrachloride	<0.37	~~U~~
108-90-7	Chlorobenzene	<0.86	~~U~~
75-00-3	Chloroethane	<1.4	~~U~~
67-66-3	Chloroform	<0.50	~~U~~
74-87-3	Chloromethane	<1.6	~~U~~
124-48-1	Dibromochloromethane	<2.6	~~U~~
75-34-3	1,1-Dichloroethane	8.6	J-
107-06-2	1,2-Dichloroethane	<0.29	~~U~~ UJ
75-35-4	1,1-Dichloroethene	2.4	J-
156-59-2	cis-1,2-Dichloroethene	0.71	~~J~~ J
156-60-5	trans-1,2-Dichloroethene	<0.53	~~U~~ UJ
78-87-5	1,2-Dichloropropane	<0.45	~~U~~
10061-01-5	cis-1,3-Dichloropropene	<0.24	~~U~~
10061-02-6	trans-1,3-Dichloropropene	<0.27	~~U~~
100-41-4	Ethylbenzene	<0.33	~~U~~
591-78-6	2-Hexanone	<6.3	~~U~~
75-09-2	Methylene Chloride	<0.32	~~U~~
108-10-1	4-Methyl-2-pentanone (MIBK)	<6.0	~~U~~
100-42-5	Styrene	<0.36	~~U~~
79-34-5	1,1,2,2-Tetrachloroethane	<0.38	~~U~~
127-18-4	Tetrachloroethene	<0.41	~~U~~
108-88-3	Toluene	<0.29	~~U~~
71-55-6	1,1,1-Trichloroethane	58.8	J-
79-00-5	1,1,2-Trichloroethane	<0.34	~~U~~ UJ
79-01-6	Trichloroethene	4.5	J-
75-01-4	Vinyl chloride	<0.17	~~U~~ UJ
1330-20-7	Xylene (Total)	<1.0	~~U~~ UJ

SAMPLE NO.

RM-307D

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay
Contract: 525156.0000PH4 LEMBERGER LF-PL
Date Received: 11/03/2023 07:30
Matrix: Water SDG No.: 40270533
Date Extracted: 11/08/2023 19:28
Lab Sample ID: 40270533002
Date Analyzed: 11/08/2023 19:28
Lab File ID: 11082023D.B\11082335.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 40MSV8 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<8.6	U
71-43-2	Benzene	<0.30	U
75-27-4	Bromodichloromethane	<0.42	U
75-25-2	Bromoform	<0.43	U
74-83-9	Bromomethane	<1.2	~~U~~ UJ
78-93-3	2-Butanone (MEK)	<6.5	U
75-15-0	Carbon disulfide	<0.65	U
56-23-5	Carbon tetrachloride	<0.37	~~U~~ UJ
108-90-7	Chlorobenzene	<0.86	U
75-00-3	Chloroethane	<1.4	~~U~~ UJ
67-66-3	Chloroform	<0.50	U
74-87-3	Chloromethane	<1.6	U
124-48-1	Dibromochloromethane	<2.6	U
75-34-3	1,1-Dichloroethane	33.6	
107-06-2	1,2-Dichloroethane	<0.29	~~U~~ UJ
75-35-4	1,1-Dichloroethene	3.1	
156-59-2	cis-1,2-Dichloroethene	4.1	
156-60-5	trans-1,2-Dichloroethene	<0.53	U
78-87-5	1,2-Dichloropropane	<0.45	U
10061-01-5	cis-1,3-Dichloropropene	<0.24	U
10061-02-6	trans-1,3-Dichloropropene	<0.27	U
100-41-4	Ethylbenzene	<0.33	U
591-78-6	2-Hexanone	<6.3	U
75-09-2	Methylene Chloride	<0.32	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<6.0	U
100-42-5	Styrene	<0.36	~~U~~ UJ
79-34-5	1,1,2,2-Tetrachloroethane	<0.38	~~U~~ UJ
127-18-4	Tetrachloroethene	0.96	J
108-88-3	Toluene	<0.29	U
71-55-6	1,1,1-Trichloroethane	92.6	
79-00-5	1,1,2-Trichloroethane	<0.34	U
79-01-6	Trichloroethene	11.8	
75-01-4	Vinyl chloride	<0.17	U
1330-20-7	Xylene (Total)	<1.0	U

SAMPLE NO.

RM-208D

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay
Contract: 525156.0000PH4 LEMBERGER LF-PL
Date Received: 11/03/2023 07:30
Matrix: Water SDG No.: 40270533
Date Extracted: 11/09/2023 09:25
Lab Sample ID: 40270533003
Date Analyzed: 11/09/2023 09:25
Lab File ID: 11092023D.B\11092307.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 40MSVB Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<8.6	U
71-43-2	Benzene	<0.30	U
75-27-4	Bromodichloromethane	<0.42	U
75-25-2	Bromoform	<0.43	~~U~~ UJ
74-83-9	Bromomethane	<1.2	U
78-93-3	2-Butanone (MEK)	<6.5	U
75-15-0	Carbon disulfide	<0.65	U
56-23-5	Carbon tetrachloride	<0.37	~~U~~ UJ
108-90-7	Chlorobenzene	<0.86	U
75-00-3	Chloroethane	<1.4	U
67-66-3	Chloroform	<0.50	U
74-87-3	Chloromethane	<1.6	U
124-48-1	Dibromochloromethane	<2.6	~~U~~ UJ
75-34-3	1,1-Dichloroethane	6.0	
107-06-2	1,2-Dichloroethane	<0.29	U
75-35-4	1,1-Dichloroethene	2.2	
156-59-2	cis-1,2-Dichloroethene	5.7	
156-60-5	trans-1,2-Dichloroethene	<0.53	U
78-87-5	1,2-Dichloropropane	<0.45	U
10061-01-5	cis-1,3-Dichloropropene	<0.24	U
10061-02-6	trans-1,3-Dichloropropene	<0.27	U
100-41-4	Ethylbenzene	<0.33	U
591-78-6	2-Hexanone	<6.3	U
75-09-2	Methylene Chloride	<0.32	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<6.0	U
100-42-5	Styrene	<0.36	~~U~~ UJ
79-34-5	1,1,2,2-Tetrachloroethane	<0.38	~~U~~ UJ
127-18-4	Tetrachloroethene	<0.41	U
108-88-3	Toluene	<0.29	U
71-55-6	1,1,1-Trichloroethane	7.8	
79-00-5	1,1,2-Trichloroethane	<0.34	U
79-01-6	Trichloroethene	2.4	
75-01-4	Vinyl chloride	<0.17	U
1330-20-7	Xylene (Total)	<1.0	U

SAMPLE NO.

RM-208XD

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay

Contract: 525156.0000PH4 LEMBERGER LF-PL

Date Received: 11/03/2023 07:30

Matrix: Water SDG No.: 40270533

Date Extracted: 11/08/2023 14:31

Lab Sample ID: 40270533004

Date Analyzed: 11/08/2023 14:31

Lab File ID: 11082023D.B\11082317.D

Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1

Instrument: 40MSVB Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<8.6	U
71-43-2	Benzene	<0.30	U
75-27-4	Bromodichloromethane	<0.42	U
75-25-2	Bromoform	<0.43	~~U~~ UJ
74-83-9	Bromomethane	<1.2	U
78-93-3	2-Butanone (MEK)	<6.5	U
75-15-0	Carbon disulfide	<0.65	U
56-23-5	Carbon tetrachloride	<0.37	U
108-90-7	Chlorobenzene	<0.86	U
75-00-3	Chloroethane	<1.4	U
67-66-3	Chloroform	<0.50	U
74-87-3	Chloromethane	<1.6	U
124-48-1	Dibromochloromethane	<2.6	~~U~~ UJ
75-34-3	1,1-Dichloroethane	<0.30	U
107-06-2	1,2-Dichloroethane	<0.29	U
75-35-4	1,1-Dichloroethene	<0.58	U
156-59-2	cis-1,2-Dichloroethene	<0.47	U
156-60-5	trans-1,2-Dichloroethene	<0.53	U
78-87-5	1,2-Dichloropropane	<0.45	U
10061-01-5	cis-1,3-Dichloropropene	<0.24	U
10061-02-6	trans-1,3-Dichloropropene	<0.27	U
100-41-4	Ethylbenzene	<0.33	U
591-78-6	2-Hexanone	<6.3	U
75-09-2	Methylene Chloride	<0.32	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<6.0	U
100-42-5	Styrene	<0.36	~~U~~ UJ
79-34-5	1,1,2,2-Tetrachloroethane	<0.38	U
127-18-4	Tetrachloroethene	<0.41	U
108-88-3	Toluene	<0.29	U
71-55-6	1,1,1-Trichloroethane	<0.30	U
79-00-5	1,1,2-Trichloroethane	<0.34	U
79-01-6	Trichloroethene	<0.32	U
75-01-4	Vinyl chloride	<0.17	U
1330-20-7	Xylene (Total)	<1.0	~~U~~ UJ

SAMPLE NO.

RM-214D

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay
Contract: 525156.0000PH4 LEMBERGER LF-PL
Date Received: 11/03/2023 07:30
Matrix: Water SDG No.: 40270533
Date Extracted: 11/09/2023 09:04
Lab Sample ID: 40270533005
Date Analyzed: 11/09/2023 09:04
Lab File ID: 11092023D.B\11092306.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 40MSVB Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<8.6	~~U~~ UJ
71-43-2	Benzene	<0.30	~~U~~
75-27-4	Bromodichloromethane	<0.42	~~U~~
75-25-2	Bromoform	<0.43	~~U~~
74-83-9	Bromomethane	<1.2	~~U~~
78-93-3	2-Butanone (MEK)	<6.5	~~U~~
75-15-0	Carbon disulfide	<0.65	~~U~~
56-23-5	Carbon tetrachloride	<0.37	~~U~~
108-90-7	Chlorobenzene	<0.86	~~U~~
75-00-3	Chloroethane	<1.4	~~U~~
67-66-3	Chloroform	<0.50	~~U~~
74-87-3	Chloromethane	<1.6	~~U~~
124-48-1	Dibromochloromethane	<2.6	~~U~~
75-34-3	1,1-Dichloroethane	5.1	J-
107-06-2	1,2-Dichloroethane	<0.29	~~U~~ UJ
75-35-4	1,1-Dichloroethene	<0.58	~~U~~ UJ
156-59-2	cis-1,2-Dichloroethene	16.3	J-
156-60-5	trans-1,2-Dichloroethene	<0.53	~~U~~ UJ
78-87-5	1,2-Dichloropropane	<0.45	~~U~~
10061-01-5	cis-1,3-Dichloropropene	<0.24	~~U~~
10061-02-6	trans-1,3-Dichloropropene	<0.27	~~U~~
100-41-4	Ethylbenzene	<0.33	~~U~~
591-78-6	2-Hexanone	<6.3	~~U~~
75-09-2	Methylene Chloride	<0.32	~~U~~
108-10-1	4-Methyl-2-pentanone (MIBK)	<6.0	~~U~~
100-42-5	Styrene	<0.36	~~U~~
79-34-5	1,1,2,2-Tetrachloroethane	<0.38	~~U~~
127-18-4	Tetrachloroethene	<0.41	~~U~~
108-88-3	Toluene	<0.29	~~U~~
71-55-6	1,1,1-Trichloroethane	6.5	J-
79-00-5	1,1,2-Trichloroethane	<0.34	~~U~~ UJ
79-01-6	Trichloroethene	2.3	J-
75-01-4	Vinyl chloride	0.90	~~J~~ J
1330-20-7	Xylene (Total)	<1.0	~~U~~ UJ

SAMPLE NO.

RM-213D

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay
Contract: 525156.0000PH4 LEMBERGER LF-PL
Date Received: 11/03/2023 07:30
Matrix: Water SDG No.: 40270533
Date Extracted: 11/08/2023 14:52
Lab Sample ID: 40270533006
Date Analyzed: 11/08/2023 14:52
Lab File ID: 11082023D.B\11082318.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 40MSVB Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<8.6	U
71-43-2	Benzene	<0.30	U
75-27-4	Bromodichloromethane	<0.42	U
75-25-2	Bromoform	<0.43	~~U~~ UJ
74-83-9	Bromomethane	<1.2	U
78-93-3	2-Butanone (MEK)	<6.5	U
75-15-0	Carbon disulfide	<0.65	U
56-23-5	Carbon tetrachloride	<0.37	U
108-90-7	Chlorobenzene	<0.86	U
75-00-3	Chloroethane	<1.4	U
67-66-3	Chloroform	<0.50	U
74-87-3	Chloromethane	<1.6	U
124-48-1	Dibromochloromethane	<2.6	~~U~~ UJ
75-34-3	1,1-Dichloroethane	<0.30	U
107-06-2	1,2-Dichloroethane	<0.29	U
75-35-4	1,1-Dichloroethene	<0.58	U
156-59-2	cis-1,2-Dichloroethene	<0.47	U
156-60-5	trans-1,2-Dichloroethene	<0.53	U
78-87-5	1,2-Dichloropropane	<0.45	U
10061-01-5	cis-1,3-Dichloropropene	<0.24	U
10061-02-6	trans-1,3-Dichloropropene	<0.27	U
100-41-4	Ethylbenzene	<0.33	U
591-78-6	2-Hexanone	<6.3	U
75-09-2	Methylene Chloride	<0.32	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<6.0	U
100-42-5	Styrene	<0.36	~~U~~ UJ
79-34-5	1,1,2,2-Tetrachloroethane	<0.38	U
127-18-4	Tetrachloroethene	<0.41	U
108-88-3	Toluene	<0.29	U
71-55-6	1,1,1-Trichloroethane	1.8	
79-00-5	1,1,2-Trichloroethane	<0.34	U
79-01-6	Trichloroethene	0.34	J
75-01-4	Vinyl chloride	<0.17	U
1330-20-7	Xylene (Total)	<1.0	~~U~~ UJ

SAMPLE NO.

RM-213XD

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay
Contract: 525156.0000PH4 LEMBERGER LF-PL
Date Received: 11/03/2023 07:30
Matrix: Water SDG No.: 40270533
Date Extracted: 11/08/2023 18:40
Lab Sample ID: 40270533007
Date Analyzed: 11/08/2023 18:40
Lab File ID: 11082023D.B\11082329.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 40MSVB Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<8.6	U
71-43-2	Benzene	<0.30	U
75-27-4	Bromodichloromethane	<0.42	U
75-25-2	Bromoform	<0.43	~~U~~ UJ
74-83-9	Bromomethane	<1.2	U
78-93-3	2-Butanone (MEK)	<6.5	U
75-15-0	Carbon disulfide	<0.65	U
56-23-5	Carbon tetrachloride	<0.37	U
108-90-7	Chlorobenzene	<0.86	U
75-00-3	Chloroethane	<1.4	U
67-66-3	Chloroform	<0.50	U
74-87-3	Chloromethane	<1.6	U
124-48-1	Dibromochloromethane	<2.6	~~U~~ UJ
75-34-3	1,1-Dichloroethane	3.0	
107-06-2	1,2-Dichloroethane	<0.29	U
75-35-4	1,1-Dichloroethene	1.6	
156-59-2	cis-1,2-Dichloroethene	2.5	
156-60-5	trans-1,2-Dichloroethene	<0.53	U
78-87-5	1,2-Dichloropropane	<0.45	U
10061-01-5	cis-1,3-Dichloropropene	<0.24	U
10061-02-6	trans-1,3-Dichloropropene	<0.27	U
100-41-4	Ethylbenzene	<0.33	U
591-78-6	2-Hexanone	<6.3	U
75-09-2	Methylene Chloride	<0.32	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<6.0	U
100-42-5	Styrene	<0.36	~~U~~ UJ
79-34-5	1,1,2,2-Tetrachloroethane	<0.38	U
127-18-4	Tetrachloroethene	<0.41	U
108-88-3	Toluene	<0.29	U
71-55-6	1,1,1-Trichloroethane	7.0	
79-00-5	1,1,2-Trichloroethane	<0.34	U
79-01-6	Trichloroethene	1.6	
75-01-4	Vinyl chloride	<0.17	U
1330-20-7	Xylene (Total)	<1.0	~~U~~ UJ

SAMPLE NO.

RM-202D

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay
Contract: 525156.0000PH4 LEMBERGER LF-PL
Date Received: 11/03/2023 07:30
Matrix: Water SDG No.: 40270533
Date Extracted: 11/08/2023 15:12
Lab Sample ID: 40270533008
Date Analyzed: 11/08/2023 15:12
Lab File ID: 11082023D.B\11082319.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 40MSVB Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<8.6	U
71-43-2	Benzene	<0.30	U
75-27-4	Bromodichloromethane	<0.42	U
75-25-2	Bromoform	<0.43	~~U~~ UJ
74-83-9	Bromomethane	<1.2	U
78-93-3	2-Butanone (MEK)	<6.5	U
75-15-0	Carbon disulfide	<0.65	U
56-23-5	Carbon tetrachloride	<0.37	U
108-90-7	Chlorobenzene	<0.86	U
75-00-3	Chloroethane	<1.4	U
67-66-3	Chloroform	<0.50	U
74-87-3	Chloromethane	<1.6	U
124-48-1	Dibromochloromethane	<2.6	~~U~~ UJ
75-34-3	1,1-Dichloroethane	<0.30	U
107-06-2	1,2-Dichloroethane	<0.29	U
75-35-4	1,1-Dichloroethene	<0.58	U
156-59-2	cis-1,2-Dichloroethene	<0.47	U
156-60-5	trans-1,2-Dichloroethene	<0.53	U
78-87-5	1,2-Dichloropropane	<0.45	U
10061-01-5	cis-1,3-Dichloropropene	<0.24	U
10061-02-6	trans-1,3-Dichloropropene	<0.27	U
100-41-4	Ethylbenzene	<0.33	U
591-78-6	2-Hexanone	<6.3	U
75-09-2	Methylene Chloride	<0.32	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<6.0	U
100-42-5	Styrene	<0.36	~~U~~ UJ
79-34-5	1,1,2,2-Tetrachloroethane	<0.38	U
127-18-4	Tetrachloroethene	<0.41	U
108-88-3	Toluene	<0.29	U
71-55-6	1,1,1-Trichloroethane	<0.30	U
79-00-5	1,1,2-Trichloroethane	<0.34	U
79-01-6	Trichloroethene	<0.32	U
75-01-4	Vinyl chloride	<0.17	U
1330-20-7	Xylene (Total)	<1.0	~~U~~ UJ

SAMPLE NO.

RM-303D

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay
Contract: 525156.0000PH4 LEMBERGER LF-PL
Date Received: 11/03/2023 07:30
Matrix: Water SDG No.: 40270533
Date Extracted: 11/08/2023 19:42
Lab Sample ID: 40270533009
Date Analyzed: 11/08/2023 19:42
Lab File ID: 11082023D.B\11082332.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 2
Instrument: 40MSVB Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<17.3	U
71-43-2	Benzene	<0.59	U
75-27-4	Bromodichloromethane	<0.83	U
75-25-2	Bromoform	<0.86	~~U~~ UJ
74-83-9	Bromomethane	<2.4	U
78-93-3	2-Butanone (MEK)	<13.0	U
75-15-0	Carbon disulfide	<1.3	U
56-23-5	Carbon tetrachloride	<0.74	U
108-90-7	Chlorobenzene	<1.7	U
75-00-3	Chloroethane	<2.8	U
67-66-3	Chloroform	<1.0	U
74-87-3	Chloromethane	<3.3	U
124-48-1	Dibromochloromethane	<5.3	~~U~~ UJ
75-34-3	1,1-Dichloroethane	163	
107-06-2	1,2-Dichloroethane	<0.58	U
75-35-4	1,1-Dichloroethene	6.8	
156-59-2	cis-1,2-Dichloroethene	65.5	
156-60-5	trans-1,2-Dichloroethene	<1.1	U
78-87-5	1,2-Dichloropropane	<0.90	U
10061-01-5	cis-1,3-Dichloropropene	<0.47	U
10061-02-6	trans-1,3-Dichloropropene	<0.53	U
100-41-4	Ethylbenzene	<0.65	U
591-78-6	2-Hexanone	<12.6	U
75-09-2	Methylene Chloride	<0.64	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<11.9	U
100-42-5	Styrene	<0.71	~~U~~ UJ
79-34-5	1,1,2,2-Tetrachloroethane	<0.76	U
127-18-4	Tetrachloroethene	1.7	J
108-88-3	Toluene	<0.58	U
71-55-6	1,1,1-Trichloroethane	175	
79-00-5	1,1,2-Trichloroethane	<0.69	U
79-01-6	Trichloroethene	50.0	
75-01-4	Vinyl chloride	<0.35	U
1330-20-7	Xylene (Total)	<2.1	~~U~~ UJ

SAMPLE NO.

FB-003

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay
Contract: 525156.0000PH4 LEMBERGER LF-PL
Date Received: 11/03/2023 07:30
Matrix: Water SDG No.: 40270533
Date Extracted: 11/08/2023 13:50
Lab Sample ID: 40270533010
Date Analyzed: 11/08/2023 13:50
Lab File ID: 11082023D.B\11082315.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 40MSVB Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<8.6	U
71-43-2	Benzene	<0.30	U
75-27-4	Bromodichloromethane	<0.42	U
75-25-2	Bromoform	<0.43	~~U~~ UJ
74-83-9	Bromomethane	<1.2	U
78-93-3	2-Butanone (MEK)	<6.5	U
75-15-0	Carbon disulfide	<0.65	U
56-23-5	Carbon tetrachloride	<0.37	U
108-90-7	Chlorobenzene	<0.86	U
75-00-3	Chloroethane	<1.4	U
67-66-3	Chloroform	<0.50	U
74-87-3	Chloromethane	<1.6	U
124-48-1	Dibromochloromethane	<2.6	~~U~~ UJ
75-34-3	1,1-Dichloroethane	<0.30	U
107-06-2	1,2-Dichloroethane	<0.29	U
75-35-4	1,1-Dichloroethene	<0.58	U
156-59-2	cis-1,2-Dichloroethene	<0.47	U
156-60-5	trans-1,2-Dichloroethene	<0.53	U
78-87-5	1,2-Dichloropropane	<0.45	U
10061-01-5	cis-1,3-Dichloropropene	<0.24	U
10061-02-6	trans-1,3-Dichloropropene	<0.27	U
100-41-4	Ethylbenzene	<0.33	U
591-78-6	2-Hexanone	<6.3	U
75-09-2	Methylene Chloride	<0.32	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<6.0	U
100-42-5	Styrene	<0.36	~~U~~ UJ
79-34-5	1,1,2,2-Tetrachloroethane	<0.38	U
127-18-4	Tetrachloroethene	<0.41	U
108-88-3	Toluene	0.51	J
71-55-6	1,1,1-Trichloroethane	<0.30	U
79-00-5	1,1,2-Trichloroethane	<0.34	U
79-01-6	Trichloroethene	<0.32	U
75-01-4	Vinyl chloride	<0.17	U
1330-20-7	Xylene (Total)	<1.0	~~U~~ UJ

Memorandum

To:	Meredith Westover
From:	David DiGena-Segal (Data Reviewer) Elizabeth Denly (Peer Reviewer)
Date:	February 14, 2024
Subject:	Data Validation Report VOC Groundwater Samples/Residential Wells: 3rd Quarter 2023 Lemberger Landfill and Lemberger Landfill Residential Wells, Manitowoc Wisconsin Laboratory Project Number 40270156

SUMMARY

Full validation (level IV) was performed on the data for 17 groundwater samples, two field duplicates, and one trip blank from residential wells collected at the Lemberger Landfill Residential Wells in Manitowoc, Wisconsin. The samples were collected October 23-24, 2023. Samples were submitted to Pace Analytical Services, LLC in Green Bay, Wisconsin for analysis. The samples were analyzed for volatile organic compounds (VOCs) using SW-846 method 8260D. The laboratory reported the results under laboratory project number 40270156.

The sample results were assessed using the *USEPA National Functional Guidelines for Organic Superfund Methods Data Review (EPA-540-R-20-005),* November 2020 and the project-specific quality assurance project plan (QAPP), dated October 2022, Revision 0.

In general, the data are valid as reported and may be used for decision-making purposes. The following issue was noted which may have a minor impact on the data usability:

- Potential uncertainty exists for the nondetect results for acetone in all samples due to continuing calibration nonconformances. These results were qualified as estimated (UJ).

SAMPLES

Samples included in this review are listed below.

- GR-8
- GR-11
- GR-16
- GR-60R
- GR-64
- GR-73
- GR-FDUP-002[2]
- GR-9
- GR-12
- GR-26
- GR-62
- GR-65
- GR-74
- TB-001
- GR-10
- GR-14
- GR-30
- GR-63
- GR-66
- GR-FDUP-001[1]

[1] FDUP-001: Field duplicate of GR-09
[2] FDUP-002: Field duplicate of GR-73

REVIEW ELEMENTS

Sample data were reviewed for the following parameters:

- Agreement of analyses conducted with chain-of-custody (COC) requests
- Data completeness
- Holding times and sample preservation
- Gas chromatography/mass spectrometry (GC/MS) tunes
- Initial and continuing calibrations
- Blanks
- Surrogate spike recoveries
- Matrix spike/matrix spike duplicate (MS/MSD) results
- Laboratory control sample (LCS) results
- Internal standard performance
- Field duplicate results
- Quantitation limits and sample results
- Target compound identification

DISCUSSION

Agreement of Analyses Conducted with Chain-of-Custody Requests

Sample reports were checked to verify that the results corresponded to analytical requests as designated on the COC. No issues were noted.

Data Completeness

The data package was found to be complete as received from the laboratory with the following exception.

- The laboratory only spiked a subset of the VOCs which were reported in the samples in the LCS and MS/MSD analyses. Thus, accuracy and/or precision could not be evaluated for select VOCs.

No validation actions were taken on the basis of this issue.

Holding Times and Sample Preservation

All holding time criteria were met. As per the COC and analytical log, samples were not acid-preserved. Since all samples were analyzed within seven days of collection, qualification of the data was not required on this basis.

Samples were received by the laboratory between two to three days after collection. Samples were stored in coolers, on ice, in a locked former treatment building at the site until delivery to the laboratory. No validation actions were required on this basis since the samples were kept on ice prior to delivery to the laboratory and were received on ice and at acceptable cooler temperatures by the laboratory.

GC/MS Tunes

The frequency and abundance of all bromofluorobenzene tunes were within the acceptance criteria.

Initial and Continuing Calibrations

The coefficients of determination, percent relative standard deviations, and relative response factors (RRFs) for all target compounds were within the laboratory acceptance criteria in the initial calibrations.

All RRFs were within the acceptance criteria in the continuing calibrations (CCs). The following table summarizes the percent difference (%D) which was outside of the laboratory acceptance criteria in the CC, the associated samples and validation actions.

CC	Analyte	%D	Associated Samples	Validation Actions
40MSVB 10/27/23 @16:27	Acetone	-24.8246	All samples in this data set	The nondetect result for acetone was qualified as estimated (UJ) in the associated samples.

Blanks

Target analytes were not detected in the trip blank or method blank.

Surrogate Spike Recoveries

The percent recoveries (%Rs) of the surrogates were within the laboratory acceptance criteria for all samples.

MS/MSD Results

MS/MSD analyses were performed on sample GR-12. All criteria were met.

Note that the laboratory only spiked a subset of the VOCs which were reported in the samples in the MS/MSDs; thus, accuracy and precision could not be evaluated for the following VOCs (which were not spiked) in the MS/MSD analyses: acetone, 2-butanone, 2-hexanone, and 4-methyl-2-pentanone. No validation action was taken on this basis.

LCS Results

An LCS was performed on each day of analysis. The %R of styrene (131%) was above the acceptance criteria (70-130%) in LCS 2634966 associated with all samples in this data set. Qualification of the data was not required since styrene was not detected in the associated samples.

Note that the laboratory only spiked a subset of the VOCs that were reported in the samples in the LCSs. Thus, accuracy could not be evaluated for the following VOCs (which were not spiked) in the LCS analyses: acetone, 2-butanone, 2-hexanone, and 4-methyl-2-pentanone. No validation action was taken on this basis.

Internal Standard Performance

Internal standards were within the method acceptance criteria in all sample analyses.

Field Duplicate Results

The samples listed below were submitted as the field duplicate pairs with this data set.

- GR-09 and FDUP-001
- GR-73 and FDUP-002

All target analytes were nondetect in both samples of each field duplicate pair; therefore, all criteria were met.

Quantitation Limits and Sample Results

Sample calculations were spot-checked; there were no errors noted. No dilutions were performed in the VOC analyses of these samples.

The laboratory's limit of detection (LOD) for select VOCs was above one or both of the project action limits specified in the QAPP; the affected VOCs, project action limits, and current laboratory LODs are summarized in the table below.

Analyte	Affected Samples	WAC Chapter NR 140 PAL (µg/L)	WAC Chapter NR 140 ES (µg/L)	Laboratory LOD (µg/L)
1,1,2,2-Tetrachloroethane	All samples in this data set	0.02	0.2	0.38
Bromodichloromethane		0.06	0.6*	0.42
Bromomethane		1	10*	1.2
cis-1,3-Dichloropropene		0.04	0.4*	0.24
trans-1,3-Dichloropropene		0.04	0.4*	0.27
Vinyl chloride		0.02	0.2*	0.17
* Laboratory LOD is below the action limit.				

Target Compound Identification

All criteria were met.

QUALIFIED FORM 1s

SAMPLE NO.

GR-60R

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay
Contract: 525156.0000PH4 LEMBERGER LF-RW
Date Received: 10/26/2023 09:14
Matrix: Water SDG No.: 40270156
Date Extracted: 10/27/2023 21:58
Lab Sample ID: 40270156001
Date Analyzed: 10/27/2023 21:58
Lab File ID: 10272023D.B\10272347.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 40MSVB Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<8.6	~~U~~ UJ
71-43-2	Benzene	<0.30	U
75-27-4	Bromodichloromethane	<0.42	U
75-25-2	Bromoform	<0.43	U
74-83-9	Bromomethane	<1.2	U
78-93-3	2-Butanone (MEK)	<6.5	U
75-15-0	Carbon disulfide	<0.65	U
56-23-5	Carbon tetrachloride	<0.37	U
108-90-7	Chlorobenzene	<0.86	U
75-00-3	Chloroethane	<1.4	U
67-66-3	Chloroform	<0.50	U
74-87-3	Chloromethane	<1.6	U
124-48-1	Dibromochloromethane	<2.6	U
75-34-3	1,1-Dichloroethane	<0.30	U
107-06-2	1,2-Dichloroethane	<0.29	U
75-35-4	1,1-Dichloroethene	<0.58	U
156-59-2	cis-1,2-Dichloroethene	<0.47	U
156-60-5	trans-1,2-Dichloroethene	<0.53	U
78-87-5	1,2-Dichloropropane	<0.45	U
10061-01-5	cis-1,3-Dichloropropene	<0.24	U
10061-02-6	trans-1,3-Dichloropropene	<0.27	U
100-41-4	Ethylbenzene	<0.33	U
591-78-6	2-Hexanone	<6.3	U
75-09-2	Methylene Chloride	<0.32	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<6.0	U
100-42-5	Styrene	<0.36	U
79-34-5	1,1,2,2-Tetrachloroethane	<0.38	U
127-18-4	Tetrachloroethene	<0.41	U
108-88-3	Toluene	<0.29	U
71-55-6	1,1,1-Trichloroethane	<0.30	U
79-00-5	1,1,2-Trichloroethane	<0.34	U
79-01-6	Trichloroethene	<0.32	U
75-01-4	Vinyl chloride	<0.17	U
1330-20-7	Xylene (Total)	<1.0	U

SAMPLE NO.

GR-26

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay

Contract: 525156.0000PH4 LEMBERGER LF-RW

Date Received: 10/26/2023 09:14

Matrix: Water SDG No.: 40270156

Date Extracted: 10/27/2023 22:19

Lab Sample ID: 40270156002

Date Analyzed: 10/27/2023 22:19

Lab File ID: 10272023D.B\10272348.D

Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1

Instrument: 40MSVB Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<8.6	~~U~~ UJ
71-43-2	Benzene	<0.30	U
75-27-4	Bromodichloromethane	<0.42	U
75-25-2	Bromoform	<0.43	U
74-83-9	Bromomethane	<1.2	U
78-93-3	2-Butanone (MEK)	<6.5	U
75-15-0	Carbon disulfide	<0.65	U
56-23-5	Carbon tetrachloride	<0.37	U
108-90-7	Chlorobenzene	<0.86	U
75-00-3	Chloroethane	<1.4	U
67-66-3	Chloroform	<0.50	U
74-87-3	Chloromethane	<1.6	U
124-48-1	Dibromochloromethane	<2.6	U
75-34-3	1,1-Dichloroethane	<0.30	U
107-06-2	1,2-Dichloroethane	<0.29	U
75-35-4	1,1-Dichloroethene	<0.58	U
156-59-2	cis-1,2-Dichloroethene	<0.47	U
156-60-5	trans-1,2-Dichloroethene	<0.53	U
78-87-5	1,2-Dichloropropane	<0.45	U
10061-01-5	cis-1,3-Dichloropropene	<0.24	U
10061-02-6	trans-1,3-Dichloropropene	<0.27	U
100-41-4	Ethylbenzene	<0.33	U
591-78-6	2-Hexanone	<6.3	U
75-09-2	Methylene Chloride	<0.32	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<6.0	U
100-42-5	Styrene	<0.36	U
79-34-5	1,1,2,2-Tetrachloroethane	<0.38	U
127-18-4	Tetrachloroethene	<0.41	U
108-88-3	Toluene	<0.29	U
71-55-6	1,1,1-Trichloroethane	<0.30	U
79-00-5	1,1,2-Trichloroethane	<0.34	U
79-01-6	Trichloroethene	<0.32	U
75-01-4	Vinyl chloride	<0.17	U
1330-20-7	Xylene (Total)	<1.0	U

SAMPLE NO.

GR-74

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay

Contract: 525156.0000PH4 LEMBERGER LF-RW

Date Received: 10/26/2023 09:14

Matrix: Water SDG No.: 40270156

Date Extracted: 10/27/2023 22:39

Lab Sample ID: 40270156003

Date Analyzed: 10/27/2023 22:39

Lab File ID: 10272023D.B\10272349.D

Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1

Instrument: 40MSVB Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<8.6	~~U~~ UJ
71-43-2	Benzene	<0.30	U
75-27-4	Bromodichloromethane	<0.42	U
75-25-2	Bromoform	<0.43	U
74-83-9	Bromomethane	<1.2	U
78-93-3	2-Butanone (MEK)	<6.5	U
75-15-0	Carbon disulfide	<0.65	U
56-23-5	Carbon tetrachloride	<0.37	U
108-90-7	Chlorobenzene	<0.86	U
75-00-3	Chloroethane	<1.4	U
67-66-3	Chloroform	<0.50	U
74-87-3	Chloromethane	<1.6	U
124-48-1	Dibromochloromethane	<2.6	U
75-34-3	1,1-Dichloroethane	<0.30	U
107-06-2	1,2-Dichloroethane	<0.29	U
75-35-4	1,1-Dichloroethene	<0.58	U
156-59-2	cis-1,2-Dichloroethene	<0.47	U
156-60-5	trans-1,2-Dichloroethene	<0.53	U
78-87-5	1,2-Dichloropropane	<0.45	U
10061-01-5	cis-1,3-Dichloropropene	<0.24	U
10061-02-6	trans-1,3-Dichloropropene	<0.27	U
100-41-4	Ethylbenzene	<0.33	U
591-78-6	2-Hexanone	<6.3	U
75-09-2	Methylene Chloride	<0.32	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<6.0	U
100-42-5	Styrene	<0.36	U
79-34-5	1,1,2,2-Tetrachloroethane	<0.38	U
127-18-4	Tetrachloroethene	<0.41	U
108-88-3	Toluene	<0.29	U
71-55-6	1,1,1-Trichloroethane	<0.30	U
79-00-5	1,1,2-Trichloroethane	<0.34	U
79-01-6	Trichloroethene	<0.32	U
75-01-4	Vinyl chloride	<0.17	U
1330-20-7	Xylene (Total)	<1.0	U

SAMPLE NO.

GR-30

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay

Contract: 525156.0000PH4 LEMBERGER LF-RW

Date Received: 10/26/2023 09:14

Matrix: Water SDG No.: 40270156

Date Extracted: 10/27/2023 23:00

Lab Sample ID: 40270156004

Date Analyzed: 10/27/2023 23:00

Lab File ID: 10272023D.B\10272350.D

Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1

Instrument: 40MSVB Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<8.6	~~U~~ UJ
71-43-2	Benzene	<0.30	U
75-27-4	Bromodichloromethane	<0.42	U
75-25-2	Bromoform	<0.43	U
74-83-9	Bromomethane	<1.2	U
78-93-3	2-Butanone (MEK)	<6.5	U
75-15-0	Carbon disulfide	<0.65	U
56-23-5	Carbon tetrachloride	<0.37	U
108-90-7	Chlorobenzene	<0.86	U
75-00-3	Chloroethane	<1.4	U
67-66-3	Chloroform	<0.50	U
74-87-3	Chloromethane	<1.6	U
124-48-1	Dibromochloromethane	<2.6	U
75-34-3	1,1-Dichloroethane	<0.30	U
107-06-2	1,2-Dichloroethane	<0.29	U
75-35-4	1,1-Dichloroethene	<0.58	U
156-59-2	cis-1,2-Dichloroethene	<0.47	U
156-60-5	trans-1,2-Dichloroethene	<0.53	U
78-87-5	1,2-Dichloropropane	<0.45	U
10061-01-5	cis-1,3-Dichloropropene	<0.24	U
10061-02-6	trans-1,3-Dichloropropene	<0.27	U
100-41-4	Ethylbenzene	<0.33	U
591-78-6	2-Hexanone	<6.3	U
75-09-2	Methylene Chloride	<0.32	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<6.0	U
100-42-5	Styrene	<0.36	U
79-34-5	1,1,2,2-Tetrachloroethane	<0.38	U
127-18-4	Tetrachloroethene	<0.41	U
108-88-3	Toluene	<0.29	U
71-55-6	1,1,1-Trichloroethane	<0.30	U
79-00-5	1,1,2-Trichloroethane	<0.34	U
79-01-6	Trichloroethene	<0.32	U
75-01-4	Vinyl chloride	<0.17	U
1330-20-7	Xylene (Total)	<1.0	U

SAMPLE NO.

GR-12

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay

Contract: 525156.0000PH4 LEMBERGER LF-RW

Date Received: 10/26/2023 09:14

Matrix: Water SDG No.: 40270156

Date Extracted: 10/27/2023 21:37

Lab Sample ID: 40270156005

Date Analyzed: 10/27/2023 21:37

Lab File ID: 10272023D.B\10272346.D

Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1

Instrument: 40MSVB Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<8.6	~~U~~ UJ
71-43-2	Benzene	<0.30	U
75-27-4	Bromodichloromethane	<0.42	U
75-25-2	Bromoform	<0.43	U
74-83-9	Bromomethane	<1.2	U
78-93-3	2-Butanone (MEK)	<6.5	U
75-15-0	Carbon disulfide	<0.65	U
56-23-5	Carbon tetrachloride	<0.37	U
108-90-7	Chlorobenzene	<0.86	U
75-00-3	Chloroethane	<1.4	U
67-66-3	Chloroform	<0.50	U
74-87-3	Chloromethane	<1.6	U
124-48-1	Dibromochloromethane	<2.6	U
75-34-3	1,1-Dichloroethane	<0.30	U
107-06-2	1,2-Dichloroethane	<0.29	U
75-35-4	1,1-Dichloroethene	<0.58	U
156-59-2	cis-1,2-Dichloroethene	<0.47	U
156-60-5	trans-1,2-Dichloroethene	<0.53	U
78-87-5	1,2-Dichloropropane	<0.45	U
10061-01-5	cis-1,3-Dichloropropene	<0.24	U
10061-02-6	trans-1,3-Dichloropropene	<0.27	U
100-41-4	Ethylbenzene	<0.33	U
591-78-6	2-Hexanone	<6.3	U
75-09-2	Methylene Chloride	<0.32	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<6.0	U
100-42-5	Styrene	<0.36	U
79-34-5	1,1,2,2-Tetrachloroethane	<0.38	U
127-18-4	Tetrachloroethene	<0.41	U
108-88-3	Toluene	<0.29	U
71-55-6	1,1,1-Trichloroethane	<0.30	U
79-00-5	1,1,2-Trichloroethane	<0.34	U
79-01-6	Trichloroethene	<0.32	U
75-01-4	Vinyl chloride	<0.17	U
1330-20-7	Xylene (Total)	<1.0	U

SAMPLE NO.

GR-9

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay
Contract: 525156.0000PH4 LEMBERGER LF-RW
Date Received: 10/26/2023 09:14
Matrix: Water SDG No.: 40270156
Date Extracted: 10/27/2023 23:21
Lab Sample ID: 40270156006
Date Analyzed: 10/27/2023 23:21
Lab File ID: 10272023D.B\10272351.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 40MSVB Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<8.6	~~U~~ UJ
71-43-2	Benzene	<0.30	U
75-27-4	Bromodichloromethane	<0.42	U
75-25-2	Bromoform	<0.43	U
74-83-9	Bromomethane	<1.2	U
78-93-3	2-Butanone (MEK)	<6.5	U
75-15-0	Carbon disulfide	<0.65	U
56-23-5	Carbon tetrachloride	<0.37	U
108-90-7	Chlorobenzene	<0.86	U
75-00-3	Chloroethane	<1.4	U
67-66-3	Chloroform	<0.50	U
74-87-3	Chloromethane	<1.6	U
124-48-1	Dibromochloromethane	<2.6	U
75-34-3	1,1-Dichloroethane	<0.30	U
107-06-2	1,2-Dichloroethane	<0.29	U
75-35-4	1,1-Dichloroethene	<0.58	U
156-59-2	cis-1,2-Dichloroethene	<0.47	U
156-60-5	trans-1,2-Dichloroethene	<0.53	U
78-87-5	1,2-Dichloropropane	<0.45	U
10061-01-5	cis-1,3-Dichloropropene	<0.24	U
10061-02-6	trans-1,3-Dichloropropene	<0.27	U
100-41-4	Ethylbenzene	<0.33	U
591-78-6	2-Hexanone	<6.3	U
75-09-2	Methylene Chloride	<0.32	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<6.0	U
100-42-5	Styrene	<0.36	U
79-34-5	1,1,2,2-Tetrachloroethane	<0.38	U
127-18-4	Tetrachloroethene	<0.41	U
108-88-3	Toluene	<0.29	U
71-55-6	1,1,1-Trichloroethane	<0.30	U
79-00-5	1,1,2-Trichloroethane	<0.34	U
79-01-6	Trichloroethene	<0.32	U
75-01-4	Vinyl chloride	<0.17	U
1330-20-7	Xylene (Total)	<1.0	U

SAMPLE NO.

GR-FDUP-001

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay
Contract: 525156.0000PH4 LEMBERGER LF-RW
Date Received: 10/26/2023 09:14
Matrix: Water SDG No.: 40270156
Date Extracted: 10/27/2023 23:41
Lab Sample ID: 40270156007
Date Analyzed: 10/27/2023 23:41
Lab File ID: 10272023D.B\10272352.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 40MSVB Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<8.6	~~U~~ UJ
71-43-2	Benzene	<0.30	U
75-27-4	Bromodichloromethane	<0.42	U
75-25-2	Bromoform	<0.43	U
74-83-9	Bromomethane	<1.2	U
78-93-3	2-Butanone (MEK)	<6.5	U
75-15-0	Carbon disulfide	<0.65	U
56-23-5	Carbon tetrachloride	<0.37	U
108-90-7	Chlorobenzene	<0.86	U
75-00-3	Chloroethane	<1.4	U
67-66-3	Chloroform	<0.50	U
74-87-3	Chloromethane	<1.6	U
124-48-1	Dibromochloromethane	<2.6	U
75-34-3	1,1-Dichloroethane	<0.30	U
107-06-2	1,2-Dichloroethane	<0.29	U
75-35-4	1,1-Dichloroethene	<0.58	U
156-59-2	cis-1,2-Dichloroethene	<0.47	U
156-60-5	trans-1,2-Dichloroethene	<0.53	U
78-87-5	1,2-Dichloropropane	<0.45	U
10061-01-5	cis-1,3-Dichloropropene	<0.24	U
10061-02-6	trans-1,3-Dichloropropene	<0.27	U
100-41-4	Ethylbenzene	<0.33	U
591-78-6	2-Hexanone	<6.3	U
75-09-2	Methylene Chloride	<0.32	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<6.0	U
100-42-5	Styrene	<0.36	U
79-34-5	1,1,2,2-Tetrachloroethane	<0.38	U
127-18-4	Tetrachloroethene	<0.41	U
108-88-3	Toluene	<0.29	U
71-55-6	1,1,1-Trichloroethane	<0.30	U
79-00-5	1,1,2-Trichloroethane	<0.34	U
79-01-6	Trichloroethene	<0.32	U
75-01-4	Vinyl chloride	<0.17	U
1330-20-7	Xylene (Total)	<1.0	U

SAMPLE NO.

GR-8

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay
Contract: 525156.0000PH4 LEMBERGER LF-RW
Date Received: 10/26/2023 09:14
Matrix: Water SDG No.: 40270156
Date Extracted: 10/28/2023 00:02
Lab Sample ID: 40270156008
Date Analyzed: 10/28/2023 00:02
Lab File ID: 10272023D.B\10272353.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 40MSVB Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<8.6	~~U~~ UJ
71-43-2	Benzene	<0.30	U
75-27-4	Bromodichloromethane	<0.42	U
75-25-2	Bromoform	<0.43	U
74-83-9	Bromomethane	<1.2	U
78-93-3	2-Butanone (MEK)	<6.5	U
75-15-0	Carbon disulfide	<0.65	U
56-23-5	Carbon tetrachloride	<0.37	U
108-90-7	Chlorobenzene	<0.86	U
75-00-3	Chloroethane	<1.4	U
67-66-3	Chloroform	<0.50	U
74-87-3	Chloromethane	<1.6	U
124-48-1	Dibromochloromethane	<2.6	U
75-34-3	1,1-Dichloroethane	<0.30	U
107-06-2	1,2-Dichloroethane	<0.29	U
75-35-4	1,1-Dichloroethene	<0.58	U
156-59-2	cis-1,2-Dichloroethene	<0.47	U
156-60-5	trans-1,2-Dichloroethene	<0.53	U
78-87-5	1,2-Dichloropropane	<0.45	U
10061-01-5	cis-1,3-Dichloropropene	<0.24	U
10061-02-6	trans-1,3-Dichloropropene	<0.27	U
100-41-4	Ethylbenzene	<0.33	U
591-78-6	2-Hexanone	<6.3	U
75-09-2	Methylene Chloride	<0.32	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<6.0	U
100-42-5	Styrene	<0.36	U
79-34-5	1,1,2,2-Tetrachloroethane	<0.38	U
127-18-4	Tetrachloroethene	<0.41	U
108-88-3	Toluene	<0.29	U
71-55-6	1,1,1-Trichloroethane	<0.30	U
79-00-5	1,1,2-Trichloroethane	<0.34	U
79-01-6	Trichloroethene	<0.32	U
75-01-4	Vinyl chloride	<0.17	U
1330-20-7	Xylene (Total)	<1.0	U

SAMPLE NO.

GR-10

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay
Contract: 525156.0000PH4 LEMBERGER LF-RW
Date Received: 10/26/2023 09:14
Matrix: Water SDG No.: 40270156
Date Extracted: 10/28/2023 00:23
Lab Sample ID: 40270156009
Date Analyzed: 10/28/2023 00:23
Lab File ID: 10272023D.B\10272354.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 40MSVB Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<8.6	~~U~~ UJ
71-43-2	Benzene	<0.30	U
75-27-4	Bromodichloromethane	<0.42	U
75-25-2	Bromoform	<0.43	U
74-83-9	Bromomethane	<1.2	U
78-93-3	2-Butanone (MEK)	<6.5	U
75-15-0	Carbon disulfide	<0.65	U
56-23-5	Carbon tetrachloride	<0.37	U
108-90-7	Chlorobenzene	<0.86	U
75-00-3	Chloroethane	<1.4	U
67-66-3	Chloroform	<0.50	U
74-87-3	Chloromethane	<1.6	U
124-48-1	Dibromochloromethane	<2.6	U
75-34-3	1,1-Dichloroethane	<0.30	U
107-06-2	1,2-Dichloroethane	<0.29	U
75-35-4	1,1-Dichloroethene	<0.58	U
156-59-2	cis-1,2-Dichloroethene	<0.47	U
156-60-5	trans-1,2-Dichloroethene	<0.53	U
78-87-5	1,2-Dichloropropane	<0.45	U
10061-01-5	cis-1,3-Dichloropropene	<0.24	U
10061-02-6	trans-1,3-Dichloropropene	<0.27	U
100-41-4	Ethylbenzene	<0.33	U
591-78-6	2-Hexanone	<6.3	U
75-09-2	Methylene Chloride	<0.32	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<6.0	U
100-42-5	Styrene	<0.36	U
79-34-5	1,1,2,2-Tetrachloroethane	<0.38	U
127-18-4	Tetrachloroethene	<0.41	U
108-88-3	Toluene	<0.29	U
71-55-6	1,1,1-Trichloroethane	<0.30	U
79-00-5	1,1,2-Trichloroethane	<0.34	U
79-01-6	Trichloroethene	<0.32	U
75-01-4	Vinyl chloride	<0.17	U
1330-20-7	Xylene (Total)	<1.0	U

SAMPLE NO.

GR-11

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay

Contract: 525156.0000PH4 LEMBERGER LF-RW

Date Received: 10/26/2023 09:14

Matrix: Water SDG No.: 40270156

Date Extracted: 10/28/2023 00:43

Lab Sample ID: 40270156010

Date Analyzed: 10/28/2023 00:43

Lab File ID: 10272023D.B\10272355.D

Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1

Instrument: 40MSVB Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<8.6	~~U~~ UJ
71-43-2	Benzene	<0.30	U
75-27-4	Bromodichloromethane	<0.42	U
75-25-2	Bromoform	<0.43	U
74-83-9	Bromomethane	<1.2	U
78-93-3	2-Butanone (MEK)	<6.5	U
75-15-0	Carbon disulfide	<0.65	U
56-23-5	Carbon tetrachloride	<0.37	U
108-90-7	Chlorobenzene	<0.86	U
75-00-3	Chloroethane	<1.4	U
67-66-3	Chloroform	<0.50	U
74-87-3	Chloromethane	<1.6	U
124-48-1	Dibromochloromethane	<2.6	U
75-34-3	1,1-Dichloroethane	<0.30	U
107-06-2	1,2-Dichloroethane	<0.29	U
75-35-4	1,1-Dichloroethene	<0.58	U
156-59-2	cis-1,2-Dichloroethene	<0.47	U
156-60-5	trans-1,2-Dichloroethene	<0.53	U
78-87-5	1,2-Dichloropropane	<0.45	U
10061-01-5	cis-1,3-Dichloropropene	<0.24	U
10061-02-6	trans-1,3-Dichloropropene	<0.27	U
100-41-4	Ethylbenzene	<0.33	U
591-78-6	2-Hexanone	<6.3	U
75-09-2	Methylene Chloride	<0.32	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<6.0	U
100-42-5	Styrene	<0.36	U
79-34-5	1,1,2,2-Tetrachloroethane	<0.38	U
127-18-4	Tetrachloroethene	<0.41	U
108-88-3	Toluene	<0.29	U
71-55-6	1,1,1-Trichloroethane	<0.30	U
79-00-5	1,1,2-Trichloroethane	<0.34	U
79-01-6	Trichloroethene	<0.32	U
75-01-4	Vinyl chloride	<0.17	U
1330-20-7	Xylene (Total)	<1.0	U

SAMPLE NO.

GR-62

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay

Contract: 525156.0000PH4 LEMBERGER LF-RW

Date Received: 10/26/2023 09:14

Matrix: Water SDG No.: 40270156

Date Extracted: 10/28/2023 01:04

Lab Sample ID: 40270156011

Date Analyzed: 10/28/2023 01:04

Lab File ID: 10272023D.B\10272356.D

Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1

Instrument: 40MSVB Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<8.6	~~U~~ UJ
71-43-2	Benzene	<0.30	U
75-27-4	Bromodichloromethane	<0.42	U
75-25-2	Bromoform	<0.43	U
74-83-9	Bromomethane	<1.2	U
78-93-3	2-Butanone (MEK)	<6.5	U
75-15-0	Carbon disulfide	<0.65	U
56-23-5	Carbon tetrachloride	<0.37	U
108-90-7	Chlorobenzene	<0.86	U
75-00-3	Chloroethane	<1.4	U
67-66-3	Chloroform	<0.50	U
74-87-3	Chloromethane	<1.6	U
124-48-1	Dibromochloromethane	<2.6	U
75-34-3	1,1-Dichloroethane	<0.30	U
107-06-2	1,2-Dichloroethane	<0.29	U
75-35-4	1,1-Dichloroethene	<0.58	U
156-59-2	cis-1,2-Dichloroethene	<0.47	U
156-60-5	trans-1,2-Dichloroethene	<0.53	U
78-87-5	1,2-Dichloropropane	<0.45	U
10061-01-5	cis-1,3-Dichloropropene	<0.24	U
10061-02-6	trans-1,3-Dichloropropene	<0.27	U
100-41-4	Ethylbenzene	<0.33	U
591-78-6	2-Hexanone	<6.3	U
75-09-2	Methylene Chloride	<0.32	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<6.0	U
100-42-5	Styrene	<0.36	U
79-34-5	1,1,2,2-Tetrachloroethane	<0.38	U
127-18-4	Tetrachloroethene	<0.41	U
108-88-3	Toluene	<0.29	U
71-55-6	1,1,1-Trichloroethane	<0.30	U
79-00-5	1,1,2-Trichloroethane	<0.34	U
79-01-6	Trichloroethene	<0.32	U
75-01-4	Vinyl chloride	<0.17	U
1330-20-7	Xylene (Total)	<1.0	U

SAMPLE NO.

GR-64

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay

Contract: 525156.0000PH4 LEMBERGER LF-RW

Date Received: 10/26/2023 09:14

Matrix: Water SDG No.: 40270156

Date Extracted: 10/28/2023 01:25

Lab Sample ID: 40270156012

Date Analyzed: 10/28/2023 01:25

Lab File ID: 10272023D.B\10272357.D

Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1

Instrument: 40MSVB Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<8.6	~~U~~ UJ
71-43-2	Benzene	<0.30	U
75-27-4	Bromodichloromethane	<0.42	U
75-25-2	Bromoform	<0.43	U
74-83-9	Bromomethane	<1.2	U
78-93-3	2-Butanone (MEK)	<6.5	U
75-15-0	Carbon disulfide	<0.65	U
56-23-5	Carbon tetrachloride	<0.37	U
108-90-7	Chlorobenzene	<0.86	U
75-00-3	Chloroethane	<1.4	U
67-66-3	Chloroform	<0.50	U
74-87-3	Chloromethane	<1.6	U
124-48-1	Dibromochloromethane	<2.6	U
75-34-3	1,1-Dichloroethane	<0.30	U
107-06-2	1,2-Dichloroethane	<0.29	U
75-35-4	1,1-Dichloroethene	<0.58	U
156-59-2	cis-1,2-Dichloroethene	<0.47	U
156-60-5	trans-1,2-Dichloroethene	<0.53	U
78-87-5	1,2-Dichloropropane	<0.45	U
10061-01-5	cis-1,3-Dichloropropene	<0.24	U
10061-02-6	trans-1,3-Dichloropropene	<0.27	U
100-41-4	Ethylbenzene	<0.33	U
591-78-6	2-Hexanone	<6.3	U
75-09-2	Methylene Chloride	<0.32	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<6.0	U
100-42-5	Styrene	<0.36	U
79-34-5	1,1,2,2-Tetrachloroethane	<0.38	U
127-18-4	Tetrachloroethene	<0.41	U
108-88-3	Toluene	<0.29	U
71-55-6	1,1,1-Trichloroethane	<0.30	U
79-00-5	1,1,2-Trichloroethane	<0.34	U
79-01-6	Trichloroethene	<0.32	U
75-01-4	Vinyl chloride	<0.17	U
1330-20-7	Xylene (Total)	<1.0	U

SAMPLE NO.

GR-63

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay

Contract: 525156.0000PH4 LEMBERGER LF-RW

Date Received: 10/26/2023 09:14

Matrix: Water SDG No.: 40270156

Date Extracted: 10/28/2023 01:45

Lab Sample ID: 40270156013

Date Analyzed: 10/28/2023 01:45

Lab File ID: 10272023D.B\10272358.D

Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1

Instrument: 40MSVB Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<8.6	~~U~~ UJ
71-43-2	Benzene	<0.30	U
75-27-4	Bromodichloromethane	<0.42	U
75-25-2	Bromoform	<0.43	U
74-83-9	Bromomethane	<1.2	U
78-93-3	2-Butanone (MEK)	<6.5	U
75-15-0	Carbon disulfide	<0.65	U
56-23-5	Carbon tetrachloride	<0.37	U
108-90-7	Chlorobenzene	<0.86	U
75-00-3	Chloroethane	<1.4	U
67-66-3	Chloroform	<0.50	U
74-87-3	Chloromethane	<1.6	U
124-48-1	Dibromochloromethane	<2.6	U
75-34-3	1,1-Dichloroethane	<0.30	U
107-06-2	1,2-Dichloroethane	<0.29	U
75-35-4	1,1-Dichloroethene	<0.58	U
156-59-2	cis-1,2-Dichloroethene	<0.47	U
156-60-5	trans-1,2-Dichloroethene	<0.53	U
78-87-5	1,2-Dichloropropane	<0.45	U
10061-01-5	cis-1,3-Dichloropropene	<0.24	U
10061-02-6	trans-1,3-Dichloropropene	<0.27	U
100-41-4	Ethylbenzene	<0.33	U
591-78-6	2-Hexanone	<6.3	U
75-09-2	Methylene Chloride	<0.32	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<6.0	U
100-42-5	Styrene	<0.36	U
79-34-5	1,1,2,2-Tetrachloroethane	<0.38	U
127-18-4	Tetrachloroethene	<0.41	U
108-88-3	Toluene	<0.29	U
71-55-6	1,1,1-Trichloroethane	<0.30	U
79-00-5	1,1,2-Trichloroethane	<0.34	U
79-01-6	Trichloroethene	<0.32	U
75-01-4	Vinyl chloride	<0.17	U
1330-20-7	Xylene (Total)	<1.0	U

SAMPLE NO.

GR-66

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay
Contract: 525156.0000PH4 LEMBERGER LF-RW
Date Received: 10/26/2023 09:14
Matrix: Water SDG No.: 40270156
Date Extracted: 10/28/2023 02:06
Lab Sample ID: 40270156014
Date Analyzed: 10/28/2023 02:06
Lab File ID: 10272023D.B\10272359.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 40MSVB Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<8.6	~~U~~ UJ
71-43-2	Benzene	<0.30	U
75-27-4	Bromodichloromethane	<0.42	U
75-25-2	Bromoform	<0.43	U
74-83-9	Bromomethane	<1.2	U
78-93-3	2-Butanone (MEK)	<6.5	U
75-15-0	Carbon disulfide	<0.65	U
56-23-5	Carbon tetrachloride	<0.37	U
108-90-7	Chlorobenzene	<0.86	U
75-00-3	Chloroethane	<1.4	U
67-66-3	Chloroform	<0.50	U
74-87-3	Chloromethane	<1.6	U
124-48-1	Dibromochloromethane	<2.6	U
75-34-3	1,1-Dichloroethane	<0.30	U
107-06-2	1,2-Dichloroethane	<0.29	U
75-35-4	1,1-Dichloroethene	<0.58	U
156-59-2	cis-1,2-Dichloroethene	<0.47	U
156-60-5	trans-1,2-Dichloroethene	<0.53	U
78-87-5	1,2-Dichloropropane	<0.45	U
10061-01-5	cis-1,3-Dichloropropene	<0.24	U
10061-02-6	trans-1,3-Dichloropropene	<0.27	U
100-41-4	Ethylbenzene	<0.33	U
591-78-6	2-Hexanone	<6.3	U
75-09-2	Methylene Chloride	<0.32	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<6.0	U
100-42-5	Styrene	<0.36	U
79-34-5	1,1,2,2-Tetrachloroethane	<0.38	U
127-18-4	Tetrachloroethene	<0.41	U
108-88-3	Toluene	<0.29	U
71-55-6	1,1,1-Trichloroethane	<0.30	U
79-00-5	1,1,2-Trichloroethane	<0.34	U
79-01-6	Trichloroethene	<0.32	U
75-01-4	Vinyl chloride	<0.17	U
1330-20-7	Xylene (Total)	<1.0	U

SAMPLE NO.

GR-73

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay

Contract: 525156.0000PH4 LEMBERGER LF-RW

Date Received: 10/26/2023 09:14

Matrix: Water SDG No.: 40270156

Date Extracted: 10/28/2023 02:27

Lab Sample ID: 40270156015

Date Analyzed: 10/28/2023 02:27

Lab File ID: 10272023D.B\10272360.D

Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1

Instrument: 40MSVB Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<8.6	~~U~~ UJ
71-43-2	Benzene	<0.30	U
75-27-4	Bromodichloromethane	<0.42	U
75-25-2	Bromoform	<0.43	U
74-83-9	Bromomethane	<1.2	U
78-93-3	2-Butanone (MEK)	<6.5	U
75-15-0	Carbon disulfide	<0.65	U
56-23-5	Carbon tetrachloride	<0.37	U
108-90-7	Chlorobenzene	<0.86	U
75-00-3	Chloroethane	<1.4	U
67-66-3	Chloroform	<0.50	U
74-87-3	Chloromethane	<1.6	U
124-48-1	Dibromochloromethane	<2.6	U
75-34-3	1,1-Dichloroethane	<0.30	U
107-06-2	1,2-Dichloroethane	<0.29	U
75-35-4	1,1-Dichloroethene	<0.58	U
156-59-2	cis-1,2-Dichloroethene	<0.47	U
156-60-5	trans-1,2-Dichloroethene	<0.53	U
78-87-5	1,2-Dichloropropane	<0.45	U
10061-01-5	cis-1,3-Dichloropropene	<0.24	U
10061-02-6	trans-1,3-Dichloropropene	<0.27	U
100-41-4	Ethylbenzene	<0.33	U
591-78-6	2-Hexanone	<6.3	U
75-09-2	Methylene Chloride	<0.32	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<6.0	U
100-42-5	Styrene	<0.36	U
79-34-5	1,1,2,2-Tetrachloroethane	<0.38	U
127-18-4	Tetrachloroethene	<0.41	U
108-88-3	Toluene	<0.29	U
71-55-6	1,1,1-Trichloroethane	<0.30	U
79-00-5	1,1,2-Trichloroethane	<0.34	U
79-01-6	Trichloroethene	<0.32	U
75-01-4	Vinyl chloride	<0.17	U
1330-20-7	Xylene (Total)	<1.0	U

SAMPLE NO.

GR-65

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay

Contract: 525156.0000PH4 LEMBERGER LF-RW

Date Received: 10/26/2023 09:14

Matrix: Water SDG No.: 40270156

Date Extracted: 10/28/2023 02:47

Lab Sample ID: 40270156016

Date Analyzed: 10/28/2023 02:47

Lab File ID: 10272023D.B\10272361.D

Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1

Instrument: 40MSVB Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<8.6	~~U~~ UJ
71-43-2	Benzene	<0.30	U
75-27-4	Bromodichloromethane	<0.42	U
75-25-2	Bromoform	<0.43	U
74-83-9	Bromomethane	<1.2	U
78-93-3	2-Butanone (MEK)	<6.5	U
75-15-0	Carbon disulfide	<0.65	U
56-23-5	Carbon tetrachloride	<0.37	U
108-90-7	Chlorobenzene	<0.86	U
75-00-3	Chloroethane	<1.4	U
67-66-3	Chloroform	<0.50	U
74-87-3	Chloromethane	<1.6	U
124-48-1	Dibromochloromethane	<2.6	U
75-34-3	1,1-Dichloroethane	<0.30	U
107-06-2	1,2-Dichloroethane	<0.29	U
75-35-4	1,1-Dichloroethene	<0.58	U
156-59-2	cis-1,2-Dichloroethene	<0.47	U
156-60-5	trans-1,2-Dichloroethene	<0.53	U
78-87-5	1,2-Dichloropropane	<0.45	U
10061-01-5	cis-1,3-Dichloropropene	<0.24	U
10061-02-6	trans-1,3-Dichloropropene	<0.27	U
100-41-4	Ethylbenzene	<0.33	U
591-78-6	2-Hexanone	<6.3	U
75-09-2	Methylene Chloride	<0.32	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<6.0	U
100-42-5	Styrene	<0.36	U
79-34-5	1,1,2,2-Tetrachloroethane	<0.38	U
127-18-4	Tetrachloroethene	<0.41	U
108-88-3	Toluene	<0.29	U
71-55-6	1,1,1-Trichloroethane	<0.30	U
79-00-5	1,1,2-Trichloroethane	<0.34	U
79-01-6	Trichloroethene	<0.32	U
75-01-4	Vinyl chloride	<0.17	U
1330-20-7	Xylene (Total)	<1.0	U

SAMPLE NO.

GR-16

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay

Contract: 525156.0000PH4 LEMBERGER LF-RW

Date Received: 10/26/2023 09:14

Matrix: Water SDG No.: 40270156

Date Extracted: 10/28/2023 03:08

Lab Sample ID: 40270156017

Date Analyzed: 10/28/2023 03:08

Lab File ID: 10272023D.B\10272362.D

Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1

Instrument: 40MSVB Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<8.6	~~U~~ UJ
71-43-2	Benzene	<0.30	U
75-27-4	Bromodichloromethane	<0.42	U
75-25-2	Bromoform	<0.43	U
74-83-9	Bromomethane	<1.2	U
78-93-3	2-Butanone (MEK)	<6.5	U
75-15-0	Carbon disulfide	<0.65	U
56-23-5	Carbon tetrachloride	<0.37	U
108-90-7	Chlorobenzene	<0.86	U
75-00-3	Chloroethane	<1.4	U
67-66-3	Chloroform	<0.50	U
74-87-3	Chloromethane	<1.6	U
124-48-1	Dibromochloromethane	<2.6	U
75-34-3	1,1-Dichloroethane	<0.30	U
107-06-2	1,2-Dichloroethane	<0.29	U
75-35-4	1,1-Dichloroethene	<0.58	U
156-59-2	cis-1,2-Dichloroethene	<0.47	U
156-60-5	trans-1,2-Dichloroethene	<0.53	U
78-87-5	1,2-Dichloropropane	<0.45	U
10061-01-5	cis-1,3-Dichloropropene	<0.24	U
10061-02-6	trans-1,3-Dichloropropene	<0.27	U
100-41-4	Ethylbenzene	<0.33	U
591-78-6	2-Hexanone	<6.3	U
75-09-2	Methylene Chloride	<0.32	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<6.0	U
100-42-5	Styrene	<0.36	U
79-34-5	1,1,2,2-Tetrachloroethane	<0.38	U
127-18-4	Tetrachloroethene	<0.41	U
108-88-3	Toluene	<0.29	U
71-55-6	1,1,1-Trichloroethane	<0.30	U
79-00-5	1,1,2-Trichloroethane	<0.34	U
79-01-6	Trichloroethene	<0.32	U
75-01-4	Vinyl chloride	<0.17	U
1330-20-7	Xylene (Total)	<1.0	U

SAMPLE NO.

GR-14

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay

Contract: 525156.0000PH4 LEMBERGER LF-RW

Date Received: 10/26/2023 09:14

Matrix: Water SDG No.: 40270156

Date Extracted: 10/28/2023 03:29

Lab Sample ID: 40270156018

Date Analyzed: 10/28/2023 03:29

Lab File ID: 10272023D.B\10272363.D

Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1

Instrument: 40MSVB Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<8.6	~~U~~ UJ
71-43-2	Benzene	<0.30	U
75-27-4	Bromodichloromethane	<0.42	U
75-25-2	Bromoform	<0.43	U
74-83-9	Bromomethane	<1.2	U
78-93-3	2-Butanone (MEK)	<6.5	U
75-15-0	Carbon disulfide	<0.65	U
56-23-5	Carbon tetrachloride	<0.37	U
108-90-7	Chlorobenzene	<0.86	U
75-00-3	Chloroethane	<1.4	U
67-66-3	Chloroform	<0.50	U
74-87-3	Chloromethane	<1.6	U
124-48-1	Dibromochloromethane	<2.6	U
75-34-3	1,1-Dichloroethane	<0.30	U
107-06-2	1,2-Dichloroethane	<0.29	U
75-35-4	1,1-Dichloroethene	<0.58	U
156-59-2	cis-1,2-Dichloroethene	<0.47	U
156-60-5	trans-1,2-Dichloroethene	<0.53	U
78-87-5	1,2-Dichloropropane	<0.45	U
10061-01-5	cis-1,3-Dichloropropene	<0.24	U
10061-02-6	trans-1,3-Dichloropropene	<0.27	U
100-41-4	Ethylbenzene	<0.33	U
591-78-6	2-Hexanone	<6.3	U
75-09-2	Methylene Chloride	<0.32	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<6.0	U
100-42-5	Styrene	<0.36	U
79-34-5	1,1,2,2-Tetrachloroethane	<0.38	U
127-18-4	Tetrachloroethene	<0.41	U
108-88-3	Toluene	<0.29	U
71-55-6	1,1,1-Trichloroethane	<0.30	U
79-00-5	1,1,2-Trichloroethane	<0.34	U
79-01-6	Trichloroethene	<0.32	U
75-01-4	Vinyl chloride	<0.17	U
1330-20-7	Xylene (Total)	<1.0	U

SAMPLE NO.

GR-FDUP-002

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay

Contract: 525156.0000PH4 LEMBERGER LF-RW

Date Received: 10/26/2023 09:14

Matrix: Water SDG No.: 40270156

Date Extracted: 10/28/2023 03:49

Lab Sample ID: 40270156019

Date Analyzed: 10/28/2023 03:49

Lab File ID: 10272023D.B\10272364.D

Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1

Instrument: 40MSVB Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<8.6	~~U~~ UJ
71-43-2	Benzene	<0.30	U
75-27-4	Bromodichloromethane	<0.42	U
75-25-2	Bromoform	<0.43	U
74-83-9	Bromomethane	<1.2	U
78-93-3	2-Butanone (MEK)	<6.5	U
75-15-0	Carbon disulfide	<0.65	U
56-23-5	Carbon tetrachloride	<0.37	U
108-90-7	Chlorobenzene	<0.86	U
75-00-3	Chloroethane	<1.4	U
67-66-3	Chloroform	<0.50	U
74-87-3	Chloromethane	<1.6	U
124-48-1	Dibromochloromethane	<2.6	U
75-34-3	1,1-Dichloroethane	<0.30	U
107-06-2	1,2-Dichloroethane	<0.29	U
75-35-4	1,1-Dichloroethene	<0.58	U
156-59-2	cis-1,2-Dichloroethene	<0.47	U
156-60-5	trans-1,2-Dichloroethene	<0.53	U
78-87-5	1,2-Dichloropropane	<0.45	U
10061-01-5	cis-1,3-Dichloropropene	<0.24	U
10061-02-6	trans-1,3-Dichloropropene	<0.27	U
100-41-4	Ethylbenzene	<0.33	U
591-78-6	2-Hexanone	<6.3	U
75-09-2	Methylene Chloride	<0.32	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<6.0	U
100-42-5	Styrene	<0.36	U
79-34-5	1,1,2,2-Tetrachloroethane	<0.38	U
127-18-4	Tetrachloroethene	<0.41	U
108-88-3	Toluene	<0.29	U
71-55-6	1,1,1-Trichloroethane	<0.30	U
79-00-5	1,1,2-Trichloroethane	<0.34	U
79-01-6	Trichloroethene	<0.32	U
75-01-4	Vinyl chloride	<0.17	U
1330-20-7	Xylene (Total)	<1.0	U

SAMPLE NO.

TB-001

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay
Contract: 525156.0000PH4 LEMBERGER LF-RW
Date Received: 10/26/2023 09:14
Matrix: Water SDG No.: 40270156
Date Extracted: 10/27/2023 21:17
Lab Sample ID: 40270156020
Date Analyzed: 10/27/2023 21:17
Lab File ID: 10272023D.B\10272345.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 40MSVB Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<8.6	~~U~~ UJ
71-43-2	Benzene	<0.30	U
75-27-4	Bromodichloromethane	<0.42	U
75-25-2	Bromoform	<0.43	U
74-83-9	Bromomethane	<1.2	U
78-93-3	2-Butanone (MEK)	<6.5	U
75-15-0	Carbon disulfide	<0.65	U
56-23-5	Carbon tetrachloride	<0.37	U
108-90-7	Chlorobenzene	<0.86	U
75-00-3	Chloroethane	<1.4	U
67-66-3	Chloroform	<0.50	U
74-87-3	Chloromethane	<1.6	U
124-48-1	Dibromochloromethane	<2.6	U
75-34-3	1,1-Dichloroethane	<0.30	U
107-06-2	1,2-Dichloroethane	<0.29	U
75-35-4	1,1-Dichloroethene	<0.58	U
156-59-2	cis-1,2-Dichloroethene	<0.47	U
156-60-5	trans-1,2-Dichloroethene	<0.53	U
78-87-5	1,2-Dichloropropane	<0.45	U
10061-01-5	cis-1,3-Dichloropropene	<0.24	U
10061-02-6	trans-1,3-Dichloropropene	<0.27	U
100-41-4	Ethylbenzene	<0.33	U
591-78-6	2-Hexanone	<6.3	U
75-09-2	Methylene Chloride	<0.32	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<6.0	U
100-42-5	Styrene	<0.36	U
79-34-5	1,1,2,2-Tetrachloroethane	<0.38	U
127-18-4	Tetrachloroethene	<0.41	U
108-88-3	Toluene	<0.29	U
71-55-6	1,1,1-Trichloroethane	<0.30	U
79-00-5	1,1,2-Trichloroethane	<0.34	U
79-01-6	Trichloroethene	<0.32	U
75-01-4	Vinyl chloride	<0.17	U
1330-20-7	Xylene (Total)	<1.0	U

Memorandum

To:	Meredith Westover
From:	David DiGena-Segal (Data Reviewer) Elizabeth Denly and Kristen Morin (Peer Reviewer)
Date:	February 19, 2024
Subject:	Data Validation Report Groundwater Samples: 3rd Quarter 2023 Lemberger Landfill and Lemberger Transport and Recycling/Franklin, Wisconsin Laboratory Project Numbers 40270181, 40270527 (Revised 02/19/2024), 40270530

SUMMARY

Limited validation (level III) was performed on the data for eight groundwater samples, one field duplicate, and one field blank collected at the Lemberger Landfill and Lemberger Transport and Recycling Site in Franklin, Wisconsin. The samples were collected on October 21, 29, and 30, 2023. Samples were submitted to Pace Analytical Services, LLC in Green Bay, Wisconsin for analysis. The samples were analyzed for one or more of the following parameters:

- Total iron and manganese using SW-846 Method 6020B
- Chloride and sulfate using EPA Method 300.0
- Alkalinity using EPA Method 310.2
- Nitrogen/nitrate + nitrite using EPA Method 353.2
- Total organic carbon (TOC) using Standard Methods 5310C

The laboratory reported the results under laboratory project numbers 40270181, 40270527, 40270530

The sample results were assessed using the *USEPA National Functional Guidelines for Inorganic Superfund Methods Data Review* (EPA-542-R-20-006), November 2020 and the project-specific quality assurance project plan (QAPP), dated October 2022, Revision 0.

In general, the data are valid as reported and may be used for decision-making purposes. The following issues were noted which may have a minor impact on the data usability:

- Select metals and TOC results were reported which were below the lowest calibration standard and quantitation limit (QL); these results were qualified by the laboratory as estimated (J).
- The positive results for chloride and TOC in select samples were qualified as nondetect (U) at the reported concentration due to method blank or field blank contamination.

SAMPLES

Samples included in this review are listed below.

<u>Laboratory Project Number 40270181</u>: collected 10/21/23

- RM-404XXD

Laboratory Project Number 40270527: collected 10/29/23

- OW-104F
- RM-102D
- RM-007D
- FDUP-002[1]
- RM-007XD

[1] Field duplicate of RM-007XD

Laboratory Project Number 40270530: collected 10/30/23

- RM-203D
- FB-002
- RM-204D
- RM-402XD

REVIEW ELEMENTS

Sample data were reviewed for the following parameters:

- Agreement of analyses conducted with chain-of-custody (COC) requests
- Data completeness
- Holding times and sample preservation
- Inductively coupled plasma-mass spectrometry (ICP-MS) tune results (Metals only)
- Initial and continuing calibrations
- Interference check sample (ICS) results (Metals only)
- Blanks
- Matrix spike/matrix spike duplicate (MS/MSD) results
- Laboratory control sample (LCS) results
- Internal standard performance (Metals only)
- Serial dilution results (Metals only)
- Laboratory duplicate results
- Field duplicate results
- Quantitation limits and sample results

DISCUSSION

Agreement of Analyses Conducted with Chain-of-Custody Requests

Sample reports were checked to verify that the results corresponded to analytical requests as designated on the COC. No issues were noted.

Data Completeness

The data packages were found to be complete as received from the laboratory.

Holding Times and Sample Preservation

All holding time and sample preservation criteria were met.

Note that samples were received by the laboratory four to six days after collection. Samples were stored in coolers, on ice, in a locked former treatment building at the site until delivery to the laboratory.

No validation actions were required on this basis since the samples were kept on ice prior to delivery to the laboratory and were received on ice by the laboratory.

ICP-MS Tune Results (Metals only)

The resolution of the mass calibration was within 0.1 atomic mass units (amu) over the range of 24 to 208 amu. The percent relative standard deviations (%RSDs) for all analytes in the tuning solution met the acceptance criteria of <5%.

Initial and Continuing Calibrations

Metals, Chloride, Sulfate, Alkalinity, Nitrogen/Nitrate + Nitrite, TOC

The laboratory did not include the initial calibration data, but criteria were met based on the case narrative. The initial calibration verification (ICV) and continuing calibration verification (CCV) percent recoveries (%Rs) met the method acceptance limits. The low-level check standard %Rs were within 90-110%.

ICS Results (Metals only)

The ICS analyses %Rs for iron and manganese were within the 80-120% acceptance criteria. The ICSA results were not evaluated since the interferent, iron, was not detected in the samples at concentrations comparable to the ICS solutions.

Blanks

Target analytes were not detected in the associated calibration blanks, field blank, and method blank with the following exception.

Chloride (0.68 J mg/L) was detected in the method blank associated with all samples in SDGs 40270527 and 40270530. The positive results for chloride in samples RM-102D, RM-007D, RM-007XD, FDUP-002, and RM-402XD were qualified as nondetect (U) at the reported concentration. Qualification was not required for the remaining associated samples since the results for chloride were either >10x the blank concentration or nondetect in these samples.

TOC (0.20 J mg/L) was detected in the field blank (FB-002) associated with all samples. The positive results for TOC in all samples in SDG 40270530, samples RM-102D, RM-007XD, OW-104F, FDUP-002, and RM-404XXD were qualified as nondetect (U) at the reported concentration.

MS/MSD Results

MS/MSD analyses were performed on the following samples for the indicated parameters:

- RM-402XD* for metals, chloride, sulfate, alkalinity, nitrogen/nitrate + nitrite, and TOC

*A post digestion spike was also performed on this sample for metals.

All criteria were met.

LCS Results

The LCS %Rs were within the laboratory acceptance criteria for metals, alkalinity, nitrogen/nitrate + nitrite, chloride, sulfate, and TOC analyses.

Internal Standard Performance (Metals only)

Internal standards were within the method acceptance criteria in all sample analyses.

Serial Dilution Results (Metals only)

Serial dilution analyses for the metals analyses were performed on sample RM-203D; all criteria were met.

Laboratory Duplicate Results

Laboratory duplicates were not performed on samples from this data set.

Field Duplicate Results

The samples listed below were submitted as the field duplicate pair with this data set.

- RM-007XD and FDUP-002

The relative percent difference (RPD) is not applicable for comparison of results if either concentration is <5x the QL; comparison in this case is based on the absolute difference (AbsD) between the results. The acceptance limits for field duplicates in aqueous media is ≤30% for the RPD and ≤QL for the AbsD. For analytes that are detected in one sample and nondetect in the other, the QL is used to represent the nondetect result in the AbsD calculation. The following table summarizes the detected results, the RPDs for the detected analytes in the field duplicate pair, and the resulting validation actions. As shown in the table, criteria were met for all detected analytes.

Analyte	QL	RM-007XD	FDUP-002	RPD (%)	Validation Actions
Sulfate	10.0 mg/L	132 mg/L	132 mg/L	0.0	None; all criteria were met
Alkalinity	25.0 mg/L	442 mg/L	442 mg/L	0.0	
Nitrogen/nitrate + nitrite	0.25 mg/L	2.2 mg/L	2.2 mg/L	0.0	

Quantitation Limits and Sample Results

The following table summarizes the dilutions performed on the samples in this data set; QLs were elevated accordingly by the laboratory.

Sample IDs	Parameter	Dilution	Reason for Dilution
RM-102D, RM-007D, RM-007XD, FDUP-002	Chloride	5-fold	Dilutions were performed due to the concentrations of target analytes which would have exceeded the calibration range if analyzed undiluted.
	Sulfate		
RM-102D	Nitrogen/nitrate + nitrite		
RM-007D	Alkalinity	2-fold	

Sample IDs	Parameter	Dilution	Reason for Dilution
RM-402XD	Chloride	10-fold	Dilutions were performed due to the concentrations of target analytes which would have exceeded the calibration range if analyzed undiluted.
	Sulfate		

Select metals and TOC results were reported which were below the lowest calibration standard level and QL (or limit of quantitation [LOQ]). These results were qualified as estimated (J) by the laboratory.

The laboratory's current LOD for alkalinity, chloride, sulfate, nitrogen/nitrate + nitrite, iron, manganese, and TOC were below the project action limits specified in the QAPP.

QUALIFIED FORM 1s

SAMPLE NO.

RM-102D

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40270527 Contract: 525156.0000PH4

Lab Sample ID: 40270527001 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7439-89-6	Iron	<58.0	U	ug/L	1	11/10/2023 13:54
7439-96-5	Manganese	<1.2	U	ug/L	1	11/10/2023 13:54

SAMPLE NO.

RM-007D

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40270527 Contract: 525156.0000PH4

Lab Sample ID: 40270527003 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7439-89-6	Iron	179	J	ug/L	1	11/10/2023 13:59
7439-96-5	Manganese	12.3		ug/L	1	11/10/2023 13:59

SAMPLE NO.

RM-007XD

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40270527 Contract: 525156.0000PH4

Lab Sample ID: 40270527004 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7439-89-6	Iron	<58.0	U	ug/L	1	11/10/2023 14:04
7439-96-5	Manganese	<1.2	U	ug/L	1	11/10/2023 14:04

SAMPLE NO.

OW-104F

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40270527 Contract: 525156.0000PH4

Lab Sample ID: 40270527005 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7439-89-6	Iron	184	J	ug/L	1	11/10/2023 14:09
7439-96-5	Manganese	7.0		ug/L	1	11/10/2023 14:09

SAMPLE NO.

FDUP-002

FORM I INORGANIC-1
INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40270527 Contract: 525156.0000PH4
Lab Sample ID: 40270527006 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7439-89-6	Iron	<58.0	U	ug/L	1	11/10/2023 14:14
7439-96-5	Manganese	<1.2	U	ug/L	1	11/10/2023 14:14

SAMPLE NO.

RM-102D

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40270527 Contract: 525156.0000PH4

Lab Sample ID: 40270527001 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
16887-00-6	Chloride	17.1 U	~~B~~	mg/L	5	11/18/2023 18:53
14808-79-8	Sulfate	13.7		mg/L	5	11/18/2023 18:53

SAMPLE NO.

RM-007D

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40270527 Contract: 525156.0000PH4

Lab Sample ID: 40270527003 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
16887-00-6	Chloride	13.4 U	~~B~~	mg/L	5	11/18/2023 19:07
14808-79-8	Sulfate	176		mg/L	5	11/18/2023 19:07

SAMPLE NO.

RM-007XD

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40270527 Contract: 525156.0000PH4

Lab Sample ID: 40270527004 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
16887-00-6	Chloride	10.7 U	~~B~~	mg/L	5	11/18/2023 19:22
14808-79-8	Sulfate	132		mg/L	5	11/18/2023 19:22

SAMPLE NO.

OW-104F

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40270527 Contract: 525156.0000PH4

Lab Sample ID: 40270527005 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
16887-00-6	Chloride	8.5		mg/L	1	11/18/2023 19:36
14808-79-8	Sulfate	22.5		mg/L	1	11/18/2023 19:36

SAMPLE NO.

FDUP-002

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40270527 Contract: 525156.0000PH4

Lab Sample ID: 40270527006 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
16887-00-6	Chloride	10.8 U	~~B~~	mg/L	5	11/18/2023 19:50
14808-79-8	Sulfate	132		mg/L	5	11/18/2023 19:50

SAMPLE NO.

RM-102D

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40270527 Contract: 525156.0000PH4

Lab Sample ID: 40270527001 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Alkalinity, Total as CaCO3	267		mg/L	1	11/08/2023 07:20
	Nitrogen, NO2 plus NO3	11.5		mg/L	5	11/16/2023 15:47
7440-44-0	Total Organic Carbon	1.8 U		mg/L	1	11/08/2023 11:21

SAMPLE NO.

RM-007D

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40270527 Contract: 525156.0000PH4

Lab Sample ID: 40270527003 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Alkalinity, Total as CaCO3	482		mg/L	2	11/08/2023 07:24
	Nitrogen, NO2 plus NO3	4.2		mg/L	1	11/16/2023 13:10
7440-44-0	Total Organic Carbon	2.1		mg/L	1	11/08/2023 11:35

SAMPLE NO.

RM-007XD

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40270527 Contract: 525156.0000PH4

Lab Sample ID: 40270527004 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Alkalinity, Total as CaCO3	442		mg/L	1	11/08/2023 07:26
	Nitrogen, NO2 plus NO3	2.2		mg/L	1	11/16/2023 13:11
7440-44-0	Total Organic Carbon	1.4 U		mg/L	1	11/08/2023 11:50

SAMPLE NO.

OW-104F

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40270527 Contract: 525156.0000PH4

Lab Sample ID: 40270527005 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Alkalinity, Total as CaCO3	294		mg/L	1	11/08/2023 07:27
	Nitrogen, NO2 plus NO3	1.8		mg/L	1	11/16/2023 13:12
7440-44-0	Total Organic Carbon	0.63 U		mg/L	1	11/08/2023 12:04

SAMPLE NO.

FDUP-002

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40270527 Contract: 525156.0000PH4

Lab Sample ID: 40270527006 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Alkalinity, Total as CaCO3	442		mg/L	1	11/08/2023 07:28
	Nitrogen, NO2 plus NO3	2.2		mg/L	1	11/16/2023 13:12
7440-44-0	Total Organic Carbon	1.4 U		mg/L	1	11/08/2023 12:18

SAMPLE NO.

RM-404XXD

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40270181 Contract: 525156.0000 PH4

Lab Sample ID: 40270181001 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7439-89-6	Iron	<58.0	U	ug/L	1	11/01/2023 05:49
7439-96-5	Manganese	9.5		ug/L	1	11/01/2023 05:49

SAMPLE NO.

RM-404XXD

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40270181 Contract: 525156.0000 PH4

Lab Sample ID: 40270181001 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
16887-00-6	Chloride	18.3		mg/L	1	11/10/2023 04:51
14808-79-8	Sulfate	32.8		mg/L	1	11/10/2023 04:51

SAMPLE NO.

RM-404XXD

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40270181 Contract: 525156.0000 PH4

Lab Sample ID: 40270181001 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Alkalinity, Total as CaCO3	319		mg/L	1	10/31/2023 11:05
	Nitrogen, NO2 plus NO3	3.2		mg/L	1	11/03/2023 09:49
7440-44-0	Total Organic Carbon	1.1 U		mg/L	1	11/04/2023 00:20

SAMPLE NO.

RM-203D

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40270530 Contract: 525156.0000PH4

Lab Sample ID: 40270530001 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7439-89-6	Iron	138	J	ug/L	1	11/10/2023 13:17
7439-96-5	Manganese	2.8	J	ug/L	1	11/10/2023 13:17

SAMPLE NO.

RM-204D

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40270530 Contract: 525156.0000PH4

Lab Sample ID: 40270530002 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7439-89-6	Iron	<58.0	U	ug/L	1	11/10/2023 13:28
7439-96-5	Manganese	1.3	J	ug/L	1	11/10/2023 13:28

SAMPLE NO.

RM-402XD

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40270530 Contract: 525156.0000PH4

Lab Sample ID: 40270530004 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7439-89-6	Iron	<58.0	U	ug/L	1	11/10/2023 12:56
7439-96-5	Manganese	<1.2	U	ug/L	1	11/10/2023 12:56

SAMPLE NO.

FB-002

FORM I INORGANIC-1
INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40270530 Contract: 525156.0000PH4
Lab Sample ID: 40270530007 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7439-89-6	Iron	<58.0	U	ug/L	1	11/10/2023 12:15
7439-96-5	Manganese	<1.2	U	ug/L	1	11/10/2023 12:15

SAMPLE NO.

RM-203D

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40270530 Contract: 525156.0000PH4

Lab Sample ID: 40270530001 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
16887-00-6	Chloride	25.1		mg/L	1	11/18/2023 20:05
14808-79-8	Sulfate	28.3		mg/L	1	11/18/2023 20:05

SAMPLE NO.

RM-204D

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40270530 Contract: 525156.0000PH4

Lab Sample ID: 40270530002 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
16887-00-6	Chloride	14.6		mg/L	1	11/18/2023 20:19
14808-79-8	Sulfate	33.8		mg/L	1	11/18/2023 20:19

SAMPLE NO.

RM-402XD

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40270530 Contract: 525156.0000PH4

Lab Sample ID: 40270530004 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
16887-00-6	Chloride	23.1 U	~~B~~	mg/L	10	11/18/2023 20:34
14808-79-8	Sulfate	325		mg/L	10	11/18/2023 20:34

SAMPLE NO.

FB-002

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40270530 Contract: 525156.0000PH4

Lab Sample ID: 40270530007 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
16887-00-6	Chloride	<0.59	U	mg/L	1	11/18/2023 22:00
14808-79-8	Sulfate	<0.44	U	mg/L	1	11/18/2023 22:00

SAMPLE NO.

RM-203D

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40270530 Contract: 525156.0000PH4

Lab Sample ID: 40270530001 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Alkalinity, Total as CaCO3	344		mg/L	1	11/08/2023 08:07
	Nitrogen, NO2 plus NO3	7.3		mg/L	1	11/16/2023 13:13
7440-44-0	Total Organic Carbon	1.1 U		mg/L	1	11/08/2023 12:53

SAMPLE NO.

RM-204D

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40270530 Contract: 525156.0000PH4

Lab Sample ID: 40270530002 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Alkalinity, Total as CaCO3	346		mg/L	1	11/08/2023 08:08
	Nitrogen, NO2 plus NO3	3.5		mg/L	1	11/16/2023 13:16
7440-44-0	Total Organic Carbon	0.85 U		mg/L	1	11/08/2023 13:07

SAMPLE NO.

RM-402XD

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40270530 Contract: 525156.0000PH4

Lab Sample ID: 40270530004 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Alkalinity, Total as CaCO3	383		mg/L	1	11/08/2023 08:09
	Nitrogen, NO2 plus NO3	5.3		mg/L	1	11/16/2023 13:17
7440-44-0	Total Organic Carbon	1.7 U		mg/L	1	11/08/2023 13:21

SAMPLE NO.

FB-002

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40270530 Contract: 525156.0000PH4

Lab Sample ID: 40270530007 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Alkalinity, Total as CaCO3	<7.4	U	mg/L	1	11/08/2023 08:12
	Nitrogen, NO2 plus NO3	<0.059	U	mg/L	1	11/16/2023 13:19
7440-44-0	Total Organic Carbon	0.20	J	mg/L	1	11/08/2023 14:06

Memorandum

To:	Meredith Westover
From:	David DiGena-Segal (Data Reviewer) Elizabeth Denly and Kristen Morin (Peer Reviewer)
Date:	February 16, 2024
Subject:	Data Validation Report Groundwater Samples: 3rd Quarter 2023 Lemberger Landfill and Lemberger Transport and Recycling/Franklin, Wisconsin Laboratory Project Number 40270186

SUMMARY

Limited validation (level III) was performed on the data for four groundwater samples, one field duplicate, and one field blank collected from sentinel wells at the Lemberger Landfill and Lemberger Transport and Recycling Site in Franklin, Wisconsin. The samples were collected on October 21 and 22, 2023. Samples were submitted to Pace Analytical Services, LLC in Green Bay, Wisconsin for analysis. The samples were analyzed for one or more of the following parameters:

- Total iron and manganese using SW-846 Method 6020B
- Chloride and sulfate using EPA Method 300.0
- Alkalinity using EPA Method 310.2
- Nitrogen/nitrate + nitrite using EPA Method 353.2
- Total organic carbon (TOC) using Standard Methods 5310C

The laboratory reported the results under laboratory project number 40270186.

The sample results were assessed using the *USEPA National Functional Guidelines for Inorganic Superfund Methods Data Review* (EPA-542-R-20-006), November 2020 and the project-specific quality assurance project plan (QAPP), dated October 2022, Revision 0.

In general, the data are valid as reported and may be used for decision-making purposes. The following issue was noted which may have a minor impact on the data usability:

- Select metals results were reported which were below the lowest calibration standard and quantitation limit (QL); these results were qualified by the laboratory as estimated (J).

SAMPLES

Samples included in this review are listed below.

- RM-002D
- RM-401XXD
- RM-003XXD
- FDUP-001[1]
- RM-210D
- FB-001

[1] Field duplicate of RM-401XXD

REVIEW ELEMENTS

Sample data were reviewed for the following parameters:

- Agreement of analyses conducted with chain-of-custody (COC) requests
- Data completeness
- Holding times and sample preservation
- Inductively coupled plasma-mass spectrometry (ICP-MS) tune results (Metals only)
- Initial and continuing calibrations
- Interference check sample (ICS) results (Metals only)
- Blanks
- Matrix spike/matrix spike duplicate (MS/MSD) results
- Laboratory control sample (LCS) results
- Internal standard performance (Metals only)
- Serial dilution results (Metals only)
- Laboratory duplicate results
- Field duplicate results
- Quantitation limits and sample results

DISCUSSION

Agreement of Analyses Conducted with Chain-of-Custody Requests

The sample report was checked to verify that the results corresponded to analytical requests as designated on the COC. No issues were noted.

Data Completeness

The data package was found to be complete as received from the laboratory with the following exception.

- The COC listed sample RM-401XXD as RM-401XD. The field team notified the laboratory about this issue and the laboratory logged the correct sample ID in the report; no validation action was required on this basis.

Holding Times and Sample Preservation

All holding time and sample preservation criteria were met.

Note that samples were received by the laboratory five to six days after collection. Samples were stored in coolers, on ice, in a locked former treatment building at the site until delivery to the laboratory. No validation actions were required on this basis since the samples were kept on ice prior to delivery to the laboratory and were received on ice by the laboratory.

ICP-MS Tune Results (Metals only)

The resolution of the mass calibration was within 0.1 atomic mass units (amu) over the range of 24 to 208 amu. The percent relative standard deviations (%RSDs) for all analytes in the tuning solution met the acceptance criteria of <5%.

Initial and Continuing Calibrations

Metals

Initial calibration correlation coefficients met criteria. The initial calibration verification (ICV) and continuing calibration verification (CCV) percent recoveries (%Rs) met the method acceptance limits. The low-level check standard %Rs were within 90-110%.

Chloride, Sulfate, Alkalinity, Nitrogen/Nitrate + Nitrite, TOC

Initial calibration correlation coefficients met criteria. The ICV and CCV %Rs met the method acceptance limits. The low-level check standard %Rs were within 90-110%.

ICS Results (Metals only)

The ICS analyses %Rs for iron and manganese were within the 80-120% acceptance criteria. The ICSA results were not evaluated since the interferent, iron, was not detected in the samples at concentrations comparable to the ICS solutions.

Blanks

Target analytes were not detected in the associated calibration blanks, field blank, and method blank.

MS/MSD Results

MS/MSD analyses were performed on the following samples for the indicated parameters:

- RM-003XXD* for metals, chloride, sulfate, alkalinity, nitrogen/nitrate + nitrite, and TOC
- RM-002D for chloride, sulfate
- RM-210D for TOC

*A post digestion spike was also performed on this sample for metals.

All criteria were met.

LCS Results

The LCS %Rs were within the laboratory acceptance criteria for metals, alkalinity, nitrogen/nitrate + nitrite, chloride, sulfate, and TOC analyses.

Internal Standard Performance (Metals only)

Internal standards were within the method acceptance criteria in all sample analyses.

Serial Dilution Results (Metals only)

Serial dilution analyses for the metals analyses were performed on sample RM-210D; all criteria were met.

Laboratory Duplicate Results

Laboratory duplicates were not performed on samples from this data set.

Field Duplicate Results

The samples listed below were submitted as the field duplicate pairs with this data set.

- RM-401XXD and FDUP-001

The relative percent difference (RPD) is not applicable for comparison of results if either concentration is <5x the QL; comparison in this case is based on the absolute difference (AbsD) between the results. The acceptance limits for field duplicates in aqueous media is ≤30% for the RPD and ≤QL for the AbsD. For analytes that are detected in one sample and nondetect in the other, the QL is used to represent the nondetect result in the AbsD calculation. The following table summarizes the detected results, the RPD or AbsD values (as applicable) for the detected analytes in the field duplicate pair, and the resulting validation actions. As shown in the table, criteria were met for all detected analytes.

Analyte	QL	RM-401XXD	FDUP-001	RPD (%) or AbsD	Validation Action
Manganese	4.0 µg/L	1.8 J µg/L	1.3 J µg/L	AbsD = 0.5 µg/L	None; all criteria were met
Chloride	2.0 mg/L	38.2 mg/L	38.3 mg/L	RPD = 0.3	
Sulfate	2.0 mg/L	21.7 mg/L	21.6 mg/L	RPD = 0.5	
Alkalinity	25.0 mg/L	299 mg/L	299 mg/L	RPD = 0.0	
Nitrogen/nitrate + nitrite	0.5 mg/L	10.3 mg/L	10.2 mg/L	RPD = 1.0	
TOC	0.50 mg/L	1.1 mg/L	0.97 mg/L	AbsD = 0.13 mg/L	

Quantitation Limits and Sample Results

The following table summarizes the dilutions performed on the samples in this data set; QLs were elevated accordingly by the laboratory.

Sample ID	Parameter	Dilution	Reason for Dilution
RM-003XXD	Nitrogen/nitrate + nitrite	2-fold	Dilutions were performed due to the concentrations of target which would have exceeded the calibration range if analyzed undiluted.
RM-401XXD			
FDUP-001			

Select metals results were reported which were below the lowest calibration standard level and QL (or limit of quantitation [LOQ]). These results were qualified as estimated (J) by the laboratory.

The laboratory's current LOD for alkalinity, chloride, sulfate, nitrogen/nitrate + nitrite, iron, manganese, and TOC were below the project action limits specified in the QAPP.

QUALIFIED FORM 1s

SAMPLE NO.

RM-003XXD

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40270186 Contract: 525156.0000 PH4

Lab Sample ID: 40270186002 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7439-89-6	Iron	<58.0	U	ug/L	1	11/01/2023 04:21
7439-96-5	Manganese	<1.2	U	ug/L	1	11/01/2023 04:21

SAMPLE NO.

RM-210D

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40270186 Contract: 525156.0000 PH4

Lab Sample ID: 40270186004 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7439-89-6	Iron	<58.0	U	ug/L	1	11/01/2023 04:51
7439-96-5	Manganese	2.4	J	ug/L	1	11/01/2023 04:51

SAMPLE NO.

RM-002D

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40270186 Contract: 525156.0000 PH4

Lab Sample ID: 40270186005 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7439-89-6	Iron	<58.0	U	ug/L	1	11/01/2023 05:05
7439-96-5	Manganese	8.4		ug/L	1	11/01/2023 05:05

SAMPLE NO.

RM-401XXD

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40270186 Contract: 525156.0000 PH4

Lab Sample ID: 40270186006 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7439-89-6	Iron	<58.0	U	ug/L	1	11/01/2023 05:13
7439-96-5	Manganese	1.8	J	ug/L	1	11/01/2023 05:13

SAMPLE NO.

FDUP-001

FORM I INORGANIC-1
INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40270186 Contract: 525156.0000 PH4
Lab Sample ID: 40270186007 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7439-89-6	Iron	<58.0	U	ug/L	1	11/01/2023 05:20
7439-96-5	Manganese	1.3	J	ug/L	1	11/01/2023 05:20

SAMPLE NO.

FB-001

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40270186 Contract: 525156.0000 PH4

Lab Sample ID: 40270186008 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7439-89-6	Iron	<58.0	U	ug/L	1	11/01/2023 04:14
7439-96-5	Manganese	<1.2	U	ug/L	1	11/01/2023 04:14

SAMPLE NO.

RM-003XXD

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40270186 Contract: 525156.0000 PH4

Lab Sample ID: 40270186002 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
16887-00-6	Chloride	27.6		mg/L	1	11/10/2023 05:05
14808-79-8	Sulfate	32.7		mg/L	1	11/10/2023 05:05

SAMPLE NO.

RM-210D

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40270186 Contract: 525156.0000 PH4

Lab Sample ID: 40270186004 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
16887-00-6	Chloride	17.7		mg/L	1	11/10/2023 06:32
14808-79-8	Sulfate	38.0		mg/L	1	11/10/2023 06:32

SAMPLE NO.

RM-002D

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40270186 Contract: 525156.0000 PH4

Lab Sample ID: 40270186005 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
16887-00-6	Chloride	13.6		mg/L	1	11/08/2023 12:28
14808-79-8	Sulfate	36.7		mg/L	1	11/08/2023 12:28

SAMPLE NO.

RM-401XXD

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40270186 Contract: 525156.0000 PH4

Lab Sample ID: 40270186006 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
16887-00-6	Chloride	38.2		mg/L	1	11/08/2023 13:12
14808-79-8	Sulfate	21.7		mg/L	1	11/08/2023 13:12

SAMPLE NO.

FDUP-001

FORM I INORGANIC-1
INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40270186 Contract: 525156.0000 PH4
Lab Sample ID: 40270186007 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
16887-00-6	Chloride	38.3		mg/L	1	11/08/2023 13:26
14808-79-8	Sulfate	21.6		mg/L	1	11/08/2023 13:26

SAMPLE NO.

FB-001

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40270186 Contract: 525156.0000 PH4

Lab Sample ID: 40270186008 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
16887-00-6	Chloride	<0.59	U	mg/L	1	11/08/2023 14:23
14808-79-8	Sulfate	<0.44	U	mg/L	1	11/08/2023 14:23

SAMPLE NO.

RM-003XXD

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40270186 Contract: 525156.0000 PH4

Lab Sample ID: 40270186002 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Alkalinity, Total as CaCO3	363		mg/L	1	10/31/2023 11:06
	Nitrogen, NO2 plus NO3	7.9		mg/L	2	11/03/2023 09:49
7440-44-0	Total Organic Carbon	1.3		mg/L	1	11/07/2023 10:07

SAMPLE NO.

RM-210D

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40270186 Contract: 525156.0000 PH4

Lab Sample ID: 40270186004 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Alkalinity, Total as CaCO3	350		mg/L	1	10/31/2023 11:09
	Nitrogen, NO2 plus NO3	4.2		mg/L	1	11/03/2023 09:52
7440-44-0	Total Organic Carbon	0.99		mg/L	1	11/07/2023 10:54

SAMPLE NO.

RM-002D

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40270186 Contract: 525156.0000 PH4

Lab Sample ID: 40270186005 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Alkalinity, Total as CaCO3	293		mg/L	1	10/31/2023 11:10
	Nitrogen, NO2 plus NO3	0.85		mg/L	1	11/03/2023 09:52
7440-44-0	Total Organic Carbon	1.5		mg/L	1	11/07/2023 11:39

SAMPLE NO.

RM-401XXD

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40270186 Contract: 525156.0000 PH4

Lab Sample ID: 40270186006 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Alkalinity, Total as CaCO3	299		mg/L	1	10/31/2023 11:14
	Nitrogen, NO2 plus NO3	10.3		mg/L	2	11/03/2023 09:53
7440-44-0	Total Organic Carbon	1.1		mg/L	1	11/07/2023 11:54

SAMPLE NO.

FDUP-001

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40270186 Contract: 525156.0000 PH4

Lab Sample ID: 40270186007 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Alkalinity, Total as CaCO3	299		mg/L	1	10/31/2023 11:15
	Nitrogen, NO2 plus NO3	10.2		mg/L	2	11/03/2023 09:56
7440-44-0	Total Organic Carbon	0.97		mg/L	1	11/07/2023 12:29

SAMPLE NO.

FB-001

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40270186 Contract: 525156.0000 PH4

Lab Sample ID: 40270186008 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Alkalinity, Total as CaCO3	<7.4	U	mg/L	1	10/31/2023 11:16
	Nitrogen, NO2 plus NO3	<0.059	U	mg/L	1	11/03/2023 09:57
7440-44-0	Total Organic Carbon	<0.19	U	mg/L	1	11/07/2023 12:43

Memorandum

To: Meredith Westover

From: David DiGena-Segal (Data Reviewer)
Elizabeth Denly (Peer Reviewer)

Date: February 27, 2024

Subject: Data Validation Report
VOC Groundwater Samples/Sentinel Wells: 3rd Quarter 2023
Lemberger Landfill and Lemberger Transport and Recycling/Franklin, Wisconsin
Laboratory Project Number 40270186

SUMMARY

Full validation (level IV) was performed on the data for six groundwater samples, one field duplicate, one trip blank, and one field blank collected from sentinel wells at the Lemberger Landfill and Lemberger Transport and Recycling Site in Franklin, Wisconsin. The samples were collected on October 21 and 22, 2023. Samples were submitted to Pace Analytical Services, LLC in Green Bay, Wisconsin for analysis. The samples were analyzed for volatile organic compounds (VOCs) using SW-846 Method 8260D. The laboratory reported the results under laboratory project number 40270186.

The sample results were assessed using the *USEPA National Functional Guidelines for Organic Superfund Methods Data Review (EPA-540-R-20-005),* November 2020 and the project-specific quality assurance project plan (QAPP), dated October 2022, Revision 0.

In general, the data are valid as reported and may be used for decision-making purposes. The following issues were noted which have a minor impact on the data usability:

- Select results were reported which were below the lowest calibration standard and quantitation limit (QL); these results were qualified as estimated (J).
- Sample FB-001 had minor headspace in the vial used for analysis; all results in this sample were qualified as estimated with a potential low bias (J-/UJ). It should be noted that the positive result for toluene in sample FB-001 were also qualified as estimated (J) due to detection below the QL; the overall qualification for toluene in sample FB-001 was J.

SAMPLES

Samples included in this review are listed below.

- RM-002D
- RM-210D
- FDUP-001[1]
- RM-003D
- RM-401XXD
- FB-001
- RM-003XXD
- RM-403XD
- TB-001

[1] Field duplicate of RM-401XXD

REVIEW ELEMENTS

Sample data were reviewed for the following parameters:

- Agreement of analyses conducted with chain-of-custody (COC) requests
- Data completeness
- Holding times and sample preservation
- Gas chromatography/mass spectrometry (GC/MS) tunes
- Initial and continuing calibrations
- Blanks
- Surrogate spike recoveries
- Matrix spike/matrix spike duplicate (MS/MSD) results
- Laboratory control sample (LCS) results
- Internal standard performance
- Field duplicate results
- Quantitation limits (QLs) and sample results
- Target compound identification

DISCUSSION

Agreement of Analyses Conducted with Chain-of-Custody Requests

Sample reports were checked to verify that the results corresponded to analytical requests as designated on the COC. No issues were noted.

Data Completeness

The data package was found to be complete as received from the laboratory with the following exceptions.

- The laboratory only spiked a subset of the VOCs which were reported in the samples in the LCS and MS/MSDs. Thus, accuracy and/or precision could not be evaluated for select VOCs. No validation actions were taken on the basis of this issue.

- The COC listed sample RM-401XXD as RM-401XD. The field team notified the laboratory about this issue and the laboratory logged the correct sample ID in the report; no validation action was required on this basis.

Holding Times and Sample Preservation

All holding time and sample preservation criteria were met with the following exception: sample FB-001 had headspace observed upon receipt by the laboratory. The positive and nondetect results for all VOCs in sample FB-001 were qualified as estimated (J-/UJ) with a potential low bias due to the headspace. It should be noted that the positive result for toluene in sample FB-001 was also qualified as estimated (J) due to detection below the QL; the overall qualification for toluene was J in sample FB-001

Note that samples were received by the laboratory five to six days after collection. Samples were stored in coolers, on ice, in a locked former treatment building at the site until delivery to the laboratory. No validation actions were required on this basis since the samples were kept on ice prior to delivery to the laboratory and were received on ice by the laboratory.

GC/MS Tunes

The frequency and abundance of all bromofluorobenzene tunes were within the acceptance criteria.

Initial and Continuing Calibrations

The percent relative standard deviations and relative response factors (RRFs) were within the laboratory acceptance criteria in the initial calibration.

All RRFs and percent differences were within the acceptance criteria in the initial calibration verification (ICV); the ICV was used as continuing calibration standard since samples were analyzed directly after the initial calibration.

Blanks

A method blank was analyzed each day prior to sample analysis. Target analytes were not detected in the trip blank or method blanks. The following table summarizes the compound that was detected in the field blank and the resulting validation actions.

Blank ID	Compound	Blank Concentration (µg/L)	2x Blank Concentration (µg/L)	QL (µg/L)	Validation Action
FB-001	Toluene	0.57 J	1.14	1.0	Qualification was not required since toluene was nondetect in the associated samples.
Associated samples: All samples in this data set					

Surrogate Spike Recoveries

The percent recoveries (%Rs) of the surrogates were within the laboratory acceptance criteria for all samples.

MS/MSD Results

MS/MSD analyses were performed on sample RM-003XXD. All criteria were met.

Note that the laboratory only spiked a subset of the VOCs which were reported in the samples in the MS/MSD; thus, accuracy and precision could not be evaluated for the following VOCs (which were not spiked) in the MS/MSD analyses: acetone, 2-butanone, 2-hexanone, and 4-methyl-2-pentanone. No validation action was taken on this basis.

LCS Results

An LCS was performed on each day of analysis. All criteria were met.

Note that the laboratory only spiked a subset of the VOCs that were reported in the samples in the LCS. Thus, accuracy could not be evaluated for the following VOCs (which were not spiked) in the LCS analysis: acetone, 2-butanone, 2-hexanone, and 4-methyl-2-pentanone. No validation action was taken on this basis.

Internal Standard Performance

Internal standards were within the method acceptance criteria in all sample analyses.

Field Duplicate Results

The following samples were submitted as the field duplicate pair with this data set:

- RM-401XXD and FDUP-001

The relative percent difference (RPD) is not applicable for comparison of results if either concentration is <5x the QL; comparison in this case is based on the absolute difference (AbsD) between the results. The acceptance limits for field duplicates in aqueous media is ≤30% for the RPD and ≤QL for the AbsD. For analytes that are detected in one sample and nondetect in the other, the QL is used to represent the nondetect result in the AbsD calculation. The following table summarizes the detected results, the RPD or AbsD values (as applicable) for the detected analytes in the field duplicate pair, and the resulting validation actions. As shown in the table, criteria were met for all detected analytes.

Analyte	QL (µg/L)	RM-401XXD (µg/L)	FDUP-001 (µg/L)	RPD (%) or AbsD (µg/L)	Validation Actions
1,1-Dichloroethane	1.0	6.7	6.8	RPD: 1.5	None. All criteria were met.
1,1-Dichloroethene	1.0	3.3	3.1	AbsD: 0.2	
cis-1,2-Dichloroethene	1.0	8.3	8.9	RPD: 7.0	
1,1,1-Trichloroethane	1.0	4.9	5.3	AbsD: 0.4	
Trichloroethene	1.0	1.2	1.3	AbsD: 0.1	
Criteria: RPD ≤ 30%; AbsD ≤ QL					

Quantitation Limits and Sample Results

Sample calculations were spot-checked; there were no errors noted. No dilutions were performed in the VOC analyses of these samples.

Select results were reported which were below the lowest calibration standard level and QL (or limit of quantitation [LOQ]). These results were qualified as estimated (J) by the laboratory.

The laboratory's limit of detection (LOD) for select VOCs was above one or both of the project action limits specified in the QAPP; the affected VOCs, project action limits, and current laboratory LODs are summarized in the table below.

Analyte	Affected Samples	WAC Chapter NR 140 PAL (µg/L)	WAC Chapter NR 140 ES (µg/L)	Laboratory LOD (µg/L)
1,1,2,2-Tetrachloroethane	All samples in this data set	0.02	0.2	0.38
Bromodichloromethane		0.06	0.6*	0.42
Bromomethane		1	10*	1.2
cis-1,3-Dichloropropene		0.04	0.4*	0.24
trans-1,3-Dichloropropene		0.04	0.4*	0.27
Vinyl chloride		0.02	0.2*	0.17
* Laboratory LOD is below the action limit.				

Target Compound Identification

All criteria were met.

QUALIFIED FORM 1s

SAMPLE NO.

RM-003D

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay
Contract: 525156.0000 PH4 LEMBERGER LF-S
Date Received: 10/27/2023 06:32
Matrix: Water SDG No.: 40270186
Date Extracted: 11/03/2023 01:02
Lab Sample ID: 40270186001
Date Analyzed: 11/03/2023 01:02
Lab File ID: 11022023D.B\11022351.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 40MSVB Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<8.6	U
71-43-2	Benzene	<0.30	U
75-27-4	Bromodichloromethane	<0.42	U
75-25-2	Bromoform	<0.43	U
74-83-9	Bromomethane	<1.2	U
78-93-3	2-Butanone (MEK)	<6.5	U
75-15-0	Carbon disulfide	<0.65	U
56-23-5	Carbon tetrachloride	<0.37	U
108-90-7	Chlorobenzene	<0.86	U
75-00-3	Chloroethane	<1.4	U
67-66-3	Chloroform	<0.50	U
74-87-3	Chloromethane	<1.6	U
124-48-1	Dibromochloromethane	<2.6	U
75-34-3	1,1-Dichloroethane	12.2	
107-06-2	1,2-Dichloroethane	<0.29	U
75-35-4	1,1-Dichloroethene	1.9	
156-59-2	cis-1,2-Dichloroethene	4.3	
156-60-5	trans-1,2-Dichloroethene	<0.53	U
78-87-5	1,2-Dichloropropane	<0.45	U
10061-01-5	cis-1,3-Dichloropropene	<0.24	U
10061-02-6	trans-1,3-Dichloropropene	<0.27	U
100-41-4	Ethylbenzene	<0.33	U
591-78-6	2-Hexanone	<6.3	U
75-09-2	Methylene Chloride	<0.32	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<6.0	U
100-42-5	Styrene	<0.36	U
79-34-5	1,1,2,2-Tetrachloroethane	<0.38	U
127-18-4	Tetrachloroethene	<0.41	U
108-88-3	Toluene	<0.29	U
71-55-6	1,1,1-Trichloroethane	17.3	
79-00-5	1,1,2-Trichloroethane	<0.34	U
79-01-6	Trichloroethene	3.0	
75-01-4	Vinyl chloride	<0.17	U
1330-20-7	Xylene (Total)	<1.0	U

SAMPLE NO.

RM-003XXD

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay
Contract: 525156.0000 PH4 LEMBERGER LF-S
Date Received: 10/27/2023 06:32
Matrix: Water SDG No.: 40270186
Date Extracted: 11/03/2023 01:22
Lab Sample ID: 40270186002
Date Analyzed: 11/03/2023 01:22
Lab File ID: 11022023D.B\11022352.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 40MSVB Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<8.6	U
71-43-2	Benzene	<0.30	U
75-27-4	Bromodichloromethane	<0.42	U
75-25-2	Bromoform	<0.43	U
74-83-9	Bromomethane	<1.2	U
78-93-3	2-Butanone (MEK)	<6.5	U
75-15-0	Carbon disulfide	<0.65	U
56-23-5	Carbon tetrachloride	<0.37	U
108-90-7	Chlorobenzene	<0.86	U
75-00-3	Chloroethane	<1.4	U
67-66-3	Chloroform	<0.50	U
74-87-3	Chloromethane	<1.6	U
124-48-1	Dibromochloromethane	<2.6	U
75-34-3	1,1-Dichloroethane	8.0	
107-06-2	1,2-Dichloroethane	<0.29	U
75-35-4	1,1-Dichloroethene	1.5	
156-59-2	cis-1,2-Dichloroethene	2.9	
156-60-5	trans-1,2-Dichloroethene	<0.53	U
78-87-5	1,2-Dichloropropane	<0.45	U
10061-01-5	cis-1,3-Dichloropropene	<0.24	U
10061-02-6	trans-1,3-Dichloropropene	<0.27	U
100-41-4	Ethylbenzene	<0.33	U
591-78-6	2-Hexanone	<6.3	U
75-09-2	Methylene Chloride	<0.32	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<6.0	U
100-42-5	Styrene	<0.36	U
79-34-5	1,1,2,2-Tetrachloroethane	<0.38	U
127-18-4	Tetrachloroethene	<0.41	U
108-88-3	Toluene	<0.29	U
71-55-6	1,1,1-Trichloroethane	9.6	
79-00-5	1,1,2-Trichloroethane	<0.34	U
79-01-6	Trichloroethene	3.0	
75-01-4	Vinyl chloride	<0.17	U
1330-20-7	Xylene (Total)	<1.0	U

SAMPLE NO.

RM-403XD

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay
Contract: 525156.0000 PH4 LEMBERGER LF-S
Date Received: 10/27/2023 06:32
Matrix: Water SDG No.: 40270186
Date Extracted: 11/03/2023 02:24
Lab Sample ID: 40270186003
Date Analyzed: 11/03/2023 02:24
Lab File ID: 11022023D.B\11022355.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 40MSVB Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<8.6	U
71-43-2	Benzene	<0.30	U
75-27-4	Bromodichloromethane	<0.42	U
75-25-2	Bromoform	<0.43	U
74-83-9	Bromomethane	<1.2	U
78-93-3	2-Butanone (MEK)	<6.5	U
75-15-0	Carbon disulfide	<0.65	U
56-23-5	Carbon tetrachloride	<0.37	U
108-90-7	Chlorobenzene	<0.86	U
75-00-3	Chloroethane	<1.4	U
67-66-3	Chloroform	<0.50	U
74-87-3	Chloromethane	<1.6	U
124-48-1	Dibromochloromethane	<2.6	U
75-34-3	1,1-Dichloroethane	60.9	
107-06-2	1,2-Dichloroethane	<0.29	U
75-35-4	1,1-Dichloroethene	7.8	
156-59-2	cis-1,2-Dichloroethene	17.1	
156-60-5	trans-1,2-Dichloroethene	<0.53	U
78-87-5	1,2-Dichloropropane	<0.45	U
10061-01-5	cis-1,3-Dichloropropene	<0.24	U
10061-02-6	trans-1,3-Dichloropropene	<0.27	U
100-41-4	Ethylbenzene	<0.33	U
591-78-6	2-Hexanone	<6.3	U
75-09-2	Methylene Chloride	<0.32	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<6.0	U
100-42-5	Styrene	<0.36	U
79-34-5	1,1,2,2-Tetrachloroethane	<0.38	U
127-18-4	Tetrachloroethene	1.1	
108-88-3	Toluene	<0.29	U
71-55-6	1,1,1-Trichloroethane	84.4	
79-00-5	1,1,2-Trichloroethane	<0.34	U
79-01-6	Trichloroethene	12.4	
75-01-4	Vinyl chloride	<0.17	U
1330-20-7	Xylene (Total)	<1.0	U

SAMPLE NO.

RM-210D

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay
Contract: 525156.0000 PH4 LEMBERGER LF-S
Date Received: 10/27/2023 06:32
Matrix: Water SDG No.: 40270186
Date Extracted: 11/02/2023 22:36
Lab Sample ID: 40270186004
Date Analyzed: 11/02/2023 22:36
Lab File ID: 11022023D.B\11022344.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 40MSVB Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<8.6	U
71-43-2	Benzene	<0.30	U
75-27-4	Bromodichloromethane	<0.42	U
75-25-2	Bromoform	<0.43	U
74-83-9	Bromomethane	<1.2	U
78-93-3	2-Butanone (MEK)	<6.5	U
75-15-0	Carbon disulfide	<0.65	U
56-23-5	Carbon tetrachloride	<0.37	U
108-90-7	Chlorobenzene	<0.86	U
75-00-3	Chloroethane	<1.4	U
67-66-3	Chloroform	<0.50	U
74-87-3	Chloromethane	<1.6	U
124-48-1	Dibromochloromethane	<2.6	U
75-34-3	1,1-Dichloroethane	3.1	
107-06-2	1,2-Dichloroethane	<0.29	U
75-35-4	1,1-Dichloroethene	0.67	J
156-59-2	cis-1,2-Dichloroethene	1.7	
156-60-5	trans-1,2-Dichloroethene	<0.53	U
78-87-5	1,2-Dichloropropane	<0.45	U
10061-01-5	cis-1,3-Dichloropropene	<0.24	U
10061-02-6	trans-1,3-Dichloropropene	<0.27	U
100-41-4	Ethylbenzene	<0.33	U
591-78-6	2-Hexanone	<6.3	U
75-09-2	Methylene Chloride	<0.32	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<6.0	U
100-42-5	Styrene	<0.36	U
79-34-5	1,1,2,2-Tetrachloroethane	<0.38	U
127-18-4	Tetrachloroethene	<0.41	U
108-88-3	Toluene	<0.29	U
71-55-6	1,1,1-Trichloroethane	3.8	
79-00-5	1,1,2-Trichloroethane	<0.34	U
79-01-6	Trichloroethene	1.1	
75-01-4	Vinyl chloride	<0.17	U
1330-20-7	Xylene (Total)	<1.0	U

SAMPLE NO.

RM-002D

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay
Contract: 525156.0000 PH4 LEMBERGER LF-S
Date Received: 10/27/2023 06:32
Matrix: Water SDG No.: 40270186
Date Extracted: 11/02/2023 22:57
Lab Sample ID: 40270186005
Date Analyzed: 11/02/2023 22:57
Lab File ID: 11022023D.B\11022345.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 40MSVB Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<8.6	U
71-43-2	Benzene	<0.30	U
75-27-4	Bromodichloromethane	<0.42	U
75-25-2	Bromoform	<0.43	U
74-83-9	Bromomethane	<1.2	U
78-93-3	2-Butanone (MEK)	<6.5	U
75-15-0	Carbon disulfide	<0.65	U
56-23-5	Carbon tetrachloride	<0.37	U
108-90-7	Chlorobenzene	<0.86	U
75-00-3	Chloroethane	<1.4	U
67-66-3	Chloroform	<0.50	U
74-87-3	Chloromethane	<1.6	U
124-48-1	Dibromochloromethane	<2.6	U
75-34-3	1,1-Dichloroethane	3.1	
107-06-2	1,2-Dichloroethane	<0.29	U
75-35-4	1,1-Dichloroethene	0.69	J
156-59-2	cis-1,2-Dichloroethene	0.90	J
156-60-5	trans-1,2-Dichloroethene	<0.53	U
78-87-5	1,2-Dichloropropane	<0.45	U
10061-01-5	cis-1,3-Dichloropropene	<0.24	U
10061-02-6	trans-1,3-Dichloropropene	<0.27	U
100-41-4	Ethylbenzene	<0.33	U
591-78-6	2-Hexanone	<6.3	U
75-09-2	Methylene Chloride	<0.32	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<6.0	U
100-42-5	Styrene	<0.36	U
79-34-5	1,1,2,2-Tetrachloroethane	<0.38	U
127-18-4	Tetrachloroethene	<0.41	U
108-88-3	Toluene	<0.29	U
71-55-6	1,1,1-Trichloroethane	3.3	
79-00-5	1,1,2-Trichloroethane	<0.34	U
79-01-6	Trichloroethene	0.99	J
75-01-4	Vinyl chloride	<0.17	U
1330-20-7	Xylene (Total)	<1.0	U

SAMPLE NO.

RM-401XXD

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay
Contract: 525156.0000 PH4 LEMBERGER LF-S
Date Received: 10/27/2023 06:32
Matrix: Water SDG No.: 40270186
Date Extracted: 11/03/2023 01:43
Lab Sample ID: 40270186006
Date Analyzed: 11/03/2023 01:43
Lab File ID: 11022023D.B\11022353.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 40MSVB Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<8.6	U
71-43-2	Benzene	<0.30	U
75-27-4	Bromodichloromethane	<0.42	U
75-25-2	Bromoform	<0.43	U
74-83-9	Bromomethane	<1.2	U
78-93-3	2-Butanone (MEK)	<6.5	U
75-15-0	Carbon disulfide	<0.65	U
56-23-5	Carbon tetrachloride	<0.37	U
108-90-7	Chlorobenzene	<0.86	U
75-00-3	Chloroethane	<1.4	U
67-66-3	Chloroform	<0.50	U
74-87-3	Chloromethane	<1.6	U
124-48-1	Dibromochloromethane	<2.6	U
75-34-3	1,1-Dichloroethane	6.7	
107-06-2	1,2-Dichloroethane	<0.29	U
75-35-4	1,1-Dichloroethene	3.3	
156-59-2	cis-1,2-Dichloroethene	8.3	
156-60-5	trans-1,2-Dichloroethene	<0.53	U
78-87-5	1,2-Dichloropropane	<0.45	U
10061-01-5	cis-1,3-Dichloropropene	<0.24	U
10061-02-6	trans-1,3-Dichloropropene	<0.27	U
100-41-4	Ethylbenzene	<0.33	U
591-78-6	2-Hexanone	<6.3	U
75-09-2	Methylene Chloride	<0.32	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<6.0	U
100-42-5	Styrene	<0.36	U
79-34-5	1,1,2,2-Tetrachloroethane	<0.38	U
127-18-4	Tetrachloroethene	<0.41	U
108-88-3	Toluene	<0.29	U
71-55-6	1,1,1-Trichloroethane	4.9	
79-00-5	1,1,2-Trichloroethane	<0.34	U
79-01-6	Trichloroethene	1.2	
75-01-4	Vinyl chloride	<0.17	U
1330-20-7	Xylene (Total)	<1.0	U

SAMPLE NO.

FDUP-001

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay
Contract: 525156.0000 PH4 LEMBERGER LF-S
Date Received: 10/27/2023 06:32
Matrix: Water SDG No.: 40270186
Date Extracted: 11/03/2023 02:04
Lab Sample ID: 40270186007
Date Analyzed: 11/03/2023 02:04
Lab File ID: 11022023D.B\11022354.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 40MSVB Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<8.6	U
71-43-2	Benzene	<0.30	U
75-27-4	Bromodichloromethane	<0.42	U
75-25-2	Bromoform	<0.43	U
74-83-9	Bromomethane	<1.2	U
78-93-3	2-Butanone (MEK)	<6.5	U
75-15-0	Carbon disulfide	<0.65	U
56-23-5	Carbon tetrachloride	<0.37	U
108-90-7	Chlorobenzene	<0.86	U
75-00-3	Chloroethane	<1.4	U
67-66-3	Chloroform	<0.50	U
74-87-3	Chloromethane	<1.6	U
124-48-1	Dibromochloromethane	<2.6	U
75-34-3	1,1-Dichloroethane	6.8	
107-06-2	1,2-Dichloroethane	<0.29	U
75-35-4	1,1-Dichloroethene	3.1	
156-59-2	cis-1,2-Dichloroethene	8.9	
156-60-5	trans-1,2-Dichloroethene	<0.53	U
78-87-5	1,2-Dichloropropane	<0.45	U
10061-01-5	cis-1,3-Dichloropropene	<0.24	U
10061-02-6	trans-1,3-Dichloropropene	<0.27	U
100-41-4	Ethylbenzene	<0.33	U
591-78-6	2-Hexanone	<6.3	U
75-09-2	Methylene Chloride	<0.32	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<6.0	U
100-42-5	Styrene	<0.36	U
79-34-5	1,1,2,2-Tetrachloroethane	<0.38	U
127-18-4	Tetrachloroethene	<0.41	U
108-88-3	Toluene	<0.29	U
71-55-6	1,1,1-Trichloroethane	5.3	
79-00-5	1,1,2-Trichloroethane	<0.34	U
79-01-6	Trichloroethene	1.3	
75-01-4	Vinyl chloride	<0.17	U
1330-20-7	Xylene (Total)	<1.0	U

SAMPLE NO.

FB-001

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay
Contract: 525156.0000 PH4 LEMBERGER LF-S
Date Received: 10/27/2023 06:32
Matrix: Water SDG No.: 40270186
Date Extracted: 11/02/2023 20:32
Lab Sample ID: 40270186008
Date Analyzed: 11/02/2023 20:32
Lab File ID: 11022023D.B\11022338.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 40MSVB Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<8.6	~~U~~ UJ
71-43-2	Benzene	<0.30	~~U~~
75-27-4	Bromodichloromethane	<0.42	~~U~~
75-25-2	Bromoform	<0.43	~~U~~
74-83-9	Bromomethane	<1.2	~~U~~
78-93-3	2-Butanone (MEK)	<6.5	~~U~~
75-15-0	Carbon disulfide	<0.65	~~U~~
56-23-5	Carbon tetrachloride	<0.37	~~U~~
108-90-7	Chlorobenzene	<0.86	~~U~~
75-00-3	Chloroethane	<1.4	~~U~~
67-66-3	Chloroform	<0.50	~~U~~
74-87-3	Chloromethane	<1.6	~~U~~
124-48-1	Dibromochloromethane	<2.6	~~U~~
75-34-3	1,1-Dichloroethane	<0.30	~~U~~
107-06-2	1,2-Dichloroethane	<0.29	~~U~~
75-35-4	1,1-Dichloroethene	<0.58	~~U~~
156-59-2	cis-1,2-Dichloroethene	<0.47	~~U~~
156-60-5	trans-1,2-Dichloroethene	<0.53	~~U~~
78-87-5	1,2-Dichloropropane	<0.45	~~U~~
10061-01-5	cis-1,3-Dichloropropene	<0.24	~~U~~
10061-02-6	trans-1,3-Dichloropropene	<0.27	~~U~~
100-41-4	Ethylbenzene	<0.33	~~U~~
591-78-6	2-Hexanone	<6.3	~~U~~
75-09-2	Methylene Chloride	<0.32	~~U~~
108-10-1	4-Methyl-2-pentanone (MIBK)	<6.0	~~U~~
100-42-5	Styrene	<0.36	~~U~~
79-34-5	1,1,2,2-Tetrachloroethane	<0.38	~~U~~
127-18-4	Tetrachloroethene	<0.41	~~U~~
108-88-3	Toluene	0.57	~~J~~ J
71-55-6	1,1,1-Trichloroethane	<0.30	~~U~~ UJ
79-00-5	1,1,2-Trichloroethane	<0.34	~~U~~
79-01-6	Trichloroethene	<0.32	~~U~~
75-01-4	Vinyl chloride	<0.17	~~U~~
1330-20-7	Xylene (Total)	<1.0	~~U~~

SAMPLE NO.

TB-001

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay
Contract: 525156.0000 PH4 LEMBERGER LF-S
Date Received: 10/27/2023 06:32
Matrix: Water SDG No.: 40270186
Date Extracted: 11/02/2023 20:53
Lab Sample ID: 40270186009
Date Analyzed: 11/02/2023 20:53
Lab File ID: 11022023D.B\11022339.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 40MSVB Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<8.6	U
71-43-2	Benzene	<0.30	U
75-27-4	Bromodichloromethane	<0.42	U
75-25-2	Bromoform	<0.43	U
74-83-9	Bromomethane	<1.2	U
78-93-3	2-Butanone (MEK)	<6.5	U
75-15-0	Carbon disulfide	<0.65	U
56-23-5	Carbon tetrachloride	<0.37	U
108-90-7	Chlorobenzene	<0.86	U
75-00-3	Chloroethane	<1.4	U
67-66-3	Chloroform	<0.50	U
74-87-3	Chloromethane	<1.6	U
124-48-1	Dibromochloromethane	<2.6	U
75-34-3	1,1-Dichloroethane	<0.30	U
107-06-2	1,2-Dichloroethane	<0.29	U
75-35-4	1,1-Dichloroethene	<0.58	U
156-59-2	cis-1,2-Dichloroethene	<0.47	U
156-60-5	trans-1,2-Dichloroethene	<0.53	U
78-87-5	1,2-Dichloropropane	<0.45	U
10061-01-5	cis-1,3-Dichloropropene	<0.24	U
10061-02-6	trans-1,3-Dichloropropene	<0.27	U
100-41-4	Ethylbenzene	<0.33	U
591-78-6	2-Hexanone	<6.3	U
75-09-2	Methylene Chloride	<0.32	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<6.0	U
100-42-5	Styrene	<0.36	U
79-34-5	1,1,2,2-Tetrachloroethane	<0.38	U
127-18-4	Tetrachloroethene	<0.41	U
108-88-3	Toluene	<0.29	U
71-55-6	1,1,1-Trichloroethane	<0.30	U
79-00-5	1,1,2-Trichloroethane	<0.34	U
79-01-6	Trichloroethene	<0.32	U
75-01-4	Vinyl chloride	<0.17	U
1330-20-7	Xylene (Total)	<1.0	U

Attachment 2

Table of Wisconsin Administrative Code Chapter NR 140 Groundwater Quality Standards (Enforcement Standards [ESs], Preventive Action Limits [PALs], Maximum Contaminant Levels [MCLs], and Secondary Maximum Contaminant Levels [SMCLs]) for the Pertinent Parameters

Attachment 2
Groundwater Quality Standards

Parameter Name	Units	MCL	SMCL	NR PAL	NR ES
1,1,1,2-Tetrachloroethane	µg/L			7	70
1,1,1-Trichloroethane	µg/L	200		40	200
1,1,2-Trichloroethane	µg/L	5		0.5	5
1,1-Dichloroethane	µg/L			85	850
1,1-Dichloroethene	µg/L	7		0.7	7
1,2,3-Trichloropropane	µg/L			12	60
1,2,4-Trichlorobenzene	µg/L	70		14	70
1,2-Dichlorobenzene	µg/L	600		60	600
1,2-Dichloroethane	µg/L	5		0.5	5
1,2-Dichloropropane	µg/L	5		0.5	5
1,4-Dichlorobenzene	µg/L	75		15	75
2,3,7,8-TCDD	ng/L	0.03		0.003	0.03
Alpha-chlordane	µg/L	2		0.2	2
Anthracene	µg/L			600	3000
Antimony, dissolved	µg/L	6		1.2	6
Antimony, total	µg/L	6		1.2	6
Aroclor-1016	µg/L	0.5		0.003	0.03
Aroclor-1221	µg/L	0.5		0.003	0.03
Aroclor-1232	µg/L	0.5		0.003	0.03
Aroclor-1242	µg/L	0.5		0.003	0.03
Aroclor-1248	µg/L	0.5		0.003	0.03
Aroclor-1254	µg/L	0.5		0.003	0.03
Aroclor-1260	µg/L	0.5		0.003	0.03
Arsenic, dissolved	µg/L	10		1	10
Arsenic, total	µg/L	10		1	10
Barium, dissolved	µg/L	2000		400	2000
Barium, total	µg/L	2000		400	2000
Bentazon	µg/L			60	300
Benzene	µg/L	5		0.5	5
Benzo(a)pyrene	µg/L	0.2		0.02	0.2
Benzo(b)fluoranthene	µg/L			0.02	0.2
Beryllium, dissolved	µg/L	4		0.4	4
Beryllium, total	µg/L	4		0.4	4
bis(2-ethylhexyl)Phthalate	µg/L	6		0.6	6
Cadmium, dissolved	µg/L	5		0.5	5
Cadmium, total	µg/L	5		0.5	5

Attachment 2 (continued)
Groundwater Quality Standards

Parameter Name	Units	MCL	SMCL	NR PAL	NR ES
Carbon disulfide	µg/L			200	1000
Carbon tetrachloride	µg/L	5		0.5	5
Chlordane, technical	µg/L	2		0.2	2
Chloride	mg/L		250	125	250
Chlorobenzene	µg/L	100		20	100
Chromium, dissolved	µg/L	100		10	100
Chromium, total	µg/L	100		10	100
Chrysene	µg/L			0.02	0.2
cis-1,2-Dichloroethene	µg/L	70		7	70
Cobalt, dissolved	µg/L			8	40
Cobalt, total	µg/L			8	40
Copper, dissolved	µg/L	1300	1000	130	1300
Copper, total	µg/L	1300	1000	130	1300
Cyanazine	µg/L			0.1	1
Cyanide, total	mg/L	0.2		0.04	0.2
Di-n-butylphthalate	µg/L			100	1000
Endrin	µg/L	2		0.4	2
Ethylbenzene	µg/L	700		140	700
Fluoranthene	µg/L			80	400
Gamma-BHC (lindane)	µg/L	0.2		0.02	0.2
Gamma-chlordane	µg/L	2		0.2	2
Heptachlor	µg/L	0.4		0.04	0.4
Heptachlor epoxide	µg/L	0.2		0.02	0.2
Hexachlorobenzene	µg/L	1		0.1	1
Hydrogen sulfide	µg/L			6	30
Iron, dissolved	µg/L		300	150	300
Iron, total	µg/L		300	150	300
Lead, dissolved	µg/L	15		1.5	15
Lead, total	µg/L	15		1.5	15
Manganese, dissolved	µg/L		50	60	300
Manganese, total	µg/L		50	60	300
Mercury, dissolved	µg/L	2		0.2	2
Mercury, total	µg/L	2		0.2	2
Methanol	µg/L			1000	5000
Methoxychlor	µg/L	40		4	40
Methylene chloride	µg/L	5		0.5	5

Attachment 2 (continued)
Groundwater Quality Standards

Parameter Name	Units	MCL	SMCL	NR PAL	NR ES
N-hexane	µg/L			120	600
Nickel, dissolved	µg/L			20	100
Nickel, total	µg/L			20	100
Nitrogen, ammonia	mg/L			0.97	9.7
N-nitrosodiphenylamine	µg/L			0.7	7
Pentachlorophenol	µg/L	1		0.1	1
Prometon	µg/L			20	100
Pyrene	µg/L			50	250
Pyridine	µg/L			2	10
Selenium, dissolved	µg/L	50		10	50
Selenium, total	µg/L	50		10	50
Silver, dissolved	µg/L		100	10	50
Silver, total	µg/L		100	10	50
Styrene	µg/L	100		10	100
Tetrachloroethene	µg/L	5		0.5	5
Thallium, dissolved	µg/L	2		0.4	2
Thallium, total	µg/L	2		0.4	2
Toluene	µg/L	1000		160	800
Toxaphene	µg/L	3		0.3	3
trans-1,2-Dichloroethene	µg/L	100		20	100
Trichloroethene	µg/L	5		0.5	5
Trimethylbenzenes, total	µg/L			96	480
Vanadium, dissolved	µg/L			6	30
Vanadium, total	µg/L			6	30
Vinyl chloride	µg/L	2		0.02	0.2
Xylenes, total	µg/L	10000		400	2000
Zinc, dissolved	µg/L		5000	2500	5000
Zinc, total	µg/L		5000	2500	5000

Note:
Table updated June 2022 to reflect June 2021 register #786 (WDNR) and latest USEPA MCLs.
(1) MCL, ES, and PAL apply to total PCBs.

Attachment 3

Tabular Summary of Analytical Results at Each Residential Well

LEMBERGER LANDFILL
RESIDENTIAL WELL VOLATILE ORGANIC ANALYSIS RESULTS
OCTOBER 2023

PARAMETER	UNITS	GR-08 10/23/2023 40270156008	GR-09 10/23/2023 40270156006	GR-09 DUP 10/23/2023 40270156007	GR-10 10/23/2023 40270156009	GR-11 10/23/2023 40270156010	GR-12 10/23/2023 40270156005	GR-14 10/24/2023 40270156018	GR-16 10/24/2023 40270156017	GR-26 10/23/2023 40270156002
1,1,1-TRICHLOROETHANE	UG/L	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30
1,1,2,2-TETRACHLOROETHANE	UG/L	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38
1,1,2-TRICHLOROETHANE	UG/L	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34
1,1-DICHLOROETHANE	UG/L	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30
1,1-DICHLOROETHENE	UG/L	< 0.58	< 0.58	< 0.58	< 0.58	< 0.58	< 0.58	< 0.58	< 0.58	< 0.58
1,2-DICHLOROETHANE	UG/L	< 0.29	< 0.29	< 0.29	< 0.29	< 0.29	< 0.29	< 0.29	< 0.29	< 0.29
1,2-DICHLOROPROPANE	UG/L	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45
2-BUTANONE	UG/L	< 6.5	< 6.5	< 6.5	< 6.5	< 6.5	< 6.5	< 6.5	< 6.5	< 6.5
2-HEXANONE	UG/L	< 6.3	< 6.3	< 6.3	< 6.3	< 6.3	< 6.3	< 6.3	< 6.3	< 6.3
4-METHYL-2-PENTANONE	UG/L	< 6.0	< 6.0	< 6.0	< 6.0	< 6.0	< 6.0	< 6.0	< 6.0	< 6.0
ACETONE	UG/L	< 8.6 v2uj	< 8.6 v2uj	< 8.6 v2uj	< 8.6 v2uj	< 8.6 v2uj	< 8.6 v2uj	< 8.6 v2uj	< 8.6 v2uj	< 8.6 v2uj
BENZENE	UG/L	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30
BROMODICHLOROMETHANE	UG/L	< 0.42	< 0.42	< 0.42	< 0.42	< 0.42	< 0.42	< 0.42	< 0.42	< 0.42
BROMOFORM	UG/L	< 0.43	< 0.43	< 0.43	< 0.43	< 0.43	< 0.43	< 0.43	< 0.43	< 0.43
BROMOMETHANE	UG/L	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2
CARBON DISULFIDE	UG/L	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65
CARBON TETRACHLORIDE	UG/L	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37
CHLOROBENZENE	UG/L	< 0.86	< 0.86	< 0.86	< 0.86	< 0.86	< 0.86	< 0.86	< 0.86	< 0.86
CHLORODIBROMOMETHANE	UG/L	< 2.6	< 2.6	< 2.6	< 2.6	< 2.6	< 2.6	< 2.6	< 2.6	< 2.6
CHLOROETHANE	UG/L	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4
CHLOROFORM	UG/L	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
CHLOROMETHANE	UG/L	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6
CIS-1,2-DICHLOROETHENE	UG/L	< 0.47	< 0.47	< 0.47	< 0.47	< 0.47	< 0.47	< 0.47	< 0.47	< 0.47
CIS-1,3-DICHLOROPROPENE	UG/L	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24
ETHYLBENZENE	UG/L	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
METHYLENE CHLORIDE	UG/L	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32
STYRENE	UG/L	< 0.36 L1	< 0.36 L1	< 0.36 L1	< 0.36 L1	< 0.36 L1	< 0.36 L1	< 0.36 L1	< 0.36 L1	< 0.36 L1
TETRACHLOROETHENE	UG/L	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41
TOLUENE	UG/L	< 0.29	< 0.29	< 0.29	< 0.29	< 0.29	< 0.29	< 0.29	< 0.29	< 0.29
TRANS-1,2-DICHLOROETHENE	UG/L	< 0.53	< 0.53	< 0.53	< 0.53	< 0.53	< 0.53	< 0.53	< 0.53	< 0.53
TRANS-1,3-DICHLOROPROPENE	UG/L	< 0.27	< 0.27	< 0.27	< 0.27	< 0.27	< 0.27	< 0.27	< 0.27	< 0.27
TRICHLOROETHENE	UG/L	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32
VINYL CHLORIDE	UG/L	< 0.17	< 0.17	< 0.17	< 0.17	< 0.17	< 0.17	< 0.17	< 0.17	< 0.17
XYLENE, TOTAL	UG/L	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

NOTES:
Laboratory data qualifiers are included in the laboratory reports in Attachment 4. See specific laboratory report for Sample Delivery Group (SDG) definition.
Non-detect results are reported as "< Limit of Detection (LOD)"
Data Validation Qualifiers:
j = the result is estimated
u = data validation rules the result as not detected

LEMBERGER LANDFILL
RESIDENTIAL WELL VOLATILE ORGANIC ANALYSIS RESULTS
OCTOBER 2023

PARAMETER	UNITS	GR-30 10/23/2023 40270156004	GR-60R 10/23/2023 40270156001	GR-62 10/23/2023 40270156011	GR-63 10/23/2023 40270156013	GR-64 10/23/2023 40270156012	GR-65 10/24/2023 40270156016	GR-66 10/23/2023 40270156014	GR-73 10/24/2023 40270156015	GR-73 DUP 10/24/2023 40270156019	GR-74 10/23/2023 40270156003
1,1,1-TRICHLOROETHANE	UG/L	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30
1,1,2,2-TETRACHLOROETHANE	UG/L	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38
1,1,2-TRICHLOROETHANE	UG/L	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34
1,1-DICHLOROETHANE	UG/L	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30
1,1-DICHLOROETHENE	UG/L	< 0.58	< 0.58	< 0.58	< 0.58	< 0.58	< 0.58	< 0.58	< 0.58	< 0.58	< 0.58
1,2-DICHLOROETHANE	UG/L	< 0.29	< 0.29	< 0.29	< 0.29	< 0.29	< 0.29	< 0.29	< 0.29	< 0.29	< 0.29
1,2-DICHLOROPROPANE	UG/L	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45
2-BUTANONE	UG/L	< 6.5	< 6.5	< 6.5	< 6.5	< 6.5	< 6.5	< 6.5	< 6.5	< 6.5	< 6.5
2-HEXANONE	UG/L	< 6.3	< 6.3	< 6.3	< 6.3	< 6.3	< 6.3	< 6.3	< 6.3	< 6.3	< 6.3
4-METHYL-2-PENTANONE	UG/L	< 6.0	< 6.0	< 6.0	< 6.0	< 6.0	< 6.0	< 6.0	< 6.0	< 6.0	< 6.0
ACETONE	UG/L	< 8.6 v2uj	< 8.6 v2uj	< 8.6 v2uj	< 8.6 v2uj	< 8.6 v2uj	< 8.6 v2uj	< 8.6 v2uj	< 8.6 v2uj	< 8.6 v2uj	< 8.6 v2uj
BENZENE	UG/L	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30
BROMODICHLOROMETHANE	UG/L	< 0.42	< 0.42	< 0.42	< 0.42	< 0.42	< 0.42	< 0.42	< 0.42	< 0.42	< 0.42
BROMOFORM	UG/L	< 0.43	< 0.43	< 0.43	< 0.43	< 0.43	< 0.43	< 0.43	< 0.43	< 0.43	< 0.43
BROMOMETHANE	UG/L	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2
CARBON DISULFIDE	UG/L	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65
CARBON TETRACHLORIDE	UG/L	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37
CHLOROBENZENE	UG/L	< 0.86	< 0.86	< 0.86	< 0.86	< 0.86	< 0.86	< 0.86	< 0.86	< 0.86	< 0.86
CHLORODIBROMOMETHANE	UG/L	< 2.6	< 2.6	< 2.6	< 2.6	< 2.6	< 2.6	< 2.6	< 2.6	< 2.6	< 2.6
CHLOROETHANE	UG/L	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4
CHLOROFORM	UG/L	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
CHLOROMETHANE	UG/L	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6
CIS-1,2-DICHLOROETHENE	UG/L	< 0.47	< 0.47	< 0.47	< 0.47	< 0.47	< 0.47	< 0.47	< 0.47	< 0.47	< 0.47
CIS-1,3-DICHLOROPROPENE	UG/L	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24
ETHYLBENZENE	UG/L	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
METHYLENE CHLORIDE	UG/L	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32
STYRENE	UG/L	< 0.36 L1	< 0.36 L1	< 0.36 L1	< 0.36 L1	< 0.36 L1	< 0.36 L1	< 0.36 L1	< 0.36 L1	< 0.36 L1	< 0.36 L1
TETRACHLOROETHENE	UG/L	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41
TOLUENE	UG/L	< 0.29	< 0.29	< 0.29	< 0.29	< 0.29	< 0.29	< 0.29	< 0.29	< 0.29	< 0.29
TRANS-1,2-DICHLOROETHENE	UG/L	< 0.53	< 0.53	< 0.53	< 0.53	< 0.53	< 0.53	< 0.53	< 0.53	< 0.53	< 0.53
TRANS-1,3-DICHLOROPROPENE	UG/L	< 0.27	< 0.27	< 0.27	< 0.27	< 0.27	< 0.27	< 0.27	< 0.27	< 0.27	< 0.27
TRICHLOROETHENE	UG/L	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32
VINYL CHLORIDE	UG/L	< 0.17	< 0.17	< 0.17	< 0.17	< 0.17	< 0.17	< 0.17	< 0.17	< 0.17	< 0.17
XYLENE, TOTAL	UG/L	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

NOTES:
Laboratory data qualifiers are included in the laboratory reports in Attachment 4. See specific laboratory report for Sample Delivery Group (SDG) definition.
Non-detect results are reported as "< Limit of Detection (LOD)"
Data Validation Qualifiers:
j = the result is estimated
u = data validation rules the result as not detected

Attachment 4

Original Laboratory Data Sheets for Residential Wells

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

ANALYTICAL RESULTS

Project: 525156.0000PH4 LEMBERGER LF-RW
Pace Project No.: 40270156

Sample: GR-60R **Lab ID: 40270156001** Collected: 10/23/23 10:10 Received: 10/26/23 09:14 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<0.30**	ug/L	1.0	0.30	1		10/27/23 21:58	71-55-6	
1,1,2,2-Tetrachloroethane	**<0.38**	ug/L	1.0	0.38	1		10/27/23 21:58	79-34-5	
1,1,2-Trichloroethane	**<0.34**	ug/L	1.0	0.34	1		10/27/23 21:58	79-00-5	
1,1-Dichloroethane	**<0.30**	ug/L	1.0	0.30	1		10/27/23 21:58	75-34-3	
1,1-Dichloroethene	**<0.58**	ug/L	1.0	0.58	1		10/27/23 21:58	75-35-4	
1,2-Dichloroethane	**<0.29**	ug/L	1.0	0.29	1		10/27/23 21:58	107-06-2	
1,2-Dichloropropane	**<0.45**	ug/L	1.0	0.45	1		10/27/23 21:58	78-87-5	
2-Butanone (MEK)	**<6.5**	ug/L	25.0	6.5	1		10/27/23 21:58	78-93-3	
2-Hexanone	**<6.3**	ug/L	25.0	6.3	1		10/27/23 21:58	591-78-6	
4-Methyl-2-pentanone (MIBK)	**<6.0**	ug/L	25.0	6.0	1		10/27/23 21:58	108-10-1	
Acetone	**<8.6**	ug/L	25.0	8.6	1		10/27/23 21:58	67-64-1	v2
Benzene	**<0.30**	ug/L	1.0	0.30	1		10/27/23 21:58	71-43-2	
Bromodichloromethane	**<0.42**	ug/L	1.0	0.42	1		10/27/23 21:58	75-27-4	
Bromoform	**<0.43**	ug/L	1.0	0.43	1		10/27/23 21:58	75-25-2	
Bromomethane	**<1.2**	ug/L	5.0	1.2	1		10/27/23 21:58	74-83-9	
Carbon disulfide	**<0.65**	ug/L	1.0	0.65	1		10/27/23 21:58	75-15-0	
Carbon tetrachloride	**<0.37**	ug/L	1.0	0.37	1		10/27/23 21:58	56-23-5	
Chlorobenzene	**<0.86**	ug/L	1.0	0.86	1		10/27/23 21:58	108-90-7	
Chloroethane	**<1.4**	ug/L	5.0	1.4	1		10/27/23 21:58	75-00-3	
Chloroform	**<0.50**	ug/L	5.0	0.50	1		10/27/23 21:58	67-66-3	
Chloromethane	**<1.6**	ug/L	5.0	1.6	1		10/27/23 21:58	74-87-3	
Dibromochloromethane	**<2.6**	ug/L	5.0	2.6	1		10/27/23 21:58	124-48-1	
Ethylbenzene	**<0.33**	ug/L	1.0	0.33	1		10/27/23 21:58	100-41-4	
Methylene Chloride	**<0.32**	ug/L	5.0	0.32	1		10/27/23 21:58	75-09-2	
Styrene	**<0.36**	ug/L	1.0	0.36	1		10/27/23 21:58	100-42-5	L1
Tetrachloroethene	**<0.41**	ug/L	1.0	0.41	1		10/27/23 21:58	127-18-4	
Toluene	**<0.29**	ug/L	1.0	0.29	1		10/27/23 21:58	108-88-3	
Trichloroethene	**<0.32**	ug/L	1.0	0.32	1		10/27/23 21:58	79-01-6	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		10/27/23 21:58	75-01-4	
Xylene (Total)	**<1.0**	ug/L	3.0	1.0	1		10/27/23 21:58	1330-20-7	
cis-1,2-Dichloroethene	**<0.47**	ug/L	1.0	0.47	1		10/27/23 21:58	156-59-2	
cis-1,3-Dichloropropene	**<0.24**	ug/L	1.0	0.24	1		10/27/23 21:58	10061-01-5	
trans-1,2-Dichloroethene	**<0.53**	ug/L	1.0	0.53	1		10/27/23 21:58	156-60-5	
trans-1,3-Dichloropropene	**<0.27**	ug/L	1.0	0.27	1		10/27/23 21:58	10061-02-6	
Surrogates									
4-Bromofluorobenzene (S)	108	%	70-130		1		10/27/23 21:58	460-00-4	
1,2-Dichlorobenzene-d4 (S)	101	%	70-130		1		10/27/23 21:58	2199-69-1	
Toluene-d8 (S)	101	%	70-130		1		10/27/23 21:58	2037-26-5	

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ANALYTICAL RESULTS

Project: 525156.0000PH4 LEMBERGER LF-RW
Pace Project No.: 40270156

Sample: GR-26 **Lab ID: 40270156002** Collected: 10/23/23 11:25 Received: 10/26/23 09:14 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<0.30**	ug/L	1.0	0.30	1		10/27/23 22:19	71-55-6	
1,1,2,2-Tetrachloroethane	**<0.38**	ug/L	1.0	0.38	1		10/27/23 22:19	79-34-5	
1,1,2-Trichloroethane	**<0.34**	ug/L	1.0	0.34	1		10/27/23 22:19	79-00-5	
1,1-Dichloroethane	**<0.30**	ug/L	1.0	0.30	1		10/27/23 22:19	75-34-3	
1,1-Dichloroethene	**<0.58**	ug/L	1.0	0.58	1		10/27/23 22:19	75-35-4	
1,2-Dichloroethane	**<0.29**	ug/L	1.0	0.29	1		10/27/23 22:19	107-06-2	
1,2-Dichloropropane	**<0.45**	ug/L	1.0	0.45	1		10/27/23 22:19	78-87-5	
2-Butanone (MEK)	**<6.5**	ug/L	25.0	6.5	1		10/27/23 22:19	78-93-3	
2-Hexanone	**<6.3**	ug/L	25.0	6.3	1		10/27/23 22:19	591-78-6	
4-Methyl-2-pentanone (MIBK)	**<6.0**	ug/L	25.0	6.0	1		10/27/23 22:19	108-10-1	
Acetone	**<8.6**	ug/L	25.0	8.6	1		10/27/23 22:19	67-64-1	v2
Benzene	**<0.30**	ug/L	1.0	0.30	1		10/27/23 22:19	71-43-2	
Bromodichloromethane	**<0.42**	ug/L	1.0	0.42	1		10/27/23 22:19	75-27-4	
Bromoform	**<0.43**	ug/L	1.0	0.43	1		10/27/23 22:19	75-25-2	
Bromomethane	**<1.2**	ug/L	5.0	1.2	1		10/27/23 22:19	74-83-9	
Carbon disulfide	**<0.65**	ug/L	1.0	0.65	1		10/27/23 22:19	75-15-0	
Carbon tetrachloride	**<0.37**	ug/L	1.0	0.37	1		10/27/23 22:19	56-23-5	
Chlorobenzene	**<0.86**	ug/L	1.0	0.86	1		10/27/23 22:19	108-90-7	
Chloroethane	**<1.4**	ug/L	5.0	1.4	1		10/27/23 22:19	75-00-3	
Chloroform	**<0.50**	ug/L	5.0	0.50	1		10/27/23 22:19	67-66-3	
Chloromethane	**<1.6**	ug/L	5.0	1.6	1		10/27/23 22:19	74-87-3	
Dibromochloromethane	**<2.6**	ug/L	5.0	2.6	1		10/27/23 22:19	124-48-1	
Ethylbenzene	**<0.33**	ug/L	1.0	0.33	1		10/27/23 22:19	100-41-4	
Methylene Chloride	**<0.32**	ug/L	5.0	0.32	1		10/27/23 22:19	75-09-2	
Styrene	**<0.36**	ug/L	1.0	0.36	1		10/27/23 22:19	100-42-5	L1
Tetrachloroethene	**<0.41**	ug/L	1.0	0.41	1		10/27/23 22:19	127-18-4	
Toluene	**<0.29**	ug/L	1.0	0.29	1		10/27/23 22:19	108-88-3	
Trichloroethene	**<0.32**	ug/L	1.0	0.32	1		10/27/23 22:19	79-01-6	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		10/27/23 22:19	75-01-4	
Xylene (Total)	**<1.0**	ug/L	3.0	1.0	1		10/27/23 22:19	1330-20-7	
cis-1,2-Dichloroethene	**<0.47**	ug/L	1.0	0.47	1		10/27/23 22:19	156-59-2	
cis-1,3-Dichloropropene	**<0.24**	ug/L	1.0	0.24	1		10/27/23 22:19	10061-01-5	
trans-1,2-Dichloroethene	**<0.53**	ug/L	1.0	0.53	1		10/27/23 22:19	156-60-5	
trans-1,3-Dichloropropene	**<0.27**	ug/L	1.0	0.27	1		10/27/23 22:19	10061-02-6	
Surrogates									
4-Bromofluorobenzene (S)	101	%	70-130		1		10/27/23 22:19	460-00-4	
1,2-Dichlorobenzene-d4 (S)	103	%	70-130		1		10/27/23 22:19	2199-69-1	
Toluene-d8 (S)	98	%	70-130		1		10/27/23 22:19	2037-26-5	

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ANALYTICAL RESULTS

Project: 525156.0000PH4 LEMBERGER LF-RW
Pace Project No.: 40270156

Sample: GR-74 **Lab ID: 40270156003** Collected: 10/23/23 12:15 Received: 10/26/23 09:14 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<0.30**	ug/L	1.0	0.30	1		10/27/23 22:39	71-55-6	
1,1,2,2-Tetrachloroethane	**<0.38**	ug/L	1.0	0.38	1		10/27/23 22:39	79-34-5	
1,1,2-Trichloroethane	**<0.34**	ug/L	1.0	0.34	1		10/27/23 22:39	79-00-5	
1,1-Dichloroethane	**<0.30**	ug/L	1.0	0.30	1		10/27/23 22:39	75-34-3	
1,1-Dichloroethene	**<0.58**	ug/L	1.0	0.58	1		10/27/23 22:39	75-35-4	
1,2-Dichloroethane	**<0.29**	ug/L	1.0	0.29	1		10/27/23 22:39	107-06-2	
1,2-Dichloropropane	**<0.45**	ug/L	1.0	0.45	1		10/27/23 22:39	78-87-5	
2-Butanone (MEK)	**<6.5**	ug/L	25.0	6.5	1		10/27/23 22:39	78-93-3	
2-Hexanone	**<6.3**	ug/L	25.0	6.3	1		10/27/23 22:39	591-78-6	
4-Methyl-2-pentanone (MIBK)	**<6.0**	ug/L	25.0	6.0	1		10/27/23 22:39	108-10-1	
Acetone	**<8.6**	ug/L	25.0	8.6	1		10/27/23 22:39	67-64-1	v2
Benzene	**<0.30**	ug/L	1.0	0.30	1		10/27/23 22:39	71-43-2	
Bromodichloromethane	**<0.42**	ug/L	1.0	0.42	1		10/27/23 22:39	75-27-4	
Bromoform	**<0.43**	ug/L	1.0	0.43	1		10/27/23 22:39	75-25-2	
Bromomethane	**<1.2**	ug/L	5.0	1.2	1		10/27/23 22:39	74-83-9	
Carbon disulfide	**<0.65**	ug/L	1.0	0.65	1		10/27/23 22:39	75-15-0	
Carbon tetrachloride	**<0.37**	ug/L	1.0	0.37	1		10/27/23 22:39	56-23-5	
Chlorobenzene	**<0.86**	ug/L	1.0	0.86	1		10/27/23 22:39	108-90-7	
Chloroethane	**<1.4**	ug/L	5.0	1.4	1		10/27/23 22:39	75-00-3	
Chloroform	**<0.50**	ug/L	5.0	0.50	1		10/27/23 22:39	67-66-3	
Chloromethane	**<1.6**	ug/L	5.0	1.6	1		10/27/23 22:39	74-87-3	
Dibromochloromethane	**<2.6**	ug/L	5.0	2.6	1		10/27/23 22:39	124-48-1	
Ethylbenzene	**<0.33**	ug/L	1.0	0.33	1		10/27/23 22:39	100-41-4	
Methylene Chloride	**<0.32**	ug/L	5.0	0.32	1		10/27/23 22:39	75-09-2	
Styrene	**<0.36**	ug/L	1.0	0.36	1		10/27/23 22:39	100-42-5	L1
Tetrachloroethene	**<0.41**	ug/L	1.0	0.41	1		10/27/23 22:39	127-18-4	
Toluene	**<0.29**	ug/L	1.0	0.29	1		10/27/23 22:39	108-88-3	
Trichloroethene	**<0.32**	ug/L	1.0	0.32	1		10/27/23 22:39	79-01-6	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		10/27/23 22:39	75-01-4	
Xylene (Total)	**<1.0**	ug/L	3.0	1.0	1		10/27/23 22:39	1330-20-7	
cis-1,2-Dichloroethene	**<0.47**	ug/L	1.0	0.47	1		10/27/23 22:39	156-59-2	
cis-1,3-Dichloropropene	**<0.24**	ug/L	1.0	0.24	1		10/27/23 22:39	10061-01-5	
trans-1,2-Dichloroethene	**<0.53**	ug/L	1.0	0.53	1		10/27/23 22:39	156-60-5	
trans-1,3-Dichloropropene	**<0.27**	ug/L	1.0	0.27	1		10/27/23 22:39	10061-02-6	
Surrogates									
4-Bromofluorobenzene (S)	106	%	70-130		1		10/27/23 22:39	460-00-4	
1,2-Dichlorobenzene-d4 (S)	103	%	70-130		1		10/27/23 22:39	2199-69-1	
Toluene-d8 (S)	99	%	70-130		1		10/27/23 22:39	2037-26-5	

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ANALYTICAL RESULTS

Project: 525156.0000PH4 LEMBERGER LF-RW
Pace Project No.: 40270156

Sample: GR-30 **Lab ID: 40270156004** Collected: 10/23/23 12:50 Received: 10/26/23 09:14 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<0.30**	ug/L	1.0	0.30	1		10/27/23 23:00	71-55-6	
1,1,2,2-Tetrachloroethane	**<0.38**	ug/L	1.0	0.38	1		10/27/23 23:00	79-34-5	
1,1,2-Trichloroethane	**<0.34**	ug/L	1.0	0.34	1		10/27/23 23:00	79-00-5	
1,1-Dichloroethane	**<0.30**	ug/L	1.0	0.30	1		10/27/23 23:00	75-34-3	
1,1-Dichloroethene	**<0.58**	ug/L	1.0	0.58	1		10/27/23 23:00	75-35-4	
1,2-Dichloroethane	**<0.29**	ug/L	1.0	0.29	1		10/27/23 23:00	107-06-2	
1,2-Dichloropropane	**<0.45**	ug/L	1.0	0.45	1		10/27/23 23:00	78-87-5	
2-Butanone (MEK)	**<6.5**	ug/L	25.0	6.5	1		10/27/23 23:00	78-93-3	
2-Hexanone	**<6.3**	ug/L	25.0	6.3	1		10/27/23 23:00	591-78-6	
4-Methyl-2-pentanone (MIBK)	**<6.0**	ug/L	25.0	6.0	1		10/27/23 23:00	108-10-1	
Acetone	**<8.6**	ug/L	25.0	8.6	1		10/27/23 23:00	67-64-1	v2
Benzene	**<0.30**	ug/L	1.0	0.30	1		10/27/23 23:00	71-43-2	
Bromodichloromethane	**<0.42**	ug/L	1.0	0.42	1		10/27/23 23:00	75-27-4	
Bromoform	**<0.43**	ug/L	1.0	0.43	1		10/27/23 23:00	75-25-2	
Bromomethane	**<1.2**	ug/L	5.0	1.2	1		10/27/23 23:00	74-83-9	
Carbon disulfide	**<0.65**	ug/L	1.0	0.65	1		10/27/23 23:00	75-15-0	
Carbon tetrachloride	**<0.37**	ug/L	1.0	0.37	1		10/27/23 23:00	56-23-5	
Chlorobenzene	**<0.86**	ug/L	1.0	0.86	1		10/27/23 23:00	108-90-7	
Chloroethane	**<1.4**	ug/L	5.0	1.4	1		10/27/23 23:00	75-00-3	
Chloroform	**<0.50**	ug/L	5.0	0.50	1		10/27/23 23:00	67-66-3	
Chloromethane	**<1.6**	ug/L	5.0	1.6	1		10/27/23 23:00	74-87-3	
Dibromochloromethane	**<2.6**	ug/L	5.0	2.6	1		10/27/23 23:00	124-48-1	
Ethylbenzene	**<0.33**	ug/L	1.0	0.33	1		10/27/23 23:00	100-41-4	
Methylene Chloride	**<0.32**	ug/L	5.0	0.32	1		10/27/23 23:00	75-09-2	
Styrene	**<0.36**	ug/L	1.0	0.36	1		10/27/23 23:00	100-42-5	L1
Tetrachloroethene	**<0.41**	ug/L	1.0	0.41	1		10/27/23 23:00	127-18-4	
Toluene	**<0.29**	ug/L	1.0	0.29	1		10/27/23 23:00	108-88-3	
Trichloroethene	**<0.32**	ug/L	1.0	0.32	1		10/27/23 23:00	79-01-6	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		10/27/23 23:00	75-01-4	
Xylene (Total)	**<1.0**	ug/L	3.0	1.0	1		10/27/23 23:00	1330-20-7	
cis-1,2-Dichloroethene	**<0.47**	ug/L	1.0	0.47	1		10/27/23 23:00	156-59-2	
cis-1,3-Dichloropropene	**<0.24**	ug/L	1.0	0.24	1		10/27/23 23:00	10061-01-5	
trans-1,2-Dichloroethene	**<0.53**	ug/L	1.0	0.53	1		10/27/23 23:00	156-60-5	
trans-1,3-Dichloropropene	**<0.27**	ug/L	1.0	0.27	1		10/27/23 23:00	10061-02-6	
Surrogates									
4-Bromofluorobenzene (S)	102	%	70-130		1		10/27/23 23:00	460-00-4	
1,2-Dichlorobenzene-d4 (S)	102	%	70-130		1		10/27/23 23:00	2199-69-1	
Toluene-d8 (S)	98	%	70-130		1		10/27/23 23:00	2037-26-5	

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ANALYTICAL RESULTS

Project: 525156.0000PH4 LEMBERGER LF-RW
Pace Project No.: 40270156

Sample: GR-12 **Lab ID: 40270156005** Collected: 10/23/23 14:20 Received: 10/26/23 09:14 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<0.30**	ug/L	1.0	0.30	1		10/27/23 21:37	71-55-6	
1,1,2,2-Tetrachloroethane	**<0.38**	ug/L	1.0	0.38	1		10/27/23 21:37	79-34-5	
1,1,2-Trichloroethane	**<0.34**	ug/L	1.0	0.34	1		10/27/23 21:37	79-00-5	
1,1-Dichloroethane	**<0.30**	ug/L	1.0	0.30	1		10/27/23 21:37	75-34-3	
1,1-Dichloroethene	**<0.58**	ug/L	1.0	0.58	1		10/27/23 21:37	75-35-4	
1,2-Dichloroethane	**<0.29**	ug/L	1.0	0.29	1		10/27/23 21:37	107-06-2	
1,2-Dichloropropane	**<0.45**	ug/L	1.0	0.45	1		10/27/23 21:37	78-87-5	
2-Butanone (MEK)	**<6.5**	ug/L	25.0	6.5	1		10/27/23 21:37	78-93-3	
2-Hexanone	**<6.3**	ug/L	25.0	6.3	1		10/27/23 21:37	591-78-6	
4-Methyl-2-pentanone (MIBK)	**<6.0**	ug/L	25.0	6.0	1		10/27/23 21:37	108-10-1	
Acetone	**<8.6**	ug/L	25.0	8.6	1		10/27/23 21:37	67-64-1	v2
Benzene	**<0.30**	ug/L	1.0	0.30	1		10/27/23 21:37	71-43-2	
Bromodichloromethane	**<0.42**	ug/L	1.0	0.42	1		10/27/23 21:37	75-27-4	
Bromoform	**<0.43**	ug/L	1.0	0.43	1		10/27/23 21:37	75-25-2	
Bromomethane	**<1.2**	ug/L	5.0	1.2	1		10/27/23 21:37	74-83-9	
Carbon disulfide	**<0.65**	ug/L	1.0	0.65	1		10/27/23 21:37	75-15-0	
Carbon tetrachloride	**<0.37**	ug/L	1.0	0.37	1		10/27/23 21:37	56-23-5	
Chlorobenzene	**<0.86**	ug/L	1.0	0.86	1		10/27/23 21:37	108-90-7	
Chloroethane	**<1.4**	ug/L	5.0	1.4	1		10/27/23 21:37	75-00-3	
Chloroform	**<0.50**	ug/L	5.0	0.50	1		10/27/23 21:37	67-66-3	
Chloromethane	**<1.6**	ug/L	5.0	1.6	1		10/27/23 21:37	74-87-3	
Dibromochloromethane	**<2.6**	ug/L	5.0	2.6	1		10/27/23 21:37	124-48-1	
Ethylbenzene	**<0.33**	ug/L	1.0	0.33	1		10/27/23 21:37	100-41-4	
Methylene Chloride	**<0.32**	ug/L	5.0	0.32	1		10/27/23 21:37	75-09-2	
Styrene	**<0.36**	ug/L	1.0	0.36	1		10/27/23 21:37	100-42-5	L1
Tetrachloroethene	**<0.41**	ug/L	1.0	0.41	1		10/27/23 21:37	127-18-4	
Toluene	**<0.29**	ug/L	1.0	0.29	1		10/27/23 21:37	108-88-3	
Trichloroethene	**<0.32**	ug/L	1.0	0.32	1		10/27/23 21:37	79-01-6	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		10/27/23 21:37	75-01-4	
Xylene (Total)	**<1.0**	ug/L	3.0	1.0	1		10/27/23 21:37	1330-20-7	
cis-1,2-Dichloroethene	**<0.47**	ug/L	1.0	0.47	1		10/27/23 21:37	156-59-2	
cis-1,3-Dichloropropene	**<0.24**	ug/L	1.0	0.24	1		10/27/23 21:37	10061-01-5	
trans-1,2-Dichloroethene	**<0.53**	ug/L	1.0	0.53	1		10/27/23 21:37	156-60-5	
trans-1,3-Dichloropropene	**<0.27**	ug/L	1.0	0.27	1		10/27/23 21:37	10061-02-6	
Surrogates									
4-Bromofluorobenzene (S)	105	%	70-130		1		10/27/23 21:37	460-00-4	
1,2-Dichlorobenzene-d4 (S)	99	%	70-130		1		10/27/23 21:37	2199-69-1	
Toluene-d8 (S)	100	%	70-130		1		10/27/23 21:37	2037-26-5	

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ANALYTICAL RESULTS

Project: 525156.0000PH4 LEMBERGER LF-RW
Pace Project No.: 40270156

Sample: GR-9 **Lab ID: 40270156006** Collected: 10/23/23 14:55 Received: 10/26/23 09:14 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<0.30**	ug/L	1.0	0.30	1		10/27/23 23:21	71-55-6	
1,1,2,2-Tetrachloroethane	**<0.38**	ug/L	1.0	0.38	1		10/27/23 23:21	79-34-5	
1,1,2-Trichloroethane	**<0.34**	ug/L	1.0	0.34	1		10/27/23 23:21	79-00-5	
1,1-Dichloroethane	**<0.30**	ug/L	1.0	0.30	1		10/27/23 23:21	75-34-3	
1,1-Dichloroethene	**<0.58**	ug/L	1.0	0.58	1		10/27/23 23:21	75-35-4	
1,2-Dichloroethane	**<0.29**	ug/L	1.0	0.29	1		10/27/23 23:21	107-06-2	
1,2-Dichloropropane	**<0.45**	ug/L	1.0	0.45	1		10/27/23 23:21	78-87-5	
2-Butanone (MEK)	**<6.5**	ug/L	25.0	6.5	1		10/27/23 23:21	78-93-3	
2-Hexanone	**<6.3**	ug/L	25.0	6.3	1		10/27/23 23:21	591-78-6	
4-Methyl-2-pentanone (MIBK)	**<6.0**	ug/L	25.0	6.0	1		10/27/23 23:21	108-10-1	
Acetone	**<8.6**	ug/L	25.0	8.6	1		10/27/23 23:21	67-64-1	v2
Benzene	**<0.30**	ug/L	1.0	0.30	1		10/27/23 23:21	71-43-2	
Bromodichloromethane	**<0.42**	ug/L	1.0	0.42	1		10/27/23 23:21	75-27-4	
Bromoform	**<0.43**	ug/L	1.0	0.43	1		10/27/23 23:21	75-25-2	
Bromomethane	**<1.2**	ug/L	5.0	1.2	1		10/27/23 23:21	74-83-9	
Carbon disulfide	**<0.65**	ug/L	1.0	0.65	1		10/27/23 23:21	75-15-0	
Carbon tetrachloride	**<0.37**	ug/L	1.0	0.37	1		10/27/23 23:21	56-23-5	
Chlorobenzene	**<0.86**	ug/L	1.0	0.86	1		10/27/23 23:21	108-90-7	
Chloroethane	**<1.4**	ug/L	5.0	1.4	1		10/27/23 23:21	75-00-3	
Chloroform	**<0.50**	ug/L	5.0	0.50	1		10/27/23 23:21	67-66-3	
Chloromethane	**<1.6**	ug/L	5.0	1.6	1		10/27/23 23:21	74-87-3	
Dibromochloromethane	**<2.6**	ug/L	5.0	2.6	1		10/27/23 23:21	124-48-1	
Ethylbenzene	**<0.33**	ug/L	1.0	0.33	1		10/27/23 23:21	100-41-4	
Methylene Chloride	**<0.32**	ug/L	5.0	0.32	1		10/27/23 23:21	75-09-2	
Styrene	**<0.36**	ug/L	1.0	0.36	1		10/27/23 23:21	100-42-5	L1
Tetrachloroethene	**<0.41**	ug/L	1.0	0.41	1		10/27/23 23:21	127-18-4	
Toluene	**<0.29**	ug/L	1.0	0.29	1		10/27/23 23:21	108-88-3	
Trichloroethene	**<0.32**	ug/L	1.0	0.32	1		10/27/23 23:21	79-01-6	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		10/27/23 23:21	75-01-4	
Xylene (Total)	**<1.0**	ug/L	3.0	1.0	1		10/27/23 23:21	1330-20-7	
cis-1,2-Dichloroethene	**<0.47**	ug/L	1.0	0.47	1		10/27/23 23:21	156-59-2	
cis-1,3-Dichloropropene	**<0.24**	ug/L	1.0	0.24	1		10/27/23 23:21	10061-01-5	
trans-1,2-Dichloroethene	**<0.53**	ug/L	1.0	0.53	1		10/27/23 23:21	156-60-5	
trans-1,3-Dichloropropene	**<0.27**	ug/L	1.0	0.27	1		10/27/23 23:21	10061-02-6	
Surrogates									
4-Bromofluorobenzene (S)	103	%	70-130		1		10/27/23 23:21	460-00-4	
1,2-Dichlorobenzene-d4 (S)	100	%	70-130		1		10/27/23 23:21	2199-69-1	
Toluene-d8 (S)	99	%	70-130		1		10/27/23 23:21	2037-26-5	

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ANALYTICAL RESULTS

Project: 525156.0000PH4 LEMBERGER LF-RW
Pace Project No.: 40270156

Sample: GR-FDUP-001 **Lab ID: 40270156007** Collected: 10/23/23 00:00 Received: 10/26/23 09:14 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<0.30**	ug/L	1.0	0.30	1		10/27/23 23:41	71-55-6	
1,1,2,2-Tetrachloroethane	**<0.38**	ug/L	1.0	0.38	1		10/27/23 23:41	79-34-5	
1,1,2-Trichloroethane	**<0.34**	ug/L	1.0	0.34	1		10/27/23 23:41	79-00-5	
1,1-Dichloroethane	**<0.30**	ug/L	1.0	0.30	1		10/27/23 23:41	75-34-3	
1,1-Dichloroethene	**<0.58**	ug/L	1.0	0.58	1		10/27/23 23:41	75-35-4	
1,2-Dichloroethane	**<0.29**	ug/L	1.0	0.29	1		10/27/23 23:41	107-06-2	
1,2-Dichloropropane	**<0.45**	ug/L	1.0	0.45	1		10/27/23 23:41	78-87-5	
2-Butanone (MEK)	**<6.5**	ug/L	25.0	6.5	1		10/27/23 23:41	78-93-3	
2-Hexanone	**<6.3**	ug/L	25.0	6.3	1		10/27/23 23:41	591-78-6	
4-Methyl-2-pentanone (MIBK)	**<6.0**	ug/L	25.0	6.0	1		10/27/23 23:41	108-10-1	
Acetone	**<8.6**	ug/L	25.0	8.6	1		10/27/23 23:41	67-64-1	v2
Benzene	**<0.30**	ug/L	1.0	0.30	1		10/27/23 23:41	71-43-2	
Bromodichloromethane	**<0.42**	ug/L	1.0	0.42	1		10/27/23 23:41	75-27-4	
Bromoform	**<0.43**	ug/L	1.0	0.43	1		10/27/23 23:41	75-25-2	
Bromomethane	**<1.2**	ug/L	5.0	1.2	1		10/27/23 23:41	74-83-9	
Carbon disulfide	**<0.65**	ug/L	1.0	0.65	1		10/27/23 23:41	75-15-0	
Carbon tetrachloride	**<0.37**	ug/L	1.0	0.37	1		10/27/23 23:41	56-23-5	
Chlorobenzene	**<0.86**	ug/L	1.0	0.86	1		10/27/23 23:41	108-90-7	
Chloroethane	**<1.4**	ug/L	5.0	1.4	1		10/27/23 23:41	75-00-3	
Chloroform	**<0.50**	ug/L	5.0	0.50	1		10/27/23 23:41	67-66-3	
Chloromethane	**<1.6**	ug/L	5.0	1.6	1		10/27/23 23:41	74-87-3	
Dibromochloromethane	**<2.6**	ug/L	5.0	2.6	1		10/27/23 23:41	124-48-1	
Ethylbenzene	**<0.33**	ug/L	1.0	0.33	1		10/27/23 23:41	100-41-4	
Methylene Chloride	**<0.32**	ug/L	5.0	0.32	1		10/27/23 23:41	75-09-2	
Styrene	**<0.36**	ug/L	1.0	0.36	1		10/27/23 23:41	100-42-5	L1
Tetrachloroethene	**<0.41**	ug/L	1.0	0.41	1		10/27/23 23:41	127-18-4	
Toluene	**<0.29**	ug/L	1.0	0.29	1		10/27/23 23:41	108-88-3	
Trichloroethene	**<0.32**	ug/L	1.0	0.32	1		10/27/23 23:41	79-01-6	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		10/27/23 23:41	75-01-4	
Xylene (Total)	**<1.0**	ug/L	3.0	1.0	1		10/27/23 23:41	1330-20-7	
cis-1,2-Dichloroethene	**<0.47**	ug/L	1.0	0.47	1		10/27/23 23:41	156-59-2	
cis-1,3-Dichloropropene	**<0.24**	ug/L	1.0	0.24	1		10/27/23 23:41	10061-01-5	
trans-1,2-Dichloroethene	**<0.53**	ug/L	1.0	0.53	1		10/27/23 23:41	156-60-5	
trans-1,3-Dichloropropene	**<0.27**	ug/L	1.0	0.27	1		10/27/23 23:41	10061-02-6	
Surrogates									
4-Bromofluorobenzene (S)	101	%	70-130		1		10/27/23 23:41	460-00-4	
1,2-Dichlorobenzene-d4 (S)	99	%	70-130		1		10/27/23 23:41	2199-69-1	
Toluene-d8 (S)	99	%	70-130		1		10/27/23 23:41	2037-26-5	

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ANALYTICAL RESULTS

Project: 525156.0000PH4 LEMBERGER LF-RW
Pace Project No.: 40270156

Sample: GR-8 **Lab ID: 40270156008** Collected: 10/23/23 15:35 Received: 10/26/23 09:14 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<0.30**	ug/L	1.0	0.30	1		10/28/23 00:02	71-55-6	
1,1,2,2-Tetrachloroethane	**<0.38**	ug/L	1.0	0.38	1		10/28/23 00:02	79-34-5	
1,1,2-Trichloroethane	**<0.34**	ug/L	1.0	0.34	1		10/28/23 00:02	79-00-5	
1,1-Dichloroethane	**<0.30**	ug/L	1.0	0.30	1		10/28/23 00:02	75-34-3	
1,1-Dichloroethene	**<0.58**	ug/L	1.0	0.58	1		10/28/23 00:02	75-35-4	
1,2-Dichloroethane	**<0.29**	ug/L	1.0	0.29	1		10/28/23 00:02	107-06-2	
1,2-Dichloropropane	**<0.45**	ug/L	1.0	0.45	1		10/28/23 00:02	78-87-5	
2-Butanone (MEK)	**<6.5**	ug/L	25.0	6.5	1		10/28/23 00:02	78-93-3	
2-Hexanone	**<6.3**	ug/L	25.0	6.3	1		10/28/23 00:02	591-78-6	
4-Methyl-2-pentanone (MIBK)	**<6.0**	ug/L	25.0	6.0	1		10/28/23 00:02	108-10-1	
Acetone	**<8.6**	ug/L	25.0	8.6	1		10/28/23 00:02	67-64-1	v2
Benzene	**<0.30**	ug/L	1.0	0.30	1		10/28/23 00:02	71-43-2	
Bromodichloromethane	**<0.42**	ug/L	1.0	0.42	1		10/28/23 00:02	75-27-4	
Bromoform	**<0.43**	ug/L	1.0	0.43	1		10/28/23 00:02	75-25-2	
Bromomethane	**<1.2**	ug/L	5.0	1.2	1		10/28/23 00:02	74-83-9	
Carbon disulfide	**<0.65**	ug/L	1.0	0.65	1		10/28/23 00:02	75-15-0	
Carbon tetrachloride	**<0.37**	ug/L	1.0	0.37	1		10/28/23 00:02	56-23-5	
Chlorobenzene	**<0.86**	ug/L	1.0	0.86	1		10/28/23 00:02	108-90-7	
Chloroethane	**<1.4**	ug/L	5.0	1.4	1		10/28/23 00:02	75-00-3	
Chloroform	**<0.50**	ug/L	5.0	0.50	1		10/28/23 00:02	67-66-3	
Chloromethane	**<1.6**	ug/L	5.0	1.6	1		10/28/23 00:02	74-87-3	
Dibromochloromethane	**<2.6**	ug/L	5.0	2.6	1		10/28/23 00:02	124-48-1	
Ethylbenzene	**<0.33**	ug/L	1.0	0.33	1		10/28/23 00:02	100-41-4	
Methylene Chloride	**<0.32**	ug/L	5.0	0.32	1		10/28/23 00:02	75-09-2	
Styrene	**<0.36**	ug/L	1.0	0.36	1		10/28/23 00:02	100-42-5	L1
Tetrachloroethene	**<0.41**	ug/L	1.0	0.41	1		10/28/23 00:02	127-18-4	
Toluene	**<0.29**	ug/L	1.0	0.29	1		10/28/23 00:02	108-88-3	
Trichloroethene	**<0.32**	ug/L	1.0	0.32	1		10/28/23 00:02	79-01-6	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		10/28/23 00:02	75-01-4	
Xylene (Total)	**<1.0**	ug/L	3.0	1.0	1		10/28/23 00:02	1330-20-7	
cis-1,2-Dichloroethene	**<0.47**	ug/L	1.0	0.47	1		10/28/23 00:02	156-59-2	
cis-1,3-Dichloropropene	**<0.24**	ug/L	1.0	0.24	1		10/28/23 00:02	10061-01-5	
trans-1,2-Dichloroethene	**<0.53**	ug/L	1.0	0.53	1		10/28/23 00:02	156-60-5	
trans-1,3-Dichloropropene	**<0.27**	ug/L	1.0	0.27	1		10/28/23 00:02	10061-02-6	
Surrogates									
4-Bromofluorobenzene (S)	103	%	70-130		1		10/28/23 00:02	460-00-4	
1,2-Dichlorobenzene-d4 (S)	101	%	70-130		1		10/28/23 00:02	2199-69-1	
Toluene-d8 (S)	100	%	70-130		1		10/28/23 00:02	2037-26-5	

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ANALYTICAL RESULTS

Project: 525156.0000PH4 LEMBERGER LF-RW
Pace Project No.: 40270156

Sample: GR-10 **Lab ID: 40270156009** Collected: 10/23/23 16:10 Received: 10/26/23 09:14 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<0.30**	ug/L	1.0	0.30	1		10/28/23 00:23	71-55-6	
1,1,2,2-Tetrachloroethane	**<0.38**	ug/L	1.0	0.38	1		10/28/23 00:23	79-34-5	
1,1,2-Trichloroethane	**<0.34**	ug/L	1.0	0.34	1		10/28/23 00:23	79-00-5	
1,1-Dichloroethane	**<0.30**	ug/L	1.0	0.30	1		10/28/23 00:23	75-34-3	
1,1-Dichloroethene	**<0.58**	ug/L	1.0	0.58	1		10/28/23 00:23	75-35-4	
1,2-Dichloroethane	**<0.29**	ug/L	1.0	0.29	1		10/28/23 00:23	107-06-2	
1,2-Dichloropropane	**<0.45**	ug/L	1.0	0.45	1		10/28/23 00:23	78-87-5	
2-Butanone (MEK)	**<6.5**	ug/L	25.0	6.5	1		10/28/23 00:23	78-93-3	
2-Hexanone	**<6.3**	ug/L	25.0	6.3	1		10/28/23 00:23	591-78-6	
4-Methyl-2-pentanone (MIBK)	**<6.0**	ug/L	25.0	6.0	1		10/28/23 00:23	108-10-1	
Acetone	**<8.6**	ug/L	25.0	8.6	1		10/28/23 00:23	67-64-1	v2
Benzene	**<0.30**	ug/L	1.0	0.30	1		10/28/23 00:23	71-43-2	
Bromodichloromethane	**<0.42**	ug/L	1.0	0.42	1		10/28/23 00:23	75-27-4	
Bromoform	**<0.43**	ug/L	1.0	0.43	1		10/28/23 00:23	75-25-2	
Bromomethane	**<1.2**	ug/L	5.0	1.2	1		10/28/23 00:23	74-83-9	
Carbon disulfide	**<0.65**	ug/L	1.0	0.65	1		10/28/23 00:23	75-15-0	
Carbon tetrachloride	**<0.37**	ug/L	1.0	0.37	1		10/28/23 00:23	56-23-5	
Chlorobenzene	**<0.86**	ug/L	1.0	0.86	1		10/28/23 00:23	108-90-7	
Chloroethane	**<1.4**	ug/L	5.0	1.4	1		10/28/23 00:23	75-00-3	
Chloroform	**<0.50**	ug/L	5.0	0.50	1		10/28/23 00:23	67-66-3	
Chloromethane	**<1.6**	ug/L	5.0	1.6	1		10/28/23 00:23	74-87-3	
Dibromochloromethane	**<2.6**	ug/L	5.0	2.6	1		10/28/23 00:23	124-48-1	
Ethylbenzene	**<0.33**	ug/L	1.0	0.33	1		10/28/23 00:23	100-41-4	
Methylene Chloride	**<0.32**	ug/L	5.0	0.32	1		10/28/23 00:23	75-09-2	
Styrene	**<0.36**	ug/L	1.0	0.36	1		10/28/23 00:23	100-42-5	L1
Tetrachloroethene	**<0.41**	ug/L	1.0	0.41	1		10/28/23 00:23	127-18-4	
Toluene	**<0.29**	ug/L	1.0	0.29	1		10/28/23 00:23	108-88-3	
Trichloroethene	**<0.32**	ug/L	1.0	0.32	1		10/28/23 00:23	79-01-6	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		10/28/23 00:23	75-01-4	
Xylene (Total)	**<1.0**	ug/L	3.0	1.0	1		10/28/23 00:23	1330-20-7	
cis-1,2-Dichloroethene	**<0.47**	ug/L	1.0	0.47	1		10/28/23 00:23	156-59-2	
cis-1,3-Dichloropropene	**<0.24**	ug/L	1.0	0.24	1		10/28/23 00:23	10061-01-5	
trans-1,2-Dichloroethene	**<0.53**	ug/L	1.0	0.53	1		10/28/23 00:23	156-60-5	
trans-1,3-Dichloropropene	**<0.27**	ug/L	1.0	0.27	1		10/28/23 00:23	10061-02-6	
Surrogates									
4-Bromofluorobenzene (S)	101	%	70-130		1		10/28/23 00:23	460-00-4	
1,2-Dichlorobenzene-d4 (S)	101	%	70-130		1		10/28/23 00:23	2199-69-1	
Toluene-d8 (S)	100	%	70-130		1		10/28/23 00:23	2037-26-5	

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ANALYTICAL RESULTS

Project: 525156.0000PH4 LEMBERGER LF-RW
Pace Project No.: 40270156

Sample: GR-11 **Lab ID: 40270156010** Collected: 10/23/23 16:45 Received: 10/26/23 09:14 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<0.30**	ug/L	1.0	0.30	1		10/28/23 00:43	71-55-6	
1,1,2,2-Tetrachloroethane	**<0.38**	ug/L	1.0	0.38	1		10/28/23 00:43	79-34-5	
1,1,2-Trichloroethane	**<0.34**	ug/L	1.0	0.34	1		10/28/23 00:43	79-00-5	
1,1-Dichloroethane	**<0.30**	ug/L	1.0	0.30	1		10/28/23 00:43	75-34-3	
1,1-Dichloroethene	**<0.58**	ug/L	1.0	0.58	1		10/28/23 00:43	75-35-4	
1,2-Dichloroethane	**<0.29**	ug/L	1.0	0.29	1		10/28/23 00:43	107-06-2	
1,2-Dichloropropane	**<0.45**	ug/L	1.0	0.45	1		10/28/23 00:43	78-87-5	
2-Butanone (MEK)	**<6.5**	ug/L	25.0	6.5	1		10/28/23 00:43	78-93-3	
2-Hexanone	**<6.3**	ug/L	25.0	6.3	1		10/28/23 00:43	591-78-6	
4-Methyl-2-pentanone (MIBK)	**<6.0**	ug/L	25.0	6.0	1		10/28/23 00:43	108-10-1	
Acetone	**<8.6**	ug/L	25.0	8.6	1		10/28/23 00:43	67-64-1	v2
Benzene	**<0.30**	ug/L	1.0	0.30	1		10/28/23 00:43	71-43-2	
Bromodichloromethane	**<0.42**	ug/L	1.0	0.42	1		10/28/23 00:43	75-27-4	
Bromoform	**<0.43**	ug/L	1.0	0.43	1		10/28/23 00:43	75-25-2	
Bromomethane	**<1.2**	ug/L	5.0	1.2	1		10/28/23 00:43	74-83-9	
Carbon disulfide	**<0.65**	ug/L	1.0	0.65	1		10/28/23 00:43	75-15-0	
Carbon tetrachloride	**<0.37**	ug/L	1.0	0.37	1		10/28/23 00:43	56-23-5	
Chlorobenzene	**<0.86**	ug/L	1.0	0.86	1		10/28/23 00:43	108-90-7	
Chloroethane	**<1.4**	ug/L	5.0	1.4	1		10/28/23 00:43	75-00-3	
Chloroform	**<0.50**	ug/L	5.0	0.50	1		10/28/23 00:43	67-66-3	
Chloromethane	**<1.6**	ug/L	5.0	1.6	1		10/28/23 00:43	74-87-3	
Dibromochloromethane	**<2.6**	ug/L	5.0	2.6	1		10/28/23 00:43	124-48-1	
Ethylbenzene	**<0.33**	ug/L	1.0	0.33	1		10/28/23 00:43	100-41-4	
Methylene Chloride	**<0.32**	ug/L	5.0	0.32	1		10/28/23 00:43	75-09-2	
Styrene	**<0.36**	ug/L	1.0	0.36	1		10/28/23 00:43	100-42-5	L1
Tetrachloroethene	**<0.41**	ug/L	1.0	0.41	1		10/28/23 00:43	127-18-4	
Toluene	**<0.29**	ug/L	1.0	0.29	1		10/28/23 00:43	108-88-3	
Trichloroethene	**<0.32**	ug/L	1.0	0.32	1		10/28/23 00:43	79-01-6	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		10/28/23 00:43	75-01-4	
Xylene (Total)	**<1.0**	ug/L	3.0	1.0	1		10/28/23 00:43	1330-20-7	
cis-1,2-Dichloroethene	**<0.47**	ug/L	1.0	0.47	1		10/28/23 00:43	156-59-2	
cis-1,3-Dichloropropene	**<0.24**	ug/L	1.0	0.24	1		10/28/23 00:43	10061-01-5	
trans-1,2-Dichloroethene	**<0.53**	ug/L	1.0	0.53	1		10/28/23 00:43	156-60-5	
trans-1,3-Dichloropropene	**<0.27**	ug/L	1.0	0.27	1		10/28/23 00:43	10061-02-6	
Surrogates									
4-Bromofluorobenzene (S)	98	%	70-130		1		10/28/23 00:43	460-00-4	
1,2-Dichlorobenzene-d4 (S)	100	%	70-130		1		10/28/23 00:43	2199-69-1	
Toluene-d8 (S)	98	%	70-130		1		10/28/23 00:43	2037-26-5	

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ANALYTICAL RESULTS

Project: 525156.0000PH4 LEMBERGER LF-RW
Pace Project No.: 40270156

Sample: GR-62 **Lab ID: 40270156011** Collected: 10/23/23 17:15 Received: 10/26/23 09:14 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<0.30**	ug/L	1.0	0.30	1		10/28/23 01:04	71-55-6	
1,1,2,2-Tetrachloroethane	**<0.38**	ug/L	1.0	0.38	1		10/28/23 01:04	79-34-5	
1,1,2-Trichloroethane	**<0.34**	ug/L	1.0	0.34	1		10/28/23 01:04	79-00-5	
1,1-Dichloroethane	**<0.30**	ug/L	1.0	0.30	1		10/28/23 01:04	75-34-3	
1,1-Dichloroethene	**<0.58**	ug/L	1.0	0.58	1		10/28/23 01:04	75-35-4	
1,2-Dichloroethane	**<0.29**	ug/L	1.0	0.29	1		10/28/23 01:04	107-06-2	
1,2-Dichloropropane	**<0.45**	ug/L	1.0	0.45	1		10/28/23 01:04	78-87-5	
2-Butanone (MEK)	**<6.5**	ug/L	25.0	6.5	1		10/28/23 01:04	78-93-3	
2-Hexanone	**<6.3**	ug/L	25.0	6.3	1		10/28/23 01:04	591-78-6	
4-Methyl-2-pentanone (MIBK)	**<6.0**	ug/L	25.0	6.0	1		10/28/23 01:04	108-10-1	
Acetone	**<8.6**	ug/L	25.0	8.6	1		10/28/23 01:04	67-64-1	v2
Benzene	**<0.30**	ug/L	1.0	0.30	1		10/28/23 01:04	71-43-2	
Bromodichloromethane	**<0.42**	ug/L	1.0	0.42	1		10/28/23 01:04	75-27-4	
Bromoform	**<0.43**	ug/L	1.0	0.43	1		10/28/23 01:04	75-25-2	
Bromomethane	**<1.2**	ug/L	5.0	1.2	1		10/28/23 01:04	74-83-9	
Carbon disulfide	**<0.65**	ug/L	1.0	0.65	1		10/28/23 01:04	75-15-0	
Carbon tetrachloride	**<0.37**	ug/L	1.0	0.37	1		10/28/23 01:04	56-23-5	
Chlorobenzene	**<0.86**	ug/L	1.0	0.86	1		10/28/23 01:04	108-90-7	
Chloroethane	**<1.4**	ug/L	5.0	1.4	1		10/28/23 01:04	75-00-3	
Chloroform	**<0.50**	ug/L	5.0	0.50	1		10/28/23 01:04	67-66-3	
Chloromethane	**<1.6**	ug/L	5.0	1.6	1		10/28/23 01:04	74-87-3	
Dibromochloromethane	**<2.6**	ug/L	5.0	2.6	1		10/28/23 01:04	124-48-1	
Ethylbenzene	**<0.33**	ug/L	1.0	0.33	1		10/28/23 01:04	100-41-4	
Methylene Chloride	**<0.32**	ug/L	5.0	0.32	1		10/28/23 01:04	75-09-2	
Styrene	**<0.36**	ug/L	1.0	0.36	1		10/28/23 01:04	100-42-5	L1
Tetrachloroethene	**<0.41**	ug/L	1.0	0.41	1		10/28/23 01:04	127-18-4	
Toluene	**<0.29**	ug/L	1.0	0.29	1		10/28/23 01:04	108-88-3	
Trichloroethene	**<0.32**	ug/L	1.0	0.32	1		10/28/23 01:04	79-01-6	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		10/28/23 01:04	75-01-4	
Xylene (Total)	**<1.0**	ug/L	3.0	1.0	1		10/28/23 01:04	1330-20-7	
cis-1,2-Dichloroethene	**<0.47**	ug/L	1.0	0.47	1		10/28/23 01:04	156-59-2	
cis-1,3-Dichloropropene	**<0.24**	ug/L	1.0	0.24	1		10/28/23 01:04	10061-01-5	
trans-1,2-Dichloroethene	**<0.53**	ug/L	1.0	0.53	1		10/28/23 01:04	156-60-5	
trans-1,3-Dichloropropene	**<0.27**	ug/L	1.0	0.27	1		10/28/23 01:04	10061-02-6	
Surrogates									
4-Bromofluorobenzene (S)	100	%	70-130		1		10/28/23 01:04	460-00-4	
1,2-Dichlorobenzene-d4 (S)	100	%	70-130		1		10/28/23 01:04	2199-69-1	
Toluene-d8 (S)	98	%	70-130		1		10/28/23 01:04	2037-26-5	

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ANALYTICAL RESULTS

Project: 525156.0000PH4 LEMBERGER LF-RW
Pace Project No.: 40270156

Sample: GR-64 **Lab ID: 40270156012** Collected: 10/23/23 18:00 Received: 10/26/23 09:14 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<0.30**	ug/L	1.0	0.30	1		10/28/23 01:25	71-55-6	
1,1,2,2-Tetrachloroethane	**<0.38**	ug/L	1.0	0.38	1		10/28/23 01:25	79-34-5	
1,1,2-Trichloroethane	**<0.34**	ug/L	1.0	0.34	1		10/28/23 01:25	79-00-5	
1,1-Dichloroethane	**<0.30**	ug/L	1.0	0.30	1		10/28/23 01:25	75-34-3	
1,1-Dichloroethene	**<0.58**	ug/L	1.0	0.58	1		10/28/23 01:25	75-35-4	
1,2-Dichloroethane	**<0.29**	ug/L	1.0	0.29	1		10/28/23 01:25	107-06-2	
1,2-Dichloropropane	**<0.45**	ug/L	1.0	0.45	1		10/28/23 01:25	78-87-5	
2-Butanone (MEK)	**<6.5**	ug/L	25.0	6.5	1		10/28/23 01:25	78-93-3	
2-Hexanone	**<6.3**	ug/L	25.0	6.3	1		10/28/23 01:25	591-78-6	
4-Methyl-2-pentanone (MIBK)	**<6.0**	ug/L	25.0	6.0	1		10/28/23 01:25	108-10-1	
Acetone	**<8.6**	ug/L	25.0	8.6	1		10/28/23 01:25	67-64-1	v2
Benzene	**<0.30**	ug/L	1.0	0.30	1		10/28/23 01:25	71-43-2	
Bromodichloromethane	**<0.42**	ug/L	1.0	0.42	1		10/28/23 01:25	75-27-4	
Bromoform	**<0.43**	ug/L	1.0	0.43	1		10/28/23 01:25	75-25-2	
Bromomethane	**<1.2**	ug/L	5.0	1.2	1		10/28/23 01:25	74-83-9	
Carbon disulfide	**<0.65**	ug/L	1.0	0.65	1		10/28/23 01:25	75-15-0	
Carbon tetrachloride	**<0.37**	ug/L	1.0	0.37	1		10/28/23 01:25	56-23-5	
Chlorobenzene	**<0.86**	ug/L	1.0	0.86	1		10/28/23 01:25	108-90-7	
Chloroethane	**<1.4**	ug/L	5.0	1.4	1		10/28/23 01:25	75-00-3	
Chloroform	**<0.50**	ug/L	5.0	0.50	1		10/28/23 01:25	67-66-3	
Chloromethane	**<1.6**	ug/L	5.0	1.6	1		10/28/23 01:25	74-87-3	
Dibromochloromethane	**<2.6**	ug/L	5.0	2.6	1		10/28/23 01:25	124-48-1	
Ethylbenzene	**<0.33**	ug/L	1.0	0.33	1		10/28/23 01:25	100-41-4	
Methylene Chloride	**<0.32**	ug/L	5.0	0.32	1		10/28/23 01:25	75-09-2	
Styrene	**<0.36**	ug/L	1.0	0.36	1		10/28/23 01:25	100-42-5	L1
Tetrachloroethene	**<0.41**	ug/L	1.0	0.41	1		10/28/23 01:25	127-18-4	
Toluene	**<0.29**	ug/L	1.0	0.29	1		10/28/23 01:25	108-88-3	
Trichloroethene	**<0.32**	ug/L	1.0	0.32	1		10/28/23 01:25	79-01-6	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		10/28/23 01:25	75-01-4	
Xylene (Total)	**<1.0**	ug/L	3.0	1.0	1		10/28/23 01:25	1330-20-7	
cis-1,2-Dichloroethene	**<0.47**	ug/L	1.0	0.47	1		10/28/23 01:25	156-59-2	
cis-1,3-Dichloropropene	**<0.24**	ug/L	1.0	0.24	1		10/28/23 01:25	10061-01-5	
trans-1,2-Dichloroethene	**<0.53**	ug/L	1.0	0.53	1		10/28/23 01:25	156-60-5	
trans-1,3-Dichloropropene	**<0.27**	ug/L	1.0	0.27	1		10/28/23 01:25	10061-02-6	
Surrogates									
4-Bromofluorobenzene (S)	103	%	70-130		1		10/28/23 01:25	460-00-4	
1,2-Dichlorobenzene-d4 (S)	100	%	70-130		1		10/28/23 01:25	2199-69-1	
Toluene-d8 (S)	100	%	70-130		1		10/28/23 01:25	2037-26-5	

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ANALYTICAL RESULTS

Project: 525156.0000PH4 LEMBERGER LF-RW
Pace Project No.: 40270156

Sample: GR-63 **Lab ID: 40270156013** Collected: 10/23/23 18:20 Received: 10/26/23 09:14 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<0.30**	ug/L	1.0	0.30	1		10/28/23 01:45	71-55-6	
1,1,2,2-Tetrachloroethane	**<0.38**	ug/L	1.0	0.38	1		10/28/23 01:45	79-34-5	
1,1,2-Trichloroethane	**<0.34**	ug/L	1.0	0.34	1		10/28/23 01:45	79-00-5	
1,1-Dichloroethane	**<0.30**	ug/L	1.0	0.30	1		10/28/23 01:45	75-34-3	
1,1-Dichloroethene	**<0.58**	ug/L	1.0	0.58	1		10/28/23 01:45	75-35-4	
1,2-Dichloroethane	**<0.29**	ug/L	1.0	0.29	1		10/28/23 01:45	107-06-2	
1,2-Dichloropropane	**<0.45**	ug/L	1.0	0.45	1		10/28/23 01:45	78-87-5	
2-Butanone (MEK)	**<6.5**	ug/L	25.0	6.5	1		10/28/23 01:45	78-93-3	
2-Hexanone	**<6.3**	ug/L	25.0	6.3	1		10/28/23 01:45	591-78-6	
4-Methyl-2-pentanone (MIBK)	**<6.0**	ug/L	25.0	6.0	1		10/28/23 01:45	108-10-1	
Acetone	**<8.6**	ug/L	25.0	8.6	1		10/28/23 01:45	67-64-1	v2
Benzene	**<0.30**	ug/L	1.0	0.30	1		10/28/23 01:45	71-43-2	
Bromodichloromethane	**<0.42**	ug/L	1.0	0.42	1		10/28/23 01:45	75-27-4	
Bromoform	**<0.43**	ug/L	1.0	0.43	1		10/28/23 01:45	75-25-2	
Bromomethane	**<1.2**	ug/L	5.0	1.2	1		10/28/23 01:45	74-83-9	
Carbon disulfide	**<0.65**	ug/L	1.0	0.65	1		10/28/23 01:45	75-15-0	
Carbon tetrachloride	**<0.37**	ug/L	1.0	0.37	1		10/28/23 01:45	56-23-5	
Chlorobenzene	**<0.86**	ug/L	1.0	0.86	1		10/28/23 01:45	108-90-7	
Chloroethane	**<1.4**	ug/L	5.0	1.4	1		10/28/23 01:45	75-00-3	
Chloroform	**<0.50**	ug/L	5.0	0.50	1		10/28/23 01:45	67-66-3	
Chloromethane	**<1.6**	ug/L	5.0	1.6	1		10/28/23 01:45	74-87-3	
Dibromochloromethane	**<2.6**	ug/L	5.0	2.6	1		10/28/23 01:45	124-48-1	
Ethylbenzene	**<0.33**	ug/L	1.0	0.33	1		10/28/23 01:45	100-41-4	
Methylene Chloride	**<0.32**	ug/L	5.0	0.32	1		10/28/23 01:45	75-09-2	
Styrene	**<0.36**	ug/L	1.0	0.36	1		10/28/23 01:45	100-42-5	L1
Tetrachloroethene	**<0.41**	ug/L	1.0	0.41	1		10/28/23 01:45	127-18-4	
Toluene	**<0.29**	ug/L	1.0	0.29	1		10/28/23 01:45	108-88-3	
Trichloroethene	**<0.32**	ug/L	1.0	0.32	1		10/28/23 01:45	79-01-6	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		10/28/23 01:45	75-01-4	
Xylene (Total)	**<1.0**	ug/L	3.0	1.0	1		10/28/23 01:45	1330-20-7	
cis-1,2-Dichloroethene	**<0.47**	ug/L	1.0	0.47	1		10/28/23 01:45	156-59-2	
cis-1,3-Dichloropropene	**<0.24**	ug/L	1.0	0.24	1		10/28/23 01:45	10061-01-5	
trans-1,2-Dichloroethene	**<0.53**	ug/L	1.0	0.53	1		10/28/23 01:45	156-60-5	
trans-1,3-Dichloropropene	**<0.27**	ug/L	1.0	0.27	1		10/28/23 01:45	10061-02-6	
Surrogates									
4-Bromofluorobenzene (S)	103	%	70-130		1		10/28/23 01:45	460-00-4	
1,2-Dichlorobenzene-d4 (S)	101	%	70-130		1		10/28/23 01:45	2199-69-1	
Toluene-d8 (S)	97	%	70-130		1		10/28/23 01:45	2037-26-5	

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ANALYTICAL RESULTS

Project: 525156.0000PH4 LEMBERGER LF-RW
Pace Project No.: 40270156

Sample: GR-66 **Lab ID: 40270156014** Collected: 10/23/23 18:50 Received: 10/26/23 09:14 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<0.30**	ug/L	1.0	0.30	1		10/28/23 02:06	71-55-6	
1,1,2,2-Tetrachloroethane	**<0.38**	ug/L	1.0	0.38	1		10/28/23 02:06	79-34-5	
1,1,2-Trichloroethane	**<0.34**	ug/L	1.0	0.34	1		10/28/23 02:06	79-00-5	
1,1-Dichloroethane	**<0.30**	ug/L	1.0	0.30	1		10/28/23 02:06	75-34-3	
1,1-Dichloroethene	**<0.58**	ug/L	1.0	0.58	1		10/28/23 02:06	75-35-4	
1,2-Dichloroethane	**<0.29**	ug/L	1.0	0.29	1		10/28/23 02:06	107-06-2	
1,2-Dichloropropane	**<0.45**	ug/L	1.0	0.45	1		10/28/23 02:06	78-87-5	
2-Butanone (MEK)	**<6.5**	ug/L	25.0	6.5	1		10/28/23 02:06	78-93-3	
2-Hexanone	**<6.3**	ug/L	25.0	6.3	1		10/28/23 02:06	591-78-6	
4-Methyl-2-pentanone (MIBK)	**<6.0**	ug/L	25.0	6.0	1		10/28/23 02:06	108-10-1	
Acetone	**<8.6**	ug/L	25.0	8.6	1		10/28/23 02:06	67-64-1	v2
Benzene	**<0.30**	ug/L	1.0	0.30	1		10/28/23 02:06	71-43-2	
Bromodichloromethane	**<0.42**	ug/L	1.0	0.42	1		10/28/23 02:06	75-27-4	
Bromoform	**<0.43**	ug/L	1.0	0.43	1		10/28/23 02:06	75-25-2	
Bromomethane	**<1.2**	ug/L	5.0	1.2	1		10/28/23 02:06	74-83-9	
Carbon disulfide	**<0.65**	ug/L	1.0	0.65	1		10/28/23 02:06	75-15-0	
Carbon tetrachloride	**<0.37**	ug/L	1.0	0.37	1		10/28/23 02:06	56-23-5	
Chlorobenzene	**<0.86**	ug/L	1.0	0.86	1		10/28/23 02:06	108-90-7	
Chloroethane	**<1.4**	ug/L	5.0	1.4	1		10/28/23 02:06	75-00-3	
Chloroform	**<0.50**	ug/L	5.0	0.50	1		10/28/23 02:06	67-66-3	
Chloromethane	**<1.6**	ug/L	5.0	1.6	1		10/28/23 02:06	74-87-3	
Dibromochloromethane	**<2.6**	ug/L	5.0	2.6	1		10/28/23 02:06	124-48-1	
Ethylbenzene	**<0.33**	ug/L	1.0	0.33	1		10/28/23 02:06	100-41-4	
Methylene Chloride	**<0.32**	ug/L	5.0	0.32	1		10/28/23 02:06	75-09-2	
Styrene	**<0.36**	ug/L	1.0	0.36	1		10/28/23 02:06	100-42-5	L1
Tetrachloroethene	**<0.41**	ug/L	1.0	0.41	1		10/28/23 02:06	127-18-4	
Toluene	**<0.29**	ug/L	1.0	0.29	1		10/28/23 02:06	108-88-3	
Trichloroethene	**<0.32**	ug/L	1.0	0.32	1		10/28/23 02:06	79-01-6	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		10/28/23 02:06	75-01-4	
Xylene (Total)	**<1.0**	ug/L	3.0	1.0	1		10/28/23 02:06	1330-20-7	
cis-1,2-Dichloroethene	**<0.47**	ug/L	1.0	0.47	1		10/28/23 02:06	156-59-2	
cis-1,3-Dichloropropene	**<0.24**	ug/L	1.0	0.24	1		10/28/23 02:06	10061-01-5	
trans-1,2-Dichloroethene	**<0.53**	ug/L	1.0	0.53	1		10/28/23 02:06	156-60-5	
trans-1,3-Dichloropropene	**<0.27**	ug/L	1.0	0.27	1		10/28/23 02:06	10061-02-6	
Surrogates									
4-Bromofluorobenzene (S)	103	%	70-130		1		10/28/23 02:06	460-00-4	
1,2-Dichlorobenzene-d4 (S)	99	%	70-130		1		10/28/23 02:06	2199-69-1	
Toluene-d8 (S)	100	%	70-130		1		10/28/23 02:06	2037-26-5	

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ANALYTICAL RESULTS

Project: 525156.0000PH4 LEMBERGER LF-RW
Pace Project No.: 40270156

Sample: GR-73 **Lab ID: 40270156015** Collected: 10/24/23 15:45 Received: 10/26/23 09:14 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<0.30**	ug/L	1.0	0.30	1		10/28/23 02:27	71-55-6	
1,1,2,2-Tetrachloroethane	**<0.38**	ug/L	1.0	0.38	1		10/28/23 02:27	79-34-5	
1,1,2-Trichloroethane	**<0.34**	ug/L	1.0	0.34	1		10/28/23 02:27	79-00-5	
1,1-Dichloroethane	**<0.30**	ug/L	1.0	0.30	1		10/28/23 02:27	75-34-3	
1,1-Dichloroethene	**<0.58**	ug/L	1.0	0.58	1		10/28/23 02:27	75-35-4	
1,2-Dichloroethane	**<0.29**	ug/L	1.0	0.29	1		10/28/23 02:27	107-06-2	
1,2-Dichloropropane	**<0.45**	ug/L	1.0	0.45	1		10/28/23 02:27	78-87-5	
2-Butanone (MEK)	**<6.5**	ug/L	25.0	6.5	1		10/28/23 02:27	78-93-3	
2-Hexanone	**<6.3**	ug/L	25.0	6.3	1		10/28/23 02:27	591-78-6	
4-Methyl-2-pentanone (MIBK)	**<6.0**	ug/L	25.0	6.0	1		10/28/23 02:27	108-10-1	
Acetone	**<8.6**	ug/L	25.0	8.6	1		10/28/23 02:27	67-64-1	v2
Benzene	**<0.30**	ug/L	1.0	0.30	1		10/28/23 02:27	71-43-2	
Bromodichloromethane	**<0.42**	ug/L	1.0	0.42	1		10/28/23 02:27	75-27-4	
Bromoform	**<0.43**	ug/L	1.0	0.43	1		10/28/23 02:27	75-25-2	
Bromomethane	**<1.2**	ug/L	5.0	1.2	1		10/28/23 02:27	74-83-9	
Carbon disulfide	**<0.65**	ug/L	1.0	0.65	1		10/28/23 02:27	75-15-0	
Carbon tetrachloride	**<0.37**	ug/L	1.0	0.37	1		10/28/23 02:27	56-23-5	
Chlorobenzene	**<0.86**	ug/L	1.0	0.86	1		10/28/23 02:27	108-90-7	
Chloroethane	**<1.4**	ug/L	5.0	1.4	1		10/28/23 02:27	75-00-3	
Chloroform	**<0.50**	ug/L	5.0	0.50	1		10/28/23 02:27	67-66-3	
Chloromethane	**<1.6**	ug/L	5.0	1.6	1		10/28/23 02:27	74-87-3	
Dibromochloromethane	**<2.6**	ug/L	5.0	2.6	1		10/28/23 02:27	124-48-1	
Ethylbenzene	**<0.33**	ug/L	1.0	0.33	1		10/28/23 02:27	100-41-4	
Methylene Chloride	**<0.32**	ug/L	5.0	0.32	1		10/28/23 02:27	75-09-2	
Styrene	**<0.36**	ug/L	1.0	0.36	1		10/28/23 02:27	100-42-5	L1
Tetrachloroethene	**<0.41**	ug/L	1.0	0.41	1		10/28/23 02:27	127-18-4	
Toluene	**<0.29**	ug/L	1.0	0.29	1		10/28/23 02:27	108-88-3	
Trichloroethene	**<0.32**	ug/L	1.0	0.32	1		10/28/23 02:27	79-01-6	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		10/28/23 02:27	75-01-4	
Xylene (Total)	**<1.0**	ug/L	3.0	1.0	1		10/28/23 02:27	1330-20-7	
cis-1,2-Dichloroethene	**<0.47**	ug/L	1.0	0.47	1		10/28/23 02:27	156-59-2	
cis-1,3-Dichloropropene	**<0.24**	ug/L	1.0	0.24	1		10/28/23 02:27	10061-01-5	
trans-1,2-Dichloroethene	**<0.53**	ug/L	1.0	0.53	1		10/28/23 02:27	156-60-5	
trans-1,3-Dichloropropene	**<0.27**	ug/L	1.0	0.27	1		10/28/23 02:27	10061-02-6	
Surrogates									
4-Bromofluorobenzene (S)	101	%	70-130		1		10/28/23 02:27	460-00-4	
1,2-Dichlorobenzene-d4 (S)	103	%	70-130		1		10/28/23 02:27	2199-69-1	
Toluene-d8 (S)	97	%	70-130		1		10/28/23 02:27	2037-26-5	

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ANALYTICAL RESULTS

Project: 525156.0000PH4 LEMBERGER LF-RW
Pace Project No.: 40270156

Sample: GR-65 **Lab ID: 40270156016** Collected: 10/24/23 16:30 Received: 10/26/23 09:14 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<0.30**	ug/L	1.0	0.30	1		10/28/23 02:47	71-55-6	
1,1,2,2-Tetrachloroethane	**<0.38**	ug/L	1.0	0.38	1		10/28/23 02:47	79-34-5	
1,1,2-Trichloroethane	**<0.34**	ug/L	1.0	0.34	1		10/28/23 02:47	79-00-5	
1,1-Dichloroethane	**<0.30**	ug/L	1.0	0.30	1		10/28/23 02:47	75-34-3	
1,1-Dichloroethene	**<0.58**	ug/L	1.0	0.58	1		10/28/23 02:47	75-35-4	
1,2-Dichloroethane	**<0.29**	ug/L	1.0	0.29	1		10/28/23 02:47	107-06-2	
1,2-Dichloropropane	**<0.45**	ug/L	1.0	0.45	1		10/28/23 02:47	78-87-5	
2-Butanone (MEK)	**<6.5**	ug/L	25.0	6.5	1		10/28/23 02:47	78-93-3	
2-Hexanone	**<6.3**	ug/L	25.0	6.3	1		10/28/23 02:47	591-78-6	
4-Methyl-2-pentanone (MIBK)	**<6.0**	ug/L	25.0	6.0	1		10/28/23 02:47	108-10-1	
Acetone	**<8.6**	ug/L	25.0	8.6	1		10/28/23 02:47	67-64-1	v2
Benzene	**<0.30**	ug/L	1.0	0.30	1		10/28/23 02:47	71-43-2	
Bromodichloromethane	**<0.42**	ug/L	1.0	0.42	1		10/28/23 02:47	75-27-4	
Bromoform	**<0.43**	ug/L	1.0	0.43	1		10/28/23 02:47	75-25-2	
Bromomethane	**<1.2**	ug/L	5.0	1.2	1		10/28/23 02:47	74-83-9	
Carbon disulfide	**<0.65**	ug/L	1.0	0.65	1		10/28/23 02:47	75-15-0	
Carbon tetrachloride	**<0.37**	ug/L	1.0	0.37	1		10/28/23 02:47	56-23-5	
Chlorobenzene	**<0.86**	ug/L	1.0	0.86	1		10/28/23 02:47	108-90-7	
Chloroethane	**<1.4**	ug/L	5.0	1.4	1		10/28/23 02:47	75-00-3	
Chloroform	**<0.50**	ug/L	5.0	0.50	1		10/28/23 02:47	67-66-3	
Chloromethane	**<1.6**	ug/L	5.0	1.6	1		10/28/23 02:47	74-87-3	
Dibromochloromethane	**<2.6**	ug/L	5.0	2.6	1		10/28/23 02:47	124-48-1	
Ethylbenzene	**<0.33**	ug/L	1.0	0.33	1		10/28/23 02:47	100-41-4	
Methylene Chloride	**<0.32**	ug/L	5.0	0.32	1		10/28/23 02:47	75-09-2	
Styrene	**<0.36**	ug/L	1.0	0.36	1		10/28/23 02:47	100-42-5	L1
Tetrachloroethene	**<0.41**	ug/L	1.0	0.41	1		10/28/23 02:47	127-18-4	
Toluene	**<0.29**	ug/L	1.0	0.29	1		10/28/23 02:47	108-88-3	
Trichloroethene	**<0.32**	ug/L	1.0	0.32	1		10/28/23 02:47	79-01-6	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		10/28/23 02:47	75-01-4	
Xylene (Total)	**<1.0**	ug/L	3.0	1.0	1		10/28/23 02:47	1330-20-7	
cis-1,2-Dichloroethene	**<0.47**	ug/L	1.0	0.47	1		10/28/23 02:47	156-59-2	
cis-1,3-Dichloropropene	**<0.24**	ug/L	1.0	0.24	1		10/28/23 02:47	10061-01-5	
trans-1,2-Dichloroethene	**<0.53**	ug/L	1.0	0.53	1		10/28/23 02:47	156-60-5	
trans-1,3-Dichloropropene	**<0.27**	ug/L	1.0	0.27	1		10/28/23 02:47	10061-02-6	
Surrogates									
4-Bromofluorobenzene (S)	101	%	70-130		1		10/28/23 02:47	460-00-4	
1,2-Dichlorobenzene-d4 (S)	103	%	70-130		1		10/28/23 02:47	2199-69-1	
Toluene-d8 (S)	100	%	70-130		1		10/28/23 02:47	2037-26-5	

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ANALYTICAL RESULTS

Project: 525156.0000PH4 LEMBERGER LF-RW
Pace Project No.: 40270156

Sample: GR-16 **Lab ID: 40270156017** Collected: 10/24/23 18:15 Received: 10/26/23 09:14 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<0.30**	ug/L	1.0	0.30	1		10/28/23 03:08	71-55-6	
1,1,2,2-Tetrachloroethane	**<0.38**	ug/L	1.0	0.38	1		10/28/23 03:08	79-34-5	
1,1,2-Trichloroethane	**<0.34**	ug/L	1.0	0.34	1		10/28/23 03:08	79-00-5	
1,1-Dichloroethane	**<0.30**	ug/L	1.0	0.30	1		10/28/23 03:08	75-34-3	
1,1-Dichloroethene	**<0.58**	ug/L	1.0	0.58	1		10/28/23 03:08	75-35-4	
1,2-Dichloroethane	**<0.29**	ug/L	1.0	0.29	1		10/28/23 03:08	107-06-2	
1,2-Dichloropropane	**<0.45**	ug/L	1.0	0.45	1		10/28/23 03:08	78-87-5	
2-Butanone (MEK)	**<6.5**	ug/L	25.0	6.5	1		10/28/23 03:08	78-93-3	
2-Hexanone	**<6.3**	ug/L	25.0	6.3	1		10/28/23 03:08	591-78-6	
4-Methyl-2-pentanone (MIBK)	**<6.0**	ug/L	25.0	6.0	1		10/28/23 03:08	108-10-1	
Acetone	**<8.6**	ug/L	25.0	8.6	1		10/28/23 03:08	67-64-1	v2
Benzene	**<0.30**	ug/L	1.0	0.30	1		10/28/23 03:08	71-43-2	
Bromodichloromethane	**<0.42**	ug/L	1.0	0.42	1		10/28/23 03:08	75-27-4	
Bromoform	**<0.43**	ug/L	1.0	0.43	1		10/28/23 03:08	75-25-2	
Bromomethane	**<1.2**	ug/L	5.0	1.2	1		10/28/23 03:08	74-83-9	
Carbon disulfide	**<0.65**	ug/L	1.0	0.65	1		10/28/23 03:08	75-15-0	
Carbon tetrachloride	**<0.37**	ug/L	1.0	0.37	1		10/28/23 03:08	56-23-5	
Chlorobenzene	**<0.86**	ug/L	1.0	0.86	1		10/28/23 03:08	108-90-7	
Chloroethane	**<1.4**	ug/L	5.0	1.4	1		10/28/23 03:08	75-00-3	
Chloroform	**<0.50**	ug/L	5.0	0.50	1		10/28/23 03:08	67-66-3	
Chloromethane	**<1.6**	ug/L	5.0	1.6	1		10/28/23 03:08	74-87-3	
Dibromochloromethane	**<2.6**	ug/L	5.0	2.6	1		10/28/23 03:08	124-48-1	
Ethylbenzene	**<0.33**	ug/L	1.0	0.33	1		10/28/23 03:08	100-41-4	
Methylene Chloride	**<0.32**	ug/L	5.0	0.32	1		10/28/23 03:08	75-09-2	
Styrene	**<0.36**	ug/L	1.0	0.36	1		10/28/23 03:08	100-42-5	L1
Tetrachloroethene	**<0.41**	ug/L	1.0	0.41	1		10/28/23 03:08	127-18-4	
Toluene	**<0.29**	ug/L	1.0	0.29	1		10/28/23 03:08	108-88-3	
Trichloroethene	**<0.32**	ug/L	1.0	0.32	1		10/28/23 03:08	79-01-6	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		10/28/23 03:08	75-01-4	
Xylene (Total)	**<1.0**	ug/L	3.0	1.0	1		10/28/23 03:08	1330-20-7	
cis-1,2-Dichloroethene	**<0.47**	ug/L	1.0	0.47	1		10/28/23 03:08	156-59-2	
cis-1,3-Dichloropropene	**<0.24**	ug/L	1.0	0.24	1		10/28/23 03:08	10061-01-5	
trans-1,2-Dichloroethene	**<0.53**	ug/L	1.0	0.53	1		10/28/23 03:08	156-60-5	
trans-1,3-Dichloropropene	**<0.27**	ug/L	1.0	0.27	1		10/28/23 03:08	10061-02-6	
Surrogates									
4-Bromofluorobenzene (S)	103	%	70-130		1		10/28/23 03:08	460-00-4	
1,2-Dichlorobenzene-d4 (S)	102	%	70-130		1		10/28/23 03:08	2199-69-1	
Toluene-d8 (S)	100	%	70-130		1		10/28/23 03:08	2037-26-5	

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ANALYTICAL RESULTS

Project: 525156.0000PH4 LEMBERGER LF-RW
Pace Project No.: 40270156

Sample: GR-14 **Lab ID: 40270156018** Collected: 10/24/23 18:40 Received: 10/26/23 09:14 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<0.30**	ug/L	1.0	0.30	1		10/28/23 03:29	71-55-6	
1,1,2,2-Tetrachloroethane	**<0.38**	ug/L	1.0	0.38	1		10/28/23 03:29	79-34-5	
1,1,2-Trichloroethane	**<0.34**	ug/L	1.0	0.34	1		10/28/23 03:29	79-00-5	
1,1-Dichloroethane	**<0.30**	ug/L	1.0	0.30	1		10/28/23 03:29	75-34-3	
1,1-Dichloroethene	**<0.58**	ug/L	1.0	0.58	1		10/28/23 03:29	75-35-4	
1,2-Dichloroethane	**<0.29**	ug/L	1.0	0.29	1		10/28/23 03:29	107-06-2	
1,2-Dichloropropane	**<0.45**	ug/L	1.0	0.45	1		10/28/23 03:29	78-87-5	
2-Butanone (MEK)	**<6.5**	ug/L	25.0	6.5	1		10/28/23 03:29	78-93-3	
2-Hexanone	**<6.3**	ug/L	25.0	6.3	1		10/28/23 03:29	591-78-6	
4-Methyl-2-pentanone (MIBK)	**<6.0**	ug/L	25.0	6.0	1		10/28/23 03:29	108-10-1	
Acetone	**<8.6**	ug/L	25.0	8.6	1		10/28/23 03:29	67-64-1	v2
Benzene	**<0.30**	ug/L	1.0	0.30	1		10/28/23 03:29	71-43-2	
Bromodichloromethane	**<0.42**	ug/L	1.0	0.42	1		10/28/23 03:29	75-27-4	
Bromoform	**<0.43**	ug/L	1.0	0.43	1		10/28/23 03:29	75-25-2	
Bromomethane	**<1.2**	ug/L	5.0	1.2	1		10/28/23 03:29	74-83-9	
Carbon disulfide	**<0.65**	ug/L	1.0	0.65	1		10/28/23 03:29	75-15-0	
Carbon tetrachloride	**<0.37**	ug/L	1.0	0.37	1		10/28/23 03:29	56-23-5	
Chlorobenzene	**<0.86**	ug/L	1.0	0.86	1		10/28/23 03:29	108-90-7	
Chloroethane	**<1.4**	ug/L	5.0	1.4	1		10/28/23 03:29	75-00-3	
Chloroform	**<0.50**	ug/L	5.0	0.50	1		10/28/23 03:29	67-66-3	
Chloromethane	**<1.6**	ug/L	5.0	1.6	1		10/28/23 03:29	74-87-3	
Dibromochloromethane	**<2.6**	ug/L	5.0	2.6	1		10/28/23 03:29	124-48-1	
Ethylbenzene	**<0.33**	ug/L	1.0	0.33	1		10/28/23 03:29	100-41-4	
Methylene Chloride	**<0.32**	ug/L	5.0	0.32	1		10/28/23 03:29	75-09-2	
Styrene	**<0.36**	ug/L	1.0	0.36	1		10/28/23 03:29	100-42-5	L1
Tetrachloroethene	**<0.41**	ug/L	1.0	0.41	1		10/28/23 03:29	127-18-4	
Toluene	**<0.29**	ug/L	1.0	0.29	1		10/28/23 03:29	108-88-3	
Trichloroethene	**<0.32**	ug/L	1.0	0.32	1		10/28/23 03:29	79-01-6	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		10/28/23 03:29	75-01-4	
Xylene (Total)	**<1.0**	ug/L	3.0	1.0	1		10/28/23 03:29	1330-20-7	
cis-1,2-Dichloroethene	**<0.47**	ug/L	1.0	0.47	1		10/28/23 03:29	156-59-2	
cis-1,3-Dichloropropene	**<0.24**	ug/L	1.0	0.24	1		10/28/23 03:29	10061-01-5	
trans-1,2-Dichloroethene	**<0.53**	ug/L	1.0	0.53	1		10/28/23 03:29	156-60-5	
trans-1,3-Dichloropropene	**<0.27**	ug/L	1.0	0.27	1		10/28/23 03:29	10061-02-6	
Surrogates									
4-Bromofluorobenzene (S)	102	%	70-130		1		10/28/23 03:29	460-00-4	
1,2-Dichlorobenzene-d4 (S)	104	%	70-130		1		10/28/23 03:29	2199-69-1	
Toluene-d8 (S)	98	%	70-130		1		10/28/23 03:29	2037-26-5	

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ANALYTICAL RESULTS

Project: 525156.0000PH4 LEMBERGER LF-RW
Pace Project No.: 40270156

Sample: GR-FDUP-002 **Lab ID: 40270156019** Collected: 10/24/23 00:00 Received: 10/26/23 09:14 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<0.30**	ug/L	1.0	0.30	1		10/28/23 03:49	71-55-6	
1,1,2,2-Tetrachloroethane	**<0.38**	ug/L	1.0	0.38	1		10/28/23 03:49	79-34-5	
1,1,2-Trichloroethane	**<0.34**	ug/L	1.0	0.34	1		10/28/23 03:49	79-00-5	
1,1-Dichloroethane	**<0.30**	ug/L	1.0	0.30	1		10/28/23 03:49	75-34-3	
1,1-Dichloroethene	**<0.58**	ug/L	1.0	0.58	1		10/28/23 03:49	75-35-4	
1,2-Dichloroethane	**<0.29**	ug/L	1.0	0.29	1		10/28/23 03:49	107-06-2	
1,2-Dichloropropane	**<0.45**	ug/L	1.0	0.45	1		10/28/23 03:49	78-87-5	
2-Butanone (MEK)	**<6.5**	ug/L	25.0	6.5	1		10/28/23 03:49	78-93-3	
2-Hexanone	**<6.3**	ug/L	25.0	6.3	1		10/28/23 03:49	591-78-6	
4-Methyl-2-pentanone (MIBK)	**<6.0**	ug/L	25.0	6.0	1		10/28/23 03:49	108-10-1	
Acetone	**<8.6**	ug/L	25.0	8.6	1		10/28/23 03:49	67-64-1	v2
Benzene	**<0.30**	ug/L	1.0	0.30	1		10/28/23 03:49	71-43-2	
Bromodichloromethane	**<0.42**	ug/L	1.0	0.42	1		10/28/23 03:49	75-27-4	
Bromoform	**<0.43**	ug/L	1.0	0.43	1		10/28/23 03:49	75-25-2	
Bromomethane	**<1.2**	ug/L	5.0	1.2	1		10/28/23 03:49	74-83-9	
Carbon disulfide	**<0.65**	ug/L	1.0	0.65	1		10/28/23 03:49	75-15-0	
Carbon tetrachloride	**<0.37**	ug/L	1.0	0.37	1		10/28/23 03:49	56-23-5	
Chlorobenzene	**<0.86**	ug/L	1.0	0.86	1		10/28/23 03:49	108-90-7	
Chloroethane	**<1.4**	ug/L	5.0	1.4	1		10/28/23 03:49	75-00-3	
Chloroform	**<0.50**	ug/L	5.0	0.50	1		10/28/23 03:49	67-66-3	
Chloromethane	**<1.6**	ug/L	5.0	1.6	1		10/28/23 03:49	74-87-3	
Dibromochloromethane	**<2.6**	ug/L	5.0	2.6	1		10/28/23 03:49	124-48-1	
Ethylbenzene	**<0.33**	ug/L	1.0	0.33	1		10/28/23 03:49	100-41-4	
Methylene Chloride	**<0.32**	ug/L	5.0	0.32	1		10/28/23 03:49	75-09-2	
Styrene	**<0.36**	ug/L	1.0	0.36	1		10/28/23 03:49	100-42-5	L1
Tetrachloroethene	**<0.41**	ug/L	1.0	0.41	1		10/28/23 03:49	127-18-4	
Toluene	**<0.29**	ug/L	1.0	0.29	1		10/28/23 03:49	108-88-3	
Trichloroethene	**<0.32**	ug/L	1.0	0.32	1		10/28/23 03:49	79-01-6	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		10/28/23 03:49	75-01-4	
Xylene (Total)	**<1.0**	ug/L	3.0	1.0	1		10/28/23 03:49	1330-20-7	
cis-1,2-Dichloroethene	**<0.47**	ug/L	1.0	0.47	1		10/28/23 03:49	156-59-2	
cis-1,3-Dichloropropene	**<0.24**	ug/L	1.0	0.24	1		10/28/23 03:49	10061-01-5	
trans-1,2-Dichloroethene	**<0.53**	ug/L	1.0	0.53	1		10/28/23 03:49	156-60-5	
trans-1,3-Dichloropropene	**<0.27**	ug/L	1.0	0.27	1		10/28/23 03:49	10061-02-6	
Surrogates									
4-Bromofluorobenzene (S)	103	%	70-130		1		10/28/23 03:49	460-00-4	
1,2-Dichlorobenzene-d4 (S)	104	%	70-130		1		10/28/23 03:49	2199-69-1	
Toluene-d8 (S)	99	%	70-130		1		10/28/23 03:49	2037-26-5	

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ANALYTICAL RESULTS

Project: 525156.0000PH4 LEMBERGER LF-RW
Pace Project No.: 40270156

Sample: TB-001 **Lab ID: 40270156020** Collected: 10/24/23 00:00 Received: 10/26/23 09:14 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<0.30**	ug/L	1.0	0.30	1		10/27/23 21:17	71-55-6	
1,1,2,2-Tetrachloroethane	**<0.38**	ug/L	1.0	0.38	1		10/27/23 21:17	79-34-5	
1,1,2-Trichloroethane	**<0.34**	ug/L	1.0	0.34	1		10/27/23 21:17	79-00-5	
1,1-Dichloroethane	**<0.30**	ug/L	1.0	0.30	1		10/27/23 21:17	75-34-3	
1,1-Dichloroethene	**<0.58**	ug/L	1.0	0.58	1		10/27/23 21:17	75-35-4	
1,2-Dichloroethane	**<0.29**	ug/L	1.0	0.29	1		10/27/23 21:17	107-06-2	
1,2-Dichloropropane	**<0.45**	ug/L	1.0	0.45	1		10/27/23 21:17	78-87-5	
2-Butanone (MEK)	**<6.5**	ug/L	25.0	6.5	1		10/27/23 21:17	78-93-3	
2-Hexanone	**<6.3**	ug/L	25.0	6.3	1		10/27/23 21:17	591-78-6	
4-Methyl-2-pentanone (MIBK)	**<6.0**	ug/L	25.0	6.0	1		10/27/23 21:17	108-10-1	
Acetone	**<8.6**	ug/L	25.0	8.6	1		10/27/23 21:17	67-64-1	v2
Benzene	**<0.30**	ug/L	1.0	0.30	1		10/27/23 21:17	71-43-2	
Bromodichloromethane	**<0.42**	ug/L	1.0	0.42	1		10/27/23 21:17	75-27-4	
Bromoform	**<0.43**	ug/L	1.0	0.43	1		10/27/23 21:17	75-25-2	
Bromomethane	**<1.2**	ug/L	5.0	1.2	1		10/27/23 21:17	74-83-9	
Carbon disulfide	**<0.65**	ug/L	1.0	0.65	1		10/27/23 21:17	75-15-0	
Carbon tetrachloride	**<0.37**	ug/L	1.0	0.37	1		10/27/23 21:17	56-23-5	
Chlorobenzene	**<0.86**	ug/L	1.0	0.86	1		10/27/23 21:17	108-90-7	
Chloroethane	**<1.4**	ug/L	5.0	1.4	1		10/27/23 21:17	75-00-3	
Chloroform	**<0.50**	ug/L	5.0	0.50	1		10/27/23 21:17	67-66-3	
Chloromethane	**<1.6**	ug/L	5.0	1.6	1		10/27/23 21:17	74-87-3	
Dibromochloromethane	**<2.6**	ug/L	5.0	2.6	1		10/27/23 21:17	124-48-1	
Ethylbenzene	**<0.33**	ug/L	1.0	0.33	1		10/27/23 21:17	100-41-4	
Methylene Chloride	**<0.32**	ug/L	5.0	0.32	1		10/27/23 21:17	75-09-2	
Styrene	**<0.36**	ug/L	1.0	0.36	1		10/27/23 21:17	100-42-5	L1
Tetrachloroethene	**<0.41**	ug/L	1.0	0.41	1		10/27/23 21:17	127-18-4	
Toluene	**<0.29**	ug/L	1.0	0.29	1		10/27/23 21:17	108-88-3	
Trichloroethene	**<0.32**	ug/L	1.0	0.32	1		10/27/23 21:17	79-01-6	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		10/27/23 21:17	75-01-4	
Xylene (Total)	**<1.0**	ug/L	3.0	1.0	1		10/27/23 21:17	1330-20-7	
cis-1,2-Dichloroethene	**<0.47**	ug/L	1.0	0.47	1		10/27/23 21:17	156-59-2	
cis-1,3-Dichloropropene	**<0.24**	ug/L	1.0	0.24	1		10/27/23 21:17	10061-01-5	
trans-1,2-Dichloroethene	**<0.53**	ug/L	1.0	0.53	1		10/27/23 21:17	156-60-5	
trans-1,3-Dichloropropene	**<0.27**	ug/L	1.0	0.27	1		10/27/23 21:17	10061-02-6	
Surrogates									
4-Bromofluorobenzene (S)	104	%	70-130		1		10/27/23 21:17	460-00-4	
1,2-Dichlorobenzene-d4 (S)	98	%	70-130		1		10/27/23 21:17	2199-69-1	
Toluene-d8 (S)	99	%	70-130		1		10/27/23 21:17	2037-26-5	

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QUALIFIERS

Project: 525156.0000PH4 LEMBERGER LF-RW
Pace Project No.: 40270156

DEFINITIONS

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

ND - Not Detected at or above LOD.

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

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

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

DL - Adjusted Method Detection Limit.

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.

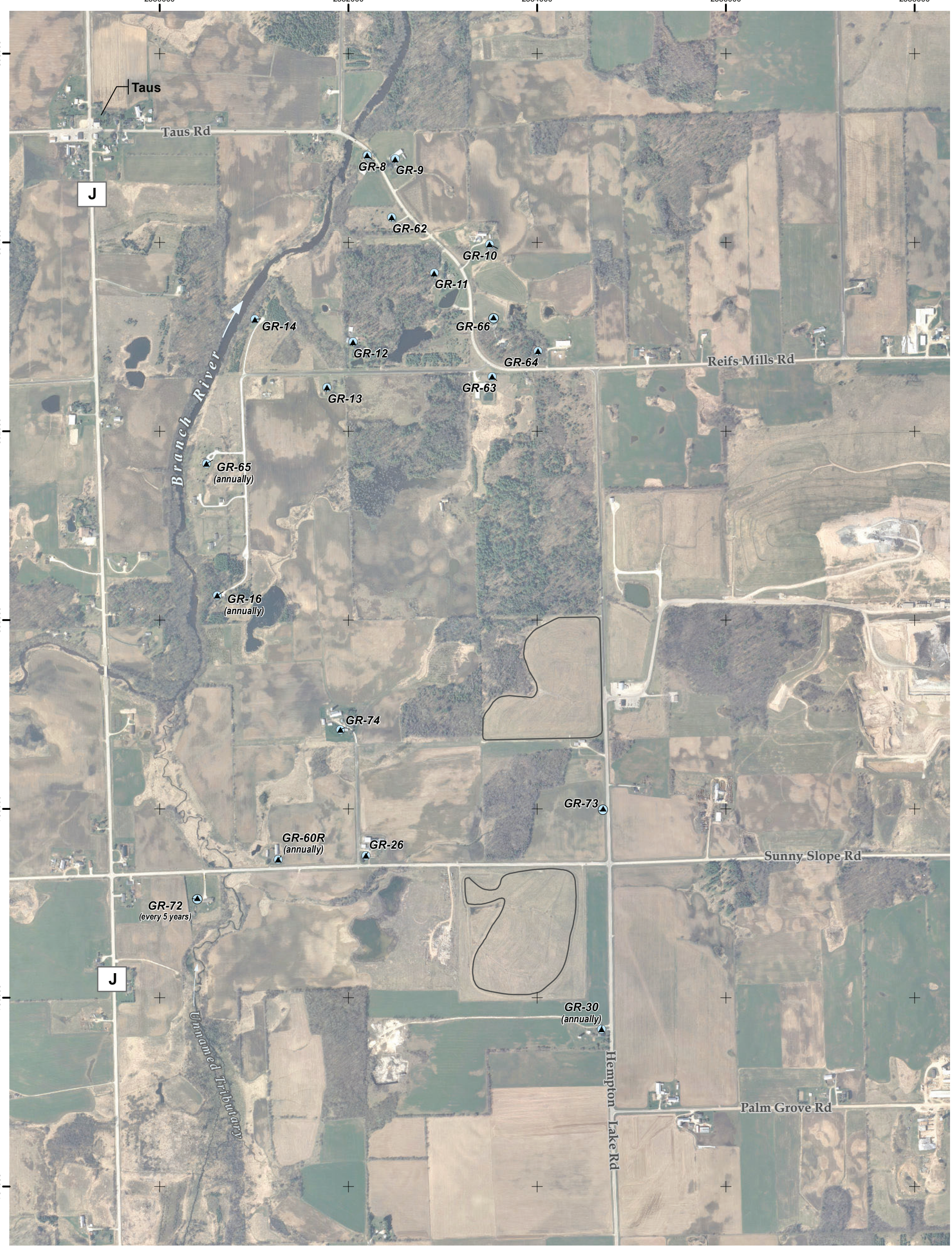
TNI - The NELAC Institute.

ANALYTE QUALIFIERS

L1	Analyte recovery in the laboratory control sample (LCS) was above QC limits. Results may be biased high.
v2	The continuing calibration verification was below the method acceptance limit. The analyte was not detected in the associated samples and the sensitivity of the instrument was verified with a reporting limit check standard.

Attachment 5

Residential Well Location Map with Owner/Occupant Addresses



LEGEND

SAMPLE AND MONITORING LOCATIONS

- RESIDENTIAL WELL (GR)
- LANDFILL AREA

NOTES

1. AERIAL IMAGERY FROM MANITOWOC COUNTY, 2010.
2. MAP COORDINATES REFERENCE WISCONSIN STATE PLANE, SOUTH ZONE, NAD 83, US SURVEY FOOT.

N

0 1,000 FEET

1 " = 1,000 '

1:12,000

PROJECT:

LEMBERGER SITES
TOWN OF FRANKLIN, WISCONSIN

SHEET TITLE:

RESIDENTIAL WELLS LOCATION MAP

DRAWN BY:	RHODE B	SCALE:		PROJ. NO.	211761
CHECKED BY:	WESTOVER M		AS NOTED	FILE NO.	211761-018.mxd
APPROVED BY:	KRAUSE K	DATE PRINTED:			**FIGURE 1**
DATE:	FEBRUARY 2014				

TRC

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Madison, WI 53717
Phone: 608.826.3600
www.trcsolutions.com

E:\LembergerLandfill\2014_211761\211761-018.mxd

RESIDENTIAL WELLS

Occupant	Owner	Well #	DNR ID #	WUWN[1]
Richard Eiles 7504 Taus Road Whitelaw, WI 54247 (920) 732-3959	same	GR-8	101	BK413
Brent Ebert 7435 Taus Road Whitelaw, WI 54247 (920) 901-3561	same	GR-9	102	BK415
Jeff Wilker 7231 Taus Road Whitelaw, WI 54247 (920) 323-9361	same	GR-10	103	EZ331
Vacant, For Sale 7208 Taus Road Whitelaw, WI 54247	Dan Kalies 7206 Taus Road Whitelaw, WI 54247 (920) 732-4402	GR-11	104	BK416
John Dugan 13116 Reifs Mills Road Whitelaw, WI 54247 (920) 732-3040	same	GR-12	105	CW004
No occupant at this resident 13207 Reifs Mills Road Whitelaw, WI 54247	Gene and Lori Gauthier 1616 Holly Drive Manitowoc, WI 54220 (920) 684-8276	GR-13	106	BK381
Scott & Stephanie Jeske 13416 Reifs Mills Road Whitelaw, WI 54247 (920) 629-0666	same	GR-14	107	BK363

RESIDENTIAL WELLS (continued)

Occupant	Owner	Well #	DNR ID #	WUWN[1]
Robert J. & Katharine E. Mizla 6512 River Bend Road Whitelaw, WI 54247 (240) 422-9809	same	GR-16	109	BK371
13116 Sunny Slope Road Cato, WI 54230 [no house at this address]	Ted Greif 4802 Mayerl Road Reedsville, WI 54230 (920) 901-6430	GR-26	113	AO649
Heidi Schiefelbein 5330 Hempton Lake Road Whitelaw, WI 54247 (920) 717-8727	same	GR-30	115	BK414
[no residence at this well location][2] 13418 Sunny Slope Road Cato, WI 54230	Elmer & Ida Mae Knepp 20928 West Goodwin Rd Reedsville, WI 54230 (920) 905-4665	GR-60R	124	IG758
Nicholas S. & Melissa C. Nadler 7325 Taus Road Whitelaw, WI 54247 (920) 901-2954	same	GR-62	120	HL794
James Einburger 12820 Reifs Mills Road Whitelaw, WI 54247 (920) 732-3805	same	GR-63	121	DS921
Mark & Ranee Thelen 12815 Reifs Mills Road Whitelaw, WI 54247 (920) 973-5307	same	GR-64	122	IE118

RESIDENTIAL WELLS (continued)

Occupant	Owner	Well #	DNR ID #	WUWN[1]
Corliss & Diana Prindle 6726 River Bend Road Whitelaw, WI 54247 (920) 732-3919	same	GR-65	123	LK291
Tim Moheng 7105 Taus Road Whitelaw, WI 54247 (402) 676-3797	same	GR-66	125	RK530
John & Vicky Schmidt 13519 Sunny Slope Road Cato, WI 54230 (920) 732-4603	same	GR-72	126	KY957
Well is just south of site 200 yards on west side of Hempton Lake Rd	Bill Braun 214 N Cherry St Whitelaw WI 54247 (920) 732-4444	GR-73	127	II633
Vacant, Remodeling 6203 Ledvina Road Cato, WI 54230	Elmer & Ida Mae Knepp 20928 West Goodwin Rd Reedsville, WI 54230 (920) 905-4665	GR-74	128	XG829

Notes:

(1) Wisconsin Unique Well Number.

(2) Former house at this location has been demolished. A barn and shed are the only structures on the property.

Attachment 6

Tabular Summary of Analytical Results at Each Monitoring Well

LEMBERGER LANDFILL
MONITORING WELL VOLATILE ORGANIC ANALYSIS RESULTS
OCTOBER 2023

PARAMETER	UNITS	OW-104F 10/29/2023 40270527005	RM-002D 10/22/2023 40270186005	RM-003D 10/21/2023 40270186001	RM-003XXD 10/21/2023 40270186002	RM-005D 10/22/2023 40270181006	RM-007D 10/29/2023 40270527003	RM-007XD 10/29/2023 40270527004	RM-007XD DUP 10/29/2023 40270527006
1,1,1-TRICHLOROETHANE	UG/L	3.6	3.3	17.3	9.6	13.2	140	154	174
1,1,2,2-TETRACHLOROETHANE	UG/L	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.94	< 0.38	< 0.38
1,1,2-TRICHLOROETHANE	UG/L	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.86	< 0.34	< 0.34
1,1-DICHLOROETHANE	UG/L	2.2	3.1	12.2	8.0	10.8	129	125	145
1,1-DICHLOROETHENE	UG/L	0.92 J	0.69 J	1.9	1.5	2.7	17.0	22.9	25.3
1,2-DICHLOROETHANE	UG/L	< 0.29	< 0.29	< 0.29	< 0.29	< 0.29	< 0.73	< 0.29	< 0.29
1,2-DICHLOROPROPANE	UG/L	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 1.1	< 0.45	< 0.45
2-BUTANONE	UG/L	< 6.5	< 6.5	< 6.5	< 6.5	< 6.5	< 16.3	< 6.5	< 6.5
2-HEXANONE	UG/L	< 6.3	< 6.3	< 6.3	< 6.3	< 6.3	< 15.7	< 6.3	< 6.3
4-METHYL-2-PENTANONE	UG/L	< 6.0	< 6.0	< 6.0	< 6.0	< 6.0	< 14.9	< 6.0	< 6.0
ACETONE	UG/L	< 8.6	< 8.6	< 8.6	< 8.6	< 8.6	< 21.6	< 8.6	< 8.6
BENZENE	UG/L	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.74	< 0.30	< 0.30
BROMODICHLOROMETHANE	UG/L	< 0.42	< 0.42	< 0.42	< 0.42	< 0.42	< 1.0	< 0.42	< 0.42
BROMOFORM	UG/L	< 0.43 v1uj	< 0.43	< 0.43	< 0.43	< 0.43	< 1.1 v1uj	< 0.43 v1uj	< 0.43 v1uj
BROMOMETHANE	UG/L	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 3.0	< 1.2	< 1.2
CARBON DISULFIDE	UG/L	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 1.6	< 0.65	< 0.65
CARBON TETRACHLORIDE	UG/L	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.92	< 0.37	< 0.37
CHLOROBENZENE	UG/L	< 0.86	< 0.86	< 0.86	< 0.86	< 0.86	< 2.1	< 0.86	< 0.86
CHLORODIBROMOMETHANE	UG/L	< 2.6 v1uj	< 2.6	< 2.6	< 2.6	< 2.6	< 6.6 v1uj	< 2.6 v1uj	< 2.6 v1uj
CHLOROETHANE	UG/L	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 3.4	< 1.4	< 1.4
CHLOROFORM	UG/L	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1.3	< 0.50	< 0.50
CHLOROMETHANE	UG/L	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 4.1	< 1.6	< 1.6
CIS-1,2-DICHLOROETHENE	UG/L	1.7	0.90 J	4.3	2.9	6.5	43.5	51.6	59.9
CIS-1,3-DICHLOROPROPENE	UG/L	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.59	< 0.24	< 0.24
ETHYLBENZENE	UG/L	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.81	< 0.33	< 0.33
METHYLENE CHLORIDE	UG/L	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.80	< 0.32	< 0.32
STYRENE	UG/L	< 0.36 L1,v1uj	< 0.36	< 0.36	< 0.36	< 0.36	< 0.89 L1,v1uj	< 0.36 L1,v1uj	< 0.36 L1,v1uj
TETRACHLOROETHENE	UG/L	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	1.8 J	1.9	1.8
TOLUENE	UG/L	< 0.29	< 0.29	< 0.29	< 0.29	< 0.29	< 0.72	< 0.29	< 0.29
TRANS-1,2-DICHLOROETHENE	UG/L	< 0.53	< 0.53	< 0.53	< 0.53	< 0.53	< 1.3	< 0.53	< 0.53
TRANS-1,3-DICHLOROPROPENE	UG/L	< 0.27	< 0.27	< 0.27	< 0.27	< 0.27	< 0.66	< 0.27	< 0.27
TRICHLOROETHENE	UG/L	1.8	0.99 J	3.0	3.0	2.6	28.5	29.6	34.8
VINYL CHLORIDE	UG/L	< 0.17	< 0.17	< 0.17	< 0.17	< 0.17	< 0.44	< 0.17	< 0.17
XYLENE, TOTAL	UG/L	< 1.0 uj	< 1.0	< 1.0	< 1.0	< 1.0	< 2.6 uj	< 1.0 uj	< 1.0 uj

NOTES:
Laboratory data qualifiers are included in the laboratory reports in Attachment 7. See specific laboratory report for Sample Delivery Group (SDG) definition.
Non-detect results are reported as "< Limit of Detection (LOD)"
Data Validation Qualifiers:
u = data validation rules result as not detected
j = the result is estimated

LEMBERGER LANDFILL
MONITORING WELL VOLATILE ORGANIC ANALYSIS RESULTS
OCTOBER 2023

PARAMETER	UNITS	RM-007XXD 10/29/2023 40270527002	RM-008D 10/30/2023 40270530003	RM-101D 10/21/2023 40270181004	RM-102D 10/29/2023 40270527001	RM-202D 10/28/2023 40270533008	RM-203D 10/30/2023 40270530001	RM-204D 10/30/2023 40270530002	RM-204D DUP 10/30/2023 40270530006	RM-208D 10/27/2023 40270533003
1,1,1-TRICHLOROETHANE	UG/L	< 0.30	24.4	1.5	< 0.30	< 0.30	0.66 J	11.2	11.5	7.8
1,1,2,2-TETRACHLOROETHANE	UG/L	< 0.38	< 0.38 v1uj	< 0.38	< 0.38	< 0.38	< 0.38 v1uj	< 0.38 v1uj	< 0.38 v1uj	< 0.38 uj
1,1,2-TRICHLOROETHANE	UG/L	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34 v1
1,1-DICHLOROETHANE	UG/L	< 0.30	11.7	1.8	< 0.30	< 0.30	< 0.30	6.3	6.7	6.0
1,1-DICHLOROETHENE	UG/L	< 0.58	1.3	< 0.58	< 0.58	< 0.58	< 0.58	1.0	0.89 J	2.2
1,2-DICHLOROETHANE	UG/L	< 0.29	< 0.29 v1uj	< 0.29	< 0.29	< 0.29	< 0.29 v1uj	< 0.29 v1uj	< 0.29 v1uj	< 0.29
1,2-DICHLOROPROPANE	UG/L	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45
2-BUTANONE	UG/L	< 6.5	< 6.5	< 6.5	< 6.5	< 6.5	< 6.5	< 6.5	< 6.5	< 6.5
2-HEXANONE	UG/L	< 6.3	< 6.3	< 6.3	< 6.3	< 6.3	< 6.3	< 6.3	< 6.3	< 6.3
4-METHYL-2-PENTANONE	UG/L	< 6.0	< 6.0	< 6.0	< 6.0	< 6.0	< 6.0	< 6.0	< 6.0	< 6.0
ACETONE	UG/L	< 8.6	< 8.6	< 8.6	< 8.6	< 8.6	< 8.6	< 8.6	< 8.6	< 8.6
BENZENE	UG/L	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30
BROMODICHLOROMETHANE	UG/L	< 0.42	< 0.42	< 0.42	< 0.42	< 0.42	< 0.42	< 0.42	< 0.42	< 0.42
BROMOFORM	UG/L	< 0.43 v1uj	< 0.43	< 0.43	< 0.43 v1uj	< 0.43 v1uj	< 0.43	< 0.43	< 0.43	< 0.43 v1uj
BROMOMETHANE	UG/L	< 1.2	< 1.2 v1uj	< 1.2	< 1.2	< 1.2	< 1.2 v1uj	< 1.2 v1uj	< 1.2 v1uj	< 1.2
CARBON DISULFIDE	UG/L	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65
CARBON TETRACHLORIDE	UG/L	< 0.37	< 0.37 v1uj	< 0.37	< 0.37	< 0.37	< 0.37 v1uj	< 0.37 v1uj	< 0.37 v1uj	< 0.37 L1,v1uj
CHLOROBENZENE	UG/L	< 0.86	< 0.86	< 0.86	< 0.86	< 0.86	< 0.86	< 0.86	< 0.86	< 0.86
CHLORODIBROMOMETHANE	UG/L	< 2.6 v1uj	< 2.6	< 2.6	< 2.6 v1uj	< 2.6 v1uj	< 2.6	< 2.6	< 2.6	< 2.6 v1uj
CHLOROETHANE	UG/L	< 1.4	< 1.4 v1uj	< 1.4	< 1.4	< 1.4	< 1.4 v1uj	< 1.4 v1uj	< 1.4 v1uj	< 1.4
CHLOROFORM	UG/L	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
CHLOROMETHANE	UG/L	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6
CIS-1,2-DICHLOROETHENE	UG/L	< 0.47	7.2	0.47 J	< 0.47	< 0.47	< 0.47	1.8	1.6	5.7
CIS-1,3-DICHLOROPROPENE	UG/L	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24
ETHYLBENZENE	UG/L	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
METHYLENE CHLORIDE	UG/L	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32
STYRENE	UG/L	< 0.36 L1,v1uj	< 0.36 v1uj	< 0.36	< 0.36 L1,v1uj	< 0.36 L1,v1uj	< 0.36 v1uj	< 0.36 v1uj	< 0.36 v1uj	< 0.36 L1,v1uj
TETRACHLOROETHENE	UG/L	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41
TOLUENE	UG/L	< 0.29	< 0.29	< 0.29	< 0.29	< 0.29	< 0.29	< 0.29	< 0.29	< 0.29
TRANS-1,2-DICHLOROETHENE	UG/L	< 0.53	< 0.53	< 0.53	< 0.53	< 0.53	< 0.53	< 0.53	< 0.53	< 0.53
TRANS-1,3-DICHLOROPROPENE	UG/L	< 0.27	< 0.27	< 0.27	< 0.27	< 0.27	< 0.27	< 0.27	< 0.27	< 0.27
TRICHLOROETHENE	UG/L	< 0.32	5.2	0.81 J	< 0.32	< 0.32	< 0.32	1.7	1.7	2.4
VINYL CHLORIDE	UG/L	< 0.17	< 0.17	< 0.17	< 0.17	< 0.17	< 0.17	< 0.17	< 0.17	< 0.17
XYLENE, TOTAL	UG/L	< 1.0 uj	< 1.0	< 1.0	< 1.0 uj	< 1.0 uj	< 1.0	< 1.0	< 1.0	< 1.0

NOTES:
Laboratory data qualifiers are included in the laboratory reports in Attachment 7. See specific laboratory report for Sample Delivery Group (SDG) definition.
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LEMBERGER LANDFILL
MONITORING WELL VOLATILE ORGANIC ANALYSIS RESULTS
OCTOBER 2023

PARAMETER	UNITS	RM-208XD 10/27/2023 40270533004	RM-210D 10/22/2023 40270186004	RM-211D 10/21/2023 40270181003	RM-212D 10/21/2023 40270181002	RM-213D 10/28/2023 40270533006	RM-213XD 10/28/2023 40270533007	RM-214D 10/28/2023 40270533005	RM-303D 10/28/2023 40270533009	RM-306D 10/27/2023 40270533001
1,1,1-TRICHLOROETHANE	UG/L	< 0.30	3.8	0.43 J	< 0.30 uj	1.8	7.0	6.5 j-	175	58.8 j-
1,1,2,2-TETRACHLOROETHANE	UG/L	< 0.38	< 0.38	< 0.38	< 0.38 uj	< 0.38	< 0.38	< 0.38 uj	< 0.76	< 0.38 v1uj
1,1,2-TRICHLOROETHANE	UG/L	< 0.34	< 0.34	< 0.34	< 0.34 uj	< 0.34	< 0.34	< 0.34 v1uj	< 0.69	< 0.34 uj
1,1-DICHLOROETHANE	UG/L	< 0.30	3.1	< 0.30	< 0.30 uj	< 0.30	3.0	5.1 j-	163	8.6 j-
1,1-DICHLOROETHENE	UG/L	< 0.58	0.67 J	< 0.58	< 0.58 uj	< 0.58	1.6	< 0.58 uj	6.8	2.4 j-
1,2-DICHLOROETHANE	UG/L	< 0.29	< 0.29	< 0.29	< 0.29 uj	< 0.29	< 0.29	< 0.29 uj	< 0.58	< 0.29 v1uj
1,2-DICHLOROPROPANE	UG/L	< 0.45	< 0.45	< 0.45	< 0.45 uj	< 0.45	< 0.45	< 0.45 uj	< 0.90	< 0.45 uj
2-BUTANONE	UG/L	< 6.5	< 6.5	< 6.5	< 6.5 uj	< 6.5	< 6.5	< 6.5 uj	< 13.0	< 6.5 uj
2-HEXANONE	UG/L	< 6.3	< 6.3	< 6.3	< 6.3 uj	< 6.3	< 6.3	< 6.3 uj	< 12.6	< 6.3 uj
4-METHYL-2-PENTANONE	UG/L	< 6.0	< 6.0	< 6.0	< 6.0 uj	< 6.0	< 6.0	< 6.0 uj	< 11.9	< 6.0 uj
ACETONE	UG/L	< 8.6	< 8.6	< 8.6	< 8.6 uj	< 8.6	< 8.6	< 8.6 uj	< 17.3	< 8.6 uj
BENZENE	UG/L	< 0.30	< 0.30	< 0.30	< 0.30 uj	< 0.30	< 0.30	< 0.30 uj	< 0.59	< 0.30 uj
BROMODICHLOROMETHANE	UG/L	< 0.42	< 0.42	< 0.42	< 0.42 uj	< 0.42	< 0.42	< 0.42 uj	< 0.83	< 0.42 uj
BROMOFORM	UG/L	< 0.43 v1uj	< 0.43	< 0.43	< 0.43 uj	< 0.43 v1uj	< 0.43 v1uj	< 0.43 v1uj	< 0.86 v1uj	< 0.43 uj
BROMOMETHANE	UG/L	< 1.2	< 1.2	< 1.2	< 1.2 uj	< 1.2	< 1.2	< 1.2 uj	< 2.4	< 1.2 v1uj
CARBON DISULFIDE	UG/L	< 0.65	< 0.65	< 0.65	< 0.65 uj	< 0.65	< 0.65	< 0.65 uj	< 1.3	< 0.65 uj
CARBON TETRACHLORIDE	UG/L	< 0.37	< 0.37	< 0.37	< 0.37 uj	< 0.37	< 0.37	< 0.37 L1,v1uj	< 0.74	< 0.37 v1uj
CHLOROBENZENE	UG/L	< 0.86	< 0.86	< 0.86	< 0.86 uj	< 0.86	< 0.86	< 0.86 uj	< 1.7	< 0.86 uj
CHLORODIBROMOMETHANE	UG/L	< 2.6 v1uj	< 2.6	< 2.6	< 2.6 uj	< 2.6 v1uj	< 2.6 v1uj	< 2.6 v1uj	< 5.3 v1uj	< 2.6 uj
CHLOROETHANE	UG/L	< 1.4	< 1.4	< 1.4	< 1.4 uj	< 1.4	< 1.4	< 1.4 uj	< 2.8	< 1.4 v1uj
CHLOROFORM	UG/L	< 0.50	< 0.50	< 0.50	< 0.50 uj	< 0.50	< 0.50	< 0.50 uj	< 1.0	< 0.50 uj
CHLOROMETHANE	UG/L	< 1.6	< 1.6	< 1.6	< 1.6 uj	< 1.6	< 1.6	< 1.6 uj	< 3.3	< 1.6 uj
CIS-1,2-DICHLOROETHENE	UG/L	< 0.47	1.7	< 0.47	< 0.47 uj	< 0.47	2.5	16.3 j-	65.5	0.71 Jj
CIS-1,3-DICHLOROPROPENE	UG/L	< 0.24	< 0.24	< 0.24	< 0.24 uj	< 0.24	< 0.24	< 0.24 uj	< 0.47	< 0.24 uj
ETHYLBENZENE	UG/L	< 0.33	< 0.33	< 0.33	< 0.33 uj	< 0.33	< 0.33	< 0.33 uj	< 0.65	< 0.33 uj
METHYLENE CHLORIDE	UG/L	< 0.32	< 0.32	< 0.32	< 0.32 uj	< 0.32	< 0.32	< 0.32 uj	< 0.64	< 0.32 uj
STYRENE	UG/L	< 0.36 L1,v1uj	< 0.36	< 0.36	< 0.36 uj	< 0.36 L1,v1uj	< 0.36 L1,v1uj	< 0.36 L1,v1uj	< 0.71 L1,v1uj	< 0.36 v1uj
TETRACHLOROETHENE	UG/L	< 0.41	< 0.41	< 0.41	< 0.41 uj	< 0.41	< 0.41	< 0.41 uj	1.7 J	< 0.41 uj
TOLUENE	UG/L	< 0.29	< 0.29	< 0.29	< 0.29 uj	< 0.29	< 0.29	< 0.29 uj	< 0.58	< 0.29 uj
TRANS-1,2-DICHLOROETHENE	UG/L	< 0.53	< 0.53	< 0.53	< 0.53 uj	< 0.53	< 0.53	< 0.53 uj	< 1.1	< 0.53 uj
TRANS-1,3-DICHLOROPROPENE	UG/L	< 0.27	< 0.27	< 0.27	< 0.27 uj	< 0.27	< 0.27	< 0.27 uj	< 0.53	< 0.27 uj
TRICHLOROETHENE	UG/L	< 0.32	1.1	< 0.32	< 0.32 uj	0.34 J	1.6	2.3 j-	50.0	4.5 j-
VINYL CHLORIDE	UG/L	< 0.17	< 0.17	< 0.17	< 0.17 uj	< 0.17	< 0.17	0.90 Jj	< 0.35	< 0.17 uj
XYLENE, TOTAL	UG/L	< 1.0 uj	< 1.0	< 1.0	< 1.0 uj	< 1.0 uj	< 1.0 uj	< 1.0 uj	< 2.1 uj	< 1.0 uj

NOTES:
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LEMBERGER LANDFILL
MONITORING WELL VOLATILE ORGANIC ANALYSIS RESULTS
OCTOBER 2023

PARAMETER	UNITS	RM-307D 10/27/2023 40270533002	RM-401XD 10/22/2023 40270181005	RM-401XXD 10/22/2023 40270186006	RM-401XXD DUP 10/22/2023 40270186007	RM-402XD 10/30/2023 40270530004	RM-402XXD 10/30/2023 40270530005	RM-403XD 10/21/2023 40270186003	RM-404XXD 10/21/2023 40270181001
1,1,1-TRICHLOROETHANE	UG/L	92.6	10.1	4.9	5.3	97.2	22.0	84.4	1.9
1,1,2,2-TETRACHLOROETHANE	UG/L	< 0.38 v1uj	< 0.38	< 0.38	< 0.38	< 0.38 v1uj	< 0.38 v1uj	< 0.38	< 0.38
1,1,2-TRICHLOROETHANE	UG/L	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34
1,1-DICHLOROETHANE	UG/L	33.6	7.7	6.7	6.8	37.9	13.4	60.9	1.0
1,1-DICHLOROETHENE	UG/L	3.1	2.4	3.3	3.1	19.6	2.9	7.8	< 0.58
1,2-DICHLOROETHANE	UG/L	< 0.29 v1uj	< 0.29	< 0.29	< 0.29	< 0.29 v1uj	< 0.29 v1uj	< 0.29	< 0.29
1,2-DICHLOROPROPANE	UG/L	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45
2-BUTANONE	UG/L	< 6.5	< 6.5	< 6.5	< 6.5	< 6.5	< 6.5	< 6.5	< 6.5
2-HEXANONE	UG/L	< 6.3	< 6.3	< 6.3	< 6.3	< 6.3	< 6.3	< 6.3	< 6.3
4-METHYL-2-PENTANONE	UG/L	< 6.0	< 6.0	< 6.0	< 6.0	< 6.0	< 6.0	< 6.0	< 6.0
ACETONE	UG/L	< 8.6	< 8.6	< 8.6	< 8.6	< 8.6	< 8.6	< 8.6	< 8.6
BENZENE	UG/L	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30
BROMODICHLOROMETHANE	UG/L	< 0.42	< 0.42	< 0.42	< 0.42	< 0.42	< 0.42	< 0.42	< 0.42
BROMOFORM	UG/L	< 0.43	< 0.43	< 0.43	< 0.43	< 0.43	< 0.43	< 0.43	< 0.43
BROMOMETHANE	UG/L	< 1.2 v1uj	< 1.2	< 1.2	< 1.2	< 1.2 v1uj	< 1.2 v1uj	< 1.2	< 1.2
CARBON DISULFIDE	UG/L	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65
CARBON TETRACHLORIDE	UG/L	< 0.37 v1uj	< 0.37	< 0.37	< 0.37	< 0.37 v1uj	< 0.37 v1uj	< 0.37	< 0.37
CHLOROBENZENE	UG/L	< 0.86	< 0.86	< 0.86	< 0.86	< 0.86	< 0.86	< 0.86	< 0.86
CHLORODIBROMOMETHANE	UG/L	< 2.6	< 2.6	< 2.6	< 2.6	< 2.6	< 2.6	< 2.6	< 2.6
CHLOROETHANE	UG/L	< 1.4 v1uj	< 1.4	< 1.4	< 1.4	< 1.4 v1uj	< 1.4 v1uj	< 1.4	< 1.4
CHLOROFORM	UG/L	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
CHLOROMETHANE	UG/L	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6
CIS-1,2-DICHLOROETHENE	UG/L	4.1	4.8	8.3	8.9	17.4	6.9	17.1	0.74 J
CIS-1,3-DICHLOROPROPENE	UG/L	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24
ETHYLBENZENE	UG/L	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
METHYLENE CHLORIDE	UG/L	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32
STYRENE	UG/L	< 0.36 v1uj	< 0.36	< 0.36	< 0.36	< 0.36 v1uj	< 0.36 v1uj	< 0.36	< 0.36
TETRACHLOROETHENE	UG/L	0.96 J	< 0.41	< 0.41	< 0.41	0.65 J	< 0.41	1.1	< 0.41
TOLUENE	UG/L	< 0.29	< 0.29	< 0.29	< 0.29	< 0.29	< 0.29	< 0.29	< 0.29
TRANS-1,2-DICHLOROETHENE	UG/L	< 0.53	< 0.53	< 0.53	< 0.53	< 0.53	< 0.53	< 0.53	< 0.53
TRANS-1,3-DICHLOROPROPENE	UG/L	< 0.27	< 0.27	< 0.27	< 0.27	< 0.27	< 0.27	< 0.27	< 0.27
TRICHLOROETHENE	UG/L	11.8	2.1	1.2	1.3	10.7	5.4	12.4	0.86 J
VINYL CHLORIDE	UG/L	< 0.17	< 0.17	< 0.17	< 0.17	< 0.17	< 0.17	< 0.17	< 0.17
XYLENE, TOTAL	UG/L	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

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Data Validation Qualifiers:
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LEMBERGER LANDFILL
MONITORING WELL INDICATOR PARAMETERS AND FIELD DATA
OCTOBER 2023

PARAMETER	UNITS	OW-104F 10/29/2023 40270527005	RM-002D 10/22/2023 40270186005	RM-003D 10/21/2023 40270186001	RM-003XXD 10/21/2023 40270186002	RM-004D 10/21/2023 W231021001	RM-005D 10/22/2023 40270181006	RM-007D 10/29/2023 40270527003	RM-007XD 10/29/2023 40270527004	RM-007XD DUP 10/29/2023 40270527006
ALKALINITY AS CACO3, TOTAL	MG/L	294	293		363			482	442	442
CHLORIDE	MG/L	8.5	13.6		27.6			13.4 Bu	10.7 Bu	10.8 Bu
COLOR, FIELD		NONE	NONE	NONE	NONE		NONE	NONE	NONE	
CONDUCTANCE, SPECIFIC	UMHOS/CM	585	571	745	814		783	1135	1024	
DEPTH TO WATER	FEET	37.33	23.44	18.68	16.51	55.17	42.78	38.86	39.25	
DISSOLVED OXYGEN, FIELD	MG/L	0.61	1.18	0.81	1.01		1.22	1.81	1.41	
IRON, TOTAL	UG/L	184 J	< 58.0		< 58.0			179 J	< 58.0	< 58.0
MANGANESE, TOTAL	UG/L	7.0	8.4		< 1.2			12.3	< 1.2	< 1.2
NITROGEN, NITRATE + NITRITE	MG/L	1.8	0.85		7.9			4.2	2.2	2.2
ODOR, FIELD		NONE	NONE	NONE	NONE		NONE	NONE	NONE	
OXIDATION REDUCTION POTENTIAL	MV	69	108	173	153		133	189	217	
PH, FIELD	SU	7.58	7.35	7.12	7.34		7.26	7.06	7.07	
SULFATE, TOTAL	MG/L	22.5	36.7		32.7			176	132	132
TEMPERATURE	DEG C	9.1	9.4	9.6	9.0		9.6	7.0	8.2	
TOTAL ORGANIC CARBON AS NPOC	MG/L	0.63 u	1.5		1.3			2.1	1.4 u	1.4 u
TURBIDITY, FIELD NTU	NTU	7	7	0	0		0	6	0	
WATER ELEVATION	FEET	791.41	792.27	801.45	805.02	803.92	800.3	804.84	804.94	

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u = data validation rules result as not detected
j = the result is estimated
j+ = the result is estimated with a positive bias.
j- = the result is estimated with a negative bias.

LEMBERGER LANDFILL
MONITORING WELL INDICATOR PARAMETERS AND FIELD DATA
OCTOBER 2023

PARAMETER	UNITS	RM-007XXD 10/29/2023 40270527002	RM-008D 10/30/2023 40270530003	RM-010D 10/21/2023 W231021002	RM-101D 10/21/2023 40270181004	RM-102D 10/29/2023 40270527001	RM-202D 10/28/2023 40270533008	RM-203D 10/30/2023 40270530001	RM-204D 10/30/2023 40270530002	RM-208D 10/27/2023 40270533003	RM-208XD 10/27/2023 40270533004
ALKALINITY AS CACO3, TOTAL	MG/L					267		344	346		
CHLORIDE	MG/L					17.1 Bu		25.1	14.6		
COLOR, FIELD		NONE	NONE		NONE	NONE	NONE	NONE	NONE	NONE	NONE
CONDUCTANCE, SPECIFIC	UMHOS/CM	623	887		692	726	603	759	728	750	683
DEPTH TO WATER	FEET	40.56	40.09	45.51	12.93	41.02	11.25	32.84	29.92	39.61	32.82
DISSOLVED OXYGEN, FIELD	MG/L	0.48	2.00		1.00	3.46	0.66	2.27	0.71	1.95	0.81
IRON, TOTAL	UG/L					< 58.0		138 J	< 58.0		
MANGANESE, TOTAL	UG/L					< 1.2		2.8 J	1.3 J		
NITROGEN, NITRATE + NITRITE	MG/L					11.5		7.3	3.5		
ODOR, FIELD		NONE	NONE		NONE	NONE	NONE	NONE	NONE	NONE	NONE
OXIDATION REDUCTION POTENTIAL	MV	-128	128		200	122	-174	88	147	146	142
PH, FIELD	SU	7.47	7.20		7.38	7.40	7.75	7.38	7.43	7.28	7.44
SULFATE, TOTAL	MG/L					13.7		28.3	33.8		
TEMPERATURE	DEG C	8.7	8.1		8.9	9.0	9.4	9.7	7.7	9.5	8.7
TOTAL ORGANIC CARBON AS NPOC	MG/L					1.8 u		1.1 u	0.85 u		
TURBIDITY, FIELD NTU	NTU	0	0		0	7	6	5	4	0	0
WATER ELEVATION	FEET	804.12	805.39	804.06	806.32	833.1	802.33	791.04	798.56	800.3	804.4

NOTES:
Laboratory data qualifiers are included in the laboratory reports in Attachment 7. See specific laboratory report for Sample Delivery Group (SDG) definition.
Non-detect results are reported as "< Limit of Detection (LOD)"
Data Validation Qualifiers:
u = data validation rules result as not detected
j = the result is estimated
j+ = the result is estimated with a positive bias.
j- = the result is estimated with a negative bias.

LEMBERGER LANDFILL
MONITORING WELL INDICATOR PARAMETERS AND FIELD DATA
OCTOBER 2023

PARAMETER	UNITS	RM-210D 10/22/2023 40270186004	RM-211D 10/21/2023 40270181003	RM-212D 10/21/2023 40270181002	RM-213D 10/28/2023 40270533006	RM-213XD 10/28/2023 40270533007	RM-214D 10/28/2023 40270533005	RM-303D 10/28/2023 40270533009	RM-305D 10/21/2023 W231021003	RM-306D 10/27/2023 40270533001
ALKALINITY AS CACO3, TOTAL	MG/L	350								
CHLORIDE	MG/L	17.7								
COLOR, FIELD		NONE	NONE	NONE	NONE	NONE	NONE	NONE		NONE
CONDUCTANCE, SPECIFIC	UMHOS/CM	731	701	606	1112	1054	1049	1154		669
DEPTH TO WATER	FEET	30.23	17.58	11.10	36.91	37.37	48.88	57.43	54.79	49.55
DISSOLVED OXYGEN, FIELD	MG/L	1.90	3.47	0.33	2.26	1.62	0.48	1.77		4.96
IRON, TOTAL	UG/L	< 58.0								
MANGANESE, TOTAL	UG/L	2.4 J								
NITROGEN, NITRATE + NITRITE	MG/L	4.2								
ODOR, FIELD		NONE	NONE	NONE	NONE	NONE	NONE	NONE		NONE
OXIDATION REDUCTION POTENTIAL	MV	169	136	129	142	180	114	149		148
PH, FIELD	SU	7.49	7.28	7.66	7.30	7.22	7.03	7.03		7.24
SULFATE, TOTAL	MG/L	38.0								
TEMPERATURE	DEG C	9.2	9.6	9.7	8.8	8.8	8.7	9.2		9.0
TOTAL ORGANIC CARBON AS NPOC	MG/L	0.99								
TURBIDITY, FIELD NTU	NTU	6	0	3	7	5	8	167		6
WATER ELEVATION	FEET	797.63	802.77	804.56	804.32	805.33	804.6	807.62	813.16	806.67

NOTES:
Laboratory data qualifiers are included in the laboratory reports in Attachment 7. See specific laboratory report for Sample Delivery Group (SDG) definition.
Non-detect results are reported as "< Limit of Detection (LOD)"
Data Validation Qualifiers:
u = data validation rules result as not detected
j = the result is estimated
j+ = the result is estimated with a positive bias.
j- = the result is estimated with a negative bias.

LEMBERGER LANDFILL
MONITORING WELL INDICATOR PARAMETERS AND FIELD DATA
OCTOBER 2023

PARAMETER	UNITS	RM-307D 10/27/2023 40270533002	RM-401XD 10/22/2023 40270181005	RM-401XXD 10/22/2023 40270186006	RM-401XXD DUP 10/22/2023 40270186007	RM-402XD 10/30/2023 40270530004	RM-402XXD 10/30/2023 40270530005	RM-403XD 10/21/2023 40270186003	RM-404XXD 10/21/2023 40270181001
ALKALINITY AS CACO3, TOTAL	MG/L			299	299	383			319
CHLORIDE	MG/L			38.2	38.3	23.1 Bu			18.3
COLOR, FIELD		NONE	NONE	NONE		NONE	NONE	NONE	NONE
CONDUCTANCE, SPECIFIC	UMHOS/CM	874	761	756		1254	839	923	728
DEPTH TO WATER	FEET	47.34	32.27	28.00		36.76	37.12	39.52	56.77
DISSOLVED OXYGEN, FIELD	MG/L	4.69	1.80	1.56		1.27	1.95	1.48	1.52
IRON, TOTAL	UG/L			< 58.0	< 58.0	< 58.0			< 58.0
MANGANESE, TOTAL	UG/L			1.8 J	1.3 J	< 1.2			9.5
NITROGEN, NITRATE + NITRITE	MG/L			10.3	10.2	5.3			3.2
ODOR, FIELD		NONE	NONE	NONE		NONE	NONE	NONE	NONE
OXIDATION REDUCTION POTENTIAL	MV	111	198	175		266	162	150	199
PH, FIELD	SU	7.12	7.33	7.46		7.20	7.29	7.15	7.21
SULFATE, TOTAL	MG/L			21.7	21.6	325			32.8
TEMPERATURE	DEG C	8.6	9.1	8.7		8.4	8.3	9.1	9.6
TOTAL ORGANIC CARBON AS NPOC	MG/L			1.1	0.97	1.7 u			1.1 u
TURBIDITY, FIELD NTU	NTU	6	0	0		0	0	0	4
WATER ELEVATION	FEET	806.6	801.33	804.85		805.31	805.1	804.98	804.89

NOTES:
Laboratory data qualifiers are included in the laboratory reports in Attachment 7. See specific laboratory report for Sample Delivery Group (SDG) definition.
Non-detect results are reported as "< Limit of Detection (LOD)"
Data Validation Qualifiers:
u = data validation rules result as not detected
j = the result is estimated
j+ = the result is estimated with a positive bias.
j- = the result is estimated with a negative bias.

Attachment 7

Laboratory Data Qualifiers for Monitoring Wells

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

QUALIFIERS

Project: 525156.0000 PH4 LEMBERGER LF P
Pace Project No.: 40270181

DEFINITIONS

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

ND - Not Detected at or above LOD.

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

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

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

DL - Adjusted Method Detection Limit.

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.

ANALYTE QUALIFIERS

1q	Detection of carbon disulfide was most likely the result of carryover from the MS/MSD analyzed prior the sample. Insufficient volume for re-analysis from a vial with out head space.
HS	Results are from sample aliquot taken from VOA vial with headspace (air bubble greater than 6 mm diameter).
M0	Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.
pH	Post-analysis pH measurement indicates insufficient VOA sample preservation.

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

QUALIFIERS

Project: 525156.0000 PH4 LEMBERGER LF-S
Pace Project No.: 40270186

DEFINITIONS

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

ND - Not Detected at or above LOD.

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

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

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

DL - Adjusted Method Detection Limit.

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.

ANALYTE QUALIFIERS

HS	Results are from sample aliquot taken from VOA vial with headspace (air bubble greater than 6 mm diameter).
M0	Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.

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

QUALIFIERS

Project: 525156.0000PH4 LEMBERGER LF PL
Pace Project No.: 40270527

DEFINITIONS

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

ND - Not Detected at or above LOD.

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

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

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

DL - Adjusted Method Detection Limit.

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.

ANALYTE QUALIFIERS

B	Analyte was detected in the associated method blank.
L1	Analyte recovery in the laboratory control sample (LCS) was above QC limits. Results may be biased high.
v1	The continuing calibration verification was above the method acceptance limit. Any detection for the analyte in the associated samples may have a high bias.

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

QUALIFIERS

Project: 525156.0000PH4 LEMBERGER LF-PL
Pace Project No.: 40270530

DEFINITIONS

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

ND - Not Detected at or above LOD.

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

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

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

DL - Adjusted Method Detection Limit.

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.

ANALYTE QUALIFIERS

B	Analyte was detected in the associated method blank.
pH	Post-analysis pH measurement indicates insufficient VOA sample preservation.
v1	The continuing calibration verification was above the method acceptance limit. Any detection for the analyte in the associated samples may have a high bias.

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

QUALIFIERS

Project: 525156.0000PH4 LEMBERGER LF-PL
Pace Project No.: 40270533

DEFINITIONS

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

ND - Not Detected at or above LOD.

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

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

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

DL - Adjusted Method Detection Limit.

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.

ANALYTE QUALIFIERS

HS	Results are from sample aliquot taken from VOA vial with headspace (air bubble greater than 6 mm diameter).
L1	Analyte recovery in the laboratory control sample (LCS) was above QC limits. Results may be biased high.
pH	Post-analysis pH measurement indicates insufficient VOA sample preservation.
v1	The continuing calibration verification was above the method acceptance limit. Any detection for the analyte in the associated samples may have a high bias.

Attachment 8

Tabular Summary of Groundwater Standard Exceedances at Plume Monitoring Wells

Summary of Groundwater Standard Exceedances at Plume Monitoring Wells
Lemberger Landfill Sites
3rd Quarter 2023

Well ID	Parameter	Result	Data Qualifiers	Units	Standard[1]		Well Location
					ES[2]	PAL[3]	
OW-104F	1,1-DICHLOROETHENE	0.92	J	UG/L		X	4,500' northwest of LL site
OW-104F	IRON, TOTAL	184	J	UG/L		X	4,500' northwest of LL site
OW-104F	TRICHLOROETHENE	1.8		UG/L		X	4,500' northwest of LL site
RM-002D	TRICHLOROETHENE	0.99	J	UG/L		X	2,900' northwest of LL site
RM-003D	1,1-DICHLOROETHENE	1.9		UG/L		X	1,000' west of LL site
RM-003D	TRICHLOROETHENE	3		UG/L		X	1,000' west of LL site
RM-003XXD	1,1-DICHLOROETHENE	1.5		UG/L		X	1,000' west of LL site
RM-003XXD	NITROGEN, NITRATE + NITRITE	7.9		MG/L		X	1,000' west of LL site
RM-003XXD	TRICHLOROETHENE	3		UG/L		X	1,000' west of LL site
RM-005D	1,1-DICHLOROETHENE	2.7		UG/L		X	Northwest side of LL site
RM-005D	TRICHLOROETHENE	2.6		UG/L		X	Northwest side of LL site
RM-007D	1,1,1-TRICHLOROETHANE	140		UG/L		X	North side of LTR site
RM-007D	1,1-DICHLOROETHANE	129		UG/L		X	North side of LTR site
RM-007D	1,1-DICHLOROETHENE	17		UG/L	X		North side of LTR site
RM-007D	CIS-1,2-DICHLOROETHENE	43.5		UG/L		X	North side of LTR site
RM-007D	IRON, TOTAL	179	J	UG/L		X	North side of LTR site
RM-007D	NITROGEN, NITRATE + NITRITE	4.2		MG/L		X	North side of LTR site
RM-007D	SULFATE, TOTAL	176		MG/L		X	North side of LTR site
RM-007D	TETRACHLOROETHENE	1.8	J	UG/L		X	North side of LTR site
RM-007D	TRICHLOROETHENE	28.5		UG/L	X		North side of LTR site
RM-007XD	1,1,1-TRICHLOROETHANE	154		UG/L		X	North side of LTR site
RM-007XD	1,1-DICHLOROETHANE	125		UG/L		X	North side of LTR site
RM-007XD	1,1-DICHLOROETHENE	22.9		UG/L	X		North side of LTR site
RM-007XD	CIS-1,2-DICHLOROETHENE	51.6		UG/L		X	North side of LTR site
RM-007XD	NITROGEN, NITRATE + NITRITE	2.2		MG/L		X	North side of LTR site
RM-007XD	SULFATE, TOTAL	132		MG/L		X	North side of LTR site
RM-007XD	TETRACHLOROETHENE	1.9		UG/L		X	North side of LTR site
RM-007XD	TRICHLOROETHENE	29.6		UG/L	X		North side of LTR site
RM-007XD DUP	1,1,1-TRICHLOROETHANE	174		UG/L		X	North side of LTR site
RM-007XD DUP	1,1-DICHLOROETHANE	145		UG/L		X	North side of LTR site
RM-007XD DUP	1,1-DICHLOROETHENE	25.3		UG/L	X		North side of LTR site
RM-007XD DUP	CIS-1,2-DICHLOROETHENE	59.9		UG/L		X	North side of LTR site
RM-007XD DUP	NITROGEN, NITRATE + NITRITE	2.2		MG/L		X	North side of LTR site
RM-007XD DUP	SULFATE, TOTAL	132		MG/L		X	North side of LTR site
RM-007XD DUP	TETRACHLOROETHENE	1.8		UG/L		X	North side of LTR site
RM-007XD DUP	TRICHLOROETHENE	34.8		UG/L	X		North side of LTR site

Summary of Groundwater Standard Exceedances at Plume Monitoring Wells
Lemberger Landfill Sites
3rd Quarter 2023

Well ID	Parameter	Result	Data Qualifiers	Units	Standard[1]		Well Location
					ES[2]	PAL[3]	
RM-008D	1,1-DICHLOROETHENE	1.3		UG/L		X	500' south of LL site
RM-008D	CIS-1,2-DICHLOROETHENE	7.2		UG/L		X	500' south of LL site
RM-008D	TRICHLOROETHENE	5.2		UG/L	X		500' south of LL site
RM-101D	TRICHLOROETHENE	0.81	J	UG/L		X	1,400' west of LTR site
RM-102D	NITROGEN, NITRATE + NITRITE	11.5		MG/L	X		500' south of LTR site
RM-203D	NITROGEN, NITRATE + NITRITE	7.3		MG/L		X	5,000' northwest of LL site
RM-204D	1,1-DICHLOROETHENE	1		UG/L		X	1,300' north of LL site
RM-204D	NITROGEN, NITRATE + NITRITE	3.5		MG/L		X	1,300' north of LL site
RM-204D	TRICHLOROETHENE	1.7		UG/L		X	1,300' north of LL site
RM-204D DUP	1,1-DICHLOROETHENE	0.89	J	UG/L		X	1,300' north of LL site
RM-204D DUP	TRICHLOROETHENE	1.7		UG/L		X	1,300' north of LL site
RM-208D	1,1-DICHLOROETHENE	2.2		UG/L		X	Southwest side of LL site
RM-208D	TRICHLOROETHENE	2.4		UG/L		X	Southwest side of LL site
RM-210D	NITROGEN, NITRATE + NITRITE	4.2		MG/L		X	3,600' north of LL site
RM-210D	TRICHLOROETHENE	1.1		UG/L		X	3,600' north of LL site
RM-213XD	1,1-DICHLOROETHENE	1.6		UG/L		X	600' north of LTR site
RM-213XD	TRICHLOROETHENE	1.6		UG/L		X	600' north of LTR site
RM-214D	CIS-1,2-DICHLOROETHENE	16.3	j-	UG/L		X	South side of LL site
RM-214D	TRICHLOROETHENE	2.3	j-	UG/L		X	South side of LL site
RM-214D	VINYL CHLORIDE	0.9	Jj	UG/L	X		South side of LL site
RM-303D	1,1,1-TRICHLOROETHANE	175		UG/L		X	North side of LTR site
RM-303D	1,1-DICHLOROETHANE	163		UG/L		X	North side of LTR site
RM-303D	1,1-DICHLOROETHENE	6.8		UG/L		X	North side of LTR site
RM-303D	CIS-1,2-DICHLOROETHENE	65.5		UG/L		X	North side of LTR site
RM-303D	TETRACHLOROETHENE	1.7	J	UG/L		X	North side of LTR site
RM-303D	TRICHLOROETHENE	50		UG/L	X		North side of LTR site
RM-306D	1,1,1-TRICHLOROETHANE	58.8	j-	UG/L		X	West side of LTR site
RM-306D	1,1-DICHLOROETHENE	2.4	j-	UG/L		X	West side of LTR site
RM-306D	TRICHLOROETHENE	4.5	j-	UG/L		X	West side of LTR site
RM-307D	1,1,1-TRICHLOROETHANE	92.6		UG/L		X	West side of LTR site
RM-307D	1,1-DICHLOROETHENE	3.1		UG/L		X	West side of LTR site
RM-307D	TETRACHLOROETHENE	0.96	J	UG/L		X	West side of LTR site
RM-307D	TRICHLOROETHENE	11.8		UG/L	X		West side of LTR site

Summary of Groundwater Standard Exceedances at Plume Monitoring Wells
Lemberger Landfill Sites
3rd Quarter 2023

Well ID	Parameter	Result	Data Qualifiers	Units	Standard[1]		Well Location
					ES[2]	PAL[3]	
RM-401XD	1,1-DICHLOROETHENE	2.4		UG/L		X	400' Northwest of LL Site
RM-401XD	TRICHLOROETHENE	2.1		UG/L		X	400' Northwest of LL Site
RM-401XXD	1,1-DICHLOROETHENE	3.3		UG/L		X	400' Northwest of LL Site
RM-401XXD	CIS-1,2-DICHLOROETHENE	8.3		UG/L		X	400' Northwest of LL Site
RM-401XXD	NITROGEN, NITRATE + NITRITE	10.3		MG/L	X		400' Northwest of LL Site
RM-401XXD	TRICHLOROETHENE	1.2		UG/L		X	400' Northwest of LL Site
RM-401XXD DUP	1,1-DICHLOROETHENE	3.1		UG/L		X	400' Northwest of LL Site
RM-401XXD DUP	CIS-1,2-DICHLOROETHENE	8.9		UG/L		X	400' Northwest of LL Site
RM-401XXD DUP	NITROGEN, NITRATE + NITRITE	10.2		MG/L	X		400' Northwest of LL Site
RM-401XXD DUP	TRICHLOROETHENE	1.3		UG/L		X	400' Northwest of LL Site
RM-402XD	1,1,1-TRICHLOROETHANE	97.2		UG/L		X	400' Northwest of LTR site
RM-402XD	1,1-DICHLOROETHENE	19.6		UG/L	X		400' Northwest of LTR site
RM-402XD	CIS-1,2-DICHLOROETHENE	17.4		UG/L		X	400' Northwest of LTR site
RM-402XD	NITROGEN, NITRATE + NITRITE	5.3		MG/L		X	400' Northwest of LTR site
RM-402XD	SULFATE, TOTAL	325		MG/L	X		400' Northwest of LTR site
RM-402XD	TETRACHLOROETHENE	0.65	J	UG/L		X	400' Northwest of LTR site
RM-402XD	TRICHLOROETHENE	10.7		UG/L	X		400' Northwest of LTR site
RM-402XXD	1,1-DICHLOROETHENE	2.9		UG/L		X	400' Northwest of LTR site
RM-402XXD	TRICHLOROETHENE	5.4		UG/L	X		400' Northwest of LTR site
RM-403XD	1,1,1-TRICHLOROETHANE	84.4		UG/L		X	400' West of LTR site
RM-403XD	1,1-DICHLOROETHENE	7.8		UG/L	X		400' West of LTR site
RM-403XD	CIS-1,2-DICHLOROETHENE	17.1		UG/L		X	400' West of LTR site
RM-403XD	TETRACHLOROETHENE	1.1		UG/L		X	400' West of LTR site
RM-403XD	TRICHLOROETHENE	12.4		UG/L	X		400' West of LTR site
RM-404XXD	NITROGEN, NITRATE + NITRITE	3.2		MG/L		X	1,200' Northwest of LL Site
RM-404XXD	TRICHLOROETHENE	0.86	J	UG/L		X	1,200' Northwest of LL Site

Notes:

[1] Table includes exceedances where the reported concentration is between the Limit of Detection and Limit of Quantitation ("J' data qualifier).

[2] ES =Wisconsin Administrative Code NR140 Enforcement Standard

[3] PAL =Wisconsin Administrative Code NR140 Preventive Action Limit

[4] LTR = Lemberger Transport and Recycling

[5] LL = Lemberger Landfill

Laboratory qualifiers are included in the sample-specific laboratory reports. See laboratory reports for the SDG-specific definitions.

State of Wisconsin
Department of Natural Resources
dnr.wi.gov

Environmental Monitoring Data Certification

Form 4400-231 (R 5/17)

Notice: Personally identifiable information collected will be used for program administration and enforcement purposes. The Department may also provide this information to requesters as required under Wisconsin's Open Records law, ss. 19.31 to 19.39, Wis. Stats.
When submitting monitoring data, the owner or operator of the facility, practice or activity is required to notify the Department in writing that a groundwater standard or an explosive gas level has been attained or exceeded, as specified in ss. NR 140.24(1)(a); NR 140.26(1)(a); NR 507.30NR 635.14(9)(a); NR 635.18(20) and NR 507.30, Wis. Adm. Code. Failure to report may result in fines, forfeitures or other penalties resulting from enforcement under ss. 289.97, 291.97 or 299.95, Wis. Stats

Instructions:

- **Prepare one form for each license or monitoring ID.**
- **Please type or print legibly.**
- Attach a notification of any values that attain or exceed groundwater standards (that is, preventive action limits, enforcement standards or alternative concentration limits). The notification must include a preliminary analysis of the cause and significance of each value.
- Attach a notification of any gas values that attain or exceed explosive gas levels.
- Send the original signed form, any notification, and Electronic Data Deliverable [EDD] to: GEMS Data Submittal Contact - WA/5
  Wisconsin Department of Natural Resources
  P.O. Box 7921
  Madison, WI 53707-7921

Monitoring Data Submittal Information

Name of entity submitting data (laboratory, consultant, facility owner)
TRC Environmental Corp.

Contact for questions about data formatting. Include data preparer's name, telephone number and Email address:

Name	Phone No. (include area code)
Meredith Westover	(608) 358-5035

Email
mwestover@trccompanies.com

Facility Name
Lemberger Landfill

License # / Monitoring ID	Facility ID (FID)
00753	436016790

Actual sampling dates (e.g., July 2-6, 2003)	The enclosed results are for sampling required in the month(s) of: (e.g., June 2003)
10/21-10/24, 10/27-10/30, 2023	July, August, September 2023

Type of Data Submitted (Check all that apply):

- [x] Groundwater monitoring data from monitoring wells
- [x] Groundwater monitoring data from private water supply wells
- [x] Leachate monitoring data
- [ ] Gas monitoring data
- [ ] Air monitoring data
- [ ] Other (specify):

Notification attached?

- [ ] No. No groundwater standards or explosive gas limits were exceeded.
- [x] Yes, a notification of values exceeding a groundwater standard is attached. It includes a list of monitoring points, dates, sample values, groundwater standard and preliminary analysis of the cause and significance of any concentration.
- [ ] Yes, a notification of values exceeding an explosive gas limit is attached. It includes the monitoring points, dates, sample values and explosive gas limits.

Certification

To the best of my knowledge, the information reported and statements made on this data submittal and attachments are true and correct. Furthermore, I have attached complete notification of any sampling values meeting or exceeding groundwater standards or explosive gas levels, and a preliminary analysis of the cause and significance of concentrations exceeding groundwater standards.

Facility Representative Name (Print)	Title	Phone No. (include area code)
Meredith Westover	Database Manager	(608) 358-5035

Signature: _____ Date Signed (mm/dd/yyyy): 2/29/2024

For DNR Use Only

Check action taken, and record date and your initials. Describe on back side if necessary.

- [ ] Found uploading problems on _____ Initials
- [ ] Notified contact of problems on _____ Uploaded data successfully on _____

EDD format(s): [ ] Diskette [ ] CD (initial submittal and follow-up) [ ] E-mail (follow-up only) [ ] Other: _____