HALL ENGINEERING COMPANY
Consulting Engineers
Since 1903

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Centerville, IA 52544
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May 18, 2026

Iowa Department of Natural Resources
Attn: Mike Smith
Wallace State Office Building
502 E. 9th Street
Des Moines, Iowa 50319

RE: Appanoose County Sanitary Landfill
Closure Permit No. 04-SDP-01-76C

Dear Mike:

Attached are the Eurofins laboratory analytical report for the Spring 2026 groundwater sampling at the North Unit of the Appanoose County Landfill, and the analytical report of the replicate sampling at MW-51 and MW-60 from Microbac laboratory.

The statistical assessment of the groundwater monitoring will be forwarded to you when completed within 45 days of the date of the groundwater analysis report.

Sincerely,

HALL ENGINEERING COMPANY

Bill Buss

Bill Buss

Copy: Dane Blozovich, Director
RASWC

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Bill Buss
Hall Engineering Company
PO BOX 825
Centerville, Iowa 52544

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JOB DESCRIPTION

Appanoose County Landfill - Spring 2026

JOB NUMBER

310-331318-1

Eurofins Cedar Falls
3019 Venture Way
Cedar Falls IA 50613

See page two for job notes and contact information.

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing North Central, LLC Project Manager.

Authorization

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Authorized for release by
Samuel Miller, Project Management Assistant I
Samuel.Miller@et.eurofinsus.com
(319)595-2008

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Job Narrative
310-331318-1

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

Receipt
The samples were received on 5/6/2026 8:40 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 1.3°C and 1.8°C.

GC/MS VOA
Method 8260D: The continuing calibration verification (CCV) associated with batch 310-488403 recovered outside control limits for Carbon disulfide (-25%D), 2-Hexanone (22%D), 1,1-Dichloroethene (-23%D) and trans-1,2-Dichloroethene (-22%D). The LCS associated with this CCV passes CCV criteria for the affected analytes; therefore, the data have been reported. The associated sample is:(CCV 310-488403/3).

Method 8260D: The continuing calibration verification (CCV) associated with batch 310-488403 recovered above the upper control limit for Vinyl chloride (29%D), Chloroethane (22%D) and Chloromethane (22%D). The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated sample is:(CCV 310-488403/4).

Method 8260D: The continuing calibration verification (CCV) associated with batch 310-488575 recovered above the upper control limit for Vinyl chloride (26%D) and Chloromethane (21%D). The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated sample is:(CCV 310-488575/4).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

GC/MS Semi VOA
Method 8270E: The continuing calibration verification (CCV) associated with batch 310-488955 recovered outside acceptance criteria, low biased, for 4,4-DDT (-55 %D), Endrin (-25 %D) and Methoxychlor (-52 %D). A reporting limit (RL) standard was analyzed, and the target analytes are detected. Since the associated samples were non-detect for the analyte(s), the data are reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Metals
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Sample Summary

Client: Hall Engineering Company
Job ID: 310-331318-1
Project/Site: Appanoose County Landfill - Spring 2026

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Sample Origin
310-331318-1	MW-51	Water	05/04/26 10:58	05/06/26 08:40	Iowa
310-331318-2	MW-60	Water	05/04/26 09:07	05/06/26 08:40	Iowa
310-331318-3	MW-27	Water	05/04/26 12:30	05/06/26 08:40	Iowa
310-331318-4	MW-50R	Water	05/04/26 13:29	05/06/26 08:40	Iowa
310-331318-5	Field Blank	Water	05/04/26 12:46	05/06/26 08:40	Iowa
310-331318-6	Trip Blank 1	Water	05/04/26 00:00	05/06/26 08:40	Iowa
310-331318-7	Trip Blank 2	Water	05/04/26 00:00	05/06/26 08:40	Iowa

Detection Summary

Client: Hall Engineering Company
Project/Site: Appanoose County Landfill - Spring 2026

Job ID: 310-331318-1

Client Sample ID: MW-51 — Lab Sample ID: 310-331318-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	0.00198	J	0.00200	0.00100	mg/L	1		6020B	Total/NA
Barium	0.00819		0.00200	0.000660	mg/L	1		6020B	Total/NA
Cobalt	0.000353	J	0.000500	0.000180	mg/L	1		6020B	Total/NA
Lead	0.000457	J	0.000500	0.000440	mg/L	1		6020B	Total/NA
Nickel	0.00764		0.00500	0.00230	mg/L	1		6020B	Total/NA
Selenium	0.000871	J	0.00500	0.000630	mg/L	1		6020B	Total/NA
Zinc	0.235		0.0200	0.0130	mg/L	1		6020B	Total/NA
Total Suspended Solids	2.38		1.88	1.05	mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-60 — Lab Sample ID: 310-331318-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	13.1		10.0	3.80	ug/L	1		8260D	Total/NA
Carbon disulfide	1.76		1.00	0.450	ug/L	1		8260D	Total/NA
Antimony	0.00532		0.00200	0.00100	mg/L	1		6020B	Total/NA
Arsenic	0.00496		0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.0288		0.00200	0.000660	mg/L	1		6020B	Total/NA
Lead	0.00258		0.000500	0.000440	mg/L	1		6020B	Total/NA
Selenium	0.00111	J	0.00500	0.000630	mg/L	1		6020B	Total/NA
Zinc	0.0135	J	0.0200	0.0130	mg/L	1		6020B	Total/NA
Sulfide	4.00		3.00	1.41	mg/L	1		9034	Total/NA

Client Sample ID: MW-27 — Lab Sample ID: 310-331318-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	5.05	J	10.0	3.80	ug/L	1		8260D	Total/NA
Benzene	0.582		0.500	0.220	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	1.32		1.00	0.550	ug/L	1		8260D	Total/NA
Arsenic	0.00405		0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.0773		0.00200	0.000660	mg/L	1		6020B	Total/NA
Cobalt	0.00608		0.000500	0.000180	mg/L	1		6020B	Total/NA
Nickel	0.0124		0.00500	0.00230	mg/L	1		6020B	Total/NA
Total Suspended Solids	23.5		7.50	4.20	mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-50R — Lab Sample ID: 310-331318-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	0.00101	J	0.00200	0.00100	mg/L	1		6020B	Total/NA
Arsenic	0.00151	J	0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.0412		0.00200	0.000660	mg/L	1		6020B	Total/NA
Cobalt	0.000836		0.000500	0.000180	mg/L	1		6020B	Total/NA
Lead	0.000640		0.000500	0.000440	mg/L	1		6020B	Total/NA
Total Suspended Solids	5.40		3.00	1.68	mg/L	1		I-3765-85	Total/NA

Client Sample ID: Field Blank — Lab Sample ID: 310-331318-5

No Detections.

Client Sample ID: Trip Blank 1 — Lab Sample ID: 310-331318-6

No Detections.

Client Sample ID: Trip Blank 2 — Lab Sample ID: 310-331318-7

No Detections.

This Detection Summary does not include radiochemical test results.

Client: Hall Engineering Company
Project/Site: Appanoose County Landfill - Spring 2026

Job ID: 310-331318-1

Client Sample ID: MW-51

Date Collected: 05/04/26 10:58
Date Received: 05/06/26 08:40

Lab Sample ID: 310-331318-1

Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			05/08/26 16:32	1
1,1,1-Trichloroethane	<0.420		1.00	0.420	ug/L			05/08/26 16:32	1
1,1,2,2-Tetrachloroethane	<0.350		1.00	0.350	ug/L			05/08/26 16:32	1
1,1,2-Trichloroethane	<0.330		1.00	0.330	ug/L			05/08/26 16:32	1
1,1-Dichloroethane	<0.400		1.00	0.400	ug/L			05/08/26 16:32	1
1,1-Dichloroethene	<0.460		2.00	0.460	ug/L			05/08/26 16:32	1
1,2,3-Trichloropropane	<0.430		1.00	0.430	ug/L			05/08/26 16:32	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			05/08/26 16:32	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			05/08/26 16:32	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			05/08/26 16:32	1
1,2-Dichloroethane	<0.890		1.00	0.890	ug/L			05/08/26 16:32	1
1,2-Dichloropropane	<0.380		1.00	0.380	ug/L			05/08/26 16:32	1
1,4-Dichlorobenzene	<0.490		1.00	0.490	ug/L			05/08/26 16:32	1
2-Butanone (MEK)	<3.40		10.0	3.40	ug/L			05/08/26 16:32	1
2-Hexanone	<3.80		10.0	3.80	ug/L			05/08/26 16:32	1
4-Methyl-2-pentanone (MIBK)	<3.50		10.0	3.50	ug/L			05/08/26 16:32	1
Acetone	<3.80	F1	10.0	3.80	ug/L			05/08/26 16:32	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			05/08/26 16:32	1
Benzene	<0.220		0.500	0.220	ug/L			05/08/26 16:32	1
Bromochloromethane	<1.70		5.00	1.70	ug/L			05/08/26 16:32	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			05/08/26 16:32	1
Bromoform	<2.60		5.00	2.60	ug/L			05/08/26 16:32	1
Bromomethane	<1.10		4.00	1.10	ug/L			05/08/26 16:32	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			05/08/26 16:32	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			05/08/26 16:32	1
Chlorobenzene	<0.350		1.00	0.350	ug/L			05/08/26 16:32	1
Chlorodibromomethane	<1.50		5.00	1.50	ug/L			05/08/26 16:32	1
Chloroethane	<0.900		4.00	0.900	ug/L			05/08/26 16:32	1
Chloroform	<1.30		3.00	1.30	ug/L			05/08/26 16:32	1
Chloromethane	<0.610		3.00	0.610	ug/L			05/08/26 16:32	1
cis-1,2-Dichloroethene	<0.550		1.00	0.550	ug/L			05/08/26 16:32	1
cis-1,3-Dichloropropene	<1.20		5.00	1.20	ug/L			05/08/26 16:32	1
Dibromomethane	<0.330		1.00	0.330	ug/L			05/08/26 16:32	1
Ethylbenzene	<0.420		1.00	0.420	ug/L			05/08/26 16:32	1
Iodomethane	<2.60		10.0	2.60	ug/L			05/08/26 16:32	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			05/08/26 16:32	1
Styrene	<0.370		1.00	0.370	ug/L			05/08/26 16:32	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			05/08/26 16:32	1
Toluene	<0.430		1.00	0.430	ug/L			05/08/26 16:32	1
trans-1,2-Dichloroethene	<0.410		1.00	0.410	ug/L			05/08/26 16:32	1
trans-1,3-Dichloropropene	<2.30		5.00	2.30	ug/L			05/08/26 16:32	1
trans-1,4-Dichloro-2-butene	<2.40		10.0	2.40	ug/L			05/08/26 16:32	1
Trichloroethene	<0.350		1.00	0.350	ug/L			05/08/26 16:32	1
Trichlorofluoromethane	<0.470		4.00	0.470	ug/L			05/08/26 16:32	1
Vinyl acetate	<7.10		10.0	7.10	ug/L			05/08/26 16:32	1
Vinyl chloride	<0.430		1.00	0.430	ug/L			05/08/26 16:32	1
Xylenes, Total	<1.10		3.00	1.10	ug/L			05/08/26 16:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*103*		*76 - 130*		*05/08/26 16:32*	*1*

Client: Hall Engineering Company
Job ID: 310-331318-1
Project/Site: Appanoose County Landfill - Spring 2026

Client Sample ID: MW-51
Lab Sample ID: 310-331318-1
Date Collected: 05/04/26 10:58
Matrix: Water
Date Received: 05/06/26 08:40

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*97*		*80 - 120*		*05/08/26 16:32*	*1*
4-Bromofluorobenzene (Surr)	*103*		*80 - 120*		*05/08/26 16:32*	*1*

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.00198**	**J**	0.00200	0.00100	mg/L		05/08/26 09:15	05/12/26 13:51	1
Arsenic	<0.000530		0.00200	0.000530	mg/L		05/08/26 09:15	05/12/26 13:51	1
Barium	**0.00819**		0.00200	0.000660	mg/L		05/08/26 09:15	05/12/26 13:51	1
Beryllium	<0.000330		0.00100	0.000330	mg/L		05/08/26 09:15	05/13/26 13:17	1
Cadmium	<0.000100		0.000200	0.000100	mg/L		05/08/26 09:15	05/12/26 13:51	1
Chromium	<0.00270		0.00500	0.00270	mg/L		05/08/26 09:15	05/12/26 13:51	1
Cobalt	**0.000353**	**J**	0.000500	0.000180	mg/L		05/08/26 09:15	05/12/26 13:51	1
Copper	<0.00280		0.00500	0.00280	mg/L		05/08/26 09:15	05/12/26 13:51	1
Lead	**0.000457**	**J**	0.000500	0.000440	mg/L		05/08/26 09:15	05/12/26 13:51	1
Nickel	**0.00764**		0.00500	0.00230	mg/L		05/08/26 09:15	05/12/26 13:51	1
Selenium	**0.000871**	**J**	0.00500	0.000630	mg/L		05/08/26 09:15	05/12/26 13:51	1
Silver	<0.000340		0.00100	0.000340	mg/L		05/08/26 09:15	05/11/26 12:22	1
Thallium	<0.000310		0.00100	0.000310	mg/L		05/08/26 09:15	05/12/26 13:51	1
Vanadium	<0.00200		0.00500	0.00200	mg/L		05/08/26 09:15	05/12/26 13:51	1
Zinc	**0.235**		0.0200	0.0130	mg/L		05/08/26 09:15	05/12/26 13:51	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide (SW846 9034)	<1.41		3.00	1.41	mg/L		05/11/26 10:37	05/11/26 11:21	1
Total Suspended Solids (USGS I-3765-85)	**2.38**		1.88	1.05	mg/L			05/07/26 09:58	1

Client: Hall Engineering Company
Project/Site: Appanoose County Landfill - Spring 2026

Job ID: 310-331318-1

Client Sample ID: MW-60
Date Collected: 05/04/26 09:07
Date Received: 05/06/26 08:40

Lab Sample ID: 310-331318-2
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			05/08/26 16:56	1
1,1,1-Trichloroethane	<0.420		1.00	0.420	ug/L			05/08/26 16:56	1
1,1,2,2-Tetrachloroethane	<0.350		1.00	0.350	ug/L			05/08/26 16:56	1
1,1,2-Trichloroethane	<0.330		1.00	0.330	ug/L			05/08/26 16:56	1
1,1-Dichloroethane	<0.400		1.00	0.400	ug/L			05/08/26 16:56	1
1,1-Dichloroethene	<0.460		2.00	0.460	ug/L			05/08/26 16:56	1
1,2,3-Trichloropropane	<0.430		1.00	0.430	ug/L			05/08/26 16:56	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			05/08/26 16:56	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			05/08/26 16:56	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			05/08/26 16:56	1
1,2-Dichloroethane	<0.890		1.00	0.890	ug/L			05/08/26 16:56	1
1,2-Dichloropropane	<0.380		1.00	0.380	ug/L			05/08/26 16:56	1
1,4-Dichlorobenzene	<0.490		1.00	0.490	ug/L			05/08/26 16:56	1
2-Butanone (MEK)	<3.40		10.0	3.40	ug/L			05/08/26 16:56	1
2-Hexanone	<3.80		10.0	3.80	ug/L			05/08/26 16:56	1
4-Methyl-2-pentanone (MIBK)	<3.50		10.0	3.50	ug/L			05/08/26 16:56	1
Acetone	**13.1**		10.0	3.80	ug/L			05/08/26 16:56	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			05/08/26 16:56	1
Benzene	<0.220		0.500	0.220	ug/L			05/08/26 16:56	1
Bromochloromethane	<1.70		5.00	1.70	ug/L			05/08/26 16:56	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			05/08/26 16:56	1
Bromoform	<2.60		5.00	2.60	ug/L			05/08/26 16:56	1
Bromomethane	<1.10		4.00	1.10	ug/L			05/08/26 16:56	1
Carbon disulfide	**1.76**		1.00	0.450	ug/L			05/08/26 16:56	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			05/08/26 16:56	1
Chlorobenzene	<0.350		1.00	0.350	ug/L			05/08/26 16:56	1
Chlorodibromomethane	<1.50		5.00	1.50	ug/L			05/08/26 16:56	1
Chloroethane	<0.900		4.00	0.900	ug/L			05/08/26 16:56	1
Chloroform	<1.30		3.00	1.30	ug/L			05/08/26 16:56	1
Chloromethane	<0.610		3.00	0.610	ug/L			05/08/26 16:56	1
cis-1,2-Dichloroethene	<0.550		1.00	0.550	ug/L			05/08/26 16:56	1
cis-1,3-Dichloropropene	<1.20		5.00	1.20	ug/L			05/08/26 16:56	1
Dibromomethane	<0.330		1.00	0.330	ug/L			05/08/26 16:56	1
Ethylbenzene	<0.420		1.00	0.420	ug/L			05/08/26 16:56	1
Iodomethane	<2.60		10.0	2.60	ug/L			05/08/26 16:56	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			05/08/26 16:56	1
Styrene	<0.370		1.00	0.370	ug/L			05/08/26 16:56	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			05/08/26 16:56	1
Toluene	<0.430		1.00	0.430	ug/L			05/08/26 16:56	1
trans-1,2-Dichloroethene	<0.410		1.00	0.410	ug/L			05/08/26 16:56	1
trans-1,3-Dichloropropene	<2.30		5.00	2.30	ug/L			05/08/26 16:56	1
trans-1,4-Dichloro-2-butene	<2.40		10.0	2.40	ug/L			05/08/26 16:56	1
Trichloroethene	<0.350		1.00	0.350	ug/L			05/08/26 16:56	1
Trichlorofluoromethane	<0.470		4.00	0.470	ug/L			05/08/26 16:56	1
Vinyl acetate	<7.10		10.0	7.10	ug/L			05/08/26 16:56	1
Vinyl chloride	<0.430		1.00	0.430	ug/L			05/08/26 16:56	1
Xylenes, Total	<1.10		3.00	1.10	ug/L			05/08/26 16:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*108*		*76 - 130*		*05/08/26 16:56*	*1*

Client: Hall Engineering Company
Job ID: 310-331318-1
Project/Site: Appanoose County Landfill - Spring 2026

Client Sample ID: MW-60
Lab Sample ID: 310-331318-2
Date Collected: 05/04/26 09:07
Matrix: Water
Date Received: 05/06/26 08:40

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*98*		*80 - 120*		*05/08/26 16:56*	*1*
4-Bromofluorobenzene (Surr)	*104*		*80 - 120*		*05/08/26 16:56*	*1*

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.00532**		0.00200	0.00100	mg/L		05/08/26 09:15	05/12/26 13:53	1
Arsenic	**0.00496**		0.00200	0.000530	mg/L		05/08/26 09:15	05/12/26 13:53	1
Barium	**0.0288**		0.00200	0.000660	mg/L		05/08/26 09:15	05/12/26 13:53	1
Beryllium	<0.000330		0.00100	0.000330	mg/L		05/08/26 09:15	05/13/26 13:20	1
Cadmium	<0.000100		0.000200	0.000100	mg/L		05/08/26 09:15	05/12/26 13:53	1
Chromium	<0.00270		0.00500	0.00270	mg/L		05/08/26 09:15	05/12/26 13:53	1
Cobalt	<0.000180		0.000500	0.000180	mg/L		05/08/26 09:15	05/12/26 13:53	1
Copper	<0.00280		0.00500	0.00280	mg/L		05/08/26 09:15	05/12/26 13:53	1
Lead	**0.00258**		0.000500	0.000440	mg/L		05/08/26 09:15	05/12/26 13:53	1
Nickel	<0.00230		0.00500	0.00230	mg/L		05/08/26 09:15	05/12/26 13:53	1
Selenium	**0.00111**	**J**	0.00500	0.000630	mg/L		05/08/26 09:15	05/12/26 13:53	1
Silver	<0.000340		0.00100	0.000340	mg/L		05/08/26 09:15	05/11/26 12:24	1
Thallium	<0.000310		0.00100	0.000310	mg/L		05/08/26 09:15	05/12/26 13:53	1
Vanadium	<0.00200		0.00500	0.00200	mg/L		05/08/26 09:15	05/12/26 13:53	1
Zinc	**0.0135**	**J**	0.0200	0.0130	mg/L		05/08/26 09:15	05/12/26 13:53	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide (SW846 9034)	**4.00**		3.00	1.41	mg/L		05/11/26 10:37	05/11/26 11:21	1
Total Suspended Solids (USGS I-3765-85)	<1.05		1.88	1.05	mg/L			05/07/26 09:58	1

Client: Hall Engineering Company
Project/Site: Appanoose County Landfill - Spring 2026

Job ID: 310-331318-1

Client Sample ID: MW-27

Date Collected: 05/04/26 12:30
Date Received: 05/06/26 08:40

Lab Sample ID: 310-331318-3

Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			05/08/26 17:18	1
1,1,1-Trichloroethane	<0.420		1.00	0.420	ug/L			05/08/26 17:18	1
1,1,2,2-Tetrachloroethane	<0.350		1.00	0.350	ug/L			05/08/26 17:18	1
1,1,2-Trichloroethane	<0.330		1.00	0.330	ug/L			05/08/26 17:18	1
1,1-Dichloroethane	<0.400		1.00	0.400	ug/L			05/08/26 17:18	1
1,1-Dichloroethene	<0.460		2.00	0.460	ug/L			05/08/26 17:18	1
1,2,3-Trichloropropane	<0.430		1.00	0.430	ug/L			05/08/26 17:18	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			05/08/26 17:18	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			05/08/26 17:18	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			05/08/26 17:18	1
1,2-Dichloroethane	<0.890		1.00	0.890	ug/L			05/08/26 17:18	1
1,2-Dichloropropane	<0.380		1.00	0.380	ug/L			05/08/26 17:18	1
1,4-Dichlorobenzene	<0.490		1.00	0.490	ug/L			05/08/26 17:18	1
2-Butanone (MEK)	<3.40		10.0	3.40	ug/L			05/08/26 17:18	1
2-Hexanone	<3.80		10.0	3.80	ug/L			05/08/26 17:18	1
4-Methyl-2-pentanone (MIBK)	<3.50		10.0	3.50	ug/L			05/08/26 17:18	1
Acetone	**5.05**	**J**	10.0	3.80	ug/L			05/08/26 17:18	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			05/08/26 17:18	1
Benzene	**0.582**		0.500	0.220	ug/L			05/08/26 17:18	1
Bromochloromethane	<1.70		5.00	1.70	ug/L			05/08/26 17:18	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			05/08/26 17:18	1
Bromoform	<2.60		5.00	2.60	ug/L			05/08/26 17:18	1
Bromomethane	<1.10		4.00	1.10	ug/L			05/08/26 17:18	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			05/08/26 17:18	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			05/08/26 17:18	1
Chlorobenzene	<0.350		1.00	0.350	ug/L			05/08/26 17:18	1
Chlorodibromomethane	<1.50		5.00	1.50	ug/L			05/08/26 17:18	1
Chloroethane	<0.900		4.00	0.900	ug/L			05/08/26 17:18	1
Chloroform	<1.30		3.00	1.30	ug/L			05/08/26 17:18	1
Chloromethane	<0.610		3.00	0.610	ug/L			05/08/26 17:18	1
cis-1,2-Dichloroethene	**1.32**		1.00	0.550	ug/L			05/08/26 17:18	1
cis-1,3-Dichloropropene	<1.20		5.00	1.20	ug/L			05/08/26 17:18	1
Dibromomethane	<0.330		1.00	0.330	ug/L			05/08/26 17:18	1
Ethylbenzene	<0.420		1.00	0.420	ug/L			05/08/26 17:18	1
Iodomethane	<2.60		10.0	2.60	ug/L			05/08/26 17:18	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			05/08/26 17:18	1
Styrene	<0.370		1.00	0.370	ug/L			05/08/26 17:18	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			05/08/26 17:18	1
Toluene	<0.430		1.00	0.430	ug/L			05/08/26 17:18	1
trans-1,2-Dichloroethene	<0.410		1.00	0.410	ug/L			05/08/26 17:18	1
trans-1,3-Dichloropropene	<2.30		5.00	2.30	ug/L			05/08/26 17:18	1
trans-1,4-Dichloro-2-butene	<2.40		10.0	2.40	ug/L			05/08/26 17:18	1
Trichloroethene	<0.350		1.00	0.350	ug/L			05/08/26 17:18	1
Trichlorofluoromethane	<0.470		4.00	0.470	ug/L			05/08/26 17:18	1
Vinyl acetate	<7.10		10.0	7.10	ug/L			05/08/26 17:18	1
Vinyl chloride	<0.430		1.00	0.430	ug/L			05/08/26 17:18	1
Xylenes, Total	<1.10		3.00	1.10	ug/L			05/08/26 17:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*107*		*76 - 130*		*05/08/26 17:18*	*1*

Client Sample ID: MW-27
Date Collected: 05/04/26 12:30
Date Received: 05/06/26 08:40

Lab Sample ID: 310-331318-3
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	*99*		*80 - 120*		*05/08/26 17:18*	*1*
4-Bromofluorobenzene (Surr)	*104*		*80 - 120*		*05/08/26 17:18*	*1*

Method: SW846 8270E - Organochlorine Pesticides by GC-MS/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
beta-BHC	<0.0189		0.119	0.0189	ug/L		05/11/26 12:06	05/14/26 17:15	1
delta-BHC	<0.0129		0.119	0.0129	ug/L		05/11/26 12:06	05/14/26 17:15	1
Dieldrin	<0.0357		0.119	0.0357	ug/L		05/11/26 12:06	05/14/26 17:15	1
Endosulfan sulfate	<0.0526		0.119	0.0526	ug/L		05/11/26 12:06	05/14/26 17:15	1
Endrin	<0.0288		0.119	0.0288	ug/L		05/11/26 12:06	05/14/26 17:15	1
Endrin aldehyde	<0.0437		0.496	0.0437	ug/L		05/11/26 12:06	05/14/26 17:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	*89*	*I*	*22 - 150*	*05/11/26 12:06*	*05/14/26 17:15*	*1*
2-Fluorobiphenyl (Surr)	*101*		*13 - 150*	*05/11/26 12:06*	*05/14/26 17:15*	*1*
Terphenyl-d14 (Surr)	*91*		*10 - 150*	*05/11/26 12:06*	*05/14/26 17:15*	*1*

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00100		0.00200	0.00100	mg/L		05/08/26 09:15	05/12/26 13:56	1
Arsenic	**0.00405**		0.00200	0.000530	mg/L		05/08/26 09:15	05/12/26 13:56	1
Barium	**0.0773**		0.00200	0.000660	mg/L		05/08/26 09:15	05/12/26 13:56	1
Beryllium	<0.000330		0.00100	0.000330	mg/L		05/08/26 09:15	05/13/26 13:23	1
Cadmium	<0.000100		0.000200	0.000100	mg/L		05/08/26 09:15	05/12/26 13:56	1
Chromium	<0.00270		0.00500	0.00270	mg/L		05/08/26 09:15	05/12/26 13:56	1
Cobalt	**0.00608**		0.000500	0.000180	mg/L		05/08/26 09:15	05/12/26 13:56	1
Copper	<0.00280		0.00500	0.00280	mg/L		05/08/26 09:15	05/12/26 13:56	1
Lead	<0.000440		0.000500	0.000440	mg/L		05/08/26 09:15	05/12/26 13:56	1
Nickel	**0.0124**		0.00500	0.00230	mg/L		05/08/26 09:15	05/12/26 13:56	1
Selenium	<0.000630		0.00500	0.000630	mg/L		05/08/26 09:15	05/12/26 13:56	1
Silver	<0.000340		0.00100	0.000340	mg/L		05/08/26 09:15	05/11/26 12:33	1
Thallium	<0.000310		0.00100	0.000310	mg/L		05/08/26 09:15	05/12/26 13:56	1
Vanadium	<0.00200		0.00500	0.00200	mg/L		05/08/26 09:15	05/12/26 13:56	1
Zinc	<0.0130		0.0200	0.0130	mg/L		05/08/26 09:15	05/12/26 13:56	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide (SW846 9034)	<1.41		3.00	1.41	mg/L		05/11/26 10:37	05/11/26 11:21	1
Total Suspended Solids (USGS I-3765-85)	**23.5**		7.50	4.20	mg/L			05/07/26 09:58	1

Client: Hall Engineering Company
Project/Site: Appanoose County Landfill - Spring 2026

Job ID: 310-331318-1

Client Sample ID: MW-50R
Date Collected: 05/04/26 13:29
Date Received: 05/06/26 08:40

Lab Sample ID: 310-331318-4
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			05/08/26 17:41	1
1,1,1-Trichloroethane	<0.420		1.00	0.420	ug/L			05/08/26 17:41	1
1,1,2,2-Tetrachloroethane	<0.350		1.00	0.350	ug/L			05/08/26 17:41	1
1,1,2-Trichloroethane	<0.330		1.00	0.330	ug/L			05/08/26 17:41	1
1,1-Dichloroethane	<0.400		1.00	0.400	ug/L			05/08/26 17:41	1
1,1-Dichloroethene	<0.460		2.00	0.460	ug/L			05/08/26 17:41	1
1,2,3-Trichloropropane	<0.430		1.00	0.430	ug/L			05/08/26 17:41	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			05/08/26 17:41	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			05/08/26 17:41	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			05/08/26 17:41	1
1,2-Dichloroethane	<0.890		1.00	0.890	ug/L			05/08/26 17:41	1
1,2-Dichloropropane	<0.380		1.00	0.380	ug/L			05/08/26 17:41	1
1,4-Dichlorobenzene	<0.490		1.00	0.490	ug/L			05/08/26 17:41	1
2-Butanone (MEK)	<3.40		10.0	3.40	ug/L			05/08/26 17:41	1
2-Hexanone	<3.80		10.0	3.80	ug/L			05/08/26 17:41	1
4-Methyl-2-pentanone (MIBK)	<3.50		10.0	3.50	ug/L			05/08/26 17:41	1
Acetone	<3.80		10.0	3.80	ug/L			05/08/26 17:41	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			05/08/26 17:41	1
Benzene	<0.220		0.500	0.220	ug/L			05/08/26 17:41	1
Bromochloromethane	<1.70		5.00	1.70	ug/L			05/08/26 17:41	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			05/08/26 17:41	1
Bromoform	<2.60		5.00	2.60	ug/L			05/08/26 17:41	1
Bromomethane	<1.10		4.00	1.10	ug/L			05/08/26 17:41	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			05/08/26 17:41	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			05/08/26 17:41	1
Chlorobenzene	<0.350		1.00	0.350	ug/L			05/08/26 17:41	1
Chlorodibromomethane	<1.50		5.00	1.50	ug/L			05/08/26 17:41	1
Chloroethane	<0.900		4.00	0.900	ug/L			05/08/26 17:41	1
Chloroform	<1.30		3.00	1.30	ug/L			05/08/26 17:41	1
Chloromethane	<0.610		3.00	0.610	ug/L			05/08/26 17:41	1
cis-1,2-Dichloroethene	<0.550		1.00	0.550	ug/L			05/08/26 17:41	1
cis-1,3-Dichloropropene	<1.20		5.00	1.20	ug/L			05/08/26 17:41	1
Dibromomethane	<0.330		1.00	0.330	ug/L			05/08/26 17:41	1
Ethylbenzene	<0.420		1.00	0.420	ug/L			05/08/26 17:41	1
Iodomethane	<2.60		10.0	2.60	ug/L			05/08/26 17:41	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			05/08/26 17:41	1
Styrene	<0.370		1.00	0.370	ug/L			05/08/26 17:41	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			05/08/26 17:41	1
Toluene	<0.430		1.00	0.430	ug/L			05/08/26 17:41	1
trans-1,2-Dichloroethene	<0.410		1.00	0.410	ug/L			05/08/26 17:41	1
trans-1,3-Dichloropropene	<2.30		5.00	2.30	ug/L			05/08/26 17:41	1
trans-1,4-Dichloro-2-butene	<2.40		10.0	2.40	ug/L			05/08/26 17:41	1
Trichloroethene	<0.350		1.00	0.350	ug/L			05/08/26 17:41	1
Trichlorofluoromethane	<0.470		4.00	0.470	ug/L			05/08/26 17:41	1
Vinyl acetate	<7.10		10.0	7.10	ug/L			05/08/26 17:41	1
Vinyl chloride	<0.430		1.00	0.430	ug/L			05/08/26 17:41	1
Xylenes, Total	<1.10		3.00	1.10	ug/L			05/08/26 17:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*106*		*76 - 130*		*05/08/26 17:41*	*1*

Client: Hall Engineering Company
Job ID: 310-331318-1
Project/Site: Appanoose County Landfill - Spring 2026

Client Sample ID: MW-50R
Lab Sample ID: 310-331318-4
Date Collected: 05/04/26 13:29
Matrix: Water
Date Received: 05/06/26 08:40

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*98*		*80 - 120*		*05/08/26 17:41*	*1*
4-Bromofluorobenzene (Surr)	*104*		*80 - 120*		*05/08/26 17:41*	*1*

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.00101**	**J**	0.00200	0.00100	mg/L		05/08/26 09:15	05/12/26 13:58	1
Arsenic	**0.00151**	**J**	0.00200	0.000530	mg/L		05/08/26 09:15	05/12/26 13:58	1
Barium	**0.0412**		0.00200	0.000660	mg/L		05/08/26 09:15	05/12/26 13:58	1
Beryllium	<0.000330		0.00100	0.000330	mg/L		05/08/26 09:15	05/13/26 13:26	1
Cadmium	<0.000100		0.000200	0.000100	mg/L		05/08/26 09:15	05/12/26 13:58	1
Chromium	<0.00270		0.00500	0.00270	mg/L		05/08/26 09:15	05/12/26 13:58	1
Cobalt	**0.000836**		0.000500	0.000180	mg/L		05/08/26 09:15	05/12/26 13:58	1
Copper	<0.00280		0.00500	0.00280	mg/L		05/08/26 09:15	05/12/26 13:58	1
Lead	**0.000640**		0.000500	0.000440	mg/L		05/08/26 09:15	05/12/26 13:58	1
Nickel	<0.00230		0.00500	0.00230	mg/L		05/08/26 09:15	05/12/26 13:58	1
Selenium	<0.000630		0.00500	0.000630	mg/L		05/08/26 09:15	05/12/26 13:58	1
Silver	<0.000340		0.00100	0.000340	mg/L		05/08/26 09:15	05/11/26 12:36	1
Thallium	<0.000310		0.00100	0.000310	mg/L		05/08/26 09:15	05/12/26 13:58	1
Vanadium	<0.00200		0.00500	0.00200	mg/L		05/08/26 09:15	05/12/26 13:58	1
Zinc	<0.0130		0.0200	0.0130	mg/L		05/08/26 09:15	05/12/26 13:58	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**5.40**		3.00	1.68	mg/L			05/07/26 09:58	1

Client: Hall Engineering Company
Project/Site: Appanoose County Landfill - Spring 2026

Job ID: 310-331318-1

Client Sample ID: Field Blank

Date Collected: 05/04/26 12:46
Date Received: 05/06/26 08:40

Lab Sample ID: 310-331318-5

Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			05/08/26 22:39	1
1,1,1-Trichloroethane	<0.420		1.00	0.420	ug/L			05/08/26 22:39	1
1,1,2,2-Tetrachloroethane	<0.350		1.00	0.350	ug/L			05/08/26 22:39	1
1,1,2-Trichloroethane	<0.330		1.00	0.330	ug/L			05/08/26 22:39	1
1,1-Dichloroethane	<0.400		1.00	0.400	ug/L			05/08/26 22:39	1
1,1-Dichloroethene	<0.460		2.00	0.460	ug/L			05/08/26 22:39	1
1,2,3-Trichloropropane	<0.430		1.00	0.430	ug/L			05/08/26 22:39	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			05/08/26 22:39	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			05/08/26 22:39	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			05/08/26 22:39	1
1,2-Dichloroethane	<0.890		1.00	0.890	ug/L			05/08/26 22:39	1
1,2-Dichloropropane	<0.380		1.00	0.380	ug/L			05/08/26 22:39	1
1,4-Dichlorobenzene	<0.490		1.00	0.490	ug/L			05/08/26 22:39	1
2-Butanone (MEK)	<3.40		10.0	3.40	ug/L			05/08/26 22:39	1
2-Hexanone	<3.80		10.0	3.80	ug/L			05/08/26 22:39	1
4-Methyl-2-pentanone (MIBK)	<3.50		10.0	3.50	ug/L			05/08/26 22:39	1
Acetone	<3.80		10.0	3.80	ug/L			05/08/26 22:39	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			05/08/26 22:39	1
Benzene	<0.220		0.500	0.220	ug/L			05/08/26 22:39	1
Bromochloromethane	<1.70		5.00	1.70	ug/L			05/08/26 22:39	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			05/08/26 22:39	1
Bromoform	<2.60		5.00	2.60	ug/L			05/08/26 22:39	1
Bromomethane	<1.10		4.00	1.10	ug/L			05/08/26 22:39	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			05/08/26 22:39	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			05/08/26 22:39	1
Chlorobenzene	<0.350		1.00	0.350	ug/L			05/08/26 22:39	1
Chlorodibromomethane	<1.50		5.00	1.50	ug/L			05/08/26 22:39	1
Chloroethane	<0.900		4.00	0.900	ug/L			05/08/26 22:39	1
Chloroform	<1.30		3.00	1.30	ug/L			05/08/26 22:39	1
Chloromethane	<0.610		3.00	0.610	ug/L			05/08/26 22:39	1
cis-1,2-Dichloroethene	<0.550		1.00	0.550	ug/L			05/08/26 22:39	1
cis-1,3-Dichloropropene	<1.20		5.00	1.20	ug/L			05/08/26 22:39	1
Dibromomethane	<0.330		1.00	0.330	ug/L			05/08/26 22:39	1
Ethylbenzene	<0.420		1.00	0.420	ug/L			05/08/26 22:39	1
Iodomethane	<2.60		10.0	2.60	ug/L			05/08/26 22:39	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			05/08/26 22:39	1
Styrene	<0.370		1.00	0.370	ug/L			05/08/26 22:39	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			05/08/26 22:39	1
Toluene	<0.430		1.00	0.430	ug/L			05/08/26 22:39	1
trans-1,2-Dichloroethene	<0.410		1.00	0.410	ug/L			05/08/26 22:39	1
trans-1,3-Dichloropropene	<2.30		5.00	2.30	ug/L			05/08/26 22:39	1
trans-1,4-Dichloro-2-butene	<2.40		10.0	2.40	ug/L			05/08/26 22:39	1
Trichloroethene	<0.350		1.00	0.350	ug/L			05/08/26 22:39	1
Trichlorofluoromethane	<0.470		4.00	0.470	ug/L			05/08/26 22:39	1
Vinyl acetate	<7.10		10.0	7.10	ug/L			05/08/26 22:39	1
Vinyl chloride	<0.430		1.00	0.430	ug/L			05/08/26 22:39	1
Xylenes, Total	<1.10		3.00	1.10	ug/L			05/08/26 22:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*102*		*76 - 130*		*05/08/26 22:39*	*1*

Client Sample ID: Field Blank
Lab Sample ID: 310-331318-5
Date Collected: 05/04/26 12:46
Matrix: Water
Date Received: 05/06/26 08:40

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*98*		*80 - 120*		*05/08/26 22:39*	*1*
4-Bromofluorobenzene (Surr)	*104*		*80 - 120*		*05/08/26 22:39*	*1*

Method: SW846 8270E - Organochlorine Pesticides by GC-MS/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
beta-BHC	<0.0189		0.119	0.0189	ug/L		05/11/26 12:06	05/13/26 19:04	1
delta-BHC	<0.0129		0.119	0.0129	ug/L		05/11/26 12:06	05/13/26 19:04	1
Dieldrin	<0.0358		0.119	0.0358	ug/L		05/11/26 12:06	05/13/26 19:04	1
Endosulfan sulfate	<0.0526		0.119	0.0526	ug/L		05/11/26 12:06	05/13/26 19:04	1
Endrin	<0.0288		0.119	0.0288	ug/L		05/11/26 12:06	05/13/26 19:04	1
Endrin aldehyde	<0.0437		0.497	0.0437	ug/L		05/11/26 12:06	05/13/26 19:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*112*		*22 - 150*	*05/11/26 12:06*	*05/13/26 19:04*	*1*
2-Fluorobiphenyl (Surr)	*105*		*13 - 150*	*05/11/26 12:06*	*05/13/26 19:04*	*1*
Terphenyl-d14 (Surr)	*103*		*10 - 150*	*05/11/26 12:06*	*05/13/26 19:04*	*1*

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00100		0.00200	0.00100	mg/L		05/08/26 09:15	05/12/26 14:01	1
Arsenic	<0.000530		0.00200	0.000530	mg/L		05/08/26 09:15	05/12/26 14:01	1
Barium	<0.000660		0.00200	0.000660	mg/L		05/08/26 09:15	05/12/26 14:01	1
Beryllium	<0.000330		0.00100	0.000330	mg/L		05/08/26 09:15	05/13/26 13:34	1
Cadmium	<0.000100		0.000200	0.000100	mg/L		05/08/26 09:15	05/12/26 14:01	1
Chromium	<0.00270		0.00500	0.00270	mg/L		05/08/26 09:15	05/12/26 14:01	1
Cobalt	<0.000180		0.000500	0.000180	mg/L		05/08/26 09:15	05/12/26 14:01	1
Copper	<0.00280		0.00500	0.00280	mg/L		05/08/26 09:15	05/12/26 14:01	1
Lead	<0.000440		0.000500	0.000440	mg/L		05/08/26 09:15	05/12/26 14:01	1
Nickel	<0.00230		0.00500	0.00230	mg/L		05/08/26 09:15	05/12/26 14:01	1
Selenium	<0.000630		0.00500	0.000630	mg/L		05/08/26 09:15	05/12/26 14:01	1
Silver	<0.000340		0.00100	0.000340	mg/L		05/08/26 09:15	05/11/26 12:39	1
Thallium	<0.000310		0.00100	0.000310	mg/L		05/08/26 09:15	05/12/26 14:01	1
Vanadium	<0.00200		0.00500	0.00200	mg/L		05/08/26 09:15	05/12/26 14:01	1
Zinc	<0.0130		0.0200	0.0130	mg/L		05/08/26 09:15	05/12/26 14:01	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide (SW846 9034)	<1.41		3.00	1.41	mg/L		05/11/26 10:37	05/11/26 11:21	1
Total Suspended Solids (USGS I-3765-85)	<2.80		5.00	2.80	mg/L			05/07/26 10:44	1

Client: Hall Engineering Company
Project/Site: Appanoose County Landfill - Spring 2026

Job ID: 310-331318-1

Client Sample ID: Trip Blank 1
Date Collected: 05/04/26 00:00
Date Received: 05/06/26 08:40

Lab Sample ID: 310-331318-6
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			05/11/26 15:05	1
1,1,1-Trichloroethane	<0.420		1.00	0.420	ug/L			05/11/26 15:05	1
1,1,2,2-Tetrachloroethane	<0.350		1.00	0.350	ug/L			05/11/26 15:05	1
1,1,2-Trichloroethane	<0.330		1.00	0.330	ug/L			05/11/26 15:05	1
1,1-Dichloroethane	<0.400		1.00	0.400	ug/L			05/11/26 15:05	1
1,1-Dichloroethene	<0.460		2.00	0.460	ug/L			05/11/26 15:05	1
1,2,3-Trichloropropane	<0.430		1.00	0.430	ug/L			05/11/26 15:05	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			05/11/26 15:05	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			05/11/26 15:05	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			05/11/26 15:05	1
1,2-Dichloroethane	<0.890		1.00	0.890	ug/L			05/11/26 15:05	1
1,2-Dichloropropane	<0.380		1.00	0.380	ug/L			05/11/26 15:05	1
1,4-Dichlorobenzene	<0.490		1.00	0.490	ug/L			05/11/26 15:05	1
2-Butanone (MEK)	<3.40		10.0	3.40	ug/L			05/11/26 15:05	1
2-Hexanone	<3.80		10.0	3.80	ug/L			05/11/26 15:05	1
4-Methyl-2-pentanone (MIBK)	<3.50		10.0	3.50	ug/L			05/11/26 15:05	1
Acetone	<3.80		10.0	3.80	ug/L			05/11/26 15:05	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			05/11/26 15:05	1
Benzene	<0.220		0.500	0.220	ug/L			05/11/26 15:05	1
Bromochloromethane	<1.70		5.00	1.70	ug/L			05/11/26 15:05	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			05/11/26 15:05	1
Bromoform	<2.60		5.00	2.60	ug/L			05/11/26 15:05	1
Bromomethane	<1.10		4.00	1.10	ug/L			05/11/26 15:05	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			05/11/26 15:05	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			05/11/26 15:05	1
Chlorobenzene	<0.350		1.00	0.350	ug/L			05/11/26 15:05	1
Chlorodibromomethane	<1.50		5.00	1.50	ug/L			05/11/26 15:05	1
Chloroethane	<0.900		4.00	0.900	ug/L			05/11/26 15:05	1
Chloroform	<1.30		3.00	1.30	ug/L			05/11/26 15:05	1
Chloromethane	<0.610		3.00	0.610	ug/L			05/11/26 15:05	1
cis-1,2-Dichloroethene	<0.550		1.00	0.550	ug/L			05/11/26 15:05	1
cis-1,3-Dichloropropene	<1.20		5.00	1.20	ug/L			05/11/26 15:05	1
Dibromomethane	<0.330		1.00	0.330	ug/L			05/11/26 15:05	1
Ethylbenzene	<0.420		1.00	0.420	ug/L			05/11/26 15:05	1
Iodomethane	<2.60		10.0	2.60	ug/L			05/11/26 15:05	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			05/11/26 15:05	1
Styrene	<0.370		1.00	0.370	ug/L			05/11/26 15:05	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			05/11/26 15:05	1
Toluene	<0.430		1.00	0.430	ug/L			05/11/26 15:05	1
trans-1,2-Dichloroethene	<0.410		1.00	0.410	ug/L			05/11/26 15:05	1
trans-1,3-Dichloropropene	<2.30		5.00	2.30	ug/L			05/11/26 15:05	1
trans-1,4-Dichloro-2-butene	<2.40		10.0	2.40	ug/L			05/11/26 15:05	1
Trichloroethene	<0.350		1.00	0.350	ug/L			05/11/26 15:05	1
Trichlorofluoromethane	<0.470		4.00	0.470	ug/L			05/11/26 15:05	1
Vinyl acetate	<7.10		10.0	7.10	ug/L			05/11/26 15:05	1
Vinyl chloride	<0.430		1.00	0.430	ug/L			05/11/26 15:05	1
Xylenes, Total	<1.10		3.00	1.10	ug/L			05/11/26 15:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*105*		*76 - 130*		*05/11/26 15:05*	*1*

Client Sample ID: Trip Blank 1
Lab Sample ID: 310-331318-6
Date Collected: 05/04/26 00:00
Matrix: Water
Date Received: 05/06/26 08:40

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	97		80 - 120		05/11/26 15:05	1
4-Bromofluorobenzene (Surr)	101		80 - 120		05/11/26 15:05	1

Client: Hall Engineering Company
Project/Site: Appanoose County Landfill - Spring 2026

Job ID: 310-331318-1

Client Sample ID: Trip Blank 2
Date Collected: 05/04/26 00:00
Date Received: 05/06/26 08:40

Lab Sample ID: 310-331318-7
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			05/08/26 12:43	1
1,1,1-Trichloroethane	<0.420		1.00	0.420	ug/L			05/08/26 12:43	1
1,1,2,2-Tetrachloroethane	<0.350		1.00	0.350	ug/L			05/08/26 12:43	1
1,1,2-Trichloroethane	<0.330		1.00	0.330	ug/L			05/08/26 12:43	1
1,1-Dichloroethane	<0.400		1.00	0.400	ug/L			05/08/26 12:43	1
1,1-Dichloroethene	<0.460		2.00	0.460	ug/L			05/08/26 12:43	1
1,2,3-Trichloropropane	<0.430		1.00	0.430	ug/L			05/08/26 12:43	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			05/08/26 12:43	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			05/08/26 12:43	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			05/08/26 12:43	1
1,2-Dichloroethane	<0.890		1.00	0.890	ug/L			05/08/26 12:43	1
1,2-Dichloropropane	<0.380		1.00	0.380	ug/L			05/08/26 12:43	1
1,4-Dichlorobenzene	<0.490		1.00	0.490	ug/L			05/08/26 12:43	1
2-Butanone (MEK)	<3.40		10.0	3.40	ug/L			05/08/26 12:43	1
2-Hexanone	<3.80		10.0	3.80	ug/L			05/08/26 12:43	1
4-Methyl-2-pentanone (MIBK)	<3.50		10.0	3.50	ug/L			05/08/26 12:43	1
Acetone	<3.80		10.0	3.80	ug/L			05/08/26 12:43	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			05/08/26 12:43	1
Benzene	<0.220		0.500	0.220	ug/L			05/11/26 15:28	1
Bromochloromethane	<1.70		5.00	1.70	ug/L			05/08/26 12:43	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			05/08/26 12:43	1
Bromoform	<2.60		5.00	2.60	ug/L			05/08/26 12:43	1
Bromomethane	<1.10		4.00	1.10	ug/L			05/08/26 12:43	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			05/08/26 12:43	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			05/08/26 12:43	1
Chlorobenzene	<0.350		1.00	0.350	ug/L			05/08/26 12:43	1
Chlorodibromomethane	<1.50		5.00	1.50	ug/L			05/08/26 12:43	1
Chloroethane	<0.900		4.00	0.900	ug/L			05/08/26 12:43	1
Chloroform	<1.30		3.00	1.30	ug/L			05/08/26 12:43	1
Chloromethane	<0.610		3.00	0.610	ug/L			05/08/26 12:43	1
cis-1,2-Dichloroethene	<0.550		1.00	0.550	ug/L			05/08/26 12:43	1
cis-1,3-Dichloropropene	<1.20		5.00	1.20	ug/L			05/08/26 12:43	1
Dibromomethane	<0.330		1.00	0.330	ug/L			05/08/26 12:43	1
Ethylbenzene	<0.420		1.00	0.420	ug/L			05/08/26 12:43	1
Iodomethane	<2.60		10.0	2.60	ug/L			05/08/26 12:43	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			05/08/26 12:43	1
Styrene	<0.370		1.00	0.370	ug/L			05/11/26 15:28	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			05/08/26 12:43	1
Toluene	<0.430		1.00	0.430	ug/L			05/08/26 12:43	1
trans-1,2-Dichloroethene	<0.410		1.00	0.410	ug/L			05/08/26 12:43	1
trans-1,3-Dichloropropene	<2.30		5.00	2.30	ug/L			05/08/26 12:43	1
trans-1,4-Dichloro-2-butene	<2.40		10.0	2.40	ug/L			05/08/26 12:43	1
Trichloroethene	<0.350		1.00	0.350	ug/L			05/08/26 12:43	1
Trichlorofluoromethane	<0.470		4.00	0.470	ug/L			05/08/26 12:43	1
Vinyl acetate	<7.10		10.0	7.10	ug/L			05/08/26 12:43	1
Vinyl chloride	<0.430		1.00	0.430	ug/L			05/08/26 12:43	1
Xylenes, Total	<1.10		3.00	1.10	ug/L			05/08/26 12:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*104*		*76 - 130*		*05/08/26 12:43*	*1*

Client: Hall Engineering Company
Job ID: 310-331318-1
Project/Site: Appanoose County Landfill - Spring 2026

Client Sample ID: Trip Blank 2
Lab Sample ID: 310-331318-7
Date Collected: 05/04/26 00:00
Matrix: Water
Date Received: 05/06/26 08:40

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	103		76 - 130		05/11/26 15:28	1
Toluene-d8 (Surr)	98		80 - 120		05/08/26 12:43	1
Toluene-d8 (Surr)	96		80 - 120		05/11/26 15:28	1
4-Bromofluorobenzene (Surr)	94		80 - 120		05/08/26 12:43	1
4-Bromofluorobenzene (Surr)	101		80 - 120		05/11/26 15:28	1

Definitions/Glossary

Client: Hall Engineering Company
Job ID: 310-331318-1
Project/Site: Appanoose County Landfill - Spring 2026

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
I	Value is EMPC (estimated maximum possible concentration).

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Surrogate Summary

Client: Hall Engineering Company
Project/Site: Appanoose County Landfill - Spring 2026

Job ID: 310-331318-1

Method: 8260D - Volatile Organic Compounds by GC/MS

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)		
		DBFM	TOL	BFB
Lab Sample ID	Client Sample ID	(76-130)	(80-120)	(80-120)
310-331318-1	MW-51	103	97	103
310-331318-1 MS	MW-51	99	101	98
310-331318-1 MSD	MW-51	98	102	96
310-331318-2	MW-60	108	98	104
310-331318-3	MW-27	107	99	104
310-331318-4	MW-50R	106	98	104
310-331318-5	Field Blank	102	98	104
310-331318-6	Trip Blank 1	105	97	101
310-331318-7	Trip Blank 2	104	98	94
310-331318-7	Trip Blank 2	103	96	101
LCS 310-488258/6	Lab Control Sample	97	101	99
LCS 310-488258/7	Lab Control Sample	107	99	104
LCS 310-488403/7	Lab Control Sample	98	102	97
LCS 310-488403/8	Lab Control Sample	105	99	104
LCS 310-488575/6	Lab Control Sample	97	97	94
LCS 310-488575/7	Lab Control Sample	106	97	101
MB 310-488258/5	Method Blank	104	100	106
MB 310-488403/6	Method Blank	106	99	101
MB 310-488575/5	Method Blank	103	97	102

Surrogate Legend

DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)
BFB = 4-Bromofluorobenzene (Surr)

Method: 8270E - Organochlorine Pesticides by GC-MS/MS

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)		
		NBZ	FBP	TPHL
Lab Sample ID	Client Sample ID	(22-150)	(13-150)	(10-150)
310-331318-3	MW-27	89 I	101	91
310-331318-5	Field Blank	112	105	103
MB 310-488573/1-A	Method Blank	102	98	100

Surrogate Legend

NBZ = Nitrobenzene-d5 (Surr)
FBP = 2-Fluorobiphenyl (Surr)
TPHL = Terphenyl-d14 (Surr)

Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 310-488258/5
Matrix: Water
Analysis Batch: 488258

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			05/08/26 09:16	1
1,1,1-Trichloroethane	<0.420		1.00	0.420	ug/L			05/08/26 09:16	1
1,1,2,2-Tetrachloroethane	<0.350		1.00	0.350	ug/L			05/08/26 09:16	1
1,1,2-Trichloroethane	<0.330		1.00	0.330	ug/L			05/08/26 09:16	1
1,1-Dichloroethane	<0.400		1.00	0.400	ug/L			05/08/26 09:16	1
1,1-Dichloroethene	<0.460		2.00	0.460	ug/L			05/08/26 09:16	1
1,2,3-Trichloropropane	<0.430		1.00	0.430	ug/L			05/08/26 09:16	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			05/08/26 09:16	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			05/08/26 09:16	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			05/08/26 09:16	1
1,2-Dichloroethane	<0.890		1.00	0.890	ug/L			05/08/26 09:16	1
1,2-Dichloropropane	<0.380		1.00	0.380	ug/L			05/08/26 09:16	1
1,4-Dichlorobenzene	<0.490		1.00	0.490	ug/L			05/08/26 09:16	1
2-Butanone (MEK)	<3.40		10.0	3.40	ug/L			05/08/26 09:16	1
2-Hexanone	<3.80		10.0	3.80	ug/L			05/08/26 09:16	1
4-Methyl-2-pentanone (MIBK)	<3.50		10.0	3.50	ug/L			05/08/26 09:16	1
Acetone	<3.80		10.0	3.80	ug/L			05/08/26 09:16	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			05/08/26 09:16	1
Benzene	<0.220		0.500	0.220	ug/L			05/08/26 09:16	1
Bromochloromethane	<1.70		5.00	1.70	ug/L			05/08/26 09:16	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			05/08/26 09:16	1
Bromoform	<2.60		5.00	2.60	ug/L			05/08/26 09:16	1
Bromomethane	<1.10		4.00	1.10	ug/L			05/08/26 09:16	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			05/08/26 09:16	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			05/08/26 09:16	1
Chlorobenzene	<0.350		1.00	0.350	ug/L			05/08/26 09:16	1
Chlorodibromomethane	<1.50		5.00	1.50	ug/L			05/08/26 09:16	1
Chloroethane	<0.900		4.00	0.900	ug/L			05/08/26 09:16	1
Chloroform	<1.30		3.00	1.30	ug/L			05/08/26 09:16	1
Chloromethane	<0.610		3.00	0.610	ug/L			05/08/26 09:16	1
cis-1,2-Dichloroethene	<0.550		1.00	0.550	ug/L			05/08/26 09:16	1
cis-1,3-Dichloropropene	<1.20		5.00	1.20	ug/L			05/08/26 09:16	1
Dibromomethane	<0.330		1.00	0.330	ug/L			05/08/26 09:16	1
Ethylbenzene	<0.420		1.00	0.420	ug/L			05/08/26 09:16	1
Iodomethane	<2.60		10.0	2.60	ug/L			05/08/26 09:16	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			05/08/26 09:16	1
Styrene	<0.370		1.00	0.370	ug/L			05/08/26 09:16	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			05/08/26 09:16	1
Toluene	<0.430		1.00	0.430	ug/L			05/08/26 09:16	1
trans-1,2-Dichloroethene	<0.410		1.00	0.410	ug/L			05/08/26 09:16	1
trans-1,3-Dichloropropene	<2.30		5.00	2.30	ug/L			05/08/26 09:16	1
trans-1,4-Dichloro-2-butene	<2.40		10.0	2.40	ug/L			05/08/26 09:16	1
Trichloroethene	<0.350		1.00	0.350	ug/L			05/08/26 09:16	1
Trichlorofluoromethane	<0.470		4.00	0.470	ug/L			05/08/26 09:16	1
Vinyl acetate	<7.10		10.0	7.10	ug/L			05/08/26 09:16	1
Vinyl chloride	<0.430		1.00	0.430	ug/L			05/08/26 09:16	1
Xylenes, Total	<1.10		3.00	1.10	ug/L			05/08/26 09:16	1

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 310-488258/5
Matrix: Water
Analysis Batch: 488258

Client Sample ID: Method Blank
Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	*104*		*76 - 130*		*05/08/26 09:16*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*05/08/26 09:16*	*1*
4-Bromofluorobenzene (Surr)	*106*		*80 - 120*		*05/08/26 09:16*	*1*

Lab Sample ID: LCS 310-488258/6
Matrix: Water
Analysis Batch: 488258

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1,2-Tetrachloroethane	20.0	18.20		ug/L		91	70 - 121
1,1,1-Trichloroethane	20.0	16.51		ug/L		83	69 - 130
1,1,2,2-Tetrachloroethane	20.0	19.60		ug/L		98	70 - 122
1,1,2-Trichloroethane	20.0	19.38		ug/L		97	75 - 121
1,1-Dichloroethane	20.0	17.86		ug/L		89	69 - 127
1,1-Dichloroethene	20.0	17.04		ug/L		85	64 - 134
1,2,3-Trichloropropane	20.0	20.30		ug/L		101	70 - 122
1,2-Dibromo-3-Chloropropane	20.0	19.60		ug/L		98	62 - 132
1,2-Dibromoethane (EDB)	20.0	18.67		ug/L		93	74 - 122
1,2-Dichlorobenzene	20.0	19.08		ug/L		95	74 - 120
1,2-Dichloroethane	20.0	18.09		ug/L		90	68 - 125
1,2-Dichloropropane	20.0	18.15		ug/L		91	72 - 128
1,4-Dichlorobenzene	20.0	18.51		ug/L		93	72 - 120
2-Butanone (MEK)	40.0	35.88		ug/L		90	60 - 134
2-Hexanone	40.0	37.01		ug/L		93	62 - 139
4-Methyl-2-pentanone (MIBK)	40.0	37.01		ug/L		93	62 - 136
Acetone	40.0	36.50		ug/L		91	59 - 136
Acrylonitrile	200	187.6		ug/L		94	50 - 150
Benzene	20.0	17.52		ug/L		88	71 - 125
Bromochloromethane	20.0	18.62		ug/L		93	69 - 131
Bromodichloromethane	20.0	16.98		ug/L		85	70 - 122
Bromoform	20.0	17.09		ug/L		85	62 - 122
Carbon disulfide	20.0	16.38		ug/L		82	58 - 137
Carbon tetrachloride	20.0	15.92		ug/L		80	63 - 136
Chlorobenzene	20.0	18.05		ug/L		90	74 - 120
Chlorodibromomethane	20.0	17.22		ug/L		86	69 - 121
Chloroform	20.0	17.14		ug/L		86	72 - 122
cis-1,2-Dichloroethene	20.0	17.25		ug/L		86	72 - 123
cis-1,3-Dichloropropene	20.0	16.89		ug/L		84	72 - 123
Dibromomethane	20.0	18.30		ug/L		91	72 - 122
Ethylbenzene	20.0	17.83		ug/L		89	75 - 120
Iodomethane	20.0	16.72		ug/L		84	18 - 150
Methylene Chloride	20.0	18.88		ug/L		94	72 - 128
Styrene	20.0	18.03		ug/L		90	74 - 122
Tetrachloroethene	20.0	16.83		ug/L		84	70 - 128
Toluene	20.0	17.97		ug/L		90	74 - 120
trans-1,2-Dichloroethene	20.0	16.35		ug/L		82	67 - 127
trans-1,3-Dichloropropene	20.0	17.05		ug/L		85	67 - 123
trans-1,4-Dichloro-2-butene	20.0	18.55		ug/L		93	50 - 150

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 310-488258/6
Matrix: Water
Analysis Batch: 488258

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Trichloroethene	20.0	17.69		ug/L		88	70 - 128
Vinyl acetate	40.0	29.63		ug/L		74	50 - 150
Xylenes, Total	40.0	35.48		ug/L		89	74 - 121

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*97*		*76 - 130*
Toluene-d8 (Surr)	*101*		*80 - 120*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*

Lab Sample ID: LCS 310-488258/7
Matrix: Water
Analysis Batch: 488258

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Bromomethane	20.0	17.92		ug/L		90	33 - 138
Chloroethane	20.0	20.47		ug/L		102	59 - 139
Chloromethane	20.0	21.30		ug/L		106	52 - 146
Trichlorofluoromethane	20.0	18.38		ug/L		92	55 - 150
Vinyl chloride	20.0	21.35		ug/L		107	60 - 142

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*107*		*76 - 130*
Toluene-d8 (Surr)	*99*		*80 - 120*
4-Bromofluorobenzene (Surr)	*104*		*80 - 120*

Lab Sample ID: 310-331318-1 MS
Matrix: Water
Analysis Batch: 488258

Client Sample ID: MW-51
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1,2-Tetrachloroethane	<0.380		20.0	17.77		ug/L		89	55 - 121
1,1,1-Trichloroethane	<0.420		20.0	17.00		ug/L		85	53 - 130
1,1,2,2-Tetrachloroethane	<0.350		20.0	20.32		ug/L		102	55 - 123
1,1,2-Trichloroethane	<0.330		20.0	19.71		ug/L		99	60 - 121
1,1-Dichloroethane	<0.400		20.0	17.86		ug/L		89	53 - 127
1,1-Dichloroethene	<0.460		20.0	17.65		ug/L		88	51 - 134
1,2,3-Trichloropropane	<0.430		20.0	21.42		ug/L		107	56 - 122
1,2-Dibromo-3-Chloropropane	<1.20		20.0	21.54		ug/L		108	44 - 138
1,2-Dibromoethane (EDB)	<0.340		20.0	18.87		ug/L		94	60 - 122
1,2-Dichlorobenzene	<0.370		20.0	19.28		ug/L		96	60 - 120
1,2-Dichloroethane	<0.890		20.0	17.78		ug/L		89	48 - 128
1,2-Dichloropropane	<0.380		20.0	18.12		ug/L		91	59 - 128
1,4-Dichlorobenzene	<0.490		20.0	19.18		ug/L		96	58 - 120
2-Butanone (MEK)	<3.40		40.0	37.82		ug/L		95	46 - 134
2-Hexanone	<3.80		40.0	41.08		ug/L		103	46 - 141
4-Methyl-2-pentanone (MIBK)	<3.50		40.0	41.63		ug/L		104	49 - 138
Acetone	<3.80	F1	40.0	67.95	F1	ug/L		170	39 - 141
Acrylonitrile	<2.20		200	190.7		ug/L		95	41 - 150

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 310-331318-1 MS
Matrix: Water
Analysis Batch: 488258

Client Sample ID: MW-51
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.220		20.0	17.59		ug/L		88	48 - 125
Bromochloromethane	<1.70		20.0	17.56		ug/L		88	55 - 131
Bromodichloromethane	<0.390		20.0	16.76		ug/L		84	53 - 122
Bromoform	<2.60		20.0	16.68		ug/L		83	47 - 122
Carbon disulfide	<0.450		20.0	18.31		ug/L		92	45 - 137
Carbon tetrachloride	<0.650		20.0	16.62		ug/L		83	45 - 136
Chlorobenzene	<0.350		20.0	18.56		ug/L		93	59 - 120
Chlorodibromomethane	<1.50		20.0	17.02		ug/L		85	53 - 121
Chloroform	<1.30		20.0	17.11		ug/L		86	52 - 122
cis-1,2-Dichloroethene	<0.550		20.0	17.01		ug/L		85	51 - 123
cis-1,3-Dichloropropene	<1.20		20.0	15.84		ug/L		79	55 - 123
Dibromomethane	<0.330		20.0	18.19		ug/L		91	57 - 122
Ethylbenzene	<0.420		20.0	18.15		ug/L		91	53 - 120
Iodomethane	<2.60		20.0	14.53		ug/L		73	18 - 150
Methylene Chloride	<1.70		20.0	17.84		ug/L		89	59 - 128
Styrene	<0.370		20.0	18.61		ug/L		93	50 - 125
Tetrachloroethene	<0.480		20.0	17.57		ug/L		88	51 - 128
Toluene	<0.430		20.0	18.06		ug/L		90	52 - 120
trans-1,2-Dichloroethene	<0.410		20.0	16.60		ug/L		83	53 - 127
trans-1,3-Dichloropropene	<2.30		20.0	15.97		ug/L		80	50 - 123
trans-1,4-Dichloro-2-butene	<2.40		20.0	16.28		ug/L		81	28 - 150
Trichloroethene	<0.350		20.0	17.64		ug/L		88	50 - 128
Vinyl acetate	<7.10		40.0	13.61		ug/L		34	31 - 150
Xylenes, Total	<1.10		40.0	36.10		ug/L		90	50 - 122

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*99*		*76 - 130*
Toluene-d8 (Surr)	*101*		*80 - 120*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*

Lab Sample ID: 310-331318-1 MSD
Matrix: Water
Analysis Batch: 488258

Client Sample ID: MW-51
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	<0.380		20.0	18.13		ug/L		91	55 - 121	2	20
1,1,1-Trichloroethane	<0.420		20.0	16.85		ug/L		84	53 - 130	1	20
1,1,2,2-Tetrachloroethane	<0.350		20.0	20.55		ug/L		103	55 - 123	1	20
1,1,2-Trichloroethane	<0.330		20.0	19.70		ug/L		99	60 - 121	0	20
1,1-Dichloroethane	<0.400		20.0	17.73		ug/L		89	53 - 127	1	20
1,1-Dichloroethene	<0.460		20.0	17.42		ug/L		87	51 - 134	1	20
1,2,3-Trichloropropane	<0.430		20.0	21.48		ug/L		107	56 - 122	0	21
1,2-Dibromo-3-Chloropropane	<1.20		20.0	20.75		ug/L		104	44 - 138	4	24
1,2-Dibromoethane (EDB)	<0.340		20.0	18.58		ug/L		93	60 - 122	2	20
1,2-Dichlorobenzene	<0.370		20.0	19.27		ug/L		96	60 - 120	0	20
1,2-Dichloroethane	<0.890		20.0	17.28		ug/L		86	48 - 128	3	20
1,2-Dichloropropane	<0.380		20.0	18.04		ug/L		90	59 - 128	0	20
1,4-Dichlorobenzene	<0.490		20.0	19.06		ug/L		95	58 - 120	1	20

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 310-331318-1 MSD
Client Sample ID: MW-51
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 488258

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2-Butanone (MEK)	<3.40		40.0	36.27		ug/L		91	46 - 134	4	23
2-Hexanone	<3.80		40.0	45.75		ug/L		114	46 - 141	11	20
4-Methyl-2-pentanone (MIBK)	<3.50		40.0	41.80		ug/L		105	49 - 138	0	20
Acetone	<3.80	F1	40.0	66.75	F1	ug/L		167	39 - 141	2	23
Acrylonitrile	<2.20		200	190.2		ug/L		95	41 - 150	0	20
Benzene	<0.220		20.0	17.51		ug/L		88	48 - 125	0	20
Bromochloromethane	<1.70		20.0	17.53		ug/L		88	55 - 131	0	21
Bromodichloromethane	<0.390		20.0	16.67		ug/L		83	53 - 122	1	20
Bromoform	<2.60		20.0	17.11		ug/L		86	47 - 122	3	20
Carbon disulfide	<0.450		20.0	17.14		ug/L		86	45 - 137	7	24
Carbon tetrachloride	<0.650		20.0	16.44		ug/L		82	45 - 136	1	20
Chlorobenzene	<0.350		20.0	18.27		ug/L		91	59 - 120	2	20
Chlorodibromomethane	<1.50		20.0	17.09		ug/L		85	53 - 121	0	20
Chloroform	<1.30		20.0	16.78		ug/L		84	52 - 122	2	20
cis-1,2-Dichloroethene	<0.550		20.0	17.11		ug/L		86	51 - 123	1	20
cis-1,3-Dichloropropene	<1.20		20.0	16.05		ug/L		80	55 - 123	1	20
Dibromomethane	<0.330		20.0	18.33		ug/L		92	57 - 122	1	20
Ethylbenzene	<0.420		20.0	18.15		ug/L		91	53 - 120	0	20
Iodomethane	<2.60		20.0	16.54		ug/L		83	18 - 150	13	32
Methylene Chloride	<1.70		20.0	17.58		ug/L		88	59 - 128	1	20
Styrene	<0.370		20.0	18.39		ug/L		92	50 - 125	1	20
Tetrachloroethene	<0.480		20.0	17.51		ug/L		88	51 - 128	0	20
Toluene	<0.430		20.0	17.93		ug/L		90	52 - 120	1	20
trans-1,2-Dichloroethene	<0.410		20.0	16.40		ug/L		82	53 - 127	1	20
trans-1,3-Dichloropropene	<2.30		20.0	16.01		ug/L		80	50 - 123	0	20
trans-1,4-Dichloro-2-butene	<2.40		20.0	16.57		ug/L		83	28 - 150	2	24
Trichloroethene	<0.350		20.0	17.38		ug/L		87	50 - 128	2	20
Vinyl acetate	<7.10		40.0	13.47		ug/L		34	31 - 150	1	25
Xylenes, Total	<1.10		40.0	35.61		ug/L		89	50 - 122	1	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*98*		*76 - 130*
Toluene-d8 (Surr)	*102*		*80 - 120*
4-Bromofluorobenzene (Surr)	*96*		*80 - 120*

Lab Sample ID: MB 310-488403/6
Client Sample ID: Method Blank
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 488403

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			05/08/26 21:07	1
1,1,1-Trichloroethane	<0.420		1.00	0.420	ug/L			05/08/26 21:07	1
1,1,2,2-Tetrachloroethane	<0.350		1.00	0.350	ug/L			05/08/26 21:07	1
1,1,2-Trichloroethane	<0.330		1.00	0.330	ug/L			05/08/26 21:07	1
1,1-Dichloroethane	<0.400		1.00	0.400	ug/L			05/08/26 21:07	1
1,1-Dichloroethene	<0.460		2.00	0.460	ug/L			05/08/26 21:07	1
1,2,3-Trichloropropane	<0.430		1.00	0.430	ug/L			05/08/26 21:07	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			05/08/26 21:07	1

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 310-488403/6
Matrix: Water
Analysis Batch: 488403

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			05/08/26 21:07	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			05/08/26 21:07	1
1,2-Dichloroethane	<0.890		1.00	0.890	ug/L			05/08/26 21:07	1
1,2-Dichloropropane	<0.380		1.00	0.380	ug/L			05/08/26 21:07	1
1,4-Dichlorobenzene	<0.490		1.00	0.490	ug/L			05/08/26 21:07	1
2-Butanone (MEK)	<3.40		10.0	3.40	ug/L			05/08/26 21:07	1
2-Hexanone	<3.80		10.0	3.80	ug/L			05/08/26 21:07	1
4-Methyl-2-pentanone (MIBK)	<3.50		10.0	3.50	ug/L			05/08/26 21:07	1
Acetone	<3.80		10.0	3.80	ug/L			05/08/26 21:07	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			05/08/26 21:07	1
Benzene	<0.220		0.500	0.220	ug/L			05/08/26 21:07	1
Bromochloromethane	<1.70		5.00	1.70	ug/L			05/08/26 21:07	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			05/08/26 21:07	1
Bromoform	<2.60		5.00	2.60	ug/L			05/08/26 21:07	1
Bromomethane	<1.10		4.00	1.10	ug/L			05/08/26 21:07	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			05/08/26 21:07	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			05/08/26 21:07	1
Chlorobenzene	<0.350		1.00	0.350	ug/L			05/08/26 21:07	1
Chlorodibromomethane	<1.50		5.00	1.50	ug/L			05/08/26 21:07	1
Chloroethane	<0.900		4.00	0.900	ug/L			05/08/26 21:07	1
Chloroform	<1.30		3.00	1.30	ug/L			05/08/26 21:07	1
Chloromethane	<0.610		3.00	0.610	ug/L			05/08/26 21:07	1
cis-1,2-Dichloroethene	<0.550		1.00	0.550	ug/L			05/08/26 21:07	1
cis-1,3-Dichloropropene	<1.20		5.00	1.20	ug/L			05/08/26 21:07	1
Dibromomethane	<0.330		1.00	0.330	ug/L			05/08/26 21:07	1
Ethylbenzene	<0.420		1.00	0.420	ug/L			05/08/26 21:07	1
Iodomethane	<2.60		10.0	2.60	ug/L			05/08/26 21:07	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			05/08/26 21:07	1
Styrene	<0.370		1.00	0.370	ug/L			05/08/26 21:07	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			05/08/26 21:07	1
Toluene	<0.430		1.00	0.430	ug/L			05/08/26 21:07	1
trans-1,2-Dichloroethene	<0.410		1.00	0.410	ug/L			05/08/26 21:07	1
trans-1,3-Dichloropropene	<2.30		5.00	2.30	ug/L			05/08/26 21:07	1
trans-1,4-Dichloro-2-butene	<2.40		10.0	2.40	ug/L			05/08/26 21:07	1
Trichloroethene	<0.350		1.00	0.350	ug/L			05/08/26 21:07	1
Trichlorofluoromethane	<0.470		4.00	0.470	ug/L			05/08/26 21:07	1
Vinyl acetate	<7.10		10.0	7.10	ug/L			05/08/26 21:07	1
Vinyl chloride	<0.430		1.00	0.430	ug/L			05/08/26 21:07	1
Xylenes, Total	<1.10		3.00	1.10	ug/L			05/08/26 21:07	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*106*		*76 - 130*		*05/08/26 21:07*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*05/08/26 21:07*	*1*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*		*05/08/26 21:07*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 310-488403/7
Matrix: Water
Analysis Batch: 488403

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1,2-Tetrachloroethane	20.0	20.15		ug/L		101	70 - 121
1,1,1-Trichloroethane	20.0	16.68		ug/L		83	69 - 130
1,1,2,2-Tetrachloroethane	20.0	22.91		ug/L		115	70 - 122
1,1,2-Trichloroethane	20.0	21.33		ug/L		107	75 - 121
1,1-Dichloroethane	20.0	17.58		ug/L		88	69 - 127
1,1-Dichloroethene	20.0	16.77		ug/L		84	64 - 134
1,2,3-Trichloropropane	20.0	23.33		ug/L		117	70 - 122
1,2-Dibromo-3-Chloropropane	20.0	22.36		ug/L		112	62 - 132
1,2-Dibromoethane (EDB)	20.0	19.98		ug/L		100	74 - 122
1,2-Dichlorobenzene	20.0	21.90		ug/L		109	74 - 120
1,2-Dichloroethane	20.0	17.50		ug/L		87	68 - 125
1,2-Dichloropropane	20.0	18.43		ug/L		92	72 - 128
1,4-Dichlorobenzene	20.0	21.54		ug/L		108	72 - 120
2-Butanone (MEK)	40.0	38.24		ug/L		96	60 - 134
2-Hexanone	40.0	43.82		ug/L		110	62 - 139
4-Methyl-2-pentanone (MIBK)	40.0	42.66		ug/L		107	62 - 136
Acetone	40.0	36.82		ug/L		92	59 - 136
Acrylonitrile	200	186.7		ug/L		93	50 - 150
Benzene	20.0	17.49		ug/L		87	71 - 125
Bromochloromethane	20.0	17.51		ug/L		88	69 - 131
Bromodichloromethane	20.0	17.74		ug/L		89	70 - 122
Bromoform	20.0	19.02		ug/L		95	62 - 122
Carbon disulfide	20.0	16.31		ug/L		82	58 - 137
Carbon tetrachloride	20.0	16.10		ug/L		81	63 - 136
Chlorobenzene	20.0	20.08		ug/L		100	74 - 120
Chlorodibromomethane	20.0	18.88		ug/L		94	69 - 121
Chloroform	20.0	17.18		ug/L		86	72 - 122
cis-1,2-Dichloroethene	20.0	16.95		ug/L		85	72 - 123
cis-1,3-Dichloropropene	20.0	18.51		ug/L		93	72 - 123
Dibromomethane	20.0	18.59		ug/L		93	72 - 122
Ethylbenzene	20.0	19.80		ug/L		99	75 - 120
Iodomethane	20.0	15.15		ug/L		76	18 - 150
Methylene Chloride	20.0	17.19		ug/L		86	72 - 128
Styrene	20.0	20.42		ug/L		102	74 - 122
Tetrachloroethene	20.0	18.40		ug/L		92	70 - 128
Toluene	20.0	18.76		ug/L		94	74 - 120
trans-1,2-Dichloroethene	20.0	16.05		ug/L		80	67 - 127
trans-1,3-Dichloropropene	20.0	18.86		ug/L		94	67 - 123
trans-1,4-Dichloro-2-butene	20.0	22.35		ug/L		112	50 - 150
Trichloroethene	20.0	17.66		ug/L		88	70 - 128
Vinyl acetate	40.0	33.02		ug/L		83	50 - 150
Xylenes, Total	40.0	39.37		ug/L		98	74 - 121

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*98*		*76 - 130*
Toluene-d8 (Surr)	*102*		*80 - 120*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 310-488403/8
Matrix: Water
Analysis Batch: 488403

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Bromomethane	20.0	20.14		ug/L		101	33 - 138
Chloroethane	20.0	24.21		ug/L		121	59 - 139
Chloromethane	20.0	25.08		ug/L		125	52 - 146
Trichlorofluoromethane	20.0	23.51		ug/L		118	55 - 150
Vinyl chloride	20.0	26.70		ug/L		134	60 - 142

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*105*		*76 - 130*
Toluene-d8 (Surr)	*99*		*80 - 120*
4-Bromofluorobenzene (Surr)	*104*		*80 - 120*

Lab Sample ID: MB 310-488575/5
Matrix: Water
Analysis Batch: 488575

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			05/11/26 13:10	1
1,1,1-Trichloroethane	<0.420		1.00	0.420	ug/L			05/11/26 13:10	1
1,1,2,2-Tetrachloroethane	<0.350		1.00	0.350	ug/L			05/11/26 13:10	1
1,1,2-Trichloroethane	<0.330		1.00	0.330	ug/L			05/11/26 13:10	1
1,1-Dichloroethane	<0.400		1.00	0.400	ug/L			05/11/26 13:10	1
1,1-Dichloroethene	<0.460		2.00	0.460	ug/L			05/11/26 13:10	1
1,2,3-Trichloropropane	<0.430		1.00	0.430	ug/L			05/11/26 13:10	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			05/11/26 13:10	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			05/11/26 13:10	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			05/11/26 13:10	1
1,2-Dichloroethane	<0.890		1.00	0.890	ug/L			05/11/26 13:10	1
1,2-Dichloropropane	<0.380		1.00	0.380	ug/L			05/11/26 13:10	1
1,4-Dichlorobenzene	<0.490		1.00	0.490	ug/L			05/11/26 13:10	1
2-Butanone (MEK)	<3.40		10.0	3.40	ug/L			05/11/26 13:10	1
2-Hexanone	<3.80		10.0	3.80	ug/L			05/11/26 13:10	1
4-Methyl-2-pentanone (MIBK)	<3.50		10.0	3.50	ug/L			05/11/26 13:10	1
Acetone	<3.80		10.0	3.80	ug/L			05/11/26 13:10	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			05/11/26 13:10	1
Benzene	<0.220		0.500	0.220	ug/L			05/11/26 13:10	1
Bromochloromethane	<1.70		5.00	1.70	ug/L			05/11/26 13:10	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			05/11/26 13:10	1
Bromoform	<2.60		5.00	2.60	ug/L			05/11/26 13:10	1
Bromomethane	<1.10		4.00	1.10	ug/L			05/11/26 13:10	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			05/11/26 13:10	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			05/11/26 13:10	1
Chlorobenzene	<0.350		1.00	0.350	ug/L			05/11/26 13:10	1
Chlorodibromomethane	<1.50		5.00	1.50	ug/L			05/11/26 13:10	1
Chloroethane	<0.900		4.00	0.900	ug/L			05/11/26 13:10	1
Chloroform	<1.30		3.00	1.30	ug/L			05/11/26 13:10	1
Chloromethane	<0.610		3.00	0.610	ug/L			05/11/26 13:10	1
cis-1,2-Dichloroethene	<0.550		1.00	0.550	ug/L			05/11/26 13:10	1
cis-1,3-Dichloropropene	<1.20		5.00	1.20	ug/L			05/11/26 13:10	1

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 310-488575/5
Matrix: Water
Analysis Batch: 488575

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibromomethane	<0.330		1.00	0.330	ug/L			05/11/26 13:10	1
Ethylbenzene	<0.420		1.00	0.420	ug/L			05/11/26 13:10	1
Iodomethane	<2.60		10.0	2.60	ug/L			05/11/26 13:10	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			05/11/26 13:10	1
Styrene	<0.370		1.00	0.370	ug/L			05/11/26 13:10	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			05/11/26 13:10	1
Toluene	<0.430		1.00	0.430	ug/L			05/11/26 13:10	1
trans-1,2-Dichloroethene	<0.410		1.00	0.410	ug/L			05/11/26 13:10	1
trans-1,3-Dichloropropene	<2.30		5.00	2.30	ug/L			05/11/26 13:10	1
trans-1,4-Dichloro-2-butene	<2.40		10.0	2.40	ug/L			05/11/26 13:10	1
Trichloroethene	<0.350		1.00	0.350	ug/L			05/11/26 13:10	1
Trichlorofluoromethane	<0.470		4.00	0.470	ug/L			05/11/26 13:10	1
Vinyl acetate	<7.10		10.0	7.10	ug/L			05/11/26 13:10	1
Vinyl chloride	<0.430		1.00	0.430	ug/L			05/11/26 13:10	1
Xylenes, Total	<1.10		3.00	1.10	ug/L			05/11/26 13:10	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*103*		*76 - 130*		*05/11/26 13:10*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*05/11/26 13:10*	*1*
4-Bromofluorobenzene (Surr)	*102*		*80 - 120*		*05/11/26 13:10*	*1*

Lab Sample ID: LCS 310-488575/6
Matrix: Water
Analysis Batch: 488575

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1,2-Tetrachloroethane	20.0	18.21		ug/L		91	70 - 121
1,1,1-Trichloroethane	20.0	19.32		ug/L		97	69 - 130
1,1,2,2-Tetrachloroethane	20.0	19.30		ug/L		97	70 - 122
1,1,2-Trichloroethane	20.0	18.88		ug/L		94	75 - 121
1,1-Dichloroethane	20.0	19.91		ug/L		100	69 - 127
1,1-Dichloroethene	20.0	20.64		ug/L		103	64 - 134
1,2,3-Trichloropropane	20.0	19.73		ug/L		99	70 - 122
1,2-Dibromo-3-Chloropropane	20.0	17.72		ug/L		89	62 - 132
1,2-Dibromoethane (EDB)	20.0	18.44		ug/L		92	74 - 122
1,2-Dichlorobenzene	20.0	18.36		ug/L		92	74 - 120
1,2-Dichloroethane	20.0	18.82		ug/L		94	68 - 125
1,2-Dichloropropane	20.0	19.47		ug/L		97	72 - 128
1,4-Dichlorobenzene	20.0	18.34		ug/L		92	72 - 120
2-Butanone (MEK)	40.0	37.29		ug/L		93	60 - 134
2-Hexanone	40.0	34.77		ug/L		87	62 - 139
4-Methyl-2-pentanone (MIBK)	40.0	34.27		ug/L		86	62 - 136
Acetone	40.0	34.22		ug/L		86	59 - 136
Acrylonitrile	200	187.1		ug/L		94	50 - 150
Benzene	20.0	19.78		ug/L		99	71 - 125
Bromochloromethane	20.0	20.28		ug/L		101	69 - 131
Bromodichloromethane	20.0	17.92		ug/L		90	70 - 122
Bromoform	20.0	15.88		ug/L		79	62 - 122

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 310-488575/6
Matrix: Water
Analysis Batch: 488575

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Carbon disulfide	20.0	20.81		ug/L		104	58 - 137
Carbon tetrachloride	20.0	18.78		ug/L		94	63 - 136
Chlorobenzene	20.0	18.81		ug/L		94	74 - 120
Chlorodibromomethane	20.0	16.86		ug/L		84	69 - 121
Chloroform	20.0	18.72		ug/L		94	72 - 122
cis-1,2-Dichloroethene	20.0	19.45		ug/L		97	72 - 123
cis-1,3-Dichloropropene	20.0	17.97		ug/L		90	72 - 123
Dibromomethane	20.0	19.48		ug/L		97	72 - 122
Ethylbenzene	20.0	18.82		ug/L		94	75 - 120
Iodomethane	20.0	21.39		ug/L		107	18 - 150
Methylene Chloride	20.0	20.61		ug/L		103	72 - 128
Styrene	20.0	18.74		ug/L		94	74 - 122
Tetrachloroethene	20.0	19.17		ug/L		96	70 - 128
Toluene	20.0	18.92		ug/L		95	74 - 120
trans-1,2-Dichloroethene	20.0	19.33		ug/L		97	67 - 127
trans-1,3-Dichloropropene	20.0	17.67		ug/L		88	67 - 123
trans-1,4-Dichloro-2-butene	20.0	18.29		ug/L		91	50 - 150
Trichloroethene	20.0	19.86		ug/L		99	70 - 128
Vinyl acetate	40.0	40.68		ug/L		102	50 - 150
Xylenes, Total	40.0	37.26		ug/L		93	74 - 121

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*97*		*76 - 130*
Toluene-d8 (Surr)	*97*		*80 - 120*
4-Bromofluorobenzene (Surr)	*94*		*80 - 120*

Lab Sample ID: LCS 310-488575/7
Matrix: Water
Analysis Batch: 488575

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Bromomethane	20.0	20.38		ug/L		102	33 - 138
Chloroethane	20.0	23.90		ug/L		120	59 - 139
Chloromethane	20.0	24.72		ug/L		124	52 - 146
Trichlorofluoromethane	20.0	22.96		ug/L		115	55 - 150
Vinyl chloride	20.0	25.04		ug/L		125	60 - 142

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*106*		*76 - 130*
Toluene-d8 (Surr)	*97*		*80 - 120*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*

Method: 8270E - Organochlorine Pesticides by GC-MS/MS

Lab Sample ID: MB 310-488573/1-A
Matrix: Water
Analysis Batch: 488773

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 488573

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
beta-BHC	<0.0188		0.118	0.0188	ug/L		05/11/26 12:06	05/13/26 16:35	1
delta-BHC	<0.0128		0.118	0.0128	ug/L		05/11/26 12:06	05/13/26 16:35	1
Dieldrin	<0.0355		0.118	0.0355	ug/L		05/11/26 12:06	05/13/26 16:35	1
Endosulfan sulfate	<0.0523		0.118	0.0523	ug/L		05/11/26 12:06	05/13/26 16:35	1
Endrin	<0.0286		0.118	0.0286	ug/L		05/11/26 12:06	05/13/26 16:35	1
Endrin aldehyde	<0.0434		0.494	0.0434	ug/L		05/11/26 12:06	05/13/26 16:35	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*102*		*22 - 150*	*05/11/26 12:06*	*05/13/26 16:35*	*1*
2-Fluorobiphenyl (Surr)	*98*		*13 - 150*	*05/11/26 12:06*	*05/13/26 16:35*	*1*
Terphenyl-d14 (Surr)	*100*		*10 - 150*	*05/11/26 12:06*	*05/13/26 16:35*	*1*

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 310-488312/1-A
Matrix: Water
Analysis Batch: 488630

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 488312

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<0.000340		0.00100	0.000340	mg/L		05/08/26 09:15	05/11/26 11:56	1

Lab Sample ID: MB 310-488312/1-A
Matrix: Water
Analysis Batch: 488790

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 488312

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00100		0.00200	0.00100	mg/L		05/08/26 09:15	05/12/26 13:28	1
Arsenic	<0.000530		0.00200	0.000530	mg/L		05/08/26 09:15	05/12/26 13:28	1
Barium	<0.000660		0.00200	0.000660	mg/L		05/08/26 09:15	05/12/26 13:28	1
Cadmium	<0.000100		0.000200	0.000100	mg/L		05/08/26 09:15	05/12/26 13:28	1
Chromium	<0.00270		0.00500	0.00270	mg/L		05/08/26 09:15	05/12/26 13:28	1
Cobalt	<0.000180		0.000500	0.000180	mg/L		05/08/26 09:15	05/12/26 13:28	1
Copper	<0.00280		0.00500	0.00280	mg/L		05/08/26 09:15	05/12/26 13:28	1
Lead	<0.000440		0.000500	0.000440	mg/L		05/08/26 09:15	05/12/26 13:28	1
Nickel	<0.00230		0.00500	0.00230	mg/L		05/08/26 09:15	05/12/26 13:28	1
Selenium	<0.000630		0.00500	0.000630	mg/L		05/08/26 09:15	05/12/26 13:28	1
Silver	<0.000340		0.00100	0.000340	mg/L		05/08/26 09:15	05/12/26 13:28	1
Thallium	<0.000310		0.00100	0.000310	mg/L		05/08/26 09:15	05/12/26 13:28	1
Vanadium	<0.00200		0.00500	0.00200	mg/L		05/08/26 09:15	05/12/26 13:28	1
Zinc	<0.0130		0.0200	0.0130	mg/L		05/08/26 09:15	05/12/26 13:28	1

Lab Sample ID: MB 310-488312/1-A
Matrix: Water
Analysis Batch: 488872

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 488312

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	<0.000330		0.00100	0.000330	mg/L		05/08/26 09:15	05/13/26 13:00	1

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 310-488312/2-A
Matrix: Water
Analysis Batch: 488630

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 488312

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Silver	0.100	0.08389		mg/L		84	80 - 120

Lab Sample ID: LCS 310-488312/2-A
Matrix: Water
Analysis Batch: 488790

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 488312

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	0.200	0.1989		mg/L		99	80 - 120
Arsenic	0.200	0.1870		mg/L		94	80 - 120
Barium	0.100	0.09651		mg/L		97	80 - 120
Cadmium	0.100	0.09840		mg/L		98	80 - 120
Chromium	0.100	0.09381		mg/L		94	80 - 120
Cobalt	0.100	0.09705		mg/L		97	80 - 120
Copper	0.200	0.1978		mg/L		99	80 - 120
Lead	0.200	0.2107		mg/L		105	80 - 120
Nickel	0.200	0.1904		mg/L		95	80 - 120
Selenium	0.400	0.3743		mg/L		94	80 - 120
Thallium	0.100	0.09943		mg/L		99	80 - 120
Vanadium	0.100	0.09340		mg/L		93	80 - 120
Zinc	0.200	0.1871		mg/L		94	80 - 120

Lab Sample ID: LCS 310-488312/2-A
Matrix: Water
Analysis Batch: 488872

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 488312

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Beryllium	0.100	0.1075		mg/L		107	80 - 120

Method: 9034 - Sulfide, Acid soluble and Insoluble (Titrimetric)

Lab Sample ID: MB 240-701288/1-A
Matrix: Water
Analysis Batch: 701296

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 701288

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	<1.41		3.00	1.41	mg/L		05/11/26 10:37	05/11/26 11:21	1

Lab Sample ID: LCS 240-701288/2-A
Matrix: Water
Analysis Batch: 701296

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 701288

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfide	8.67	8.400		mg/L		97	70 - 120

Lab Sample ID: 310-331318-1 MS
Matrix: Water
Analysis Batch: 701296

Client Sample ID: MW-51
Prep Type: Total/NA
Prep Batch: 701288

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfide	<1.41		8.67	6.800		mg/L		78	24 - 135

Method: 9034 - Sulfide, Acid soluble and Insoluble (Titrimetric)

Lab Sample ID: 310-331318-1 MSD
Client Sample ID: MW-51
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 701296
Prep Batch: 701288

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Sulfide	<1.41		8.67	7.200		mg/L		83	24 - 135	6	35

Method: I-3765-85 - Residue, Non-filterable (TSS)

Lab Sample ID: MB 310-488216/1
Client Sample ID: Method Blank
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 488216

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	<2.80		5.00	2.80	mg/L			05/07/26 09:58	1

Lab Sample ID: LCS 310-488216/2
Client Sample ID: Lab Control Sample
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 488216

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Suspended Solids	100	93.00		mg/L		93	82 - 117

Lab Sample ID: MB 310-488231/1
Client Sample ID: Method Blank
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 488231

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	<2.80		5.00	2.80	mg/L			05/07/26 10:44	1

Lab Sample ID: LCS 310-488231/2
Client Sample ID: Lab Control Sample
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 488231

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Suspended Solids	100	95.00		mg/L		95	82 - 117

GC/MS VOA

Analysis Batch: 488258

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-331318-1	MW-51	Total/NA	Water	8260D	
310-331318-2	MW-60	Total/NA	Water	8260D	
310-331318-3	MW-27	Total/NA	Water	8260D	
310-331318-4	MW-50R	Total/NA	Water	8260D	
310-331318-7	Trip Blank 2	Total/NA	Water	8260D	
MB 310-488258/5	Method Blank	Total/NA	Water	8260D	
LCS 310-488258/6	Lab Control Sample	Total/NA	Water	8260D	
LCS 310-488258/7	Lab Control Sample	Total/NA	Water	8260D	
310-331318-1 MS	MW-51	Total/NA	Water	8260D	
310-331318-1 MSD	MW-51	Total/NA	Water	8260D	

Analysis Batch: 488403

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-331318-5	Field Blank	Total/NA	Water	8260D	
MB 310-488403/6	Method Blank	Total/NA	Water	8260D	
LCS 310-488403/7	Lab Control Sample	Total/NA	Water	8260D	
LCS 310-488403/8	Lab Control Sample	Total/NA	Water	8260D	

Analysis Batch: 488575

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-331318-6	Trip Blank 1	Total/NA	Water	8260D	
310-331318-7	Trip Blank 2	Total/NA	Water	8260D	
MB 310-488575/5	Method Blank	Total/NA	Water	8260D	
LCS 310-488575/6	Lab Control Sample	Total/NA	Water	8260D	
LCS 310-488575/7	Lab Control Sample	Total/NA	Water	8260D	

GC/MS Semi VOA

Prep Batch: 488573

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-331318-3	MW-27	Total/NA	Water	3511	
310-331318-5	Field Blank	Total/NA	Water	3511	
MB 310-488573/1-A	Method Blank	Total/NA	Water	3511	

Analysis Batch: 488773

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-331318-5	Field Blank	Total/NA	Water	8270E	488573
MB 310-488573/1-A	Method Blank	Total/NA	Water	8270E	488573

Analysis Batch: 488955

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-331318-3	MW-27	Total/NA	Water	8270E	488573

Metals

Prep Batch: 488312

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-331318-1	MW-51	Total/NA	Water	3005A	
310-331318-2	MW-60	Total/NA	Water	3005A	
310-331318-3	MW-27	Total/NA	Water	3005A	
310-331318-4	MW-50R	Total/NA	Water	3005A	
310-331318-5	Field Blank	Total/NA	Water	3005A	

Metals (Continued)

Prep Batch: 488312 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 310-488312/1-A	Method Blank	Total/NA	Water	3005A	
LCS 310-488312/2-A	Lab Control Sample	Total/NA	Water	3005A	

Analysis Batch: 488630

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-331318-1	MW-51	Total/NA	Water	6020B	488312
310-331318-2	MW-60	Total/NA	Water	6020B	488312
310-331318-3	MW-27	Total/NA	Water	6020B	488312
310-331318-4	MW-50R	Total/NA	Water	6020B	488312
310-331318-5	Field Blank	Total/NA	Water	6020B	488312
MB 310-488312/1-A	Method Blank	Total/NA	Water	6020B	488312
LCS 310-488312/2-A	Lab Control Sample	Total/NA	Water	6020B	488312

Analysis Batch: 488790

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-331318-1	MW-51	Total/NA	Water	6020B	488312
310-331318-2	MW-60	Total/NA	Water	6020B	488312
310-331318-3	MW-27	Total/NA	Water	6020B	488312
310-331318-4	MW-50R	Total/NA	Water	6020B	488312
310-331318-5	Field Blank	Total/NA	Water	6020B	488312
MB 310-488312/1-A	Method Blank	Total/NA	Water	6020B	488312
LCS 310-488312/2-A	Lab Control Sample	Total/NA	Water	6020B	488312

Analysis Batch: 488872

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-331318-1	MW-51	Total/NA	Water	6020B	488312
310-331318-2	MW-60	Total/NA	Water	6020B	488312
310-331318-3	MW-27	Total/NA	Water	6020B	488312
310-331318-4	MW-50R	Total/NA	Water	6020B	488312
310-331318-5	Field Blank	Total/NA	Water	6020B	488312
MB 310-488312/1-A	Method Blank	Total/NA	Water	6020B	488312
LCS 310-488312/2-A	Lab Control Sample	Total/NA	Water	6020B	488312

General Chemistry

Analysis Batch: 488216

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-331318-1	MW-51	Total/NA	Water	I-3765-85	
310-331318-2	MW-60	Total/NA	Water	I-3765-85	
310-331318-3	MW-27	Total/NA	Water	I-3765-85	
310-331318-4	MW-50R	Total/NA	Water	I-3765-85	
MB 310-488216/1	Method Blank	Total/NA	Water	I-3765-85	
LCS 310-488216/2	Lab Control Sample	Total/NA	Water	I-3765-85	

Analysis Batch: 488231

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-331318-5	Field Blank	Total/NA	Water	I-3765-85	
MB 310-488231/1	Method Blank	Total/NA	Water	I-3765-85	
LCS 310-488231/2	Lab Control Sample	Total/NA	Water	I-3765-85	

QC Association Summary

Client: Hall Engineering Company
Job ID: 310-331318-1
Project/Site: Appanoose County Landfill - Spring 2026

General Chemistry

Prep Batch: 701288

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-331318-1	MW-51	Total/NA	Water	9030B	
310-331318-2	MW-60	Total/NA	Water	9030B	
310-331318-3	MW-27	Total/NA	Water	9030B	
310-331318-5	Field Blank	Total/NA	Water	9030B	
MB 240-701288/1-A	Method Blank	Total/NA	Water	9030B	
LCS 240-701288/2-A	Lab Control Sample	Total/NA	Water	9030B	
310-331318-1 MS	MW-51	Total/NA	Water	9030B	
310-331318-1 MSD	MW-51	Total/NA	Water	9030B	

Analysis Batch: 701296

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-331318-1	MW-51	Total/NA	Water	9034	701288
310-331318-2	MW-60	Total/NA	Water	9034	701288
310-331318-3	MW-27	Total/NA	Water	9034	701288
310-331318-5	Field Blank	Total/NA	Water	9034	701288
MB 240-701288/1-A	Method Blank	Total/NA	Water	9034	701288
LCS 240-701288/2-A	Lab Control Sample	Total/NA	Water	9034	701288
310-331318-1 MS	MW-51	Total/NA	Water	9034	701288
310-331318-1 MSD	MW-51	Total/NA	Water	9034	701288

Lab Chronicle

Client: Hall Engineering Company
Job ID: 310-331318-1
Project/Site: Appanoose County Landfill - Spring 2026

Client Sample ID: MW-51
Lab Sample ID: 310-331318-1
Date Collected: 05/04/26 10:58
Matrix: Water
Date Received: 05/06/26 08:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	488258	FE5V	EET CF	05/08/26 16:32
Total/NA	Prep	3005A			488312	F8JX	EET CF	05/08/26 09:15
Total/NA	Analysis	6020B		1	488790	NFT2	EET CF	05/12/26 13:51
Total/NA	Prep	3005A			488312	F8JX	EET CF	05/08/26 09:15
Total/NA	Analysis	6020B		1	488630	NFT2	EET CF	05/11/26 12:22
Total/NA	Prep	3005A			488312	F8JX	EET CF	05/08/26 09:15
Total/NA	Analysis	6020B		1	488872	NFT2	EET CF	05/13/26 13:17
Total/NA	Prep	9030B			701288	BLW	EET CLE	05/11/26 10:37
Total/NA	Analysis	9034		1	701296	BLW	EET CLE	05/11/26 11:21
Total/NA	Analysis	I-3765-85		1	488216	HE7K	EET CF	05/07/26 09:58

Client Sample ID: MW-60
Lab Sample ID: 310-331318-2
Date Collected: 05/04/26 09:07
Matrix: Water
Date Received: 05/06/26 08:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	488258	FE5V	EET CF	05/08/26 16:56
Total/NA	Prep	3005A			488312	F8JX	EET CF	05/08/26 09:15
Total/NA	Analysis	6020B		1	488790	NFT2	EET CF	05/12/26 13:53
Total/NA	Prep	3005A			488312	F8JX	EET CF	05/08/26 09:15
Total/NA	Analysis	6020B		1	488630	NFT2	EET CF	05/11/26 12:24
Total/NA	Prep	3005A			488312	F8JX	EET CF	05/08/26 09:15
Total/NA	Analysis	6020B		1	488872	NFT2	EET CF	05/13/26 13:20
Total/NA	Prep	9030B			701288	BLW	EET CLE	05/11/26 10:37
Total/NA	Analysis	9034		1	701296	BLW	EET CLE	05/11/26 11:21
Total/NA	Analysis	I-3765-85		1	488216	HE7K	EET CF	05/07/26 09:58

Client Sample ID: MW-27
Lab Sample ID: 310-331318-3
Date Collected: 05/04/26 12:30
Matrix: Water
Date Received: 05/06/26 08:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	488258	FE5V	EET CF	05/08/26 17:18
Total/NA	Prep	3511			488573	P5ZC	EET CF	05/11/26 12:06
Total/NA	Analysis	8270E		1	488955	D2YP	EET CF	05/14/26 17:15
Total/NA	Prep	3005A			488312	F8JX	EET CF	05/08/26 09:15
Total/NA	Analysis	6020B		1	488790	NFT2	EET CF	05/12/26 13:56
Total/NA	Prep	3005A			488312	F8JX	EET CF	05/08/26 09:15
Total/NA	Analysis	6020B		1	488630	NFT2	EET CF	05/11/26 12:33
Total/NA	Prep	3005A			488312	F8JX	EET CF	05/08/26 09:15
Total/NA	Analysis	6020B		1	488872	NFT2	EET CF	05/13/26 13:23
Total/NA	Prep	9030B			701288	BLW	EET CLE	05/11/26 10:37
Total/NA	Analysis	9034		1	701296	BLW	EET CLE	05/11/26 11:21
Total/NA	Analysis	I-3765-85		1	488216	HE7K	EET CF	05/07/26 09:58

Client Sample ID: MW-50R
Lab Sample ID: 310-331318-4

Date Collected: 05/04/26 13:29
Matrix: Water
Date Received: 05/06/26 08:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	488258	FE5V	EET CF	05/08/26 17:41
Total/NA	Prep	3005A			488312	F8JX	EET CF	05/08/26 09:15
Total/NA	Analysis	6020B		1	488790	NFT2	EET CF	05/12/26 13:58
Total/NA	Prep	3005A			488312	F8JX	EET CF	05/08/26 09:15
Total/NA	Analysis	6020B		1	488630	NFT2	EET CF	05/11/26 12:36
Total/NA	Prep	3005A			488312	F8JX	EET CF	05/08/26 09:15
Total/NA	Analysis	6020B		1	488872	NFT2	EET CF	05/13/26 13:26
Total/NA	Analysis	I-3765-85		1	488216	HE7K	EET CF	05/07/26 09:58

Client Sample ID: Field Blank
Lab Sample ID: 310-331318-5

Date Collected: 05/04/26 12:46
Matrix: Water
Date Received: 05/06/26 08:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	488403	FE5V	EET CF	05/08/26 22:39
Total/NA	Prep	3511			488573	P5ZC	EET CF	05/11/26 12:06
Total/NA	Analysis	8270E		1	488773	D2YP	EET CF	05/13/26 19:04
Total/NA	Prep	3005A			488312	F8JX	EET CF	05/08/26 09:15
Total/NA	Analysis	6020B		1	488790	NFT2	EET CF	05/12/26 14:01
Total/NA	Prep	3005A			488312	F8JX	EET CF	05/08/26 09:15
Total/NA	Analysis	6020B		1	488630	NFT2	EET CF	05/11/26 12:39
Total/NA	Prep	3005A			488312	F8JX	EET CF	05/08/26 09:15
Total/NA	Analysis	6020B		1	488872	NFT2	EET CF	05/13/26 13:34
Total/NA	Prep	9030B			701288	BLW	EET CLE	05/11/26 10:37
Total/NA	Analysis	9034		1	701296	BLW	EET CLE	05/11/26 11:21
Total/NA	Analysis	I-3765-85		1	488231	HE7K	EET CF	05/07/26 10:44

Client Sample ID: Trip Blank 1
Lab Sample ID: 310-331318-6

Date Collected: 05/04/26 00:00
Matrix: Water
Date Received: 05/06/26 08:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	488575	WSE8	EET CF	05/11/26 15:05

Client Sample ID: Trip Blank 2
Lab Sample ID: 310-331318-7

Date Collected: 05/04/26 00:00
Matrix: Water
Date Received: 05/06/26 08:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	488258	FE5V	EET CF	05/08/26 12:43
Total/NA	Analysis	8260D		1	488575	WSE8	EET CF	05/11/26 15:28

Laboratory References:

EET CF = Eurofins Cedar Falls, 3019 Venture Way, Cedar Falls, IA 50613, TEL (319)277-2401

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

Accreditation/Certification Summary

Client: Hall Engineering Company
Job ID: 310-331318-1
Project/Site: Appanoose County Landfill - Spring 2026

Laboratory: Eurofins Cedar Falls

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Iowa	State	007	12-01-27

Laboratory: Eurofins Cleveland

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Connecticut	State	PH-0806	09-30-26
Georgia	State	4062	02-27-27
Illinois	NELAP	200004	08-31-26
Iowa	State	421	06-01-27
Kansas	NELAP	E-10336	01-31-27
Kentucky (UST)	State	112225	02-28-27
Kentucky (WW)	State	KY98016	12-31-26
Michigan	State	9135	01-10-27
Minnesota	NELAP	039-999-348	12-31-26
New Hampshire	NELAP	2250	09-30-26
New Jersey	NELAP	OH001	06-30-26
New York	NELAP	10975	04-01-27
Ohio	State	8303	02-28-27
Ohio VAP	State	ORELAP 4062	02-28-27
Oregon	NELAP	4062	02-27-27
Pennsylvania	NELAP	68-00340	08-31-26
Texas	NELAP	T104704517	08-31-26
US Fish & Wildlife	US Federal Programs	A26406	02-28-27
USDA	US Federal Programs	525-24-5-34740	01-05-27
Virginia	NELAP	460175	09-30-26
West Virginia DEP	State	210	12-31-26
Wisconsin	State	399167560	08-31-26

Method Summary

Client: Hall Engineering Company
Job ID: 310-331318-1
Project/Site: Appanoose County Landfill - Spring 2026

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	EET CF
8270E	Organochlorine Pesticides by GC-MS/MS	SW846	EET CF
6020B	Metals (ICP/MS)	SW846	EET CF
9034	Sulfide, Acid soluble and Insoluble (Titrimetric)	SW846	EET CLE
I-3765-85	Residue, Non-filterable (TSS)	USGS	EET CF
3005A	Preparation, Total Metals	SW846	EET CF
3511	Microextraction of Organic Compounds	SW846	EET CF
5030B	Purge and Trap	SW846	EET CF
9030B	Sulfide, Distillation (Acid Soluble and Insoluble)	SW846	EET CLE

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

USGS = "Methods For Analysis Of Water And Fluvial Sediments", USGS, 1989

Laboratory References:

EET CF = Eurofins Cedar Falls, 3019 Venture Way, Cedar Falls, IA 50613, TEL (319)277-2401

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

eurofins | Environment Testing America

310-331318 Chain of Custody

Cooler/Sample Receipt and Temperature Log Form

Client Information

Client: HM Engineering

City/State: CITY | STATE | Project:

Receipt Information

Date/Time Received: DATE 5/6/26 | TIME 0840 | Received By:

Delivery Type: ☒ UPS ☐ FedEx ☐ FedEx Ground ☐ US Mail ☐ Spee-Dee ☐ Lab Courier ☐ Lab Field Services ☐ Client Drop-off ☐ Other:

Condition of Cooler/Containers

Sample(s) received in Cooler? ☒ Yes ☐ No *If yes:* Cooler ID:

Multiple Coolers? ☒ Yes ☐ No *If yes:* Cooler # 1 of 2

Cooler Custody Seals Present? ☒ Yes ☐ No *If yes:* Cooler custody seals intact? ☐ Yes ☐ No

Sample Custody Seals Present? ☐ Yes ☒ No *If yes* Sample custody seals intact? ☐ Yes ☐ No

Trip Blank Present? ☒ Yes ☐ No *If yes:* Which VOA samples are in cooler? ↓

S1, 2?, FB

Temperature Record

Coolant ☒ Wet ice ☐ Blue ice ☐ Dry ice ☐ Other: ☐ NONE

Thermometer ID: BD | Correction Factor (°C): 0

• **Temp Blank Temperature** – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature

Uncorrected Temp (°C): 1.3 | Corrected Temp (°C): 1.3

• **Sample Container Temperature**

	CONTAINER 1	CONTAINER 2
Container(s) used:		
Uncorrected Temp (°C):		
Corrected Temp (°C):		

Exceptions Noted

1) If temperature exceeds criteria, was sample(s) received same day of sampling? ☐ Yes ☐ No
   a) *If yes:* Is there evidence that the chilling process began? ☐ Yes ☐ No

2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e g , bulging septa, broken/cracked bottles, frozen solid?) ☐ Yes ☐ No

NOTE. If yes, contact PM before proceeding If no, proceed with login

Additional Comments

eurofins | Environment Testing America

Place COC scanning label here

Cooler/Sample Receipt and Temperature Log Form

Client Information

Client: HM Environmental

City/State: CITY | STATE | Project:

Receipt Information

Date/Time Received: DATE 5/6/26 | TIME 0840 | Received By

Delivery Type: ☒ UPS ☐ FedEx ☐ FedEx Ground ☐ US Mail ☐ Spee-Dee ☐ Lab Courier ☐ Lab Field Services ☐ Client Drop-off ☐ Other:

Condition of Cooler/Containers

Sample(s) received in Cooler? ☒ Yes ☐ No *If yes:* Cooler ID.

Multiple Coolers? ☒ Yes ☐ No *If yes:* Cooler # 2 of 2

Cooler Custody Seals Present? ☒ Yes ☐ No *If yes* Cooler custody seals intact? ☒ Yes ☐ No

Sample Custody Seals Present? ☐ Yes ☒ No *If yes:* Sample custody seals intact? ☐ Yes ☐ No

Trip Blank Present? ☒ Yes ☐ No *If yes* Which VOA samples are in cooler? ↓

The cat

Temperature Record

Coolant: ☒ Wet ice ☐ Blue ice ☐ Dry ice ☐ Other: ☐ NONE

Thermometer ID: BD | Correction Factor (°C): 0

• **Temp Blank Temperature** – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature

Uncorrected Temp (°C): 1.8 | Corrected Temp (°C): 1.8

• **Sample Container Temperature**

	CONTAINER 1	CONTAINER 2
Container(s) used.		
Uncorrected Temp (°C):		
Corrected Temp (°C)		

Exceptions Noted

1) If temperature exceeds criteria, was sample(s) received same day of sampling? ☐ Yes ☐ No
   a) *If yes:* Is there evidence that the chilling process began? ☐ Yes ☐ No

2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e.g , bulging septa, broken/cracked bottles, frozen solid?) ☐ Yes ☐ No

NOTE: If yes, contact PM before proceeding If no, proceed with login

Additional Comments

Eurofins Cedar Falls
3019 Venture Way
Cedar Falls IA 50613
Phone (319) 277-2401 Phone (319) 277-2425

Chain of Custody Record

eurofins

Client Information	Sampler	Lab PM.	Carrier Tracking No(s)	COC No.
		Miller Samuel		310-106472-28366 1
Client Contact: Bill Buss	Phone:	E-Mail: Samuel Miller@et.eurofinsus com	State of Origin:	Page: Page 1 of 1
Company: Hall Engineering Company	PWSID			Job #:

Address: PO BOX 825	Due Date Requested	
City: Centerville	TAT Requested (days)	
State Zip: IA, 52544	Compliance Project: Δ Yes Δ No	
Phone:	PO #: Purchase Order not required	
Email: bbuss@hall-engineering us	WO #:	
Project Name: Appanoose County Landfill - Spring 2026	Project #: 31010067	
Site:	SSOW#:	

Analysis Requested

Preservation Codes
D - HNO3
A - HCL
N - None
CB - ZnAcetate/NaOH
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020B - Appendix I	8260D - Volatile App I list	8260D Volatile App I list (unpreserved method)	I_3765_85 - Residue, Non-filterable (TSS)	8081B Pesticides - Short List	9034_Calc - Sulfide (subt to Cleveland)	Total Number of containers	Special Instructions/Note
			Preservation Code:				D	A	N	N	N	CB		
MW-51	5/4/2026	10:58 AM	G	Water			X	X	X	X		X	9	
MW-60	5/4/2026	9:07 AM	G	Water			X	X	X	X		X	9	
MW-27	5/4/2026	12:30 PM	G	Water			X	X	X	X	X	X	10	
MW-50R	5/4/2026	1:29 PM	G	Water			X	X	X	X			8	
Field Blank	5/4/2026	12:46 PM	G	Water			X	X	X	X	X	X	10	
Trip Blank	5/4/2026			Water				X	X				4	

See attached Sample Label Data

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested I II III IV Other (specify)

Special Instructions/QC Requirements

Empty Kit Relinquished by:	Date	Time	Method of Shipment:

Relinquished by: Bill Buss	Date/Time: 5/5/2026 2:15 PM	Company: HEC	Received by:	Date/Time: 5.6.25 840	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No: 2929451 & 2929450	Cooler Temperature(s) °C and Other Remarks.

Ver 05/06/2024

SAMPLE LABEL DATA

All samples collected for the Rathbun Area Solid Waste Management Commission – Appanoose County Sanitary Landfill

All samples collected by Hall Engineering Company/Bill Buss

NORTH LANDFILL – Spring 2026

MW-51:

6020B – Appendix 1 Metals Sample Collected 5-4-2026 @ 10:58 AM

8260D – Volatile Appendix 1 Sublist Sample Collected 5-4-2026 @ 10:58 AM

9034_Calc – Sulfide Sample Collected 5-4-2026 @ 10:58 AM

I_3765_85 – Residue (TSS) Sample Collected 5-4-26 @ 10:58 AM

MW-27:

6020B – Appendix 1 Metals Sample Collected 5-4-2026 @ 12:30 PM

8260D – Volatile Appendix 1 Sublist Sample Collected 5-4-2026 @ 12:30 PM

8081B – (MOD) Standard Pesticides – Short List Sample Collected 5-4-2026 @ 12:30 PM

9034_Calc – Sulfide Sample Collected 5-4-2026 @ 12:30 PM

I_3765_85 – Residue (TSS) Sample Collected 5-4-2026 @ 12:30 PM

MW-50R:

6020B – Appendix 1 Metals Sample Collected 5-4-2026 @ 1:29 PM

8260D – Volatile Appendix 1 Sublist Sample Collected 5-4-2026 @ 1:29 PM

I_3765_85 – Residue (TSS) Sample Collected 5-4-2026 @ 1:29 PM

MW-60:

6020B – Appendix 1 Metals Sample Collected 5-4-2026 @ 9:07 AM

8260D – Volatile Appendix 1 Sublist Sample Collected 5-4-2026 @ 9:07 AM

9034_Calc - Sulfide Sample Collected 5-4-2026 @ 9:07 AM

I_3765_85 – Residue (TSS) Sample Collected 5-4-2026 @ 9:07 AM

Field Blank Samples Collected 5-4-2026 @ 12:46 PM

Eurofins Cedar Falls
3019 Venture Way
Cedar Falls, IA 50613
Phone: 319-277-2401 Fax: 319-277-2425

Chain of Custody Record

eurofins

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Miller Samuel	Carrier Tracking No(s): N/A	COC No: 310-93971 1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Samuel.Miller@et.eurofinsus.com	State of Origin: Iowa	Page: Page 1 of 1
Company: Eurofins Environment Testing North Centr		Accreditations Required (See note): State Program Iowa		Job #: 310-331318-1
Address: 180 S. Van Buren Avenue	Due Date Requested: 5/14/2026			
City: Barberton	TAT Requested (days): N/A			
State, Zip: OH 44203				
Phone: 330-497-9396(Tel) 330-497-0772(Fax)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Appanoose County Landfill Spring 2026	Project #: 31010067			
Site: N/A	SSOW#: N/A			

Analysis Requested

Preservation Codes:

Other: N/A

G T7

Sample Identification Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9034_Calc/9030BSulfide	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
MW-51 (310-331318-1)	5/4/26	10:58 Central	G	Water			X	1	
MW-60 (310-331318-2)	5/4/26	09:07 Central	G	Water			X	1	
MW-27 (310-331318-3)	5/4/26	12:30 Central	G	Water			X	1	
Field Blank (310-331318-5)	5/4/26	12:46 Central	G	Water			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing North Central, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing North Central LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing North Central, LLC attention immediately. If al requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing North Central, LLC.

Possible Hazard Identification *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I II III IV Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time: 5626 1500	Company	Received by: CHRIS ROAN	Date/Time: 5/27/26 10:00	Company RC
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes No	Custody Seal No	Cooler Temperature(s) °C and Other Remarks:

Ver 0. 0/20

5/15/2026

Eurofins – Cleveland Sample Receipt Form/Narrative **Login # :**
Barberton Facility

Client Euro Fins Site Name

Cooler unpacked by: CHRIS ROAN

Cooler Received on 5/7/26 Opened on 5/8/26

FedEx: 1st Grd (Exp) UPS FAS Waypoint Client Drop Off Eurofins Courier Other

Receipt After-hours Drop-off Date/Time Storage Location

(Eurofins Cooler # EC) Foam Box Client Cooler Box Other

Packing material used. Bubble Wrap Foam Plastic Bag (None) Other

COOLANT (Wet Ice) Blue Ice Dry Ice Water None

1 Cooler temperature upon receipt ☐ See Multiple Cooler Form

IR GUN # 2 (CF -0.1 °C) Observed Cooler Temp 7.5 °C Corrected Cooler Temp. 7.4 °C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity	Yes	(No)
-Were the seals on the outside of the cooler(s) signed & dated?	Yes	No (NA)
-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?	Yes	(No)
-Were tamper/custody seals intact and uncompromised?	Yes	No (NA)
3 Shippers' packing slip attached to the cooler(s)?	(Yes)	No
4. Did custody papers accompany the sample(s)?	(Yes)	No
5 Were the custody papers relinquished & signed in the appropriate place?	(Yes)	No
6. Was/were the person(s) who collected the samples clearly identified on the COC?	Yes	(No)
7 Did all bottles arrive in good condition (Unbroken)?	(Yes)	No
8. Could all bottle labels (ID/Date/Time) be reconciled with the COC?	(Yes)	No
9 For each sample, does the COC specify preservatives (Y/N), # of containers (Y/N), and sample type of grab/comp (Y/N)?	(Y)	N
10 Were correct bottle(s) used for the test(s) indicated?	(Yes)	No
11 Sufficient quantity received to perform indicated analyses?	(Yes)	No
12. Are these work share samples and all listed on the COC?	(Yes)	No
If yes, Questions 13-17 have been checked at the originating laboratory		
13 Were all preserved sample(s) at the correct pH upon receipt?	Yes	No NA
14. Were VOAs on the COC?	Yes	No
15 Were air bubbles >6 mm in any VOA vials? ● Larger than this	Yes	No NA
16 Was a VOA trip blank present in the cooler(s)? Trip Blank Lot #	Yes	No
17 Was a LL Hg or Me Hg trip blank present?	Yes	No

~~pH Strip Lot# HC574455~~

Tests that are not checked for pH by Receiving:
VOAs
Oil and Grease
TOC

Contacted PM Date by via Verbal Voice Mail Other

Concerning

18. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES ☐ additional next page

Labeled by:

Labels Verified by:

19 SAMPLE CONDITION

Sample(s) were received after the recommended holding time had expired.

Sample(s) were received in a broken container

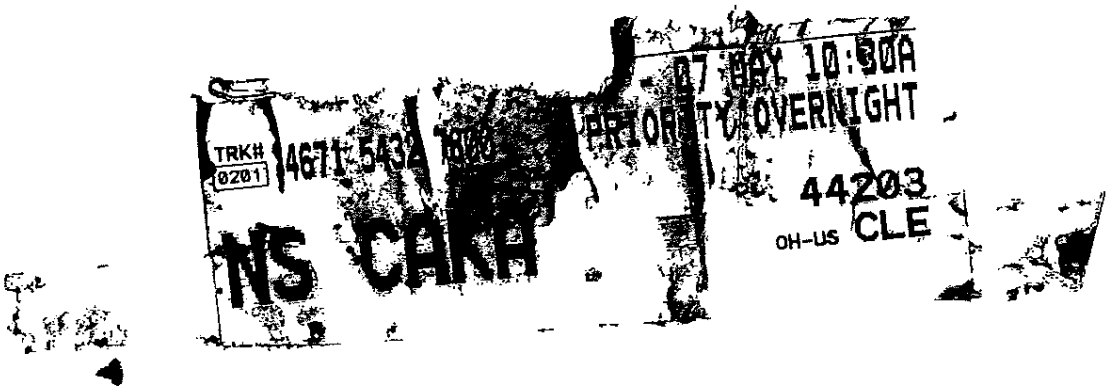
Sample(s) were received with bubble >6 mm in diameter (Notify PM)

20. SAMPLE PRESERVATION

Sample(s) were further preserved in the laboratory

Time preserved Preservative(s) added/Lot number(s)

VOA Sample Preservation - Date/Time VOAs Frozen.


07 DAY 10:30A
PRIORITY OVERNIGHT
TRK#
0201
4671 5432
44203
OH-US
CLE
NS CARR

Login Sample Receipt Checklist

Client: Hall Engineering Company

Job Number: 310-331318-1

Login Number: 331318

List Source: Eurofins Cedar Falls

List Number: 1

Creator: Hirsch, Preston

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

MICROBAC®

Microbac Laboratories, Inc., Centerville

CERTIFICATE OF ANALYSIS

4JE0110

Hall Engineering Company

Bill Buss
Alliant Building, Suite 101 300 Sheridan Ave
Centerville, IA 52544

Project Name: wastewater

Project / PO Number: N/A
Received: 05/05/2026
Reported: 05/14/2026

Analytical Testing Parameters

Client Sample ID: MW 51
Sample Matrix: Aqueous
Lab Sample ID: 4JE0110-01
Collected By: Bill Buss
Collection Date: 05/04/2026 11:57

Analyses Performed by: Microbac Laboratories, Inc., Newton

Determination of Volatile Organic Compounds	Result	MDL	RL	Units	Note	Prepared	Analyzed	Analyst
EPA 8260D								
Chloromethane	<0.4	0.4	1.0	ug/L		05/08/26 0000	05/08/26 1221	RAF
Vinyl Chloride	<0.3	0.3	1.0	ug/L		05/08/26 0000	05/08/26 1221	RAF
Bromomethane	<0.6	0.6	1.0	ug/L		05/08/26 0000	05/08/26 1221	RAF
Chloroethane	<0.5	0.5	1.0	ug/L		05/08/26 0000	05/08/26 1221	RAF
Trichlorofluoromethane	<0.3	0.3	1.0	ug/L		05/08/26 0000	05/08/26 1221	RAF
1,1-Dichloroethylene	<0.5	0.5	1.0	ug/L		05/08/26 0000	05/08/26 1221	RAF
Acetone	<10.0	10.0	10.0	ug/L		05/08/26 0000	05/08/26 1221	RAF
Methyl Iodide	<1.0	1.0	1.0	ug/L		05/08/26 0000	05/08/26 1221	RAF
Carbon Disulfide	<0.8	0.8	1.0	ug/L		05/08/26 0000	05/08/26 1221	RAF
Methylene Chloride	<1.1	1.1	5.0	ug/L		05/08/26 0000	05/08/26 1221	RAF
Acrylonitrile	<0.9	0.9	5.0	ug/L		05/08/26 0000	05/08/26 1221	RAF
trans-1,2-Dichloroethylene	<0.5	0.5	1.0	ug/L		05/08/26 0000	05/08/26 1221	RAF
1,1-Dichloroethane	<0.4	0.4	1.0	ug/L		05/08/26 0000	05/08/26 1221	RAF
Vinyl Acetate	<2.9	2.9	5.0	ug/L		05/08/26 0000	05/08/26 1221	RAF
cis-1,2-Dichloroethylene	<0.6	0.6	1.0	ug/L		05/08/26 0000	05/08/26 1221	RAF
2-Butanone (MEK)	<1.4	1.4	10.0	ug/L		05/08/26 0000	05/08/26 1221	RAF
Bromochloromethane	<0.5	0.5	1.0	ug/L		05/08/26 0000	05/08/26 1221	RAF
Chloroform	<0.4	0.4	1.0	ug/L		05/08/26 0000	05/08/26 1221	RAF
1,1,1-Trichloroethane	<0.4	0.4	1.0	ug/L		05/08/26 0000	05/08/26 1221	RAF
Carbon Tetrachloride	<0.4	0.4	1.0	ug/L		05/08/26 0000	05/08/26 1221	RAF
Benzene	<0.3	0.3	1.0	ug/L		05/08/26 0000	05/08/26 1221	RAF
1,2-Dichloroethane	<0.4	0.4	1.0	ug/L		05/08/26 0000	05/08/26 1221	RAF
Trichloroethylene	<0.4	0.4	1.0	ug/L		05/08/26 0000	05/08/26 1221	RAF
1,2-Dichloropropane	<0.3	0.3	1.0	ug/L		05/08/26 0000	05/08/26 1221	RAF
Dibromomethane	<0.5	0.5	1.0	ug/L		05/08/26 0000	05/08/26 1221	RAF
Bromodichloromethane	<0.4	0.4	1.0	ug/L		05/08/26 0000	05/08/26 1221	RAF
cis-1,3-Dichloropropene	<0.4	0.4	1.0	ug/L		05/08/26 0000	05/08/26 1221	RAF
4-Methyl-2-pentanone (MIBK)	<1.0	1.0	5.0	ug/L		05/08/26 0000	05/08/26 1221	RAF
Toluene	<0.3	0.3	1.0	ug/L		05/08/26 0000	05/08/26 1221	RAF
trans-1,3-Dichloropropene	<0.4	0.4	1.0	ug/L		05/08/26 0000	05/08/26 1221	RAF
1,1,2-Trichloroethane	<0.4	0.4	1.0	ug/L		05/08/26 0000	05/08/26 1221	RAF
Tetrachloroethylene	<0.5	0.5	1.0	ug/L		05/11/26 0000	05/11/26 1633	RAF
2-Hexanone (MBK)	<1.2	1.2	5.0	ug/L		05/08/26 0000	05/08/26 1221	RAF
Dibromochloromethane	<0.4	0.4	1.0	ug/L		05/08/26 0000	05/08/26 1221	RAF

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CERTIFICATE OF ANALYSIS

4JE0110

Client Sample ID:	MW 51		
Sample Matrix:	Aqueous	**Collected By:**	Bill Buss
Lab Sample ID:	4JE0110-01	**Collection Date:**	05/04/2026 11:57

Determination of Volatile Organic Compounds	Result	MDL	RL	Units	Note	Prepared	Analyzed	Analyst
1,2-Dibromoethane	<0.3	0.3	1.0	ug/L		05/08/26 0000	05/08/26 1221	RAF
Chlorobenzene	<0.4	0.4	1.0	ug/L		05/08/26 0000	05/08/26 1221	RAF
1,1,1,2-Tetrachloroethane	<0.4	0.4	1.0	ug/L		05/08/26 0000	05/08/26 1221	RAF
Ethylbenzene	<0.4	0.4	1.0	ug/L		05/08/26 0000	05/08/26 1221	RAF
Xylenes, total	<1.4	1.4	2.0	ug/L		05/08/26 0000	05/08/26 1221	RAF
Styrene	<0.5	0.5	1.0	ug/L		05/08/26 0000	05/08/26 1221	RAF
Bromoform	<0.4	0.4	1.0	ug/L		05/08/26 0000	05/08/26 1221	RAF
1,2,3-Trichloropropane	<0.9	0.9	1.0	ug/L		05/08/26 0000	05/08/26 1221	RAF
trans-1,4-Dichloro-2-butene	<2.3	2.3	5.0	ug/L		05/08/26 0000	05/08/26 1221	RAF
1,1,2,2-Tetrachloroethane	<0.4	0.4	1.0	ug/L		05/08/26 0000	05/08/26 1221	RAF
1,4-Dichlorobenzene	<0.5	0.5	1.0	ug/L		05/08/26 0000	05/08/26 1221	RAF
1,2-Dichlorobenzene	<0.4	0.4	1.0	ug/L		05/08/26 0000	05/08/26 1221	RAF
1,2-Dibromo-3-chloropropane	<0.7	0.7	5.0	ug/L		05/08/26 0000	05/08/26 1221	RAF
Surrogate: Dibromofluoromethane	104	Limit: 75-136		% Rec		05/08/26 0000	05/08/26 1221	RAF
Surrogate: Dibromofluoromethane	104	Limit: 75-136		% Rec		05/11/26 0000	05/11/26 1633	RAF
Surrogate: Dibromofluoromethane	104	Limit: 57-128		% Rec		05/08/26 0000	05/08/26 1221	RAF
Surrogate: 1,2-Dichloroethane-d4	106	Limit: 61-142		% Rec		05/11/26 0000	05/11/26 1633	RAF
Surrogate: 1,2-Dichloroethane-d4	109	Limit: 49-135		% Rec		05/08/26 0000	05/08/26 1221	RAF
Surrogate: 1,2-Dichloroethane-d4	109	Limit: 61-142		% Rec		05/08/26 0000	05/08/26 1221	RAF
Surrogate: Toluene-d8	96.7	Limit: 82-121		% Rec		05/08/26 0000	05/08/26 1221	RAF
Surrogate: Toluene-d8	100	Limit: 82-121		% Rec		05/11/26 0000	05/11/26 1633	RAF
Surrogate: Toluene-d8	96.7	Limit: 82-116		% Rec		05/08/26 0000	05/08/26 1221	RAF
Surrogate: 4-Bromofluorobenzene	98.5	Limit: 80-116		% Rec		05/11/26 0000	05/11/26 1633	RAF
Surrogate: 4-Bromofluorobenzene	97.9	Limit: 77-114		% Rec		05/08/26 0000	05/08/26 1221	RAF
Surrogate: 4-Bromofluorobenzene	97.9	Limit: 80-116		% Rec		05/08/26 0000	05/08/26 1221	RAF

Inorganics Total	Result	MDL	RL	Units	Note	Prepared	Analyzed	Analyst
USGS I-3765-85								
Total Suspended Solids (TSS)	**4**	2	2	mg/L		05/06/26 1253	05/07/26 0819	LAW

Metals Total by ICPMS	Result	MDL	RL	Units	Note	Prepared	Analyzed	Analyst
EPA 6020A								
Antimony	**0.000681**	0.000544	0.00100	mg/L	**J**	05/06/26 1422	05/08/26 2003	RVV
Arsenic	<0.000471	0.000471	0.00200	mg/L		05/06/26 1422	05/08/26 2003	RVV
Barium	**0.00764**	0.000223	0.00100	mg/L		05/06/26 1422	05/08/26 2003	RVV
Beryllium	<0.000110	0.000110	0.000500	mg/L		05/06/26 1422	05/08/26 2003	RVV
Cadmium	<0.000104	0.000104	0.000200	mg/L		05/06/26 1422	05/08/26 2003	RVV
Chromium	<0.000494	0.000494	0.00100	mg/L		05/06/26 1422	05/08/26 2003	RVV
Cobalt	**0.000401**	0.0000290	0.000500	mg/L	**J**	05/06/26 1422	05/08/26 2003	RVV
Copper	**0.00525**	0.00140	0.00500	mg/L		05/06/26 1422	05/08/26 2003	RVV
Lead	**0.000182**	0.000152	0.00100	mg/L	**J**	05/06/26 1422	05/08/26 2003	RVV
Nickel	**0.0105**	0.000226	0.00500	mg/L		05/06/26 1422	05/08/26 2003	RVV
Selenium	<0.000958	0.000958	0.00200	mg/L		05/06/26 1422	05/08/26 2003	RVV
Silver	<0.00365	0.00365	0.00500	mg/L		05/06/26 1422	05/08/26 2003	RVV

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CERTIFICATE OF ANALYSIS

4JE0110

Client Sample ID:	MW 51		
Sample Matrix:	Aqueous	**Collected By:**	Bill Buss
Lab Sample ID:	4JE0110-01	**Collection Date:**	05/04/2026 11:57

Metals Total by ICPMS	Result	MDL	RL	Units	Note	Prepared	Analyzed	Analyst
Thallium	<0.0000414	0.0000414	0.000500	mg/L		05/06/26 1422	05/08/26 2003	RVV
Vanadium	<0.000278	0.000278	0.00200	mg/L		05/06/26 1422	05/08/26 2003	RVV
Zinc	**0.173**	0.00273	0.00500	mg/L		05/06/26 1422	05/08/26 2003	RVV

Determination of Conventional Chemistry Parameters	Result	MDL	RL	Units	Note	Prepared	Analyzed	Analyst
EPA 376.2								
Sulfide, total	**1.1**	0.050	0.10	mg/L		05/05/26 1524	05/11/26 1543	CJF

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CERTIFICATE OF ANALYSIS

4JE0110

Client Sample ID: Trip Blank
Sample Matrix: Aqueous
Lab Sample ID: 4JE0110-02
Collection Date: 05/04/2026

Analyses Performed by: Microbac Laboratories, Inc., Newton

Determination of Volatile Organic Compounds	Result	MDL	RL	Units	Note	Prepared	Analyzed	Analyst
EPA 8260D								
Chloromethane	<0.4	0.4	1.0	ug/L		05/11/26 0000	05/11/26 1430	RAF
Vinyl Chloride	<0.3	0.3	1.0	ug/L		05/11/26 0000	05/11/26 1430	RAF
Bromomethane	<0.6	0.6	1.0	ug/L		05/11/26 0000	05/11/26 1430	RAF
Chloroethane	<0.5	0.5	1.0	ug/L		05/11/26 0000	05/11/26 1430	RAF
Trichlorofluoromethane	<0.3	0.3	1.0	ug/L		05/11/26 0000	05/11/26 1430	RAF
1,1-Dichloroethylene	<0.5	0.5	1.0	ug/L		05/11/26 0000	05/11/26 1430	RAF
Acetone	<10.0	10.0	10.0	ug/L		05/11/26 0000	05/11/26 1430	RAF
Methyl Iodide	<1.0	1.0	1.0	ug/L		05/11/26 0000	05/11/26 1430	RAF
Carbon Disulfide	<0.8	0.8	1.0	ug/L		05/11/26 0000	05/11/26 1430	RAF
Methylene Chloride	<1.1	1.1	5.0	ug/L		05/11/26 0000	05/11/26 1430	RAF
Acrylonitrile	<0.9	0.9	5.0	ug/L		05/11/26 0000	05/11/26 1430	RAF
trans-1,2-Dichloroethylene	<0.5	0.5	1.0	ug/L		05/11/26 0000	05/11/26 1430	RAF
1,1-Dichloroethane	<0.4	0.4	1.0	ug/L		05/11/26 0000	05/11/26 1430	RAF
Vinyl Acetate	<2.9	2.9	5.0	ug/L		05/11/26 0000	05/11/26 1430	RAF
cis-1,2-Dichloroethylene	<0.6	0.6	1.0	ug/L		05/11/26 0000	05/11/26 1430	RAF
2-Butanone (MEK)	<1.4	1.4	10.0	ug/L		05/11/26 0000	05/11/26 1430	RAF
Bromochloromethane	<0.5	0.5	1.0	ug/L		05/11/26 0000	05/11/26 1430	RAF
Chloroform	<0.4	0.4	1.0	ug/L		05/11/26 0000	05/11/26 1430	RAF
1,1,1-Trichloroethane	<0.4	0.4	1.0	ug/L		05/11/26 0000	05/11/26 1430	RAF
Carbon Tetrachloride	<0.4	0.4	1.0	ug/L		05/11/26 0000	05/11/26 1430	RAF
Benzene	<0.3	0.3	1.0	ug/L		05/11/26 0000	05/11/26 1430	RAF
1,2-Dichloroethane	<0.4	0.4	1.0	ug/L		05/11/26 0000	05/11/26 1430	RAF
Trichloroethylene	<0.4	0.4	1.0	ug/L		05/11/26 0000	05/11/26 1430	RAF
1,2-Dichloropropane	<0.3	0.3	1.0	ug/L		05/11/26 0000	05/11/26 1430	RAF
Dibromomethane	<0.5	0.5	1.0	ug/L		05/11/26 0000	05/11/26 1430	RAF
Bromodichloromethane	<0.4	0.4	1.0	ug/L		05/11/26 0000	05/11/26 1430	RAF
cis-1,3-Dichloropropene	<0.4	0.4	1.0	ug/L		05/11/26 0000	05/11/26 1430	RAF
4-Methyl-2-pentanone (MIBK)	<1.0	1.0	5.0	ug/L		05/11/26 0000	05/11/26 1430	RAF
Toluene	<0.3	0.3	1.0	ug/L		05/11/26 0000	05/11/26 1430	RAF
trans-1,3-Dichloropropene	<0.4	0.4	1.0	ug/L		05/11/26 0000	05/11/26 1430	RAF
1,1,2-Trichloroethane	<0.4	0.4	1.0	ug/L		05/11/26 0000	05/11/26 1430	RAF
Tetrachloroethylene	<0.5	0.5	1.0	ug/L		05/11/26 0000	05/11/26 1430	RAF
2-Hexanone (MBK)	<1.2	1.2	5.0	ug/L		05/11/26 0000	05/11/26 1430	RAF
Dibromochloromethane	<0.4	0.4	1.0	ug/L		05/11/26 0000	05/11/26 1430	RAF
1,2-Dibromoethane	<0.3	0.3	1.0	ug/L		05/11/26 0000	05/11/26 1430	RAF
Chlorobenzene	<0.4	0.4	1.0	ug/L		05/11/26 0000	05/11/26 1430	RAF
1,1,1,2-Tetrachloroethane	<0.4	0.4	1.0	ug/L		05/11/26 0000	05/11/26 1430	RAF
Ethylbenzene	<0.4	0.4	1.0	ug/L		05/11/26 0000	05/11/26 1430	RAF
Xylenes, total	<1.4	1.4	2.0	ug/L		05/11/26 0000	05/11/26 1430	RAF
Styrene	<0.5	0.5	1.0	ug/L		05/11/26 0000	05/11/26 1430	RAF
Bromoform	<0.4	0.4	1.0	ug/L		05/11/26 0000	05/11/26 1430	RAF

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CERTIFICATE OF ANALYSIS

4JE0110

Client Sample ID: Trip Blank
Sample Matrix: Aqueous
Lab Sample ID: 4JE0110-02
Collection Date: 05/04/2026

Determination of Volatile Organic Compounds	Result	MDL	RL	Units	Note	Prepared	Analyzed	Analyst
1,2,3-Trichloropropane	<0.9	0.9	1.0	ug/L		05/11/26 0000	05/11/26 1430	RAF
trans-1,4-Dichloro-2-butene	<2.3	2.3	5.0	ug/L		05/11/26 0000	05/11/26 1430	RAF
1,1,2,2-Tetrachloroethane	<0.4	0.4	1.0	ug/L		05/11/26 0000	05/11/26 1430	RAF
1,4-Dichlorobenzene	<0.5	0.5	1.0	ug/L		05/11/26 0000	05/11/26 1430	RAF
1,2-Dichlorobenzene	<0.4	0.4	1.0	ug/L		05/11/26 0000	05/11/26 1430	RAF
1,2-Dibromo-3-chloropropane	<0.7	0.7	5.0	ug/L		05/11/26 0000	05/11/26 1430	RAF
Surrogate: Dibromofluoromethane	106	Limit: 57-128		% Rec		05/11/26 0000	05/11/26 1430	RAF
Surrogate: Dibromofluoromethane	106	Limit: 75-136		% Rec		05/11/26 0000	05/11/26 1430	RAF
Surrogate: 1,2-Dichloroethane-d4	102	Limit: 61-142		% Rec		05/11/26 0000	05/11/26 1430	RAF
Surrogate: 1,2-Dichloroethane-d4	102	Limit: 49-135		% Rec		05/11/26 0000	05/11/26 1430	RAF
Surrogate: Toluene-d8	101	Limit: 82-121		% Rec		05/11/26 0000	05/11/26 1430	RAF
Surrogate: Toluene-d8	101	Limit: 82-116		% Rec		05/11/26 0000	05/11/26 1430	RAF
Surrogate: 4-Bromofluorobenzene	99.7	Limit: 80-116		% Rec		05/11/26 0000	05/11/26 1430	RAF
Surrogate: 4-Bromofluorobenzene	99.7	Limit: 77-114		% Rec		05/11/26 0000	05/11/26 1430	RAF

Definitions

J: Estimated value. The analyte concentration is less than the reporting/quantitation limit.
MDL: Minimum Detection Limit
RL: Reporting Limit

Report Comments

Reviewed and Approved By:

Darcie Bouchard
Supervisor
darcie.bouchard@microbac.com
05/14/26 08:37

CHAIN OF CUSTODY RECORD

MICROBAC
205 East Van Buren St.
Centerville, IA 52544
Phone: 641-437-7023

Printed: 4/30/2026 10:41:33AM

SITE INFORMATION

Sampler:

Project: Groundwater Analysis
wastewater

REPORT TO

Bill Buss
Hall Engineering Company
Alliant Building, Suite 101 300 Sheridan /
Centerville, IA 52544

INVOICE TO

Bill Buss
Hall Engineering Company
Alliant Building, Suite 101 300 Sheridan Ave
Centerville, IA 52544

SPECIAL INSTRUCTIONS

None

Turn Around Time
☐ Standard ☐ RUSH, need by ___/___/___

LAB USE ONLY

Laboratory attach WO label here

Temperature: 8.3 oC

Number	Sample Identification / Client ID	Matrix	Sample Type	Date	Time	# Containers	Analyses	Lab Sample Number
01-001	MW 51	Aqueous		2	2		lndfll-app1-metals-6020 lndfill-app1-voc-group Sulfide S2 E376.2 TSS USGS I-3765	1

4 J E 0 1 1 0
Hall Engineering Company
PM: Darcie Bouchard

Relinquished By Date/Time

Received By Date/Time

Bill Buss 5/5/2026 2:35PM
Relinquished By Date/Time

Received for Lab By 5/5/26 1445
Date/Time

See attached Sample Label Data

Remarks:
No Field Blank Samples
All bottles contain Ground water

CHAIN OF CUSTODY RECORD

MICROBAC
205 East Van Buren St.
Centerville, IA 52544
Phone: 641-437-7023

Printed: 4/30/2026 10:41:33AM

SITE INFORMATION

Sampler:

Project: Groundwater Analysis
wastewater

REPORT TO

Bill Buss
Hall Engineering Company
Alliant Building, Suite 101 300 Sheridan /
Centerville, IA 52544

INVOICE TO

Bill Buss
Hall Engineering Company
Alliant Building, Suite 101 300 Sheridan Ave
Centerville, IA 52544

SPECIAL INSTRUCTIONS

None

Turn Around Time
☐ Standard ☐ RUSH, need by ___/___/___

LAB USE ONLY

Laboratory attach WO label here

Temperature: 8.3 oC

Number	Sample Identification / Client ID	Matrix	Sample Type	Date	Time	# Containers	Analyses	Lab Sample Number
01-001	MW 51	Aqueous		2.	2.		lndfll-app1-metals-6020 lndfill-app1-voc-group Sulfide S2 E376.2 TSS USGS I-3765	1

4 J E 0 1 1 0
Hall Engineering Company
PM: Darcie Bouchard

Relinquished By Date/Time

Received By Date/Time

Bill Buss 5/5/2026 2:35PM
Relinquished By Date/Time

Received for Lab By 5/5/26 1445
Date/Time

See attached Sample Label Data

Remarks:
No Field Blank Samples
All bottles contain Ground water

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Microbac Laboratories, Inc., Centerville

CERTIFICATE OF ANALYSIS

4JE0111

Hall Engineering Company

Bill Buss
Alliant Building, Suite 101 300 Sheridan Ave
Centerville, IA 52544

Project Name: wastewater

Project / PO Number: N/A
Received: 05/05/2026
Reported: 05/14/2026

Analytical Testing Parameters

Client Sample ID: MW 60
Sample Matrix: Aqueous
Lab Sample ID: 4JE0111-01
Collected By: Bill Buss
Collection Date: 05/04/2026 10:12

Analyses Performed by: Microbac Laboratories, Inc., Newton

Determination of Volatile Organic Compounds	Result	MDL	RL	Units	Note	Prepared	Analyzed	Analyst
EPA 8260D								
Chloromethane	<0.4	0.4	1.0	ug/L		05/08/26 0000	05/08/26 1245	RAF
Vinyl Chloride	<0.3	0.3	1.0	ug/L		05/08/26 0000	05/08/26 1245	RAF
Bromomethane	<0.6	0.6	1.0	ug/L		05/08/26 0000	05/08/26 1245	RAF
Chloroethane	<0.5	0.5	1.0	ug/L		05/08/26 0000	05/08/26 1245	RAF
Trichlorofluoromethane	<0.3	0.3	1.0	ug/L		05/08/26 0000	05/08/26 1245	RAF
1,1-Dichloroethylene	<0.5	0.5	1.0	ug/L		05/08/26 0000	05/08/26 1245	RAF
Acetone	**12.6**	10.0	10.0	ug/L		05/08/26 0000	05/08/26 1245	RAF
Methyl Iodide	<1.0	1.0	1.0	ug/L		05/08/26 0000	05/08/26 1245	RAF
Carbon Disulfide	**0.8**	0.8	1.0	ug/L	**J**	05/08/26 0000	05/08/26 1245	RAF
Methylene Chloride	<1.1	1.1	5.0	ug/L		05/08/26 0000	05/08/26 1245	RAF
Acrylonitrile	<0.9	0.9	5.0	ug/L		05/08/26 0000	05/08/26 1245	RAF
trans-1,2-Dichloroethylene	<0.5	0.5	1.0	ug/L		05/08/26 0000	05/08/26 1245	RAF
1,1-Dichloroethane	<0.4	0.4	1.0	ug/L		05/08/26 0000	05/08/26 1245	RAF
Vinyl Acetate	<2.9	2.9	5.0	ug/L		05/08/26 0000	05/08/26 1245	RAF
cis-1,2-Dichloroethylene	<0.6	0.6	1.0	ug/L		05/08/26 0000	05/08/26 1245	RAF
2-Butanone (MEK)	**5.9**	1.4	10.0	ug/L	**J**	05/08/26 0000	05/08/26 1245	RAF
Bromochloromethane	<0.5	0.5	1.0	ug/L		05/08/26 0000	05/08/26 1245	RAF
Chloroform	<0.4	0.4	1.0	ug/L		05/08/26 0000	05/08/26 1245	RAF
1,1,1-Trichloroethane	<0.4	0.4	1.0	ug/L		05/08/26 0000	05/08/26 1245	RAF
Carbon Tetrachloride	<0.4	0.4	1.0	ug/L		05/08/26 0000	05/08/26 1245	RAF
Benzene	<0.3	0.3	1.0	ug/L		05/08/26 0000	05/08/26 1245	RAF
1,2-Dichloroethane	<0.4	0.4	1.0	ug/L		05/08/26 0000	05/08/26 1245	RAF
Trichloroethylene	<0.4	0.4	1.0	ug/L		05/08/26 0000	05/08/26 1245	RAF
1,2-Dichloropropane	<0.3	0.3	1.0	ug/L		05/08/26 0000	05/08/26 1245	RAF
Dibromomethane	<0.5	0.5	1.0	ug/L		05/08/26 0000	05/08/26 1245	RAF
Bromodichloromethane	<0.4	0.4	1.0	ug/L		05/08/26 0000	05/08/26 1245	RAF
cis-1,3-Dichloropropene	<0.4	0.4	1.0	ug/L		05/08/26 0000	05/08/26 1245	RAF
4-Methyl-2-pentanone (MIBK)	<1.0	1.0	5.0	ug/L		05/08/26 0000	05/08/26 1245	RAF
Toluene	<0.3	0.3	1.0	ug/L		05/08/26 0000	05/08/26 1245	RAF
trans-1,3-Dichloropropene	<0.4	0.4	1.0	ug/L		05/08/26 0000	05/08/26 1245	RAF
1,1,2-Trichloroethane	<0.4	0.4	1.0	ug/L		05/08/26 0000	05/08/26 1245	RAF
Tetrachloroethylene	<0.5	0.5	1.0	ug/L		05/11/26 0000	05/11/26 1658	RAF
2-Hexanone (MBK)	<1.2	1.2	5.0	ug/L		05/08/26 0000	05/08/26 1245	RAF
Dibromochloromethane	<0.4	0.4	1.0	ug/L		05/08/26 0000	05/08/26 1245	RAF

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CERTIFICATE OF ANALYSIS

4JE0111

Client Sample ID:	MW 60		
Sample Matrix:	Aqueous	**Collected By:**	Bill Buss
Lab Sample ID:	4JE0111-01	**Collection Date:**	05/04/2026 10:12

Determination of Volatile Organic Compounds	Result	MDL	RL	Units	Note	Prepared	Analyzed	Analyst
1,2-Dibromoethane	<0.3	0.3	1.0	ug/L		05/08/26 0000	05/08/26 1245	RAF
Chlorobenzene	<0.4	0.4	1.0	ug/L		05/08/26 0000	05/08/26 1245	RAF
1,1,1,2-Tetrachloroethane	<0.4	0.4	1.0	ug/L		05/08/26 0000	05/08/26 1245	RAF
Ethylbenzene	<0.4	0.4	1.0	ug/L		05/08/26 0000	05/08/26 1245	RAF
Xylenes, total	<1.4	1.4	2.0	ug/L		05/08/26 0000	05/08/26 1245	RAF
Styrene	<0.5	0.5	1.0	ug/L		05/08/26 0000	05/08/26 1245	RAF
Bromoform	<0.4	0.4	1.0	ug/L		05/08/26 0000	05/08/26 1245	RAF
1,2,3-Trichloropropane	<0.9	0.9	1.0	ug/L		05/08/26 0000	05/08/26 1245	RAF
trans-1,4-Dichloro-2-butene	<2.3	2.3	5.0	ug/L		05/08/26 0000	05/08/26 1245	RAF
1,1,2,2-Tetrachloroethane	<0.4	0.4	1.0	ug/L		05/08/26 0000	05/08/26 1245	RAF
1,4-Dichlorobenzene	<0.5	0.5	1.0	ug/L		05/08/26 0000	05/08/26 1245	RAF
1,2-Dichlorobenzene	<0.4	0.4	1.0	ug/L		05/08/26 0000	05/08/26 1245	RAF
1,2-Dibromo-3-chloropropane	<0.7	0.7	5.0	ug/L		05/08/26 0000	05/08/26 1245	RAF
Surrogate: Dibromofluoromethane		104	Limit: 75-136	% Rec		05/08/26 0000	05/08/26 1245	RAF
Surrogate: Dibromofluoromethane		107	Limit: 75-136	% Rec		05/11/26 0000	05/11/26 1658	RAF
Surrogate: Dibromofluoromethane		104	Limit: 57-128	% Rec		05/08/26 0000	05/08/26 1245	RAF
Surrogate: 1,2-Dichloroethane-d4		111	Limit: 61-142	% Rec		05/11/26 0000	05/11/26 1658	RAF
Surrogate: 1,2-Dichloroethane-d4		107	Limit: 49-135	% Rec		05/08/26 0000	05/08/26 1245	RAF
Surrogate: 1,2-Dichloroethane-d4		107	Limit: 61-142	% Rec		05/08/26 0000	05/08/26 1245	RAF
Surrogate: Toluene-d8		97.9	Limit: 82-121	% Rec		05/08/26 0000	05/08/26 1245	RAF
Surrogate: Toluene-d8		99.4	Limit: 82-121	% Rec		05/11/26 0000	05/11/26 1658	RAF
Surrogate: Toluene-d8		97.9	Limit: 82-116	% Rec		05/08/26 0000	05/08/26 1245	RAF
Surrogate: 4-Bromofluorobenzene		92.3	Limit: 80-116	% Rec		05/11/26 0000	05/11/26 1658	RAF
Surrogate: 4-Bromofluorobenzene		101	Limit: 77-114	% Rec		05/08/26 0000	05/08/26 1245	RAF
Surrogate: 4-Bromofluorobenzene		101	Limit: 80-116	% Rec		05/08/26 0000	05/08/26 1245	RAF

Inorganics Total	Result	MDL	RL	Units	Note	Prepared	Analyzed	Analyst
USGS I-3765-85								
Total Suspended Solids (TSS)	**5**	2	2	mg/L		05/06/26 1253	05/07/26 0819	LAW

Metals Total by ICPMS	Result	MDL	RL	Units	Note	Prepared	Analyzed	Analyst
EPA 6020A								
Antimony	**0.00526**	0.000544	0.00100	mg/L		05/06/26 1422	05/08/26 2013	RVV
Arsenic	**0.00482**	0.000471	0.00200	mg/L		05/06/26 1422	05/08/26 2013	RVV
Barium	**0.0295**	0.000223	0.00100	mg/L		05/06/26 1422	05/08/26 2013	RVV
Beryllium	<0.000110	0.000110	0.000500	mg/L		05/06/26 1422	05/08/26 2013	RVV
Cadmium	<0.000104	0.000104	0.000200	mg/L		05/06/26 1422	05/08/26 2013	RVV
Chromium	**0.000815**	0.000494	0.00100	mg/L	**J**	05/06/26 1422	05/08/26 2013	RVV
Cobalt	**0.000147**	0.0000290	0.000500	mg/L	**J**	05/06/26 1422	05/08/26 2013	RVV
Copper	**0.00187**	0.00140	0.00500	mg/L	**J**	05/06/26 1422	05/08/26 2013	RVV
Lead	**0.00171**	0.000152	0.00100	mg/L		05/06/26 1422	05/08/26 2013	RVV
Nickel	**0.00182**	0.000226	0.00500	mg/L	**J**	05/06/26 1422	05/08/26 2013	RVV
Selenium	<0.000958	0.000958	0.00200	mg/L		05/06/26 1422	05/08/26 2013	RVV
Silver	<0.00365	0.00365	0.00500	mg/L		05/06/26 1422	05/08/26 2013	RVV

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Microbac Laboratories, Inc., Centerville

CERTIFICATE OF ANALYSIS

4JE0111

Client Sample ID:	MW 60		
Sample Matrix:	Aqueous	**Collected By:**	Bill Buss
Lab Sample ID:	4JE0111-01	**Collection Date:**	05/04/2026 10:12

Metals Total by ICPMS	Result	MDL	RL	Units	Note	Prepared	Analyzed	Analyst
Thallium	<0.0000414	0.0000414	0.000500	mg/L		05/06/26 1422	05/08/26 2013	RVV
Vanadium	**0.000463**	0.000278	0.00200	mg/L	**J**	05/06/26 1422	05/08/26 2013	RVV
Zinc	**0.0197**	0.00273	0.00500	mg/L		05/06/26 1422	05/08/26 2013	RVV

Determination of Conventional Chemistry Parameters	Result	MDL	RL	Units	Note	Prepared	Analyzed	Analyst
EPA 376.2								
Sulfide, total	**78**	7.4	15	mg/L		05/05/26 1524	05/11/26 1543	CJF

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Microbac Laboratories, Inc., Centerville

CERTIFICATE OF ANALYSIS

4JE0111

Client Sample ID: Trip Blank
Sample Matrix: Aqueous
Lab Sample ID: 4JE0111-02
Collection Date: 05/04/2026

Analyses Performed by: Microbac Laboratories, Inc., Newton

Determination of Volatile Organic Compounds	Result	MDL	RL	Units	Note	Prepared	Analyzed	Analyst
EPA 8260D								
Chloromethane	<0.4	0.4	1.0	ug/L		05/11/26 0000	05/11/26 1455	RAF
Vinyl Chloride	<0.3	0.3	1.0	ug/L		05/11/26 0000	05/11/26 1455	RAF
Bromomethane	<0.6	0.6	1.0	ug/L		05/11/26 0000	05/11/26 1455	RAF
Chloroethane	<0.5	0.5	1.0	ug/L		05/11/26 0000	05/11/26 1455	RAF
Trichlorofluoromethane	<0.3	0.3	1.0	ug/L		05/11/26 0000	05/11/26 1455	RAF
1,1-Dichloroethylene	<0.5	0.5	1.0	ug/L		05/11/26 0000	05/11/26 1455	RAF
Acetone	<10.0	10.0	10.0	ug/L		05/11/26 0000	05/11/26 1455	RAF
Methyl Iodide	<1.0	1.0	1.0	ug/L		05/11/26 0000	05/11/26 1455	RAF
Carbon Disulfide	<0.8	0.8	1.0	ug/L		05/11/26 0000	05/11/26 1455	RAF
Methylene Chloride	<1.1	1.1	5.0	ug/L		05/11/26 0000	05/11/26 1455	RAF
Acrylonitrile	<0.9	0.9	5.0	ug/L		05/11/26 0000	05/11/26 1455	RAF
trans-1,2-Dichloroethylene	<0.5	0.5	1.0	ug/L		05/11/26 0000	05/11/26 1455	RAF
1,1-Dichloroethane	<0.4	0.4	1.0	ug/L		05/11/26 0000	05/11/26 1455	RAF
Vinyl Acetate	<2.9	2.9	5.0	ug/L		05/11/26 0000	05/11/26 1455	RAF
cis-1,2-Dichloroethylene	<0.6	0.6	1.0	ug/L		05/11/26 0000	05/11/26 1455	RAF
2-Butanone (MEK)	<1.4	1.4	10.0	ug/L		05/11/26 0000	05/11/26 1455	RAF
Bromochloromethane	<0.5	0.5	1.0	ug/L		05/11/26 0000	05/11/26 1455	RAF
Chloroform	<0.4	0.4	1.0	ug/L		05/11/26 0000	05/11/26 1455	RAF
1,1,1-Trichloroethane	<0.4	0.4	1.0	ug/L		05/11/26 0000	05/11/26 1455	RAF
Carbon Tetrachloride	<0.4	0.4	1.0	ug/L		05/11/26 0000	05/11/26 1455	RAF
Benzene	<0.3	0.3	1.0	ug/L		05/11/26 0000	05/11/26 1455	RAF
1,2-Dichloroethane	<0.4	0.4	1.0	ug/L		05/11/26 0000	05/11/26 1455	RAF
Trichloroethylene	<0.4	0.4	1.0	ug/L		05/11/26 0000	05/11/26 1455	RAF
1,2-Dichloropropane	<0.3	0.3	1.0	ug/L		05/11/26 0000	05/11/26 1455	RAF
Dibromomethane	<0.5	0.5	1.0	ug/L		05/11/26 0000	05/11/26 1455	RAF
Bromodichloromethane	<0.4	0.4	1.0	ug/L		05/11/26 0000	05/11/26 1455	RAF
cis-1,3-Dichloropropene	<0.4	0.4	1.0	ug/L		05/11/26 0000	05/11/26 1455	RAF
4-Methyl-2-pentanone (MIBK)	<1.0	1.0	5.0	ug/L		05/11/26 0000	05/11/26 1455	RAF
Toluene	<0.3	0.3	1.0	ug/L		05/11/26 0000	05/11/26 1455	RAF
trans-1,3-Dichloropropene	<0.4	0.4	1.0	ug/L		05/11/26 0000	05/11/26 1455	RAF
1,1,2-Trichloroethane	<0.4	0.4	1.0	ug/L		05/11/26 0000	05/11/26 1455	RAF
Tetrachloroethylene	<0.5	0.5	1.0	ug/L		05/11/26 0000	05/11/26 1455	RAF
2-Hexanone (MBK)	<1.2	1.2	5.0	ug/L		05/11/26 0000	05/11/26 1455	RAF
Dibromochloromethane	<0.4	0.4	1.0	ug/L		05/11/26 0000	05/11/26 1455	RAF
1,2-Dibromoethane	<0.3	0.3	1.0	ug/L		05/11/26 0000	05/11/26 1455	RAF
Chlorobenzene	<0.4	0.4	1.0	ug/L		05/11/26 0000	05/11/26 1455	RAF
1,1,1,2-Tetrachloroethane	<0.4	0.4	1.0	ug/L		05/11/26 0000	05/11/26 1455	RAF
Ethylbenzene	<0.4	0.4	1.0	ug/L		05/11/26 0000	05/11/26 1455	RAF
Xylenes, total	<1.4	1.4	2.0	ug/L		05/11/26 0000	05/11/26 1455	RAF
Styrene	<0.5	0.5	1.0	ug/L		05/11/26 0000	05/11/26 1455	RAF
Bromoform	<0.4	0.4	1.0	ug/L		05/11/26 0000	05/11/26 1455	RAF

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Microbac Laboratories, Inc., Centerville

CERTIFICATE OF ANALYSIS

4JE0111

Client Sample ID: Trip Blank
Sample Matrix: Aqueous
Lab Sample ID: 4JE0111-02
Collection Date: 05/04/2026

Determination of Volatile Organic Compounds	Result	MDL	RL	Units	Note	Prepared	Analyzed	Analyst
1,2,3-Trichloropropane	<0.9	0.9	1.0	ug/L		05/11/26 0000	05/11/26 1455	RAF
trans-1,4-Dichloro-2-butene	<2.3	2.3	5.0	ug/L		05/11/26 0000	05/11/26 1455	RAF
1,1,2,2-Tetrachloroethane	<0.4	0.4	1.0	ug/L		05/11/26 0000	05/11/26 1455	RAF
1,4-Dichlorobenzene	<0.5	0.5	1.0	ug/L		05/11/26 0000	05/11/26 1455	RAF
1,2-Dichlorobenzene	<0.4	0.4	1.0	ug/L		05/11/26 0000	05/11/26 1455	RAF
1,2-Dibromo-3-chloropropane	<0.7	0.7	5.0	ug/L		05/11/26 0000	05/11/26 1455	RAF
Surrogate: Dibromofluoromethane	107	Limit: 57-128		% Rec		05/11/26 0000	05/11/26 1455	RAF
Surrogate: Dibromofluoromethane	107	Limit: 75-136		% Rec		05/11/26 0000	05/11/26 1455	RAF
Surrogate: 1,2-Dichloroethane-d4	103	Limit: 61-142		% Rec		05/11/26 0000	05/11/26 1455	RAF
Surrogate: 1,2-Dichloroethane-d4	103	Limit: 49-135		% Rec		05/11/26 0000	05/11/26 1455	RAF
Surrogate: Toluene-d8	100	Limit: 82-121		% Rec		05/11/26 0000	05/11/26 1455	RAF
Surrogate: Toluene-d8	100	Limit: 82-116		% Rec		05/11/26 0000	05/11/26 1455	RAF
Surrogate: 4-Bromofluorobenzene	89.3	Limit: 80-116		% Rec		05/11/26 0000	05/11/26 1455	RAF
Surrogate: 4-Bromofluorobenzene	89.3	Limit: 77-114		% Rec		05/11/26 0000	05/11/26 1455	RAF

Definitions

J: Estimated value. The analyte concentration is less than the reporting/quantitation limit.
MDL: Minimum Detection Limit
RL: Reporting Limit

Report Comments

Reviewed and Approved By:

Darcie Bouchard
Supervisor
darcie.bouchard@microbac.com
05/14/26 08:37

CHAIN OF CUSTODY RECORD

MICROBAC
205 East Van Buren St.
Centerville, IA 52544
Phone: 641-437-7023

Printed: 4/28/2026 2:01:00PM

SITE INFORMATION

Sampler:

Project: Groundwater Analysis
wastewater

REPORT TO

Bill Buss
Hall Engineering Company
Alliant Building, Suite 101 300 Sheridan /
Centerville, IA 52544

INVOICE TO

Bill Buss
Hall Engineering Company
Alliant Building, Suite 101 300 Sheridan Ave
Centerville, IA 52544

SPECIAL INSTRUCTIONS

None

Turn Around Time
☐ Standard ☐ RUSH, need by ___/___/___

LAB USE ONLY

Laboratory attach WO label here

Temperature: 8.8 oC

Number	Sample Identification / Client ID	Matrix	Sample Type	Date	Time	# Containers	Analyses	Lab Sample Number
01-001	MW 60	Aqueous		2/2			Indfill-app1-metals-6020 Indfill-app1-voc-group Sulfide S2 E376.2 TSS USGS I-3765	1

4JE0111
Hall Engineering Company
PM: Darcie Bouchard

		Bill Buss	5/5/2026 2:35 PM
Relinquished By	Date/Time	Relinquished By	Date/Time
Received By	Date/Time	Received for Lab By	5/5/26 1445 Date/Time

See attached Sample Label Data

Remarks:
No Field Blank Samples
All bottles contain Ground Water