FOURTH FIVE-YEAR REVIEW REPORT FOR STOUGHTON CITY LANDFILL SUPERFUND SITE
City of Stoughton, Dane County, Wisconsin

Prepared by

Wisconsin Department of Natural Resources for the
U.S. Environmental Protection Agency
Region 5
Chicago, Illinois

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LIST OF ABBREVIATIONS & ACRONYMS

CD	Consent Decree
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
DCDFM	Dichlorodifluoromethane
DCE	1,2-Dichloroethylene
EPA	United States Environmental Protection Agency
ES	Ch. NR 140, Wisconsin Administrative Code (WAC) Enforcement Standard
FYR	Five-Year Review
HI	Hazard Index
HQ	Hazard Quotient
ICs	Institutional Controls
MCL	Maximum Contaminant Level
NCP	National Oil and Hazardous Substances Pollution Contingency Plan
NPL	National Priorities List
O&M	Operation and Maintenance
OU	Operable Unit
PAL	Ch. NR 140, Wisconsin Administrative Code (WAC) Preventive Action Limit
PCE	Tetrachloroethylene
RA	Remedial Action
RAO	Remedial Action Objectives
RD	Remedial Design
RI/FS	Remedial Investigation/Feasibility Study
ROD	Record of Decision
RSL	Regional Screening Level
Site	Stoughton City Landfill Superfund Site
SWRAU	Site-Wide Ready for Anticipated Use
TCE	Trichloroethylene
THF	Tetrahydrofuran
ug/L	Micrograms per Liter
UU/UE	Unlimited Use and Unrestricted Exposure
VC	Vinyl Chloride
VOC	Volatile Organic Compound
WAC	Wisconsin Administrative Code
WDNR	Wisconsin Department of Natural Resources

I. INTRODUCTION

The purpose of a Five-Year Review (FYR) is to evaluate the implementation and performance of a remedy in order to determine if the remedy is and will continue to be protective of human health and the environment. The methods, findings, and conclusions of reviews are documented in FYR reports such as this one. In addition, FYR reports identify issues found during the review, if any, and document recommendations to address them.

The Wisconsin Department of Natural Resources (WDNR) is preparing this FYR pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Section 121, consistent with the National Contingency Plan (NCP)(40 CFR Section 300.430(f)(4)(ii)), and considering the United States Environmental Protection Agency (EPA) policy.

This is the fourth FYR for the Stoughton City Landfill Superfund Site (Site). The triggering action for this **statutory** review is April 15, 2013. The FYR has been prepared due to the fact that hazardous substances, pollutants, or contaminants remain at the site above levels that allow for unlimited use and unrestricted exposure (UU/UE).

The Site consists of one operable unit (OU) which was reviewed and addressed in this FYR. OU1 addresses both landfill gas migration and groundwater quality.

The Stoughton City Landfill Superfund Site FYR was led by Jason Lowery from WDNR. Other participants included Eli Sankey and Leslie Busse, Engineers from SCS Engineers, and Giang-Van Nguyen, Remedial Project Manager from EPA. The public notice was published on April 13, 2017 to notify the initiation of the FYR. The review began on 4/13/2017.

Site Background

The Stoughton City Landfill site is located in the northeast portion of Stoughton, Dane County, Wisconsin. The property containing the landfill site encompasses approximately 27 acres and occupies a portion of section 4, township 5 north, range 11 east. Although the landfill property originally occupied approximately 40 acres, landfilling has occurred on only about 15 acres of the property. Since 1982, land exchanges between the city and the owner of an adjacent property have modified the original property boundaries.

A wetland area that existed in the southeast portion of the current property boundary was the initial area of waste disposal. Wetlands occur adjacent to the southeast portion of the site, in the north portion of the site, and west of the site along the Yahara River. The river comes within approximately 400 feet of the waste disposal area. Approximately 1/8th of the site (the northeastern section, which consists of wetlands) is situated within the 100-year flood plain. The nearest developed land occurs along Amundson Parkway, the site access road to the south, and Skogdalen Drive, a road off Amundson Parkway just south of the site, where residential homes have been built. An extensive residential area occurs approximately 1/4 mile south of the site, where the city street grid pattern begins. The land immediately adjacent to the southern site boundary was undeveloped at the time of the remedial investigation. Then, as now, there was no developed land in the vicinity of the site to the west, north or east. The City of Stoughton has a population of about 12,611 per the 2010 census. The residents of Stoughton are connected to city water.

Quaternary/glacial deposits, composed primarily of lacustrine plain and ice-contact stratified deposits, are approximately 200 feet thick at the site. Ice-contact stratified deposits generally include significant sand and gravel deposits and land forms such as kames and eskers. These deposits occupy higher ground within the landfill site and south of it. Lacustrine plain or glacial lake-bottom sediments are generally composed of fine-grained silt and clay. Some sand is present near former shorelines and stream inlets. These areas are often flat, poorly drained, and show evidence of peat accumulation. Lacustrine plain deposits occupy the southeast portion of the current property boundary, which was initially developed for waste disposal, and the low-lying ground adjacent to the east, north, and west portion of the site. Lacustrine plain sediments are generally overlain by younger marsh deposits. Under these deposits is reported to be Cambrian sandstone bedrock.

Regional groundwater flow is toward the Yahara River, which serves as a groundwater discharge. However, the groundwater flow in the surficial aquifer was radial beneath the site at the time of the remedial investigation. The surficial aquifer and the aquifer in the bedrock are hydraulically connected. Municipal well #3 is situated about 3000 ft west of the site and is set in the sandstone bedrock as an open pipe from roughly 210 ft below ground surface to 940 ft below ground surface.

FIVE-YEAR REVIEW SUMMARY FORM

SITE IDENTIFICATION		
Site Name: Stoughton City Landfill		
EPA ID: WID980901219		
Region: 5	**State:** WI	**City/County:** Stoughton, Dane County
SITE STATUS		
NPL Status: Final		
Multiple OUs? No	**Has the site achieved construction completion?** Yes	
REVIEW STATUS		
Lead agency: State		
Author name (Federal or State Project Manager): Jason B. Lowery, State Project Manager		
Author affiliation: Wisconsin Department of Natural Resources		
Review period: 4/13/2017 - 1/16/2018		
Date of site inspection: 10/27/2017		
Type of review: Statutory		
Review number: 4		
Triggering action date: 4/15/2013		
Due date *(five years after triggering action date)*: 4/15/2018		

II. RESPONSE ACTION SUMMARY

Basis for Taking Action

Actual or threatened releases of hazardous substances from this site, if not addressed by implementation of the response action selected in the Record of Decision (ROD), might present an imminent and substantial endangerment to public health, welfare, or the environment. This determination was based on the findings in the remedial investigation and the baseline risk assessment.

The City of Stoughton purchased the original 40-acre site in July 1952 and annexed it in September 1952 when landfill operation began. Between 1952 and 1969 the facility was operated as an uncontrolled dump site. Common municipal waste and both dry and liquid wastes were disposed of at the site. Some sludge materials containing 2-butanone, acetone, tetrahydrofuran, toluene, and xylene mixtures were disposed of at the site from 1954 until 1962. During this period, the liquid wastes were commonly poured over garbage and burned. It was also reported that some liquid wastes were poured down holes drilled to test auger drilling equipment in the west-central portion of the landfill. In 1969, the facility began operation as a state-licensed landfill. In 1977, the WDNR required that the site be closed according to state regulations. Closure activities included construction of a trash transfer station, placement of cover material borrowed from the northwest portion of the site and from agricultural areas, application of topsoil also derived from an agricultural area, and seeding. From 1978 to 1982 only brick, rubble, and similar construction materials were accepted at the site while closure work was performed. The landfill was officially closed in 1982.

Response Actions

The remedial action objectives for the site are:

- Minimize direct contact with the wastes;
- Minimize the further movement of contaminants to groundwater by reducing the amount of precipitation which infiltrates the landfill;
- Contain the movement of contaminants in the groundwater in order to prevent contaminants from leaving the site boundary;
- Extract and treat groundwater to meet state water quality discharge limits; and
- Restore the groundwater to state groundwater quality standards.

The remedy selected in the September 30, 1991 ROD was:

- Excavation of wastes in contact with groundwater to the southeast and northeast and placement of these materials under the cap;
- Placement of a solid waste landfill cover (cap) system over the waste disposal area;
- Extraction and treatment of contaminated groundwater unless additional investigations indicated that this might not be required;
- Placement of a fence around the cap, or slightly within the edges of the cap;
- Land use restrictions to prevent the installation of drinking water wells within 1,200 feet of the property boundary and to prevent residential development of the property; and
- Long-term groundwater monitoring to confirm the effectiveness of the other components of the selected remedy.

A February 29, 1996 Explanation of Significant Differences reduced the amount of wastes that were to be relocated under the cap. Further investigation of the groundwater during the remedial design indicated that it was not necessary to implement the extraction and treatment of the groundwater at the time of the construction of the cap and the other parts of the remedy.

Status of Implementation

The closure of the Stoughton City Landfill site involved the excavation and relocation of saturated waste deposited in wetlands, construction of a multilayer soil cover system, installation of a passive gas venting system, and construction of an access road and a perimeter security fence. Construction took place between April and December 1998.

The closure included the following:

- Construction of temporary facilities and security fencing;
- Construction of a decontamination pad and development of a water management plan for water resulting from decontamination and dewatering;
- Clearing, grubbing, and stripping of existing topsoil within the limits of the cap;
- Installation of soil erosion control measures, including a temporary flood control berm along the edge of the existing wetlands;
- Demolition and onsite consolidation of existing on-site facilities and debris, including a water line and picnic shelter;
- Abandonment of some existing monitoring wells on the site;
- Removal and onsite disposal and consolidation of drummed wastes from remedial investigation activities;
- Test pit investigations to determine the limits of the wastes;
- Excavation, dewatering, and on-site consolidation of saturated wastes, including the construction of a dewatering pad;
- Construction of the multilayer soil cover system (cap) after completion of a clay test pad;
- Installation of a passive landfill gas vent system;
- Construction of a permanent access road;
- Installation of a permanent perimeter fence and gates; and
- Final grading and restoration, including construction of a storm water and erosion system.

Additional wastes were encountered during the abandonment of the existing water line and, consequently, additional test pits were excavated in areas outside the originally defined waste relocation areas. It was found that wastes to the south extended to within a few feet of Skogdalen Drive. Due to the additional wastes discovered outside the original limits and some waste found to be at a greater depth than was anticipated, the actual amount of wastes relocated was nearly 25,000 cubic yards. This resulted in the cover being raised about two feet at the highest point.

Construction completion for the site was achieved with the issuance of the Preliminary Close Out Report on December 15, 1998.

Table 1: Site Chronology

Event	Date
Landfill began operation (initially as an uncontrolled dump)	September 1952
Operation as a state-licensed landfill began	1969
Wisconsin Department of Natural Resources required closure	1977
Closure completed following operation for landfilling of construction debris since 1978	1982
Site proposed for the National Priority List (NPL)	10/15/84
Placed as final on the NPL	6/10/86
Administrative Order by Consent for the remedial investigation (RI) and feasibility study (FS)	April 15, 1988 effective May 2, 1988
RI field work begins	March 1989
Proposed Plan released	7/12/91
Public meeting to discuss Proposed Plan and RI and FS reports	7/24/91
End of public comment period for the Proposed Plan	8/12/91
Record of Decision (ROD)	9/30/91
Fund lead remedial design (RD) began	9/28/92
Negotiations for RD and remedial action (RA) completed	9/28/92
Explanation of Significant Differences released	2/29/96
RD completed	1/30/97
Consent decree for cost settlement between City of Stoughton and United States and State of Wisconsin	lodged 6/5/97 entered 8/13/97
Fund lead RA began	9/27/97
On-site mobilization for RA began	4/10/98
Preliminary Close Out Report (construction completion under CERCLA)	12/15/98
Site inspection for the first FYR	4/08/03
First FYR report completed	4/17/03
Site inspection for second FYR	10/17/07
Second FYR report completed	4/16/08
Restrictive Covenant recorded at Dane County recorder's office	11/23/2010
Site inspection for third FYR	10/12/12
Sitewide Ready for Anticipated Use (SWRAU) completed	1/24/13
Completion of third FYR report	4/15/13
Site inspection for fourth FYR	10/27/17

Institutional Controls

Institutional controls (ICs) are non-engineered instruments, such as administrative and/or legal controls, that help minimize the potential for exposure to contamination and protect the integrity of the remedy. Compliance with ICs is required to assure long-term protectiveness for any areas which do not allow for UU/UE.

The map in Figure 1 shows the area within the fence line that does not support UU/UE. Table 2 summarizes ICs for these restricted areas.

Table 2: Summary of ICs

Media, engineered controls, and areas that do not support UU/UE based on current conditions	ICs Needed	ICs Called for in the Decision Documents	Impacted Parcel(s)	IC Objective	Title of IC Instrument Implemented and Date
Soil and Groundwater– Constructed Subtitle C landfill cap over waste area disposal area within fence	Yes	Yes	281/0511-043-8500-5	Prohibit interference of cap and assure integrity of the landfill cap; Prohibit residential use	-Environmental Protection Easement and Declaration of Restrictive Covenant recorded at Dane County recorder's office on 11/23/2010. Document # 4717518. -State of Wisconsin Chapter NR 506 (requires a prior approval from WDNR to build on a closed or abandoned landfill)
North of Stoughton Landfill on Property – Area of site beyond landfill treated to recreational cleanup standards	Yes	Yes	281/0511-042-9340-8	Prohibit residential use	-Environmental Protection Easement and Declaration of Restrictive Covenant recorded at Dane County recorder's office on 11/23/2010. Document # 4717518. -State of Wisconsin Chapter NR 506 (requires a prior approval from WDNR to build on a closed or abandoned landfill)
Groundwater – current area on Stoughton Property that exceeds groundwater cleanup standards	Yes	Yes	281/0511-043-8500-5	Prohibit groundwater use (until cleanup standards are achieved)	-Environmental Protection Easement and Declaration of Restrictive Covenant recorded at Dane County recorder's office on 11/23/2010. Document #4717518.
Groundwater – current area beyond Stoughton property that exceeds groundwater cleanup standards	Yes	Yes	Various	Prohibit groundwater use (until cleanup standards are achieved)	State of Wisconsin Chapter NR 812 (prohibits construction of well within 1,200 feet of landfill waste boundary without prior written approval from WDNR)

The IC ROD Requirements: Cleanup goals for the Site, within the fence, include containment of soils and groundwater and a prohibition of residential use of the Site. Cleanup goals for groundwater beyond the site are based upon residential use.

The September 1991 ROD states that the remedy includes "Land use restrictions to prevent the installation of a well within 1,200 feet of the property boundary and to prevent residential development of the site." It also states that a component of the remedy is "Groundwater use in the area would be prevented by obtaining deed restrictions on the use and placement of wells in the affected area." Finally, the ROD states that the remedy includes "...the placement of institutional controls such as deed

restrictions to control future land use..." One of the deed restrictions that was to be placed on the two parcels of property at the site states: "No water wells, other than monitoring wells, shall be located on the property." In addition, the ROD calls for the prohibition of wells within 1,200 feet of the property boundary. The ROD 1,200 feet separation requirement is generally being met by the requirements of NR 812, Wis. Adm. Code, that a well not be constructed within 1,200 feet of a landfill unless a written variance is granted by WDNR.

The Consent Decree IC Requirements: The City of Stoughton entered into a Consent Decree (CD) with the agencies in 1997 to settle their Superfund liability for the site. In the ICs section of the CD, it refers to the ROD, and Appendices B, C, and D of the CD address ICs. In Appendix B, "Declaration of Restrictions", section 1(e), it specifically states: "No recreational use within the fence installed pursuant to the ROD".

November 2010 Deed Instrument: An Environmental Protection Easement and Declaration of Restrictive Covenants for the site was recorded at Dane County's office on November 23, 2010. This easement and restrictive covenant prevents installation of drinking water wells in the area of concern, prohibits residential and recreational reuse, and cap interference.

Other Existing ICs: Several Wisconsin regulations are governmental ICs which help to ensure the protectiveness of the remedy. These are as follows:
• Chapter NR 812, Wisconsin Administrative Code, requires anyone who wishes to construct a well within 1,200 feet of a landfill to obtain a prior written variance from WDNR.
• Chapter NR 506, Wisconsin Administrative Code, requires anyone who wishes to build on a closed or abandoned landfill to get prior approval from WDNR.

Current Compliance: Based on the inspection conducted as part of this FYR, no site uses which are inconsistent with the implemented ICs or the remedy IC objectives were noted.

IC Follow up Actions needed: No follow up actions are required at this time.

Long-Term Stewardship: WDNR regularly inspects ICs at the Site and provides annual certification to EPA that ICs are in place and effective.

Systems Operations/Operation & Maintenance

WDNR is providing the operation and maintenance (O&M) required under the state's regulations for a closed landfill and the monitoring required by the ROD. This consists of groundwater monitoring, gas probe monitoring and inspection and maintenance of the fence, cover, drainage features and gas vents.

WDNR has performed O&M since July of 2000. A repair contractor is hired on an as-needed basis to conduct non-routine repairs. The current site map, showing monitoring wells, gas vents, gas probes, the fence, gates, site topography and the access road is attached as Figure 1.

The following landfill maintenance issues were noted and addressed during the past five years:

- Broken slats were observed in the fence at multiple locations during various site inspections. Ayres Associates and the City of Stoughton subsequently repaired the broken slats.

- Site signage near the west gate was observed to be missing during the April 4, 2015 site inspection. The sign was subsequently replaced by Ayres Associates on November 7, 2015.
- Riprap in a stormwater drainage channel in the southern portion of the site was observed to be clogged with sediment, cattails, and woody vegetation during the site inspection on April 30, 2013. Additional heavy vegetation was observed at several culverts during the site inspection on April 17, 2017. These obstructions were not repaired because they were minor enough that they were not causing significant ponding.
- Several animal burrows and woody vegetation around gas vents and monitoring wells were observed during various site inspections. Woody vegetation was removed and animal burrows were plugged during subsequent site visits.
- The protective casings for monitoring wells MW4D, MW14I, and MW15D were found to interfere with the locking clasp mechanisms during various site inspections. Ayres modified the locks/locking process during subsequent site visits to address the issues.
- The lock for gas probe GMP-3 was corroded and replaced by Ayres Associates in December 2015.
- Artesian/flowing conditions were observed at monitoring wells OW-1, OW-2, MW7B, MW10D, MW13I, and MW13D during various site inspections. Monitoring wells OW-1, MW7B, MW10D and MW13D were subsequently abandoned during the past five years. Inflatable plugs were installed at monitoring wells MW13I and OW-2.

III. PROGRESS SINCE THE LAST REVIEW

This section includes the protectiveness determinations and statements from the last FYR as well as the recommendations from the last FYR and the current status of those recommendations.

Table 3: Protectiveness Determinations/Statements from the 2013 FYR

OU #	Protectiveness Determination	Protectiveness Statement
1	Short-term Protective	The remedy is protective of human health and the environment in the short-term. Exposure pathways that could result in unacceptable risks are being controlled and monitored. Institutional controls are in place and effective. However, in order for the remedy to be protective in the long-term, groundwater monitoring and gas migration monitoring results need to continue to be assessed for increasing trends and appropriate action taken if needed.
Sitewide	Short-term Protective	The remedy is protective of human health and the environment in the short-term. Exposure pathways that could result in unacceptable risks are being controlled and monitored. Institutional controls are in place and effective. However, in order for the remedy to be protective in the long-term, groundwater monitoring and gas migration monitoring results need to continue to be assessed for increasing trends and appropriate action taken if needed.

Table 4: Status of Recommendations from the 2013 FYR

OU #	Issue	Recommendations	Current Status	Current Implementation Status Description	Completion Date (if applicable)
1	Groundwater Quality	Based on an evaluation of the groundwater monitoring results, the monitoring program should continue. If wells show increasing trends, then the need for additional groundwater action would be evaluated prior to or in the next five-year review report.	Ongoing	Annual monitoring	N/A
1	Landfill Gas Migration	Determine through additional gas probe monitoring if landfill gas migration is occurring to the south; develop and implement corrective measures if they are needed.	Ongoing	Bi-monthly monitoring	N/A

Recommendation #1

Groundwater monitoring is ongoing. A copy of the most recent Annual Groundwater Monitoring Report, prepared by SCS Engineers and dated July 13, 2017, is attached as Appendix A. In addition to quality assurance/quality control samples, the most recent scope of work includes collecting groundwater samples from monitoring wells every spring for the following parameters:

Table 5: Groundwater Monitoring Schedule

Well	GEMS ID	Parameters
MW3D	112	Water elevation – MSL, FI, DCDFM, THF
MW4D	115	Water elevation – MSL, FI, DCDFM, THF
MW5D	117	Water elevation – MSL, FI, DCDFM, THF
MW7I	119	Water elevation – MSL, FI, DCDFM, THF
MW8I	122	Water elevation – MSL, FI, DCDFM, THF
MW9S	124	Water elevation – MSL, FI, DCDFM, THF, Full VOCs
MW9I	125	Water elevation – MSL, FI, DCDFM, THF, Full VOCs
MW9B	126	Water elevation – MSL, FI, DCDFM, THF, Full VOCs
MW10S	127	Water elevation – MSL, FI, DCDFM, THF, Full VOCs
MW10I	128	Water elevation – MSL, FI, DCDFM, THF, Full VOCs
MW13I	131	Water elevation – MSL, FI, DCDFM, THF

MW14S	133	Water elevation – MSL, FI, DCDFM, THF, Full VOCs
MW14I	134	Water elevation – MSL, FI, DCDFM, THF, Full VOCs

Key: GEMS ID= Groundwater and Environmental Monitoring System Identification; MSL = Mean Sea Level; DCDFM = Dichlorodifluoromethane; THF = Tetrahydrofuran; FI = Field Indicators = pH, temperature, and specific conductance; VOC = volatile organic compounds

For the compounds analyzed, detections have generally been below applicable groundwater standards. The only ch. NR 140, Wisconsin Administrative Code (WAC), Preventive Action Limit (PAL) exceedance in spring 2017 was tetrachloroethylene (PCE) in groundwater at monitoring well MW10I (1.8 micrograms per liter (ug/L)). The following PAL or ch. NR 140 WAC Enforcement Standard (ES) exceedances have also been detected in groundwater samples collected from the following wells over the past five years. The table indicates that the highest concentrations generally occurred in 2013 or 2014 and have declined to being below detection limits since then.

Table 6: Groundwater Standard Exceedances

Well	Compounds	Standards (ug/L) – highest standard exceeded in bold font	Highest Concentration Past 5 Years and 2017 Concentration (ug/L)
MW3D	THF	**PAL = 10**, ES = 50	17 (2013), 6.5 J (2017)
MW7I	THF	**PAL = 10**, ES = 50	18 (2013), 6.9 J (2017)
MW9S	VC	PAL = 0.02, **ES = 0.2**	0.23 (2013), <0.20 (2017)
MW9I	TCE	**PAL = 0.5**, ES = 5	0.98 (2013), <0.16 (2017)
MW9I	VC	PAL = 0.02, **ES = 0.2**	0.25 (2013), <0.20 2017
MW10I	TCE	**PAL = 0.5**, ES=5	0.94 (2013), <0.16 (2017)
MW10I	PCE	**PAL = 0.5**, ES = 5	5 (2013), 1.8 (2017)
MW10I	VC	**PAL = 0.02**, ES = 0.2	0.19 (2013), <0.20 (2017)
MW13I	THF	**PAL = 10**, ES = 50	19 (2014), <1.9 (2017)
MW14S	PCE	**PAL = 0.5**, ES = 5	1.2 (2013), <0.37 (2017)
MW14I	PCE	PAL = 0.5, ES = 5	0.51 (2013), <0.37 (2017)
MW14I	VC	PAL = 0.02, **ES=0.2**	0.28 (2014), <0.20 (2017)

J = detected below Limit of Quantitation

Recommendation #2

In addition to general maintenance of the landfill, gas migration is monitored through bi-monthly measurements at three gas probes near the south edge of the site as follows:

Table 7: Gas Probe Monitoring Schedule

Probe	Parameters
GMP-1	% LEL as methane, % O_2, % CO_2, PID (ppm), and pressure (in. H_2O)
GMP-2	
GMP-3	

Key: LEL = lower explosive limit; PID = photoionization detector; ppm = parts per million

Indications of significant landfill gas migration have generally not been noted during the past five years. Landfill gas probe results are shown in Table 8. The most recent Semiannual Facility Inspection Report, dated November 14, 2017, is attached as Appendix B.

Table 8: Gas Probe Results

Probe	% Methane	% O2	%CO2	PID (ppm)	Pressure (in. H_2O)
GMP-1	0.0 to 0.7% (Dec '14)	18.9 (Dec '14) to 21.0	0.0 to 3.4 (Dec '14)	0.0 to 0.1 (Apr '17)	-0.16 to +0.03 (Aug '17)
GMP-2	0.0 to 0.1% (Dec '14)	11.9 (Feb '13) to 21.3	0.0 to 3.3 (Jun '14)	0.0 to 0.2 (June '16)	-0.10 to 0.00 (Oct '17)
GMP-3	0.0 to 7.6% (>LEL, Jun '13)	10.2 (Apr '13) to 21.6	0.0 to 8.1 (Jun '15)	0.0 to 0.3 (Feb '17)	-0.10 to +0.01 (Apr '17)

Note: Year of highest or lowest results indicated in parentheses after highest or lowest value
LEL for methane is 5%

Gas probe monitoring results have indicated greater concerns at gas probe GMP-3 than the other two probes but results have generally improved over the past few years. The highest methane and CO_2 and lowest O_2 results occurred at least two years ago. The three most recent monitoring events indicated greater than 19% O_2 and 0.0 ppm PID at each probe. CO_2 concentrations recently increased but are still significantly below concentrations measured in 2015 and earlier. Methane was detected at 0.4% at gas probe GMP-1 in October 2017, which was the first methane detection since December 2014, when methane was detected as high as 0.7% at gas probe GMP-1. The 7.6% methane result at gas probe GMP-3 in June 2013 occurred immediately after a thunderstorm that saturated the ground. Methane was measured at 0.0% during the subsequent monitoring event in August 2013.

IV. FIVE-YEAR REVIEW PROCESS

Community Notification, Involvement & Site Interviews

A public notice was made available by WDNR in the Stoughton Courier Hub on April 13, 2017, stating that there was a FYR and inviting the public to submit any comments to WDNR. The public notice is attached as Appendix C. The results of the review and the report will be made available at the Stoughton Public Library located at 304 South Fourth St., Stoughton, WI 53589.

Data Review

Groundwater

The main objectives of the groundwater monitoring are to track the concentrations of THF and DCDFM, which were identified during the earlier studies as the two substances that were of primary concern. Other organics are also tracked. Compounds of secondary concern are PCE, trichloroethylene (TCE), and vinyl chloride (VC).

Groundwater monitoring results from April 2013 to April 2017 were reviewed. In summary, the following was found:

- The sampling results show that all organic compounds of primary and secondary concern are most recently below ch. NR 140 ESs. VC exceeded its ES at least once in groundwater at three monitoring wells in 2013 or 2014. The VC concentrations remain below the federal Maximum

Contaminant Level (MCL) of 2.0 ug/L. The federal MCLs for TCE and PCE are equal to the ES of 5.0 ug/L for both compounds.

- A few ch. NR 140 PAL exceedances are still being detected for the organic compounds of primary and secondary concern in each sampling event. The total number of detected PAL exceedances (all compounds at all wells) steadily decreased from 12 in April 2013 to one (PCE at monitoring well MW10I) in May 2017.

- All the organic compounds data from April 2013 to May 2017 for wells where the results exceeded PALs were reviewed and plotted on graphs to determine if any increasing trend could be noted. Increasing trends were not evident; however, due to continued exceedances of PALs in a number of wells for organics, a continued VOC monitoring program is warranted. The graph plots are attached as Appendix D.

It is to be noted that THF and DCDFM do not have federal MCLs. EPA Region 9 publishes a table of generic Regional Screening Levels (RSL). In this table, concentrations in water are given that result from a specified scenario and correspond to a cancer risk of 10^{-6} for carcinogens or a hazard quotient (HQ) of 1.0 for non-carcinogens (the sum of the HQs, when there is more than one non-carcinogen, gives the hazard index (HI); a HQ or HI of 1 is the maximum acceptable value); if a substance falls into both categories, then the lower concentration is presented in the table. The tap water RSL for THF is 3,400 ug/L and the tap water RSL for DCDFM is 200 ug/L. Both RSLs are based upon the HI of 1 since the compounds are not considered carcinogenic. The Wisconsin PAL and ES for DCDFM are 200 ug/l and 1,000 ug/L, respectively. The Wisconsin PAL and ES for THF are 10 and 50 ug/L, respectively.

Soil Gas

As indicated earlier, elevated methane levels were detected at gas probe GMP-3 in June 2013, under saturated soil conditions, but the next highest methane concentration at this probe was 0.1% in December 2014. Some elevated CO_2 concentrations have also been detected at gas probe GMP-3. Plots of CO_2 and O_2 concentrations at the gas probes are included as Appendix D. Additional testing is needed to provide a larger data set to confirm that that the marked improvement is ongoing.

Site Inspection

The inspection of the Site was conducted on 10/27/2017. In attendance were Jason Lowery, WDNR, Giang-Van Nguyen of EPA, and Eli Sankey of SCS Engineers. The purpose of the inspection was to assess the protectiveness of the remedy. The Site Inspection Checklist including photographs associated with the issues identified below is included as Appendix E. A separate inspection report competed by a WDNR Waste Management Specialist on September 22, 2017 is included as Appendix F.

The state O&M contractor also completed their regular semi-annual site inspection on 10/27/2017 and their report, including photographs, is attached as Appendix B.

The landfill cover (photo 3) appeared to be in generally good condition. No bare spots or sparse vegetation were noted. Two animal burrows were observed near monitoring well MW-2D (photo 5).

All monitoring wells except for monitoring wells MW-12S, MW-12I, and MW-12D were inspected in October 2017. The monitoring well MW-12 cluster was not located. Monitoring wells were in generally

good condition and locked. Several monitoring wells were unlabeled (example, photo 4) and water was observed to be flowing out of three of the monitoring wells (photos 14, 15, and 16).

The gas vents were found to be undamaged and no stressed vegetation was found near the vents. All vent screens were clear. However, gas vents were unlabeled (photo 6).

The fence was in good condition. One minor break in a fence slat was observed (photo 17) in the southwest portion of the landfill. The chain-link fence was in good condition. Both access gates were in good condition and the padlocks operated properly. The warning signs on the gates were noted (photos 1 and 2). The access road was in very good condition with no ruts, ponding, or erosion noted.

WDNR did observe a disc golf player jumping over the fence along the west side of the landfill (area shown in photo 12). WDNR discussed the issue with EPA and recommended adding "no trespassing" signs to that particular area. This would dissuade disc golf players from climbing over the fence and also minimize damage to the fence line that occurs when this happens.

The storm water drainage system around the site was in generally good condition. No visible erosion was found. The culverts were undamaged. Some ponding and cattails were observed in the south storm water ditch (photos 10 and 11). Several dead branches were also observed to be partially blocking the drainage slightly downstream of the ponded areas and adjacent west of the culvert near the Main Gate (photo 18).

The City of Stoughton, O&M contractor, or other contractor(s) will be tasked with the following repairs:

- Filling in animal burrows near monitoring well MW-2D.
- Clearing branches out of storm water ditch adjacent west of culvert near the Main Gate.
- Labeling gas vents and monitoring wells and, in some cases, re-painting the monitoring well pro-tops.
- Plugging the three flowing monitoring wells to minimize the amount of flow.
- Replacing the broken fence slat in the southwest portion of the landfill.
- Adding signs along the west fence line to dissuade disc golf players from entering the landfill property.

V. TECHNICAL ASSESSMENT

QUESTION A: Is the remedy functioning as intended by the decision documents?

Yes.

In general, the integrity of the cap and other landfill components have been adequately maintained over the past 5 years. The review of the available information indicates that the remedy is functioning as it was intended. None of the monitoring wells currently sampled for organics are showing increasing trends and concentrations are generally decreasing. Based on the results, it is recommended that the annual organics monitoring program continue for at least another 5 years to allow continued evaluation of the data over that time by the agencies and report the results and make any recommendations prior to or in the next FYR, to be completed by April 2023. If wells start to show increasing trends, then the need for some sort of additional groundwater action would be evaluated.

No Site uses which are inconsistent with the implemented ICs or the remedy IC objectives have been noted during the Site inspection or via interviews.

QUESTION B: Are the exposure assumptions, toxicity data, cleanup levels, and remedial action objectives (RAOs) used at the time of the remedy selection still valid?

Yes.
There have been no major changes in the physical conditions of the site that would affect the protectiveness of the remedy. The site is being used as anticipated (that is, the waste disposal area is not being used). Therefore, there are no new exposure pathways and new exposure assumptions are not needed at this time.

The primary applicable or relevant and appropriate requirements that the site has to meet fall into two general categories of regulations: landfill and groundwater. Most of the landfill requirements have been met through the construction that has taken place and the remedy is progressing as expected. Of primary concern now is continuing to meet the standards for the gas and groundwater.

There have been no changes to toxicity factors for the applicable compounds or risk assessment methods that would impact the protectiveness of the remedy.

QUESTION C: Has any other information come to light that could call into question the protectiveness of the remedy?

No. There has been no new information that would suggest that the selected remedy is not protective.

VI. ISSUES/RECOMMENDATIONS

Issues/Recommendations
OU(s) without Issues/Recommendations Identified in the Five-Year Review:
None

Issues and Recommendations Identified in the Five-Year Review: None

OU(s): 1	Issue Category: Monitoring			
	Issue: Groundwater Quality			
	Recommendation: Based upon an evaluation of the groundwater monitoring results, the monitoring program should continue. If wells show increasing trends, then the need for additional action would be evaluated prior to or in the next FYR report.			
Affect Current Protectiveness	**Affect Future Protectiveness**	**Party Responsible**	**Oversight Party**	**Milestone Date**
No	Yes	State	EPA	4/15/2023

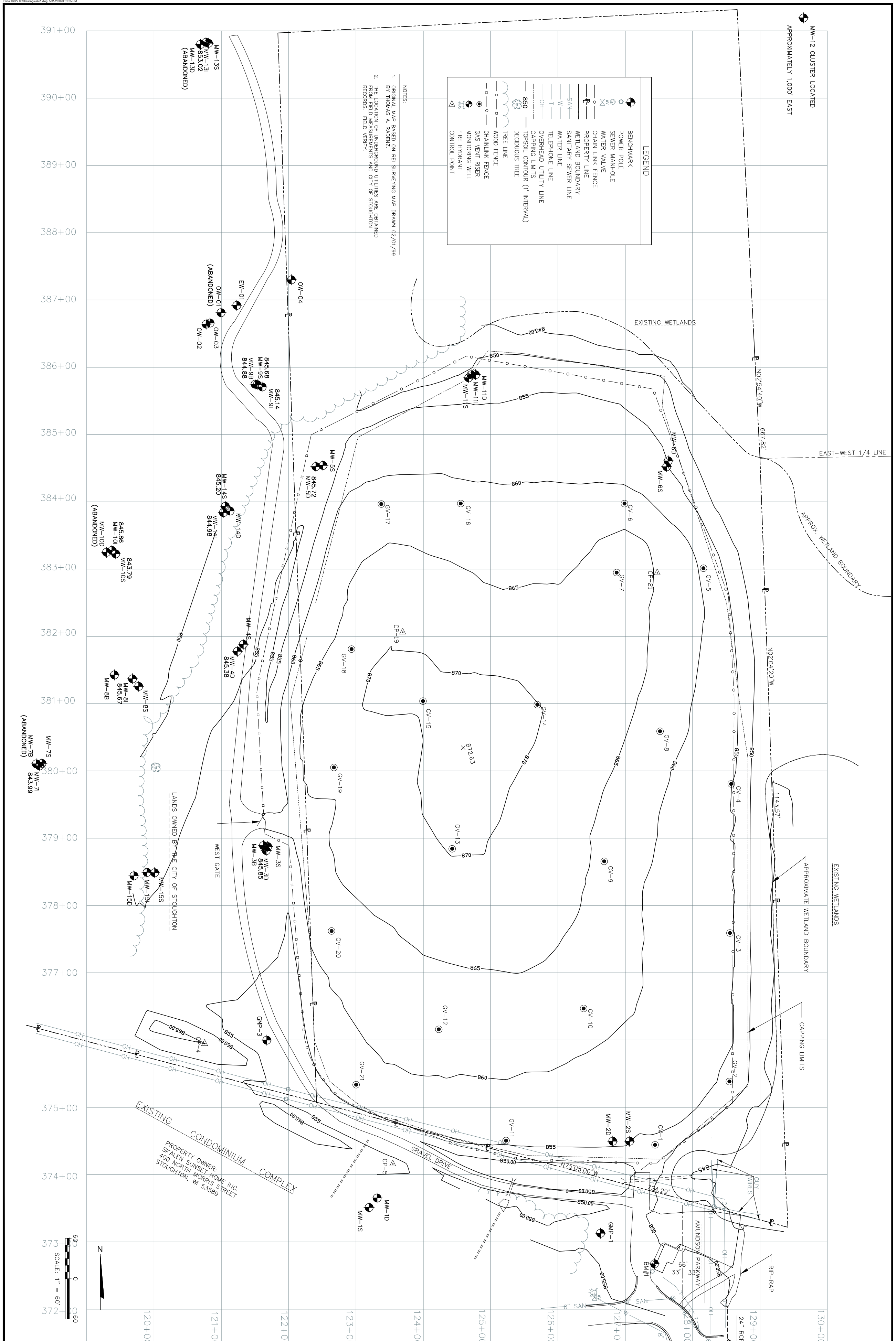
OU(s): 1	Issue Category: Monitoring			
	Issue: Landfill Gas Migration			
	Recommendation: Determine through additional gas probe monitoring if landfill gas migration is occurring to the south; develop and implement corrective measures if they are needed.			
Affect Current Protectiveness	**Affect Future Protectiveness**	**Party Responsible**	**Oversight Party**	**Milestone Date**
No	Yes	State	EPA	4/15/2023

VII. PROTECTIVENESS STATEMENT

OU1 and Sitewide Protectiveness Statement
Protectiveness Determination: Short-term Protective
Protectiveness Statement: The remedy is currently protective of human health and the environment. Exposure pathways that could result in unacceptable risks are being controlled and monitored. ICs are in place and effective. However, in order for the remedy to be protective in the long-term, the following actions need to be taken to ensure protectiveness: groundwater monitoring and gas migration results need to continue to be assessed and appropriate action taken if needed.

VIII. NEXT REVIEW

The next FYR report for the Stoughton City Landfill Superfund Site is required no less than five years from EPA's signature date of this review.



PROJECT NO.	25216022.00	DRAWN BY:	AHB
DRAWN:	06/06/00	CHECKED BY:	SS
REVISED:	05/26/16	APPROVED BY:	LAB 05/31/16

SCS ENGINEERS
2830 DAIRY DRIVE MADISON, WI 53718-6751
PHONE: (608) 224-2830

DEPARTMENT OF NATURAL RESOURCES
101 S. WEBSTER STREET
MADISON, WI 53702

STOUGHTON CITY LANDFILL
STOUGHTON, WISCONSIN

SITE PLAN

SHEET 1

APPENDIX A: Annual Groundwater Monitoring Report

Environmental Consultants
and Contractors

2830 Dairy Drive
Madison, WI 53718-6751

608 224-2830
FAX 608 224-2839
www.scsengineers.com

SCS ENGINEERS

July 13, 2017
File No. 25216022.00

Mr. Jason Lowery
Wisconsin Department of Natural Resources
Bureau for Remediation and Redevelopment – RR/5
P.O. Box 7921
Madison, WI 53707

Subject: Annual Groundwater Monitoring Report
May 2017 Monitoring Event
Stoughton City Landfill
FID #113005950 – License #133
USEPA ID #WID980901219
WDNR Purchase Order #37000-0000006548

Dear Mr. Lowery:

This letter provides the Annual Groundwater Monitoring Report for the May 2017 monitoring event for the Stoughton City Landfill site. The annual groundwater monitoring events are scheduled for April of each year; however, due to wet conditions this year the monitoring did not occur until May. The 2017 groundwater monitoring well sampling was conducted on May 4, 2017 and May 5, 2017. Two copies of this report and a compact disk with the electronic data file is being submitted to the Wisconsin Department of Natural Resources (WDNR) Central Office, along with the Groundwater Monitoring Data Certification Form. A copy is also being sent to the U.S. Environmental Protection Agency (USEPA).

ANNUAL GROUNDWATER MONITORING FIELD PROCEDURES

The field procedures and the groundwater sampling were performed in accordance with the Quality Assurance Project Plan (QAPP) Revision 2 submitted to the WDNR on March 31, 2016. TestAmerica, Inc. of University Park, IL, analyzed the groundwater samples for volatile organic compounds (VOCs) including dichlorodifluoromethane (DCDFM) and tetrahydrofuran (THF) by EPA Method SW 8260B.

Groundwater Analytical Results

Table 1 is a summary of analytical results for the groundwater monitoring at the site. The new water table elevations summary is included as **Table 2**. Field parameter results are summarized in **Table 3**. Historical target compound detections are summarized in **Table 4**. The original laboratory analytical and quality control report are enclosed as **Attachment A**. A summary of NR 140 standard exceedances is provided in **Attachment B**. The field data form is provided in **Attachment C**.

Quality Assurance

The laboratory's quality control data were all within acceptable limits. The laboratory's percent Surrogate recoveries were all within acceptance limits. All LCS spike recoveries were within the acceptance limits, as were all the MS/MSD recoveries.

It should be noted that all the historical site data were analyzed by the USEPA Contract Laboratory Program (CLP) Routine Analytical Services (RAS) using the Low/Medium Concentration Organic Target Compound List (TCL) and Contract Required Quantitation Limits (CRQL) of 10 micrograms per liter (µg/L). The current analytical laboratory, TestAmerica, Inc., provides detection limits for SW 8260B VOCs ranging from 0.15 µg/L for benzene to 2.0 µg/L for 1,2-Dibromo-3-Chloropropane.

Volatile Organic Compounds Detected

The following VOC was detected above the preventive action limit (PAL) or enforcement standard (ES):

- Tetrachloroethene – MW10I at 1.8 µg/L (PAL of 0.5 µg/L)

This is consistent with past results. Several other VOCs were detected at levels below their respective PAL and ES limits (see **Table 1**).

Sampling Plan Deviations

There were no noted deviations from the sampling plan.

A compact disk is enclosed containing a copy of this report as a PDF file. If you have any questions about the results or any other aspect of the project, please call us at (608) 224-2830.

Sincerely,

Eli I. Sankey
Associate Engineer, EIT
SCS ENGINEERS

Leslie A. Busse, PE
Senior Project Manager
SCS ENGINEERS

ES/lmh/LAB

cc: Ms. Giang Van Nguyen – USEPA Region V (w/o CD)

Enclosures: CD Containing Electronic Copy of Report
Table 1 – Groundwater Analytical Results Summary - VOCs
Table 2 – Water Level Summary
Table 3 – Groundwater Monitoring Results for Field Parameters
Table 4 – Historical Target Compound Detections
Figure 1 – Site Plan
Attachment A – Laboratory Analytical Report
Attachment B – Groundwater Monitoring Data Certification Form (with Exceedances Report)
Attachment C – Field Data Form

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TABLES

Table 1. Groundwater Analytical Results Summary - VOCs
Stoughton City Landfill / SCS Engineers Project #25216022.00
(Results are in µg/L)

Sample	Date	Lab Notes	DRO	GRO	Benzene	Ethylbenzene	Toluene	Xylenes	TMBs	MTBE	Naphthalene	Lead	Other VOCs
MW3D	4/7/2016	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND
	5/4/2017	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Tetrahydrofuran 6.5 J
MW4D	4/7/2016	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND
	5/4/2017	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND
MW5D	4/7/2016	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND
	5/4/2017	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND
MW5D Dup	4/7/2016	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND
	5/4/2017	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND
MW7I	4/7/2016	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND
	5/5/2017	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Tetrahydrofuran 6.9 J
MW8I	4/7/2016	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND
	5/5/2017	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND
MW9B	4/7/2016	--	NA	NA	<0.15	<0.18	<0.15	<0.22	<0.61	<0.39	<0.34	NA	Dichlorodifluoromethane 11 Trichlorofluoromethane 7.9
	5/5/2017	--	NA	NA	<0.15	<0.18	<0.15	<0.22	<0.61	<0.39	<0.34	NA	Dichlorodifluoromethane 3.1 Dichlorofluoromethane 1.5
MW9S	4/7/2016	--	NA	NA	<0.15	<0.18	<0.15	<0.22	<0.61	<0.39	<0.34	NA	Dichlorodifluoromethane 23
	5/5/2017	--	NA	NA	<0.15	<0.18	<0.15	<0.22	<0.61	<0.39	<0.34	NA	Dichlorodifluoromethane 26 Dichlorofluoromethane 30
MW9I	4/7/2016	--	NA	NA	<0.15	<0.18	<0.15	<0.22	<0.61	<0.39	<0.34	NA	Dichlorodifluoromethane 19 Trichloroethene *0.59*
	5/5/2017	--	NA	NA	<0.15	<0.18	<0.15	<0.22	<0.61	<0.39	<0.34	NA	Dichlorodifluoromethane 24 Dichlorofluoromethane 13
MW9I Dup	4/7/2016	--	NA	NA	<0.15	<0.18	<0.15	<0.22	<0.61	<0.39	<0.34	NA	Dichlorodifluoromethane 21
	5/5/2017	--	NA	NA	<0.15	<0.18	<0.15	<0.22	<0.61	<0.39	<0.34	NA	Dichlorodifluoromethane 26 Dichlorofluoromethane 14 Trichloroethene 0.39 J
MW10S	4/7/2016	--	NA	NA	<0.15	<0.18	<0.15	<0.22	<0.61	<0.39	<0.34	NA	ND
	5/5/2017	--	NA	NA	<0.15	<0.18	<0.15	<0.22	<0.61	<0.39	<0.34	NA	ND
MW10I	4/7/2016	--	NA	NA	<0.15	<0.18	<0.15	<0.22	<0.61	<0.39	<0.34	NA	Dichlorodifluoromethane 8.2 Tetrachloroethene *1.3*
	5/5/2017	--	NA	NA	<0.15	<0.18	<0.15	<0.22	<0.61	<0.39	<0.34	NA	Dichlorodifluoromethane 12 Dichlorofluoromethane 6.1 Tetrachloroethene *1.8*

Table 1. Groundwater Analytical Results Summary - VOCs
Stoughton City Landfill / SCS Engineers Project #25216022.00
(Results are in µg/L)

Sample	Date	Lab Notes	DRO	GRO	Benzene	Ethylbenzene	Toluene	Xylenes	TMBs	MTBE	Naphthalene	Lead	Other VOCs	
MW13I	4/7/2016	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Dichlorodifluoromethane Tetrahydrofuran	4.1 *13*
	10/18/2016	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Tetrahydrofuran	4.6 J
	5/5/2017	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	
MW14S	4/7/2016	--	NA	NA	<0.15	<0.18	<0.15	<0.22	<0.61	<0.39	<0.34	NA	ND	
	5/5/2017	--	NA	NA	<0.15	<0.18	<0.15	<0.22	<0.61	<0.39	<0.34	NA	ND	
MW14I	4/7/2016	--	NA	NA	<0.15	<0.18	<0.15	<0.22	<0.61	<0.39	<0.34	NA	Dichlorodifluoromethane	2.8
	5/5/2017	--	NA	NA	<0.15	<0.18	<0.15	<0.22	<0.61	<0.39	<0.34	NA	Dichlorodifluoromethane Dichlorofluoromethane	4.6 12
Field Blank	4/7/2016	--	NA	NA	<0.15	<0.18	<0.15	<0.22	<0.61	<0.39	<0.34	NA	ND	
	5/5/2017	--	NA	NA	<0.15	<0.18	<0.15	<0.22	<0.61	<0.39	<0.34 *F1	NA	ND	
Trip Blank	4/7/2016	--	NA	NA	<0.15	<0.18	<0.15	<0.22	<0.61	<0.39	<0.34	NA	ND	
	10/18/2016	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Tetrahydrofuran	2.5 J
	5/4/2017	--	NA	NA	<0.15	<0.18	<0.15	<0.22	<0.61	<0.39	<0.34	NA	ND	
NR 140 Enforcement Standards (ESs)			NE	NE	*5*	700	800	2,000	480	60	100	15	Dichlorodifluoromethane Dichlorofluoromethane Tetrahydrofuran Tetrachloroethene Trichloroethene Trichlorofluoromethane	1,000 NE 50 *5* *5* 3,490
NR 140 Preventive Action Limits (PALs)			NE	NE	0.5	140	160	400	96	12	10	1.5	Dichlorodifluoromethane Dichlorofluoromethane Tetrahydrofuran Tetrachloroethene Trichloroethene Trichlorofluoromethane	200 NE 10 0.5 0.5 698

Abbreviations:
µg/L = micrograms per liter or parts per billion (ppb)
TMBs = 1,2,4- and 1,3,5-trimethylbenzenes
NA = Not Analyzed
(Dup) = Duplicate Sample
DRO = Diesel Range Organics
MTBE = Methyl-tert-butyl ether
ND = Not Detected
-- = Not Applicable
GRO = Gasoline Range Organics
VOCs = Volatile Organic Compounds
NE = No Standard Established

Notes:
NR 140 ESs - Wisconsin Administrative Code (WAC), Chapter NR 140.10 Table 1 - Public Health Groundwater Quality Standards from February 2017.
NR 140 PALs - WAC, Chapter NR 140.10 Table 1 - Public Health Groundwater Quality Standards from February 2017.
Bold+underlined values meet or exceed NR 140 enforcement standards.
Italic+underlined values meet or exceed NR 140 preventive action limits.

Laboratory Notes/Qualifiers:
F1 = MS and/or MSD Recovery is outside acceptance limits.
J = Results reported between the Method Detection Limit (MDL) and Limit of Quantitation (LOQ) are less certain than results at or above the LOQ.
* = LCS or LCSD is outside acceptance limits.

Created by:	AV	Date:	4/29/2016
Last revision by:	MOB	Date:	6/29/2017
Checked by:	EIS	Date:	7/6/2017

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Table 2. Water Level Summary
Stoughton City Landfill
SCS Engineers Project #25216022.00

Raw Data	Depth to Water in feet below top of well casing												
	MW03D	MW04D	MW05D	MW07I	MW08I	MW09S	MW09I	MW09B	MW10S	MW10I	MW13I	MW14S	MW14I
Measurement Date													
May 4, 2017	8.74	6.14	6.08										
May 5, 2017				0.00	0.12	1.11	1.48	1.25	3.18	0.00	0.00	2.94	1.68

	Ground Water Elevation in feet above mean sea level (amsl)												
Well Number	**MW03D**	**MW04D**	**MW05D**	**MW07I**	**MW08I**	**MW09S**	**MW09I**	**MW09B**	**MW10S**	**MW10I**	**MW13I**	**MW14S**	**MW14I**
Top of Casing Elevation (feet amsl)	855.17	852.08	852.35	843.99	846.32	847.23	847.14	846.68	846.88	845.86	853.02	848.73	847.38
Screen Length (ft)	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
Total Depth (ft from top of casing)	73.0	74.0	77.0	60.0	62.4	13.4	21.5	83.3	16.9	39.8	57.5	26.2	51.2
Top of Well Screen Elevation (ft)	792.17	788.08	785.35	793.99	793.92	843.83	835.64	773.38	839.98	816.06	805.52	832.53	806.18
Measurement Date													
May 4, 2017	846.43	845.94	846.27										
May 5, 2017				843.99	846.20	846.12	845.66	845.43	843.70	845.86	853.02	845.79	845.70
Bottom of Well Elevation (ft)	782.17	778.08	775.35	783.99	783.92	833.83	825.64	763.38	829.98	806.06	795.52	822.53	796.18

Created by: ES Date: 6/28/17
Last revision by: ES Date: 6/28/17
Checked by: MOB Date: 6/29/17

I:\25216022.00\Deliverables\Annual GW Report and Semiannual Inspection\2017\[Table 2_Water level summary.xls]levels

Table 3. Groundwater Monitoring Results for Field Parameters
Stoughton City Landfill
SCS Engineers Project #25216022.00

Well Number	Date	Temperature (^{0} C)	Specific Conductivity (us/cm)	pH (Std. Units)
MW03D	5/4/17	9.0	793	7.53
MW04D	5/4/17	8.7	878	7.37
MW05D	5/4/17	8.9	717	7.58
MW07I	5/5/17	10.1	774	7.40
MW08I	5/5/17	9.9	898	7.27
MW09S	5/5/17	9.3	646	7.56
MW09I	5/5/17	9.8	626	7.44
MW09B	5/5/17	9.5	635	7.34
MW10S	5/5/17	8.0	523	7.29
MW10I	5/5/17	10.0	647	7.25
MW13I	5/5/17	9.8	528	7.60
MW14S	5/5/17	9.2	321	7.68
MW14I	5/5/17	10.3	652	7.40

Created by: ES Date: 6/28/17
Last revision by: ES Date: 6/28/17
Checked by: MOB Date: 6/29/17

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Table 4. Historical Target Compound Detections
Annual Groundwater Report - May 2017
Stoughton City Landfill / SCS Engineers Project #25216022.00

Shallow Monitoring Wells				
	Current Event Concentration (µg/L)		Historical Range (µg/L)	
Well	DCDFM	THF	DCDFM	THF
MW9S	26	ND	22-400	ND-22
MW10S	ND	ND	ND-20	ND-20
MW13S	NA	NA	ND	ND
MW14S	ND	ND	2.5-710	ND-50

Intermediate and Deep Monitoring Wells				
	Current Event Concentration (µg/L)		Historical Range (µg/L)	
Well	DCDFM	THF	DCDFM	THF
MW3D	ND	6.5	ND	3.2-310
MW4D	ND	ND	ND-0.05	ND-2.2
MW5D	ND	ND	0.92-10	1.1-4.0
MW7I	ND	6.9	ND-0.026	ND-16
MW8I	ND	ND	ND	ND-20
MW8B	NA	NA	ND	ND
MW9I	26	ND	12-340	ND-12
MW9B	3.1	ND	2.3-25	ND-2.4
MW10I	12	ND	ND-280	ND-21
MW13I	ND	ND	ND-9.2	ND-22
MW14I	4.6	ND	4.4-590	ND-2.4

Abbreviations:
µg/L = micrograms per liter
DCDFM = dichlorodifluoromethane
THF = tetrahydrofuran
NA = Not Analyzed
ND = No Detections

Created by: ES Date: 6/28/2017
Last revision by: ES Date: 6/28/2017
Checked by: LMH Date: 7/10/2017

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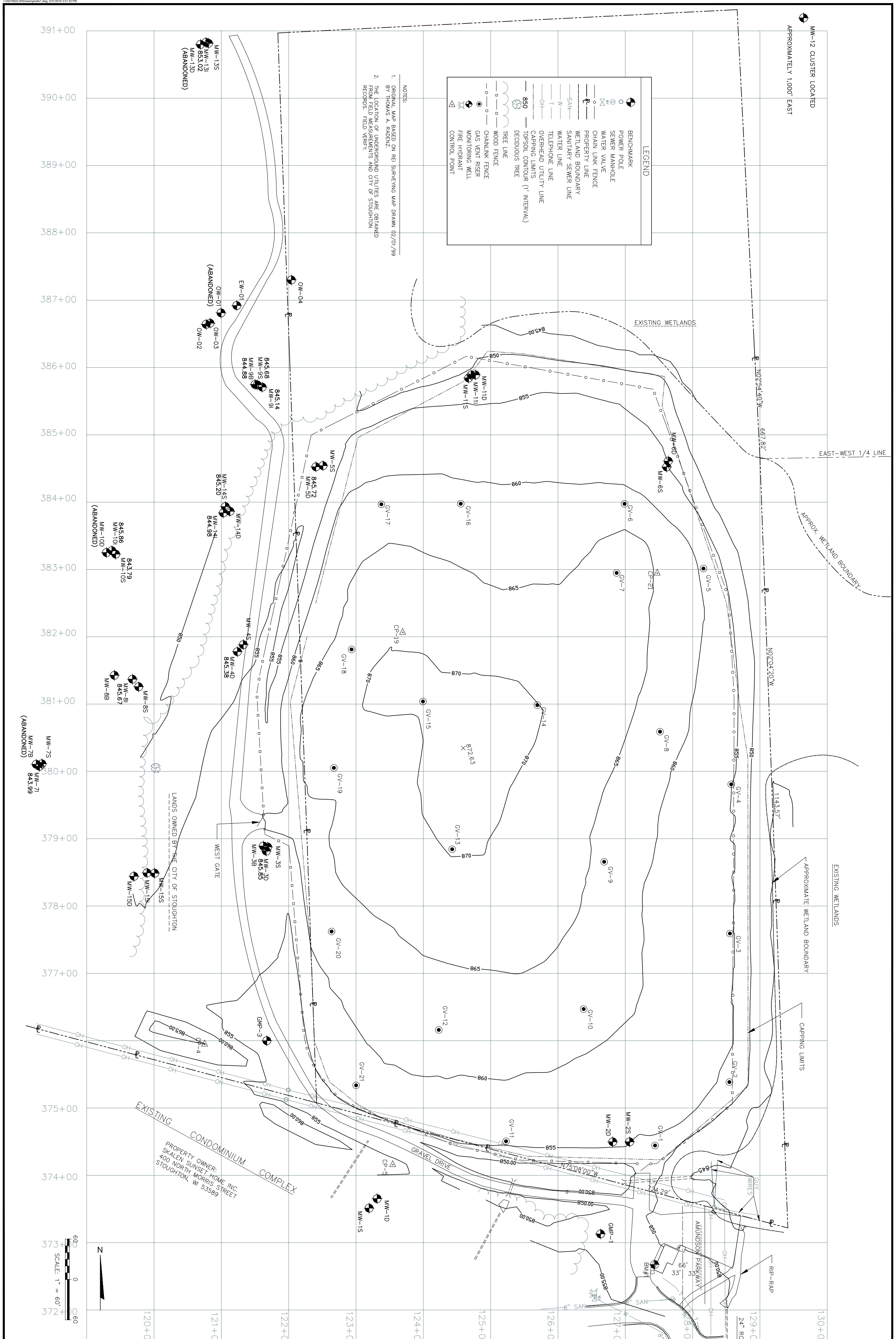
FIGURE 1

Site Plan



PROJECT NO.	25216022.00	DRAWN BY:	AHB	SCS ENGINEERS 2830 DAIRY DRIVE MADISON, WI 53718-6751 PHONE: (608) 224-2830	DEPARTMENT OF NATURAL RESOURCES 101 S. WEBSTER STREET MADISON, WI 53702	STOUGHTON CITY LANDFILL STOUGHTON, WISCONSIN	SITE PLAN	SHEET 1
DRAWN:	06/06/00	CHECKED BY:	SS					
REVISED:	05/26/16	APPROVED BY:	LAB 05/31/16					

ATTACHMENT A

Laboratory Analytical Report

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Chicago
2417 Bond Street
University Park, IL 60484
Tel: (708)534-5200

TestAmerica Job ID: 500-127911-1
Client Project/Site: Stoughton LF - 25216022

For:
SCS Engineers
2830 Dairy Dr
Madison, Wisconsin 53718

Attn: Mr. Tom Karwoski

Authorized for release by:
5/23/2017 8:19:02 PM

Sandie Fredrick, Project Manager II
(920)261-1660
sandie.fredrick@testamericainc.com

Table of Contents

Job ID: 500-127911-1

Laboratory: TestAmerica Chicago

Narrative

Job Narrative
500-127911-1

Comments
No additional comments.

Receipt
The samples were received on 5/10/2017 9:05 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.7º C.

GC/MS VOA
Method(s) 8260B: The laboratory control sample (LCS) for batch 385529 recovered outside control limits for Naphthalene. This analyte was biased high in the LCS and was not detected in the associated samples: Trip Blank (500-127911-1) and Field Blank (500-127911-2) ; therefore, the data has been reported.

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

Detection Summary

Client: SCS Engineers
Project/Site: Stoughton LF - 25216022

TestAmerica Job ID: 500-127911-1

Client Sample ID: Trip Blank — Lab Sample ID: 500-127911-1

No Detections.

Client Sample ID: Field Blank — Lab Sample ID: 500-127911-2

No Detections.

Client Sample ID: MW3D — Lab Sample ID: 500-127911-3

Analyte	Result	Qualifier	RL	LOD	Unit	Dil Fac	D	Method	Prep Type
Tetrahydrofuran	6.5	J	10	1.9	ug/L	1		8260B	Total/NA

Client Sample ID: MW4D — Lab Sample ID: 500-127911-4

No Detections.

Client Sample ID: MW5D — Lab Sample ID: 500-127911-5

No Detections.

Client Sample ID: MW5D DUP — Lab Sample ID: 500-127911-6

No Detections.

Client Sample ID: MW7I — Lab Sample ID: 500-127911-7

Analyte	Result	Qualifier	RL	LOD	Unit	Dil Fac	D	Method	Prep Type
Tetrahydrofuran	6.9	J	10	1.9	ug/L	1		8260B	Total/NA

Client Sample ID: MW8I — Lab Sample ID: 500-127911-8

No Detections.

Client Sample ID: MW9S — Lab Sample ID: 500-127911-9

Analyte	Result	Qualifier	RL	LOD	Unit	Dil Fac	D	Method	Prep Type
Dichlorodifluoromethane	26		2.0	0.67	ug/L	1		8260B	Total/NA
Dichlorofluoromethane	30		1.0	0.38	ug/L	1		8260B	Total/NA

Client Sample ID: MW9D — Lab Sample ID: 500-127911-10

Analyte	Result	Qualifier	RL	LOD	Unit	Dil Fac	D	Method	Prep Type
Dichlorodifluoromethane	3.1		2.0	0.67	ug/L	1		8260B	Total/NA
Trichlorofluoromethane	1.5		1.0	0.43	ug/L	1		8260B	Total/NA

Client Sample ID: MW9I — Lab Sample ID: 500-127911-11

Analyte	Result	Qualifier	RL	LOD	Unit	Dil Fac	D	Method	Prep Type
Dichlorodifluoromethane	24		2.0	0.67	ug/L	1		8260B	Total/NA
Dichlorofluoromethane	13		1.0	0.38	ug/L	1		8260B	Total/NA

Client Sample ID: MW9I DUP — Lab Sample ID: 500-127911-12

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: SCS Engineers
Project/Site: Stoughton LF - 25216022

TestAmerica Job ID: 500-127911-1

Client Sample ID: MW9I DUP (Continued) — Lab Sample ID: 500-127911-12

Analyte	Result	Qualifier	RL	LOD	Unit	Dil Fac	D	Method	Prep Type
Dichlorodifluoromethane	26		2.0	0.67	ug/L	1		8260B	Total/NA
Dichlorofluoromethane	14		1.0	0.38	ug/L	1		8260B	Total/NA
Trichloroethene	0.39	J	0.50	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: MW10S — Lab Sample ID: 500-127911-13

No Detections.

Client Sample ID: MW10I — Lab Sample ID: 500-127911-14

Analyte	Result	Qualifier	RL	LOD	Unit	Dil Fac	D	Method	Prep Type
Dichlorodifluoromethane	12		2.0	0.67	ug/L	1		8260B	Total/NA
Dichlorofluoromethane	6.1		1.0	0.38	ug/L	1		8260B	Total/NA
Tetrachloroethene	1.8		1.0	0.37	ug/L	1		8260B	Total/NA

Client Sample ID: MW13I — Lab Sample ID: 500-127911-15

No Detections.

Client Sample ID: MW14S — Lab Sample ID: 500-127911-16

No Detections.

Client Sample ID: MW14I — Lab Sample ID: 500-127911-17

Analyte	Result	Qualifier	RL	LOD	Unit	Dil Fac	D	Method	Prep Type
Dichlorodifluoromethane	4.6		2.0	0.67	ug/L	1		8260B	Total/NA
Dichlorofluoromethane	12		1.0	0.38	ug/L	1		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Method Summary

Client: SCS Engineers
Project/Site: Stoughton LF - 25216022

TestAmerica Job ID: 500-127911-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CHI

Protocol References:

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

Laboratory References:

TAL CHI = TestAmerica Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

Sample Summary

Client: SCS Engineers
Project/Site: Stoughton LF - 25216022

TestAmerica Job ID: 500-127911-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-127911-1	Trip Blank	Water	05/04/17 00:00	05/10/17 09:05
500-127911-2	Field Blank	Water	05/05/17 16:15	05/10/17 09:05
500-127911-3	MW3D	Water	05/04/17 13:30	05/10/17 09:05
500-127911-4	MW4D	Water	05/04/17 14:40	05/10/17 09:05
500-127911-5	MW5D	Water	05/04/17 14:00	05/10/17 09:05
500-127911-6	MW5D DUP	Water	05/04/17 14:00	05/10/17 09:05
500-127911-7	MW7I	Water	05/05/17 11:50	05/10/17 09:05
500-127911-8	MW8I	Water	05/05/17 13:35	05/10/17 09:05
500-127911-9	MW9S	Water	05/05/17 15:10	05/10/17 09:05
500-127911-10	MW9D	Water	05/05/17 15:40	05/10/17 09:05
500-127911-11	MW9I	Water	05/05/17 16:00	05/10/17 09:05
500-127911-12	MW9I DUP	Water	05/05/17 16:00	05/10/17 09:05
500-127911-13	MW10S	Water	05/05/17 13:15	05/10/17 09:05
500-127911-14	MW10I	Water	05/05/17 12:45	05/10/17 09:05
500-127911-15	MW13I	Water	05/05/17 12:15	05/10/17 09:05
500-127911-16	MW14S	Water	05/05/17 14:15	05/10/17 09:05
500-127911-17	MW14I	Water	05/05/17 14:30	05/10/17 09:05

Client: SCS Engineers
Project/Site: Stoughton LF - 25216022

TestAmerica Job ID: 500-127911-1

Client Sample ID: Trip Blank
Date Collected: 05/04/17 00:00
Date Received: 05/10/17 09:05

Lab Sample ID: 500-127911-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.15		0.50	0.15	ug/L			05/17/17 23:14	1
Bromobenzene	<0.36		1.0	0.36	ug/L			05/17/17 23:14	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			05/17/17 23:14	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			05/17/17 23:14	1
Bromoform	<0.48		1.0	0.48	ug/L			05/17/17 23:14	1
Bromomethane	<0.80		2.0	0.80	ug/L			05/17/17 23:14	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			05/17/17 23:14	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			05/17/17 23:14	1
Chloroethane	<0.51		1.0	0.51	ug/L			05/17/17 23:14	1
Chloroform	<0.37		2.0	0.37	ug/L			05/17/17 23:14	1
Chloromethane	<0.32		1.0	0.32	ug/L			05/17/17 23:14	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			05/17/17 23:14	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			05/17/17 23:14	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			05/17/17 23:14	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			05/17/17 23:14	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			05/17/17 23:14	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			05/17/17 23:14	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			05/17/17 23:14	1
Dibromomethane	<0.27		1.0	0.27	ug/L			05/17/17 23:14	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			05/17/17 23:14	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			05/17/17 23:14	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			05/17/17 23:14	1
Dichlorodifluoromethane	<0.67		2.0	0.67	ug/L			05/17/17 23:14	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			05/17/17 23:14	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			05/17/17 23:14	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			05/17/17 23:14	1
Dichlorofluoromethane	<0.38		1.0	0.38	ug/L			05/17/17 23:14	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			05/17/17 23:14	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			05/17/17 23:14	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			05/17/17 23:14	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			05/17/17 23:14	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			05/17/17 23:14	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			05/17/17 23:14	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			05/17/17 23:14	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			05/17/17 23:14	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			05/17/17 23:14	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			05/17/17 23:14	1
Naphthalene	<0.34	*	1.0	0.34	ug/L			05/17/17 23:14	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			05/17/17 23:14	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			05/17/17 23:14	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			05/17/17 23:14	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			05/17/17 23:14	1
Styrene	<0.39		1.0	0.39	ug/L			05/17/17 23:14	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			05/17/17 23:14	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			05/17/17 23:14	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			05/17/17 23:14	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			05/17/17 23:14	1
Tetrahydrofuran	<1.9		10	1.9	ug/L			05/17/17 23:14	1
Toluene	<0.15		0.50	0.15	ug/L			05/17/17 23:14	1

Client Sample ID: Trip Blank

Lab Sample ID: 500-127911-1

Date Collected: 05/04/17 00:00

Matrix: Water

Date Received: 05/10/17 09:05

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

Analyte	Result	Qualifier	RL	LOD	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			05/17/17 23:14	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			05/17/17 23:14	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			05/17/17 23:14	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			05/17/17 23:14	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			05/17/17 23:14	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			05/17/17 23:14	1
Trichloroethene	<0.16		0.50	0.16	ug/L			05/17/17 23:14	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			05/17/17 23:14	1
1,2,3-Trichloropropane	<0.41		1.0	0.41	ug/L			05/17/17 23:14	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			05/17/17 23:14	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			05/17/17 23:14	1
Vinyl chloride	<0.20		0.50	0.20	ug/L			05/17/17 23:14	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			05/17/17 23:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*72 - 124*		*05/17/17 23:14*	*1*
Dibromofluoromethane	*94*		*75 - 120*		*05/17/17 23:14*	*1*
1,2-Dichloroethane-d4 (Surr)	*105*		*75 - 126*		*05/17/17 23:14*	*1*
Toluene-d8 (Surr)	*90*		*75 - 120*		*05/17/17 23:14*	*1*

Client Sample ID: Field Blank

Lab Sample ID: 500-127911-2

Date Collected: 05/05/17 16:15

Matrix: Water

Date Received: 05/10/17 09:05

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

Analyte	Result	Qualifier	RL	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.15		0.50	0.15	ug/L			05/18/17 00:54	1
Bromobenzene	<0.36		1.0	0.36	ug/L			05/18/17 00:54	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			05/18/17 00:54	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			05/18/17 00:54	1
Bromoform	<0.48		1.0	0.48	ug/L			05/18/17 00:54	1
Bromomethane	<0.80		2.0	0.80	ug/L			05/18/17 00:54	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			05/18/17 00:54	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			05/18/17 00:54	1
Chloroethane	<0.51		1.0	0.51	ug/L			05/18/17 00:54	1
Chloroform	<0.37		2.0	0.37	ug/L			05/18/17 00:54	1
Chloromethane	<0.32		1.0	0.32	ug/L			05/18/17 00:54	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			05/18/17 00:54	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			05/18/17 00:54	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			05/18/17 00:54	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			05/18/17 00:54	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			05/18/17 00:54	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			05/18/17 00:54	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			05/18/17 00:54	1
Dibromomethane	<0.27		1.0	0.27	ug/L			05/18/17 00:54	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			05/18/17 00:54	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			05/18/17 00:54	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			05/18/17 00:54	1
Dichlorodifluoromethane	<0.67		2.0	0.67	ug/L			05/18/17 00:54	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			05/18/17 00:54	1

Client: SCS Engineers
Project/Site: Stoughton LF - 25216022

TestAmerica Job ID: 500-127911-1

Client Sample ID: Field Blank
Date Collected: 05/05/17 16:15
Date Received: 05/10/17 09:05

Lab Sample ID: 500-127911-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	LOD	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			05/18/17 00:54	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			05/18/17 00:54	1
Dichlorofluoromethane	<0.38		1.0	0.38	ug/L			05/18/17 00:54	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			05/18/17 00:54	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			05/18/17 00:54	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			05/18/17 00:54	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			05/18/17 00:54	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			05/18/17 00:54	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			05/18/17 00:54	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			05/18/17 00:54	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			05/18/17 00:54	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			05/18/17 00:54	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			05/18/17 00:54	1
Naphthalene	<0.34	* F1	1.0	0.34	ug/L			05/18/17 00:54	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			05/18/17 00:54	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			05/18/17 00:54	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			05/18/17 00:54	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			05/18/17 00:54	1
Styrene	<0.39		1.0	0.39	ug/L			05/18/17 00:54	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			05/18/17 00:54	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			05/18/17 00:54	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			05/18/17 00:54	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			05/18/17 00:54	1
Tetrahydrofuran	<1.9	F1	10	1.9	ug/L			05/18/17 00:54	1
Toluene	<0.15		0.50	0.15	ug/L			05/18/17 00:54	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			05/18/17 00:54	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			05/18/17 00:54	1
1,2,3-Trichlorobenzene	<0.46	F1	1.0	0.46	ug/L			05/18/17 00:54	1
1,2,4-Trichlorobenzene	<0.34	F1	1.0	0.34	ug/L			05/18/17 00:54	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			05/18/17 00:54	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			05/18/17 00:54	1
Trichloroethene	<0.16		0.50	0.16	ug/L			05/18/17 00:54	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			05/18/17 00:54	1
1,2,3-Trichloropropane	<0.41		1.0	0.41	ug/L			05/18/17 00:54	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			05/18/17 00:54	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			05/18/17 00:54	1
Vinyl chloride	<0.20	F1	0.50	0.20	ug/L			05/18/17 00:54	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			05/18/17 00:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*72 - 124*		*05/18/17 00:54*	*1*
Dibromofluoromethane	*94*		*75 - 120*		*05/18/17 00:54*	*1*
1,2-Dichloroethane-d4 (Surr)	*106*		*75 - 126*		*05/18/17 00:54*	*1*
Toluene-d8 (Surr)	*90*		*75 - 120*		*05/18/17 00:54*	*1*

Client Sample ID: MW3D

Lab Sample ID: 500-127911-3
Date Collected: 05/04/17 13:30
Matrix: Water
Date Received: 05/10/17 09:05

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

Analyte	Result	Qualifier	RL	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	<0.67		2.0	0.67	ug/L			05/18/17 05:57	1
Tetrahydrofuran	6.5	J	10	1.9	ug/L			05/18/17 05:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*113*		*72 - 124*		*05/18/17 05:57*	*1*
Dibromofluoromethane	*98*		*75 - 120*		*05/18/17 05:57*	*1*
1,2-Dichloroethane-d4 (Surr)	*116*		*75 - 126*		*05/18/17 05:57*	*1*
Toluene-d8 (Surr)	*99*		*75 - 120*		*05/18/17 05:57*	*1*

Client Sample ID: MW4D

Lab Sample ID: 500-127911-4
Date Collected: 05/04/17 14:40
Matrix: Water
Date Received: 05/10/17 09:05

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

Analyte	Result	Qualifier	RL	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	<0.67		2.0	0.67	ug/L			05/18/17 06:24	1
Tetrahydrofuran	<1.9		10	1.9	ug/L			05/18/17 06:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*115*		*72 - 124*		*05/18/17 06:24*	*1*
Dibromofluoromethane	*97*		*75 - 120*		*05/18/17 06:24*	*1*
1,2-Dichloroethane-d4 (Surr)	*118*		*75 - 126*		*05/18/17 06:24*	*1*
Toluene-d8 (Surr)	*100*		*75 - 120*		*05/18/17 06:24*	*1*

Client Sample ID: MW5D

Lab Sample ID: 500-127911-5
Date Collected: 05/04/17 14:00
Matrix: Water
Date Received: 05/10/17 09:05

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

Analyte	Result	Qualifier	RL	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	<0.67		2.0	0.67	ug/L			05/18/17 06:51	1
Tetrahydrofuran	<1.9		10	1.9	ug/L			05/18/17 06:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*116*		*72 - 124*		*05/18/17 06:51*	*1*
Dibromofluoromethane	*100*		*75 - 120*		*05/18/17 06:51*	*1*
1,2-Dichloroethane-d4 (Surr)	*119*		*75 - 126*		*05/18/17 06:51*	*1*
Toluene-d8 (Surr)	*101*		*75 - 120*		*05/18/17 06:51*	*1*

Client Sample ID: MW5D DUP

Lab Sample ID: 500-127911-6
Date Collected: 05/04/17 14:00
Matrix: Water
Date Received: 05/10/17 09:05

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

Analyte	Result	Qualifier	RL	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	<0.67		2.0	0.67	ug/L			05/18/17 07:17	1
Tetrahydrofuran	<1.9		10	1.9	ug/L			05/18/17 07:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*117*		*72 - 124*		*05/18/17 07:17*	*1*
Dibromofluoromethane	*97*		*75 - 120*		*05/18/17 07:17*	*1*

Client Sample ID: MW5D DUP

Lab Sample ID: 500-127911-6
Date Collected: 05/04/17 14:00
Matrix: Water
Date Received: 05/10/17 09:05

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*119*		*75 - 126*		*05/18/17 07:17*	*1*
Toluene-d8 (Surr)	*100*		*75 - 120*		*05/18/17 07:17*	*1*

Client Sample ID: MW7I

Lab Sample ID: 500-127911-7
Date Collected: 05/05/17 11:50
Matrix: Water
Date Received: 05/10/17 09:05

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

Analyte	Result	Qualifier	RL	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	<0.67		2.0	0.67	ug/L			05/18/17 07:44	1
Tetrahydrofuran	**6.9**	**J**	10	1.9	ug/L			05/18/17 07:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*116*		*72 - 124*		*05/18/17 07:44*	*1*
Dibromofluoromethane	*96*		*75 - 120*		*05/18/17 07:44*	*1*
1,2-Dichloroethane-d4 (Surr)	*117*		*75 - 126*		*05/18/17 07:44*	*1*
Toluene-d8 (Surr)	*100*		*75 - 120*		*05/18/17 07:44*	*1*

Client Sample ID: MW8I

Lab Sample ID: 500-127911-8
Date Collected: 05/05/17 13:35
Matrix: Water
Date Received: 05/10/17 09:05

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

Analyte	Result	Qualifier	RL	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	<0.67		2.0	0.67	ug/L			05/18/17 23:43	1
Tetrahydrofuran	<1.9		10	1.9	ug/L			05/18/17 23:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*113*		*72 - 124*		*05/18/17 23:43*	*1*
Dibromofluoromethane	*93*		*75 - 120*		*05/18/17 23:43*	*1*
1,2-Dichloroethane-d4 (Surr)	*114*		*75 - 126*		*05/18/17 23:43*	*1*
Toluene-d8 (Surr)	*102*		*75 - 120*		*05/18/17 23:43*	*1*

Client Sample ID: MW9S

Lab Sample ID: 500-127911-9
Date Collected: 05/05/17 15:10
Matrix: Water
Date Received: 05/10/17 09:05

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

Analyte	Result	Qualifier	RL	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.15		0.50	0.15	ug/L			05/19/17 00:10	1
Bromobenzene	<0.36		1.0	0.36	ug/L			05/19/17 00:10	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			05/19/17 00:10	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			05/19/17 00:10	1
Bromoform	<0.48		1.0	0.48	ug/L			05/19/17 00:10	1
Bromomethane	<0.80		2.0	0.80	ug/L			05/19/17 00:10	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			05/19/17 00:10	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			05/19/17 00:10	1
Chloroethane	<0.51		1.0	0.51	ug/L			05/19/17 00:10	1
Chloroform	<0.37		2.0	0.37	ug/L			05/19/17 00:10	1
Chloromethane	<0.32		1.0	0.32	ug/L			05/19/17 00:10	1

Client: SCS Engineers
Project/Site: Stoughton LF - 25216022

TestAmerica Job ID: 500-127911-1

Client Sample ID: MW9S
Date Collected: 05/05/17 15:10
Date Received: 05/10/17 09:05

Lab Sample ID: 500-127911-9
Matrix: Water

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

Analyte	Result	Qualifier	RL	LOD	Unit	D	Prepared	Analyzed	Dil Fac
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			05/19/17 00:10	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			05/19/17 00:10	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			05/19/17 00:10	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			05/19/17 00:10	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			05/19/17 00:10	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			05/19/17 00:10	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			05/19/17 00:10	1
Dibromomethane	<0.27		1.0	0.27	ug/L			05/19/17 00:10	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			05/19/17 00:10	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			05/19/17 00:10	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			05/19/17 00:10	1
Dichlorodifluoromethane	**26**		2.0	0.67	ug/L			05/19/17 00:10	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			05/19/17 00:10	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			05/19/17 00:10	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			05/19/17 00:10	1
Dichlorofluoromethane	**30**		1.0	0.38	ug/L			05/19/17 00:10	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			05/19/17 00:10	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			05/19/17 00:10	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			05/19/17 00:10	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			05/19/17 00:10	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			05/19/17 00:10	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			05/19/17 00:10	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			05/19/17 00:10	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			05/19/17 00:10	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			05/19/17 00:10	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			05/19/17 00:10	1
Naphthalene	<0.34		1.0	0.34	ug/L			05/19/17 00:10	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			05/19/17 00:10	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			05/19/17 00:10	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			05/19/17 00:10	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			05/19/17 00:10	1
Styrene	<0.39		1.0	0.39	ug/L			05/19/17 00:10	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			05/19/17 00:10	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			05/19/17 00:10	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			05/19/17 00:10	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			05/19/17 00:10	1
Tetrahydrofuran	<1.9		10	1.9	ug/L			05/19/17 00:10	1
Toluene	<0.15		0.50	0.15	ug/L			05/19/17 00:10	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			05/19/17 00:10	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			05/19/17 00:10	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			05/19/17 00:10	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			05/19/17 00:10	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			05/19/17 00:10	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			05/19/17 00:10	1
Trichloroethene	<0.16		0.50	0.16	ug/L			05/19/17 00:10	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			05/19/17 00:10	1
1,2,3-Trichloropropane	<0.41		1.0	0.41	ug/L			05/19/17 00:10	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			05/19/17 00:10	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			05/19/17 00:10	1

Client Sample ID: MW9S

Date Collected: 05/05/17 15:10
Date Received: 05/10/17 09:05

Lab Sample ID: 500-127911-9
Matrix: Water

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

Analyte	Result	Qualifier	RL	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	<0.20		0.50	0.20	ug/L			05/19/17 00:10	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			05/19/17 00:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*117*		*72 - 124*		*05/19/17 00:10*	*1*
Dibromofluoromethane	*93*		*75 - 120*		*05/19/17 00:10*	*1*
1,2-Dichloroethane-d4 (Surr)	*112*		*75 - 126*		*05/19/17 00:10*	*1*
Toluene-d8 (Surr)	*103*		*75 - 120*		*05/19/17 00:10*	*1*

Client Sample ID: MW9D

Date Collected: 05/05/17 15:40
Date Received: 05/10/17 09:05

Lab Sample ID: 500-127911-10
Matrix: Water

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

Analyte	Result	Qualifier	RL	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.15		0.50	0.15	ug/L			05/19/17 00:36	1
Bromobenzene	<0.36		1.0	0.36	ug/L			05/19/17 00:36	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			05/19/17 00:36	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			05/19/17 00:36	1
Bromoform	<0.48		1.0	0.48	ug/L			05/19/17 00:36	1
Bromomethane	<0.80		2.0	0.80	ug/L			05/19/17 00:36	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			05/19/17 00:36	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			05/19/17 00:36	1
Chloroethane	<0.51		1.0	0.51	ug/L			05/19/17 00:36	1
Chloroform	<0.37		2.0	0.37	ug/L			05/19/17 00:36	1
Chloromethane	<0.32		1.0	0.32	ug/L			05/19/17 00:36	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			05/19/17 00:36	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			05/19/17 00:36	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			05/19/17 00:36	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			05/19/17 00:36	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			05/19/17 00:36	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			05/19/17 00:36	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			05/19/17 00:36	1
Dibromomethane	<0.27		1.0	0.27	ug/L			05/19/17 00:36	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			05/19/17 00:36	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			05/19/17 00:36	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			05/19/17 00:36	1
Dichlorodifluoromethane	**3.1**		2.0	0.67	ug/L			05/19/17 00:36	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			05/19/17 00:36	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			05/19/17 00:36	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			05/19/17 00:36	1
Dichlorofluoromethane	<0.38		1.0	0.38	ug/L			05/19/17 00:36	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			05/19/17 00:36	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			05/19/17 00:36	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			05/19/17 00:36	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			05/19/17 00:36	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			05/19/17 00:36	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			05/19/17 00:36	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			05/19/17 00:36	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			05/19/17 00:36	1

Client Sample ID: MW9D
Date Collected: 05/05/17 15:40
Date Received: 05/10/17 09:05

Lab Sample ID: 500-127911-10
Matrix: Water

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

Analyte	Result	Qualifier	RL	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	<1.6		5.0	1.6	ug/L			05/19/17 00:36	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			05/19/17 00:36	1
Naphthalene	<0.34		1.0	0.34	ug/L			05/19/17 00:36	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			05/19/17 00:36	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			05/19/17 00:36	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			05/19/17 00:36	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			05/19/17 00:36	1
Styrene	<0.39		1.0	0.39	ug/L			05/19/17 00:36	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			05/19/17 00:36	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			05/19/17 00:36	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			05/19/17 00:36	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			05/19/17 00:36	1
Tetrahydrofuran	<1.9		10	1.9	ug/L			05/19/17 00:36	1
Toluene	<0.15		0.50	0.15	ug/L			05/19/17 00:36	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			05/19/17 00:36	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			05/19/17 00:36	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			05/19/17 00:36	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			05/19/17 00:36	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			05/19/17 00:36	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			05/19/17 00:36	1
Trichloroethene	<0.16		0.50	0.16	ug/L			05/19/17 00:36	1
Trichlorofluoromethane	**1.5**		1.0	0.43	ug/L			05/19/17 00:36	1
1,2,3-Trichloropropane	<0.41		1.0	0.41	ug/L			05/19/17 00:36	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			05/19/17 00:36	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			05/19/17 00:36	1
Vinyl chloride	<0.20		0.50	0.20	ug/L			05/19/17 00:36	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			05/19/17 00:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*112*		*72 - 124*		*05/19/17 00:36*	*1*
Dibromofluoromethane	*93*		*75 - 120*		*05/19/17 00:36*	*1*
1,2-Dichloroethane-d4 (Surr)	*113*		*75 - 126*		*05/19/17 00:36*	*1*
Toluene-d8 (Surr)	*102*		*75 - 120*		*05/19/17 00:36*	*1*

Client Sample ID: MW9I
Date Collected: 05/05/17 16:00
Date Received: 05/10/17 09:05

Lab Sample ID: 500-127911-11
Matrix: Water

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

Analyte	Result	Qualifier	RL	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.15		0.50	0.15	ug/L			05/19/17 01:04	1
Bromobenzene	<0.36		1.0	0.36	ug/L			05/19/17 01:04	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			05/19/17 01:04	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			05/19/17 01:04	1
Bromoform	<0.48		1.0	0.48	ug/L			05/19/17 01:04	1
Bromomethane	<0.80		2.0	0.80	ug/L			05/19/17 01:04	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			05/19/17 01:04	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			05/19/17 01:04	1
Chloroethane	<0.51		1.0	0.51	ug/L			05/19/17 01:04	1
Chloroform	<0.37		2.0	0.37	ug/L			05/19/17 01:04	1

Client Sample ID: MW9I
Date Collected: 05/05/17 16:00
Date Received: 05/10/17 09:05

Lab Sample ID: 500-127911-11
Matrix: Water

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

Analyte	Result	Qualifier	RL	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	<0.32		1.0	0.32	ug/L			05/19/17 01:04	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			05/19/17 01:04	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			05/19/17 01:04	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			05/19/17 01:04	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			05/19/17 01:04	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			05/19/17 01:04	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			05/19/17 01:04	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			05/19/17 01:04	1
Dibromomethane	<0.27		1.0	0.27	ug/L			05/19/17 01:04	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			05/19/17 01:04	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			05/19/17 01:04	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			05/19/17 01:04	1
Dichlorodifluoromethane	**24**		2.0	0.67	ug/L			05/19/17 01:04	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			05/19/17 01:04	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			05/19/17 01:04	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			05/19/17 01:04	1
Dichlorofluoromethane	**13**		1.0	0.38	ug/L			05/19/17 01:04	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			05/19/17 01:04	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			05/19/17 01:04	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			05/19/17 01:04	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			05/19/17 01:04	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			05/19/17 01:04	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			05/19/17 01:04	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			05/19/17 01:04	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			05/19/17 01:04	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			05/19/17 01:04	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			05/19/17 01:04	1
Naphthalene	<0.34		1.0	0.34	ug/L			05/19/17 01:04	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			05/19/17 01:04	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			05/19/17 01:04	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			05/19/17 01:04	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			05/19/17 01:04	1
Styrene	<0.39		1.0	0.39	ug/L			05/19/17 01:04	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			05/19/17 01:04	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			05/19/17 01:04	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			05/19/17 01:04	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			05/19/17 01:04	1
Tetrahydrofuran	<1.9		10	1.9	ug/L			05/19/17 01:04	1
Toluene	<0.15		0.50	0.15	ug/L			05/19/17 01:04	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			05/19/17 01:04	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			05/19/17 01:04	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			05/19/17 01:04	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			05/19/17 01:04	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			05/19/17 01:04	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			05/19/17 01:04	1
Trichloroethene	<0.16		0.50	0.16	ug/L			05/19/17 01:04	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			05/19/17 01:04	1
1,2,3-Trichloropropane	<0.41		1.0	0.41	ug/L			05/19/17 01:04	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			05/19/17 01:04	1

Client Sample ID: MW9I

Date Collected: 05/05/17 16:00
Date Received: 05/10/17 09:05

Lab Sample ID: 500-127911-11
Matrix: Water

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

Analyte	Result	Qualifier	RL	LOD	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			05/19/17 01:04	1
Vinyl chloride	<0.20		0.50	0.20	ug/L			05/19/17 01:04	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			05/19/17 01:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*117*		*72 - 124*		*05/19/17 01:04*	*1*
Dibromofluoromethane	*91*		*75 - 120*		*05/19/17 01:04*	*1*
1,2-Dichloroethane-d4 (Surr)	*110*		*75 - 126*		*05/19/17 01:04*	*1*
Toluene-d8 (Surr)	*103*		*75 - 120*		*05/19/17 01:04*	*1*

Client Sample ID: MW9I DUP

Date Collected: 05/05/17 16:00
Date Received: 05/10/17 09:05

Lab Sample ID: 500-127911-12
Matrix: Water

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

Analyte	Result	Qualifier	RL	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.15		0.50	0.15	ug/L			05/19/17 01:31	1
Bromobenzene	<0.36		1.0	0.36	ug/L			05/19/17 01:31	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			05/19/17 01:31	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			05/19/17 01:31	1
Bromoform	<0.48		1.0	0.48	ug/L			05/19/17 01:31	1
Bromomethane	<0.80		2.0	0.80	ug/L			05/19/17 01:31	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			05/19/17 01:31	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			05/19/17 01:31	1
Chloroethane	<0.51		1.0	0.51	ug/L			05/19/17 01:31	1
Chloroform	<0.37		2.0	0.37	ug/L			05/19/17 01:31	1
Chloromethane	<0.32		1.0	0.32	ug/L			05/19/17 01:31	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			05/19/17 01:31	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			05/19/17 01:31	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			05/19/17 01:31	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			05/19/17 01:31	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			05/19/17 01:31	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			05/19/17 01:31	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			05/19/17 01:31	1
Dibromomethane	<0.27		1.0	0.27	ug/L			05/19/17 01:31	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			05/19/17 01:31	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			05/19/17 01:31	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			05/19/17 01:31	1
Dichlorodifluoromethane	**26**		2.0	0.67	ug/L			05/19/17 01:31	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			05/19/17 01:31	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			05/19/17 01:31	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			05/19/17 01:31	1
Dichlorofluoromethane	**14**		1.0	0.38	ug/L			05/19/17 01:31	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			05/19/17 01:31	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			05/19/17 01:31	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			05/19/17 01:31	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			05/19/17 01:31	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			05/19/17 01:31	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			05/19/17 01:31	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			05/19/17 01:31	1

Client Sample ID: MW9I DUP

Lab Sample ID: 500-127911-12

Date Collected: 05/05/17 16:00

Matrix: Water

Date Received: 05/10/17 09:05

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

Analyte	Result	Qualifier	RL	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Isopropyl ether	<0.28		1.0	0.28	ug/L			05/19/17 01:31	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			05/19/17 01:31	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			05/19/17 01:31	1
Naphthalene	<0.34		1.0	0.34	ug/L			05/19/17 01:31	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			05/19/17 01:31	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			05/19/17 01:31	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			05/19/17 01:31	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			05/19/17 01:31	1
Styrene	<0.39		1.0	0.39	ug/L			05/19/17 01:31	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			05/19/17 01:31	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			05/19/17 01:31	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			05/19/17 01:31	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			05/19/17 01:31	1
Tetrahydrofuran	<1.9		10	1.9	ug/L			05/19/17 01:31	1
Toluene	<0.15		0.50	0.15	ug/L			05/19/17 01:31	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			05/19/17 01:31	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			05/19/17 01:31	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			05/19/17 01:31	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			05/19/17 01:31	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			05/19/17 01:31	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			05/19/17 01:31	1
Trichloroethene	**0.39**	**J**	0.50	0.16	ug/L			05/19/17 01:31	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			05/19/17 01:31	1
1,2,3-Trichloropropane	<0.41		1.0	0.41	ug/L			05/19/17 01:31	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			05/19/17 01:31	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			05/19/17 01:31	1
Vinyl chloride	<0.20		0.50	0.20	ug/L			05/19/17 01:31	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			05/19/17 01:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*117*		*72 - 124*		*05/19/17 01:31*	*1*
Dibromofluoromethane	*95*		*75 - 120*		*05/19/17 01:31*	*1*
1,2-Dichloroethane-d4 (Surr)	*115*		*75 - 126*		*05/19/17 01:31*	*1*
Toluene-d8 (Surr)	*103*		*75 - 120*		*05/19/17 01:31*	*1*

Client Sample ID: MW10S

Lab Sample ID: 500-127911-13

Date Collected: 05/05/17 13:15

Matrix: Water

Date Received: 05/10/17 09:05

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

Analyte	Result	Qualifier	RL	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.15		0.50	0.15	ug/L			05/19/17 01:58	1
Bromobenzene	<0.36		1.0	0.36	ug/L			05/19/17 01:58	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			05/19/17 01:58	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			05/19/17 01:58	1
Bromoform	<0.48		1.0	0.48	ug/L			05/19/17 01:58	1
Bromomethane	<0.80		2.0	0.80	ug/L			05/19/17 01:58	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			05/19/17 01:58	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			05/19/17 01:58	1
Chloroethane	<0.51		1.0	0.51	ug/L			05/19/17 01:58	1

Client: SCS Engineers
Project/Site: Stoughton LF - 25216022

TestAmerica Job ID: 500-127911-1

Client Sample ID: MW10S
Date Collected: 05/05/17 13:15
Date Received: 05/10/17 09:05

Lab Sample ID: 500-127911-13
Matrix: Water

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

Analyte	Result	Qualifier	RL	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Chloroform	<0.37		2.0	0.37	ug/L			05/19/17 01:58	1
Chloromethane	<0.32		1.0	0.32	ug/L			05/19/17 01:58	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			05/19/17 01:58	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			05/19/17 01:58	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			05/19/17 01:58	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			05/19/17 01:58	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			05/19/17 01:58	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			05/19/17 01:58	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			05/19/17 01:58	1
Dibromomethane	<0.27		1.0	0.27	ug/L			05/19/17 01:58	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			05/19/17 01:58	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			05/19/17 01:58	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			05/19/17 01:58	1
Dichlorodifluoromethane	<0.67		2.0	0.67	ug/L			05/19/17 01:58	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			05/19/17 01:58	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			05/19/17 01:58	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			05/19/17 01:58	1
Dichlorofluoromethane	<0.38		1.0	0.38	ug/L			05/19/17 01:58	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			05/19/17 01:58	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			05/19/17 01:58	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			05/19/17 01:58	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			05/19/17 01:58	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			05/19/17 01:58	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			05/19/17 01:58	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			05/19/17 01:58	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			05/19/17 01:58	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			05/19/17 01:58	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			05/19/17 01:58	1
Naphthalene	<0.34		1.0	0.34	ug/L			05/19/17 01:58	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			05/19/17 01:58	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			05/19/17 01:58	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			05/19/17 01:58	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			05/19/17 01:58	1
Styrene	<0.39		1.0	0.39	ug/L			05/19/17 01:58	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			05/19/17 01:58	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			05/19/17 01:58	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			05/19/17 01:58	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			05/19/17 01:58	1
Tetrahydrofuran	<1.9		10	1.9	ug/L			05/19/17 01:58	1
Toluene	<0.15		0.50	0.15	ug/L			05/19/17 01:58	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			05/19/17 01:58	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			05/19/17 01:58	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			05/19/17 01:58	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			05/19/17 01:58	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			05/19/17 01:58	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			05/19/17 01:58	1
Trichloroethene	<0.16		0.50	0.16	ug/L			05/19/17 01:58	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			05/19/17 01:58	1
1,2,3-Trichloropropane	<0.41		1.0	0.41	ug/L			05/19/17 01:58	1

Client Sample ID: MW10S

Lab Sample ID: 500-127911-13

Date Collected: 05/05/17 13:15

Matrix: Water

Date Received: 05/10/17 09:05

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

Analyte	Result	Qualifier	RL	LOD	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			05/19/17 01:58	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			05/19/17 01:58	1
Vinyl chloride	<0.20		0.50	0.20	ug/L			05/19/17 01:58	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			05/19/17 01:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*114*		*72 - 124*		*05/19/17 01:58*	*1*
Dibromofluoromethane	*90*		*75 - 120*		*05/19/17 01:58*	*1*
1,2-Dichloroethane-d4 (Surr)	*112*		*75 - 126*		*05/19/17 01:58*	*1*
Toluene-d8 (Surr)	*103*		*75 - 120*		*05/19/17 01:58*	*1*

Client Sample ID: MW10I

Lab Sample ID: 500-127911-14

Date Collected: 05/05/17 12:45

Matrix: Water

Date Received: 05/10/17 09:05

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

Analyte	Result	Qualifier	RL	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.15		0.50	0.15	ug/L			05/19/17 02:25	1
Bromobenzene	<0.36		1.0	0.36	ug/L			05/19/17 02:25	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			05/19/17 02:25	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			05/19/17 02:25	1
Bromoform	<0.48		1.0	0.48	ug/L			05/19/17 02:25	1
Bromomethane	<0.80		2.0	0.80	ug/L			05/19/17 02:25	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			05/19/17 02:25	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			05/19/17 02:25	1
Chloroethane	<0.51		1.0	0.51	ug/L			05/19/17 02:25	1
Chloroform	<0.37		2.0	0.37	ug/L			05/19/17 02:25	1
Chloromethane	<0.32		1.0	0.32	ug/L			05/19/17 02:25	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			05/19/17 02:25	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			05/19/17 02:25	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			05/19/17 02:25	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			05/19/17 02:25	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			05/19/17 02:25	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			05/19/17 02:25	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			05/19/17 02:25	1
Dibromomethane	<0.27		1.0	0.27	ug/L			05/19/17 02:25	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			05/19/17 02:25	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			05/19/17 02:25	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			05/19/17 02:25	1
Dichlorodifluoromethane	**12**		2.0	0.67	ug/L			05/19/17 02:25	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			05/19/17 02:25	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			05/19/17 02:25	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			05/19/17 02:25	1
Dichlorofluoromethane	**6.1**		1.0	0.38	ug/L			05/19/17 02:25	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			05/19/17 02:25	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			05/19/17 02:25	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			05/19/17 02:25	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			05/19/17 02:25	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			05/19/17 02:25	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			05/19/17 02:25	1

Client Sample ID: MW10I — **Lab Sample ID: 500-127911-14**
Date Collected: 05/05/17 12:45 — **Matrix: Water**
Date Received: 05/10/17 09:05

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

Analyte	Result	Qualifier	RL	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Isopropylbenzene	<0.39		1.0	0.39	ug/L			05/19/17 02:25	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			05/19/17 02:25	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			05/19/17 02:25	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			05/19/17 02:25	1
Naphthalene	<0.34		1.0	0.34	ug/L			05/19/17 02:25	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			05/19/17 02:25	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			05/19/17 02:25	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			05/19/17 02:25	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			05/19/17 02:25	1
Styrene	<0.39		1.0	0.39	ug/L			05/19/17 02:25	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			05/19/17 02:25	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			05/19/17 02:25	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			05/19/17 02:25	1
Tetrachloroethene	**1.8**		1.0	0.37	ug/L			05/19/17 02:25	1
Tetrahydrofuran	<1.9		10	1.9	ug/L			05/19/17 02:25	1
Toluene	<0.15		0.50	0.15	ug/L			05/19/17 02:25	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			05/19/17 02:25	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			05/19/17 02:25	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			05/19/17 02:25	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			05/19/17 02:25	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			05/19/17 02:25	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			05/19/17 02:25	1
Trichloroethene	<0.16		0.50	0.16	ug/L			05/19/17 02:25	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			05/19/17 02:25	1
1,2,3-Trichloropropane	<0.41		1.0	0.41	ug/L			05/19/17 02:25	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			05/19/17 02:25	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			05/19/17 02:25	1
Vinyl chloride	<0.20		0.50	0.20	ug/L			05/19/17 02:25	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			05/19/17 02:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*116*		*72 - 124*		*05/19/17 02:25*	*1*
Dibromofluoromethane	*92*		*75 - 120*		*05/19/17 02:25*	*1*
1,2-Dichloroethane-d4 (Surr)	*114*		*75 - 126*		*05/19/17 02:25*	*1*
Toluene-d8 (Surr)	*103*		*75 - 120*		*05/19/17 02:25*	*1*

Client Sample ID: MW13I — **Lab Sample ID: 500-127911-15**
Date Collected: 05/05/17 12:15 — **Matrix: Water**
Date Received: 05/10/17 09:05

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

Analyte	Result	Qualifier	RL	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	<0.67		2.0	0.67	ug/L			05/19/17 02:52	1
Tetrahydrofuran	<1.9		10	1.9	ug/L			05/19/17 02:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*117*		*72 - 124*		*05/19/17 02:52*	*1*
Dibromofluoromethane	*95*		*75 - 120*		*05/19/17 02:52*	*1*
1,2-Dichloroethane-d4 (Surr)	*118*		*75 - 126*		*05/19/17 02:52*	*1*
Toluene-d8 (Surr)	*102*		*75 - 120*		*05/19/17 02:52*	*1*

Client: SCS Engineers
Project/Site: Stoughton LF - 25216022

TestAmerica Job ID: 500-127911-1

Client Sample ID: MW14S
Date Collected: 05/05/17 14:15
Date Received: 05/10/17 09:05

Lab Sample ID: 500-127911-16
Matrix: Water

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

Analyte	Result	Qualifier	RL	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.15		0.50	0.15	ug/L			05/19/17 03:18	1
Bromobenzene	<0.36		1.0	0.36	ug/L			05/19/17 03:18	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			05/19/17 03:18	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			05/19/17 03:18	1
Bromoform	<0.48		1.0	0.48	ug/L			05/19/17 03:18	1
Bromomethane	<0.80		2.0	0.80	ug/L			05/19/17 03:18	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			05/19/17 03:18	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			05/19/17 03:18	1
Chloroethane	<0.51		1.0	0.51	ug/L			05/19/17 03:18	1
Chloroform	<0.37		2.0	0.37	ug/L			05/19/17 03:18	1
Chloromethane	<0.32		1.0	0.32	ug/L			05/19/17 03:18	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			05/19/17 03:18	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			05/19/17 03:18	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			05/19/17 03:18	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			05/19/17 03:18	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			05/19/17 03:18	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			05/19/17 03:18	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			05/19/17 03:18	1
Dibromomethane	<0.27		1.0	0.27	ug/L			05/19/17 03:18	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			05/19/17 03:18	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			05/19/17 03:18	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			05/19/17 03:18	1
Dichlorodifluoromethane	<0.67		2.0	0.67	ug/L			05/19/17 03:18	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			05/19/17 03:18	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			05/19/17 03:18	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			05/19/17 03:18	1
Dichlorofluoromethane	<0.38		1.0	0.38	ug/L			05/19/17 03:18	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			05/19/17 03:18	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			05/19/17 03:18	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			05/19/17 03:18	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			05/19/17 03:18	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			05/19/17 03:18	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			05/19/17 03:18	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			05/19/17 03:18	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			05/19/17 03:18	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			05/19/17 03:18	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			05/19/17 03:18	1
Naphthalene	<0.34		1.0	0.34	ug/L			05/19/17 03:18	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			05/19/17 03:18	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			05/19/17 03:18	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			05/19/17 03:18	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			05/19/17 03:18	1
Styrene	<0.39		1.0	0.39	ug/L			05/19/17 03:18	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			05/19/17 03:18	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			05/19/17 03:18	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			05/19/17 03:18	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			05/19/17 03:18	1
Tetrahydrofuran	<1.9		10	1.9	ug/L			05/19/17 03:18	1
Toluene	<0.15		0.50	0.15	ug/L			05/19/17 03:18	1

Client Sample ID: MW14S

Lab Sample ID: 500-127911-16

Date Collected: 05/05/17 14:15

Matrix: Water

Date Received: 05/10/17 09:05

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

Analyte	Result	Qualifier	RL	LOD	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			05/19/17 03:18	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			05/19/17 03:18	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			05/19/17 03:18	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			05/19/17 03:18	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			05/19/17 03:18	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			05/19/17 03:18	1
Trichloroethene	<0.16		0.50	0.16	ug/L			05/19/17 03:18	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			05/19/17 03:18	1
1,2,3-Trichloropropane	<0.41		1.0	0.41	ug/L			05/19/17 03:18	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			05/19/17 03:18	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			05/19/17 03:18	1
Vinyl chloride	<0.20		0.50	0.20	ug/L			05/19/17 03:18	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			05/19/17 03:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*113*		*72 - 124*		*05/19/17 03:18*	*1*
Dibromofluoromethane	*95*		*75 - 120*		*05/19/17 03:18*	*1*
1,2-Dichloroethane-d4 (Surr)	*113*		*75 - 126*		*05/19/17 03:18*	*1*
Toluene-d8 (Surr)	*101*		*75 - 120*		*05/19/17 03:18*	*1*

Client Sample ID: MW14I

Lab Sample ID: 500-127911-17

Date Collected: 05/05/17 14:30

Matrix: Water

Date Received: 05/10/17 09:05

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

Analyte	Result	Qualifier	RL	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.15		0.50	0.15	ug/L			05/19/17 03:46	1
Bromobenzene	<0.36		1.0	0.36	ug/L			05/19/17 03:46	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			05/19/17 03:46	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			05/19/17 03:46	1
Bromoform	<0.48		1.0	0.48	ug/L			05/19/17 03:46	1
Bromomethane	<0.80		2.0	0.80	ug/L			05/19/17 03:46	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			05/19/17 03:46	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			05/19/17 03:46	1
Chloroethane	<0.51		1.0	0.51	ug/L			05/19/17 03:46	1
Chloroform	<0.37		2.0	0.37	ug/L			05/19/17 03:46	1
Chloromethane	<0.32		1.0	0.32	ug/L			05/19/17 03:46	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			05/19/17 03:46	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			05/19/17 03:46	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			05/19/17 03:46	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			05/19/17 03:46	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			05/19/17 03:46	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			05/19/17 03:46	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			05/19/17 03:46	1
Dibromomethane	<0.27		1.0	0.27	ug/L			05/19/17 03:46	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			05/19/17 03:46	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			05/19/17 03:46	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			05/19/17 03:46	1
Dichlorodifluoromethane	**4.6**		2.0	0.67	ug/L			05/19/17 03:46	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			05/19/17 03:46	1

Client Sample ID: MW14I
Date Collected: 05/05/17 14:30
Date Received: 05/10/17 09:05

Lab Sample ID: 500-127911-17
Matrix: Water

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

Analyte	Result	Qualifier	RL	LOD	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			05/19/17 03:46	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			05/19/17 03:46	1
Dichlorofluoromethane	12		1.0	0.38	ug/L			05/19/17 03:46	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			05/19/17 03:46	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			05/19/17 03:46	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			05/19/17 03:46	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			05/19/17 03:46	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			05/19/17 03:46	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			05/19/17 03:46	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			05/19/17 03:46	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			05/19/17 03:46	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			05/19/17 03:46	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			05/19/17 03:46	1
Naphthalene	<0.34		1.0	0.34	ug/L			05/19/17 03:46	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			05/19/17 03:46	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			05/19/17 03:46	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			05/19/17 03:46	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			05/19/17 03:46	1
Styrene	<0.39		1.0	0.39	ug/L			05/19/17 03:46	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			05/19/17 03:46	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			05/19/17 03:46	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			05/19/17 03:46	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			05/19/17 03:46	1
Tetrahydrofuran	<1.9		10	1.9	ug/L			05/19/17 03:46	1
Toluene	<0.15		0.50	0.15	ug/L			05/19/17 03:46	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			05/19/17 03:46	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			05/19/17 03:46	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			05/19/17 03:46	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			05/19/17 03:46	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			05/19/17 03:46	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			05/19/17 03:46	1
Trichloroethene	<0.16		0.50	0.16	ug/L			05/19/17 03:46	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			05/19/17 03:46	1
1,2,3-Trichloropropane	<0.41		1.0	0.41	ug/L			05/19/17 03:46	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			05/19/17 03:46	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			05/19/17 03:46	1
Vinyl chloride	<0.20		0.50	0.20	ug/L			05/19/17 03:46	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			05/19/17 03:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*117*		*72 - 124*		*05/19/17 03:46*	*1*
Dibromofluoromethane	*94*		*75 - 120*		*05/19/17 03:46*	*1*
1,2-Dichloroethane-d4 (Surr)	*114*		*75 - 126*		*05/19/17 03:46*	*1*
Toluene-d8 (Surr)	*103*		*75 - 120*		*05/19/17 03:46*	*1*

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
J	Reported value was between the limit of detection and the limit of quantitation.
F1	MS and/or MSD Recovery is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits

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	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
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 (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

GC/MS VOA

Analysis Batch: 385529

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127911-1	Trip Blank	Total/NA	Water	8260B	
500-127911-2	Field Blank	Total/NA	Water	8260B	
MB 500-385529/6	Method Blank	Total/NA	Water	8260B	
LCS 500-385529/29	Lab Control Sample	Total/NA	Water	8260B	
500-127911-2 MS	Field Blank	Total/NA	Water	8260B	
500-127911-2 MSD	Field Blank	Total/NA	Water	8260B	

Analysis Batch: 385531

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127911-3	MW3D	Total/NA	Water	8260B	
500-127911-4	MW4D	Total/NA	Water	8260B	
500-127911-5	MW5D	Total/NA	Water	8260B	
500-127911-6	MW5D DUP	Total/NA	Water	8260B	
500-127911-7	MW7I	Total/NA	Water	8260B	
MB 500-385531/7	Method Blank	Total/NA	Water	8260B	
LCS 500-385531/4	Lab Control Sample	Total/NA	Water	8260B	

Analysis Batch: 385770

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127911-8	MW8I	Total/NA	Water	8260B	
500-127911-9	MW9S	Total/NA	Water	8260B	
500-127911-10	MW9D	Total/NA	Water	8260B	
500-127911-11	MW9I	Total/NA	Water	8260B	
500-127911-12	MW9I DUP	Total/NA	Water	8260B	
500-127911-13	MW10S	Total/NA	Water	8260B	
500-127911-14	MW10I	Total/NA	Water	8260B	
500-127911-15	MW13I	Total/NA	Water	8260B	
500-127911-16	MW14S	Total/NA	Water	8260B	
500-127911-17	MW14I	Total/NA	Water	8260B	
MB 500-385770/6	Method Blank	Total/NA	Water	8260B	
LCS 500-385770/4	Lab Control Sample	Total/NA	Water	8260B	
500-127911-8 MS	MW8I	Total/NA	Water	8260B	
500-127911-8 MSD	MW8I	Total/NA	Water	8260B	

Surrogate Summary

Client: SCS Engineers
Project/Site: Stoughton LF - 25216022

TestAmerica Job ID: 500-127911-1

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		BFB	DBFM	12DCE	TOL
Lab Sample ID	Client Sample ID	(72-124)	(75-120)	(75-126)	(75-120)
500-127911-1	Trip Blank	94	94	105	90
500-127911-2	Field Blank	92	94	106	90
500-127911-2 MS	Field Blank	86	98	105	91
500-127911-2 MSD	Field Blank	88	96	106	92
500-127911-3	MW3D	113	98	116	99
500-127911-4	MW4D	115	97	118	100
500-127911-5	MW5D	116	100	119	101
500-127911-6	MW5D DUP	117	97	119	100
500-127911-7	MW7I	116	96	117	100
500-127911-8	MW8I	113	93	114	102
500-127911-8 MS	MW8I	114	94	110	101
500-127911-8 MSD	MW8I	117	97	111	101
500-127911-9	MW9S	117	93	112	103
500-127911-10	MW9D	112	93	113	102
500-127911-11	MW9I	117	91	110	103
500-127911-12	MW9I DUP	117	95	115	103
500-127911-13	MW10S	114	90	112	103
500-127911-14	MW10I	116	92	114	103
500-127911-15	MW13I	117	95	118	102
500-127911-16	MW14S	113	95	113	101
500-127911-17	MW14I	117	94	114	103
LCS 500-385529/29	Lab Control Sample	86	96	101	93
LCS 500-385531/4	Lab Control Sample	112	100	119	98
LCS 500-385770/4	Lab Control Sample	115	99	114	101
MB 500-385529/6	Method Blank	96	95	107	90
MB 500-385531/7	Method Blank	117	100	120	100
MB 500-385770/6	Method Blank	118	96	117	102

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane
12DCE = 1,2-Dichloroethane-d4 (Surr)
TOL = Toluene-d8 (Surr)

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

Lab Sample ID: MB 500-385529/6
Matrix: Water
Analysis Batch: 385529

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

Analyte	MB Result	MB Qualifier	RL	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.15		0.50	0.15	ug/L			05/17/17 22:25	1
Bromobenzene	<0.36		1.0	0.36	ug/L			05/17/17 22:25	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			05/17/17 22:25	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			05/17/17 22:25	1
Bromoform	<0.48		1.0	0.48	ug/L			05/17/17 22:25	1
Bromomethane	<0.80		2.0	0.80	ug/L			05/17/17 22:25	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			05/17/17 22:25	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			05/17/17 22:25	1
Chloroethane	<0.51		1.0	0.51	ug/L			05/17/17 22:25	1
Chloroform	<0.37		2.0	0.37	ug/L			05/17/17 22:25	1
Chloromethane	<0.32		1.0	0.32	ug/L			05/17/17 22:25	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			05/17/17 22:25	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			05/17/17 22:25	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			05/17/17 22:25	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			05/17/17 22:25	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			05/17/17 22:25	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			05/17/17 22:25	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			05/17/17 22:25	1
Dibromomethane	<0.27		1.0	0.27	ug/L			05/17/17 22:25	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			05/17/17 22:25	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			05/17/17 22:25	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			05/17/17 22:25	1
Dichlorodifluoromethane	<0.67		2.0	0.67	ug/L			05/17/17 22:25	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			05/17/17 22:25	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			05/17/17 22:25	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			05/17/17 22:25	1
Dichlorofluoromethane	<0.38		1.0	0.38	ug/L			05/17/17 22:25	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			05/17/17 22:25	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			05/17/17 22:25	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			05/17/17 22:25	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			05/17/17 22:25	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			05/17/17 22:25	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			05/17/17 22:25	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			05/17/17 22:25	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			05/17/17 22:25	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			05/17/17 22:25	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			05/17/17 22:25	1
Naphthalene	<0.34		1.0	0.34	ug/L			05/17/17 22:25	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			05/17/17 22:25	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			05/17/17 22:25	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			05/17/17 22:25	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			05/17/17 22:25	1
Styrene	<0.39		1.0	0.39	ug/L			05/17/17 22:25	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			05/17/17 22:25	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			05/17/17 22:25	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			05/17/17 22:25	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			05/17/17 22:25	1
Tetrahydrofuran	<1.9		10	1.9	ug/L			05/17/17 22:25	1

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

Lab Sample ID: MB 500-385529/6
Matrix: Water
Analysis Batch: 385529

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

Analyte	MB Result	MB Qualifier	RL	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	<0.15		0.50	0.15	ug/L			05/17/17 22:25	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			05/17/17 22:25	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			05/17/17 22:25	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			05/17/17 22:25	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			05/17/17 22:25	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			05/17/17 22:25	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			05/17/17 22:25	1
Trichloroethene	<0.16		0.50	0.16	ug/L			05/17/17 22:25	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			05/17/17 22:25	1
1,2,3-Trichloropropane	<0.41		1.0	0.41	ug/L			05/17/17 22:25	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			05/17/17 22:25	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			05/17/17 22:25	1
Vinyl chloride	<0.20		0.50	0.20	ug/L			05/17/17 22:25	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			05/17/17 22:25	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*72 - 124*		*05/17/17 22:25*	*1*
Dibromofluoromethane	*95*		*75 - 120*		*05/17/17 22:25*	*1*
1,2-Dichloroethane-d4 (Surr)	*107*		*75 - 126*		*05/17/17 22:25*	*1*
Toluene-d8 (Surr)	*90*		*75 - 120*		*05/17/17 22:25*	*1*

Lab Sample ID: LCS 500-385529/29
Matrix: Water
Analysis Batch: 385529

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	50.0	45.0		ug/L		90	70 - 120
Bromobenzene	50.0	41.8		ug/L		84	70 - 122
Bromochloromethane	50.0	49.2		ug/L		98	65 - 122
Bromodichloromethane	50.0	41.8		ug/L		84	69 - 120
Bromoform	50.0	43.1		ug/L		86	56 - 132
Bromomethane	50.0	50.9		ug/L		102	40 - 130
Carbon tetrachloride	50.0	43.3		ug/L		87	65 - 122
Chlorobenzene	50.0	44.3		ug/L		89	70 - 120
Chloroethane	50.0	50.9		ug/L		102	45 - 127
Chloroform	50.0	43.2		ug/L		86	70 - 120
Chloromethane	50.0	59.0		ug/L		118	54 - 147
2-Chlorotoluene	50.0	39.1		ug/L		78	70 - 125
4-Chlorotoluene	50.0	40.1		ug/L		80	68 - 124
cis-1,2-Dichloroethene	50.0	43.8		ug/L		88	70 - 125
cis-1,3-Dichloropropene	50.0	42.1		ug/L		84	64 - 127
Dibromochloromethane	50.0	43.4		ug/L		87	68 - 125
1,2-Dibromo-3-Chloropropane	50.0	42.3		ug/L		85	56 - 123
1,2-Dibromoethane	50.0	45.8		ug/L		92	70 - 125
Dibromomethane	50.0	46.1		ug/L		92	70 - 120
1,2-Dichlorobenzene	50.0	46.6		ug/L		93	70 - 125
1,3-Dichlorobenzene	50.0	44.4		ug/L		89	70 - 125
1,4-Dichlorobenzene	50.0	44.6		ug/L		89	70 - 120

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

Lab Sample ID: LCS 500-385529/29
Matrix: Water
Analysis Batch: 385529

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dichlorodifluoromethane	50.0	44.4		ug/L		89	40 - 150
1,1-Dichloroethane	50.0	51.5		ug/L		103	70 - 125
1,2-Dichloroethane	50.0	50.0		ug/L		100	68 - 127
1,1-Dichloroethene	50.0	42.9		ug/L		86	67 - 122
Dichlorofluoromethane	50.0	51.7		ug/L		103	69 - 124
1,2-Dichloropropane	50.0	53.8		ug/L		108	67 - 130
1,3-Dichloropropane	50.0	45.3		ug/L		91	62 - 136
2,2-Dichloropropane	50.0	37.9		ug/L		76	58 - 129
1,1-Dichloropropene	50.0	45.1		ug/L		90	70 - 121
Ethylbenzene	50.0	45.8		ug/L		92	70 - 120
Hexachlorobutadiene	50.0	58.7		ug/L		117	51 - 150
Isopropylbenzene	50.0	42.2		ug/L		84	70 - 126
Methylene Chloride	50.0	44.7		ug/L		89	69 - 125
Methyl tert-butyl ether	50.0	44.9		ug/L		90	70 - 120
Naphthalene	50.0	65.7	*	ug/L		131	59 - 130
n-Butylbenzene	50.0	43.5		ug/L		87	68 - 125
N-Propylbenzene	50.0	40.3		ug/L		81	69 - 127
p-Isopropyltoluene	50.0	45.1		ug/L		90	70 - 125
sec-Butylbenzene	50.0	44.4		ug/L		89	70 - 123
Styrene	50.0	47.2		ug/L		94	70 - 120
tert-Butylbenzene	50.0	43.5		ug/L		87	70 - 121
1,1,1,2-Tetrachloroethane	50.0	45.8		ug/L		92	70 - 125
1,1,2,2-Tetrachloroethane	50.0	42.9		ug/L		86	67 - 127
Tetrachloroethene	50.0	48.6		ug/L		97	70 - 128
Tetrahydrofuran	100	120		ug/L		120	59 - 139
Toluene	50.0	44.2		ug/L		88	70 - 125
trans-1,2-Dichloroethene	50.0	43.4		ug/L		87	70 - 125
trans-1,3-Dichloropropene	50.0	41.0		ug/L		82	62 - 128
1,2,3-Trichlorobenzene	50.0	66.3		ug/L		133	55 - 140
1,2,4-Trichlorobenzene	50.0	61.3		ug/L		123	66 - 127
1,1,1-Trichloroethane	50.0	40.2		ug/L		80	70 - 125
1,1,2-Trichloroethane	50.0	45.1		ug/L		90	70 - 122
Trichloroethene	50.0	49.1		ug/L		98	70 - 125
Trichlorofluoromethane	50.0	46.6		ug/L		93	70 - 126
1,2,3-Trichloropropane	50.0	40.1		ug/L		80	50 - 133
1,2,4-Trimethylbenzene	50.0	43.7		ug/L		87	70 - 123
1,3,5-Trimethylbenzene	50.0	43.6		ug/L		87	70 - 123
Vinyl chloride	50.0	62.7		ug/L		125	64 - 126
Xylenes, Total	100	86.9		ug/L		87	70 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*86*		*72 - 124*
Dibromofluoromethane	*96*		*75 - 120*
1,2-Dichloroethane-d4 (Surr)	*101*		*75 - 126*
Toluene-d8 (Surr)	*93*		*75 - 120*

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

Lab Sample ID: 500-127911-2 MS
Matrix: Water
Analysis Batch: 385529

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.15		50.0	49.4		ug/L		99	70 - 120
Bromobenzene	<0.36		50.0	46.2		ug/L		92	70 - 122
Bromochloromethane	<0.43		50.0	54.7		ug/L		109	65 - 122
Bromodichloromethane	<0.37		50.0	46.0		ug/L		92	69 - 120
Bromoform	<0.48		50.0	45.5		ug/L		91	56 - 132
Bromomethane	<0.80		50.0	58.0		ug/L		116	40 - 130
Carbon tetrachloride	<0.38		50.0	47.3		ug/L		95	65 - 122
Chlorobenzene	<0.39		50.0	47.7		ug/L		95	70 - 120
Chloroethane	<0.51		50.0	47.8		ug/L		96	45 - 127
Chloroform	<0.37		50.0	47.9		ug/L		96	70 - 120
Chloromethane	<0.32		50.0	66.7		ug/L		133	54 - 147
2-Chlorotoluene	<0.31		50.0	42.7		ug/L		85	70 - 125
4-Chlorotoluene	<0.35		50.0	42.8		ug/L		86	68 - 124
cis-1,2-Dichloroethene	<0.41		50.0	48.1		ug/L		96	70 - 125
cis-1,3-Dichloropropene	<0.42		50.0	45.8		ug/L		92	64 - 127
Dibromochloromethane	<0.49		50.0	46.9		ug/L		94	68 - 125
1,2-Dibromo-3-Chloropropane	<2.0		50.0	42.2		ug/L		84	56 - 123
1,2-Dibromoethane	<0.39		50.0	50.2		ug/L		100	70 - 125
Dibromomethane	<0.27		50.0	50.3		ug/L		101	70 - 120
1,2-Dichlorobenzene	<0.33		50.0	50.3		ug/L		101	70 - 125
1,3-Dichlorobenzene	<0.40		50.0	47.9		ug/L		96	70 - 125
1,4-Dichlorobenzene	<0.36		50.0	47.2		ug/L		94	70 - 120
Dichlorodifluoromethane	<0.67		50.0	50.6		ug/L		101	40 - 150
1,1-Dichloroethane	<0.41		50.0	56.4		ug/L		113	70 - 125
1,2-Dichloroethane	<0.39		50.0	56.1		ug/L		112	68 - 127
1,1-Dichloroethene	<0.39		50.0	47.2		ug/L		94	67 - 122
Dichlorofluoromethane	<0.38		50.0	56.9		ug/L		114	69 - 124
1,2-Dichloropropane	<0.43		50.0	59.6		ug/L		119	67 - 130
1,3-Dichloropropane	<0.36		50.0	48.3		ug/L		97	62 - 136
2,2-Dichloropropane	<0.44		50.0	40.5		ug/L		81	58 - 129
1,1-Dichloropropene	<0.30		50.0	48.5		ug/L		97	70 - 121
Ethylbenzene	<0.18		50.0	49.1		ug/L		98	70 - 120
Hexachlorobutadiene	<0.45		50.0	61.9		ug/L		124	51 - 150
Isopropylbenzene	<0.39		50.0	45.6		ug/L		91	70 - 126
Methylene Chloride	<1.6		50.0	49.6		ug/L		99	69 - 125
Methyl tert-butyl ether	<0.39		50.0	50.5		ug/L		101	70 - 120
Naphthalene	<0.34	* F1	50.0	72.6	F1	ug/L		145	59 - 130
n-Butylbenzene	<0.39		50.0	45.8		ug/L		92	68 - 125
N-Propylbenzene	<0.41		50.0	43.6		ug/L		87	69 - 127
p-Isopropyltoluene	<0.36		50.0	48.4		ug/L		97	70 - 125
sec-Butylbenzene	<0.40		50.0	47.5		ug/L		95	70 - 123
Styrene	<0.39		50.0	50.7		ug/L		101	70 - 120
tert-Butylbenzene	<0.40		50.0	48.0		ug/L		96	70 - 121
1,1,1,2-Tetrachloroethane	<0.46		50.0	49.6		ug/L		99	70 - 125
1,1,2,2-Tetrachloroethane	<0.40		50.0	46.2		ug/L		92	67 - 127
Tetrachloroethene	<0.37		50.0	52.5		ug/L		105	70 - 128
Tetrahydrofuran	<1.9	F1	100	135		ug/L		135	59 - 139
Toluene	<0.15		50.0	47.7		ug/L		95	70 - 125

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

Lab Sample ID: 500-127911-2 MS
Matrix: Water
Analysis Batch: 385529

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
trans-1,2-Dichloroethene	<0.35		50.0	47.1		ug/L		94	70 - 125
trans-1,3-Dichloropropene	<0.36		50.0	43.8		ug/L		88	62 - 128
1,2,3-Trichlorobenzene	<0.46	F1	50.0	73.1	F1	ug/L		146	55 - 140
1,2,4-Trichlorobenzene	<0.34	F1	50.0	64.2	F1	ug/L		128	66 - 127
1,1,1-Trichloroethane	<0.38		50.0	44.8		ug/L		90	70 - 125
1,1,2-Trichloroethane	<0.35		50.0	50.0		ug/L		100	70 - 122
Trichloroethene	<0.16		50.0	52.9		ug/L		106	70 - 125
Trichlorofluoromethane	<0.43		50.0	47.1		ug/L		94	70 - 126
1,2,3-Trichloropropane	<0.41		50.0	43.6		ug/L		87	50 - 133
1,2,4-Trimethylbenzene	<0.36		50.0	47.2		ug/L		94	70 - 123
1,3,5-Trimethylbenzene	<0.25		50.0	47.1		ug/L		94	70 - 123
Vinyl chloride	<0.20	F1	50.0	69.8	F1	ug/L		140	64 - 126
Xylenes, Total	<0.22		100	93.7		ug/L		94	70 - 125

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*86*		*72 - 124*
Dibromofluoromethane	*98*		*75 - 120*
1,2-Dichloroethane-d4 (Surr)	*105*		*75 - 126*
Toluene-d8 (Surr)	*91*		*75 - 120*

Lab Sample ID: 500-127911-2 MSD
Matrix: Water
Analysis Batch: 385529

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.15		50.0	50.2		ug/L		100	70 - 120	2	20
Bromobenzene	<0.36		50.0	48.9		ug/L		98	70 - 122	6	20
Bromochloromethane	<0.43		50.0	55.6		ug/L		111	65 - 122	2	20
Bromodichloromethane	<0.37		50.0	46.1		ug/L		92	69 - 120	0	20
Bromoform	<0.48		50.0	45.6		ug/L		91	56 - 132	0	20
Bromomethane	<0.80		50.0	52.7		ug/L		105	40 - 130	10	20
Carbon tetrachloride	<0.38		50.0	48.2		ug/L		96	65 - 122	2	20
Chlorobenzene	<0.39		50.0	48.7		ug/L		97	70 - 120	2	20
Chloroethane	<0.51		50.0	38.7	F2	ug/L		77	45 - 127	21	20
Chloroform	<0.37		50.0	49.2		ug/L		98	70 - 120	3	20
Chloromethane	<0.32		50.0	63.3		ug/L		127	54 - 147	5	20
2-Chlorotoluene	<0.31		50.0	44.5		ug/L		89	70 - 125	4	20
4-Chlorotoluene	<0.35		50.0	44.6		ug/L		89	68 - 124	4	20
cis-1,2-Dichloroethene	<0.41		50.0	48.5		ug/L		97	70 - 125	1	20
cis-1,3-Dichloropropene	<0.42		50.0	45.9		ug/L		92	64 - 127	0	20
Dibromochloromethane	<0.49		50.0	47.5		ug/L		95	68 - 125	1	20
1,2-Dibromo-3-Chloropropane	<2.0		50.0	45.8		ug/L		92	56 - 123	8	20
1,2-Dibromoethane	<0.39		50.0	51.7		ug/L		103	70 - 125	3	20
Dibromomethane	<0.27		50.0	51.3		ug/L		103	70 - 120	2	20
1,2-Dichlorobenzene	<0.33		50.0	51.5		ug/L		103	70 - 125	2	20
1,3-Dichlorobenzene	<0.40		50.0	49.4		ug/L		99	70 - 125	3	20
1,4-Dichlorobenzene	<0.36		50.0	48.8		ug/L		98	70 - 120	3	20
Dichlorodifluoromethane	<0.67		50.0	46.0		ug/L		92	40 - 150	10	20

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

Lab Sample ID: 500-127911-2 MSD
Matrix: Water
Analysis Batch: 385529

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethane	<0.41		50.0	56.4		ug/L		113	70 - 125	0	20
1,2-Dichloroethane	<0.39		50.0	57.7		ug/L		115	68 - 127	3	20
1,1-Dichloroethene	<0.39		50.0	46.1		ug/L		92	67 - 122	2	20
Dichlorofluoromethane	<0.38		50.0	52.4		ug/L		105	69 - 124	8	20
1,2-Dichloropropane	<0.43		50.0	60.6		ug/L		121	67 - 130	2	20
1,3-Dichloropropane	<0.36		50.0	50.1		ug/L		100	62 - 136	4	20
2,2-Dichloropropane	<0.44		50.0	40.6		ug/L		81	58 - 129	0	20
1,1-Dichloropropene	<0.30		50.0	49.1		ug/L		98	70 - 121	1	20
Ethylbenzene	<0.18		50.0	50.0		ug/L		100	70 - 120	2	20
Hexachlorobutadiene	<0.45		50.0	62.0		ug/L		124	51 - 150	0	20
Isopropylbenzene	<0.39		50.0	46.5		ug/L		93	70 - 126	2	20
Methylene Chloride	<1.6		50.0	51.3		ug/L		103	69 - 125	3	20
Methyl tert-butyl ether	<0.39		50.0	51.9		ug/L		104	70 - 120	3	20
Naphthalene	<0.34	* F1	50.0	75.7	F1	ug/L		151	59 - 130	4	20
n-Butylbenzene	<0.39		50.0	46.7		ug/L		93	68 - 125	2	20
N-Propylbenzene	<0.41		50.0	44.0		ug/L		88	69 - 127	1	20
p-Isopropyltoluene	<0.36		50.0	49.8		ug/L		100	70 - 125	3	20
sec-Butylbenzene	<0.40		50.0	48.8		ug/L		98	70 - 123	3	20
Styrene	<0.39		50.0	51.7		ug/L		103	70 - 120	2	20
tert-Butylbenzene	<0.40		50.0	49.0		ug/L		98	70 - 121	2	20
1,1,1,2-Tetrachloroethane	<0.46		50.0	49.8		ug/L		100	70 - 125	0	20
1,1,2,2-Tetrachloroethane	<0.40		50.0	49.0		ug/L		98	67 - 127	6	20
Tetrachloroethene	<0.37		50.0	51.8		ug/L		104	70 - 128	1	20
Tetrahydrofuran	<1.9	F1	100	143	F1	ug/L		143	59 - 139	6	20
Toluene	<0.15		50.0	48.7		ug/L		97	70 - 125	2	20
trans-1,2-Dichloroethene	<0.35		50.0	48.0		ug/L		96	70 - 125	2	20
trans-1,3-Dichloropropene	<0.36		50.0	44.9		ug/L		90	62 - 128	3	20
1,2,3-Trichlorobenzene	<0.46	F1	50.0	75.0	F1	ug/L		150	55 - 140	3	20
1,2,4-Trichlorobenzene	<0.34	F1	50.0	65.3	F1	ug/L		131	66 - 127	2	20
1,1,1-Trichloroethane	<0.38		50.0	45.4		ug/L		91	70 - 125	1	20
1,1,2-Trichloroethane	<0.35		50.0	50.1		ug/L		100	70 - 122	0	20
Trichloroethene	<0.16		50.0	53.6		ug/L		107	70 - 125	1	20
Trichlorofluoromethane	<0.43		50.0	46.8		ug/L		94	70 - 126	1	20
1,2,3-Trichloropropane	<0.41		50.0	46.3		ug/L		93	50 - 133	6	20
1,2,4-Trimethylbenzene	<0.36		50.0	48.6		ug/L		97	70 - 123	3	20
1,3,5-Trimethylbenzene	<0.25		50.0	48.2		ug/L		96	70 - 123	2	20
Vinyl chloride	<0.20	F1	50.0	66.0	F1	ug/L		132	64 - 126	6	20
Xylenes, Total	<0.22		100	95.0		ug/L		95	70 - 125	1	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*88*		*72 - 124*
Dibromofluoromethane	*96*		*75 - 120*
1,2-Dichloroethane-d4 (Surr)	*106*		*75 - 126*
Toluene-d8 (Surr)	*92*		*75 - 120*

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

Lab Sample ID: MB 500-385531/7
Matrix: Water
Analysis Batch: 385531

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

Analyte	MB Result	MB Qualifier	RL	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	<0.67		2.0	0.67	ug/L			05/17/17 22:48	1
Tetrahydrofuran	<1.9		10	1.9	ug/L			05/17/17 22:48	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*117*		*72 - 124*		*05/17/17 22:48*	*1*
Dibromofluoromethane	*100*		*75 - 120*		*05/17/17 22:48*	*1*
1,2-Dichloroethane-d4 (Surr)	*120*		*75 - 126*		*05/17/17 22:48*	*1*
Toluene-d8 (Surr)	*100*		*75 - 120*		*05/17/17 22:48*	*1*

Lab Sample ID: LCS 500-385531/4
Matrix: Water
Analysis Batch: 385531

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dichlorodifluoromethane	50.0	48.8		ug/L		98	40 - 150
Tetrahydrofuran	100	86.3		ug/L		86	59 - 139

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*112*		*72 - 124*
Dibromofluoromethane	*100*		*75 - 120*
1,2-Dichloroethane-d4 (Surr)	*119*		*75 - 126*
Toluene-d8 (Surr)	*98*		*75 - 120*

Lab Sample ID: MB 500-385770/6
Matrix: Water
Analysis Batch: 385770

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

Analyte	MB Result	MB Qualifier	RL	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.15		0.50	0.15	ug/L			05/18/17 23:16	1
Bromobenzene	<0.36		1.0	0.36	ug/L			05/18/17 23:16	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			05/18/17 23:16	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			05/18/17 23:16	1
Bromoform	<0.48		1.0	0.48	ug/L			05/18/17 23:16	1
Bromomethane	<0.80		2.0	0.80	ug/L			05/18/17 23:16	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			05/18/17 23:16	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			05/18/17 23:16	1
Chloroethane	<0.51		1.0	0.51	ug/L			05/18/17 23:16	1
Chloroform	<0.37		2.0	0.37	ug/L			05/18/17 23:16	1
Chloromethane	<0.32		1.0	0.32	ug/L			05/18/17 23:16	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			05/18/17 23:16	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			05/18/17 23:16	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			05/18/17 23:16	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			05/18/17 23:16	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			05/18/17 23:16	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			05/18/17 23:16	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			05/18/17 23:16	1
Dibromomethane	<0.27		1.0	0.27	ug/L			05/18/17 23:16	1

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

Lab Sample ID: MB 500-385770/6
Matrix: Water
Analysis Batch: 385770

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

Analyte	MB Result	MB Qualifier	RL	LOD	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			05/18/17 23:16	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			05/18/17 23:16	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			05/18/17 23:16	1
Dichlorodifluoromethane	<0.67		2.0	0.67	ug/L			05/18/17 23:16	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			05/18/17 23:16	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			05/18/17 23:16	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			05/18/17 23:16	1
Dichlorofluoromethane	<0.38		1.0	0.38	ug/L			05/18/17 23:16	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			05/18/17 23:16	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			05/18/17 23:16	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			05/18/17 23:16	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			05/18/17 23:16	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			05/18/17 23:16	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			05/18/17 23:16	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			05/18/17 23:16	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			05/18/17 23:16	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			05/18/17 23:16	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			05/18/17 23:16	1
Naphthalene	<0.34		1.0	0.34	ug/L			05/18/17 23:16	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			05/18/17 23:16	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			05/18/17 23:16	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			05/18/17 23:16	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			05/18/17 23:16	1
Styrene	<0.39		1.0	0.39	ug/L			05/18/17 23:16	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			05/18/17 23:16	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			05/18/17 23:16	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			05/18/17 23:16	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			05/18/17 23:16	1
Tetrahydrofuran	<1.9		10	1.9	ug/L			05/18/17 23:16	1
Toluene	<0.15		0.50	0.15	ug/L			05/18/17 23:16	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			05/18/17 23:16	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			05/18/17 23:16	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			05/18/17 23:16	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			05/18/17 23:16	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			05/18/17 23:16	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			05/18/17 23:16	1
Trichloroethene	<0.16		0.50	0.16	ug/L			05/18/17 23:16	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			05/18/17 23:16	1
1,2,3-Trichloropropane	<0.41		1.0	0.41	ug/L			05/18/17 23:16	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			05/18/17 23:16	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			05/18/17 23:16	1
Vinyl chloride	<0.20		0.50	0.20	ug/L			05/18/17 23:16	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			05/18/17 23:16	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*118*		*72 - 124*		*05/18/17 23:16*	*1*
Dibromofluoromethane	*96*		*75 - 120*		*05/18/17 23:16*	*1*
1,2-Dichloroethane-d4 (Surr)	*117*		*75 - 126*		*05/18/17 23:16*	*1*

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

Lab Sample ID: MB 500-385770/6
Matrix: Water
Analysis Batch: 385770

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	102		75 - 120		05/18/17 23:16	1

Lab Sample ID: LCS 500-385770/4
Matrix: Water
Analysis Batch: 385770

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	50.0	42.9		ug/L		86	70 - 120
Bromobenzene	50.0	47.0		ug/L		94	70 - 122
Bromochloromethane	50.0	42.7		ug/L		85	65 - 122
Bromodichloromethane	50.0	44.2		ug/L		88	69 - 120
Bromoform	50.0	34.7		ug/L		69	56 - 132
Bromomethane	50.0	39.6		ug/L		79	40 - 130
Carbon tetrachloride	50.0	39.7		ug/L		79	65 - 122
Chlorobenzene	50.0	44.9		ug/L		90	70 - 120
Chloroethane	50.0	33.7		ug/L		67	45 - 127
Chloroform	50.0	47.3		ug/L		95	70 - 120
Chloromethane	50.0	40.3		ug/L		81	54 - 147
2-Chlorotoluene	50.0	50.7		ug/L		101	70 - 125
4-Chlorotoluene	50.0	50.3		ug/L		101	68 - 124
cis-1,2-Dichloroethene	50.0	42.9		ug/L		86	70 - 125
cis-1,3-Dichloropropene	50.0	45.3		ug/L		91	64 - 127
Dibromochloromethane	50.0	40.8		ug/L		82	68 - 125
1,2-Dibromo-3-Chloropropane	50.0	46.9		ug/L		94	56 - 123
1,2-Dibromoethane	50.0	46.9		ug/L		94	70 - 125
Dibromomethane	50.0	46.1		ug/L		92	70 - 120
1,2-Dichlorobenzene	50.0	45.5		ug/L		91	70 - 125
1,3-Dichlorobenzene	50.0	45.2		ug/L		90	70 - 125
1,4-Dichlorobenzene	50.0	44.8		ug/L		90	70 - 120
Dichlorodifluoromethane	50.0	48.8		ug/L		98	40 - 150
1,1-Dichloroethane	50.0	42.7		ug/L		85	70 - 125
1,2-Dichloroethane	50.0	51.2		ug/L		102	68 - 127
1,1-Dichloroethene	50.0	39.8		ug/L		80	67 - 122
Dichlorofluoromethane	50.0	46.7		ug/L		93	69 - 124
1,2-Dichloropropane	50.0	43.0		ug/L		86	67 - 130
1,3-Dichloropropane	50.0	50.1		ug/L		100	62 - 136
2,2-Dichloropropane	50.0	46.5		ug/L		93	58 - 129
1,1-Dichloropropene	50.0	44.5		ug/L		89	70 - 121
Ethylbenzene	50.0	45.4		ug/L		91	70 - 120
Hexachlorobutadiene	50.0	45.4		ug/L		91	51 - 150
Isopropylbenzene	50.0	48.2		ug/L		96	70 - 126
Methylene Chloride	50.0	47.2		ug/L		94	69 - 125
Methyl tert-butyl ether	50.0	47.3		ug/L		95	70 - 120
Naphthalene	50.0	44.9		ug/L		90	59 - 130
n-Butylbenzene	50.0	46.6		ug/L		93	68 - 125
N-Propylbenzene	50.0	49.7		ug/L		99	69 - 127
p-Isopropyltoluene	50.0	45.7		ug/L		91	70 - 125
sec-Butylbenzene	50.0	47.5		ug/L		95	70 - 123

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

Lab Sample ID: LCS 500-385770/4
Matrix: Water
Analysis Batch: 385770

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Styrene	50.0	45.6		ug/L		91	70 - 120
tert-Butylbenzene	50.0	47.6		ug/L		95	70 - 121
1,1,1,2-Tetrachloroethane	50.0	41.4		ug/L		83	70 - 125
1,1,2,2-Tetrachloroethane	50.0	49.5		ug/L		99	67 - 127
Tetrachloroethene	50.0	39.3		ug/L		79	70 - 128
Tetrahydrofuran	100	78.0		ug/L		78	59 - 139
Toluene	50.0	46.0		ug/L		92	70 - 125
trans-1,2-Dichloroethene	50.0	41.8		ug/L		84	70 - 125
trans-1,3-Dichloropropene	50.0	43.9		ug/L		88	62 - 128
1,2,3-Trichlorobenzene	50.0	51.1		ug/L		102	55 - 140
1,2,4-Trichlorobenzene	50.0	43.6		ug/L		87	66 - 127
1,1,1-Trichloroethane	50.0	44.4		ug/L		89	70 - 125
1,1,2-Trichloroethane	50.0	45.9		ug/L		92	70 - 122
Trichloroethene	50.0	39.0		ug/L		78	70 - 125
Trichlorofluoromethane	50.0	60.7		ug/L		121	70 - 126
1,2,3-Trichloropropane	50.0	47.5		ug/L		95	50 - 133
1,2,4-Trimethylbenzene	50.0	49.2		ug/L		98	70 - 123
1,3,5-Trimethylbenzene	50.0	48.9		ug/L		98	70 - 123
Vinyl chloride	50.0	43.2		ug/L		86	64 - 126
Xylenes, Total	100	92.8		ug/L		93	70 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*115*		*72 - 124*
Dibromofluoromethane	*99*		*75 - 120*
1,2-Dichloroethane-d4 (Surr)	*114*		*75 - 126*
Toluene-d8 (Surr)	*101*		*75 - 120*

Lab Sample ID: 500-127911-8 MS
Matrix: Water
Analysis Batch: 385770

Client Sample ID: MW8I
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Dichlorodifluoromethane	<0.67		50.0	51.5		ug/L		103	40 - 150
Tetrahydrofuran	<1.9		100	65.4		ug/L		65	59 - 139

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*114*		*72 - 124*
Dibromofluoromethane	*94*		*75 - 120*
1,2-Dichloroethane-d4 (Surr)	*110*		*75 - 126*
Toluene-d8 (Surr)	*101*		*75 - 120*

Lab Sample ID: 500-127911-8 MSD
Matrix: Water
Analysis Batch: 385770

Client Sample ID: MW8I
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Dichlorodifluoromethane	<0.67		50.0	49.2		ug/L		98	40 - 150	4	20
Tetrahydrofuran	<1.9		100	73.4		ug/L		73	59 - 139	12	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	117		72 - 124
Dibromofluoromethane	97		75 - 120
1,2-Dichloroethane-d4 (Surr)	111		75 - 126
Toluene-d8 (Surr)	101		75 - 120

Lab Chronicle

Client: SCS Engineers
Project/Site: Stoughton LF - 25216022

TestAmerica Job ID: 500-127911-1

Client Sample ID: Trip Blank
Lab Sample ID: 500-127911-1
Date Collected: 05/04/17 00:00
Matrix: Water
Date Received: 05/10/17 09:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	385529	05/17/17 23:14	PMF	TAL CHI

Client Sample ID: Field Blank
Lab Sample ID: 500-127911-2
Date Collected: 05/05/17 16:15
Matrix: Water
Date Received: 05/10/17 09:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	385529	05/18/17 00:54	PMF	TAL CHI

Client Sample ID: MW3D
Lab Sample ID: 500-127911-3
Date Collected: 05/04/17 13:30
Matrix: Water
Date Received: 05/10/17 09:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	385531	05/18/17 05:57	PMF	TAL CHI

Client Sample ID: MW4D
Lab Sample ID: 500-127911-4
Date Collected: 05/04/17 14:40
Matrix: Water
Date Received: 05/10/17 09:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	385531	05/18/17 06:24	PMF	TAL CHI

Client Sample ID: MW5D
Lab Sample ID: 500-127911-5
Date Collected: 05/04/17 14:00
Matrix: Water
Date Received: 05/10/17 09:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	385531	05/18/17 06:51	PMF	TAL CHI

Client Sample ID: MW5D DUP
Lab Sample ID: 500-127911-6
Date Collected: 05/04/17 14:00
Matrix: Water
Date Received: 05/10/17 09:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	385531	05/18/17 07:17	PMF	TAL CHI

Lab Chronicle

Client: SCS Engineers
Project/Site: Stoughton LF - 25216022

TestAmerica Job ID: 500-127911-1

Client Sample ID: MW7I
Lab Sample ID: 500-127911-7
Date Collected: 05/05/17 11:50
Matrix: Water
Date Received: 05/10/17 09:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	385531	05/18/17 07:44	PMF	TAL CHI

Client Sample ID: MW8I
Lab Sample ID: 500-127911-8
Date Collected: 05/05/17 13:35
Matrix: Water
Date Received: 05/10/17 09:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	385770	05/18/17 23:43	PMF	TAL CHI

Client Sample ID: MW9S
Lab Sample ID: 500-127911-9
Date Collected: 05/05/17 15:10
Matrix: Water
Date Received: 05/10/17 09:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	385770	05/19/17 00:10	PMF	TAL CHI

Client Sample ID: MW9D
Lab Sample ID: 500-127911-10
Date Collected: 05/05/17 15:40
Matrix: Water
Date Received: 05/10/17 09:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	385770	05/19/17 00:36	PMF	TAL CHI

Client Sample ID: MW9I
Lab Sample ID: 500-127911-11
Date Collected: 05/05/17 16:00
Matrix: Water
Date Received: 05/10/17 09:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	385770	05/19/17 01:04	PMF	TAL CHI

Client Sample ID: MW9I DUP
Lab Sample ID: 500-127911-12
Date Collected: 05/05/17 16:00
Matrix: Water
Date Received: 05/10/17 09:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	385770	05/19/17 01:31	PMF	TAL CHI

Lab Chronicle

Client: SCS Engineers
Project/Site: Stoughton LF - 25216022

TestAmerica Job ID: 500-127911-1

Client Sample ID: MW10S
Date Collected: 05/05/17 13:15
Date Received: 05/10/17 09:05

Lab Sample ID: 500-127911-13
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	385770	05/19/17 01:58	PMF	TAL CHI

Client Sample ID: MW10I
Date Collected: 05/05/17 12:45
Date Received: 05/10/17 09:05

Lab Sample ID: 500-127911-14
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	385770	05/19/17 02:25	PMF	TAL CHI

Client Sample ID: MW13I
Date Collected: 05/05/17 12:15
Date Received: 05/10/17 09:05

Lab Sample ID: 500-127911-15
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	385770	05/19/17 02:52	PMF	TAL CHI

Client Sample ID: MW14S
Date Collected: 05/05/17 14:15
Date Received: 05/10/17 09:05

Lab Sample ID: 500-127911-16
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	385770	05/19/17 03:18	PMF	TAL CHI

Client Sample ID: MW14I
Date Collected: 05/05/17 14:30
Date Received: 05/10/17 09:05

Lab Sample ID: 500-127911-17
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	385770	05/19/17 03:46	PMF	TAL CHI

Laboratory References:

TAL CHI = TestAmerica Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

Accreditation/Certification Summary

Client: SCS Engineers
Project/Site: Stoughton LF - 25216022

TestAmerica Job ID: 500-127911-1

Laboratory: TestAmerica Chicago

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

Authority	Program	EPA Region	Identification Number	Expiration Date
Wisconsin	State Program	5	999580010	08-31-17

TestAmerica

THE LEADER IN ENVIRONMENTAL

2417 Bond Street, University Park, IL 604
Phone: 708.534.5200 Fax: 708.534.7

500-127911 COC

(optional)
Report To
Contact:
Company:
Address:
Address:
Phone:
Fax:
E-Mail:

(optional)
Bill To
Contact:
Company:
Address:
Address:
Phone:
Fax:
PO#/Reference#

Chain of Custody Record

Lab Job #: 500-127911
Chain of Custody Number:
Page 1 of 2
Temperature °C of Cooler: 3.7

Client	Client Project #	Preservative	1	1								
SCS	25216022											
Project Name		Parameter	VOC (8260B)	THF and DCDFM only								
Stoughton City Landfill												
Project Location/State	Lab Project #											
WI												
Sampler	Lab PM											
Paul A. Grover												

Preservative Key
1. HCL, Cool to 4°
2. H2SO4, Cool to 4°
3. HNO3, Cool to 4°
4. NaOH, Cool to 4°
5. NaOH/Zn, Cool to 4°
6. NaHSO4
7. Cool to 4°
8. None
9. Other

Lab ID	MS/MSD	Sample ID	Sampling Date	Sampling Time	# of Containers	Matrix	Comments
1		Trip Blank	3/29/17	—	2	W	
2		Field Blank	5-5-17	16:15	3		
3		MW 3D	5-4-17	13:30			
4		MW 4D		14:40			
5		MW 5D		14:00			
6		MW 5D Dup					
7		MW 7I	5-5-17	11:50			
8		MW 8I		13:35			
9		MW 9S		15:10			
10		MW 9D		15:40			

Turnaround Time Required (Business Days)
___ 1 Day ___ 2 Days ___ 5 Days ___ 7 Days ___ 10 Days ___ 15 Days _____ Other
Requested Due Date _____

Sample Disposal
☐ Return to Client ☐ Disposal by Lab ☐ Archive for _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
Paul A. Grover	SCS	5/8/17	11:00	[illegible]	TA-CHI	5/10/17	0905
Relinquished By	Company	Date	Time	Received By	Company	Date	Time
Relinquished By	Company	Date	Time	Received By	Company	Date	Time

Lab Courier
Shipped Fed Ex
Hand Delivered

Matrix Key
WW – Wastewater
W – Water
S – Soil
SL – Sludge
MS – Miscellaneous
OL – Oil
A – Air
SE – Sediment
SO – Soil
L – Leachate
WI – Wipe
DW – Drinking Water
O – Other

Client Comments

Lab Comments:

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

2417 Bond Street, University Park, IL 60484
Phone: 708.534.5200 Fax: 708.534.5211

(optional)
Report To
Contact:
Company:
Address:
Address:
Phone:
Fax:
E-Mail:

(optional)
Bill To
Contact:
Company:
Address:
Address:
Phone:
Fax:
PO#/Reference#

Chain of Custody Record

Lab Job #: 500-127911
Chain of Custody Number:
Page 2 of 2
Temperature °C of Cooler:

Client: SCS
Client Project #: 25216022
Project Name: Stoughton City Landfill
Project Location/State: WI
Lab Project #:
Sampler: Paul A. Grover
Lab PM:

Preservative
Parameter

Lab ID	MS/MSD	Sample ID	Sampling Date	Sampling Time	# of Containers	Matrix	VOC (8260B)	THF and DCDFM only
11		MW 9I	5-5-17	16:00	3	W	X	
12		MW 9I Dup		16:00			X	
13		MW 10S		13:15			X	
14		MW 10I		12:45			X	
15		MW 13I		12:15				X
16		MW 14S		14:15			X	
17		MW 14I		14:30			X	

Preservative Key
1. HCL, Cool to 4°
2. H2SO4, Cool to 4°
3. HNO3, Cool to 4°
4. NaOH, Cool to 4°
5. NaOH/Zn, Cool to 4°
6. NaHSO4
7. Cool to 4°
8. None
9. Other

Comments

Turnaround Time Required (Business Days)
___ 1 Day ___ 2 Days ___ 5 Days ___ 7 Days ___ 10 Days ___ 15 Days _____ Other
Requested Due Date:

Sample Disposal
☐ Return to Client ☐ Disposal by Lab ☐ Archive for _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
Paul A. Grover	SCS	5-8-17	11:00	[illegible]	TA-CHI	5/10/17	0905
Relinquished By	Company	Date	Time	Received By	Company	Date	Time
Relinquished By	Company	Date	Time	Received By	Company	Date	Time

Lab Courier:
Shipped: Fed X
Hand Delivered:

Matrix Key
WW – Wastewater
W – Water
S – Soil
SL – Sludge
MS – Miscellaneous
OL – Oil
A – Air
SE – Sediment
SO – Soil
L – Leachate
WI – Wipe
DW – Drinking Water
O – Other

Client Comments:

Lab Comments:

Login Sample Receipt Checklist

Client: SCS Engineers

Job Number: 500-127911-1

Login Number: 127911
List Number: 1
Creator: Scott, Sherri L

List Source: TestAmerica Chicago

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.7
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

ATTACHMENT B

Groundwater Monitoring Data Certification Form
(with Exceedances Report)

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

Environmental Monitoring Data Certification

Form 4400-231 (R 5/17)

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

Instructions:

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

Monitoring Data Submittal Information

Name of entity submitting data (laboratory, consultant, facility owner)
TestAmerica Inc.

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

Name	Phone No. (include area code)
Sandra Fredrick	(920) 261-1660

Email
Sandra.Fredrick@testamericainc.com

Facility Name
Stoughton City Landfill -25216022

License # / Monitoring ID	Facility ID (FID)
133	113005950

Actual sampling dates (e.g., July 2-6, 2003)	The enclosed results are for sampling required in the month(s) of: (e.g., June 2003)
May 4-5, 2017	May 2017

Type of Data Submitted (Check all that apply):

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

Notification attached?

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

Certification

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

Facility Representative Name (Print)	Title	Phone No. (include area code)
Paula Buckley	Mgr. of Proj. Mgmt. Assistants	(708) 534-5200

Paula Buckley
Signature

6/29/17
Date Signed (mm/dd/yyyy)

For DNR Use Only

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

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

NR 140 PAL-ES Exceedance Report
Stoughton LF - 25216022

May-17

PAL Exceeded?	ES Exceeded?

Sample No	Well ID	Well Name	Date Sampled	Parameter	Description	RESULT	PAL	ES	LOD	Units
500-127911-1	999	Trip Blank	05/04/2017	77562	1,1,1,2-Tetrachloroethane		7	70	0.46	ug/L
500-127911-1	999	Trip Blank	05/04/2017	34506	1,1,1-Trichloroethane		40	200	0.38	ug/L
500-127911-1	999	Trip Blank	05/04/2017	34516	1,1,2,2-Tetrachloroethane		0.02	0.2	0.4	ug/L
500-127911-1	999	Trip Blank	05/04/2017	34511	1,1,2-Trichloroethane		0.5	5	0.35	ug/L
500-127911-1	999	Trip Blank	05/04/2017	34496	1,1-Dichloroethane		85	850	0.41	ug/L
500-127911-1	999	Trip Blank	05/04/2017	34501	1,1-Dichloroethene		0.7	7	0.39	ug/L
500-127911-1	999	Trip Blank	05/04/2017	77168	1,1-Dichloropropene				0.3	ug/L
500-127911-1	999	Trip Blank	05/04/2017	77613	1,2,3-Trichlorobenzene				0.46	ug/L
500-127911-1	999	Trip Blank	05/04/2017	77443	1,2,3-Trichloropropane		12	60	0.41	ug/L
500-127911-1	999	Trip Blank	05/04/2017	34551	1,2,4-Trichlorobenzene		14	70	0.34	ug/L
500-127911-1	999	Trip Blank	05/04/2017	77222	1,2,4-Trimethylbenzene		96	480	0.36	ug/L
500-127911-1	999	Trip Blank	05/04/2017	38437	1,2-Dibromo-3-Chloropropane		0.02	0.2	2	ug/L
500-127911-1	999	Trip Blank	05/04/2017	77651	1,2-Dibromoethane		0.005	0.05	0.39	ug/L
500-127911-1	999	Trip Blank	05/04/2017	34536	1,2-Dichlorobenzene		60	600	0.33	ug/L
500-127911-1	999	Trip Blank	05/04/2017	32103	1,2-Dichloroethane		0.5	5	0.39	ug/L
500-127911-1	999	Trip Blank	05/04/2017	34541	1,2-Dichloropropane		0.5	5	0.43	ug/L
500-127911-1	999	Trip Blank	05/04/2017	77226	1,3,5-Trimethylbenzene		96	480	0.25	ug/L
500-127911-1	999	Trip Blank	05/04/2017	34566	1,3-Dichlorobenzene		120	600	0.4	ug/L
500-127911-1	999	Trip Blank	05/04/2017	77173	1,3-Dichloropropane				0.36	ug/L
500-127911-1	999	Trip Blank	05/04/2017	34571	1,4-Dichlorobenzene		15	75	0.36	ug/L
500-127911-1	999	Trip Blank	05/04/2017	77170	2,2-Dichloropropane				0.44	ug/L
500-127911-1	999	Trip Blank	05/04/2017	77275	2-Chlorotoluene				0.31	ug/L
500-127911-1	999	Trip Blank	05/04/2017	77277	4-Chlorotoluene				0.35	ug/L
500-127911-1	999	Trip Blank	05/04/2017	34030	Benzene		0.5	5	0.15	ug/L
500-127911-1	999	Trip Blank	05/04/2017	81555	Bromobenzene				0.36	ug/L
500-127911-1	999	Trip Blank	05/04/2017	77297	Bromochloromethane				0.43	ug/L
500-127911-1	999	Trip Blank	05/04/2017	32101	Bromodichloromethane		0.06	0.6	0.37	ug/L
500-127911-1	999	Trip Blank	05/04/2017	32104	Bromoform		0.44	4.4	0.48	ug/L
500-127911-1	999	Trip Blank	05/04/2017	34413	Bromomethane		1	10	0.8	ug/L
500-127911-1	999	Trip Blank	05/04/2017	32102	Carbon tetrachloride		0.5	5	0.38	ug/L
500-127911-1	999	Trip Blank	05/04/2017	34301	Chlorobenzene		20	100	0.39	ug/L
500-127911-1	999	Trip Blank	05/04/2017	34311	Chloroethane		80	400	0.51	ug/L
500-127911-1	999	Trip Blank	05/04/2017	32106	Chloroform		0.6	6	0.37	ug/L
500-127911-1	999	Trip Blank	05/04/2017	34418	Chloromethane		3	30	0.32	ug/L
500-127911-1	999	Trip Blank	05/04/2017	77093	cis-1,2-Dichloroethene		7	70	0.41	ug/L
500-127911-1	999	Trip Blank	05/04/2017	34704	cis-1,3-Dichloropropene		0.04	0.4	0.42	ug/L
500-127911-1	999	Trip Blank	05/04/2017	32105	Dibromochloromethane		6	60	0.49	ug/L
500-127911-1	999	Trip Blank	05/04/2017	77596	Dibromomethane				0.27	ug/L
500-127911-1	999	Trip Blank	05/04/2017	34668	Dichlorodifluoromethane		200	1000	0.67	ug/L
500-127911-1	999	Trip Blank	05/04/2017	77119	Dichlorofluoromethane				0.38	ug/L
500-127911-1	999	Trip Blank	05/04/2017	78113	Ethylbenzene		140	700	0.18	ug/L
500-127911-1	999	Trip Blank	05/04/2017	34391	Hexachlorobutadiene				0.45	ug/L
500-127911-1	999	Trip Blank	05/04/2017	81577	Isopropyl ether				0.28	ug/L
500-127911-1	999	Trip Blank	05/04/2017	77223	Isopropylbenzene				0.39	ug/L
500-127911-1	999	Trip Blank	05/04/2017	78032	Methyl tert-butyl ether		12	60	0.39	ug/L
500-127911-1	999	Trip Blank	05/04/2017	34423	Methylene Chloride		0.5	5	1.6	ug/L
500-127911-1	999	Trip Blank	05/04/2017	34696	Naphthalene		10	100	0.34	ug/L
500-127911-1	999	Trip Blank	05/04/2017	77342	n-Butylbenzene				0.39	ug/L
500-127911-1	999	Trip Blank	05/04/2017	77224	N-Propylbenzene				0.41	ug/L
500-127911-1	999	Trip Blank	05/04/2017	77356	p-Isopropyltoluene				0.36	ug/L
500-127911-1	999	Trip Blank	05/04/2017	77350	sec-Butylbenzene				0.4	ug/L
500-127911-1	999	Trip Blank	05/04/2017	77128	Styrene		10	100	0.39	ug/L
500-127911-1	999	Trip Blank	05/04/2017	77353	tert-Butylbenzene				0.4	ug/L
500-127911-1	999	Trip Blank	05/04/2017	34475	Tetrachloroethene		0.5	5	0.37	ug/L
500-127911-1	999	Trip Blank	05/04/2017	81607	Tetrahydrofuran		10	50	1.9	ug/L
500-127911-1	999	Trip Blank	05/04/2017	34010	Toluene		160	800	0.15	ug/L
500-127911-1	999	Trip Blank	05/04/2017	34546	trans-1,2-Dichloroethene		20	100	0.35	ug/L
500-127911-1	999	Trip Blank	05/04/2017	34699	trans-1,3-Dichloropropene		0.04	0.4	0.36	ug/L
500-127911-1	999	Trip Blank	05/04/2017	39180	Trichloroethene		0.5	5	0.16	ug/L
500-127911-1	999	Trip Blank	05/04/2017	34488	Trichlorofluoromethane		698	3490	0.43	ug/L
500-127911-1	999	Trip Blank	05/04/2017	39175	Vinyl chloride		0.02	0.2	0.2	ug/L
500-127911-1	999	Trip Blank	05/04/2017	81551	Xylenes, Total		400	2000	0.22	ug/L
500-127911-10	126	MW9B	05/05/2017	77562	1,1,1,2-Tetrachloroethane		7	70	0.46	ug/L
500-127911-10	126	MW9B	05/05/2017	34506	1,1,1-Trichloroethane		40	200	0.38	ug/L
500-127911-10	126	MW9B	05/05/2017	34516	1,1,2,2-Tetrachloroethane		0.02	0.2	0.4	ug/L
500-127911-10	126	MW9B	05/05/2017	34511	1,1,2-Trichloroethane		0.5	5	0.35	ug/L
500-127911-10	126	MW9B	05/05/2017	34496	1,1-Dichloroethane		85	850	0.41	ug/L
500-127911-10	126	MW9B	05/05/2017	34501	1,1-Dichloroethene		0.7	7	0.39	ug/L
500-127911-10	126	MW9B	05/05/2017	77168	1,1-Dichloropropene				0.3	ug/L
500-127911-10	126	MW9B	05/05/2017	77613	1,2,3-Trichlorobenzene				0.46	ug/L
500-127911-10	126	MW9B	05/05/2017	77443	1,2,3-Trichloropropane		12	60	0.41	ug/L
500-127911-10	126	MW9B	05/05/2017	34551	1,2,4-Trichlorobenzene		14	70	0.34	ug/L
500-127911-10	126	MW9B	05/05/2017	77222	1,2,4-Trimethylbenzene		96	480	0.36	ug/L
500-127911-10	126	MW9B	05/05/2017	38437	1,2-Dibromo-3-Chloropropane		0.02	0.2	2	ug/L
500-127911-10	126	MW9B	05/05/2017	77651	1,2-Dibromoethane		0.005	0.05	0.39	ug/L
500-127911-10	126	MW9B	05/05/2017	34536	1,2-Dichlorobenzene		60	600	0.33	ug/L
500-127911-10	126	MW9B	05/05/2017	32103	1,2-Dichloroethane		0.5	5	0.39	ug/L
500-127911-10	126	MW9B	05/05/2017	34541	1,2-Dichloropropane		0.5	5	0.43	ug/L
500-127911-10	126	MW9B	05/05/2017	77226	1,3,5-Trimethylbenzene		96	480	0.25	ug/L
500-127911-10	126	MW9B	05/05/2017	34566	1,3-Dichlorobenzene		120	600	0.4	ug/L
500-127911-10	126	MW9B	05/05/2017	77173	1,3-Dichloropropane				0.36	ug/L
500-127911-10	126	MW9B	05/05/2017	34571	1,4-Dichlorobenzene		15	75	0.36	ug/L
500-127911-10	126	MW9B	05/05/2017	77170	2,2-Dichloropropane				0.44	ug/L
500-127911-10	126	MW9B	05/05/2017	77275	2-Chlorotoluene				0.31	ug/L
500-127911-10	126	MW9B	05/05/2017	77277	4-Chlorotoluene				0.35	ug/L
500-127911-10	126	MW9B	05/05/2017	34030	Benzene		0.5	5	0.15	ug/L
500-127911-10	126	MW9B	05/05/2017	81555	Bromobenzene				0.36	ug/L
500-127911-10	126	MW9B	05/05/2017	77297	Bromochloromethane				0.43	ug/L
500-127911-10	126	MW9B	05/05/2017	32101	Bromodichloromethane		0.06	0.6	0.37	ug/L
500-127911-10	126	MW9B	05/05/2017	32104	Bromoform		0.44	4.4	0.48	ug/L
500-127911-10	126	MW9B	05/05/2017	34413	Bromomethane		1	10	0.8	ug/L
500-127911-10	126	MW9B	05/05/2017	32102	Carbon tetrachloride		0.5	5	0.38	ug/L
500-127911-10	126	MW9B	05/05/2017	34301	Chlorobenzene		20	100	0.39	ug/L
500-127911-10	126	MW9B	05/05/2017	34311	Chloroethane		80	400	0.51	ug/L
500-127911-10	126	MW9B	05/05/2017	32106	Chloroform		0.6	6	0.37	ug/L
500-127911-10	126	MW9B	05/05/2017	34418	Chloromethane		3	30	0.32	ug/L

NR 140 PAL-ES Exceedance Report
Stoughton LF - 25216022

May-17

Sample No	Well ID	Well Name	Date Sampled	Parameter	Description	RESULT	PAL	ES	LOD	Units	PAL Exceeded?	ES Exceeded?
500-127911-10	126	MW9B	05/05/2017	77093	cis-1,2-Dichloroethene		7	70	0.41	ug/L		
500-127911-10	126	MW9B	05/05/2017	34704	cis-1,3-Dichloropropene		0.04	0.4	0.42	ug/L		
500-127911-10	126	MW9B	05/05/2017	32105	Dibromochloromethane		6	60	0.49	ug/L		
500-127911-10	126	MW9B	05/05/2017	77596	Dibromomethane				0.27	ug/L		
500-127911-10	126	MW9B	05/05/2017	34668	Dichlorodifluoromethane	3.1	200	1000	0.67	ug/L		
500-127911-10	126	MW9B	05/05/2017	77119	Dichlorofluoromethane				0.38	ug/L		
500-127911-10	126	MW9B	05/05/2017	78113	Ethylbenzene		140	700	0.18	ug/L		
500-127911-10	126	MW9B	05/05/2017	34391	Hexachlorobutadiene				0.45	ug/L		
500-127911-10	126	MW9B	05/05/2017	81577	Isopropyl ether				0.28	ug/L		
500-127911-10	126	MW9B	05/05/2017	77223	Isopropylbenzene				0.39	ug/L		
500-127911-10	126	MW9B	05/05/2017	78032	Methyl tert-butyl ether		12	60	0.39	ug/L		
500-127911-10	126	MW9B	05/05/2017	34423	Methylene Chloride		0.5	5	1.6	ug/L		
500-127911-10	126	MW9B	05/05/2017	34696	Naphthalene		10	100	0.34	ug/L		
500-127911-10	126	MW9B	05/05/2017	77342	n-Butylbenzene				0.39	ug/L		
500-127911-10	126	MW9B	05/05/2017	77224	N-Propylbenzene				0.41	ug/L		
500-127911-10	126	MW9B	05/05/2017	77356	p-Isopropyltoluene				0.36	ug/L		
500-127911-10	126	MW9B	05/05/2017	77350	sec-Butylbenzene				0.4	ug/L		
500-127911-10	126	MW9B	05/05/2017	77128	Styrene		10	100	0.39	ug/L		
500-127911-10	126	MW9B	05/05/2017	77353	tert-Butylbenzene				0.4	ug/L		
500-127911-10	126	MW9B	05/05/2017	34475	Tetrachloroethene		0.5	5	0.37	ug/L		
500-127911-10	126	MW9B	05/05/2017	81607	Tetrahydrofuran		10	50	1.9	ug/L		
500-127911-10	126	MW9B	05/05/2017	34010	Toluene		160	800	0.15	ug/L		
500-127911-10	126	MW9B	05/05/2017	34546	trans-1,2-Dichloroethene		20	100	0.35	ug/L		
500-127911-10	126	MW9B	05/05/2017	34699	trans-1,3-Dichloropropene		0.04	0.4	0.36	ug/L		
500-127911-10	126	MW9B	05/05/2017	39180	Trichloroethene		0.5	5	0.16	ug/L		
500-127911-10	126	MW9B	05/05/2017	34488	Trichlorofluoromethane	1.5	698	3490	0.43	ug/L		
500-127911-10	126	MW9B	05/05/2017	39175	Vinyl chloride		0.02	0.2	0.2	ug/L		
500-127911-10	126	MW9B	05/05/2017	81551	Xylenes, Total		400	2000	0.22	ug/L		
500-127911-11	125	MW9I	05/05/2017	77562	1,1,1,2-Tetrachloroethane		7	70	0.46	ug/L		
500-127911-11	125	MW9I	05/05/2017	34506	1,1,1-Trichloroethane		40	200	0.38	ug/L		
500-127911-11	125	MW9I	05/05/2017	34516	1,1,2,2-Tetrachloroethane		0.02	0.2	0.4	ug/L		
500-127911-11	125	MW9I	05/05/2017	34511	1,1,2-Trichloroethane		0.5	5	0.35	ug/L		
500-127911-11	125	MW9I	05/05/2017	34496	1,1-Dichloroethane		85	850	0.41	ug/L		
500-127911-11	125	MW9I	05/05/2017	34501	1,1-Dichloroethene		0.7	7	0.39	ug/L		
500-127911-11	125	MW9I	05/05/2017	77168	1,1-Dichloropropene				0.3	ug/L		
500-127911-11	125	MW9I	05/05/2017	77613	1,2,3-Trichlorobenzene				0.46	ug/L		
500-127911-11	125	MW9I	05/05/2017	77443	1,2,3-Trichloropropane		12	60	0.41	ug/L		
500-127911-11	125	MW9I	05/05/2017	34551	1,2,4-Trichlorobenzene		14	70	0.34	ug/L		
500-127911-11	125	MW9I	05/05/2017	77222	1,2,4-Trimethylbenzene		96	480	0.36	ug/L		
500-127911-11	125	MW9I	05/05/2017	38437	1,2-Dibromo-3-Chloropropane		0.02	0.2	2	ug/L		
500-127911-11	125	MW9I	05/05/2017	77651	1,2-Dibromoethane		0.005	0.05	0.39	ug/L		
500-127911-11	125	MW9I	05/05/2017	34536	1,2-Dichlorobenzene		60	600	0.33	ug/L		
500-127911-11	125	MW9I	05/05/2017	32103	1,2-Dichloroethane		0.5	5	0.39	ug/L		
500-127911-11	125	MW9I	05/05/2017	34541	1,2-Dichloropropane		0.5	5	0.43	ug/L		
500-127911-11	125	MW9I	05/05/2017	77226	1,3,5-Trimethylbenzene		96	480	0.25	ug/L		
500-127911-11	125	MW9I	05/05/2017	34566	1,3-Dichlorobenzene		120	600	0.4	ug/L		
500-127911-11	125	MW9I	05/05/2017	77173	1,3-Dichloropropane				0.36	ug/L		
500-127911-11	125	MW9I	05/05/2017	34571	1,4-Dichlorobenzene		15	75	0.36	ug/L		
500-127911-11	125	MW9I	05/05/2017	77170	2,2-Dichloropropane				0.44	ug/L		
500-127911-11	125	MW9I	05/05/2017	77275	2-Chlorotoluene				0.31	ug/L		
500-127911-11	125	MW9I	05/05/2017	77277	4-Chlorotoluene				0.35	ug/L		
500-127911-11	125	MW9I	05/05/2017	34030	Benzene		0.5	5	0.15	ug/L		
500-127911-11	125	MW9I	05/05/2017	81555	Bromobenzene				0.36	ug/L		
500-127911-11	125	MW9I	05/05/2017	77297	Bromochloromethane				0.43	ug/L		
500-127911-11	125	MW9I	05/05/2017	32101	Bromodichloromethane		0.06	0.6	0.37	ug/L		
500-127911-11	125	MW9I	05/05/2017	32104	Bromoform		0.44	4.4	0.48	ug/L		
500-127911-11	125	MW9I	05/05/2017	34413	Bromomethane		1	10	0.8	ug/L		
500-127911-11	125	MW9I	05/05/2017	32102	Carbon tetrachloride		0.5	5	0.38	ug/L		
500-127911-11	125	MW9I	05/05/2017	34301	Chlorobenzene		20	100	0.39	ug/L		
500-127911-11	125	MW9I	05/05/2017	34311	Chloroethane		80	400	0.51	ug/L		
500-127911-11	125	MW9I	05/05/2017	32106	Chloroform		0.6	6	0.37	ug/L		
500-127911-11	125	MW9I	05/05/2017	34418	Chloromethane		3	30	0.32	ug/L		
500-127911-11	125	MW9I	05/05/2017	77093	cis-1,2-Dichloroethene		7	70	0.41	ug/L		
500-127911-11	125	MW9I	05/05/2017	34704	cis-1,3-Dichloropropene		0.04	0.4	0.42	ug/L		
500-127911-11	125	MW9I	05/05/2017	32105	Dibromochloromethane		6	60	0.49	ug/L		
500-127911-11	125	MW9I	05/05/2017	77596	Dibromomethane				0.27	ug/L		
500-127911-11	125	MW9I	05/05/2017	34668	Dichlorodifluoromethane	24	200	1000	0.67	ug/L		
500-127911-11	125	MW9I	05/05/2017	77119	Dichlorofluoromethane	13			0.38	ug/L		
500-127911-11	125	MW9I	05/05/2017	78113	Ethylbenzene		140	700	0.18	ug/L		
500-127911-11	125	MW9I	05/05/2017	34391	Hexachlorobutadiene				0.45	ug/L		
500-127911-11	125	MW9I	05/05/2017	81577	Isopropyl ether				0.28	ug/L		
500-127911-11	125	MW9I	05/05/2017	77223	Isopropylbenzene				0.39	ug/L		
500-127911-11	125	MW9I	05/05/2017	78032	Methyl tert-butyl ether		12	60	0.39	ug/L		
500-127911-11	125	MW9I	05/05/2017	34423	Methylene Chloride		0.5	5	1.6	ug/L		
500-127911-11	125	MW9I	05/05/2017	34696	Naphthalene		10	100	0.34	ug/L		
500-127911-11	125	MW9I	05/05/2017	77342	n-Butylbenzene				0.39	ug/L		
500-127911-11	125	MW9I	05/05/2017	77224	N-Propylbenzene				0.41	ug/L		
500-127911-11	125	MW9I	05/05/2017	77356	p-Isopropyltoluene				0.36	ug/L		
500-127911-11	125	MW9I	05/05/2017	77350	sec-Butylbenzene				0.4	ug/L		
500-127911-11	125	MW9I	05/05/2017	77128	Styrene		10	100	0.39	ug/L		
500-127911-11	125	MW9I	05/05/2017	77353	tert-Butylbenzene				0.4	ug/L		
500-127911-11	125	MW9I	05/05/2017	34475	Tetrachloroethene		0.5	5	0.37	ug/L		
500-127911-11	125	MW9I	05/05/2017	81607	Tetrahydrofuran		10	50	1.9	ug/L		
500-127911-11	125	MW9I	05/05/2017	34010	Toluene		160	800	0.15	ug/L		
500-127911-11	125	MW9I	05/05/2017	34546	trans-1,2-Dichloroethene		20	100	0.35	ug/L		
500-127911-11	125	MW9I	05/05/2017	34699	trans-1,3-Dichloropropene		0.04	0.4	0.36	ug/L		
500-127911-11	125	MW9I	05/05/2017	39180	Trichloroethene		0.5	5	0.16	ug/L		
500-127911-11	125	MW9I	05/05/2017	34488	Trichlorofluoromethane		698	3490	0.43	ug/L		
500-127911-11	125	MW9I	05/05/2017	39175	Vinyl chloride		0.02	0.2	0.2	ug/L		
500-127911-11	125	MW9I	05/05/2017	81551	Xylenes, Total		400	2000	0.22	ug/L		
500-127911-12	125	MW9I DUP	05/05/2017	77562	1,1,1,2-Tetrachloroethane		7	70	0.46	ug/L		
500-127911-12	125	MW9I DUP	05/05/2017	34506	1,1,1-Trichloroethane		40	200	0.38	ug/L		
500-127911-12	125	MW9I DUP	05/05/2017	34516	1,1,2,2-Tetrachloroethane		0.02	0.2	0.4	ug/L		
500-127911-12	125	MW9I DUP	05/05/2017	34511	1,1,2-Trichloroethane		0.5	5	0.35	ug/L		
500-127911-12	125	MW9I DUP	05/05/2017	34496	1,1-Dichloroethane		85	850	0.41	ug/L		
500-127911-12	125	MW9I DUP	05/05/2017	34501	1,1-Dichloroethene		0.7	7	0.39	ug/L		

NR 140 PAL-ES Exceedance Report
Stoughton LF - 25216022

May-17

PAL Exceeded?	ES Exceeded?

Sample No	Well ID	Well Name	Date Sampled	Parameter	Description	RESULT	PAL	ES	LOD	Units
500-127911-12	125	MW9I DUP	05/05/2017	77168	1,1-Dichloropropene				0.3	ug/L
500-127911-12	125	MW9I DUP	05/05/2017	77613	1,2,3-Trichlorobenzene				0.46	ug/L
500-127911-12	125	MW9I DUP	05/05/2017	77443	1,2,3-Trichloropropane		12	60	0.41	ug/L
500-127911-12	125	MW9I DUP	05/05/2017	34551	1,2,4-Trichlorobenzene		14	70	0.34	ug/L
500-127911-12	125	MW9I DUP	05/05/2017	77222	1,2,4-Trimethylbenzene		96	480	0.36	ug/L
500-127911-12	125	MW9I DUP	05/05/2017	38437	1,2-Dibromo-3-Chloropropane		0.02	0.2	2	ug/L
500-127911-12	125	MW9I DUP	05/05/2017	77651	1,2-Dibromoethane		0.005	0.05	0.39	ug/L
500-127911-12	125	MW9I DUP	05/05/2017	34536	1,2-Dichlorobenzene		60	600	0.33	ug/L
500-127911-12	125	MW9I DUP	05/05/2017	32103	1,2-Dichloroethane		0.5	5	0.39	ug/L
500-127911-12	125	MW9I DUP	05/05/2017	34541	1,2-Dichloropropane		0.5	5	0.43	ug/L
500-127911-12	125	MW9I DUP	05/05/2017	77226	1,3,5-Trimethylbenzene		96	480	0.25	ug/L
500-127911-12	125	MW9I DUP	05/05/2017	34566	1,3-Dichlorobenzene		120	600	0.4	ug/L
500-127911-12	125	MW9I DUP	05/05/2017	77173	1,3-Dichloropropane				0.36	ug/L
500-127911-12	125	MW9I DUP	05/05/2017	34571	1,4-Dichlorobenzene		15	75	0.36	ug/L
500-127911-12	125	MW9I DUP	05/05/2017	77170	2,2-Dichloropropane				0.44	ug/L
500-127911-12	125	MW9I DUP	05/05/2017	77275	2-Chlorotoluene				0.31	ug/L
500-127911-12	125	MW9I DUP	05/05/2017	77277	4-Chlorotoluene				0.35	ug/L
500-127911-12	125	MW9I DUP	05/05/2017	34030	Benzene		0.5	5	0.15	ug/L
500-127911-12	125	MW9I DUP	05/05/2017	81555	Bromobenzene				0.36	ug/L
500-127911-12	125	MW9I DUP	05/05/2017	77297	Bromochloromethane				0.43	ug/L
500-127911-12	125	MW9I DUP	05/05/2017	32101	Bromodichloromethane		0.06	0.6	0.37	ug/L
500-127911-12	125	MW9I DUP	05/05/2017	32104	Bromoform		0.44	4.4	0.48	ug/L
500-127911-12	125	MW9I DUP	05/05/2017	34413	Bromomethane		1	10	0.8	ug/L
500-127911-12	125	MW9I DUP	05/05/2017	32102	Carbon tetrachloride		0.5	5	0.38	ug/L
500-127911-12	125	MW9I DUP	05/05/2017	34301	Chlorobenzene		20	100	0.39	ug/L
500-127911-12	125	MW9I DUP	05/05/2017	34311	Chloroethane		80	400	0.51	ug/L
500-127911-12	125	MW9I DUP	05/05/2017	32106	Chloroform		0.6	6	0.37	ug/L
500-127911-12	125	MW9I DUP	05/05/2017	34418	Chloromethane		3	30	0.32	ug/L
500-127911-12	125	MW9I DUP	05/05/2017	77093	cis-1,2-Dichloroethene		7	70	0.41	ug/L
500-127911-12	125	MW9I DUP	05/05/2017	34704	cis-1,3-Dichloropropene		0.04	0.4	0.42	ug/L
500-127911-12	125	MW9I DUP	05/05/2017	32105	Dibromochloromethane		6	60	0.49	ug/L
500-127911-12	125	MW9I DUP	05/05/2017	77596	Dibromomethane				0.27	ug/L
500-127911-12	125	MW9I DUP	05/05/2017	34668	Dichlorodifluoromethane	26	200	1000	0.67	ug/L
500-127911-12	125	MW9I DUP	05/05/2017	77119	Dichlorofluoromethane	14			0.38	ug/L
500-127911-12	125	MW9I DUP	05/05/2017	78113	Ethylbenzene		140	700	0.18	ug/L
500-127911-12	125	MW9I DUP	05/05/2017	34391	Hexachlorobutadiene				0.45	ug/L
500-127911-12	125	MW9I DUP	05/05/2017	81577	Isopropyl ether				0.28	ug/L
500-127911-12	125	MW9I DUP	05/05/2017	77223	Isopropylbenzene				0.39	ug/L
500-127911-12	125	MW9I DUP	05/05/2017	78032	Methyl tert-butyl ether		12	60	0.39	ug/L
500-127911-12	125	MW9I DUP	05/05/2017	34423	Methylene Chloride		0.5	5	1.6	ug/L
500-127911-12	125	MW9I DUP	05/05/2017	34696	Naphthalene		10	100	0.34	ug/L
500-127911-12	125	MW9I DUP	05/05/2017	77342	n-Butylbenzene				0.39	ug/L
500-127911-12	125	MW9I DUP	05/05/2017	77224	N-Propylbenzene				0.41	ug/L
500-127911-12	125	MW9I DUP	05/05/2017	77356	p-Isopropyltoluene				0.36	ug/L
500-127911-12	125	MW9I DUP	05/05/2017	77350	sec-Butylbenzene				0.4	ug/L
500-127911-12	125	MW9I DUP	05/05/2017	77128	Styrene		10	100	0.39	ug/L
500-127911-12	125	MW9I DUP	05/05/2017	77353	tert-Butylbenzene				0.4	ug/L
500-127911-12	125	MW9I DUP	05/05/2017	34475	Tetrachloroethene		0.5	5	0.37	ug/L
500-127911-12	125	MW9I DUP	05/05/2017	81607	Tetrahydrofuran		10	50	1.9	ug/L
500-127911-12	125	MW9I DUP	05/05/2017	34010	Toluene		160	800	0.15	ug/L
500-127911-12	125	MW9I DUP	05/05/2017	34546	trans-1,2-Dichloroethene		20	100	0.35	ug/L
500-127911-12	125	MW9I DUP	05/05/2017	34699	trans-1,3-Dichloropropene		0.04	0.4	0.36	ug/L
500-127911-12	125	MW9I DUP	05/05/2017	39180	Trichloroethene	0.39	0.5	5	0.16	ug/L
500-127911-12	125	MW9I DUP	05/05/2017	34488	Trichlorofluoromethane		698	3490	0.43	ug/L
500-127911-12	125	MW9I DUP	05/05/2017	39175	Vinyl chloride		0.02	0.2	0.2	ug/L
500-127911-12	125	MW9I DUP	05/05/2017	81551	Xylenes, Total		400	2000	0.22	ug/L
500-127911-13	127	MW10S	05/05/2017	77562	1,1,1,2-Tetrachloroethane		7	70	0.46	ug/L
500-127911-13	127	MW10S	05/05/2017	34506	1,1,1-Trichloroethane		40	200	0.38	ug/L
500-127911-13	127	MW10S	05/05/2017	34516	1,1,2,2-Tetrachloroethane		0.02	0.2	0.4	ug/L
500-127911-13	127	MW10S	05/05/2017	34511	1,1,2-Trichloroethane		0.5	5	0.35	ug/L
500-127911-13	127	MW10S	05/05/2017	34496	1,1-Dichloroethane		85	850	0.41	ug/L
500-127911-13	127	MW10S	05/05/2017	34501	1,1-Dichloroethene		0.7	7	0.39	ug/L
500-127911-13	127	MW10S	05/05/2017	77168	1,1-Dichloropropene				0.3	ug/L
500-127911-13	127	MW10S	05/05/2017	77613	1,2,3-Trichlorobenzene				0.46	ug/L
500-127911-13	127	MW10S	05/05/2017	77443	1,2,3-Trichloropropane		12	60	0.41	ug/L
500-127911-13	127	MW10S	05/05/2017	34551	1,2,4-Trichlorobenzene		14	70	0.34	ug/L
500-127911-13	127	MW10S	05/05/2017	77222	1,2,4-Trimethylbenzene		96	480	0.36	ug/L
500-127911-13	127	MW10S	05/05/2017	38437	1,2-Dibromo-3-Chloropropane		0.02	0.2	2	ug/L
500-127911-13	127	MW10S	05/05/2017	77651	1,2-Dibromoethane		0.005	0.05	0.39	ug/L
500-127911-13	127	MW10S	05/05/2017	34536	1,2-Dichlorobenzene		60	600	0.33	ug/L
500-127911-13	127	MW10S	05/05/2017	32103	1,2-Dichloroethane		0.5	5	0.39	ug/L
500-127911-13	127	MW10S	05/05/2017	34541	1,2-Dichloropropane		0.5	5	0.43	ug/L
500-127911-13	127	MW10S	05/05/2017	77226	1,3,5-Trimethylbenzene		96	480	0.25	ug/L
500-127911-13	127	MW10S	05/05/2017	34566	1,3-Dichlorobenzene		120	600	0.4	ug/L
500-127911-13	127	MW10S	05/05/2017	77173	1,3-Dichloropropane				0.36	ug/L
500-127911-13	127	MW10S	05/05/2017	34571	1,4-Dichlorobenzene		15	75	0.36	ug/L
500-127911-13	127	MW10S	05/05/2017	77170	2,2-Dichloropropane				0.44	ug/L
500-127911-13	127	MW10S	05/05/2017	77275	2-Chlorotoluene				0.31	ug/L
500-127911-13	127	MW10S	05/05/2017	77277	4-Chlorotoluene				0.35	ug/L
500-127911-13	127	MW10S	05/05/2017	34030	Benzene		0.5	5	0.15	ug/L
500-127911-13	127	MW10S	05/05/2017	81555	Bromobenzene				0.36	ug/L
500-127911-13	127	MW10S	05/05/2017	77297	Bromochloromethane				0.43	ug/L
500-127911-13	127	MW10S	05/05/2017	32101	Bromodichloromethane		0.06	0.6	0.37	ug/L
500-127911-13	127	MW10S	05/05/2017	32104	Bromoform		0.44	4.4	0.48	ug/L
500-127911-13	127	MW10S	05/05/2017	34413	Bromomethane		1	10	0.8	ug/L
500-127911-13	127	MW10S	05/05/2017	32102	Carbon tetrachloride		0.5	5	0.38	ug/L
500-127911-13	127	MW10S	05/05/2017	34301	Chlorobenzene		20	100	0.39	ug/L
500-127911-13	127	MW10S	05/05/2017	34311	Chloroethane		80	400	0.51	ug/L
500-127911-13	127	MW10S	05/05/2017	32106	Chloroform		0.6	6	0.37	ug/L
500-127911-13	127	MW10S	05/05/2017	34418	Chloromethane		3	30	0.32	ug/L
500-127911-13	127	MW10S	05/05/2017	77093	cis-1,2-Dichloroethene		7	70	0.41	ug/L
500-127911-13	127	MW10S	05/05/2017	34704	cis-1,3-Dichloropropene		0.04	0.4	0.42	ug/L
500-127911-13	127	MW10S	05/05/2017	32105	Dibromochloromethane		6	60	0.49	ug/L
500-127911-13	127	MW10S	05/05/2017	77596	Dibromomethane				0.27	ug/L
500-127911-13	127	MW10S	05/05/2017	34668	Dichlorodifluoromethane		200	1000	0.67	ug/L
500-127911-13	127	MW10S	05/05/2017	77119	Dichlorofluoromethane				0.38	ug/L

NR 140 PAL-ES Exceedance Report
Stoughton LF - 25216022

May-17

Sample No	Well ID	Well Name	Date Sampled	Parameter	Description	RESULT	PAL	ES	LOD	Units	PAL Exceeded?	ES Exceeded?
500-127911-13	127	MW10S	05/05/2017	78113	Ethylbenzene		140	700	0.18	ug/L		
500-127911-13	127	MW10S	05/05/2017	34391	Hexachlorobutadiene				0.45	ug/L		
500-127911-13	127	MW10S	05/05/2017	81577	Isopropyl ether				0.28	ug/L		
500-127911-13	127	MW10S	05/05/2017	77223	Isopropylbenzene				0.39	ug/L		
500-127911-13	127	MW10S	05/05/2017	78032	Methyl tert-butyl ether		12	60	0.39	ug/L		
500-127911-13	127	MW10S	05/05/2017	34423	Methylene Chloride		0.5	5	1.6	ug/L		
500-127911-13	127	MW10S	05/05/2017	34696	Naphthalene		10	100	0.34	ug/L		
500-127911-13	127	MW10S	05/05/2017	77342	n-Butylbenzene				0.39	ug/L		
500-127911-13	127	MW10S	05/05/2017	77224	N-Propylbenzene				0.41	ug/L		
500-127911-13	127	MW10S	05/05/2017	77356	p-Isopropyltoluene				0.36	ug/L		
500-127911-13	127	MW10S	05/05/2017	77350	sec-Butylbenzene				0.4	ug/L		
500-127911-13	127	MW10S	05/05/2017	77128	Styrene		10	100	0.39	ug/L		
500-127911-13	127	MW10S	05/05/2017	77353	tert-Butylbenzene				0.4	ug/L		
500-127911-13	127	MW10S	05/05/2017	34475	Tetrachloroethene		0.5	5	0.37	ug/L		
500-127911-13	127	MW10S	05/05/2017	81607	Tetrahydrofuran		10	50	1.9	ug/L		
500-127911-13	127	MW10S	05/05/2017	34010	Toluene		160	800	0.15	ug/L		
500-127911-13	127	MW10S	05/05/2017	34546	trans-1,2-Dichloroethene		20	100	0.35	ug/L		
500-127911-13	127	MW10S	05/05/2017	34699	trans-1,3-Dichloropropene		0.04	0.4	0.36	ug/L		
500-127911-13	127	MW10S	05/05/2017	39180	Trichloroethene		0.5	5	0.16	ug/L		
500-127911-13	127	MW10S	05/05/2017	34488	Trichlorofluoromethane		698	3490	0.43	ug/L		
500-127911-13	127	MW10S	05/05/2017	39175	Vinyl chloride		0.02	0.2	0.2	ug/L		
500-127911-13	127	MW10S	05/05/2017	81551	Xylenes, Total		400	2000	0.22	ug/L		
500-127911-14	128	MW10I	05/05/2017	77562	1,1,1,2-Tetrachloroethane		7	70	0.46	ug/L		
500-127911-14	128	MW10I	05/05/2017	34506	1,1,1-Trichloroethane		40	200	0.38	ug/L		
500-127911-14	128	MW10I	05/05/2017	34516	1,1,2,2-Tetrachloroethane		0.02	0.2	0.4	ug/L		
500-127911-14	128	MW10I	05/05/2017	34511	1,1,2-Trichloroethane		0.5	5	0.35	ug/L		
500-127911-14	128	MW10I	05/05/2017	34496	1,1-Dichloroethane		85	850	0.41	ug/L		
500-127911-14	128	MW10I	05/05/2017	34501	1,1-Dichloroethene		0.7	7	0.39	ug/L		
500-127911-14	128	MW10I	05/05/2017	77168	1,1-Dichloropropene				0.3	ug/L		
500-127911-14	128	MW10I	05/05/2017	77613	1,2,3-Trichlorobenzene				0.46	ug/L		
500-127911-14	128	MW10I	05/05/2017	77443	1,2,3-Trichloropropane		12	60	0.41	ug/L		
500-127911-14	128	MW10I	05/05/2017	34551	1,2,4-Trichlorobenzene		14	70	0.34	ug/L		
500-127911-14	128	MW10I	05/05/2017	77222	1,2,4-Trimethylbenzene		96	480	0.36	ug/L		
500-127911-14	128	MW10I	05/05/2017	38437	1,2-Dibromo-3-Chloropropane		0.02	0.2	2	ug/L		
500-127911-14	128	MW10I	05/05/2017	77651	1,2-Dibromoethane		0.005	0.05	0.39	ug/L		
500-127911-14	128	MW10I	05/05/2017	34536	1,2-Dichlorobenzene		60	600	0.33	ug/L		
500-127911-14	128	MW10I	05/05/2017	32103	1,2-Dichloroethane		0.5	5	0.39	ug/L		
500-127911-14	128	MW10I	05/05/2017	34541	1,2-Dichloropropane		0.5	5	0.43	ug/L		
500-127911-14	128	MW10I	05/05/2017	77226	1,3,5-Trimethylbenzene		96	480	0.25	ug/L		
500-127911-14	128	MW10I	05/05/2017	34566	1,3-Dichlorobenzene		120	600	0.4	ug/L		
500-127911-14	128	MW10I	05/05/2017	77173	1,3-Dichloropropane				0.36	ug/L		
500-127911-14	128	MW10I	05/05/2017	34571	1,4-Dichlorobenzene		15	75	0.36	ug/L		
500-127911-14	128	MW10I	05/05/2017	77170	2,2-Dichloropropane				0.44	ug/L		
500-127911-14	128	MW10I	05/05/2017	77275	2-Chlorotoluene				0.31	ug/L		
500-127911-14	128	MW10I	05/05/2017	77277	4-Chlorotoluene				0.35	ug/L		
500-127911-14	128	MW10I	05/05/2017	34030	Benzene		0.5	5	0.15	ug/L		
500-127911-14	128	MW10I	05/05/2017	81555	Bromobenzene				0.36	ug/L		
500-127911-14	128	MW10I	05/05/2017	77297	Bromochloromethane				0.43	ug/L		
500-127911-14	128	MW10I	05/05/2017	32101	Bromodichloromethane		0.06	0.6	0.37	ug/L		
500-127911-14	128	MW10I	05/05/2017	32104	Bromoform		0.44	4.4	0.48	ug/L		
500-127911-14	128	MW10I	05/05/2017	34413	Bromomethane		1	10	0.8	ug/L		
500-127911-14	128	MW10I	05/05/2017	32102	Carbon tetrachloride		0.5	5	0.38	ug/L		
500-127911-14	128	MW10I	05/05/2017	34301	Chlorobenzene		20	100	0.39	ug/L		
500-127911-14	128	MW10I	05/05/2017	34311	Chloroethane		80	400	0.51	ug/L		
500-127911-14	128	MW10I	05/05/2017	32106	Chloroform		0.6	6	0.37	ug/L		
500-127911-14	128	MW10I	05/05/2017	34418	Chloromethane		3	30	0.32	ug/L		
500-127911-14	128	MW10I	05/05/2017	77093	cis-1,2-Dichloroethene		7	70	0.41	ug/L		
500-127911-14	128	MW10I	05/05/2017	34704	cis-1,3-Dichloropropene		0.04	0.4	0.42	ug/L		
500-127911-14	128	MW10I	05/05/2017	32105	Dibromochloromethane		6	60	0.49	ug/L		
500-127911-14	128	MW10I	05/05/2017	77596	Dibromomethane				0.27	ug/L		
500-127911-14	128	MW10I	05/05/2017	34668	Dichlorodifluoromethane	12	200	1000	0.67	ug/L		
500-127911-14	128	MW10I	05/05/2017	77119	Dichlorofluoromethane	6.1			0.38	ug/L		
500-127911-14	128	MW10I	05/05/2017	78113	Ethylbenzene		140	700	0.18	ug/L		
500-127911-14	128	MW10I	05/05/2017	34391	Hexachlorobutadiene				0.45	ug/L		
500-127911-14	128	MW10I	05/05/2017	81577	Isopropyl ether				0.28	ug/L		
500-127911-14	128	MW10I	05/05/2017	77223	Isopropylbenzene				0.39	ug/L		
500-127911-14	128	MW10I	05/05/2017	78032	Methyl tert-butyl ether		12	60	0.39	ug/L		
500-127911-14	128	MW10I	05/05/2017	34423	Methylene Chloride		0.5	5	1.6	ug/L		
500-127911-14	128	MW10I	05/05/2017	34696	Naphthalene		10	100	0.34	ug/L		
500-127911-14	128	MW10I	05/05/2017	77342	n-Butylbenzene				0.39	ug/L		
500-127911-14	128	MW10I	05/05/2017	77224	N-Propylbenzene				0.41	ug/L		
500-127911-14	128	MW10I	05/05/2017	77356	p-Isopropyltoluene				0.36	ug/L		
500-127911-14	128	MW10I	05/05/2017	77350	sec-Butylbenzene				0.4	ug/L		
500-127911-14	128	MW10I	05/05/2017	77128	Styrene		10	100	0.39	ug/L		
500-127911-14	128	MW10I	05/05/2017	77353	tert-Butylbenzene				0.4	ug/L		
500-127911-14	128	**MW10I**	05/05/2017	34475	**Tetrachloroethene**	**1.8**	0.5	5	0.37	ug/L	**PAL Exceeded**	
500-127911-14	128	MW10I	05/05/2017	81607	Tetrahydrofuran		10	50	1.9	ug/L		
500-127911-14	128	MW10I	05/05/2017	34010	Toluene		160	800	0.15	ug/L		
500-127911-14	128	MW10I	05/05/2017	34546	trans-1,2-Dichloroethene		20	100	0.35	ug/L		
500-127911-14	128	MW10I	05/05/2017	34699	trans-1,3-Dichloropropene		0.04	0.4	0.36	ug/L		
500-127911-14	128	MW10I	05/05/2017	39180	Trichloroethene		0.5	5	0.16	ug/L		
500-127911-14	128	MW10I	05/05/2017	34488	Trichlorofluoromethane		698	3490	0.43	ug/L		
500-127911-14	128	MW10I	05/05/2017	39175	Vinyl chloride		0.02	0.2	0.2	ug/L		
500-127911-14	128	MW10I	05/05/2017	81551	Xylenes, Total		400	2000	0.22	ug/L		
500-127911-15	131	MW13I	05/05/2017	34668	Dichlorodifluoromethane		200	1000	0.67	ug/L		
500-127911-15	131	MW13I	05/05/2017	81607	Tetrahydrofuran		10	50	1.9	ug/L		
500-127911-16	133	MW14S	05/05/2017	77562	1,1,1,2-Tetrachloroethane		7	70	0.46	ug/L		
500-127911-16	133	MW14S	05/05/2017	34506	1,1,1-Trichloroethane		40	200	0.38	ug/L		
500-127911-16	133	MW14S	05/05/2017	34516	1,1,2,2-Tetrachloroethane		0.02	0.2	0.4	ug/L		
500-127911-16	133	MW14S	05/05/2017	34511	1,1,2-Trichloroethane		0.5	5	0.35	ug/L		
500-127911-16	133	MW14S	05/05/2017	34496	1,1-Dichloroethane		85	850	0.41	ug/L		
500-127911-16	133	MW14S	05/05/2017	34501	1,1-Dichloroethene		0.7	7	0.39	ug/L		
500-127911-16	133	MW14S	05/05/2017	77168	1,1-Dichloropropene				0.3	ug/L		
500-127911-16	133	MW14S	05/05/2017	77613	1,2,3-Trichlorobenzene				0.46	ug/L		
500-127911-16	133	MW14S	05/05/2017	77443	1,2,3-Trichloropropane		12	60	0.41	ug/L		
500-127911-16	133	MW14S	05/05/2017	34551	1,2,4-Trichlorobenzene		14	70	0.34	ug/L		

NR 140 PAL-ES Exceedance Report
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May-17

Sample No	Well ID	Well Name	Date Sampled	Parameter	Description	RESULT	PAL	ES	LOD	Units	PAL Exceeded?	ES Exceeded?
500-127911-16	133	MW14S	05/05/2017	77222	1,2,4-Trimethylbenzene		96	480	0.36	ug/L		
500-127911-16	133	MW14S	05/05/2017	38437	1,2-Dibromo-3-Chloropropane		0.02	0.2	2	ug/L		
500-127911-16	133	MW14S	05/05/2017	77651	1,2-Dibromoethane		0.005	0.05	0.39	ug/L		
500-127911-16	133	MW14S	05/05/2017	34536	1,2-Dichlorobenzene		60	600	0.33	ug/L		
500-127911-16	133	MW14S	05/05/2017	32103	1,2-Dichloroethane		0.5	5	0.39	ug/L		
500-127911-16	133	MW14S	05/05/2017	34541	1,2-Dichloropropane		0.5	5	0.43	ug/L		
500-127911-16	133	MW14S	05/05/2017	77226	1,3,5-Trimethylbenzene		96	480	0.25	ug/L		
500-127911-16	133	MW14S	05/05/2017	34566	1,3-Dichlorobenzene		120	600	0.4	ug/L		
500-127911-16	133	MW14S	05/05/2017	77173	1,3-Dichloropropane				0.36	ug/L		
500-127911-16	133	MW14S	05/05/2017	34571	1,4-Dichlorobenzene		15	75	0.36	ug/L		
500-127911-16	133	MW14S	05/05/2017	77170	2,2-Dichloropropane				0.44	ug/L		
500-127911-16	133	MW14S	05/05/2017	77275	2-Chlorotoluene				0.31	ug/L		
500-127911-16	133	MW14S	05/05/2017	77277	4-Chlorotoluene				0.35	ug/L		
500-127911-16	133	MW14S	05/05/2017	34030	Benzene		0.5	5	0.15	ug/L		
500-127911-16	133	MW14S	05/05/2017	81555	Bromobenzene				0.36	ug/L		
500-127911-16	133	MW14S	05/05/2017	77297	Bromochloromethane				0.43	ug/L		
500-127911-16	133	MW14S	05/05/2017	32101	Bromodichloromethane		0.06	0.6	0.37	ug/L		
500-127911-16	133	MW14S	05/05/2017	32104	Bromoform		0.44	4.4	0.48	ug/L		
500-127911-16	133	MW14S	05/05/2017	34413	Bromomethane		1	10	0.8	ug/L		
500-127911-16	133	MW14S	05/05/2017	32102	Carbon tetrachloride		0.5	5	0.38	ug/L		
500-127911-16	133	MW14S	05/05/2017	34301	Chlorobenzene		20	100	0.39	ug/L		
500-127911-16	133	MW14S	05/05/2017	34311	Chloroethane		80	400	0.51	ug/L		
500-127911-16	133	MW14S	05/05/2017	32106	Chloroform		0.6	6	0.37	ug/L		
500-127911-16	133	MW14S	05/05/2017	34418	Chloromethane		3	30	0.32	ug/L		
500-127911-16	133	MW14S	05/05/2017	77093	cis-1,2-Dichloroethene		7	70	0.41	ug/L		
500-127911-16	133	MW14S	05/05/2017	34704	cis-1,3-Dichloropropene		0.04	0.4	0.42	ug/L		
500-127911-16	133	MW14S	05/05/2017	32105	Dibromochloromethane		6	60	0.49	ug/L		
500-127911-16	133	MW14S	05/05/2017	77596	Dibromomethane				0.27	ug/L		
500-127911-16	133	MW14S	05/05/2017	34668	Dichlorodifluoromethane		200	1000	0.67	ug/L		
500-127911-16	133	MW14S	05/05/2017	77119	Dichlorofluoromethane				0.38	ug/L		
500-127911-16	133	MW14S	05/05/2017	78113	Ethylbenzene		140	700	0.18	ug/L		
500-127911-16	133	MW14S	05/05/2017	34391	Hexachlorobutadiene				0.45	ug/L		
500-127911-16	133	MW14S	05/05/2017	81577	Isopropyl ether				0.28	ug/L		
500-127911-16	133	MW14S	05/05/2017	77223	Isopropylbenzene				0.39	ug/L		
500-127911-16	133	MW14S	05/05/2017	78032	Methyl tert-butyl ether		12	60	0.39	ug/L		
500-127911-16	133	MW14S	05/05/2017	34423	Methylene Chloride		0.5	5	1.6	ug/L		
500-127911-16	133	MW14S	05/05/2017	34696	Naphthalene		10	100	0.34	ug/L		
500-127911-16	133	MW14S	05/05/2017	77342	n-Butylbenzene				0.39	ug/L		
500-127911-16	133	MW14S	05/05/2017	77224	N-Propylbenzene				0.41	ug/L		
500-127911-16	133	MW14S	05/05/2017	77356	p-Isopropyltoluene				0.36	ug/L		
500-127911-16	133	MW14S	05/05/2017	77350	sec-Butylbenzene				0.4	ug/L		
500-127911-16	133	MW14S	05/05/2017	77128	Styrene		10	100	0.39	ug/L		
500-127911-16	133	MW14S	05/05/2017	77353	tert-Butylbenzene				0.4	ug/L		
500-127911-16	133	MW14S	05/05/2017	34475	Tetrachloroethene		0.5	5	0.37	ug/L		
500-127911-16	133	MW14S	05/05/2017	81607	Tetrahydrofuran		10	50	1.9	ug/L		
500-127911-16	133	MW14S	05/05/2017	34010	Toluene		160	800	0.15	ug/L		
500-127911-16	133	MW14S	05/05/2017	34546	trans-1,2-Dichloroethene		20	100	0.35	ug/L		
500-127911-16	133	MW14S	05/05/2017	34699	trans-1,3-Dichloropropene		0.04	0.4	0.36	ug/L		
500-127911-16	133	MW14S	05/05/2017	39180	Trichloroethene		0.5	5	0.16	ug/L		
500-127911-16	133	MW14S	05/05/2017	34488	Trichlorofluoromethane		698	3490	0.43	ug/L		
500-127911-16	133	MW14S	05/05/2017	39175	Vinyl chloride		0.02	0.2	0.2	ug/L		
500-127911-16	133	MW14S	05/05/2017	81551	Xylenes, Total		400	2000	0.22	ug/L		
500-127911-17	134	MW14I	05/05/2017	77562	1,1,1,2-Tetrachloroethane		7	70	0.46	ug/L		
500-127911-17	134	MW14I	05/05/2017	34506	1,1,1-Trichloroethane		40	200	0.38	ug/L		
500-127911-17	134	MW14I	05/05/2017	34516	1,1,2,2-Tetrachloroethane		0.02	0.2	0.4	ug/L		
500-127911-17	134	MW14I	05/05/2017	34511	1,1,2-Trichloroethane		0.5	5	0.35	ug/L		
500-127911-17	134	MW14I	05/05/2017	34496	1,1-Dichloroethane		85	850	0.41	ug/L		
500-127911-17	134	MW14I	05/05/2017	34501	1,1-Dichloroethene		0.7	7	0.39	ug/L		
500-127911-17	134	MW14I	05/05/2017	77168	1,1-Dichloropropene				0.3	ug/L		
500-127911-17	134	MW14I	05/05/2017	77613	1,2,3-Trichlorobenzene				0.46	ug/L		
500-127911-17	134	MW14I	05/05/2017	77443	1,2,3-Trichloropropane		12	60	0.41	ug/L		
500-127911-17	134	MW14I	05/05/2017	34551	1,2,4-Trichlorobenzene		14	70	0.34	ug/L		
500-127911-17	134	MW14I	05/05/2017	77222	1,2,4-Trimethylbenzene		96	480	0.36	ug/L		
500-127911-17	134	MW14I	05/05/2017	38437	1,2-Dibromo-3-Chloropropane		0.02	0.2	2	ug/L		
500-127911-17	134	MW14I	05/05/2017	77651	1,2-Dibromoethane		0.005	0.05	0.39	ug/L		
500-127911-17	134	MW14I	05/05/2017	34536	1,2-Dichlorobenzene		60	600	0.33	ug/L		
500-127911-17	134	MW14I	05/05/2017	32103	1,2-Dichloroethane		0.5	5	0.39	ug/L		
500-127911-17	134	MW14I	05/05/2017	34541	1,2-Dichloropropane		0.5	5	0.43	ug/L		
500-127911-17	134	MW14I	05/05/2017	77226	1,3,5-Trimethylbenzene		96	480	0.25	ug/L		
500-127911-17	134	MW14I	05/05/2017	34566	1,3-Dichlorobenzene		120	600	0.4	ug/L		
500-127911-17	134	MW14I	05/05/2017	77173	1,3-Dichloropropane				0.36	ug/L		
500-127911-17	134	MW14I	05/05/2017	34571	1,4-Dichlorobenzene		15	75	0.36	ug/L		
500-127911-17	134	MW14I	05/05/2017	77170	2,2-Dichloropropane				0.44	ug/L		
500-127911-17	134	MW14I	05/05/2017	77275	2-Chlorotoluene				0.31	ug/L		
500-127911-17	134	MW14I	05/05/2017	77277	4-Chlorotoluene				0.35	ug/L		
500-127911-17	134	MW14I	05/05/2017	34030	Benzene		0.5	5	0.15	ug/L		
500-127911-17	134	MW14I	05/05/2017	81555	Bromobenzene				0.36	ug/L		
500-127911-17	134	MW14I	05/05/2017	77297	Bromochloromethane				0.43	ug/L		
500-127911-17	134	MW14I	05/05/2017	32101	Bromodichloromethane		0.06	0.6	0.37	ug/L		
500-127911-17	134	MW14I	05/05/2017	32104	Bromoform		0.44	4.4	0.48	ug/L		
500-127911-17	134	MW14I	05/05/2017	34413	Bromomethane		1	10	0.8	ug/L		
500-127911-17	134	MW14I	05/05/2017	32102	Carbon tetrachloride		0.5	5	0.38	ug/L		
500-127911-17	134	MW14I	05/05/2017	34301	Chlorobenzene		20	100	0.39	ug/L		
500-127911-17	134	MW14I	05/05/2017	34311	Chloroethane		80	400	0.51	ug/L		
500-127911-17	134	MW14I	05/05/2017	32106	Chloroform		0.6	6	0.37	ug/L		
500-127911-17	134	MW14I	05/05/2017	34418	Chloromethane		3	30	0.32	ug/L		
500-127911-17	134	MW14I	05/05/2017	77093	cis-1,2-Dichloroethene		7	70	0.41	ug/L		
500-127911-17	134	MW14I	05/05/2017	34704	cis-1,3-Dichloropropene		0.04	0.4	0.42	ug/L		
500-127911-17	134	MW14I	05/05/2017	32105	Dibromochloromethane		6	60	0.49	ug/L		
500-127911-17	134	MW14I	05/05/2017	77596	Dibromomethane				0.27	ug/L		
500-127911-17	134	MW14I	05/05/2017	34668	Dichlorodifluoromethane	4.6	200	1000	0.67	ug/L		
500-127911-17	134	MW14I	05/05/2017	77119	Dichlorofluoromethane	12			0.38	ug/L		
500-127911-17	134	MW14I	05/05/2017	78113	Ethylbenzene		140	700	0.18	ug/L		
500-127911-17	134	MW14I	05/05/2017	34391	Hexachlorobutadiene				0.45	ug/L		
500-127911-17	134	MW14I	05/05/2017	81577	Isopropyl ether				0.28	ug/L		
500-127911-17	134	MW14I	05/05/2017	77223	Isopropylbenzene				0.39	ug/L		

NR 140 PAL-ES Exceedance Report
Stoughton LF - 25216022

May-17

PAL Exceeded?	ES Exceeded?

Sample No	Well ID	Well Name	Date Sampled	Parameter	Description	RESULT	PAL	ES	LOD	Units
500-127911-17	134	MW14I	05/05/2017	78032	Methyl tert-butyl ether		12	60	0.39	ug/L
500-127911-17	134	MW14I	05/05/2017	34423	Methylene Chloride		0.5	5	1.6	ug/L
500-127911-17	134	MW14I	05/05/2017	34696	Naphthalene		10	100	0.34	ug/L
500-127911-17	134	MW14I	05/05/2017	77342	n-Butylbenzene				0.39	ug/L
500-127911-17	134	MW14I	05/05/2017	77224	N-Propylbenzene				0.41	ug/L
500-127911-17	134	MW14I	05/05/2017	77356	p-Isopropyltoluene				0.36	ug/L
500-127911-17	134	MW14I	05/05/2017	77350	sec-Butylbenzene				0.4	ug/L
500-127911-17	134	MW14I	05/05/2017	77128	Styrene		10	100	0.39	ug/L
500-127911-17	134	MW14I	05/05/2017	77353	tert-Butylbenzene				0.4	ug/L
500-127911-17	134	MW14I	05/05/2017	34475	Tetrachloroethene		0.5	5	0.37	ug/L
500-127911-17	134	MW14I	05/05/2017	81607	Tetrahydrofuran		10	50	1.9	ug/L
500-127911-17	134	MW14I	05/05/2017	34010	Toluene		160	800	0.15	ug/L
500-127911-17	134	MW14I	05/05/2017	34546	trans-1,2-Dichloroethene		20	100	0.35	ug/L
500-127911-17	134	MW14I	05/05/2017	34699	trans-1,3-Dichloropropene		0.04	0.4	0.36	ug/L
500-127911-17	134	MW14I	05/05/2017	39180	Trichloroethene		0.5	5	0.16	ug/L
500-127911-17	134	MW14I	05/05/2017	34488	Trichlorofluoromethane		698	3490	0.43	ug/L
500-127911-17	134	MW14I	05/05/2017	39175	Vinyl chloride		0.02	0.2	0.2	ug/L
500-127911-17	134	MW14I	05/05/2017	81551	Xylenes, Total		400	2000	0.22	ug/L
500-127911-2	997	Field Blank	05/05/2017	77562	1,1,1,2-Tetrachloroethane		7	70	0.46	ug/L
500-127911-2	997	Field Blank	05/05/2017	34506	1,1,1-Trichloroethane		40	200	0.38	ug/L
500-127911-2	997	Field Blank	05/05/2017	34516	1,1,2,2-Tetrachloroethane		0.02	0.2	0.4	ug/L
500-127911-2	997	Field Blank	05/05/2017	34511	1,1,2-Trichloroethane		0.5	5	0.35	ug/L
500-127911-2	997	Field Blank	05/05/2017	34496	1,1-Dichloroethane		85	850	0.41	ug/L
500-127911-2	997	Field Blank	05/05/2017	34501	1,1-Dichloroethene		0.7	7	0.39	ug/L
500-127911-2	997	Field Blank	05/05/2017	77168	1,1-Dichloropropene				0.3	ug/L
500-127911-2	997	Field Blank	05/05/2017	77613	1,2,3-Trichlorobenzene				0.46	ug/L
500-127911-2	997	Field Blank	05/05/2017	77443	1,2,3-Trichloropropane		12	60	0.41	ug/L
500-127911-2	997	Field Blank	05/05/2017	34551	1,2,4-Trichlorobenzene		14	70	0.34	ug/L
500-127911-2	997	Field Blank	05/05/2017	77222	1,2,4-Trimethylbenzene		96	480	0.36	ug/L
500-127911-2	997	Field Blank	05/05/2017	38437	1,2-Dibromo-3-Chloropropane		0.02	0.2	2	ug/L
500-127911-2	997	Field Blank	05/05/2017	77651	1,2-Dibromoethane		0.005	0.05	0.39	ug/L
500-127911-2	997	Field Blank	05/05/2017	34536	1,2-Dichlorobenzene		60	600	0.33	ug/L
500-127911-2	997	Field Blank	05/05/2017	32103	1,2-Dichloroethane		0.5	5	0.39	ug/L
500-127911-2	997	Field Blank	05/05/2017	34541	1,2-Dichloropropane		0.5	5	0.43	ug/L
500-127911-2	997	Field Blank	05/05/2017	77226	1,3,5-Trimethylbenzene		96	480	0.25	ug/L
500-127911-2	997	Field Blank	05/05/2017	34566	1,3-Dichlorobenzene		120	600	0.4	ug/L
500-127911-2	997	Field Blank	05/05/2017	77173	1,3-Dichloropropane				0.36	ug/L
500-127911-2	997	Field Blank	05/05/2017	34571	1,4-Dichlorobenzene		15	75	0.36	ug/L
500-127911-2	997	Field Blank	05/05/2017	77170	2,2-Dichloropropane				0.44	ug/L
500-127911-2	997	Field Blank	05/05/2017	77275	2-Chlorotoluene				0.31	ug/L
500-127911-2	997	Field Blank	05/05/2017	77277	4-Chlorotoluene				0.35	ug/L
500-127911-2	997	Field Blank	05/05/2017	34030	Benzene		0.5	5	0.15	ug/L
500-127911-2	997	Field Blank	05/05/2017	81555	Bromobenzene				0.36	ug/L
500-127911-2	997	Field Blank	05/05/2017	77297	Bromochloromethane				0.43	ug/L
500-127911-2	997	Field Blank	05/05/2017	32101	Bromodichloromethane		0.06	0.6	0.37	ug/L
500-127911-2	997	Field Blank	05/05/2017	32104	Bromoform		0.44	4.4	0.48	ug/L
500-127911-2	997	Field Blank	05/05/2017	34413	Bromomethane		1	10	0.8	ug/L
500-127911-2	997	Field Blank	05/05/2017	32102	Carbon tetrachloride		0.5	5	0.38	ug/L
500-127911-2	997	Field Blank	05/05/2017	34301	Chlorobenzene		20	100	0.39	ug/L
500-127911-2	997	Field Blank	05/05/2017	34311	Chloroethane		80	400	0.51	ug/L
500-127911-2	997	Field Blank	05/05/2017	32106	Chloroform		0.6	6	0.37	ug/L
500-127911-2	997	Field Blank	05/05/2017	34418	Chloromethane		3	30	0.32	ug/L
500-127911-2	997	Field Blank	05/05/2017	77093	cis-1,2-Dichloroethene		7	70	0.41	ug/L
500-127911-2	997	Field Blank	05/05/2017	34704	cis-1,3-Dichloropropene		0.04	0.4	0.42	ug/L
500-127911-2	997	Field Blank	05/05/2017	32105	Dibromochloromethane		6	60	0.49	ug/L
500-127911-2	997	Field Blank	05/05/2017	77596	Dibromomethane				0.27	ug/L
500-127911-2	997	Field Blank	05/05/2017	34668	Dichlorodifluoromethane		200	1000	0.67	ug/L
500-127911-2	997	Field Blank	05/05/2017	77119	Dichlorofluoromethane				0.38	ug/L
500-127911-2	997	Field Blank	05/05/2017	78113	Ethylbenzene		140	700	0.18	ug/L
500-127911-2	997	Field Blank	05/05/2017	34391	Hexachlorobutadiene				0.45	ug/L
500-127911-2	997	Field Blank	05/05/2017	81577	Isopropyl ether				0.28	ug/L
500-127911-2	997	Field Blank	05/05/2017	77223	Isopropylbenzene				0.39	ug/L
500-127911-2	997	Field Blank	05/05/2017	78032	Methyl tert-butyl ether		12	60	0.39	ug/L
500-127911-2	997	Field Blank	05/05/2017	34423	Methylene Chloride		0.5	5	1.6	ug/L
500-127911-2	997	Field Blank	05/05/2017	34696	Naphthalene		10	100	0.34	ug/L
500-127911-2	997	Field Blank	05/05/2017	77342	n-Butylbenzene				0.39	ug/L
500-127911-2	997	Field Blank	05/05/2017	77224	N-Propylbenzene				0.41	ug/L
500-127911-2	997	Field Blank	05/05/2017	77356	p-Isopropyltoluene				0.36	ug/L
500-127911-2	997	Field Blank	05/05/2017	77350	sec-Butylbenzene				0.4	ug/L
500-127911-2	997	Field Blank	05/05/2017	77128	Styrene		10	100	0.39	ug/L
500-127911-2	997	Field Blank	05/05/2017	77353	tert-Butylbenzene				0.4	ug/L
500-127911-2	997	Field Blank	05/05/2017	34475	Tetrachloroethene		0.5	5	0.37	ug/L
500-127911-2	997	Field Blank	05/05/2017	81607	Tetrahydrofuran		10	50	1.9	ug/L
500-127911-2	997	Field Blank	05/05/2017	34010	Toluene		160	800	0.15	ug/L
500-127911-2	997	Field Blank	05/05/2017	34546	trans-1,2-Dichloroethene		20	100	0.35	ug/L
500-127911-2	997	Field Blank	05/05/2017	34699	trans-1,3-Dichloropropene		0.04	0.4	0.36	ug/L
500-127911-2	997	Field Blank	05/05/2017	39180	Trichloroethene		0.5	5	0.16	ug/L
500-127911-2	997	Field Blank	05/05/2017	34488	Trichlorofluoromethane		698	3490	0.43	ug/L
500-127911-2	997	Field Blank	05/05/2017	39175	Vinyl chloride		0.02	0.2	0.2	ug/L
500-127911-2	997	Field Blank	05/05/2017	81551	Xylenes, Total		400	2000	0.22	ug/L
500-127911-3	112	MW3D	05/04/2017	34668	Dichlorodifluoromethane		200	1000	0.67	ug/L
500-127911-3	112	MW3D	05/04/2017	81607	Tetrahydrofuran	6.5	10	50	1.9	ug/L
500-127911-4	115	MW4D	05/04/2017	34668	Dichlorodifluoromethane		200	1000	0.67	ug/L
500-127911-4	115	MW4D	05/04/2017	81607	Tetrahydrofuran		10	50	1.9	ug/L
500-127911-5	117	MW5D	05/04/2017	34668	Dichlorodifluoromethane		200	1000	0.67	ug/L
500-127911-5	117	MW5D	05/04/2017	81607	Tetrahydrofuran		10	50	1.9	ug/L
500-127911-6	117	MW5D DUP	05/04/2017	34668	Dichlorodifluoromethane		200	1000	0.67	ug/L
500-127911-6	117	MW5D DUP	05/04/2017	81607	Tetrahydrofuran		10	50	1.9	ug/L
500-127911-7	119	MW7I	05/05/2017	34668	Dichlorodifluoromethane		200	1000	0.67	ug/L
500-127911-7	119	MW7I	05/05/2017	81607	Tetrahydrofuran	6.9	10	50	1.9	ug/L
500-127911-8	122	MW8I	05/05/2017	34668	Dichlorodifluoromethane		200	1000	0.67	ug/L
500-127911-8	122	MW8I	05/05/2017	81607	Tetrahydrofuran		10	50	1.9	ug/L
500-127911-9	124	MW9S	05/05/2017	77562	1,1,1,2-Tetrachloroethane		7	70	0.46	ug/L
500-127911-9	124	MW9S	05/05/2017	34506	1,1,1-Trichloroethane		40	200	0.38	ug/L
500-127911-9	124	MW9S	05/05/2017	34516	1,1,2,2-Tetrachloroethane		0.02	0.2	0.4	ug/L
500-127911-9	124	MW9S	05/05/2017	34511	1,1,2-Trichloroethane		0.5	5	0.35	ug/L

NR 140 PAL-ES Exceedance Report
Stoughton LF - 25216022

May-17

Sample No	Well ID	Well Name	Date Sampled	Parameter	Description	RESULT	PAL	ES	LOD	Units	PAL Exceeded?	ES Exceeded?
500-127911-9	124	MW9S	05/05/2017	34496	1,1-Dichloroethane		85	850	0.41	ug/L		
500-127911-9	124	MW9S	05/05/2017	34501	1,1-Dichloroethene		0.7	7	0.39	ug/L		
500-127911-9	124	MW9S	05/05/2017	77168	1,1-Dichloropropene				0.3	ug/L		
500-127911-9	124	MW9S	05/05/2017	77613	1,2,3-Trichlorobenzene				0.46	ug/L		
500-127911-9	124	MW9S	05/05/2017	77443	1,2,3-Trichloropropane		12	60	0.41	ug/L		
500-127911-9	124	MW9S	05/05/2017	34551	1,2,4-Trichlorobenzene		14	70	0.34	ug/L		
500-127911-9	124	MW9S	05/05/2017	77222	1,2,4-Trimethylbenzene		96	480	0.36	ug/L		
500-127911-9	124	MW9S	05/05/2017	38437	1,2-Dibromo-3-Chloropropane		0.02	0.2	2	ug/L		
500-127911-9	124	MW9S	05/05/2017	77651	1,2-Dibromoethane		0.005	0.05	0.39	ug/L		
500-127911-9	124	MW9S	05/05/2017	34536	1,2-Dichlorobenzene		60	600	0.33	ug/L		
500-127911-9	124	MW9S	05/05/2017	32103	1,2-Dichloroethane		0.5	5	0.39	ug/L		
500-127911-9	124	MW9S	05/05/2017	34541	1,2-Dichloropropane		0.5	5	0.43	ug/L		
500-127911-9	124	MW9S	05/05/2017	77226	1,3,5-Trimethylbenzene		96	480	0.25	ug/L		
500-127911-9	124	MW9S	05/05/2017	34566	1,3-Dichlorobenzene		120	600	0.4	ug/L		
500-127911-9	124	MW9S	05/05/2017	77173	1,3-Dichloropropane				0.36	ug/L		
500-127911-9	124	MW9S	05/05/2017	34571	1,4-Dichlorobenzene		15	75	0.36	ug/L		
500-127911-9	124	MW9S	05/05/2017	77170	2,2-Dichloropropane				0.44	ug/L		
500-127911-9	124	MW9S	05/05/2017	77275	2-Chlorotoluene				0.31	ug/L		
500-127911-9	124	MW9S	05/05/2017	77277	4-Chlorotoluene				0.35	ug/L		
500-127911-9	124	MW9S	05/05/2017	34030	Benzene		0.5	5	0.15	ug/L		
500-127911-9	124	MW9S	05/05/2017	81555	Bromobenzene				0.36	ug/L		
500-127911-9	124	MW9S	05/05/2017	77297	Bromochloromethane				0.43	ug/L		
500-127911-9	124	MW9S	05/05/2017	32101	Bromodichloromethane		0.06	0.6	0.37	ug/L		
500-127911-9	124	MW9S	05/05/2017	32104	Bromoform		0.44	4.4	0.48	ug/L		
500-127911-9	124	MW9S	05/05/2017	34413	Bromomethane		1	10	0.8	ug/L		
500-127911-9	124	MW9S	05/05/2017	32102	Carbon tetrachloride		0.5	5	0.38	ug/L		
500-127911-9	124	MW9S	05/05/2017	34301	Chlorobenzene		20	100	0.39	ug/L		
500-127911-9	124	MW9S	05/05/2017	34311	Chloroethane		80	400	0.51	ug/L		
500-127911-9	124	MW9S	05/05/2017	32106	Chloroform		0.6	6	0.37	ug/L		
500-127911-9	124	MW9S	05/05/2017	34418	Chloromethane		3	30	0.32	ug/L		
500-127911-9	124	MW9S	05/05/2017	77093	cis-1,2-Dichloroethene		7	70	0.41	ug/L		
500-127911-9	124	MW9S	05/05/2017	34704	cis-1,3-Dichloropropene		0.04	0.4	0.42	ug/L		
500-127911-9	124	MW9S	05/05/2017	32105	Dibromochloromethane		6	60	0.49	ug/L		
500-127911-9	124	MW9S	05/05/2017	77596	Dibromomethane				0.27	ug/L		
500-127911-9	124	MW9S	05/05/2017	34668	Dichlorodifluoromethane	26	200	1000	0.67	ug/L		
500-127911-9	124	MW9S	05/05/2017	77119	Dichlorofluoromethane	30			0.38	ug/L		
500-127911-9	124	MW9S	05/05/2017	78113	Ethylbenzene		140	700	0.18	ug/L		
500-127911-9	124	MW9S	05/05/2017	34391	Hexachlorobutadiene				0.45	ug/L		
500-127911-9	124	MW9S	05/05/2017	81577	Isopropyl ether				0.28	ug/L		
500-127911-9	124	MW9S	05/05/2017	77223	Isopropylbenzene				0.39	ug/L		
500-127911-9	124	MW9S	05/05/2017	78032	Methyl tert-butyl ether		12	60	0.39	ug/L		
500-127911-9	124	MW9S	05/05/2017	34423	Methylene Chloride		0.5	5	1.6	ug/L		
500-127911-9	124	MW9S	05/05/2017	34696	Naphthalene		10	100	0.34	ug/L		
500-127911-9	124	MW9S	05/05/2017	77342	n-Butylbenzene				0.39	ug/L		
500-127911-9	124	MW9S	05/05/2017	77224	N-Propylbenzene				0.41	ug/L		
500-127911-9	124	MW9S	05/05/2017	77356	p-Isopropyltoluene				0.36	ug/L		
500-127911-9	124	MW9S	05/05/2017	77350	sec-Butylbenzene				0.4	ug/L		
500-127911-9	124	MW9S	05/05/2017	77128	Styrene		10	100	0.39	ug/L		
500-127911-9	124	MW9S	05/05/2017	77353	tert-Butylbenzene				0.4	ug/L		
500-127911-9	124	MW9S	05/05/2017	34475	Tetrachloroethene		0.5	5	0.37	ug/L		
500-127911-9	124	MW9S	05/05/2017	81607	Tetrahydrofuran		10	50	1.9	ug/L		
500-127911-9	124	MW9S	05/05/2017	34010	Toluene		160	800	0.15	ug/L		
500-127911-9	124	MW9S	05/05/2017	34546	trans-1,2-Dichloroethene		20	100	0.35	ug/L		
500-127911-9	124	MW9S	05/05/2017	34699	trans-1,3-Dichloropropene		0.04	0.4	0.36	ug/L		
500-127911-9	124	MW9S	05/05/2017	39180	Trichloroethene		0.5	5	0.16	ug/L		
500-127911-9	124	MW9S	05/05/2017	34488	Trichlorofluoromethane		698	3490	0.43	ug/L		
500-127911-9	124	MW9S	05/05/2017	39175	Vinyl chloride		0.02	0.2	0.2	ug/L		
500-127911-9	124	MW9S	05/05/2017	81551	Xylenes, Total		400	2000	0.22	ug/L		

ATTACHMENT C

Field Data Form

Job Name: Stoughton City Landfill **Job. No.** 25216022.00 **By:** Eli Sankey

SCS ENGINEERS

Location: Stoughton, Wisconsin **Project Mgr.** Leslie Busse

Notes: 2017 Annual GW Monitoring

Well No.	DNR ID	Sample Date	Time Sampled	Depth to Water	Total Depth	Volume Purged	Odor	Color	Turb.	Dissolved Oxygen (ppm)	Temp. (^{0}C)	Specific Conductivity (µs/cm)	pH
Param #	--	--	--	--	--	--	**1**	**2**	**3**		**10**	**94**	**400**
MW3S	111	5/4/2017	--	8.74	19.4								
MW3D	112	5/4/2017	1330	8.74	73	50 gal	Slight	Rust	Mod.	0.32	9.0	793	7.53
MW3B	113	5/4/2017	--	9.63	95								
MW4S	114	5/4/2017	--	6.23	15.2								
MW4D	115	5/4/2017	1440	6.14	74	50 gal	Swampy	Black	Very	0.21	8.7	878	7.37
MW5S	116	5/4/2017	--	6.22	16.6								
MW5D	117	5/4/2017	1400	6.08	77	22 gal, dry	Swampy	Black	Very	0.4	8.9	717	7.58
MW7S	118	5/5/2017	--	3.79	15.1								
MW7I	119	5/5/2017	1150	0.00	60	Artesian	N	C	N	0.11	10.1	774	7.40
MW8S	120	5/4/2017	--	0.30	33								
MW8I	122	5/5/2017	1335	0.12	62.4	220 gal	N	C	N	0.28	9.9	898	7.27
MW8B	123	5/4/2017	--	0.93	39.5								
MW9S	124	5/5/2017	1510	1.11	13.4	11 gal, dry	Y	Lt. brown	Mod.	0.24	9.3	646	7.56
MW9I	125	5/5/2017	1600	1.48	47.2	30 gal	N	C	N	0.12	9.8	626	7.44
MW9B	126	5/5/2017	1540	1.25	83.3	60 +	N	C	N	3.79	9.5	635	7.34
MW10S	127	5/5/2017	1315	3.18	16.9	4 gal, dry	Slight	Lt. gray	Very	4.14	8.0	523	7.29
MW10I	128	5/5/2017	1245	0.00	--	Artesian	N	C	N	0.32	10.0	647	7.25
MW13S	130	5/5/2017	--	3.90	16.7								

Job Name: Stoughton City Landfill **Job. No.** 25216022.00 **By:** Eli Sankey

SCS ENGINEERS

Location: Stoughton, Wisconsin **Project Mgr.** Leslie Busse

Notes: 2017 Annual GW Monitoring

Well No.	DNR ID	Sample Date	Time Sampled	Depth to Water	Total Depth	Volume Purged	Odor	Color	Turb.	Dissolved Oxygen (ppm)	Temp. (^{0}C)	Specific Conductivity (µs/cm)	pH
Param #	--	--	--	--	--	--	**1**	**2**	**3**		**10**	**94**	**400**
MW13I	131	5/5/2017	1215	0.00	--	Artesian	N	C	N	0.26	9.8	528	7.60
MW14S	133	5/5/2017	1415	2.94	26.2	8 gal, dry	Slight	Lt. brown	Mod.	1.16	9.2	321	7.68
MW14I	134	5/5/2017	1430	1.68	51.2	50 gal	N	C	N	0.11	10.3	652	7.40
MW14D	135	5/4/2017	--	1.24	89.6								
MW15S	136	5/4/2017	--	4.02	16.6								
MW15I	137	5/4/2017	--	1.57	57.4								
MW15D	138	5/4/2017	--	1.68	85.9								
MW5D DUP	--	5/4/2017	1100	--	--	--	--	--	--		--	--	--
MW9I DUP	--	5/4/2017	1250	--	--	--	--	--	--		--	--	--
Trip Blank	999	5/4/2017	800	--	--	--	--	--	--		--	--	--
Field Blank	997	5/4/2017	1530	--	--	--	--	--	--		--	--	--

Comments: Purge water from MW9I was containerized and disposed of at MMSD.

APPENDIX B: Support Agency O&M Contractor Semiannual Facility Inspection Report

Environmental Consultants
and Contractors

2830 Dairy Drive
Madison, WI 53718-6751

608 224-2830
FAX 608 224-2839
www.scsengineers.com

SCS ENGINEERS

November 14, 2017
File No. 25216022.00

Mr. Jason Lowery
Wisconsin Department of Natural Resources
101 S. Webster St.
P.O. Box 7921
Madison, WI 53707-7921

Subject: Semiannual Facility Inspection Report
Stoughton City Landfill
FID #113005950 – License #133
USEPA ID #WID980901219
WDNR Purchase Order #37000-0000000548

Dear Mr. Lowery:

This letter provides the semiannual facility inspection report information for the Stoughton City Landfill site. We have included two copies for you and an electronic copy on a compact disk. One copy has been mailed to the U.S. Environmental Protection Agency (USEPA).

SCS Engineers (SCS) performed the gas probes monitoring on June 16, August 16, and October 27, 2017. SCS performed the semiannual facility inspection at the site on October 27, 2017. The semiannual facility inspection reports are included in **Attachment B**. The following inspection items were noted:

Bimonthly Gas Monitoring – The bimonthly monitoring of the three perimeter gas probes was conducted on June 16, August 16, and October 27, 2017. All gas probes except for GMP-1 had methane readings of 0.0 percent. On October 27, GMP-1 had a methane reading of 0.4 percent which is 8 percent of the lower explosive limit (LEL) of 5 percent as methane. Based on the monitoring results from these three events, it does not appear that high concentration landfill gas, exceeding the LEL of 5 percent for methane, is migrating to the south of the landfill towards occupied homes. The completed bimonthly gas monitoring report forms are included in **Attachment A**.

Landfill Cover – The quality of the vegetative cover across the landfill was in very good condition. The annual cover mowing of the facility occurred on August 31, 2017. No bare spots, signs of erosion, or sparse vegetation were found (photographs in **Attachment C**). No drainage gullies were apparent on the cover. No rutting was observed as noted in the last semiannual inspection on May 2, 2017. Several small burrow holes were present near MW-2D. The burrow holes appear shallow and there is no evidence that the cap has been compromised.

Storm Water Management System – No visible erosion was found in the drainage channels. The culverts were undamaged. Dense vegetation, including large shrubs, are present near many of the culverts restricting flow. A map depicting these culvert locations is included in **Attachment D**. Best management practices would be to clear this vegetation and debris in front of the culverts to allow for unrestricted storm water flow.

Landfill Gas Venting System – Gas vent eight (GV-8) was inspected and remains in a fixed upright position. No damage was found at any of the remaining gas venting wells, and no stressed vegetation was found near any of the wells. Gas vent well screens were clear. Labels are to be attached to the gas vents for easy identification.

Perimeter Security Fencing – The chain-link fencing on the north and east sides of the site were in good condition. Both access gates are in good condition, and the padlocks operated properly. Signage was present and legible on both access gates. The wooden perimeter fence was in good condition with the exception of one broken slat located on the southwest side of property.

Monitoring Wells and Wellhead Covers – No signs of tampering or damage were found at any of the site monitoring wells. All monitoring wells were properly covered and locked. Identification markings were missing or illegible on some of the monitoring wells. All un-marked monitoring wells should be labeled during the next monitoring event. Three artesian monitoring wells: OW-2, MM-7I, and MW-13I were flowing. Standing water was present around the wells and the casings were corroding. Best management practices would be stop, or greatly reduce, water flowing from the wells by property capping the wells.

Access Road – The site access road was in good condition with no ruts, or erosion noted. The site inspection was conducted during dry conditions so ponding was not detectable; however, no major grading issues were visible.

If you have any questions about this report or any other aspect of the project, please call us at 608-224-2830.

Sincerely,

Eli Sankey
Associate Engineer
SCS ENGINEERS

Leslie A. Busse, PE
Senior Project Manager
SCS ENGINEERS

ES/AV/LAB

cc: Ms. Giang Van Nguyen, USEPA Region V

Enclosures: Attachment A – Bimonthly Gas Monitoring Report Forms
Attachment B – Semiannual Facility Inspection Form
Attachment C – Photograph Log
Attachment D – Culvert Maintenance Locations
CD Containing Electronic Copy of Report

I:\25216022.00\Deliverables\Facility Inspection Report\171027_Facility Inspection Report\171027_Facility Inspection Report.docx

ATTACHMENT A

Bimonthly Gas Monitoring Report Forms

Gas Probe Monitoring Report
Stoughton City Landfill
Stoughton, Wisconsin

Probe	%LEL (as methane)	% Oxygen	% CO_2	PID (ppm)	Pressure (inches of water)
GMP-1	0.0	20.2	0.2	0.0	+0.01
GMP-2	0.0	19.6	1.2	0.0	-0.02
GMP-3	0.0	19.7	1.4	0.0	0.00

Instruments Used: GEM 5000/HNU

Operator: Paul Grover

Date: June 16, 2017

Weather Conditions:

Barometric Pressure (inches of Hg): 29.70 Temperature (Degrees F): 87°F

Relative Humidity (%): 42 Dewpoint (Degrees F): 61°F Wind: S@9mph

Sky Conditions: Sunny

Ground Conditions:

_____Snow __X__No Snow ____Frozen Ground/Frost

Gas Probe Monitoring Report
Stoughton City Landfill
Stoughton, Wisconsin

Probe	%LEL (as methane)	% Oxygen	% CO_2	PID (ppm)	Pressure (inches of water)
GMP-1	0.0	20.6	0.4	0.0	0.03
GMP-2	0.0	19.9	1.3	0.0	0.00
GMP-3	0.0	20.4	0.8	0.0	0.00

Instruments Used: Gem 5000

Operator: Paul Grover

Date: August 16, 2017

Weather Conditions:

Barometric Pressure (inches of Hg): 29.87 Temperature (Degrees F): 83°F

Relative Humidity (%): 63 Dewpoint (Degrees F): 69°F Wind: ESE@12

Sky Conditions: Partly Sunny

Ground Conditions:

_____Snow __X__No Snow ____Frozen Ground/Frost

Gas Probe Monitoring Report
Stoughton City Landfill
Stoughton, Wisconsin

Probe	%LEL (as methane)	% Oxygen	% CO_2	PID (ppm)	Pressure (inches of water)
GMP-1	8.0	19.9	2.3	0.0	-0.02
GMP-2	0.0	20.2	0.9	0.0	0.00
GMP-3	0.0	20.0	2.7	0.0	-0.01

Instruments Used: Gem 5000, MiniRAE PID

Operator: Eli Sankey

Date: October 27, 2017

Weather Conditions:

Barometric Pressure (inches of Hg): 29.67 Temperature (Degrees F): 37°F

Relative Humidity (%): 78 Dewpoint (Degrees F): 31°F Wind: SW@20

Sky Conditions: Overcast

Ground Conditions:

_____Snow __X__No Snow ____Frozen Ground/Frost

ATTACHMENT B

Semiannual Facility Inspection Form

Operation and Maintenance Semi Annual Inspection Report
Stoughton City Landfill
Stoughton, Wisconsin

Inspector	Eli Sankey
Company	SCS Enginners
Project	Stoughton LF Monitoring
Location	Stoughton, WI
Date/Time	10/27/17, 1:00 P.M
Project No.	25216022.0

Weather	Clear	P. Cloudy	**Cloudy**	Fog
Temperature	Low	**37 F**	---	---
Wind	Calm	Medium	**High**	---
Precipitation	**None**	Light	Moderate	Heavy
	Snow	Light	Moderate	Heavy

Type of Inspection Routine ☒ Special ☐

Persons/Equipment Present: Jason Lowry (WDNR), Giang Van Nguyen (EPA), Eli Sankey (SCS Engineers)

General Description of Site Conditions: The cover area was dry however perimeter ditches contained some water. Cover vegitation was in good condtion and an acceptable length.

Specific Inspection Items	Potential Problem Areas	Status *	Notes
Perimeter Security Fencing	Broken or missing wood slats, torn chain link fabric.	2	Partial slat missing on the SW fence line neat GMP-3. Additonal signage along the west perimeter fence near the disc golf hole.
Entrance Gate and Locking Mechanism	Lock broken/missing, mechanism inoperative.	1	Lock present and functional.
Monitoring Wells and Wellhead Covers	Signs of tampering, casing damaged, lock missing.	2	Cap artesian wells: OW2, 7I, 13I. Water is corroding well casings. Label all MW's, only several wells are curerntly labeled.
Final Cover Vegetation	Bare spots, stressed vegetation, deep rooted vegetation.		Vegetation appear heathly, no bare spots obsreved.
Final Cover Slope (explain below)	Gullies, lack of vegetation, subsidence, ponding.	1	No erosion observed, slopes in good conditon.
Evidence of Burrowing Animals	Damage to final cover, evidence of waste.	2	Fill burrow holes near MW-2D with soil. Burrow holes appear to be shallow, no evidence that the cover has been compromised.
Stormwater Drainage Channels	Gullies, erosion, debris, culvert blocked.	2	Several large shrubs impeding storm water flow into the culvert near the south entrance gate.
Landfill Gas Venting System	Damaged or blocked vent risers, stressed vegetation.	2	Landfill gas vents should be labeled.
Access Road	Ponding, rutting, erosion.	1	Access road in good condition no issues observed.
Cover Mowing and Tall Vegetation Removal (October Inspection Only)	Mowing and tall vegetation removal done to specified vegetation hight, any missed areas	1	Vegetation is an acceptable height on landfill cap.

* (1) Acceptable - No Maintenance Required. (2) Not Acceptable - Identify Required Maintenance.

Summary of Deficiencies and/or Corrective Actions: Label GV's and MW's, repair slat near GMP-3, cap artesian wells, fill burrow holes near MW-2D, and remove shrubs in drainage way near south entrance gate.

Signature of Inspector Eli Sankey Date 10/27/17

ATTACHMENT C

Photograph Log

Semiannual Facility Inspection Report
Stoughton City Landfill – October 27, 2017
SCS Engineers Project No. 25216022.00

Photo 1: Photo taken just inside the south access gate. Final cover vegetation was in good condition and of the appropriate length (Looking north)

Photo 2: Gravel drive and storm water channel on the south side of the landfill (Looking west)

Photo 3: GV-1 is functional but is missing an identification label (Looking south)

Photo 4: Animal burrow present near MW-2D (looking down)

Photo 5: Large shrubs inhibiting water flow into culvert near the south gate entrance (Looking west)

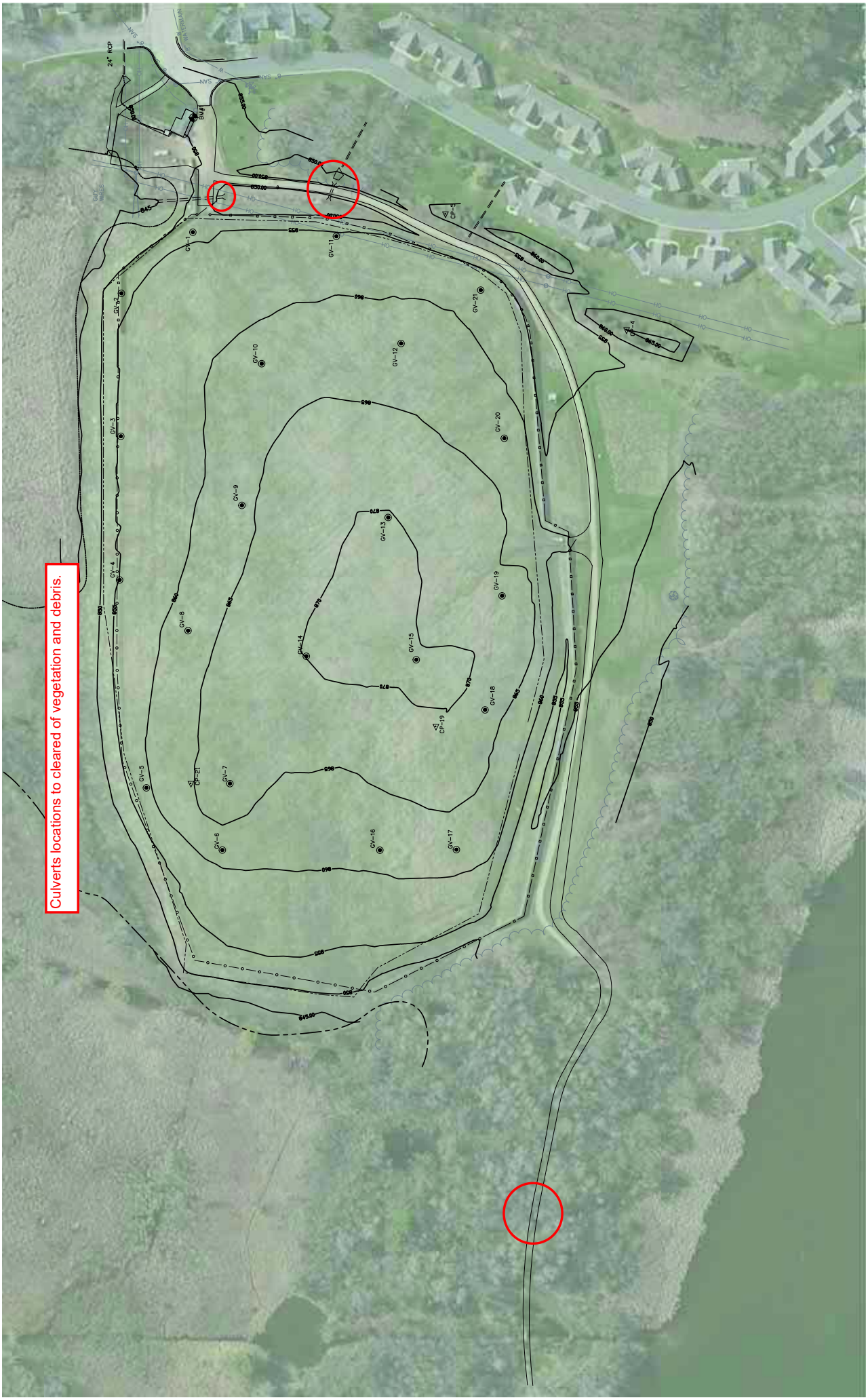
Photo 6: West perimeter security fencing depicted, slats were recently repaired (Looking east)

Photo 7: OW-2 casing flooded with water, well plug was floating (Looking down)

Photo 8: MW-5D depicted, well locked and no signs of tampering (Looking east)

ATTACHMENT D

Culvert Maintenance Locations


Culverts locations to cleared of vegetation and debris.

APPENDIX C: Five-year Review Public Notice

Boys lacrosse

Vikings look to finally get past Catholic Memorial at state

The Stoughton boys lacrosse team returns 17 letterwinners this season after winning a Madison Area white lacrosse conference championship, with a 13-1 record.

Stoughton (20-4 overall) went on to earn a state championship appearance, where the team lost to Catholic Memorial for the third straight year.

"Overall, this a group that is obviously led by a very strong senior class: Dylan Gross, Zach Scheel, Sam Onsager and Nathan Krueger," head coach Josh Wollin said. "This group is very motivated from losing the state championship game three years in a row. I have not seen a more motivated and focused squad in my six years as head coach."

The Vikings are expecting the same success this season with all three starting defensemen returning, including captains Scheel and Krueger, as well as junior Matt Krcma. Stoughton also welcomes back junior captain face-off/defensive middie Quinn Link.

New starters include: junior attackers Cam Furseth and Matt Read, junior middies Chase Kotlowski and Isaak Olson, long stick sophomore midfielder Drew Pasold and sophomore goalie Jack Sundby.

The team's offensive returning starters include attackman Onsager, who is also a captain, and offensive middie Gross, who has a surprising 15 goals so far.

Stoughton has played in three games so far this season, including a doubleheader in which the Vikings beat Neenah 11-10 but fell 9-5 against defending Division 1 state champion Kettle Moraine. Stoughton opened the conference season last Friday, beating La Crosse 17-4.

Furseth is second on the team in goals so far this season with six, while Read and Kotlowski each have three goals, and Onsager and Olson have two apiece.

What's next

Stoughton boys lacrosse host Sauk Prairie in a conference game at 5 p.m. Thursday.

Stoughton 15, Baraboo 4

Gross (four), Read (three) and Onsager (two) combined for nine goals Monday in a 15-4 blowout of Baraboo. Furseth led the team with four assists.

Link (seven) and Krueger (six) collected 13 ground balls. Link also won have of Stoughton's 22 faceoffs. Sunby stopped seven of 12 shots on goal.

Photo submitted

Returning letterwinners for the Stoughton lacrosse team (front, from left) are: Jake Mathias, Cam Furseth, Isaak Olson, Dylan Gross, Drew Pasold, Chase Kotlowski and Quinn Link; (back) Chad Clark, Matt Krcma, Carson Roisum, Nathan Krueger, Luke Geister-Jones, Sam Onsager, Matt Read, Jack Sunby and Zach Scheel; (not pictured) Jake Lenz.

Baseball

Stoughton drops fifth straight to open season

ANTHONY IOZZO
Assistant sports editor

The Stoughton High School baseball team is still searching for its first win of the season following Tuesday's 6-4 loss to Badger South rival Milton.

The host Vikings scored three runs in the bottom of the seventh, but that is where their rally ended.

Stoughton's offense managed just five hits, but the Vikings threatened with 13 total baserunners with Milton committing six errors.

In the seventh, Mitch Fuller and Brady Schipper both scored on an error, and Matt Curry hit an RBI single to plate Andy Johnson.

Alec Tomzcyk put Stoughton up 1-0 early with an RBI single that scored Dillon Nowicki.

Nowicki took the loss. He allowed no earned runs on five hits in 5 1/3 innings, striking out six and walking six.

Noah Schafer finished the game and allowed an earned run on one hit in 1 2/3 innings, striking out one.

Dakota Cude earned the win for Milton. He went the distance and allowed one earned run on five hits, striking out six and walking two.

What's next

The Stoughton High School baseball team travels to Monroe at 5 p.m. Thursday and hosts Portage in a Badger crossover at 5 p.m. Tuesday, April 18

Monona Grove 4, Stoughton 3

The Vikings opened the Badger South Conference season Thursday and fell 4-3 against Monona Grove at Firemen's Park in Cottage Grove.

Stoughton led 3-2 in the bottom of the seventh, but the Silver Eagles scored twice for the win.

Marshall Lehman hit the game-winning RBI single on a bunt that scored Jackson Thomsen.

Graham Arndt scored on an error to tie the game with one out.

Johnson scored on a wild pitch in the sixth to give the Vikings a 3-2 lead.

Stoughton also took a one-run lead in the third on an RBI single by Nick Waldorf (3-for-4) that plated Schipper (2-for-4) , but the Silver Eagles tied the game in the bottom of the inning when Mitch Kelsey scored on an error.

Waldorf also brought home Schipper on an RBI single in the first, but the lead was once again short lived as Kolten Koch (2-for-4) scored on an error in the bottom of the inning.

Bryan Wendt (2-for-3) also had multiple hits for Stoughton.

Ethan Sehmer took the loss. He allowed an earned run on four hits in 1 1/3 innings, striking out two and walking one.

Nowicki started and allowed no earned runs on two hits and three walks. He struck out seven in five innings.

Eau Claire North 15, Stoughton 0

The Vikings opened a tournament at the Woodside Sports Complex in the Wisconsin Dells Friday and lost 15-0 to Eau Claire North, which is ranked No. 3 in the state.

Brock Wanninger took the loss after allowing nine earned runs on 13 hits in 4 1/3 innings, striking out four and walking five. Schipper struck out one and allowed a hit and no earned runs in 1/3 of an inning, and Saxton Shore allowed a hit in 1/3 of an inning.

Carson Lemanski earned the win with a strikeout in one inning. Stoughton was held to four hits.

Menomonie 12, Stoughton 9

The Vikings offense did much better Saturday morning in the tournament, but Stoughton still fell 12-9 to Menomonie.

Tomczyk (triple) and Nowicki both had two RBIs, and Schipper was 2-for-3 with a triple and a run scored. Shore, Waldorf and Wendt all added RBIs.

Cole Mensing picked up the win for Menomonie. He allowed seven earned runs on seven hits in 6 2/3 innings, striking out eight and walking seven.

Schafer took the loss for Stoughton. He allowed five earned runs on three hits and seven walks in 4 1/3 innings, striking out three.

Schipper pitched in relief and allowed three earned runs on six hits and a walk in 2 2/3 innings, striking out one.

E.C. Memorial 11, Stoughton 6

The Vikings dropped to 0-4 overall with an 11-6 loss to state honorable mention Eau Claire Memorial Saturday afternoon.

Stoughton scored five runs in the final three innings, but it wasn't enough.

Schipper finished 2-for-3 with a double and two RBIs, and Nowicki was 2-for-3 with a run scored. Tomczyk was 3-for-4 with a double, two RBIs and a run scored,

Turn to **Baseball**/*Page 12*

Softball

Vikes short in close games

JEREMY JONES
Sports editor

After graduating ace Holly Brickson from the circle this year, Stoughton softball coach Kristin Siget expected the opposition to put more balls in play this spring. And while that's been the case so far, it's the Vikings' bats that have yet to come around.

What's next

Stoughton hopes to finally get out on its varsity field for a game at 5 p.m. Thursday, April 13 for a home game against Monroe.

The Cheesemakers are picked by many to win the Badger South this season. Stoughton will follow that up Monday, April 17 at home against Oregon.

MG 3, Stoughton 2

Stoughton played well defensively Thursday but struggled to string hits together in a 3-2 loss at home against Monona Grove.

"Defensively, we've only committed a couple of errors so far this season; it's the bats that haven't come along yet," Siget said.

She attributed at least some of her team's struggles at the plate to only being able to get outside and hit so far this season.

"We still have yet to get outside and even practice on our field," said Siget whose varsity team played Thursday's game on the Stoughton JV field. "We've been hitting inside, but it's just not the same as getting outside and facing live pitching."

Scoreless through the first three innings, the Badger South debut turned into a back-and-forth game in the fourth and fifth innings, with Jordan Dahlhauser and Carly Patton putting the Silver Eagles on top for good after a lead-off single by Hannah Grossman.

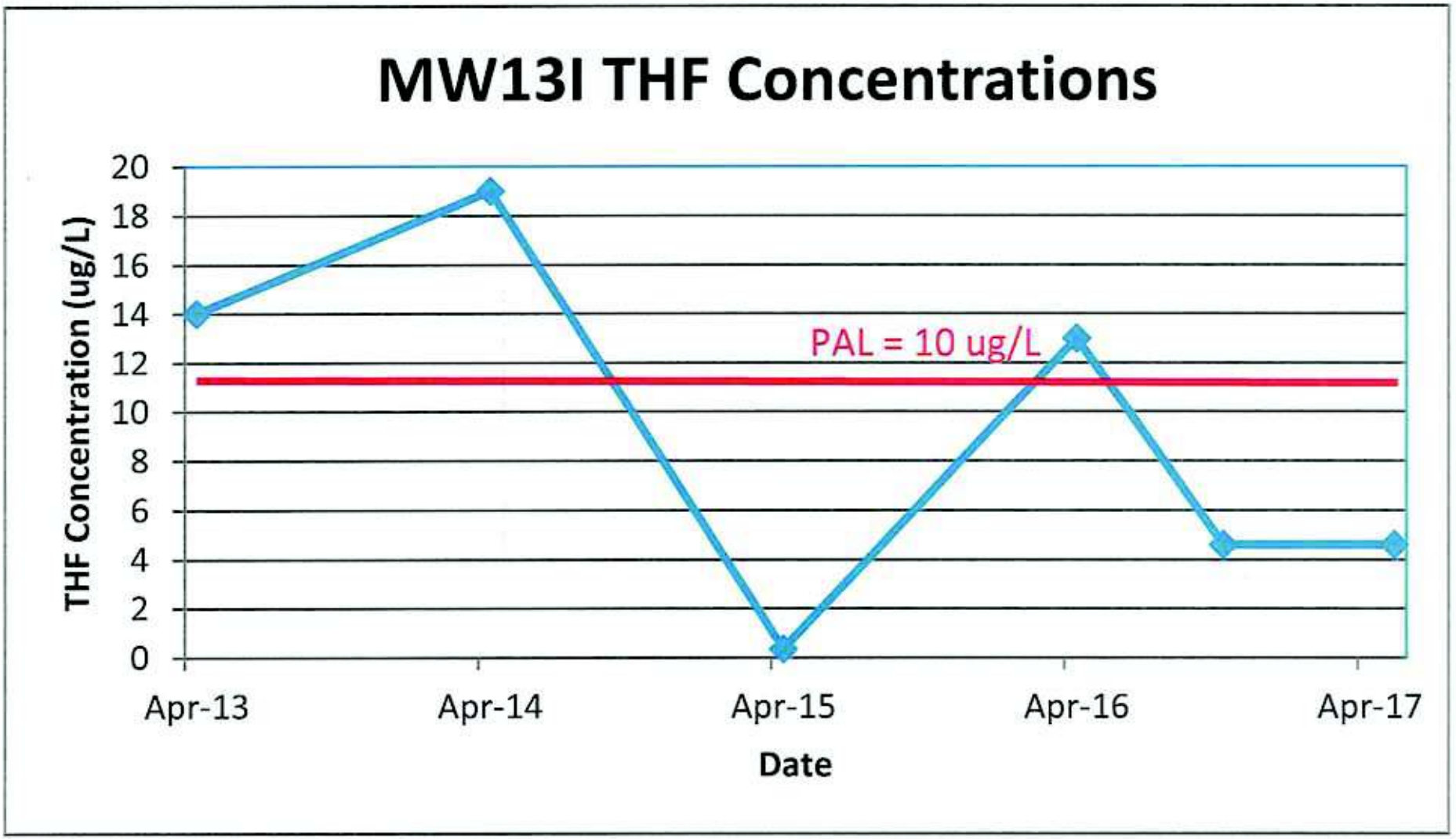
Grossman singled over second base, Kayley Novotny and came around to score one out later on a Dahlhauser single. Patton followed that up, hitting a ball that caromed off Stoughton pitcher Molly Skonning to give Monona Grove a 3-1 advantage.

The Vikings, who left six runners on base in the loss, pulled within a run in the bottom of the fifth when Morgan Neuenfeld ricocheted a ball off the MG first baseman to score Maddy Brickson.

Monona Grove pitcher Alyssa Guerton kept Stoughton off-balance all night, sitting the Vikings down in order in the sixth. Stoughton

Turn to **Softball**/*Page 12*

APPENDIX D: Data Plots For Groundwater and Gas Monitoring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THF Concentration (ug/L)
20
18
16
14
12
10
8
6
4
2
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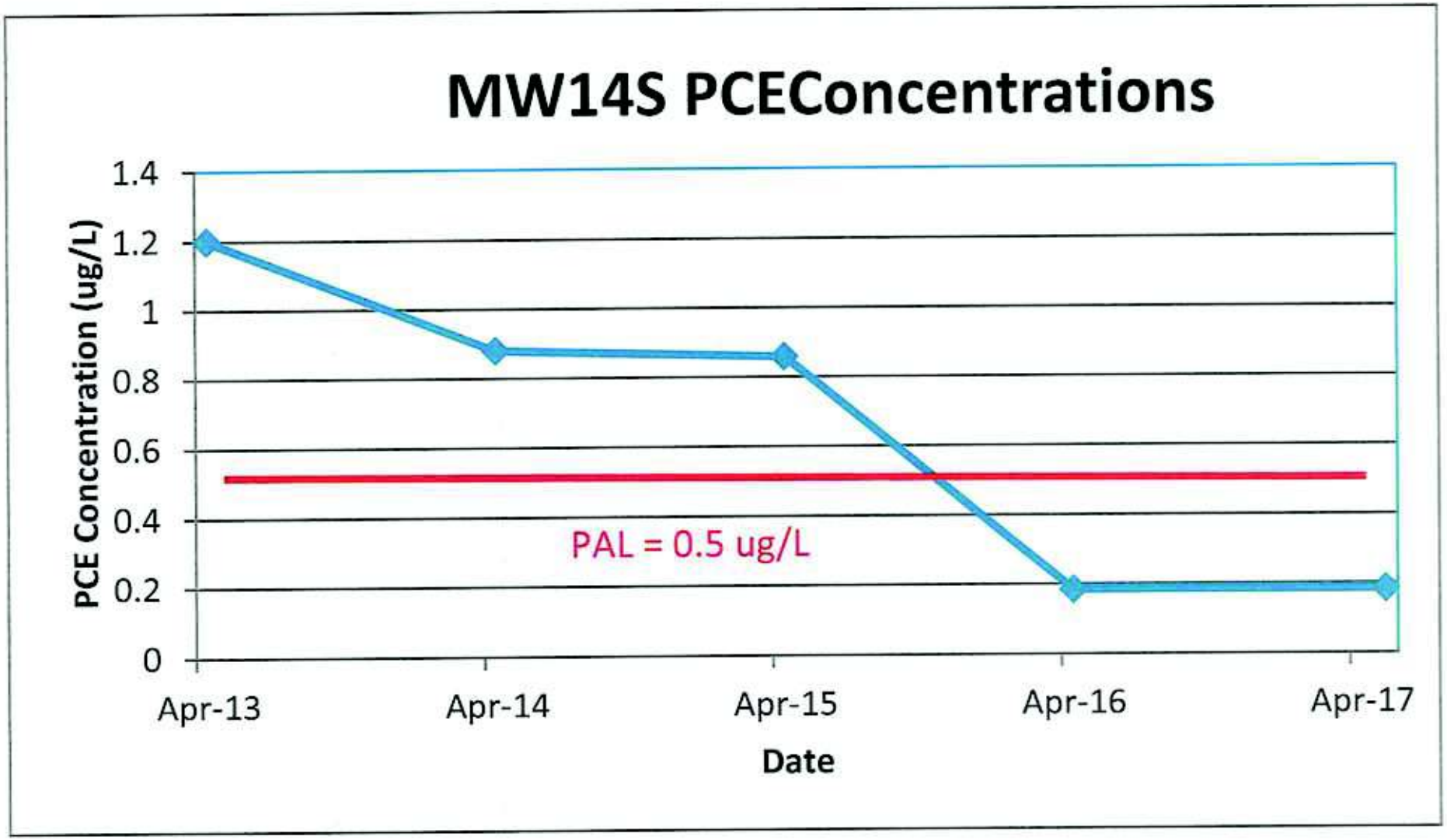
PAL = 10 ug/L
Apr-13
Apr-14
Apr-15
Apr-16
Apr-17
Date


MW14S PCEConcentrations
PCE Concentration (ug/L)
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1.2
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0.8
0.6
0.4
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PAL = 0.5 ug/L
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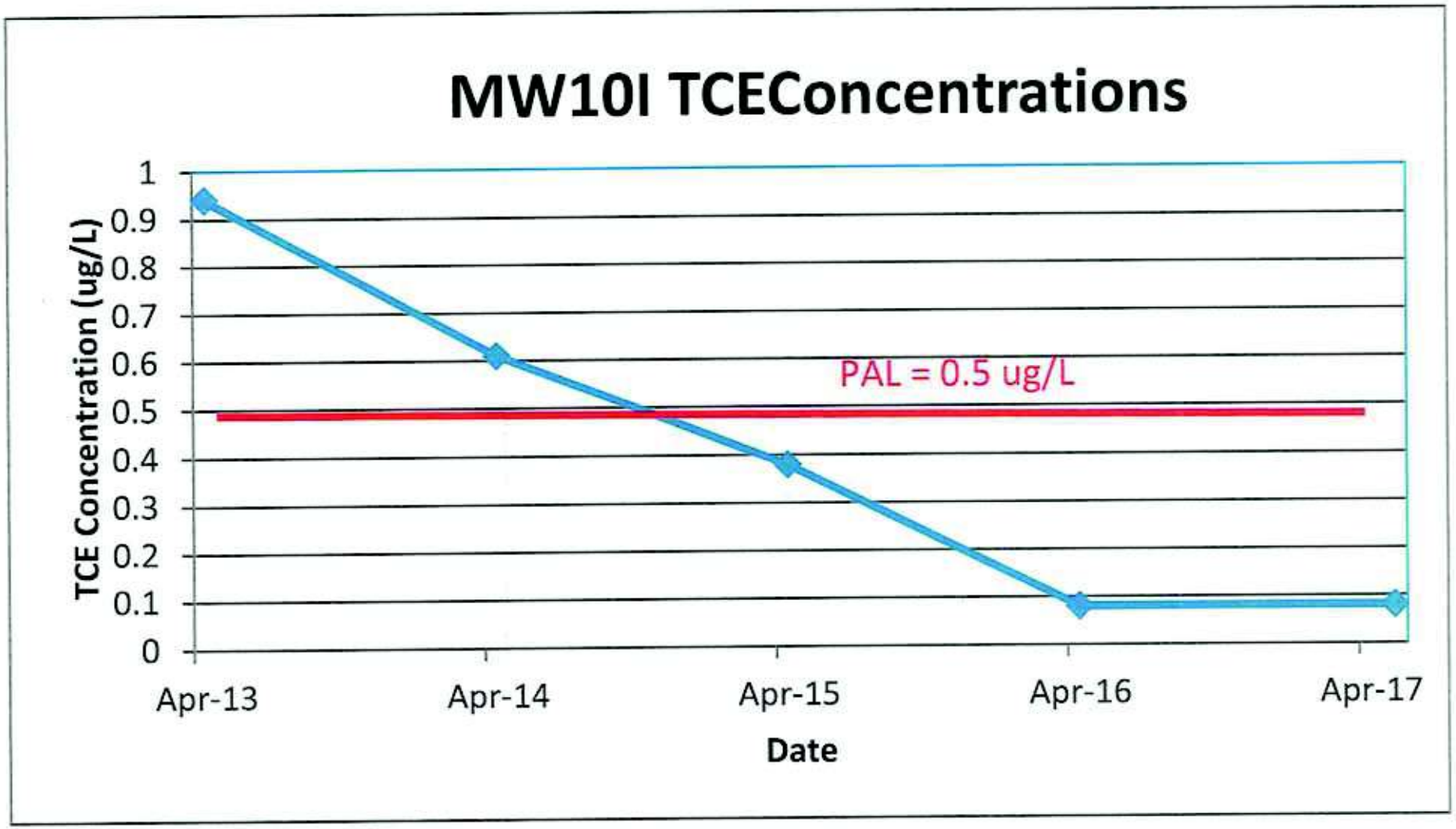
Apr-14
Apr-15
Apr-16
Apr-17
Date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TCE Concentration (ug/L)
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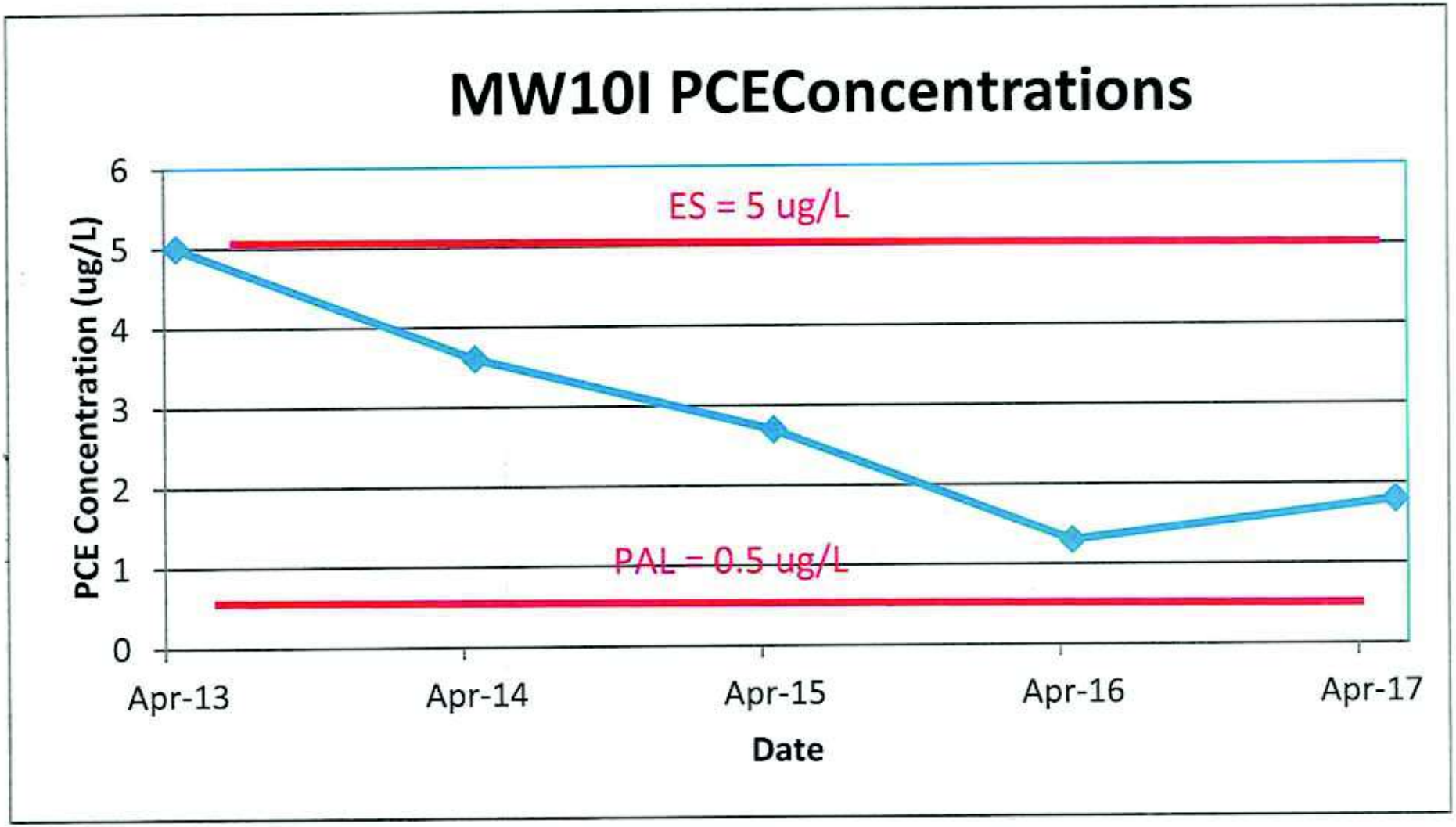
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
PAL = 0.5 ug/L
Apr-13
Apr-14
Apr-15
Apr-16
Apr-17
Date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PCE Concentration (ug/L)
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5
4
3
2
1
0
ES = 5 ug/L
PAL = 0.5 ug/L
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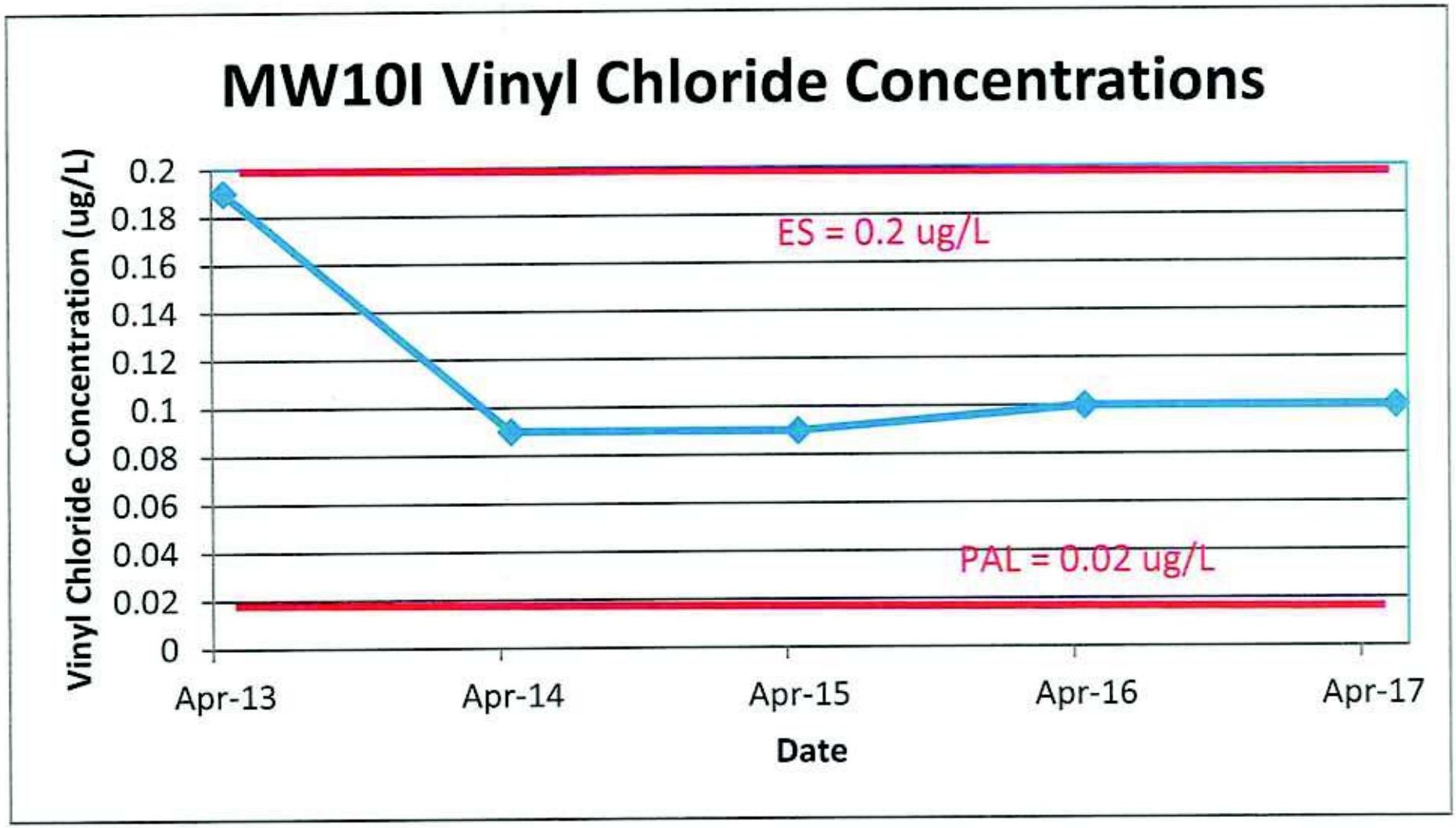
Apr-14
Apr-15
Apr-16
Apr-17
Date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Vinyl Chloride Concentration (ug/L)
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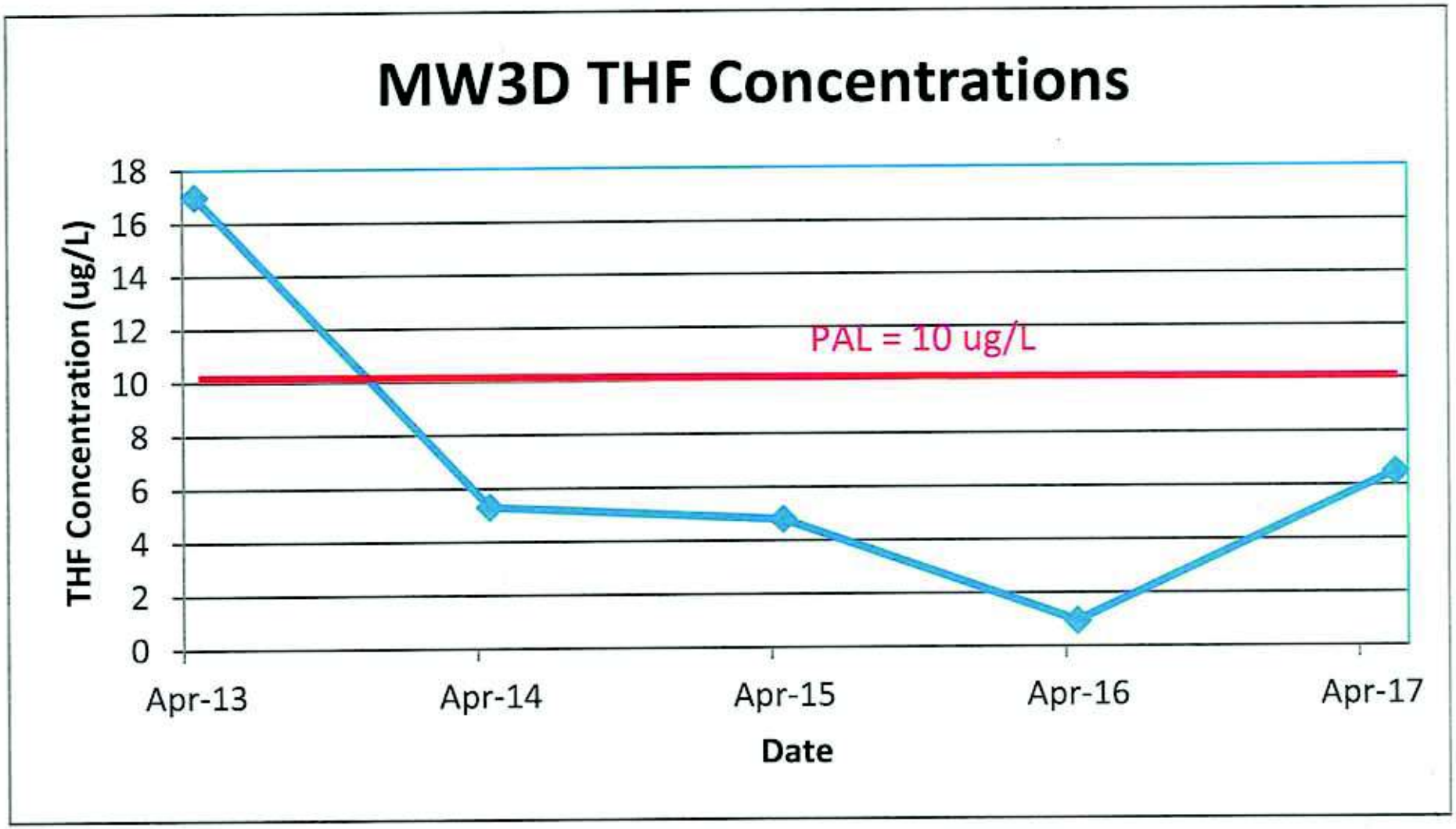
0.16
0.14
0.12
0.1
0.08
0.06
0.04
0.02
0
ES = 0.2 ug/L
PAL = 0.02 ug/L
Apr-13
Apr-14
Apr-15
Apr-16
Apr-17
Date


MW3D THF Concentrations
THF Concentration (ug/L)
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14
12
10
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6
4
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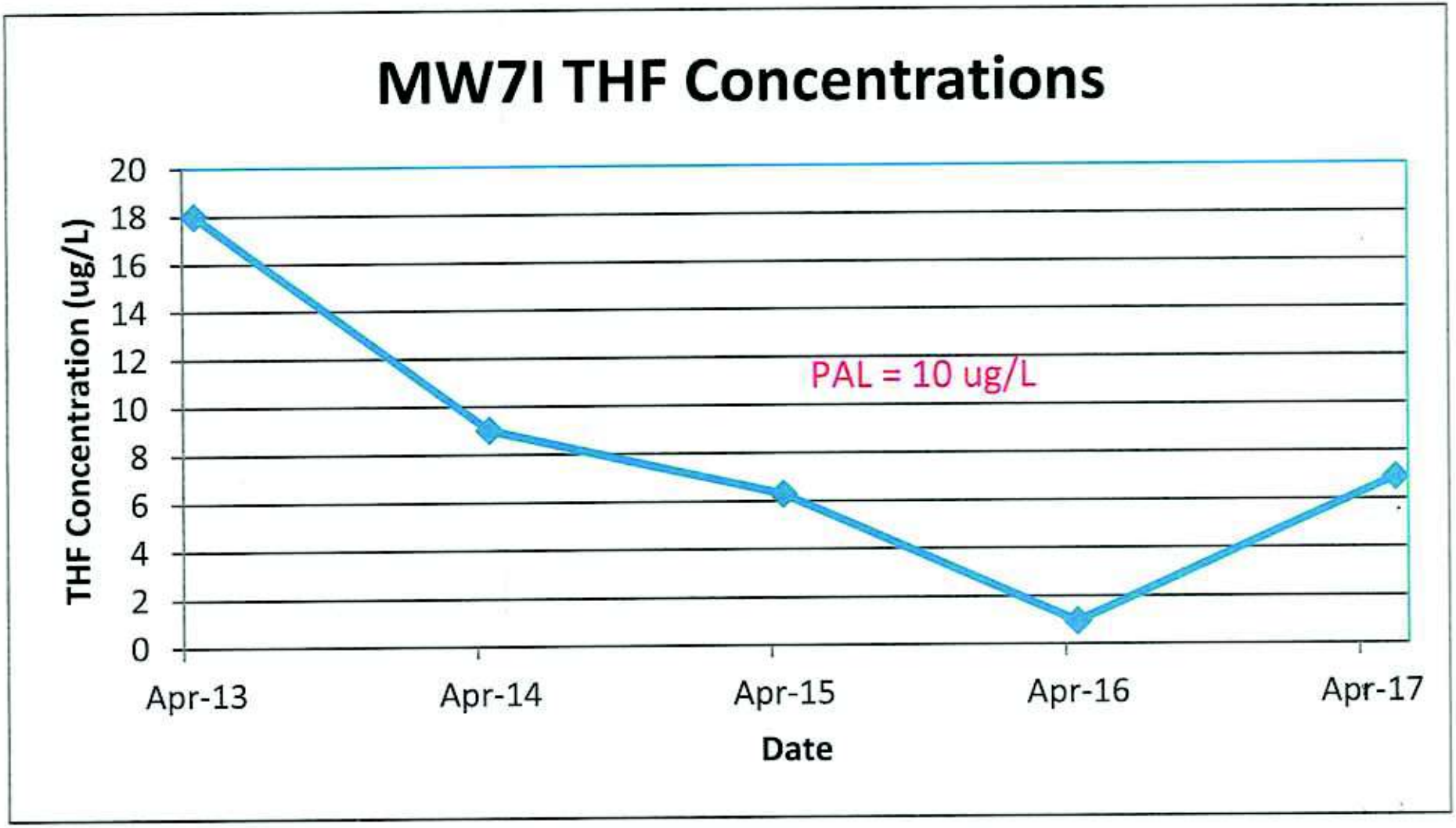
Apr-14
Apr-15
Apr-16
Apr-17
Date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THF Concentration (ug/L)
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18
16
14
12
10
8
6
4
2
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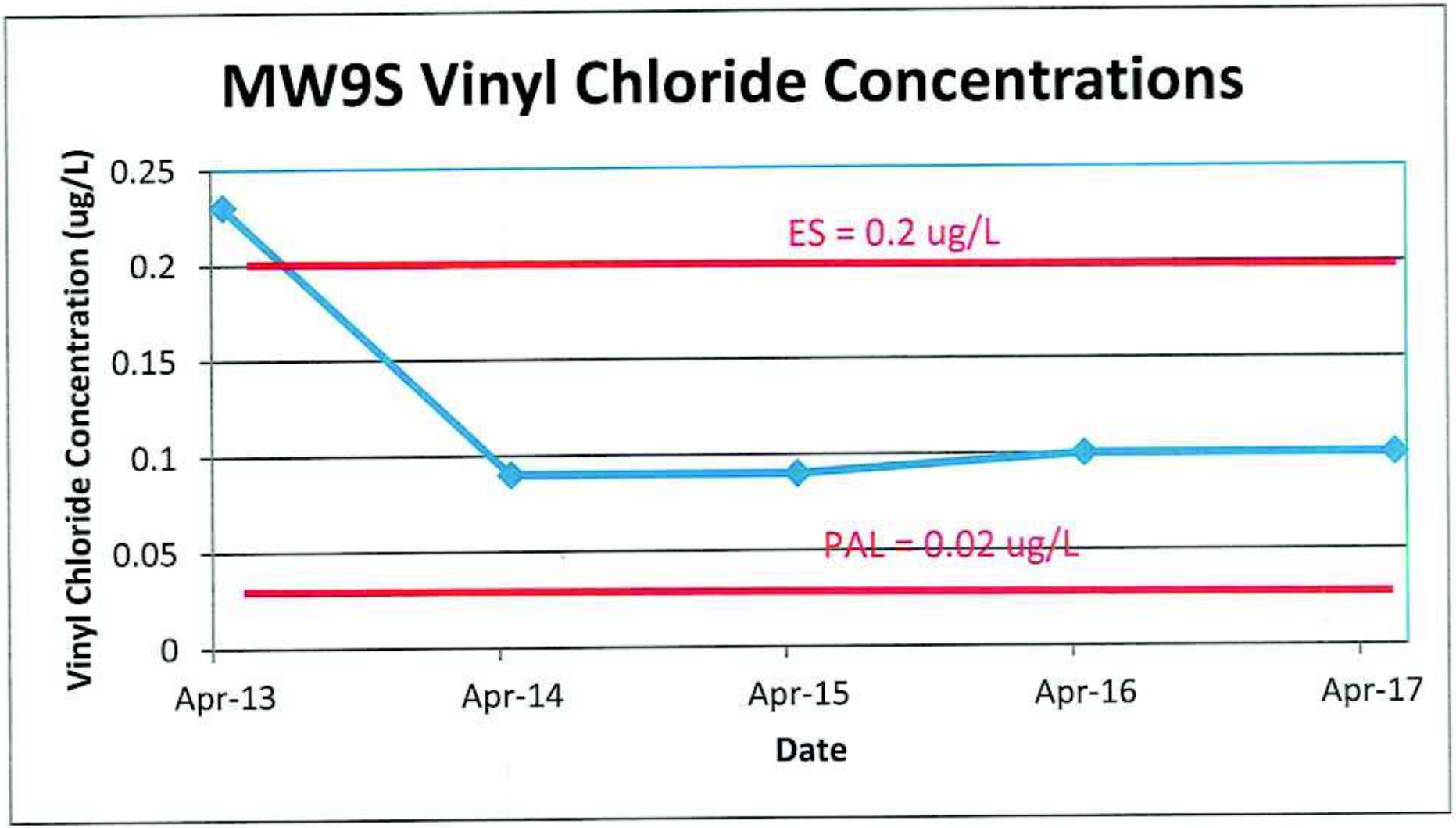
PAL = 10 ug/L
Apr-13
Apr-14
Apr-15
Apr-16
Apr-17
Date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Vinyl Chloride Concentration (ug/L)
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0.15
0.1
0.05
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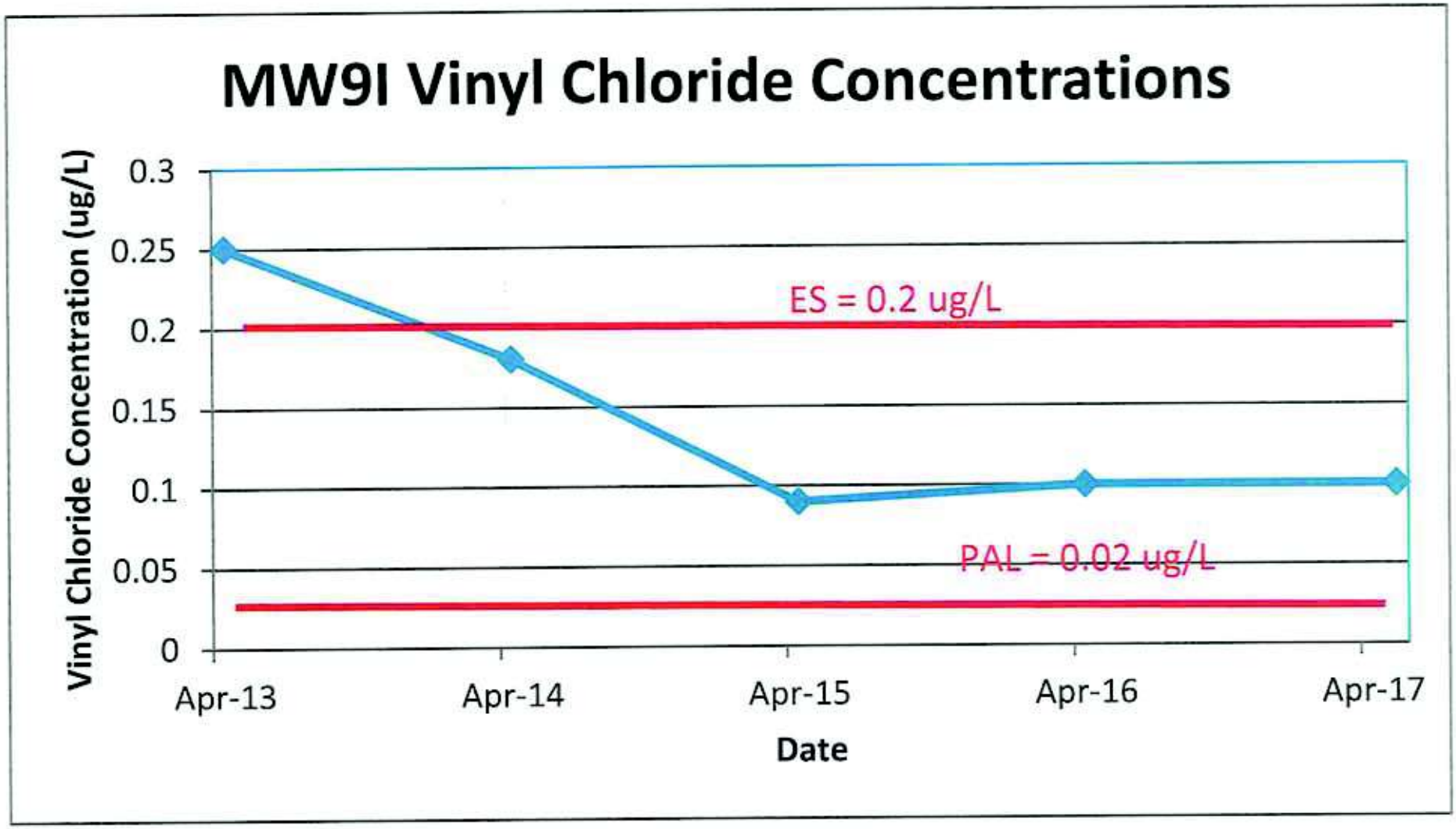
ES = 0.2 ug/L
PAL = 0.02 ug/L
Apr-13
Apr-14
Apr-15
Apr-16
Apr-17
Date


MW9I Vinyl Chloride Concentrations
Vinyl Chloride Concentration (ug/L)
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0.2
0.15
0.1
0.05
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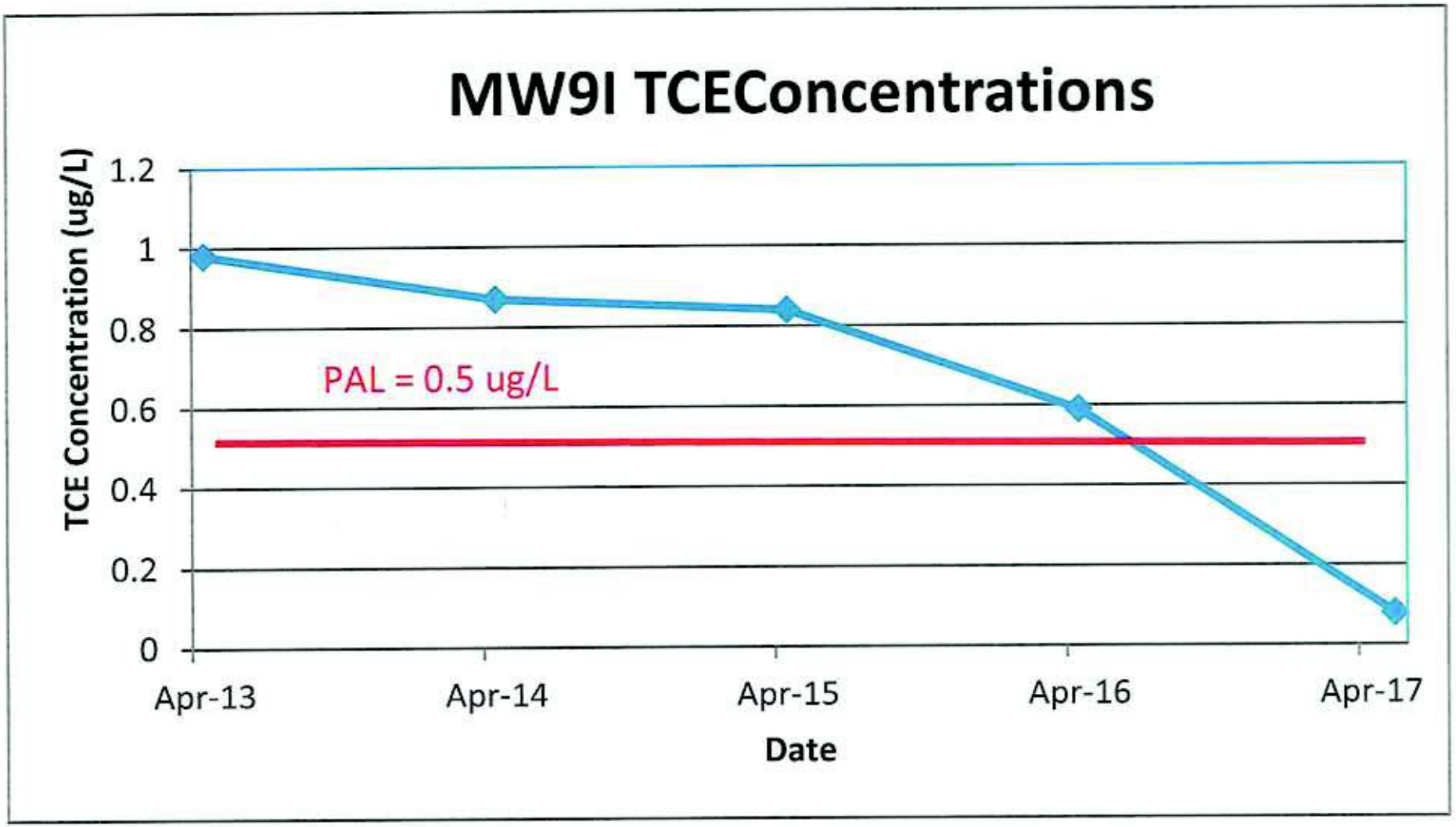
ES = 0.2 ug/L
PAL = 0.02 ug/L
Apr-13
Apr-14
Apr-15
Apr-16
Apr-17
Date


MW9I TCEConcentrations
TCE Concentration (ug/L)
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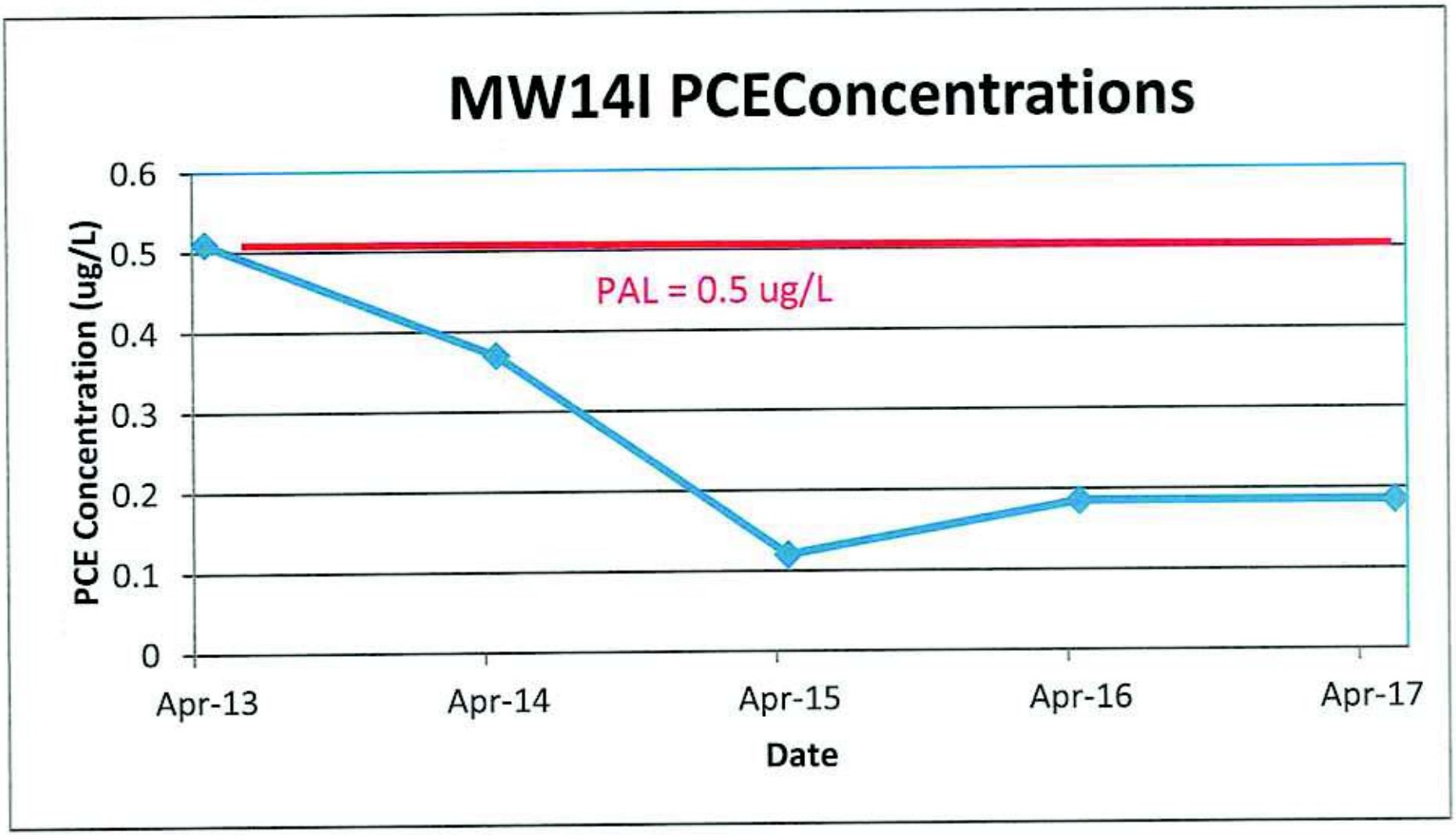
1
0.8
0.6
0.4
0.2
0
PAL = 0.5 ug/L
Apr-13
Apr-14
Apr-15
Apr-16
Apr-17
Date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PCE Concentration (ug/L)
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0.4
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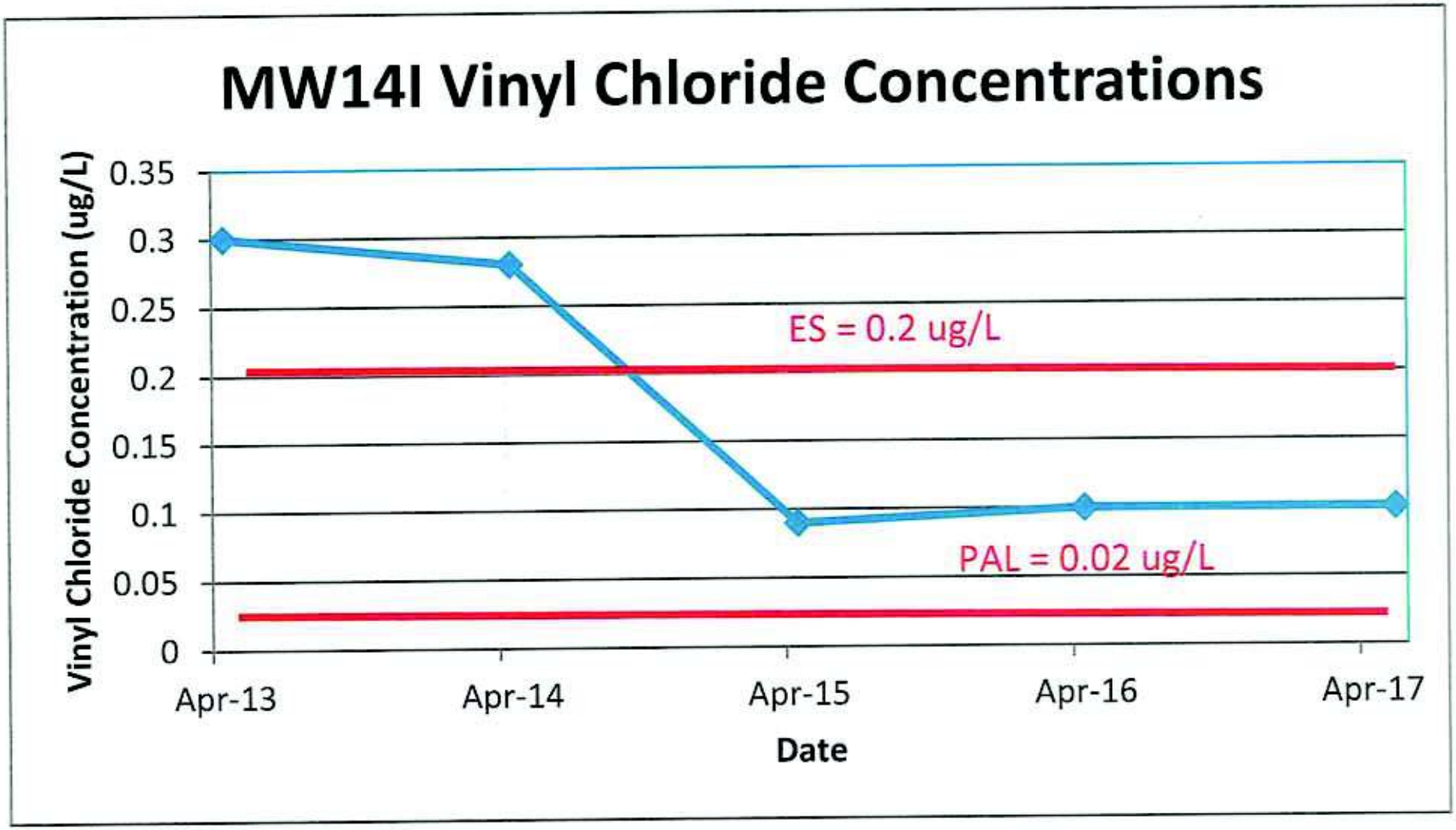
0.1
0
PAL = 0.5 ug/L
Apr-13
Apr-14
Apr-15
Apr-16
Apr-17
Date


MW14I Vinyl Chloride Concentrations
Vinyl Chloride Concentration (ug/L)
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0.3
0.25
0.2
0.15
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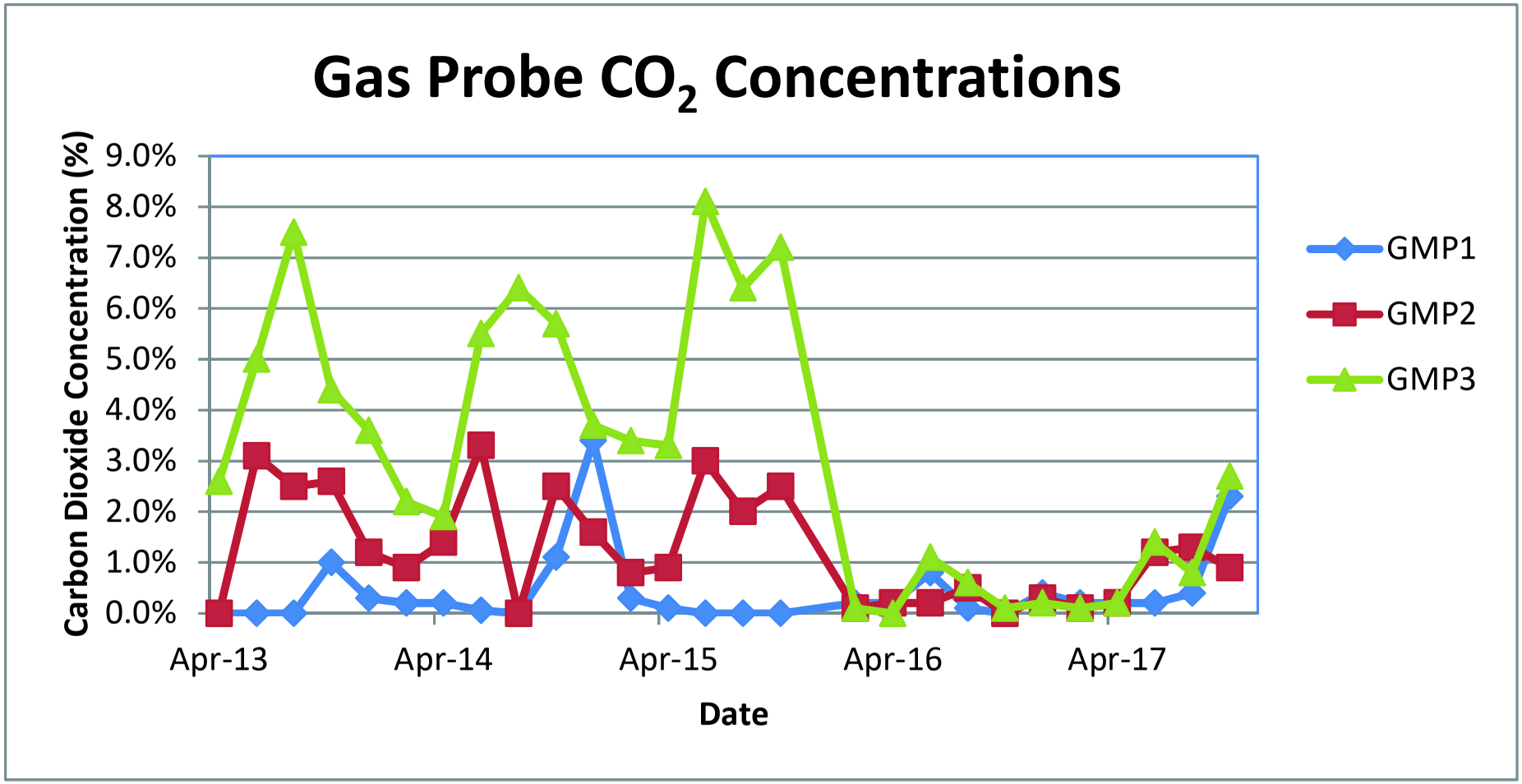
0.05
0
ES = 0.2 ug/L
PAL = 0.02 ug/L
Apr-13
Apr-14
Apr-15
Apr-16
Apr-17
Date


Gas Probe CO_2 Concentrations
Carbon Dioxide Concentration (%)
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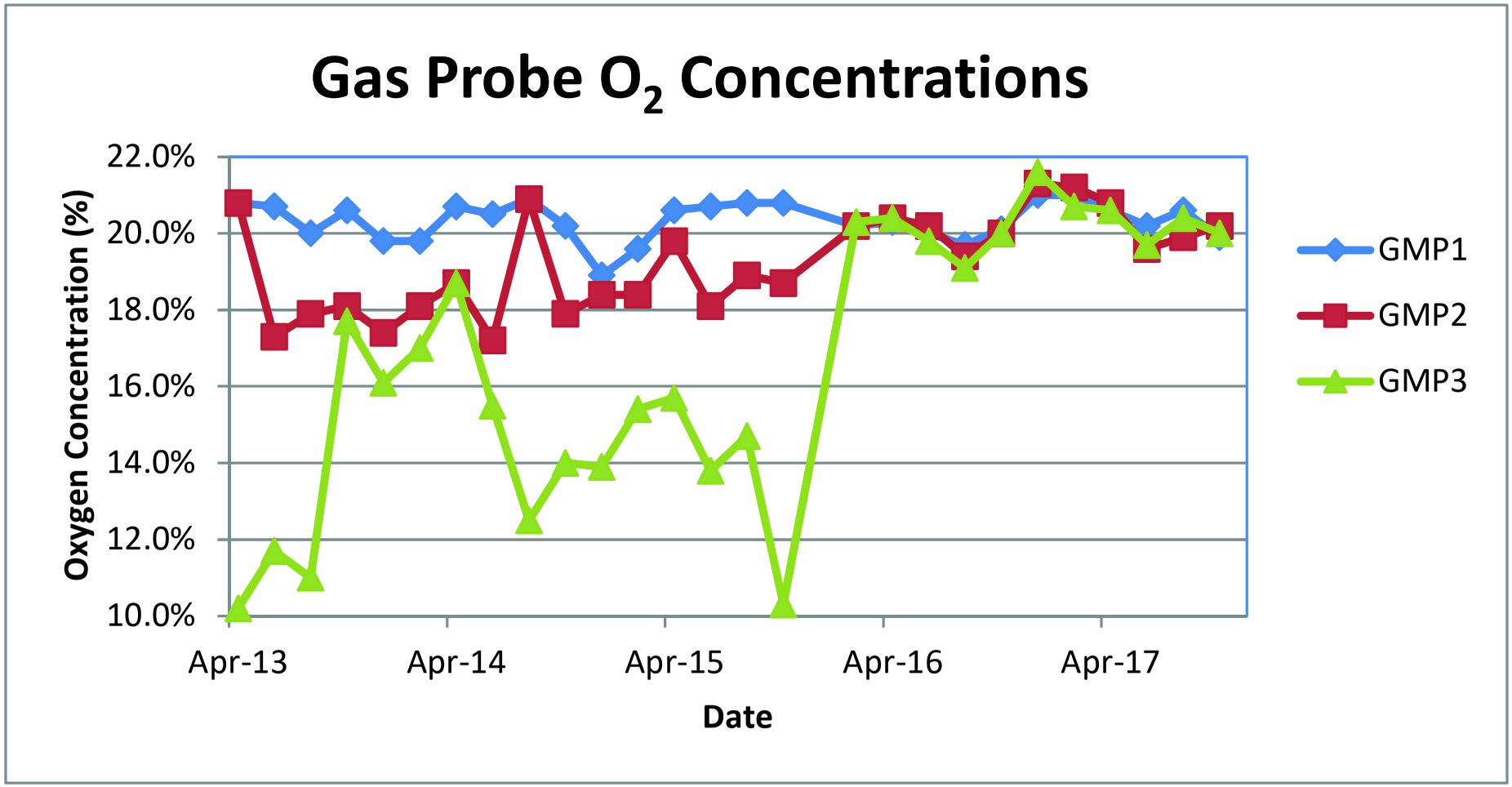
7.0%
6.0%
5.0%
4.0%
3.0%
2.0%
1.0%
0.0%
Apr-13
Apr-14
Apr-15
Apr-16
Apr-17
Date
GMP1
GMP2
GMP3


Gas Probe O_2 Concentrations
Oxygen Concentration (%)
22.0%
20.0%
18.0%
16.0%
14.0%
12.0%
10.0%
Apr-13
Apr-14
Apr-15
Apr-16
Apr-17
Date
GMP1
GMP2
GMP3

APPENDIX E: Five-Year Review Site Inspection Checklist, Photo Key Map, Photographs

Site Inspection Checklist

I. SITE INFORMATION	
Site name: **City of Stoughton Landfill**	**Date of inspection:** **10/27/2017**
Location and Region: **Stoughton, WI (Region V)**	**EPA ID:** **WID980901219**
Agency, office, or company leading the FYR: Jason Lowery, Wisconsin DNR	**Weather/temperature:** 37 degrees F and cloudy

Remedy Includes: (Check all that apply)

☒ Landfill cover/containment	☐ Monitored natural attenuation
☒ Access controls	☐ Groundwater containment
☒ Institutional controls	☐ Vertical barrier walls
☐ Groundwater pump and treatment	☒ Other: Waste consolidation; passive LF gas collection; stormwater controls/drainage controls
☐ Surface water collection and treatment	

Attachments:

☐ Inspection team roster attached	☒ Site map attached

II. INTERVIEWS (Check all that apply)

1. **O&M Site Manager** **Jason Lowery, Hydrogeologist, 10/27/2017**

   Interviewed: ☐ at site ☐ at office ☐ by phone Phone Number: 608-267-7570

   Problems, suggestions: ☒ Report attached

   See comments on form; inside

2. **O&M Staff** **Eli Sankey, SCS, Fiel Engineer, 10/27/2017**

   Interviewed: ☒ at site ☐ at office ☐ by phone Phone Number: 715-308-0187

   Problems, suggestions: ☒ Report attached

   See comments on form; inside. Wisconsin DNR is responsible for site O&M. This is carried out by a contractor working for WI DNR. The City of Stoughton has agreed informally to perform additional fence inspections and maintenance.

3. **Local regulatory authorities and response agencies** (i.e., State and Tribal offices, emergency response office, police department, office of public health or environmental health, zoning office, recorder of deeds, or other city and county offices, etc.) Fill in all that apply.

   Agency: City of Stoughton Parks Dept.Pat Groom

   Contact: Name , Maintenance Supervisor, 10/27/2017, P: 608-873-6746

   Problems, suggestions: ☒ Report attached

   See comments attached in form. Lowery spoke with Pat Groom on 10/31/17. Mr Groom indicated that the City of Stoughton would replace the broken slat in the southwest portion of the site and add “No trespassing” signs along the west fence line.

   Agency: Click or tap here to enter text.

   Contact: Name , Title , Click or tap to enter a date., P: Phone Number

   Problems, suggestions: ☐ Report attached

   Click or tap here to enter text.

   Agency: Click or tap here to enter text.

   Contact: Name , Title , Click or tap to enter a date., P: Phone Number

   Problems, suggestions: ☐ Report attached

   Click or tap here to enter text.

   Agency: Click or tap here to enter text.

   Contact: Name , Title , Click or tap to enter a date., P: Phone Number

   Problems, suggestions:

   Click or tap here to enter text.

4. **Other Interviews (optional):** ☒ Report attached

Giang Van Nguyen of US EPA Region 5 attended the inspection. O&M Contractor semi-annual inspection was also conducted on the same date. Their report is attached as Appendix B, dated November 14, 2017. A photo key map and photos taken by the author are also attached as part of this checklist.

III. ON-SITE DOCUMENTS & RECORDS VERIFIED (Check all that apply)

1. O&M Documents

☒ O&M manual	☒ Readily available	☒ Up to date	☐ N/A
☒ As-built drawings	☒ Readily available	☒ Up to date	☐ N/A
☒ Maintenance logs	☒ Readily available	☒ Up to date	☐ N/A

Remarks: **Kept by WI DNR and also O&M Contractor**

2. Site-Specific Health and Safety Plan ☒ Readily available

☒ Contingency Plan/Emergency Response Plan ☒ Readily available

Remarks: Kept by WI DNR and also O&M Contractor

3. O&M and OSHA Training Records

☒ Readily available ☒ Up to date ☐ N/A

Remarks: Kept by O&M Contractor

4. Permits and Service Agreements

☐ Air discharge permit	☐ Readily available	☐ Up to date	☒ N/A
☐ Effluent discharge	☐ Readily available	☐ Up to date	☒ N/A
☐ Waste disposal, POTW	☐ Readily available	☐ Up to date	☒ N/A

☐ Other permits: Click or tap here to enter text.

Remarks: Click or tap here to enter text.

5. Gas Generation Records

☐ Readily available ☐ Up to date ☒ N/A

Remarks: passive system

6. Settlement Monument Records

☐ Readily available ☐ Up to date ☒ N/A

Remarks: none maintained

7. Groundwater Monitoring Records

☒ Readily available ☐ Up to date ☐ N/A

Remarks: Kept by WI DNR as paper and electronic GEMS system. Paper on file with USEPA

8. Leachate Extraction Records

☐ Readily available ☐ Up to date ☒ N/A

Remarks: Click or tap here to enter text.

9. Discharge Compliance Records

☐ Air ☐ Readily available ☐ Up to date ☒ N/A

☐Water (effluent) ☐ Readily available ☐ Up to date ☒ N/A

Remarks: Click or tap here to enter text.

10. Daily Access/Security Logs

☐ Readily available ☐ Up to date ☒ N/A

Remarks: No daily access or activities

IV. O&M COSTS

1. O&M Organization

☐ State in-house ☒ Contractor for State

☐ PRP in-house ☐ Contractor for PRP

☐ Federal Facility in-house ☐ Contractor for Federal Facility

Remarks: Click or tap here to enter text.

2. O&M Cost Records

☒Readily available ☐ Up to date ☐ Funding mechanism/agreement in place

Original O&M cost estimate Click or tap here to enter text. ☐ Breakdown attached

Total annual cost by year for review period if available

From	To	Total cost	
4/1/2016	10/27/2017	$12,875	☐ Breakdown attached
From Click or tap to enter a date.	To Click or tap to enter a date.	Total cost Click or tap here to enter text.	☐ Breakdown attached
From Click or tap to enter a date.	To Click or tap to enter a date.	Total cost Click or tap here to enter text.	☐ Breakdown attached
From Click or tap to enter a date.	To Click or tap to enter a date.	Total cost Click or tap here to enter text.	☐ Breakdown attached
From Click or tap to enter a date.	To Click or tap to enter a date.	Total cost Click or tap here to enter text.	☐ Breakdown attached

3. Unanticipated or Unusually High O&M Costs During Review Period

Describe costs and reasons:

N/A

V. ACCESS AND INSTITUTIONAL CONTROLS

☒ Applicable ☐ N/A

1. Fencing Damaged ☒ Location shown on site map ☒ Gates secured ☐ N/A

Remarks: One broken slat was observed near the southwest portion of the landfill (see photograph 17 and photo key map)

2. Other Access Restrictions ☐ Location shown on site map ☐ Gates secured

Remarks: Signs were up-to-date (see photographs 1 & 2). Additional signs along the west fence line are needed to minimize the chances of disc golf players climbing over the fence to retrieve frisbees when playing disc golf on the course adjacent west of the landfill.

3. Institutional Controls (ICs)

A. Implementation and Enforcement

Site conditions imply ICs not properly implemented	☐ Yes	☒ No	☐ N/A
Site conditions imply ICs not being fully enforced	☐ Yes	☒ No	☐ N/A
Type of monitoring (*e.g.*, self-reporting, drive by)	Monitored by WI DNR		
Frequency	As needed		

Responsible party/agency WI DNR

Contact: Jason Lowery, Hydrogeologist, 10/27/2017, P: (608-267-7570

Reporting is up-to-date	☐ Yes	☐ No	☒ N/A
Reports are verified by the lead agency	☐ Yes	☐ No	☒ N/A
Specific requirements in deed or decision documents have been met	☒ Yes	☐ No	☐ N/A
Violations have been reported	☐ Yes	☐ No	☒ N/A

Other problems or suggestions:

Deed restrictions required by the ROD to prevent building or well construction have been put into place by the City of Stoughton. The 1997 Consent Decree with the City requires no recreational use.

B. Adequacy ☒ ICs are adequate ☐ ICs are inadequate ☐ N/A

Remarks: Click or tap here to enter text.

4. General

A. Vandalism/Trespassing ☐ Location shown on site map ☐ No vandalism evident

Remarks: A disc golf player was observed climbing the west fence line to retrieve a frisbee that flew over the fence and into the landfill.

B. Land use changes on site ☒ N/A

Remarks: Click or tap here to enter text.

C. Land use changes off site ☒ N/A

Remarks: Click or tap here to enter text.

VI. GENERAL SITE CONDITIONS

1. Roads ☐ Applicable ☐ N/A

A. Roads damaged ☐ Location shown on site map ☒ Roads adequate ☐ N/A

Remarks: Click or tap here to enter text.

B. Other Site Conditions

Remarks: Click or tap here to enter text.

VII. LANDFILL COVERS

1. Landfill Surface ☒ Applicable ☐ N/A

A. Settlement (Low Spots) ☐ Location Shown on Site Map ☒ Settlement Not Evident

Areal Extent: Click or tap here to enter text. Depth: Click or tap here to enter text.

Remarks: Click or tap here to enter text.

Site Inspection Checklist

B. Cracks ☐ Location Shown on Site Map ☒ Cracking Not Evident

Lengths: Click or tap here to enter text. Widths: Click or tap here to enter text. Depths: Click or tap here to enter text.

Remarks: Click or tap here to enter text.

C. Erosion ☐ Location Shown on Site Map ☒ Erosion Not Evident

Areal Extent: Click or tap here to enter text. Depth: Click or tap here to enter text.

Remarks: Click or tap here to enter text.

D. Holes ☐ Location Shown on Site Map ☐ Holes Not Evident

Areal Extent: Click or tap here to enter text. Depth: Click or tap here to enter text.

Remarks: Animal burrows noted near monitoring well MW-2D (see photograph 5) and will be repaired.

E. Vegetative Cover ☐ Grass ☐ Cover Properly Established

☐ Tress/Shrubs (indicate size and locations on a diagram ☒ No Signs of Stress

Remarks: Recently mowed and in good condition.

F. Alternative Cover (armored rock, concrete, etc.) ☒ N/A

Remarks: Click or tap here to enter text.

G. Bulges ☐ Location Shown on Site Map ☒ Bulges Not Evident

Areal Extent: Click or tap here to enter text. Height: Click or tap here to enter text.

Remarks: Click or tap here to enter text.

H. Wet Areas/Water Damage ☐ Wet Areas/Water Damage Not Evident

☐ Wet Areas	☐ Location Shown on Site Map	Areal Extent: Click or tap here to enter text.
☒ Ponding	☐ Location Shown on Site Map	Areal Extent: Click or tap here to enter text.
☐ Seeps	☐ Location Shown on Site Map	Areal Extent: Click or tap here to enter text.
☐ Soft Subgrade	☐ Location Shown on Site Map	Areal Extent: Click or tap here to enter text.

Remarks: Ponding was observed in the south storm water ditch (photographs 10 & 11). Ponding could be mitigated with removal of vegetation in downstream culvert (photodraph 18).

I. Slope Instability ☐ Location Shown on Site Map ☒ Slope Instability Not Evident

☐ Slides Areal Extent: Click or tap here to enter text.

Remarks: Click or tap here to enter text.

2. Benches ☐ Applicable ☒ N/A

(Horizontally constructed mounds of earth placed across a steep landfill side slope to interrupt the slope in order to slow down the velocity of surface runoff and intercept and convey the runoff to a lined channel.)

A. Flows Bypass Bench ☐ Location Shown on Site Map ☒ N/A or Okay

Remarks: Click or tap here to enter text.

B. Bench Breached ☐ Location Shown on Site Map ☒ N/A or Okay

Remarks: Click or tap here to enter text.

C. Bench Overtopped ☐ Location Shown on Site Map ☒ N/A or Okay

Remarks: Click or tap here to enter text.

3. Letdown Channels ☐ Applicable ☒ N/A

(Channel lined with erosion control mats, riprap, grout bags, or gabions that descend down the steep side slope of the cover and will allow the runoff water collected by the benches to move off of the landfill cover without creating erosion gullies.)

A. Settlement ☐ Location Shown on Site Map ☒ Settlement Not Evident

Areal Extent: Click or tap here to enter text. Depth: Click or tap here to enter text.

Remarks: Click or tap here to enter text.

B. Material Degradation ☐ Location Shown on Site Map ☒ Degradation Not Evident

Material Type: Click or tap here to enter text. Areal Extent: Click or tap here to enter text.

Remarks: Click or tap here to enter text.

C. Erosion ☐ Location Shown on Site Map ☒ Erosion Not Evident

Areal Extent: Click or tap here to enter text. Depth: Click or tap here to enter text.

Remarks: Click or tap here to enter text.

D. Undercutting ☐ Location Shown on Site Map ☒ Undercutting Not Evident

Areal Extent: Click or tap here to enter text. Depth: Click or tap here to enter text.

Remarks: Click or tap here to enter text.

E. Obstructions ☒ Location Shown on Site Map ☐ Undercutting Not Evident

Type: Dead vegetation I culvert

Areal Extent: Click or tap here to enter text. Size: Click or tap here to enter text.

Remarks: Dead tree branches were observed in the water on the west side of the culvert in the southwest portion of the site (photograph 18). Branches may be partially blocking flow into the culvert and leading to ponding in the storm water ditch on the southern portin of the landfill.

F. Excessive Vegetative Growth ☐ Location Shown on Site Map ☒ Excessive Growth Not Evident

Areal Extent: Click or tap here to enter text. ☐ Vegetation in channels does not obstruct flow

Remarks: Click or tap here to enter text.

4. Cover Penetrations ☒ Applicable ☐ N/A

A. Gas Vents ☐ Active ☐ Passive

☐ Properly secured/locked ☐ Functioning ☐ Routinely sampled

☐ Good condition ☐ Evidence of leakage at penetration

☒ Needs Maintenance ☐ N/A

Remarks: Gas vents need to be labeled (see photograph 6)

B. Gas Monitoring Probes

☒ Properly secured/locked ☐ Functioning ☐ Routinely sampled

☐ Good condition ☐ Evidence of leakage at penetration

☐ Needs Maintenance ☐ N/A

Remarks: Click or tap here to enter text.

C. Monitoring Wells

☒ Properly secured/locked ☐ Functioning ☒ Routinely sampled

☐ Good condition ☐ Evidence of leakage at penetration

☒ Needs Maintenance ☐ N/A

Remarks: Several groundwater monitoring wells were not labeled (photograph 4). Groundwater was flowing out of three monitoring wells (photograph 14, 15, and 16).

D. Leachate Extraction Wells

☐ Properly secured/locked ☐ Functioning ☐ Routinely sampled

☐ Good condition ☐ Evidence of leakage at penetration

☐ Needs Maintenance ☒ N/A

Remarks: Click or tap here to enter text.

E. Settlement Monuments ☐ Located ☐ Routinely Surveyed ☒ N/A

Remarks: Click or tap here to enter text.

5. Gas Collection and Treatment ☐ Applicable ☒ N/A

A. Gas Treatment Facilities

☐ Flaring ☐ Thermal Destruction ☐ Collection for Reuse

☐ Good condition ☐ Needs Maintenance

Remarks: Click or tap here to enter text.

B. Gas Collection Wells, Manifolds, and Piping

☐ Good condition ☐ Needs Maintenance ☒ N/A

Remarks: Click or tap here to enter text.

C. Gas Monitoring Facilities (e.g. gas monitoring of adjacent homes or buildings)

☐ Good condition ☐ Needs Maintenance ☒ N/A

Remarks: Click or tap here to enter text.

6. Cover Drainage Layer ☐ Applicable ☒ N/A

A. Outlet Pipes Inspected ☐ Functioning ☒ N/A

Remarks: Click or tap here to enter text.

B. Outlet Rock Inspected ☐ Functioning ☒ N/A

Remarks: Click or tap here to enter text.

7. Detention/Sediment Ponds ☐ Applicable ☒ N/A

A. Siltation ☐ Siltation Not Evident ☒ N/A

Areal Extent: Click or tap here to enter text. Depth: Click or tap here to enter text.

Remarks: Click or tap here to enter text.

B. Erosion ☐ Erosion Not Evident

Areal Extent: Click or tap here to enter text. Depth: Click or tap here to enter text.

Remarks: Click or tap here to enter text.

C. Outlet Works ☐ Functioning ☒ N/A

Remarks: Click or tap here to enter text.

D. Dam ☐ Functioning ☒ N/A

Remarks: Click or tap here to enter text.

8. Retaining Walls ☐ Applicable ☒ N/A

A. Deformations ☐ Location Shown on Site Map ☐ Deformation Not Evident

Horizontal Displacement: Click or tap here to enter text.

Vertical Displacement: Click or tap here to enter text.

Rotational Displacement: Click or tap here to enter text.

Remarks: Click or tap here to enter text.

B. Degradation ☐ Location Shown on Site Map ☐ Deformation Not Evident

Remarks: Click or tap here to enter text.

9. Perimeter Ditches/Off-Site Discharge ☒ Applicable ☐ N/A

A. Siltation ☒ Location Shown on Site Map ☐ Siltation Not Evident

Areal Extent: Click or tap here to enter text. Depth: Click or tap here to enter text.

Remarks: Some siltation may have occurred in south ditch near location of standing water. Does not appear to be significant.

B. Vegetative Growth ☒ Location Shown on Site Map ☐ N/A

☐ Vegetation Does Not Impede Flow

Areal Extent: Click or tap here to enter text. Type: Click or tap here to enter text.

Remarks: Siltation may have allowed some cattails to grow in south ditch with some ponding, but culverts are clean. Dead vegetation may be blocking flow upstream of culvert near main entrance.

C. Erosion ☐ Location Shown on Site Map ☒ Erosion Not Evident

Areal Extent: Click or tap here to enter text. Depth: Click or tap here to enter text.

Remarks: Click or tap here to enter text.

D. Discharge Structure ☐ Functioning ☒ N/A

Remarks: Click or tap here to enter text.

VIII. VERTICAL BARRIER WALLS

☐ Applicable ☒ N/A

1. Settlement ☐ Location Shown on Site Map ☐ Settlement Not Evident

Areal Extent: Click or tap here to enter text. Depth: Click or tap here to enter text.

Remarks: Click or tap here to enter text.

2. Performance Monitoring Type of Monitoring: Click or tap here to enter text.

☐ Performance Not Monitored ☐ Evidence of Breaching

Frequency: Click or tap here to enter text. Head Differential: Click or tap here to enter text.

Remarks: Click or tap here to enter text.

IX. GROUNDWATER/SURFACE WATER REMEDIES

☐ Applicable ☒ N/A

1. Groundwater Extraction Wells, Pumps, and Pipelines ☐ Applicable ☒ N/A

A. Pumps, Wellhead Plumbing, and Electrical ☐ N/A

☐ Good Condition ☐ All Required Wells Properly Operating ☐ Needs Maintenance

Remarks: Click or tap here to enter text.

B. Extraction System Pipelines, Valves, Valve Boxes, and Other Appurtenances

☐ Good Condition ☐ Needs Maintenance

Remarks: Click or tap here to enter text.

C. Spare Parts and Equipment ☐ Needs to be Provided

☐ Readily Available ☐ Good Condition ☐ Requires Upgrade

Remarks: Click or tap here to enter text.

2. Surface Water Collection Structures, Pumps, and Pipelines ☐ Applicable ☒ N/A

A. Collection Structures, Pumps, and Electrical

☐ Good Condition ☐ Needs Maintenance

Remarks: Click or tap here to enter text.

B. Surface Water Collection System Pipelines, Valves, Valve Boxes, and Other Appurtenances

☐ Good Condition ☐ Needs Maintenance

Remarks: Click or tap here to enter text.

C. Spare Parts and Equipment ☐ Needs to be Provided

☐ Readily Available ☐ Good Condition ☐ Requires Upgrade

Remarks: Click or tap here to enter text.

3. Treatment System ☐ Applicable ☒ N/A

A. Treatment Train (Check components that apply)

☐ Metals removal ☐ Oil/Water Separation ☐ Bioremediation

☐ Air Stripping ☐ Carbon Absorbers

☐ Filters Click or tap here to enter text.

☐ Additive (e.g. chelation agent, flocculent) Click or tap here to enter text.

☐ Others Click or tap here to enter text.

☐ Good Condition ☐ Needs Maintenance

☐ Sampling ports properly marked and functional

☐ Sampling/maintenance log displayed and up to date

☐ Equipment properly identified

☐ Quantity of groundwater treated annually Click or tap here to enter text.

☐ Quantity of surface water treated annually Click or tap here to enter text.

Remarks: Click or tap here to enter text.

B. Electrical Enclosures and Panels (properly rated and functional)

☒ N/A ☐ Good Condition ☐ Needs Maintenance

Remarks: Click or tap here to enter text.

C. Tanks, Vaults, Storage Vessels ☒ N/A

☐ Proper Secondary Containment ☐ Good Condition ☐ Needs Maintenance

Remarks: Click or tap here to enter text.

D. Discharge Structure and Appurtenances

☒ N/A ☐ Good Condition ☐ Needs Maintenance

Remarks: Click or tap here to enter text.

E. Treatment Building(s)

☒ N/A ☐ Good condition (esp. roof and doorways)

☐ Needs repair ☐ Chemicals and equipment properly stored

Remarks Click or tap here to enter text.

F. Monitoring Wells (Pump and Treatment Remedy) ☒ N/A

☐ Properly secured/locked ☐ Functioning

☐ Routinely sampled ☐ All required wells located

☐ Good condition ☐ Needs Maintenance

Remarks Click or tap here to enter text.

4. Monitoring Data

A. Monitoring Data:

☒ Is Routinely Submitted on Time ☐ Is of Acceptable Quality

B. Monitoring Data Suggests:

☒ Groundwater plume is effectively contained ☒ Contaminant concentrations are declining

5. Monitored Natural Attenuation

A. Monitoring Wells (natural attenuation remedy) ☐ N/A

☒ Properly secured/locked ☒ Functioning ☒ Routinely sampled

☐ All required wells located ☒ Needs Maintenance ☐ Good condition

Remarks: Monitoring wells need to be labeled and plugs need to be installed in three monitoring wells to stop artesian flow conditions. Unable to locate monitoring well MW-12 cluster.

X. OTHER REMEDIES

If there are remedies applied at the site which are not covered above, attach an inspection sheet describing the physical nature and condition of any facility associated with the remedy. An example would be soil vapor extraction.

XI. OVERALL OBSERVATIONS

1. Implementation of the Remedy

Describe issues and observations relating to whether the remedy is effective and functioning as designed. Begin with a brief statement of what the remedy is to accomplish (i.e., to contain contaminant plume, minimize infiltration and gas emission, etc.).

See text of FYR for detailed discussion.

2. Adequacy of O&M

Describe issues and observations related to the implementation and scope of O&M procedures. In particular, discuss their relationship to the current and long-term protectiveness of the remedy.

See text of FYR for detailed discussion.

3. Early Indicators of Potential Remedy Problems

Describe issues and observations such as unexpected changes in the cost or scope of O&M or a high frequency of unscheduled repairs that suggest that the protectiveness of the remedy may be compromised in the future.

Click or tap here to enter text.

4. Early Indicators of Potential Remedy Problems

Describe possible opportunities for optimization in monitoring tasks or the operation of the remedy.

Click or tap here to enter text.

Site Map

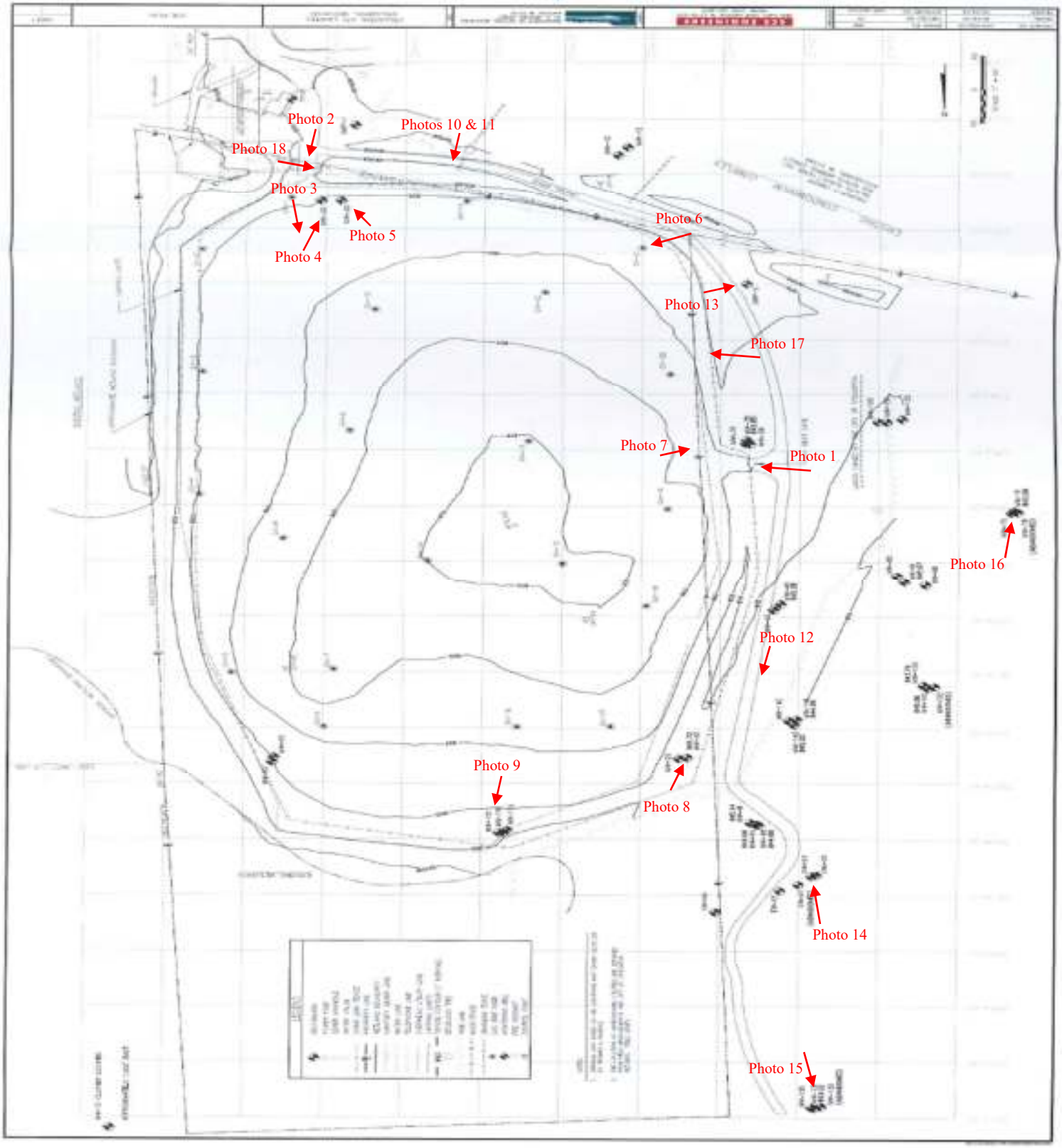


Photo 2
Photos 10 & 11
Photo 18
Photo 3
Photo 5
Photo 4
Photo 6
Photo 13
Photo 17
Photo 7
Photo 1
Photo 16
Photo 12
Photo 9
Photo 8
Photo 14
Photo 15

Stoughton Landfill Photographs, October 27, 2017

Photo 1: View east toward West Gate. Sign is up-to-date.

Photo 2: View north toward Main Gate at SE corner of site. Sign is up-to-date.

Stoughton Landfill Photographs, October 27, 2017

Photo 3: View north from south portion of site. Cap was in good condition.

Photo 4: View toward monitoring well MW-2S. Several wells were not properly labeled.

Stoughton Landfill Photographs, October 27, 2017

Photo 5: Animal burrows surrounding monitoring well MW-2D

Photo 6: View NE toward Gas Vent GV-21. Gas vents were not properly labeled.

Photo 7: View west toward polyethylene tank in western portion of the site and next to West Gate

Stoughton Landfill Photographs, October 27, 2017

Photo 8: View south toward monitoring well MW-5D and storm water drainage along west edge of landfill.

Stoughton Landfill Photographs, October 27, 2017

Photo 9: View north toward monitoring well MW-11S, 11I, and 11D nest followed by north fenceline.

Stoughton Landfill Photographs, October 27, 2017

Photo 10: View north toward drainage channel (with cattails) south of landfill.

Photo 11: Close-up of ponded water in drainage channel shown in previous photograph (south drainage channel)

Photo 12: View north along west fence line. Disc golf players were observed climbing the fence to retrieve frisbees.

Photo 13: View west toward gas probe GMP-3.

Photo 14: View toward monitoring well OW-02. Well is flowing and cap is floating on top of casing.

Stoughton Landfill Photographs, October 27, 2017

Photo 15: View toward monitoring well 13I. Well is flowing and plug is on ground.

Photo 16: View toward monitoring well MW-7I. Well is flowing.

Stoughton Landfill Photographs, October 27, 2017

Photo 17: View east toward broken slat on west fence line.

Photo 18: View west toward west end of culvert near Main Gate. Drainage channel partially blocked with branches.

APPENDIX F: DNR Landfill Compliance Inspection Report, September 22, 2017

State of Wisconsin
DEPARTMENT OF NATURAL RESOURCES
SCR Headquarters
3911 Fish Hatch
Fitchburg WI 53711

Scott Walker, Governor
Kurt A. Thiede, Interim Secretary
Telephone 608-266-2621
Toll Free 1-888-936-7463
TTY Access via relay - 711

September 22, 2017

File Ref: FID 113005950
Dane
SW / CMEL

Jason Lowery
Wisconsin DNR
PO Box 7921
Madison, WI 53701

Subject: Compliance At Closed Landfill Inspection at City of Stoughton #133 (Amundson Park)

Dear Mr. Lowery:

On September 7, 2017, the department conducted a closed landfill compliance inspection at Amundson Park located at Amundson Pkwy & Skogdalen Dr, Stoughton, Wisconsin. A copy of the completed inspection form and the 22 photos are enclosed.

At the time of the inspection the Department found no evidence of noncompliance with the solid waste requirements stated in Chapters NR 500 to 538, Wisconsin Administrative Code. The inspection form identified 2 items that were not inspected (NI). Since the items were not inspected a compliance determination was not made. There was one area of concern. Several of the monitoring wells that were located were not labeled per NR 507.04(4). Please see that the wells are labeled with, at a minimum, the devices name and 3-digit identification number assigned to each well by the department.

If you have any questions or comments, please feel free to contact me at (608) 273-5608.

Thank you for your cooperation.

Sincerely,

Daniel Werner
Waste Management Specialist

cc: John Halverson, Streets Supervisor, City of Stoughton
Leslie Busse, PE, SCS Engineers
SC Facility File

State of Wisconsin
Department of Natural Resources
Form 4430-5 (R. 03/06)

COMPLIANCE MONITORING AND EVALUATION FORM

A. GENERAL INFORMATION

FIST SEQ #: 60518

Facility Name (current)	FID #	EPA ID #	Case #	Complaint #
STOUGHTON CTY (AMUNDSON PARK)	113005950	WID980901219	60518	

Street/Location	Notification Status
AMUNDSON PKWY & SKOGDALEN DR	LANDFILL UNCLASSIFIED

City	Zip Code	County	Type of Contact	Contact Date/Time
STOUGHTON	53589-	DANE	FIELD	09/07/2017 00:00

Contact Name/Phone Number		Staff Assigned to Site	Case Close Out Date
STEVEN B SMITH, BT2 CONSULT	(608) 224-2830	WERNER, DANIEL	

B. FACILITY INSPECTED AS

Inspection Type
LANDFILL UNCLASSIFIED

C. NOTIFICATION CHANGE

Date processed SHWIMS____________, EPA Data System____________

Status Change: Field Verified Status Is

Name Change: Former Name

D. ACTIVITY TYPES

Lic/RU/RA	Staff Person	Lead Program	Activity Type
133	WERNER, DANIEL B	SOLID WASTE	COMPLIANCE CLOSED LANDFILL

E. ACTIONS AND VIOLATIONS

Action Date	Action Type	Close Date	SNC	Comments
09/22/2017	LETTER	09/22/2017		

F. CASE CONTACTS

G. COMMENTS

Closed landfill inspection

SITE NARRATIVE

Narrative:

On 9/7/17, Dan Werner met with John Halverson (City of Stoughton Streets Supervisor) at the Stougthon Closed Landfill #133. Werner and Halverson walked the site. The cap was in good shape, vegetation looked recently mown. Werner and Halverson could not find all of the monitoring wells, but all those found were locked. About half were labeled.

Region Signature(s)		Date Signed	
Daniel Werner	WERNER, DANIEL	9/22/17	

CLOSED LANDFILL INSPECTION FORM

Section 1: General Facility Requirements

A. Gate provided at the entrance and kept locked when authorized personnel not on site.	C	506.07(1)(j)
B. Entrance area clean and no solid waste indiscriminately dumped (e.g., operating an unlicensed storage or disposal facility).	C	289.31(1)
C. Sign posted at the entrance to the facility indicating that the landfill is closed, and includes the landfill name, license number, penalty for unauthorized use and any other pertinent information unless the approved final use does not require signage.	NA	506.08(1)(b)
D. Access to the landfill restricted by use of gates, fencing, or other appropriate means unless approved final use allowing access (e.g. baseball playfields, soccer fields, dog runs, etc.) does not require these restrictions.	C	506.08(2)

Section 2: Sediment and Erosion Control

A. Runoff channels are protected to prevent scour and erosion that generates sediment.	C	506.07(2)(a)(5)
B. Storm water drainage ditches, structures and sedimentation basins cleaned and maintained.	C	506.07(2)(b)
C. The entire solid waste disposal area is covered with compacted earth and final grades are adequately sloped to allow storm water runoff. (e.g. no depressions with ponded water or wetland vegetation on the disposal area).	C	506.08(3)(a)
D. Storm water run-on diverted around all areas used for solid waste disposal to limit erosion of the cover soils and infiltration.	C	506.08(3)(b)
E. The finished surface of the disposal area is covered with a minimum of 6 inches of topsoil.	C	506.08(3)(d)
F. Vegetation established to minimize erosion (e.g. no bare spots or woody vegetation).	C	506.08(4)

Section 3: Gas Control

A. Effective means being utilized to prevent migration of explosive gases generated by the waste fill (e.g. no noticeable gas odors or indication of stressed vegetation, and gas control system operating, if applicable).	C	506.07(4)

Section 4: Leachate Collection System

A. Any liquid that comes in contact with waste being handled as leachate and properly managed (e.g. no leachate seeps or discolored surface water/soil).	NA	506.07(5)(b)
B. Leachate removal from all leachate storage structures to maintain gravity flow (e.g. no leachate storage on landfill base or liner).	NA	506.07(5)(a)
C. All leachate removed from the leachate collection system is being disposed of at a wastewater treatment facility unless the facility has approval to recirculate leachate or gas condensate.	NA	506.07(5)(a)
D. Leachate lines cleaned on an annual basis or other frequency approved by the Department.	NA	506.07(5)(c)
E. Leachate head wells protected and being monitored for leachate head levels.	NA	507.04(3)

CLOSED LANDFILL INSPECTION FORM

Section 5: Monitoring Devices

A. Monitoring and sampling devices protected to prevent contaminant entry and damage (e.g. caps present and locked, protective casing in good condition and not affected by frost heave or sunk relative to the well casing that prevents closure).	C	507.04(3)
B. All monitoring devices clearly and permanently labeled on the outside of the device.	CA	507.04(4)
C. Any permanent monitoring well no longer being used to gather information is properly abandoned within 60 days after its use has been discontinued.	NI	141.25(1)(b)
D. Any monitoring devise that has been damaged, provides a conduit to the subsurface or otherwise fails to function is properly abandoned and replaced within 60 days after discovery.	NI	507.13
E. Surface water sampling locations surveyed and permanently and clearly marked.	NA	507.23(2)

Section 6: Final Use

A. Waste disposal area not being used for agricultural purposes unless approved by the Department.	C	506.085(1)
B. No structures or other development over waste disposal area unless approved by the Department.	C	506.085(2)
C. No excavation of the final cover or any waste materials.	C	506.085(3)

Key: C: Compliance CA: Compliance with Concern R: Returned to Compliance X: Non-Compliance NA: Not Applicable ND: Not Determined NI: Not Inspecte
Y: Yes N: No UN: Unknown
Revision : 10/02/2012
Notes : 1. * Dept. approved alternate may apply 2. Questions without a status entry use narrative responses

SITE PHOTOS

Photo # 51356 | Photo 1 of 22
Photo Date & Time 09/07/2017 12:32
Photo Direction E
Photographer WERNER, DANIEL

Photo Description
Sign on South entrance gate

SITE PHOTOS

Photo # 51357 | Photo 2 of 22
Photo Date & Time 09/07/2017 12:44
Photo Direction S
Photographer WERNER, DANIEL
Photo Description
Monitoring well GMP1

Photo # 51358 | Photo 3 of 22
Photo Date & Time 09/07/2017 12:48
Photo Direction W
Photographer WERNER, DANIEL
Photo Description
Monitoring well GMP2

Photo # 51359 | Photo 4 of 22
Photo Date & Time 09/07/2017 12:51
Photo Direction UNK
Photographer WERNER, DANIEL
Photo Description
Monitoring well GMP3

SITE PHOTOS

Photo # 51360 | Photo 5 of 22
Photo Date & Time 09/07/2017 12:58
Photo Direction UNK
Photographer WERNER, DANIEL
Photo Description
Monitoring Well

Photo # 51361 | Photo 6 of 22
Photo Date & Time 09/07/2017 12:58
Photo Direction UNK
Photographer WERNER, DANIEL
Photo Description
MW5D

Photo # 51362 | Photo 7 of 22
Photo Date & Time 09/07/2017 13:00
Photo Direction UNK
Photographer WERNER, DANIEL
Photo Description
Monitoring Well

SITE PHOTOS

Photo # 51363 | Photo 8 of 22
Photo Date & Time 09/07/2017 13:01
Photo Direction UNK
Photographer WERNER, DANIEL
Photo Description
Monitoring Well

Photo # 51364 | Photo 9 of 22
Photo Date & Time 09/07/2017 13:01
Photo Direction UNK
Photographer WERNER, DANIEL
Photo Description
Monitoring Well

Photo # 51365 | Photo 10 of 22
Photo Date & Time 09/07/2017 13:01
Photo Direction UNK
Photographer WERNER, DANIEL
Photo Description
MW11D

SITE PHOTOS

Photo # 51366 | Photo 11 of 22

Photo Date & Time 09/07/2017 13:03

Photo Direction UNK

Photographer WERNER, DANIEL

Photo Description

Monitoring Well

Photo # 51367 | Photo 12 of 22

Photo Date & Time 09/07/2017 13:03

Photo Direction UNK

Photographer WERNER, DANIEL

Photo Description

Monitoring Well

Photo # 51368 | Photo 13 of 22

Photo Date & Time 09/07/2017 13:14

Photo Direction UNK

Photographer WERNER, DANIEL

Photo Description

Monitoring Well

SITE PHOTOS

Photo # 51369 | Photo 14 of 22
Photo Date & Time 09/07/2017 13:15
Photo Direction UNK
Photographer WERNER, DANIEL
Photo Description
Monitoring Well

Photo # 51370 | Photo 15 of 22
Photo Date & Time 09/07/2017 13:19
Photo Direction UNK
Photographer WERNER, DANIEL
Photo Description
MW4D

Photo # 51371 | Photo 16 of 22
Photo Date & Time 09/07/2017 13:20
Photo Direction UNK
Photographer WERNER, DANIEL
Photo Description
MW4S

SITE PHOTOS

Photo # 51372 | Photo 17 of 22

Photo Date & Time 09/07/2017 13:22

Photo Direction UNK

Photographer WERNER, DANIEL

Photo Description

MW9I

Photo # 51373 | Photo 18 of 22

Photo Date & Time 09/07/2017 13:22

Photo Direction UNK

Photographer WERNER, DANIEL

Photo Description

MW9S

Photo # 51374 | Photo 19 of 22

Photo Date & Time 09/07/2017 13:22

Photo Direction UNK

Photographer WERNER, DANIEL

Photo Description

MW9D

SITE PHOTOS

Photo # 51375 | Photo 20 of 22
Photo Date & Time 09/07/2017 13:25
Photo Direction UNK
Photographer WERNER, DANIEL
Photo Description
Monitoring Well

Photo # 51376 | Photo 21 of 22
Photo Date & Time 09/07/2017 13:25
Photo Direction UNK
Photographer WERNER, DANIEL
Photo Description
Monitoring Well

Photo # 51377 | Photo 22 of 22
Photo Date & Time 09/07/2017 13:44
Photo Direction UNK
Photographer WERNER, DANIEL
Photo Description
OW4