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February 16, 2021

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 2020

Dear Ms. Collier:

On behalf of the Lemberger Site Remediation Group (LSRG), and in accordance with the Environmental Monitoring Plan (EMP), Revision 4 (February 2014), 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 September and October 2020, in accordance with a March 2016 revision to the post-MNA study program.

All of the residential wells specified in the third quarter monitoring program were sampled during this event. Note that the residential well monitoring program was modified in the EMP to remove wells that cannot be sampled due to access (*e.g.,* GR-25), are no longer in service (*e.g.,* GR-15 and GR-17), or are outside of the groundwater plume (*e.g.,* GR-31, GR-33, and GR-41). 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 – Perkins Coie, LLP
Kristin Jones – Newell Rubbermaid
Troy Adams – Manitowoc Public Utilities
Scott Karbon – Manitowoc Public Utilities
James Wallner – Red Arrow Products
James Cook – Manitowoc Cranes
Kathleen McDaniel – City of Manitowoc
David Dougherty – Subterranean Research, 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: Amy Bass (Data Reviewer)
Elizabeth Denly (Peer Reviewer)

Date: December 14, 2020

Subject: Data Validation Report
VOC Groundwater Samples/Residential Wells: 3rd Quarter 2020
Lemberger Landfill and Lemberger Transport and Recycling/Franklin, Wisconsin
Laboratory Project Numbers 40215656, 40215657, and 40216881

SUMMARY

Full validation (level IV) was performed on the data for 18 groundwater samples, two field duplicates, and two trip blanks collected from residential wells at the Lemberger Landfill and Lemberger Transport and Recycling Site in Franklin, Wisconsin. The samples were collected on September 29 and 30 and October 18, 2020. 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 8260B. The laboratory reported the results under laboratory project numbers 40215656, 40215657, and 40216881.

The sample results were assessed using the *USEPA National Functional Guidelines for Organic Superfund Methods Data Review (EPA-540-R-2017-002),* January 2017 and the project-specific quality assurance project plan (QAPP), dated September 2011, Revision 1.

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).
- 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 40215656: collected 9/29/20

- GR-13
- GR-26
- GR-60R
- GR-63
- GR-73
- GR-FDUP-001[1]

Laboratory Project Number 40215657: collected 9/30/20

- GR-08
- GR-09
- GR-10
- GR-12
- GR-62
- GR-64
- GR-65
- TB-001 (09/30/2020)

Laboratory Project Number 40216881: collected 10/18/20

- GR-11
- GR-14
- GR-16
- GR-30
- GR-66
- GR-74
- GR-FDUP-002[2]
- TB-001 (10/18/2020)

[1] Field duplicate of GR-63

[2] Field duplicate of GR-14

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 packages were 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.

- The laboratory did not provide daily method blank or LCS analyses relevant to samples analyzed on 10/25/2020 in Laboratory Project Number 40216881. The results for the associated method blank were obtained from the laboratory in a separate communication.

Additional details are provided in the following sections. No validation actions were taken on the basis of these data completeness issues.

Holding Times and Sample Preservation

All samples were received by the laboratory on ice (temperature measurements were not provided) but were otherwise unpreserved. The samples were noted as unpreserved (no acid preservation) on the COC forms; however, the laboratory reports contain certain conflicting information in this regard. It was verified through communication with the laboratory that the samples in this sample set were unpreserved. All analyses were performed within the method-specified holding time for unpreserved samples; therefore, no validation action was required on this basis.

The narrative for Laboratory Project Number 40215656 noted "insufficient VOA sample preservation" for samples GR-73 and GR-FDUP-001. These samples were intentionally submitted as unpreserved; therefore, no validation action was required on the basis of this narrative comment regarding sample pH.

Note that samples were received by the laboratory one 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 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, coefficients of determination, and relative response factors (RRFs) 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 differences or percent drifts (%Ds) which were outside of the laboratory acceptance criteria in the CCs, the associated samples and validation actions.

CC	Analyte	%D	Associated Sample(s)	Validation Actions
40MSV3 10/02/20 @16:18	2-Butanone (MEK)	-20.7508	GR-FDUP-001 GR-08, GR-09, GR-10, GR-12, GR-62, GR-64, GR-65, TB-001 (09/30/20)	The nondetect results for the listed VOCs were qualified as estimated (UJ) in the associated samples.
	2-Hexanone	-33.7280		
	4-Methyl-2-pentanone (MIBK)	-30.3951		
40MSV3 10/05/20 @06:02	Acetone	-31.4326	GR-26, GR-60R	The nondetect results for the listed VOCs were qualified as estimated (UJ) in the associated samples.
	2-Butanone (MEK)	-27.2324		
	Chloromethane	-23.8156		
	2-Hexanone	-35.5070		

CC	Analyte	%D	Associated Sample(s)	Validation Actions
	4-Methyl-2-pentanone (MIBK)	-39.5814		
	1,1,2,2-Tetrachloroethane	-20.4417		
40MSV3 10/05/20 @13:08	Acetone	-32.9430	GR-13, GR-63	The nondetect results for the listed VOCs were qualified as estimated (UJ) in the associated samples.
	2-Butanone (MEK)	-25.8643		
	2-Hexanone	-35.0264		
	4-Methyl-2-pentanone (MIBK)	-33.2926		
40MSV8 10/02/20 @14:16	2-Butanone (MEK)	-21.1053	GR-73	The nondetect results for the listed VOCs were qualified as estimated (UJ) in the associated sample.
	Tetrachloroethene	26.5870		
40MSVA 10/24/20 @10:12	Bromomethane	36.7868	TB-001 (10/18/20)	The nondetect result for the listed VOC was qualified as estimated (UJ) in the associated sample.

Blanks

A method blank was analyzed each day prior to sample analysis. Target analytes were not detected in the trip blanks or method blanks, with the exception of one method blank relevant to Laboratory Project Number 40215656. The following table summarizes the concentration of the analyte detected, the associated sample, and the resulting validation actions.

Analyte	Blank Concentration (µg/L)	QL (µg/L)	Blank ID: Associated Sample(s)	Validation Actions
Carbon disulfide	0.46 J	1.5	Method Blank 2121338: GR-73	Qualification was not required since carbon disulfide was not detected in sample GR-73.

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-64 in Laboratory Project Number 40215657. All %R and relative percent difference (RPD) 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 each day prior to sample analysis, with one exception. The LCS relevant to samples GR-11, GR-14, GR-16, GR-30, GR-66, GR-74, and GR-FDUP-002 (in Laboratory Project

Number 40216881) was analyzed on the day prior to and >12 hours before the noted samples. No validation action was taken on this basis.

Spike %R criteria were met for all LCS analyses relevant to this sample set.

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

- GR-63 and GR-FDUP-001 (Laboratory Project Number 40215656)
- GR-14 and GR-FDUP-002 (Laboratory Project Number 40216881)

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

Criteria:
- When both results are ≥ 5x the QL, RPDs must be ≤ 35%.
- When one or both results are < 5x the QL, absolute difference must be < the 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	0.28
1,1,2-Trichloroethane		0.5	5*	0.55
Bromodichloromethane		0.06	0.6*	0.36
Bromoform		0.44	4.4*	4.0
Carbon tetrachloride		0.5	5*	1.1
Chloroform		0.6	6*	1.3
cis-1,3-Dichloropropene		0.02	0.2	3.6

Analyte	Affected Samples	WAC Chapter NR 140 PAL (µg/L)	WAC Chapter NR 140 ES (µg/L)	Laboratory LOD (µg/L)
Methylene chloride		0.5	5*	0.58
trans-1,3-Dichloropropene		0.02	0.2	4.4
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: 376175.0 PH 4 LEMBERGER LF - R
Date Received: 10/01/2020 07:00
Matrix: Water SDG No.: 40215656
Date Extracted: 10/05/2020 11:45
Lab Sample ID: 40215656001
Date Analyzed: 10/05/2020 11:45
Lab File ID: 10052020.B\10052018.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 40MSV3 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<2.7	~~U~~ UJ
71-43-2	Benzene	<0.25	U
75-27-4	Bromodichloromethane	<0.36	U
75-25-2	Bromoform	<4.0	U
74-83-9	Bromomethane	<0.97	U
78-93-3	2-Butanone (MEK)	<2.9	~~U~~ UJ
75-15-0	Carbon disulfide	<0.45	U
56-23-5	Carbon tetrachloride	<1.1	U
108-90-7	Chlorobenzene	<0.71	U
75-00-3	Chloroethane	<1.3	U
67-66-3	Chloroform	<1.3	U
74-87-3	Chloromethane	<2.2	~~U~~ UJ
124-48-1	Dibromochloromethane	<2.6	U
75-34-3	1,1-Dichloroethane	<0.27	U
107-06-2	1,2-Dichloroethane	<0.28	U
75-35-4	1,1-Dichloroethene	<0.24	U
156-59-2	cis-1,2-Dichloroethene	<0.27	U
156-60-5	trans-1,2-Dichloroethene	<0.46	U
78-87-5	1,2-Dichloropropane	<0.28	U
10061-01-5	cis-1,3-Dichloropropene	<3.6	U
10061-02-6	trans-1,3-Dichloropropene	<4.4	U
100-41-4	Ethylbenzene	<0.32	U
591-78-6	2-Hexanone	<5.2	~~U~~ UJ
75-09-2	Methylene Chloride	<0.58	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<4.6	~~U~~ UJ
100-42-5	Styrene	<3.0	U
79-34-5	1,1,2,2-Tetrachloroethane	<0.28	~~U~~ UJ
127-18-4	Tetrachloroethene	<0.33	U
108-88-3	Toluene	<0.27	U
71-55-6	1,1,1-Trichloroethane	<0.24	U
79-00-5	1,1,2-Trichloroethane	<0.55	U
79-01-6	Trichloroethene	<0.26	U
75-01-4	Vinyl chloride	<0.17	U
1330-20-7	Xylene (Total)	<1.5	U

SAMPLE NO.

GR-26

MSV - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay
Contract: 376175.0 PH 4 LEMBERGER LF - R
Date Received: 10/01/2020 07:00
Matrix: Water SDG No.: 40215656
Date Extracted: 10/05/2020 12:06
Lab Sample ID: 40215656002
Date Analyzed: 10/05/2020 12:06
Lab File ID: 10052020.B\10052019.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 40MSV3 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<2.7	~~U~~ UJ
71-43-2	Benzene	<0.25	U
75-27-4	Bromodichloromethane	<0.36	U
75-25-2	Bromoform	<4.0	U
74-83-9	Bromomethane	<0.97	U
78-93-3	2-Butanone (MEK)	<2.9	~~U~~ UJ
75-15-0	Carbon disulfide	<0.45	U
56-23-5	Carbon tetrachloride	<1.1	U
108-90-7	Chlorobenzene	<0.71	U
75-00-3	Chloroethane	<1.3	U
67-66-3	Chloroform	<1.3	U
74-87-3	Chloromethane	<2.2	~~U~~ UJ
124-48-1	Dibromochloromethane	<2.6	U
75-34-3	1,1-Dichloroethane	<0.27	U
107-06-2	1,2-Dichloroethane	<0.28	U
75-35-4	1,1-Dichloroethene	<0.24	U
156-59-2	cis-1,2-Dichloroethene	<0.27	U
156-60-5	trans-1,2-Dichloroethene	<0.46	U
78-87-5	1,2-Dichloropropane	<0.28	U
10061-01-5	cis-1,3-Dichloropropene	<3.6	U
10061-02-6	trans-1,3-Dichloropropene	<4.4	U
100-41-4	Ethylbenzene	<0.32	U
591-78-6	2-Hexanone	<5.2	~~U~~ UJ
75-09-2	Methylene Chloride	<0.58	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<4.6	~~U~~ UJ
100-42-5	Styrene	<3.0	U
79-34-5	1,1,2,2-Tetrachloroethane	<0.28	~~U~~ UJ
127-18-4	Tetrachloroethene	<0.33	U
108-88-3	Toluene	<0.27	U
71-55-6	1,1,1-Trichloroethane	<0.24	U
79-00-5	1,1,2-Trichloroethane	<0.55	U
79-01-6	Trichloroethene	<0.26	U
75-01-4	Vinyl chloride	<0.17	U
1330-20-7	Xylene (Total)	<1.5	U

SAMPLE NO.

GR-73

MSV - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay
Contract: 376175.0 PH 4 LEMBERGER LF - R
Date Received: 10/01/2020 07:00
Matrix: Water SDG No.: 40215656
Date Extracted: 10/02/2020 22:35
Lab Sample ID: 40215656003
Date Analyzed: 10/02/2020 22:35
Lab File ID: 10022020.B\10022062.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	<2.7	U
71-43-2	Benzene	<0.25	U
75-27-4	Bromodichloromethane	<0.36	U
75-25-2	Bromoform	<4.0	U
74-83-9	Bromomethane	<0.97	U
78-93-3	2-Butanone (MEK)	<2.9	~~U~~ UJ
75-15-0	Carbon disulfide	<0.45	U
56-23-5	Carbon tetrachloride	<1.1	U
108-90-7	Chlorobenzene	<0.71	U
75-00-3	Chloroethane	<1.3	U
67-66-3	Chloroform	<1.3	U
74-87-3	Chloromethane	<2.2	U
124-48-1	Dibromochloromethane	<2.6	U
75-34-3	1,1-Dichloroethane	<0.27	U
107-06-2	1,2-Dichloroethane	<0.28	U
75-35-4	1,1-Dichloroethene	<0.24	U
156-59-2	cis-1,2-Dichloroethene	<0.27	U
156-60-5	trans-1,2-Dichloroethene	<0.46	U
78-87-5	1,2-Dichloropropane	<0.28	U
10061-01-5	cis-1,3-Dichloropropene	<3.6	U
10061-02-6	trans-1,3-Dichloropropene	<4.4	U
100-41-4	Ethylbenzene	<0.32	U
591-78-6	2-Hexanone	<5.2	U
75-09-2	Methylene Chloride	<0.58	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<4.6	U
100-42-5	Styrene	<3.0	U
79-34-5	1,1,2,2-Tetrachloroethane	<0.28	U
127-18-4	Tetrachloroethene	<0.33	~~U~~ UJ
108-88-3	Toluene	<0.27	U
71-55-6	1,1,1-Trichloroethane	<0.24	U
79-00-5	1,1,2-Trichloroethane	<0.55	U
79-01-6	Trichloroethene	<0.26	U
75-01-4	Vinyl chloride	<0.17	U
1330-20-7	Xylene (Total)	<1.5	U

SAMPLE NO.

GR-13

MSV - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay
Contract: 376175.0 PH 4 LEMBERGER LF - R
Date Received: 10/01/2020 07:00
Matrix: Water SDG No.: 40215656
Date Extracted: 10/05/2020 14:13
Lab Sample ID: 40215656004
Date Analyzed: 10/05/2020 14:13
Lab File ID: 10052020.B\10052035.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 40MSV3 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<2.7	~~U~~ UJ
71-43-2	Benzene	<0.25	U
75-27-4	Bromodichloromethane	<0.36	U
75-25-2	Bromoform	<4.0	U
74-83-9	Bromomethane	<0.97	U
78-93-3	2-Butanone (MEK)	<2.9	~~U~~ UJ
75-15-0	Carbon disulfide	<0.45	U
56-23-5	Carbon tetrachloride	<1.1	U
108-90-7	Chlorobenzene	<0.71	U
75-00-3	Chloroethane	<1.3	U
67-66-3	Chloroform	<1.3	U
74-87-3	Chloromethane	<2.2	U
124-48-1	Dibromochloromethane	<2.6	U
75-34-3	1,1-Dichloroethane	0.37	J
107-06-2	1,2-Dichloroethane	<0.28	U
75-35-4	1,1-Dichloroethene	<0.24	U
156-59-2	cis-1,2-Dichloroethene	<0.27	U
156-60-5	trans-1,2-Dichloroethene	<0.46	U
78-87-5	1,2-Dichloropropane	<0.28	U
10061-01-5	cis-1,3-Dichloropropene	<3.6	U
10061-02-6	trans-1,3-Dichloropropene	<4.4	U
100-41-4	Ethylbenzene	<0.32	U
591-78-6	2-Hexanone	<5.2	~~U~~ UJ
75-09-2	Methylene Chloride	<0.58	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<4.6	~~U~~ UJ
100-42-5	Styrene	<3.0	U
79-34-5	1,1,2,2-Tetrachloroethane	<0.28	U
127-18-4	Tetrachloroethene	<0.33	U
108-88-3	Toluene	<0.27	U
71-55-6	1,1,1-Trichloroethane	<0.24	U
79-00-5	1,1,2-Trichloroethane	<0.55	U
79-01-6	Trichloroethene	<0.26	U
75-01-4	Vinyl chloride	<0.17	U
1330-20-7	Xylene (Total)	<1.5	U

SAMPLE NO.

GR-63

MSV - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay
Contract: 376175.0 PH 4 LEMBERGER LF - R
Date Received: 10/01/2020 07:00
Matrix: Water SDG No.: 40215656
Date Extracted: 10/05/2020 14:34
Lab Sample ID: 40215656005
Date Analyzed: 10/05/2020 14:34
Lab File ID: 10052020.B\10052036.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 40MSV3 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<2.7	~~U~~ UJ
71-43-2	Benzene	<0.25	U
75-27-4	Bromodichloromethane	<0.36	U
75-25-2	Bromoform	<4.0	U
74-83-9	Bromomethane	<0.97	U
78-93-3	2-Butanone (MEK)	<2.9	~~U~~ UJ
75-15-0	Carbon disulfide	<0.45	U
56-23-5	Carbon tetrachloride	<1.1	U
108-90-7	Chlorobenzene	<0.71	U
75-00-3	Chloroethane	<1.3	U
67-66-3	Chloroform	<1.3	U
74-87-3	Chloromethane	<2.2	U
124-48-1	Dibromochloromethane	<2.6	U
75-34-3	1,1-Dichloroethane	<0.27	U
107-06-2	1,2-Dichloroethane	<0.28	U
75-35-4	1,1-Dichloroethene	<0.24	U
156-59-2	cis-1,2-Dichloroethene	<0.27	U
156-60-5	trans-1,2-Dichloroethene	<0.46	U
78-87-5	1,2-Dichloropropane	<0.28	U
10061-01-5	cis-1,3-Dichloropropene	<3.6	U
10061-02-6	trans-1,3-Dichloropropene	<4.4	U
100-41-4	Ethylbenzene	<0.32	U
591-78-6	2-Hexanone	<5.2	~~U~~ UJ
75-09-2	Methylene Chloride	<0.58	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<4.6	~~U~~ UJ
100-42-5	Styrene	<3.0	U
79-34-5	1,1,2,2-Tetrachloroethane	<0.28	U
127-18-4	Tetrachloroethene	<0.33	U
108-88-3	Toluene	<0.27	U
71-55-6	1,1,1-Trichloroethane	<0.24	U
79-00-5	1,1,2-Trichloroethane	<0.55	U
79-01-6	Trichloroethene	<0.26	U
75-01-4	Vinyl chloride	<0.17	U
1330-20-7	Xylene (Total)	<1.5	U

SAMPLE NO.

GR-FDUP-001

MSV - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay
Contract: 376175.0 PH 4 LEMBERGER LF - R
Date Received: 10/01/2020 07:00
Matrix: Water SDG No.: 40215656
Date Extracted: 10/03/2020 03:24
Lab Sample ID: 40215656006
Date Analyzed: 10/03/2020 03:24
Lab File ID: 10022020.B\10022063.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 40MSV3 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<2.7	U
71-43-2	Benzene	<0.25	U
75-27-4	Bromodichloromethane	<0.36	U
75-25-2	Bromoform	<4.0	U
74-83-9	Bromomethane	<0.97	U
78-93-3	2-Butanone (MEK)	<2.9	~~U~~ UJ
75-15-0	Carbon disulfide	<0.45	U
56-23-5	Carbon tetrachloride	<1.1	U
108-90-7	Chlorobenzene	<0.71	U
75-00-3	Chloroethane	<1.3	U
67-66-3	Chloroform	<1.3	U
74-87-3	Chloromethane	<2.2	U
124-48-1	Dibromochloromethane	<2.6	U
75-34-3	1,1-Dichloroethane	<0.27	U
107-06-2	1,2-Dichloroethane	<0.28	U
75-35-4	1,1-Dichloroethene	<0.24	U
156-59-2	cis-1,2-Dichloroethene	<0.27	U
156-60-5	trans-1,2-Dichloroethene	<0.46	U
78-87-5	1,2-Dichloropropane	<0.28	U
10061-01-5	cis-1,3-Dichloropropene	<3.6	U
10061-02-6	trans-1,3-Dichloropropene	<4.4	U
100-41-4	Ethylbenzene	<0.32	U
591-78-6	2-Hexanone	<5.2	~~U~~ UJ
75-09-2	Methylene Chloride	<0.58	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<4.6	~~U~~ UJ
100-42-5	Styrene	<3.0	U
79-34-5	1,1,2,2-Tetrachloroethane	<0.28	U
127-18-4	Tetrachloroethene	<0.33	U
108-88-3	Toluene	<0.27	U
71-55-6	1,1,1-Trichloroethane	<0.24	U
79-00-5	1,1,2-Trichloroethane	<0.55	U
79-01-6	Trichloroethene	<0.26	U
75-01-4	Vinyl chloride	<0.17	U
1330-20-7	Xylene (Total)	<1.5	U

SAMPLE NO.

GR-65

MSV - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay
Contract: 376175.0 PH4 LEMBERGER LF - RE
Date Received: 10/01/2020 07:00
Matrix: Water SDG No.: 40215657
Date Extracted: 10/02/2020 23:28
Lab Sample ID: 40215657001
Date Analyzed: 10/02/2020 23:28
Lab File ID: 10022020.B\10022052.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 40MSV3 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<2.7	U
71-43-2	Benzene	<0.25	U
75-27-4	Bromodichloromethane	<0.36	U
75-25-2	Bromoform	<4.0	U
74-83-9	Bromomethane	<0.97	U
78-93-3	2-Butanone (MEK)	<2.9	~~U~~ UJ
75-15-0	Carbon disulfide	<0.45	U
56-23-5	Carbon tetrachloride	<1.1	U
108-90-7	Chlorobenzene	<0.71	U
75-00-3	Chloroethane	<1.3	U
67-66-3	Chloroform	<1.3	U
74-87-3	Chloromethane	<2.2	U
124-48-1	Dibromochloromethane	<2.6	U
75-34-3	1,1-Dichloroethane	<0.27	U
107-06-2	1,2-Dichloroethane	<0.28	U
75-35-4	1,1-Dichloroethene	<0.24	U
156-59-2	cis-1,2-Dichloroethene	<0.27	U
156-60-5	trans-1,2-Dichloroethene	<0.46	U
78-87-5	1,2-Dichloropropane	<0.28	U
10061-01-5	cis-1,3-Dichloropropene	<3.6	U
10061-02-6	trans-1,3-Dichloropropene	<4.4	U
100-41-4	Ethylbenzene	<0.32	U
591-78-6	2-Hexanone	<5.2	~~U~~ UJ
75-09-2	Methylene Chloride	<0.58	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<4.6	~~U~~ UJ
100-42-5	Styrene	<3.0	U
79-34-5	1,1,2,2-Tetrachloroethane	<0.28	U
127-18-4	Tetrachloroethene	<0.33	U
108-88-3	Toluene	<0.27	U
71-55-6	1,1,1-Trichloroethane	<0.24	U
79-00-5	1,1,2-Trichloroethane	<0.55	U
79-01-6	Trichloroethene	<0.26	U
75-01-4	Vinyl chloride	<0.17	U
1330-20-7	Xylene (Total)	<1.5	U

SAMPLE NO.

GR-12

MSV - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay
Contract: 376175.0 PH4 LEMBERGER LF - RE
Date Received: 10/01/2020 07:00
Matrix: Water SDG No.: 40215657
Date Extracted: 10/02/2020 23:49
Lab Sample ID: 40215657002
Date Analyzed: 10/02/2020 23:49
Lab File ID: 10022020.B\10022053.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 40MSV3 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<2.7	U
71-43-2	Benzene	<0.25	U
75-27-4	Bromodichloromethane	<0.36	U
75-25-2	Bromoform	<4.0	U
74-83-9	Bromomethane	<0.97	U
78-93-3	2-Butanone (MEK)	<2.9	~~U~~ UJ
75-15-0	Carbon disulfide	<0.45	U
56-23-5	Carbon tetrachloride	<1.1	U
108-90-7	Chlorobenzene	<0.71	U
75-00-3	Chloroethane	<1.3	U
67-66-3	Chloroform	<1.3	U
74-87-3	Chloromethane	<2.2	U
124-48-1	Dibromochloromethane	<2.6	U
75-34-3	1,1-Dichloroethane	<0.27	U
107-06-2	1,2-Dichloroethane	<0.28	U
75-35-4	1,1-Dichloroethene	<0.24	U
156-59-2	cis-1,2-Dichloroethene	<0.27	U
156-60-5	trans-1,2-Dichloroethene	<0.46	U
78-87-5	1,2-Dichloropropane	<0.28	U
10061-01-5	cis-1,3-Dichloropropene	<3.6	U
10061-02-6	trans-1,3-Dichloropropene	<4.4	U
100-41-4	Ethylbenzene	<0.32	U
591-78-6	2-Hexanone	<5.2	~~U~~ UJ
75-09-2	Methylene Chloride	<0.58	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<4.6	~~U~~ UJ
100-42-5	Styrene	<3.0	U
79-34-5	1,1,2,2-Tetrachloroethane	<0.28	U
127-18-4	Tetrachloroethene	<0.33	U
108-88-3	Toluene	<0.27	U
71-55-6	1,1,1-Trichloroethane	<0.24	U
79-00-5	1,1,2-Trichloroethane	<0.55	U
79-01-6	Trichloroethene	<0.26	U
75-01-4	Vinyl chloride	<0.17	U
1330-20-7	Xylene (Total)	<1.5	U

SAMPLE NO.

GR-10

MSV - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay
Contract: 376175.0 PH4 LEMBERGER LF - RE
Date Received: 10/01/2020 07:00
Matrix: Water SDG No.: 40215657
Date Extracted: 10/03/2020 00:11
Lab Sample ID: 40215657003
Date Analyzed: 10/03/2020 00:11
Lab File ID: 10022020.B\10022054.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 40MSV3 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<2.7	U
71-43-2	Benzene	<0.25	U
75-27-4	Bromodichloromethane	<0.36	U
75-25-2	Bromoform	<4.0	U
74-83-9	Bromomethane	<0.97	U
78-93-3	2-Butanone (MEK)	<2.9	~~U~~ UJ
75-15-0	Carbon disulfide	<0.45	U
56-23-5	Carbon tetrachloride	<1.1	U
108-90-7	Chlorobenzene	<0.71	U
75-00-3	Chloroethane	<1.3	U
67-66-3	Chloroform	<1.3	U
74-87-3	Chloromethane	<2.2	U
124-48-1	Dibromochloromethane	<2.6	U
75-34-3	1,1-Dichloroethane	<0.27	U
107-06-2	1,2-Dichloroethane	<0.28	U
75-35-4	1,1-Dichloroethene	<0.24	U
156-59-2	cis-1,2-Dichloroethene	<0.27	U
156-60-5	trans-1,2-Dichloroethene	<0.46	U
78-87-5	1,2-Dichloropropane	<0.28	U
10061-01-5	cis-1,3-Dichloropropene	<3.6	U
10061-02-6	trans-1,3-Dichloropropene	<4.4	U
100-41-4	Ethylbenzene	<0.32	U
591-78-6	2-Hexanone	<5.2	~~U~~ UJ
75-09-2	Methylene Chloride	<0.58	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<4.6	~~U~~ UJ
100-42-5	Styrene	<3.0	U
79-34-5	1,1,2,2-Tetrachloroethane	<0.28	U
127-18-4	Tetrachloroethene	<0.33	U
108-88-3	Toluene	<0.27	U
71-55-6	1,1,1-Trichloroethane	<0.24	U
79-00-5	1,1,2-Trichloroethane	<0.55	U
79-01-6	Trichloroethene	<0.26	U
75-01-4	Vinyl chloride	<0.17	U
1330-20-7	Xylene (Total)	<1.5	U

SAMPLE NO.

GR-62

MSV - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay
Contract: 376175.0 PH4 LEMBERGER LF - RE
Date Received: 10/01/2020 07:00
Matrix: Water SDG No.: 40215657
Date Extracted: 10/03/2020 00:32
Lab Sample ID: 40215657004
Date Analyzed: 10/03/2020 00:32
Lab File ID: 10022020.B\10022055.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 40MSV3 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<2.7	U
71-43-2	Benzene	<0.25	U
75-27-4	Bromodichloromethane	<0.36	U
75-25-2	Bromoform	<4.0	U
74-83-9	Bromomethane	<0.97	U
78-93-3	2-Butanone (MEK)	<2.9	~~U~~ UJ
75-15-0	Carbon disulfide	<0.45	U
56-23-5	Carbon tetrachloride	<1.1	U
108-90-7	Chlorobenzene	<0.71	U
75-00-3	Chloroethane	<1.3	U
67-66-3	Chloroform	<1.3	U
74-87-3	Chloromethane	<2.2	U
124-48-1	Dibromochloromethane	<2.6	U
75-34-3	1,1-Dichloroethane	<0.27	U
107-06-2	1,2-Dichloroethane	<0.28	U
75-35-4	1,1-Dichloroethene	<0.24	U
156-59-2	cis-1,2-Dichloroethene	<0.27	U
156-60-5	trans-1,2-Dichloroethene	<0.46	U
78-87-5	1,2-Dichloropropane	<0.28	U
10061-01-5	cis-1,3-Dichloropropene	<3.6	U
10061-02-6	trans-1,3-Dichloropropene	<4.4	U
100-41-4	Ethylbenzene	<0.32	U
591-78-6	2-Hexanone	<5.2	~~U~~ UJ
75-09-2	Methylene Chloride	<0.58	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<4.6	~~U~~ UJ
100-42-5	Styrene	<3.0	U
79-34-5	1,1,2,2-Tetrachloroethane	<0.28	U
127-18-4	Tetrachloroethene	<0.33	U
108-88-3	Toluene	<0.27	U
71-55-6	1,1,1-Trichloroethane	<0.24	U
79-00-5	1,1,2-Trichloroethane	<0.55	U
79-01-6	Trichloroethene	<0.26	U
75-01-4	Vinyl chloride	<0.17	U
1330-20-7	Xylene (Total)	<1.5	U

SAMPLE NO.

GR-08

MSV - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay
Contract: 376175.0 PH4 LEMBERGER LF - RE
Date Received: 10/01/2020 07:00
Matrix: Water SDG No.: 40215657
Date Extracted: 10/03/2020 00:54
Lab Sample ID: 40215657005
Date Analyzed: 10/03/2020 00:54
Lab File ID: 10022020.B\10022056.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 40MSV3 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<2.7	U
71-43-2	Benzene	<0.25	U
75-27-4	Bromodichloromethane	<0.36	U
75-25-2	Bromoform	<4.0	U
74-83-9	Bromomethane	<0.97	U
78-93-3	2-Butanone (MEK)	<2.9	~~U~~ UJ
75-15-0	Carbon disulfide	<0.45	U
56-23-5	Carbon tetrachloride	<1.1	U
108-90-7	Chlorobenzene	<0.71	U
75-00-3	Chloroethane	<1.3	U
67-66-3	Chloroform	<1.3	U
74-87-3	Chloromethane	<2.2	U
124-48-1	Dibromochloromethane	<2.6	U
75-34-3	1,1-Dichloroethane	<0.27	U
107-06-2	1,2-Dichloroethane	<0.28	U
75-35-4	1,1-Dichloroethene	<0.24	U
156-59-2	cis-1,2-Dichloroethene	<0.27	U
156-60-5	trans-1,2-Dichloroethene	<0.46	U
78-87-5	1,2-Dichloropropane	<0.28	U
10061-01-5	cis-1,3-Dichloropropene	<3.6	U
10061-02-6	trans-1,3-Dichloropropene	<4.4	U
100-41-4	Ethylbenzene	<0.32	U
591-78-6	2-Hexanone	<5.2	~~U~~ UJ
75-09-2	Methylene Chloride	<0.58	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<4.6	~~U~~ UJ
100-42-5	Styrene	<3.0	U
79-34-5	1,1,2,2-Tetrachloroethane	<0.28	U
127-18-4	Tetrachloroethene	<0.33	U
108-88-3	Toluene	<0.27	U
71-55-6	1,1,1-Trichloroethane	<0.24	U
79-00-5	1,1,2-Trichloroethane	<0.55	U
79-01-6	Trichloroethene	<0.26	U
75-01-4	Vinyl chloride	<0.17	U
1330-20-7	Xylene (Total)	<1.5	U

SAMPLE NO.

GR-09

MSV - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay
Contract: 376175.0 PH4 LEMBERGER LF - RE
Date Received: 10/01/2020 07:00
Matrix: Water SDG No.: 40215657
Date Extracted: 10/03/2020 01:15
Lab Sample ID: 40215657006
Date Analyzed: 10/03/2020 01:15
Lab File ID: 10022020.B\10022057.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 40MSV3 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<2.7	U
71-43-2	Benzene	<0.25	U
75-27-4	Bromodichloromethane	<0.36	U
75-25-2	Bromoform	<4.0	U
74-83-9	Bromomethane	<0.97	U
78-93-3	2-Butanone (MEK)	<2.9	~~U~~ UJ
75-15-0	Carbon disulfide	<0.45	U
56-23-5	Carbon tetrachloride	<1.1	U
108-90-7	Chlorobenzene	<0.71	U
75-00-3	Chloroethane	<1.3	U
67-66-3	Chloroform	<1.3	U
74-87-3	Chloromethane	<2.2	U
124-48-1	Dibromochloromethane	<2.6	U
75-34-3	1,1-Dichloroethane	<0.27	U
107-06-2	1,2-Dichloroethane	<0.28	U
75-35-4	1,1-Dichloroethene	<0.24	U
156-59-2	cis-1,2-Dichloroethene	<0.27	U
156-60-5	trans-1,2-Dichloroethene	<0.46	U
78-87-5	1,2-Dichloropropane	<0.28	U
10061-01-5	cis-1,3-Dichloropropene	<3.6	U
10061-02-6	trans-1,3-Dichloropropene	<4.4	U
100-41-4	Ethylbenzene	<0.32	U
591-78-6	2-Hexanone	<5.2	~~U~~ UJ
75-09-2	Methylene Chloride	<0.58	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<4.6	~~U~~ UJ
100-42-5	Styrene	<3.0	U
79-34-5	1,1,2,2-Tetrachloroethane	<0.28	U
127-18-4	Tetrachloroethene	<0.33	U
108-88-3	Toluene	<0.27	U
71-55-6	1,1,1-Trichloroethane	<0.24	U
79-00-5	1,1,2-Trichloroethane	<0.55	U
79-01-6	Trichloroethene	<0.26	U
75-01-4	Vinyl chloride	<0.17	U
1330-20-7	Xylene (Total)	<1.5	U

SAMPLE NO.

GR-64

MSV - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay
Contract: 376175.0 PH4 LEMBERGER LF - RE
Date Received: 10/01/2020 07:00
Matrix: Water SDG No.: 40215657
Date Extracted: 10/02/2020 23:06
Lab Sample ID: 40215657007
Date Analyzed: 10/02/2020 23:06
Lab File ID: 10022020.B\10022051.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 40MSV3 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<2.7	U
71-43-2	Benzene	<0.25	U
75-27-4	Bromodichloromethane	<0.36	U
75-25-2	Bromoform	<4.0	U
74-83-9	Bromomethane	<0.97	U
78-93-3	2-Butanone (MEK)	<2.9	~~U~~ UJ
75-15-0	Carbon disulfide	<0.45	U
56-23-5	Carbon tetrachloride	<1.1	U
108-90-7	Chlorobenzene	<0.71	U
75-00-3	Chloroethane	<1.3	U
67-66-3	Chloroform	<1.3	U
74-87-3	Chloromethane	<2.2	U
124-48-1	Dibromochloromethane	<2.6	U
75-34-3	1,1-Dichloroethane	<0.27	U
107-06-2	1,2-Dichloroethane	<0.28	U
75-35-4	1,1-Dichloroethene	<0.24	U
156-59-2	cis-1,2-Dichloroethene	<0.27	U
156-60-5	trans-1,2-Dichloroethene	<0.46	U
78-87-5	1,2-Dichloropropane	<0.28	U
10061-01-5	cis-1,3-Dichloropropene	<3.6	U
10061-02-6	trans-1,3-Dichloropropene	<4.4	U
100-41-4	Ethylbenzene	<0.32	U
591-78-6	2-Hexanone	<5.2	~~U~~ UJ
75-09-2	Methylene Chloride	<0.58	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<4.6	~~U~~ UJ
100-42-5	Styrene	<3.0	U
79-34-5	1,1,2,2-Tetrachloroethane	<0.28	U
127-18-4	Tetrachloroethene	<0.33	U
108-88-3	Toluene	<0.27	U
71-55-6	1,1,1-Trichloroethane	<0.24	U
79-00-5	1,1,2-Trichloroethane	<0.55	U
79-01-6	Trichloroethene	<0.26	U
75-01-4	Vinyl chloride	<0.17	U
1330-20-7	Xylene (Total)	<1.5	U

SAMPLE NO.

MSV - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

TB-001

Lab Name: Pace Analytical - Green Bay
Contract: 376175.0 PH4 LEMBERGER LF - RE
Date Received: 10/01/2020 07:00
Matrix: Water SDG No.: 40215657
Date Extracted: 10/02/2020 22:45
Lab Sample ID: 40215657008
Date Analyzed: 10/02/2020 22:45
Lab File ID: 10022020.B\10022050.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 40MSV3 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<2.7	U
71-43-2	Benzene	<0.25	U
75-27-4	Bromodichloromethane	<0.36	U
75-25-2	Bromoform	<4.0	U
74-83-9	Bromomethane	<0.97	U
78-93-3	2-Butanone (MEK)	<2.9	~~U~~ UJ
75-15-0	Carbon disulfide	<0.45	U
56-23-5	Carbon tetrachloride	<1.1	U
108-90-7	Chlorobenzene	<0.71	U
75-00-3	Chloroethane	<1.3	U
67-66-3	Chloroform	<1.3	U
74-87-3	Chloromethane	<2.2	U
124-48-1	Dibromochloromethane	<2.6	U
75-34-3	1,1-Dichloroethane	<0.27	U
107-06-2	1,2-Dichloroethane	<0.28	U
75-35-4	1,1-Dichloroethene	<0.24	U
156-59-2	cis-1,2-Dichloroethene	<0.27	U
156-60-5	trans-1,2-Dichloroethene	<0.46	U
78-87-5	1,2-Dichloropropane	<0.28	U
10061-01-5	cis-1,3-Dichloropropene	<3.6	U
10061-02-6	trans-1,3-Dichloropropene	<4.4	U
100-41-4	Ethylbenzene	<0.32	U
591-78-6	2-Hexanone	<5.2	~~U~~ UJ
75-09-2	Methylene Chloride	<0.58	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<4.6	~~U~~ UJ
100-42-5	Styrene	<3.0	U
79-34-5	1,1,2,2-Tetrachloroethane	<0.28	U
127-18-4	Tetrachloroethene	<0.33	U
108-88-3	Toluene	<0.27	U
71-55-6	1,1,1-Trichloroethane	<0.24	U
79-00-5	1,1,2-Trichloroethane	<0.55	U
79-01-6	Trichloroethene	<0.26	U
75-01-4	Vinyl chloride	<0.17	U
1330-20-7	Xylene (Total)	<1.5	U

SAMPLE NO.

GR-66

MSV - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay
Contract: 376175 P4 LEMBERGER LF RES
Date Received: 10/21/2020 07:30
Matrix: Water SDG No.: 40216881
Date Extracted: 10/25/2020 09:31
Lab Sample ID: 40216881001
Date Analyzed: 10/25/2020 09:31
Lab File ID: 10252020.B\10252007.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 40MSVA Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<2.7	U
71-43-2	Benzene	<0.25	U
75-27-4	Bromodichloromethane	<0.36	U
75-25-2	Bromoform	<4.0	U
74-83-9	Bromomethane	<0.97	U
78-93-3	2-Butanone (MEK)	<2.9	U
75-15-0	Carbon disulfide	<0.45	U
56-23-5	Carbon tetrachloride	<1.1	U
108-90-7	Chlorobenzene	<0.71	U
75-00-3	Chloroethane	<1.3	U
67-66-3	Chloroform	<1.3	U
74-87-3	Chloromethane	<2.2	U
124-48-1	Dibromochloromethane	<2.6	U
75-34-3	1,1-Dichloroethane	<0.27	U
107-06-2	1,2-Dichloroethane	<0.28	U
75-35-4	1,1-Dichloroethene	<0.24	U
156-59-2	cis-1,2-Dichloroethene	<0.27	U
156-60-5	trans-1,2-Dichloroethene	<0.46	U
78-87-5	1,2-Dichloropropane	<0.28	U
10061-01-5	cis-1,3-Dichloropropene	<3.6	U
10061-02-6	trans-1,3-Dichloropropene	<4.4	U
100-41-4	Ethylbenzene	<0.32	U
591-78-6	2-Hexanone	<5.2	U
75-09-2	Methylene Chloride	<0.58	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<4.6	U
100-42-5	Styrene	<3.0	U
79-34-5	1,1,2,2-Tetrachloroethane	<0.28	U
127-18-4	Tetrachloroethene	<0.33	U
108-88-3	Toluene	<0.27	U
71-55-6	1,1,1-Trichloroethane	<0.24	U
79-00-5	1,1,2-Trichloroethane	<0.55	U
79-01-6	Trichloroethene	<0.26	U
75-01-4	Vinyl chloride	<0.17	U
1330-20-7	Xylene (Total)	<1.5	U

SAMPLE NO.

GR-11

MSV - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay
Contract: 376175 P4 LEMBERGER LF RES
Date Received: 10/21/2020 07:30
Matrix: Water SDG No.: 40216881
Date Extracted: 10/25/2020 09:54
Lab Sample ID: 40216881002
Date Analyzed: 10/25/2020 09:54
Lab File ID: 10252020.B\10252008.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 40MSVA Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<2.7	U
71-43-2	Benzene	<0.25	U
75-27-4	Bromodichloromethane	<0.36	U
75-25-2	Bromoform	<4.0	U
74-83-9	Bromomethane	<0.97	U
78-93-3	2-Butanone (MEK)	<2.9	U
75-15-0	Carbon disulfide	<0.45	U
56-23-5	Carbon tetrachloride	<1.1	U
108-90-7	Chlorobenzene	<0.71	U
75-00-3	Chloroethane	<1.3	U
67-66-3	Chloroform	<1.3	U
74-87-3	Chloromethane	<2.2	U
124-48-1	Dibromochloromethane	<2.6	U
75-34-3	1,1-Dichloroethane	<0.27	U
107-06-2	1,2-Dichloroethane	<0.28	U
75-35-4	1,1-Dichloroethene	<0.24	U
156-59-2	cis-1,2-Dichloroethene	<0.27	U
156-60-5	trans-1,2-Dichloroethene	<0.46	U
78-87-5	1,2-Dichloropropane	<0.28	U
10061-01-5	cis-1,3-Dichloropropene	<3.6	U
10061-02-6	trans-1,3-Dichloropropene	<4.4	U
100-41-4	Ethylbenzene	<0.32	U
591-78-6	2-Hexanone	<5.2	U
75-09-2	Methylene Chloride	<0.58	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<4.6	U
100-42-5	Styrene	<3.0	U
79-34-5	1,1,2,2-Tetrachloroethane	<0.28	U
127-18-4	Tetrachloroethene	<0.33	U
108-88-3	Toluene	<0.27	U
71-55-6	1,1,1-Trichloroethane	<0.24	U
79-00-5	1,1,2-Trichloroethane	<0.55	U
79-01-6	Trichloroethene	<0.26	U
75-01-4	Vinyl chloride	<0.17	U
1330-20-7	Xylene (Total)	<1.5	U

SAMPLE NO.

GR-14

MSV - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay
Contract: 376175 P4 LEMBERGER LF RES
Date Received: 10/21/2020 07:30
Matrix: Water SDG No.: 40216881
Date Extracted: 10/25/2020 10:16
Lab Sample ID: 40216881003
Date Analyzed: 10/25/2020 10:16
Lab File ID: 10252020.B\10252009.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 40MSVA Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<2.7	U
71-43-2	Benzene	<0.25	U
75-27-4	Bromodichloromethane	<0.36	U
75-25-2	Bromoform	<4.0	U
74-83-9	Bromomethane	<0.97	U
78-93-3	2-Butanone (MEK)	<2.9	U
75-15-0	Carbon disulfide	<0.45	U
56-23-5	Carbon tetrachloride	<1.1	U
108-90-7	Chlorobenzene	<0.71	U
75-00-3	Chloroethane	<1.3	U
67-66-3	Chloroform	<1.3	U
74-87-3	Chloromethane	<2.2	U
124-48-1	Dibromochloromethane	<2.6	U
75-34-3	1,1-Dichloroethane	<0.27	U
107-06-2	1,2-Dichloroethane	<0.28	U
75-35-4	1,1-Dichloroethene	<0.24	U
156-59-2	cis-1,2-Dichloroethene	<0.27	U
156-60-5	trans-1,2-Dichloroethene	<0.46	U
78-87-5	1,2-Dichloropropane	<0.28	U
10061-01-5	cis-1,3-Dichloropropene	<3.6	U
10061-02-6	trans-1,3-Dichloropropene	<4.4	U
100-41-4	Ethylbenzene	<0.32	U
591-78-6	2-Hexanone	<5.2	U
75-09-2	Methylene Chloride	<0.58	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<4.6	U
100-42-5	Styrene	<3.0	U
79-34-5	1,1,2,2-Tetrachloroethane	<0.28	U
127-18-4	Tetrachloroethene	<0.33	U
108-88-3	Toluene	<0.27	U
71-55-6	1,1,1-Trichloroethane	<0.24	U
79-00-5	1,1,2-Trichloroethane	<0.55	U
79-01-6	Trichloroethene	<0.26	U
75-01-4	Vinyl chloride	<0.17	U
1330-20-7	Xylene (Total)	<1.5	U

SAMPLE NO.

GR-16

MSV - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay
Contract: 376175 P4 LEMBERGER LF RES
Date Received: 10/21/2020 07:30
Matrix: Water SDG No.: 40216881
Date Extracted: 10/25/2020 10:39
Lab Sample ID: 40216881004
Date Analyzed: 10/25/2020 10:39
Lab File ID: 10252020.B\10252010.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 40MSVA Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<2.7	U
71-43-2	Benzene	<0.25	U
75-27-4	Bromodichloromethane	<0.36	U
75-25-2	Bromoform	<4.0	U
74-83-9	Bromomethane	<0.97	U
78-93-3	2-Butanone (MEK)	<2.9	U
75-15-0	Carbon disulfide	<0.45	U
56-23-5	Carbon tetrachloride	<1.1	U
108-90-7	Chlorobenzene	<0.71	U
75-00-3	Chloroethane	<1.3	U
67-66-3	Chloroform	<1.3	U
74-87-3	Chloromethane	<2.2	U
124-48-1	Dibromochloromethane	<2.6	U
75-34-3	1,1-Dichloroethane	<0.27	U
107-06-2	1,2-Dichloroethane	<0.28	U
75-35-4	1,1-Dichloroethene	<0.24	U
156-59-2	cis-1,2-Dichloroethene	<0.27	U
156-60-5	trans-1,2-Dichloroethene	<0.46	U
78-87-5	1,2-Dichloropropane	<0.28	U
10061-01-5	cis-1,3-Dichloropropene	<3.6	U
10061-02-6	trans-1,3-Dichloropropene	<4.4	U
100-41-4	Ethylbenzene	<0.32	U
591-78-6	2-Hexanone	<5.2	U
75-09-2	Methylene Chloride	<0.58	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<4.6	U
100-42-5	Styrene	<3.0	U
79-34-5	1,1,2,2-Tetrachloroethane	<0.28	U
127-18-4	Tetrachloroethene	<0.33	U
108-88-3	Toluene	<0.27	U
71-55-6	1,1,1-Trichloroethane	<0.24	U
79-00-5	1,1,2-Trichloroethane	<0.55	U
79-01-6	Trichloroethene	<0.26	U
75-01-4	Vinyl chloride	<0.17	U
1330-20-7	Xylene (Total)	<1.5	U

SAMPLE NO.

GR-74

MSV - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay
Contract: 376175 P4 LEMBERGER LF RES
Date Received: 10/21/2020 07:30
Matrix: Water SDG No.: 40216881
Date Extracted: 10/25/2020 11:01
Lab Sample ID: 40216881005
Date Analyzed: 10/25/2020 11:01
Lab File ID: 10252020.B\10252011.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 40MSVA Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<2.7	U
71-43-2	Benzene	<0.25	U
75-27-4	Bromodichloromethane	<0.36	U
75-25-2	Bromoform	<4.0	U
74-83-9	Bromomethane	<0.97	U
78-93-3	2-Butanone (MEK)	<2.9	U
75-15-0	Carbon disulfide	<0.45	U
56-23-5	Carbon tetrachloride	<1.1	U
108-90-7	Chlorobenzene	<0.71	U
75-00-3	Chloroethane	<1.3	U
67-66-3	Chloroform	<1.3	U
74-87-3	Chloromethane	<2.2	U
124-48-1	Dibromochloromethane	<2.6	U
75-34-3	1,1-Dichloroethane	<0.27	U
107-06-2	1,2-Dichloroethane	<0.28	U
75-35-4	1,1-Dichloroethene	<0.24	U
156-59-2	cis-1,2-Dichloroethene	<0.27	U
156-60-5	trans-1,2-Dichloroethene	<0.46	U
78-87-5	1,2-Dichloropropane	<0.28	U
10061-01-5	cis-1,3-Dichloropropene	<3.6	U
10061-02-6	trans-1,3-Dichloropropene	<4.4	U
100-41-4	Ethylbenzene	<0.32	U
591-78-6	2-Hexanone	<5.2	U
75-09-2	Methylene Chloride	<0.58	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<4.6	U
100-42-5	Styrene	<3.0	U
79-34-5	1,1,2,2-Tetrachloroethane	<0.28	U
127-18-4	Tetrachloroethene	<0.33	U
108-88-3	Toluene	<0.27	U
71-55-6	1,1,1-Trichloroethane	<0.24	U
79-00-5	1,1,2-Trichloroethane	<0.55	U
79-01-6	Trichloroethene	<0.26	U
75-01-4	Vinyl chloride	<0.17	U
1330-20-7	Xylene (Total)	<1.5	U

SAMPLE NO.

GR-30

MSV - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay
Contract: 376175 P4 LEMBERGER LF RES
Date Received: 10/21/2020 07:30
Matrix: Water SDG No.: 40216881
Date Extracted: 10/25/2020 11:24
Lab Sample ID: 40216881006
Date Analyzed: 10/25/2020 11:24
Lab File ID: 10252020.B\10252012.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 40MSVA Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<2.7	U
71-43-2	Benzene	<0.25	U
75-27-4	Bromodichloromethane	<0.36	U
75-25-2	Bromoform	<4.0	U
74-83-9	Bromomethane	<0.97	U
78-93-3	2-Butanone (MEK)	<2.9	U
75-15-0	Carbon disulfide	<0.45	U
56-23-5	Carbon tetrachloride	<1.1	U
108-90-7	Chlorobenzene	<0.71	U
75-00-3	Chloroethane	<1.3	U
67-66-3	Chloroform	<1.3	U
74-87-3	Chloromethane	<2.2	U
124-48-1	Dibromochloromethane	<2.6	U
75-34-3	1,1-Dichloroethane	<0.27	U
107-06-2	1,2-Dichloroethane	<0.28	U
75-35-4	1,1-Dichloroethene	<0.24	U
156-59-2	cis-1,2-Dichloroethene	<0.27	U
156-60-5	trans-1,2-Dichloroethene	<0.46	U
78-87-5	1,2-Dichloropropane	<0.28	U
10061-01-5	cis-1,3-Dichloropropene	<3.6	U
10061-02-6	trans-1,3-Dichloropropene	<4.4	U
100-41-4	Ethylbenzene	<0.32	U
591-78-6	2-Hexanone	<5.2	U
75-09-2	Methylene Chloride	<0.58	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<4.6	U
100-42-5	Styrene	<3.0	U
79-34-5	1,1,2,2-Tetrachloroethane	<0.28	U
127-18-4	Tetrachloroethene	<0.33	U
108-88-3	Toluene	<0.27	U
71-55-6	1,1,1-Trichloroethane	0.33	J
79-00-5	1,1,2-Trichloroethane	<0.55	U
79-01-6	Trichloroethene	<0.26	U
75-01-4	Vinyl chloride	<0.17	U
1330-20-7	Xylene (Total)	<1.5	U

SAMPLE NO.

GR-FDUP-002

MSV - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay
Contract: 376175 P4 LEMBERGER LF RES
Date Received: 10/21/2020 07:30
Matrix: Water SDG No.: 40216881
Date Extracted: 10/25/2020 11:46
Lab Sample ID: 40216881007
Date Analyzed: 10/25/2020 11:46
Lab File ID: 10252020.B\10252013.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 40MSVA Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<2.7	U
71-43-2	Benzene	<0.25	U
75-27-4	Bromodichloromethane	<0.36	U
75-25-2	Bromoform	<4.0	U
74-83-9	Bromomethane	<0.97	U
78-93-3	2-Butanone (MEK)	<2.9	U
75-15-0	Carbon disulfide	<0.45	U
56-23-5	Carbon tetrachloride	<1.1	U
108-90-7	Chlorobenzene	<0.71	U
75-00-3	Chloroethane	<1.3	U
67-66-3	Chloroform	<1.3	U
74-87-3	Chloromethane	<2.2	U
124-48-1	Dibromochloromethane	<2.6	U
75-34-3	1,1-Dichloroethane	<0.27	U
107-06-2	1,2-Dichloroethane	<0.28	U
75-35-4	1,1-Dichloroethene	<0.24	U
156-59-2	cis-1,2-Dichloroethene	<0.27	U
156-60-5	trans-1,2-Dichloroethene	<0.46	U
78-87-5	1,2-Dichloropropane	<0.28	U
10061-01-5	cis-1,3-Dichloropropene	<3.6	U
10061-02-6	trans-1,3-Dichloropropene	<4.4	U
100-41-4	Ethylbenzene	<0.32	U
591-78-6	2-Hexanone	<5.2	U
75-09-2	Methylene Chloride	<0.58	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<4.6	U
100-42-5	Styrene	<3.0	U
79-34-5	1,1,2,2-Tetrachloroethane	<0.28	U
127-18-4	Tetrachloroethene	<0.33	U
108-88-3	Toluene	<0.27	U
71-55-6	1,1,1-Trichloroethane	<0.24	U
79-00-5	1,1,2-Trichloroethane	<0.55	U
79-01-6	Trichloroethene	<0.26	U
75-01-4	Vinyl chloride	<0.17	U
1330-20-7	Xylene (Total)	<1.5	U

SAMPLE NO.

TB-001

MSV - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay
Contract: 376175 P4 LEMBERGER LF RES
Date Received: 10/21/2020 07:30
Matrix: Water SDG No.: 40216881
Date Extracted: 10/24/2020 15:50
Lab Sample ID: 40216881008
Date Analyzed: 10/24/2020 15:50
Lab File ID: 10242020.B\10242017.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 40MSVA Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<2.7	U
71-43-2	Benzene	<0.25	U
75-27-4	Bromodichloromethane	<0.36	U
75-25-2	Bromoform	<4.0	U
74-83-9	Bromomethane	<0.97	U UJ
78-93-3	2-Butanone (MEK)	<2.9	U
75-15-0	Carbon disulfide	<0.45	U
56-23-5	Carbon tetrachloride	<1.1	U
108-90-7	Chlorobenzene	<0.71	U
75-00-3	Chloroethane	<1.3	U
67-66-3	Chloroform	<1.3	U
74-87-3	Chloromethane	<2.2	U
124-48-1	Dibromochloromethane	<2.6	U
75-34-3	1,1-Dichloroethane	<0.27	U
107-06-2	1,2-Dichloroethane	<0.28	U
75-35-4	1,1-Dichloroethene	<0.24	U
156-59-2	cis-1,2-Dichloroethene	<0.27	U
156-60-5	trans-1,2-Dichloroethene	<0.46	U
78-87-5	1,2-Dichloropropane	<0.28	U
10061-01-5	cis-1,3-Dichloropropene	<3.6	U
10061-02-6	trans-1,3-Dichloropropene	<4.4	U
100-41-4	Ethylbenzene	<0.32	U
591-78-6	2-Hexanone	<5.2	U
75-09-2	Methylene Chloride	<0.58	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<4.6	U
100-42-5	Styrene	<3.0	U
79-34-5	1,1,2,2-Tetrachloroethane	<0.28	U
127-18-4	Tetrachloroethene	<0.33	U
108-88-3	Toluene	<0.27	U
71-55-6	1,1,1-Trichloroethane	<0.24	U
79-00-5	1,1,2-Trichloroethane	<0.55	U
79-01-6	Trichloroethene	<0.26	U
75-01-4	Vinyl chloride	<0.17	U
1330-20-7	Xylene (Total)	<1.5	U

Memorandum

To: Meredith Westover

From: Amy Bass (Data Reviewer)
Elizabeth Denly (Peer Reviewer)

Date: December 14, 2020

Subject: Data Validation Report
VOC Groundwater Samples/Sentinel Wells: 3rd Quarter 2020
Lemberger Landfill and Lemberger Transport and Recycling/Franklin, Wisconsin
Laboratory Project Number 40215658

SUMMARY

Full validation (level IV) was performed on the data for seven groundwater samples, one field duplicate, one field blank, and one trip blank collected from sentinel wells at the Lemberger Landfill and Lemberger Transport and Recycling Site in Franklin, Wisconsin. The samples were collected on September 27 and 28, 2020. 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 8260B. The laboratory reported the results under laboratory project number 40215658.

The sample results were assessed using the *USEPA National Functional Guidelines for Organic Superfund Methods Data Review (EPA-540-R-2017-002),* January 2017 and the project-specific quality assurance project plan (QAPP), dated September 2011, Revision 1.

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

SAMPLES

Samples included in this review are listed below.

- RM-002D
- RM-003D
- RM-003XXD
- TB-001
- RM-210D
- RM-401XXD
- RM-403XD
- RM-404XXD
- FDUP-001[1]
- 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
- 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 packages were found to be complete as received from the laboratory with the following exception.

- The laboratory only spiked a subset of the VOCs reported in the samples in the LCS and MS/MSDs; thus, accuracy and/or precision could not be evaluated for select VOCs.

Additional details are provided in the following sections. No validation actions were taken on the basis of these issues.

Holding Times and Sample Preservation

All samples were received by the laboratory on ice (temperature measurements were not provided) and were noted to be acid preserved. All VOC analyses were performed within the method-specified holding time.

Note that samples were received by the laboratory three to four 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 bromofluorobenzene tunes were within the acceptance criteria.

Initial and Continuing Calibrations

The percent relative standard deviations, coefficients of determination, and relative response factors (RRFs) 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 differences or percent drifts (%Ds) which were outside of the laboratory acceptance criteria in the CCs, the associated samples, and resulting validation actions.

CC	Analyte	%D	Associated Sample(s)	Validation Actions
40MSV3 10/05/20 @06:02	Acetone	-31.4326	RM-002D, RM-003D, RM-003XXD, RM-210D, RM-401XXD, RM-403XD, RM404XXD, FDUP-001, FB-001	The nondetect results for the listed VOCs were qualified as estimated (UJ) in the associated samples.
	2-Butanone (MEK)	-27.2324		
	Chloromethane	-23.8156		
	2-Hexanone	-35.5070		
	4-Methyl-2-pentanone (MIBK)	-39.5814		
	1,1,2,2-Tetrachloroethane	-20.4417		
40MSV3 10/06/20 @05:39	Acetone	-30.1608	TB-001	The nondetect results for the listed VOCs were qualified as estimated (UJ) in the associated sample.
	2-Hexanone	-35.7017		
	4-Methyl-2-pentanone (MIBK)	-31.1943		

Blanks

A method blank was analyzed each day prior to sample analysis. Target analytes were not detected in the field blank, trip blank, or method blanks, with the exception of one analyte detected in the field blank. The following table summarizes the concentration of the analyte detected, the associated samples, and the resulting validation actions.

Blank ID: Analyte	Blank Concentration (µg/L)	QL (µg/L)	Associated Samples	Validation Actions
Field Blank (FB-001): Toluene	1.6	1.0	RM-002D, RM-003D, RM-003XXD, RM-210D, RM-401XXD, RM-403XD, RM404XXD, FDUP-001	Qualification was not required since toluene was not detected in the associated samples.

Surrogate Spike Recoveries

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

MS/MSD Results

MS/MSD analyses for VOCs were performed on sample RM-404XXD. All %R and relative percent difference (RPD) criteria were met.

Note that the laboratory only spiked a subset of the VOCs 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 analyzed each day prior to sample analysis. The %R criteria were met for all LCS analyses relevant to this sample set.

Note that the laboratory only spiked a subset of the VOCs reported in the samples in the LCS analyses. 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 following samples were submitted as the field duplicate pair with this data set:

- RM-401XXD and FDUP-001

The following table summarizes the RPDs for the detected VOC results in the field duplicate pair. If one or both sample results are below 5× the QL, the RPD is not applicable, and the absolute difference (AbsD) was used to evaluate field duplicate precision.

Compound	QL (µg/L)	RM-401XXD (µg/L)	FDUP-001 (µg/L)	RPD (%) or AbsD (µg/L)	Validation Action
1,1,1-Trichloroethane	1.0	8.7	9.0	RPD = 3.4	None; all criteria were met.
1,1-Dichloroethane	1.0	8.6	8.6	RPD = 0	
1,1-Dichloroethene	1.0	4.2	4.3	AbsD = 0.1	
cis-1,2-Dichloroethene	1.0	11.6	11.6	RPD = 0	
Trichloroethene	1.0	1.9	1.8	AbsD = 0.1	

Criteria:

- When both results are ≥ 5x the QL, RPDs must be ≤ 35%.
- When one or both results are < 5x the QL, absolute difference must be < the 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	0.28
1,1,2-Trichloroethane		0.5	5*	0.55
Bromodichloromethane		0.06	0.6*	0.36
Bromoform		0.44	4.4*	4.0
Carbon tetrachloride		0.5	5*	1.1
Chloroform		0.6	6*	1.3
cis-1,3-Dichloropropene		0.02	0.2	3.6
Methylene chloride		0.5	5*	0.58
trans-1,3-Dichloropropene		0.02	0.2	4.4
Vinyl chloride		0.02	0.2*	0.17
* Laboratory LOD is below the action limit.				

Target Compound Identification

All criteria were met.

However, it was noted that the secondary ion (99) for 1,1,1-trichloroethane (detected in each sample of this sample set) coelutes with the internal standard (IS), which also has the secondary ion of 99 and therefore interferes in the proper identification of this compound. Inquiry was made to the laboratory regarding this issue. The laboratory concurred with this potential interference issue, which had been considered in the reported compound identification. In response to the inquiry, the laboratory reviewed the reported detections of 1,1,1-trichloroethane; no revisions to the reported results were required.

QUALIFIED FORM 1s

SAMPLE NO.

RM-403XD

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay Contract: 376175.0 PH4 LEMBERGER LF - RE

Date Received: 10/01/2020 07:00 Matrix: Water SDG No.: 40215658

Date Extracted: 10/05/2020 08:53 Lab Sample ID: 40215658001

Date Analyzed: 10/05/2020 08:53 Lab File ID: 10052020.B\10052010.D

Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1 Instrument: 40MSV3 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<2.7	~~U~~ UJ
71-43-2	Benzene	<0.25	U
75-27-4	Bromodichloromethane	<0.36	U
75-25-2	Bromoform	<4.0	U
74-83-9	Bromomethane	<0.97	U
78-93-3	2-Butanone (MEK)	<2.9	~~U~~ UJ
75-15-0	Carbon disulfide	<0.45	U
56-23-5	Carbon tetrachloride	<1.1	U
108-90-7	Chlorobenzene	<0.71	U
75-00-3	Chloroethane	27.4	
67-66-3	Chloroform	<1.3	U
74-87-3	Chloromethane	<2.2	~~U~~ UJ
124-48-1	Dibromochloromethane	<2.6	U
75-34-3	1,1-Dichloroethane	66.4	
107-06-2	1,2-Dichloroethane	<0.28	U
75-35-4	1,1-Dichloroethene	5.8	
156-59-2	cis-1,2-Dichloroethene	12.1	
156-60-5	trans-1,2-Dichloroethene	<0.46	U
78-87-5	1,2-Dichloropropane	<0.28	U
10061-01-5	cis-1,3-Dichloropropene	<3.6	U
10061-02-6	trans-1,3-Dichloropropene	<4.4	U
100-41-4	Ethylbenzene	<0.32	U
591-78-6	2-Hexanone	<5.2	~~U~~ UJ
75-09-2	Methylene Chloride	<0.58	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<4.6	~~U~~ UJ
100-42-5	Styrene	<3.0	U
79-34-5	1,1,2,2-Tetrachloroethane	<0.28	~~U~~ UJ
127-18-4	Tetrachloroethene	1.2	
108-88-3	Toluene	<0.27	U
71-55-6	1,1,1-Trichloroethane	92.3	
79-00-5	1,1,2-Trichloroethane	<0.55	U
79-01-6	Trichloroethene	15.8	
75-01-4	Vinyl chloride	<0.17	U
1330-20-7	Xylene (Total)	<1.5	U

SAMPLE NO.

RM-404XXD

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay Contract: 376175.0 PH4 LEMBERGER LF - RE

Date Received: 10/01/2020 07:00 Matrix: Water SDG No.: 40215658

Date Extracted: 10/05/2020 08:32 Lab Sample ID: 40215658002

Date Analyzed: 10/05/2020 08:32 Lab File ID: 10052020.B\10052009.D

Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1 Instrument: 40MSV3 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<2.7	~~U~~ UJ
71-43-2	Benzene	<0.25	U
75-27-4	Bromodichloromethane	<0.36	U
75-25-2	Bromoform	<4.0	U
74-83-9	Bromomethane	<0.97	U
78-93-3	2-Butanone (MEK)	<2.9	~~U~~ UJ
75-15-0	Carbon disulfide	<0.45	U
56-23-5	Carbon tetrachloride	<1.1	U
108-90-7	Chlorobenzene	<0.71	U
75-00-3	Chloroethane	<1.3	U
67-66-3	Chloroform	<1.3	U
74-87-3	Chloromethane	<2.2	~~U~~ UJ
124-48-1	Dibromochloromethane	<2.6	U
75-34-3	1,1-Dichloroethane	<0.27	U
107-06-2	1,2-Dichloroethane	<0.28	U
75-35-4	1,1-Dichloroethene	<0.24	U
156-59-2	cis-1,2-Dichloroethene	<0.27	U
156-60-5	trans-1,2-Dichloroethene	<0.46	U
78-87-5	1,2-Dichloropropane	<0.28	U
10061-01-5	cis-1,3-Dichloropropene	<3.6	U
10061-02-6	trans-1,3-Dichloropropene	<4.4	U
100-41-4	Ethylbenzene	<0.32	U
591-78-6	2-Hexanone	<5.2	~~U~~ UJ
75-09-2	Methylene Chloride	<0.58	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<4.6	~~U~~ UJ
100-42-5	Styrene	<3.0	U
79-34-5	1,1,2,2-Tetrachloroethane	<0.28	~~U~~ UJ
127-18-4	Tetrachloroethene	<0.33	U
108-88-3	Toluene	<0.27	U
71-55-6	1,1,1-Trichloroethane	0.83	J
79-00-5	1,1,2-Trichloroethane	<0.55	U
79-01-6	Trichloroethene	<0.26	U
75-01-4	Vinyl chloride	<0.17	U
1330-20-7	Xylene (Total)	<1.5	U

SAMPLE NO.

RM-003D

MSV - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay
Contract: 376175.0 PH4 LEMBERGER LF - RE
Date Received: 10/01/2020 07:00
Matrix: Water SDG No.: 40215658
Date Extracted: 10/05/2020 09:15
Lab Sample ID: 40215658003
Date Analyzed: 10/05/2020 09:15
Lab File ID: 10052020.B\10052011.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 40MSV3 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<2.7	~~U~~ UJ
71-43-2	Benzene	<0.25	U
75-27-4	Bromodichloromethane	<0.36	U
75-25-2	Bromoform	<4.0	U
74-83-9	Bromomethane	<0.97	U
78-93-3	2-Butanone (MEK)	<2.9	~~U~~ UJ
75-15-0	Carbon disulfide	<0.45	U
56-23-5	Carbon tetrachloride	<1.1	U
108-90-7	Chlorobenzene	<0.71	U
75-00-3	Chloroethane	<1.3	U
67-66-3	Chloroform	<1.3	U
74-87-3	Chloromethane	<2.2	~~U~~ UJ
124-48-1	Dibromochloromethane	<2.6	U
75-34-3	1,1-Dichloroethane	23.9	
107-06-2	1,2-Dichloroethane	<0.28	U
75-35-4	1,1-Dichloroethene	3.9	
156-59-2	cis-1,2-Dichloroethene	8.8	
156-60-5	trans-1,2-Dichloroethene	<0.46	U
78-87-5	1,2-Dichloropropane	<0.28	U
10061-01-5	cis-1,3-Dichloropropene	<3.6	U
10061-02-6	trans-1,3-Dichloropropene	<4.4	U
100-41-4	Ethylbenzene	<0.32	U
591-78-6	2-Hexanone	<5.2	~~U~~ UJ
75-09-2	Methylene Chloride	<0.58	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<4.6	~~U~~ UJ
100-42-5	Styrene	<3.0	U
79-34-5	1,1,2,2-Tetrachloroethane	<0.28	~~U~~ UJ
127-18-4	Tetrachloroethene	0.37	J
108-88-3	Toluene	<0.27	U
71-55-6	1,1,1-Trichloroethane	35.3	
79-00-5	1,1,2-Trichloroethane	<0.55	U
79-01-6	Trichloroethene	6.1	
75-01-4	Vinyl chloride	<0.17	U
1330-20-7	Xylene (Total)	<1.5	U

SAMPLE NO.

RM-003XXD

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay Contract: 376175.0 PH4 LEMBERGER LF - RE

Date Received: 10/01/2020 07:00 Matrix: Water SDG No.: 40215658

Date Extracted: 10/05/2020 09:36 Lab Sample ID: 40215658004

Date Analyzed: 10/05/2020 09:36 Lab File ID: 10052020.B\10052012.D

Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1 Instrument: 40MSV3 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<2.7	~~U~~ UJ
71-43-2	Benzene	<0.25	U
75-27-4	Bromodichloromethane	<0.36	U
75-25-2	Bromoform	<4.0	U
74-83-9	Bromomethane	<0.97	U
78-93-3	2-Butanone (MEK)	<2.9	~~U~~ UJ
75-15-0	Carbon disulfide	<0.45	U
56-23-5	Carbon tetrachloride	<1.1	U
108-90-7	Chlorobenzene	<0.71	U
75-00-3	Chloroethane	<1.3	U
67-66-3	Chloroform	<1.3	U
74-87-3	Chloromethane	<2.2	~~U~~ UJ
124-48-1	Dibromochloromethane	<2.6	U
75-34-3	1,1-Dichloroethane	0.64	J
107-06-2	1,2-Dichloroethane	<0.28	U
75-35-4	1,1-Dichloroethene	<0.24	U
156-59-2	cis-1,2-Dichloroethene	0.36	J
156-60-5	trans-1,2-Dichloroethene	<0.46	U
78-87-5	1,2-Dichloropropane	<0.28	U
10061-01-5	cis-1,3-Dichloropropene	<3.6	U
10061-02-6	trans-1,3-Dichloropropene	<4.4	U
100-41-4	Ethylbenzene	<0.32	U
591-78-6	2-Hexanone	<5.2	~~U~~ UJ
75-09-2	Methylene Chloride	<0.58	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<4.6	~~U~~ UJ
100-42-5	Styrene	<3.0	U
79-34-5	1,1,2,2-Tetrachloroethane	<0.28	~~U~~ UJ
127-18-4	Tetrachloroethene	<0.33	U
108-88-3	Toluene	<0.27	U
71-55-6	1,1,1-Trichloroethane	2.6	
79-00-5	1,1,2-Trichloroethane	<0.55	U
79-01-6	Trichloroethene	0.59	J
75-01-4	Vinyl chloride	<0.17	U
1330-20-7	Xylene (Total)	<1.5	U

SAMPLE NO.

RM-401XXD

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay Contract: 376175.0 PH4 LEMBERGER LF - RE

Date Received: 10/01/2020 07:00 Matrix: Water SDG No.: 40215658

Date Extracted: 10/05/2020 09:58 Lab Sample ID: 40215658005

Date Analyzed: 10/05/2020 09:58 Lab File ID: 10052020.B\10052013.D

Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1 Instrument: 40MSV3 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<2.7	~~U~~ UJ
71-43-2	Benzene	<0.25	U
75-27-4	Bromodichloromethane	<0.36	U
75-25-2	Bromoform	<4.0	U
74-83-9	Bromomethane	<0.97	U
78-93-3	2-Butanone (MEK)	<2.9	~~U~~ UJ
75-15-0	Carbon disulfide	<0.45	U
56-23-5	Carbon tetrachloride	<1.1	U
108-90-7	Chlorobenzene	<0.71	U
75-00-3	Chloroethane	<1.3	U
67-66-3	Chloroform	<1.3	U
74-87-3	Chloromethane	<2.2	~~U~~ UJ
124-48-1	Dibromochloromethane	<2.6	U
75-34-3	1,1-Dichloroethane	8.6	
107-06-2	1,2-Dichloroethane	<0.28	U
75-35-4	1,1-Dichloroethene	4.2	
156-59-2	cis-1,2-Dichloroethene	11.6	
156-60-5	trans-1,2-Dichloroethene	<0.46	U
78-87-5	1,2-Dichloropropane	<0.28	U
10061-01-5	cis-1,3-Dichloropropene	<3.6	U
10061-02-6	trans-1,3-Dichloropropene	<4.4	U
100-41-4	Ethylbenzene	<0.32	U
591-78-6	2-Hexanone	<5.2	~~U~~ UJ
75-09-2	Methylene Chloride	<0.58	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<4.6	~~U~~ UJ
100-42-5	Styrene	<3.0	U
79-34-5	1,1,2,2-Tetrachloroethane	<0.28	~~U~~ UJ
127-18-4	Tetrachloroethene	<0.33	U
108-88-3	Toluene	<0.27	U
71-55-6	1,1,1-Trichloroethane	8.7	
79-00-5	1,1,2-Trichloroethane	<0.55	U
79-01-6	Trichloroethene	1.9	
75-01-4	Vinyl chloride	<0.17	U
1330-20-7	Xylene (Total)	<1.5	U

SAMPLE NO.

RM-002D

MSV - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay
Contract: 376175.0 PH4 LEMBERGER LF - RE
Date Received: 10/01/2020 07:00
Matrix: Water SDG No.: 40215658
Date Extracted: 10/05/2020 10:19
Lab Sample ID: 40215658006
Date Analyzed: 10/05/2020 10:19
Lab File ID: 10052020.B\10052014.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 40MSV3 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<2.7	~~U~~ UJ
71-43-2	Benzene	<0.25	U
75-27-4	Bromodichloromethane	<0.36	U
75-25-2	Bromoform	<4.0	U
74-83-9	Bromomethane	<0.97	U
78-93-3	2-Butanone (MEK)	<2.9	~~U~~ UJ
75-15-0	Carbon disulfide	<0.45	U
56-23-5	Carbon tetrachloride	<1.1	U
108-90-7	Chlorobenzene	<0.71	U
75-00-3	Chloroethane	<1.3	U
67-66-3	Chloroform	<1.3	U
74-87-3	Chloromethane	<2.2	~~U~~ UJ
124-48-1	Dibromochloromethane	<2.6	U
75-34-3	1,1-Dichloroethane	6.3	
107-06-2	1,2-Dichloroethane	<0.28	U
75-35-4	1,1-Dichloroethene	0.80	J
156-59-2	cis-1,2-Dichloroethene	1.5	
156-60-5	trans-1,2-Dichloroethene	<0.46	U
78-87-5	1,2-Dichloropropane	<0.28	U
10061-01-5	cis-1,3-Dichloropropene	<3.6	U
10061-02-6	trans-1,3-Dichloropropene	<4.4	U
100-41-4	Ethylbenzene	<0.32	U
591-78-6	2-Hexanone	<5.2	~~U~~ UJ
75-09-2	Methylene Chloride	<0.58	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<4.6	~~U~~ UJ
100-42-5	Styrene	<3.0	U
79-34-5	1,1,2,2-Tetrachloroethane	<0.28	~~U~~ UJ
127-18-4	Tetrachloroethene	<0.33	U
108-88-3	Toluene	<0.27	U
71-55-6	1,1,1-Trichloroethane	5.9	
79-00-5	1,1,2-Trichloroethane	<0.55	U
79-01-6	Trichloroethene	1.5	
75-01-4	Vinyl chloride	<0.17	U
1330-20-7	Xylene (Total)	<1.5	U

SAMPLE NO.

RM-210D

MSV - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay
Contract: 376175.0 PH4 LEMBERGER LF - RE
Date Received: 10/01/2020 07:00
Matrix: Water SDG No.: 40215658
Date Extracted: 10/05/2020 10:41
Lab Sample ID: 40215658007
Date Analyzed: 10/05/2020 10:41
Lab File ID: 10052020.B\10052015.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 40MSV3 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<2.7	~~U~~ UJ
71-43-2	Benzene	<0.25	U
75-27-4	Bromodichloromethane	<0.36	U
75-25-2	Bromoform	<4.0	U
74-83-9	Bromomethane	<0.97	U
78-93-3	2-Butanone (MEK)	<2.9	~~U~~ UJ
75-15-0	Carbon disulfide	<0.45	U
56-23-5	Carbon tetrachloride	<1.1	U
108-90-7	Chlorobenzene	<0.71	U
75-00-3	Chloroethane	<1.3	U
67-66-3	Chloroform	<1.3	U
74-87-3	Chloromethane	<2.2	~~U~~ UJ
124-48-1	Dibromochloromethane	<2.6	U
75-34-3	1,1-Dichloroethane	4.9	
107-06-2	1,2-Dichloroethane	<0.28	U
75-35-4	1,1-Dichloroethene	0.98	J
156-59-2	cis-1,2-Dichloroethene	2.1	
156-60-5	trans-1,2-Dichloroethene	<0.46	U
78-87-5	1,2-Dichloropropane	<0.28	U
10061-01-5	cis-1,3-Dichloropropene	<3.6	U
10061-02-6	trans-1,3-Dichloropropene	<4.4	U
100-41-4	Ethylbenzene	<0.32	U
591-78-6	2-Hexanone	<5.2	~~U~~ UJ
75-09-2	Methylene Chloride	<0.58	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<4.6	~~U~~ UJ
100-42-5	Styrene	<3.0	U
79-34-5	1,1,2,2-Tetrachloroethane	<0.28	~~U~~ UJ
127-18-4	Tetrachloroethene	<0.33	U
108-88-3	Toluene	<0.27	U
71-55-6	1,1,1-Trichloroethane	7.2	
79-00-5	1,1,2-Trichloroethane	<0.55	U
79-01-6	Trichloroethene	1.7	
75-01-4	Vinyl chloride	<0.17	U
1330-20-7	Xylene (Total)	<1.5	U

SAMPLE NO.

FB-001

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay Contract: 376175.0 PH4 LEMBERGER LF - RE

Date Received: 10/01/2020 07:00 Matrix: Water SDG No.: 40215658

Date Extracted: 10/05/2020 11:02 Lab Sample ID: 40215658008

Date Analyzed: 10/05/2020 11:02 Lab File ID: 10052020.B\10052016.D

Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1 Instrument: 40MSV3 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<2.7	~~U~~ UJ
71-43-2	Benzene	<0.25	U
75-27-4	Bromodichloromethane	<0.36	U
75-25-2	Bromoform	<4.0	U
74-83-9	Bromomethane	<0.97	U
78-93-3	2-Butanone (MEK)	<2.9	~~U~~ UJ
75-15-0	Carbon disulfide	<0.45	U
56-23-5	Carbon tetrachloride	<1.1	U
108-90-7	Chlorobenzene	<0.71	U
75-00-3	Chloroethane	<1.3	U
67-66-3	Chloroform	<1.3	U
74-87-3	Chloromethane	<2.2	~~U~~ UJ
124-48-1	Dibromochloromethane	<2.6	U
75-34-3	1,1-Dichloroethane	<0.27	U
107-06-2	1,2-Dichloroethane	<0.28	U
75-35-4	1,1-Dichloroethene	<0.24	U
156-59-2	cis-1,2-Dichloroethene	<0.27	U
156-60-5	trans-1,2-Dichloroethene	<0.46	U
78-87-5	1,2-Dichloropropane	<0.28	U
10061-01-5	cis-1,3-Dichloropropene	<3.6	U
10061-02-6	trans-1,3-Dichloropropene	<4.4	U
100-41-4	Ethylbenzene	<0.32	U
591-78-6	2-Hexanone	<5.2	~~U~~ UJ
75-09-2	Methylene Chloride	<0.58	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<4.6	~~U~~ UJ
100-42-5	Styrene	<3.0	U
79-34-5	1,1,2,2-Tetrachloroethane	<0.28	~~U~~ UJ
127-18-4	Tetrachloroethene	<0.33	U
108-88-3	Toluene	1.6	
71-55-6	1,1,1-Trichloroethane	<0.24	U
79-00-5	1,1,2-Trichloroethane	<0.55	U
79-01-6	Trichloroethene	<0.26	U
75-01-4	Vinyl chloride	<0.17	U
1330-20-7	Xylene (Total)	<1.5	U

SAMPLE NO.

FDUP-001

MSV - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay
Contract: 376175.0 PH4 LEMBERGER LF - RE
Date Received: 10/01/2020 07:00
Matrix: Water SDG No.: 40215658
Date Extracted: 10/05/2020 11:24
Lab Sample ID: 40215658009
Date Analyzed: 10/05/2020 11:24
Lab File ID: 10052020.B\10052017.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 40MSV3 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<2.7	~~U~~ UJ
71-43-2	Benzene	<0.25	U
75-27-4	Bromodichloromethane	<0.36	U
75-25-2	Bromoform	<4.0	U
74-83-9	Bromomethane	<0.97	U
78-93-3	2-Butanone (MEK)	<2.9	~~U~~ UJ
75-15-0	Carbon disulfide	<0.45	U
56-23-5	Carbon tetrachloride	<1.1	U
108-90-7	Chlorobenzene	<0.71	U
75-00-3	Chloroethane	<1.3	U
67-66-3	Chloroform	<1.3	U
74-87-3	Chloromethane	<2.2	~~U~~ UJ
124-48-1	Dibromochloromethane	<2.6	U
75-34-3	1,1-Dichloroethane	8.6	
107-06-2	1,2-Dichloroethane	<0.28	U
75-35-4	1,1-Dichloroethene	4.3	
156-59-2	cis-1,2-Dichloroethene	11.6	
156-60-5	trans-1,2-Dichloroethene	<0.46	U
78-87-5	1,2-Dichloropropane	<0.28	U
10061-01-5	cis-1,3-Dichloropropene	<3.6	U
10061-02-6	trans-1,3-Dichloropropene	<4.4	U
100-41-4	Ethylbenzene	<0.32	U
591-78-6	2-Hexanone	<5.2	~~U~~ UJ
75-09-2	Methylene Chloride	<0.58	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<4.6	~~U~~ UJ
100-42-5	Styrene	<3.0	U
79-34-5	1,1,2,2-Tetrachloroethane	<0.28	~~U~~ UJ
127-18-4	Tetrachloroethene	<0.33	U
108-88-3	Toluene	<0.27	U
71-55-6	1,1,1-Trichloroethane	9.0	
79-00-5	1,1,2-Trichloroethane	<0.55	U
79-01-6	Trichloroethene	1.8	
75-01-4	Vinyl chloride	<0.17	U
1330-20-7	Xylene (Total)	<1.5	U

SAMPLE NO.

TB-001

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay Contract: 376175.0 PH4 LEMBERGER LF - RE

Date Received: 10/01/2020 07:00 Matrix: Water SDG No.: 40215658

Date Extracted: 10/06/2020 08:10 Lab Sample ID: 40215658010

Date Analyzed: 10/06/2020 08:10 Lab File ID: 10062020.B\10062009.D

Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1 Instrument: 40MSV3 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<2.7	~~U~~ UJ
71-43-2	Benzene	<0.25	U
75-27-4	Bromodichloromethane	<0.36	U
75-25-2	Bromoform	<4.0	U
74-83-9	Bromomethane	<0.97	U
78-93-3	2-Butanone (MEK)	<2.9	U
75-15-0	Carbon disulfide	<0.45	U
56-23-5	Carbon tetrachloride	<1.1	U
108-90-7	Chlorobenzene	<0.71	U
75-00-3	Chloroethane	<1.3	U
67-66-3	Chloroform	<1.3	U
74-87-3	Chloromethane	<2.2	U
124-48-1	Dibromochloromethane	<2.6	U
75-34-3	1,1-Dichloroethane	<0.27	U
107-06-2	1,2-Dichloroethane	<0.28	U
75-35-4	1,1-Dichloroethene	<0.24	U
156-59-2	cis-1,2-Dichloroethene	<0.27	U
156-60-5	trans-1,2-Dichloroethene	<0.46	U
78-87-5	1,2-Dichloropropane	<0.28	U
10061-01-5	cis-1,3-Dichloropropene	<3.6	U
10061-02-6	trans-1,3-Dichloropropene	<4.4	U
100-41-4	Ethylbenzene	<0.32	U
591-78-6	2-Hexanone	<5.2	~~U~~ UJ
75-09-2	Methylene Chloride	<0.58	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<4.6	~~U~~ UJ
100-42-5	Styrene	<3.0	U
79-34-5	1,1,2,2-Tetrachloroethane	<0.28	U
127-18-4	Tetrachloroethene	<0.33	U
108-88-3	Toluene	<0.27	U
71-55-6	1,1,1-Trichloroethane	<0.24	U
79-00-5	1,1,2-Trichloroethane	<0.55	U
79-01-6	Trichloroethene	<0.26	U
75-01-4	Vinyl chloride	<0.17	U
1330-20-7	Xylene (Total)	<1.5	U

Memorandum

To: Meredith Westover

From: Amy Bass (Data Reviewer)
Elizabeth Denly (Peer Reviewer)

Date: December 17, 2020

Subject: Data Validation Report
Groundwater Samples: 3rd Quarter 2020
Lemberger Landfill and Lemberger Transport and Recycling/Franklin, Wisconsin
Laboratory Project Numbers 40215658 (excluding VOCs), 40217355, 40217549

SUMMARY

Limited validation (level III) was performed on the data for 29 groundwater samples, three field duplicates, three field blanks, and two trip blanks collected at the Lemberger Landfill and Lemberger Transport and Recycling Site in Franklin, Wisconsin. The samples were collected on September 27 and 28, and October 26 - 31, 2020. 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:

- Volatile organic compounds (VOCs) using SW-846 Method 8260B
- Total iron and manganese using SW-846 Method 6020
- 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 Method SM-5310C

The laboratory reported the results under laboratory project numbers 40215658, 40217355, 40217549. Note that the VOC results for laboratory project number 40215658 were reviewed separately, using full validation (level IV), and are not included in this review.

The sample results were assessed using the *USEPA National Functional Guidelines for Organic Superfund Methods Data Review (EPA-540-R-2017-002),* January 2017, *USEPA National Functional Guidelines for Inorganic Superfund Methods Data Review* (*EPA-540-R-2017-001*), January 2017, and the project-specific quality assurance project plan (QAPP), dated September 2011, Revision 1.

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).
- Potential uncertainty exists for the positive and/or nondetect results for select VOCs in all samples due to continuing calibration nonconformances. These results were qualified as estimated (J/UJ).

- The positive result for manganese in sample RM-003XXD was qualified as an estimated nondetect (UJ) due to method blank contamination and detection below the QL.
- Potential high bias exists for the positive results for manganese in samples RM-404XXD and RM-210D due to method blank contamination. These results were qualified as estimated (J+) with a potential high bias.
- Potential high bias exists for the positive results for TOC in all groundwater samples in this data set due to field blank contamination. These results were qualified as estimated (J+) with a potential high bias.
- Potential low bias exists for the positive results for alkalinity in samples RM-404XXD, RM-003XXD, RM-401XXD, RM-210D, RM-002D, and FDUP-001 due to low recoveries in the MS and MSD analyses. These results were qualified as estimated (J-) with a potential low bias.
- Potential uncertainty exists for the positive results for chloride in samples RM-007XD and FDUP-002 due to field duplicate variability. These results were qualified as estimated (J).
- Potential low bias exists for the positive and nondetect results for all VOCs in sample TB-001 (10/28/20) in laboratory report number 40217355 due to the presence of headspace in the sample vial. These results were qualified as estimated (J/UJ).

SAMPLES

Samples included in this review are listed below.

Laboratory Project Number 40215658: sentinel wells collected 9/27/20 and 9/28/20

- RM-002D
- RM-003XXD
- RM-210D
- RM-401XXD
- RM-404XXD
- FDUP-001[1]
- FB-001

Laboratory Project Number 40217355: plume wells collected 10/26 – 10/28/20

- OW-104F
- RM-005D
- RM-102D
- RM-202D
- RM-203D
- RM-208D
- RM-208XD
- RM-211D
- RM-213D
- RM-213XD
- RM-214D
- RM-401XD
- FDUP-003[2]
- FB-003
- TB-001 (10/28/20)

Laboratory Project Number 40217549: plume wells collected 10/29 – 10/31/20

- RM-007D
- RM-007XD
- RM-007XXD
- RM-008D
- RM-101D
- RM-204D
- RM-212D
- RM-303D
- RM-306D
- RM-307D
- RM-402XD
- RM-402XXD
- FDUP-002[3]
- FB-002
- TB-001 (10/31/2020)

[1] FDUP-001: Field duplicate of RM-401XXD
[2] FDUP-003: Field duplicate of RM-401XD
[3] FDUP-002: Field duplicate of RM-007XD

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 (VOCs only)
- Inductively coupled plasma (ICP)-MS tune results (Metals only)
- Initial and continuing calibrations
- Interference check sample (ICS) results (Metals only)
- Blanks
- Surrogate spike recoveries (VOCs only)
- Matrix spike/matrix spike duplicate (MS/MSD) results
- Laboratory control sample (LCS) results
- Internal standard performance (VOCs and Metals only)
- Serial dilution results (Metals only)
- Laboratory duplicate results (All parameters except VOCs)
- 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 COCs. No issues were noted.

The laboratory noted one sample label had a date that differed from the COC in laboratory report number 40217355 (sample RM-401XD). The laboratory logged the sample collection date according to the COC. No validation action was required.

Data Completeness

The data packages were 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 laboratory did not provide daily method blank and/or LCS results for the analyses of VOCs in select samples and for the re-analysis of sulfate in sample RM-404XXD.
- Run logs were not provided for the VOC analyses in laboratory reports 40217355 and 40217549.

No validation actions were taken on the basis of these issues.

Holding Times and Sample Preservation

All samples were analyzed within the method-specified holding time. All samples were received by the laboratory on ice (temperature measurements not provided). All samples were noted as properly preserved.

The laboratory noted that the sample vial used for analysis of sample TB-001 (10/28/20) in laboratory report 40217355 contained headspace; therefore, the nondetect results for VOCs in this sample were qualified as estimated (UJ). The detected result for toluene in this sample was qualified as estimated (J) by the laboratory due to detection below the lowest calibration standard; thus, the overall qualification for toluene in this sample was J.

Samples were received by the laboratory between one and four 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 (VOCs only)

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

ICP-MS Tune Results (Metals only)

The resolution of the mass calibration was within 0.1 atomic mass units (amu) over the range of 7 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

<u>VOCs</u>

The coefficients of determination, %RSDs, 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 differences or percent drifts (%Ds) which were outside of the laboratory acceptance criteria in the CCs, the associated samples, and the resulting validation actions.

CC	Analyte	%D	Associated Samples	Validation Actions
40MSVA 11/05/20 @05:22	Acetone	-29.3677	OW-104F, RM-005D, RM-102D, RM-202D, RM-203D, RM-208D, RM-208XD, RM-211D, RM-214D, RM-401XD, FDUP-003, FB-003, TB-001 (10/28/20)	The nondetect results for the listed VOCs were qualified as estimated (UJ) in the associated samples.
	Chloroethane	-23.5832		
	Chloromethane	-41.5910		
	2-Hexanone	-33.6053		
	4-Methyl-2-pentanone	-31.8163		
40MSVA 11/06/20 @06:12	4-Methyl-2-pentanone	20.5422	RM-213D, RM-213XD	The nondetect results for the listed VOC were qualified as estimated (UJ) in the associated samples.
40MSV3 11/04/20	Tetrachloroethene	20.7675	RM-007D, RM-007XD, RM-007XXD, RM-204D, RM-303D,	The positive and/or nondetect results for the listed VOC were

CC	Analyte	%D	Associated Samples	Validation Actions
@05:24			RM-307D, RM-402XXD, FDUP-002	qualified as estimated (J/UJ) in the associated samples.
40MSV3 11/04/20 @16:00	trans-1,3-Dichloropropene	-22.9526	RM-008D, RM-101D, RM-212D, RM-306D, RM-402XD, FB-002, TB-001 (10/31/20)	The nondetect results for the listed VOC were qualified as estimated (UJ) in the associated samples.

Metals

Initial calibration correlation coefficients provided in laboratory report 40215658 met criteria; laboratory reports 40217355 and 40217549 (Level III reporting) do 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 70-130%.

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

The ICV and CCV %Rs met the method acceptance limits. The low-level check standard %Rs were within 60-140%.

ICS Results (Metals only)

The ICSAB 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

VOCs

Target analytes were not detected in the laboratory method blanks for VOCs. The following table summarizes the concentrations of the compounds that were detected in the trip blanks and/or field blanks, the associated samples, and the resulting validation actions. The maximum reported blank concentration for toluene is listed in the table since this analyte was detected in one trip blank and in all three field blanks.

Analyte	Blank Concentration (µg/L)	QL (µg/L)	Blank ID: Associated Samples	Validation Actions
Acetone	3.9 J	20.0	FB-002: RM-007D, RM-007XD, RM-007XXD, RM-008D, RM-101D, RM-204D, RM-212D, RM-303D, RM-306D, RM-307D, RM-402XD, RM-402XXD, FDUP-002	Qualification was not required since acetone was not detected in the associated samples.
Toluene*	1.9	1.0	TB-001 (10/28/20), FB-001, FB-002, FB-003: * All groundwater samples in this data set	Qualification was not required since toluene was not detected in the associated samples

Analyte	Blank Concentration (µg/L)	QL (µg/L)	Blank ID: Associated Samples	Validation Actions
* The maximum toluene concentration from TB-001 (10/28/20) and all field blanks in this data set was used to evaluate sample results.				

The laboratory did not provide daily method blank results for the samples noted below, or the laboratory reported a batch method blank that was analyzed >12 hours prior to these samples. The results for VOCs in the batch method blank associated with these samples were used to evaluate the results. No validation action was taken on this basis.

- RM-213D and RM-213XD (analyzed 11/06/20) in the Level III data package provided for laboratory project number 40217355; and
- RM-008D, RM-101D, RM-212D, RM-306D, RM-402XD, FB-002, TB-001 (10/31/20) in the Level III data package provided for laboratory project number 40217549.

Metals[1]

Target analytes were not detected in the calibration blanks.

The following table summarizes the concentrations of the analytes that were detected in one of the method blanks, the associated samples, and the resulting validation actions.

Analyte	Blank Concentration (µg/L)	QL (µg/L)	Blank ID: Associated Samples	Validation Actions
Manganese	1.5 J	4.0	Method Blank 2122309: RM-002D, RM-003XXD, RM-210D, RM-404XXD, RM-401XXD, FDUP-001, FB-001	The positive result for manganese in sample RM-003XXD was qualified as an estimated nondetect at the reported concentration since this result was <QL. The positive results for manganese in samples RM-404XXD and RM-210D were qualified as estimated (J+) with a potential high bias since these results were >QL and <10× the blank concentration. Qualification was not required in the remaining associated samples since manganese was either >10× the blank concentration or not detected.
Criteria: If concentration in sample is < the QL, flag reported concentration with "UJ" If concentration in sample ≥QL and <10× blank concentration, flag with "J+" If concentration in sample ≥QL and ≥10× blank concentration, no qualification				

Alkalinity[1], Nitrogen/Nitrate + Nitrite[1], Chloride[1], Sulfate[1], TOC

Target analytes were not detected in the associated calibration, field blanks, and method blanks, with the exception of TOC, detected in both field blanks (FB-001 and FB-002). The following table summarizes the maximum detected field blank concentration for TOC, the associated samples, and the resulting validation actions.

Analyte	Blank Concentration (mg/L)	QL (mg/L)	Blank ID: Associated Samples	Validation Actions
TOC	0.28 J	0.50	FB-001, FB-002: * All samples in this sample set	The positive results for TOC in all groundwater samples in this data set were qualified as estimated (J+) with a potential high bias since these results were >QL and <10× the blank concentration.
* The maximum TOC concentration from FB-001 and FB-002 was used to evaluate sample results.				
Criteria: If concentration in sample is < the QL, flag reported concentration with "UJ" If concentration in sample ≥QL and <10× blank concentration, flag with "J+" If concentration in sample ≥QL and ≥10× blank concentration, no qualification				

The laboratory did not provide daily method blank results for the sample and analyte noted below; the laboratory reported a batch method blank that was analyzed >24 hours prior to this sample. The result for sulfate in the batch method blank associated with this sample was used to evaluate the sample result. No validation action was taken on this basis.

- Sulfate: RM-404XXD in the Level III data package provided for laboratory project number 40215658. This sample was reanalyzed at dilution (sulfate only) >24 hours after the method blank was run.

[1]The laboratory's instrument detection limits were approximately 2×, 3.4×, 4.6×, 6.8×, and 4.2× higher than the sample limits of detection (LODs) (or method detection limits) for metals, alkalinity, chloride, sulfate, and nitrate + nitrite, respectively, in laboratory project numbers 40215658, 40217355, and 40217549. Thus, calibration blanks were only evaluated to the IDL for these parameters.

Surrogate Spike Recoveries (VOCs only)

The %Rs of the surrogates were within the laboratory acceptance criteria for all samples.

MS/MSD Results

VOCs

MS/MSD analyses were performed on samples RM-005D and RM-007XXD for VOCs. The MS/MSD %Rs and relative percent differences (RPDs) met criteria.

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: 2-butanone, 2-hexanone, 4-methyl-2-pentanone, and acetone. No validation action was taken on this basis.

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

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

- Laboratory project number 40215658: RM-404XXD for metals, chloride, sulfate, alkalinity, nitrogen/nitrate + nitrite, TOC
- Laboratory project number 40217355: OW-104F for metals and nitrogen/nitrate + nitrite

- Laboratory project number 40217549: RM-007D for alkalinity and TOC

The following table summarizes the %Rs that were outside of the laboratory's acceptance criteria in the MS/MSD analyses and the validation actions; all RPD criteria were met.

MS/MSD Sample ID	Analyte	MS %R	MSD %R	QC Limits %R	Validation Action
RM-404XXD	Alkalinity	53	55	90-110	The positive results for alkalinity in the associated samples were qualified as estimated (J-) with a potential low bias.
Associated samples: RM-404XXD, RM-003XXD, RM-401XXD, RM-002D, RM-210D, FDUP-001					

LCS Results

VOCs

An LCS was performed each day prior to sample analysis with the following exceptions. The laboratory did not provide daily LCS results for the samples noted below; the laboratory reported a batch LCS that was analyzed >12 hours prior to these samples. The results for VOCs in the batch LCS associated with these samples were used to evaluate the results. No validation action was taken on this basis.

- RM-213D and RM-213XD (analyzed 11/06/20) in the Level III data package provided for laboratory project number 40217355; and
- RM-008D, RM-101D, RM-212D, RM-306D, RM-402XD, FB-002, TB-001 (10/31/20) in the Level III data package provided for laboratory project number 40217549.

All LCS %Rs for the VOCs were within the laboratory's acceptance criteria.

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 all LCSs: 2-butanone, 2-hexanone, 4-methyl-2-pentanone, and acetone. No validation action was taken on this basis.

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

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

The laboratory did not provide daily LCS results for the sample and analyte noted below; the laboratory reported a batch LCS that was analyzed >24 hours prior to this sample. The result for sulfate in the batch LCS associated with this sample was used to evaluate the sample result. No validation action was taken on this basis.

- Sulfate: RM-404XXD in the Level III data package provided for laboratory project number 40215658. This sample was reanalyzed at dilution (sulfate only) >24 hours after the batch LCS was run.

Internal Standard Performance (VOCs and 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 samples RM-003XXD and RM-203D; all criteria were met.

Laboratory Duplicate Results (All parameters except VOCs)

Laboratory duplicates were not performed on a sample 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 (laboratory project number 40215658)
- RM-007XD and FDUP-002 (laboratory project number 40217549)
- RM-401XD and FDUP-003 (laboratory project number 40217355)

The following tables summarize the RPDs or absolute differences (AbsDs) of the detected results in the field duplicate pairs. All criteria were met, with the exception of chloride in field duplicate pair RM-007XD/FDUP-002. Note that VOC results for laboratory project number 40215658 were evaluated in a separate validation report and therefore are not presented below.

Analyte	QL (mg/L)	RM-401XXD (mg/L)	FDUP-001 (mg/L)	RPD (%) or AbsD (mg/L)	Validation Action
Chloride	2.0	38.9	38.8	RPD = 0.3	None; all criteria were met (see criteria, below)
Sulfate	2.0	22.5	22.6	RPD = 0.4	
Alkalinity	24.8	297	298	RPD = 0.3	
Nitrogen/nitrate + nitrite	0.25	9.3	9.4	RPD = 1.1	
TOC	0.50	0.92	0.89	AbsD = 0.03	

Analyte	QL (*)	RM-007XD (*)	FDUP-002 (*)	RPD (%) or AbsD (*)	Validation Action
1,1,1-Trichloroethane	1.0	207	208	RPD = 0.5	None; all criteria were met (see criteria, below)
1,1-Dichloroethane	1.0	143	147	RPD = 2.8	
1,1-Dichloroethene	1.0	23.8	23.5	RPD = 1.3	
cis-1,2-Dichloroethene	1.0	62.3	63.1	RPD = 1.3	
Tetrachloroethene	1.1	2.4	2.4	AbsD = 0	
Trichloroethene	1.0	43.3	44.4	RPD = 2.5	
Chloride	2.0 / 10.0	8.0	11.2	AbsD = 3.2 **	The positive results for chloride in samples RM-007XD and FDUP-002 were qualified as estimated (J).
Sulfate	10.0	107	108	RPD = 0.9	None; all criteria were met (see criteria, below)
Alkalinity	24.8	444	443	RPD = 0.2	

Analyte	QL (*)	RM-007XD (*)	FDUP-002 (*)	RPD (%) or AbsD (*)	Validation Action
Nitrogen/nitrate + nitrite	0.25	1.3	1.3	RPD = 0	
TOC	0.50	1.5	1.5	AbsD = 0	
* VOCs reported in µg/L; all others reported in mg/L			** Criteria were not met		

Analyte	QL (µg/L)	RM-401XD (µg/L)	FDUP-003 (µg/L)	RPD (%) or AbsD (µg/L)	Validation Action
1,1,1-Trichloroethane	1.0	21.3	21.8	RPD = 2.3	None; all criteria were met (see criteria, below)
1,1-Dichloroethane	1.0	11.6	12.0	RPD = 3.4	
1,1-Dichloroethene	1.0	3.3	3.2	AbsD = 0.1	
cis-1,2-Dichloroethene	1.0	7.0	7.1	RPD = 1.4	
Trichloroethene	1.0	4.0	4.1	AbsD = 0.1	

Criteria:

- When both results are > 5x the QL, RPDs must be ≤ 35%.
- When one or both results are < 5x the QL, AbsD must be < the 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	Parameter	Dilution	Reason for Dilution
RM-007D	VOCs	2.5-fold	Dilutions were performed due to the concentrations of target or non-target analytes which would have exceeded the calibration range if analyzed undiluted.
RM-303D	VOCs	2-fold	
RM-404XXD	Sulfate	5-fold	
RM-007D	Sulfate	10-fold	
RM-402XD	Sulfate	10-fold	
RM-007XD	Sulfate	5-fold	
FDUP-002	Chloride	5-fold	
FDUP-002	Sulfate	5-fold	
RM-404XXD	Alkalinity	2-fold	
RM-007D			
RM-102D	Nitrogen/nitrate + nitrite	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 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 sample set, except for RM-007D and	0.02	0.2	0.28
1,1,2-Trichloroethane		0.5	5*	0.55
Bromodichloromethane		0.06	0.6*	0.36

Analyte	Affected Samples	WAC Chapter NR 140 PAL (µg/L)	WAC Chapter NR 140 ES (µg/L)	Laboratory LOD (µg/L)
Bromoform	RM303D	0.44	4.4*	4.0
Carbon tetrachloride		0.5	5*	1.1
Chloroform		0.6	6*	1.3
cis-1,3-Dichloropropene		0.02	0.2	3.6
Methylene chloride		0.5	5*	0.58
trans-1,3-Dichloropropene		0.02	0.2	4.4
Vinyl chloride		0.02	0.2*	0.17
1,1,2,2-Tetrachloroethane	RM-007D	0.02	0.2	0.69
1,1,2-Trichloroethane		0.5	5*	1.4
1,2-Dichloroethane		0.5	5*	0.70
1,2-Dichloropropane		0.5	5*	0.71
Benzene		0.5	5*	0.62
Bromodichloromethane		0.06	0.6	0.91
Bromoform		0.44	4.4	9.9
Bromomethane		1	10*	2.4
Carbon tetrachloride		0.5	5*	2.7
Chlorodibromomethane		6	60*	6.5
Chloroform		0.6	6*	3.2
Chloromethane		3	30*	5.5
cis-1,3-Dichloropropene		0.02	0.2	9.1
Methylene chloride		0.5	5*	1.5
trans-1,3-Dichloropropene		0.02	0.2	10.9
Vinyl chloride		0.02	0.2	0.44
1,1,2,2-Tetrachloroethane	RM-303D	0.02	0.2	0.55
1,1,2-Trichloroethane		0.5	5*	1.1
1,2-Dichloroethane		0.5	5*	0.56
1,2-Dichloropropane		0.5	5*	0.57
Bromodichloromethane		0.06	0.6	0.73
Bromoform		0.44	4.4	7.9
Bromomethane		1	10*	1.9
Carbon tetrachloride		0.5	5*	2.2
Chloroform		0.6	6*	2.5
Chloromethane		3	30*	4.4
cis-1,3-Dichloropropene		0.02	0.2	7.3
Methylene chloride		0.5	5*	1.2
trans-1,3-Dichloropropene		0.02	0.2	8.7
Vinyl chloride		0.02	0.2	0.35
* Laboratory LOD is below action limit				

The laboratory's LOD for chloride, sulfate, nitrogen/nitrate + nitrite, iron, and manganese were below the project action limits specified in the QAPP. No project action limits were specified in the QAPP for alkalinity and TOC.

QUALIFIED FORM 1s

SAMPLE NO.

RM-401XD

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay Contract: 376175.0 PH4 LEMBERGER PLUME

Date Received: 10/29/2020 07:30 Matrix: Water SDG No.: 40217355

Date Extracted: 11/05/2020 12:07 Lab Sample ID: 40217355001

Date Analyzed: 11/05/2020 12:07 Lab File ID: 11052020.B\11052020.D

Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1 Instrument: 40MSVA Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<2.7	~~U~~ UJ
71-43-2	Benzene	<0.25	U
75-27-4	Bromodichloromethane	<0.36	U
75-25-2	Bromoform	<4.0	U
74-83-9	Bromomethane	<0.97	U
78-93-3	2-Butanone (MEK)	<2.9	U
75-15-0	Carbon disulfide	<0.45	U
56-23-5	Carbon tetrachloride	<1.1	U
108-90-7	Chlorobenzene	<0.71	U
75-00-3	Chloroethane	<1.3	~~U~~ UJ
67-66-3	Chloroform	<1.3	U
74-87-3	Chloromethane	<2.2	~~U~~ UJ
124-48-1	Dibromochloromethane	<2.6	U
75-34-3	1,1-Dichloroethane	11.6	
107-06-2	1,2-Dichloroethane	<0.28	U
75-35-4	1,1-Dichloroethene	3.3	
156-59-2	cis-1,2-Dichloroethene	7.0	
156-60-5	trans-1,2-Dichloroethene	<0.46	U
78-87-5	1,2-Dichloropropane	<0.28	U
10061-01-5	cis-1,3-Dichloropropene	<3.6	U
10061-02-6	trans-1,3-Dichloropropene	<4.4	U
100-41-4	Ethylbenzene	<0.32	U
591-78-6	2-Hexanone	<5.2	~~U~~ UJ
75-09-2	Methylene Chloride	<0.58	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<4.6	~~U~~ UJ
100-42-5	Styrene	<3.0	U
79-34-5	1,1,2,2-Tetrachloroethane	<0.28	U
127-18-4	Tetrachloroethene	<0.33	U
108-88-3	Toluene	<0.27	U
71-55-6	1,1,1-Trichloroethane	21.3	
79-00-5	1,1,2-Trichloroethane	<0.55	U
79-01-6	Trichloroethene	4.0	
75-01-4	Vinyl chloride	<0.17	U
1330-20-7	Xylene (Total)	<1.5	U

SAMPLE NO.

RM-005D

MSV - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay
Contract: 376175.0 PH4 LEMBERGER PLUME
Date Received: 10/29/2020 07:30
Matrix: Water SDG No.: 40217355
Date Extracted: 11/05/2020 11:45
Lab Sample ID: 40217355002
Date Analyzed: 11/05/2020 11:45
Lab File ID: 11052020.B\11052019.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 40MSVA Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<2.7	~~U~~ UJ
71-43-2	Benzene	<0.25	U
75-27-4	Bromodichloromethane	<0.36	U
75-25-2	Bromoform	<4.0	U
74-83-9	Bromomethane	<0.97	U
78-93-3	2-Butanone (MEK)	<2.9	U
75-15-0	Carbon disulfide	<0.45	U
56-23-5	Carbon tetrachloride	<1.1	U
108-90-7	Chlorobenzene	<0.71	U
75-00-3	Chloroethane	<1.3	~~U~~ UJ
67-66-3	Chloroform	<1.3	U
74-87-3	Chloromethane	<2.2	~~U~~ UJ
124-48-1	Dibromochloromethane	<2.6	U
75-34-3	1,1-Dichloroethane	10.7	
107-06-2	1,2-Dichloroethane	<0.28	U
75-35-4	1,1-Dichloroethene	3.1	
156-59-2	cis-1,2-Dichloroethene	7.3	
156-60-5	trans-1,2-Dichloroethene	<0.46	U
78-87-5	1,2-Dichloropropane	<0.28	U
10061-01-5	cis-1,3-Dichloropropene	<3.6	U
10061-02-6	trans-1,3-Dichloropropene	<4.4	U
100-41-4	Ethylbenzene	<0.32	U
591-78-6	2-Hexanone	<5.2	~~U~~ UJ
75-09-2	Methylene Chloride	<0.58	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<4.6	~~U~~ UJ
100-42-5	Styrene	<3.0	U
79-34-5	1,1,2,2-Tetrachloroethane	<0.28	U
127-18-4	Tetrachloroethene	<0.33	U
108-88-3	Toluene	<0.27	U
71-55-6	1,1,1-Trichloroethane	19.7	
79-00-5	1,1,2-Trichloroethane	<0.55	U
79-01-6	Trichloroethene	3.8	
75-01-4	Vinyl chloride	<0.17	U
1330-20-7	Xylene (Total)	<1.5	U

SAMPLE NO.

RM-208XD

MSV - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay
Contract: 376175.0 PH4 LEMBERGER PLUME
Date Received: 10/29/2020 07:30
Matrix: Water SDG No.: 40217355
Date Extracted: 11/05/2020 12:30
Lab Sample ID: 40217355003
Date Analyzed: 11/05/2020 12:30
Lab File ID: 11052020.B\11052021.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 40MSVA Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<2.7	~~U~~ UJ
71-43-2	Benzene	<0.25	U
75-27-4	Bromodichloromethane	<0.36	U
75-25-2	Bromoform	<4.0	U
74-83-9	Bromomethane	<0.97	U
78-93-3	2-Butanone (MEK)	<2.9	U
75-15-0	Carbon disulfide	<0.45	U
56-23-5	Carbon tetrachloride	<1.1	U
108-90-7	Chlorobenzene	<0.71	U
75-00-3	Chloroethane	<1.3	~~U~~ UJ
67-66-3	Chloroform	<1.3	U
74-87-3	Chloromethane	<2.2	~~U~~ UJ
124-48-1	Dibromochloromethane	<2.6	U
75-34-3	1,1-Dichloroethane	<0.27	U
107-06-2	1,2-Dichloroethane	<0.28	U
75-35-4	1,1-Dichloroethene	<0.24	U
156-59-2	cis-1,2-Dichloroethene	<0.27	U
156-60-5	trans-1,2-Dichloroethene	<0.46	U
78-87-5	1,2-Dichloropropane	<0.28	U
10061-01-5	cis-1,3-Dichloropropene	<3.6	U
10061-02-6	trans-1,3-Dichloropropene	<4.4	U
100-41-4	Ethylbenzene	<0.32	U
591-78-6	2-Hexanone	<5.2	~~U~~ UJ
75-09-2	Methylene Chloride	<0.58	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<4.6	~~U~~ UJ
100-42-5	Styrene	<3.0	U
79-34-5	1,1,2,2-Tetrachloroethane	<0.28	U
127-18-4	Tetrachloroethene	<0.33	U
108-88-3	Toluene	<0.27	U
71-55-6	1,1,1-Trichloroethane	<0.24	U
79-00-5	1,1,2-Trichloroethane	<0.55	U
79-01-6	Trichloroethene	<0.26	U
75-01-4	Vinyl chloride	<0.17	U
1330-20-7	Xylene (Total)	<1.5	U

SAMPLE NO.

RM-208D

MSV - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay
Contract: 376175.0 PH4 LEMBERGER PLUME
Date Received: 10/29/2020 07:30
Matrix: Water SDG No.: 40217355
Date Extracted: 11/05/2020 12:52
Lab Sample ID: 40217355004
Date Analyzed: 11/05/2020 12:52
Lab File ID: 11052020.B\11052022.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 40MSVA Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<2.7	~~U~~ UJ
71-43-2	Benzene	<0.25	U
75-27-4	Bromodichloromethane	<0.36	U
75-25-2	Bromoform	<4.0	U
74-83-9	Bromomethane	<0.97	U
78-93-3	2-Butanone (MEK)	<2.9	U
75-15-0	Carbon disulfide	<0.45	U
56-23-5	Carbon tetrachloride	<1.1	U
108-90-7	Chlorobenzene	<0.71	U
75-00-3	Chloroethane	<1.3	~~U~~ UJ
67-66-3	Chloroform	<1.3	U
74-87-3	Chloromethane	<2.2	~~U~~ UJ
124-48-1	Dibromochloromethane	<2.6	U
75-34-3	1,1-Dichloroethane	7.7	
107-06-2	1,2-Dichloroethane	<0.28	U
75-35-4	1,1-Dichloroethene	2.1	
156-59-2	cis-1,2-Dichloroethene	4.9	
156-60-5	trans-1,2-Dichloroethene	<0.46	U
78-87-5	1,2-Dichloropropane	<0.28	U
10061-01-5	cis-1,3-Dichloropropene	<3.6	U
10061-02-6	trans-1,3-Dichloropropene	<4.4	U
100-41-4	Ethylbenzene	<0.32	U
591-78-6	2-Hexanone	<5.2	~~U~~ UJ
75-09-2	Methylene Chloride	<0.58	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<4.6	~~U~~ UJ
100-42-5	Styrene	<3.0	U
79-34-5	1,1,2,2-Tetrachloroethane	<0.28	U
127-18-4	Tetrachloroethene	<0.33	U
108-88-3	Toluene	<0.27	U
71-55-6	1,1,1-Trichloroethane	14.6	
79-00-5	1,1,2-Trichloroethane	<0.55	U
79-01-6	Trichloroethene	3.2	
75-01-4	Vinyl chloride	<0.17	U
1330-20-7	Xylene (Total)	<1.5	U

SAMPLE NO.

FDUP-003

MSV - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay
Contract: 376175.0 PH4 LEMBERGER PLUME
Date Received: 10/29/2020 07:30
Matrix: Water SDG No.: 40217355
Date Extracted: 11/05/2020 13:15
Lab Sample ID: 40217355005
Date Analyzed: 11/05/2020 13:15
Lab File ID: 11052020.B\11052023.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 40MSVA Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<2.7	~~U~~ UJ
71-43-2	Benzene	<0.25	U
75-27-4	Bromodichloromethane	<0.36	U
75-25-2	Bromoform	<4.0	U
74-83-9	Bromomethane	<0.97	U
78-93-3	2-Butanone (MEK)	<2.9	U
75-15-0	Carbon disulfide	<0.45	U
56-23-5	Carbon tetrachloride	<1.1	U
108-90-7	Chlorobenzene	<0.71	U
75-00-3	Chloroethane	<1.3	~~U~~ UJ
67-66-3	Chloroform	<1.3	U
74-87-3	Chloromethane	<2.2	~~U~~ UJ
124-48-1	Dibromochloromethane	<2.6	U
75-34-3	1,1-Dichloroethane	12.0	
107-06-2	1,2-Dichloroethane	<0.28	U
75-35-4	1,1-Dichloroethene	3.2	
156-59-2	cis-1,2-Dichloroethene	7.1	
156-60-5	trans-1,2-Dichloroethene	<0.46	U
78-87-5	1,2-Dichloropropane	<0.28	U
10061-01-5	cis-1,3-Dichloropropene	<3.6	U
10061-02-6	trans-1,3-Dichloropropene	<4.4	U
100-41-4	Ethylbenzene	<0.32	U
591-78-6	2-Hexanone	<5.2	~~U~~ UJ
75-09-2	Methylene Chloride	<0.58	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<4.6	~~U~~ UJ
100-42-5	Styrene	<3.0	U
79-34-5	1,1,2,2-Tetrachloroethane	<0.28	U
127-18-4	Tetrachloroethene	<0.33	U
108-88-3	Toluene	<0.27	U
71-55-6	1,1,1-Trichloroethane	21.8	
79-00-5	1,1,2-Trichloroethane	<0.55	U
79-01-6	Trichloroethene	4.1	
75-01-4	Vinyl chloride	<0.17	U
1330-20-7	Xylene (Total)	<1.5	U

SAMPLE NO.

OW-104F

MSV - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay
Contract: 376175.0 PH4 LEMBERGER PLUME
Date Received: 10/29/2020 07:30
Matrix: Water SDG No.: 40217355
Date Extracted: 11/05/2020 13:37
Lab Sample ID: 40217355006
Date Analyzed: 11/05/2020 13:37
Lab File ID: 11052020.B\11052024.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 40MSVA Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<2.7	~~U~~ UJ
71-43-2	Benzene	<0.25	U
75-27-4	Bromodichloromethane	<0.36	U
75-25-2	Bromoform	<4.0	U
74-83-9	Bromomethane	<0.97	U
78-93-3	2-Butanone (MEK)	<2.9	U
75-15-0	Carbon disulfide	<0.45	U
56-23-5	Carbon tetrachloride	<1.1	U
108-90-7	Chlorobenzene	<0.71	U
75-00-3	Chloroethane	<1.3	~~U~~ UJ
67-66-3	Chloroform	<1.3	U
74-87-3	Chloromethane	<2.2	~~U~~ UJ
124-48-1	Dibromochloromethane	<2.6	U
75-34-3	1,1-Dichloroethane	2.7	
107-06-2	1,2-Dichloroethane	<0.28	U
75-35-4	1,1-Dichloroethene	1.4	
156-59-2	cis-1,2-Dichloroethene	2.3	
156-60-5	trans-1,2-Dichloroethene	<0.46	U
78-87-5	1,2-Dichloropropane	<0.28	U
10061-01-5	cis-1,3-Dichloropropene	<3.6	U
10061-02-6	trans-1,3-Dichloropropene	<4.4	U
100-41-4	Ethylbenzene	<0.32	U
591-78-6	2-Hexanone	<5.2	~~U~~ UJ
75-09-2	Methylene Chloride	<0.58	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<4.6	~~U~~ UJ
100-42-5	Styrene	<3.0	U
79-34-5	1,1,2,2-Tetrachloroethane	<0.28	U
127-18-4	Tetrachloroethene	<0.33	U
108-88-3	Toluene	<0.27	U
71-55-6	1,1,1-Trichloroethane	6.5	
79-00-5	1,1,2-Trichloroethane	<0.55	U
79-01-6	Trichloroethene	3.3	
75-01-4	Vinyl chloride	<0.17	U
1330-20-7	Xylene (Total)	<1.5	U

SAMPLE NO.

RM-203D

MSV - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay
Contract: 376175.0 PH4 LEMBERGER PLUME
Date Received: 10/29/2020 07:30
Matrix: Water SDG No.: 40217355
Date Extracted: 11/05/2020 13:59
Lab Sample ID: 40217355007
Date Analyzed: 11/05/2020 13:59
Lab File ID: 11052020.B\11052025.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 40MSVA Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<2.7	~~U~~ UJ
71-43-2	Benzene	<0.25	U
75-27-4	Bromodichloromethane	<0.36	U
75-25-2	Bromoform	<4.0	U
74-83-9	Bromomethane	<0.97	U
78-93-3	2-Butanone (MEK)	<2.9	U
75-15-0	Carbon disulfide	<0.45	U
56-23-5	Carbon tetrachloride	<1.1	U
108-90-7	Chlorobenzene	<0.71	U
75-00-3	Chloroethane	<1.3	~~U~~ UJ
67-66-3	Chloroform	<1.3	U
74-87-3	Chloromethane	<2.2	~~U~~ UJ
124-48-1	Dibromochloromethane	<2.6	U
75-34-3	1,1-Dichloroethane	<0.27	U
107-06-2	1,2-Dichloroethane	<0.28	U
75-35-4	1,1-Dichloroethene	<0.24	U
156-59-2	cis-1,2-Dichloroethene	<0.27	U
156-60-5	trans-1,2-Dichloroethene	<0.46	U
78-87-5	1,2-Dichloropropane	<0.28	U
10061-01-5	cis-1,3-Dichloropropene	<3.6	U
10061-02-6	trans-1,3-Dichloropropene	<4.4	U
100-41-4	Ethylbenzene	<0.32	U
591-78-6	2-Hexanone	<5.2	~~U~~ UJ
75-09-2	Methylene Chloride	<0.58	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<4.6	~~U~~ UJ
100-42-5	Styrene	<3.0	U
79-34-5	1,1,2,2-Tetrachloroethane	<0.28	U
127-18-4	Tetrachloroethene	<0.33	U
108-88-3	Toluene	<0.27	U
71-55-6	1,1,1-Trichloroethane	0.43	J
79-00-5	1,1,2-Trichloroethane	<0.55	U
79-01-6	Trichloroethene	<0.26	U
75-01-4	Vinyl chloride	<0.17	U
1330-20-7	Xylene (Total)	<1.5	U

SAMPLE NO.

RM-102D

MSV - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay
Contract: 376175.0 PH4 LEMBERGER PLUME
Date Received: 10/29/2020 07:30
Matrix: Water SDG No.: 40217355
Date Extracted: 11/05/2020 14:22
Lab Sample ID: 40217355008
Date Analyzed: 11/05/2020 14:22
Lab File ID: 11052020.B\11052026.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 40MSVA Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<2.7	~~U~~ UJ
71-43-2	Benzene	<0.25	U
75-27-4	Bromodichloromethane	<0.36	U
75-25-2	Bromoform	<4.0	U
74-83-9	Bromomethane	<0.97	U
78-93-3	2-Butanone (MEK)	<2.9	U
75-15-0	Carbon disulfide	<0.45	U
56-23-5	Carbon tetrachloride	<1.1	U
108-90-7	Chlorobenzene	<0.71	U
75-00-3	Chloroethane	<1.3	~~U~~ UJ
67-66-3	Chloroform	<1.3	U
74-87-3	Chloromethane	<2.2	~~U~~ UJ
124-48-1	Dibromochloromethane	<2.6	U
75-34-3	1,1-Dichloroethane	<0.27	U
107-06-2	1,2-Dichloroethane	<0.28	U
75-35-4	1,1-Dichloroethene	<0.24	U
156-59-2	cis-1,2-Dichloroethene	<0.27	U
156-60-5	trans-1,2-Dichloroethene	<0.46	U
78-87-5	1,2-Dichloropropane	<0.28	U
10061-01-5	cis-1,3-Dichloropropene	<3.6	U
10061-02-6	trans-1,3-Dichloropropene	<4.4	U
100-41-4	Ethylbenzene	<0.32	U
591-78-6	2-Hexanone	<5.2	~~U~~ UJ
75-09-2	Methylene Chloride	<0.58	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<4.6	~~U~~ UJ
100-42-5	Styrene	<3.0	U
79-34-5	1,1,2,2-Tetrachloroethane	<0.28	U
127-18-4	Tetrachloroethene	<0.33	U
108-88-3	Toluene	<0.27	U
71-55-6	1,1,1-Trichloroethane	<0.24	U
79-00-5	1,1,2-Trichloroethane	<0.55	U
79-01-6	Trichloroethene	<0.26	U
75-01-4	Vinyl chloride	<0.17	U
1330-20-7	Xylene (Total)	<1.5	U

SAMPLE NO.

RM-211D

MSV - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay
Contract: 376175.0 PH4 LEMBERGER PLUME
Date Received: 10/29/2020 07:30
Matrix: Water SDG No.: 40217355
Date Extracted: 11/05/2020 14:44
Lab Sample ID: 40217355009
Date Analyzed: 11/05/2020 14:44
Lab File ID: 11052020.B\11052027.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 40MSVA Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<2.7	~~U~~ UJ
71-43-2	Benzene	<0.25	U
75-27-4	Bromodichloromethane	<0.36	U
75-25-2	Bromoform	<4.0	U
74-83-9	Bromomethane	<0.97	U
78-93-3	2-Butanone (MEK)	<2.9	U
75-15-0	Carbon disulfide	<0.45	U
56-23-5	Carbon tetrachloride	<1.1	U
108-90-7	Chlorobenzene	<0.71	U
75-00-3	Chloroethane	<1.3	~~U~~ UJ
67-66-3	Chloroform	<1.3	U
74-87-3	Chloromethane	<2.2	~~U~~ UJ
124-48-1	Dibromochloromethane	<2.6	U
75-34-3	1,1-Dichloroethane	2.5	
107-06-2	1,2-Dichloroethane	<0.28	U
75-35-4	1,1-Dichloroethene	0.45	J
156-59-2	cis-1,2-Dichloroethene	0.62	J
156-60-5	trans-1,2-Dichloroethene	<0.46	U
78-87-5	1,2-Dichloropropane	<0.28	U
10061-01-5	cis-1,3-Dichloropropene	<3.6	U
10061-02-6	trans-1,3-Dichloropropene	<4.4	U
100-41-4	Ethylbenzene	<0.32	U
591-78-6	2-Hexanone	<5.2	~~U~~ UJ
75-09-2	Methylene Chloride	<0.58	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<4.6	~~U~~ UJ
100-42-5	Styrene	<3.0	U
79-34-5	1,1,2,2-Tetrachloroethane	<0.28	U
127-18-4	Tetrachloroethene	<0.33	U
108-88-3	Toluene	<0.27	U
71-55-6	1,1,1-Trichloroethane	6.3	
79-00-5	1,1,2-Trichloroethane	<0.55	U
79-01-6	Trichloroethene	1.1	
75-01-4	Vinyl chloride	<0.17	U
1330-20-7	Xylene (Total)	<1.5	U

SAMPLE NO.

RM-202D

MSV - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay
Contract: 376175.0 PH4 LEMBERGER PLUME
Date Received: 10/29/2020 07:30
Matrix: Water SDG No.: 40217355
Date Extracted: 11/05/2020 15:07
Lab Sample ID: 40217355010
Date Analyzed: 11/05/2020 15:07
Lab File ID: 11052020.B\11052028.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 40MSVA Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<2.7	~~U~~ UJ
71-43-2	Benzene	<0.25	U
75-27-4	Bromodichloromethane	<0.36	U
75-25-2	Bromoform	<4.0	U
74-83-9	Bromomethane	<0.97	U
78-93-3	2-Butanone (MEK)	<2.9	U
75-15-0	Carbon disulfide	<0.45	U
56-23-5	Carbon tetrachloride	<1.1	U
108-90-7	Chlorobenzene	<0.71	U
75-00-3	Chloroethane	<1.3	~~U~~ UJ
67-66-3	Chloroform	<1.3	U
74-87-3	Chloromethane	<2.2	~~U~~ UJ
124-48-1	Dibromochloromethane	<2.6	U
75-34-3	1,1-Dichloroethane	<0.27	U
107-06-2	1,2-Dichloroethane	<0.28	U
75-35-4	1,1-Dichloroethene	<0.24	U
156-59-2	cis-1,2-Dichloroethene	<0.27	U
156-60-5	trans-1,2-Dichloroethene	<0.46	U
78-87-5	1,2-Dichloropropane	<0.28	U
10061-01-5	cis-1,3-Dichloropropene	<3.6	U
10061-02-6	trans-1,3-Dichloropropene	<4.4	U
100-41-4	Ethylbenzene	<0.32	U
591-78-6	2-Hexanone	<5.2	~~U~~ UJ
75-09-2	Methylene Chloride	<0.58	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<4.6	~~U~~ UJ
100-42-5	Styrene	<3.0	U
79-34-5	1,1,2,2-Tetrachloroethane	<0.28	U
127-18-4	Tetrachloroethene	<0.33	U
108-88-3	Toluene	<0.27	U
71-55-6	1,1,1-Trichloroethane	<0.24	U
79-00-5	1,1,2-Trichloroethane	<0.55	U
79-01-6	Trichloroethene	<0.26	U
75-01-4	Vinyl chloride	<0.17	U
1330-20-7	Xylene (Total)	<1.5	U

SAMPLE NO.

RM-214D

MSV - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay
Contract: 376175.0 PH4 LEMBERGER PLUME
Date Received: 10/29/2020 07:30
Matrix: Water SDG No.: 40217355
Date Extracted: 11/05/2020 15:29
Lab Sample ID: 40217355011
Date Analyzed: 11/05/2020 15:29
Lab File ID: 11052020.B\11052029.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 40MSVA Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<2.7	~~U~~ UJ
71-43-2	Benzene	<0.25	U
75-27-4	Bromodichloromethane	<0.36	U
75-25-2	Bromoform	<4.0	U
74-83-9	Bromomethane	<0.97	U
78-93-3	2-Butanone (MEK)	<2.9	U
75-15-0	Carbon disulfide	<0.45	U
56-23-5	Carbon tetrachloride	<1.1	U
108-90-7	Chlorobenzene	<0.71	U
75-00-3	Chloroethane	<1.3	~~U~~ UJ
67-66-3	Chloroform	<1.3	U
74-87-3	Chloromethane	<2.2	~~U~~ UJ
124-48-1	Dibromochloromethane	<2.6	U
75-34-3	1,1-Dichloroethane	4.8	
107-06-2	1,2-Dichloroethane	<0.28	U
75-35-4	1,1-Dichloroethene	0.58	J
156-59-2	cis-1,2-Dichloroethene	15.9	
156-60-5	trans-1,2-Dichloroethene	<0.46	U
78-87-5	1,2-Dichloropropane	<0.28	U
10061-01-5	cis-1,3-Dichloropropene	<3.6	U
10061-02-6	trans-1,3-Dichloropropene	<4.4	U
100-41-4	Ethylbenzene	<0.32	U
591-78-6	2-Hexanone	<5.2	~~U~~ UJ
75-09-2	Methylene Chloride	<0.58	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<4.6	~~U~~ UJ
100-42-5	Styrene	<3.0	U
79-34-5	1,1,2,2-Tetrachloroethane	<0.28	U
127-18-4	Tetrachloroethene	<0.33	U
108-88-3	Toluene	<0.27	U
71-55-6	1,1,1-Trichloroethane	9.3	
79-00-5	1,1,2-Trichloroethane	<0.55	U
79-01-6	Trichloroethene	3.0	
75-01-4	Vinyl chloride	0.49	J
1330-20-7	Xylene (Total)	<1.5	U

SAMPLE NO.

RM-213XD

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay Contract: 376175.0 PH4 LEMBERGER PLUME

Date Received: 10/29/2020 07:30 Matrix: Water SDG No.: 40217355

Date Extracted: 11/06/2020 08:49 Lab Sample ID: 40217355012

Date Analyzed: 11/06/2020 08:49 Lab File ID: 11062020.B\11062009.D

Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1 Instrument: 40MSVA Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<2.7	U
71-43-2	Benzene	<0.25	U
75-27-4	Bromodichloromethane	<0.36	U
75-25-2	Bromoform	<4.0	U
74-83-9	Bromomethane	<0.97	U
78-93-3	2-Butanone (MEK)	<2.9	U
75-15-0	Carbon disulfide	<0.45	U
56-23-5	Carbon tetrachloride	<1.1	U
108-90-7	Chlorobenzene	<0.71	U
75-00-3	Chloroethane	<1.3	U
67-66-3	Chloroform	<1.3	U
74-87-3	Chloromethane	<2.2	U
124-48-1	Dibromochloromethane	<2.6	U
75-34-3	1,1-Dichloroethane	5.9	
107-06-2	1,2-Dichloroethane	<0.28	U
75-35-4	1,1-Dichloroethene	2.5	
156-59-2	cis-1,2-Dichloroethene	4.2	
156-60-5	trans-1,2-Dichloroethene	<0.46	U
78-87-5	1,2-Dichloropropane	<0.28	U
10061-01-5	cis-1,3-Dichloropropene	<3.6	U
10061-02-6	trans-1,3-Dichloropropene	<4.4	U
100-41-4	Ethylbenzene	<0.32	U
591-78-6	2-Hexanone	<5.2	U
75-09-2	Methylene Chloride	<0.58	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<4.6	~~U~~ UJ
100-42-5	Styrene	<3.0	U
79-34-5	1,1,2,2-Tetrachloroethane	<0.28	U
127-18-4	Tetrachloroethene	<0.33	U
108-88-3	Toluene	<0.27	U
71-55-6	1,1,1-Trichloroethane	15.9	
79-00-5	1,1,2-Trichloroethane	<0.55	U
79-01-6	Trichloroethene	3.0	
75-01-4	Vinyl chloride	<0.17	U
1330-20-7	Xylene (Total)	<1.5	U

SAMPLE NO.

RM-213D

MSV - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay
Contract: 376175.0 PH4 LEMBERGER PLUME
Date Received: 10/29/2020 07:30
Matrix: Water SDG No.: 40217355
Date Extracted: 11/06/2020 09:12
Lab Sample ID: 40217355013
Date Analyzed: 11/06/2020 09:12
Lab File ID: 11062020.B\11062010.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 40MSVA Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<2.7	U
71-43-2	Benzene	<0.25	U
75-27-4	Bromodichloromethane	<0.36	U
75-25-2	Bromoform	<4.0	U
74-83-9	Bromomethane	<0.97	U
78-93-3	2-Butanone (MEK)	<2.9	U
75-15-0	Carbon disulfide	<0.45	U
56-23-5	Carbon tetrachloride	<1.1	U
108-90-7	Chlorobenzene	<0.71	U
75-00-3	Chloroethane	<1.3	U
67-66-3	Chloroform	<1.3	U
74-87-3	Chloromethane	<2.2	U
124-48-1	Dibromochloromethane	<2.6	U
75-34-3	1,1-Dichloroethane	0.29	J
107-06-2	1,2-Dichloroethane	<0.28	U
75-35-4	1,1-Dichloroethene	<0.24	U
156-59-2	cis-1,2-Dichloroethene	<0.27	U
156-60-5	trans-1,2-Dichloroethene	<0.46	U
78-87-5	1,2-Dichloropropane	<0.28	U
10061-01-5	cis-1,3-Dichloropropene	<3.6	U
10061-02-6	trans-1,3-Dichloropropene	<4.4	U
100-41-4	Ethylbenzene	<0.32	U
591-78-6	2-Hexanone	<5.2	U
75-09-2	Methylene Chloride	<0.58	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<4.6	~~U~~ UJ
100-42-5	Styrene	<3.0	U
79-34-5	1,1,2,2-Tetrachloroethane	<0.28	U
127-18-4	Tetrachloroethene	<0.33	U
108-88-3	Toluene	<0.27	U
71-55-6	1,1,1-Trichloroethane	2.4	
79-00-5	1,1,2-Trichloroethane	<0.55	U
79-01-6	Trichloroethene	0.36	J
75-01-4	Vinyl chloride	<0.17	U
1330-20-7	Xylene (Total)	<1.5	U

SAMPLE NO.

FB-003

MSV - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay
Contract: 376175.0 PH4 LEMBERGER PLUME
Date Received: 10/29/2020 07:30
Matrix: Water SDG No.: 40217355
Date Extracted: 11/05/2020 10:37
Lab Sample ID: 40217355014
Date Analyzed: 11/05/2020 10:37
Lab File ID: 11052020.B\11052016.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 40MSVA Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<2.7	~~U~~ UJ
71-43-2	Benzene	<0.25	U
75-27-4	Bromodichloromethane	<0.36	U
75-25-2	Bromoform	<4.0	U
74-83-9	Bromomethane	<0.97	U
78-93-3	2-Butanone (MEK)	<2.9	U
75-15-0	Carbon disulfide	<0.45	U
56-23-5	Carbon tetrachloride	<1.1	U
108-90-7	Chlorobenzene	<0.71	U
75-00-3	Chloroethane	<1.3	~~U~~ UJ
67-66-3	Chloroform	<1.3	U
74-87-3	Chloromethane	<2.2	~~U~~ UJ
124-48-1	Dibromochloromethane	<2.6	U
75-34-3	1,1-Dichloroethane	<0.27	U
107-06-2	1,2-Dichloroethane	<0.28	U
75-35-4	1,1-Dichloroethene	<0.24	U
156-59-2	cis-1,2-Dichloroethene	<0.27	U
156-60-5	trans-1,2-Dichloroethene	<0.46	U
78-87-5	1,2-Dichloropropane	<0.28	U
10061-01-5	cis-1,3-Dichloropropene	<3.6	U
10061-02-6	trans-1,3-Dichloropropene	<4.4	U
100-41-4	Ethylbenzene	<0.32	U
591-78-6	2-Hexanone	<5.2	~~U~~ UJ
75-09-2	Methylene Chloride	<0.58	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<4.6	~~U~~ UJ
100-42-5	Styrene	<3.0	U
79-34-5	1,1,2,2-Tetrachloroethane	<0.28	U
127-18-4	Tetrachloroethene	<0.33	U
108-88-3	Toluene	1.8	
71-55-6	1,1,1-Trichloroethane	<0.24	U
79-00-5	1,1,2-Trichloroethane	<0.55	U
79-01-6	Trichloroethene	<0.26	U
75-01-4	Vinyl chloride	<0.17	U
1330-20-7	Xylene (Total)	<1.5	U

SAMPLE NO.

TB-001 (10/28/20)

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay | Contract: 376175.0 PH4 LEMBERGER PLUME

Date Received: 10/29/2020 07:30 | Matrix: Water | SDG No.: 40217355

Date Extracted: 11/05/2020 11:00 | Lab Sample ID: 40217355015

Date Analyzed: 11/05/2020 11:00 | Lab File ID: 11052020.B\11052017.D

Initial wt/vol: 5 mL | Final wt/vol: 5 mL | Dilution: 1 | Instrument: 40MSVA | Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<2.7	~~U~~ UJ
71-43-2	Benzene	<0.25	U
75-27-4	Bromodichloromethane	<0.36	U
75-25-2	Bromoform	<4.0	U
74-83-9	Bromomethane	<0.97	U
78-93-3	2-Butanone (MEK)	<2.9	U
75-15-0	Carbon disulfide	<0.45	U
56-23-5	Carbon tetrachloride	<1.1	U
108-90-7	Chlorobenzene	<0.71	U
75-00-3	Chloroethane	<1.3	U
67-66-3	Chloroform	<1.3	U
74-87-3	Chloromethane	<2.2	U
124-48-1	Dibromochloromethane	<2.6	U
75-34-3	1,1-Dichloroethane	<0.27	U
107-06-2	1,2-Dichloroethane	<0.28	U
75-35-4	1,1-Dichloroethene	<0.24	U
156-59-2	cis-1,2-Dichloroethene	<0.27	U
156-60-5	trans-1,2-Dichloroethene	<0.46	U
78-87-5	1,2-Dichloropropane	<0.28	U
10061-01-5	cis-1,3-Dichloropropene	<3.6	U
10061-02-6	trans-1,3-Dichloropropene	<4.4	U
100-41-4	Ethylbenzene	<0.32	U
591-78-6	2-Hexanone	<5.2	U
75-09-2	Methylene Chloride	<0.58	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<4.6	U
100-42-5	Styrene	<3.0	U
79-34-5	1,1,2,2-Tetrachloroethane	<0.28	U
127-18-4	Tetrachloroethene	<0.33	~~U~~ UJ
108-88-3	Toluene	0.31	~~J~~ J
71-55-6	1,1,1-Trichloroethane	<0.24	~~U~~ UJ
79-00-5	1,1,2-Trichloroethane	<0.55	U
79-01-6	Trichloroethene	<0.26	U
75-01-4	Vinyl chloride	<0.17	U
1330-20-7	Xylene (Total)	<1.5	~~U~~ UJ

SAMPLE NO.

RM-007XXD

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay | Contract: 376175.0 PH4 LEMB LF-PLUME WEL

Date Received: 11/02/2020 07:30 | Matrix: Water | SDG No.: 40217549

Date Extracted: 11/04/2020 12:32 | Lab Sample ID: 40217549001

Date Analyzed: 11/04/2020 12:32 | Lab File ID: 11042020.B\11042022.D

Initial wt/vol: 5 mL | Final wt/vol: 5 mL | Dilution: 1 | Instrument: 40MSV3 | Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<2.7	U
71-43-2	Benzene	<0.25	U
75-27-4	Bromodichloromethane	<0.36	U
75-25-2	Bromoform	<4.0	U
74-83-9	Bromomethane	<0.97	U
78-93-3	2-Butanone (MEK)	<2.9	U
75-15-0	Carbon disulfide	<0.45	U
56-23-5	Carbon tetrachloride	<1.1	U
108-90-7	Chlorobenzene	<0.71	U
75-00-3	Chloroethane	<1.3	U
67-66-3	Chloroform	<1.3	U
74-87-3	Chloromethane	<2.2	U
124-48-1	Dibromochloromethane	<2.6	U
75-34-3	1,1-Dichloroethane	<0.27	U
107-06-2	1,2-Dichloroethane	<0.28	U
75-35-4	1,1-Dichloroethene	<0.24	U
156-59-2	cis-1,2-Dichloroethene	<0.27	U
156-60-5	trans-1,2-Dichloroethene	<0.46	U
78-87-5	1,2-Dichloropropane	<0.28	U
10061-01-5	cis-1,3-Dichloropropene	<3.6	U
10061-02-6	trans-1,3-Dichloropropene	<4.4	U
100-41-4	Ethylbenzene	<0.32	U
591-78-6	2-Hexanone	<5.2	U
75-09-2	Methylene Chloride	<0.58	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<4.6	U
100-42-5	Styrene	<3.0	U
79-34-5	1,1,2,2-Tetrachloroethane	<0.28	U
127-18-4	Tetrachloroethene	<0.33	~~U~~ UJ
108-88-3	Toluene	<0.27	U
71-55-6	1,1,1-Trichloroethane	<0.24	U
79-00-5	1,1,2-Trichloroethane	<0.55	U
79-01-6	Trichloroethene	<0.26	U
75-01-4	Vinyl chloride	<0.17	U
1330-20-7	Xylene (Total)	<1.5	U

SAMPLE NO.

RM-007D

MSV - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay
Contract: 376175.0 PH4 LEMB LF-PLUME WEL
Date Received: 11/02/2020 07:30
Matrix: Water SDG No.: 40217549
Date Extracted: 11/04/2020 13:36
Lab Sample ID: 40217549002
Date Analyzed: 11/04/2020 13:36
Lab File ID: 11042020.B\11042025.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 2.5
Instrument: 40MSV3 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<6.9	U
71-43-2	Benzene	<0.62	U
75-27-4	Bromodichloromethane	<0.91	U
75-25-2	Bromoform	<9.9	U
74-83-9	Bromomethane	<2.4	U
78-93-3	2-Butanone (MEK)	<7.3	U
75-15-0	Carbon disulfide	<1.1	U
56-23-5	Carbon tetrachloride	<2.7	U
108-90-7	Chlorobenzene	<1.8	U
75-00-3	Chloroethane	<3.4	U
67-66-3	Chloroform	<3.2	U
74-87-3	Chloromethane	<5.5	U
124-48-1	Dibromochloromethane	<6.5	U
75-34-3	1,1-Dichloroethane	155	
107-06-2	1,2-Dichloroethane	<0.70	U
75-35-4	1,1-Dichloroethene	14.2	
156-59-2	cis-1,2-Dichloroethene	48.8	
156-60-5	trans-1,2-Dichloroethene	<1.2	U
78-87-5	1,2-Dichloropropane	<0.71	U
10061-01-5	cis-1,3-Dichloropropene	<9.1	U
10061-02-6	trans-1,3-Dichloropropene	<10.9	U
100-41-4	Ethylbenzene	<0.80	U
591-78-6	2-Hexanone	<13.0	U
75-09-2	Methylene Chloride	<1.5	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<11.6	U
100-42-5	Styrene	<7.5	U
79-34-5	1,1,2,2-Tetrachloroethane	<0.69	U
127-18-4	Tetrachloroethene	2.8	J
108-88-3	Toluene	<0.67	U
71-55-6	1,1,1-Trichloroethane	215	
79-00-5	1,1,2-Trichloroethane	<1.4	U
79-01-6	Trichloroethene	43.6	
75-01-4	Vinyl chloride	<0.44	U
1330-20-7	Xylene (Total)	<3.8	U

SAMPLE NO.

RM-007XD

MSV - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay
Contract: 376175.0 PH4 LEMB LF-PLUME WEL
Date Received: 11/02/2020 07:30
Matrix: Water SDG No.: 40217549
Date Extracted: 11/04/2020 12:53
Lab Sample ID: 40217549003
Date Analyzed: 11/04/2020 12:53
Lab File ID: 11042020.B\11042023.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 40MSV3 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<2.7	U
71-43-2	Benzene	<0.25	U
75-27-4	Bromodichloromethane	<0.36	U
75-25-2	Bromoform	<4.0	U
74-83-9	Bromomethane	<0.97	U
78-93-3	2-Butanone (MEK)	<2.9	U
75-15-0	Carbon disulfide	<0.45	U
56-23-5	Carbon tetrachloride	<1.1	U
108-90-7	Chlorobenzene	<0.71	U
75-00-3	Chloroethane	<1.3	U
67-66-3	Chloroform	<1.3	U
74-87-3	Chloromethane	<2.2	U
124-48-1	Dibromochloromethane	<2.6	U
75-34-3	1,1-Dichloroethane	143	
107-06-2	1,2-Dichloroethane	<0.28	U
75-35-4	1,1-Dichloroethene	23.8	
156-59-2	cis-1,2-Dichloroethene	62.3	
156-60-5	trans-1,2-Dichloroethene	<0.46	U
78-87-5	1,2-Dichloropropane	<0.28	U
10061-01-5	cis-1,3-Dichloropropene	<3.6	U
10061-02-6	trans-1,3-Dichloropropene	<4.4	U
100-41-4	Ethylbenzene	<0.32	U
591-78-6	2-Hexanone	<5.2	U
75-09-2	Methylene Chloride	<0.58	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<4.6	U
100-42-5	Styrene	<3.0	U
79-34-5	1,1,2,2-Tetrachloroethane	<0.28	U
127-18-4	Tetrachloroethene	2.4	J
108-88-3	Toluene	<0.27	U
71-55-6	1,1,1-Trichloroethane	207	
79-00-5	1,1,2-Trichloroethane	<0.55	U
79-01-6	Trichloroethene	43.3	
75-01-4	Vinyl chloride	<0.17	U
1330-20-7	Xylene (Total)	<1.5	U

SAMPLE NO.

RM-204D

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay | Contract: 376175.0 PH4 LEMB LF-PLUME WEL

Date Received: 11/02/2020 07:30 | Matrix: Water | SDG No.: 40217549

Date Extracted: 11/04/2020 14:19 | Lab Sample ID: 40217549004

Date Analyzed: 11/04/2020 14:19 | Lab File ID: 11042020.B\11042027.D

Initial wt/vol: 5 mL | Final wt/vol: 5 mL | Dilution: 1 | Instrument: 40MSV3 | Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<2.7	U
71-43-2	Benzene	<0.25	U
75-27-4	Bromodichloromethane	<0.36	U
75-25-2	Bromoform	<4.0	U
74-83-9	Bromomethane	<0.97	U
78-93-3	2-Butanone (MEK)	<2.9	U
75-15-0	Carbon disulfide	<0.45	U
56-23-5	Carbon tetrachloride	<1.1	U
108-90-7	Chlorobenzene	<0.71	U
75-00-3	Chloroethane	<1.3	U
67-66-3	Chloroform	<1.3	U
74-87-3	Chloromethane	<2.2	U
124-48-1	Dibromochloromethane	<2.6	U
75-34-3	1,1-Dichloroethane	6.7	
107-06-2	1,2-Dichloroethane	<0.28	U
75-35-4	1,1-Dichloroethene	1.0	
156-59-2	cis-1,2-Dichloroethene	1.8	
156-60-5	trans-1,2-Dichloroethene	<0.46	U
78-87-5	1,2-Dichloropropane	<0.28	U
10061-01-5	cis-1,3-Dichloropropene	<3.6	U
10061-02-6	trans-1,3-Dichloropropene	<4.4	U
100-41-4	Ethylbenzene	<0.32	U
591-78-6	2-Hexanone	<5.2	U
75-09-2	Methylene Chloride	<0.58	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<4.6	U
100-42-5	Styrene	<3.0	U
79-34-5	1,1,2,2-Tetrachloroethane	<0.28	U
127-18-4	Tetrachloroethene	<0.33	~~U~~ UJ
108-88-3	Toluene	<0.27	U
71-55-6	1,1,1-Trichloroethane	11.5	
79-00-5	1,1,2-Trichloroethane	<0.55	U
79-01-6	Trichloroethene	1.7	
75-01-4	Vinyl chloride	<0.17	U
1330-20-7	Xylene (Total)	<1.5	U

SAMPLE NO.

FDUP-002

MSV - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay
Contract: 376175.0 PH4 LEMB LF-PLUME WEL
Date Received: 11/02/2020 07:30
Matrix: Water SDG No.: 40217549
Date Extracted: 11/04/2020 14:41
Lab Sample ID: 40217549005
Date Analyzed: 11/04/2020 14:41
Lab File ID: 11042020.B\11042028.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 40MSV3 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<2.7	U
71-43-2	Benzene	<0.25	U
75-27-4	Bromodichloromethane	<0.36	U
75-25-2	Bromoform	<4.0	U
74-83-9	Bromomethane	<0.97	U
78-93-3	2-Butanone (MEK)	<2.9	U
75-15-0	Carbon disulfide	<0.45	U
56-23-5	Carbon tetrachloride	<1.1	U
108-90-7	Chlorobenzene	<0.71	U
75-00-3	Chloroethane	<1.3	U
67-66-3	Chloroform	<1.3	U
74-87-3	Chloromethane	<2.2	U
124-48-1	Dibromochloromethane	<2.6	U
75-34-3	1,1-Dichloroethane	147	
107-06-2	1,2-Dichloroethane	<0.28	U
75-35-4	1,1-Dichloroethene	23.5	
156-59-2	cis-1,2-Dichloroethene	63.1	
156-60-5	trans-1,2-Dichloroethene	<0.46	U
78-87-5	1,2-Dichloropropane	<0.28	U
10061-01-5	cis-1,3-Dichloropropene	<3.6	U
10061-02-6	trans-1,3-Dichloropropene	<4.4	U
100-41-4	Ethylbenzene	<0.32	U
591-78-6	2-Hexanone	<5.2	U
75-09-2	Methylene Chloride	<0.58	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<4.6	U
100-42-5	Styrene	<3.0	U
79-34-5	1,1,2,2-Tetrachloroethane	<0.28	U
127-18-4	Tetrachloroethene	2.4	J
108-88-3	Toluene	<0.27	U
71-55-6	1,1,1-Trichloroethane	208	
79-00-5	1,1,2-Trichloroethane	<0.55	U
79-01-6	Trichloroethene	44.4	
75-01-4	Vinyl chloride	<0.17	U
1330-20-7	Xylene (Total)	<1.5	U

SAMPLE NO.

RM-402XXD

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay | Contract: 376175.0 PH4 LEMB LF-PLUME WEL

Date Received: 11/02/2020 07:30 | Matrix: Water | SDG No.: 40217549

Date Extracted: 11/04/2020 15:02 | Lab Sample ID: 40217549006

Date Analyzed: 11/04/2020 15:02 | Lab File ID: 11042020.B\11042029.D

Initial wt/vol: 5 mL | Final wt/vol: 5 mL | Dilution: 1 | Instrument: 40MSV3 | Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<2.7	U
71-43-2	Benzene	<0.25	U
75-27-4	Bromodichloromethane	<0.36	U
75-25-2	Bromoform	<4.0	U
74-83-9	Bromomethane	<0.97	U
78-93-3	2-Butanone (MEK)	<2.9	U
75-15-0	Carbon disulfide	<0.45	U
56-23-5	Carbon tetrachloride	<1.1	U
108-90-7	Chlorobenzene	<0.71	U
75-00-3	Chloroethane	<1.3	U
67-66-3	Chloroform	<1.3	U
74-87-3	Chloromethane	<2.2	U
124-48-1	Dibromochloromethane	<2.6	U
75-34-3	1,1-Dichloroethane	14.7	
107-06-2	1,2-Dichloroethane	<0.28	U
75-35-4	1,1-Dichloroethene	2.8	
156-59-2	cis-1,2-Dichloroethene	7.3	
156-60-5	trans-1,2-Dichloroethene	<0.46	U
78-87-5	1,2-Dichloropropane	<0.28	U
10061-01-5	cis-1,3-Dichloropropene	<3.6	U
10061-02-6	trans-1,3-Dichloropropene	<4.4	U
100-41-4	Ethylbenzene	<0.32	U
591-78-6	2-Hexanone	<5.2	U
75-09-2	Methylene Chloride	<0.58	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<4.6	U
100-42-5	Styrene	<3.0	U
79-34-5	1,1,2,2-Tetrachloroethane	<0.28	U
127-18-4	Tetrachloroethene	<0.33	~~U~~ UJ
108-88-3	Toluene	<0.27	U
71-55-6	1,1,1-Trichloroethane	28.0	
79-00-5	1,1,2-Trichloroethane	<0.55	U
79-01-6	Trichloroethene	6.0	
75-01-4	Vinyl chloride	<0.17	U
1330-20-7	Xylene (Total)	<1.5	U

SAMPLE NO.

RM-402XD

MSV - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay
Contract: 376175.0 PH4 LEMB LF-PLUME WEL
Date Received: 11/02/2020 07:30
Matrix: Water SDG No.: 40217549
Date Extracted: 11/04/2020 17:47
Lab Sample ID: 40217549007
Date Analyzed: 11/04/2020 17:47
Lab File ID: 11042020.B\11042037.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 40MSV3 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<2.7	U
71-43-2	Benzene	<0.25	U
75-27-4	Bromodichloromethane	<0.36	U
75-25-2	Bromoform	<4.0	U
74-83-9	Bromomethane	<0.97	U
78-93-3	2-Butanone (MEK)	<2.9	U
75-15-0	Carbon disulfide	<0.45	U
56-23-5	Carbon tetrachloride	<1.1	U
108-90-7	Chlorobenzene	<0.71	U
75-00-3	Chloroethane	<1.3	U
67-66-3	Chloroform	<1.3	U
74-87-3	Chloromethane	<2.2	U
124-48-1	Dibromochloromethane	<2.6	U
75-34-3	1,1-Dichloroethane	34.9	
107-06-2	1,2-Dichloroethane	<0.28	U
75-35-4	1,1-Dichloroethene	19.0	
156-59-2	cis-1,2-Dichloroethene	17.3	
156-60-5	trans-1,2-Dichloroethene	<0.46	U
78-87-5	1,2-Dichloropropane	<0.28	U
10061-01-5	cis-1,3-Dichloropropene	<3.6	U
10061-02-6	trans-1,3-Dichloropropene	<4.4	~~U~~ UJ
100-41-4	Ethylbenzene	<0.32	U
591-78-6	2-Hexanone	<5.2	U
75-09-2	Methylene Chloride	<0.58	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<4.6	U
100-42-5	Styrene	<3.0	U
79-34-5	1,1,2,2-Tetrachloroethane	<0.28	U
127-18-4	Tetrachloroethene	0.82	J
108-88-3	Toluene	<0.27	U
71-55-6	1,1,1-Trichloroethane	101	
79-00-5	1,1,2-Trichloroethane	<0.55	U
79-01-6	Trichloroethene	12.8	
75-01-4	Vinyl chloride	<0.17	U
1330-20-7	Xylene (Total)	<1.5	U

SAMPLE NO.

RM-008D

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay | Contract: 376175.0 PH4 LEMB LF-PLUME WEL

Date Received: 11/02/2020 07:30 | Matrix: Water | SDG No.: 40217549

Date Extracted: 11/04/2020 18:09 | Lab Sample ID: 40217549008

Date Analyzed: 11/04/2020 18:09 | Lab File ID: 11042020.B\11042038.D

Initial wt/vol: 5 mL | Final wt/vol: 5 mL | Dilution: 1 | Instrument: 40MSV3 | Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<2.7	U
71-43-2	Benzene	<0.25	U
75-27-4	Bromodichloromethane	<0.36	U
75-25-2	Bromoform	<4.0	U
74-83-9	Bromomethane	<0.97	U
78-93-3	2-Butanone (MEK)	<2.9	U
75-15-0	Carbon disulfide	<0.45	U
56-23-5	Carbon tetrachloride	<1.1	U
108-90-7	Chlorobenzene	<0.71	U
75-00-3	Chloroethane	<1.3	U
67-66-3	Chloroform	<1.3	U
74-87-3	Chloromethane	<2.2	U
124-48-1	Dibromochloromethane	<2.6	U
75-34-3	1,1-Dichloroethane	7.8	
107-06-2	1,2-Dichloroethane	<0.28	U
75-35-4	1,1-Dichloroethene	1.1	
156-59-2	cis-1,2-Dichloroethene	4.9	
156-60-5	trans-1,2-Dichloroethene	<0.46	U
78-87-5	1,2-Dichloropropane	<0.28	U
10061-01-5	cis-1,3-Dichloropropene	<3.6	U
10061-02-6	trans-1,3-Dichloropropene	<4.4	~~U~~ UJ
100-41-4	Ethylbenzene	<0.32	U
591-78-6	2-Hexanone	<5.2	U
75-09-2	Methylene Chloride	<0.58	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<4.6	U
100-42-5	Styrene	<3.0	U
79-34-5	1,1,2,2-Tetrachloroethane	<0.28	U
127-18-4	Tetrachloroethene	<0.33	U
108-88-3	Toluene	<0.27	U
71-55-6	1,1,1-Trichloroethane	18.9	
79-00-5	1,1,2-Trichloroethane	<0.55	U
79-01-6	Trichloroethene	4.0	
75-01-4	Vinyl chloride	<0.17	U
1330-20-7	Xylene (Total)	<1.5	U

SAMPLE NO.

RM-212D

MSV - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay
Contract: 376175.0 PH4 LEMB LF-PLUME WEL
Date Received: 11/02/2020 07:30
Matrix: Water SDG No.: 40217549
Date Extracted: 11/04/2020 18:30
Lab Sample ID: 40217549009
Date Analyzed: 11/04/2020 18:30
Lab File ID: 11042020.B\11042039.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 40MSV3 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<2.7	U
71-43-2	Benzene	<0.25	U
75-27-4	Bromodichloromethane	<0.36	U
75-25-2	Bromoform	<4.0	U
74-83-9	Bromomethane	<0.97	U
78-93-3	2-Butanone (MEK)	<2.9	U
75-15-0	Carbon disulfide	<0.45	U
56-23-5	Carbon tetrachloride	<1.1	U
108-90-7	Chlorobenzene	<0.71	U
75-00-3	Chloroethane	<1.3	U
67-66-3	Chloroform	<1.3	U
74-87-3	Chloromethane	<2.2	U
124-48-1	Dibromochloromethane	<2.6	U
75-34-3	1,1-Dichloroethane	<0.27	U
107-06-2	1,2-Dichloroethane	<0.28	U
75-35-4	1,1-Dichloroethene	<0.24	U
156-59-2	cis-1,2-Dichloroethene	<0.27	U
156-60-5	trans-1,2-Dichloroethene	<0.46	U
78-87-5	1,2-Dichloropropane	<0.28	U
10061-01-5	cis-1,3-Dichloropropene	<3.6	U
10061-02-6	trans-1,3-Dichloropropene	<4.4	~~U~~ UJ
100-41-4	Ethylbenzene	<0.32	U
591-78-6	2-Hexanone	<5.2	U
75-09-2	Methylene Chloride	<0.58	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<4.6	U
100-42-5	Styrene	<3.0	U
79-34-5	1,1,2,2-Tetrachloroethane	<0.28	U
127-18-4	Tetrachloroethene	<0.33	U
108-88-3	Toluene	<0.27	U
71-55-6	1,1,1-Trichloroethane	<0.24	U
79-00-5	1,1,2-Trichloroethane	<0.55	U
79-01-6	Trichloroethene	<0.26	U
75-01-4	Vinyl chloride	<0.17	U
1330-20-7	Xylene (Total)	<1.5	U

SAMPLE NO.

FB-002

MSV - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay
Contract: 376175.0 PH4 LEMB LF-PLUME WEL
Date Received: 11/02/2020 07:30
Matrix: Water SDG No.: 40217549
Date Extracted: 11/04/2020 17:26
Lab Sample ID: 40217549010
Date Analyzed: 11/04/2020 17:26
Lab File ID: 11042020.B\11042036.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 40MSV3 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	3.9	J
71-43-2	Benzene	<0.25	U
75-27-4	Bromodichloromethane	<0.36	U
75-25-2	Bromoform	<4.0	U
74-83-9	Bromomethane	<0.97	U
78-93-3	2-Butanone (MEK)	<2.9	U
75-15-0	Carbon disulfide	<0.45	U
56-23-5	Carbon tetrachloride	<1.1	U
108-90-7	Chlorobenzene	<0.71	U
75-00-3	Chloroethane	<1.3	U
67-66-3	Chloroform	<1.3	U
74-87-3	Chloromethane	<2.2	U
124-48-1	Dibromochloromethane	<2.6	U
75-34-3	1,1-Dichloroethane	<0.27	U
107-06-2	1,2-Dichloroethane	<0.28	U
75-35-4	1,1-Dichloroethene	<0.24	U
156-59-2	cis-1,2-Dichloroethene	<0.27	U
156-60-5	trans-1,2-Dichloroethene	<0.46	U
78-87-5	1,2-Dichloropropane	<0.28	U
10061-01-5	cis-1,3-Dichloropropene	<3.6	U
10061-02-6	trans-1,3-Dichloropropene	<4.4	~~U~~ UJ
100-41-4	Ethylbenzene	<0.32	U
591-78-6	2-Hexanone	<5.2	U
75-09-2	Methylene Chloride	<0.58	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<4.6	U
100-42-5	Styrene	<3.0	U
79-34-5	1,1,2,2-Tetrachloroethane	<0.28	U
127-18-4	Tetrachloroethene	<0.33	U
108-88-3	Toluene	1.9	
71-55-6	1,1,1-Trichloroethane	<0.24	U
79-00-5	1,1,2-Trichloroethane	<0.55	U
79-01-6	Trichloroethene	<0.26	U
75-01-4	Vinyl chloride	<0.17	U
1330-20-7	Xylene (Total)	<1.5	U

SAMPLE NO.

MSV - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

TB-001 (10/31/20)

Lab Name: Pace Analytical - Green Bay
Contract: 376175.0 PH4 LEMB LF-PLUME WEL
Date Received: 11/02/2020 07:30
Matrix: Water SDG No.: 40217549
Date Extracted: 11/04/2020 17:04
Lab Sample ID: 40217549011
Date Analyzed: 11/04/2020 17:04
Lab File ID: 11042020.B\11042035.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 40MSV3 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<2.7	U
71-43-2	Benzene	<0.25	U
75-27-4	Bromodichloromethane	<0.36	U
75-25-2	Bromoform	<4.0	U
74-83-9	Bromomethane	<0.97	U
78-93-3	2-Butanone (MEK)	<2.9	U
75-15-0	Carbon disulfide	<0.45	U
56-23-5	Carbon tetrachloride	<1.1	U
108-90-7	Chlorobenzene	<0.71	U
75-00-3	Chloroethane	<1.3	U
67-66-3	Chloroform	<1.3	U
74-87-3	Chloromethane	<2.2	U
124-48-1	Dibromochloromethane	<2.6	U
75-34-3	1,1-Dichloroethane	<0.27	U
107-06-2	1,2-Dichloroethane	<0.28	U
75-35-4	1,1-Dichloroethene	<0.24	U
156-59-2	cis-1,2-Dichloroethene	<0.27	U
156-60-5	trans-1,2-Dichloroethene	<0.46	U
78-87-5	1,2-Dichloropropane	<0.28	U
10061-01-5	cis-1,3-Dichloropropene	<3.6	U
10061-02-6	trans-1,3-Dichloropropene	<4.4	~~U~~ UJ
100-41-4	Ethylbenzene	<0.32	U
591-78-6	2-Hexanone	<5.2	U
75-09-2	Methylene Chloride	<0.58	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<4.6	U
100-42-5	Styrene	<3.0	U
79-34-5	1,1,2,2-Tetrachloroethane	<0.28	U
127-18-4	Tetrachloroethene	<0.33	U
108-88-3	Toluene	<0.27	U
71-55-6	1,1,1-Trichloroethane	<0.24	U
79-00-5	1,1,2-Trichloroethane	<0.55	U
79-01-6	Trichloroethene	<0.26	U
75-01-4	Vinyl chloride	<0.17	U
1330-20-7	Xylene (Total)	<1.5	U

SAMPLE NO.

RM-303D

MSV - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay
Contract: 376175.0 PH4 LEMB LF-PLUME WEL
Date Received: 11/02/2020 07:30
Matrix: Water SDG No.: 40217549
Date Extracted: 11/04/2020 13:58
Lab Sample ID: 40217549012
Date Analyzed: 11/04/2020 13:58
Lab File ID: 11042020.B\11042026.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 2
Instrument: 40MSV3 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<5.5	U
71-43-2	Benzene	<0.49	U
75-27-4	Bromodichloromethane	<0.73	U
75-25-2	Bromoform	<7.9	U
74-83-9	Bromomethane	<1.9	U
78-93-3	2-Butanone (MEK)	<5.9	U
75-15-0	Carbon disulfide	<0.90	U
56-23-5	Carbon tetrachloride	<2.2	U
108-90-7	Chlorobenzene	<1.4	U
75-00-3	Chloroethane	<2.7	U
67-66-3	Chloroform	<2.5	U
74-87-3	Chloromethane	<4.4	U
124-48-1	Dibromochloromethane	<5.2	U
75-34-3	1,1-Dichloroethane	146	
107-06-2	1,2-Dichloroethane	<0.56	U
75-35-4	1,1-Dichloroethene	6.5	
156-59-2	cis-1,2-Dichloroethene	59.0	
156-60-5	trans-1,2-Dichloroethene	<0.93	U
78-87-5	1,2-Dichloropropane	<0.57	U
10061-01-5	cis-1,3-Dichloropropene	<7.3	U
10061-02-6	trans-1,3-Dichloropropene	<8.7	U
100-41-4	Ethylbenzene	<0.64	U
591-78-6	2-Hexanone	<10.4	U
75-09-2	Methylene Chloride	<1.2	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<9.3	U
100-42-5	Styrene	<6.0	U
79-34-5	1,1,2,2-Tetrachloroethane	<0.55	U
127-18-4	Tetrachloroethene	1.6	~~J~~ J
108-88-3	Toluene	<0.54	U
71-55-6	1,1,1-Trichloroethane	191	
79-00-5	1,1,2-Trichloroethane	<1.1	U
79-01-6	Trichloroethene	55.0	
75-01-4	Vinyl chloride	<0.35	U
1330-20-7	Xylene (Total)	<3.0	U

SAMPLE NO.

RM-306D

MSV - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay
Contract: 376175.0 PH4 LEMB LF-PLUME WEL
Date Received: 11/02/2020 07:30
Matrix: Water SDG No.: 40217549
Date Extracted: 11/04/2020 18:51
Lab Sample ID: 40217549013
Date Analyzed: 11/04/2020 18:51
Lab File ID: 11042020.B\11042040.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 40MSV3 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<2.7	U
71-43-2	Benzene	<0.25	U
75-27-4	Bromodichloromethane	<0.36	U
75-25-2	Bromoform	<4.0	U
74-83-9	Bromomethane	<0.97	U
78-93-3	2-Butanone (MEK)	<2.9	U
75-15-0	Carbon disulfide	<0.45	U
56-23-5	Carbon tetrachloride	<1.1	U
108-90-7	Chlorobenzene	<0.71	U
75-00-3	Chloroethane	<1.3	U
67-66-3	Chloroform	<1.3	U
74-87-3	Chloromethane	<2.2	U
124-48-1	Dibromochloromethane	<2.6	U
75-34-3	1,1-Dichloroethane	1.8	
107-06-2	1,2-Dichloroethane	<0.28	U
75-35-4	1,1-Dichloroethene	0.98	J
156-59-2	cis-1,2-Dichloroethene	<0.27	U
156-60-5	trans-1,2-Dichloroethene	<0.46	U
78-87-5	1,2-Dichloropropane	<0.28	U
10061-01-5	cis-1,3-Dichloropropene	<3.6	U
10061-02-6	trans-1,3-Dichloropropene	<4.4	UJ
100-41-4	Ethylbenzene	<0.32	U
591-78-6	2-Hexanone	<5.2	U
75-09-2	Methylene Chloride	<0.58	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<4.6	U
100-42-5	Styrene	<3.0	U
79-34-5	1,1,2,2-Tetrachloroethane	<0.28	U
127-18-4	Tetrachloroethene	<0.33	U
108-88-3	Toluene	<0.27	U
71-55-6	1,1,1-Trichloroethane	18.7	
79-00-5	1,1,2-Trichloroethane	<0.55	U
79-01-6	Trichloroethene	1.7	
75-01-4	Vinyl chloride	<0.17	U
1330-20-7	Xylene (Total)	<1.5	U

SAMPLE NO.

RM-307D

MSV - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay
Contract: 376175.0 PH4 LEMB LF-PLUME WEL
Date Received: 11/02/2020 07:30
Matrix: Water SDG No.: 40217549
Date Extracted: 11/04/2020 13:15
Lab Sample ID: 40217549014
Date Analyzed: 11/04/2020 13:15
Lab File ID: 11042020.B\11042024.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 40MSV3 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<2.7	U
71-43-2	Benzene	<0.25	U
75-27-4	Bromodichloromethane	<0.36	U
75-25-2	Bromoform	<4.0	U
74-83-9	Bromomethane	<0.97	U
78-93-3	2-Butanone (MEK)	<2.9	U
75-15-0	Carbon disulfide	<0.45	U
56-23-5	Carbon tetrachloride	<1.1	U
108-90-7	Chlorobenzene	<0.71	U
75-00-3	Chloroethane	<1.3	U
67-66-3	Chloroform	<1.3	U
74-87-3	Chloromethane	<2.2	U
124-48-1	Dibromochloromethane	<2.6	U
75-34-3	1,1-Dichloroethane	18.0	
107-06-2	1,2-Dichloroethane	<0.28	U
75-35-4	1,1-Dichloroethene	2.7	
156-59-2	cis-1,2-Dichloroethene	2.8	
156-60-5	trans-1,2-Dichloroethene	<0.46	U
78-87-5	1,2-Dichloropropane	<0.28	U
10061-01-5	cis-1,3-Dichloropropene	<3.6	U
10061-02-6	trans-1,3-Dichloropropene	<4.4	U
100-41-4	Ethylbenzene	<0.32	U
591-78-6	2-Hexanone	<5.2	U
75-09-2	Methylene Chloride	<0.58	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<4.6	U
100-42-5	Styrene	<3.0	U
79-34-5	1,1,2,2-Tetrachloroethane	<0.28	U
127-18-4	Tetrachloroethene	0.71	J ~~J~~
108-88-3	Toluene	<0.27	U
71-55-6	1,1,1-Trichloroethane	68.6	
79-00-5	1,1,2-Trichloroethane	<0.55	U
79-01-6	Trichloroethene	9.0	
75-01-4	Vinyl chloride	<0.17	U
1330-20-7	Xylene (Total)	<1.5	U

SAMPLE NO.

RM-101D

MSV - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay
Contract: 376175.0 PH4 LEMB LF-PLUME WEL
Date Received: 11/02/2020 07:30
Matrix: Water SDG No.: 40217549
Date Extracted: 11/04/2020 19:13
Lab Sample ID: 40217549015
Date Analyzed: 11/04/2020 19:13
Lab File ID: 11042020.B\11042041.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 40MSV3 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<2.7	U
71-43-2	Benzene	<0.25	U
75-27-4	Bromodichloromethane	<0.36	U
75-25-2	Bromoform	<4.0	U
74-83-9	Bromomethane	<0.97	U
78-93-3	2-Butanone (MEK)	<2.9	U
75-15-0	Carbon disulfide	<0.45	U
56-23-5	Carbon tetrachloride	<1.1	U
108-90-7	Chlorobenzene	<0.71	U
75-00-3	Chloroethane	<1.3	U
67-66-3	Chloroform	<1.3	U
74-87-3	Chloromethane	<2.2	U
124-48-1	Dibromochloromethane	<2.6	U
75-34-3	1,1-Dichloroethane	2.0	
107-06-2	1,2-Dichloroethane	<0.28	U
75-35-4	1,1-Dichloroethene	0.34	J
156-59-2	cis-1,2-Dichloroethene	0.35	J
156-60-5	trans-1,2-Dichloroethene	<0.46	U
78-87-5	1,2-Dichloropropane	<0.28	U
10061-01-5	cis-1,3-Dichloropropene	<3.6	U
10061-02-6	trans-1,3-Dichloropropene	<4.4	~~U~~ UJ
100-41-4	Ethylbenzene	<0.32	U
591-78-6	2-Hexanone	<5.2	U
75-09-2	Methylene Chloride	<0.58	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<4.6	U
100-42-5	Styrene	<3.0	U
79-34-5	1,1,2,2-Tetrachloroethane	<0.28	U
127-18-4	Tetrachloroethene	<0.33	U
108-88-3	Toluene	<0.27	U
71-55-6	1,1,1-Trichloroethane	3.1	
79-00-5	1,1,2-Trichloroethane	<0.55	U
79-01-6	Trichloroethene	0.85	J
75-01-4	Vinyl chloride	<0.17	U
1330-20-7	Xylene (Total)	<1.5	U

SAMPLE NO.

RM-404XXD

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40215658 Contract: 376175.0 PH4 LEMBERGER

Lab Sample ID: 40215658002 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7439-89-6	Iron	<58.0	U	ug/L	1	10/03/2020 00:35
7439-96-5	Manganese	4.8 J+	~~B~~	ug/L	1	10/03/2020 00:35

SAMPLE NO.

RM-003XXD

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40215658 Contract: 376175.0 PH4 LEMBERGER

Lab Sample ID: 40215658004 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7439-89-6	Iron	<58.0	U	ug/L	1	10/03/2020 01:03
7439-96-5	Manganese 1.3 UJ	~~1.3~~	~~J B~~	ug/L	1	10/03/2020 01:03

SAMPLE NO.

RM-401XXD

FORM I INORGANIC-1
INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40215658 Contract: 376175.0 PH4 LEMBERGER
Lab Sample ID: 40215658005 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7439-89-6	Iron	<58.0	U	ug/L	1	10/03/2020 07:21
7439-96-5	Manganese	<1.2	U	ug/L	1	10/03/2020 07:21

SAMPLE NO.

RM-002D

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40215658 Contract: 376175.0 PH4 LEMBERGER

Lab Sample ID: 40215658006 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7439-89-6	Iron	<58.0	U	ug/L	1	10/03/2020 07:28
7439-96-5	Manganese	22.6		ug/L	1	10/03/2020 07:28

SAMPLE NO.

RM-210D

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40215658 Contract: 376175.0 PH4 LEMBERGER

Lab Sample ID: 40215658007 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7439-89-6	Iron	117	J	ug/L	1	10/03/2020 07:34
7439-96-5	Manganese	13.1 J+	~~B~~	ug/L	1	10/03/2020 07:34

SAMPLE NO.

FB-001

FORM I INORGANIC-1
INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40215658 Contract: 376175.0 PH4 LEMBERGER
Lab Sample ID: 40215658008 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7439-89-6	Iron	<58.0	U	ug/L	1	10/03/2020 07:41
7439-96-5	Manganese	<1.2	U	ug/L	1	10/03/2020 07:41

SAMPLE NO.

FDUP-001

FORM I INORGANIC-1
INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40215658 Contract: 376175.0 PH4 LEMBERGER
Lab Sample ID: 40215658009 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7439-89-6	Iron	<58.0	U	ug/L	1	10/03/2020 07:48
7439-96-5	Manganese	<1.2	U	ug/L	1	10/03/2020 07:48

SAMPLE NO.

OW-104F

FORM I INORGANIC-1
INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40217355 Contract: 376175.0 PH4 LEMBERGER
Lab Sample ID: 40217355006 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7439-89-6	Iron	171	J	ug/L	1	11/04/2020 20:19
7439-96-5	Manganese	6.7		ug/L	1	11/04/2020 20:19

SAMPLE NO.

RM-203D

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40217355 Contract: 376175.0 PH4 LEMBERGER

Lab Sample ID: 40217355007 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7439-89-6	Iron	127	J	ug/L	1	11/04/2020 20:47
7439-96-5	Manganese	2.5	J	ug/L	1	11/04/2020 20:47

SAMPLE NO.

RM-102D

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40217355 Contract: 376175.0 PH4 LEMBERGER

Lab Sample ID: 40217355008 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7439-89-6	Iron	81.2	J	ug/L	1	11/04/2020 21:00
7439-96-5	Manganese	1.4	J	ug/L	1	11/04/2020 21:00

SAMPLE NO.

RM-007D

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40217549 Contract: 376175.0 PH4 LEMB LF-

Lab Sample ID: 40217549002 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7439-89-6	Iron	145	J	ug/L	1	11/11/2020 17:30
7439-96-5	Manganese	17.2		ug/L	1	11/11/2020 17:30

SAMPLE NO.

RM-007XD

FORM I INORGANIC-1
INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40217549 Contract: 376175.0 PH4 LEMB LF-
Lab Sample ID: 40217549003 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7439-89-6	Iron	<58.0	U	ug/L	1	11/11/2020 17:36
7439-96-5	Manganese	<1.2	U	ug/L	1	11/11/2020 17:36

SAMPLE NO.

RM-204D

FORM I INORGANIC-1
INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40217549 Contract: 376175.0 PH4 LEMB LF-
Lab Sample ID: 40217549004 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7439-89-6	Iron	<58.0	U	ug/L	1	11/11/2020 17:43
7439-96-5	Manganese	1.5	J	ug/L	1	11/11/2020 17:43

SAMPLE NO.

FDUP-002

FORM I INORGANIC-1
INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40217549 Contract: 376175.0 PH4 LEMB LF-
Lab Sample ID: 40217549005 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7439-89-6	Iron	<58.0	U	ug/L	1	11/11/2020 17:50
7439-96-5	Manganese	<1.2	U	ug/L	1	11/11/2020 17:50

SAMPLE NO.

RM-402XD

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40217549 Contract: 376175.0 PH4 LEMB LF-

Lab Sample ID: 40217549007 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7439-89-6	Iron	<58.0	U	ug/L	1	11/11/2020 17:57
7439-96-5	Manganese	<1.2	U	ug/L	1	11/11/2020 17:57

SAMPLE NO.

FB-002

FORM I INORGANIC-1
INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40217549 Contract: 376175.0 PH4 LEMB LF-
Lab Sample ID: 40217549010 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7439-89-6	Iron	<58.0	U	ug/L	1	11/11/2020 18:04
7439-96-5	Manganese	<1.2	U	ug/L	1	11/11/2020 18:04

SAMPLE NO.

RM-404XXD

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40215658 Contract: 376175.0 PH4 LEMBERGER

Lab Sample ID: 40215658002 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
16887-00-6	Chloride	13.7		mg/L	1	10/07/2020 18:57
14808-79-8	Sulfate	47.4		mg/L	5	10/08/2020 23:57

SAMPLE NO.

RM-003XXD

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40215658 Contract: 376175.0 PH4 LEMBERGER

Lab Sample ID: 40215658004 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
16887-00-6	Chloride	33.0		mg/L	1	10/07/2020 19:41
14808-79-8	Sulfate	27.8		mg/L	1	10/07/2020 19:41

SAMPLE NO.

RM-401XXD

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40215658 Contract: 376175.0 PH4 LEMBERGER

Lab Sample ID: 40215658005 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
16887-00-6	Chloride	38.9		mg/L	1	10/07/2020 19:56
14808-79-8	Sulfate	22.5		mg/L	1	10/07/2020 19:56

SAMPLE NO.

RM-002D

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40215658 Contract: 376175.0 PH4 LEMBERGER

Lab Sample ID: 40215658006 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
16887-00-6	Chloride	12.7		mg/L	1	10/07/2020 20:11
14808-79-8	Sulfate	37.2		mg/L	1	10/07/2020 20:11

SAMPLE NO.

RM-210D

FORM I INORGANIC-1
INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40215658 Contract: 376175.0 PH4 LEMBERGER
Lab Sample ID: 40215658007 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
16887-00-6	Chloride	16.9		mg/L	1	10/07/2020 21:11
14808-79-8	Sulfate	39.1		mg/L	1	10/07/2020 21:11

SAMPLE NO.

FB-001

FORM I INORGANIC-1
INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40215658 Contract: 376175.0 PH4 LEMBERGER
Lab Sample ID: 40215658008 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
16887-00-6	Chloride	<0.43	U	mg/L	1	10/07/2020 21:25
14808-79-8	Sulfate	<0.44	U	mg/L	1	10/07/2020 21:25

SAMPLE NO.

FDUP-001

FORM I INORGANIC-1
INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40215658 Contract: 376175.0 PH4 LEMBERGER
Lab Sample ID: 40215658009 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
16887-00-6	Chloride	38.8		mg/L	1	10/07/2020 21:40
14808-79-8	Sulfate	22.6		mg/L	1	10/07/2020 21:40

SAMPLE NO.

OW-104F

FORM I INORGANIC-1
INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40217355 Contract: 376175.0 PH4 LEMBERGER
Lab Sample ID: 40217355006 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
16887-00-6	Chloride	8.3		mg/L	1	11/10/2020 05:35
14808-79-8	Sulfate	22.7		mg/L	1	11/10/2020 05:35

SAMPLE NO.

RM-203D

FORM I INORGANIC-1
INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40217355 Contract: 376175.0 PH4 LEMBERGER
Lab Sample ID: 40217355007 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
16887-00-6	Chloride	29.4		mg/L	1	11/10/2020 05:50
14808-79-8	Sulfate	20.0		mg/L	1	11/10/2020 05:50

SAMPLE NO.

RM-102D

FORM I INORGANIC-1
INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40217355 Contract: 376175.0 PH4 LEMBERGER
Lab Sample ID: 40217355008 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
16887-00-6	Chloride	14.2		mg/L	1	11/10/2020 06:05
14808-79-8	Sulfate	8.8		mg/L	1	11/10/2020 06:05

SAMPLE NO.

RM-007D

FORM I INORGANIC-1
INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40217549 Contract: 376175.0 PH4 LEMB LF-
Lab Sample ID: 40217549002 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
16887-00-6	Chloride	9.4		mg/L	1	11/12/2020 04:14
14808-79-8	Sulfate	146		mg/L	10	11/12/2020 07:06

SAMPLE NO.

RM-007XD

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40217549 Contract: 376175.0 PH4 LEMB LF-

Lab Sample ID: 40217549003 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
16887-00-6	Chloride	8.0	J	mg/L	1	11/12/2020 04:28
14808-79-8	Sulfate	107		mg/L	5	11/12/2020 07:21

SAMPLE NO.

RM-204D

FORM I INORGANIC-1
INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40217549 Contract: 376175.0 PH4 LEMB LF-
Lab Sample ID: 40217549004 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
16887-00-6	Chloride	13.3		mg/L	1	11/12/2020 04:43
14808-79-8	Sulfate	30.8		mg/L	1	11/12/2020 04:43

SAMPLE NO.

FDUP-002

FORM I INORGANIC-1
INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40217549 Contract: 376175.0 PH4 LEMB LF-
Lab Sample ID: 40217549005 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
16887-00-6	Chloride	11.2	J	mg/L	5	11/12/2020 04:57
14808-79-8	Sulfate	108		mg/L	5	11/12/2020 04:57

SAMPLE NO.

RM-402XD

FORM I INORGANIC-1
INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40217549 Contract: 376175.0 PH4 LEMB LF-
Lab Sample ID: 40217549007 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
16887-00-6	Chloride	17.9		mg/L	1	11/12/2020 05:11
14808-79-8	Sulfate	253		mg/L	10	11/12/2020 07:35

SAMPLE NO.

FB-002

FORM I INORGANIC-1
INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40217549 Contract: 376175.0 PH4 LEMB LF-
Lab Sample ID: 40217549010 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
16887-00-6	Chloride	<0.43	U	mg/L	1	11/12/2020 05:26
14808-79-8	Sulfate	<0.44	U	mg/L	1	11/12/2020 05:26

SAMPLE NO.

RM-404XXD

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40215658 Contract: 376175.0 PH4 LEMBERGER

Lab Sample ID: 40215658002 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Alkalinity, Total as CaCO3	346	J-	mg/L	2	10/05/2020 17:09
	Nitrogen, NO2 plus NO3	4.4		mg/L	1	10/13/2020 13:38
7440-44-0	Total Organic Carbon	1.0	J+	mg/L	1	10/04/2020 23:15

SAMPLE NO.

RM-003XXD

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40215658 Contract: 376175.0 PH4 LEMBERGER

Lab Sample ID: 40215658004 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Alkalinity, Total as CaCO3	317	J-	mg/L	1	10/05/2020 17:16
	Nitrogen, NO2 plus NO3	6.0		mg/L	1	10/13/2020 13:42
7440-44-0	Total Organic Carbon	1.1	J+	mg/L	1	10/05/2020 00:17

SAMPLE NO.

RM-401XXD

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40215658 Contract: 376175.0 PH4 LEMBERGER

Lab Sample ID: 40215658005 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Alkalinity, Total as CaCO3	297	J-	mg/L	1	10/05/2020 17:17
	Nitrogen, NO2 plus NO3	9.3		mg/L	1	10/13/2020 13:43
7440-44-0	Total Organic Carbon	0.92	J+	mg/L	1	10/05/2020 00:38

SAMPLE NO.

RM-002D

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40215658 Contract: 376175.0 PH4 LEMBERGER

Lab Sample ID: 40215658006 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Alkalinity, Total as CaCO3	320	J-	mg/L	1	10/05/2020 17:18
	Nitrogen, NO2 plus NO3	1.6		mg/L	1	10/13/2020 13:43
7440-44-0	Total Organic Carbon	1.2	J+	mg/L	1	10/05/2020 00:58

SAMPLE NO.

RM-210D

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40215658 Contract: 376175.0 PH4 LEMBERGER

Lab Sample ID: 40215658007 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Alkalinity, Total as CaCO3	351	J-	mg/L	1	10/05/2020 17:19
	Nitrogen, NO2 plus NO3	3.8		mg/L	1	10/13/2020 13:44
7440-44-0	Total Organic Carbon	0.83	J+	mg/L	1	10/05/2020 01:19

SAMPLE NO.

FB-001

FORM I INORGANIC-1
INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40215658 Contract: 376175.0 PH4 LEMBERGER
Lab Sample ID: 40215658008 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Alkalinity, Total as CaCO3	<7.4	~~U~~ U	mg/L	1	10/05/2020 17:20
	Nitrogen, NO2 plus NO3	<0.059	U	mg/L	1	10/13/2020 13:45
7440-44-0	Total Organic Carbon	0.26	J	mg/L	1	10/05/2020 01:40

SAMPLE NO.

FDUP-001

FORM I INORGANIC-1
INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40215658 Contract: 376175.0 PH4 LEMBERGER
Lab Sample ID: 40215658009 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Alkalinity, Total as CaCO3	298	J-	mg/L	1	10/05/2020 17:23
	Nitrogen, NO2 plus NO3	9.4		mg/L	1	10/13/2020 13:45
7440-44-0	Total Organic Carbon	0.89	J+	mg/L	1	10/05/2020 02:01

SAMPLE NO.

OW-104F

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40217355 Contract: 376175.0 PH4 LEMBERGER

Lab Sample ID: 40217355006 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Alkalinity, Total as CaCO3	290		mg/L	1	11/03/2020 16:03
	Nitrogen, NO2 plus NO3	1.8		mg/L	1	11/10/2020 18:37
7440-44-0	Total Organic Carbon	0.70	J+	mg/L	1	11/04/2020 00:12

SAMPLE NO.

RM-203D

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40217355 Contract: 376175.0 PH4 LEMBERGER

Lab Sample ID: 40217355007 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Alkalinity, Total as CaCO3	354		mg/L	1	11/03/2020 16:04
	Nitrogen, NO2 plus NO3	8.9		mg/L	1	11/10/2020 18:39
7440-44-0	Total Organic Carbon	1.2	J+	mg/L	1	11/04/2020 00:26

SAMPLE NO.

RM-102D

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40217355 Contract: 376175.0 PH4 LEMBERGER

Lab Sample ID: 40217355008 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Alkalinity, Total as CaCO3	312		mg/L	1	11/03/2020 16:06
	Nitrogen, NO2 plus NO3	12.2		mg/L	2	11/10/2020 18:41
7440-44-0	Total Organic Carbon	1.9	J+	mg/L	1	11/04/2020 00:40

SAMPLE NO.

RM-007D

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40217549 Contract: 376175.0 PH4 LEMB LF-

Lab Sample ID: 40217549002 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Alkalinity, Total as CaCO3	481		mg/L	2	11/09/2020 16:12
	Nitrogen, NO2 plus NO3	1.6		mg/L	1	11/12/2020 10:47
7440-44-0	Total Organic Carbon	2.1	J+	mg/L	1	11/04/2020 04:10

SAMPLE NO.

RM-007XD

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40217549 Contract: 376175.0 PH4 LEMB LF-

Lab Sample ID: 40217549003 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Alkalinity, Total as CaCO3	444		mg/L	1	11/09/2020 16:16
	Nitrogen, NO2 plus NO3	1.3		mg/L	1	11/12/2020 10:48
7440-44-0	Total Organic Carbon	1.5	J+	mg/L	1	11/04/2020 05:14

SAMPLE NO.

RM-204D

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40217549 Contract: 376175.0 PH4 LEMB LF-

Lab Sample ID: 40217549004 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Alkalinity, Total as CaCO3	338		mg/L	1	11/09/2020 16:17
	Nitrogen, NO2 plus NO3	3.5		mg/L	1	11/12/2020 10:48
7440-44-0	Total Organic Carbon	0.94	J+	mg/L	1	11/04/2020 05:28

SAMPLE NO.

FDUP-002

FORM I INORGANIC-1
INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40217549 Contract: 376175.0 PH4 LEMB LF-
Lab Sample ID: 40217549005 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Alkalinity, Total as CaCO3	443		mg/L	1	11/09/2020 16:18
	Nitrogen, NO2 plus NO3	1.3		mg/L	1	11/12/2020 10:49
7440-44-0	Total Organic Carbon	1.5	J+	mg/L	1	11/04/2020 05:42

SAMPLE NO.

RM-402XD

FORM I INORGANIC-1
INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40217549 Contract: 376175.0 PH4 LEMB LF-
Lab Sample ID: 40217549007 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Alkalinity, Total as CaCO3	379		mg/L	1	11/09/2020 16:19
	Nitrogen, NO2 plus NO3	5.5		mg/L	1	11/12/2020 10:50
7440-44-0	Total Organic Carbon	1.7	J+	mg/L	1	11/04/2020 05:57

SAMPLE NO.

FB-002

FORM I INORGANIC-1
INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40217549 Contract: 376175.0 PH4 LEMB LF-
Lab Sample ID: 40217549010 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Alkalinity, Total as CaCO3	<7.4	U	mg/L	1	11/09/2020 16:20
	Nitrogen, NO2 plus NO3	<0.059	U	mg/L	1	11/12/2020 10:50
7440-44-0	Total Organic Carbon	0.28	J	mg/L	1	11/04/2020 06:11

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-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	100		20	100
Nickel, total	µg/L	100		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 January 2018 to reflect February 2017 register (WDNR) and latest USEPA MCLs.

Attachment 3

Tabular Summary of Analytical Results at Each Residential Well

LEMBERGER LANDFILL
RESIDENTIAL WELL VOLATILE ORGANIC ANALYSIS RESULTS
SEPTEMBER/OCTOBER 2020

PARAMETER	UNITS	GR-08 9/30/2020 40215657005	GR-09 9/30/2020 40215657006	GR-10 9/30/2020 40215657003	GR-11 10/18/2020 40216881002	GR-12 9/30/2020 40215657002	GR-13 9/29/2020 40215656004
1,1,1-TRICHLOROETHANE	UG/L	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24
1,1,2,2-TETRACHLOROETHANE	UG/L	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28
1,1,2-TRICHLOROETHANE	UG/L	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55
1,1-DICHLOROETHANE	UG/L	< 0.27	< 0.27	< 0.27	< 0.27	< 0.27	0.37 J
1,1-DICHLOROETHENE	UG/L	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24
1,2-DICHLOROETHANE	UG/L	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28
1,2-DICHLOROPROPANE	UG/L	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28
2-BUTANONE	UG/L	< 2.9 j	< 2.9 j	< 2.9 j	< 2.9	< 2.9 j	< 2.9 j
2-HEXANONE	UG/L	< 5.2 j	< 5.2 j	< 5.2 j	< 5.2	< 5.2 j	< 5.2 j
4-METHYL-2-PENTANONE	UG/L	< 4.6 j	< 4.6 j	< 4.6 j	< 4.6	< 4.6 j	< 4.6 j
ACETONE	UG/L	< 2.7	< 2.7	< 2.7	< 2.7	< 2.7	< 2.7 j
BENZENE	UG/L	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25
BROMODICHLOROMETHANE	UG/L	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36
BROMOFORM	UG/L	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
BROMOMETHANE	UG/L	< 0.97	< 0.97	< 0.97	< 0.97	< 0.97	< 0.97
CARBON DISULFIDE	UG/L	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45
CARBON TETRACHLORIDE	UG/L	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1
CHLOROBENZENE	UG/L	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71
CHLORODIBROMOMETHANE	UG/L	< 2.6	< 2.6	< 2.6	< 2.6	< 2.6	< 2.6
CHLOROETHANE	UG/L	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3
CHLOROFORM	UG/L	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3
CHLOROMETHANE	UG/L	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2
CIS-1,2-DICHLOROETHENE	UG/L	< 0.27	< 0.27	< 0.27	< 0.27	< 0.27	< 0.27
CIS-1,3-DICHLOROPROPENE	UG/L	< 3.6	< 3.6	< 3.6	< 3.6	< 3.6	< 3.6
ETHYLBENZENE	UG/L	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32
METHYLENE CHLORIDE	UG/L	< 0.58	< 0.58	< 0.58	< 0.58	< 0.58	< 0.58
STYRENE	UG/L	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
TETRACHLOROETHENE	UG/L	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
TOLUENE	UG/L	< 0.27	< 0.27	< 0.27	< 0.27	< 0.27	< 0.27
TRANS-1,2-DICHLOROETHENE	UG/L	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46
TRANS-1,3-DICHLOROPROPENE	UG/L	< 4.4	< 4.4	< 4.4	< 4.4	< 4.4	< 4.4
TRICHLOROETHENE	UG/L	< 0.26	< 0.26	< 0.26	< 0.26	< 0.26	< 0.26
VINYL CHLORIDE	UG/L	< 0.17	< 0.17	< 0.17	< 0.17	< 0.17	< 0.17
XYLENE, TOTAL	UG/L	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5

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

LEMBERGER LANDFILL
RESIDENTIAL WELL VOLATILE ORGANIC ANALYSIS RESULTS
SEPTEMBER/OCTOBER 2020

PARAMETER	UNITS	GR-14 10/18/2020 40216881003	GR-14 DUP 10/18/2020 40216881007	GR-16 10/18/2020 40216881004	GR-26 9/29/2020 40215656002	GR-30 10/18/2020 40216881006	GR-60R 9/29/2020 40215656001	GR-62 9/30/2020 40215657004
1,1,1-TRICHLOROETHANE	UG/L	< 0.24	< 0.24	< 0.24	< 0.24	0.33 J	< 0.24	< 0.24
1,1,2,2-TETRACHLOROETHANE	UG/L	< 0.28	< 0.28	< 0.28	< 0.28 j	< 0.28	< 0.28 j	< 0.28
1,1,2-TRICHLOROETHANE	UG/L	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55
1,1-DICHLOROETHANE	UG/L	< 0.27	< 0.27	< 0.27	< 0.27	< 0.27	< 0.27	< 0.27
1,1-DICHLOROETHENE	UG/L	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24
1,2-DICHLOROETHANE	UG/L	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28
1,2-DICHLOROPROPANE	UG/L	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28
2-BUTANONE	UG/L	< 2.9	< 2.9	< 2.9	< 2.9 j	< 2.9	< 2.9 j	< 2.9 j
2-HEXANONE	UG/L	< 5.2	< 5.2	< 5.2	< 5.2 j	< 5.2	< 5.2 j	< 5.2 j
4-METHYL-2-PENTANONE	UG/L	< 4.6	< 4.6	< 4.6	< 4.6 j	< 4.6	< 4.6 j	< 4.6 j
ACETONE	UG/L	< 2.7	< 2.7	< 2.7	< 2.7 j	< 2.7	< 2.7 j	< 2.7
BENZENE	UG/L	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25
BROMODICHLOROMETHANE	UG/L	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36
BROMOFORM	UG/L	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
BROMOMETHANE	UG/L	< 0.97	< 0.97	< 0.97	< 0.97	< 0.97	< 0.97	< 0.97
CARBON DISULFIDE	UG/L	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45
CARBON TETRACHLORIDE	UG/L	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1
CHLOROBENZENE	UG/L	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71
CHLORODIBROMOMETHANE	UG/L	< 2.6	< 2.6	< 2.6	< 2.6	< 2.6	< 2.6	< 2.6
CHLOROETHANE	UG/L	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3
CHLOROFORM	UG/L	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3
CHLOROMETHANE	UG/L	< 2.2	< 2.2	< 2.2	< 2.2 j	< 2.2	< 2.2 j	< 2.2
CIS-1,2-DICHLOROETHENE	UG/L	< 0.27	< 0.27	< 0.27	< 0.27	< 0.27	< 0.27	< 0.27
CIS-1,3-DICHLOROPROPENE	UG/L	< 3.6	< 3.6	< 3.6	< 3.6	< 3.6	< 3.6	< 3.6
ETHYLBENZENE	UG/L	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32
METHYLENE CHLORIDE	UG/L	< 0.58	< 0.58	< 0.58	< 0.58	< 0.58	< 0.58	< 0.58
STYRENE	UG/L	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
TETRACHLOROETHENE	UG/L	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
TOLUENE	UG/L	< 0.27	< 0.27	< 0.27	< 0.27	< 0.27	< 0.27	< 0.27
TRANS-1,2-DICHLOROETHENE	UG/L	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46
TRANS-1,3-DICHLOROPROPENE	UG/L	< 4.4	< 4.4	< 4.4	< 4.4	< 4.4	< 4.4	< 4.4
TRICHLOROETHENE	UG/L	< 0.26	< 0.26	< 0.26	< 0.26	< 0.26	< 0.26	< 0.26
VINYL CHLORIDE	UG/L	< 0.17	< 0.17	< 0.17	< 0.17	< 0.17	< 0.17	< 0.17
XYLENE, TOTAL	UG/L	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5

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

LEMBERGER LANDFILL
RESIDENTIAL WELL VOLATILE ORGANIC ANALYSIS RESULTS
SEPTEMBER/OCTOBER 2020

PARAMETER	UNITS	GR-63 9/29/2020 40215656005	GR-63 DUP 9/29/2020 40215656006	GR-64 9/30/2020 40215657007	GR-65 9/30/2020 40215657001	GR-66 10/18/2020 40216881001	GR-73 9/29/2020 40215656003	GR-74 10/18/2020 40216881005
1,1,1-TRICHLOROETHANE	UG/L	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24
1,1,2,2-TETRACHLOROETHANE	UG/L	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28
1,1,2-TRICHLOROETHANE	UG/L	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55
1,1-DICHLOROETHANE	UG/L	< 0.27	< 0.27	< 0.27	< 0.27	< 0.27	< 0.27	< 0.27
1,1-DICHLOROETHENE	UG/L	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24
1,2-DICHLOROETHANE	UG/L	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28
1,2-DICHLOROPROPANE	UG/L	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28
2-BUTANONE	UG/L	< 2.9 j	< 2.9 j	< 2.9 j	< 2.9 j	< 2.9	< 2.9 j	< 2.9
2-HEXANONE	UG/L	< 5.2 j	< 5.2 j	< 5.2 j	< 5.2 j	< 5.2	< 5.2	< 5.2
4-METHYL-2-PENTANONE	UG/L	< 4.6 j	< 4.6 j	< 4.6 j	< 4.6 j	< 4.6	< 4.6	< 4.6
ACETONE	UG/L	< 2.7 j	< 2.7	< 2.7	< 2.7	< 2.7	< 2.7	< 2.7
BENZENE	UG/L	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25
BROMODICHLOROMETHANE	UG/L	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36
BROMOFORM	UG/L	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
BROMOMETHANE	UG/L	< 0.97	< 0.97	< 0.97	< 0.97	< 0.97	< 0.97	< 0.97
CARBON DISULFIDE	UG/L	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45
CARBON TETRACHLORIDE	UG/L	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1
CHLOROBENZENE	UG/L	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71
CHLORODIBROMOMETHANE	UG/L	< 2.6	< 2.6	< 2.6	< 2.6	< 2.6	< 2.6	< 2.6
CHLOROETHANE	UG/L	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3
CHLOROFORM	UG/L	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3
CHLOROMETHANE	UG/L	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2
CIS-1,2-DICHLOROETHENE	UG/L	< 0.27	< 0.27	< 0.27	< 0.27	< 0.27	< 0.27	< 0.27
CIS-1,3-DICHLOROPROPENE	UG/L	< 3.6	< 3.6	< 3.6	< 3.6	< 3.6	< 3.6	< 3.6
ETHYLBENZENE	UG/L	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32
METHYLENE CHLORIDE	UG/L	< 0.58	< 0.58	< 0.58	< 0.58	< 0.58	< 0.58	< 0.58
STYRENE	UG/L	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
TETRACHLOROETHENE	UG/L	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33 j	< 0.33
TOLUENE	UG/L	< 0.27	< 0.27	< 0.27	< 0.27	< 0.27	< 0.27	< 0.27
TRANS-1,2-DICHLOROETHENE	UG/L	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46
TRANS-1,3-DICHLOROPROPENE	UG/L	< 4.4	< 4.4	< 4.4	< 4.4	< 4.4	< 4.4	< 4.4
TRICHLOROETHENE	UG/L	< 0.26	< 0.26	< 0.26	< 0.26	< 0.26	< 0.26	< 0.26
VINYL CHLORIDE	UG/L	< 0.17	< 0.17	< 0.17	< 0.17	< 0.17	< 0.17	< 0.17
XYLENE, TOTAL	UG/L	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5

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

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: 376175.0 PH 4 LEMBERGER LF - R
Pace Project No.: 40215656

Sample: GR-60R **Lab ID: 40215656001** Collected: 09/29/20 13:33 Received: 10/01/20 07:00 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	**<0.24**	ug/L	1.0	0.24	1		10/05/20 11:45	71-55-6	
1,1,2,2-Tetrachloroethane	**<0.28**	ug/L	1.0	0.28	1		10/05/20 11:45	79-34-5	
1,1,2-Trichloroethane	**<0.55**	ug/L	5.0	0.55	1		10/05/20 11:45	79-00-5	
1,1-Dichloroethane	**<0.27**	ug/L	1.0	0.27	1		10/05/20 11:45	75-34-3	
1,1-Dichloroethene	**<0.24**	ug/L	1.0	0.24	1		10/05/20 11:45	75-35-4	
1,2-Dichloroethane	**<0.28**	ug/L	1.0	0.28	1		10/05/20 11:45	107-06-2	
1,2-Dichloropropane	**<0.28**	ug/L	1.0	0.28	1		10/05/20 11:45	78-87-5	
2-Butanone (MEK)	**<2.9**	ug/L	20.0	2.9	1		10/05/20 11:45	78-93-3	
2-Hexanone	**<5.2**	ug/L	17.4	5.2	1		10/05/20 11:45	591-78-6	
4-Methyl-2-pentanone (MIBK)	**<4.6**	ug/L	15.5	4.6	1		10/05/20 11:45	108-10-1	
Acetone	**<2.7**	ug/L	20.0	2.7	1		10/05/20 11:45	67-64-1	
Benzene	**<0.25**	ug/L	1.0	0.25	1		10/05/20 11:45	71-43-2	
Bromodichloromethane	**<0.36**	ug/L	1.2	0.36	1		10/05/20 11:45	75-27-4	
Bromoform	**<4.0**	ug/L	13.2	4.0	1		10/05/20 11:45	75-25-2	
Bromomethane	**<0.97**	ug/L	5.0	0.97	1		10/05/20 11:45	74-83-9	
Carbon disulfide	**<0.45**	ug/L	1.5	0.45	1		10/05/20 11:45	75-15-0	
Carbon tetrachloride	**<1.1**	ug/L	3.6	1.1	1		10/05/20 11:45	56-23-5	
Chlorobenzene	**<0.71**	ug/L	2.4	0.71	1		10/05/20 11:45	108-90-7	
Chloroethane	**<1.3**	ug/L	5.0	1.3	1		10/05/20 11:45	75-00-3	
Chloroform	**<1.3**	ug/L	5.0	1.3	1		10/05/20 11:45	67-66-3	
Chloromethane	**<2.2**	ug/L	7.3	2.2	1		10/05/20 11:45	74-87-3	
Dibromochloromethane	**<2.6**	ug/L	8.7	2.6	1		10/05/20 11:45	124-48-1	
Ethylbenzene	**<0.32**	ug/L	1.1	0.32	1		10/05/20 11:45	100-41-4	
Methylene Chloride	**<0.58**	ug/L	5.0	0.58	1		10/05/20 11:45	75-09-2	
Styrene	**<3.0**	ug/L	10.0	3.0	1		10/05/20 11:45	100-42-5	
Tetrachloroethene	**<0.33**	ug/L	1.1	0.33	1		10/05/20 11:45	127-18-4	
Toluene	**<0.27**	ug/L	1.0	0.27	1		10/05/20 11:45	108-88-3	
Trichloroethene	**<0.26**	ug/L	1.0	0.26	1		10/05/20 11:45	79-01-6	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		10/05/20 11:45	75-01-4	
Xylene (Total)	**<1.5**	ug/L	3.0	1.5	1		10/05/20 11:45	1330-20-7	
cis-1,2-Dichloroethene	**<0.27**	ug/L	1.0	0.27	1		10/05/20 11:45	156-59-2	
cis-1,3-Dichloropropene	**<3.6**	ug/L	12.1	3.6	1		10/05/20 11:45	10061-01-5	
trans-1,2-Dichloroethene	**<0.46**	ug/L	1.5	0.46	1		10/05/20 11:45	156-60-5	
trans-1,3-Dichloropropene	**<4.4**	ug/L	14.6	4.4	1		10/05/20 11:45	10061-02-6	
Surrogates									
4-Bromofluorobenzene (S)	97	%	70-130		1		10/05/20 11:45	460-00-4	
Dibromofluoromethane (S)	96	%	70-130		1		10/05/20 11:45	1868-53-7	
Toluene-d8 (S)	97	%	70-130		1		10/05/20 11:45	2037-26-5	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: 376175.0 PH 4 LEMBERGER LF - R
Pace Project No.: 40215656

Sample: GR-26 **Lab ID: 40215656002** Collected: 09/29/20 14:42 Received: 10/01/20 07:00 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	**<0.24**	ug/L	1.0	0.24	1		10/05/20 12:06	71-55-6	
1,1,2,2-Tetrachloroethane	**<0.28**	ug/L	1.0	0.28	1		10/05/20 12:06	79-34-5	
1,1,2-Trichloroethane	**<0.55**	ug/L	5.0	0.55	1		10/05/20 12:06	79-00-5	
1,1-Dichloroethane	**<0.27**	ug/L	1.0	0.27	1		10/05/20 12:06	75-34-3	
1,1-Dichloroethene	**<0.24**	ug/L	1.0	0.24	1		10/05/20 12:06	75-35-4	
1,2-Dichloroethane	**<0.28**	ug/L	1.0	0.28	1		10/05/20 12:06	107-06-2	
1,2-Dichloropropane	**<0.28**	ug/L	1.0	0.28	1		10/05/20 12:06	78-87-5	
2-Butanone (MEK)	**<2.9**	ug/L	20.0	2.9	1		10/05/20 12:06	78-93-3	
2-Hexanone	**<5.2**	ug/L	17.4	5.2	1		10/05/20 12:06	591-78-6	
4-Methyl-2-pentanone (MIBK)	**<4.6**	ug/L	15.5	4.6	1		10/05/20 12:06	108-10-1	
Acetone	**<2.7**	ug/L	20.0	2.7	1		10/05/20 12:06	67-64-1	
Benzene	**<0.25**	ug/L	1.0	0.25	1		10/05/20 12:06	71-43-2	
Bromodichloromethane	**<0.36**	ug/L	1.2	0.36	1		10/05/20 12:06	75-27-4	
Bromoform	**<4.0**	ug/L	13.2	4.0	1		10/05/20 12:06	75-25-2	
Bromomethane	**<0.97**	ug/L	5.0	0.97	1		10/05/20 12:06	74-83-9	
Carbon disulfide	**<0.45**	ug/L	1.5	0.45	1		10/05/20 12:06	75-15-0	
Carbon tetrachloride	**<1.1**	ug/L	3.6	1.1	1		10/05/20 12:06	56-23-5	
Chlorobenzene	**<0.71**	ug/L	2.4	0.71	1		10/05/20 12:06	108-90-7	
Chloroethane	**<1.3**	ug/L	5.0	1.3	1		10/05/20 12:06	75-00-3	
Chloroform	**<1.3**	ug/L	5.0	1.3	1		10/05/20 12:06	67-66-3	
Chloromethane	**<2.2**	ug/L	7.3	2.2	1		10/05/20 12:06	74-87-3	
Dibromochloromethane	**<2.6**	ug/L	8.7	2.6	1		10/05/20 12:06	124-48-1	
Ethylbenzene	**<0.32**	ug/L	1.1	0.32	1		10/05/20 12:06	100-41-4	
Methylene Chloride	**<0.58**	ug/L	5.0	0.58	1		10/05/20 12:06	75-09-2	
Styrene	**<3.0**	ug/L	10.0	3.0	1		10/05/20 12:06	100-42-5	
Tetrachloroethene	**<0.33**	ug/L	1.1	0.33	1		10/05/20 12:06	127-18-4	
Toluene	**<0.27**	ug/L	1.0	0.27	1		10/05/20 12:06	108-88-3	
Trichloroethene	**<0.26**	ug/L	1.0	0.26	1		10/05/20 12:06	79-01-6	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		10/05/20 12:06	75-01-4	
Xylene (Total)	**<1.5**	ug/L	3.0	1.5	1		10/05/20 12:06	1330-20-7	
cis-1,2-Dichloroethene	**<0.27**	ug/L	1.0	0.27	1		10/05/20 12:06	156-59-2	
cis-1,3-Dichloropropene	**<3.6**	ug/L	12.1	3.6	1		10/05/20 12:06	10061-01-5	
trans-1,2-Dichloroethene	**<0.46**	ug/L	1.5	0.46	1		10/05/20 12:06	156-60-5	
trans-1,3-Dichloropropene	**<4.4**	ug/L	14.6	4.4	1		10/05/20 12:06	10061-02-6	
Surrogates									
4-Bromofluorobenzene (S)	97	%	70-130		1		10/05/20 12:06	460-00-4	
Dibromofluoromethane (S)	95	%	70-130		1		10/05/20 12:06	1868-53-7	
Toluene-d8 (S)	98	%	70-130		1		10/05/20 12:06	2037-26-5	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: 376175.0 PH 4 LEMBERGER LF - R
Pace Project No.: 40215656

Sample: GR-73 **Lab ID: 40215656003** Collected: 09/29/20 15:27 Received: 10/01/20 07:00 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	**<0.24**	ug/L	1.0	0.24	1		10/02/20 22:35	71-55-6	
1,1,2,2-Tetrachloroethane	**<0.28**	ug/L	1.0	0.28	1		10/02/20 22:35	79-34-5	
1,1,2-Trichloroethane	**<0.55**	ug/L	5.0	0.55	1		10/02/20 22:35	79-00-5	
1,1-Dichloroethane	**<0.27**	ug/L	1.0	0.27	1		10/02/20 22:35	75-34-3	
1,1-Dichloroethene	**<0.24**	ug/L	1.0	0.24	1		10/02/20 22:35	75-35-4	
1,2-Dichloroethane	**<0.28**	ug/L	1.0	0.28	1		10/02/20 22:35	107-06-2	
1,2-Dichloropropane	**<0.28**	ug/L	1.0	0.28	1		10/02/20 22:35	78-87-5	
2-Butanone (MEK)	**<2.9**	ug/L	20.0	2.9	1		10/02/20 22:35	78-93-3	
2-Hexanone	**<5.2**	ug/L	17.4	5.2	1		10/02/20 22:35	591-78-6	
4-Methyl-2-pentanone (MIBK)	**<4.6**	ug/L	15.5	4.6	1		10/02/20 22:35	108-10-1	
Acetone	**<2.7**	ug/L	20.0	2.7	1		10/02/20 22:35	67-64-1	
Benzene	**<0.25**	ug/L	1.0	0.25	1		10/02/20 22:35	71-43-2	
Bromodichloromethane	**<0.36**	ug/L	1.2	0.36	1		10/02/20 22:35	75-27-4	
Bromoform	**<4.0**	ug/L	13.2	4.0	1		10/02/20 22:35	75-25-2	
Bromomethane	**<0.97**	ug/L	5.0	0.97	1		10/02/20 22:35	74-83-9	
Carbon disulfide	**<0.45**	ug/L	1.5	0.45	1		10/02/20 22:35	75-15-0	
Carbon tetrachloride	**<1.1**	ug/L	3.6	1.1	1		10/02/20 22:35	56-23-5	
Chlorobenzene	**<0.71**	ug/L	2.4	0.71	1		10/02/20 22:35	108-90-7	
Chloroethane	**<1.3**	ug/L	5.0	1.3	1		10/02/20 22:35	75-00-3	
Chloroform	**<1.3**	ug/L	5.0	1.3	1		10/02/20 22:35	67-66-3	
Chloromethane	**<2.2**	ug/L	7.3	2.2	1		10/02/20 22:35	74-87-3	
Dibromochloromethane	**<2.6**	ug/L	8.7	2.6	1		10/02/20 22:35	124-48-1	
Ethylbenzene	**<0.32**	ug/L	1.1	0.32	1		10/02/20 22:35	100-41-4	
Methylene Chloride	**<0.58**	ug/L	5.0	0.58	1		10/02/20 22:35	75-09-2	
Styrene	**<3.0**	ug/L	10.0	3.0	1		10/02/20 22:35	100-42-5	
Tetrachloroethene	**<0.33**	ug/L	1.1	0.33	1		10/02/20 22:35	127-18-4	
Toluene	**<0.27**	ug/L	1.0	0.27	1		10/02/20 22:35	108-88-3	
Trichloroethene	**<0.26**	ug/L	1.0	0.26	1		10/02/20 22:35	79-01-6	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		10/02/20 22:35	75-01-4	
Xylene (Total)	**<1.5**	ug/L	3.0	1.5	1		10/02/20 22:35	1330-20-7	
cis-1,2-Dichloroethene	**<0.27**	ug/L	1.0	0.27	1		10/02/20 22:35	156-59-2	
cis-1,3-Dichloropropene	**<3.6**	ug/L	12.1	3.6	1		10/02/20 22:35	10061-01-5	
trans-1,2-Dichloroethene	**<0.46**	ug/L	1.5	0.46	1		10/02/20 22:35	156-60-5	
trans-1,3-Dichloropropene	**<4.4**	ug/L	14.6	4.4	1		10/02/20 22:35	10061-02-6	
Surrogates									
4-Bromofluorobenzene (S)	98	%	70-130		1		10/02/20 22:35	460-00-4	pH
Dibromofluoromethane (S)	96	%	70-130		1		10/02/20 22:35	1868-53-7	
Toluene-d8 (S)	99	%	70-130		1		10/02/20 22:35	2037-26-5	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: 376175.0 PH 4 LEMBERGER LF - R
Pace Project No.: 40215656

Sample: GR-13 **Lab ID: 40215656004** Collected: 09/29/20 10:20 Received: 10/01/20 07:00 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	**<0.24**	ug/L	1.0	0.24	1		10/05/20 14:13	71-55-6	
1,1,2,2-Tetrachloroethane	**<0.28**	ug/L	1.0	0.28	1		10/05/20 14:13	79-34-5	
1,1,2-Trichloroethane	**<0.55**	ug/L	5.0	0.55	1		10/05/20 14:13	79-00-5	
1,1-Dichloroethane	**0.37J**	ug/L	1.0	0.27	1		10/05/20 14:13	75-34-3	
1,1-Dichloroethene	**<0.24**	ug/L	1.0	0.24	1		10/05/20 14:13	75-35-4	
1,2-Dichloroethane	**<0.28**	ug/L	1.0	0.28	1		10/05/20 14:13	107-06-2	
1,2-Dichloropropane	**<0.28**	ug/L	1.0	0.28	1		10/05/20 14:13	78-87-5	
2-Butanone (MEK)	**<2.9**	ug/L	20.0	2.9	1		10/05/20 14:13	78-93-3	
2-Hexanone	**<5.2**	ug/L	17.4	5.2	1		10/05/20 14:13	591-78-6	
4-Methyl-2-pentanone (MIBK)	**<4.6**	ug/L	15.5	4.6	1		10/05/20 14:13	108-10-1	
Acetone	**<2.7**	ug/L	20.0	2.7	1		10/05/20 14:13	67-64-1	
Benzene	**<0.25**	ug/L	1.0	0.25	1		10/05/20 14:13	71-43-2	
Bromodichloromethane	**<0.36**	ug/L	1.2	0.36	1		10/05/20 14:13	75-27-4	
Bromoform	**<4.0**	ug/L	13.2	4.0	1		10/05/20 14:13	75-25-2	
Bromomethane	**<0.97**	ug/L	5.0	0.97	1		10/05/20 14:13	74-83-9	
Carbon disulfide	**<0.45**	ug/L	1.5	0.45	1		10/05/20 14:13	75-15-0	
Carbon tetrachloride	**<1.1**	ug/L	3.6	1.1	1		10/05/20 14:13	56-23-5	
Chlorobenzene	**<0.71**	ug/L	2.4	0.71	1		10/05/20 14:13	108-90-7	
Chloroethane	**<1.3**	ug/L	5.0	1.3	1		10/05/20 14:13	75-00-3	
Chloroform	**<1.3**	ug/L	5.0	1.3	1		10/05/20 14:13	67-66-3	
Chloromethane	**<2.2**	ug/L	7.3	2.2	1		10/05/20 14:13	74-87-3	
Dibromochloromethane	**<2.6**	ug/L	8.7	2.6	1		10/05/20 14:13	124-48-1	
Ethylbenzene	**<0.32**	ug/L	1.1	0.32	1		10/05/20 14:13	100-41-4	
Methylene Chloride	**<0.58**	ug/L	5.0	0.58	1		10/05/20 14:13	75-09-2	
Styrene	**<3.0**	ug/L	10.0	3.0	1		10/05/20 14:13	100-42-5	
Tetrachloroethene	**<0.33**	ug/L	1.1	0.33	1		10/05/20 14:13	127-18-4	
Toluene	**<0.27**	ug/L	1.0	0.27	1		10/05/20 14:13	108-88-3	
Trichloroethene	**<0.26**	ug/L	1.0	0.26	1		10/05/20 14:13	79-01-6	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		10/05/20 14:13	75-01-4	
Xylene (Total)	**<1.5**	ug/L	3.0	1.5	1		10/05/20 14:13	1330-20-7	
cis-1,2-Dichloroethene	**<0.27**	ug/L	1.0	0.27	1		10/05/20 14:13	156-59-2	
cis-1,3-Dichloropropene	**<3.6**	ug/L	12.1	3.6	1		10/05/20 14:13	10061-01-5	
trans-1,2-Dichloroethene	**<0.46**	ug/L	1.5	0.46	1		10/05/20 14:13	156-60-5	
trans-1,3-Dichloropropene	**<4.4**	ug/L	14.6	4.4	1		10/05/20 14:13	10061-02-6	
Surrogates									
4-Bromofluorobenzene (S)	98	%	70-130		1		10/05/20 14:13	460-00-4	
Dibromofluoromethane (S)	92	%	70-130		1		10/05/20 14:13	1868-53-7	
Toluene-d8 (S)	98	%	70-130		1		10/05/20 14:13	2037-26-5	

REPORT OF LABORATORY ANALYSIS

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

Project: 376175.0 PH 4 LEMBERGER LF - R
Pace Project No.: 40215656

Sample: GR-63 **Lab ID: 40215656005** Collected: 09/29/20 17:15 Received: 10/01/20 07:00 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	**<0.24**	ug/L	1.0	0.24	1		10/05/20 14:34	71-55-6	
1,1,2,2-Tetrachloroethane	**<0.28**	ug/L	1.0	0.28	1		10/05/20 14:34	79-34-5	
1,1,2-Trichloroethane	**<0.55**	ug/L	5.0	0.55	1		10/05/20 14:34	79-00-5	
1,1-Dichloroethane	**<0.27**	ug/L	1.0	0.27	1		10/05/20 14:34	75-34-3	
1,1-Dichloroethene	**<0.24**	ug/L	1.0	0.24	1		10/05/20 14:34	75-35-4	
1,2-Dichloroethane	**<0.28**	ug/L	1.0	0.28	1		10/05/20 14:34	107-06-2	
1,2-Dichloropropane	**<0.28**	ug/L	1.0	0.28	1		10/05/20 14:34	78-87-5	
2-Butanone (MEK)	**<2.9**	ug/L	20.0	2.9	1		10/05/20 14:34	78-93-3	
2-Hexanone	**<5.2**	ug/L	17.4	5.2	1		10/05/20 14:34	591-78-6	
4-Methyl-2-pentanone (MIBK)	**<4.6**	ug/L	15.5	4.6	1		10/05/20 14:34	108-10-1	
Acetone	**<2.7**	ug/L	20.0	2.7	1		10/05/20 14:34	67-64-1	
Benzene	**<0.25**	ug/L	1.0	0.25	1		10/05/20 14:34	71-43-2	
Bromodichloromethane	**<0.36**	ug/L	1.2	0.36	1		10/05/20 14:34	75-27-4	
Bromoform	**<4.0**	ug/L	13.2	4.0	1		10/05/20 14:34	75-25-2	
Bromomethane	**<0.97**	ug/L	5.0	0.97	1		10/05/20 14:34	74-83-9	
Carbon disulfide	**<0.45**	ug/L	1.5	0.45	1		10/05/20 14:34	75-15-0	
Carbon tetrachloride	**<1.1**	ug/L	3.6	1.1	1		10/05/20 14:34	56-23-5	
Chlorobenzene	**<0.71**	ug/L	2.4	0.71	1		10/05/20 14:34	108-90-7	
Chloroethane	**<1.3**	ug/L	5.0	1.3	1		10/05/20 14:34	75-00-3	
Chloroform	**<1.3**	ug/L	5.0	1.3	1		10/05/20 14:34	67-66-3	
Chloromethane	**<2.2**	ug/L	7.3	2.2	1		10/05/20 14:34	74-87-3	
Dibromochloromethane	**<2.6**	ug/L	8.7	2.6	1		10/05/20 14:34	124-48-1	
Ethylbenzene	**<0.32**	ug/L	1.1	0.32	1		10/05/20 14:34	100-41-4	
Methylene Chloride	**<0.58**	ug/L	5.0	0.58	1		10/05/20 14:34	75-09-2	
Styrene	**<3.0**	ug/L	10.0	3.0	1		10/05/20 14:34	100-42-5	
Tetrachloroethene	**<0.33**	ug/L	1.1	0.33	1		10/05/20 14:34	127-18-4	
Toluene	**<0.27**	ug/L	1.0	0.27	1		10/05/20 14:34	108-88-3	
Trichloroethene	**<0.26**	ug/L	1.0	0.26	1		10/05/20 14:34	79-01-6	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		10/05/20 14:34	75-01-4	
Xylene (Total)	**<1.5**	ug/L	3.0	1.5	1		10/05/20 14:34	1330-20-7	
cis-1,2-Dichloroethene	**<0.27**	ug/L	1.0	0.27	1		10/05/20 14:34	156-59-2	
cis-1,3-Dichloropropene	**<3.6**	ug/L	12.1	3.6	1		10/05/20 14:34	10061-01-5	
trans-1,2-Dichloroethene	**<0.46**	ug/L	1.5	0.46	1		10/05/20 14:34	156-60-5	
trans-1,3-Dichloropropene	**<4.4**	ug/L	14.6	4.4	1		10/05/20 14:34	10061-02-6	
Surrogates									
4-Bromofluorobenzene (S)	96	%	70-130		1		10/05/20 14:34	460-00-4	
Dibromofluoromethane (S)	94	%	70-130		1		10/05/20 14:34	1868-53-7	
Toluene-d8 (S)	98	%	70-130		1		10/05/20 14:34	2037-26-5	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: 376175.0 PH 4 LEMBERGER LF - R
Pace Project No.: 40215656

Sample: GR-FDUP-001 **Lab ID: 40215656006** Collected: 09/29/20 00:00 Received: 10/01/20 07:00 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	**<0.24**	ug/L	1.0	0.24	1		10/03/20 03:24	71-55-6	
1,1,2,2-Tetrachloroethane	**<0.28**	ug/L	1.0	0.28	1		10/03/20 03:24	79-34-5	
1,1,2-Trichloroethane	**<0.55**	ug/L	5.0	0.55	1		10/03/20 03:24	79-00-5	
1,1-Dichloroethane	**<0.27**	ug/L	1.0	0.27	1		10/03/20 03:24	75-34-3	
1,1-Dichloroethene	**<0.24**	ug/L	1.0	0.24	1		10/03/20 03:24	75-35-4	
1,2-Dichloroethane	**<0.28**	ug/L	1.0	0.28	1		10/03/20 03:24	107-06-2	
1,2-Dichloropropane	**<0.28**	ug/L	1.0	0.28	1		10/03/20 03:24	78-87-5	
2-Butanone (MEK)	**<2.9**	ug/L	20.0	2.9	1		10/03/20 03:24	78-93-3	
2-Hexanone	**<5.2**	ug/L	17.4	5.2	1		10/03/20 03:24	591-78-6	
4-Methyl-2-pentanone (MIBK)	**<4.6**	ug/L	15.5	4.6	1		10/03/20 03:24	108-10-1	
Acetone	**<2.7**	ug/L	20.0	2.7	1		10/03/20 03:24	67-64-1	
Benzene	**<0.25**	ug/L	1.0	0.25	1		10/03/20 03:24	71-43-2	
Bromodichloromethane	**<0.36**	ug/L	1.2	0.36	1		10/03/20 03:24	75-27-4	
Bromoform	**<4.0**	ug/L	13.2	4.0	1		10/03/20 03:24	75-25-2	
Bromomethane	**<0.97**	ug/L	5.0	0.97	1		10/03/20 03:24	74-83-9	
Carbon disulfide	**<0.45**	ug/L	1.5	0.45	1		10/03/20 03:24	75-15-0	
Carbon tetrachloride	**<1.1**	ug/L	3.6	1.1	1		10/03/20 03:24	56-23-5	
Chlorobenzene	**<0.71**	ug/L	2.4	0.71	1		10/03/20 03:24	108-90-7	
Chloroethane	**<1.3**	ug/L	5.0	1.3	1		10/03/20 03:24	75-00-3	
Chloroform	**<1.3**	ug/L	5.0	1.3	1		10/03/20 03:24	67-66-3	
Chloromethane	**<2.2**	ug/L	7.3	2.2	1		10/03/20 03:24	74-87-3	
Dibromochloromethane	**<2.6**	ug/L	8.7	2.6	1		10/03/20 03:24	124-48-1	
Ethylbenzene	**<0.32**	ug/L	1.1	0.32	1		10/03/20 03:24	100-41-4	
Methylene Chloride	**<0.58**	ug/L	5.0	0.58	1		10/03/20 03:24	75-09-2	
Styrene	**<3.0**	ug/L	10.0	3.0	1		10/03/20 03:24	100-42-5	
Tetrachloroethene	**<0.33**	ug/L	1.1	0.33	1		10/03/20 03:24	127-18-4	
Toluene	**<0.27**	ug/L	1.0	0.27	1		10/03/20 03:24	108-88-3	
Trichloroethene	**<0.26**	ug/L	1.0	0.26	1		10/03/20 03:24	79-01-6	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		10/03/20 03:24	75-01-4	
Xylene (Total)	**<1.5**	ug/L	3.0	1.5	1		10/03/20 03:24	1330-20-7	
cis-1,2-Dichloroethene	**<0.27**	ug/L	1.0	0.27	1		10/03/20 03:24	156-59-2	
cis-1,3-Dichloropropene	**<3.6**	ug/L	12.1	3.6	1		10/03/20 03:24	10061-01-5	
trans-1,2-Dichloroethene	**<0.46**	ug/L	1.5	0.46	1		10/03/20 03:24	156-60-5	
trans-1,3-Dichloropropene	**<4.4**	ug/L	14.6	4.4	1		10/03/20 03:24	10061-02-6	
Surrogates									
4-Bromofluorobenzene (S)	98	%	70-130		1		10/03/20 03:24	460-00-4	pH
Dibromofluoromethane (S)	96	%	70-130		1		10/03/20 03:24	1868-53-7	
Toluene-d8 (S)	99	%	70-130		1		10/03/20 03:24	2037-26-5	

REPORT OF LABORATORY ANALYSIS

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

QUALIFIERS

Project: 376175.0 PH 4 LEMBERGER LF - R
Pace Project No.: 40215656

DEFINITIONS

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

ND - Not Detected at or above LOD.

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

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

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

pH Post-analysis pH measurement indicates insufficient VOA sample preservation.

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

Project: 376175.0 PH4 LEMBERGER LF - RE
Pace Project No.: 40215657

Sample: GR-65 **Lab ID: 40215657001** Collected: 09/30/20 11:40 Received: 10/01/20 07:00 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	**<0.24**	ug/L	1.0	0.24	1		10/02/20 23:28	71-55-6	
1,1,2,2-Tetrachloroethane	**<0.28**	ug/L	1.0	0.28	1		10/02/20 23:28	79-34-5	
1,1,2-Trichloroethane	**<0.55**	ug/L	5.0	0.55	1		10/02/20 23:28	79-00-5	
1,1-Dichloroethane	**<0.27**	ug/L	1.0	0.27	1		10/02/20 23:28	75-34-3	
1,1-Dichloroethene	**<0.24**	ug/L	1.0	0.24	1		10/02/20 23:28	75-35-4	
1,2-Dichloroethane	**<0.28**	ug/L	1.0	0.28	1		10/02/20 23:28	107-06-2	
1,2-Dichloropropane	**<0.28**	ug/L	1.0	0.28	1		10/02/20 23:28	78-87-5	
2-Butanone (MEK)	**<2.9**	ug/L	20.0	2.9	1		10/02/20 23:28	78-93-3	
2-Hexanone	**<5.2**	ug/L	17.4	5.2	1		10/02/20 23:28	591-78-6	
4-Methyl-2-pentanone (MIBK)	**<4.6**	ug/L	15.5	4.6	1		10/02/20 23:28	108-10-1	
Acetone	**<2.7**	ug/L	20.0	2.7	1		10/02/20 23:28	67-64-1	
Benzene	**<0.25**	ug/L	1.0	0.25	1		10/02/20 23:28	71-43-2	
Bromodichloromethane	**<0.36**	ug/L	1.2	0.36	1		10/02/20 23:28	75-27-4	
Bromoform	**<4.0**	ug/L	13.2	4.0	1		10/02/20 23:28	75-25-2	
Bromomethane	**<0.97**	ug/L	5.0	0.97	1		10/02/20 23:28	74-83-9	
Carbon disulfide	**<0.45**	ug/L	1.5	0.45	1		10/02/20 23:28	75-15-0	
Carbon tetrachloride	**<1.1**	ug/L	3.6	1.1	1		10/02/20 23:28	56-23-5	
Chlorobenzene	**<0.71**	ug/L	2.4	0.71	1		10/02/20 23:28	108-90-7	
Chloroethane	**<1.3**	ug/L	5.0	1.3	1		10/02/20 23:28	75-00-3	
Chloroform	**<1.3**	ug/L	5.0	1.3	1		10/02/20 23:28	67-66-3	
Chloromethane	**<2.2**	ug/L	7.3	2.2	1		10/02/20 23:28	74-87-3	
Dibromochloromethane	**<2.6**	ug/L	8.7	2.6	1		10/02/20 23:28	124-48-1	
Ethylbenzene	**<0.32**	ug/L	1.1	0.32	1		10/02/20 23:28	100-41-4	
Methylene Chloride	**<0.58**	ug/L	5.0	0.58	1		10/02/20 23:28	75-09-2	
Styrene	**<3.0**	ug/L	10.0	3.0	1		10/02/20 23:28	100-42-5	
Tetrachloroethene	**<0.33**	ug/L	1.1	0.33	1		10/02/20 23:28	127-18-4	
Toluene	**<0.27**	ug/L	1.0	0.27	1		10/02/20 23:28	108-88-3	
Trichloroethene	**<0.26**	ug/L	1.0	0.26	1		10/02/20 23:28	79-01-6	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		10/02/20 23:28	75-01-4	
Xylene (Total)	**<1.5**	ug/L	3.0	1.5	1		10/02/20 23:28	1330-20-7	
cis-1,2-Dichloroethene	**<0.27**	ug/L	1.0	0.27	1		10/02/20 23:28	156-59-2	
cis-1,3-Dichloropropene	**<3.6**	ug/L	12.1	3.6	1		10/02/20 23:28	10061-01-5	
trans-1,2-Dichloroethene	**<0.46**	ug/L	1.5	0.46	1		10/02/20 23:28	156-60-5	
trans-1,3-Dichloropropene	**<4.4**	ug/L	14.6	4.4	1		10/02/20 23:28	10061-02-6	
Surrogates									
4-Bromofluorobenzene (S)	97	%	70-130		1		10/02/20 23:28	460-00-4	
Dibromofluoromethane (S)	96	%	70-130		1		10/02/20 23:28	1868-53-7	
Toluene-d8 (S)	99	%	70-130		1		10/02/20 23:28	2037-26-5	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: 376175.0 PH4 LEMBERGER LF - RE
Pace Project No.: 40215657

Sample: GR-12 **Lab ID: 40215657002** Collected: 09/30/20 12:12 Received: 10/01/20 07:00 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	**<0.24**	ug/L	1.0	0.24	1		10/02/20 23:49	71-55-6	
1,1,2,2-Tetrachloroethane	**<0.28**	ug/L	1.0	0.28	1		10/02/20 23:49	79-34-5	
1,1,2-Trichloroethane	**<0.55**	ug/L	5.0	0.55	1		10/02/20 23:49	79-00-5	
1,1-Dichloroethane	**<0.27**	ug/L	1.0	0.27	1		10/02/20 23:49	75-34-3	
1,1-Dichloroethene	**<0.24**	ug/L	1.0	0.24	1		10/02/20 23:49	75-35-4	
1,2-Dichloroethane	**<0.28**	ug/L	1.0	0.28	1		10/02/20 23:49	107-06-2	
1,2-Dichloropropane	**<0.28**	ug/L	1.0	0.28	1		10/02/20 23:49	78-87-5	
2-Butanone (MEK)	**<2.9**	ug/L	20.0	2.9	1		10/02/20 23:49	78-93-3	
2-Hexanone	**<5.2**	ug/L	17.4	5.2	1		10/02/20 23:49	591-78-6	
4-Methyl-2-pentanone (MIBK)	**<4.6**	ug/L	15.5	4.6	1		10/02/20 23:49	108-10-1	
Acetone	**<2.7**	ug/L	20.0	2.7	1		10/02/20 23:49	67-64-1	
Benzene	**<0.25**	ug/L	1.0	0.25	1		10/02/20 23:49	71-43-2	
Bromodichloromethane	**<0.36**	ug/L	1.2	0.36	1		10/02/20 23:49	75-27-4	
Bromoform	**<4.0**	ug/L	13.2	4.0	1		10/02/20 23:49	75-25-2	
Bromomethane	**<0.97**	ug/L	5.0	0.97	1		10/02/20 23:49	74-83-9	
Carbon disulfide	**<0.45**	ug/L	1.5	0.45	1		10/02/20 23:49	75-15-0	
Carbon tetrachloride	**<1.1**	ug/L	3.6	1.1	1		10/02/20 23:49	56-23-5	
Chlorobenzene	**<0.71**	ug/L	2.4	0.71	1		10/02/20 23:49	108-90-7	
Chloroethane	**<1.3**	ug/L	5.0	1.3	1		10/02/20 23:49	75-00-3	
Chloroform	**<1.3**	ug/L	5.0	1.3	1		10/02/20 23:49	67-66-3	
Chloromethane	**<2.2**	ug/L	7.3	2.2	1		10/02/20 23:49	74-87-3	
Dibromochloromethane	**<2.6**	ug/L	8.7	2.6	1		10/02/20 23:49	124-48-1	
Ethylbenzene	**<0.32**	ug/L	1.1	0.32	1		10/02/20 23:49	100-41-4	
Methylene Chloride	**<0.58**	ug/L	5.0	0.58	1		10/02/20 23:49	75-09-2	
Styrene	**<3.0**	ug/L	10.0	3.0	1		10/02/20 23:49	100-42-5	
Tetrachloroethene	**<0.33**	ug/L	1.1	0.33	1		10/02/20 23:49	127-18-4	
Toluene	**<0.27**	ug/L	1.0	0.27	1		10/02/20 23:49	108-88-3	
Trichloroethene	**<0.26**	ug/L	1.0	0.26	1		10/02/20 23:49	79-01-6	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		10/02/20 23:49	75-01-4	
Xylene (Total)	**<1.5**	ug/L	3.0	1.5	1		10/02/20 23:49	1330-20-7	
cis-1,2-Dichloroethene	**<0.27**	ug/L	1.0	0.27	1		10/02/20 23:49	156-59-2	
cis-1,3-Dichloropropene	**<3.6**	ug/L	12.1	3.6	1		10/02/20 23:49	10061-01-5	
trans-1,2-Dichloroethene	**<0.46**	ug/L	1.5	0.46	1		10/02/20 23:49	156-60-5	
trans-1,3-Dichloropropene	**<4.4**	ug/L	14.6	4.4	1		10/02/20 23:49	10061-02-6	
Surrogates									
4-Bromofluorobenzene (S)	97	%	70-130		1		10/02/20 23:49	460-00-4	
Dibromofluoromethane (S)	97	%	70-130		1		10/02/20 23:49	1868-53-7	
Toluene-d8 (S)	98	%	70-130		1		10/02/20 23:49	2037-26-5	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: 376175.0 PH4 LEMBERGER LF - RE
Pace Project No.: 40215657

Sample: GR-10 **Lab ID: 40215657003** Collected: 09/30/20 13:21 Received: 10/01/20 07:00 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	**<0.24**	ug/L	1.0	0.24	1		10/03/20 00:11	71-55-6	
1,1,2,2-Tetrachloroethane	**<0.28**	ug/L	1.0	0.28	1		10/03/20 00:11	79-34-5	
1,1,2-Trichloroethane	**<0.55**	ug/L	5.0	0.55	1		10/03/20 00:11	79-00-5	
1,1-Dichloroethane	**<0.27**	ug/L	1.0	0.27	1		10/03/20 00:11	75-34-3	
1,1-Dichloroethene	**<0.24**	ug/L	1.0	0.24	1		10/03/20 00:11	75-35-4	
1,2-Dichloroethane	**<0.28**	ug/L	1.0	0.28	1		10/03/20 00:11	107-06-2	
1,2-Dichloropropane	**<0.28**	ug/L	1.0	0.28	1		10/03/20 00:11	78-87-5	
2-Butanone (MEK)	**<2.9**	ug/L	20.0	2.9	1		10/03/20 00:11	78-93-3	
2-Hexanone	**<5.2**	ug/L	17.4	5.2	1		10/03/20 00:11	591-78-6	
4-Methyl-2-pentanone (MIBK)	**<4.6**	ug/L	15.5	4.6	1		10/03/20 00:11	108-10-1	
Acetone	**<2.7**	ug/L	20.0	2.7	1		10/03/20 00:11	67-64-1	
Benzene	**<0.25**	ug/L	1.0	0.25	1		10/03/20 00:11	71-43-2	
Bromodichloromethane	**<0.36**	ug/L	1.2	0.36	1		10/03/20 00:11	75-27-4	
Bromoform	**<4.0**	ug/L	13.2	4.0	1		10/03/20 00:11	75-25-2	
Bromomethane	**<0.97**	ug/L	5.0	0.97	1		10/03/20 00:11	74-83-9	
Carbon disulfide	**<0.45**	ug/L	1.5	0.45	1		10/03/20 00:11	75-15-0	
Carbon tetrachloride	**<1.1**	ug/L	3.6	1.1	1		10/03/20 00:11	56-23-5	
Chlorobenzene	**<0.71**	ug/L	2.4	0.71	1		10/03/20 00:11	108-90-7	
Chloroethane	**<1.3**	ug/L	5.0	1.3	1		10/03/20 00:11	75-00-3	
Chloroform	**<1.3**	ug/L	5.0	1.3	1		10/03/20 00:11	67-66-3	
Chloromethane	**<2.2**	ug/L	7.3	2.2	1		10/03/20 00:11	74-87-3	
Dibromochloromethane	**<2.6**	ug/L	8.7	2.6	1		10/03/20 00:11	124-48-1	
Ethylbenzene	**<0.32**	ug/L	1.1	0.32	1		10/03/20 00:11	100-41-4	
Methylene Chloride	**<0.58**	ug/L	5.0	0.58	1		10/03/20 00:11	75-09-2	
Styrene	**<3.0**	ug/L	10.0	3.0	1		10/03/20 00:11	100-42-5	
Tetrachloroethene	**<0.33**	ug/L	1.1	0.33	1		10/03/20 00:11	127-18-4	
Toluene	**<0.27**	ug/L	1.0	0.27	1		10/03/20 00:11	108-88-3	
Trichloroethene	**<0.26**	ug/L	1.0	0.26	1		10/03/20 00:11	79-01-6	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		10/03/20 00:11	75-01-4	
Xylene (Total)	**<1.5**	ug/L	3.0	1.5	1		10/03/20 00:11	1330-20-7	
cis-1,2-Dichloroethene	**<0.27**	ug/L	1.0	0.27	1		10/03/20 00:11	156-59-2	
cis-1,3-Dichloropropene	**<3.6**	ug/L	12.1	3.6	1		10/03/20 00:11	10061-01-5	
trans-1,2-Dichloroethene	**<0.46**	ug/L	1.5	0.46	1		10/03/20 00:11	156-60-5	
trans-1,3-Dichloropropene	**<4.4**	ug/L	14.6	4.4	1		10/03/20 00:11	10061-02-6	
Surrogates									
4-Bromofluorobenzene (S)	96	%	70-130		1		10/03/20 00:11	460-00-4	
Dibromofluoromethane (S)	93	%	70-130		1		10/03/20 00:11	1868-53-7	
Toluene-d8 (S)	98	%	70-130		1		10/03/20 00:11	2037-26-5	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: 376175.0 PH4 LEMBERGER LF - RE
Pace Project No.: 40215657

Sample: GR-62 **Lab ID: 40215657004** Collected: 09/30/20 13:57 Received: 10/01/20 07:00 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	**<0.24**	ug/L	1.0	0.24	1		10/03/20 00:32	71-55-6	
1,1,2,2-Tetrachloroethane	**<0.28**	ug/L	1.0	0.28	1		10/03/20 00:32	79-34-5	
1,1,2-Trichloroethane	**<0.55**	ug/L	5.0	0.55	1		10/03/20 00:32	79-00-5	
1,1-Dichloroethane	**<0.27**	ug/L	1.0	0.27	1		10/03/20 00:32	75-34-3	
1,1-Dichloroethene	**<0.24**	ug/L	1.0	0.24	1		10/03/20 00:32	75-35-4	
1,2-Dichloroethane	**<0.28**	ug/L	1.0	0.28	1		10/03/20 00:32	107-06-2	
1,2-Dichloropropane	**<0.28**	ug/L	1.0	0.28	1		10/03/20 00:32	78-87-5	
2-Butanone (MEK)	**<2.9**	ug/L	20.0	2.9	1		10/03/20 00:32	78-93-3	
2-Hexanone	**<5.2**	ug/L	17.4	5.2	1		10/03/20 00:32	591-78-6	
4-Methyl-2-pentanone (MIBK)	**<4.6**	ug/L	15.5	4.6	1		10/03/20 00:32	108-10-1	
Acetone	**<2.7**	ug/L	20.0	2.7	1		10/03/20 00:32	67-64-1	
Benzene	**<0.25**	ug/L	1.0	0.25	1		10/03/20 00:32	71-43-2	
Bromodichloromethane	**<0.36**	ug/L	1.2	0.36	1		10/03/20 00:32	75-27-4	
Bromoform	**<4.0**	ug/L	13.2	4.0	1		10/03/20 00:32	75-25-2	
Bromomethane	**<0.97**	ug/L	5.0	0.97	1		10/03/20 00:32	74-83-9	
Carbon disulfide	**<0.45**	ug/L	1.5	0.45	1		10/03/20 00:32	75-15-0	
Carbon tetrachloride	**<1.1**	ug/L	3.6	1.1	1		10/03/20 00:32	56-23-5	
Chlorobenzene	**<0.71**	ug/L	2.4	0.71	1		10/03/20 00:32	108-90-7	
Chloroethane	**<1.3**	ug/L	5.0	1.3	1		10/03/20 00:32	75-00-3	
Chloroform	**<1.3**	ug/L	5.0	1.3	1		10/03/20 00:32	67-66-3	
Chloromethane	**<2.2**	ug/L	7.3	2.2	1		10/03/20 00:32	74-87-3	
Dibromochloromethane	**<2.6**	ug/L	8.7	2.6	1		10/03/20 00:32	124-48-1	
Ethylbenzene	**<0.32**	ug/L	1.1	0.32	1		10/03/20 00:32	100-41-4	
Methylene Chloride	**<0.58**	ug/L	5.0	0.58	1		10/03/20 00:32	75-09-2	
Styrene	**<3.0**	ug/L	10.0	3.0	1		10/03/20 00:32	100-42-5	
Tetrachloroethene	**<0.33**	ug/L	1.1	0.33	1		10/03/20 00:32	127-18-4	
Toluene	**<0.27**	ug/L	1.0	0.27	1		10/03/20 00:32	108-88-3	
Trichloroethene	**<0.26**	ug/L	1.0	0.26	1		10/03/20 00:32	79-01-6	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		10/03/20 00:32	75-01-4	
Xylene (Total)	**<1.5**	ug/L	3.0	1.5	1		10/03/20 00:32	1330-20-7	
cis-1,2-Dichloroethene	**<0.27**	ug/L	1.0	0.27	1		10/03/20 00:32	156-59-2	
cis-1,3-Dichloropropene	**<3.6**	ug/L	12.1	3.6	1		10/03/20 00:32	10061-01-5	
trans-1,2-Dichloroethene	**<0.46**	ug/L	1.5	0.46	1		10/03/20 00:32	156-60-5	
trans-1,3-Dichloropropene	**<4.4**	ug/L	14.6	4.4	1		10/03/20 00:32	10061-02-6	
Surrogates									
4-Bromofluorobenzene (S)	98	%	70-130		1		10/03/20 00:32	460-00-4	
Dibromofluoromethane (S)	95	%	70-130		1		10/03/20 00:32	1868-53-7	
Toluene-d8 (S)	99	%	70-130		1		10/03/20 00:32	2037-26-5	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: 376175.0 PH4 LEMBERGER LF - RE
Pace Project No.: 40215657

Sample: GR-08 **Lab ID: 40215657005** Collected: 09/30/20 14:30 Received: 10/01/20 07:00 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	**<0.24**	ug/L	1.0	0.24	1		10/03/20 00:54	71-55-6	
1,1,2,2-Tetrachloroethane	**<0.28**	ug/L	1.0	0.28	1		10/03/20 00:54	79-34-5	
1,1,2-Trichloroethane	**<0.55**	ug/L	5.0	0.55	1		10/03/20 00:54	79-00-5	
1,1-Dichloroethane	**<0.27**	ug/L	1.0	0.27	1		10/03/20 00:54	75-34-3	
1,1-Dichloroethene	**<0.24**	ug/L	1.0	0.24	1		10/03/20 00:54	75-35-4	
1,2-Dichloroethane	**<0.28**	ug/L	1.0	0.28	1		10/03/20 00:54	107-06-2	
1,2-Dichloropropane	**<0.28**	ug/L	1.0	0.28	1		10/03/20 00:54	78-87-5	
2-Butanone (MEK)	**<2.9**	ug/L	20.0	2.9	1		10/03/20 00:54	78-93-3	
2-Hexanone	**<5.2**	ug/L	17.4	5.2	1		10/03/20 00:54	591-78-6	
4-Methyl-2-pentanone (MIBK)	**<4.6**	ug/L	15.5	4.6	1		10/03/20 00:54	108-10-1	
Acetone	**<2.7**	ug/L	20.0	2.7	1		10/03/20 00:54	67-64-1	
Benzene	**<0.25**	ug/L	1.0	0.25	1		10/03/20 00:54	71-43-2	
Bromodichloromethane	**<0.36**	ug/L	1.2	0.36	1		10/03/20 00:54	75-27-4	
Bromoform	**<4.0**	ug/L	13.2	4.0	1		10/03/20 00:54	75-25-2	
Bromomethane	**<0.97**	ug/L	5.0	0.97	1		10/03/20 00:54	74-83-9	
Carbon disulfide	**<0.45**	ug/L	1.5	0.45	1		10/03/20 00:54	75-15-0	
Carbon tetrachloride	**<1.1**	ug/L	3.6	1.1	1		10/03/20 00:54	56-23-5	
Chlorobenzene	**<0.71**	ug/L	2.4	0.71	1		10/03/20 00:54	108-90-7	
Chloroethane	**<1.3**	ug/L	5.0	1.3	1		10/03/20 00:54	75-00-3	
Chloroform	**<1.3**	ug/L	5.0	1.3	1		10/03/20 00:54	67-66-3	
Chloromethane	**<2.2**	ug/L	7.3	2.2	1		10/03/20 00:54	74-87-3	
Dibromochloromethane	**<2.6**	ug/L	8.7	2.6	1		10/03/20 00:54	124-48-1	
Ethylbenzene	**<0.32**	ug/L	1.1	0.32	1		10/03/20 00:54	100-41-4	
Methylene Chloride	**<0.58**	ug/L	5.0	0.58	1		10/03/20 00:54	75-09-2	
Styrene	**<3.0**	ug/L	10.0	3.0	1		10/03/20 00:54	100-42-5	
Tetrachloroethene	**<0.33**	ug/L	1.1	0.33	1		10/03/20 00:54	127-18-4	
Toluene	**<0.27**	ug/L	1.0	0.27	1		10/03/20 00:54	108-88-3	
Trichloroethene	**<0.26**	ug/L	1.0	0.26	1		10/03/20 00:54	79-01-6	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		10/03/20 00:54	75-01-4	
Xylene (Total)	**<1.5**	ug/L	3.0	1.5	1		10/03/20 00:54	1330-20-7	
cis-1,2-Dichloroethene	**<0.27**	ug/L	1.0	0.27	1		10/03/20 00:54	156-59-2	
cis-1,3-Dichloropropene	**<3.6**	ug/L	12.1	3.6	1		10/03/20 00:54	10061-01-5	
trans-1,2-Dichloroethene	**<0.46**	ug/L	1.5	0.46	1		10/03/20 00:54	156-60-5	
trans-1,3-Dichloropropene	**<4.4**	ug/L	14.6	4.4	1		10/03/20 00:54	10061-02-6	
Surrogates									
4-Bromofluorobenzene (S)	98	%	70-130		1		10/03/20 00:54	460-00-4	
Dibromofluoromethane (S)	98	%	70-130		1		10/03/20 00:54	1868-53-7	
Toluene-d8 (S)	100	%	70-130		1		10/03/20 00:54	2037-26-5	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: 376175.0 PH4 LEMBERGER LF - RE
Pace Project No.: 40215657

Sample: GR-09 **Lab ID: 40215657006** Collected: 09/30/20 15:09 Received: 10/01/20 07:00 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	**<0.24**	ug/L	1.0	0.24	1		10/03/20 01:15	71-55-6	
1,1,2,2-Tetrachloroethane	**<0.28**	ug/L	1.0	0.28	1		10/03/20 01:15	79-34-5	
1,1,2-Trichloroethane	**<0.55**	ug/L	5.0	0.55	1		10/03/20 01:15	79-00-5	
1,1-Dichloroethane	**<0.27**	ug/L	1.0	0.27	1		10/03/20 01:15	75-34-3	
1,1-Dichloroethene	**<0.24**	ug/L	1.0	0.24	1		10/03/20 01:15	75-35-4	
1,2-Dichloroethane	**<0.28**	ug/L	1.0	0.28	1		10/03/20 01:15	107-06-2	
1,2-Dichloropropane	**<0.28**	ug/L	1.0	0.28	1		10/03/20 01:15	78-87-5	
2-Butanone (MEK)	**<2.9**	ug/L	20.0	2.9	1		10/03/20 01:15	78-93-3	
2-Hexanone	**<5.2**	ug/L	17.4	5.2	1		10/03/20 01:15	591-78-6	
4-Methyl-2-pentanone (MIBK)	**<4.6**	ug/L	15.5	4.6	1		10/03/20 01:15	108-10-1	
Acetone	**<2.7**	ug/L	20.0	2.7	1		10/03/20 01:15	67-64-1	
Benzene	**<0.25**	ug/L	1.0	0.25	1		10/03/20 01:15	71-43-2	
Bromodichloromethane	**<0.36**	ug/L	1.2	0.36	1		10/03/20 01:15	75-27-4	
Bromoform	**<4.0**	ug/L	13.2	4.0	1		10/03/20 01:15	75-25-2	
Bromomethane	**<0.97**	ug/L	5.0	0.97	1		10/03/20 01:15	74-83-9	
Carbon disulfide	**<0.45**	ug/L	1.5	0.45	1		10/03/20 01:15	75-15-0	
Carbon tetrachloride	**<1.1**	ug/L	3.6	1.1	1		10/03/20 01:15	56-23-5	
Chlorobenzene	**<0.71**	ug/L	2.4	0.71	1		10/03/20 01:15	108-90-7	
Chloroethane	**<1.3**	ug/L	5.0	1.3	1		10/03/20 01:15	75-00-3	
Chloroform	**<1.3**	ug/L	5.0	1.3	1		10/03/20 01:15	67-66-3	
Chloromethane	**<2.2**	ug/L	7.3	2.2	1		10/03/20 01:15	74-87-3	
Dibromochloromethane	**<2.6**	ug/L	8.7	2.6	1		10/03/20 01:15	124-48-1	
Ethylbenzene	**<0.32**	ug/L	1.1	0.32	1		10/03/20 01:15	100-41-4	
Methylene Chloride	**<0.58**	ug/L	5.0	0.58	1		10/03/20 01:15	75-09-2	
Styrene	**<3.0**	ug/L	10.0	3.0	1		10/03/20 01:15	100-42-5	
Tetrachloroethene	**<0.33**	ug/L	1.1	0.33	1		10/03/20 01:15	127-18-4	
Toluene	**<0.27**	ug/L	1.0	0.27	1		10/03/20 01:15	108-88-3	
Trichloroethene	**<0.26**	ug/L	1.0	0.26	1		10/03/20 01:15	79-01-6	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		10/03/20 01:15	75-01-4	
Xylene (Total)	**<1.5**	ug/L	3.0	1.5	1		10/03/20 01:15	1330-20-7	
cis-1,2-Dichloroethene	**<0.27**	ug/L	1.0	0.27	1		10/03/20 01:15	156-59-2	
cis-1,3-Dichloropropene	**<3.6**	ug/L	12.1	3.6	1		10/03/20 01:15	10061-01-5	
trans-1,2-Dichloroethene	**<0.46**	ug/L	1.5	0.46	1		10/03/20 01:15	156-60-5	
trans-1,3-Dichloropropene	**<4.4**	ug/L	14.6	4.4	1		10/03/20 01:15	10061-02-6	
Surrogates									
4-Bromofluorobenzene (S)	96	%	70-130		1		10/03/20 01:15	460-00-4	
Dibromofluoromethane (S)	98	%	70-130		1		10/03/20 01:15	1868-53-7	
Toluene-d8 (S)	98	%	70-130		1		10/03/20 01:15	2037-26-5	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: 376175.0 PH4 LEMBERGER LF - RE
Pace Project No.: 40215657

Sample: GR-64 **Lab ID: 40215657007** Collected: 09/30/20 17:16 Received: 10/01/20 07:00 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	**<0.24**	ug/L	1.0	0.24	1		10/02/20 23:06	71-55-6	
1,1,2,2-Tetrachloroethane	**<0.28**	ug/L	1.0	0.28	1		10/02/20 23:06	79-34-5	
1,1,2-Trichloroethane	**<0.55**	ug/L	5.0	0.55	1		10/02/20 23:06	79-00-5	
1,1-Dichloroethane	**<0.27**	ug/L	1.0	0.27	1		10/02/20 23:06	75-34-3	
1,1-Dichloroethene	**<0.24**	ug/L	1.0	0.24	1		10/02/20 23:06	75-35-4	
1,2-Dichloroethane	**<0.28**	ug/L	1.0	0.28	1		10/02/20 23:06	107-06-2	
1,2-Dichloropropane	**<0.28**	ug/L	1.0	0.28	1		10/02/20 23:06	78-87-5	
2-Butanone (MEK)	**<2.9**	ug/L	20.0	2.9	1		10/02/20 23:06	78-93-3	
2-Hexanone	**<5.2**	ug/L	17.4	5.2	1		10/02/20 23:06	591-78-6	
4-Methyl-2-pentanone (MIBK)	**<4.6**	ug/L	15.5	4.6	1		10/02/20 23:06	108-10-1	
Acetone	**<2.7**	ug/L	20.0	2.7	1		10/02/20 23:06	67-64-1	
Benzene	**<0.25**	ug/L	1.0	0.25	1		10/02/20 23:06	71-43-2	
Bromodichloromethane	**<0.36**	ug/L	1.2	0.36	1		10/02/20 23:06	75-27-4	
Bromoform	**<4.0**	ug/L	13.2	4.0	1		10/02/20 23:06	75-25-2	
Bromomethane	**<0.97**	ug/L	5.0	0.97	1		10/02/20 23:06	74-83-9	
Carbon disulfide	**<0.45**	ug/L	1.5	0.45	1		10/02/20 23:06	75-15-0	
Carbon tetrachloride	**<1.1**	ug/L	3.6	1.1	1		10/02/20 23:06	56-23-5	
Chlorobenzene	**<0.71**	ug/L	2.4	0.71	1		10/02/20 23:06	108-90-7	
Chloroethane	**<1.3**	ug/L	5.0	1.3	1		10/02/20 23:06	75-00-3	
Chloroform	**<1.3**	ug/L	5.0	1.3	1		10/02/20 23:06	67-66-3	
Chloromethane	**<2.2**	ug/L	7.3	2.2	1		10/02/20 23:06	74-87-3	
Dibromochloromethane	**<2.6**	ug/L	8.7	2.6	1		10/02/20 23:06	124-48-1	
Ethylbenzene	**<0.32**	ug/L	1.1	0.32	1		10/02/20 23:06	100-41-4	
Methylene Chloride	**<0.58**	ug/L	5.0	0.58	1		10/02/20 23:06	75-09-2	
Styrene	**<3.0**	ug/L	10.0	3.0	1		10/02/20 23:06	100-42-5	
Tetrachloroethene	**<0.33**	ug/L	1.1	0.33	1		10/02/20 23:06	127-18-4	
Toluene	**<0.27**	ug/L	1.0	0.27	1		10/02/20 23:06	108-88-3	
Trichloroethene	**<0.26**	ug/L	1.0	0.26	1		10/02/20 23:06	79-01-6	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		10/02/20 23:06	75-01-4	
Xylene (Total)	**<1.5**	ug/L	3.0	1.5	1		10/02/20 23:06	1330-20-7	
cis-1,2-Dichloroethene	**<0.27**	ug/L	1.0	0.27	1		10/02/20 23:06	156-59-2	
cis-1,3-Dichloropropene	**<3.6**	ug/L	12.1	3.6	1		10/02/20 23:06	10061-01-5	
trans-1,2-Dichloroethene	**<0.46**	ug/L	1.5	0.46	1		10/02/20 23:06	156-60-5	
trans-1,3-Dichloropropene	**<4.4**	ug/L	14.6	4.4	1		10/02/20 23:06	10061-02-6	
Surrogates									
4-Bromofluorobenzene (S)	99	%	70-130		1		10/02/20 23:06	460-00-4	
Dibromofluoromethane (S)	97	%	70-130		1		10/02/20 23:06	1868-53-7	
Toluene-d8 (S)	99	%	70-130		1		10/02/20 23:06	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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QUALIFIERS

Project: 376175.0 PH4 LEMBERGER LF - RE
Pace Project No.: 40215657

DEFINITIONS

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

ND - Not Detected at or above LOD.

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

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

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

TNI - The NELAC Institute.

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ANALYTICAL RESULTS

Project: 376175 P4 LEMBERGER LF RES
Pace Project No.: 40216881

Sample: GR-66 **Lab ID: 40216881001** Collected: 10/18/20 11:29 Received: 10/21/20 07:30 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	**<0.24**	ug/L	1.0	0.24	1		10/25/20 09:31	71-55-6	
1,1,2,2-Tetrachloroethane	**<0.28**	ug/L	1.0	0.28	1		10/25/20 09:31	79-34-5	
1,1,2-Trichloroethane	**<0.55**	ug/L	5.0	0.55	1		10/25/20 09:31	79-00-5	
1,1-Dichloroethane	**<0.27**	ug/L	1.0	0.27	1		10/25/20 09:31	75-34-3	
1,1-Dichloroethene	**<0.24**	ug/L	1.0	0.24	1		10/25/20 09:31	75-35-4	
1,2-Dichloroethane	**<0.28**	ug/L	1.0	0.28	1		10/25/20 09:31	107-06-2	
1,2-Dichloropropane	**<0.28**	ug/L	1.0	0.28	1		10/25/20 09:31	78-87-5	
2-Butanone (MEK)	**<2.9**	ug/L	20.0	2.9	1		10/25/20 09:31	78-93-3	
2-Hexanone	**<5.2**	ug/L	17.4	5.2	1		10/25/20 09:31	591-78-6	
4-Methyl-2-pentanone (MIBK)	**<4.6**	ug/L	15.5	4.6	1		10/25/20 09:31	108-10-1	
Acetone	**<2.7**	ug/L	20.0	2.7	1		10/25/20 09:31	67-64-1	
Benzene	**<0.25**	ug/L	1.0	0.25	1		10/25/20 09:31	71-43-2	
Bromodichloromethane	**<0.36**	ug/L	1.2	0.36	1		10/25/20 09:31	75-27-4	
Bromoform	**<4.0**	ug/L	13.2	4.0	1		10/25/20 09:31	75-25-2	
Bromomethane	**<0.97**	ug/L	5.0	0.97	1		10/25/20 09:31	74-83-9	
Carbon disulfide	**<0.45**	ug/L	1.5	0.45	1		10/25/20 09:31	75-15-0	
Carbon tetrachloride	**<1.1**	ug/L	3.6	1.1	1		10/25/20 09:31	56-23-5	
Chlorobenzene	**<0.71**	ug/L	2.4	0.71	1		10/25/20 09:31	108-90-7	
Chloroethane	**<1.3**	ug/L	5.0	1.3	1		10/25/20 09:31	75-00-3	
Chloroform	**<1.3**	ug/L	5.0	1.3	1		10/25/20 09:31	67-66-3	
Chloromethane	**<2.2**	ug/L	7.3	2.2	1		10/25/20 09:31	74-87-3	
Dibromochloromethane	**<2.6**	ug/L	8.7	2.6	1		10/25/20 09:31	124-48-1	
Ethylbenzene	**<0.32**	ug/L	1.1	0.32	1		10/25/20 09:31	100-41-4	
Methylene Chloride	**<0.58**	ug/L	5.0	0.58	1		10/25/20 09:31	75-09-2	
Styrene	**<3.0**	ug/L	10.0	3.0	1		10/25/20 09:31	100-42-5	
Tetrachloroethene	**<0.33**	ug/L	1.1	0.33	1		10/25/20 09:31	127-18-4	
Toluene	**<0.27**	ug/L	1.0	0.27	1		10/25/20 09:31	108-88-3	
Trichloroethene	**<0.26**	ug/L	1.0	0.26	1		10/25/20 09:31	79-01-6	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		10/25/20 09:31	75-01-4	
Xylene (Total)	**<1.5**	ug/L	3.0	1.5	1		10/25/20 09:31	1330-20-7	
cis-1,2-Dichloroethene	**<0.27**	ug/L	1.0	0.27	1		10/25/20 09:31	156-59-2	
cis-1,3-Dichloropropene	**<3.6**	ug/L	12.1	3.6	1		10/25/20 09:31	10061-01-5	
trans-1,2-Dichloroethene	**<0.46**	ug/L	1.5	0.46	1		10/25/20 09:31	156-60-5	
trans-1,3-Dichloropropene	**<4.4**	ug/L	14.6	4.4	1		10/25/20 09:31	10061-02-6	
Surrogates									
4-Bromofluorobenzene (S)	98	%	70-130		1		10/25/20 09:31	460-00-4	
Dibromofluoromethane (S)	104	%	70-130		1		10/25/20 09:31	1868-53-7	
Toluene-d8 (S)	99	%	70-130		1		10/25/20 09:31	2037-26-5	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 376175 P4 LEMBERGER LF RES
Pace Project No.: 40216881

Sample: GR-11 **Lab ID: 40216881002** Collected: 10/18/20 12:05 Received: 10/21/20 07:30 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	**<0.24**	ug/L	1.0	0.24	1		10/25/20 09:54	71-55-6	
1,1,2,2-Tetrachloroethane	**<0.28**	ug/L	1.0	0.28	1		10/25/20 09:54	79-34-5	
1,1,2-Trichloroethane	**<0.55**	ug/L	5.0	0.55	1		10/25/20 09:54	79-00-5	
1,1-Dichloroethane	**<0.27**	ug/L	1.0	0.27	1		10/25/20 09:54	75-34-3	
1,1-Dichloroethene	**<0.24**	ug/L	1.0	0.24	1		10/25/20 09:54	75-35-4	
1,2-Dichloroethane	**<0.28**	ug/L	1.0	0.28	1		10/25/20 09:54	107-06-2	
1,2-Dichloropropane	**<0.28**	ug/L	1.0	0.28	1		10/25/20 09:54	78-87-5	
2-Butanone (MEK)	**<2.9**	ug/L	20.0	2.9	1		10/25/20 09:54	78-93-3	
2-Hexanone	**<5.2**	ug/L	17.4	5.2	1		10/25/20 09:54	591-78-6	
4-Methyl-2-pentanone (MIBK)	**<4.6**	ug/L	15.5	4.6	1		10/25/20 09:54	108-10-1	
Acetone	**<2.7**	ug/L	20.0	2.7	1		10/25/20 09:54	67-64-1	
Benzene	**<0.25**	ug/L	1.0	0.25	1		10/25/20 09:54	71-43-2	
Bromodichloromethane	**<0.36**	ug/L	1.2	0.36	1		10/25/20 09:54	75-27-4	
Bromoform	**<4.0**	ug/L	13.2	4.0	1		10/25/20 09:54	75-25-2	
Bromomethane	**<0.97**	ug/L	5.0	0.97	1		10/25/20 09:54	74-83-9	
Carbon disulfide	**<0.45**	ug/L	1.5	0.45	1		10/25/20 09:54	75-15-0	
Carbon tetrachloride	**<1.1**	ug/L	3.6	1.1	1		10/25/20 09:54	56-23-5	
Chlorobenzene	**<0.71**	ug/L	2.4	0.71	1		10/25/20 09:54	108-90-7	
Chloroethane	**<1.3**	ug/L	5.0	1.3	1		10/25/20 09:54	75-00-3	
Chloroform	**<1.3**	ug/L	5.0	1.3	1		10/25/20 09:54	67-66-3	
Chloromethane	**<2.2**	ug/L	7.3	2.2	1		10/25/20 09:54	74-87-3	
Dibromochloromethane	**<2.6**	ug/L	8.7	2.6	1		10/25/20 09:54	124-48-1	
Ethylbenzene	**<0.32**	ug/L	1.1	0.32	1		10/25/20 09:54	100-41-4	
Methylene Chloride	**<0.58**	ug/L	5.0	0.58	1		10/25/20 09:54	75-09-2	
Styrene	**<3.0**	ug/L	10.0	3.0	1		10/25/20 09:54	100-42-5	
Tetrachloroethene	**<0.33**	ug/L	1.1	0.33	1		10/25/20 09:54	127-18-4	
Toluene	**<0.27**	ug/L	1.0	0.27	1		10/25/20 09:54	108-88-3	
Trichloroethene	**<0.26**	ug/L	1.0	0.26	1		10/25/20 09:54	79-01-6	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		10/25/20 09:54	75-01-4	
Xylene (Total)	**<1.5**	ug/L	3.0	1.5	1		10/25/20 09:54	1330-20-7	
cis-1,2-Dichloroethene	**<0.27**	ug/L	1.0	0.27	1		10/25/20 09:54	156-59-2	
cis-1,3-Dichloropropene	**<3.6**	ug/L	12.1	3.6	1		10/25/20 09:54	10061-01-5	
trans-1,2-Dichloroethene	**<0.46**	ug/L	1.5	0.46	1		10/25/20 09:54	156-60-5	
trans-1,3-Dichloropropene	**<4.4**	ug/L	14.6	4.4	1		10/25/20 09:54	10061-02-6	
Surrogates									
4-Bromofluorobenzene (S)	97	%	70-130		1		10/25/20 09:54	460-00-4	
Dibromofluoromethane (S)	104	%	70-130		1		10/25/20 09:54	1868-53-7	
Toluene-d8 (S)	98	%	70-130		1		10/25/20 09:54	2037-26-5	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 376175 P4 LEMBERGER LF RES
Pace Project No.: 40216881

Sample: GR-14 **Lab ID: 40216881003** Collected: 10/18/20 13:10 Received: 10/21/20 07:30 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	**<0.24**	ug/L	1.0	0.24	1		10/25/20 10:16	71-55-6	
1,1,2,2-Tetrachloroethane	**<0.28**	ug/L	1.0	0.28	1		10/25/20 10:16	79-34-5	
1,1,2-Trichloroethane	**<0.55**	ug/L	5.0	0.55	1		10/25/20 10:16	79-00-5	
1,1-Dichloroethane	**<0.27**	ug/L	1.0	0.27	1		10/25/20 10:16	75-34-3	
1,1-Dichloroethene	**<0.24**	ug/L	1.0	0.24	1		10/25/20 10:16	75-35-4	
1,2-Dichloroethane	**<0.28**	ug/L	1.0	0.28	1		10/25/20 10:16	107-06-2	
1,2-Dichloropropane	**<0.28**	ug/L	1.0	0.28	1		10/25/20 10:16	78-87-5	
2-Butanone (MEK)	**<2.9**	ug/L	20.0	2.9	1		10/25/20 10:16	78-93-3	
2-Hexanone	**<5.2**	ug/L	17.4	5.2	1		10/25/20 10:16	591-78-6	
4-Methyl-2-pentanone (MIBK)	**<4.6**	ug/L	15.5	4.6	1		10/25/20 10:16	108-10-1	
Acetone	**<2.7**	ug/L	20.0	2.7	1		10/25/20 10:16	67-64-1	
Benzene	**<0.25**	ug/L	1.0	0.25	1		10/25/20 10:16	71-43-2	
Bromodichloromethane	**<0.36**	ug/L	1.2	0.36	1		10/25/20 10:16	75-27-4	
Bromoform	**<4.0**	ug/L	13.2	4.0	1		10/25/20 10:16	75-25-2	
Bromomethane	**<0.97**	ug/L	5.0	0.97	1		10/25/20 10:16	74-83-9	
Carbon disulfide	**<0.45**	ug/L	1.5	0.45	1		10/25/20 10:16	75-15-0	
Carbon tetrachloride	**<1.1**	ug/L	3.6	1.1	1		10/25/20 10:16	56-23-5	
Chlorobenzene	**<0.71**	ug/L	2.4	0.71	1		10/25/20 10:16	108-90-7	
Chloroethane	**<1.3**	ug/L	5.0	1.3	1		10/25/20 10:16	75-00-3	
Chloroform	**<1.3**	ug/L	5.0	1.3	1		10/25/20 10:16	67-66-3	
Chloromethane	**<2.2**	ug/L	7.3	2.2	1		10/25/20 10:16	74-87-3	
Dibromochloromethane	**<2.6**	ug/L	8.7	2.6	1		10/25/20 10:16	124-48-1	
Ethylbenzene	**<0.32**	ug/L	1.1	0.32	1		10/25/20 10:16	100-41-4	
Methylene Chloride	**<0.58**	ug/L	5.0	0.58	1		10/25/20 10:16	75-09-2	
Styrene	**<3.0**	ug/L	10.0	3.0	1		10/25/20 10:16	100-42-5	
Tetrachloroethene	**<0.33**	ug/L	1.1	0.33	1		10/25/20 10:16	127-18-4	
Toluene	**<0.27**	ug/L	1.0	0.27	1		10/25/20 10:16	108-88-3	
Trichloroethene	**<0.26**	ug/L	1.0	0.26	1		10/25/20 10:16	79-01-6	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		10/25/20 10:16	75-01-4	
Xylene (Total)	**<1.5**	ug/L	3.0	1.5	1		10/25/20 10:16	1330-20-7	
cis-1,2-Dichloroethene	**<0.27**	ug/L	1.0	0.27	1		10/25/20 10:16	156-59-2	
cis-1,3-Dichloropropene	**<3.6**	ug/L	12.1	3.6	1		10/25/20 10:16	10061-01-5	
trans-1,2-Dichloroethene	**<0.46**	ug/L	1.5	0.46	1		10/25/20 10:16	156-60-5	
trans-1,3-Dichloropropene	**<4.4**	ug/L	14.6	4.4	1		10/25/20 10:16	10061-02-6	
Surrogates									
4-Bromofluorobenzene (S)	99	%	70-130		1		10/25/20 10:16	460-00-4	
Dibromofluoromethane (S)	103	%	70-130		1		10/25/20 10:16	1868-53-7	
Toluene-d8 (S)	99	%	70-130		1		10/25/20 10:16	2037-26-5	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 376175 P4 LEMBERGER LF RES
Pace Project No.: 40216881

Sample: GR-16 **Lab ID: 40216881004** Collected: 10/18/20 14:00 Received: 10/21/20 07:30 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	**<0.24**	ug/L	1.0	0.24	1		10/25/20 10:39	71-55-6	
1,1,2,2-Tetrachloroethane	**<0.28**	ug/L	1.0	0.28	1		10/25/20 10:39	79-34-5	
1,1,2-Trichloroethane	**<0.55**	ug/L	5.0	0.55	1		10/25/20 10:39	79-00-5	
1,1-Dichloroethane	**<0.27**	ug/L	1.0	0.27	1		10/25/20 10:39	75-34-3	
1,1-Dichloroethene	**<0.24**	ug/L	1.0	0.24	1		10/25/20 10:39	75-35-4	
1,2-Dichloroethane	**<0.28**	ug/L	1.0	0.28	1		10/25/20 10:39	107-06-2	
1,2-Dichloropropane	**<0.28**	ug/L	1.0	0.28	1		10/25/20 10:39	78-87-5	
2-Butanone (MEK)	**<2.9**	ug/L	20.0	2.9	1		10/25/20 10:39	78-93-3	
2-Hexanone	**<5.2**	ug/L	17.4	5.2	1		10/25/20 10:39	591-78-6	
4-Methyl-2-pentanone (MIBK)	**<4.6**	ug/L	15.5	4.6	1		10/25/20 10:39	108-10-1	
Acetone	**<2.7**	ug/L	20.0	2.7	1		10/25/20 10:39	67-64-1	
Benzene	**<0.25**	ug/L	1.0	0.25	1		10/25/20 10:39	71-43-2	
Bromodichloromethane	**<0.36**	ug/L	1.2	0.36	1		10/25/20 10:39	75-27-4	
Bromoform	**<4.0**	ug/L	13.2	4.0	1		10/25/20 10:39	75-25-2	
Bromomethane	**<0.97**	ug/L	5.0	0.97	1		10/25/20 10:39	74-83-9	
Carbon disulfide	**<0.45**	ug/L	1.5	0.45	1		10/25/20 10:39	75-15-0	
Carbon tetrachloride	**<1.1**	ug/L	3.6	1.1	1		10/25/20 10:39	56-23-5	
Chlorobenzene	**<0.71**	ug/L	2.4	0.71	1		10/25/20 10:39	108-90-7	
Chloroethane	**<1.3**	ug/L	5.0	1.3	1		10/25/20 10:39	75-00-3	
Chloroform	**<1.3**	ug/L	5.0	1.3	1		10/25/20 10:39	67-66-3	
Chloromethane	**<2.2**	ug/L	7.3	2.2	1		10/25/20 10:39	74-87-3	
Dibromochloromethane	**<2.6**	ug/L	8.7	2.6	1		10/25/20 10:39	124-48-1	
Ethylbenzene	**<0.32**	ug/L	1.1	0.32	1		10/25/20 10:39	100-41-4	
Methylene Chloride	**<0.58**	ug/L	5.0	0.58	1		10/25/20 10:39	75-09-2	
Styrene	**<3.0**	ug/L	10.0	3.0	1		10/25/20 10:39	100-42-5	
Tetrachloroethene	**<0.33**	ug/L	1.1	0.33	1		10/25/20 10:39	127-18-4	
Toluene	**<0.27**	ug/L	1.0	0.27	1		10/25/20 10:39	108-88-3	
Trichloroethene	**<0.26**	ug/L	1.0	0.26	1		10/25/20 10:39	79-01-6	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		10/25/20 10:39	75-01-4	
Xylene (Total)	**<1.5**	ug/L	3.0	1.5	1		10/25/20 10:39	1330-20-7	
cis-1,2-Dichloroethene	**<0.27**	ug/L	1.0	0.27	1		10/25/20 10:39	156-59-2	
cis-1,3-Dichloropropene	**<3.6**	ug/L	12.1	3.6	1		10/25/20 10:39	10061-01-5	
trans-1,2-Dichloroethene	**<0.46**	ug/L	1.5	0.46	1		10/25/20 10:39	156-60-5	
trans-1,3-Dichloropropene	**<4.4**	ug/L	14.6	4.4	1		10/25/20 10:39	10061-02-6	
Surrogates									
4-Bromofluorobenzene (S)	96	%	70-130		1		10/25/20 10:39	460-00-4	
Dibromofluoromethane (S)	101	%	70-130		1		10/25/20 10:39	1868-53-7	
Toluene-d8 (S)	98	%	70-130		1		10/25/20 10:39	2037-26-5	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: 376175 P4 LEMBERGER LF RES
Pace Project No.: 40216881

Sample: GR-74 **Lab ID: 40216881005** Collected: 10/18/20 14:55 Received: 10/21/20 07:30 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	**<0.24**	ug/L	1.0	0.24	1		10/25/20 11:01	71-55-6	
1,1,2,2-Tetrachloroethane	**<0.28**	ug/L	1.0	0.28	1		10/25/20 11:01	79-34-5	
1,1,2-Trichloroethane	**<0.55**	ug/L	5.0	0.55	1		10/25/20 11:01	79-00-5	
1,1-Dichloroethane	**<0.27**	ug/L	1.0	0.27	1		10/25/20 11:01	75-34-3	
1,1-Dichloroethene	**<0.24**	ug/L	1.0	0.24	1		10/25/20 11:01	75-35-4	
1,2-Dichloroethane	**<0.28**	ug/L	1.0	0.28	1		10/25/20 11:01	107-06-2	
1,2-Dichloropropane	**<0.28**	ug/L	1.0	0.28	1		10/25/20 11:01	78-87-5	
2-Butanone (MEK)	**<2.9**	ug/L	20.0	2.9	1		10/25/20 11:01	78-93-3	
2-Hexanone	**<5.2**	ug/L	17.4	5.2	1		10/25/20 11:01	591-78-6	
4-Methyl-2-pentanone (MIBK)	**<4.6**	ug/L	15.5	4.6	1		10/25/20 11:01	108-10-1	
Acetone	**<2.7**	ug/L	20.0	2.7	1		10/25/20 11:01	67-64-1	
Benzene	**<0.25**	ug/L	1.0	0.25	1		10/25/20 11:01	71-43-2	
Bromodichloromethane	**<0.36**	ug/L	1.2	0.36	1		10/25/20 11:01	75-27-4	
Bromoform	**<4.0**	ug/L	13.2	4.0	1		10/25/20 11:01	75-25-2	
Bromomethane	**<0.97**	ug/L	5.0	0.97	1		10/25/20 11:01	74-83-9	
Carbon disulfide	**<0.45**	ug/L	1.5	0.45	1		10/25/20 11:01	75-15-0	
Carbon tetrachloride	**<1.1**	ug/L	3.6	1.1	1		10/25/20 11:01	56-23-5	
Chlorobenzene	**<0.71**	ug/L	2.4	0.71	1		10/25/20 11:01	108-90-7	
Chloroethane	**<1.3**	ug/L	5.0	1.3	1		10/25/20 11:01	75-00-3	
Chloroform	**<1.3**	ug/L	5.0	1.3	1		10/25/20 11:01	67-66-3	
Chloromethane	**<2.2**	ug/L	7.3	2.2	1		10/25/20 11:01	74-87-3	
Dibromochloromethane	**<2.6**	ug/L	8.7	2.6	1		10/25/20 11:01	124-48-1	
Ethylbenzene	**<0.32**	ug/L	1.1	0.32	1		10/25/20 11:01	100-41-4	
Methylene Chloride	**<0.58**	ug/L	5.0	0.58	1		10/25/20 11:01	75-09-2	
Styrene	**<3.0**	ug/L	10.0	3.0	1		10/25/20 11:01	100-42-5	
Tetrachloroethene	**<0.33**	ug/L	1.1	0.33	1		10/25/20 11:01	127-18-4	
Toluene	**<0.27**	ug/L	1.0	0.27	1		10/25/20 11:01	108-88-3	
Trichloroethene	**<0.26**	ug/L	1.0	0.26	1		10/25/20 11:01	79-01-6	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		10/25/20 11:01	75-01-4	
Xylene (Total)	**<1.5**	ug/L	3.0	1.5	1		10/25/20 11:01	1330-20-7	
cis-1,2-Dichloroethene	**<0.27**	ug/L	1.0	0.27	1		10/25/20 11:01	156-59-2	
cis-1,3-Dichloropropene	**<3.6**	ug/L	12.1	3.6	1		10/25/20 11:01	10061-01-5	
trans-1,2-Dichloroethene	**<0.46**	ug/L	1.5	0.46	1		10/25/20 11:01	156-60-5	
trans-1,3-Dichloropropene	**<4.4**	ug/L	14.6	4.4	1		10/25/20 11:01	10061-02-6	
Surrogates									
4-Bromofluorobenzene (S)	99	%	70-130		1		10/25/20 11:01	460-00-4	
Dibromofluoromethane (S)	103	%	70-130		1		10/25/20 11:01	1868-53-7	
Toluene-d8 (S)	99	%	70-130		1		10/25/20 11:01	2037-26-5	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: 376175 P4 LEMBERGER LF RES
Pace Project No.: 40216881

Sample: GR-30 **Lab ID: 40216881006** Collected: 10/18/20 15:40 Received: 10/21/20 07:30 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	**0.33J**	ug/L	1.0	0.24	1		10/25/20 11:24	71-55-6	
1,1,2,2-Tetrachloroethane	**<0.28**	ug/L	1.0	0.28	1		10/25/20 11:24	79-34-5	
1,1,2-Trichloroethane	**<0.55**	ug/L	5.0	0.55	1		10/25/20 11:24	79-00-5	
1,1-Dichloroethane	**<0.27**	ug/L	1.0	0.27	1		10/25/20 11:24	75-34-3	
1,1-Dichloroethene	**<0.24**	ug/L	1.0	0.24	1		10/25/20 11:24	75-35-4	
1,2-Dichloroethane	**<0.28**	ug/L	1.0	0.28	1		10/25/20 11:24	107-06-2	
1,2-Dichloropropane	**<0.28**	ug/L	1.0	0.28	1		10/25/20 11:24	78-87-5	
2-Butanone (MEK)	**<2.9**	ug/L	20.0	2.9	1		10/25/20 11:24	78-93-3	
2-Hexanone	**<5.2**	ug/L	17.4	5.2	1		10/25/20 11:24	591-78-6	
4-Methyl-2-pentanone (MIBK)	**<4.6**	ug/L	15.5	4.6	1		10/25/20 11:24	108-10-1	
Acetone	**<2.7**	ug/L	20.0	2.7	1		10/25/20 11:24	67-64-1	
Benzene	**<0.25**	ug/L	1.0	0.25	1		10/25/20 11:24	71-43-2	
Bromodichloromethane	**<0.36**	ug/L	1.2	0.36	1		10/25/20 11:24	75-27-4	
Bromoform	**<4.0**	ug/L	13.2	4.0	1		10/25/20 11:24	75-25-2	
Bromomethane	**<0.97**	ug/L	5.0	0.97	1		10/25/20 11:24	74-83-9	
Carbon disulfide	**<0.45**	ug/L	1.5	0.45	1		10/25/20 11:24	75-15-0	
Carbon tetrachloride	**<1.1**	ug/L	3.6	1.1	1		10/25/20 11:24	56-23-5	
Chlorobenzene	**<0.71**	ug/L	2.4	0.71	1		10/25/20 11:24	108-90-7	
Chloroethane	**<1.3**	ug/L	5.0	1.3	1		10/25/20 11:24	75-00-3	
Chloroform	**<1.3**	ug/L	5.0	1.3	1		10/25/20 11:24	67-66-3	
Chloromethane	**<2.2**	ug/L	7.3	2.2	1		10/25/20 11:24	74-87-3	
Dibromochloromethane	**<2.6**	ug/L	8.7	2.6	1		10/25/20 11:24	124-48-1	
Ethylbenzene	**<0.32**	ug/L	1.1	0.32	1		10/25/20 11:24	100-41-4	
Methylene Chloride	**<0.58**	ug/L	5.0	0.58	1		10/25/20 11:24	75-09-2	
Styrene	**<3.0**	ug/L	10.0	3.0	1		10/25/20 11:24	100-42-5	
Tetrachloroethene	**<0.33**	ug/L	1.1	0.33	1		10/25/20 11:24	127-18-4	
Toluene	**<0.27**	ug/L	1.0	0.27	1		10/25/20 11:24	108-88-3	
Trichloroethene	**<0.26**	ug/L	1.0	0.26	1		10/25/20 11:24	79-01-6	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		10/25/20 11:24	75-01-4	
Xylene (Total)	**<1.5**	ug/L	3.0	1.5	1		10/25/20 11:24	1330-20-7	
cis-1,2-Dichloroethene	**<0.27**	ug/L	1.0	0.27	1		10/25/20 11:24	156-59-2	
cis-1,3-Dichloropropene	**<3.6**	ug/L	12.1	3.6	1		10/25/20 11:24	10061-01-5	
trans-1,2-Dichloroethene	**<0.46**	ug/L	1.5	0.46	1		10/25/20 11:24	156-60-5	
trans-1,3-Dichloropropene	**<4.4**	ug/L	14.6	4.4	1		10/25/20 11:24	10061-02-6	
Surrogates									
4-Bromofluorobenzene (S)	97	%	70-130		1		10/25/20 11:24	460-00-4	
Dibromofluoromethane (S)	103	%	70-130		1		10/25/20 11:24	1868-53-7	
Toluene-d8 (S)	98	%	70-130		1		10/25/20 11:24	2037-26-5	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: 376175 P4 LEMBERGER LF RES
Pace Project No.: 40216881

Sample: GR-FDUP-002 **Lab ID: 40216881007** Collected: 10/18/20 00:00 Received: 10/21/20 07:30 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	**<0.24**	ug/L	1.0	0.24	1		10/25/20 11:46	71-55-6	
1,1,2,2-Tetrachloroethane	**<0.28**	ug/L	1.0	0.28	1		10/25/20 11:46	79-34-5	
1,1,2-Trichloroethane	**<0.55**	ug/L	5.0	0.55	1		10/25/20 11:46	79-00-5	
1,1-Dichloroethane	**<0.27**	ug/L	1.0	0.27	1		10/25/20 11:46	75-34-3	
1,1-Dichloroethene	**<0.24**	ug/L	1.0	0.24	1		10/25/20 11:46	75-35-4	
1,2-Dichloroethane	**<0.28**	ug/L	1.0	0.28	1		10/25/20 11:46	107-06-2	
1,2-Dichloropropane	**<0.28**	ug/L	1.0	0.28	1		10/25/20 11:46	78-87-5	
2-Butanone (MEK)	**<2.9**	ug/L	20.0	2.9	1		10/25/20 11:46	78-93-3	
2-Hexanone	**<5.2**	ug/L	17.4	5.2	1		10/25/20 11:46	591-78-6	
4-Methyl-2-pentanone (MIBK)	**<4.6**	ug/L	15.5	4.6	1		10/25/20 11:46	108-10-1	
Acetone	**<2.7**	ug/L	20.0	2.7	1		10/25/20 11:46	67-64-1	
Benzene	**<0.25**	ug/L	1.0	0.25	1		10/25/20 11:46	71-43-2	
Bromodichloromethane	**<0.36**	ug/L	1.2	0.36	1		10/25/20 11:46	75-27-4	
Bromoform	**<4.0**	ug/L	13.2	4.0	1		10/25/20 11:46	75-25-2	
Bromomethane	**<0.97**	ug/L	5.0	0.97	1		10/25/20 11:46	74-83-9	
Carbon disulfide	**<0.45**	ug/L	1.5	0.45	1		10/25/20 11:46	75-15-0	
Carbon tetrachloride	**<1.1**	ug/L	3.6	1.1	1		10/25/20 11:46	56-23-5	
Chlorobenzene	**<0.71**	ug/L	2.4	0.71	1		10/25/20 11:46	108-90-7	
Chloroethane	**<1.3**	ug/L	5.0	1.3	1		10/25/20 11:46	75-00-3	
Chloroform	**<1.3**	ug/L	5.0	1.3	1		10/25/20 11:46	67-66-3	
Chloromethane	**<2.2**	ug/L	7.3	2.2	1		10/25/20 11:46	74-87-3	
Dibromochloromethane	**<2.6**	ug/L	8.7	2.6	1		10/25/20 11:46	124-48-1	
Ethylbenzene	**<0.32**	ug/L	1.1	0.32	1		10/25/20 11:46	100-41-4	
Methylene Chloride	**<0.58**	ug/L	5.0	0.58	1		10/25/20 11:46	75-09-2	
Styrene	**<3.0**	ug/L	10.0	3.0	1		10/25/20 11:46	100-42-5	
Tetrachloroethene	**<0.33**	ug/L	1.1	0.33	1		10/25/20 11:46	127-18-4	
Toluene	**<0.27**	ug/L	1.0	0.27	1		10/25/20 11:46	108-88-3	
Trichloroethene	**<0.26**	ug/L	1.0	0.26	1		10/25/20 11:46	79-01-6	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		10/25/20 11:46	75-01-4	
Xylene (Total)	**<1.5**	ug/L	3.0	1.5	1		10/25/20 11:46	1330-20-7	
cis-1,2-Dichloroethene	**<0.27**	ug/L	1.0	0.27	1		10/25/20 11:46	156-59-2	
cis-1,3-Dichloropropene	**<3.6**	ug/L	12.1	3.6	1		10/25/20 11:46	10061-01-5	
trans-1,2-Dichloroethene	**<0.46**	ug/L	1.5	0.46	1		10/25/20 11:46	156-60-5	
trans-1,3-Dichloropropene	**<4.4**	ug/L	14.6	4.4	1		10/25/20 11:46	10061-02-6	
Surrogates									
4-Bromofluorobenzene (S)	97	%	70-130		1		10/25/20 11:46	460-00-4	
Dibromofluoromethane (S)	103	%	70-130		1		10/25/20 11:46	1868-53-7	
Toluene-d8 (S)	100	%	70-130		1		10/25/20 11:46	2037-26-5	

REPORT OF LABORATORY ANALYSIS

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

QUALIFIERS

Project: 376175 P4 LEMBERGER LF RES
Pace Project No.: 40216881

DEFINITIONS

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

ND - Not Detected at or above LOD.

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

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

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

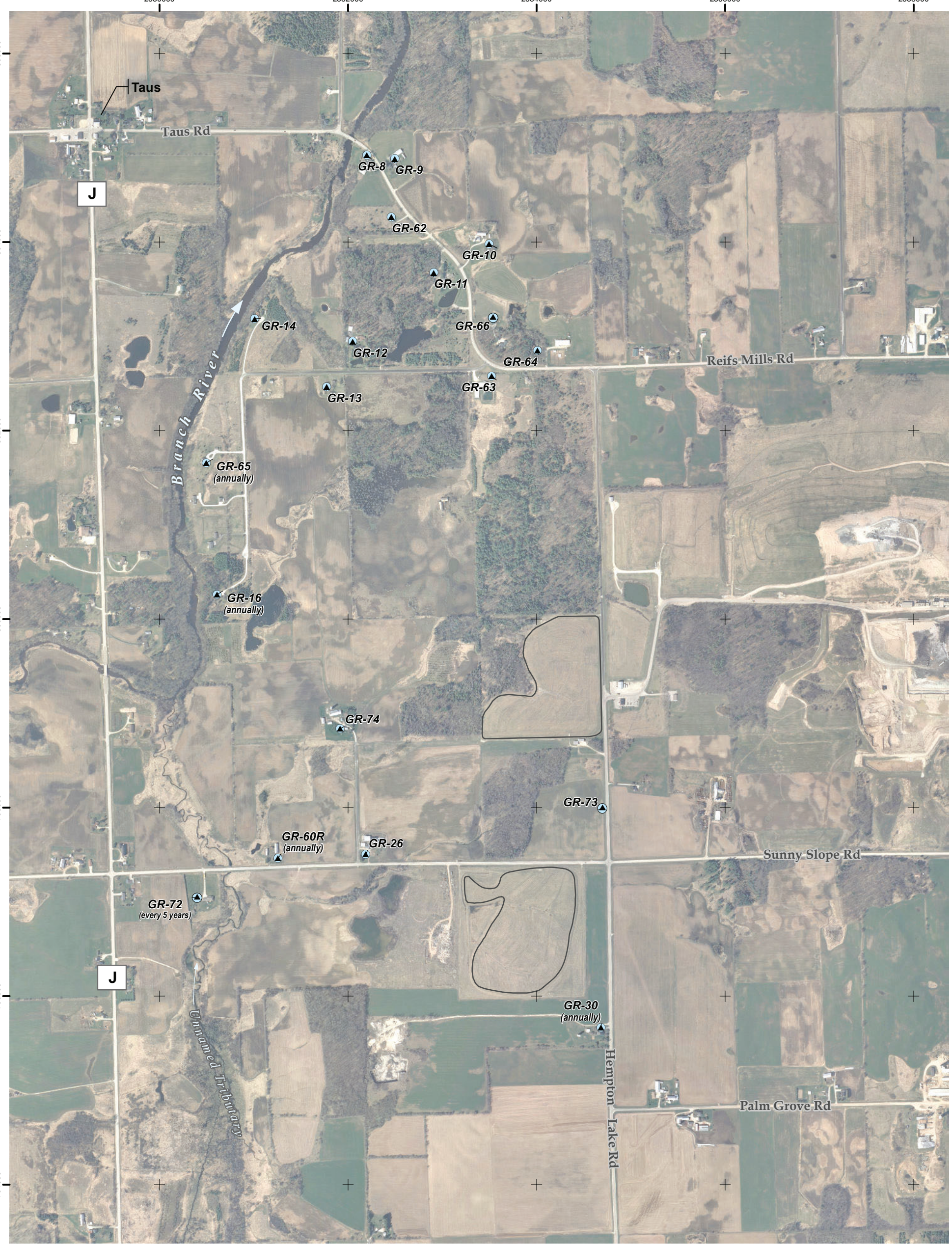
N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

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

TNI - The NELAC Institute.

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

708 Heartland Trail, Suite 3000
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
SEPTEMBER/OCTOBER 2020

PARAMETER	UNITS	OW-104F 10/27/2020 40217355006	RM-002D 9/28/2020 40215658006	RM-003D 9/27/2020 40215658003	RM-003XXD 9/27/2020 40215658004	RM-005D 10/26/2020 40217355002	RM-007D 10/30/2020 40217549002	RM-007XD 10/30/2020 40217549003	RM-007XD DUP 10/30/2020 40217549005
1,1,1-TRICHLOROETHANE	UG/L	6.5	5.9	35.3	2.6	19.7	215	207	208
1,1,2,2-TETRACHLOROETHANE	UG/L	< 0.28	< 0.28 j	< 0.28 j	< 0.28 j	< 0.28	< 0.69	< 0.28	< 0.28
1,1,2-TRICHLOROETHANE	UG/L	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 1.4	< 0.55	< 0.55
1,1-DICHLOROETHANE	UG/L	2.7	6.3	23.9	0.64 J	10.7	155	143	147
1,1-DICHLOROETHENE	UG/L	1.4	0.80 J	3.9	< 0.24	3.1	14.2	23.8	23.5
1,2-DICHLOROETHANE	UG/L	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.70	< 0.28	< 0.28
1,2-DICHLOROPROPANE	UG/L	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.71	< 0.28	< 0.28
2-BUTANONE	UG/L	< 2.9	< 2.9 j	< 2.9 j	< 2.9 j	< 2.9	< 7.3	< 2.9	< 2.9
2-HEXANONE	UG/L	< 5.2 j	< 5.2 j	< 5.2 j	< 5.2 j	< 5.2 j	< 13.0	< 5.2	< 5.2
4-METHYL-2-PENTANONE	UG/L	< 4.6 j	< 4.6 j	< 4.6 j	< 4.6 j	< 4.6 j	< 11.6	< 4.6	< 4.6
ACETONE	UG/L	< 2.7 j	< 2.7 j	< 2.7 j	< 2.7 j	< 2.7 j	< 6.9	< 2.7	< 2.7
BENZENE	UG/L	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.62	< 0.25	< 0.25
BROMODICHLOROMETHANE	UG/L	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.91	< 0.36	< 0.36
BROMOFORM	UG/L	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 9.9	< 4.0	< 4.0
BROMOMETHANE	UG/L	< 0.97	< 0.97	< 0.97	< 0.97 j	< 0.97	< 2.4	< 0.97	< 0.97
CARBON DISULFIDE	UG/L	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 1.1	< 0.45	< 0.45
CARBON TETRACHLORIDE	UG/L	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 2.7	< 1.1	< 1.1
CHLOROBENZENE	UG/L	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 1.8	< 0.71	< 0.71
CHLORODIBROMOMETHANE	UG/L	< 2.6	< 2.6	< 2.6	< 2.6	< 2.6	< 6.5	< 2.6	< 2.6
CHLOROETHANE	UG/L	< 1.3 j	< 1.3	< 1.3	< 1.3	< 1.3 j	< 3.4	< 1.3	< 1.3
CHLOROFORM	UG/L	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3	< 3.2	< 1.3	< 1.3
CHLOROMETHANE	UG/L	< 2.2 j	< 2.2 j	< 2.2 j	< 2.2	< 2.2 j	< 5.5	< 2.2	< 2.2
CIS-1,2-DICHLOROETHENE	UG/L	2.3	1.5	8.8	0.36 J	7.3	48.8	62.3	63.1
CIS-1,3-DICHLOROPROPENE	UG/L	< 3.6	< 3.6	< 3.6	< 3.6	< 3.6	< 9.1	< 3.6	< 3.6
ETHYLBENZENE	UG/L	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.80	< 0.32	< 0.32
METHYLENE CHLORIDE	UG/L	< 0.58	< 0.58	< 0.58	< 0.58	< 0.58	< 1.5	< 0.58	< 0.58
STYRENE	UG/L	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 7.5	< 3.0	< 3.0
TETRACHLOROETHENE	UG/L	< 0.33	< 0.33	0.37 J	< 0.33	< 0.33	2.8 j	2.4 j	2.4 j
TOLUENE	UG/L	< 0.27	< 0.27	< 0.27	< 0.27	< 0.27	< 0.67	< 0.27	< 0.27
TRANS-1,2-DICHLOROETHENE	UG/L	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 1.2	< 0.46	< 0.46
TRANS-1,3-DICHLOROPROPENE	UG/L	< 4.4	< 4.4	< 4.4	< 4.4	< 4.4	< 10.9	< 4.4	< 4.4
TRICHLOROETHENE	UG/L	3.3	1.5	6.1	0.59 J	3.8	43.6	43.3	44.4
VINYL CHLORIDE	UG/L	< 0.17	< 0.17	< 0.17	< 0.17	< 0.17	< 0.44	< 0.17	< 0.17
XYLENE, TOTAL	UG/L	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 3.8	< 1.5	< 1.5

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
SEPTEMBER/OCTOBER 2020

PARAMETER	UNITS	RM-007XXD 10/30/2020 40217549001	RM-008D 10/31/2020 40217549008	RM-101D 10/29/2020 40217549015	RM-102D 10/27/2020 40217355008	RM-202D 10/28/2020 40217355010	RM-203D 10/27/2020 40217355007	RM-204D 10/30/2020 40217549004	RM-208D 10/26/2020 40217355004
1,1,1-TRICHLOROETHANE	UG/L	< 0.24	18.9	3.1	< 0.24	< 0.24	0.43 J	11.5	14.6
1,1,2,2-TETRACHLOROETHANE	UG/L	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28
1,1,2-TRICHLOROETHANE	UG/L	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55
1,1-DICHLOROETHANE	UG/L	< 0.27	7.8	2.0	< 0.27	< 0.27	< 0.27	6.7	7.7
1,1-DICHLOROETHENE	UG/L	< 0.24	1.1	0.34 J	< 0.24	< 0.24	< 0.24	1.0	2.1
1,2-DICHLOROETHANE	UG/L	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28
1,2-DICHLOROPROPANE	UG/L	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28
2-BUTANONE	UG/L	< 2.9	< 2.9	< 2.9	< 2.9	< 2.9	< 2.9	< 2.9	< 2.9
2-HEXANONE	UG/L	< 5.2	< 5.2	< 5.2	< 5.2 j	< 5.2 j	< 5.2 j	< 5.2	< 5.2 j
4-METHYL-2-PENTANONE	UG/L	< 4.6	< 4.6	< 4.6	< 4.6 j	< 4.6 j	< 4.6 j	< 4.6	< 4.6 j
ACETONE	UG/L	< 2.7	< 2.7	< 2.7	< 2.7 j	< 2.7 j	< 2.7 j	< 2.7	< 2.7 j
BENZENE	UG/L	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25
BROMODICHLOROMETHANE	UG/L	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36
BROMOFORM	UG/L	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
BROMOMETHANE	UG/L	< 0.97	< 0.97	< 0.97	< 0.97	< 0.97	< 0.97	< 0.97	< 0.97
CARBON DISULFIDE	UG/L	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45
CARBON TETRACHLORIDE	UG/L	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1
CHLOROBENZENE	UG/L	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71
CHLORODIBROMOMETHANE	UG/L	< 2.6	< 2.6	< 2.6	< 2.6	< 2.6	< 2.6	< 2.6	< 2.6
CHLOROETHANE	UG/L	< 1.3	< 1.3	< 1.3	< 1.3 j	< 1.3 j	< 1.3 j	< 1.3	< 1.3 j
CHLOROFORM	UG/L	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3
CHLOROMETHANE	UG/L	< 2.2	< 2.2	< 2.2	< 2.2 j	< 2.2 j	< 2.2 j	< 2.2	< 2.2 j
CIS-1,2-DICHLOROETHENE	UG/L	< 0.27	4.9	0.35 J	< 0.27	< 0.27	< 0.27	1.8	4.9
CIS-1,3-DICHLOROPROPENE	UG/L	< 3.6	< 3.6	< 3.6	< 3.6	< 3.6	< 3.6	< 3.6	< 3.6
ETHYLBENZENE	UG/L	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32
METHYLENE CHLORIDE	UG/L	< 0.58	< 0.58	< 0.58	< 0.58	< 0.58	< 0.58	< 0.58	< 0.58
STYRENE	UG/L	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
TETRACHLOROETHENE	UG/L	< 0.33 j	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33 j	< 0.33
TOLUENE	UG/L	< 0.27	< 0.27	< 0.27	< 0.27	< 0.27	< 0.27	< 0.27	< 0.27
TRANS-1,2-DICHLOROETHENE	UG/L	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46
TRANS-1,3-DICHLOROPROPENE	UG/L	< 4.4	< 4.4 j	< 4.4 j	< 4.4	< 4.4	< 4.4	< 4.4	< 4.4
TRICHLOROETHENE	UG/L	< 0.26	4.0	0.85 J	< 0.26	< 0.26	< 0.26	1.7	3.2
VINYL CHLORIDE	UG/L	< 0.17	< 0.17	< 0.17	< 0.17	< 0.17	< 0.17	< 0.17	< 0.17
XYLENE, TOTAL	UG/L	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5

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
SEPTEMBER/OCTOBER 2020

PARAMETER	UNITS	RM-208XD 10/26/2020 40217355003	RM-210D 9/28/2020 40215658007	RM-211D 10/27/2020 40217355009	RM-212D 10/31/2020 40217549009	RM-213D 10/28/2020 40217355013	RM-213XD 10/28/2020 40217355012	RM-214D 10/28/2020 40217355011	RM-303D 10/29/2020 40217549012
1,1,1-TRICHLOROETHANE	UG/L	< 0.24	7.2	6.3	< 0.24	2.4	15.9	9.3	191
1,1,2,2-TETRACHLOROETHANE	UG/L	< 0.28	< 0.28 j	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.55
1,1,2-TRICHLOROETHANE	UG/L	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 1.1
1,1-DICHLOROETHANE	UG/L	< 0.27	4.9	2.5	< 0.27	0.29 J	5.9	4.8	146
1,1-DICHLOROETHENE	UG/L	< 0.24	0.98 J	0.45 J	< 0.24	< 0.24	2.5	0.58 J	6.5
1,2-DICHLOROETHANE	UG/L	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.56
1,2-DICHLOROPROPANE	UG/L	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.57
2-BUTANONE	UG/L	< 2.9	< 2.9 j	< 2.9	< 2.9	< 2.9	< 2.9	< 2.9	< 5.9
2-HEXANONE	UG/L	< 5.2 j	< 5.2 j	< 5.2 j	< 5.2	< 5.2	< 5.2	< 5.2 j	< 10.4
4-METHYL-2-PENTANONE	UG/L	< 4.6 j	< 4.6 j	< 4.6 j	< 4.6	< 4.6 j	< 4.6 j	< 4.6 j	< 9.3
ACETONE	UG/L	< 2.7 j	< 2.7 j	< 2.7 j	< 2.7	< 2.7	< 2.7	< 2.7 j	< 5.5
BENZENE	UG/L	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.49
BROMODICHLOROMETHANE	UG/L	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.73
BROMOFORM	UG/L	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 7.9
BROMOMETHANE	UG/L	< 0.97	< 0.97	< 0.97	< 0.97	< 0.97	< 0.97	< 0.97	< 1.9
CARBON DISULFIDE	UG/L	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.90
CARBON TETRACHLORIDE	UG/L	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 2.2
CHLOROBENZENE	UG/L	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 1.4
CHLORODIBROMOMETHANE	UG/L	< 2.6	< 2.6	< 2.6	< 2.6	< 2.6	< 2.6	< 2.6	< 5.2
CHLOROETHANE	UG/L	< 1.3 j	< 1.3	< 1.3 j	< 1.3	< 1.3	< 1.3	< 1.3 j	< 2.7
CHLOROFORM	UG/L	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3	< 2.5
CHLOROMETHANE	UG/L	< 2.2 j	< 2.2 j	< 2.2 j	< 2.2	< 2.2	< 2.2	< 2.2 j	< 4.4
CIS-1,2-DICHLOROETHENE	UG/L	< 0.27	2.1	0.62 J	< 0.27	< 0.27	4.2	15.9	59.0
CIS-1,3-DICHLOROPROPENE	UG/L	< 3.6	< 3.6	< 3.6	< 3.6	< 3.6	< 3.6	< 3.6	< 7.3
ETHYLBENZENE	UG/L	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.64
METHYLENE CHLORIDE	UG/L	< 0.58	< 0.58	< 0.58	< 0.58	< 0.58	< 0.58	< 0.58	< 1.2
STYRENE	UG/L	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 6.0
TETRACHLOROETHENE	UG/L	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	1.6 Jj
TOLUENE	UG/L	< 0.27	< 0.27	< 0.27	< 0.27	< 0.27	< 0.27	< 0.27	< 0.54
TRANS-1,2-DICHLOROETHENE	UG/L	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.93
TRANS-1,3-DICHLOROPROPENE	UG/L	< 4.4	< 4.4	< 4.4	< 4.4 j	< 4.4	< 4.4	< 4.4	< 8.7
TRICHLOROETHENE	UG/L	< 0.26	1.7	1.1	< 0.26	0.36 J	3.0	3.0	55.0
VINYL CHLORIDE	UG/L	< 0.17	< 0.17	< 0.17	< 0.17	< 0.17	< 0.17	0.49 J	< 0.35
XYLENE, TOTAL	UG/L	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 3.0

NOTES:
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Data Validation Qualifiers:
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j = the result is estimated

LEMBERGER LANDFILL
MONITORING WELL VOLATILE ORGANIC ANALYSIS RESULTS
SEPTEMBER/OCTOBER 2020

PARAMETER	UNITS	RM-306D 10/29/2020 40217549013	RM-307D 10/29/2020 40217549014	RM-401XD 10/26/2020 40217355001	RM-401XD DUP 10/26/2020 40217355005	RM-401XXD 9/28/2020 40215658005	RM-401XXD DUP 9/28/2020 40215658009	RM-402XD 10/31/2020 40217549007	RM-402XXD 10/31/2020 40217549006
1,1,1-TRICHLOROETHANE	UG/L	18.7	68.6	21.3	21.8	8.7	9.0	101	28.0
1,1,2,2-TETRACHLOROETHANE	UG/L	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28 j	< 0.28 j	< 0.28	< 0.28
1,1,2-TRICHLOROETHANE	UG/L	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55
1,1-DICHLOROETHANE	UG/L	1.8	18.0	11.6	12.0	8.6	8.6	34.9	14.7
1,1-DICHLOROETHENE	UG/L	0.98 J	2.7	3.3	3.2	4.2	4.3	19.0	2.8
1,2-DICHLOROETHANE	UG/L	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28
1,2-DICHLOROPROPANE	UG/L	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28
2-BUTANONE	UG/L	< 2.9	< 2.9	< 2.9	< 2.9	< 2.9 j	< 2.9 j	< 2.9	< 2.9
2-HEXANONE	UG/L	< 5.2	< 5.2	< 5.2 j	< 5.2 j	< 5.2 j	< 5.2 j	< 5.2	< 5.2
4-METHYL-2-PENTANONE	UG/L	< 4.6	< 4.6	< 4.6 j	< 4.6 j	< 4.6 j	< 4.6 j	< 4.6	< 4.6
ACETONE	UG/L	< 2.7	< 2.7	< 2.7 j	< 2.7 j	< 2.7 j	< 2.7 j	< 2.7	< 2.7
BENZENE	UG/L	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25
BROMODICHLOROMETHANE	UG/L	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36
BROMOFORM	UG/L	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
BROMOMETHANE	UG/L	< 0.97	< 0.97	< 0.97	< 0.97	< 0.97	< 0.97	< 0.97	< 0.97
CARBON DISULFIDE	UG/L	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45
CARBON TETRACHLORIDE	UG/L	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1
CHLOROBENZENE	UG/L	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71	< 0.71
CHLORODIBROMOMETHANE	UG/L	< 2.6	< 2.6	< 2.6	< 2.6	< 2.6	< 2.6	< 2.6	< 2.6
CHLOROETHANE	UG/L	< 1.3	< 1.3	< 1.3 j	< 1.3 j	< 1.3	< 1.3	< 1.3	< 1.3
CHLOROFORM	UG/L	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3
CHLOROMETHANE	UG/L	< 2.2	< 2.2	< 2.2 j	< 2.2 j	< 2.2 j	< 2.2 j	< 2.2	< 2.2
CIS-1,2-DICHLOROETHENE	UG/L	< 0.27	2.8	7.0	7.1	11.6	11.6	17.3	7.3
CIS-1,3-DICHLOROPROPENE	UG/L	< 3.6	< 3.6	< 3.6	< 3.6	< 3.6	< 3.6	< 3.6	< 3.6
ETHYLBENZENE	UG/L	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32
METHYLENE CHLORIDE	UG/L	< 0.58	< 0.58	< 0.58	< 0.58	< 0.58	< 0.58	< 0.58	< 0.58
STYRENE	UG/L	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
TETRACHLOROETHENE	UG/L	< 0.33	0.71 Jj	< 0.33	< 0.33	< 0.33	< 0.33	0.82 J	< 0.33 j
TOLUENE	UG/L	< 0.27	< 0.27	< 0.27	< 0.27	< 0.27	< 0.27	< 0.27	< 0.27
TRANS-1,2-DICHLOROETHENE	UG/L	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46
TRANS-1,3-DICHLOROPROPENE	UG/L	< 4.4 j	< 4.4	< 4.4	< 4.4	< 4.4	< 4.4	< 4.4 j	< 4.4
TRICHLOROETHENE	UG/L	1.7	9.0	4.0	4.1	1.9	1.8	12.8	6.0
VINYL CHLORIDE	UG/L	< 0.17	< 0.17	< 0.17	< 0.17	< 0.17	< 0.17	< 0.17	< 0.17
XYLENE, TOTAL	UG/L	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5

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
SEPTEMBER/OCTOBER 2020

PARAMETER	UNITS	RM-403XD 9/27/2020 40215658001	RM-404XXD 9/27/2020 40215658002
1,1,1-TRICHLOROETHANE	UG/L	92.3	0.83 J
1,1,2,2-TETRACHLOROETHANE	UG/L	< 0.28 j	< 0.28 j
1,1,2-TRICHLOROETHANE	UG/L	< 0.55	< 0.55
1,1-DICHLOROETHANE	UG/L	66.4	< 0.27
1,1-DICHLOROETHENE	UG/L	5.8	< 0.24
1,2-DICHLOROETHANE	UG/L	< 0.28	< 0.28
1,2-DICHLOROPROPANE	UG/L	< 0.28	< 0.28
2-BUTANONE	UG/L	< 2.9 j	< 2.9 j
2-HEXANONE	UG/L	< 5.2 j	< 5.2 j
4-METHYL-2-PENTANONE	UG/L	< 4.6 j	< 4.6 j
ACETONE	UG/L	< 2.7 j	< 2.7 j
BENZENE	UG/L	< 0.25	< 0.25
BROMODICHLOROMETHANE	UG/L	< 0.36	< 0.36
BROMOFORM	UG/L	< 4.0	< 4.0
BROMOMETHANE	UG/L	< 0.97	< 0.97
CARBON DISULFIDE	UG/L	< 0.45	< 0.45
CARBON TETRACHLORIDE	UG/L	< 1.1	< 1.1
CHLOROBENZENE	UG/L	< 0.71	< 0.71
CHLORODIBROMOMETHANE	UG/L	< 2.6	< 2.6
CHLOROETHANE	UG/L	27.4	< 1.3
CHLOROFORM	UG/L	< 1.3	< 1.3
CHLOROMETHANE	UG/L	< 2.2 j	< 2.2 j
CIS-1,2-DICHLOROETHENE	UG/L	12.1	< 0.27
CIS-1,3-DICHLOROPROPENE	UG/L	< 3.6	< 3.6
ETHYLBENZENE	UG/L	< 0.32	< 0.32
METHYLENE CHLORIDE	UG/L	< 0.58	< 0.58
STYRENE	UG/L	< 3.0	< 3.0
TETRACHLOROETHENE	UG/L	1.2	< 0.33
TOLUENE	UG/L	< 0.27	< 0.27
TRANS-1,2-DICHLOROETHENE	UG/L	< 0.46	< 0.46
TRANS-1,3-DICHLOROPROPENE	UG/L	< 4.4	< 4.4
TRICHLOROETHENE	UG/L	15.8	< 0.26
VINYL CHLORIDE	UG/L	< 0.17	< 0.17
XYLENE, TOTAL	UG/L	< 1.5	< 1.5

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 INDICATOR PARAMETERS AND FIELD DATA
SEPTEMBER/OCTOBER 2020

PARAMETER	UNITS	OW-104F 10/27/2020 40217355006	RM-002D 9/28/2020 40215658006	RM-003D 9/27/2020 40215658003	RM-003XXD 9/27/2020 40215658004	RM-004D 9/27/2020 W200927001	RM-005D 10/26/2020 40217355002	RM-007D 10/30/2020 40217549002	RM-007XD 10/30/2020 40217549003
ALKALINITY AS CACO3, TOTAL	MG/L	290	320 j-		317 j-			481	444
CHLORIDE	MG/L	8.3	12.7		33.0			9.4	8.0 j
COLOR, FIELD		NONE	NONE	NONE	NONE		NONE	NONE	NONE
CONDUCTANCE, SPECIFIC	UMHOS/CM	595	552	783	712		806	1102	975
DEPTH TO WATER	FEET	36.10	23.91	16.11	14.00	54.38	40.93	36.56	36.96
DISSOLVED OXYGEN, FIELD	MG/L	0.50	3.57	1.43	1.31		2.38	2.45	2.28
IRON, TOTAL	UG/L	171 J	< 58.0		< 58.0			145 J	< 58.0
MANGANESE, TOTAL	UG/L	6.7	22.6		1.3 JBuj			17.2	< 1.2
NITROGEN, NITRATE + NITRITE	MG/L	1.8	1.6		6.0			1.6	1.3
ODOR, FIELD		NONE	NONE	NONE	NONE		NONE	NONE	NONE
OXIDATION REDUCTION POTENTIAL	MV	71	57	158	183		134	132	138
PH, FIELD	SU	7.76	7.32	7.38	7.52		7.56	7.09	7.14
SULFATE, TOTAL	MG/L	22.7	37.2		27.8			146	107
TEMPERATURE	DEG C	3.8	8.4	9.1	8.9		9.6	7.2	8.5
TOTAL ORGANIC CARBON AS NPOC	MG/L	0.70 j+	1.2 j+		1.1 j+			2.1 j+	1.5 j+
TURBIDITY, FIELD NTU	NTU	8	6	0	0		0	8	0
WATER ELEVATION	FEET	792.64	791.8	804.02	807.53	804.71	802.15	807.14	807.23

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
SEPTEMBER/OCTOBER 2020

PARAMETER	UNITS	RM-007XD DUP 10/30/2020 40217549005	RM-007XXD 10/30/2020 40217549001	RM-008D 10/31/2020 40217549008	RM-010D 9/27/2020 W200927002	RM-101D 10/29/2020 40217549015	RM-102D 10/27/2020 40217355008	RM-202D 10/28/2020 40217355010
ALKALINITY AS CACO3, TOTAL	MG/L	443					312	
CHLORIDE	MG/L	11.2 j					14.2	
COLOR, FIELD			NONE	NONE		NONE	NONE	NONE
CONDUCTANCE, SPECIFIC	UMHOS/CM		610	892		689	700	599
DEPTH TO WATER	FEET		38.04	37.84	45.23	12.45	34.04	9.33
DISSOLVED OXYGEN, FIELD	MG/L		0.29	5.92		1.97	4.23	0.23
IRON, TOTAL	UG/L	< 58.0					81.2 J	
MANGANESE, TOTAL	UG/L	< 1.2					1.4 J	
NITROGEN, NITRATE + NITRITE	MG/L	1.3					12.2	
ODOR, FIELD			NONE	NONE		NONE	NONE	NONE
OXIDATION REDUCTION POTENTIAL	MV		-156	141		181	145	-209
PH, FIELD	SU		7.55	7.29		7.79	7.43	7.80
SULFATE, TOTAL	MG/L	108					8.8	
TEMPERATURE	DEG C		6.9	3.6		8.7	5.9	8.2
TOTAL ORGANIC CARBON AS NPOC	MG/L	1.5 j+					1.9 j+	
TURBIDITY, FIELD NTU	NTU		0	0		0	7	6
WATER ELEVATION	FEET		806.64	807.64	804.34	806.8	840.08	804.25

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
SEPTEMBER/OCTOBER 2020

PARAMETER	UNITS	RM-203D 10/27/2020 40217355007	RM-204D 10/30/2020 40217549004	RM-208D 10/26/2020 40217355004	RM-208XD 10/26/2020 40217355003	RM-210D 9/28/2020 40215658007	RM-211D 10/27/2020 40217355009	RM-212D 10/31/2020 40217549009
ALKALINITY AS CACO3, TOTAL	MG/L	354	338			351 j-		
CHLORIDE	MG/L	29.4	13.3			16.9		
COLOR, FIELD		NONE	NONE	NONE	NONE	NONE	NONE	NONE
CONDUCTANCE, SPECIFIC	UMHOS/CM	800	728	758	634	771	714	629
DEPTH TO WATER	FEET	31.88	27.59	30.12	30.22	25.79	15.64	9.02
DISSOLVED OXYGEN, FIELD	MG/L	4.47	0.62	2.38	0.31	0.69	2.46	0.16
IRON, TOTAL	UG/L	127 J	< 58.0			117 J		
MANGANESE, TOTAL	UG/L	2.5 J	1.5 J			13.1 Bj+		
NITROGEN, NITRATE + NITRITE	MG/L	8.9	3.5			3.8		
ODOR, FIELD		NONE	NONE	NONE	NONE	NONE	NONE	NONE
OXIDATION REDUCTION POTENTIAL	MV	96	115	217	150	113	154	62
PH, FIELD	SU	7.65	7.37	7.45	7.55	7.25	7.41	7.72
SULFATE, TOTAL	MG/L	20.0	30.8			39.1		
TEMPERATURE	DEG C	7.4	4.2	8.1	8.8	7.8	7.1	6.8
TOTAL ORGANIC CARBON AS NPOC	MG/L	1.2 j+	0.94 j+			0.83 j+		
TURBIDITY, FIELD NTU	NTU	7	6	0	0	6	0	5
WATER ELEVATION	FEET	792	800.89	809.79	807	802.07	804.71	806.64

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
SEPTEMBER/OCTOBER 2020

PARAMETER	UNITS	RM-213D 10/28/2020 40217355013	RM-213XD 10/28/2020 40217355012	RM-214D 10/28/2020 40217355011	RM-303D 10/29/2020 40217549012	RM-305D 9/27/2020 W200927003	RM-306D 10/29/2020 40217549013	RM-307D 10/29/2020 40217549014
ALKALINITY AS CACO3, TOTAL	MG/L							
CHLORIDE	MG/L							
COLOR, FIELD		NONE	NONE	NONE	NONE		NONE	NONE
CONDUCTANCE, SPECIFIC	UMHOS/CM	989	1053	966	919		660	759
DEPTH TO WATER	FEET	34.52	35.39	46.00	49.02	53.44	42.29	46.67
DISSOLVED OXYGEN, FIELD	MG/L	4.30	2.83	0.39	0.90		5.28	4.13
IRON, TOTAL	UG/L							
MANGANESE, TOTAL	UG/L							
NITROGEN, NITRATE + NITRITE	MG/L							
ODOR, FIELD		NONE	NONE	NONE	NONE		NONE	NONE
OXIDATION REDUCTION POTENTIAL	MV	231	156	96	123		185	138
PH, FIELD	SU	7.34	7.47	7.41	7.33		7.36	7.43
SULFATE, TOTAL	MG/L							
TEMPERATURE	DEG C	7.3	8.6	5.1	6.9		7.9	7.9
TOTAL ORGANIC CARBON AS NPOC	MG/L							
TURBIDITY, FIELD NTU	NTU	7	7	9	28		7	6
WATER ELEVATION	FEET	806.71	807.31	807.48	816.03	814.51	813.93	807.27

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
SEPTEMBER/OCTOBER 2020

PARAMETER	UNITS	RM-401XD 10/26/2020 40217355001	RM-401XXD 9/28/2020 40215658005	RM-401XXD DUP 9/28/2020 40215658009	RM-402XD 10/31/2020 40217549007	RM-402XXD 10/31/2020 40217549006	RM-403XD 9/27/2020 40215658001	RM-404XXD 9/27/2020 40215658002
ALKALINITY AS CACO3, TOTAL	MG/L		297 j-	298 j-	379			346 M0j-
CHLORIDE	MG/L		38.9	38.8	17.9			13.7
COLOR, FIELD		NONE	NONE		NONE	NONE	NONE	NONE
CONDUCTANCE, SPECIFIC	UMHOS/CM	795	729		1207	841	878	736
DEPTH TO WATER	FEET	30.47	25.30		34.64	35.05	37.15	54.21
DISSOLVED OXYGEN, FIELD	MG/L	2.28	2.03		2.93	4.98	1.70	2.43
IRON, TOTAL	UG/L		< 58.0	< 58.0	< 58.0			< 58.0
MANGANESE, TOTAL	UG/L		< 1.2	< 1.2	< 1.2			4.8 Bj+
NITROGEN, NITRATE + NITRITE	MG/L		9.3	9.4	5.5			4.4
ODOR, FIELD		NONE	NONE		NONE	NONE	NONE	NONE
OXIDATION REDUCTION POTENTIAL	MV	160	205		171	174	158	216
PH, FIELD	SU	7.62	7.39		7.22	7.30	7.35	7.54
SULFATE, TOTAL	MG/L		22.5	22.6	253			47.4
TEMPERATURE	DEG C	8.6	8.8		4.2	3.9	9.0	9.8
TOTAL ORGANIC CARBON AS NPOC	MG/L		0.92 j+	0.89 j+	1.7 j+			1.0 j+
TURBIDITY, FIELD NTU	NTU	2	0		0	0	0	5
WATER ELEVATION	FEET	803.13	807.55		807.43	807.17	807.35	807.45

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: 376175.0 PH4 LEMBERGER LF - RE
Pace Project No.: 40215658

DEFINITIONS

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

ND - Not Detected at or above LOD.

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

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

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

B	Analyte was detected in the associated method blank.
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: 376175.0 PH4 LEMBERGER PLUME
Pace Project No.: 40217355

DEFINITIONS

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

ND - Not Detected at or above LOD.

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

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

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

TNI - The NELAC Institute.

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: 376175.0 PH4 LEMB LF-PLUME WEL
Pace Project No.: 40217549

DEFINITIONS

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

ND - Not Detected at or above LOD.

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

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

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

TNI - The NELAC Institute.

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 2020

Well ID	Parameter	Result	Data Qualifiers	Units	Standard[1]		Well Location
					ES[2]	PAL[3]	
OW-104F	1,1-Dichloroethene	1.4		UG/L		X	4,500' northwest of LL site
OW-104F	Iron, total	171	J	UG/L		X	4,500' northwest of LL site
OW-104F	Trichloroethene	3.3		UG/L		X	4,500' northwest of LL site
RM-002D	1,1-Dichloroethene	0.8	J	UG/L		X	2,900' northwest of LL site
RM-002D	Trichloroethene	1.5		UG/L		X	2,900' northwest of LL site
RM-003D	1,1-Dichloroethene	3.9		UG/L		X	1,000' west of LL site
RM-003D	cis-1,2-Dichloroethene	8.8		UG/L		X	1,000' west of LL site
RM-003D	Trichloroethene	6.1		UG/L	X		1,000' west of LL site
RM-003XXD	Nitrogen, nitrate + nitrite	6		MG/L		X	1,000' west of LL site
RM-003XXD	Trichloroethene	0.59	J	UG/L		X	1,000' west of LL site
RM-005D	1,1-Dichloroethene	3.1		UG/L		X	Northwest side of LL site
RM-005D	cis-1,2-Dichloroethene	7.3		UG/L		X	Northwest side of LL site
RM-005D	Trichloroethene	3.8		UG/L		X	Northwest side of LL site
RM-007D	1,1,1-Trichloroethane	215		UG/L	X		North side of LTR site
RM-007D	1,1-Dichloroethane	155		UG/L		X	North side of LTR site
RM-007D	1,1-Dichloroethene	14.2		UG/L	X		North side of LTR site
RM-007D	cis-1,2-Dichloroethene	48.8		UG/L		X	North side of LTR site
RM-007D	Sulfate, total	146		MG/L		X	North side of LTR site
RM-007D	Tetrachloroethene	2.8	j	UG/L		X	North side of LTR site
RM-007D	Trichloroethene	43.6		UG/L	X		North side of LTR site
RM-007XD	1,1,1-Trichloroethane	207		UG/L	X		North side of LTR site
RM-007XD	1,1-Dichloroethane	143		UG/L		X	North side of LTR site
RM-007XD	1,1-Dichloroethene	23.8		UG/L	X		North side of LTR site
RM-007XD	cis-1,2-Dichloroethene	62.3		UG/L		X	North side of LTR site
RM-007XD	Tetrachloroethene	2.4	j	UG/L		X	North side of LTR site
RM-007XD	Trichloroethene	43.3		UG/L	X		North side of LTR site
RM-007XD DUP	1,1,1-Trichloroethane	208		UG/L	X		North side of LTR site
RM-007XD DUP	1,1-Dichloroethane	147		UG/L		X	North side of LTR site
RM-007XD DUP	1,1-Dichloroethene	23.5		UG/L	X		North side of LTR site
RM-007XD DUP	cis-1,2-Dichloroethene	63.1		UG/L		X	North side of LTR site
RM-007XD DUP	Tetrachloroethene	2.4	j	UG/L		X	North side of LTR site
RM-007XD DUP	Trichloroethene	44.4		UG/L	X		North side of LTR site
RM-008D	1,1-Dichloroethene	1.1		UG/L		X	500' south of LL site
RM-008D	Trichloroethene	4		UG/L		X	500' south of LL site
RM-101D	Trichloroethene	0.85	J	UG/L		X	1,400' west of LTR site
RM-102D	Nitrogen, nitrate + nitrite	12.2		MG/L	X		500' south of LTR site

Summary of Groundwater Standard Exceedances at Plume Monitoring Wells
Lemberger Landfill Sites
3rd Quarter 2020

Well ID	Parameter	Result	Data Qualifiers	Units	Standard[1]		Well Location
					ES[2]	PAL[3]	
RM-203D	Nitrogen, nitrate + nitrite	8.9		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-208D	1,1-Dichloroethene	2.1		UG/L		X	Southwest side of LL site
RM-208D	Trichloroethene	3.2		UG/L		X	Southwest side of LL site
RM-210D	1,1-Dichloroethene	0.98	J	UG/L		X	3,600' north of LL site
RM-210D	Nitrogen, nitrate + nitrite	3.8		MG/L		X	3,600' north of LL site
RM-210D	Trichloroethene	1.7		UG/L		X	3,600' north of LL site
RM-211D	Trichloroethene	1.1		UG/L		X	1,000' west of LL site
RM-213XD	1,1-Dichloroethene	2.5		UG/L		X	600' north of LTR site
RM-213XD	Trichloroethene	3		UG/L		X	600' north of LTR site
RM-214D	cis-1,2-Dichloroethene	15.9		UG/L		X	South side of LL site
RM-214D	Trichloroethene	3		UG/L		X	South side of LL site
RM-214D	Vinyl chloride	0.49	J	UG/L	X		South side of LL site
RM-303D	1,1,1-Trichloroethane	191		UG/L		X	North side of LTR site
RM-303D	1,1-Dichloroethane	146		UG/L		X	North side of LTR site
RM-303D	1,1-Dichloroethene	6.5		UG/L		X	North side of LTR site
RM-303D	cis-1,2-Dichloroethene	59		UG/L		X	North side of LTR site
RM-303D	Tetrachloroethene	1.6	Jj	UG/L		X	North side of LTR site
RM-303D	Trichloroethene	55		UG/L	X		North side of LTR site
RM-306D	1,1-Dichloroethene	0.98	J	UG/L		X	West side of LTR site
RM-306D	Trichloroethene	1.7		UG/L		X	West side of LTR site
RM-307D	1,1,1-Trichloroethane	68.6		UG/L		X	West side of LTR site
RM-307D	1,1-Dichloroethene	2.7		UG/L		X	West side of LTR site
RM-307D	Tetrachloroethene	0.71	Jj	UG/L		X	West side of LTR site
RM-307D	Trichloroethene	9		UG/L	X		West side of LTR site
RM-401XD	1,1-Dichloroethene	3.3		UG/L		X	400' Northwest of LL Site
RM-401XD	cis-1,2-Dichloroethene	7		UG/L		X	400' Northwest of LL Site
RM-401XD	Trichloroethene	4		UG/L		X	400' Northwest of LL Site
RM-401XD DUP	1,1-Dichloroethene	3.2		UG/L		X	400' Northwest of LL Site
RM-401XD DUP	cis-1,2-Dichloroethene	7.1		UG/L		X	400' Northwest of LL Site
RM-401XD DUP	Trichloroethene	4.1		UG/L		X	400' Northwest of LL Site
RM-401XXD	1,1-Dichloroethene	4.2		UG/L		X	400' Northwest of LL Site
RM-401XXD	cis-1,2-Dichloroethene	11.6		UG/L		X	400' Northwest of LL Site
RM-401XXD	Nitrogen, nitrate + nitrite	9.3		MG/L		X	400' Northwest of LL Site

Summary of Groundwater Standard Exceedances at Plume Monitoring Wells
Lemberger Landfill Sites
3rd Quarter 2020

Well ID	Parameter	Result	Data Qualifiers	Units	Standard[1]		Well Location
					ES[2]	PAL[3]	
RM-401XXD	Trichloroethene	1.9		UG/L		X	400' Northwest of LL Site
RM-401XXD DUP	1,1-Dichloroethene	4.3		UG/L		X	400' Northwest of LL Site
RM-401XXD DUP	cis-1,2-Dichloroethene	11.6		UG/L		X	400' Northwest of LL Site
RM-401XXD DUP	Nitrogen, nitrate + nitrite	9.4		MG/L		X	400' Northwest of LL Site
RM-401XXD DUP	Trichloroethene	1.8		UG/L		X	400' Northwest of LL Site
RM-402XD	1,1,1-Trichloroethane	101		UG/L		X	400' Northwest of LTR site
RM-402XD	1,1-Dichloroethene	19		UG/L	X		400' Northwest of LTR site
RM-402XD	cis-1,2-Dichloroethene	17.3		UG/L		X	400' Northwest of LTR site
RM-402XD	Nitrogen, nitrate + nitrite	5.5		MG/L		X	400' Northwest of LTR site
RM-402XD	Sulfate, total	253		MG/L	X		400' Northwest of LTR site
RM-402XD	Tetrachloroethene	0.82	J	UG/L		X	400' Northwest of LTR site
RM-402XD	Trichloroethene	12.8		UG/L	X		400' Northwest of LTR site
RM-402XXD	1,1-Dichloroethene	2.8		UG/L		X	400' Northwest of LTR site
RM-402XXD	cis-1,2-Dichloroethene	7.3		UG/L		X	400' Northwest of LTR site
RM-402XXD	Trichloroethene	6		UG/L	X		400' Northwest of LTR site
RM-403XD	1,1,1-Trichloroethane	92.3		UG/L		X	400' West of LTR site
RM-403XD	1,1-Dichloroethene	5.8		UG/L		X	400' West of LTR site
RM-403XD	cis-1,2-Dichloroethene	12.1		UG/L		X	400' West of LTR site
RM-403XD	Tetrachloroethene	1.2		UG/L		X	400' West of LTR site
RM-403XD	Trichloroethene	15.8		UG/L	X		400' West of LTR site
RM-404XXD	Nitrogen, nitrate + nitrite	4.4		MG/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.

Environmental Monitoring Data Certification

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

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)
7/31, 8/31, 9/27-30, 10/18, 10/26-31, 2020	July, August, and September 2020

Type of Data Submitted (Check all that apply):

- ☒ Groundwater monitoring data from monitoring wells
- ☒ Groundwater monitoring data from private water supply wells
- ☒ Leachate monitoring data
- ☐ Gas monitoring data
- ☐ Air monitoring data
- ☐ Other (specify):

Notification attached?

- ☐ No. No groundwater standards or explosive gas limits were exceeded.
- ☒ 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

1/12/2021
Date Signed (mm/dd/yyyy)

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: _____