

SCS ENGINEERS

January 6, 2017
File No. 25212002.00

GEMS Data Submittal Contact – WA/5
Bureau of Waste and Materials Management
Wisconsin Department of Natural Resources
P.O. Box 7921
Madison, WI 53707-7921



Subject: Hagen Farm Landfill, Town of Dunkirk, Dane County, Wisconsin
WDNR License No. 02981 – FID #113176030
Fourth Quarter 2016 Environmental Data Submittal

Dear GEMS Data Submittal Contact:

Enclosed is the fourth quarter 2016 environmental data submittal for the Hagen Farm Landfill, License No. 02981. The submittal includes results from the quarterly (November 2016) sampling event at the site. The data was collected in accordance with the requirements of the U.S. Environmental Protection Agency (USEPA) approval of the Hagen Farm Site Groundwater Control Operable Unit Revised Workplan dated March 1, 2005, as amended.

SAMPLING SUMMARY

The fourth quarter sampling event, which was performed on November 7, 2016, included measurement of water levels and/or collection of groundwater samples at 17 monitoring wells in the vicinity of the site. The samples and associated field data were collected by SCS Engineers staff. The samples were submitted to TestAmerica Buffalo (Wisconsin Lab Certification No. 998310390) for laboratory analysis.

INFORMATION INCLUDED IN THIS SUBMITTAL

This submittal includes the following:

- A CD with the electronic data submittal file (nov16-02981.txt) from this period.
- **Attachment A**, a table that identifies the compounds that exceeded the groundwater standards identified in Chapter NR 140, Wis. Adm. Code (i.e., exceedances) during this sampling period.
- **Attachment B**, a table that identifies sample results between the limit of detection (LOD) and limit of quantitation (LOQ) from this sampling period.



- **Attachment C**, a completed Environmental Monitoring Data Certification Form [Form 4400-231(R 1/04)].
- **Attachment D**, a printout of the data from this sampling period.

SUBMITTAL NOTES

Please note the following:

- Results for vinyl chloride are reported from two different analytical methods, using gas chromatography/mass spectrometry (GC/MS) and selective ion methodology (SIM). The data from the two analytical methods are evaluated independently in that if both results exceeded a groundwater standard, two exceedances are reported in **Attachments A and D**, even though the results are from the same sample.
- Manganese results are evaluated with regard to the criteria identified in **Table 1** (Public Health Groundwater Quality Standards) and **Table 2** (Public Welfare Groundwater Quality Standards) of NR 140.10 and NR 140.12, respectively. Thus, the data from a single sample may be reported as two exceedances in **Attachments A and D**.
- Results from this sampling period that exceed the values identified as the enforcement standard (ES) or preventive action limit (PAL) in Chapter NR 140, Wis. Adm. Code, are denoted using an E or P, respectively, in **Attachments A and D** of this submittal. A “P*” indicates that the well is within the Design Management Zone (DMZ) and property boundary; therefore, the well meets the point of standards criteria identified in NR 140.22 and the ES does not apply. Consistent with prior submittals, the preliminary cause and significance of concentrations exceeding groundwater standards is not presented herein. Groundwater quality has been evaluated as part of the remedial investigation for this USEPA-lead Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) site and is also periodically evaluated in the annual reports for the operation and maintenance of the selected remedy.

DATA QUALITY

In addition to laboratory quality control measures, the laboratory analyzed two trip blank (TBs) and one field blank (FB) collected in association with this sampling event to assess data quality. Only one volatile organic compound (VOC), dichloromethane, was quantified above the LOD from analysis of one of the TBs associated with this sampling event. Dichloromethane, also known as methylene chloride, is a common laboratory contaminant and the reported concentration in the trip blank is low (i.e., less than PAL) and qualified as estimated (i.e., J-flagged). The results from analysis of the FB for inorganic parameters are typical of deionized

water and do not indicate a significant data quality issue, especially since dedicated sampling equipment is utilized at the site.

Only one result (vinyl chloride by SIM at P32B) from this reporting period was qualified by the laboratory as failing Wisconsin Department of Natural Resources (WDNR) Quality Control (QC) Flag 1 in that the analyte was also detected in the associated method, trip or field blanks at a concentration above the specified criteria.

No results from this reporting period were qualified by the laboratory as failing WDNR QC Flag 2 in that all samples met preservation and holding time criteria.

Four results for a VOC (i.e., chloromethane) were appropriately qualified by the laboratory as failing the WDNR QC Flag 3 criteria, as the batch matrix spike/matrix spike duplicate (MS/MSD) recovery was biased high and failed to meet laboratory QC criteria. The associated laboratory control sample recovery was within acceptable limits; thus, the data were acceptable in accordance with the method specifications, and are reported in this submittal.

Given the specific parameters and results qualified, and the explanations summarized above, the data from this period is acceptable for use and the qualified results are not expected to materially affect the overall evaluation of the data.

Please contact me at (262) 345-1220 if you have any questions regarding this report.

Sincerely,



Gary Sterkel
Environmental Specialist
SCS ENGINEERS

GLS/AV/MJP

cc: Ms. Sheila Sullivan, USEPA, w/o disk
Mr. Gary Edelstein, WDNR, w/o disk
Mr. Michael Peterson, Waste Management of Wisconsin, Inc., w/o disk

Attachments: A through D

Z:\Projects\25212002.00\Reports\GEMS Reports\2016\Quarter 4\Hagen_4thqtr2016_tad.doc

ATTACHMENT A

**Fourth Quarter 2016
Identification of NR 140 Exceedances**

Attachment A
Fourth Quarter 2016

Hagen Farm Landfill

Identification of NR 140 Exceedances

License Number: 02981
 Facility ID Number: 113176030

Well	Sample Date	Parameter	Sample Result	NR140 Standards		Units	Type of Standard	Type of Exceedance	Qualifier	RL	LOD	LOQ
				PAL	ES							
OB8M	161107	IRON-DISSOLVED AS FE	0.20	0.15	0.3	MGL	Table 2	P		0.03	0.019	0.064
P17C	161107	IRON-DISSOLVED AS FE	3.0	0.15	0.3	MGL	Table 2	P*		0.03	0.019	0.064
P22B	161107	IRON-DISSOLVED AS FE	4.6	0.15	0.3	MGL	Table 2	P*		0.03	0.019	0.064
OB8M	161107	MANGANESE-DISSOLVED AS MN	146	60	300	UGL	Table 1	P		2	0.4	1.3
OB8M	161107	MANGANESE-DISSOLVED AS MN	146	25	50	UGL	Table 2	E		2	0.4	1.3
P17B	161107	MANGANESE-DISSOLVED AS MN	50.4	25	50	UGL	Table 2	P*		2	0.4	1.3
P17C	161107	MANGANESE-DISSOLVED AS MN	261	60	300	UGL	Table 1	P		2	0.4	1.3
P17C	161107	MANGANESE-DISSOLVED AS MN	261	25	50	UGL	Table 2	P*		2	0.4	1.3
P22B	161107	MANGANESE-DISSOLVED AS MN	108	60	300	UGL	Table 1	P		2	0.4	1.3
P22B	161107	MANGANESE-DISSOLVED AS MN	108	25	50	UGL	Table 2	P*		2	0.4	1.3
P32B	161107	MANGANESE-DISSOLVED AS MN	112	60	300	UGL	Table 1	P		2	0.4	1.3
P32B	161107	MANGANESE-DISSOLVED AS MN	112	25	50	UGL	Table 2	E		2	0.4	1.3
OBS-2C	161107	NITRITE PLUS NITRATE-DISSOLVED AS N	2.8	2	10	MGL AS N	Table 1	P		0.05	0.02	0.067
OB8M	161107	VINYL CHLORIDE	0.85	0.02	0.2	UGL	Table 1	E		0.02	0.004	0.013
P17C	161107	VINYL CHLORIDE	0.42	0.02	0.2	UGL	Table 1	P*		0.02	0.004	0.013
P26B	161107	VINYL CHLORIDE	0.28	0.02	0.2	UGL	Table 1	P*		0.02	0.004	0.013
P32B	161107	VINYL CHLORIDE	0.029	0.02	0.2	UGL	Table 1	P		0.02	0.004	0.013

Hagen Farm Landfill

Identification of NR 140 Exceedances

Well	Sample Date	Parameter	Sample Result	NR140 Standards PAL	Type of Standard ES	Units	Type of Standard Exceedance	Qualifier	RL	LOD	LOQ

P* = Well is located within the Design Management Zone (DMZ) and property boundary, thus the Enforcement Standard does not apply

P = NR 140 Preventive Action Limit or NR 500 Alternate Concentration Limit exceedance

E = NR 140 Enforcement Standard exceedance

J = Sample result is between the Limit of Detection (LOD) and the Limit of Quantitation (LOQ)

EX = NR 140.28 (NR 508.19) Exemptions granted for exceedance

Special Notes:

J-Qualifier (Flag) indicates an estimated concentration of an analyte between the Limit of Detection (LOD) and the Limit of Quantitation (LOQ), thus the values are not quantifiable numbers and do not constitute exceedances. However, these values are reported in compliance with NR 507.26 (3)(b) and NR 140.16(5).

Vinyl chloride is analyzed by EPA Method 8260B and by Selective Ion Monitoring. The data from the two analytical methods is evaluated independently in that if both results exceeded a groundwater standard, two exceedances are reported even though the results are from the same sample.

ATTACHMENT B

Fourth Quarter 2016
Identification of Sample Results Between
the LOD and LOQ ("J-Flags")

Hagen Farm Landfill

Identification of Sample Results Between the LOD and LOQ ("J-Flags")

License Number: 02981
Facility ID Number: 113176030

Well	Sample Date	Parameter	NR140 Standards							
			Sample Result	PAL	ES	Units	Qualifier	RL	LOD	LOQ
MW-22	161107	IRON-DISSOLVED AS FE	0.019	0.15	0.3	MG/L	J	0.03	0.019	0.064
OBS-1B	161107	IRON-DISSOLVED AS FE	0.035	0.15	0.3	MG/L	J	0.03	0.019	0.064
OBS-1C	161107	IRON-DISSOLVED AS FE	0.036	0.15	0.3	MG/L	J	0.03	0.019	0.064
OBS-2C	161107	MANGANESE-DISSOLVED AS MN	0.84	60	300	UG/L	J	2	0.4	1.3
P17B	161107	IRON-DISSOLVED AS FE	0.040	0.15	0.3	MG/L	J	0.03	0.019	0.064
P17B	161107	VINYL CHLORIDE	0.0090	0.072	0.2	UG/L	J	0.02	0.004	0.013
P32B	161107	IRON-DISSOLVED AS FE	0.025	0.15	0.3	MG/L	J	0.03	0.019	0.064

Notes:
J = Estimated result - sample result is between the Limit of Detection (LOD) and the Limit of Quantitation (LOQ)

Special Note:

J-Qualifier (Flag) indicates an estimated concentration of an analyte between the Limit of Detection (LOD) and the Limit of Quantitation (LOQ), thus the values are not quantifiable numbers and do not constitute exceedances. However, these values are reported in compliance with NR 507.26 (3)(b) and NR 140.16(5).

ATTACHMENT C

Fourth Quarter 2016
Environmental Monitoring Data Certification
Form [Form 4400-231 (R1/04)]

State of Wisconsin
Department of Natural Resources

Environmental Monitoring Data Certification
Form 4400-231(R 1/04)

Notice: Personally identifiable information collected will be used for program administration and enforcement purposes. The Department may also provide this information to requesters as required under Wisconsin's Open Records law, ss. 19.31 to 19.39, Wis. Stats.

When submitting monitoring data, the owner or operator of the facility, practice or activity is required to notify the Department in writing that a groundwater standard or an explosive gas level has been attained or exceeded, as specified in ss. NR 140.24(1)(a); NR 140.26(1)(a); NR 507.30NR 635.14(9)(a); NR 635.18(20) and NR 507.30, Wis. Adm. Code. Failure to report may result in fines, forfeitures or other penalties resulting from enforcement under ss. 289.97, 291.97 or 299.95, Wis. Stats.

Instructions:

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

Bureau of Waste Management
Wisconsin Department of Natural Resources
101 South Webster Street
Madison WI 53707-7921

Monitoring Data Submittal Information

Name of entity submitting data (laboratory, consultant, facility owner):

SCS Engineers

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

Name: Gary Sterkel Phone: (262) 345-1220

E-mail: gsterkel@scsengineers.com

Facility name:	License # / Monitoring ID	Facility ID [FID]	Actual sampling dates (e.g., July 2-6, 2003)
Hagen Farm Landfill	02981	113176030	November 7, 2016

The enclosed results are for sampling required in the month(s) of: (e.g., June 2003)

November 2016

Type of Data Submitted (Check all that apply)

<input checked="" type="checkbox"/> Groundwater monitoring data from monitoring wells	<input type="checkbox"/> Gas monitoring data
<input type="checkbox"/> Groundwater monitoring data from private water supply wells	<input type="checkbox"/> Air monitoring data
<input type="checkbox"/> Leachate monitoring data	<input type="checkbox"/> Other (specify) _____

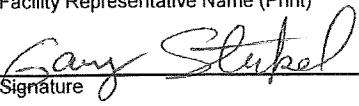
Notification attached?

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

Certification

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

Gary Sterkel Environmental Specialist (262) 345-1220
Facility Representative Name (Print) Title (Area Code) Telephone No.

1/7/17
Signature Date

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

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

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

ATTACHMENT D

**Fourth Quarter 2016
Environmental Monitoring Data**

Hagen Farm Landfill

Stoughton, WI

License Number: 02981
Facility ID Number: 113176030

Fourth Quarter 2016 Environmental Monitoring Data

Samples Collected by:	SCS Engineers Gary Sterkel and Steve Smith
Samples Analyzed by:	Test America, Inc., Amherst, NY (Laboratory Certification Number: 998310390)

Color, Odor, Turbidity: If the Results column shows 0 the parameter was present. If the Qualifier column shows N the parameter was not present.

Exceedance Key:

P* = Within the Design Management Zone (DMZ) and property boundary

P = NR 140 Preventive Action Limit or NR 500 Alternate Concentration Limit exceedance

E = NR 140 Enforcement Standard exceedance

EX = NR 140.28 (NR 508.19) Exemptions granted for exceedance

All exceedances take into account 40 CFR 257-258 Subtitle D standards as well as WDNR approved alternate concentration limits (ACLs)

Qualifier Flag Codes:

N = Analyte was not detected above the Limit of Detection (LOD)

J = Analyte was detected between the Limit of Detection (LOD)

and the Limit of Quantitation (LOQ) (LOD ≤ result < LOQ)

QC Flag 2 Codes:

M = Met Preservation and Holding Time criteria

F = Failed Preservation and Holding Time criteria

QC Flag 1 Codes:

M = Analyte was not detected in Method, Trip, or Field Blanks

F = For a sample in which an analyte was detected, the analyte was also detected in the associated Method, Trip, or Field Blanks at concentrations which exceed the highest of the following values:

1. The limit of detection, or
2. Five percent of the lowest applicable regulatory limit, or
3. Ten percent of the measured concentration in the sample.

QC Flag 3 Codes:

M = Met Laboratory Quality Control Standards

F = Failed Laboratory Quality Control Standards

Hagen Farm Landfill

License Number: 02981
Facility ID Number: 113176030

Sample Point:	01TB	WDNR Point ID:	999	WDNR			QC QC QC			Type of Standard				
				Date	Parameter	Qualifier	Value	Units	PAL	ES	Exceedance	Standard	1	2
161107	1,1,1-TRICHLOROETHANE	N		UG/L	40	200		Table 1	M	M	1.0	0.82	2.7	998310390
161107	1,1,2,2-TETRACHLOROETHANE	N		UG/L	0.02	0.2		Table 1	M	M	1.0	0.21	0.70	998310390
161107	1,1,2-TRICHLOROETHANE	N		UG/L	0.5	5		Table 1	M	M	1.0	0.23	0.77	998310390
161107	1,1-DICHLOROETHANE	N		UG/L	85	850		Table 1	M	M	1.0	0.38	1.3	998310390
161107	1,1-DICHLOROETHYLENE	N		UG/L	0.7	7		Table 1	M	M	1.0	0.29	0.97	998310390
161107	1,2,4-TRICHLOROBENZENE	N		UG/L	14	70		Table 1	M	M	1.0	0.41	1.4	998310390
161107	1,2-DIBROMO-3-CHLOROPROPANE	N		UG/L	0.02	0.2		Table 1	M	M	1.0	0.39	1.3	998310390
161107	1,2-DIBROMOETHANE (EDB)	N		UG/L	0.005	0.05		Table 1	M	M	1.0	0.73	2.4	998310390
161107	1,2-DICHLOROETHANE	N		UG/L	0.5	5		Table 1	M	M	1.0	0.21	0.70	998310390
161107	1,2-DICHLOROPROPANE	N		UG/L	0.5	5		Table 1	M	M	1.0	0.72	2.4	998310390
161107	2-HEXANONE	N		UG/L	50	500		Table 1	M	M	5.0	1.2	4.1	998310390
161107	4-METHYL-2-PENTANONE (MIBK)	N		UG/L	1800	9000		Table 1	M	M	10	3.0	10	998310390
161107	ACETONE	N		UG/L	0.5	5		Table 1	M	M	1.0	0.41	1.4	998310390
161107	BENZENE	N		UG/L	0.06	0.6		Table 1	M	M	1.0	0.39	1.3	998310390
161107	BROMODICHLOROMETHANE	N		UG/L	1	10		Table 1	M	M	1.0	0.69	2.3	998310390
161107	BROMOMETHANE	N		UG/L	200	1000		Table 1	M	M	1.0	0.19	0.63	998310390
161107	CARBON DISULFIDE	N		UG/L	0.5	5		Table 1	M	M	1.0	0.27	0.90	998310390
161107	CARBON TETRACHLORIDE	N		UG/L	20	100		Table 1	M	M	1.0	0.75	2.5	998310390
161107	CHLOROBENZENE	N		UG/L	80	400		Table 1	M	M	1.0	0.32	1.1	998310390
161107	CHLOROETHANE	N		UG/L	0.04	0.4		Table 1	M	M	1.0	0.34	1.1	998310390
161107	CHLOROFORM	N		UG/L	6	60		Table 1	M	M	1.0	0.35	1.2	998310390
161107	CHLOROMETHANE	N		UG/L	3	30		Table 1	M	M	1.0	0.81	2.7	998310390
161107	CIS-1,2-DICHLOROETHENE	N		UG/L	7	70		Table 1	M	M	1.0	0.36	1.2	998310390
161107	CIS-1,3-DICHLOROPROPENE	N		UG/L	0.49	49		Table 1	M	M	1.0	0.44	1.5	998310390
161107	DIBROMOCHLOROMETHANE	N		UG/L	140	700		Table 1	M	M	1.0	0.74	2.5	998310390
161107	DIBROMOMETHANE	N		UG/L	698	3490		Table 1	M	M	1.0	0.88	2.9	998310390
161107	DICHLORODIFLUOROMETHANE	N		UG/L	200	1000		Table 1	M	M	1.0	0.68	2.3	998310390
161107	DICHLOROMETHANE	J	0.49	UG/L	0.5	5		Table 1	M	M	1.0	0.22	0.70	998310390
161107	ETHYL BENZENE	N		UG/L	120	600		Table 1	M	M	1.0	0.78	2.6	998310390
161107	FLUOROTRICHLOROMETHANE	N		UG/L	800	4000		Table 1	M	M	10	1.3	4.4	998310390
161107	M-DICHLOROBENZENE	N		UG/L	12	60		Table 1	M	M	1.0	0.16	0.53	998310390
161107	METHYL ETHYL KETONE (MEK)	N												
161107	METHYL TERT-BUTYL ETHER (MTBE)	N												

Hagen Farm Landfill

License Number: 02981
Facility ID Number: 113176030

Sample Date	Parameter	WDNR Point ID:	Qualifier	Value	Units	PAL	ES	Type of Exceedance	Type of Standard	WDNR		
										QC 1	QC 2	QC 3
Sample Point: 01TB WDNR Point ID: 999												
161107	NAPHTHALENE	N	UG/L	10	100				Table 1	M	M	1.0
161107	O-DICHLOROBENZENE	N	UG/L	60	600				Table 1	M	M	0.79
161107	P-DICHLOROBENZENE	N	UG/L	15	75				Table 1	M	M	0.84
161107	STYRENE	N	UG/L	10	100				Table 1	M	M	0.73
161107	TETRACHLOROETHYLENE	N	UG/L	0.5	5				Table 1	M	M	1.2
161107	TETRAHYDROFURAN	N	UG/L	10	50				Table 1	M	M	1.3
161107	TOLUENE	N	UG/L	160	800				Table 1	M	M	0.51
161107	TRANS-1,2-DICHLOROETHENE (TOTAL)	N	UG/L	20	100				Table 1	M	M	0.90
161107	TRANS-1,3-DICHLOROPROPENE	N	UG/L	0.04	0.4				Table 1	M	M	0.37
161107	TRIBROMOMETHANE	N	UG/L	0.44	4.4				Table 1	M	M	0.26
161107	TRICHLOROETHYLENE	N	UG/L	0.5	5				Table 1	M	M	1.5
161107	VINYL CHLORIDE	N	UG/L	0.02	0.2				Table 1	M	M	0.020
161107	VINYL CHLORIDE	N	UG/L	0.02	0.2				Table 1	M	M	0.013
161107	XYLENES-TOTAL	N	UG/L	400	2000				Table 1	M	M	3.0
Sample Point: 02TB WDNR Point ID: 999												
161107	1,1,1-TRICHLOROETHANE	N	UG/L	40	200				Table 1	M	M	0.82
161107	1,1,2,2-TETRACHLOROETHANE	N	UG/L	0.02	0.2				Table 1	M	M	0.70
161107	1,1,2-TRICHLOROETHANE	N	UG/L	0.5	5				Table 1	M	M	0.23
161107	1,1-DICHLOROETHANE	N	UG/L	85	850				Table 1	M	M	0.77
161107	1,1-DICHLOROETHYLENE	N	UG/L	0.7	7				Table 1	M	M	1.3
161107	1,1-DICHLOROBENZENE	N	UG/L	14	70				Table 1	M	M	0.38
161107	1,2,4-TRICHLOROBENZENE	N	UG/L	0.02	0.2				Table 1	M	M	0.29
161107	1,2-DIBROMO-3-CHLOROPROPANE	N	UG/L	0.005	0.05				Table 1	M	M	0.97
161107	1,2-DIBROMOETHANE (EDB)	N	UG/L	0.5	5				Table 1	M	M	1.4
161107	1,2-DICHLOROETHANE	N	UG/L	0.5	5				Table 1	M	M	0.41
161107	1,2-DICHLOROPROPANE	N	UG/L	0.5	5				Table 1	M	M	1.4
161107	2-HEXANONE	N	UG/L	50	500				Table 1	M	M	0.39
161107	4-METHYL-2-PENTANONE (MIBK)	N	UG/L	1800	9000				Table 1	M	M	0.73
161107	ACETONE	N	UG/L	0.5	5				Table 1	M	M	2.4
161107	BENZENE	N	UG/L	0.06	0.6				Table 1	M	M	4.1
161107	BROMODICHLOROMETHANE	N	UG/L	1	10				Table 1	M	M	0.39
161107	BROMOMETHANE	N	UG/L	200	1000				Table 1	M	M	2.3
161107	CARBON DISULFIDE	N	UG/L	0.5	5				Table 1	M	M	0.63
161107	CARBON TETRACHLORIDE	N	UG/L	20	100				Table 1	M	M	0.27
161107	CHLOROBENZENE	N	UG/L						Table 1	M	M	0.90

Hagen Farm Landfill

License Number: 02981
Facility ID Number: 113176030

Sample Date	Parameter	WDNR Point ID:	Qualifier Value	Units	PAL	ES	Type of Exceedance	Type of Standard	QC QC QC			WDNR		
									1	2	3	RL	LOQ	Lab Cert
02/10/2017	02TB	999	N	UG/L	80	400	Table 1	M	M	1.0	0.32	1.1	998310390	
16/11/07	CHLOROETHANE		N	UG/L	0.6	6	Table 1	M	M	1.0	0.34	1.1	998310390	
16/11/07	CHLOROFORM		N	UG/L	3	30	Table 1	M	M	1.0	0.35	1.2	998310390	
16/11/07	CHLOROMETHANE		N	UG/L	7	70	Table 1	M	M	1.0	0.81	2.7	998310390	
16/11/07	CIS-1,2-DICHLOROETHENE		N	UG/L	0.04	0.4	Table 1	M	M	1.0	0.36	1.2	998310390	
16/11/07	CIS-1,3-DICHLOROPROPENE		N	UG/L	6	60	Table 1	M	M	1.0	0.32	1.1	998310390	
16/11/07	DBROMOCHLOROMETHANE		N	UG/L			Table 1	M	M	1.0	0.41	1.4	998310390	
16/11/07	DBROMOMETHANE		N	UG/L	200	1000	Table 1	M	M	1.0	0.68	2.3	998310390	
16/11/07	DICHLORODIFLUOROMETHANE		N	UG/L	0.5	5	Table 1	M	M	1.0	0.44	1.5	998310390	
16/11/07	DICHLOROMETHANE		N	UG/L	140	700	Table 1	M	M	1.0	0.74	2.5	998310390	
16/11/07	ETHYLBENZENE		N	UG/L	698	3490	Table 1	M	M	1.0	0.88	2.9	998310390	
16/11/07	FLUOROTRICHLOROMETHANE		N	UG/L	120	600	Table 1	M	M	1.0	0.78	2.6	998310390	
16/11/07	M,DICHLOROBENZENE		N	UG/L	800	4000	Table 1	M	M	10	1.3	4.4	998310390	
16/11/07	METHYLETHYL KETONE (MEK)		N	UG/L	12	60	Table 1	M	M	1.0	0.16	0.53	998310390	
16/11/07	METHYL TERT-BUTYL ETHER (MTBE)		N	UG/L	10	100	Table 1	M	M	1.0	0.43	1.4	998310390	
16/11/07	NAPHTHALENE		N	UG/L	60	600	Table 1	M	M	1.0	0.79	2.6	998310390	
16/11/07	O-DICHLOROBENZENE		N	UG/L	15	75	Table 1	M	M	1.0	0.84	2.8	998310390	
16/11/07	P-DICHLOROBENZENE		N	UG/L	10	100	Table 1	M	M	1.0	0.73	2.4	998310390	
16/11/07	STYRENE		N	UG/L	0.5	5	Table 1	M	M	1.0	0.36	1.2	998310390	
16/11/07	TETRACHLOROETHYLENE		N	UG/L	10	50	Table 1	M	M	5.0	1.3	4.2	998310390	
16/11/07	TETRAHYDROFURAN		N	UG/L	160	800	Table 1	M	M	1.0	0.51	1.7	998310390	
16/11/07	TOLUENE		N	UG/L	20	100	Table 1	M	M	1.0	0.90	3.0	998310390	
16/11/07	TRANS-1,2-DICHLOROETHENE (TOTAL)		N	UG/L	0.04	0.4	Table 1	M	M	1.0	0.37	1.2	998310390	
16/11/07	TRANS-1,3-DICHLOROPROPENE		N	UG/L	0.44	4.4	Table 1	M	M	1.0	0.26	0.87	998310390	
16/11/07	TRIBROMOMETHANE		N	UG/L	0.5	5	Table 1	M	M	1.0	0.46	1.5	998310390	
16/11/07	TRICHLOROETHYLENE		N	UG/L	0.02	0.2	Table 1	M	M	1.0	0.90	3.0	998310390	
16/11/07	VINYL CHLORIDE		N	UG/L	0.02	0.2	Table 1	M	M	0.020	0.004	0.013	998310390	
16/11/07	VINYL CHLORIDE		N	UG/L	400	2000	Table 1	M	M	2.0	0.66	2.2	998310390	
Sample Point: 08FB		WDNR Point ID: 997												
16/11/07	1,1,1-TRICHLOROETHANE		N	UG/L	40	200	Table 1	M	M	1.0	0.82	2.7	998310390	
16/11/07	1,1,2,2-TETRACHLOROETHANE		N	UG/L	0.02	0.2	Table 1	M	M	1.0	0.21	0.70	998310390	
16/11/07	1,1,2-TRICHLOROETHANE		N	UG/L	0.5	5	Table 1	M	M	1.0	0.23	0.77	998310390	
16/11/07	1,1-DICHLOROETHANE		N	UG/L	85	850	Table 1	M	M	1.0	0.38	1.3	998310390	
16/11/07	1,1-DICHLOROETHYLENE		N	UG/L	0.7	7	Table 1	M	M	1.0	0.29	0.97	998310390	

Hagen Farm Landfill

License Number: 02981
 Facility ID Number: 113176030

Sample Date	Parameter	Qualifer	Value	Units	PAL	ES	Exceedance	Type of Standard	QC QC QC			WDNR		
									1	2	3	RL	LOQ	Lab Cert
	Sample Point: 08FB	WDNR Point ID:	997											
161107	1,2,4-TRICHLOROBENZENE	N	UG/L	14	70			M	M	1.0	0.41	1.4	998310390	Table 1
161107	1,2-DIBROMO-3-CHLOROPROPANE	N	UG/L	0.02	0.2			M	M	1.0	0.39	1.3	998310390	Table 1
161107	1,2-DIBROMOETHANE (EDB)	N	UG/L	0.005	0.05			M	M	1.0	0.73	2.4	998310390	Table 1
161107	1,2-DICHLOROETHANE	N	UG/L	0.5	5			M	M	1.0	0.21	0.70	998310390	Table 1
161107	1,2-DICHLOROPROPANE	N	UG/L	0.5	5			M	M	1.0	0.72	2.4	998310390	Table 1
161107	2-HEXANONE	N	UG/L	50	500			M	M	5.0	1.2	4.1	998310390	Table 1
161107	4-METHYL-2-PENTANONE (MBK)	N	UG/L	1800	9000			M	M	5.0	2.1	7.0	998310390	Table 1
161107	ACETONE	N	MGL					M	M	10.0	4.0	13.3	998310390	
161107	ALKALINITY-TOTAL AS CACO3 (FILT)	N	UG/L	0.5	5			M	M	1.0	0.41	1.4	998310390	Table 1
161107	BENZENE	N	UG/L	0.06	0.6			M	M	1.0	0.39	1.3	998310390	Table 1
161107	BROMODICHLOROMETHANE	N	UG/L	1	10			M	M	1.0	0.69	2.3	998310390	Table 1
161107	BROMOMETHANE	N	UG/L	200	1000			M	M	1.0	0.19	0.63	998310390	Table 1
161107	CARBON DISULFIDE	N	UG/L	0.5	5			M	M	1.0	0.27	0.90	998310390	Table 1
161107	CARBON TETRACHLORIDE	N	UG/L	20	100			M	M	1.0	0.75	2.5	998310390	Table 1
161107	CHLOROBENZENE	N	UG/L	80	400			M	M	1.0	0.32	1.1	998310390	Table 1
161107	CHLOROETHANE	N	UG/L	0.6	6			M	M	1.0	0.34	1.1	998310390	Table 1
161107	CHLOROFORM	N	UG/L	3	30			M	M	1.0	0.35	1.2	998310390	Table 1
161107	CHLOROMETHANE	N	UG/L	7	70			M	M	1.0	0.81	2.7	998310390	Table 1
161107	CIS-1,2-DICHLOROETHENE	N	UG/L	0.04	0.4			M	M	1.0	0.36	1.2	998310390	Table 1
161107	CIS-1,3-DICHLOROPROPENE	N	UG/L	6	60			M	M	1.0	0.32	1.1	998310390	Table 1
161107	DIBROMOCHLOROMETHANE	N	UG/L					M	M	1.0	0.41	1.4	998310390	
161107	DIBROMOMETHANE	N	UG/L	200	1000			M	M	1.0	0.68	2.3	998310390	Table 1
161107	DICHLORODIFLUOROMETHANE	N	UG/L	0.5	5			M	M	1.0	0.44	1.5	998310390	Table 1
161107	DICHLOROMETHANE	N	UG/L	140	700			M	M	1.0	0.74	2.5	998310390	Table 1
161107	ETHYL BENZENE	N	UG/L	25	50			M	M	2.0	0.40	1.3	998310390	Table 2
161107	FLUOROTRICHLOROMETHANE	N	UG/L	698	3490			M	M	1.0	0.88	2.9	998310390	Table 1
161107	IRON-DISSOLVED AS FE	N	MGL	0.15	0.3			M	M	0.030	0.019	0.064	998310390	Table 2
161107	MANGANESE-DISSOLVED AS MN	N	UG/L	60	300			M	M	2.0	0.40	1.3	998310390	Table 1
161107	MANGANESE-DISSOLVED AS MN	N	UG/L	25	50			M	M	2.0	0.40	1.3	998310390	Table 2
161107	M-DICHLOROBENZENE	N	UG/L	120	600			M	M	1.0	0.78	2.6	998310390	Table 1
161107	METHYL ETHYL KETONE (MEK)	N	UG/L	800	4000			M	M	10	1.3	4.4	998310390	Table 1
161107	METHYL TERT-BUTYL ETHER (MTBE)	N	UG/L	12	60			M	M	1.0	0.16	0.53	998310390	Table 1
161107	NAPHTHALENE	N	UG/L	10	100			M	M	1.0	0.43	1.4	998310390	Table 1
161107	NITRITE PLUS NITRATE-DISSOLVED AS N	N	MGL AS N	2	10			M	M	0.050	0.020	0.067	998310390	Table 1

Hagen Farm Landfill

License Number: 02981
Facility ID Number: 113176030

Sample Date	Parameter		Qualifier	Value	Units	PAL	ES	Type of Exceedance	Type of Standard	QC	QC	QC	WDNR
										1	2	3	
Sample Point: 08FB WDNR Point ID: 997													
161107	O-DICHLOROBENZENE	N	UG/L	60	600				Table 1	M	M	1.0	0.79
161107	P-DICHLOROBENZENE	N	UG/L	15	75				Table 1	M	M	1.0	0.84
161107	PH-FIELD		S.U.										
161107	SAMPLE COLOR	N	NONE										
161107	SAMPLE ODOR	N	NONE										
161107	SAMPLE TEMPERATURE		18.6	DEGREES C									
161107	SAMPLE TURBIDITY	N	NONE										
161107	SPECIFIC CONDUCTANCE-FIELD		8	UMHOS/CM									
161107	STYRENE	N	UG/L	10	100				Table 1	M	M	1.0	0.73
161107	SULFATE-DISSOLVED AS SO4	N	MGL	125	250				Table 2	M	M	2.0	0.35
161107	TETRACHLOROETHYLENE	N	UG/L	0.5	5				Table 1	M	M	1.0	0.36
161107	TETRAHYDROFURAN	N	UG/L	10	50				Table 1	M	M	5.0	1.3
161107	TOLUENE	N	UG/L	160	800				Table 1	M	M	1.0	0.51
161107	TRANS-1,2-DICHLOROETHENE (TOTAL)	N	UG/L	20	100				Table 1	M	M	1.0	0.90
161107	TRANS-1,3-DICHLOROPROPENE	N	UG/L	0.04	0.4				Table 1	M	M	1.0	0.37
161107	TRIBROMOMETHANE	N	UG/L	0.44	4.4				Table 1	M	M	1.0	0.26
161107	TRICHLOROETHYLENE	N	UG/L	0.5	5				Table 1	M	M	1.0	0.46
161107	VINYL CHLORIDE	N	UG/L	0.02	0.2				Table 1	M	M	0.020	0.004
161107	VINYL CHLORIDE	N	UG/L	0.02	0.2				Table 1	M	M	1.0	0.90
161107	XYLENES-TOTAL	N	UG/L	400	2000				Table 1	M	M	2.0	0.66
Sample Point: MW100 WDNR Point ID: 175													
161107	GROUNDWATER ELEVATION			862.76	FT MSL								
Sample Point: MW-22 WDNR Point ID: 060													
161107	1,1,1-TRICHLOROETHANE	N	UG/L	40	200				Table 1	M	M	1.0	0.82
161107	1,1,2,2-TETRACHLOROETHANE	N	UG/L	0.02	0.2				Table 1	M	M	1.0	0.21
161107	1,1,2-TRICHLOROETHANE	N	UG/L	0.5	5				Table 1	M	M	1.0	0.23
161107	1,1-DICHLOROETHANE	N	UG/L	85	850				Table 1	M	M	1.0	0.38
161107	1,1-DICHLOROETHYLENE	N	UG/L	0.7	7				Table 1	M	M	1.0	0.29
161107	1,2,4-TRICHLOROBENZENE	N	UG/L	14	70				Table 1	M	M	1.0	0.41
161107	1,2-DIBROMO-3-CHLOROPROPANE	N	UG/L	0.02	0.2				Table 1	M	M	1.0	0.39
161107	1,2-DIBROMOETHANE (EDB)	N	UG/L	0.005	0.05				Table 1	M	M	1.0	0.73
161107	1,2-DICHLOROETHANE	N	UG/L	0.5	5				Table 1	M	M	1.0	0.21
161107	1,2-DICHLOROPROPANE	N	UG/L	0.5	5				Table 1	M	M	1.0	0.72

Hagen Farm Landfill

License Number: 02981
Facility ID Number: 113176030

Sample Date	Parameter	WDNR Point ID:	Qualifier	Value	Units	PAL	ES	Exceedance	Type of Standard	QC 1	QC 2	QC 3	WDNR
									QC Lab Cert	QC RL	QC LOD	QC LOQ	QC Lab Cert
161107	2-HEXANONE	N	UG/L	50	50				M	M	5.0	1.2	4.1
161107	4-METHYL-2-PENTANONE (MBK)	N	UG/L	1800	9000				M	M	5.0	2.1	7.0
161107	ACETONE	N	MGL	0.5	5				M	M	10	3.0	10
161107	ALKALINITY-TOTAL AS CACO3 (FILT)	376	UG/L	0.06	0.6				M	M	50.0	20.0	66.7
161107	BENZENE	N	UG/L	1	10				M	M	1.0	0.41	1.4
161107	BROMODICHLOROMETHANE	N	UG/L	200	1000				M	M	1.0	0.39	1.3
161107	BROMOMETHANE	N	UG/L	20	100				M	M	1.0	0.69	2.3
161107	CARBON DISULFIDE	N	UG/L	80	400				M	M	1.0	0.19	0.63
161107	CARBON TETRACHLORIDE	N	UG/L	0.6	6				M	M	1.0	0.27	0.90
161107	CHLOROBENZENE	N	UG/L	3	30				M	M	1.0	0.75	2.5
161107	CHLOROETHANE	N	UG/L	7	70				M	M	1.0	0.32	1.1
161107	CHLOROFORM	N	UG/L	0.04	0.4				M	M	1.0	0.34	1.1
161107	CHLORMETHANE	N	UG/L	6	60				M	F	1.0	0.35	1.2
161107	CIS-1,2-DICHLOROETHENE	N	UG/L	200	1000				M	M	1.0	0.81	2.7
161107	CIS-1,3-DICHLOROPROPENE	N	UG/L	0.5	5				M	M	1.0	0.36	1.2
161107	DBROMOCHLOROMETHANE	N	MGL	140	700				M	M	1.0	0.32	1.1
161107	DBROMOMETHANE	N	UG/L	860.03	FT MSL				M	M	1.0	0.41	1.4
161107	DICHLORODIFLUOROMETHANE	N	UG/L	0.019	MGL	0.15	0.3		M	M	0.030	0.019	0.064
161107	DISSOLVED OXYGEN, FIELD BY PROBE	N	MGL	2.2	UG/L	60	300		M	M	2.0	0.40	1.3
161107	DISSOLVED OXYGEN, FIELD BY PROBE	N	UG/L	2.2	UG/L	25	50		M	M	1.0	0.78	2.6
161107	ETHYLBENZENE	N	UG/L	800	4000				M	M	10	1.3	4.4
161107	FLUOROTRICHLOROMETHANE	N	UG/L	12	60				M	M	1.0	0.16	0.53
161107	GROUNDWATER ELEVATION	J	UG/L	2.2	UG/L	10	100		M	M	1.0	0.43	1.4
161107	IRON-DISSOLVED AS FE	N	UG/L	120	600				M	M	0.050	0.020	0.067
161107	MANGANESE-DISSOLVED AS MN	N	UG/L	0.27	MGL AS N	2	10		M	M	1.0	0.79	2.6
161107	M-DICHLOROBENZENE	N	UG/L	60	600				M	M	1.0	0.84	2.8
161107	METHYL ETHYL KETONE (MEK)	N	UG/L	15	MILLIVOLTS				M	M	Table 1	998310390	998310390
161107	METHYL TERT-BUTYL ETHER (MTBE)	N	UG/L	15	75				M	M	Table 1	998310390	998310390
161107	NAPHTHALENE	N	UG/L	15	75				M	M	Table 1	998310390	998310390
161107	NITRITE PLUS NITRATE-DISSOLVED AS N	N	UG/L	15	75				M	M	Table 1	998310390	998310390
161107	O-DICHLOROBENZENE	N	UG/L	15	75				M	M	Table 1	998310390	998310390
161107	P-DICHLOROBENZENE	N	UG/L	15	75				M	M	Table 1	998310390	998310390

Hagen Farm Landfill

License Number: 02981
Facility ID Number: 113176030

Sample Date	Parameter		Qualifier	Value	Units	PAL	ES	Type of Exceedance	Type of Standard	QC 1	QC 2	QC 3	WDNR RL	LOQ	Lab Cert
	Sample Point: MW-22	WDNR Point ID:	060												
161107	PH-FIELD			7.86	S.U.										
161107	SAMPLE COLOR	N			NONE										
161107	SAMPLE ODOR	N			NONE										
161107	SAMPLE TEMPERATURE	N		13.9	DEGREES C										
161107	SAMPLE TURBIDITY	N			NONE										
161107	SPECIFIC CONDUCTANCE-FIELD	N		636	UMHO/CM	10	100			Table 1	M	M	1.0	0.73	2.4
161107	STYRENE	N		10.3	UG/L	125	250			Table 2	M	M	2.0	0.35	1.2
161107	SULFATE-DISSOLVED AS SO4	N			MG/L	0.5	5			Table 1	M	M	1.0	0.36	1.2
161107	TETRACHLOROETHYLENE	N			UG/L	10	50			Table 1	M	M	5.0	1.3	4.2
161107	TETRAHYDROFURAN	N			UG/L	160	800			Table 1	M	M	1.0	0.51	1.7
161107	TOLUENE	N			UG/L	20	100			Table 1	M	M	1.0	0.90	3.0
161107	TRANS-1,2-DICHLOROETHENE (TOTAL)	N			UG/L	0.04	0.4			Table 1	M	M	1.0	0.37	1.2
161107	TRANS-1,3-DICHLOROPROPENE	N			UG/L	0.44	4.4			Table 1	M	M	1.0	0.26	0.87
161107	TRIBROMOMETHANE	N			UG/L	0.5	5			Table 1	M	M	1.0	0.46	1.5
161107	TRICHLOROETHYLENE	N			UG/L	0.02	0.2			Table 1	M	M	1.0	0.90	3.0
161107	VINYL CHLORIDE	N			UG/L	0.02	0.2			Table 1	M	M	0.020	0.004	0.013
161107	VINYL CHLORIDE	N			UG/L	400	2000			Table 1	M	M	2.0	0.66	2.2
161107	XYLENES-TOTAL	N													
	Sample Point: MW30	WDNR Point ID:	130												
161107	GROUNDWATER ELEVATION			859.08	FT MSL										
	Sample Point: MW32	WDNR Point ID:	145												
161107	GROUNDWATER ELEVATION			857.06	FT MSL										
	Sample Point: MW33	WDNR Point ID:	155												
161107	GROUNDWATER ELEVATION			859.65	FT MSL										
	Sample Point: MW7	WDNR Point ID:	025												
161107	1,1,1-TRICHLOROETHANE	N			UG/L	40	200			Table 1	M	M	1.0	0.82	2.7
161107	1,1,2,2-TETRACHLOROETHANE	N			UG/L	0.02	0.2			Table 1	M	M	1.0	0.21	0.70
161107	1,1,2-TRICHLOROETHANE	N			UG/L	0.5	5			Table 1	M	M	1.0	0.23	0.77
161107	1,1-DICHLOROETHANE	N			UG/L	85	850			Table 1	M	M	1.0	0.38	1.3
161107	1,1-DICHLOROETHYLENE	N			UG/L	0.7	7			Table 1	M	M	1.0	0.29	0.97
161107	1,2,4-TRICHLOROBENZENE	N			UG/L	14	70			Table 1	M	M	1.0	0.41	1.4
161107	1,2-DIBROMO-3-CHLOROPROPANE	N			UG/L	0.02	0.2			Table 1	M	M	1.0	0.39	1.3

Hagen Farm Landfill

License Number: 02981
Facility ID Number: 113176030

Sample Date	Parameter	WDNR Point ID:	WDNR Point ID:	Qualifier	Value	Units	PAL	ES	Exceedance	Type of Standard	Type of QC	QC 1	QC 2	QC 3	WDNR		
															RL	LOQ	Lab Cert
161107	1,2-DIBROMOETHANE (EDB)	N	N	UG/L	0.005	0.05				Table 1	M	M	1.0	0.73	2.4	998310390	
161107	1,2-DICHLOROETHANE	N	N	UG/L	0.5	5				Table 1	M	M	1.0	0.21	0.70	998310390	
161107	1,2-DICLOROPROPANE	N	N	UG/L	0.5	5				Table 1	M	M	1.0	0.72	2.4	998310390	
161107	2-HEXANONE	N	N	UG/L	0.5	5				Table 1	M	M	5.0	1.2	4.1	998310390	
161107	4-METHYL-2-PENTANONE (MBK)	N	N	UG/L	50	500				Table 1	M	M	5.0	2.1	7.0	998310390	
161107	ACETONE	N	N	UG/L	1800	9000				Table 1	M	M	10	3.0	10	998310390	
161107	BENZENE	N	N	UG/L	0.5	5				Table 1	M	M	1.0	0.41	1.4	998310390	
161107	BROMODICHLOROMETHANE	N	N	UG/L	0.06	0.6				Table 1	M	M	1.0	0.39	1.3	998310390	
161107	BROMOMETHANE	N	N	UG/L	1	10				Table 1	M	M	1.0	0.69	2.3	998310390	
161107	CARBON DISULFIDE	N	N	UG/L	200	1000				Table 1	M	M	1.0	0.19	0.63	998310390	
161107	CARBON TETRACHLORIDE	N	N	UG/L	0.5	5				Table 1	M	M	1.0	0.27	0.90	998310390	
161107	CHLOROBENZENE	N	N	UG/L	20	100				Table 1	M	M	1.0	0.75	2.5	998310390	
161107	CHLOROETHANE	N	N	UG/L	80	400				Table 1	M	M	1.0	0.32	1.1	998310390	
161107	CHLOROFORM	N	N	UG/L	0.6	6				Table 1	M	M	1.0	0.34	1.1	998310390	
161107	CHLOROMETHANE	N	N	UG/L	3	30				Table 1	M	M	1.0	0.35	1.2	998310390	
161107	CIS-1,2-DICHLOROETHENE	N	N	UG/L	7	70				Table 1	M	M	1.0	0.81	2.7	998310390	
161107	CIS-1,3-DICHLOROPROPENE	N	N	UG/L	0.04	0.4				Table 1	M	M	1.0	0.36	1.2	998310390	
161107	DBROMOCHLOROMETHANE	N	N	UG/L	6	60				Table 1	M	M	1.0	0.32	1.1	998310390	
161107	DBROMOMETHANE	N	N	UG/L	200	1000				Table 1	M	M	1.0	0.41	1.4	998310390	
161107	DICHLORODIFLUOROMETHANE	N	N	UG/L	0.5	5				Table 1	M	M	1.0	0.68	2.3	998310390	
161107	DICHLOROMETHANE	N	N	UG/L	140	700				Table 1	M	M	1.0	0.44	1.5	998310390	
161107	ETHYL BENZENE	N	N	UG/L	698	3490				Table 1	M	M	1.0	0.74	2.5	998310390	
161107	FLUOROTRICHLOROMETHANE	N	N	UG/L	120	600				Table 1	M	M	1.0	0.88	2.9	998310390	
161107	M-DICHLOROBENZENE	N	N	UG/L	800	4000				Table 1	M	M	1.0	0.78	2.6	998310390	
161107	METHYL ETHYL KETONE (MEK)	N	N	UG/L	12	60				Table 1	M	M	1.0	1.3	4.4	998310390	
161107	METHYL TERT-BUTYL ETHER (MTBE)	N	N	UG/L	10	100				Table 1	M	M	1.0	0.16	0.53	998310390	
161107	NAPHTHALENE	N	N	UG/L	60	600				Table 1	M	M	1.0	0.43	1.4	998310390	
161107	O-DICHLOROBENZENE	N	N	UG/L	15	75				Table 1	M	M	1.0	0.79	2.6	998310390	
161107	P-DICHLOROBENZENE	N	N	UG/L	10	100				Table 1	M	M	1.0	0.84	2.8	998310390	
161107	STYRENE	N	N	UG/L	0.5	5				Table 1	M	M	1.0	0.73	2.4	998310390	
161107	TETRACHLOROETHYLENE	N	N	UG/L	10	50				Table 1	M	M	1.0	0.36	1.2	998310390	
161107	TETRAHYDROFURAN	N	N	UG/L	160	800				Table 1	M	M	5.0	1.3	4.2	998310390	
161107	TOLUENE	N	N	UG/L	20	100				Table 1	M	M	1.0	0.51	1.7	998310390	
161107	TRANS-1,2-DICHLOROETHENE (TOTAL)	N	N							Table 1	M	M	1.0	0.90	3.0	998310390	

Hagen Farm Landfill

License Number: 02981
 Facility ID Number: 113176030

Sample Date	Parameter	WDNR Point ID:	Qualifier Value	Units	PAL	ES	Exceedance	Type of Standard	QC QC QC			WDNR		
									1	2	3	RL	LOD	LOQ
Sample Point: MW7 WDNR Point ID: 025														
161107	TRANS-1,3-DICHLOROPROPENE	N	UG/L	0.04	0.4			Table 1	M	M	1.0	0.37	1.2	998310390
161107	TRIBROMOMETHANE	N	UG/L	0.44	4.4			Table 1	M	M	1.0	0.26	0.87	998310390
161107	TRICHLOROETHYLENE	N	UG/L	0.5	5			Table 1	M	M	1.0	0.46	1.5	998310390
161107	VINYL CHLORIDE	N	UG/L	0.02	0.2			Table 1	M	M	0.020	0.004	0.013	998310390
161107	VINYL CHLORIDE	N	UG/L	0.02	0.2			Table 1	M	M	1.0	0.90	3.0	998310390
161107	XYLENES-TOTAL	N	UG/L	400	2000			Table 1	M	M	2.0	0.66	2.2	998310390
Sample Point: OB8M WDNR Point ID: 035														
161107	1,1,1-TRICHLOROETHANE	N	UG/L	40	200			Table 1	M	M	1.0	0.82	2.7	998310390
161107	1,1,2,2-TETRACHLOROETHANE	N	UG/L	0.02	0.2			Table 1	M	M	1.0	0.21	0.70	998310390
161107	1,1,2-TRICHLOROETHANE	N	UG/L	0.5	5			Table 1	M	M	1.0	0.23	0.77	998310390
161107	1,1-DICHLOROETHANE	N	UG/L	85	850			Table 1	M	M	1.0	0.38	1.3	998310390
161107	1,1-DICHLOROETHYLENE	N	UG/L	0.7	7			Table 1	M	M	1.0	0.29	0.97	998310390
161107	1,2-DICHLOROBENZENE	N	UG/L	14	70			Table 1	M	M	1.0	0.41	1.4	998310390
161107	1,2-DIBROMO-3-CHLOROPROPANE	N	UG/L	0.02	0.2			Table 1	M	M	1.0	0.39	1.3	998310390
161107	1,2-DIBROMOETHANE (EDB)	N	UG/L	0.005	0.05			Table 1	M	M	1.0	0.73	2.4	998310390
161107	1,2-DICHLOROETHANE	N	UG/L	0.5	5			Table 1	M	M	1.0	0.21	0.70	998310390
161107	1,2-DICHLOROPROPANE	N	UG/L	0.5	5			Table 1	M	M	1.0	0.72	2.4	998310390
161107	2-HEXANONE	N	UG/L						M	M	5.0	1.2	4.1	998310390
161107	4-METHYL-2-PENTANONE (MBK)	N	UG/L	50	500			Table 1	M	M	5.0	2.1	7.0	998310390
161107	ACETONE	N	UG/L	1800	9000			Table 1	M	M	10	3.0	10	998310390
161107	ALKALINITY-TOTAL AS CaCO ₃ (FILT)	288	MGL						M	M	50.0	20.0	66.7	998310390
161107	BENZENE	N	UG/L	0.5	5			Table 1	M	M	1.0	0.41	1.4	998310390
161107	BROMODICHLOROMETHANE	N	UG/L	0.06	0.6			Table 1	M	M	1.0	0.39	1.3	998310390
161107	BROMOMETHANE	N	UG/L	1	10			Table 1	M	M	1.0	0.69	2.3	998310390
161107	CARBON DISULFIDE	N	UG/L	200	1000			Table 1	M	M	1.0	0.19	0.63	998310390
161107	CARBON TETRACHLORIDE	N	UG/L	0.5	5			Table 1	M	M	1.0	0.27	0.90	998310390
161107	CHLOROBENZENE	N	UG/L	20	100			Table 1	M	M	1.0	0.75	2.5	998310390
161107	CHLOROETHANE	N	UG/L	80	400			Table 1	M	M	1.0	0.32	1.1	998310390
161107	CHLOROFORM	N	UG/L	0.6	6			Table 1	M	M	1.0	0.34	1.1	998310390
161107	CHLOROMETHANE	N	UG/L	3	30			Table 1	M	M	1.0	0.35	1.2	998310390
161107	CIS-1,2-DICHLOROETHENE	N	UG/L	7	70			Table 1	M	M	1.0	0.81	2.7	998310390
161107	CIS-1,3-DICHLOROPROPENE	N	UG/L	0.04	0.4			Table 1	M	M	1.0	0.36	1.2	998310390
161107	DIBROMOCHLOROMETHANE	N	UG/L	6	60			Table 1	M	M	1.0	0.32	1.1	998310390
161107	DIBROMOMETHANE	N	UG/L						M	M	1.0	0.41	1.4	998310390

Hagen Farm Landfill

License Number: 02981
Facility ID Number: 113176030

Sample Date	Parameter	Qualifier	Value	Units	PAL	ES	Type of Exceedance	Type of Standard	QC 1	QC 2	QC 3	WDNR RL	WDNR LOD	WDNR LOQ	WDNR Lab Cert
Sample Point: OBSM WDNR Point ID: 035															
161107	DICHLORODIFLUOROMETHANE	N		UG/L	200	1000			M	M	M	1.0	0.68	2.3	998310390
161107	DICHLOROMETHANE	N		UG/L	0.5	5			M	M	M	1.0	0.44	1.5	998310390
161107	DISOLVED OXYGEN, FIELD BY PROBE	N	5.9	MGL					Table 1	M	M	1.0	0.74	2.5	998310390
161107	ETHYLBENZENE	N		UG/L	140	700			Table 1	M	M	1.0	0.88	2.9	998310390
161107	FLUOROTRICHLOROMETHANE	N		UG/L	698	3490			Table 1	M	M	1.0			
161107	GROUNDWATER ELEVATION			FT MSL					Table 2	M	M	0.030	0.019	0.064	998310390
161107	IRON-DISSOLVED AS FE	N	0.20	MGL	0.15	0.3	P		Table 1	M	M	2.0	0.40	1.3	998310390
161107	MANGANESE-DISSOLVED AS MN	N	146	UG/L	60	300	P		Table 2	M	M	2.0	0.40	1.3	998310390
161107	MANGANESE-DISSOLVED AS MN	N	146	UG/L	25	50	E		Table 1	M	M	1.0	0.78	2.6	998310390
161107	M-DICHLOROBENZENE	N		UG/L	120	600			Table 1	M	M	1.0			
161107	M-DICHLOROBENZENE	N		UG/L	800	4000			Table 1	M	M	10	1.3	4.4	998310390
161107	METHYL ETHYL KETONE (MEK)	N		UG/L	12	60			Table 1	M	M	1.0	0.16	0.53	998310390
161107	METHYL TERT-BUTYL ETHER (MTBE)	N		UG/L	10	100			Table 1	M	M	1.0	0.43	1.4	998310390
161107	NAPHTHALENE	N		UG/L	2	10			Table 1	M	M	0.050	0.020	0.067	998310390
161107	NITRITE PLUS NITRATE-DISSOLVED AS N	N	0.28	MGL/AS N	2	10			Table 1	M	M	1.0	0.79	2.6	998310390
161107	O-DICHLOROBENZENE	N		UG/L	60	600			Table 1	M	M	1.0			
161107	OXIDATION REDUCTION POTENTIAL	N	100	MILLIVOLTS					Table 1	M	M	1.0	0.84	2.8	998310390
161107	P-DICHLOROBENZENE	N		UG/L	15	75			Table 1	M	M	1.0			
161107	PH-FIELD	N	7.56	S.U.											
161107	SAMPLE COLOR	N		NONE											
161107	SAMPLE ODOR	N		NONE											
161107	SAMPLE TEMPERATURE	N	13.8	DEGREES C											
161107	SAMPLE TURBIDITY	N		NONE											
161107	SPECIFIC CONDUCTANCE-FIELD	N	885	UMHOS/CM					Table 1	M	M	1.0	0.73	2.4	998310390
161107	STYRENE	N	25.7	MGL	125	250			Table 2	M	M	2.0	0.35	1.2	998310390
161107	SULFATE-DISSOLVED AS SO4	N		UG/L	0.5	5			Table 1	M	M	1.0	0.36	1.2	998310390
161107	TETRACHLOROETHYLENE	N		UG/L	10	50			Table 1	M	M	5.0	1.3	4.2	998310390
161107	TETRAHYDROFURAN	N		UG/L	160	800			Table 1	M	M	1.0	0.51	1.7	998310390
161107	TOLUENE	N		UG/L	20	100			Table 1	M	M	1.0	0.90	3.0	998310390
161107	TRANS-1,2-DICHLOROETHENE (TOTAL)	N		UG/L	0.04	0.4			Table 1	M	M	1.0	0.37	1.2	998310390
161107	TRANS-1,3-DICHLOROPROPENE	N		UG/L	0.44	4.4			Table 1	M	M	1.0	0.26	0.87	998310390
161107	TRIBROMOMETHANE	N		UG/L	0.5	5			Table 1	M	M	1.0	0.46	1.5	998310390
161107	TRICHLOROETHYLENE	N		UG/L	0.02	0.2			Table 1	M	M	1.0	0.90	3.0	998310390
161107	VINYL CHLORIDE	N	0.85	UG/L	0.02	0.2	E		Table 1	M	M	0.020	0.004	0.013	998310390

Hagen Farm Landfill

License Number: 02981
Facility ID Number: 113176030

Sample Date	Parameter	Qualifier	Value	Units	PAL	ES	Type of Exceedance	Type of Standard	QC 1	QC 2	QC 3	WDNR RL	LOQ	Lab Cert
Sample Point: OB8M	WDNR Point ID: 035	N	UG/L	400	2000			Table 1	M	M	M	2.0	0.66	2.2
161107 XYLENES-TOTAL	WDNR Point ID: 010	N	UG/L	40	200			Table 1	M	M	M	1.0	0.82	2.7
161107 1,1,1-TRICHLOROETHANE		N	UG/L	0.02	0.2			Table 1	M	M	M	1.0	0.21	2.7
161107 1,1,2,2-TETRACHLOROETHANE		N	UG/L	0.5	5			Table 1	M	M	M	1.0	0.23	0.77
161107 1,1,2-TRICHLOROETHANE		N	UG/L	85	850			Table 1	M	M	M	1.0	0.38	1.3
161107 1,1-DICHLOROETHANE		N	UG/L	0.7	7			Table 1	M	M	M	1.0	0.29	0.97
161107 1,1-DICHLOROETHYLENE		N	UG/L	14	70			Table 1	M	M	M	1.0	0.41	1.4
161107 1,2,4-TRICHLOROBENZENE		N	UG/L	0.02	0.2			Table 1	M	M	M	1.0	0.39	1.3
161107 1,2-DIBROMO-3-CHLOROPROPANE		N	UG/L	0.005	0.05			Table 1	M	M	M	1.0	0.73	2.4
161107 1,2-DIBROMOETHANE (EDB)		N	UG/L	0.5	5			Table 1	M	M	M	1.0	0.21	0.70
161107 1,2-DIBROMOETHANE		N	UG/L	0.5	5			Table 1	M	M	M	1.0	0.72	2.4
161107 1,2-DICHLOROPROPANE		N	UG/L	0.5	5			Table 1	M	M	M	5.0	1.2	4.1
161107 1,2-DICHLOROETHANE		N	UG/L	50	500			Table 1	M	M	M	5.0	2.1	7.0
161107 1,2,4-METHYL-2-PENTANONE (MBK)		N	UG/L	1800	9000			Table 1	M	M	M	10	3.0	10
161107 ACETONE		N	MGL	0.5	5			Table 1	M	M	M	50.0	20.0	66.7
161107 ALKALINITY-TOTAL AS CACO3 (FILT)		351	UG/L	0.06	0.6			Table 1	M	M	M	1.0	0.41	1.4
161107 BENZENE		N	UG/L	1	10			Table 1	M	M	M	1.0	0.39	1.3
161107 BROMODICHLOROMETHANE		N	UG/L	200	1000			Table 1	M	M	M	1.0	0.69	2.3
161107 BROMOMETHANE		N	UG/L	80	400			Table 1	M	M	M	1.0	0.32	1.1
161107 CARBON DISULFIDE		N	UG/L	0.6	6			Table 1	M	M	M	1.0	0.19	0.63
161107 CARBON TETRACHLORIDE		N	UG/L	0.5	5			Table 1	M	M	M	1.0	0.27	0.90
161107 CHLOROBENZENE		N	UG/L	20	100			Table 1	M	M	M	1.0	0.75	2.5
161107 CHLOROETHANE		N	UG/L	0.04	0.4			Table 1	M	M	M	1.0	0.32	1.1
161107 CHLOROFORM		N	UG/L	6	60			Table 1	M	M	M	1.0	0.36	1.1
161107 CHLOROMETHANE		N	UG/L	3	30			Table 1	M	F	M	1.0	0.35	1.2
161107 CIS-1,2-DICHLOROETHENE		N	UG/L	7	70			Table 1	M	M	M	1.0	0.81	2.7
161107 CIS-1,3-DICHLOROPROPENE		N	UG/L	0.04	0.4			Table 1	M	M	M	1.0	0.32	1.2
161107 DIBROMOCHLOROMETHANE		N	UG/L	6	60			Table 1	M	M	M	1.0	0.32	1.1
161107 DIBROMOMETHANE		N	MGL	200	1000			Table 1	M	M	M	1.0	0.41	1.4
161107 DICHLORODIFLUOROMETHANE		N	UG/L	0.5	5			Table 1	M	M	M	1.0	0.68	2.3
161107 DISOLVED OXYGEN, FIELD BY PROBE		N	MGL	140	700			Table 1	M	M	M	1.0	0.44	1.5
161107 ETHYLBENZENE		N	UG/L	698	3490			Table 1	M	M	M	1.0	0.88	2.9
161107 FLUOROTRICHLOROMETHANE		N	UG/L	7.7				Table 1	M	M	M	1.0	0.74	2.5

Hagen Farm Landfill

License Number: 02981
Facility ID Number: 113176030

Sample Date	Parameter	Qualifier	Value	Units	PAL	ES	Exceedance	Type of Standard	QC QC QC			WDNR	
									1	2	3		
	Sample Point: OBS-1A	WDNR Point ID:	010										
161107	GROUNDWATER ELEVATION	N	839.41	FT MSL					M	M	0.030	0.019	0.064
161107	IRON-DISSOLVED AS FE			MG/L	0.15	0.3			M	M	2.0	0.40	1.3
161107	MANGANESE-DISSOLVED AS MN	N	2.3	UG/L	60	300			M	M	2.0	0.40	1.3
161107	MANGANESE-DISSOLVED AS MN		2.3	UG/L	25	50			M	M	1.0	0.78	2.6
161107	M-DICHLOROBENZENE	N		UG/L	120	600			M	M	10	1.3	4.4
161107	METHYL ETHYL KETONE (MEK)	N		UG/L	800	4000			M	M	1.0	0.16	0.53
161107	METHYL TERT-BUTYL ETHER (MTBE)	N		UG/L	12	60			M	M	1.0	0.43	1.4
161107	NAPHTHALENE	N		UG/L	10	100			M	M	0.050	0.020	0.067
161107	NITRITE PLUS NITRATE-DISSOLVED AS N	N	0.32	MG/L AS N	2	10			M	M	1.0	0.79	2.6
161107	O-DICHLOROBENZENE	N		UG/L	60	600			M	M	1.0	0.84	2.8
161107	OXIDATION REDUCTION POTENTIAL			212	MILLIVOLTS								
161107	P-DICHLOROBENZENE	N		UG/L	15	75			M	M	1.0	0.73	2.4
161107	PH-FIELD			S.U.					M	M	2.0	0.35	1.2
161107	SAMPLE COLOR	N		NONE					M	M	1.0	0.36	1.2
161107	SAMPLE ODOR	N		NONE					M	M	5.0	1.3	4.2
161107	SAMPLE TEMPERATURE	N	14.5	DEGREES C					M	M	1.0	0.51	1.7
161107	SAMPLE TURBIDITY	N		NONE					M	M	1.0	0.90	3.0
161107	SPECIFIC CONDUCTANCE-FIELD	N	598	UMHOS/CM					M	M	1.0	0.37	1.2
161107	STYRENE	N	4.3	MG/L	125	250			M	M	2.0	0.35	1.2
161107	SULFATE-DISSOLVED AS SO4	N		UG/L	0.5	5			M	M	1.0	0.36	1.2
161107	TETRACHLOROETHYLENE	N		UG/L	10	50			M	M	5.0	1.3	4.2
161107	TETRAHYDROFURAN	N		UG/L	160	800			M	M	1.0	0.51	1.7
161107	TOLUENE	N		UG/L	20	100			M	M	1.0	0.90	3.0
161107	TRANS-1,2-DICHLOROETHENE (TOTAL)	N		UG/L	0.04	0.4			M	M	1.0	0.37	1.2
161107	TRANS-1,3-DICHLOROPROPENE	N		UG/L	0.44	4.4			M	M	1.0	0.26	0.87
161107	TRIBROMOMETHANE	N		UG/L	0.5	5			M	M	1.0	0.46	1.5
161107	TRICHLOROETHYLENE	N		UG/L	0.02	0.2			M	M	1.0	0.90	3.0
161107	VINYL CHLORIDE	N		UG/L	0.02	0.2			M	M	0.020	0.004	0.013
161107	VINYL CHLORIDE	N		UG/L	400	2000			M	M	2.0	0.66	2.2
161107	XYLENES-TOTAL	N		UG/L					M	M			
	Sample Point: OBS-1B	WDNR Point ID:	015										
161107	1,1,1-TRICHLOROETHANE	N		UG/L	40	200			M	M	1.0	0.82	2.7
161107	1,1,2,2-TETRACHLOROETHANE	N		UG/L	0.02	0.2			M	M	1.0	0.21	0.70
161107	1,1,2-TRICHLOROETHANE	N		UG/L	0.5	5			M	M	1.0	0.23	0.77

Hagen Farm Landfill

License Number: 02981
Facility ID Number: 113176030

Sample Date	Parameter	WDNR Point ID:	Qualifier	Value	Units	PAL	ES	Type of Exceedance	Type of Standard	QC QC QC			WDNR		
										1	2	3	RL	LOQ	Lab Cert
161107	1,1-DICHLOROETHANE	N		UG/L	85	850			Table 1	M	M	1.0	0.38	1.3	998310390
161107	1,1-DICHLOROETHYLENE	N		UG/L	0.7	7			Table 1	M	M	1.0	0.29	0.97	998310390
161107	1,2,4-TRICHLOROBENZENE	N		UG/L	14	70			Table 1	M	M	1.0	0.41	1.4	998310390
161107	1,2-DIBROMO-3-CHLOROPROPANE	N		UG/L	0.02	0.2			Table 1	M	M	1.0	0.39	1.3	998310390
161107	1,2-DIBROMOETHANE (EDB)	N		UG/L	0.005	0.05			Table 1	M	M	1.0	0.73	2.4	998310390
161107	1,2-DICHLOROETHANE	N		UG/L	0.5	5			Table 1	M	M	1.0	0.21	0.70	998310390
161107	1,2-DICHLOROPROPANE	N		UG/L	0.5	5			Table 1	M	M	1.0	0.72	2.4	998310390
161107	2-HEXANONE	N		UG/L					Table 1	M	M	5.0	1.2	4.1	998310390
161107	4-METHYL-2-PENTANONE (MBK)	N		UG/L	50	500			Table 1	M	M	5.0	2.1	7.0	998310390
161107	ACETONE	N		UG/L	1800	9000			Table 1	M	M	10	3.0	10	998310390
161107	ALKALINITY-TOTAL AS CACO3 (FILT)	422		MGL					Table 1	M	M	50.0	20.0	66.7	998310390
161107	BENZENE	N		UG/L	0.5	5			Table 1	M	M	1.0	0.41	1.4	998310390
161107	BROMODICHLOROMETHANE	N		UG/L	0.06	0.6			Table 1	M	M	1.0	0.39	1.3	998310390
161107	BROMOMETHANE	N		UG/L	1	10			Table 1	M	M	1.0	0.69	2.3	998310390
161107	CARBON DISULFIDE	N		UG/L	200	1000			Table 1	M	M	1.0	0.19	0.63	998310390
161107	CARBON TETRACHLORIDE	N		UG/L	0.5	5			Table 1	M	M	1.0	0.27	0.90	998310390
161107	CHLOROBENZENE	N		UG/L	20	100			Table 1	M	M	1.0	0.75	2.5	998310390
161107	CHLOROETHANE	N		UG/L	80	400			Table 1	M	M	1.0	0.32	1.1	998310390
161107	CHLOROFORM	N		UG/L	0.6	6			Table 1	M	M	1.0	0.34	1.1	998310390
161107	CHLOROMETHANE	N		UG/L	3	30			Table 1	M	F	1.0	0.35	1.2	998310390
161107	CIS-1,2-DICHLOROETHENE	N		UG/L	7	70			Table 1	M	M	1.0	0.81	2.7	998310390
161107	CIS-1,3-DICHLOROPROPENE	N		UG/L	0.04	0.4			Table 1	M	M	1.0	0.36	1.2	998310390
161107	DIBROMOCHLOROMETHANE	N		UG/L	6	60			Table 1	M	M	1.0	0.32	1.1	998310390
161107	DIBROMOMETHANE	N		UG/L					Table 1	M	M	1.0	0.41	1.4	998310390
161107	DICHLORODIFLUOROMETHANE	N		UG/L	200	1000			Table 1	M	M	1.0	0.68	2.3	998310390
161107	DICHLOROMETHANE	N		MGL	0.5	5			Table 1	M	M	1.0	0.44	1.5	998310390
161107	DISSOLVED OXYGEN, FIELD BY PROBE	14.0		UG/L	140	700			Table 1	M	M	1.0	0.74	2.5	998310390
161107	ETHYLBENZENE	N		UG/L	698	3490			Table 1	M	M	1.0	0.88	2.9	998310390
161107	FLUOROTRICHLOROMETHANE	N		859.49					FT MSL	M	M	0.030	0.019	0.064	998310390
161107	GROUNDWATER ELEVATION	J	0.035	MGL	0.15	0.3			Table 2	M	M	2.0	0.40	1.3	998310390
161107	IRON-DISSOLVED AS FE			UG/L	60	300			Table 1	M	M	2.0	0.40	1.3	998310390
161107	MANGANESE-DISSOLVED AS MN	2.0		UG/L	25	50			Table 2	M	M	2.0	0.40	1.3	998310390
161107	M-DICHLOROBENZENE	N		UG/L	120	600			Table 1	M	M	1.0	0.78	2.6	998310390

Hagen Farm Landfill

License Number: 02981
Facility ID Number: 113176030

Sample Date	Parameter	Qualifier	Value	Units	PAL	ES	Type of Exceedance	Type of Standard	WDNR			
									QC 1	QC 2	QC 3	RL
	Sample Point: OBS-1B	WDNR Point ID:	015									
161107	METHYL ETHYL KETONE (MEK)	N		UG/L	800	4000		Table 1	M	M	1.0	1.3
161107	METHYL TERT-BUTYL ETHER (MTBE)	N		UG/L	12	60		Table 1	M	M	1.0	0.16
161107	NAPHTHALENE	N		UG/L	10	100		Table 1	M	M	1.0	0.43
161107	NITRITE PLUS NITRATE-DISSOLVED AS N	N	1.9	MG/L AS N	2	10		Table 1	M	M	0.050	0.020
161107	O-DICHLOROBENZENE	N		UG/L	60	600		Table 1	M	M	1.0	0.79
161107	OXIDATION REDUCTION POTENTIAL	N	191	MILLIVOLTS	UG/L	15	75	Table 1	M	M	1.0	0.84
161107	P-DICHLOROBENZENE	N		UG/L	7.76	S.U.		Table 1	M	M	1.0	2.8
161107	PH-FIELD	N			NONE							
161107	SAMPLE COLOR	N			NONE							
161107	SAMPLE ODOR	N			NONE							
161107	SAMPLE TEMPERATURE	N			13.5	DEGREES C						
161107	SAMPLE TURBIDITY	N			NONE							
161107	SPECIFIC CONDUCTANCE-FIELD	N	844	UMHOS/CM	UG/L	10	100					
161107	STYRENE	N	31.3	MG/L	125	250		Table 1	M	M	2.0	0.35
161107	SULFATE-DISSOLVED AS SO4	N		UG/L	0.5	5		Table 2	M	M	1.0	1.2
161107	TETRACHLOROETHYLENE	N		UG/L	10	50		Table 1	M	M	1.0	0.36
161107	TETRAHYDROFURAN	N		UG/L	160	800		Table 1	M	M	5.0	1.3
161107	TOLUENE	N		UG/L	20	100		Table 1	M	M	1.0	0.51
161107	TRANS-1,2-DICHLOROETHENE (TOTAL)	N		UG/L	0.04	0.4		Table 1	M	M	1.0	0.90
161107	TRANS-1,3-DICHLOROPROPENE	N		UG/L	0.44	4.4		Table 1	M	M	1.0	0.37
161107	TRIBROMOMETHANE	N		UG/L	0.5	5		Table 1	M	M	1.0	0.26
161107	TRICHLOROETHYLENE	N		UG/L	0.02	0.2		Table 1	M	M	1.0	0.46
161107	VINYL CHLORIDE	N		UG/L	0.02	0.2		Table 1	M	M	1.0	0.90
161107	VINYL CHLORIDE	N		UG/L	400	2000		Table 1	M	M	0.020	0.013
161107	XYLENES-TOTAL	N		UG/L				Table 1	M	M	2.0	0.66
	Sample Point: OBS-1C	WDNR Point ID:	017									
161107	1,1,1-TRICHLOROETHANE	N		UG/L	40	200		Table 1	M	M	1.0	0.82
161107	1,1,2,2-TETRACHLOROETHANE	N		UG/L	0.02	0.2		Table 1	M	M	1.0	0.21
161107	1,1,2-TRICHLOROETHANE	N		UG/L	0.5	5		Table 1	M	M	1.0	0.23
161107	1,1-DICHLOROETHANE	N		UG/L	85	850		Table 1	M	M	1.0	0.38
161107	1,1-DICHLOROETHYLENE	N		UG/L	0.7	7		Table 1	M	M	1.0	0.29
161107	1,2,4-TRICHLOROBENZENE	N		UG/L	14	70		Table 1	M	M	1.0	0.41
161107	1,2-DIBROMO-3-CHLOROPROPANE	N		UG/L	0.02	0.2		Table 1	M	M	1.0	0.39
161107	1,2-DIBROMOETHANE (EDB)	N		UG/L	0.005	0.05		Table 1	M	M	1.0	0.73

Hagen Farm Landfill

License Number: 02981
Facility ID Number: 113176030

Sample Date	Parameter	WDNR Point ID:	Qualifer	Value	Units	PAL	ES	Type of Exceedance	Type of Standard	QC QC QC			WDNR		
										1	2	3	RL	LOD	LOQ
161107	1,2-DICHLOROETHANE	N	UG/L	0.5	5				Table 1	M	M	1.0	0.21	0.70	998310390
161107	1,2-DICHLOROPROpane	N	UG/L	0.5	5				Table 1	M	M	1.0	0.72	2.4	998310390
161107	2-HEXANONE	N	UG/L							M	M	5.0	1.2	4.1	998310390
161107	4-METHYL-2-PENTANONE (MIBK)	N	UG/L	50	500				Table 1	M	M	5.0	2.1	7.0	998310390
161107	ACETONE	N	UG/L	1800	9000				Table 1	M	M	10	3.0	10	998310390
161107	ALKALINITY-TOTAL AS CACO3 (FILT)	440	MG/L							M	M	50.0	20.0	66.7	998310390
161107	BENZENE	N	UG/L	0.5	5				Table 1	M	M	1.0	0.41	1.4	998310390
161107	BROMODICHLOROMETHANE	N	UG/L	0.06	0.6				Table 1	M	M	1.0	0.39	1.3	998310390
161107	BROMOMETHANE	N	UG/L	1	10				Table 1	M	M	1.0	0.69	2.3	998310390
161107	CARBON DISULFIDE	N	UG/L	200	1000				Table 1	M	M	1.0	0.19	0.63	998310390
161107	CARBON TETRACHLORIDE	N	UG/L	0.5	5				Table 1	M	M	1.0	0.27	0.90	998310390
161107	CHLOROBENZENE	N	UG/L	20	100				Table 1	M	M	1.0	0.75	2.5	998310390
161107	CHLOROETHANE	N	UG/L	80	400				Table 1	M	M	1.0	0.32	1.1	998310390
161107	CHLOROFORM	N	UG/L	0.6	6				Table 1	M	M	1.0	0.34	1.1	998310390
161107	CHLORMETHANE	N	UG/L	3	30				Table 1	M	F	1.0	0.35	1.2	998310390
161107	CIS-1,2-DICHLOROETHENE	N	UG/L	7	70				Table 1	M	M	1.0	0.81	2.7	998310390
161107	CIS-1,3-DICHLOROPROPENE	N	UG/L	0.04	0.4				Table 1	M	M	1.0	0.36	1.2	998310390
161107	DIBROMOCHLOROMETHANE	N	UG/L	6	60				Table 1	M	M	1.0	0.32	1.1	998310390
161107	DI(BROMOMETHANE)	N	UG/L	200	1000				Table 1	M	M	1.0	0.41	1.4	998310390
161107	DICHLORODIFLUOROMETHANE	N	UG/L	0.5	5				Table 1	M	M	1.0	0.68	2.3	998310390
161107	DICHLOROMETHANE	N	MG/L						Table 1	M	M	1.0	0.44	1.5	998310390
161107	DISOLVED OXYGEN, FIELD BY PROBE	12.1	UG/L	140	700				Table 1	M	M	1.0	0.74	2.5	998310390
161107	ETHYLBENZENE	N	UG/L	698	3490				Table 1	M	M	1.0	0.88	2.9	998310390
161107	FLUOROTRICHLOROMETHANE	N	FT MSL												
161107	GROUNDWATER ELEVATION			859.50											
161107	IRON-DISSOLVED AS FE	J	MG/L	0.15	0.3				Table 2	M	M	0.030	0.019	0.064	998310390
161107	MANGANESE-DISSOLVED AS MN	1.8	UG/L	60	300				Table 1	M	M	2.0	0.40	1.3	998310390
161107	MANGANESE-DISSOLVED AS MN	1.8	UG/L	25	50				Table 2	M	M	2.0	0.40	1.3	998310390
161107	M-DICHLOROBENZENE	N	UG/L	120	600				Table 1	M	M	1.0	0.78	2.6	998310390
161107	METHYL ETHYL KETONE (MEK)	N	UG/L	800	4000				Table 1	M	M	10	1.3	4.4	998310390
161107	METHYL TERT-BUTYL ETHER (MTBE)	N	UG/L	12	60				Table 1	M	M	1.0	0.16	0.53	998310390
161107	NAPHTHALENE	N	UG/L	10	100				Table 1	M	M	1.0	0.43	1.4	998310390
161107	NITRITE PLUS NITRATE-DISSOLVED AS N	0.11	MG/L AS N	2	10				Table 1	M	M	0.050	0.020	0.067	998310390
161107	O-DICHLOROBENZENE	N	UG/L	60	600				Table 1	M	M	1.0	0.79	2.6	998310390

Hagen Farm Landfill

License Number: 02981
Facility ID Number: 113176030

Sample Date	Parameter	Qualifier	Value	Units	PAL	ES	Type of Exceedance	Type of Standard	QC 1	QC 2	QC 3	WDNR RL	LOQ	Lab Cert
Sample Point: OBS-1C WDNR Point ID: 017														
161107	OXIDATION REDUCTION POTENTIAL	N	181	MILLIVOLTS	15	75		Table 1	M	M	M	1.0	0.84	2.8
161107	P-DICHLOROBENZENE	N	7.87	UG/L	S.U.									998310390
161107	PH-FIELD													
161107	SAMPLE COLOR	N					NONE							
161107	SAMPLE ODOR	N					NONE							
161107	SAMPLE TEMPERATURE	N	12.7	DEGREES C										
161107	SAMPLE TURBIDITY	N					NONE							
161107	SPECIFIC CONDUCTANCE-FIELD	N	818	UMHOS/CM	UG/L	10	100	Table 1	M	M	M	1.0	0.73	2.4
161107	STYRENE	N	17.6	MGL	125	250		Table 2	M	M	M	2.0	0.35	1.2
161107	SULFATE-DISSOLVED AS SO4	N		UG/L	0.5	5		Table 1	M	M	M	1.0	0.36	1.2
161107	TETRACHLOROETHYLENE	N		UG/L	10	50		Table 1	M	M	M	5.0	1.3	4.2
161107	TETRAHYDROFURAN	N		UG/L	160	800		Table 1	M	M	M	1.0	0.51	1.7
161107	TOLUENE	N		UG/L	20	100		Table 1	M	M	M	1.0	0.90	3.0
161107	TRANS-1,2-DICHLOROETHENE (TOTAL)	N		UG/L	0.04	0.4		Table 1	M	M	M	1.0	0.37	1.2
161107	TRANS-1,3-DICHLOROPROPENE	N		UG/L	0.44	4.4		Table 1	M	M	M	1.0	0.26	0.87
161107	TRIBROMOMETHANE	N		UG/L	0.5	5		Table 1	M	M	M	1.0	0.46	1.5
161107	TRICHLOROETHYLENE	N		UG/L	0.02	0.2		Table 1	M	M	M	0.020	0.004	0.013
161107	VINYL CHLORIDE	N		UG/L	0.02	0.2		Table 1	M	M	M	1.0	0.90	3.0
161107	VINYL CHLORIDE	N		UG/L	400	2000		Table 1	M	M	M	2.0	0.66	2.2
161107	XYLENES-TOTAL	N		UG/L				Table 1	M	M	M			
Sample Point: OBS-2C WDNR Point ID: 022														
161107	1,1,1-TRICHLOROETHANE	N		UG/L	40	200		Table 1	M	M	M	1.0	0.82	2.7
161107	1,1,2,2-TETRACHLOROETHANE	N		UG/L	0.02	0.2		Table 1	M	M	M	1.0	0.21	0.70
161107	1,1,2-TRICHLOROETHANE	N		UG/L	0.5	5		Table 1	M	M	M	1.0	0.23	0.77
161107	1,1-DICHLOROETHANE	N		UG/L	85	850		Table 1	M	M	M	1.0	0.38	1.3
161107	1,1-DICHLOROETHYLENE	N		UG/L	0.7	7		Table 1	M	M	M	1.0	0.29	0.97
161107	1,1-DICHLOROBENZENE	N		UG/L	14	70		Table 1	M	M	M	1.0	0.41	1.4
161107	1,2,4-TRICHLOROPROPANE	N		UG/L	0.02	0.2		Table 1	M	M	M	1.0	0.39	1.3
161107	1,2-DIBROMO-3-CHLOROPROPANE	N		UG/L	0.005	0.05		Table 1	M	M	M	1.0	0.73	2.4
161107	1,2-DIBROMOETHANE (EDB)	N		UG/L	0.5	5		Table 1	M	M	M	1.0	0.21	0.70
161107	1,2-DICHLOROETHANE	N		UG/L	0.5	5		Table 1	M	M	M	1.0	0.72	2.4
161107	1,2-DICHLOROPROPANE	N		UG/L					M	M	M	5.0	1.2	4.1
161107	2-HEXANONE	N		UG/L	50	500		Table 1	M	M	M	5.0	2.1	7.0
161107	4-METHYL-2-PENTANONE (MBK)	N		UG/L	1800	9000		Table 1	M	M	M	10	3.0	10
161107	ACETONE	N		UG/L					M	M	M			

Hagen Farm Landfill

License Number: 02981
Facility ID Number: 113176030

Sample Point:	OBS-2C	WDNR Point ID:	022	Qualifier	Value	Units	PAL	ES	Exceedance	Type of Standard	QC	QC	QC	WDNR		
											1	2	3	RL	LOD	LOQ
161107	ALKALINITY-TOTAL AS CACO3 (FILT)	N	372	MGL	5					M	M	M	50.0	20.0	66.7	998310390
161107	BENZENE	N		UG/L	0.5					Table 1	M	M	1.0	0.41	1.4	998310390
161107	BROMODICHLOROMETHANE	N		UG/L	0.06	0.6				Table 1	M	M	1.0	0.39	1.3	998310390
161107	BROMOMETHANE	N		UG/L	1	10				Table 1	M	M	1.0	0.69	2.3	998310390
161107	CARBON DISULFIDE	N		UG/L	200	1000				Table 1	M	M	1.0	0.19	0.63	998310390
161107	CARBON TETRACHLORIDE	N		UG/L	0.5	5				Table 1	M	M	1.0	0.27	0.90	998310390
161107	CHLOROBENZENE	N		UG/L	20	100				Table 1	M	M	1.0	0.75	2.5	998310390
161107	CHLOROETHANE	N		UG/L	80	400				Table 1	M	M	1.0	0.32	1.1	998310390
161107	CHLOROFORM	N		UG/L	0.6	6				Table 1	M	M	1.0	0.34	1.1	998310390
161107	CHLORMETHANE	N		UG/L	3	30				Table 1	M	M	1.0	0.35	1.2	998310390
161107	CIS-1,2-DICHLOROETHENE	N		UG/L	7	70				Table 1	M	M	1.0	0.81	2.7	998310390
161107	CIS-1,3-DICHLOROPROPENE	N		UG/L	0.04	0.4				Table 1	M	M	1.0	0.36	1.2	998310390
161107	DBROMOCHLOROMETHANE	N		UG/L	6	60				Table 1	M	M	1.0	0.32	1.1	998310390
161107	DBROMOMETHANE	N		UG/L							M	M	1.0	0.41	1.4	998310390
161107	DICHLORODIFLUOROMETHANE	N		UG/L	200	1000				Table 1	M	M	1.0	0.68	2.3	998310390
161107	DICHLOROMETHANE	N		UG/L	0.5	5				Table 1	M	M	1.0	0.44	1.5	998310390
161107	DISSOLVED OXYGEN, FIELD BY PROBE		14.4	MGL												
161107	ETHYLBENZENE	N		UG/L	140	700				Table 1	M	M	1.0	0.74	2.5	998310390
161107	FLUOROTRICHLOROMETHANE	N		UG/L	698	3490				Table 1	M	M	1.0	0.88	2.9	998310390
161107	GROUNDWATER ELEVATION		859.26	FT MSL												
161107	IRON-DISSOLVED AS FE	N		MGL	0.15	0.3				Table 2	M	M	0.030	0.019	0.064	998310390
161107	MANGANESE-DISSOLVED AS MN	J	0.84	UG/L	60	300				Table 1	M	M	2.0	0.40	1.3	998310390
161107	MANGANESE-DISSOLVED AS MN	J	0.84	UG/L	25	50				Table 2	M	M	2.0	0.40	1.3	998310390
161107	M-DICHLOROBENZENE	N		UG/L	120	600				Table 1	M	M	1.0	0.78	2.6	998310390
161107	METHYL ETHYL KETONE (MEK)	N		UG/L	800	4000				Table 1	M	M	10	1.3	4.4	998310390
161107	METHYL TERT-BUTYL ETHER (MTBE)	N		UG/L	12	60				Table 1	M	M	1.0	0.16	0.53	998310390
161107	NAPHTHALENE	N		UG/L	10	100				Table 1	M	M	1.0	0.43	1.4	998310390
161107	NITRITE PLUS NITRATE-DISSOLVED AS N		2.8	MGL AS N	2	10	P			Table 1	M	M	0.050	0.020	0.067	998310390
161107	O-DICHLOROBENZENE	N		UG/L	60	600				Table 1	M	M	1.0	0.79	2.6	998310390
161107	OXIDATION REDUCTION POTENTIAL		216	MILLIVOLTS												
161107	P-DICHLOROBENZENE	N		UG/L	15	75										
161107	PH-FIELD		7.76	S.U.												
161107	SAMPLE COLOR	N														
161107	SAMPLE ODOR	N														

Hagen Farm Landfill

License Number: 02981
Facility ID Number: 113176030

Sample Date	Parameter	Sample Point: OBS-2C	WDNR Point ID:	022	Qualifier	Value	Units	PAL	ES	Type of Exceedance	Type of Standard	QC 1	QC 2	QC 3	WDNR RL	LOQ	Lab Cert
161107	SAMPLE TEMPERATURE	N		14.3	DEGREES C							M	M	M	1.0	0.73	2.4
161107	SAMPLE TURBIDITY	N		756	UMHOS/CM	UG/L	10	100				M	M	M	2.0	0.35	1.2
161107	SPECIFIC CONDUCTANCE-FIELD	N		22.1		MG/L	125	250				Table 1	Table 2	Table 1	1.0	0.36	1.2
161107	STYRENE	N				UG/L	0.5	5				Table 1	Table 1	Table 1	5.0	1.3	4.2
161107	SULFATE-DISSOLVED AS SO4	N				UG/L	10	50				Table 1	Table 1	Table 1			
161107	TETRACHLOROETHYLENE	N				UG/L	160	800				Table 1	Table 1	Table 1	1.0	0.51	1.7
161107	TETRAHYDROFURAN	N				UG/L	20	100				Table 1	Table 1	Table 1	1.0	0.90	3.0
161107	TOLUENE	N				UG/L	0.04	0.4				Table 1	Table 1	Table 1	1.0	0.37	1.2
161107	TRANS-1,2-DICHLOROETHENE (TOTAL)	N				UG/L	0.44	4.4				Table 1	Table 1	Table 1	1.0	0.26	0.87
161107	TRANS-1,3-DICHLOROPROPENE	N				UG/L	0.5	5				Table 1	Table 1	Table 1	1.0	0.46	1.5
161107	TRIBROMOMETHANE	N				UG/L	0.02	0.2				Table 1	Table 1	Table 1	0.020	0.004	0.013
161107	TRICHLOROETHYLENE	N				UG/L	0.02	0.2				Table 1	Table 1	Table 1	1.0	0.90	3.0
161107	VINYL CHLORIDE	N				UG/L	400	2000				Table 1	Table 1	Table 1	2.0	0.66	2.2
161107	VINYL CHLORIDE	N				UG/L											
161107	XYLEMES-TOTAL	N				UG/L											
Sample Point:	P17B		WDNR Point ID:	045								Table 1					
161107	1,1,1-TRICHLOROETHANE	N				UG/L	40	200				M	M	M	1.0	0.82	2.7
161107	1,1,2,2-TETRACHLOROETHANE	N				UG/L	0.02	0.2				Table 1	Table 1	Table 1	1.0	0.21	0.70
161107	1,1,2,2-TRICHLOROETHANE	N				UG/L	0.5	5				Table 1	Table 1	Table 1	1.0	0.23	0.77
161107	1,1-DICHLOROETHANE	N				UG/L	85	850				Table 1	Table 1	Table 1	1.0	0.38	1.3
161107	1,1-DICHLOROETHYLENE	N				UG/L	0.7	7				Table 1	Table 1	Table 1	1.0	0.29	0.97
161107	1,2,4-TRICHLOROBENZENE	N				UG/L	14	70				Table 1	Table 1	Table 1	1.0	0.41	1.4
161107	1,2,4-DIBROMO-3-CHLOROPROPANE	N				UG/L	0.02	0.2				Table 1	Table 1	Table 1	1.0	0.39	1.3
161107	1,2-DIBROMOETHANE (EDB)	N				UG/L	0.005	0.05				Table 1	Table 1	Table 1	1.0	0.73	2.4
161107	1,2-DICHLOROETHANE	N				UG/L	0.5	5				Table 1	Table 1	Table 1	1.0	0.21	0.70
161107	1,2-DICHLOROPROpane	N				UG/L	0.5	5				Table 1	Table 1	Table 1	1.0	0.72	2.4
161107	2-HEXANONE	N				UG/L	50	500				Table 1	Table 1	Table 1	5.0	1.2	4.1
161107	4-METHYL-2-PENTANONE (MBK)	N				MGL	0.5	5				Table 1	Table 1	Table 1	1.0	0.41	1.4
161107	ACETONE	N				UG/L	1800	9000				Table 1	Table 1	Table 1	10	3.0	10
161107	ALKALINITY-TOTAL AS CACO3 (FLIT)	N		397		UG/L						Table 1	Table 1	Table 1	50.0	20.0	66.7
161107	BENZENE	N				UG/L											
161107	BROMODICHLOROMETHANE	N				UG/L	0.06	0.6									
161107	BROMOMETHANE	N				UG/L	1	10									
161107	CARBON DISULFIDE	N				UG/L	200	1000									

Hagen Farm Landfill

License Number: 02981
 Facility ID Number: 113176030

Sample Date	Parameter	WDNR Point ID:	WDNR	WDNR											
				Qualifier	Value	Units	PAL	ES	Type of Exceedance	Type of Standard	QC 1	QC 2	QC 3	RL	LOD
161107	CARBON TETRACHLORIDE	N		UG/L	0.5	5			Table 1	M	M	1.0	0.27	0.90	998310390
161107	CHLOROBENZENE	N		UG/L	20	100			Table 1	M	M	1.0	0.75	2.5	998310390
161107	CHLOROETHANE	N		UG/L	80	400			Table 1	M	M	1.0	0.32	1.1	998310390
161107	CHLOROFORM	N		UG/L	0.6	6			Table 1	M	M	1.0	0.34	1.1	998310390
161107	CHLORMETHANE	N		UG/L	3	30			Table 1	M	M	1.0	0.35	1.2	998310390
161107	CIS-1,2-DICHLOROETHENE	N		UG/L	7	70			Table 1	M	M	1.0	0.81	2.7	998310390
161107	CIS-1,3-DICHLOROPROPENE	N		UG/L	0.04	0.4			Table 1	M	M	1.0	0.36	1.2	998310390
161107	DIBROMOCHLOROMETHANE	N		UG/L	6	60			Table 1	M	M	1.0	0.32	1.1	998310390
161107	DIBROMOMETHANE	N		UG/L	200	1000			Table 1	M	M	1.0	0.41	1.4	998310390
161107	DICHLORODIFLUOROMETHANE	N		UG/L	0.5	5			Table 1	M	M	1.0	0.68	2.3	998310390
161107	DICHLOROMETHANE	N		MGL	5.4				Table 1	M	M	1.0	0.44	1.5	998310390
161107	DISSOLVED OXYGEN, FIELD BY PROBE	N		UG/L	140	700			Table 1	M	M	1.0	0.74	2.5	998310390
161107	ETHYLBENZENE	N		UG/L	698	3490			Table 1	M	M	1.0	0.88	2.9	998310390
161107	FLUOROTRICHLOROMETHANE	N		FT MSL	859.05										
161107	GROUNDWATER ELEVATION	J	0.040	MGL	0.15	0.3			Table 2	M	M	0.030	0.019	0.064	998310390
161107	IRON-DISSOLVED AS FE			UG/L	60	300			Table 1	M	M	2.0	0.40	1.3	998310390
161107	MANGANESE-DISSOLVED AS MN	50.4		UG/L	25	50	P*		Table 2	M	M	2.0	0.40	1.3	998310390
161107	MANGANESE-DISSOLVED AS MN	50.4		UG/L	120	600			Table 1	M	M	1.0	0.78	2.6	998310390
161107	M-DICHLOROBENZENE	N		UG/L	800	4000			Table 1	M	M	10	1.3	4.4	998310390
161107	METHYL ETHYL KETONE (MEK)	N		UG/L	12	60			Table 1	M	M	1.0	0.16	0.53	998310390
161107	METHYL TERT-BUTYL ETHER (MTBE)	N		UG/L	10	100			Table 1	M	M	1.0	0.43	1.4	998310390
161107	NAPHTHALENE	N	1.0	MGL/AS N	2	10			Table 1	M	M	0.050	0.020	0.067	998310390
161107	NITRITE PLUS NITRATE-DISSOLVED AS N	N		UG/L	60	600			Table 1	M	M	1.0	0.79	2.6	998310390
161107	O-DICHLOROBENZENE	N		149 MILLIVOLTS	15	75			Table 1	M	M	1.0	0.84	2.8	998310390
161107	OXIDATION REDUCTION POTENTIAL	N		UG/L	S.U.										
161107	P-DICHLOROBENZENE	N													
161107	PH-FIELD		7.67												
161107	SAMPLE COLOR	N													
161107	SAMPLE ODOR	N													
161107	SAMPLE TEMPERATURE														
161107	SAMPLE TURBIDITY	N													
161107	SPECIFIC CONDUCTANCE-FIELD	N													
161107	STYRENE														
161107	SULFATE-DISSOLVED AS SO4	N	15.8	MGL	125	250			Table 1	M	M	1.0	0.73	2.4	998310390
									Table 2	M	M	2.0	0.35	1.2	998310390

Hagen Farm Landfill

License Number: 02981
Facility ID Number: 113176030

Sample Date	Parameter	WDNR Point ID:	Qualifier	Value	Units	PAL	ES	Exceedance	Type of Standard	QC 1	QC 2	QC 3	WDNR			
									Type of Exceedance	QC 1	QC 2	QC 3	RL	LQD	LOQ	Lab Cert
161107	TETRACHLOROETHYLENE	N	UG/L	0.5	5				Table 1	M	M	M	1.0	0.36	1.2	998310390
161107	TETRAHYDROFURAN	N	UG/L	10	50				Table 1	M	M	M	5.0	1.3	4.2	998310390
161107	TOLUENE	N	UG/L	160	800				Table 1	M	M	M	1.0	0.51	1.7	998310390
161107	TRANS-1,2-DICHLOROETHENE (TOTAL)	N	UG/L	20	100				Table 1	M	M	M	1.0	0.90	3.0	998310390
161107	TRANS-1,3-DICHLOROPROPENE	N	UG/L	0.04	0.4				Table 1	M	M	M	1.0	0.37	1.2	998310390
161107	TRIBROMOMETHANE	N	UG/L	0.44	4.4				Table 1	M	M	M	1.0	0.26	0.87	998310390
161107	TRICHLOROETHYLENE	N	UG/L	0.5	5				Table 1	M	M	M	1.0	0.46	1.5	998310390
161107	VINYL CHLORIDE	J	UG/L	0.02	0.2				Table 1	M	M	M	0.020	0.004	0.013	998310390
161107	VINYL CHLORIDE	N	UG/L	0.02	0.2				Table 1	M	M	M	1.0	0.90	3.0	998310390
161107	XYLENES-TOTAL	N	UG/L	400	2000				Table 1	M	M	M	2.0	0.66	2.2	998310390
Sample Point: P17C		WDNR Point ID:	050													
161107	1,1,1-TRICHLOROETHANE	N	UG/L	40	200				Table 1	M	M	M	1.0	0.82	2.7	998310390
161107	1,1,2,2-TETRACHLOROETHANE	N	UG/L	0.02	0.2				Table 1	M	M	M	1.0	0.21	0.70	998310390
161107	1,1,2-TRICHLOROETHANE	N	UG/L	0.5	5				Table 1	M	M	M	1.0	0.23	0.77	998310390
161107	1,1-DICHLOROETHANE	N	UG/L	85	850				Table 1	M	M	M	1.0	0.38	1.3	998310390
161107	1,1-DICHLOROETHYLENE	N	UG/L	0.7	7				Table 1	M	M	M	1.0	0.29	0.97	998310390
161107	1,2,4-TRICHLOROBENZENE	N	UG/L	14	70				Table 1	M	M	M	1.0	0.41	1.4	998310390
161107	1,2-DIBROMO-3-CHLOROPROPANE	N	UG/L	0.02	0.2				Table 1	M	M	M	1.0	0.39	1.3	998310390
161107	1,2,DIBROMOETHANE (EDB)	N	UG/L	0.005	0.05				Table 1	M	M	M	1.0	0.73	2.4	998310390
161107	1,2-DICHLOROETHANE	N	UG/L	0.5	5				Table 1	M	M	M	1.0	0.21	0.70	998310390
161107	1,2-DICHLOROPROPANE	N	UG/L	0.5	5				Table 1	M	M	M	1.0	0.72	2.4	998310390
161107	2-HEXANONE	N	UG/L	50	500				Table 1	M	M	M	5.0	1.2	4.1	998310390
161107	4-METHYL-2-PENTANONE (MIBK)	N	UG/L	1800	9000				Table 1	M	M	M	10	3.0	10	998310390
161107	ACETONE	N	MG/L							M	M	M	50.0	20.0	66.7	998310390
161107	ALKALINITY-TOTAL AS CACO3 (FILT)	N	437													
161107	BENZENE	N	UG/L	0.5	5				Table 1	M	M	M	1.0	0.41	1.4	998310390
161107	BROMODICHLOROMETHANE	N	UG/L	0.06	0.6				Table 1	M	M	M	1.0	0.39	1.3	998310390
161107	BROMOMETHANE	N	UG/L	1	10				Table 1	M	M	M	1.0	0.69	2.3	998310390
161107	CARBON DISULFIDE	N	UG/L	200	1000				Table 1	M	M	M	1.0	0.19	0.63	998310390
161107	CARBON TETRACHLORIDE	N	UG/L	0.5	5				Table 1	M	M	M	1.0	0.27	0.90	998310390
161107	CHLOROBENZENE	N	UG/L	20	100				Table 1	M	M	M	1.0	0.75	2.5	998310390
161107	CHLOROETHANE	N	UG/L	80	400				Table 1	M	M	M	1.0	0.32	1.1	998310390
161107	CHLOROFORM	N	UG/L	0.6	6				Table 1	M	M	M	1.0	0.34	1.1	998310390
161107	CHLORMETHANE	N	UG/L	3	30				Table 1	M	M	M	1.0	0.35	1.2	998310390

Hagen Farm Landfill

License Number: 02981
Facility ID Number: 113176030

Sample Date	Parameter	WDNR Point ID:	Qualifier	Value	Units	PAL	ES	Type of Exceedance	Type of Standard	QC QC QC			WDNR			
										1	2	3	RL	LOQ	Lab Cert	
Sample Point: P17C																
161107	CIS-1,2-DICHLOROETHENE	N		UG/L	7	70			Table 1	M	M	1.0	0.81	2.7	998310390	
161107	CIS-1,3-DICHLOROPROPENE	N		UG/L	0.04	0.4			Table 1	M	M	1.0	0.36	1.2	998310390	
161107	DIBROMOCHLOROMETHANE	N		UG/L	6	60			Table 1	M	M	1.0	0.32	1.1	998310390	
161107	DIBROMOMETHANE	N		UG/L						M	M	1.0	0.41	1.4	998310390	
161107	DICHLORODIFLUOROMETHANE	N		UG/L	200	1000			Table 1	M	M	1.0	0.68	2.3	998310390	
161107	DICHLOROMETHANE	N		UG/L	0.5	5			Table 1	M	M	1.0	0.44	1.5	998310390	
161107	DISOLVED OXYGEN, FIELD BY PROBE			MGL												
161107	ETHYLBENZENE	N		UG/L	140	700			Table 1	M	M	1.0	0.74	2.5	998310390	
161107	FLUOROTRICHLOROMETHANE	N		UG/L	698	3490			Table 1	M	M	1.0	0.88	2.9	998310390	
161107	GROUNDWATER ELEVATION			859.10	FT	MSL										
161107	IRON-DISSOLVED AS FE			MGL	0.15	0.3	P*		Table 2	M	M	0.030	0.019	0.064	998310390	
161107	MANGANESE-DISSOLVED AS MN	N		UG/L	60	300	P		Table 1	M	M	2.0	0.40	1.3	998310390	
161107	MANGANESE-DISSOLVED AS MN	N		UG/L	25	50	P*		Table 2	M	M	2.0	0.40	1.3	998310390	
161107	M-DICHLOROBENZENE			UG/L	120	600			Table 1	M	M	1.0	0.78	2.6	998310390	
161107	METHYL ETHYL KETONE (MEK)	N		UG/L	800	4000			Table 1	M	M	10	1.3	4.4	998310390	
161107	METHYL TERT-BUTYL ETHER (MTBE)	N		UG/L	12	60			Table 1	M	M	1.0	0.16	0.53	998310390	
161107	NAPHTHALENE	N		UG/L	10	100			Table 1	M	M	1.0	0.43	1.4	998310390	
161107	NITRITE PLUS NITRATE-DISSOLVED AS N	N		MGL AS N	2	10			Table 1	M	M	0.050	0.020	0.067	998310390	
161107	O-DICHLOROBENZENE	N		UG/L	60	600			Table 1	M	M	1.0	0.79	2.6	998310390	
161107	OXIDATION REDUCTION POTENTIAL			-101	MILLIVOLTS											
161107	P-DICHLOROBENZENE	N		UG/L	15	75			Table 1	M	M	1.0	0.84	2.8	998310390	
161107	PH-FIELD			S.U.												
161107	SAMPLE COLOR	N					NONE									
161107	SAMPLE ODOR	N					NONE									
161107	SAMPLE TEMPERATURE						14.6 DEGREES C									
161107	SPECIFIC CONDUCTANCE-FIELD	N		790	UMHOS/CM											
161107	STYRENE	N			UG/L	10	100			Table 1	M	M	1.0	0.73	2.4	998310390
161107	SULFATE-DISSOLVED AS SO4	N		9.7	MGL	125	250			Table 2	M	M	2.0	0.35	1.2	998310390
161107	TETRACHLOROETHYLENE	N		UG/L	0.5	5			Table 1	M	M	1.0	0.36	1.2	998310390	
161107	TETRAHYDROFURAN	N		UG/L	10	50			Table 1	M	M	5.0	1.3	4.2	998310390	
161107	TOLUENE	N		UG/L	160	800			Table 1	M	M	1.0	0.51	1.7	998310390	
161107	TRANS-1,2-DICHLOROETHENE (TOTAL)	N		UG/L	20	100			Table 1	M	M	1.0	0.90	3.0	998310390	
161107	TRANS-1,3-DICHLOROPROPENE	N		UG/L	0.04	0.4			Table 1	M	M	1.0	0.37	1.2	998310390	

Hagen Farm Landfill

License Number: 02981
Facility ID Number: 113176030

Sample Date	Parameter	WDNR Point ID:	Qualifier	Value	Units	PAL	ES	Exceedance	Type of Standard	QC	QC	QC	WDNR			
									1	2	3	RL	LOQ			
161107	TRIBROMOMETHANE	P17C	WDNR Point ID: 050	N	UG/L	0.44	4.4		Table 1	M	M	M	1.0	0.26	0.87	998310390
161107	TRICHLOROETHYLENE			N	UG/L	0.5	5		Table 1	M	M	M	1.0	0.46	1.5	998310390
161107	VINYL CHLORIDE			0.42	UG/L	0.02	0.2	P*	Table 1	M	M	M	0.020	0.004	0.013	998310390
161107	VINYL CHLORIDE			N	UG/L	0.02	0.2		Table 1	M	M	M	1.0	0.90	3.0	998310390
161107	XYLENES-TOTAL			N	UG/L	400	2000		Table 1	M	M	M	2.0	0.66	2.2	998310390
161107	GROUNDWATER ELEVATION	P17DR	WDNR Point ID: 055	858.91	FT MSL											
161107	Sample Point: P22B	WDNR Point ID: 065														
161107	1,1,1-TRICHLOROETHANE			N	UG/L	40	200		Table 1	M	M	M	1.0	0.82	2.7	998310390
161107	1,1,2,2-TETRACHLOROETHANE			N	UG/L	0.02	0.2		Table 1	M	M	M	1.0	0.21	0.70	998310390
161107	1,1,2-TRICHLOROETHANE			N	UG/L	0.5	5		Table 1	M	M	M	1.0	0.23	0.77	998310390
161107	1,1-DICHLOROETHANE			N	UG/L	85	850		Table 1	M	M	M	1.0	0.38	1.3	998310390
161107	1,1-DICHLOROETHYLENE			N	UG/L	0.7	7		Table 1	M	M	M	1.0	0.29	0.97	998310390
161107	1,1,2,4-TRICHLOROBENZENE			N	UG/L	14	70		Table 1	M	M	M	1.0	0.41	1.4	998310390
161107	1,2-DIBROMO-3-CHLOROPROPANE			N	UG/L	0.02	0.2		Table 1	M	M	M	1.0	0.39	1.3	998310390
161107	1,2-DIBROMOETHANE (EDB)			N	UG/L	0.005	0.05		Table 1	M	M	M	1.0	0.73	2.4	998310390
161107	1,2-DICHLOROETHANE			N	UG/L	0.5	5		Table 1	M	M	M	1.0	0.21	0.70	998310390
161107	1,2-DICHLOROPROPANE			N	UG/L	0.5	5		Table 1	M	M	M	1.0	0.72	2.4	998310390
161107	2-HEXANONE			N	UG/L	50	500		Table 1	M	M	M	5.0	1.2	4.1	998310390
161107	4-METHYL-2-PENTANONE (MBK)			N	UG/L	1800	9000		Table 1	M	M	M	10	3.0	7.0	998310390
161107	ACETONE			N	MGL				Table 1	M	M	M	50.0	20.0	66.7	998310390
161107	ALKALINITY-TOTAL AS CACO3 (FILT)			362	UG/L	0.5	5		Table 1	M	M	M	1.0	0.41	1.4	998310390
161107	BENZENE			N	UG/L	0.06	0.6		Table 1	M	M	M	1.0	0.39	1.3	998310390
161107	BROMODICHLOROMETHANE			N	UG/L	1	10		Table 1	M	M	M	1.0	0.69	2.3	998310390
161107	BROMOMETHANE			N	UG/L	200	1000		Table 1	M	M	M	1.0	0.19	0.63	998310390
161107	CARBON DISULFIDE			N	UG/L	0.5	5		Table 1	M	M	M	1.0	0.27	0.90	998310390
161107	CARBON TETRACHLORIDE			N	UG/L	20	100		Table 1	M	M	M	1.0	0.75	2.5	998310390
161107	CHLOROBENZENE			N	UG/L	80	400		Table 1	M	M	M	1.0	0.32	1.1	998310390
161107	CHLOROETHANE			N	UG/L	0.6	6		Table 1	M	M	M	1.0	0.34	1.1	998310390
161107	CHLOROFORM			N	UG/L	3	30		Table 1	M	M	M	1.0	0.35	1.2	998310390
161107	CHLORMETHANE			N	UG/L	7	70		Table 1	M	M	M	1.0	0.81	2.7	998310390
161107	CIS-1,2-DICHLOROETHENE			N	UG/L	0.04	0.4		Table 1	M	M	M	1.0	0.36	1.2	998310390
161107	CIS-1,3-DICHLOROPROPENE			N												

Hagen Farm Landfill

License Number: 02981
Facility ID Number: 113176030

Sample Date	Parameter	WDNR Point ID:	Qualifer	Value	Units	PAL	ES	Type of Exceedance	Type of Standard	QC QC QC			WDNR					
										1	2	3	RL	LOD	LOQ	Lab Cert		
Sample Point: P22B																		
161107	DIBROMOCHLOROMETHANE	N		UG/L	6	60			Table 1	M	M	1.0	0.32	1.1	998310390			
.61107	DIBROMOMETHANE	N		UG/L	200	1000			Table 1	M	M	1.0	0.41	1.4	998310390			
161107	DICHLORODIFLUOROMETHANE	N		UG/L	0.5	5			Table 1	M	M	1.0	0.68	2.3	998310390			
161107	DICHLOROMETHANE	N		UG/L	140	700			Table 1	M	M	1.0	0.44	1.5	998310390			
161107	DISSOLVED OXYGEN, FIELD BY PROBE	3.0		MG/L	698	3490			Table 1	M	M	1.0	0.74	2.5	998310390			
161107	ETHYLBENZENE	N		UG/L	FT MSL				Table 1	M	M	1.0	0.88	2.9	998310390			
161107	FLUOROTRICHLOROMETHANE	N		860.44	4.6	MG/L	0.15	0.3	P*	Table 2	M	M	0.030	0.019	0.064	998310390		
161107	GROUNDWATER ELEVATION			UG/L	60	300	P		Table 1	M	M	2.0	0.40	1.3	998310390			
161107	IRON-DISSOLVED AS FE			UG/L	25	50	P*		Table 2	M	M	2.0	0.40	1.3	998310390			
161107	MANGANESE-DISSOLVED AS MN	108		UG/L	120	600			Table 1	M	M	1.0	0.78	2.6	998310390			
161107	MANGANESE-DISSOLVED AS MN	108		UG/L	800	4000			Table 1	M	M	10	1.3	4.4	998310390			
161107	M-DICHLOROBENZENE	N		UG/L	12	60			Table 1	M	M	1.0	0.16	0.53	998310390			
161107	METHYL ETHYL KETONE (MEK)	N		UG/L	10	100			Table 1	M	M	1.0	0.43	1.4	998310390			
161107	METHYL TERT-BUTYL ETHER (MTBE)	N		MG/L AS N	2	10			Table 1	M	M	0.050	0.020	0.067	998310390			
161107	NAPHTHALENE	N		UG/L	60	600			Table 1	M	M	1.0	0.79	2.6	998310390			
161107	NITRITE PLUS NITRATE-DISSOLVED AS N	N		-83	MILLIVOLTS					Table 1	M	M	1.0	0.84	2.8	998310390		
161107	O-DICHLOROBENZENE	N		UG/L	15	75				Table 1	M	M	1.0	0.37	1.2	998310390		
161107	OXIDATION REDUCTION POTENTIAL	N		S.U.							Table 1	M	M	1.0	0.35	1.2	998310390	
161107	P-DICHLOROBENZENE	N		7.72	NONE							Table 1	M	M	1.0	0.51	1.7	998310390
161107	PH-FIELD			UG/L									M	M	1.0	0.90	3.0	998310390
161107	SAMPLE COLOR	N		NONE									M	M	1.0	0.36	1.2	998310390
161107	SAMPLE ODOR	N		NONE									M	M	1.0	0.73	2.4	998310390
161107	SAMPLE TEMPERATURE			13.5	DEGREES C								M	M	2.0	0.35	1.2	998310390
161107	SAMPLE TURBIDITY	N		NONE									M	M	1.0	0.51	1.7	998310390
161107	SPECIFIC CONDUCTANCE-FIELD			734	UMHOS/CM								M	M	1.0	0.90	3.0	998310390
161107	STYRENE	N		UG/L	10	100							M	M	5.0	1.3	4.2	998310390
161107	SULFATE-DISSOLVED AS SO4	30.6		MG/L	125	250							M	M	1.0	0.51	1.7	998310390
161107	TETRACHLOROETHYLENE	N		UG/L	0.5	5							M	M	1.0	0.90	3.0	998310390
161107	TETRAHYDROFURAN	N		UG/L	10	50							M	M	1.0	0.37	1.2	998310390
161107	TOLUENE	N		UG/L	160	800							M	M	1.0	0.26	0.87	998310390
161107	TRANS-1,2-DICHLOROETHENE (TOTAL)	N		UG/L	20	100							M	M	1.0	0.46	1.5	998310390
161107	TRANS-1,3-DICHLOROPROPENE	N		UG/L	0.04	0.4							M	M	1.0	0.26	0.87	998310390
161107	TRIBROMOMETHANE	N		UG/L	0.44	4.4							M	M	1.0	0.46	1.5	998310390
161107	TRICHLOROETHYLENE	N		UG/L	0.5	5							M	M	1.0	0.46	1.5	998310390

Hagen Farm Landfill

License Number: 02981
Facility ID Number: 113176030

Sample Date	Parameter	WDNR Point ID:	WDNR Point ID:	Qualifier	Value	Units	PAL	ES	Exceedance	Type of Standard	WDNR		
											1	2	3
161107	P22B	WDNR Point ID: 065	WDNR Point ID: 085							Table 1	M	M	M
161107	VINYL CHLORIDE	N	N	UG/L	0.02	0.2				Table 1	M	M	0.020
161107	VINYL CHLORIDE	N	N	UG/L	0.02	0.2				Table 1	M	M	1.0
161107	XYLENES-TOTAL	N	N	UG/L	400	2000				Table 1	M	M	2.0
161107	1,1,1-TRICHLOROETHANE	N	N	UG/L	40	200				Table 1	M	M	1.0
161107	1,1,2,2-TETRACHLOROETHANE	N	N	UG/L	0.02	0.2				Table 1	M	M	1.0
161107	1,1,2-TRICHLOROETHANE	N	N	UG/L	0.5	5				Table 1	M	M	1.0
161107	1,1,2,2-TETRACHLOROETHANE	N	N	UG/L	85	850				Table 1	M	M	1.0
161107	1,1-DICHLOROETHANE	N	N	UG/L	0.7	7				Table 1	M	M	1.0
161107	1,1-DICHLOROETHYLENE	N	N	UG/L	14	70				Table 1	M	M	1.0
161107	1,2,4-TRICHLOROBENZENE	N	N	UG/L	0.02	0.2				Table 1	M	M	1.0
161107	1,2-DIBROMO-3-CHLOROPROPANE	N	N	UG/L	0.005	0.05				Table 1	M	M	1.0
161107	1,2-DIBROMOETHANE (EDB)	N	N	UG/L	0.5	5				Table 1	M	M	1.0
161107	1,2-DICHLOROETHANE	N	N	UG/L	0.5	5				Table 1	M	M	1.0
161107	1,2-DICHLOROPROPANE	N	N	UG/L	50	500				Table 1	M	M	5.0
161107	2-HEXANONE	N	N	UG/L	1800	9000				Table 1	M	M	5.0
161107	4-METHYL-2-PENTANONE (MIBK)	N	N	UG/L	0.5	5				Table 1	M	M	5.0
161107	ACETONE	N	N	UG/L	0.06	0.6				Table 1	M	M	1.0
161107	BENZENE	N	N	UG/L	1	10				Table 1	M	M	1.0
161107	BROMODICHLOROMETHANE	N	N	UG/L	200	1000				Table 1	M	M	1.0
161107	BROMOMETHANE	N	N	UG/L	0.5	5				Table 1	M	M	1.0
161107	CARBON DISULFIDE	N	N	UG/L	20	100				Table 1	M	M	1.0
161107	CARBON TETRACHLORIDE	N	N	UG/L	80	400				Table 1	M	M	1.0
161107	CHLOROETHANE	N	N	UG/L	0.6	6				Table 1	M	M	1.0
161107	CHLOROFORM	N	N	UG/L	3	30				Table 1	M	M	1.0
161107	CHLOROMETHANE	N	N	UG/L	7	70				Table 1	M	M	1.0
161107	CIS-1,2-DICHLOROETHENE	N	N	UG/L	0.04	0.4				Table 1	M	M	1.0
161107	CIS-1,3-DICHLOROPROPENE	N	N	UG/L	6	60				Table 1	M	M	1.0
161107	DIBROMOCHLOROMETHANE	N	N	UG/L	200	1000				Table 1	M	M	1.0
161107	DICHLORODIFLUOROMETHANE	N	N	UG/L	0.5	5				Table 1	M	M	1.0
161107	DICHLOROMETHANE	N	N	UG/L	140	700				Table 1	M	M	1.0
161107	ETHYLBENZENE	N	N	UG/L	698	3490				Table 1	M	M	1.0
161107	FLUOROTRICHLOROMETHANE	N	N	UG/L						Table 1	M	M	0.88

Hagen Farm Landfill

License Number: 02981

Facility ID Number: 113176030

Sample Date	Parameter	Sample Point: P26B	WDNR Point ID: 085	Qualifier	Value	Units	PAL	ES	Type of Exceedance	Type of Standard	QC QC QC			WDNR		
											1	2	3	RL	LOQ	Lab Cert
161107	M-DICHLOROBENZENE	N	UG/L	120	600					Table 1	M	M	1.0	0.78	2.6	998310390
161107	METHYL ETHYL KETONE (MEK)	N	UG/L	800	4000					Table 1	M	M	10	1.3	4.4	998310390
161107	METHYL TERT-BUTYL ETHER (MTBE)	N	UG/L	12	60					Table 1	M	M	1.0	0.16	0.53	998310390
161107	NAPHTHALENE	N	UG/L	10	100					Table 1	M	M	1.0	0.43	1.4	998310390
161107	O-DICHLOROBENZENE	N	UG/L	60	600					Table 1	M	M	1.0	0.79	2.6	998310390
161107	P-DICHLOROBENZENE	N	UG/L	15	75					Table 1	M	M	1.0	0.84	2.8	998310390
161107	STYRENE	N	UG/L	10	100					Table 1	M	M	1.0	0.73	2.4	998310390
161107	TETRACHLOROETHYLENE	N	UG/L	0.5	5					Table 1	M	M	1.0	0.36	1.2	998310390
161107	TETRAHYDROFURAN	N	UG/L	10	50					Table 1	M	M	5.0	1.3	4.2	998310390
161107	TOLUENE	N	UG/L	160	800					Table 1	M	M	1.0	0.51	1.7	998310390
161107	TRANS-1,2-DICHLOROETHENE (TOTAL)	N	UG/L	20	100					Table 1	M	M	1.0	0.90	3.0	998310390
161107	TRANS-1,3-DICHLOROPROPENE	N	UG/L	0.04	0.4					Table 1	M	M	1.0	0.37	1.2	998310390
161107	TRIBROMOMETHANE	N	UG/L	0.44	4.4					Table 1	M	M	1.0	0.26	0.87	998310390
161107	TRICHLOROETHYLENE	N	UG/L	0.5	5					Table 1	M	M	1.0	0.46	1.5	998310390
161107	VINYL CHLORIDE	N	UG/L	0.02	0.2	P*				Table 1	M	M	0.020	0.004	0.013	998310390
161107	VINYL CHLORIDE	N	UG/L	0.02	0.2					Table 1	M	M	1.0	0.90	3.0	998310390
161107	XYLENES-TOTAL	N	UG/L	400	2000					Table 1	M	M	2.0	0.66	2.2	998310390
Sample Date	Parameter	Sample Point: P32B	WDNR Point ID: 150	Qualifier	Value	Units	PAL	ES	Type of Exceedance	Type of Standard	QC QC QC			WDNR		
											1	2	3	RL	LOQ	Lab Cert
161107	1,1,1-TRICHLOROETHANE	N	UG/L	40	200					Table 1	M	M	1.0	0.82	2.7	998310390
161107	1,1,2,2-TETRACHLOROETHANE	N	UG/L	0.02	0.2					Table 1	M	M	1.0	0.21	0.70	998310390
161107	1,1,2-TRICHLOROETHANE	N	UG/L	0.5	5					Table 1	M	M	1.0	0.23	0.77	998310390
161107	1,1-DICHLOROETHANE	N	UG/L	85	850					Table 1	M	M	1.0	0.38	1.3	998310390
161107	1,1-DICHLOROETHYLENE	N	UG/L	0.7	7					Table 1	M	M	1.0	0.29	0.97	998310390
161107	1,2,4-TRICHLOROBENZENE	N	UG/L	14	70					Table 1	M	M	1.0	0.41	1.4	998310390
161107	1,2-DIBROMO-3-CHLOROPROPANE	N	UG/L	0.02	0.2					Table 1	M	M	1.0	0.39	1.3	998310390
161107	1,2-DIBROMOETHANE (EDB)	N	UG/L	0.005	0.05					Table 1	M	M	1.0	0.73	2.4	998310390
161107	1,2-DICHLOROETHANE	N	UG/L	0.5	5					Table 1	M	M	1.0	0.21	0.70	998310390
161107	1,2-DICHLOROPROPANE	N	UG/L	0.5	5					Table 1	M	M	1.0	0.72	2.4	998310390
161107	2-HEXANONE	N	UG/L	50	500					Table 1	M	M	5.0	1.2	4.1	998310390
161107	4-METHYL-2-PENTANONE (MBK)	N	UG/L	1800	9000					Table 1	M	M	20.0	8.0	26.7	998310390
161107	ACETONE	N	MG/L	0.5	5					Table 1	M	M	1.0	0.41	1.4	998310390
161107	ALKALINITY-TOTAL AS CACO ₃ (FILT)	N	175							Table 1	M	M	1.0	0.39	1.3	998310390
161107	BENZENE	N	UG/L	0.06	0.6					Table 1	M	M	1.0	0.39	1.3	998310390
161107	BROMODICHLOROMETHANE	N	UG/L													

Hagen Farm Landfill

License Number: 02981
Facility ID Number: 113176030

Sample Date	Parameter	Sample Point:	P32B	WDNR Point ID:	150	Qualifier	Value	Units	PAL	ES	Exceedance	Type of Standard	QC 1	QC 2	QC 3	WDNR			
																QL	LOQ	Lab Cert	
16/11/07	BROMOMETHANE		N		UG/L	1	10						Table 1	M	M	1.0	0.69	2.3	998310390
16/11/07	CARBON DISULFIDE		N		UG/L	200	1000						Table 1	M	M	1.0	0.19	0.63	998310390
16/11/07	CARBON TETRACHLORIDE		N		UG/L	0.5	5						Table 1	M	M	1.0	0.27	0.90	998310390
16/11/07	CHLOROBENZENE		N		UG/L	20	100						Table 1	M	M	1.0	0.75	2.5	998310390
16/11/07	CHLOROETHANE		N		UG/L	80	400						Table 1	M	M	1.0	0.32	1.1	998310390
16/11/07	CHLOROFORM		N		UG/L	0.6	6						Table 1	M	M	1.0	0.34	1.1	998310390
16/11/07	CHLOROMETHANE		N		UG/L	3	30						Table 1	M	M	1.0	0.35	1.2	998310390
16/11/07	CIS-1,2-DICHLOROETHENE		N		UG/L	7	70						Table 1	M	M	1.0	0.81	2.7	998310390
16/11/07	CIS-1,3-DICHLOROPROPENE		N		UG/L	0.04	0.4						Table 1	M	M	1.0	0.36	1.2	998310390
16/11/07	DIBROMOCHLOROMETHANE		N		UG/L	6	60						Table 1	M	M	1.0	0.32	1.1	998310390
16/11/07	DIBROMOMETHANE		N		UG/L	200	1000						Table 1	M	M	1.0	0.41	1.4	998310390
16/11/07	DICHLORODIFLUOROMETHANE		N		UG/L	0.5	5						Table 1	M	M	1.0	0.68	2.3	998310390
16/11/07	DICHLOROMETHANE		N		MGL	3.1							Table 1	M	M	1.0	0.44	1.5	998310390
16/11/07	DISSOLVED OXYGEN, FIELD BY PROBE				UG/L	140	700						Table 1	M	M	1.0	0.74	2.5	998310390
16/11/07	ETHYL BENZENE		N		UG/L	698	3490						Table 1	M	M	1.0	0.88	2.9	998310390
16/11/07	FLUOROTRICHLOROMETHANE		N		FT MSL	857.19							Table 2	M	M	0.030	0.019	0.064	998310390
16/11/07	GROUNDWATER ELEVATION				MGL	0.15	0.3						Table 1	M	M	2.0	0.40	1.3	998310390
16/11/07	IRON-DISSOLVED AS FE		J	0.025	UG/L	60	300	P					Table 2	M	M	2.0	0.40	1.3	998310390
16/11/07	MANGANESE-DISSOLVED AS MN		112		UG/L	25	50	E					Table 1	M	M	1.0	0.78	2.6	998310390
16/11/07	MANGANESE-DISSOLVED AS MN		112		UG/L	120	600						Table 1	M	M	1.0	1.3	4.4	998310390
16/11/07	M-DICHLOROBENZENE		N		UG/L	800	4000						Table 1	M	M	1.0	0.16	0.53	998310390
16/11/07	METHYL ETHYL KETONE (MEK)		N		UG/L	12	60						Table 1	M	M	1.0	0.43	1.4	998310390
16/11/07	METHYL TERT-BUTYL ETHER (MTBE)		N		UG/L	10	100						Table 1	M	M	0.050	0.020	0.067	998310390
16/11/07	NAPHTHALENE		N		MGL AS N	0.17							Table 1	M	M	1.0	0.79	2.6	998310390
16/11/07	NITRITE PLUS NITRATE DISSOLVED AS N				UG/L	2	10						Table 1	M	M	1.0	0.84	2.8	998310390
16/11/07	O-DICHLOROBENZENE		N		MILLIVOLTS	197							Table 1	S.U.	S.U.				
16/11/07	OXIDATION REDUCTION POTENTIAL				UG/L	15	75												
16/11/07	P-DICHLOROBENZENE		N			7.75													
16/11/07	PH-FIELD																		
16/11/07	SAMPLE COLOR																		
16/11/07	SAMPLE ODOR																		
16/11/07	SAMPLE TEMPERATURE																		
16/11/07	SAMPLE TURBIDITY																		
16/11/07	SPECIFIC CONDUCTANCE-FIELD																		

Hagen Farm LandfillLicense Number: 02981
Facility ID Number: 113176030

Sample Date	Parameter	WDNR Point ID:	Qualifier	Value	Units	PAL	ES	Type of Exceedance	Type of Standard	QC QC QC			WDNR		
										1	2	3	RL	LOD	LOQ
Sample Point: P32B															
161107	STYRENE	N		UG/L	10	100			Table 1	M	M	1.0	0.73	2.4	998310390
161107	SULFATE-DISSOLVED AS SO4	N	23.1	MG/L	125	250			Table 2	M	M	2.0	0.35	1.2	998310390
161107	TETRACHLOROETHYLENE	N		UG/L	0.5	5			Table 1	M	M	1.0	0.36	1.2	998310390
161107	TETRAHYDROFURAN	N		UG/L	10	50			Table 1	M	M	5.0	1.3	4.2	998310390
161107	TOLUENE	N		UG/L	160	800			Table 1	M	M	1.0	0.51	1.7	998310390
161107	TRANS-1,2-DICHLOROETHENE (TOTAL)	N		UG/L	20	100			Table 1	M	M	1.0	0.90	3.0	998310390
161107	TRANS-1,3-DICHLOROPROPENE	N		UG/L	0.04	0.4			Table 1	M	M	1.0	0.37	1.2	998310390
161107	TRIBROMOMETHANE	N		UG/L	0.44	4.4			Table 1	M	M	1.0	0.26	0.87	998310390
161107	TRICHLOROETHYLENE	N		UG/L	0.5	5			Table 1	M	M	1.0	0.46	1.5	998310390
161107	VINYL CHLORIDE	N	0.029	UG/L	0.02	0.2	P		Table 1	F	M	0.020	0.004	0.013	998310390
161107	VINYL CHLORIDE	N		UG/L	0.02	0.2			Table 1	M	M	1.0	0.90	3.0	998310390
161107	XYLENES-TOTAL	N		UG/L	400	2000			Table 1	M	M	2.0	0.66	2.2	998310390



October 4, 2016

WASTE MANAGEMENT

Closed Sites Management Group
W124N9355 Boundary Road
Menomonee Falls, WI 53051
262 253 8626
262 255 3798 Fax

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 18, 2016. 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.

I would recommend that you contact Ms. Sheila Sullivan from the USEPA if you would like any additional information regarding this correspondence. Ms. Sullivan is USEPA's representative for the Hagen Farm Landfill and provides regulatory oversight at the site. Ms. Sullivan's telephone number is (312) 886-5251.

Thank you for your consideration of this matter.

Sincerely,
Waste Management of Wisconsin, Inc.

Michael L. Peterson

Michael L. Peterson, P.E.
District Manager – Closed Sites Management Group

cc: Sheila Sullivan, USEPA
Gary Edelstein, WDNR



Definitions/Glossary

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

TestAmerica Job ID: 480-104791-1



5

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
^a 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
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
B	Compound was found in the blank and sample.
F1	MS and/or MSD Recovery is outside acceptance limits.
J	Reported value was between the limit of detection and the limit of quantitation.
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL. The data are considered valid because the absolute difference is less than the RL.
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.

Glossary

Abbreviation

These commonly used abbreviations may or may not be present in this report.

^a	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
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)

Case Narrative

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

TestAmerica Job ID: 480-104791-1

Job ID: 480-104791-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative
480-104791-1

Comments

No additional comments.

Receipt

The samples were received on 8/19/2016 9:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 2.7° C and 3.0° C.

GC/MS VOA

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-317079 recovered above the upper control limit for Chloromethane, Methylene Chloride and Vinyl chloride. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following samples are impacted: PW02 (480-104791-1), PW03 (480-104791-2), PW04 (480-104791-3), PW05 (480-104791-4), PW09 (480-104791-5) and TB (480-104791-6).

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

HPLC/IC

Method(s) 300.0: The following sample was diluted to bring the concentration of target analytes within the calibration range: PW03 (480-104791-2). 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(s) 6020A: The continuing calibration blank (CCB) for analytical batch 480-317506 contained Total Thallium above the method detection limit. All reported samples, PW02 (480-104791-1), PW03 (480-104791-2), PW04 (480-104791-3), PW05 (480-104791-4), PW09 (480-104791-5), (LCS 480-317092/2-A) and (MB 480-317092/1-A), associated with this CCB were either below the laboratory's standard reporting limit for this analyte or contained this analyte at a concentration greater than 10X the value found in the CCB; therefore, re-analysis of samples was not performed.

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

General Chemistry

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

Client Sample Results

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

TestAmerica Job ID: 480-104791-1

Client Sample ID: PW05

Date Collected: 08/18/16 10:30

Date Received: 08/19/16 09:00

Lab Sample ID: 480-104791-4

Matrix: Water

Method: 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		08/23/16 18:01	1
Surrogate									
TBA-d9 (Sur)	93		50 - 150					08/23/16 18:01	1
Dibromofluoromethane (Sur)	95		50 - 150					08/23/16 18:01	1

Method: 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		08/22/16 15:41	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.70	0.21	ug/L		08/22/16 15:41	1
1,1,2-Trichloroethane	ND		1.0	0.77	0.23	ug/L		08/22/16 15:41	1
1,1-Dichloroethane	ND		1.0	1.3	0.38	ug/L		08/22/16 15:41	1
1,1-Dichloroethene	ND		1.0	0.97	0.29	ug/L		08/22/16 15:41	1
1,2,4-Trichlorobenzene	ND		1.0	1.4	0.41	ug/L		08/22/16 15:41	1
1,2-Dibromo-3-Chloropropane	ND		1.0	1.3	0.39	ug/L		08/22/16 15:41	1
1,2-Dibromoethane (EDB)	ND		1.0	2.4	0.73	ug/L		08/22/16 15:41	1
1,2-Dichlorobenzene	ND		1.0	2.6	0.79	ug/L		08/22/16 15:41	1
1,2-Dichloroethane	ND		1.0	0.70	0.21	ug/L		08/22/16 15:41	1
1,2-Dichloropropane	ND		1.0	2.4	0.72	ug/L		08/22/16 15:41	1
1,3-Dichlorobenzene	ND		1.0	2.6	0.78	ug/L		08/22/16 15:41	1
1,4-Dichlorobenzene	ND		1.0	2.8	0.84	ug/L		08/22/16 15:41	1
2-Butanone (MEK)	ND		10	4.4	1.3	ug/L		08/22/16 15:41	1
2-Hexanone	ND		5.0	4.1	1.2	ug/L		08/22/16 15:41	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	7.0	2.1	ug/L		08/22/16 15:41	1
Acetone	ND		10	10	3.0	ug/L		08/22/16 15:41	1
Benzene	ND		1.0	1.4	0.41	ug/L		08/22/16 15:41	1
Bromodichloromethane	ND		1.0	1.3	0.39	ug/L		08/22/16 15:41	1
Bromoform	ND		1.0	0.87	0.26	ug/L		08/22/16 15:41	1
Bromomethane	ND		1.0	2.3	0.69	ug/L		08/22/16 15:41	1
Carbon disulfide	ND		1.0	0.63	0.19	ug/L		08/22/16 15:41	1
Carbon tetrachloride	ND		1.0	0.90	0.27	ug/L		08/22/16 15:41	1
Chlorobenzene	ND		1.0	2.5	0.75	ug/L		08/22/16 15:41	1
Chloroethane	ND		1.0	1.1	0.32	ug/L		08/22/16 15:41	1
Chloroform	ND		1.0	1.1	0.34	ug/L		08/22/16 15:41	1
Chloromethane	ND ^c		1.0	1.2	0.35	ug/L		08/22/16 15:41	1
cis-1,2-Dichloroethene	ND		1.0	2.7	0.81	ug/L		08/22/16 15:41	1
cis-1,3-Dichloropropene	ND		1.0	1.2	0.36	ug/L		08/22/16 15:41	1
Dibromochloromethane	ND		1.0	1.1	0.32	ug/L		08/22/16 15:41	1
Dibromomethane	ND		1.0	1.4	0.41	ug/L		08/22/16 15:41	1
Dichlorodifluoromethane	ND		1.0	2.3	0.68	ug/L		08/22/16 15:41	1
Ethylbenzene	ND		1.0	2.5	0.74	ug/L		08/22/16 15:41	1
Methylene Chloride	ND ^c		1.0	1.5	0.44	ug/L		08/22/16 15:41	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.53	0.16	ug/L		08/22/16 15:41	1
Naphthalene	ND		1.0	1.4	0.43	ug/L		08/22/16 15:41	1
Styrene	ND		1.0	2.4	0.73	ug/L		08/22/16 15:41	1
Tetrachloroethene	ND		1.0	1.2	0.36	ug/L		08/22/16 15:41	1
Tetrahydrofuran	ND		5.0	4.2	1.3	ug/L		08/22/16 15:41	1
Toluene	ND		1.0	1.7	0.51	ug/L		08/22/16 15:41	1
trans-1,2-Dichloroethene	ND		1.0	3.0	0.90	ug/L		08/22/16 15:41	1
trans-1,3-Dichloropropene	ND		1.0	1.2	0.37	ug/L		08/22/16 15:41	1

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-104791-1

Client Sample ID: PW05

Lab Sample ID: 480-104791-4

Date Collected: 08/18/16 10:30

Matrix: Water

Date Received: 08/19/16 09:00

Method: 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		08/22/16 15:41	1
Trichlorofluoromethane	ND		1.0	2.9	0.88	ug/L		08/22/16 15:41	1
Vinyl chloride	ND ^c		1.0	3.0	0.90	ug/L		08/22/16 15:41	1
Xylenes, Total	ND		2.0	2.2	0.66	ug/L		08/22/16 15:41	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichlorethane-d4 (Surr)	101		77 - 120					08/22/16 15:41	1
4-Bromofluorobenzene (Surr)	92		73 - 120					08/22/16 15:41	1
Toluene-d8 (Surr)	99		80 - 120					08/22/16 15:41	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	LOQ	LOD	Unit	D	Analyzed	Dil Fac
Aluminum	ND		80.0	200	60.0	ug/L		08/22/16 23:48	1
Barium	24.5		6.0	2.3	0.70	ug/L		08/22/16 23:48	1
Calcium	69.8 B		5.0	0.33	0.10	mg/L		08/22/16 23:48	1
Chromium	1.4 J		5.0	3.3	1.0	ug/L		08/22/16 23:48	1
Cobalt	ND		6.0	2.1	0.63	ug/L		08/22/16 23:48	1
Copper	7.4		25.0	5.3	1.6	ug/L		08/22/16 23:48	1
Iron	0.12		0.10	0.064	0.019	mg/L		08/22/16 23:48	1
Magnesium	38.7		5.0	0.14	0.043	mg/L		08/22/16 23:48	1
Manganese	1.6 B		3.0	1.3	0.40	ug/L		08/22/16 23:48	1
Nickel	ND		4.0	4.2	1.3	ug/L		08/22/16 23:48	1
Potassium	1.4		5.0	0.33	0.10	mg/L		08/22/16 23:48	1
Silver	ND		3.0	5.7	1.7	ug/L		08/22/16 23:48	1
Sodium	2.9		5.0	1.1	0.32	mg/L		08/22/16 23:48	1
Vanadium	ND		5.0	5.0	1.5	ug/L		08/22/16 23:48	1
Zinc	32.1 B		4.0	5.0	1.5	ug/L		08/22/16 23:48	1

Method: 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		08/23/16 08:10	1
Arsenic	ND		2.0	0.90	0.27	ug/L		08/23/16 08:10	1
Beryllium	ND		0.20	0.10	0.030	ug/L		08/23/16 08:10	1
Cadmium	ND		0.20	0.24	0.071	ug/L		08/23/16 08:10	1
Selenium	0.86 J		5.0	1.5	0.44	ug/L		08/23/16 08:10	1
Thallium	ND		0.20	0.063	0.019	ug/L		08/23/16 19:01	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	LOQ	LOD	Unit	D	Analyzed	Dil Fac
Mercury	ND		0.20	0.40	0.12	ug/L		08/22/16 12:32	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	334		0.50	0.33	0.10	mg/L		08/25/16 13:15	1

General Chemistry

Analyte	Result	Qualifier	RL	LOQ	LOD	Unit	D	Analyzed	Dil Fac
Chloride	3.2		0.50	0.94	0.28	mg/L		08/22/16 11:51	1
Sulfate	17.9		2.0	1.2	0.35	mg/L		08/22/16 11:51	1
Alkalinity, Total	308		50.0	66.7	20.0	mg/L		08/23/16 12:15	5
Total Cyanide	ND		0.020	0.017	0.0050	mg/L		08/25/16 14:46	1

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-104791-1

Client Sample ID: PW05

Lab Sample ID: 480-104791-4

Date Collected: 08/18/16 10:30

Matrix: Water

Date Received: 08/19/16 09:00

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	LOQ	LOD	Unit	D	Analyzed	Dil Fac
Ammonia (as N)	0.19	J	0.20	0.33	0.10	mg/L		08/22/16 15:31	1
Total Kjeldahl Nitrogen	ND		0.20	0.50	0.15	mg/L as N		08/23/16 11:48	1
Nitrate Nitrite as N	1.0		0.050	0.067	0.020	mg/L as N		08/22/16 21:27	1
Chemical Oxygen Demand	ND		10.0	16.7	5.0	mg/L		08/22/16 16:53	1
Total Dissolved Solids	318	B	10.0	13.3	4.0	mg/L		08/24/16 06:36	1
Total Suspended Solids	2.0	J B	2.0	6.7	2.0	mg/L		08/23/16 19:54	1
Phosphorus, Total	ND		0.20	0.016	0.0050	mg/L as P		08/24/16 11:15	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	LOQ	LOD	Unit	D	Analyzed	Dil Fac
Color	No				NONE			08/18/16 11:30	1
Dissolved Oxygen, Field	2.7				mg/L			08/18/16 11:30	1
Field EH/ORP	202.0				millivolts			08/18/16 11:30	1
Odor	No				NONE			08/18/16 11:30	1
pH, Field	8.02				SU			08/18/16 11:30	1
Specific Conductance, Field	598				umhos/cm			08/18/16 11:30	1
Temperature, Field (C)	14.8				Degrees C			08/18/16 11:30	1
Turbidity, Field	No				NONE			08/18/16 11:30	1

**WASTE MANAGEMENT**

Closed Sites Management Group
W124N9355 Boundary Road
Menomonee Falls, WI 53051
262 253 8626
262 255 3798 Fax

October 4, 2016

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 18, 2016. 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. Nitrate-nitrite was present in the sample at a concentration consistent with previous samples and is generally associated with, or related to, farming activities.

I would recommend that you contact Ms. Sheila Sullivan from the USEPA if you would like any additional information regarding this correspondence. Ms. Sullivan is USEPA's representative for the Hagen Farm Landfill and provides regulatory oversight at the site. Ms. Sullivan's telephone number is (312) 886-5251.

Thank you for your consideration of this matter.

Sincerely,
Waste Management of Wisconsin, Inc.

A handwritten signature in black ink that reads "Michael L. Peterson".

Michael L. Peterson, P.E.
District Manager – Closed Sites Management Group

cc: Sheila Sullivan, USEPA
 Gary Edelstein, WDNR

Definitions/Glossary

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

TestAmerica Job ID: 480-104791-1



5

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
^A 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
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
^B	Compound was found in the blank and sample.
F1	MS and/or MSD Recovery is outside acceptance limits.
J	Reported value was between the limit of detection and the limit of quantitation.
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL. The data are considered valid because the absolute difference is less than the RL.
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.

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
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
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)

Case Narrative

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

TestAmerica Job ID: 480-104791-1

Job ID: 480-104791-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative
480-104791-1

Comments

No additional comments.

Receipt

The samples were received on 8/19/2016 9:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 2.7° C and 3.0° C.

GC/MS VOA

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-317079 recovered above the upper control limit for Chloromethane, Methylene Chloride and Vinyl chloride. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following samples are impacted: PW02 (480-104791-1), PW03 (480-104791-2), PW04 (480-104791-3), PW05 (480-104791-4), PW09 (480-104791-5) and TB (480-104791-6).

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

HPLC/IC

Method(s) 300.0: The following sample was diluted to bring the concentration of target analytes within the calibration range: PW03 (480-104791-2). 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(s) 6020A: The continuing calibration blank (CCB) for analytical batch 480-317506 contained Total Thallium above the method detection limit. All reported samples, PW02 (480-104791-1), PW03 (480-104791-2), PW04 (480-104791-3), PW05 (480-104791-4), PW09 (480-104791-5), (LCS 480-317092/2-A) and (MB 480-317092/1-A), associated with this CCB were either below the laboratory's standard reporting limit for this analyte or contained this analyte at a concentration greater than 10X the value found in the CCB; therefore, re-analysis of samples was not performed.

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

General Chemistry

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

Client Sample Results

Client: Waste Management

Project/Site: Hagen Farms - Groundwater

TestAmerica Job ID: 480-104791-1

Client Sample ID: PW04

Date Collected: 08/18/16 12:10

Date Received: 08/19/16 09:00

Lab Sample ID: 480-104791-3

Matrix: Water

Method: 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		08/19/16 21:00	1
<hr/>									
Surrogate	%Recovery	Qualifier		Limits			Prepared	Analyzed	Dil Fac
TBA-d9 (Surr)	83			50 - 150				08/19/16 21:00	1
Dibromofluoromethane (Surr)	98			50 - 150				08/19/16 21:00	1

Method: 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		08/22/16 15:14	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.70	0.21	ug/L		08/22/16 15:14	1
1,1,2-Trichloroethane	ND		1.0	0.77	0.23	ug/L		08/22/16 15:14	1
1,1-Dichloroethane	ND		1.0	1.3	0.38	ug/L		08/22/16 15:14	1
1,1-Dichloroethene	ND		1.0	0.97	0.29	ug/L		08/22/16 15:14	1
1,2,4-Trichlorobenzene	ND		1.0	1.4	0.41	ug/L		08/22/16 15:14	1
1,2-Dibromo-3-Chloropropane	ND		1.0	1.3	0.39	ug/L		08/22/16 15:14	1
1,2-Dibromoethane (EDB)	ND		1.0	2.4	0.73	ug/L		08/22/16 15:14	1
1,2-Dichlorobenzene	ND		1.0	2.6	0.79	ug/L		08/22/16 15:14	1
1,2-Dichloroethane	ND		1.0	0.70	0.21	ug/L		08/22/16 15:14	1
1,2-Dichloropropane	ND		1.0	2.4	0.72	ug/L		08/22/16 15:14	1
1,3-Dichlorobenzene	ND		1.0	2.6	0.78	ug/L		08/22/16 15:14	1
1,4-Dichlorobenzene	ND		1.0	2.8	0.84	ug/L		08/22/16 15:14	1
2-Butanone (MEK)	ND		10	4.4	1.3	ug/L		08/22/16 15:14	1
2-Hexanone	ND		5.0	4.1	1.2	ug/L		08/22/16 15:14	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	7.0	2.1	ug/L		08/22/16 15:14	1
Acetone	ND		10	10	3.0	ug/L		08/22/16 15:14	1
Benzene	ND		1.0	1.4	0.41	ug/L		08/22/16 15:14	1
Bromodichloromethane	ND		1.0	1.3	0.39	ug/L		08/22/16 15:14	1
Bromoform	ND		1.0	0.87	0.26	ug/L		08/22/16 15:14	1
Bromomethane	ND		1.0	2.3	0.69	ug/L		08/22/16 15:14	1
Carbon disulfide	ND		1.0	0.63	0.19	ug/L		08/22/16 15:14	1
Carbon tetrachloride	ND		1.0	0.90	0.27	ug/L		08/22/16 15:14	1
Chlorobenzene	ND		1.0	2.5	0.75	ug/L		08/22/16 15:14	1
Chloroethane	ND		1.0	1.1	0.32	ug/L		08/22/16 15:14	1
Chloroform	ND		1.0	1.1	0.34	ug/L		08/22/16 15:14	1
Chloromethane	ND ^c		1.0	1.2	0.35	ug/L		08/22/16 15:14	1
cis-1,2-Dichloroethene	ND		1.0	2.7	0.81	ug/L		08/22/16 15:14	1
cis-1,3-Dichloropropene	ND		1.0	1.2	0.36	ug/L		08/22/16 15:14	1
Dibromochloromethane	ND		1.0	1.1	0.32	ug/L		08/22/16 15:14	1
Dibromomethane	ND		1.0	1.4	0.41	ug/L		08/22/16 15:14	1
Dichlorodifluoromethane	ND		1.0	2.3	0.68	ug/L		08/22/16 15:14	1
Ethylbenzene	ND		1.0	2.5	0.74	ug/L		08/22/16 15:14	1
Methylene Chloride	ND ^c		1.0	1.5	0.44	ug/L		08/22/16 15:14	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.53	0.16	ug/L		08/22/16 15:14	1
Naphthalene	ND		1.0	1.4	0.43	ug/L		08/22/16 15:14	1
Styrene	ND		1.0	2.4	0.73	ug/L		08/22/16 15:14	1
Tetrachloroethene	ND		1.0	1.2	0.36	ug/L		08/22/16 15:14	1
Tetrahydrofuran	ND		5.0	4.2	1.3	ug/L		08/22/16 15:14	1
Toluene	ND		1.0	1.7	0.51	ug/L		08/22/16 15:14	1
trans-1,2-Dichloroethene	ND		1.0	3.0	0.90	ug/L		08/22/16 15:14	1
trans-1,3-Dichloropropene	ND		1.0	1.2	0.37	ug/L		08/22/16 15:14	1

TestAmerica Buffalo

Client Sample Results

Client: Waste Management

Project/Site: Hagen Farms - Groundwater

TestAmerica Job ID: 480-104791-1

Client Sample ID: PW04

Lab Sample ID: 480-104791-3

Date Collected: 08/18/16 12:10

Matrix: Water

Date Received: 08/19/16 09:00

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

Analyte	Result	Qualifier	RL	LOQ	LOD	Unit	D	Analyzed	Dil Fac
Trichloroethylene	ND		1.0	1.5	0.46	ug/L		08/22/16 15:14	1
Trichlorofluoromethane	ND		1.0	2.9	0.88	ug/L		08/22/16 15:14	1
Vinyl chloride	ND ^c		1.0	3.0	0.90	ug/L		08/22/16 15:14	1
Xylenes, Total	ND		2.0	2.2	0.66	ug/L		08/22/16 15:14	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	95		77 - 120					08/22/16 15:14	1
4-Bromofluorobenzene (Surr)	94		73 - 120					08/22/16 15:14	1
Toluene-d8 (Surr)	99		80 - 120					08/22/16 15:14	1

8

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	LOQ	LOD	Unit	D	Analyzed	Dil Fac
Aluminum	ND		80.0	200	60.0	ug/L		08/22/16 23:45	1
Barium	34.5		6.0	2.3	0.70	ug/L		08/22/16 23:45	1
Calcium	87.5 B		5.0	0.33	0.10	mg/L		08/22/16 23:45	1
Chromium	1.3 J		5.0	3.3	1.0	ug/L		08/22/16 23:45	1
Cobalt	ND		6.0	2.1	0.63	ug/L		08/22/16 23:45	1
Copper	26.0		25.0	5.3	1.6	ug/L		08/22/16 23:45	1
Iron	0.11		0.10	0.064	0.019	mg/L		08/22/16 23:45	1
Magnesium	46.2		5.0	0.14	0.043	mg/L		08/22/16 23:45	1
Manganese	2.7 B		3.0	1.3	0.40	ug/L		08/22/16 23:45	1
Nickel	ND		4.0	4.2	1.3	ug/L		08/22/16 23:45	1
Potassium	1.1		5.0	0.33	0.10	mg/L		08/22/16 23:45	1
Silver	ND		3.0	5.7	1.7	ug/L		08/22/16 23:45	1
Sodium	7.8		5.0	1.1	0.32	mg/L		08/22/16 23:45	1
Vanadium	ND		5.0	5.0	1.5	ug/L		08/22/16 23:45	1
Zinc	548 B		4.0	5.0	1.5	ug/L		08/22/16 23:45	1

Method: 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		08/23/16 08:04	1
Arsenic	0.28 J		2.0	0.90	0.27	ug/L		08/23/16 08:04	1
Beryllium	ND		0.20	0.10	0.030	ug/L		08/23/16 08:04	1
Cadmium	ND		0.20	0.24	0.071	ug/L		08/23/16 08:04	1
Selenium	0.64 J		5.0	1.5	0.44	ug/L		08/23/16 08:04	1
Thallium	0.075		0.20	0.063	0.019	ug/L		08/23/16 18:43	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	LOQ	LOD	Unit	D	Analyzed	Dil Fac
Mercury	ND		0.20	0.40	0.12	ug/L		08/22/16 12:31	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	409		0.50	0.33	0.10	mg/L		08/25/16 13:15	1

General Chemistry

Analyte	Result	Qualifier	RL	LOQ	LOD	Unit	D	Analyzed	Dil Fac
Chloride	22.4		0.50	0.94	0.28	mg/L		08/22/16 11:43	1
Sulfate	24.7		2.0	1.2	0.35	mg/L		08/22/16 11:43	1
Alkalinity, Total	326		50.0	66.7	20.0	mg/L		08/23/16 12:15	5
Total Cyanide	ND		0.020	0.017	0.0050	mg/L		08/25/16 14:41	1

TestAmerica Buffalo

Client Sample Results

Client: Waste Management

Project/Site: Hagen Farms - Groundwater

TestAmerica Job ID: 480-104791-1

Client Sample ID: PW04

Lab Sample ID: 480-104791-3

Date Collected: 08/18/16 12:10

Matrix: Water

Date Received: 08/19/16 09:00

General Chemistry (Continued)									
Analyte	Result	Qualifier	RL	LOQ	LOD	Unit	D	Analyzed	Dil Fac
Ammonia (as N)	ND		0.20	0.33	0.10	mg/L		08/22/16 15:30	1
Total Kjeldahl Nitrogen	ND		0.20	0.50	0.15	mg/L as N		08/25/16 11:43	1
Nitrate Nitrite as N	10.6		0.50	0.67	0.20	mg/L as N		08/22/16 21:25	10
Chemical Oxygen Demand	6.7	J	10.0	16.7	5.0	mg/L		08/22/16 16:53	1
Total Dissolved Solids	449	B	10.0	13.3	4.0	mg/L		08/24/16 06:36	1
Total Suspended Solids	ND		2.0	6.7	2.0	mg/L		08/23/16 19:54	1
Phosphorus, Total	ND		0.20	0.016	0.0050	mg/L as P		08/24/16 11:15	1

8

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	LOQ	LOD	Unit	D	Analyzed	Dil Fac
Color	No				NONE			08/18/16 13:10	1
Dissolved Oxygen, Field	3.1				mg/L			08/18/16 13:10	1
Field EH/ORP	207.0				millivolts			08/18/16 13:10	1
Odor	No				NONE			08/18/16 13:10	1
pH, Field	7.48				SU			08/18/16 13:10	1
Specific Conductance, Field	766				umhos/cm			08/18/16 13:10	1
Temperature, Field (C)	17.5				Degrees C			08/18/16 13:10	1
Turbidity, Field	No				NONE			08/18/16 13:10	1

TestAmerica Buffalo



October 4, 2016

WASTE MANAGEMENT

Closed Sites Management Group
W124N9355 Boundary Road
Menomonee Falls, WI 53051
262 253 8626
262 255 3798 Fax

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 18, 2016. 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 that well indicates the water quality is typical of groundwater in the area, and does not indicate any adverse effect from the Hagen Farm Landfill. Iron and manganese are present in the sample and groundwater throughout this area at concentrations consistent with historical data. Chloride was again reported in the sample at a concentration slightly greater than the state of Wisconsin groundwater criteria. The presence of these elements at the identified concentrations may cause staining and taste concerns.

I would recommend that you contact Ms. Sheila Sullivan from the USEPA if you would like any additional information regarding this correspondence. Ms. Sullivan is USEPA's representative for the Hagen Farm Landfill and provides regulatory oversight at the site. Ms. Sullivan's telephone number is (312) 886-5251.

Thank you for your consideration of this matter.

Sincerely,
Waste Management of Wisconsin, Inc.

Michael L. Peterson

Michael L. Peterson, P.E.
District Manager – Closed Sites Management Group

cc: Sheila Sullivan, USEPA
Gary Edelstein, WDNR

Definitions/Glossary

Client: Waste Management

Project/Site: Hagen Farms - Groundwater

TestAmerica Job ID: 480-104791-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
A/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
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
B	Compound was found in the blank and sample.
F1	MS and/or MSD Recovery is outside acceptance limits.
J	Reported value was between the limit of detection and the limit of quantitation.
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL. The data are considered valid because the absolute difference is less than the RL.
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.

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
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
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)

Case Narrative

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

TestAmerica Job ID: 480-104791-1

Job ID: 480-104791-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative
480-104791-1

Comments

No additional comments.

Receipt

The samples were received on 8/19/2016 9:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 2.7° C and 3.0° C.

GC/MS VOA

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-317079 recovered above the upper control limit for Chloromethane, Methylene Chloride and Vinyl chloride. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following samples are impacted: PW02 (480-104791-1), PW03 (480-104791-2), PW04 (480-104791-3), PW05 (480-104791-4), PW09 (480-104791-5) and TB (480-104791-6).

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

HPLC/IC

Method(s) 300.0: The following sample was diluted to bring the concentration of target analytes within the calibration range: PW03 (480-104791-2). 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(s) 6020A: The continuing calibration blank (CCB) for analytical batch 480-317506 contained Total Thallium above the method detection limit. All reported samples, PW02 (480-104791-1), PW03 (480-104791-2), PW04 (480-104791-3), PW05 (480-104791-4), PW09 (480-104791-5), (LCS 480-317092/2-A) and (MB 480-317092/1-A), associated with this CCB were either below the laboratory's standard reporting limit for this analyte or contained this analyte at a concentration greater than 10X the value found in the CCB; therefore, re-analysis of samples was not performed.

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

General Chemistry

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

Client Sample Results

Client: Waste Management

Project/Site: Hagen Farms - Groundwater

TestAmerica Job ID: 480-104791-1

Client Sample ID: PW03

Date Collected: 08/18/16 11:15

Date Received: 08/19/16 09:00

Lab Sample ID: 480-104791-2

Matrix: Water

Method: 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		08/19/16 20:35	1
Surrogate									
TBA-d9 (Sur)	82	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Sur)	99			50 - 150				08/19/16 20:35	1
				50 - 150				08/19/16 20:35	1

Method: 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		08/22/16 14:47	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.70	0.21	ug/L		08/22/16 14:47	1
1,1,2-Trichloroethane	ND		1.0	0.77	0.23	ug/L		08/22/16 14:47	1
1,1-Dichloroethane	ND		1.0	1.3	0.38	ug/L		08/22/16 14:47	1
1,1-Dichloroethene	ND		1.0	0.97	0.29	ug/L		08/22/16 14:47	1
1,2,4-Trichlorobenzene	ND		1.0	1.4	0.41	ug/L		08/22/16 14:47	1
1,2-Dibromo-3-Chloropropane	ND		1.0	1.3	0.39	ug/L		08/22/16 14:47	1
1,2-Dibromoethane (EDB)	ND		1.0	2.4	0.73	ug/L		08/22/16 14:47	1
1,2-Dichlorobenzene	ND		1.0	2.6	0.79	ug/L		08/22/16 14:47	1
1,2-Dichloroethane	ND		1.0	0.70	0.21	ug/L		08/22/16 14:47	1
1,2-Dichloropropane	ND		1.0	2.4	0.72	ug/L		08/22/16 14:47	1
1,3-Dichlorobenzene	ND		1.0	2.6	0.78	ug/L		08/22/16 14:47	1
1,4-Dichlorobenzene	ND		1.0	2.8	0.84	ug/L		08/22/16 14:47	1
2-Butanone (MEK)	ND		10	4.4	1.3	ug/L		08/22/16 14:47	1
2-Hexanone	ND		5.0	4.1	1.2	ug/L		08/22/16 14:47	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	7.0	2.1	ug/L		08/22/16 14:47	1
Acetone	ND		10	10	3.0	ug/L		08/22/16 14:47	1
Benzene	ND		1.0	1.4	0.41	ug/L		08/22/16 14:47	1
Bromodichloromethane	ND		1.0	1.3	0.39	ug/L		08/22/16 14:47	1
Bromoform	ND		1.0	0.87	0.26	ug/L		08/22/16 14:47	1
Bromomethane	ND		1.0	2.3	0.69	ug/L		08/22/16 14:47	1
Carbon disulfide	ND		1.0	0.63	0.19	ug/L		08/22/16 14:47	1
Carbon tetrachloride	ND		1.0	0.90	0.27	ug/L		08/22/16 14:47	1
Chlorobenzene	ND		1.0	2.5	0.75	ug/L		08/22/16 14:47	1
Chloroethane	ND		1.0	1.1	0.32	ug/L		08/22/16 14:47	1
Chloroform	ND		1.0	1.1	0.34	ug/L		08/22/16 14:47	1
Chloromethane	ND ^c		1.0	1.2	0.35	ug/L		08/22/16 14:47	1
cis-1,2-Dichloroethene	ND		1.0	2.7	0.81	ug/L		08/22/16 14:47	1
cis-1,3-Dichloropropene	ND		1.0	1.2	0.36	ug/L		08/22/16 14:47	1
Dibromochloromethane	ND		1.0	1.1	0.32	ug/L		08/22/16 14:47	1
Dibromomethane	ND		1.0	1.4	0.41	ug/L		08/22/16 14:47	1
Dichlorodifluoromethane	ND		1.0	2.3	0.68	ug/L		08/22/16 14:47	1
Ethylbenzene	ND		1.0	2.5	0.74	ug/L		08/22/16 14:47	1
Methylene Chloride	ND ^c		1.0	1.5	0.44	ug/L		08/22/16 14:47	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.53	0.16	ug/L		08/22/16 14:47	1
Naphthalene	ND		1.0	1.4	0.43	ug/L		08/22/16 14:47	1
Styrene	ND		1.0	2.4	0.73	ug/L		08/22/16 14:47	1
Tetrachloroethene	ND		1.0	1.2	0.36	ug/L		08/22/16 14:47	1
Tetrahydrofuran	ND		5.0	4.2	1.3	ug/L		08/22/16 14:47	1
Toluene	ND		1.0	1.7	0.51	ug/L		08/22/16 14:47	1
trans-1,2-Dichloroethene	ND		1.0	3.0	0.90	ug/L		08/22/16 14:47	1
trans-1,3-Dichloropropene	ND		1.0	1.2	0.37	ug/L		08/22/16 14:47	1

8

TestAmerica Buffalo

Client Sample Results

Client: Waste Management

Project/Site: Hagen Farms - Groundwater

TestAmerica Job ID: 480-104791-1

Client Sample ID: PW03

Lab Sample ID: 480-104791-2

Matrix: Water

Date Collected: 08/18/16 11:15

Date Received: 08/19/16 09:00

Method: 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		08/22/16 14:47	1
Trichlorofluoromethane	ND		1.0	2.9	0.88	ug/L		08/22/16 14:47	1
Vinyl chloride	ND ^c		1.0	3.0	0.90	ug/L		08/22/16 14:47	1
Xylenes, Total	ND		2.0	2.2	0.66	ug/L		08/22/16 14:47	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		77 - 120					08/22/16 14:47	1
4-Bromofluorobenzene (Surr)	98		73 - 120					08/22/16 14:47	1
Toluene-d8 (Surr)	100		80 - 120					08/22/16 14:47	1

8

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	LOQ	LOD	Unit	D	Analyzed	Dil Fac
Aluminum	ND		80.0	200	60.0	ug/L		08/22/16 23:42	1
Barium	48.1		6.0	2.3	0.70	ug/L		08/22/16 23:42	1
Calcium	100 B		5.0	0.33	0.10	mg/L		08/22/16 23:42	1
Chromium	ND		5.0	3.3	1.0	ug/L		08/22/16 23:42	1
Cobalt	ND		6.0	2.1	0.63	ug/L		08/22/16 23:42	1
Copper	ND		25.0	5.3	1.6	ug/L		08/22/16 23:42	1
Iron	0.79		0.10	0.064	0.019	mg/L		08/22/16 23:42	1
Magnesium	45.7		5.0	0.14	0.043	mg/L		08/22/16 23:42	1
Manganese	147 B		3.0	1.3	0.40	ug/L		08/22/16 23:42	1
Nickel	1.6 J		4.0	4.2	1.3	ug/L		08/22/16 23:42	1
Potassium	2.0		5.0	0.33	0.10	mg/L		08/22/16 23:42	1
Silver	ND		3.0	5.7	1.7	ug/L		08/22/16 23:42	1
Sodium	64.4		5.0	1.1	0.32	mg/L		08/22/16 23:42	1
Vanadium	ND		5.0	5.0	1.5	ug/L		08/22/16 23:42	1
Zinc	248 B		4.0	5.0	1.5	ug/L		08/22/16 23:42	1

Method: 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		08/23/16 07:59	1
Arsenic	ND		2.0	0.90	0.27	ug/L		08/23/16 07:59	1
Beryllium	ND		0.20	0.10	0.030	ug/L		08/23/16 07:59	1
Cadmium	ND		0.20	0.24	0.071	ug/L		08/23/16 07:59	1
Selenium	ND		5.0	1.5	0.44	ug/L		08/23/16 07:59	1
Thallium	0.092		0.20	0.063	0.019	ug/L		08/23/16 18:38	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	LOQ	LOD	Unit	D	Analyzed	Dil Fac
Mercury	ND		0.20	0.40	0.12	ug/L		08/22/16 12:29	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	439		0.50	0.33	0.10	mg/L		08/25/16 13:15	1

General Chemistry

Analyte	Result	Qualifier	RL	LOQ	LOD	Unit	D	Analyzed	Dil Fac
Chloride	142		1.0	1.9	0.56	mg/L		08/22/16 10:46	2
Sulfate	13.1		4.0	2.3	0.70	mg/L		08/22/16 10:46	2
Alkalinity, Total	355		50.0	66.7	20.0	mg/L		08/23/16 12:13	5
Total Cyanide	ND		0.020	0.017	0.0050	mg/L		08/25/16 14:24	1

TestAmerica Buffalo

Client Sample Results

Client: Waste Management

Project/Site: Hagen Farms - Groundwater

TestAmerica Job ID: 480-104791-1

Client Sample ID: PW03

Lab Sample ID: 480-104791-2

Matrix: Water

Date Collected: 08/18/16 11:15

Date Received: 08/19/16 09:00

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	LOQ	LOD	Unit	D	Analyzed	Dil Fac
Ammonia (as N)	0.16	J	0.20	0.33	0.10	mg/L		08/22/16 15:19	1
Total Kjeldahl Nitrogen	ND		0.20	0.50	0.15	mg/L as N		08/23/16 11:48	1
Nitrate Nitrite as N	0.083		0.050	0.067	0.020	mg/L as N		08/22/16 21:21	1
Chemical Oxygen Demand	ND		10.0	16.7	5.0	mg/L		08/22/16 16:53	1
Total Dissolved Solids	619	B	10.0	13.3	4.0	mg/L		08/24/16 06:36	1
Total Suspended Solids	ND		2.0	6.7	2.0	mg/L		08/23/16 19:54	1
Phosphorus, Total	0.0077	J	0.20	0.016	0.0050	mg/L as P		08/25/16 11:06	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	LOQ	LOD	Unit	D	Analyzed	Dil Fac
Color	No				NONE			08/18/16 12:15	1
Dissolved Oxygen, Field	3.9				mg/L			08/18/16 12:15	1
Field EH/ORP	201.0				millivolts			08/18/16 12:15	1
Odor	No				NONE			08/18/16 12:15	1
pH, Field	7.56				SU			08/18/16 12:15	1
Specific Conductance, Field	1104				umhos/cm			08/18/16 12:15	1
Temperature, Field (C)	17.2				Degrees C			08/18/16 12:15	1
Turbidity, Field	No				NONE			08/18/16 12:15	1

8



October 4, 2016

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

WASTE MANAGEMENT

Closed Sites Management Group
W124N9355 Boundary Road
Menomonee Falls, WI 53051
262 253 8626
262 255 3798 Fax

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 18, 2016. 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 that well indicates the water quality is typical of groundwater in the area, and does not indicate any affect from the Hagen Farm Landfill. Nitrate-nitrite was present in the sample at a concentration consistent with previous samples and is generally associated with, or related to, farming activities.

I would recommend that you contact Ms. Sheila Sullivan from the USEPA if you would like any additional information regarding this correspondence. Ms. Sullivan is USEPA's representative for the Hagen Farm Landfill and provides regulatory oversight at the site. Ms. Sullivan's telephone number is (312) 886-5251.

Thank you for your consideration of this matter.

Sincerely,
Waste Management of Wisconsin, Inc.

A handwritten signature in black ink that reads "Michael L. Peterson".

Michael L. Peterson, P.E.
District Manager – Closed Sites

cc: Sheila Sullivan, USEPA
Gary Edelstein, WDNR

Definitions/Glossary

Client: Waste Management

Project/Site: Hagen Farms - Groundwater

TestAmerica Job ID: 480-104791-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
^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
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
B	Compound was found in the blank and sample.
F1	MS and/or MSD Recovery is outside acceptance limits.
J	Reported value was between the limit of detection and the limit of quantitation.
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL. The data are considered valid because the absolute difference is less than the RL.
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.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
n	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
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)

Case Narrative

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

TestAmerica Job ID: 480-104791-1

Job ID: 480-104791-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative
480-104791-1

6

Comments

No additional comments.

Receipt

The samples were received on 8/19/2016 9:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 2.7° C and 3.0° C.

GC/MS VOA

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-317079 recovered above the upper control limit for Chloromethane, Methylene Chloride and Vinyl chloride. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following samples are impacted: PW02 (480-104791-1), PW03 (480-104791-2), PW04 (480-104791-3), PW05 (480-104791-4), PW09 (480-104791-5) and TB (480-104791-6).

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

HPLC/IC

Method(s) 300.0: The following sample was diluted to bring the concentration of target analytes within the calibration range: PW03 (480-104791-2). 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(s) 6020A: The continuing calibration blank (CCB) for analytical batch 480-317506 contained Total Thallium above the method detection limit. All reported samples, PW02 (480-104791-1), PW03 (480-104791-2), PW04 (480-104791-3), PW05 (480-104791-4), PW09 (480-104791-5), (LCS 480-317092/2-A) and (MB 480-317092/1-A), associated with this CCB were either below the laboratory's standard reporting limit for this analyte or contained this analyte at a concentration greater than 10X the value found in the CCB; therefore, re-analysis of samples was not performed.

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

General Chemistry

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

Client Sample Results

Client: Waste Management

Project/Site: Hagen Farms - Groundwater

TestAmerica Job ID: 480-104791-1

Client Sample ID: PW02

Date Collected: 08/18/16 10:35

Date Received: 08/19/16 09:00

Lab Sample ID: 480-104791-1

Matrix: Water

Method: 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		08/19/16 20:11	1
Surrogate									
TBA-d9 (Surrogate)	85		50 - 150					08/19/16 20:11	1
Dibromofluoromethane (Surrogate)	96		50 - 150					08/19/16 20:11	1

Method: 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		08/22/16 14:20	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.70	0.21	ug/L		08/22/16 14:20	1
1,1,2-Trichloroethane	ND		1.0	0.77	0.23	ug/L		08/22/16 14:20	1
1,1-Dichloroethane	ND		1.0	1.3	0.38	ug/L		08/22/16 14:20	1
1,1-Dichloroethene	ND		1.0	0.97	0.29	ug/L		08/22/16 14:20	1
1,2,4-Trichlorobenzene	ND		1.0	1.4	0.41	ug/L		08/22/16 14:20	1
1,2-Dibromo-3-Chloropropane	ND		1.0	1.3	0.39	ug/L		08/22/16 14:20	1
1,2-Dibromoethane (EDB)	ND		1.0	2.4	0.73	ug/L		08/22/16 14:20	1
1,2-Dichlorobenzene	ND		1.0	2.6	0.79	ug/L		08/22/16 14:20	1
1,2-Dichloroethane	ND		1.0	0.70	0.21	ug/L		08/22/16 14:20	1
1,2-Dichloropropane	ND		1.0	2.4	0.72	ug/L		08/22/16 14:20	1
1,3-Dichlorobenzene	ND		1.0	2.6	0.78	ug/L		08/22/16 14:20	1
1,4-Dichlorobenzene	ND		1.0	2.8	0.84	ug/L		08/22/16 14:20	1
2-Butanone (MEK)	ND		10	4.4	1.3	ug/L		08/22/16 14:20	1
2-Hexanone	ND		5.0	4.1	1.2	ug/L		08/22/16 14:20	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	7.0	2.1	ug/L		08/22/16 14:20	1
Acetone	ND		10	10	3.0	ug/L		08/22/16 14:20	1
Benzene	ND		1.0	1.4	0.41	ug/L		08/22/16 14:20	1
Bromodichloromethane	ND		1.0	1.3	0.39	ug/L		08/22/16 14:20	1
Bromoform	ND		1.0	0.87	0.26	ug/L		08/22/16 14:20	1
Bromomethane	ND		1.0	2.3	0.69	ug/L		08/22/16 14:20	1
Carbon disulfide	ND		1.0	0.63	0.19	ug/L		08/22/16 14:20	1
Carbon tetrachloride	ND		1.0	0.90	0.27	ug/L		08/22/16 14:20	1
Chlorobenzene	ND		1.0	2.5	0.75	ug/L		08/22/16 14:20	1
Chloroethane	ND		1.0	1.1	0.32	ug/L		08/22/16 14:20	1
Chloroform	ND		1.0	1.1	0.34	ug/L		08/22/16 14:20	1
Chloromethane	ND ^c		1.0	1.2	0.35	ug/L		08/22/16 14:20	1
cis-1,2-Dichloroethene	ND		1.0	2.7	0.81	ug/L		08/22/16 14:20	1
cis-1,3-Dichloropropene	ND		1.0	1.2	0.36	ug/L		08/22/16 14:20	1
Dibromochloromethane	ND		1.0	1.1	0.32	ug/L		08/22/16 14:20	1
Dibromomethane	ND		1.0	1.4	0.41	ug/L		08/22/16 14:20	1
Dichlorodifluoromethane	ND		1.0	2.3	0.68	ug/L		08/22/16 14:20	1
Ethylbenzene	ND		1.0	2.5	0.74	ug/L		08/22/16 14:20	1
Methylene Chloride	ND ^c		1.0	1.5	0.44	ug/L		08/22/16 14:20	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.53	0.16	ug/L		08/22/16 14:20	1
Naphthalene	ND		1.0	1.4	0.43	ug/L		08/22/16 14:20	1
Styrene	ND		1.0	2.4	0.73	ug/L		08/22/16 14:20	1
Tetrachloroethene	ND		1.0	1.2	0.36	ug/L		08/22/16 14:20	1
Tetrahydrofuran	ND		5.0	4.2	1.3	ug/L		08/22/16 14:20	1
Toluene	ND		1.0	1.7	0.51	ug/L		08/22/16 14:20	1
trans-1,2-Dichloroethene	ND		1.0	3.0	0.90	ug/L		08/22/16 14:20	1
trans-1,3-Dichloropropene	ND		1.0	1.2	0.37	ug/L		08/22/16 14:20	1

TestAmerica Buffalo

Client Sample Results

Client: Waste Management

Project/Site: Hagen Farms - Groundwater

TestAmerica Job ID: 480-104791-1

Client Sample ID: PW02

Lab Sample ID: 480-104791-1

Date Collected: 08/18/16 10:35

Matrix: Water

Date Received: 08/19/16 09:00

Method: 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		08/22/16 14:20	1
Trichlorofluoromethane	ND		1.0	2.9	0.88	ug/L		08/22/16 14:20	1
Vinyl chloride	ND ^c		1.0	3.0	0.90	ug/L		08/22/16 14:20	1
Xylenes, Total	ND		2.0	2.2	0.66	ug/L		08/22/16 14:20	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		77 - 120					08/22/16 14:20	1
4-Bromofluorobenzene (Surr)	96		73 - 120					08/22/16 14:20	1
Toluene-d8 (Surr)	101		80 - 120					08/22/16 14:20	1

8

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	LOQ	LOD	Unit	D	Analyzed	Dil Fac
Aluminum	ND		80.0	200	60.0	ug/L		08/22/16 23:38	1
Barium	43.7		6.0	2.3	0.70	ug/L		08/22/16 23:38	1
Calcium	90.1 B		5.0	0.33	0.10	mg/L		08/22/16 23:38	1
Chromium	1.4 J		5.0	3.3	1.0	ug/L		08/22/16 23:38	1
Cobalt	ND		6.0	2.1	0.63	ug/L		08/22/16 23:38	1
Copper	29.6		25.0	5.3	1.6	ug/L		08/22/16 23:38	1
Iron	0.068		0.10	0.064	0.019	mg/L		08/22/16 23:38	1
Magnesium	46.6		5.0	0.14	0.043	mg/L		08/22/16 23:38	1
Manganese	1.3 B		3.0	1.3	0.40	ug/L		08/22/16 23:38	1
Nickel	ND		4.0	4.2	1.3	ug/L		08/22/16 23:38	1
Potassium	0.89		5.0	0.33	0.10	mg/L		08/22/16 23:38	1
Silver	ND		3.0	5.7	1.7	ug/L		08/22/16 23:38	1
Sodium	7.4		5.0	1.1	0.32	mg/L		08/22/16 23:38	1
Vanadium	ND		5.0	5.0	1.5	ug/L		08/22/16 23:38	1
Zinc	160 B		4.0	5.0	1.5	ug/L		08/22/16 23:38	1

Method: 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		08/23/16 07:53	1
Arsenic	0.27 J		2.0	0.90	0.27	ug/L		08/23/16 07:53	1
Beryllium	ND		0.20	0.10	0.030	ug/L		08/23/16 07:53	1
Cadmium	ND		0.20	0.24	0.071	ug/L		08/23/16 07:53	1
Selenium	0.69 J		5.0	1.5	0.44	ug/L		08/23/16 07:53	1
Thallium	ND		0.20	0.063	0.019	ug/L		08/23/16 18:32	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	LOQ	LOD	Unit	D	Analyzed	Dil Fac
Mercury	ND		0.20	0.40	0.12	ug/L		08/22/16 12:18	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	417		0.50	0.33	0.10	mg/L		08/25/16 13:15	1

General Chemistry

Analyte	Result	Qualifier	RL	LOQ	LOD	Unit	D	Analyzed	Dil Fac
Chloride	20.5		0.50	0.94	0.28	mg/L		08/22/16 10:38	1
Sulfate	22.5		2.0	1.2	0.35	mg/L		08/22/16 10:38	1
Alkalinity, Total	323		50.0	66.7	20.0	mg/L		08/23/16 12:13	5
Total Cyanide	ND F1		0.020	0.017	0.0050	mg/L		08/25/16 14:21	1

TestAmerica Buffalo

Client Sample Results

Client: Waste Management

Project/Site: Hagen Farms - Groundwater

TestAmerica Job ID: 480-104791-1

Client Sample ID: PW02

Lab Sample ID: 480-104791-1

Date Collected: 08/18/16 10:35

Matrix: Water

Date Received: 08/19/16 09:00

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	LOQ	LOD	Unit	D	Analyzed	Dil Fac
Ammonia (as N)	ND		0.20	0.33	0.10	mg/L	08/22/16	15:21	1
Total Kjeldahl Nitrogen	ND		0.20	0.50	0.15	mg/L as N	08/23/16	11:48	1
Nitrate Nitrite as N	12.4		0.50	0.67	0.20	mg/L as N	08/22/16	21:20	10
Chemical Oxygen Demand	ND		10.0	16.7	5.0	mg/L	08/22/16	16:53	1
Total Dissolved Solids	433	B	10.0	13.3	4.0	mg/L	08/24/16	06:36	1
Total Suspended Solids	ND		2.0	6.7	2.0	mg/L	08/23/16	19:54	1
Phosphorus, Total	ND		0.20	0.016	0.0050	mg/L as P	08/24/16	11:15	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	LOQ	LOD	Unit	D	Analyzed	Dil Fac
Color	No				NONE		08/18/16	11:35	1
Dissolved Oxygen, Field	3.7				mg/L		08/18/16	11:35	1
Field EH/ORP	204.0				millivolts		08/18/16	11:35	1
Odor	No				NONE		08/18/16	11:35	1
pH, Field	7.88				SU		08/18/16	11:35	1
Specific Conductance, Field	775				umhos/cm		08/18/16	11:35	1
Temperature, Field (C)	16.0				Degrees C		08/18/16	11:35	1
Turbidity, Field	No				NONE		08/18/16	11:35	1

8

TestAmerica Buffalo



October 4, 2016

WASTE MANAGEMENT

Closed Sites Management Group
W124N9355 Boundary Road
Menomonee Falls, WI 53051
262 253 8626
262 255 3798 Fax

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 18, 2016. 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 that well indicates the water quality is typical of groundwater in the area, and does not indicate any affect from the Hagen Farm Landfill. Manganese is present in the sample and groundwater throughout this area at concentrations consistent with historical data. The presence of manganese at the identified concentrations may cause staining and taste concerns.

Vinyl Chloride was detected at a trace level in the sample, well below the State of Wisconsin Enforcement Standard of 0.2 ug/l and the Preventive Action Level of 0.02 ug/l.

I would recommend that you contact Ms. Sheila Sullivan from the USEPA if you would like any additional information regarding this correspondence. Ms. Sullivan is USEPA's representative for the Hagen Farm Landfill and provides regulatory oversight at the site. Ms. Sullivan's telephone number is (312) 886-5251.

Thank you for your consideration of this matter.

Sincerely,
Waste Management of Wisconsin, Inc.

A handwritten signature in black ink that reads "Michael L. Peterson".

Michael L. Peterson, P.E.
District Manager – Closed Sites Management Group

cc: Sheila Sullivan, USEPA
Gary Edelstein, WDNR

Definitions/Glossary

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

TestAmerica Job ID: 480-104791-1



5

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
^a 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
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
B	Compound was found in the blank and sample.
F1	MS and/or MSD Recovery is outside acceptance limits.
J	Reported value was between the limit of detection and the limit of quantitation.
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL. The data are considered valid because the absolute difference is less than the RL.
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.

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
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
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)



5



5

5

TestAmerica Buffalo

Case Narrative

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

TestAmerica Job ID: 480-104791-1

Job ID: 480-104791-1

Laboratory: TestAmerica Buffalo

Narrative

**Job Narrative
480-104791-1**

6

Comments

No additional comments.

Receipt

The samples were received on 8/19/2016 9:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 2.7° C and 3.0° C.

GC/MS VOA

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-317079 recovered above the upper control limit for Chloromethane, Methylene Chloride and Vinyl chloride. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following samples are impacted: PW02 (480-104791-1), PW03 (480-104791-2), PW04 (480-104791-3), PW05 (480-104791-4), PW09 (480-104791-5) and TB (480-104791-6).

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

HPLC/IC

Method(s) 300.0: The following sample was diluted to bring the concentration of target analytes within the calibration range: PW03 (480-104791-2). 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(s) 6020A: The continuing calibration blank (CCB) for analytical batch 480-317506 contained Total Thallium above the method detection limit. All reported samples, PW02 (480-104791-1), PW03 (480-104791-2), PW04 (480-104791-3), PW05 (480-104791-4), PW09 (480-104791-5), (LCS 480-317092/2-A) and (MB 480-317092/1-A), associated with this CCB were either below the laboratory's standard reporting limit for this analyte or contained this analyte at a concentration greater than 10X the value found in the CCB; therefore, re-analysis of samples was not performed.

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

General Chemistry

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

Client Sample Results

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

TestAmerica Job ID: 480-104791-1

Client Sample ID: PW09

Date Collected: 08/18/16 11:45

Date Received: 08/19/16 09:00

Lab Sample ID: 480-104791-5

Matrix: Water

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

Analyte	Result	Qualifier	RL	LOQ	LOD	Unit	D	Analyzed	Dil Fac
Vinyl chloride	0.0090	J	0.020	0.013	0.0040	ug/L		08/23/16 18:26	1
Surrogate									
TBA-d9 (Surr)	99			50 - 150				08/23/16 18:26	1
Dibromofluoromethane (Surr)	94			50 - 150				08/23/16 18:26	1

Method: 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		08/22/16 16:08	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.70	0.21	ug/L		08/22/16 16:08	1
1,1,2-Trichloroethane	ND		1.0	0.77	0.23	ug/L		08/22/16 16:08	1
1,1-Dichloroethane	ND		1.0	1.3	0.38	ug/L		08/22/16 16:08	1
1,1-Dichloroethene	ND		1.0	0.97	0.29	ug/L		08/22/16 16:08	1
1,2,4-Trichlorobenzene	ND		1.0	1.4	0.41	ug/L		08/22/16 16:08	1
1,2-Dibromo-3-Chloropropane	ND		1.0	1.3	0.39	ug/L		08/22/16 16:08	1
1,2-Dibromoethane (EDB)	ND		1.0	2.4	0.73	ug/L		08/22/16 16:08	1
1,2-Dichlorobenzene	ND		1.0	2.6	0.79	ug/L		08/22/16 16:08	1
1,2-Dichloroethane	ND		1.0	0.70	0.21	ug/L		08/22/16 16:08	1
1,2-Dichloropropane	ND		1.0	2.4	0.72	ug/L		08/22/16 16:08	1
1,3-Dichlorobenzene	ND		1.0	2.6	0.78	ug/L		08/22/16 16:08	1
1,4-Dichlorobenzene	ND		1.0	2.8	0.84	ug/L		08/22/16 16:08	1
2-Butanone (MEK)	ND		10	4.4	1.3	ug/L		08/22/16 16:08	1
2-Hexanone	ND		5.0	4.1	1.2	ug/L		08/22/16 16:08	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	7.0	2.1	ug/L		08/22/16 16:08	1
Acetone	ND		10	10	3.0	ug/L		08/22/16 16:08	1
Benzene	ND		1.0	1.4	0.41	ug/L		08/22/16 16:08	1
Bromodichloromethane	ND		1.0	1.3	0.39	ug/L		08/22/16 16:08	1
Bromoform	ND		1.0	0.87	0.26	ug/L		08/22/16 16:08	1
Bromomethane	ND		1.0	2.3	0.69	ug/L		08/22/16 16:08	1
Carbon disulfide	ND		1.0	0.63	0.19	ug/L		08/22/16 16:08	1
Carbon tetrachloride	ND		1.0	0.90	0.27	ug/L		08/22/16 16:08	1
Chlorobenzene	ND		1.0	2.5	0.75	ug/L		08/22/16 16:08	1
Chloroethane	ND		1.0	1.1	0.32	ug/L		08/22/16 16:08	1
Chloroform	ND		1.0	1.1	0.34	ug/L		08/22/16 16:08	1
Chloromethane	ND ^c		1.0	1.2	0.35	ug/L		08/22/16 16:08	1
cis-1,2-Dichloroethene	ND		1.0	2.7	0.81	ug/L		08/22/16 16:08	1
cis-1,3-Dichloropropene	ND		1.0	1.2	0.36	ug/L		08/22/16 16:08	1
Dibromochloromethane	ND		1.0	1.1	0.32	ug/L		08/22/16 16:08	1
Dibromomethane	ND		1.0	1.4	0.41	ug/L		08/22/16 16:08	1
Dichlorodifluoromethane	ND		1.0	2.3	0.68	ug/L		08/22/16 16:08	1
Ethylbenzene	ND		1.0	2.5	0.74	ug/L		08/22/16 16:08	1
Methylene Chloride	ND ^c		1.0	1.5	0.44	ug/L		08/22/16 16:08	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.53	0.16	ug/L		08/22/16 16:08	1
Naphthalene	ND		1.0	1.4	0.43	ug/L		08/22/16 16:08	1
Styrene	ND		1.0	2.4	0.73	ug/L		08/22/16 16:08	1
Tetrachloroethene	ND		1.0	1.2	0.36	ug/L		08/22/16 16:08	1
Tetrahydrofuran	ND		5.0	4.2	1.3	ug/L		08/22/16 16:08	1
Toluene	ND		1.0	1.7	0.51	ug/L		08/22/16 16:08	1
trans-1,2-Dichloroethene	ND		1.0	3.0	0.90	ug/L		08/22/16 16:08	1
trans-1,3-Dichloropropene	ND		1.0	1.2	0.37	ug/L		08/22/16 16:08	1

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-104791-1

Client Sample ID: PW09

Lab Sample ID: 480-104791-5

Date Collected: 08/18/16 11:45

Matrix: Water

Date Received: 08/19/16 09:00

Method: 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		08/22/16 16:08	1
Trichlorofluoromethane	ND		1.0	2.9	0.88	ug/L		08/22/16 16:08	1
Vinyl chloride	ND ^c		1.0	3.0	0.90	ug/L		08/22/16 16:08	1
Xylenes, Total	ND		2.0	2.2	0.66	ug/L		08/22/16 16:08	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		77 - 120					08/22/16 16:08	1
4-Bromofluorobenzene (Surr)	94		73 - 120					08/22/16 16:08	1
Toluene-d8 (Surr)	100		80 - 120					08/22/16 16:08	1

8

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	LOQ	LOD	Unit	D	Analyzed	Dil Fac
Aluminum	ND		80.0	200	60.0	ug/L		08/22/16 23:52	1
Barium	44.6		6.0	2.3	0.70	ug/L		08/22/16 23:52	1
Calcium	85.0	B	5.0	0.33	0.10	mg/L		08/22/16 23:52	1
Chromium	ND		5.0	3.3	1.0	ug/L		08/22/16 23:52	1
Cobalt	ND		6.0	2.1	0.63	ug/L		08/22/16 23:52	1
Copper	52.9		25.0	5.3	1.6	ug/L		08/22/16 23:52	1
Iron	ND		0.10	0.064	0.019	mg/L		08/22/16 23:52	1
Magnesium	40.0		5.0	0.14	0.043	mg/L		08/22/16 23:52	1
Manganese	76.2	B	3.0	1.3	0.40	ug/L		08/22/16 23:52	1
Nickel	ND		4.0	4.2	1.3	ug/L		08/22/16 23:52	1
Potassium	1.3		5.0	0.33	0.10	mg/L		08/22/16 23:52	1
Silver	ND		3.0	5.7	1.7	ug/L		08/22/16 23:52	1
Sodium	4.2		5.0	1.1	0.32	mg/L		08/22/16 23:52	1
Vanadium	ND		5.0	5.0	1.5	ug/L		08/22/16 23:52	1
Zinc	10.5	B	4.0	5.0	1.5	ug/L		08/22/16 23:52	1

Method: 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		08/23/16 08:33	1
Arsenic	0.57	J	2.0	0.90	0.27	ug/L		08/23/16 08:33	1
Beryllium	ND		0.20	0.10	0.030	ug/L		08/23/16 08:33	1
Cadmium	ND		0.20	0.24	0.071	ug/L		08/23/16 08:33	1
Selenium	ND		5.0	1.5	0.44	ug/L		08/23/16 08:33	1
Thallium	ND		0.20	0.063	0.019	ug/L		08/23/16 19:07	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	LOQ	LOD	Unit	D	Analyzed	Dil Fac
Mercury	ND		0.20	0.40	0.12	ug/L		08/22/16 12:34	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	377		0.50	0.33	0.10	mg/L		08/25/16 13:15	1

General Chemistry

Analyte	Result	Qualifier	RL	LOQ	LOD	Unit	D	Analyzed	Dil Fac
Chloride	22.0		0.50	0.94	0.28	mg/L		08/22/16 11:59	1
Sulfate	4.4		2.0	1.2	0.35	mg/L		08/22/16 11:59	1
Alkalinity, Total	333		50.0	66.7	20.0	mg/L		08/23/16 12:10	5
Total Cyanide	ND		0.020	0.017	0.0050	mg/L		08/25/16 14:47	1

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-104791-1

Client Sample ID: PW09

Lab Sample ID: 480-104791-5

Date Collected: 08/18/16 11:45

Matrix: Water

Date Received: 08/19/16 09:00

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	LOQ	LOD	Unit	D	Analyzed	Dil Fac
Ammonia (as N)	0.13	J F1	0.20	0.33	0.10	mg/L	08/24/16	11:28	1
Total Kjeldahl Nitrogen	0.28	J	0.20	0.50	0.15	mg/L as N	08/23/16	11:48	1
Nitrate Nitrite as N	0.023	J	0.050	0.067	0.020	mg/L as N	08/22/16	21:28	1
Chemical Oxygen Demand	7.3	J	10.0	16.7	5.0	mg/L	08/22/16	16:53	1
Total Dissolved Solids	381	B	10.0	13.3	4.0	mg/L	08/24/16	06:36	1
Total Suspended Solids	ND		2.0	6.7	2.0	mg/L	08/23/16	19:54	1
Phosphorus, Total	ND		0.20	0.016	0.0050	mg/L as P	08/24/16	11:15	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	LOQ	LOD	Unit	D	Analyzed	Dil Fac
Color	No					NONE	08/18/16	12:45	1
Dissolved Oxygen, Field	2.9					mg/L	08/18/16	12:45	1
Field EH/ORP	211.0					millivolts	08/18/16	12:45	1
Odor	No					NONE	08/18/16	12:45	1
pH, Field	7.42					SU	08/18/16	12:45	1
Specific Conductance, Field	685					umhos/cm	08/18/16	12:45	1
Temperature, Field (C)	19.4					Degrees C	08/18/16	12:45	1
Turbidity, Field	No					NONE	08/18/16	12:45	1

8

TestAmerica Buffalo