Midwest
Environmental Legacy
Management Group

W132 N10487 Grant Drive
Germantown, WI 53022
262 509 5630

October 2, 2023

Mr. Dale Alme
FoamTech Insulation
2259 County Trunk A
Stoughton, WI 53589

Dear Mr. Alme:

As required by the Unilateral Administrative Order for clean-up of the Hagen Farm Landfill, Waste Management of Wisconsin, Inc. (WMWI) samples the well (PW02) at the above referenced facility on an annual basis. This letter transmits the analytical data for that water supply well, which was sampled on August 23, 2023. Analytical results for water samples collected from the well are also sent to the United States Environmental Protection Agency (USEPA) and the Wisconsin Department of Natural Resources (WDNR) for review.

Compounds that attained or exceeded groundwater or drinking water criteria in the sample are summarized below.

		Regulatory Criteria		
Parameter	Concentration	PAL	ES	MCL
Nitrate-nitrite	9.2 milligrams/liter (mg/L)	2 mg/L	10 mg/L	10 mg/L

The regulatory criteria tabulated above are the Preventive Action Limit (PAL) and Enforcement Standard (ES) for Public Health Groundwater Quality Standards from Table 1 of Chapter NR 140.10 Wis. Adm. Code (Groundwater Quality) and the Federal Maximum Contaminant Level (MCL) established in the National Primary Drinking Water Regulations. The identified nitrate-nitrite result is below the concentration that would indicate that the water is potentially unsafe for consumption (i.e., ES and MCL).

A brief review of the recent laboratory results for water samples collected from that well indicates the water quality is typical of groundwater in the area. Nitrate-nitrite was present in the sample at a concentration consistent with previous samples and is generally associated with, or related to, farming activities. The concentration is also consistent with the results from analysis of a number of other samples throughout this area.

You may contact Christopher Black from the USEPA if you would like additional information regarding this correspondence. Mr. Black is the USEPA representative providing regulatory oversite for the Hagen Farm Landfill and can be contacted via telephone at (312) 886-1451.

Sincerely,

Waste Management of Wisconsin, Inc.

Ryan J. Baeten, PE
District Manager

cc: Christopher Black, USEPA
Bruce LeRoy, WDNR

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1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16

ANALYTICAL REPORT

PREPARED FOR

Attn: Ryan Baeten
Waste Management
W124 N9355 Boundary Road
Menomonee Falls, Wisconsin 53051

Generated 9/22/2023 10:50:19 AM

JOB DESCRIPTION

Hagen Farms - Groundwater
Annual Private Wells (8)

JOB NUMBER

480-212170-1

Eurofins Buffalo
10 Hazelwood Drive
Amherst NY 14228-2298

See page two for job notes and contact information.

my EOL

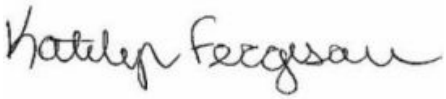
Eurofins Buffalo

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 Northeast, LLC Project Manager.

Authorization



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Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
^c	CCV Recovery is outside acceptance limits.
J	Reported value was between the limit of detection and the limit of quantitation.

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
B	Compound was found in the blank and sample.
J	Reported value was between the limit of detection and the limit of quantitation.

General Chemistry

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
F1	MS and/or MSD recovery exceeds control limits.
H	Sample was prepped or analyzed beyond the specified holding time. This does not meet regulatory requirements.
J	Reported value was between the limit of detection and the limit of quantitation.

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

Job ID: 480-212170-1

Laboratory: Eurofins Buffalo

Narrative

Job Narrative
480-212170-1

Receipt
The samples were received on 8/25/2023 10:30 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 3 coolers at receipt time were 2.5º C, 2.7º C and 3.0º C.

GC/MS VOA
Method 8260C: The continuing calibration verification (CCV) associated with batch 480-681445 recovered outside acceptance criteria, low biased, for 1,1,2,2-Tetrachloroethane. 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. The associated samples are impacted: PW02 (480-212170-1), PW03 (480-212170-2) and TB (480-212170-6).

Method 8260C: The continuing calibration verification (CCV) associated with batch 480-681445 recovered above the upper control limit for Acetone and Chloromethane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated samples are impacted: PW02 (480-212170-1), PW03 (480-212170-2), PW04 (480-212170-3), PW05 (480-212170-4), PW09 (480-212170-5) and TB (480-212170-6).

Method 8260C: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for analytical batch 480-681445 recovered outside control limits for the following analytes: Chloromethane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported. The associated samples are impacted: PW02 (480-212170-1), PW03 (480-212170-2), PW04 (480-212170-3), PW05 (480-212170-4), PW09 (480-212170-5) and TB (480-212170-6).

Method 8260C: The continuing calibration verification (CCV) associated with batch 480-681768 recovered above the upper control limit for Acetone, 2-Butanone (MEK) and Tetrahydrofuran. The samples associated with this CCV were not detected above the reporting limit (RL) for the affected analytes; therefore, the data have been reported. The associated sample is impacted: TB (480-212170-6).

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

HPLC/IC
Method 300.0: The following sample was diluted to bring the concentration of target analytes within the calibration range: PW03 (480-212170-2). Elevated reporting limits (RLs) are provided.

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

Metals
Method 6010C: The method blank for preparation batch 480-681710 and analytical batch 480-681955 contained Total Manganese above the method detection limit. This target analyte concentration was less than the reporting limit (RL) in the method blank; therefore, re-extraction and/or re-analysis of samples PW02 (480-212170-1), PW03 (480-212170-2), PW04 (480-212170-3), PW05 (480-212170-4) and PW09 (480-212170-5) was not performed.

Method 6010C: The Total Manganese and Zinc results reported for the following sample do not concur with results previously reported for this site: PW02 (480-212170-1). Reanalysis was performed, and the result(s) confirmed.

Method 6010C: The Total Zinc result reported for the following sample do not concur with results previously reported for this site: PW03 (480-212170-2). Reanalysis was performed, and the result(s) confirmed.

Method 6010C: The Total Manganese result reported for the following sample do not concur with results previously reported for this site: PW05 (480-212170-4). Reanalysis was performed, and the result(s) confirmed.

Method 6010C: The Total Iron, Potassium and Zinc results reported for the following sample do not concur with results previously reported for this site: PW09 (480-212170-5). Reanalysis was performed, and the result(s) confirmed.

Method 6020A: The Total Arsenic results reported for the following sample do not concur with results previously reported for this site: PW09 (480-212170-5). Reanalysis was performed, and the result(s) confirmed.

Job ID: 480-212170-1 (Continued)

Laboratory: Eurofins Buffalo (Continued)

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

General Chemistry
Method SM 2540C: Reanalysis of the following samples were performed outside of the analytical holding time due to not achieving constant weight in the original dataset: PW02 (480-212170-1), PW03 (480-212170-2), PW04 (480-212170-3), PW05 (480-212170-4) and PW09 (480-212170-5). Both sets of data have been reported.

Methods 335.4, 9012B: The method blank for batch 682037 contained Total Cyanide above the reporting limit (RL). None of the samples associated with this method blank contained the target compound above the reporting limit; therefore, re-extraction and/or re-analysis of samples were not performed: PW02 (480-212170-1), PW03 (480-212170-2), PW04 (480-212170-3), PW05 (480-212170-4), PW09 (480-212170-5), (480-212164-D-8) and (480-212164-D-8 MS).

Method 353.2: The results reported for the following sample do not concur with results previously reported for this site: PW03 (480-212170-2). Reanalysis was performed, and the result(s) confirmed.

Method SM 4500 P E: The results reported for the following sample do not concur with results previously reported for this site: PW05 (480-212170-4). Reanalysis was performed, and the result(s) confirmed.

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

Client Sample ID: PW02
Date Collected: 08/23/23 10:30
Date Received: 08/25/23 10:30

Lab Sample ID: 480-212170-1
Matrix: Potable Water

Method: SW846 8260C SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	LOQ	LOD	Unit	D	Analyzed	Dil Fac
Vinyl chloride	ND		0.020	0.013	0.0040	ug/L		08/28/23 04:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
TBA-d9 (Surr)	*83*		*50 - 150*		*08/28/23 04:08*	*1*
Dibromofluoromethane (Surr)	*111*		*50 - 150*		*08/28/23 04:08*	*1*

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

Analyte	Result	Qualifier	RL	LOQ	LOD	Unit	D	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	2.7	0.82	ug/L		08/28/23 16:07	1
1,1,2,2-Tetrachloroethane	ND	^c	1.0	0.70	0.21	ug/L		08/28/23 16:07	1
1,1,2-Trichloroethane	ND		1.0	0.77	0.23	ug/L		08/28/23 16:07	1
1,1-Dichloroethane	ND		1.0	1.3	0.38	ug/L		08/28/23 16:07	1
1,1-Dichloroethene	ND		1.0	0.97	0.29	ug/L		08/28/23 16:07	1
1,2,4-Trichlorobenzene	ND		1.0	1.4	0.41	ug/L		08/28/23 16:07	1
1,2-Dibromo-3-Chloropropane	ND		1.0	1.3	0.39	ug/L		08/28/23 16:07	1
1,2-Dibromoethane (EDB)	ND		1.0	2.4	0.73	ug/L		08/28/23 16:07	1
1,2-Dichlorobenzene	ND		1.0	2.6	0.79	ug/L		08/28/23 16:07	1
1,2-Dichloroethane	ND		1.0	0.70	0.21	ug/L		08/28/23 16:07	1
1,2-Dichloropropane	ND		1.0	2.4	0.72	ug/L		08/28/23 16:07	1
1,3-Dichlorobenzene	ND		1.0	2.6	0.78	ug/L		08/28/23 16:07	1
1,4-Dichlorobenzene	ND		1.0	2.8	0.84	ug/L		08/28/23 16:07	1
2-Butanone (MEK)	ND		10	4.4	1.3	ug/L		08/28/23 16:07	1
2-Hexanone	ND		5.0	4.1	1.2	ug/L		08/28/23 16:07	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	7.0	2.1	ug/L		08/28/23 16:07	1
Acetone	ND	^c	10	10	3.0	ug/L		08/28/23 16:07	1
Benzene	ND		1.0	1.4	0.41	ug/L		08/28/23 16:07	1
Bromodichloromethane	ND		1.0	1.3	0.39	ug/L		08/28/23 16:07	1
Bromoform	ND		1.0	0.87	0.26	ug/L		08/28/23 16:07	1
Bromomethane	ND		1.0	2.3	0.69	ug/L		08/28/23 16:07	1
Carbon disulfide	ND		1.0	0.63	0.19	ug/L		08/28/23 16:07	1
Carbon tetrachloride	ND		1.0	0.90	0.27	ug/L		08/28/23 16:07	1
Chlorobenzene	ND		1.0	2.5	0.75	ug/L		08/28/23 16:07	1
Chloroethane	ND		1.0	1.1	0.32	ug/L		08/28/23 16:07	1
Chloroform	ND		1.0	1.1	0.34	ug/L		08/28/23 16:07	1
Chloromethane	ND	^c *	1.0	1.2	0.35	ug/L		08/28/23 16:07	1
cis-1,2-Dichloroethene	ND		1.0	2.7	0.81	ug/L		08/28/23 16:07	1
cis-1,3-Dichloropropene	ND		1.0	1.2	0.36	ug/L		08/28/23 16:07	1
Dibromochloromethane	ND		1.0	1.1	0.32	ug/L		08/28/23 16:07	1
Dibromomethane	ND		1.0	1.4	0.41	ug/L		08/28/23 16:07	1
Dichlorodifluoromethane	ND		1.0	2.3	0.68	ug/L		08/28/23 16:07	1
Ethylbenzene	ND		1.0	2.5	0.74	ug/L		08/28/23 16:07	1
Methylene Chloride	ND		1.0	1.5	0.44	ug/L		08/28/23 16:07	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.53	0.16	ug/L		08/28/23 16:07	1
Naphthalene	ND		1.0	1.4	0.43	ug/L		08/28/23 16:07	1
Styrene	ND		1.0	2.4	0.73	ug/L		08/28/23 16:07	1
Tetrachloroethene	ND		1.0	1.2	0.36	ug/L		08/28/23 16:07	1
Tetrahydrofuran	ND		5.0	4.2	1.3	ug/L		08/28/23 16:07	1
Toluene	ND		1.0	1.7	0.51	ug/L		08/28/23 16:07	1
trans-1,2-Dichloroethene	ND		1.0	3.0	0.90	ug/L		08/28/23 16:07	1
trans-1,3-Dichloropropene	ND		1.0	1.2	0.37	ug/L		08/28/23 16:07	1

Client Sample ID: PW02
Date Collected: 08/23/23 10:30
Date Received: 08/25/23 10:30

Lab Sample ID: 480-212170-1
Matrix: Potable Water

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

Analyte	Result	Qualifier	RL	LOQ	LOD	Unit	D	Analyzed	Dil Fac
Trichloroethene	ND		1.0	1.5	0.46	ug/L		08/28/23 16:07	1
Trichlorofluoromethane	ND		1.0	2.9	0.88	ug/L		08/28/23 16:07	1
Vinyl chloride	ND		1.0	3.0	0.90	ug/L		08/28/23 16:07	1
Xylenes, Total	ND		2.0	2.2	0.66	ug/L		08/28/23 16:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*116*		*77 - 120*		*08/28/23 16:07*	*1*
4-Bromofluorobenzene (Surr)	*100*		*73 - 120*		*08/28/23 16:07*	*1*
Toluene-d8 (Surr)	*94*		*80 - 120*		*08/28/23 16:07*	*1*

Method: SW846 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	LOQ	LOD	Unit	D	Analyzed	Dil Fac
Aluminum	ND		80.0	200	60.0	ug/L		08/31/23 02:10	1
Barium	**47.0**		6.0	2.3	0.70	ug/L		08/31/23 02:10	1
Calcium	**89.5**		5.0	0.33	0.10	mg/L		08/31/23 15:35	1
Chromium	**1.3**	**J**	5.0	3.3	1.0	ug/L		08/31/23 02:10	1
Cobalt	ND		6.0	2.1	0.63	ug/L		08/31/23 02:10	1
Copper	**11.3**		25.0	5.3	1.6	ug/L		08/31/23 02:10	1
Iron	**0.047**	**J**	0.10	0.064	0.019	mg/L		08/31/23 02:10	1
Magnesium	**46.3**		5.0	0.14	0.043	mg/L		08/31/23 02:10	1
Manganese	**0.92**	**J B**	3.0	1.3	0.40	ug/L		08/31/23 02:10	1
Nickel	ND		4.0	4.2	1.3	ug/L		08/31/23 02:10	1
Potassium	**1.1**		5.0	0.33	0.10	mg/L		08/31/23 02:10	1
Silver	ND		3.0	5.7	1.7	ug/L		08/31/23 02:10	1
Sodium	**8.2**		5.0	1.1	0.32	mg/L		08/31/23 02:10	1
Vanadium	ND		5.0	5.0	1.5	ug/L		08/31/23 02:10	1
Zinc	**63.5**		4.0	5.0	1.5	ug/L		08/31/23 02:10	1

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

Analyte	Result	Qualifier	RL	LOQ	LOD	Unit	D	Analyzed	Dil Fac
Antimony	ND		0.50	1.2	0.35	ug/L		08/31/23 14:19	1
Arsenic	ND		2.0	0.90	0.27	ug/L		08/30/23 17:02	1
Beryllium	ND		0.20	0.10	0.030	ug/L		08/30/23 17:02	1
Cadmium	ND		0.20	0.24	0.071	ug/L		08/30/23 17:02	1
Selenium	**0.49**	**J**	5.0	1.5	0.44	ug/L		08/30/23 17:02	1
Thallium	ND		0.20	0.063	0.019	ug/L		08/30/23 17:02	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	LOQ	LOD	Unit	D	Analyzed	Dil Fac
Mercury	ND		0.20	0.14	0.043	ug/L		09/06/23 14:36	1

Method: SM 2340B - Total Hardness (as CaCO3) by calculation

Analyte	Result	Qualifier	RL	LOQ	LOD	Unit	D	Analyzed	Dil Fac
Calcium and Magnesium Hardness	**414**		0.50	0.33	0.10	mg/L		09/01/23 13:30	1

General Chemistry

Analyte	Result	Qualifier	RL	LOQ	LOD	Unit	D	Analyzed	Dil Fac
Chloride (EPA 300.0)	**21.8**		0.50	0.94	0.28	mg/L		08/26/23 21:57	1
Sulfate (EPA 300.0)	**19.5**		2.0	1.2	0.35	mg/L		08/26/23 21:57	1
Alkalinity, Total (EPA 310.2)	**337**		50.0	66.7	20.0	mg/L		08/30/23 11:44	5
Total Cyanide (EPA 335.4)	ND		0.020	0.017	0.0041	mg/L		08/31/23 01:35	1

Client: Waste Management
Project/Site: Hagen Farms - Groundwater

Job ID: 480-212170-1

Client Sample ID: PW02
Date Collected: 08/23/23 10:30
Date Received: 08/25/23 10:30

Lab Sample ID: 480-212170-1
Matrix: Potable Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	LOQ	LOD	Unit	D	Analyzed	Dil Fac
Ammonia (as N) (EPA 350.1)	ND		0.20	0.33	0.10	mg/L		08/29/23 16:55	1
Total Kjeldahl Nitrogen (EPA 351.2)	ND		0.20	0.62	0.19	mg/L as N		08/31/23 09:02	1
Nitrate Nitrite as N (EPA 353.2)	**9.2**		1.3	1.7	0.50	mg/L as N		08/28/23 12:17	25
Chemical Oxygen Demand (EPA 410.4)	ND		10.0	16.7	5.0	mg/L		08/28/23 14:34	1
Total Dissolved Solids (SM 2540C)	**388**		10.0	13.3	4.0	mg/L		08/29/23 10:26	1
Total Dissolved Solids (SM 2540C)	**392**	**H**	10.0	13.3	4.0	mg/L		09/06/23 11:37	1
Total Suspended Solids (SM 2540D)	ND		4.0	13.4	4.0	mg/L		08/30/23 10:06	1
Phosphorus, Total (SM 4500 P E)	**0.050**		0.20	0.016	0.0050	mg/L as P		08/28/23 11:51	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	LOQ	LOD	Unit	D	Analyzed	Dil Fac
Color	**No**					NONE		08/23/23 11:30	1
Dissolved Oxygen, Field	**5.9**					mg/L		08/23/23 11:30	1
Field EH/ORP	**-59.1**					millivolts		08/23/23 11:30	1
Odor	**No**					NONE		08/23/23 11:30	1
pH, Field	**7.42**					SU		08/23/23 11:30	1
Specific Conductance, Field	**734**					umhos/cm		08/23/23 11:30	1
Temperature, Field (C)	**15.3**					Degrees C		08/23/23 11:30	1
Turbidity, Field	**No**					NONE		08/23/23 11:30	1

Midwest
Environmental Legacy
Management Group

W132 N10487 Grant Drive
Germantown, WI 53022
262 509 5630

October 2, 2023

Mr. Greg Sundby
Safety and Health Manager
Wingra Redi-Mix, Inc.
P.O. Box 44284
Madison, WI 53744-4284

Dear Mr. Sundby:

As required by the Unilateral Administrative Order for clean-up of the Hagen Farm Landfill, Waste Management of Wisconsin, Inc. (WMWI) samples the well (PW03) at the above referenced facility on an annual basis. This letter transmits the analytical data for that water supply well, which was sampled on August 23, 2023. Analytical results for water samples collected from the well are also sent to the United States Environmental Protection Agency (USEPA) and the Wisconsin Department of Natural Resources (WDNR) for review.

Compounds that attained or exceeded groundwater or drinking water criteria in the sample are summarized below.

		Regulatory Criteria		
Parameter	Concentration	PAL	ES	MCL
Iron [2]	2.1 milligrams/liter (mg/L)	0.15 mg/L	0.3 mg/L	Not established
Manganese [1]	86.3 micrograms/liter (ug/L)	60 ug/L	300 ug/L	Not established
Manganese [2]	86.3 micrograms/liter (ug/L)	25 ug/L	50 ug/L	Not established
Zinc [2]	2.78 milligrams/liter (mg/L)	2.5 mg/L	5.0 mg/L	Not established

Notes
1. Public Health Groundwater Quality Standards from Table 1 of Chapter NR 140.10 Wis. Adm. Code.
2. Public Welfare Groundwater Quality Standards from Table 2 of Chapter NR 140.12 Wis. Adm. Code.

The regulatory criteria tabulated above for iron and manganese include the Enforcement Standards (ESs) for Public Welfare Groundwater Quality Standards from Table 2 of Chapter NR 140.12 Wis. Adm. Code. Additionally, the PAL in Table 1 of Chapter NR 140.10, Public Health Groundwater Quality Standards, regulatory criteria (i.e., 60 ug/L) applies to manganese. The regulatory criteria for zinc is the Preventive Action Limit (PAL) for Public Welfare Groundwater Quality Standards from Table 2 of Chapter NR 140.12 Wis. Adm. Code. Iron, manganese and zinc are not regulated by federal Maximum Contaminant

Levels (MCLs) established in the National Primary Drinking Water Regulations, thus criteria are not established. The identified results are below concentrations that would indicate the water is potentially unsafe for consumption over time (i.e., Table 1 ES and MCL).

A brief review of the recent laboratory results for water samples collected from that well indicates the water quality is typical of groundwater in the area. Iron and manganese are present in the sample, and groundwater throughout this area, at concentrations generally consistent with historical data and above the State of Wisconsin (State) groundwater criteria. The presence of these elements at the identified concentrations may cause staining and taste concerns. The zinc concentration, while higher than recent prior results, is also regulated as a public welfare parameter and thus not associated with health concerns.

You may contact Christopher Black from the USEPA if you would like additional information regarding this correspondence. Mr. Black is the USEPA representative providing regulatory oversite for the Hagen Farm Landfill and can be contacted via telephone at (312) 886-1451.

Sincerely,

Waste Management of Wisconsin, Inc.

Ryan J. Baeten, PE
District Manager

cc: Christopher Black, USEPA
Bruce LeRoy, WDNR

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1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16

ANALYTICAL REPORT

PREPARED FOR

Attn: Ryan Baeten
Waste Management
W124 N9355 Boundary Road
Menomonee Falls, Wisconsin 53051

Generated 9/22/2023 10:50:19 AM

JOB DESCRIPTION

Hagen Farms - Groundwater
Annual Private Wells (8)

JOB NUMBER

480-212170-1

Eurofins Buffalo
10 Hazelwood Drive
Amherst NY 14228-2298

See page two for job notes and contact information.

my EOL

Eurofins Buffalo

Job Notes

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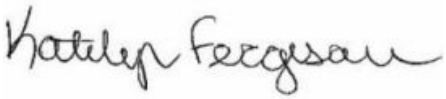

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Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
^c	CCV Recovery is outside acceptance limits.
J	Reported value was between the limit of detection and the limit of quantitation.

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
B	Compound was found in the blank and sample.
J	Reported value was between the limit of detection and the limit of quantitation.

General Chemistry

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
F1	MS and/or MSD recovery exceeds control limits.
H	Sample was prepped or analyzed beyond the specified holding time. This does not meet regulatory requirements.
J	Reported value was between the limit of detection and the limit of quantitation.

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

Job ID: 480-212170-1

Laboratory: Eurofins Buffalo

Narrative

Job Narrative
480-212170-1

Receipt
The samples were received on 8/25/2023 10:30 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 3 coolers at receipt time were 2.5º C, 2.7º C and 3.0º C.

GC/MS VOA
Method 8260C: The continuing calibration verification (CCV) associated with batch 480-681445 recovered outside acceptance criteria, low biased, for 1,1,2,2-Tetrachloroethane. 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. The associated samples are impacted: PW02 (480-212170-1), PW03 (480-212170-2) and TB (480-212170-6).

Method 8260C: The continuing calibration verification (CCV) associated with batch 480-681445 recovered above the upper control limit for Acetone and Chloromethane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated samples are impacted: PW02 (480-212170-1), PW03 (480-212170-2), PW04 (480-212170-3), PW05 (480-212170-4), PW09 (480-212170-5) and TB (480-212170-6).

Method 8260C: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for analytical batch 480-681445 recovered outside control limits for the following analytes: Chloromethane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported. The associated samples are impacted: PW02 (480-212170-1), PW03 (480-212170-2), PW04 (480-212170-3), PW05 (480-212170-4), PW09 (480-212170-5) and TB (480-212170-6).

Method 8260C: The continuing calibration verification (CCV) associated with batch 480-681768 recovered above the upper control limit for Acetone, 2-Butanone (MEK) and Tetrahydrofuran. The samples associated with this CCV were not detected above the reporting limit (RL) for the affected analytes; therefore, the data have been reported. The associated sample is impacted: TB (480-212170-6).

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

HPLC/IC
Method 300.0: The following sample was diluted to bring the concentration of target analytes within the calibration range: PW03 (480-212170-2). Elevated reporting limits (RLs) are provided.

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

Metals
Method 6010C: The method blank for preparation batch 480-681710 and analytical batch 480-681955 contained Total Manganese above the method detection limit. This target analyte concentration was less than the reporting limit (RL) in the method blank; therefore, re-extraction and/or re-analysis of samples PW02 (480-212170-1), PW03 (480-212170-2), PW04 (480-212170-3), PW05 (480-212170-4) and PW09 (480-212170-5) was not performed.

Method 6010C: The Total Manganese and Zinc results reported for the following sample do not concur with results previously reported for this site: PW02 (480-212170-1). Reanalysis was performed, and the result(s) confirmed.

Method 6010C: The Total Zinc result reported for the following sample do not concur with results previously reported for this site: PW03 (480-212170-2). Reanalysis was performed, and the result(s) confirmed.

Method 6010C: The Total Manganese result reported for the following sample do not concur with results previously reported for this site: PW05 (480-212170-4). Reanalysis was performed, and the result(s) confirmed.

Method 6010C: The Total Iron, Potassium and Zinc results reported for the following sample do not concur with results previously reported for this site: PW09 (480-212170-5). Reanalysis was performed, and the result(s) confirmed.

Method 6020A: The Total Arsenic results reported for the following sample do not concur with results previously reported for this site: PW09 (480-212170-5). Reanalysis was performed, and the result(s) confirmed.

Job ID: 480-212170-1 (Continued)

Laboratory: Eurofins Buffalo (Continued)

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

General Chemistry
Method SM 2540C: Reanalysis of the following samples were performed outside of the analytical holding time due to not achieving constant weight in the original dataset: PW02 (480-212170-1), PW03 (480-212170-2), PW04 (480-212170-3), PW05 (480-212170-4) and PW09 (480-212170-5). Both sets of data have been reported.

Methods 335.4, 9012B: The method blank for batch 682037 contained Total Cyanide above the reporting limit (RL). None of the samples associated with this method blank contained the target compound above the reporting limit; therefore, re-extraction and/or re-analysis of samples were not performed: PW02 (480-212170-1), PW03 (480-212170-2), PW04 (480-212170-3), PW05 (480-212170-4), PW09 (480-212170-5), (480-212164-D-8) and (480-212164-D-8 MS).

Method 353.2: The results reported for the following sample do not concur with results previously reported for this site: PW03 (480-212170-2). Reanalysis was performed, and the result(s) confirmed.

Method SM 4500 P E: The results reported for the following sample do not concur with results previously reported for this site: PW05 (480-212170-4). Reanalysis was performed, and the result(s) confirmed.

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

Client Sample ID: PW03

Date Collected: 08/23/23 09:50
Date Received: 08/25/23 10:30

Lab Sample ID: 480-212170-2

Matrix: Potable Water

Method: SW846 8260C SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	LOQ	LOD	Unit	D	Analyzed	Dil Fac
Vinyl chloride	ND		0.020	0.013	0.0040	ug/L		08/28/23 11:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
TBA-d9 (Surr)	*83*		*50 - 150*		*08/28/23 11:43*	*1*
Dibromofluoromethane (Surr)	*110*		*50 - 150*		*08/28/23 11:43*	*1*

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

Analyte	Result	Qualifier	RL	LOQ	LOD	Unit	D	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	2.7	0.82	ug/L		08/28/23 16:30	1
1,1,2,2-Tetrachloroethane	ND	^c	1.0	0.70	0.21	ug/L		08/28/23 16:30	1
1,1,2-Trichloroethane	ND		1.0	0.77	0.23	ug/L		08/28/23 16:30	1
1,1-Dichloroethane	ND		1.0	1.3	0.38	ug/L		08/28/23 16:30	1
1,1-Dichloroethene	ND		1.0	0.97	0.29	ug/L		08/28/23 16:30	1
1,2,4-Trichlorobenzene	ND		1.0	1.4	0.41	ug/L		08/28/23 16:30	1
1,2-Dibromo-3-Chloropropane	ND		1.0	1.3	0.39	ug/L		08/28/23 16:30	1
1,2-Dibromoethane (EDB)	ND		1.0	2.4	0.73	ug/L		08/28/23 16:30	1
1,2-Dichlorobenzene	ND		1.0	2.6	0.79	ug/L		08/28/23 16:30	1
1,2-Dichloroethane	ND		1.0	0.70	0.21	ug/L		08/28/23 16:30	1
1,2-Dichloropropane	ND		1.0	2.4	0.72	ug/L		08/28/23 16:30	1
1,3-Dichlorobenzene	ND		1.0	2.6	0.78	ug/L		08/28/23 16:30	1
1,4-Dichlorobenzene	ND		1.0	2.8	0.84	ug/L		08/28/23 16:30	1
2-Butanone (MEK)	ND		10	4.4	1.3	ug/L		08/28/23 16:30	1
2-Hexanone	ND		5.0	4.1	1.2	ug/L		08/28/23 16:30	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	7.0	2.1	ug/L		08/28/23 16:30	1
Acetone	ND	^c	10	10	3.0	ug/L		08/28/23 16:30	1
Benzene	ND		1.0	1.4	0.41	ug/L		08/28/23 16:30	1
Bromodichloromethane	ND		1.0	1.3	0.39	ug/L		08/28/23 16:30	1
Bromoform	ND		1.0	0.87	0.26	ug/L		08/28/23 16:30	1
Bromomethane	ND		1.0	2.3	0.69	ug/L		08/28/23 16:30	1
Carbon disulfide	ND		1.0	0.63	0.19	ug/L		08/28/23 16:30	1
Carbon tetrachloride	ND		1.0	0.90	0.27	ug/L		08/28/23 16:30	1
Chlorobenzene	ND		1.0	2.5	0.75	ug/L		08/28/23 16:30	1
Chloroethane	ND		1.0	1.1	0.32	ug/L		08/28/23 16:30	1
Chloroform	ND		1.0	1.1	0.34	ug/L		08/28/23 16:30	1
Chloromethane	ND	^c *	1.0	1.2	0.35	ug/L		08/28/23 16:30	1
cis-1,2-Dichloroethene	ND		1.0	2.7	0.81	ug/L		08/28/23 16:30	1
cis-1,3-Dichloropropene	ND		1.0	1.2	0.36	ug/L		08/28/23 16:30	1
Dibromochloromethane	ND		1.0	1.1	0.32	ug/L		08/28/23 16:30	1
Dibromomethane	ND		1.0	1.4	0.41	ug/L		08/28/23 16:30	1
Dichlorodifluoromethane	ND		1.0	2.3	0.68	ug/L		08/28/23 16:30	1
Ethylbenzene	ND		1.0	2.5	0.74	ug/L		08/28/23 16:30	1
Methylene Chloride	ND		1.0	1.5	0.44	ug/L		08/28/23 16:30	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.53	0.16	ug/L		08/28/23 16:30	1
Naphthalene	ND		1.0	1.4	0.43	ug/L		08/28/23 16:30	1
Styrene	ND		1.0	2.4	0.73	ug/L		08/28/23 16:30	1
Tetrachloroethene	ND		1.0	1.2	0.36	ug/L		08/28/23 16:30	1
Tetrahydrofuran	ND		5.0	4.2	1.3	ug/L		08/28/23 16:30	1
Toluene	ND		1.0	1.7	0.51	ug/L		08/28/23 16:30	1
trans-1,2-Dichloroethene	ND		1.0	3.0	0.90	ug/L		08/28/23 16:30	1
trans-1,3-Dichloropropene	ND		1.0	1.2	0.37	ug/L		08/28/23 16:30	1

Client Sample ID: PW03
Date Collected: 08/23/23 09:50
Date Received: 08/25/23 10:30

Lab Sample ID: 480-212170-2
Matrix: Potable Water

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

Analyte	Result	Qualifier	RL	LOQ	LOD	Unit	D	Analyzed	Dil Fac
Trichloroethene	ND		1.0	1.5	0.46	ug/L		08/28/23 16:30	1
Trichlorofluoromethane	ND		1.0	2.9	0.88	ug/L		08/28/23 16:30	1
Vinyl chloride	ND		1.0	3.0	0.90	ug/L		08/28/23 16:30	1
Xylenes, Total	ND		2.0	2.2	0.66	ug/L		08/28/23 16:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*115*		*77 - 120*		*08/28/23 16:30*	*1*
4-Bromofluorobenzene (Surr)	*111*		*73 - 120*		*08/28/23 16:30*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*08/28/23 16:30*	*1*

Method: SW846 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	LOQ	LOD	Unit	D	Analyzed	Dil Fac
Aluminum	ND		80.0	200	60.0	ug/L		08/31/23 02:14	1
Barium	**39.1**		6.0	2.3	0.70	ug/L		08/31/23 02:14	1
Calcium	**81.7**		5.0	0.33	0.10	mg/L		08/31/23 15:39	1
Chromium	ND		5.0	3.3	1.0	ug/L		08/31/23 02:14	1
Cobalt	ND		6.0	2.1	0.63	ug/L		08/31/23 02:14	1
Copper	**6.0**		25.0	5.3	1.6	ug/L		08/31/23 02:14	1
Iron	**2.1**		0.10	0.064	0.019	mg/L		08/31/23 02:14	1
Magnesium	**38.2**		5.0	0.14	0.043	mg/L		08/31/23 02:14	1
Manganese	**86.3**	**B**	3.0	1.3	0.40	ug/L		08/31/23 02:14	1
Nickel	**2.1**	**J**	4.0	4.2	1.3	ug/L		08/31/23 02:14	1
Potassium	**1.7**		5.0	0.33	0.10	mg/L		08/31/23 02:14	1
Silver	ND		3.0	5.7	1.7	ug/L		08/31/23 02:14	1
Sodium	**66.9**		5.0	1.1	0.32	mg/L		08/31/23 02:14	1
Vanadium	ND		5.0	5.0	1.5	ug/L		08/31/23 02:14	1
Zinc	**2780**		4.0	5.0	1.5	ug/L		08/31/23 02:14	1

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

Analyte	Result	Qualifier	RL	LOQ	LOD	Unit	D	Analyzed	Dil Fac
Antimony	ND		0.50	1.2	0.35	ug/L		08/31/23 14:42	1
Arsenic	ND		2.0	0.90	0.27	ug/L		08/30/23 17:14	1
Beryllium	ND		0.20	0.10	0.030	ug/L		08/30/23 17:14	1
Cadmium	ND		0.20	0.24	0.071	ug/L		08/30/23 17:14	1
Selenium	ND		5.0	1.5	0.44	ug/L		08/30/23 17:14	1
Thallium	**0.034**	**J**	0.20	0.063	0.019	ug/L		08/30/23 17:14	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	LOQ	LOD	Unit	D	Analyzed	Dil Fac
Mercury	ND		0.20	0.14	0.043	ug/L		09/06/23 14:37	1

Method: SM 2340B - Total Hardness (as CaCO3) by calculation

Analyte	Result	Qualifier	RL	LOQ	LOD	Unit	D	Analyzed	Dil Fac
Calcium and Magnesium Hardness	**361**		0.50	0.33	0.10	mg/L		09/01/23 13:30	1

General Chemistry

Analyte	Result	Qualifier	RL	LOQ	LOD	Unit	D	Analyzed	Dil Fac
Chloride (EPA 300.0)	**103**		2.5	4.7	1.4	mg/L		08/26/23 22:16	5
Sulfate (EPA 300.0)	**9.0**		10.0	5.8	1.7	mg/L		08/26/23 22:16	5
Alkalinity, Total (EPA 310.2)	**333**		50.0	66.7	20.0	mg/L		08/30/23 11:51	5
Total Cyanide (EPA 335.4)	ND		0.020	0.017	0.0041	mg/L		08/31/23 01:38	1

Client: Waste Management
Project/Site: Hagen Farms - Groundwater

Job ID: 480-212170-1

Client Sample ID: PW03

Date Collected: 08/23/23 09:50
Date Received: 08/25/23 10:30

Lab Sample ID: 480-212170-2

Matrix: Potable Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	LOQ	LOD	Unit	D	Analyzed	Dil Fac
Ammonia (as N) (EPA 350.1)	ND	F1	0.20	0.33	0.10	mg/L		08/29/23 17:13	1
Total Kjeldahl Nitrogen (EPA 351.2)	**0.23**	**J**	0.20	0.62	0.19	mg/L as N		08/31/23 09:02	1
Nitrate Nitrite as N (EPA 353.2)	**0.088**	**F1**	0.050	0.067	0.020	mg/L as N		08/28/23 16:06	1
Chemical Oxygen Demand (EPA 410.4)	ND		10.0	16.7	5.0	mg/L		08/28/23 14:34	1
Total Dissolved Solids (SM 2540C)	**497**		10.0	13.3	4.0	mg/L		08/29/23 10:26	1
Total Dissolved Solids (SM 2540C)	**460**	**H**	10.0	13.3	4.0	mg/L		09/06/23 11:37	1
Total Suspended Solids (SM 2540D)	ND		4.0	13.4	4.0	mg/L		08/30/23 10:06	1
Phosphorus, Total (SM 4500 P E)	ND		0.20	0.016	0.0050	mg/L as P		08/28/23 11:51	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	LOQ	LOD	Unit	D	Analyzed	Dil Fac
Color	**No**					NONE		08/23/23 10:50	1
Dissolved Oxygen, Field	**1.9**					mg/L		08/23/23 10:50	1
Field EH/ORP	**11.1**					millivolts		08/23/23 10:50	1
Odor	**No**					NONE		08/23/23 10:50	1
pH, Field	**7.05**					SU		08/23/23 10:50	1
Specific Conductance, Field	**933**					umhos/cm		08/23/23 10:50	1
Temperature, Field (C)	**19.7**					Degrees C		08/23/23 10:50	1
Turbidity, Field	**No**					NONE		08/23/23 10:50	1

Midwest
Environmental Legacy
Management Group

W132 N10487 Grant Drive
Germantown, WI 53022
262 509 5630

October 2, 2023

Mr. R. Gullickson
1036 Collins Road
Stoughton, WI 53589

Dear Mr. Gullickson:

As required by the Unilateral Administrative Order for clean-up of the Hagen Farm Landfill, Waste Management of Wisconsin, Inc. (WMWI) samples your well (PW04) on an annual basis. This letter transmits the analytical data for your water supply well, which was sampled on August 23, 2023. Analytical results for water samples collected from the well are also sent to the United States Environmental Protection Agency (USEPA) and the Wisconsin Department of Natural Resources (WDNR) for review.

Compounds that attained or exceeded groundwater or drinking water criteria in the sample are summarized below.

		Regulatory Criteria		
Parameter	Concentration	PAL	ES	MCL
Nitrate-nitrite	9.4 milligrams/liter (mg/L)	2 mg/L	10 mg/L	10 mg/L

The regulatory criteria tabulated above are the Preventive Action Limit (PAL) and Enforcement Standard (ES) for Public Health Groundwater Quality Standards from Table 1 of Chapter NR 140.10 Wis. Adm. Code (Groundwater Quality) and the Federal Maximum Contaminant Level (MCL) established in the National Primary Drinking Water Regulations. The identified nitrate-nitrite result is below the concentration that would indicate that the water is potentially unsafe for consumption (i.e., ES and MCL).

A brief review of the recent laboratory results for water samples collected from your well indicates the water quality is typical of groundwater in the area. Nitrate-nitrite was present in the sample at a concentration consistent with previous samples and is generally associated with, or related to, farming activities. The concentration is also consistent with the results from analysis of a number of other samples throughout this area.

You may contact Christopher Black from the USEPA if you would like additional information regarding this correspondence. Mr. Black is the USEPA representative providing regulatory oversite for the Hagen Farm Landfill and can be contacted via telephone at (312) 886-1451.

Sincerely,

Waste Management of Wisconsin, Inc.

Ryan J. Baeten, PE
District Manager

cc: Christopher Black, USEPA
Bruce LeRoy, WDNR

eurofins | Environment Testing

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16

ANALYTICAL REPORT

PREPARED FOR

Attn: Ryan Baeten
Waste Management
W124 N9355 Boundary Road
Menomonee Falls, Wisconsin 53051

Generated 9/22/2023 10:50:19 AM

JOB DESCRIPTION

Hagen Farms - Groundwater
Annual Private Wells (8)

JOB NUMBER

480-212170-1

Eurofins Buffalo
10 Hazelwood Drive
Amherst NY 14228-2298

See page two for job notes and contact information.

my EOL

Eurofins Buffalo

Job Notes

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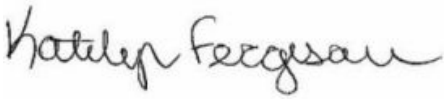
The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed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

Authorization



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Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
^c	CCV Recovery is outside acceptance limits.
J	Reported value was between the limit of detection and the limit of quantitation.

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
B	Compound was found in the blank and sample.
J	Reported value was between the limit of detection and the limit of quantitation.

General Chemistry

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
F1	MS and/or MSD recovery exceeds control limits.
H	Sample was prepped or analyzed beyond the specified holding time. This does not meet regulatory requirements.
J	Reported value was between the limit of detection and the limit of quantitation.

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

Job ID: 480-212170-1

Laboratory: Eurofins Buffalo

Narrative

Job Narrative
480-212170-1

Receipt
The samples were received on 8/25/2023 10:30 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 3 coolers at receipt time were 2.5º C, 2.7º C and 3.0º C.

GC/MS VOA
Method 8260C: The continuing calibration verification (CCV) associated with batch 480-681445 recovered outside acceptance criteria, low biased, for 1,1,2,2-Tetrachloroethane. 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. The associated samples are impacted: PW02 (480-212170-1), PW03 (480-212170-2) and TB (480-212170-6).

Method 8260C: The continuing calibration verification (CCV) associated with batch 480-681445 recovered above the upper control limit for Acetone and Chloromethane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated samples are impacted: PW02 (480-212170-1), PW03 (480-212170-2), PW04 (480-212170-3), PW05 (480-212170-4), PW09 (480-212170-5) and TB (480-212170-6).

Method 8260C: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for analytical batch 480-681445 recovered outside control limits for the following analytes: Chloromethane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported. The associated samples are impacted: PW02 (480-212170-1), PW03 (480-212170-2), PW04 (480-212170-3), PW05 (480-212170-4), PW09 (480-212170-5) and TB (480-212170-6).

Method 8260C: The continuing calibration verification (CCV) associated with batch 480-681768 recovered above the upper control limit for Acetone, 2-Butanone (MEK) and Tetrahydrofuran. The samples associated with this CCV were not detected above the reporting limit (RL) for the affected analytes; therefore, the data have been reported. The associated sample is impacted: TB (480-212170-6).

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

HPLC/IC
Method 300.0: The following sample was diluted to bring the concentration of target analytes within the calibration range: PW03 (480-212170-2). Elevated reporting limits (RLs) are provided.

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

Metals
Method 6010C: The method blank for preparation batch 480-681710 and analytical batch 480-681955 contained Total Manganese above the method detection limit. This target analyte concentration was less than the reporting limit (RL) in the method blank; therefore, re-extraction and/or re-analysis of samples PW02 (480-212170-1), PW03 (480-212170-2), PW04 (480-212170-3), PW05 (480-212170-4) and PW09 (480-212170-5) was not performed.

Method 6010C: The Total Manganese and Zinc results reported for the following sample do not concur with results previously reported for this site: PW02 (480-212170-1). Reanalysis was performed, and the result(s) confirmed.

Method 6010C: The Total Zinc result reported for the following sample do not concur with results previously reported for this site: PW03 (480-212170-2). Reanalysis was performed, and the result(s) confirmed.

Method 6010C: The Total Manganese result reported for the following sample do not concur with results previously reported for this site: PW05 (480-212170-4). Reanalysis was performed, and the result(s) confirmed.

Method 6010C: The Total Iron, Potassium and Zinc results reported for the following sample do not concur with results previously reported for this site: PW09 (480-212170-5). Reanalysis was performed, and the result(s) confirmed.

Method 6020A: The Total Arsenic results reported for the following sample do not concur with results previously reported for this site: PW09 (480-212170-5). Reanalysis was performed, and the result(s) confirmed.

Job ID: 480-212170-1 (Continued)

Laboratory: Eurofins Buffalo (Continued)

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

General Chemistry
Method SM 2540C: Reanalysis of the following samples were performed outside of the analytical holding time due to not achieving constant weight in the original dataset: PW02 (480-212170-1), PW03 (480-212170-2), PW04 (480-212170-3), PW05 (480-212170-4) and PW09 (480-212170-5). Both sets of data have been reported.

Methods 335.4, 9012B: The method blank for batch 682037 contained Total Cyanide above the reporting limit (RL). None of the samples associated with this method blank contained the target compound above the reporting limit; therefore, re-extraction and/or re-analysis of samples were not performed: PW02 (480-212170-1), PW03 (480-212170-2), PW04 (480-212170-3), PW05 (480-212170-4), PW09 (480-212170-5), (480-212164-D-8) and (480-212164-D-8 MS).

Method 353.2: The results reported for the following sample do not concur with results previously reported for this site: PW03 (480-212170-2). Reanalysis was performed, and the result(s) confirmed.

Method SM 4500 P E: The results reported for the following sample do not concur with results previously reported for this site: PW05 (480-212170-4). Reanalysis was performed, and the result(s) confirmed.

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

Client Sample ID: PW04

Date Collected: 08/23/23 10:55
Date Received: 08/25/23 10:30

Lab Sample ID: 480-212170-3

Matrix: Potable Water

Method: SW846 8260C SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	LOQ	LOD	Unit	D	Analyzed	Dil Fac
Vinyl chloride	ND		0.020	0.013	0.0040	ug/L		08/28/23 12:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
TBA-d9 (Surr)	*80*		*50 - 150*		*08/28/23 12:07*	*1*
Dibromofluoromethane (Surr)	*110*		*50 - 150*		*08/28/23 12:07*	*1*

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

Analyte	Result	Qualifier	RL	LOQ	LOD	Unit	D	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	2.7	0.82	ug/L		08/28/23 16:52	1
1,1,2,2-Tetrachloroethane	ND	^c	1.0	0.70	0.21	ug/L		08/28/23 16:52	1
1,1,2-Trichloroethane	ND		1.0	0.77	0.23	ug/L		08/28/23 16:52	1
1,1-Dichloroethane	ND		1.0	1.3	0.38	ug/L		08/28/23 16:52	1
1,1-Dichloroethene	ND		1.0	0.97	0.29	ug/L		08/28/23 16:52	1
1,2,4-Trichlorobenzene	ND		1.0	1.4	0.41	ug/L		08/28/23 16:52	1
1,2-Dibromo-3-Chloropropane	ND		1.0	1.3	0.39	ug/L		08/28/23 16:52	1
1,2-Dibromoethane (EDB)	ND		1.0	2.4	0.73	ug/L		08/28/23 16:52	1
1,2-Dichlorobenzene	ND		1.0	2.6	0.79	ug/L		08/28/23 16:52	1
1,2-Dichloroethane	ND		1.0	0.70	0.21	ug/L		08/28/23 16:52	1
1,2-Dichloropropane	ND		1.0	2.4	0.72	ug/L		08/28/23 16:52	1
1,3-Dichlorobenzene	ND		1.0	2.6	0.78	ug/L		08/28/23 16:52	1
1,4-Dichlorobenzene	ND		1.0	2.8	0.84	ug/L		08/28/23 16:52	1
2-Butanone (MEK)	ND		10	4.4	1.3	ug/L		08/28/23 16:52	1
2-Hexanone	ND		5.0	4.1	1.2	ug/L		08/28/23 16:52	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	7.0	2.1	ug/L		08/28/23 16:52	1
Acetone	ND	^c	10	10	3.0	ug/L		08/28/23 16:52	1
Benzene	ND		1.0	1.4	0.41	ug/L		08/28/23 16:52	1
Bromodichloromethane	ND		1.0	1.3	0.39	ug/L		08/28/23 16:52	1
Bromoform	ND		1.0	0.87	0.26	ug/L		08/28/23 16:52	1
Bromomethane	ND		1.0	2.3	0.69	ug/L		08/28/23 16:52	1
Carbon disulfide	ND		1.0	0.63	0.19	ug/L		08/28/23 16:52	1
Carbon tetrachloride	ND		1.0	0.90	0.27	ug/L		08/28/23 16:52	1
Chlorobenzene	ND		1.0	2.5	0.75	ug/L		08/28/23 16:52	1
Chloroethane	ND		1.0	1.1	0.32	ug/L		08/28/23 16:52	1
Chloroform	ND		1.0	1.1	0.34	ug/L		08/28/23 16:52	1
Chloromethane	ND	^c *	1.0	1.2	0.35	ug/L		08/28/23 16:52	1
cis-1,2-Dichloroethene	ND		1.0	2.7	0.81	ug/L		08/28/23 16:52	1
cis-1,3-Dichloropropene	ND		1.0	1.2	0.36	ug/L		08/28/23 16:52	1
Dibromochloromethane	ND		1.0	1.1	0.32	ug/L		08/28/23 16:52	1
Dibromomethane	ND		1.0	1.4	0.41	ug/L		08/28/23 16:52	1
Dichlorodifluoromethane	ND		1.0	2.3	0.68	ug/L		08/28/23 16:52	1
Ethylbenzene	ND		1.0	2.5	0.74	ug/L		08/28/23 16:52	1
Methylene Chloride	ND		1.0	1.5	0.44	ug/L		08/28/23 16:52	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.53	0.16	ug/L		08/28/23 16:52	1
Naphthalene	ND		1.0	1.4	0.43	ug/L		08/28/23 16:52	1
Styrene	ND		1.0	2.4	0.73	ug/L		08/28/23 16:52	1
Tetrachloroethene	ND		1.0	1.2	0.36	ug/L		08/28/23 16:52	1
Tetrahydrofuran	ND		5.0	4.2	1.3	ug/L		08/28/23 16:52	1
Toluene	ND		1.0	1.7	0.51	ug/L		08/28/23 16:52	1
trans-1,2-Dichloroethene	ND		1.0	3.0	0.90	ug/L		08/28/23 16:52	1
trans-1,3-Dichloropropene	ND		1.0	1.2	0.37	ug/L		08/28/23 16:52	1

Client Sample ID: PW04
Date Collected: 08/23/23 10:55
Date Received: 08/25/23 10:30

Lab Sample ID: 480-212170-3
Matrix: Potable Water

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

Analyte	Result	Qualifier	RL	LOQ	LOD	Unit	D	Analyzed	Dil Fac
Trichloroethene	ND		1.0	1.5	0.46	ug/L		08/28/23 16:52	1
Trichlorofluoromethane	ND		1.0	2.9	0.88	ug/L		08/28/23 16:52	1
Vinyl chloride	ND		1.0	3.0	0.90	ug/L		08/28/23 16:52	1
Xylenes, Total	ND		2.0	2.2	0.66	ug/L		08/28/23 16:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*115*		*77 - 120*		*08/28/23 16:52*	*1*
4-Bromofluorobenzene (Surr)	*103*		*73 - 120*		*08/28/23 16:52*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*		*08/28/23 16:52*	*1*

Method: SW846 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	LOQ	LOD	Unit	D	Analyzed	Dil Fac
Aluminum	ND		80.0	200	60.0	ug/L		08/31/23 02:32	1
Barium	**38.0**		6.0	2.3	0.70	ug/L		08/31/23 02:32	1
Calcium	**85.9**		5.0	0.33	0.10	mg/L		08/31/23 15:57	1
Chromium	**1.4**	**J**	5.0	3.3	1.0	ug/L		08/31/23 02:32	1
Cobalt	ND		6.0	2.1	0.63	ug/L		08/31/23 02:32	1
Copper	**11.0**		25.0	5.3	1.6	ug/L		08/31/23 02:32	1
Iron	**0.098**		0.10	0.064	0.019	mg/L		08/31/23 02:32	1
Magnesium	**46.1**		5.0	0.14	0.043	mg/L		08/31/23 02:32	1
Manganese	ND		3.0	1.3	0.40	ug/L		08/31/23 02:32	1
Nickel	ND		4.0	4.2	1.3	ug/L		08/31/23 02:32	1
Potassium	**1.2**		5.0	0.33	0.10	mg/L		08/31/23 02:32	1
Silver	ND		3.0	5.7	1.7	ug/L		08/31/23 02:32	1
Sodium	**8.1**		5.0	1.1	0.32	mg/L		08/31/23 02:32	1
Vanadium	ND		5.0	5.0	1.5	ug/L		08/31/23 02:32	1
Zinc	**35.1**		4.0	5.0	1.5	ug/L		08/31/23 02:32	1

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

Analyte	Result	Qualifier	RL	LOQ	LOD	Unit	D	Analyzed	Dil Fac
Antimony	ND		0.50	1.2	0.35	ug/L		08/31/23 14:44	1
Arsenic	**0.27**	**J**	2.0	0.90	0.27	ug/L		08/30/23 17:16	1
Beryllium	ND		0.20	0.10	0.030	ug/L		08/30/23 17:16	1
Cadmium	ND		0.20	0.24	0.071	ug/L		08/30/23 17:16	1
Selenium	**0.54**	**J**	5.0	1.5	0.44	ug/L		08/30/23 17:16	1
Thallium	ND		0.20	0.063	0.019	ug/L		08/30/23 17:16	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	LOQ	LOD	Unit	D	Analyzed	Dil Fac
Mercury	ND		0.20	0.14	0.043	ug/L		09/06/23 14:38	1

Method: SM 2340B - Total Hardness (as CaCO3) by calculation

Analyte	Result	Qualifier	RL	LOQ	LOD	Unit	D	Analyzed	Dil Fac
Calcium and Magnesium Hardness	**405**		0.50	0.33	0.10	mg/L		09/01/23 13:30	1

General Chemistry

Analyte	Result	Qualifier	RL	LOQ	LOD	Unit	D	Analyzed	Dil Fac
Chloride (EPA 300.0)	**22.0**		0.50	0.94	0.28	mg/L		08/26/23 22:36	1
Sulfate (EPA 300.0)	**21.9**		2.0	1.2	0.35	mg/L		08/26/23 22:36	1
Alkalinity, Total (EPA 310.2)	**318**		50.0	66.7	20.0	mg/L		08/30/23 11:56	5
Total Cyanide (EPA 335.4)	ND		0.020	0.017	0.0041	mg/L		08/31/23 01:40	1

Client: Waste Management
Project/Site: Hagen Farms - Groundwater

Job ID: 480-212170-1

Client Sample ID: PW04

Date Collected: 08/23/23 10:55
Date Received: 08/25/23 10:30

Lab Sample ID: 480-212170-3

Matrix: Potable Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	LOQ	LOD	Unit	D	Analyzed	Dil Fac
Ammonia (as N) (EPA 350.1)	ND		0.20	0.33	0.10	mg/L		08/29/23 17:19	1
Total Kjeldahl Nitrogen (EPA 351.2)	ND		0.20	0.62	0.19	mg/L as N		08/31/23 09:02	1
Nitrate Nitrite as N (EPA 353.2)	**9.4**		1.3	1.7	0.50	mg/L as N		08/28/23 12:25	25
Chemical Oxygen Demand (EPA 410.4)	ND		10.0	16.7	5.0	mg/L		08/28/23 14:34	1
Total Dissolved Solids (SM 2540C)	**458**		10.0	13.3	4.0	mg/L		08/29/23 10:26	1
Total Dissolved Solids (SM 2540C)	**361**	**H**	10.0	13.3	4.0	mg/L		09/06/23 11:37	1
Total Suspended Solids (SM 2540D)	ND		4.0	13.4	4.0	mg/L		08/30/23 10:06	1
Phosphorus, Total (SM 4500 P E)	**0.011**	**J**	0.20	0.016	0.0050	mg/L as P		08/28/23 11:51	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	LOQ	LOD	Unit	D	Analyzed	Dil Fac
Color	**No**					NONE		08/23/23 11:55	1
Dissolved Oxygen, Field	**5.8**					mg/L		08/23/23 11:55	1
Field EH/ORP	**-1.2**					millivolts		08/23/23 11:55	1
Odor	**No**					NONE		08/23/23 11:55	1
pH, Field	**7.44**					SU		08/23/23 11:55	1
Specific Conductance, Field	**735**					umhos/cm		08/23/23 11:55	1
Temperature, Field (C)	**16.4**					Degrees C		08/23/23 11:55	1
Turbidity, Field	**No**					NONE		08/23/23 11:55	1

Midwest
Environmental Legacy
Management Group

W132 N10487 Grant Drive
Germantown, WI 53022
262 509 5630

October 2, 2023

Mr. and Mrs. Scott Harried
2362 County Trunk A
Stoughton, WI 53589

Dear Mr. and Mrs. Harried:

As required by the Unilateral Administrative Order for clean-up of the Hagen Farm Landfill, Waste Management of Wisconsin, Inc. (WMWI) samples your well (PW05) on an annual basis. This letter transmits the analytical data for your water supply well, which was sampled on August 23, 2023. Analytical results for water samples collected from the well are also sent to the United States Environmental Protection Agency (USEPA) and the Wisconsin Department of Natural Resources (WDNR) for review.

A brief review of the recent laboratory results for water samples collected from your well indicates the water quality is typical of groundwater in the area and does not indicate any affect from the Hagen Farm Landfill. No results were in excess of the Preventive Action Limits (PALs) or Enforcement Standards (ESs) established in Chapter NR 140 Wis. Adm. Code (Groundwater Quality) or the Federal Maximum Contaminant Levels (MCLs) established in the National Primary Drinking Water Regulations (NPDWR).

You may contact Christopher Black from the USEPA if you would like additional information regarding this correspondence. Mr. Black is the USEPA representative providing regulatory oversite for the Hagen Farm Landfill and can be contacted via telephone at (312) 886-1451.

Sincerely,

Waste Management of Wisconsin, Inc.

Ryan J. Baeten, PE
District Manager

cc: Christopher Black, USEPA
Bruce LeRoy, WDNR

eurofins | Environment Testing

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16

ANALYTICAL REPORT

PREPARED FOR

Attn: Ryan Baeten
Waste Management
W124 N9355 Boundary Road
Menomonee Falls, Wisconsin 53051

Generated 9/22/2023 10:50:19 AM

JOB DESCRIPTION

Hagen Farms - Groundwater
Annual Private Wells (8)

JOB NUMBER

480-212170-1

Eurofins Buffalo
10 Hazelwood Drive
Amherst NY 14228-2298

See page two for job notes and contact information.

my EOL

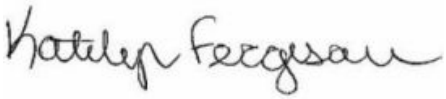
Eurofins Buffalo

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 Northeast, LLC Project Manager.

Authorization



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Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
^c	CCV Recovery is outside acceptance limits.
J	Reported value was between the limit of detection and the limit of quantitation.

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
B	Compound was found in the blank and sample.
J	Reported value was between the limit of detection and the limit of quantitation.

General Chemistry

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
F1	MS and/or MSD recovery exceeds control limits.
H	Sample was prepped or analyzed beyond the specified holding time. This does not meet regulatory requirements.
J	Reported value was between the limit of detection and the limit of quantitation.

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

Job ID: 480-212170-1

Laboratory: Eurofins Buffalo

Narrative

Job Narrative
480-212170-1

Receipt
The samples were received on 8/25/2023 10:30 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 3 coolers at receipt time were 2.5º C, 2.7º C and 3.0º C.

GC/MS VOA
Method 8260C: The continuing calibration verification (CCV) associated with batch 480-681445 recovered outside acceptance criteria, low biased, for 1,1,2,2-Tetrachloroethane. 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. The associated samples are impacted: PW02 (480-212170-1), PW03 (480-212170-2) and TB (480-212170-6).

Method 8260C: The continuing calibration verification (CCV) associated with batch 480-681445 recovered above the upper control limit for Acetone and Chloromethane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated samples are impacted: PW02 (480-212170-1), PW03 (480-212170-2), PW04 (480-212170-3), PW05 (480-212170-4), PW09 (480-212170-5) and TB (480-212170-6).

Method 8260C: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for analytical batch 480-681445 recovered outside control limits for the following analytes: Chloromethane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported. The associated samples are impacted: PW02 (480-212170-1), PW03 (480-212170-2), PW04 (480-212170-3), PW05 (480-212170-4), PW09 (480-212170-5) and TB (480-212170-6).

Method 8260C: The continuing calibration verification (CCV) associated with batch 480-681768 recovered above the upper control limit for Acetone, 2-Butanone (MEK) and Tetrahydrofuran. The samples associated with this CCV were not detected above the reporting limit (RL) for the affected analytes; therefore, the data have been reported. The associated sample is impacted: TB (480-212170-6).

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

HPLC/IC
Method 300.0: The following sample was diluted to bring the concentration of target analytes within the calibration range: PW03 (480-212170-2). Elevated reporting limits (RLs) are provided.

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

Metals
Method 6010C: The method blank for preparation batch 480-681710 and analytical batch 480-681955 contained Total Manganese above the method detection limit. This target analyte concentration was less than the reporting limit (RL) in the method blank; therefore, re-extraction and/or re-analysis of samples PW02 (480-212170-1), PW03 (480-212170-2), PW04 (480-212170-3), PW05 (480-212170-4) and PW09 (480-212170-5) was not performed.

Method 6010C: The Total Manganese and Zinc results reported for the following sample do not concur with results previously reported for this site: PW02 (480-212170-1). Reanalysis was performed, and the result(s) confirmed.

Method 6010C: The Total Zinc result reported for the following sample do not concur with results previously reported for this site: PW03 (480-212170-2). Reanalysis was performed, and the result(s) confirmed.

Method 6010C: The Total Manganese result reported for the following sample do not concur with results previously reported for this site: PW05 (480-212170-4). Reanalysis was performed, and the result(s) confirmed.

Method 6010C: The Total Iron, Potassium and Zinc results reported for the following sample do not concur with results previously reported for this site: PW09 (480-212170-5). Reanalysis was performed, and the result(s) confirmed.

Method 6020A: The Total Arsenic results reported for the following sample do not concur with results previously reported for this site: PW09 (480-212170-5). Reanalysis was performed, and the result(s) confirmed.

Job ID: 480-212170-1 (Continued)

Laboratory: Eurofins Buffalo (Continued)

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

General Chemistry
Method SM 2540C: Reanalysis of the following samples were performed outside of the analytical holding time due to not achieving constant weight in the original dataset: PW02 (480-212170-1), PW03 (480-212170-2), PW04 (480-212170-3), PW05 (480-212170-4) and PW09 (480-212170-5). Both sets of data have been reported.

Methods 335.4, 9012B: The method blank for batch 682037 contained Total Cyanide above the reporting limit (RL). None of the samples associated with this method blank contained the target compound above the reporting limit; therefore, re-extraction and/or re-analysis of samples were not performed: PW02 (480-212170-1), PW03 (480-212170-2), PW04 (480-212170-3), PW05 (480-212170-4), PW09 (480-212170-5), (480-212164-D-8) and (480-212164-D-8 MS).

Method 353.2: The results reported for the following sample do not concur with results previously reported for this site: PW03 (480-212170-2). Reanalysis was performed, and the result(s) confirmed.

Method SM 4500 P E: The results reported for the following sample do not concur with results previously reported for this site: PW05 (480-212170-4). Reanalysis was performed, and the result(s) confirmed.

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

Client Sample ID: PW05

Date Collected: 08/23/23 12:10
Date Received: 08/25/23 10:30

Lab Sample ID: 480-212170-4

Matrix: Potable Water

Method: SW846 8260C SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	LOQ	LOD	Unit	D	Analyzed	Dil Fac
Vinyl chloride	ND		0.020	0.013	0.0040	ug/L		08/28/23 12:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
TBA-d9 (Surr)	*81*		*50 - 150*		*08/28/23 12:31*	*1*
Dibromofluoromethane (Surr)	*113*		*50 - 150*		*08/28/23 12:31*	*1*

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

Analyte	Result	Qualifier	RL	LOQ	LOD	Unit	D	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	2.7	0.82	ug/L		08/28/23 17:14	1
1,1,2,2-Tetrachloroethane	ND	^c	1.0	0.70	0.21	ug/L		08/28/23 17:14	1
1,1,2-Trichloroethane	ND		1.0	0.77	0.23	ug/L		08/28/23 17:14	1
1,1-Dichloroethane	ND		1.0	1.3	0.38	ug/L		08/28/23 17:14	1
1,1-Dichloroethene	ND		1.0	0.97	0.29	ug/L		08/28/23 17:14	1
1,2,4-Trichlorobenzene	ND		1.0	1.4	0.41	ug/L		08/28/23 17:14	1
1,2-Dibromo-3-Chloropropane	ND		1.0	1.3	0.39	ug/L		08/28/23 17:14	1
1,2-Dibromoethane (EDB)	ND		1.0	2.4	0.73	ug/L		08/28/23 17:14	1
1,2-Dichlorobenzene	ND		1.0	2.6	0.79	ug/L		08/28/23 17:14	1
1,2-Dichloroethane	ND		1.0	0.70	0.21	ug/L		08/28/23 17:14	1
1,2-Dichloropropane	ND		1.0	2.4	0.72	ug/L		08/28/23 17:14	1
1,3-Dichlorobenzene	ND		1.0	2.6	0.78	ug/L		08/28/23 17:14	1
1,4-Dichlorobenzene	ND		1.0	2.8	0.84	ug/L		08/28/23 17:14	1
2-Butanone (MEK)	ND		10	4.4	1.3	ug/L		08/28/23 17:14	1
2-Hexanone	ND		5.0	4.1	1.2	ug/L		08/28/23 17:14	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	7.0	2.1	ug/L		08/28/23 17:14	1
Acetone	ND	^c	10	10	3.0	ug/L		08/28/23 17:14	1
Benzene	ND		1.0	1.4	0.41	ug/L		08/28/23 17:14	1
Bromodichloromethane	ND		1.0	1.3	0.39	ug/L		08/28/23 17:14	1
Bromoform	ND		1.0	0.87	0.26	ug/L		08/28/23 17:14	1
Bromomethane	ND		1.0	2.3	0.69	ug/L		08/28/23 17:14	1
Carbon disulfide	ND		1.0	0.63	0.19	ug/L		08/28/23 17:14	1
Carbon tetrachloride	ND		1.0	0.90	0.27	ug/L		08/28/23 17:14	1
Chlorobenzene	ND		1.0	2.5	0.75	ug/L		08/28/23 17:14	1
Chloroethane	ND		1.0	1.1	0.32	ug/L		08/28/23 17:14	1
Chloroform	ND		1.0	1.1	0.34	ug/L		08/28/23 17:14	1
Chloromethane	ND	^c *	1.0	1.2	0.35	ug/L		08/28/23 17:14	1
cis-1,2-Dichloroethene	ND		1.0	2.7	0.81	ug/L		08/28/23 17:14	1
cis-1,3-Dichloropropene	ND		1.0	1.2	0.36	ug/L		08/28/23 17:14	1
Dibromochloromethane	ND		1.0	1.1	0.32	ug/L		08/28/23 17:14	1
Dibromomethane	ND		1.0	1.4	0.41	ug/L		08/28/23 17:14	1
Dichlorodifluoromethane	ND		1.0	2.3	0.68	ug/L		08/28/23 17:14	1
Ethylbenzene	ND		1.0	2.5	0.74	ug/L		08/28/23 17:14	1
Methylene Chloride	ND		1.0	1.5	0.44	ug/L		08/28/23 17:14	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.53	0.16	ug/L		08/28/23 17:14	1
Naphthalene	ND		1.0	1.4	0.43	ug/L		08/28/23 17:14	1
Styrene	ND		1.0	2.4	0.73	ug/L		08/28/23 17:14	1
Tetrachloroethene	ND		1.0	1.2	0.36	ug/L		08/28/23 17:14	1
Tetrahydrofuran	ND		5.0	4.2	1.3	ug/L		08/28/23 17:14	1
Toluene	ND		1.0	1.7	0.51	ug/L		08/28/23 17:14	1
trans-1,2-Dichloroethene	ND		1.0	3.0	0.90	ug/L		08/28/23 17:14	1
trans-1,3-Dichloropropene	ND		1.0	1.2	0.37	ug/L		08/28/23 17:14	1

Client Sample ID: PW05
Date Collected: 08/23/23 12:10
Date Received: 08/25/23 10:30

Lab Sample ID: 480-212170-4
Matrix: Potable Water

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

Analyte	Result	Qualifier	RL	LOQ	LOD	Unit	D	Analyzed	Dil Fac
Trichloroethene	ND		1.0	1.5	0.46	ug/L		08/28/23 17:14	1
Trichlorofluoromethane	ND		1.0	2.9	0.88	ug/L		08/28/23 17:14	1
Vinyl chloride	ND		1.0	3.0	0.90	ug/L		08/28/23 17:14	1
Xylenes, Total	ND		2.0	2.2	0.66	ug/L		08/28/23 17:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*113*		*77 - 120*		*08/28/23 17:14*	*1*
4-Bromofluorobenzene (Surr)	*104*		*73 - 120*		*08/28/23 17:14*	*1*
Toluene-d8 (Surr)	*92*		*80 - 120*		*08/28/23 17:14*	*1*

Method: SW846 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	LOQ	LOD	Unit	D	Analyzed	Dil Fac
Aluminum	ND		80.0	200	60.0	ug/L		08/31/23 02:36	1
Barium	**24.9**		6.0	2.3	0.70	ug/L		08/31/23 02:36	1
Calcium	**66.2**		5.0	0.33	0.10	mg/L		08/31/23 16:12	1
Chromium	**1.2**	**J**	5.0	3.3	1.0	ug/L		08/31/23 02:36	1
Cobalt	ND		6.0	2.1	0.63	ug/L		08/31/23 02:36	1
Copper	**4.4**	**J**	25.0	5.3	1.6	ug/L		08/31/23 02:36	1
Iron	**0.042**	**J**	0.10	0.064	0.019	mg/L		08/31/23 02:36	1
Magnesium	**37.7**		5.0	0.14	0.043	mg/L		08/31/23 02:36	1
Manganese	ND		3.0	1.3	0.40	ug/L		08/31/23 02:36	1
Nickel	ND		4.0	4.2	1.3	ug/L		08/31/23 02:36	1
Potassium	**1.4**		5.0	0.33	0.10	mg/L		08/31/23 02:36	1
Silver	ND		3.0	5.7	1.7	ug/L		08/31/23 02:36	1
Sodium	**2.7**		5.0	1.1	0.32	mg/L		08/31/23 02:36	1
Vanadium	ND		5.0	5.0	1.5	ug/L		08/31/23 02:36	1
Zinc	**10.9**		4.0	5.0	1.5	ug/L		08/31/23 02:36	1

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

Analyte	Result	Qualifier	RL	LOQ	LOD	Unit	D	Analyzed	Dil Fac
Antimony	ND		0.50	1.2	0.35	ug/L		08/31/23 14:47	1
Arsenic	ND		2.0	0.90	0.27	ug/L		08/30/23 17:19	1
Beryllium	ND		0.20	0.10	0.030	ug/L		08/30/23 17:19	1
Cadmium	ND		0.20	0.24	0.071	ug/L		08/30/23 17:19	1
Selenium	**0.78**	**J**	5.0	1.5	0.44	ug/L		08/30/23 17:19	1
Thallium	ND		0.20	0.063	0.019	ug/L		08/30/23 17:19	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	LOQ	LOD	Unit	D	Analyzed	Dil Fac
Mercury	ND		0.20	0.14	0.043	ug/L		09/06/23 14:39	1

Method: SM 2340B - Total Hardness (as CaCO3) by calculation

Analyte	Result	Qualifier	RL	LOQ	LOD	Unit	D	Analyzed	Dil Fac
Calcium and Magnesium Hardness	**321**		0.50	0.33	0.10	mg/L		09/01/23 13:30	1

General Chemistry

Analyte	Result	Qualifier	RL	LOQ	LOD	Unit	D	Analyzed	Dil Fac
Chloride (EPA 300.0)	**2.2**		0.50	0.94	0.28	mg/L		08/26/23 22:56	1
Sulfate (EPA 300.0)	**13.5**		2.0	1.2	0.35	mg/L		08/26/23 22:56	1
Alkalinity, Total (EPA 310.2)	**311**		50.0	66.7	20.0	mg/L		08/30/23 11:56	5
Total Cyanide (EPA 335.4)	ND		0.020	0.017	0.0041	mg/L		08/31/23 01:43	1

Client: Waste Management
Project/Site: Hagen Farms - Groundwater

Job ID: 480-212170-1

Client Sample ID: PW05

Date Collected: 08/23/23 12:10
Date Received: 08/25/23 10:30

Lab Sample ID: 480-212170-4

Matrix: Potable Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	LOQ	LOD	Unit	D	Analyzed	Dil Fac
Ammonia (as N) (EPA 350.1)	ND		0.20	0.33	0.10	mg/L		08/29/23 17:21	1
Total Kjeldahl Nitrogen (EPA 351.2)	ND		0.20	0.62	0.19	mg/L as N		08/31/23 09:02	1
Nitrate Nitrite as N (EPA 353.2)	**0.67**		0.050	0.067	0.020	mg/L as N		08/28/23 12:23	1
Chemical Oxygen Demand (EPA 410.4)	ND		10.0	16.7	5.0	mg/L		08/28/23 14:34	1
Total Dissolved Solids (SM 2540C)	**285**		10.0	13.3	4.0	mg/L		08/29/23 10:26	1
Total Dissolved Solids (SM 2540C)	**250**	**H**	10.0	13.3	4.0	mg/L		09/06/23 11:37	1
Total Suspended Solids (SM 2540D)	ND		4.0	13.4	4.0	mg/L		08/30/23 10:06	1
Phosphorus, Total (SM 4500 P E)	**0.022**		0.20	0.016	0.0050	mg/L as P		09/08/23 15:44	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	LOQ	LOD	Unit	D	Analyzed	Dil Fac
Color	**No**					NONE		08/23/23 13:10	1
Dissolved Oxygen, Field	**4.3**					mg/L		08/23/23 13:10	1
Field EH/ORP	**26.5**					millivolts		08/23/23 13:10	1
Odor	**No**					NONE		08/23/23 13:10	1
pH, Field	**7.39**					SU		08/23/23 13:10	1
Specific Conductance, Field	**547**					umhos/cm		08/23/23 13:10	1
Temperature, Field (C)	**18.8**					Degrees C		08/23/23 13:10	1
Turbidity, Field	**No**					NONE		08/23/23 13:10	1

Midwest
Environmental Legacy
Management Group

W132 N10487 Grant Drive
Germantown, WI 53022
262 509 5630

October 2, 2023

Stoughton Conservation Club
984 Collins Road
Stoughton, WI 53589

To whom it may concern:

As required by the Unilateral Administrative Order for clean-up of the Hagen Farm Landfill, Waste Management of Wisconsin, Inc. (WMWI) samples the well at the above referenced facility (PW09) on an annual basis. This letter transmits the analytical data for that water supply well, which was sampled on August 23, 2023. Analytical results for water samples collected from the well are also sent to the United States Environmental Protection Agency (USEPA) and the Wisconsin Department of Natural Resources (WDNR) for review.

Compounds that attained or exceeded groundwater or drinking water criteria in the sample are summarized below.

		Regulatory Criteria		
Parameter	Concentration	PAL	ES	MCL
Arsenic	8.7 micrograms/liter (ug/L)	1 ug/L	10 ug/L	10 ug/L
Vinyl chloride	0.02 micrograms/liter (ug/L)	0.02 ug/L	0.2 ug/L	2 ug/L

The regulatory criteria tabulated above are the Preventive Action Limit (PAL) and Enforcement Standard (ES) for Public Health Groundwater Quality Standards from Table 1 of Chapter NR 140.10 Wis. Adm. Code (Groundwater Quality) and the Federal Maximum Contaminant Level (MCL) established in the National Primary Drinking Water Regulations. The identified results are below the concentrations that would indicate that the water is potentially unsafe for consumption over time (i.e., ES and MCL).

The identified concentration of arsenic is consistent with recent prior results. Arsenic is naturally present in subsurface soils and rock, thus concentrations in groundwater similar to that reported in this sample are not unusual.

You may contact Christopher Black from the USEPA if you would like additional information regarding this correspondence. Mr. Black is the USEPA representative providing regulatory oversite for the Hagen Farm Landfill and can be contacted via telephone at (312) 886-1451.

Sincerely,

Waste Management of Wisconsin, Inc.

Ryan J. Baeten, PE
District Manager

cc: Christopher Black, USEPA
Bruce LeRoy, WDNR

eurofins | Environment Testing

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16

ANALYTICAL REPORT

PREPARED FOR

Attn: Ryan Baeten
Waste Management
W124 N9355 Boundary Road
Menomonee Falls, Wisconsin 53051

Generated 9/22/2023 10:50:19 AM

JOB DESCRIPTION

Hagen Farms - Groundwater
Annual Private Wells (8)

JOB NUMBER

480-212170-1

Eurofins Buffalo
10 Hazelwood Drive
Amherst NY 14228-2298

See page two for job notes and contact information.

my EOL

Eurofins Buffalo

Job Notes

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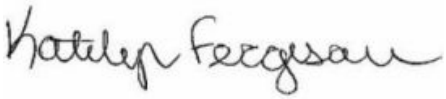
Authorization



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Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
^c	CCV Recovery is outside acceptance limits.
J	Reported value was between the limit of detection and the limit of quantitation.

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
B	Compound was found in the blank and sample.
J	Reported value was between the limit of detection and the limit of quantitation.

General Chemistry

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
F1	MS and/or MSD recovery exceeds control limits.
H	Sample was prepped or analyzed beyond the specified holding time. This does not meet regulatory requirements.
J	Reported value was between the limit of detection and the limit of quantitation.

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

Job ID: 480-212170-1

Laboratory: Eurofins Buffalo

Narrative

Job Narrative
480-212170-1

Receipt
The samples were received on 8/25/2023 10:30 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 3 coolers at receipt time were 2.5º C, 2.7º C and 3.0º C.

GC/MS VOA
Method 8260C: The continuing calibration verification (CCV) associated with batch 480-681445 recovered outside acceptance criteria, low biased, for 1,1,2,2-Tetrachloroethane. 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. The associated samples are impacted: PW02 (480-212170-1), PW03 (480-212170-2) and TB (480-212170-6).

Method 8260C: The continuing calibration verification (CCV) associated with batch 480-681445 recovered above the upper control limit for Acetone and Chloromethane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated samples are impacted: PW02 (480-212170-1), PW03 (480-212170-2), PW04 (480-212170-3), PW05 (480-212170-4), PW09 (480-212170-5) and TB (480-212170-6).

Method 8260C: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for analytical batch 480-681445 recovered outside control limits for the following analytes: Chloromethane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported. The associated samples are impacted: PW02 (480-212170-1), PW03 (480-212170-2), PW04 (480-212170-3), PW05 (480-212170-4), PW09 (480-212170-5) and TB (480-212170-6).

Method 8260C: The continuing calibration verification (CCV) associated with batch 480-681768 recovered above the upper control limit for Acetone, 2-Butanone (MEK) and Tetrahydrofuran. The samples associated with this CCV were not detected above the reporting limit (RL) for the affected analytes; therefore, the data have been reported. The associated sample is impacted: TB (480-212170-6).

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

HPLC/IC
Method 300.0: The following sample was diluted to bring the concentration of target analytes within the calibration range: PW03 (480-212170-2). Elevated reporting limits (RLs) are provided.

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

Metals
Method 6010C: The method blank for preparation batch 480-681710 and analytical batch 480-681955 contained Total Manganese above the method detection limit. This target analyte concentration was less than the reporting limit (RL) in the method blank; therefore, re-extraction and/or re-analysis of samples PW02 (480-212170-1), PW03 (480-212170-2), PW04 (480-212170-3), PW05 (480-212170-4) and PW09 (480-212170-5) was not performed.

Method 6010C: The Total Manganese and Zinc results reported for the following sample do not concur with results previously reported for this site: PW02 (480-212170-1). Reanalysis was performed, and the result(s) confirmed.

Method 6010C: The Total Zinc result reported for the following sample do not concur with results previously reported for this site: PW03 (480-212170-2). Reanalysis was performed, and the result(s) confirmed.

Method 6010C: The Total Manganese result reported for the following sample do not concur with results previously reported for this site: PW05 (480-212170-4). Reanalysis was performed, and the result(s) confirmed.

Method 6010C: The Total Iron, Potassium and Zinc results reported for the following sample do not concur with results previously reported for this site: PW09 (480-212170-5). Reanalysis was performed, and the result(s) confirmed.

Method 6020A: The Total Arsenic results reported for the following sample do not concur with results previously reported for this site: PW09 (480-212170-5). Reanalysis was performed, and the result(s) confirmed.

Job ID: 480-212170-1 (Continued)

Laboratory: Eurofins Buffalo (Continued)

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

General Chemistry
Method SM 2540C: Reanalysis of the following samples were performed outside of the analytical holding time due to not achieving constant weight in the original dataset: PW02 (480-212170-1), PW03 (480-212170-2), PW04 (480-212170-3), PW05 (480-212170-4) and PW09 (480-212170-5). Both sets of data have been reported.

Methods 335.4, 9012B: The method blank for batch 682037 contained Total Cyanide above the reporting limit (RL). None of the samples associated with this method blank contained the target compound above the reporting limit; therefore, re-extraction and/or re-analysis of samples were not performed: PW02 (480-212170-1), PW03 (480-212170-2), PW04 (480-212170-3), PW05 (480-212170-4), PW09 (480-212170-5), (480-212164-D-8) and (480-212164-D-8 MS).

Method 353.2: The results reported for the following sample do not concur with results previously reported for this site: PW03 (480-212170-2). Reanalysis was performed, and the result(s) confirmed.

Method SM 4500 P E: The results reported for the following sample do not concur with results previously reported for this site: PW05 (480-212170-4). Reanalysis was performed, and the result(s) confirmed.

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

Client Sample ID: PW09

Date Collected: 08/23/23 12:20
Date Received: 08/25/23 10:30

Lab Sample ID: 480-212170-5

Matrix: Potable Water

Method: SW846 8260C SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	LOQ	LOD	Unit	D	Analyzed	Dil Fac
Vinyl chloride	0.020		0.020	0.013	0.0040	ug/L		08/28/23 12:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
TBA-d9 (Surr)	*80*		*50 - 150*		*08/28/23 12:55*	*1*
Dibromofluoromethane (Surr)	*110*		*50 - 150*		*08/28/23 12:55*	*1*

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

Analyte	Result	Qualifier	RL	LOQ	LOD	Unit	D	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	2.7	0.82	ug/L		08/28/23 17:36	1
1,1,2,2-Tetrachloroethane	ND	^c	1.0	0.70	0.21	ug/L		08/28/23 17:36	1
1,1,2-Trichloroethane	ND		1.0	0.77	0.23	ug/L		08/28/23 17:36	1
1,1-Dichloroethane	ND		1.0	1.3	0.38	ug/L		08/28/23 17:36	1
1,1-Dichloroethene	ND		1.0	0.97	0.29	ug/L		08/28/23 17:36	1
1,2,4-Trichlorobenzene	ND		1.0	1.4	0.41	ug/L		08/28/23 17:36	1
1,2-Dibromo-3-Chloropropane	ND		1.0	1.3	0.39	ug/L		08/28/23 17:36	1
1,2-Dibromoethane (EDB)	ND		1.0	2.4	0.73	ug/L		08/28/23 17:36	1
1,2-Dichlorobenzene	ND		1.0	2.6	0.79	ug/L		08/28/23 17:36	1
1,2-Dichloroethane	ND		1.0	0.70	0.21	ug/L		08/28/23 17:36	1
1,2-Dichloropropane	ND		1.0	2.4	0.72	ug/L		08/28/23 17:36	1
1,3-Dichlorobenzene	ND		1.0	2.6	0.78	ug/L		08/28/23 17:36	1
1,4-Dichlorobenzene	ND		1.0	2.8	0.84	ug/L		08/28/23 17:36	1
2-Butanone (MEK)	ND		10	4.4	1.3	ug/L		08/28/23 17:36	1
2-Hexanone	ND		5.0	4.1	1.2	ug/L		08/28/23 17:36	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	7.0	2.1	ug/L		08/28/23 17:36	1
Acetone	ND	^c	10	10	3.0	ug/L		08/28/23 17:36	1
Benzene	ND		1.0	1.4	0.41	ug/L		08/28/23 17:36	1
Bromodichloromethane	ND		1.0	1.3	0.39	ug/L		08/28/23 17:36	1
Bromoform	ND		1.0	0.87	0.26	ug/L		08/28/23 17:36	1
Bromomethane	ND		1.0	2.3	0.69	ug/L		08/28/23 17:36	1
Carbon disulfide	ND		1.0	0.63	0.19	ug/L		08/28/23 17:36	1
Carbon tetrachloride	ND		1.0	0.90	0.27	ug/L		08/28/23 17:36	1
Chlorobenzene	ND		1.0	2.5	0.75	ug/L		08/28/23 17:36	1
Chloroethane	ND		1.0	1.1	0.32	ug/L		08/28/23 17:36	1
Chloroform	ND		1.0	1.1	0.34	ug/L		08/28/23 17:36	1
Chloromethane	ND	^c *	1.0	1.2	0.35	ug/L		08/28/23 17:36	1
cis-1,2-Dichloroethene	ND		1.0	2.7	0.81	ug/L		08/28/23 17:36	1
cis-1,3-Dichloropropene	ND		1.0	1.2	0.36	ug/L		08/28/23 17:36	1
Dibromochloromethane	ND		1.0	1.1	0.32	ug/L		08/28/23 17:36	1
Dibromomethane	ND		1.0	1.4	0.41	ug/L		08/28/23 17:36	1
Dichlorodifluoromethane	ND		1.0	2.3	0.68	ug/L		08/28/23 17:36	1
Ethylbenzene	ND		1.0	2.5	0.74	ug/L		08/28/23 17:36	1
Methylene Chloride	ND		1.0	1.5	0.44	ug/L		08/28/23 17:36	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.53	0.16	ug/L		08/28/23 17:36	1
Naphthalene	ND		1.0	1.4	0.43	ug/L		08/28/23 17:36	1
Styrene	ND		1.0	2.4	0.73	ug/L		08/28/23 17:36	1
Tetrachloroethene	ND		1.0	1.2	0.36	ug/L		08/28/23 17:36	1
Tetrahydrofuran	ND		5.0	4.2	1.3	ug/L		08/28/23 17:36	1
Toluene	ND		1.0	1.7	0.51	ug/L		08/28/23 17:36	1
trans-1,2-Dichloroethene	ND		1.0	3.0	0.90	ug/L		08/28/23 17:36	1
trans-1,3-Dichloropropene	ND		1.0	1.2	0.37	ug/L		08/28/23 17:36	1

Client Sample ID: PW09

Date Collected: 08/23/23 12:20
Date Received: 08/25/23 10:30

Lab Sample ID: 480-212170-5

Matrix: Potable Water

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

Analyte	Result	Qualifier	RL	LOQ	LOD	Unit	D	Analyzed	Dil Fac
Trichloroethene	ND		1.0	1.5	0.46	ug/L		08/28/23 17:36	1
Trichlorofluoromethane	ND		1.0	2.9	0.88	ug/L		08/28/23 17:36	1
Vinyl chloride	ND		1.0	3.0	0.90	ug/L		08/28/23 17:36	1
Xylenes, Total	ND		2.0	2.2	0.66	ug/L		08/28/23 17:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*115*		*77 - 120*		*08/28/23 17:36*	*1*
4-Bromofluorobenzene (Surr)	*106*		*73 - 120*		*08/28/23 17:36*	*1*
Toluene-d8 (Surr)	*94*		*80 - 120*		*08/28/23 17:36*	*1*

Method: SW846 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	LOQ	LOD	Unit	D	Analyzed	Dil Fac
Aluminum	ND		80.0	200	60.0	ug/L		08/31/23 02:52	1
Barium	ND		6.0	2.3	0.70	ug/L		08/31/23 02:52	1
Calcium	**0.23**	**J**	5.0	0.33	0.10	mg/L		08/31/23 02:52	1
Chromium	ND		5.0	3.3	1.0	ug/L		08/31/23 02:52	1
Cobalt	ND		6.0	2.1	0.63	ug/L		08/31/23 02:52	1
Copper	**23.2**		25.0	5.3	1.6	ug/L		08/31/23 02:52	1
Iron	**0.13**		0.10	0.064	0.019	mg/L		08/31/23 16:16	1
Magnesium	**0.12**	**J**	5.0	0.14	0.043	mg/L		08/31/23 02:52	1
Manganese	**0.93**	**J B**	3.0	1.3	0.40	ug/L		08/31/23 02:52	1
Nickel	ND		4.0	4.2	1.3	ug/L		08/31/23 02:52	1
Potassium	**15.3**		5.0	0.33	0.10	mg/L		08/31/23 02:52	1
Silver	ND		3.0	5.7	1.7	ug/L		08/31/23 02:52	1
Sodium	**176**		5.0	1.1	0.32	mg/L		08/31/23 02:52	1
Vanadium	ND		5.0	5.0	1.5	ug/L		08/31/23 02:52	1
Zinc	**24.6**		4.0	5.0	1.5	ug/L		08/31/23 02:52	1

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

Analyte	Result	Qualifier	RL	LOQ	LOD	Unit	D	Analyzed	Dil Fac
Antimony	ND		0.50	1.2	0.35	ug/L		08/31/23 14:49	1
Arsenic	**8.7**		2.0	0.90	0.27	ug/L		08/30/23 17:28	1
Beryllium	ND		0.20	0.10	0.030	ug/L		08/30/23 17:28	1
Cadmium	ND		0.20	0.24	0.071	ug/L		08/30/23 17:28	1
Selenium	ND		5.0	1.5	0.44	ug/L		08/30/23 17:28	1
Thallium	ND		0.20	0.063	0.019	ug/L		08/30/23 17:28	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	LOQ	LOD	Unit	D	Analyzed	Dil Fac
Mercury	ND		0.20	0.14	0.043	ug/L		09/06/23 14:41	1

Method: SM 2340B - Total Hardness (as CaCO3) by calculation

Analyte	Result	Qualifier	RL	LOQ	LOD	Unit	D	Analyzed	Dil Fac
Calcium and Magnesium Hardness	**1.1**		0.50	0.33	0.10	mg/L		09/01/23 13:30	1

General Chemistry

Analyte	Result	Qualifier	RL	LOQ	LOD	Unit	D	Analyzed	Dil Fac
Chloride (EPA 300.0)	**24.9**		0.50	0.94	0.28	mg/L		08/26/23 23:15	1
Sulfate (EPA 300.0)	**4.7**		2.0	1.2	0.35	mg/L		08/26/23 23:15	1
Alkalinity, Total (EPA 310.2)	**370**		50.0	66.7	20.0	mg/L		08/30/23 11:57	5
Total Cyanide (EPA 335.4)	ND		0.020	0.017	0.0041	mg/L		08/31/23 01:46	1

Client: Waste Management
Project/Site: Hagen Farms - Groundwater

Job ID: 480-212170-1

Client Sample ID: PW09

Date Collected: 08/23/23 12:20
Date Received: 08/25/23 10:30

Lab Sample ID: 480-212170-5

Matrix: Potable Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	LOQ	LOD	Unit	D	Analyzed	Dil Fac
Ammonia (as N) (EPA 350.1)	ND		0.20	0.33	0.10	mg/L		08/29/23 17:24	1
Total Kjeldahl Nitrogen (EPA 351.2)	ND		0.20	0.62	0.19	mg/L as N		08/31/23 09:02	1
Nitrate Nitrite as N (EPA 353.2)	ND		0.050	0.067	0.020	mg/L as N		08/28/23 12:27	1
Chemical Oxygen Demand (EPA 410.4)	**5.7**	**J**	10.0	16.7	5.0	mg/L		08/30/23 10:26	1
Total Dissolved Solids (SM 2540C)	**628**		10.0	13.3	4.0	mg/L		08/29/23 10:26	1
Total Dissolved Solids (SM 2540C)	**577**	**H**	10.0	13.3	4.0	mg/L		09/11/23 15:18	1
Total Suspended Solids (SM 2540D)	ND		4.0	13.4	4.0	mg/L		08/30/23 10:06	1
Phosphorus, Total (SM 4500 P E)	**0.14**		0.20	0.016	0.0050	mg/L as P		08/28/23 11:51	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	LOQ	LOD	Unit	D	Analyzed	Dil Fac
Color	**No**					NONE		08/23/23 13:20	1
Dissolved Oxygen, Field	**1.8**					mg/L		08/23/23 13:20	1
Field EH/ORP	**-15.1**					millivolts		08/23/23 13:20	1
Odor	**No**					NONE		08/23/23 13:20	1
pH, Field	**7.45**					SU		08/23/23 13:20	1
Specific Conductance, Field	**732**					umhos/cm		08/23/23 13:20	1
Temperature, Field (C)	**23.1**					Degrees C		08/23/23 13:20	1
Turbidity, Field	**No**					NONE		08/23/23 13:20	1