



April 12, 2021

Steve Peotter  
One Community Bank  
733 North Main Street  
Oregon WI 53575

E. David Locke  
FH of McFarland, Inc.  
5990 Highway 51  
McFarland WI 53558

**SENT BY ELECTRONIC MAIL 4/12/2021**

**KEEP THIS LEGAL DOCUMENT WITH YOUR PROPERTY RECORDS**

SUBJECT: Case Closure with Continuing Obligations  
Best Way Cleaners, 5914 Highway 51, McFarland, WI 53558  
BRRTS #: 02-13-583171

Dear Mr. Peotter and Mr. Locke:

The Wisconsin Department of Natural Resources (DNR) is pleased to inform you that the Best Way Cleaners case met the requirements of Wisconsin Administrative (Wis. Admin.) Code chapters NR 725-727 for case closure with continuing obligations (COs). COs are legal requirements to address potential exposure to remaining contamination. No further investigation or remediation is required at this time for the reported hazardous substance discharge and/or environmental pollution.

However, you, future property owners, and occupants of the property must comply with the COs explained in this letter, which may include maintaining certain features and notifying the DNR and obtaining approval before taking specific actions. You must provide this letter and all enclosures to anyone who purchases, rents, or leases this property from you.

This case closure decision is issued under Wis. Admin. Code chs. NR 725-727 and based on information received by the DNR to date. The DNR reviewed the case closure request for compliance with state laws and standards and determined the case closure request met the notification requirements of Wis. Admin. Code ch. NR 725, the response action goals of Wis. Admin. Code § NR 726.05(4), and the case closure criteria of Wis. Admin. Code §§ NR 726.05, 726.09 and 726.11, and Wis. Admin. Code ch. NR 140.

Best Way Cleaners operated in a tenant space in the Stonefield Square shopping center from 1985 – 2018. The dry-cleaning operations used tetrachloroethene (a chlorinated solvent also known as PCE), and although there were no known spills at the site, chlorinated solvent contamination was discovered during an environmental site assessment in 2018. Because PCE in sub-slab vapor sampling exceeded the vapor risk screening level for small commercial sites, the responsible party had a vapor mitigation system installed for the former Best Way tenant space.

The Best Way Cleaners site was investigated for a discharge of hazardous substances from dry-cleaning operations in one tenant space of the Stonefield Square shopping center. Case closure is granted for the volatile organic compound contaminants analyzed during the site investigation, as documented in the case file. The site investigation addressed soil, groundwater, and subsurface vapor. Actions taken for vapor intrusion included removal of the dry-cleaning equipment and solvents and installation of a vapor mitigation system for the former Best Way Cleaners tenant space. Contamination remains in soil, groundwater, and subsurface vapor beneath the former Best Way Cleaners tenant space.

The case closure decision and COs required are based on the site being used for commercial purposes. The site is currently zoned General Commercial, which is non-industrial use under Wis. Admin. Code § NR 720.05(5) for determining residual contaminant levels in soil.

### SUMMARY OF CONTINUING OBLIGATIONS

The following locations have COs applied:

<u>Address (City, WI)</u>	<u>COs Applied</u>	<u>Date of Maintenance Plan(s)</u>
5914 US Highway 51 McFarland WI 53558 (Source Property)	-Residual Soil Contamination -Groundwater Contamination Equals or Exceeds Enforcement Standards -Cover -Structural Impediment -Vapor Mitigation System -Commercial/Industrial Use -Future Vapor Intrusion Concern	- Cap maintenance plan, December 2020  - Vapor mitigation system maintenance plan, December 2020

### CLOSURE CONDITIONS

Closure conditions are legally required conditions which include both COs and other requirements for case closure (Wis. Stat. § 292.12(2)). Under Wis. Stat. § 292.12(5). You, any subsequent property owners and occupants of the property must comply with the closure conditions in this letter. The property owner must notify occupants for any condition specified in this letter under Wis. Admin. Code §§ NR 726.15(1)(b) and NR 727.05(2). If an occupant is responsible for maintenance of any closure condition specified in this letter, you and any subsequent property owner must include the condition in the lease agreement under Wis. Admin. Code § NR 727.05(3) and provide the maintenance plan to any occupant that is responsible.

DNR staff may conduct periodic pre-arranged inspections to ensure that the conditions in this letter and the December 2020 maintenance plans are met (Wis. Stat. § 292.11(8)). If these requirements are not followed, the DNR may take enforcement action under Wis. Stat. ch. 292 to ensure compliance with the closure conditions.

### SOIL

#### *Continuing Obligations to Address Soil Contamination*

Residual Soil Contamination (Wis. Admin. Code chs. NR 718, NR 500-599, and § NR 726.15(2)(b), and Wis. Stat. ch. 289)

Soil contamination remains in the B-5, GB-2, and GPZ-1 areas, as indicated on the enclosed map (Fig. B.2.b., Residual Soil Contamination Map, 3/30/2021). If soil in the locations shown on the map is excavated in the future, the property owner or right-of-way holder at the time of excavation must sample and analyze the excavated soil. If sampling confirms that contamination is present, the property owner or right-of-way holder at the time of excavation will need to determine if the material is considered solid waste and ensure that any storage, treatment, or disposal complies with applicable standards and rules. Contaminated soil may be managed under Wis. Admin. Code ch. NR 718 with prior DNR approval.

In addition, all current and future property owners, occupants, and right-of-way holders need to be aware that excavation of the contaminated soil may pose an inhalation and direct contact hazard; special precautions may be needed to prevent a threat to human health.

Cover (Wis. Stat. § 292.12 (2) (a), Wis. Admin. Code §§ NR 724.13(1) and (2), NR 726.15(2)(d) and/or (e), NR 727.07(1))

The building, as shown on the enclosed map (Fig. D.2, Location Map (Cap Maintenance Plan), 1/6/2021) must be maintained in compliance with the enclosed cap maintenance plan, dated December 2020. The purpose of the cover is to minimize the infiltration of water through contaminated soil. The building is also considered a structural impediment; additional investigation and response requirements apply as described in the section of this letter titled Structural Impediments.

The cover approved for this closure was designed to be protective for commercial or industrial land uses. Before using the property for residential purposes and before taking an action, the property owner must notify the DNR to determine if additional response actions are needed. A cover intended for industrial land uses or certain types of commercial land uses may not be protective if the property changes to a residential use. This may include, but is not limited to, single or multiple family residences, a school, day care, senior center, hospital or similar settings.

To modify or replace a cover, the property owner must submit a request to the DNR under Wis. Admin. Code ch. NR 727. The DNR must approve the request in advance of the work. The replacement or modified cover must be a structure of similar permeability or be protective of the revised use of the property until contaminant levels no longer exceed Wis. Admin. Code ch. NR 720 groundwater pathway residual contaminant levels (RCLs).

Structural Impediment (Wis. Stat. § 292.12 (2) (b), Wis. Admin. Code §§ NR 726.15 (2) (f), NR 727.07 (2))  
The remaining building as shown on the enclosed map (Fig. B.2.b., Residual Soil Contamination Map, 3/30/2021) made complete site investigation and remediation of the contamination on this property impracticable. Upon removal of the structural impediment, the property owner must investigate the degree and extent of volatile organic compound contamination obstructed by the structural impediment. If contamination is found at that time, the property owner must remediate the contamination in accordance with Wis. Admin. Code chs. NR 700–799.

## **GROUNDWATER**

### *Continuing Obligations to Address Groundwater Contamination and/or Monitoring Wells*

Groundwater Contamination Equals or Exceeds Enforcement Standards (Wis. Admin. Code ch. NR 140 and § NR 812.09(4)(w))

Groundwater contamination which equals or exceeds the enforcement standards for tetrachloroethene is present under the former Best Way Cleaners tenant space, as shown on the enclosed map (Fig. B.3.b., Groundwater Isoconcentration Map, 1/6/2021). To construct a new well or reconstruct an existing well, the property owner must obtain prior DNR approval. Additional casing may be necessary to prevent contamination of the well.

## VAPOR

### *Continuing Obligations to Address Vapor Contamination*

Vapor intrusion is the movement of vapors from volatile chemicals in the soil or groundwater or within preferential pathways into buildings where people may breathe air contaminated by the vapors.

Vapor Mitigation Systems and/or Vapor Barriers: (Wis. Stat. § 292.12(2), Wis. Admin. Code § NR 726.15(2)(h), (i), (j) or (m))

Vapor mitigation systems, which may include vapor barriers, are used to interrupt the vapor pathway, thereby reducing or preventing vapors from moving into the building. Soil vapor beneath the former Best Way Cleaners tenant space contains chlorinated volatile organic compounds at levels that would pose a risk to human health, if allowed to migrate into an occupied building on the property.

Vapor is mitigated with a sub-slab depressurization system installed in the west end of the former Best Way Cleaners tenant space; the system uses a blower to move collected vapors through connective piping to a roof-mounted vent pipe. The property owner must maintain, operate, and inspect the vapor mitigation system, installed in December 2018, in accordance with the enclosed maintenance plan, dated December 2020. System components must be repaired or replaced immediately upon discovery of a malfunction. The property owner must document inspections on the VMS inspection log (Form 4400-321). See the Other Closure Requirements section of this letter for more details.

Commercial/Industrial Use: (Wis. Stat. § 292.12(2), Wis. Admin. Code § NR 726.15(2)(k) or (m))

Soil vapor beneath the former Best Way Cleaners tenant space in the Stonefield Square shopping center contains contamination at concentrations that pose a long-term risk to human health if allowed to migrate into an occupied building. See the enclosed map (Fig. B.4.a, Vapor Intrusion Map, 1/6/2021). Case closure is based on the following site-specific exposure assumptions: commercial use, vapor mitigation, and continued existence of the building floor as a cap. Use of this property is restricted to industrial or commercial uses. If changes in property or land use are planned, the property owner must evaluate whether the closure is protective for the proposed use. The DNR may require additional response actions. The property owner must maintain the cap and vapor mitigation system in accordance with the enclosed maintenance plans dated December 2020.

Future Vapor Intrusion Concern: (Wis. Stat. § 292.12(2), Wis. Admin. Code § NR 726.15(2)(L) or (m), as applicable.

Chlorinated volatile organic compounds remain in soil vapor beneath the former Best Way Cleaners tenant space, as shown on the enclosed map, (Fig. B.4.a., Vapor Intrusion Map, 1/6/2021), at concentrations that may be of concern for vapor intrusion in the future, if a building is constructed, renovated or expanded in an area where no building currently exists or if an existing building is remodeled.

Vapor control technologies are required for new construction or for modification of occupied buildings on the property unless the property owner assesses the vapor pathway and the DNR agrees that vapor control technologies are not needed. The property owner must maintain the current building use and layout.

See the Other Closure Requirements section for more details.

## OTHER CLOSURE REQUIREMENTS

Maintenance Plan and Inspection Log (Wis. Admin. Code § NR 726.11(2), NR 726.15(1)(d), NR 727.05(1)(b) 3.)

The property owner is required to comply with the enclosed maintenance plans dated December 2020 for the cover and vapor mitigation system, to conduct inspections annually, and to use the inspection logs (DNR Form 4400-305 and Form 4400-321) to document the required inspections. The maintenance plans and inspection logs are to be kept up-to-date and either on-site or at the property owner's office. The property owner will submit the inspection log to the DNR when requested.

Limitations on Activities, Prior Approval Needed (Wis. Admin. Code §§ NR 724.13(2)(h), NR 726.15(2))

Certain activities are limited at closed sites to:

- ensure that the cover will function as intended to prevent contact with any remaining contamination,
- ensure that the VMS will function as intended to prevent or limit vapor intrusion into an occupied building, and
- reduce the risk of exposure to residual contamination via vapor intrusion.

The limitations on activities are identified in the enclosed maintenance plan(s). The following activities are prohibited on any portion of this property where the cover and vapor mitigation system control are required, unless prior approval is given by DNR:

- removal of the existing cap
- replacement with another cap
- excavating or grading of the land surface
- filling on capped areas
- plowing for agricultural cultivation; or
- construction or placement of a building or other structure.

Pre-Approval Required for Well Construction (Wis. Admin. Code § NR 812.09(4)(w))

DNR approval is required before well construction or reconstruction for all sites identified as having residual contamination and COs. This requirement applies to private drinking water wells and high capacity wells. To obtain approval, complete Form 3300-254 (Continuing Obligations/Residual Contamination Well Approval Application) and submit to the DNR Drinking and Groundwater program's regional water supply specialist. A well driller can help complete this form. The form is available at [dnr.wi.gov](http://dnr.wi.gov) (search "3300-254"). Additional casing may be necessary to help prevent contamination of the well.

## **DNR NOTIFICATION REQUIREMENTS**

DNR Notification (Wis. Admin. Code §§ NR 727.07, NR 726.15(2))

The property owner is required to notify the DNR at least 45 days before taking the following actions. The DNR may require additional investigation and/or cleanup actions if necessary, to be protective of human health and the environment.

- Before removing a cover or any portion of a cover
- Before removing a structural impediment
- Before deciding to no longer use the vapor mitigation system, to shut off the fan or disrupt or abandon the vapor mitigation system, or before making any change to the vapor mitigation system or to a vapor barrier
- Before changing the land use for sites where commercial or industrial exposure settings were used to determine vapor risk screening levels.
- Before constructing a building and/or modifying the construction of an existing building or changing property use

Send written notifications to the DNR using the RR Program Submittal Portal on DNR's website at <https://dnr.wi.gov/topic/Brownfields/Submittal.html>. Questions on using this portal can be directed to the contact below or to the environmental program associate (EPA) for the regional DNR office. Visit [dnr.wi.gov](http://dnr.wi.gov), search "RR contacts," and select the EPA tab (<https://dnr.wi.gov/topic/Brownfields/Contact.html>).

## CLOSING

Site and case closure-related information can be found in the Bureau for Remediation and Redevelopment Tracking System (BRRTS) on the Web (BOTW); go to [dnr.wi.gov](http://dnr.wi.gov) and search "BOTW." Use the BRRTS ID # found at the top of this letter. The site can also be found on the Remediation and Redevelopment Sites Map by searching "RRSM."

Please be aware that the case may be reopened under Wis. Admin. Code § NR 727.13 if additional information indicates that contamination on or from the site poses a threat, or for a lack of compliance with a CO or closure requirement. Compliance with maintenance plans is considered when evaluating the reopening criteria.

The DNR appreciates your efforts to restore the environment at this site. If you have any questions regarding this closure decision or anything stated in this letter, please contact DNR Project Manager, Cindy Koepke at 608-219-2181 or [cynthia.koepke@wisconsin.gov](mailto:cynthia.koepke@wisconsin.gov). If the project manager is not available, go to [dnr.wi.gov](http://dnr.wi.gov) and search "RR contacts."

Sincerely,



Steven L. Martin, P.G.  
South Central Region Team Supervisor  
Remediation & Redevelopment Program

Copies to:

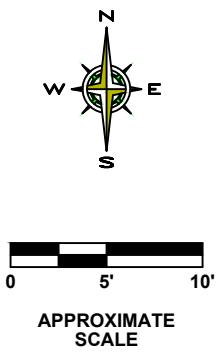
K. Bugel, Giles Engineering (by email)  
T. Giles (by email)  
C. Sweeney (by email)  
Chad Beyler, 5472 Alan Drive, Oregon WI 53575

Attachments:

- Fig. B.3.b, Groundwater Isoconcentration Map, 1/6/2021
- Fig. B.2.b., Residual Soil Contamination Map, 3/30/2021
- Fig. B.4.a., Vapor Intrusion Map, 1/6/2021
- Fig. D.2, Location Map (Cap Maintenance Plan), 1/6/2021
- Attachment D, Cap Maintenance Plan, December 2020
  - o Inspection Log (DNR Form 4400-305)
- Attachment D, Vapor Mitigation Maintenance Plan, December 2020
  - o Inspection Log (DNR Form 4400-321: Vapor Mitigation System Inspection Log)

**NOTES:**  
 FIELD PID RESULTS EXPRESSED IN INSTUMENT UNITS  
 VOC RESULTS EXPRESSED IN MICROGRAMS PER KILOGRAM (ug/kg) EQUIVALENT TO PARTS PER BILLION (ppb)  
 J: CONCENTRATION BETWEEN LABORATORY LIMIT OF DETECTION AND QUANTITATION LIMIT.  
 \*: SAMPLE COLLECTED BY SEYMOUR ENVIRONMENTAL SERVICES, INC.  
**RESULTS INDICATED IN BLUE / UNDERLINED EXCEED THE WAC NR 720 RCLs FOR SOIL TO GROUNDWATER PATHWAY**  
 THE BUILDING IS A STRUCTURAL IMPEDIMENT FOR THE SITE INVESTIGATION.

**CHEMICAL KEY:**  
 c-DCE: cis-DICHLOROETHENE  
 t-DCE: trans-DICHLOROETHENE  
**ABBREVIATIONS:**  
 LOD: LIMIT OF DETECTION  
 NR: NATURAL RESOURCES  
 PID: PHOTOIONIZATION DETECTOR (FIELD)  
 RCLs: RESIDUAL CONTAMINANT LEVELS  
 VOCs: VOLATILE ORGANIC COMPOUNDS  
 WAC: WISCONSIN ADMINISTRATIVE CODE



PALENQUE MEXICAN RESTAURANT  
 (5906 U.S. HWY. 51)

MONDA'S HAIR SALON  
 (5910 U.S. HWY. 51)

FORMER BEST WAY CLEANERS  
 (5914 U.S. HWY. 51)

VIP NAIL SALON  
 (5918 U.S. HWY. 51)

VACANT  
 (5922 U.S. HWY. 51)

**LEGEND:**

- ESTIMATED EXTENT OF "RESIDUAL" UNSATURATED IMPACTED SOIL EXCEEDING NR 720 RCLs FOR SOIL TO GROUNDWATER PATHWAY
- GPZ-1 PIEZOMETER
- GB-2 SOIL BORING
- BM BENCHMARK: FINISHED FLOOR AT NORTH SIDE OF DOORWAY ASSUMED ELEVATION = 100.0'
- (DCM) FORMER DRY CLEANING MACHINE
- B-5 PREVIOUS BORING (BY SEYMOUR)
- PROPERTY LINE
- UE UNDERGROUND ELECTRIC LINE
- G GAS LINE
- W WATER LINE
- SN SANITARY SEWER LINE
- FLOOR DRAIN

3.5' DEPTH \*  
 PID < 5  
 DETECTED VOCs  
 c-1,2-DCE = 954

2 - 4' DEPTH  
 PID = 8.0  
 DETECTED VOCs  
 c-1,2-DCE = 53 J

2 - 4' DEPTH  
 PID = 44.7  
 DETECTED VOCs  
 c-1,2-DCE = 3,700  
 t-1,2-DCE = 120

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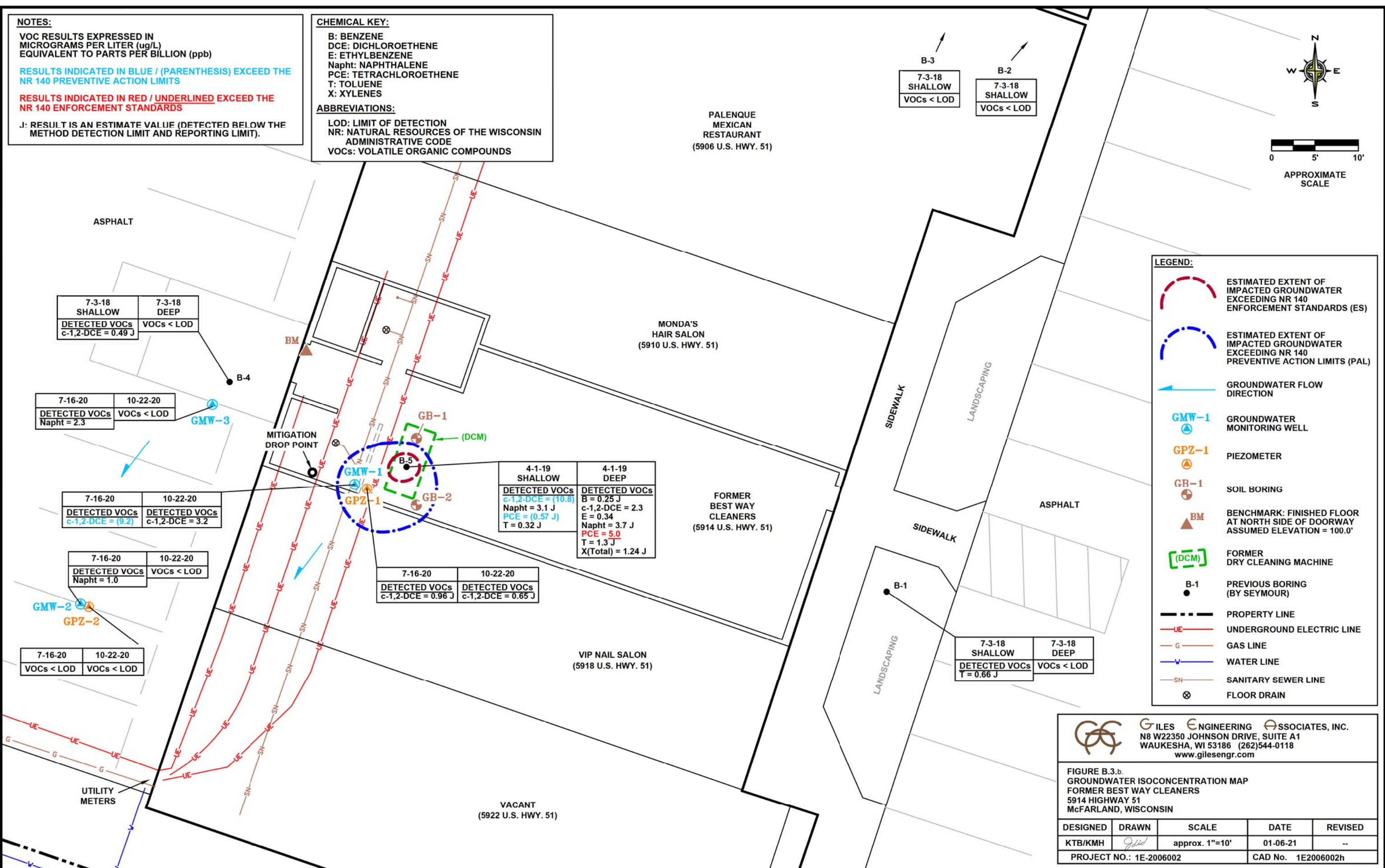
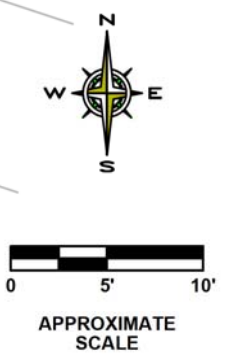
FIGURE B.2.b  
 RESIDUAL SOIL CONTAMINATION MAP  
 FORMER BEST WAY CLEANERS  
 5914 HIGHWAY 51  
 McFARLAND, WISCONSIN

DESIGNED	DRAWN	SCALE	DATE	REVISED
KTB/KMH	<i>Jed</i>	approx. 1"=10'	01-06-21	03-30-21
PROJECT NO.: 1E-2006002			CAD No. 1E2006002e	

**NOTES:**  
 VOC RESULTS EXPRESSED IN MICROGRAMS PER LITER (ug/L) EQUIVALENT TO PARTS PER BILLION (ppb)  
**RESULTS INDICATED IN BLUE / (PARENTHESIS) EXCEED THE NR 140 PREVENTIVE ACTION LIMITS**  
**RESULTS INDICATED IN RED / UNDERLINED EXCEED THE NR 140 ENFORCEMENT STANDARDS**  
 J: RESULT IS AN ESTIMATE VALUE (DETECTED BELOW THE METHOD DETECTION LIMIT AND REPORTING LIMIT).

**CHEMICAL KEY:**  
 B: BENZENE  
 DCE: DICHLOROETHENE  
 E: ETHYLBENZENE  
 Napht: NAPHTHALENE  
 PCE: TETRACHLOROETHENE  
 T: TOLUENE  
 X: XYLENES

**ABBREVIATIONS:**  
 LOD: LIMIT OF DETECTION  
 NR: NATURAL RESOURCES OF THE WISCONSIN ADMINISTRATIVE CODE  
 VOCs: VOLATILE ORGANIC COMPOUNDS



**LEGEND:**

- ESTIMATED EXTENT OF IMPACTED GROUNDWATER EXCEEDING NR 140 ENFORCEMENT STANDARDS (ES)
- ESTIMATED EXTENT OF IMPACTED GROUNDWATER EXCEEDING NR 140 PREVENTIVE ACTION LIMITS (PAL)
- GROUNDWATER FLOW DIRECTION
- GROUNDWATER MONITORING WELL
- PIEZOMETER
- SOIL BORING
- BENCHMARK: FINISHED FLOOR AT NORTH SIDE OF DOORWAY ASSUMED ELEVATION = 100.0'
- FORMER DRY CLEANING MACHINE
- PREVIOUS BORING (BY SEYMOUR)
- PROPERTY LINE
- UNDERGROUND ELECTRIC LINE
- GAS LINE
- WATER LINE
- SANITARY SEWER LINE
- FLOOR DRAIN

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**FIGURE B.3.b.**  
 GROUNDWATER ISOCONCENTRATION MAP  
 FORMER BEST WAY CLEANERS  
 5914 HIGHWAY 51  
 McFARLAND, WISCONSIN

DESIGNED	DRAWN	SCALE	DATE	REVISED
KTB/KMH	<i>Jed</i>	approx. 1"=10'	01-06-21	--
PROJECT NO.: 1E-2006002			CAD No. 1E2006002h	



4-1-19	7-2-20
DETECTED VOCs PCE = 166	DETECTED VOCs TC-TF = 0.63 J 1,3-DCBz = 1.0 J 1,4-DCBz = 26 2-Bu = 2.9 J Ace = 26 J Bta = 44 CIF = 48 CyHx = 0.66 J <u>DCDFM = 5,700</u> Hex = 0.28 J MeChl = 3.5 J,B S = 0.78 J PCE = 270 TCE = 1.5 J TCFM = 1.8 J

7-19-18	4-1-19
DETECTED VOCs c-1,2-DCE = 1,575 <u>PCE = (14,510)</u> TCE = [1,204]	DETECTED VOCs c-1,2-DCE = 485 PCE = 3,178 TCE = (334)

7-2-20
DETECTED VOCs c-1,2-DCE = 2,400 MeChl = 340 J,B <u>PCE = (12,000)</u> TCE = [1,100]

4-1-19	7-2-20
DETECTED VOCs PCE = 180	DETECTED VOCs 1,1,1-TCA = 0.21 J TC-TF = 0.52 J 1,3,5-TMB = 0.46 J 1,4-DCBz = 12 2-Bu = 2.0 J Ace = 200 B = 0.37 J BrMe = 0.23 J Bta = 4.0 CS2 = 0.29 J CCl4 = 0.47 J ChIDMe = 2.3 CIF = 0.50 J ChIMe = 1.5 J CyHx = 0.50 J DCDFM = 51 Hep = 0.22 J Hex = 1.2 J MeChl = 4.0 B S = 0.54 J PCE = 4 T = 1.9 J TCFM = 1.6

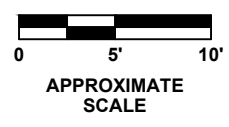
PALENQUE MEXICAN RESTAURANT  
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FORMER BEST WAY CLEANERS  
(5914 U.S. HWY. 51)

VIP NAIL SALON  
(5918 U.S. HWY. 51)

VACANT  
(5922 U.S. HWY. 51)



**LEGEND:**

- ESTIMATED EXTENT OF SUB-SLAB SOIL GAS EXCEEDING VRSL (LARGE COMMERCIAL / INDUSTRIAL)
- ESTIMATED EXTENT OF SUB-SLAB SOIL GAS EXCEEDING VRSL (SMALL COMMERCIAL)
- ESTIMATED EXTENT OF SUB-SLAB SOIL GAS EXCEEDING VRSL (RESIDENTIAL)
- ESTIMATED EXTENT OF UNSATURATED IMPACTED SOIL EXCEEDING NR 720 RCLs FOR SOIL TO GROUNDWATER PATHWAY
- ESTIMATED EXTENT OF IMPACTED GROUNDWATER EXCEEDING NR 140 PREVENTIVE ACTION LIMITS (PAL) OR ENFORCEMENT STANDARDS (ES)
- GSS-1 SOIL GAS POINT
- BM BENCHMARK: FINISHED FLOOR AT NORTH SIDE OF DOORWAY ASSUMED ELEVATION = 100.0'
- [DCM] FORMER DRY CLEANING MACHINE
- SS-1 PREVIOUS BORINGS (BY SEYMOUR)
- PROPERTY LINE
- UE- UNDERGROUND ELECTRIC LINE
- G- GAS LINE
- W- WATER LINE
- SN- SANITARY SEWER LINE
- FLOOR DRAIN

**ABBREVIATIONS:**  
VOCs: VOLATILE ORGANIC COMPOUNDS  
VRSL: VAPOR RISK SCREENING LEVELS

**NOTES:**  
VOC RESULTS EXPRESSED IN MICROGRAMS PER CUBIC METER (ug/m3)  
**RESULTS INDICATED IN GREEN / UNDERLINE EXCEED THE SUB-SLAB VRSL (RESIDENTIAL)**  
**RESULTS INDICATED IN BLUE / (PARENTHESIS) EXCEED THE SUB-SLAB VRSL (SMALL COMMERCIAL)**  
**RESULTS INDICATED IN RED / [BRACKETS] EXCEED THE SUB-SLAB VRSL (LARGE COMMERCIAL / INDUSTRIAL)**  
J: RESULT IS AN ESTIMATE VALUE (DETECTED BELOW THE METHOD DETECTION LIMIT AND REPORTING LIMIT).  
B: COMPOUND WAS DETECTED IN THE METHOD BLANK AND IN THE SAMPLE.

**CHEMICAL KEY:**  
Ace: ACETONE  
B: BENZENE  
BrMe: BROMOMETHANE  
Bta: BUTANE  
Bu: BUTANONE  
CCl4: CARBON TETRACHLORIDE  
ChIDMe: CHLORODIFLUOROMETHANE  
ChIMe: CHLOROMETHANE  
CIF: CHLOROFORM  
CS2: CARBON DISULFIDE  
CyHx: CYCLOHEXANE  
DCDFM: DICHLORODIFLUOROMETHANE  
DCE: DICHLOROETHENE  
Hep: HEPTANE  
Hex: HEXANE  
MeChl: METHYLENE CHLORIDE  
PCE: TETRACHLOROETHENE  
S: STYRENE  
T: TOLUENE  
TCA: TRICHLOROETHANE  
TCBz: TRICHLOROETHENE  
TCE: TRICHLOROETHENE  
TCFM: TRICHLOROFLUOROMETHANE  
TC-TF: 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE  
TMB: TRIMETHYLBENZENE

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FIGURE B.4.a  
VAPOR INTRUSION MAP  
FORMER BEST WAY CLEANERS  
5914 HIGHWAY 51  
McFARLAND, WISCONSIN

DESIGNED	DRAWN	SCALE	DATE	REVISED
KTB/KMH	<i>Jed</i>	approx. 1"=10'	01-06-21	--
PROJECT NO.: 1E-2006002			CAD No. 1E2006002k	

## **Attachment D: Maintenance Plans and Photographs**

### **Engineered Cap**

D.1(1) Cap Maintenance Plan

Included

D.2(1) Location Map

Included

D.3(1) Photographs

Included

D.4(1) Inspection Log

Included

### **Vapor Mitigation System**

D.1(2) Vapor Mitigation System Maintenance Plan

Included

D.2(2) Location Map

Included

D.3(2) Photographs

Included

D.4(2) Inspection Log

Included

## **D.1(1) Description of Cap Maintenance Plan For:**

**Best Way Cleaners  
5914 U.S. Highway 51  
McFarland, Wisconsin**

**WDNR BRRTS # 02-13-583171  
December 2020**

### **Legal Description:**

SW ¼ of the NW ¼ of Section 3, Township 6 North, Range 10 East, in the Village of McFarland, Dane County, Wisconsin. Tax Key No. 154/0610-032-4510-1.

### **Introduction**

This document is the maintenance plan for an integrated cap at the above-referenced property (the Site) in accordance with the requirements of s. NR 724.13 (2), Wis. Adm. Code. The maintenance activities relate to the existing concrete floor slab which occupies the area over the residual contaminated soil and groundwater.

More site-specific information about this Site may be found:

- In the case file in the Wisconsin Department of Natural Resources (WDNR) South Central office.
- From the WDNR project manager for Dane County.
- BRRTS on the Web (WDNR's internet-based database of contaminated sites) and the RR Sites Map (map view of the Site and surrounding properties) at the link: <http://dnr.wi.gov/topic/Brownfields/wrrd.html>. Both BRRTs on the Web and the RR Sites Map provide PDFs of site-specific information and details regarding continuing obligations for the Site.

### Description of Contamination

Residual dry cleaning-related volatile organic compound (VOC)-impacted soil remains on Site near the former Best Way Cleaners former dry cleaning machine (DCM). The residual VOC soil impacts exceed the NR 720 Residual Contaminant Levels (RCLs) for groundwater protection. Soil impacts are present from beneath the building slab to the water table, approximately 5 feet below ground surface (bgs). Additionally, limited VOC-impacted groundwater is present beneath the footprint of the former DCM. When last sampled in 2019, the concentration of one VOC was at the NR 140 Enforcement Standard (ES). The extent of soil and groundwater impacts are shown on the attached Figure D.2(1).

### Cap Description and Purpose

The contamination is limited to the vicinity of the former DCM that had been located within the Best Way Cleaners lease space. Therefore, the cap consists of the concrete floor slab of the existing shopping center building that overlies the contaminated soil. The floor slab over the area of residual VOC contamination is approximately 6-inch thick and will act as a cap to protect against direct contact with the contaminated soil, and act as an infiltration barrier. Based on the current commercial use of the property, the cap should function as intended unless disturbed.

### Annual Inspection

The cap overlying the impacted soil as shown on Attachment D.2(1) must be inspected once a year for deterioration, cracks, and other potential problems that can cause additional surface water infiltration. The inspections will be performed by the property owner or their designated representative. The inspections will be performed to evaluate damage due to settling, wear from traffic, increasing age, and other factors. Any area where contaminated soil has become or is likely to become exposed will be documented.

A log of the inspections and any repairs will be maintained by the property owner. The Continuing Obligations Inspection and Maintenance Log (Form 4400-305) is included as Case Closure Attachment D.4(1). The log will include recommendations for necessary repair of any areas where infiltration from the surface will not be effectively minimized. Completed repairs will be documented in the inspection log. A copy of the maintenance plan and inspection log will be kept at the Site or, if there is no acceptable place to keep it at the Site, at the address of the property owner. The log must be available for submittal or inspection by WDNR representatives upon request. If required in the case closure letter, a copy of the inspection log must be submitted electronically to the WDNR after every inspection, at least annually.

### Maintenance Activities

If problems in the cap are noted during the annual inspections, or at any other time during the year, repairs will be scheduled and completed as soon as practicable. Repairs can include patching and filling, larger resurfacing, or construction operations. The owner must also sample/laboratory analyze soil that is generated from below the cap to properly characterize the soil for off-site disposal or placement in another area of the Site. The soil must be treated, stored, and disposed of by the property owner in accordance with applicable local, state, and federal law.

In the event the floor slab overlying the contaminated soil is removed or replaced, the replacement cap must be equally impervious. Any replacement cap will be subject to the same maintenance and inspection guidelines as outlined in this maintenance plan unless indicated otherwise by the WDNR or its successor.

### Prohibition of Activities and Notification of DNR Prior to Actions Affecting the Cap

The following activities are prohibited on any portion of the property where the cap is required as shown on the attached Figure D.2(1), unless prior written approval has been obtained from the WDNR: 1) removal of the existing cap; 2) replacement with another cap; 3) excavating or grading of the land surface; 4) filling on capped areas; 5) plowing for agricultural cultivation; or 6) construction or placement of a building or other structure.

If removal, replacement or other changes to the cap are considered, the property owner will contact the WDNR at least 45 days before taking such an action, to determine whether further action may be necessary to protect human health, safety, or welfare or the environment, in accordance with s. NR 727.07, Wis. Adm. Code.

### Amendment or Withdrawal of Maintenance Plan

This Maintenance Plan can be amended or withdrawn by the property owner and its successors with the written approval of WDNR.

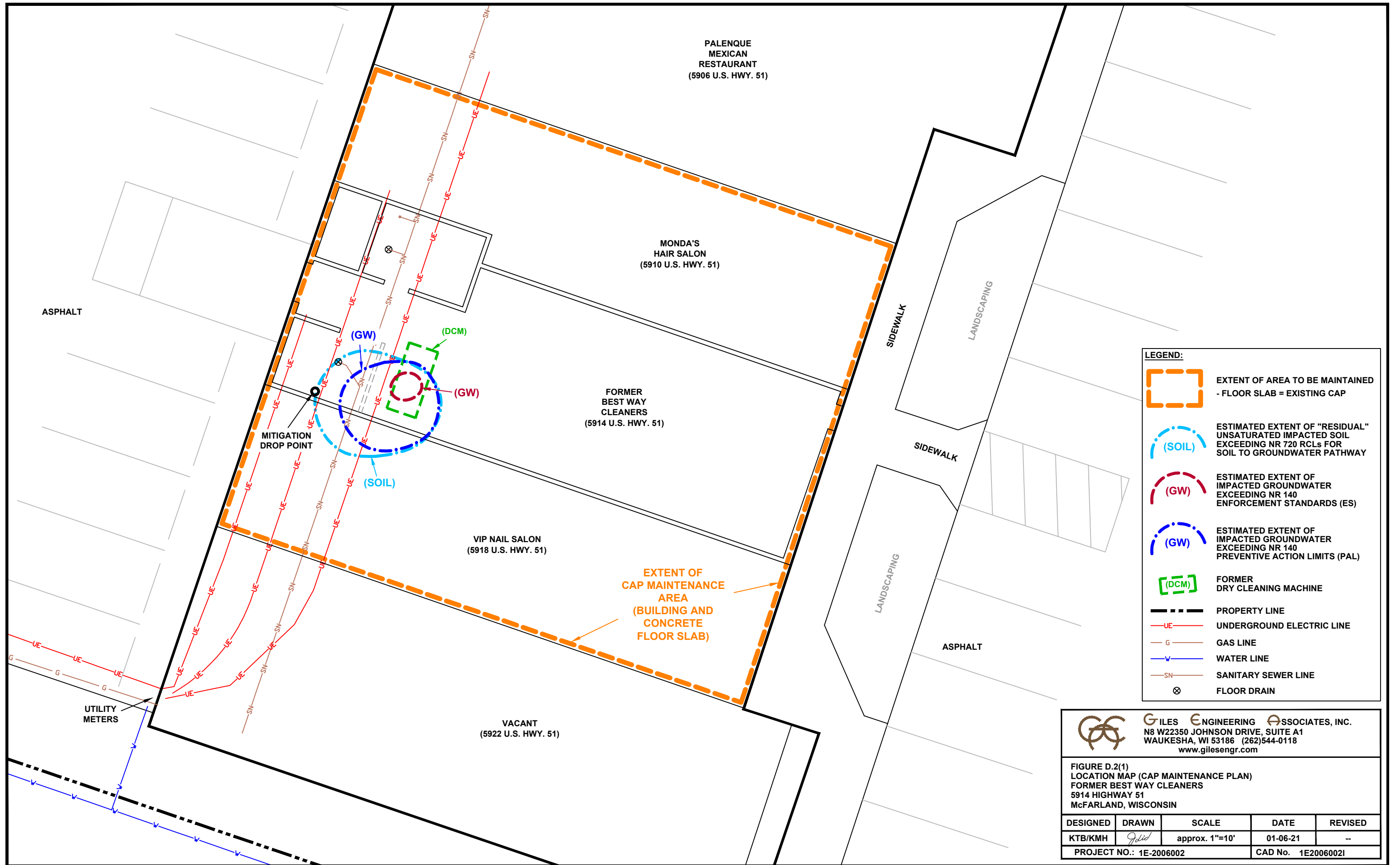
D.1(1) Cap Maintenance Plan  
Best Way Cleaners  
BRRTS No. 02-13-583171

Contact Information (as of December 2020)

Site Owner and Operator: E. David Locke  
FH of McFarland, Inc.  
5990 U.S. Highway 51  
McFarland, WI 53558

Consultants: Giles Engineering Associates, Inc.  
N8 W 22350 Johnson Road  
Waukesha, WI 53186  
Attention: Mr. Kevin T. Bugel  
(262) 544-0118

WDNR: Wisconsin Department of Natural Resources  
3911 Fish Hatchery Road  
Madison, Wisconsin 53711  
Attention: Cynthia Koepke  
(608) 219-2181



**LEGEND:**

- EXTENT OF AREA TO BE MAINTAINED - FLOOR SLAB = EXISTING CAP
- (SOIL) ESTIMATED EXTENT OF "RESIDUAL" UNSATURATED IMPACTED SOIL EXCEEDING NR 720 RCLs FOR SOIL TO GROUNDWATER PATHWAY
- (GW) ESTIMATED EXTENT OF IMPACTED GROUNDWATER EXCEEDING NR 140 ENFORCEMENT STANDARDS (ES)
- (GW) ESTIMATED EXTENT OF IMPACTED GROUNDWATER EXCEEDING NR 140 PREVENTIVE ACTION LIMITS (PAL)
- (DCM) FORMER DRY CLEANING MACHINE
- PROPERTY LINE
- UNDERGROUND ELECTRIC LINE
- GAS LINE
- WATER LINE
- SANITARY SEWER LINE
- FLOOR DRAIN

GILES ENGINEERING ASSOCIATES, INC.  
 N8 W22350 JOHNSON DRIVE, SUITE A1  
 WAUKESHA, WI 53186 (262)544-0118  
 www.gilesengr.com

FIGURE D.2(1)  
 LOCATION MAP (CAP MAINTENANCE PLAN)  
 FORMER BEST WAY CLEANERS  
 5914 HIGHWAY 51  
 McFARLAND, WISCONSIN

DESIGNED	DRAWN	SCALE	DATE	REVISED
KTB/KMH	<i>Jed</i>	approx. 1"=10'	01-06-21	--
PROJECT NO.: 1E-2006002			CAD No. 1E2006002I	

## **D.1(2) Description of Vapor Mitigation System Maintenance Plan For:**

**Best Way Cleaners  
5914 U.S. Highway 51  
McFarland, Wisconsin**

**WDNR BRRTS # 02-13-583171  
December 2020**

### **Legal Description:**

SW ¼ of the NW ¼ of Section 3, Township 6 North, Range 10 East, in the Village of McFarland, Dane County, Wisconsin. Tax Key No. 154/0610-032-4510-1.

### **Introduction**

This document is the maintenance plan for a sub-slab depressurization system at the above-referenced property (the Site) in accordance with the requirements of s. NR 724.13 (2), Wis. Adm. Code. The maintenance activities relate to the existing system installed within the former Best Way Cleaners lease space.

More site-specific information about this site may be found:

- In the case file in the Wisconsin Department of Natural Resources (WDNR) South Central office.
- From the WDNR project manager for Dane County.
- BRRTS on the Web (WDNR's internet-based database of contaminated sites) and the RR Sites Map (map view of the Site and surrounding properties) at the link: <http://dnr.wi.gov/topic/Brownfields/wrrd.html>. Both BRRTs on the Web and the RR Sites Map provide PDFs of site-specific information and details regarding continuing obligations for the Site.

### Description of Contamination

Dry cleaning-related volatile organic compound (VOC)-impacted soil gas remains on Site near the former Best Way Cleaners former dry cleaning machine (DCM). The residual VOC soil gas impacts exceed the Sub-Slab Vapor Risk Screening Levels (VRSL) for small commercial properties. The extent of sub-slab soil gas impact is shown on the attached Figure D.2(2). A sub-slab depressurization system was installed in December 2018 to mitigate the vapor intrusion risk posed by the presence of the VOC-impacted soil gas beneath the building slab.

### Vapor mitigation System Description and Purpose

The sub-slab depressurization system consists of a roof-mounted ventilation blower, a drop point within the source unit (former Best Way Cleaners), and connective piping. The drop point is located near the source of the impacted soil gas, the former DCM. The point penetrates the building's approximately 6-inch thick floor slab and terminates within the underlying base course material. The blower creates a negative pressure beneath the floor slab to reduce the potential for sub-slab vapors to infiltrate the building. Vapors extracted by the system are vented to the atmosphere through stacks located on the roof of the existing building.

### Vapor Mitigation System Design and Construction

The sub-slab depressurization system was designed to create a negative pressure beneath the floor slab near the source area, the former DCM. The ventilation blower is a RadonAway Model GP-501 with the capacity to create a vacuum of up to 4 inches of water. The system was designed with an inlet vacuum of 3.5 inches of water and vents approximately 27 cubic feet per minute (cfm) of air from beneath the slab. The rooftop exhaust vent is located at least 20 feet from the roof-mounted HVAC equipment.

### System Maintenance

The sub-slab depressurization system requires minimal maintenance. The system's thermal overload protection is equipped with an automatic reset, and the system has a design life cycle of 15 years.

### Annual Inspection

The sub-slab depressurization system will be inspected once a year. Inspections will be performed in the late fall or early winter when the HVAC system is switched between heating to cooling operations. The inspection will be performed by the property owner or their designated representative. The inspections will be performed to evaluate the induced negative pressure from the mitigation system. Specifically, the vacuum at the drop point on the manometer should be checked. The exterior venting system should be checked for damage due exposure to the weather, increasing age and other factors. A log of the inspections and any repairs will be maintained by the property owner and is attached. The log will include recommendations for necessary repairs made during annual inspections. Once repairs are completed, they will be documented in the inspection log. A copy of the inspection log will be kept at the address of the property owner and made available for submittal or inspection by the Wisconsin Department of Natural Resources (WDNR) representatives upon their request.

### Maintenance Activities

If problems are noted during the annual inspections or at any other time during the year, repairs will be scheduled as soon as practicable. Repairs can include normal maintenance of the drop point floor seal, piping, or replacement of the ventilation blower unit. If replacement of the ventilation blower is required, the replacement unit must be able to provide similar air flow rates as the existing unit (~27 cfm at 3.5-inch water vacuum). Any replacement system equipment will be subject to the same maintenance and inspection guidelines as outlined in this Maintenance Plan unless indicated otherwise by WDNR or its successor. The property owner, in order to maintain the integrity of the sub-slab depressurization system, will maintain a copy of this Maintenance Plan on-site and make it available to all interested parties (i.e. on-site employees, contractors, future property owners, etc.) for viewing.

### Amendment or Withdrawal of Maintenance Plan

This Maintenance Plan can be amended or withdrawn by the property owner and its successors with the written approval of WDNR.

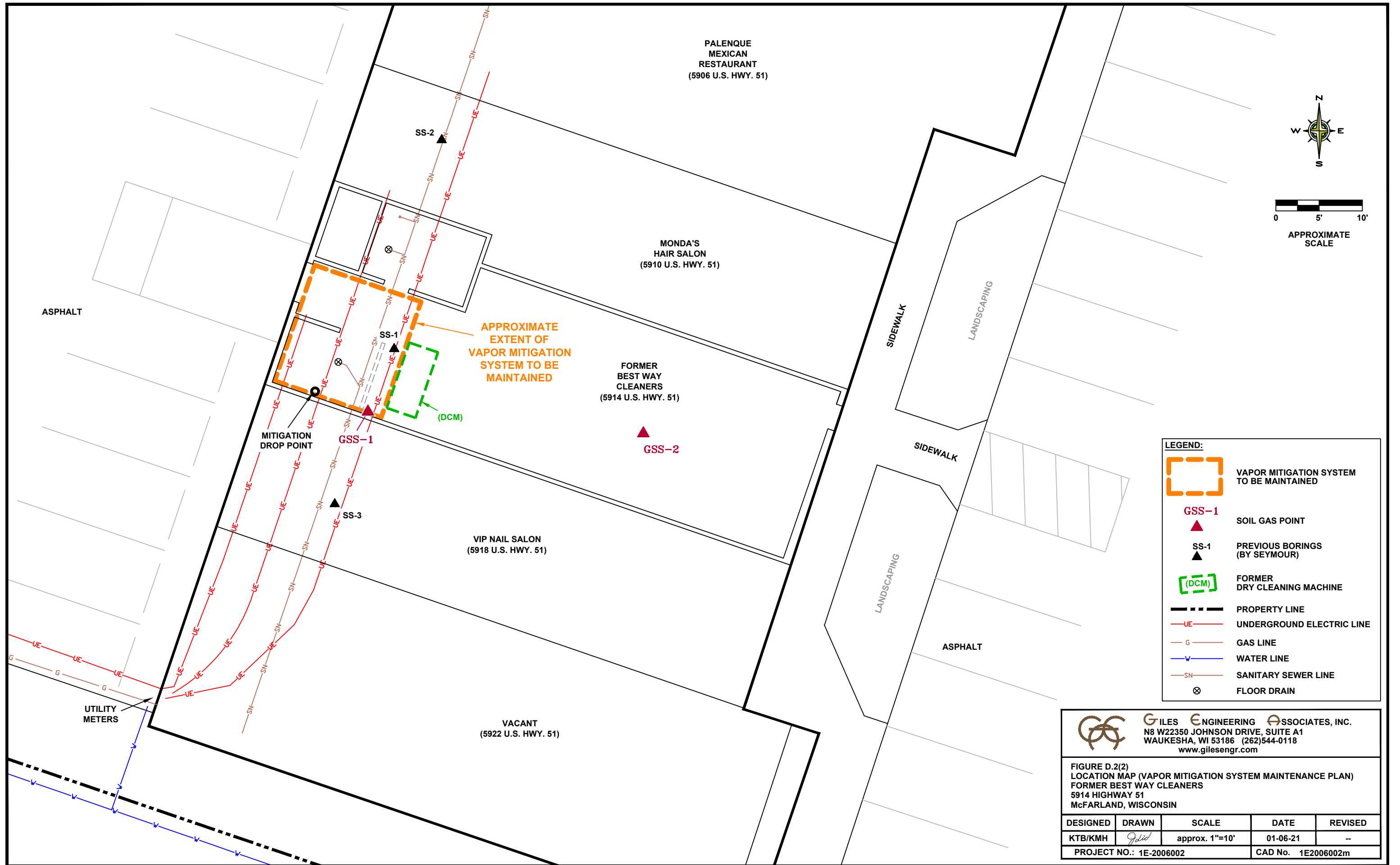


Contact Information (as of December 2020)

Site Owner and Operator: E. David Locke  
FH of McFarland, Inc.  
5990 U.S. Highway 51  
McFarland, WI 53558

Consultants: Giles Engineering Associates, Inc.  
N8 W 22350 Johnson Road  
Waukesha, WI 53186  
Attention: Mr. Kevin T. Bugel  
(262) 544-0118

WDNR: Wisconsin Department of Natural Resources  
3911 Fish Hatchery Road  
Madison, Wisconsin 53711  
Attention: Cynthia Koepke  
(608) 219-2181



0 5' 10'  
 APPROXIMATE SCALE

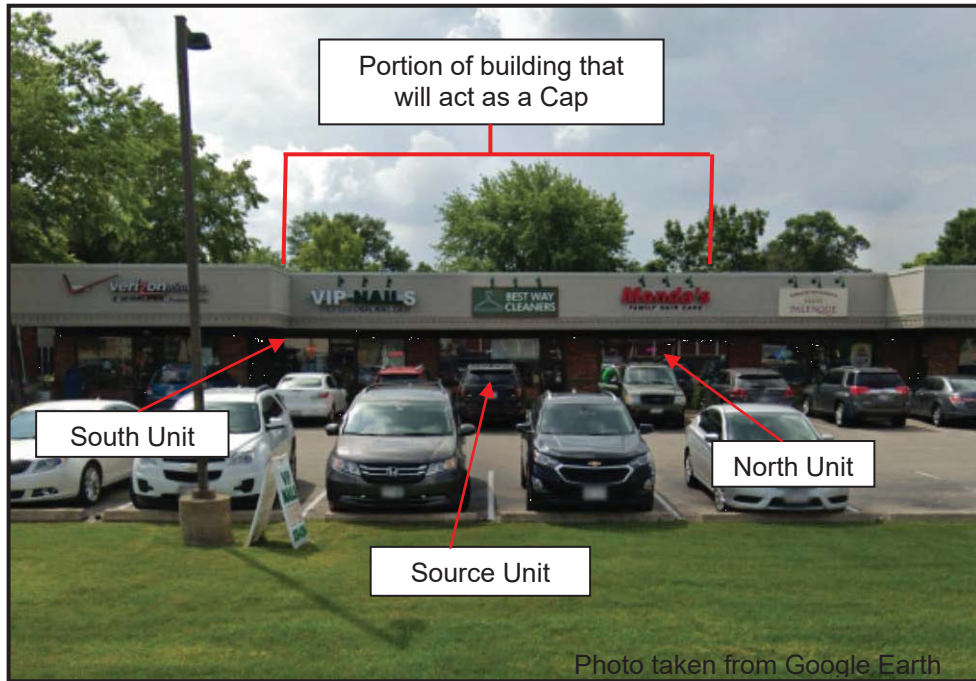
**LEGEND:**

	VAPOR MITIGATION SYSTEM TO BE MAINTAINED
	GSS-1 SOIL GAS POINT
	SS-1 PREVIOUS BORINGS (BY SEYMOUR)
	FORMER DRY CLEANING MACHINE (DCM)
	PROPERTY LINE
	UNDERGROUND ELECTRIC LINE
	GAS LINE
	WATER LINE
	SANITARY SEWER LINE
	FLOOR DRAIN

**GILES ENGINEERING ASSOCIATES, INC.**  
 N8 W22350 JOHNSON DRIVE, SUITE A1  
 WAUKESHA, WI 53186 (262)544-0118  
 www.gilesengr.com

FIGURE D.2(2)  
 LOCATION MAP (VAPOR MITIGATION SYSTEM MAINTENANCE PLAN)  
 FORMER BEST WAY CLEANERS  
 5914 HIGHWAY 51  
 McFARLAND, WISCONSIN

DESIGNED	DRAWN	SCALE	DATE	REVISED
KTB/KMH	<i>Jed</i>	approx. 1"=10'	01-06-21	--
PROJECT NO.: 1E-2006002			CAD No. 1E2006002m	



View of the front of the shopping center building along U.S. Highway 51, facing west.



View of the back of the shopping center building, facing southwest.

**D.3(1) CAP PHOTOGRAPHS**

October 22, 2020

**Best Way Cleaners**  
 5914 U.S. Highway 51  
 McFarland, Wisconsin  
 Project No. 1E-2006002  
 BRRTS No. 02-13-583171



**GILES**  
 ENGINEERING ASSOCIATES, INC.



View of the interior of source unit and typical concrete floor to be maintained, facing east.



View of the interior of source unit and typical concrete floor to be maintained, facing west.

### D.3(1) CAP PHOTOGRAPHS

October 22, 2020

**Best Way Cleaners**  
5914 U.S. Highway 51  
McFarland, Wisconsin  
Project No. 1E-2006002  
BRRTS No. 02-13-583171



**GILES**  
ENGINEERING ASSOCIATES, INC.



View of the roof-mounted ventilation blower.



View of the mitigation system piping penetrating the concrete floor slab.

**D.3(2) PHOTOGRAPHS**

December 14, 2018

Photographs taken from Seymour Environmental Services, Inc.

Vapor Mitigation System Inspection Log

**Best Way Cleaners**  
5914 U.S. Highway 51  
McFarland, Wisconsin  
Project No. 1E-2006002  
BRRTS No. 02-13-583171



**GILES**  
ENGINEERING ASSOCIATES, INC.



View of the manometer reading 4 inches of water.



View of a manometer reading at SS-1 showing negative pressure of 0.2 inches of water.

**D.3(2) PHOTOGRAPHS**

December 14, 2018

Photographs taken from Seymour Environmental Services, Inc.

Vapor Mitigation System Inspection Log

**Best Way Cleaners**  
5914 U.S. Highway 51  
McFarland, Wisconsin  
Project No. 1E-2006002  
BRRS No. 02-13-583171



**GILES**  
ENGINEERING ASSOCIATES, INC.

**Directions:** In accordance with s. NR 727.05 (1) (b) 3., Wis. Adm. Code, use of this form for documenting the inspections and maintenance of certain continuing obligations is required. Personal information collected will be used for administrative purposes and may be provided to requesters to the extent required by Wisconsin's Open Records law [ss. 19.31-19.39, Wis. Stats.]. When using this form, identify the condition that is being inspected. See the closure approval letter for this site for requirements regarding the submittal of this form to the Department of Natural Resources. A copy of this inspection log is required to be maintained either on the property, or at a location specified in the closure approval letter. Do NOT delete previous inspection results. This form was developed to provide a continuous history of site inspection results. The Department of Natural Resources project manager is identified in the closure letter. The project manager may also be identified from the database, BRRTS on the Web, at <http://dnr.wi.gov/botw/SetUpBasicSearchForm.do>, by searching for the site using the BRRTS ID number, and then looking in the "Who" section.

Activity (Site) Name Best Way Cleaners	BRRTS No. 02-13-583171
---	---------------------------

Inspections are required to be conducted (see closure approval letter):

annually  
 semi-annually  
 other – specify \_\_\_\_\_

When submittal of this form is required, submit the form electronically to the DNR project manager. An electronic version of this filled out form, or a scanned version may be sent to the following email address (see closure approval letter):

Inspection Date	Inspector Name	Item	Describe the condition of the item that is being inspected	Recommendations for repair or maintenance	Previous recommendations implemented?	Photographs taken and attached?
		<input type="checkbox"/> monitoring well <input type="checkbox"/> cover/barrier <input type="checkbox"/> vapor mitigation system <input type="checkbox"/> other:			<input type="radio"/> Y <input type="radio"/> N	<input type="radio"/> Y <input type="radio"/> N
		<input type="checkbox"/> monitoring well <input type="checkbox"/> cover/barrier <input type="checkbox"/> vapor mitigation system <input type="checkbox"/> other:			<input type="radio"/> Y <input type="radio"/> N	<input type="radio"/> Y <input type="radio"/> N
		<input type="checkbox"/> monitoring well <input type="checkbox"/> cover/barrier <input type="checkbox"/> vapor mitigation system <input type="checkbox"/> other:			<input type="radio"/> Y <input type="radio"/> N	<input type="radio"/> Y <input type="radio"/> N
		<input type="checkbox"/> monitoring well <input type="checkbox"/> cover/barrier <input type="checkbox"/> vapor mitigation system <input type="checkbox"/> other:			<input type="radio"/> Y <input type="radio"/> N	<input type="radio"/> Y <input type="radio"/> N
		<input type="checkbox"/> monitoring well <input type="checkbox"/> cover/barrier <input type="checkbox"/> vapor mitigation system <input type="checkbox"/> other:			<input type="radio"/> Y <input type="radio"/> N	<input type="radio"/> Y <input type="radio"/> N
		<input type="checkbox"/> monitoring well <input type="checkbox"/> cover/barrier <input type="checkbox"/> vapor mitigation system <input type="checkbox"/> other:			<input type="radio"/> Y <input type="radio"/> N	<input type="radio"/> Y <input type="radio"/> N

{Click to Add/Edit Image}

Date added:

Title:

{Click to Add/Edit Image}

Date added:

Title:



**Notice:** In accordance with s. NR 727.05 (1) (b) 3., Wis. Adm. Code, use of this form for documenting the inspections and maintenance of certain vapor-related continuing obligations is required. Personal information collected will be used for administrative purposes and may be provided to requesters to the extent required by Wisconsin's Public Records law [ss. 19.31-19.39, Wis. Stats.].


**Directions:** This form was developed to provide the results of a site inspection of a vapor related continuing obligation, typically a vapor mitigation system. See the closure approval letter for this site for requirements regarding the submittal of this form to the Department of Natural Resources. A copy of this inspection log is required to be maintained either on the property, or at a location specified in the closure approval letter. The closure letter may be found in the database, [BRRTS on the Web](#), by searching for the site using the BRRTS ID number, and then looking in the "Action" section, for code 56.

Activity (Site) Name: Best Way Cleaners

BRRTS No. 02-13-583171


Date of Inspection: \_\_\_\_\_

When submittal of this form is required, submit an electronic version or a scanned copy of this completed form to the [RR Submittal Portal](#).

SYSTEM COMPONENT		DATE:		
NAME	WHAT DOES IT DO?	WHAT DO I CHECK?	WHAT SHOULD I SEE?	WHAT TO FIX?
<b>Manometer or Differential Pressure Gauge</b>	Measures differential pressure between vacuum side of vent pipe and indoor space.  This measurement confirms there is a vacuum being pulled by the fan.	Liquid Level on Manometer or Gauge	Liquid level in manometer should be offset (not level with each other).	A change in liquid level indicates a change in the vacuum below foundation. This could be caused by failure of fan, blockage of vent pipe, change in water level below building, or other conditions.  Hire a professional to identify cause and repair if needed.
PHOTO  <p>Optional: Click on photo to upload your own.</p>		<b>NOTES:</b> (Record the reading on the gauge. Identify specific building and location description:) <input type="checkbox"/> Not Applicable		

SYSTEM COMPONENT		WHAT DO I CHECK?	WHAT SHOULD I SEE?	DATE:
NAME	WHAT DOES IT DO?			WHAT TO FIX?
<b>Fan</b>	<p>Fan creates a vacuum and lowers pressure below foundation.</p> <p>The fan also removes soil gases from below foundation for discharge to atmosphere.</p>	<p>Fan Operation</p> <p>Fan Location</p> <p>Motor Noise</p>	<p>Fan is on.</p> <p>Fan mounted outside &amp; secure.</p> <p>Fan motor is quiet (loud motor may indicate problem).</p>	<p>Replace the fan immediately once the fan stops running. Fans typically run for 10-20 years, but it may be less.</p> <p>Replacement fan to have similar specifications as original with respect to flow and vacuum.</p> <p>After a fan is replaced, the system should be evaluated by a mitigation professional to verify effectiveness, which includes pressure readings.</p> <p><b>Original Fan Make and Model:</b></p>



PHOTO



Optional:  
Click on photo to  
upload your own.

**NOTES:** (Identify specific building and location description:)

Not Applicable

SYSTEM COMPONENT		DATE:		
NAME	WHAT DOES IT DO?	WHAT DO I CHECK?	WHAT SHOULD I SEE?	WHAT TO FIX?
<p><b>Suction Drop Point w/ Vent Pipe</b></p>	<p><b>Suction Point</b> : Soil gases are collected in a void space below the foundation, and tight seal prevents soil gas from getting inside the home. <b>Vent Pipe:</b> Pipe conveys the vacuum from the fan, and collects soil gases for discharge to the atmosphere.</p>	<p>Suction Point Seal  Vent Pipe Condition</p>	<p>Seal is air tight around pipe penetration.  Vent pipe is connected to fan, has not cracked.</p>	<p>Suction point seal or vent pipe may need to be sealed or replaced if cracks or leaks appear.  If any piping or sealing of the system is altered or replaced, the system should be evaluated by a mitigation professional to verify effectiveness, which includes pressure readings.</p>
<p>PHOTO</p>  <p>Optional: Click on photo to upload your own.</p>			<p><b>NOTES:</b> (Identify specific building and location description:)</p> <p><input type="checkbox"/> Not Applicable</p>	
<p><b>Sealed Sump w/Vent Pipe</b></p>	<p><b>Sump Cover:</b> Soil gases are collected in sump and the cover prevents soil gas from getting inside home. <b>Vent Pipe:</b> Pipe transports the soil gas from the sump for discharge to the atmosphere.</p>	<p>Suction Point Seal  Vent Pipe Seal Condition</p>	<p>Seal is airtight to floor.  Vent pipe is connected to the sump cover and is not cracked.</p>	<p>Sump cover or vent pipe may need to be sealed or replaced if cracks or leaks appear.  If any piping or sealing of the system is altered or replaced, the system should be evaluated by a plumber or a mitigation professional to verify effectiveness, which includes pressure readings.</p>
<p>PHOTO</p>  <p>Optional: Click on photo to upload your own.</p>			<p><b>NOTES:</b> (Identify specific building and location description:)</p> <p><input type="checkbox"/> Not Applicable</p>	

SYSTEM COMPONENT		WHAT DO I CHECK?	WHAT SHOULD I SEE?	DATE:
NAME	WHAT DOES IT DO?			WHAT TO FIX?
<b>Outdoor Vent Pipe</b>	Pipe transports the soil gas from beneath the foundation for discharge to the atmosphere.	Vent Pipe Condition  Vent Pipe Location	Vent pipe remains connected to fan. End of pipe free from obstructions. The exhaust is more than 15 feet from windows or air intakes.	Vent pipe may require replacement, or cleaning to remove ice or debris. If any piping or sealing of the system is altered or replaced, the system should be evaluated by a mitigation professional to verify effectiveness, which includes pressure readings.

PHOTO



Optional:  
Click on photo to upload your own.

NOTES: (Identify specific building and location description:)

Not Applicable

<b>Foundation Floor</b>	Foundation is a barrier that minimizes soil gas entry into building, and helps fan to work efficiently.	Foundation Condition  Foundation Footprint	No penetrating cracks or holes in foundation.  Check if there have been alterations or additions to building or footprint.	Seal cracks or other penetrations as you would to prevent water from entering.  If building floor plan has changed, notify DNR and contact a mitigation professional to evaluate if modifications to the vapor mitigation system are necessary.
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PHOTO



Optional:  
Click on photo to upload your own.

NOTES: (Identify specific building and location description:)

Not Applicable

SYSTEM COMPONENT				DATE:
NAME	WHAT DOES IT DO?	WHAT DO I CHECK?	WHAT SHOULD I SEE?	WHAT TO FIX?
Sub Slab Vapor Port	This is a sample port to measure vacuum or take sample of soil gas if needed. It needs to remain sealed when not in use to prevent soil gas entry into the home.	Port Seal/Cap	If able to measure the vacuum with a micromanometer, the pressure differential should be at least 0.004 inches of H <sub>2</sub> O or at least one Pascal.	Repair or replace the seal and cover as needed.
		Port Condition	Port is sealed and capped when not in use.	Permanently seal hole if sample port is ever removed.

PHOTO



Optional:  
Click on photo to upload  
your own.

**NOTES:** (If taken, record the pressure differential reading. Identify specific building and location description:)

Not Applicable

## Foellmi, Thomas J - DNR

---

**From:** Koepke, Cynthia L - DNR  
**Sent:** Tuesday, March 30, 2021 8:35 AM  
**To:** E. David Locke; speotter@oregoncommunitybank.com; Kevin Bugel; Kelly Hayden  
**Cc:** Troy E. Giles; Charles V. Sweeney  
**Subject:** Remaining Actions Needed for Best Way Cleaners project closure, 02-13-583171

On March 12, 2021, the Department of Natural Resources (DNR) reviewed your request for closure of the case described above. DNR reviews environmental remediation cases for compliance with applicable local, state, and federal laws. The following actions are required before DNR can grant you case closure in compliance with Wis. Stat. ch. 292 and Wis. Adm. Code chs. NR 700-754. Pursuant to Wis. Adm. Code § NR 726.09(2)(g), you are required to provide this information to the DNR within 120 days of the date of this letter.

### Remaining Actions Needed

#### Monitoring Well Filling and Sealing

DNR received documentation on March 16, 2021 that the monitoring wells had been sealed according to Wis. Adm. Code ch. NR 141. Thank you for attending to this so promptly.

#### Purge Water, Waste and/or Soil Pile Removal (if applicable)

Any remaining purge water, solid waste and/or contaminated soil piles generated as part of site investigation or remediation activities must be removed from the site and properly managed in accordance with the applicable local, state, and federal laws. Once that work is complete, send documentation to the DNR indicating the methods used for appropriate treatment or disposal of the remaining purge water, solid waste and/or contaminated soil.

#### Closure Packet Revisions

1. Structural impediment should be included on Figures B.2.a and B.2.b.
2. F.4. should have the new owner's signature.

### Documentation

When the required actions are completed, submit the appropriate documentation within 120 days of the date of this letter, to verify completion. At that point, your closure request can be approved and DNR will send you a final closure letter.

If any changes to the closure request are still outstanding, submit all changes to the original closure request. Only revisions or updates need to be submitted. ~~The submittal of both an electronic and paper copy are required in accordance with Wis. Adm. Code s. NR 726.09 (1).~~ Because of the pandemic, the requirement to submit a paper copy is currently waived. For more information on electronic submittals, see *Guidance for Electronic Submittals for the Remediation and Redevelopment Program, RR- 690*. To view or download the document, go to [dnr.wi.gov](http://dnr.wi.gov) and search "RR 690".

### Listing on Database

This site will be listed on the DNR's Bureau for Remediation and Redevelopment Tracking System on the Web (BOTW) and RR Sites Map to provide public notice of remaining contamination and continuing obligations. The continuing obligations will be specified in the final case closure approval letter. Information submitted with your closure request application will be included on BOTW, located at [dnr.wi.gov](http://dnr.wi.gov) (search "BOTW").

### In Conclusion

We appreciate your efforts to restore the environment at this site. This remedial action project is nearing completion. I look forward to working with you to complete all remaining actions that are necessary to achieve case closure. As always, let me know if you have any questions.

**We are committed to service excellence.**

Visit our survey at <http://dnr.wi.gov/customersurvey> to evaluate how I did.

**Cindy Koepke, P.G.**

[she/her/hers]

Hydrogeologist – Remediation & Redevelopment Program

Wisconsin Department of Natural Resources

South Central Region

3911 Fish Hatchery Road

Fitchburg WI 53711

Phone: **608-219-2181**

Email: [cynthia.koepke@wisconsin.gov](mailto:cynthia.koepke@wisconsin.gov)



**SUBMIT AS UNBOUND PACKAGE IN THE ORDER SHOWN**

**Notice:** Pursuant to ch. 292, Wis. Stats., and chs. NR 726 and 746, Wis. Adm. Code, this form is required to be completed for case closure requests. The closure of a case means that the Department of Natural Resources (DNR) has determined that no further response is required at that time based on the information that has been submitted to the DNR. All sections of this form must be completed unless otherwise directed by the Department. DNR will consider your request administratively complete when the form and all sections are completed, all attachments are included, and the applicable fees required under ch. NR 749, Wis. Adm. Code, are included, and sent to the proper destinations. Personal information collected will be used for administrative purposes and may be provided to requesters to the extent required by Wisconsin's Open Records Law (ss. 19.31 - 19.39, Wis. Stats.). Incomplete forms will be considered "administratively incomplete" and processing of the request will stop until required information is provided.

Site Information			
BRRTS No.	VPLE No.		
02-13-583171			
Parcel ID No.			
154/0610-032-4510-1			
FID No.	WTM Coordinates		
	X	Y	
	576796	282637	
BRRTS Activity (Site) Name	WTM Coordinates Represent:		
Best Way Cleaners	<input checked="" type="checkbox"/> Source Area <input type="checkbox"/> Parcel Center		
Site Address	City	State	ZIP Code
5914 U.S. Highway 51 Acres Ready For Use	McFarland	WI	53558

1

Responsible Party (RP) Name			
Steve Peotter			
Company Name			
One Community Bank			
Mailing Address	City	State	ZIP Code
733 North Main Street	Oregon	WI	53575
Phone Number	Email		
(608) 835-3168	speotter@oregoncommunitybank.com		

Check here if the RP is the owner of the source property.

Environmental Consultant Name			
Kevin T. Bugel			
Consulting Firm			
Giles Engineering Associates, Inc.			
Mailing Address	City	State	ZIP Code
N8W22350 Johnson Drive, Suite A1	Waukesha	WI	53186
Phone Number	Email		
(262) 544-0118	kbugel@gilesengr.com		

**Fees and Mailing of Closure Request**

1. **Send a copy of page one** of this form and the applicable ch. NR 749, Wis. Adm. Code, fee(s) to the DNR Regional EPA (Environmental Program Associate) at <http://dnr.wi.gov/topic/Brownfields/Contact.html#tabx3>. Check all fees that apply:

- |   |   |
|---|---|
| <input type="checkbox"/> \$1,050 Closure Fee  | <input type="checkbox"/> \$300 Database Fee for Soil                  |
| <input type="checkbox"/> \$350 Database Fee for Groundwater or Monitoring Wells (Not Abandoned) | Total Amount of Payment \$ _____                                      |
|   | <input checked="" type="checkbox"/> Resubmittal, Fees Previously Paid |

2. **Send one paper copy and one e-copy on compact disk of the entire closure package** to the Regional Project Manager assigned to your site. Submit as *unbound, separate documents* in the order and with the titles prescribed by this form. For electronic document submittal requirements, see <http://dnr.wi.gov/files/PDF/pubs/rr/RR690.pdf>.



**Site Summary**

*If any portion of the Site Summary Section is not relevant to the case closure request, you must fully explain the reasons why in the relevant section of the form. All information submitted shall be legible. Providing illegible information will result in a submittal being considered incomplete until corrected.*

**1. General Site Information and Site History**

- A. **Site Location:** Describe the physical location of the site, both generally and specific to its immediate surroundings.  
The former Best Way Cleaners lease space is located within a single-story, multi-tenant shopping center. A hair salon is located in the lease space to the north of the former dry cleaner unit, and a nail salon operates in the unit to the south. The shopping center is located in an area of mixed commercial and residential land use. US Highway 51 right-of-way (ROW) forms the property's east boundary with a commercial restaurant beyond, a bank building is located to the south, a furniture store is located to the adjoining north, and residential properties are located to the west. Lake Waubesa is located approximately 420 feet west of the Site, and a waterway connected to the lake is located approximately 240 feet to the south and southwest.
- B. **Prior and current site usage:** Specifically describe the current and historic occupancy and types of use.  
According to the Case Closure previously prepared by Seymour Environmental Services, Inc. (Seymour, Inc.) and submitted to the Wisconsin Department of Natural Resources (WDNR) on November 8, 2019, the property was vacant land until the 1950's when an auto repair facility was constructed on the northeast portion of the property. The auto repair building was razed in 1984 during redevelopment of the property as a shopping center.
- C. **Current zoning** (e.g., industrial, commercial, residential) for the site and for neighboring properties, and how verified (Provide documentation in Attachment G).  
According to the Village of McFarland Zoning Map, the Site and adjoining properties to the north, south, and east are zoned as C-G, or General Commercial. The property to the northeast of the Site is zoned as C-L, or Limited Commercial, and the properties to the adjoining west are zoned as R-2, or Single & Two-Family Residence.
- D. **Describe how and when site contamination was discovered.**  
Contamination at the Site was discovered when Seymour, Inc. performed a Phase II Environmental Site Assessment (ESA) for the property in July 2018 in advance of a property transaction.
- E. **Describe the type(s) and source(s) or suspected source(s) of contamination.**  
Low-levels of common dry cleaning solvents, including tetrachloroethene (PCE) and its degradation products, were identified at the Site near the former Best Way Cleaners lease space. The likely source of the contamination is the former dry cleaning machine (DCM) that was located in the west portion of the Best Way Cleaners lease space.
- F. **Other relevant site description information (or enter Not Applicable).**  
To address the possibility of the presence of emerging contaminants such as PFAS at the Site, an interview was conducted with the former owner/operator of the Best Way Cleaners regarding the former business's operations. The operator has stated that the facility provided garment dry cleaning services, but waterproofing services or cleaning of materials such as leather and carpets were not part of their operation. To the best of the former operator's knowledge, PFAS-containing chemicals were not used or stored at the Site. Based on the business operation history provided by the former owner, it was determined at the time of the investigation that PFAS were not likely to be a concern at the Site.
- G. **List BRRTS activity/site name and number for BRRTS activities at this source property, including closed cases.**  
02-12-583171 Best Way Cleaners - open ERP site  
07-13-583141 Stonefield Square Shopping Center - General Liability Clarification
- H. **List BRRTS activity/site name(s) and number(s) for all properties immediately adjacent to (abutting) this source property.**  
03-13-000413 McFarland Motors - closed LUST site. Located east of the Site, across U.S. Highway 51.

**2. General Site Conditions**

- A. **Soil/Geology**
- i. **Describe soil type(s) and relevant physical properties, thickness of soil column across the site, vertical and lateral variations in soil types.**  
Subsurface materials encountered during Giles Engineering Associates, Inc.'s (Giles) supplemental environmental investigation were consistent with the findings of Seymour, Inc. The borings completed within the building were surfaced with an approximately 6-inch concrete slab underlain by approximately 3.5 feet of sand and gravel granular fill material and approximately 1 foot of clayey silt fill. Exterior borings were surfaced with 3 inches of asphalt underlain by 4 to 5 feet of sand and gravel fill. Native soil consisting of clayey silt and silty clay was observed to approximately 6 to 7.5 feet below ground surface (bgs). Coarse sand was observed between 7.5 and 16 feet bgs, the maximum depth of Giles' borings, with a 1 to 2 foot lens of silty clay at approximately 10 feet bgs.
- ii. **Describe the composition, location and lateral extent, and depth of fill or waste deposits on the site.**  
Fill material primarily consisted of coarse to fine sand and coarse to fine gravel, and was observed to approximately 3.5 feet bgs beneath the building footprint and 5 to 6 feet bgs within the parking lot west of the building. Additionally, 1 to

2 feet of clayey silt with trace coarse to fine gravel was observed from 3.5 to 4.5 feet bgs in borings completed inside the existing building.

- iii. Describe the depth to bedrock, bedrock type, competency and whether or not it was encountered during the investigation. According to the map titled Preliminary Bedrock Geology of Dane County, Wisconsin, dated 2013, the bedrock beneath the Site consists of the Tunnel City Group sandstone, and the Site is located near the contact with the Trempealeau Group sandstone. The Tunnel City Group is a quartz sandstone and includes the Lone Rock Formation, a feldspathic sandstone, and the Mazomaine Formation, a fine to medium grained sandstone. According to historic well construction reports obtained from the WDNR Well Construction Information System, the depth to bedrock in the vicinity of the site ranges between approximately 30 and 40 feet bgs. Bedrock was not encountered during the environmental investigations at the Site.

- iv. Describe the nature and locations of current surface cover(s) across the site (e.g., natural vegetation, landscaped areas, gravel, hard surfaces, and buildings).  
The overall Site consists of a single story multi-tenant shopping center. Asphalt parking lots are located to the east and west of the building. Landscaped areas with grass, shrubs, and/or small trees are located to the north and south of the building and along the east property line. The former Best Way Cleaners lease space was located in a central unit in the south half of the building. According to boring logs from direct-push borings completed with the building, the building's floor slab within the former Best Way Cleaners unit consists of approximately 6 inches of concrete.

#### B. Groundwater

- i. Discuss depth to groundwater and piezometric elevations. Describe and explain depth variations, including high and low water table elevation and whether free product affects measurement of water table elevation. Describe the stratigraphic unit(s) where water table was found or which were measured for piezometric levels.

Water table elevations were measured three times in NR 141-variance groundwater monitoring wells GMW-1, GMW-2 and GMW-3; twice in July and once in October 2020. Stable groundwater elevations varied between approximately 4 and 5 feet bgs in July, and approximately 4.5 and 5.5 feet bgs in October. The piezometric surface was also measured three times in NR 14-variance piezometers GPZ-1 and GPZ-2. Gauged elevations ranged from approximately 3.5 and 5 feet bgs in July and approximately 4.5 and 5.5 feet bgs in October. The decrease in elevation of the water table and piezometric surface between July and October reflects seasonal changes in precipitation. The high watertable/piezometric surface is within the sand and gravel fill material or clayey silt fill material identified in the boring logs. The low water table/piezometric surface was within the native clayey silt which underlies the fill material.

- ii. Discuss groundwater flow direction(s), shallow and deep. Describe and explain flow variations, including fracture flow if present.

The direction of groundwater flow for the shallow groundwater was established based on elevations gauged in the groundwater monitoring wells between July and October 2020. Based on these measurements, the direction of groundwater flow is to the southwest, towards a waterway that connects to Lake Waubesa. It is expected that the deep groundwater flow direction would be to the west, towards the lake, which is located approximately 420 feet west of the Site.

- iii. Discuss groundwater flow characteristics: hydraulic conductivity, flow rate and permeability, or state why this information was not obtained.

Two-inch wells were not installed during the environmental investigation of the Site, therefore the hydraulic conductivity, flow rate, and permeability were not obtained.

- iv. Identify and describe locations/distance of potable and/or municipal wells within 1200 feet of the site. Include general summary of well construction (geology, depth of casing, depth of screened or open interval).

Review of records on the WDNR Well Construction Information System shows that there were multiple wells within 1,200 feet of the Site. However, the construction forms indicate they were installed between 1939 and 1958. Currently, municipal water is supplied in the Village of McFarland. According to a representative of the Village of McFarland utility services, the occupied buildings within 500 feet of the Site are supplied with municipal water. Therefore given the age of the wells and availability of municipal water, it unlikely that the documented wells are still in use as potable water sources.

### 3. Site Investigation Summary

#### A. General

- i. Provide a brief summary of the site investigation history. Reference previous submittals by name and date. Describe site investigation activities undertaken since the last submittal for this project and attach the appropriate documentation in Attachment C, if not previously provided.

Seymour, Inc. completed a Phase II ESA for the property in July 2018. The Phase II included an evaluation of the former Best Way Cleaners lease space and the former auto repair facility that had been located on the north end of the property prior to the construction of the shopping center. Dry cleaning solvent was identified in the environment during the investigation, but no petroleum compounds were detected near the former auto repair facility. Seymour, Inc. notified the WDNR of the release on February 15, 2019, and a responsible party letter was issued. To define the degree and extent of contamination from the dry cleaners, Seymour, Inc. completed a site investigation (SI) for the property. The findings were summarized in the Site Investigation Report submitted to the WDNR June 11, 2019. The SI identified soil, groundwater, and soil gas impacts above their respective state standards in samples collected within the footprint of

the former dry cleaning machine (DCM) within the former Best Way Cleaners lease space. Seymour, Inc. then collected sub-slab soil gas samples from the units to the north and south of the dry cleaning facility, and oversaw the installation of a sub-slab depressurization system. Seymour, Inc. prepared a Case Closure and submitted it to the WNDR November 8, 2019. However, the WNDR determined that additional investigation was necessary to define the degree and extent of impacts.

Giles was retained to continue the supplemental SI regarding the identified soil, soil gas, and groundwater impacts. Giles installed three NR 141-variance groundwater wells, two NR 141-variance piezometers, and collected several soil, groundwater, and sub-slab soil gas samples. Giles' investigation concurred with Seymour Inc.'s findings in that the soil samples contained degradation products of PCE but did not contain PCE itself. Also, groundwater samples collected downgradient from the former DCM showed little to no impact from dry cleaning solvent. Despite not being present in the soil or groundwater, sub-slab soil gas samples contained PCE and trichloroethene (TCE) above their respective Vapor Risk Screening Levels (VRSLs). Giles summarized the findings of the supplemental investigation in an e-mail to the WNDR sent on August 19, 2020 (included as Attachment C.6).

- ii. Identify whether contamination extends beyond the source property boundary, and if so describe the media affected (e.g., soil, groundwater, vapors and/or sediment, etc.), and the vertical and horizontal extent of impacts. Based on the results of the soil, groundwater, and soil gas samples collected during the SI and supplemental investigation, it was determined that the contamination does not extend beyond the source property and is limited to the area under the building beneath the former DCM.
- iii. Identify any structural impediments to the completion of site investigation and/or remediation and whether these impediments are on the source property or off the source property. Identify the type and location of any structural impediment (e.g., structure) that also serves as the performance standard barrier for protection of the direct contact or the groundwater pathway.

The presence of the shopping center building poses a structural impediment to remediation. The extent of contamination is limited to an area within the building footprint. Due to the limitations of the interior space and the presence of sub-grade utilities, remediation of the residually impacted soil, groundwater, or soil gas is impeded. The building structure and concrete floor slab however, will act as a cap and impermeable barrier over the residual soil and groundwater impacts that will remain at the Site.

#### B. Soil

- i. Describe degree and extent of soil contamination. Relate this to known or suspected sources and known or potential receptors/migration pathways. Shallow and deep soil samples collected by Seymour, Inc. from boring B-5 (within the footprint of the former DCM) at 3.5 and 7 feet bgs and Giles sample from boring GB-2 (southeast of the former DCM) at 2-4 feet bgs contained cis-1,2-dichloroethene (DCE) above the NR 720 RCL for groundwater protection. Giles soil samples from GPZ-1 (southwest of the former DCM) at 2-4 and 4-6 feet bgs also contained cis-1,2-DCE and trans-1,2-DCE above the NR 720 RCL for groundwater protection. Soil samples collected outside the building did not contain soil impacts above their respective RCLs. Based on these findings, it was determined that the area of soil impacts is limited to the vicinity of the former DCM and extends from just beneath the floor slab to the water table, approximately 5 feet bgs.

Groundwater is a potential receptor for the soil contamination. However, groundwater samples show that concentrations of cis- and trans-1,2-DCE are below the NR 140 Enforcement Standard (ES).

- ii. Describe the concentration(s) and types of soil contaminants found in the upper four feet of the soil column. Concentrations of cis- and trans-1,2-DCE above the NR 720 RCL for groundwater protection were identified in shallow samples (between 2 and 4 feet bgs) from B-5, GB-2, and GPZ-1. These borings were located within the footprint of the former DCM and immediately to the southeast and southwest of the machine, respectively.
- iii. Identify the ch. NR 720, Wis. Adm. Code, method used to establish the soil cleanup standards for this site. This includes a soil performance standard established in accordance with s. NR 720.08, a Residual Contaminant Level (RCL) established in accordance with s. NR 720.10 that is protective of groundwater quality, or an RCL established in accordance with s. NR 720.12 that is protective of human health from direct contact with contaminated soil. Identify the land use classification that was used to establish cleanup standards. Provide a copy of the supporting calculations/information in Attachment C.

The Wisconsin Administrative Code Chapter NR 720 Soil to Groundwater Pathway and Direct Contact Pathway (Non-Industrial and Industrial) RCLs were applied.

#### C. Groundwater

- i. Describe degree and extent of groundwater contamination. Relate this to known or suspected sources and known or potential receptors/migration pathways. Specifically address any potential or existing impacts to water supply wells or interception with building foundation drain systems.

Seymour, Inc. collected shallow and deep groundwater samples from temporary wells B-1 through B-5 during their investigation. Cis-1,2-DCE and PCE were detected above their respective NR 140 PAL in Seymour, Inc.'s shallow groundwater sample collected from B-5 (within the footprint of the DCM) during their initial sampling event in April 2019. In addition, the deep sample collected from B-5 contained PCE at the ES. Giles' July 2020 groundwater sample from NR 141-variance well GMW-1, installed just southwest of the former DCM and downgradient from B-5,

contained cis-1,2-DCE above the PAL, however no PCE was detected. Furthermore, the concentration of cis-1,2-DCE was below the PAL in GMW-1 during Giles' second groundwater sampling event in October 2020. Based on the results of Seymour, Inc.'s initial sampling and Giles' subsequent sampling, the PCE contamination in groundwater appears to have a limited extent and does not extend beyond the footprint of the former DCM.

Utilities located beneath the building slab are a potential migration pathway for groundwater contamination. With the aid of a private utility locating service, Giles determined that underground electric and sanitary sewer utilities run parallel beneath the west portion of the shopping center building. The closest utility, and potential migration pathway, to the former DCM is an underground electric line located approximately two feet west of the former DCM. However, the depth of the utilities under the building slab are likely above the measured groundwater table elevation of approximately 5 feet bgs, and well above Seymour, Inc.'s "deep" sample interval that contained PCE at the ES. Therefore, although the utilities are in close proximity to the source area, they are unlikely to intercept the contaminated groundwater to act as a migration pathway.

- ii. Describe the presence of free product at the site, including the thickness, depth, and locations. Identify the depth and location of the smear zone.

Free product was not encountered at the Site.

#### D. Vapor

- i. Describe how the vapor migration pathway was assessed, including locations where vapor, soil gas, or indoor air samples were collected. If the vapor pathway was not assessed, explain reasons why.

Sub-slab soil gas samples were collected within the former Best Way Cleaners lease space, and within the adjoining north and south units. Seymour, Inc. installed sub-slab vapor points SS-1/1A (Best Way), SS-2 (north unit), and SS-3 (south unit) during their investigation. Giles installed two additional vapor points in July 2020, one just southwest of the former DCM (GSS-1) and one in the east portion of the Best Way unit (GSS-2).

Seymour, Inc.'s initial sample from SS-1 contained PCE above the WNDR sub-slab VRSL for small commercial properties and TCE above the large commercial VRSL. Seymour, Inc. oversaw the installation of a sub-slab depressurization system in December 2018. The post-system sub-slab soil gas sample collected from the source area (SS-1A) showed a 70% decrease in PCE and TCE concentrations, and samples from the neighboring units did not contain PCE or TCE above their respective VRSLs.

The PCE and TCE identified in the soil gas were not identified in significant quantities in the soil or groundwater samples collected during the investigation. Based on the findings of the investigation, it is inferred that the sub-slab vapors are the result of dry cleaning solvent contained within the basecourse material immediately beneath the building floor slab.

Giles collected sub-slab soil gas samples from vapor points SS-2, SS-3, GSS-1, and GSS-2 in July 2020. The sub-slab depressurization system was turned off for 7 days prior to the collection of the samples. The detected concentrations of PCE and TCE in the sample from GSS-1 were comparable to concentrations detected by Seymour, Inc. in July 2018, which had been collected prior to the installation of the system. Dichlorodifluoromethane and chloroform were also detected above their respective VRSL for residential properties in samples from GSS-2 and SS-2. However it should be noted that the building is zoned as/used for commercial and not residential use, therefore the "small commercial" VRSLs are the most applicable. In addition, the lack of PCE and TCE in soil gas samples from the neighboring units indicates that the sub-slab utilities are not acting as a significant migration pathway for soil gas contamination.

- ii. Identify the applicable DNR action levels and the land use classification used to establish them. Describe where the DNR action levels were reached or exceeded (e.g., sub slab, indoor air or both).

Results were compared to WDNR Vapor Risk Screening Levels for sub-slab soil gas for residential, small commercial, and large commercial/industrial land use. VRSLs for the three land use types were exceeded in samples from SS-1/1A and GSS-1, and residential land use standards were exceeded in GSS-2 and SS-2. It should be noted that the property is considered small commercial.

#### E. Surface Water and Sediment

- i. Identify whether surface water and/or sediment was assessed and describe the impacts found. If this pathway was not assessed, explain why.

Surface water and sediment are not present at the Site, therefore the pathway was not assessed.

- ii. Identify any surface water and/or sediment action levels used to assess the impacts for this pathway and how these were derived. Describe where the DNR action levels were reached or exceeded.

Surface water and sediment are not present at the Site, therefore the pathway was not assessed.

#### 4. Remedial Actions Implemented and Residual Levels at Closure

- A. General: Provide a brief summary of the remedial action history. List previous remedial action report submittals by name and date. Identify remedial actions undertaken since the last submittal for this project and provide the appropriate documentation in Attachment C.

Based on Seymour, Inc.'s initial sub-slab soil gas results, a sub-slab depressurization system was installed on December 15, 2018 within the former Best Way Cleaners lease space. The system was installed to create a negative pressure field beneath the building slab to mitigate the risk posed by the detected sub-slab vapors. The system consists of a single drop point located near the source area, a Radon Away ventilation blower (model GP-501), and connecting PVC piping. The ventilation blower and discharge stacks are located on the roof of the building, above the former Best Way Cleaners lease space. Additional details of the depressurization system were included within Seymour Inc.'s No Action Required request dated January 2019.

Giles completed a pressure field test of the system in July 2020 which showed that the system's radius of influence included the entire Best Way Cleaners lease space, but did not extend to the north and south units. Though the system was determined to be adequate to mitigate the risk from the sub-slab vapors, Giles is aware that the WDNR does not consider the installation of such a system a form of remediation.

- B. Describe any immediate or interim actions taken at the site under ch NR 708, Wis. Adm. Code.  
No immediate or interim actions were taken under NR 708.

- C. Describe the *active* remedial actions taken at the source property, including: type of remedial system(s) used for each media affected; the size and location of any excavation or in-situ treatment; the effectiveness of the systems to address the contaminated media and substances; operational history of the systems; and summarize the performance of the active remedial actions. Provide any system performance documentation in Attachment A.7.

The sub-slab depressurization system was installed to mitigate the risk for vapor intrusion based on the presence of sub-slab vapors above their respective VRSL for small commercial properties. However, the mitigation system is not considered remediation by the WDNR. Therefore, no active remedial actions were taken at the source property.

- D. Describe the alternatives considered during the Green and Sustainable Remediation evaluation in accordance with NR 722.09 and any practices implemented as a result of the evaluation.  
Not applicable.

- E. Describe the nature, degree and extent of residual contamination that will remain at the source property or on other affected properties after case [closure](#).

Residual groundwater, soil, and soil gas contamination at the Site are limited to the footprint of the former DCM and its immediate vicinity. A groundwater sample collected from within the DCM footprint (B-5) contained PCE at the ES when it was last sampled in April 2019. Subsequent downgradient samples from 2020 did not contain PCE, indicating that the extent of impacted groundwater is limited to the vicinity of the former DCM. Concentrations of cis-1,2-DCE detected in groundwater samples decreased to below the PAL over the course of the investigation, indicating natural attenuation may be occurring.

Residual soil impacts will remain near the former DCM. Concentrations of cis- and trans-1,2-DCE were detected above their respective NR 720 RCL for groundwater protection in five shallow and deep soil samples collected from within or just outside of the DCM footprint. The possibility also exists for PCE and TCE-contaminated basecourse material to remain immediately beneath the building slab in the vicinity of the former DCM.

Sub-slab soil gas samples collected from vapor points within the immediate vicinity of the former DCM contained PCE and TCE above their respective small commercial VRSL. Although a sub-slab depressurization system was installed to mitigate the vapor intrusion risk, the system does not remediate the condition.

- F. Describe the residual soil contamination within four feet of ground surface (direct contact zone) that attains or exceeds RCLs established under s. NR 720.12, Wis. Adm. Code, for protection of human health from direct contact.  
Shallow soil samples collected from the Site within four feet of ground surface did not contain VOCs above their respective direct contact RCLs. Shallow samples were collected within the former DCM footprint, immediately to the southeast, east, and southwest of the former DCM.
- G. Describe the residual soil contamination that is above the observed low water table that attains or exceeds the soil standard(s) for the groundwater pathway.  
Unsaturated soil samples collected from borings B-5, GB-2, and GPZ-1 contained cis-1,2-DCE above the groundwater pathway RCL. Additionally, the sample from GPZ-1 contained trans-1,2-DCE above the groundwater pathway RCL. These samples were collected within the footprint of the former DCM and immediately to the southeast and southwest, respectively. Soil intervals that contained the cis- and trans-1,2-DCE were collected between 2 and 7 feet bgs.
- H. Describe how the residual contamination will be addressed, including but not limited to details concerning: covers, engineering controls or other barrier features; use of natural attenuation of groundwater; and vapor mitigation systems or measures.

The residual vapor intrusion risk will continue to be addressed with the sub-slab depressurization system that was installed within the former Best Way Cleaners lease space in December 2018. Due to the low-levels of residual contamination in the

soil and groundwater at the Site, residual soil and groundwater contamination will be addressed through a cap, consisting of the existing shopping center building, and through natural attenuation.

- I. If using natural attenuation as a groundwater remedy, describe how the data collected supports the conclusion that natural attenuation is effective in reducing contaminant mass and concentration (e.g., stable or receding groundwater plume). Concentrations of contaminants in groundwater have shown a decreasing trend over the course of the investigation. A groundwater grab sample collected from temporary well B-5 by Seymour, Inc. in 2019 contained PCE at the ES and cis-1,2-DCE above the PAL. Samples collected from Giles' groundwater monitoring well GMW-1, installed approximately five feet southwest (downgradient) from B-5, did not contain PCE, and the concentration of cis-1,2-DCE decreased to below the PAL during the most recent groundwater sampling event (October 2020).
- J. Identify how all exposure pathways (soil, groundwater, vapor) were removed and/or adequately addressed by immediate, interim and/or remedial action(s).  
Residual soil and groundwater contamination will be addressed through natural attenuation and by an engineered cap consisting of the existing shopping center building. The structure and concrete floor slab will prevent direct contact with contaminated soil beneath the building and provide an impermeable barrier. The sub-slab vapor condition was addressed by the sub-slab depressurization system installed near the source area.
- K. Identify any system hardware anticipated to be left in place after site closure, and explain the reasons why it will remain.  
The sub-slab depressurization system hardware will remain in place after closure to create a negative pressure field beneath the building slab and to extract and vent vapors from beneath the building's floor slab.
- L. Identify the need for a ch. NR 140, Wis. Adm. Code, groundwater Preventive Action Limit (PAL) or Enforcement Standard (ES) exemption, and identify the affected monitoring points and applicable substances.  
An ES exemption is needed for sampling point B-5. The boring was completed within the footprint of the former DCM and the groundwater grab sample collected from the boring in 2019 contained PCE at the ES.
- M. If a DNR action level for vapor intrusion was exceeded (for indoor air, sub slab, or both) describe where it was exceeded and how the pathway was addressed.  
The VRSL for sub-slab soil gas at small commercial properties was exceeded in sub-slab soil gas points SS-1/-1A and GSS-1. The exposure pathway from the soil gas was addressed through the installation of a sub-slab depressurization system.
- N. Describe the surface water and/or sediment contaminant concentrations and areas after remediation. If a DNR action level was exceeded, describe where it was exceeded and how the pathway was addressed.  
Not applicable, no surface water or sediment is present at the Site.

**5. Continuing Obligations: Includes all affected properties and rights-of-way (ROWs). In certain situations, maintenance plans are also required, and must be included in Attachment D.**

Directions: For each of the 3 property types below, check all situations that apply to this closure request.

(NOTE: Monitoring wells to be transferred to another site are addressed in Attachment E.)

This situation applies to the following property or Right of Way (ROW):			Case Closure Situation - Continuing Obligation (database fees will apply, ii. - xiv.)	Maintenance Plan Required	
Property Type:					
Source Property	Affected Property (Off-Source)	ROW			
i.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	None of the following situations apply to this case closure request.	NA
ii.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Residual groundwater contamination exceeds ch. NR 140 ESs.	NA
iii.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Residual soil contamination exceeds ch. NR 720 RCLs.	NA
iv.				Monitoring Wells Remain:	
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	• Not Abandoned (filled and sealed)	NA
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	• Continued Monitoring (requested or required)	Yes
v.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Cover/Barrier/Engineered Cover or Control for (soil) direct contact pathways (includes vapor barriers)	Yes
vi.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Cover/Barrier/Engineered Cover or Control for (soil) groundwater infiltration pathway	Yes
vii.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Structural Impediment: impedes completion of investigation or remedial action (not as a performance standard cover)	NA
viii.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Residual soil contamination meets NR 720 industrial soil RCLs, land use is classified as industrial	NA
ix.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	NA	Vapor Mitigation System (VMS) required due to exceedances of vapor risk screening levels or other health based concern	Yes
x.	<input type="checkbox"/>	<input type="checkbox"/>	NA	Vapor: Dewatering System needed for VMS to work effectively	Yes
xi.	<input type="checkbox"/>	<input type="checkbox"/>	NA	Vapor: Compounds of Concern in use: full vapor assessment could not be completed	NA
xii.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	NA	Vapor: Commercial/industrial exposure assumptions used.	NA
xiii.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Vapor: Residual volatile contamination poses future risk of vapor intrusion	NA
xiv.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Site-specific situation: (e. g., fencing, methane monitoring, other) ( <i>discuss with project manager before submitting the closure request</i> )	Site specific

**6. Underground Storage Tanks**

A. Were any tanks, piping or other associated tank system components removed as part of the investigation or remedial action?  Yes  No

B. Do any upgraded tanks meeting the requirements of ch. ATCP 93, Wis. Adm. Code, exist on the property?  Yes  No

C. If the answer to question 6.B. is yes, is the leak detection system currently being monitored?  Yes  No

## General Instructions

All information shall be legible. Providing illegible information will result in a submittal being considered incomplete until corrected. For each attachment (A-G), provide a Table of Contents page, listing all 'applicable' and 'not applicable' items by Closure Form titles (e.g., A.1. Groundwater Analytical Table, A.2. Soil Analytical Results Table, etc.). If any item is 'not applicable' to the case closure request, you must fully explain the reasons why.

## Data Tables (Attachment A)

### Directions for Data Tables:

- Use **bold** and italics font for information of importance on tables and figures. Use **bold** font for ch. NR 140, Wis. Adm. Code ES attainments or exceedances, and *italicized font* for ch. NR 140, Wis. Adm. Code, PAL attainments or exceedances.
- Use **bold** font to identify individual ch. NR 720 Wis. Adm. Code RCL exceedances. Tables should also include the corresponding groundwater pathway and direct contact pathway RCLs for comparison purposes. Cumulative hazard index and cumulative cancer risk exceedances should also be tabulated and identified on Tables A.2 and A.3.
- Do not use shading or highlighting on the analytical tables.
- Include on Data Tables the level of detection for results which are below the detection level (i.e., do not just list as no detect (ND)).
- Include the units on data tables.
- Summaries of all data must include information collected by previous consultants.
- Do not submit lab data sheets unless these have not been submitted in a previous report. Tabulate all data required in s. NR 716.15 (3)(c), Wis. Adm. Code, in the format required in s. NR 716.15(4)(e), Wis. Adm. Code.
- Include in Attachment A all of the following tables, in the order prescribed below, with the specific Closure Form titles noted on the separate attachments (e.g., Title: A.1. Groundwater Analytical Table; A.2. Soil Analytical Results Table, etc.).
- For required documents, each table (e.g., A.1., A.2., etc.) should be a separate Portable Document Format (PDF).

### A. Data Tables

- Groundwater Analytical Table(s):** Table(s) showing the analytical results and collection dates for all groundwater sampling points (e.g., monitoring wells, temporary wells, sumps, extraction wells, potable wells) for which samples have been collected.
- Soil Analytical Results Table(s):** Table(s) showing **all** soil analytical results and collection dates. Indicate if sample was collected above or below the observed low water table (unsaturated versus saturated).
- Residual Soil Contamination Table(s):** Table(s) showing the analytical results of only the residual soil contamination at the time of closure. This table shall be a subset of table A.2 and should include only the soil sample locations that exceed an RCL. Indicate if sample was collected above or below the observed low water table (unsaturated versus saturated). Table A.3 is optional only if a total of fewer than 15 soil samples have been collected at the site.
- Vapor Analytical Table(s):** Table(s) showing type(s) of samples, sample collection methods, analytical method, sample results, date of sample collection, time period for sample collection, method and results of leak detection, and date, method and results of communication testing.
- Other Media of Concern (e.g., sediment or surface water):** Table(s) showing type(s) of sample, sample collection method, analytical method, sample results, date of sample collection, and time period for sample collection.
- Water Level Elevations:** Table(s) showing all water level elevation measurements and dates from all monitoring wells. If present, free product should be noted on the table.
- Other:** This attachment should include: 1) any available tabulated natural attenuation data; 2) data tables pertaining to engineered remedial systems that document operational history, demonstrate system performance and effectiveness, and display emissions data; and (3) any other data tables relevant to case closure not otherwise noted above. If this section is not applicable, please explain the reasons why.

## Maps, Figures and Photos (Attachment B)

### Directions for Maps, Figures and Photos:

- Provide on paper no larger than 11 x 17 inches, unless otherwise directed by the Department. Maps and figures may be submitted in a larger electronic size than 11 x 17 inches, in a PDF readable by the Adobe Acrobat Reader. However, those larger-size documents must be legible when printed.
- Prepare visual aids, including maps, plans, drawings, fence diagrams, tables and photographs according to the applicable portions of ss. NR 716.15(4), 726.09(2) and 726.11(3), (5) and (6), Wis. Adm. Code.
- Include all sample locations.
- Contour lines should be clearly labeled and defined.
- Include in Attachment B all of the following maps and figures, in the order prescribed below, with the specific Closure Form titles noted on the separate attachments (e.g., Title: B.1. Location Map; B.2. Detailed Site Map, etc.).
- For the electronic copies that are required, each map (e.g., B.1.a., B.2.a, etc.,) should be a separate PDF.
- Maps, figures and photos should be dated to reflect the most recent revision.

### B.1. Location Maps

- Location Map:** A map outlining all properties within the contaminated site boundaries on a United States Geological Survey (U.S.G.S.) topographic map or plat map in sufficient detail to permit easy location of all affected and/or adjacent parcels. If groundwater standards are exceeded, include the location of all potable wells, including municipal wells, within 1200 feet of the area of contamination.
- Detailed Site Map:** A map that shows all relevant features (buildings, roads, current ground surface cover, individual property boundaries for all affected properties, contaminant sources, utility lines, monitoring wells and potable wells) within the contaminated area. This map is to show the location of all contaminated public streets, and highway and railroad rights-of-way in relation to the source property and in relation to the boundaries of groundwater contamination attaining or exceeding a ch. NR 140 ES, and/or in relation to the boundaries of soil contamination attaining or exceeding a RCL. Provide parcel identification numbers for all affected properties.
- RR Sites Map:** From RR Sites Map ([http://dnrmaps.wi.gov/sl/?Viewer=RR\\_Sites](http://dnrmaps.wi.gov/sl/?Viewer=RR_Sites)) attach a map depicting the source property, and all open and closed BRRTS sites within a half-mile radius or less of the property.



**B.2. Soil Figures**

- B.2.a. **Soil Contamination:** Figure(s) showing the location of **all** identified unsaturated soil contamination. Use a single contour to show the horizontal extent of each area of contiguous soil contamination that exceeds a soil to groundwater pathway RCL as determined under ch. NR 720.Wis. Adm. Code. A separate contour line should be used to indicate the horizontal extent of each area of contiguous soil contamination that exceeds a direct contact RCL exceedances (0-4 foot depth).
- B.2.b. **Residual Soil Contamination:** Figure(s) showing only the locations of soil samples where unsaturated soil contamination remains at the time of closure (locations represented in Table A.3). Use a single contour to show the horizontal extent of each area of contiguous soil contamination that exceeds a soil to groundwater pathway RCL as determined under ch. NR 720 Wis. Adm. Code. A separate contour line should be used to indicate the horizontal extent of each area of contiguous soil contamination that exceeds a direct contact RCL exceedance (0-4 foot depth).

**B.3. Groundwater Figures**

- B.3.a. **Geologic Cross-Section Figure(s):** One or more cross-section diagrams showing soil types and correlations across the site, water table and piezometric elevations, and locations and elevations of geologic rock units, if encountered. Display on one or more figures all of the following:
- Source location(s) and vertical extent of residual soil contamination exceeding an RCL. Distinguish between direct contact and the groundwater pathway RCLs.
  - Source location(s) and lateral and vertical extent if groundwater contamination exceeds ch. NR 140 ES.
  - Surface features, including buildings and basements, and show surface elevation changes.
  - Any areas of active remediation within the cross section path, such as excavations or treatment zones.
  - Include a map displaying the cross-section location(s), if they are not displayed on the Detailed Site Map (Map B.1.b.)
- B.3.b. **Groundwater Isoconcentration:** Figure(s) showing the horizontal extent of the post-remedial groundwater contamination exceeding a ch. NR 140, Wis. Adm. Code, PAL and/or an ES. Indicate the date and direction of groundwater flow based on the most recent sampling data.
- B.3.c. **Groundwater Flow Direction:** Figure(s) representing groundwater movement at the site. If the flow direction varies by more than 20° over the history of the site, submit two groundwater flow maps showing the maximum variation in flow direction.
- B.3.d. **Monitoring Wells:** Figure(s) showing all monitoring wells, with well identification number. Clearly designate any wells that: (1) are proposed to be abandoned; (2) cannot be located; (3) are being transferred; (4) will be retained for further sampling, or (5) have been abandoned.

**B.4. Vapor Maps and Other Media**

- B.4.a. **Vapor Intrusion Map:** Map(s) showing all locations and results for samples taken to investigate the vapor intrusion pathway in relation to residual soil and groundwater contamination, including sub-slab, indoor air, soil vapor, soil gas, ambient air, and communication testing. Show locations and footprints of affected structures and utility corridors, and/or where residual contamination poses a future risk of vapor intrusion.
- B.4.b. **Other media of concern (e.g., sediment or surface water):** Map(s) showing all sampling locations and results for other media investigation. Include the date of sample collection and identify where any standards are exceeded.
- B.4.c. **Other:** Include any other relevant maps and figures not otherwise noted above. (This section may remain blank).

- B.5. Structural Impediment Photos:** One or more photographs documenting the structural impediment feature(s) which precluded a complete site investigation or remediation at the time of the closure request. The photographs should document the area that could not be investigated or remediated due to a structural impediment. The structural impediment should be indicated on Figures B.2.a and B.2.b.

**Documentation of Remedial Action (Attachment C)****Directions for Documentation of Remedial Action:**

- Include in Attachment C all of the following documentation, in the order prescribed below, with the specific Closure Form titles noted on the separate attachments (e.g., Title: C.1. Site Investigation Documentation; C.2. Investigative Waste, etc.).
- If the documentation requested below has already been submitted to the DNR, please note the title and date of the report for that particular document requested.
  - C.1. **Site investigation documentation**, that has not otherwise been submitted with the Site Investigation Report.
  - C.2. **Investigative waste** disposal documentation.
  - C.3. Provide a **description of the methodology** used along with all supporting documentation if the RCLs are different than those contained in the Department's RCL Spreadsheet available at: <http://dnr.wi.gov/topic/Brownfields/Professionals.html>.
  - C.4. **Construction documentation** or as-built report for any constructed remedial action or portion of, or interim action specified in s. NR 724.02(1), Wis. Adm. Code.
  - C.5. **Decommissioning of Remedial Systems.** Include plans to properly abandon any systems or equipment.
  - C.6. **Other.** Include any other relevant documentation not otherwise noted above (This section may remain blank).

**Maintenance Plan(s) and Photographs (Attachment D)****Directions for Maintenance Plans and Photographs:**

Attach a maintenance plan for each affected property (source property, each off-source affected property) with continuing obligations requiring future maintenance (e.g., direct contact, groundwater protection, vapor intrusion). See Site Summary section 5 for all affected property(s) requiring a maintenance plan. Maintenance plan guidance and/or templates for: 1) Cover/barrier systems; 2) Vapor intrusion; and 3) Monitoring wells, can be found at: <http://dnr.wi.gov/topic/Brownfields/Professionals.html#tabx3>

- D.1. **Descriptions of maintenance action(s) required for maximizing effectiveness of the engineered control, vapor mitigation system, feature or other action for which maintenance is required:**
- Provide brief descriptions of the type, depth and location of residual contamination.

- Provide a description of the system/cover/barrier/monitoring well(s) to be maintained.
  - Provide a description of the maintenance actions required for maximizing effectiveness of the engineered control, vapor mitigation system, feature or other action for which maintenance is required.
  - Provide contact information, including the name, address and phone number of the individual or facility who will be conducting the maintenance.
- D.2. **Location map(s) which show(s):** (1) the feature that requires maintenance; (2) the location of the feature(s) that require(s) maintenance - on and off the source property; (3) the extent of the structure or feature(s) to be maintained, in relation to other structures or features on the site; (4) the extent and type of residual contamination; and (5) all property boundaries.
- D.3. **Photographs** for site or facilities with a cover or other performance standard, a structural impediment or a vapor mitigation system, include one or more photographs documenting the condition and extent of the feature at the time of the closure request. Pertinent features shall be visible and discernible. Photographs shall be submitted with a title related to the site name and location, and the date on which it was taken.
- D.4. **Inspection log**, to be maintained on site, or at a location specified in the maintenance plan or approval letter. The inspection and maintenance log is found at: <http://dnr.wi.gov/files/PDF/forms/4400/4400-305.pdf>.

#### Monitoring Well Information (Attachment E)

##### Directions for Monitoring Well Information:

For all wells that will remain in use, be transferred to another party, or that could not be located; attach monitoring well construction and development forms (DNR Form 4400-113 A and B: [http://dnr.wi.gov/topic/groundwater/documents/forms/4400\\_113\\_1\\_2.pdf](http://dnr.wi.gov/topic/groundwater/documents/forms/4400_113_1_2.pdf))

##### Select One:

- No monitoring wells were installed as part of this response action.
- All monitoring wells have been located and will be properly abandoned upon the DNR granting conditional closure to the site
- Select One or More:**
- Not all monitoring wells can be located, despite good faith efforts. Attachment E must include a description of efforts made to locate the wells.
- One or more wells will remain in use at the site after this closure. Attachment E must include documentation as to the reason (s) the well(s) will remain in use. When one or more monitoring wells will remain in use this is considered a continuing obligation and a maintenance plan will be required and must be included in Attachment D.
- One or more monitoring wells will be transferred to another owner upon case closure being granted. Attachment E should include documentation identifying the name, address and email for the new owner(s). Provide documentation from the party accepting future responsibility for monitoring well(s).

#### Source Legal Documents (Attachment F)

##### Directions for Source Legal Documents:

Label documents with the specific closure form titles (e.g., F.1. Deed, F.2. Certified Survey Map, etc.). Include all of the following documents, in the order listed:

- F.1. **Deed:** The most recent deed with legal description clearly listed.
- Note: If a property has been purchased with a land contract and the purchaser has not yet received a deed, a copy of the land contract which includes the legal description shall be submitted instead of the most recent deed. If the property has been inherited, written documentation of the property transfer should be submitted along with the most recent deed.*
- F.2. **Certified Survey Map:** A copy of the certified survey map or the relevant section of the recorded plat map for those properties where the legal description in the most recent deed refers to a certified survey map or a recorded plat map. In cases where the certified survey map or recorded plat map are not legible or are unavailable, a copy of a parcel map from a county land information office may be substituted. A copy of a parcel map from a county land information office shall be legible, and the parcels identified in the legal description shall be clearly identified and labeled with the applicable parcel identification number.
- F.3. **Verification of Zoning:** Documentation (e.g., official zoning map or letter from municipality) of the property's or properties' current zoning status.
- F.4. **Signed Statement:** A statement signed by the Responsible Party (RP), which states that he or she believes that the attached legal description(s) accurately describe(s) the correct contaminated property or properties. This section applies to the source property only. Signed statements for Other Affected Properties should be included in Attachment G.

**Notifications to Owners of Affected Properties (Attachment G)**

**Directions for Notifications to Owners of Affected Properties:**

Complete the table on the following page for sites which require notification to owners of affected properties pursuant to ch. 292, Wis. Stats. and ch. NR 725 and 726, Wis. Adm. Code. Personal information collected will be used for administrative purposes and may be provided to requesters to the extent required by Wisconsin's Open Records law [ss. 19.31- 19.39, Wis. Stats.]. The DNR's "Guidance on Case Closure and the Requirements for Managing Continuing Obligations" (PUB-RR-606) lists specific notification requirements <http://dnr.wi.gov/files/PDF/pubs/rr/RR606.pdf>.

State law requires that the responsible party provide a 30-day, written advance notification to certain persons prior to applying for case closure. This requirement applies if: (1) the person conducting the response action does not own the source property; (2) the contamination has migrated onto another property; and/or (3) one or more monitoring wells will not be abandoned. Use form 4400-286, Notification of Continuing Obligations and Residual Contamination, at <http://dnr.wi.gov/files/PDF/forms/4400/4400-286.pdf>

Include a copy of each notification sent and accompanying proof of delivery, i.e., return receipt or signature confirmation.

Include the following documents for each property, keeping each property's documents grouped together and labeled with the letter G and the corresponding ID number from the table on the following page. (Source Property documents should only be included in Attachment F):

- **Deed:** The most recent deed with legal descriptions clearly listed for all affected properties.  
*Note: If a property has been purchased with a land contract and the purchaser has not yet received a deed, a copy of the land contract which includes the legal description shall be submitted instead of the most recent deed. If the property has been inherited, written documentation of the property transfer should be submitted along with the most recent deed.*
- **Certified Survey Map:** A copy of the certified survey map or the relevant section of the recorded plat map for those properties where the legal description in the most recent deed refers to a certified survey map or a recorded plat map. In cases where the certified survey map or recorded plat map are not legible or are unavailable, a copy of a parcel map from a county land information office may be substituted. A copy of a parcel map from a county land information office shall be legible, and the parcels identified in the legal description shall be clearly identified and labeled with the applicable parcel identification number.
- **Verification of Zoning:** Documentation (e.g., official zoning map or letter from municipality) of the property's or properties' current zoning status.
- **Signed Statement:** A statement signed by the Responsible Party (RP), which states that he or she believes the attached legal description(s) accurately describe(s) the correct contaminated property or properties.

**Notifications to Owners of Affected Properties (Attachment G)**

Press the space bar or click in the box to check a box under "Letter Sent To" or "Reasons Letter Sent" columns.

**Reasons Notification Letter Sent:**

ID	Address of Affected	Parcel ID No.	Date of Receipt of Letter	Type of Property Owner	WTMX	WTMY	Residual Groundwater Contamination = or > ES	Residual Soil Contamination Exceeds RCLs	Monitoring Wells: Not Abandoned	Monitoring Wells: Continued Monitoring	Cover/Barrier/Engineered Control	Structural Impediment	Industrial RCLs Met/Applied	Vapor Mitigation System(VMS)	Dewatering System Needed for VMS	Compounds of Concern in Use	Commercial/Industrial Vapor Exposure Assumptions Applied	Residual Volatile Contamination Poses Future Risk of Vapor Intrusion	Site Specification Situation	
- A																				
- B																				
- C																				
- D																				

**Signatures and Findings for Closure Determination**

*This page has been updated as of February 2019 to comply with the requirements of Wis. Admin. Code ch. NR 712.*

Check the correct box for this case closure request and complete the corresponding certification statement(s) listed below to demonstrate that the requirements of Wis. Admin. Code ch. NR 712 have been met. The responsibility for signing the certification may not be delegated per Wis. Admin. Code § NR 712.09 (1). Per Wis. Admin. Code § 712.05 (1), the work must be conducted or supervised by the person certifying.

- The investigation and/or response action(s) for this site evaluated and/or addressed groundwater (including natural attenuation remedies). Both a professional engineer and a hydrogeologist must sign this document per Wis. Admin. Code ch. NR 712.
- The investigation and the response action(s) for this site did not evaluate or address groundwater. A professional engineer must sign this document per Wis. Admin. Code ch. NR 712.

**Engineering Certification**

I, David M. Cornale, hereby certify that I am a registered professional engineer in the State of Wisconsin, registered in accordance with the requirements of ch. A-E 4, Wis. Adm. Code; that this document has been prepared in accordance with the Rules of Professional Conduct in ch. A-E 8, Wis. Adm. Code; and that, to the best of my knowledge, all information contained in this document is correct and the document was prepared in compliance with all applicable requirements in chs. NR 700 to 726, Wis. Adm. Code.

Signature 

P. E. #

Title Senior Geotechnical Consultant

P.E. Stamp



**Hydrogeologist Certification**

I, Kevin T. Bugel, hereby certify that I am a hydrogeologist as that term is defined in s. NR 712.03 (1), Wis. Adm. Code, am registered in accordance with the requirements of ch. GHSS 2, Wis. Adm. Code, or licensed in accordance with the requirements of ch. GHSS 3, Wis. Adm. Code, and that, to the best of my knowledge, all of the information contained in this document is correct and the document was prepared in compliance with all applicable requirements in chs. NR 700 to 726, Wis. Adm. Code.

Signature 

Title Environmental Division Manager

Date

01/05/2021

## **Attachment A: Data Tables**

### Data Table A.1: Groundwater Analytical Table

Included

### Data Table A.2: Soil Analytical Results Table

Included

### Data Table A.3: Residual Soil Contamination Table

Included

### Data Table A.4: Vapor Analytical Table

Included

### Data Table A.5: Other Media of Concern

Not included. No other media of concern (e.g. surface water or sediment) were present at the Site.

### Data Table A.6: Water Level Elevations

Included

### Data Table A.7: Other

Not included. No natural attenuation data was obtained and remediation systems were not installed.

**Table A.1  
Groundwater Analytical Results**

Former Bestway Cleaners  
5914 Highway 51  
McFarland, Wisconsin  
BRRTS Number 02-13-583171  
Project Number 1E-2006002

Sample Location	*B-1 (E of unit)		*B-2 (NE of building)	*B-3 (NE of building)	*B-4 (W of unit)		*B-5 (DCM footprint)		GMW-1 (SW of DCM)		GPZ-1 (SW of DCM)		GMW-2 (SW of unit)		GPZ-2 (SW of unit)		GMW-3 (W of unit)		NR 140 <sup>1</sup> (µg/L)	
	Shallow	Deep	Shallow	Shallow	Shallow	Deep	Shallow	Deep	WT Well		Piezometer		WT Well		Piezometer		WT Well		PAL	ES
Sample Date	7/3/2018	7/3/2018	7/3/2018	7/3/2018	7/3/2018	7/3/2018	4/1/2019	4/1/2019	7/16/2020	10/22/2020	7/16/2020	10/22/2020	7/16/2020	10/22/2020	7/16/2020	10/22/2020	7/16/2020	10/22/2020		
Depth to Water (Ft below TOC)	NA	NA	NA	NA	NA	NA	NA	NA	4.81	5.67	4.79	5.67	3.78	4.64	3.66	4.55	3.98	4.87		
<b>Detected VOCs (µg/L)</b>																				
Benzene	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.25	0.25 J	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	0.5	5
cis-1,2-Dichloroethene	<0.26	<0.26	<0.26	<0.26	0.49 J	<0.26	<i>(10.8)</i>	2.3	<i>(9.2)</i>	3.2	0.96 J	0.65 J	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	7	70
Ethylbenzene	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.22	0.34	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	140	700
Naphthalene	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	3.1 J	3.7 J	<0.34	<0.34	<0.34	<0.34	1.0	<0.34	<0.34	<0.34	2.3	<0.34	10	100
Tetrachloroethene (PCE)	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<i>(0.57 J)</i>	<b>5.0</b>	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	0.5	5
Toluene	0.66 J	<0.50	<0.57	<0.50	<0.50	<0.50	0.32 J	1.3 J	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	160	800
Xylenes, Total	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<0.73	1.24 J	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	400	2,000

**Notes:**

<sup>1</sup>Wisconsin Administrative Code Natural Resources Chapter (NR) 140 Public Health Groundwater Quality Standards, updated January 2020

\*Samples collected by Seymour Environmental Services, Inc.

**PAL:** Preventive Action Limit

**ES:** Enforcement Standard

**DCM:** Dry Cleaning Machine (former)

**WT:** Watertable

**TOC:** Top of casing

**VOCs:** Volatile Organic Compounds

**µg/L:** Micrograms per Liter; equivalent to parts per billion (ppb)

**J:** Result is an estimate value (detected between the laboratory method detection limit and reporting limit)

**NA:** Not Available

<xx.x: Result concentration was detected below the method detection limit of x

*(xx.x)*: Italic/parenthesized results exceed the NR 140 Preventive Action Limit

**xx.x**: Bold/underlined results exceed the NR 140 Enforcement Standard

**Table A.2**  
**Soil Analytical Results**  
Former Bestway Cleaners  
5914 Highway 51  
McFarland, Wisconsin  
BRRTS Number 02-13-583171  
Project Number 1E-2006002

Sample Location	*B-1	*B-2	*B-3	*B-4	*B-5		GB-1	GB-2	GPZ-1		GMW-2	NR 720 RCLs <sup>1</sup>			
	(E of unit)	(NE of building)	(NE of building)	(W of unit)	(DCM footprint)		(DMC footprint)	(SE of DMC)	(SW of DCM)		(SW of unit)	Soil to Groundwater Pathway	Direct Contact Pathway <sup>2</sup>		
Sample Depth (feet bgs)	4	7	5	5	3.5	7	2-4	2-4	2-4	4-6	2-4				
Sample Date	7/3/2018	7/3/2018	7/3/2018	7/3/2018	4/1/2019	4/1/2019	6/23/2020	6/23/2020	6/23/2020	6/23/2020	6/23/2020				
Saturated/Unsaturated (S or U)	U	S	U	U	U	S	U	U	U	S	U				
Fill/Native (F or N)	N	N	N	N	F	N	F	F	F	N	F				
PID (instrument units)	0	0	0	0	0	0	2.6	8.0	44.7	32.2	2.6				
<b>Detected VOCs (µg/kg)</b>															
cis-1,2-Dichloroethene	<25	<25	<25	<25	954	269	<26	53 J	3,700	2,500	<23	41	156,000	2,340,000	
Naphthalene	71.8 J	<40	<40	250 J	<40	<40	<21	<19	290	450	27 J	658	5,520	24,100	
Toluene	<25	<25	<25	<25	<25	<25	<9.3	<8.4	<9.0	31 J	<8.3	1,107	818,000	818,000	
trans-1,2-Dichloroethene	<25	<25	<25	<25	<25	<25	<22	<20	120	78 J	<20	63	1,560,000	1,850,000	

**Notes:**

<sup>1</sup>Wisconsin Administrative Code Natural Resources Chapter (NR) 720 Residual Contaminant Levels (RCLs) obtained from the Wisconsin Department of Natural Resources (WDNR) "RCL spreadsheet", last updated December 2018.

<sup>2</sup>Direct Contact RCLs only apply to soil samples collected within four feet of the ground surface

\*Samples collected by Seymour Environmental Services, Inc.

**DCM:** Dry Cleaning Machine (former)

**bgs:** Below ground surface

**PID:** Photoionization Detector

**VOCs:** Volatile Organic Compounds

**µg/kg:** Micrograms per kilogram; equivalent to parts per billion (ppb)

**J:** Result is an estimate value (detected between the laboratory method detection limit and reporting limit)

<xx.x: Result detected below the method detection limit of x

xx.x: Underlined results exceed the Soil to Groundwater Pathway RCL



**Table A.3**  
**Residual Soil Analytical Results**

Former Bestway Cleaners  
5914 Highway 51  
McFarland, Wisconsin  
BRRTS Number 02-13-583171  
Project Number 1E-2006002

Sample Location	*B-5 (DCM footprint)		GB-2 (SE of DMC)	GPZ-1 (SW of DCM)		NR 720 RCLs <sup>1</sup>		
	Sample Depth (feet bgs)	Sample Date	Sample Date	Sample Date	Sample Date	Soil to Groundwater Pathway	Direct Contact Pathway <sup>2</sup>	
Saturated/Unsaturated (S or U)	U	S	U	U	S		Non-Industrial Land Use	Industrial Land Use
Fill/Native (F or N)	F	N	F	F	N			
PID (instrument units)	0	0	8.0	44.7	32.2			
Detected VOCs (µg/kg)								
cis-1,2-Dichloroethene	<u>954</u>	<u>269</u>	<u>53 J</u>	<u>3,700</u>	<u>2,500</u>	<u>41</u>	<u>156,000</u>	<u>2,340,000</u>
Naphthalene	<40	<40	<19	290	450	<u>658</u>	<u>5,520</u>	<u>24,100</u>
Toluene	<25	<25	<8.4	<9.0	31 J	<u>1,107</u>	<u>818,000</u>	<u>818,000</u>
trans-1,2-Dichloroethene	<25	<25	<20	<u>120</u>	<u>78 J</u>	<u>63</u>	<u>1,560,000</u>	<u>1,850,000</u>

**Notes:**

<sup>1</sup>Wisconsin Administrative Code Natural Resources Chapter (NR) 720 Residual Contaminant Levels (RCLs) obtained from the Wisconsin Department of Natural Resources (WDNR)

<sup>2</sup>Direct Contact RCLs only apply to soil samples collected within four feet of the ground surface

\*Samples collected by Seymour Environmental Services, Inc.

**DCM:** Dry Cleaning Machine (former)

**bgs:** Below ground surface

**PID:** Photoionization Detector

**VOCs:** Volatile Organic Compounds

**µg/kg:** Micrograms per kilogram; equivalent to parts per billion (ppb)

**J:** Result is an estimate value (detected between the laboratory method detection limit and reporting limit)

<xx.x: Result detected below the method detection limit of x

xx.x: Underlined results exceed the Soil to Groundwater Pathway RCL

**Table A.4**  
**Soil Gas Analytical Results**  
Former Bestway Cleaners  
5914 Highway 51  
McFarland, Wisconsin  
BRRTS Number 02-13-583171  
Project Number 1E-2006002

Sample Location	SS-1/SS-1A (NW of DCM)		GSS-1 (SW of DCM)	GSS-2 (east portion of unit)	SS-2 (adjoining north unit)		SS-3 (adjoining south unit)		Sub-Slab VRSL <sup>1</sup> (µg/m <sup>3</sup> )		
	7/19/2018*	4/1/2019*	7/2/2020	7/2/2020	4/1/2019*	7/2/2020	4/1/2019*	7/2/2020	Land Use		
Sample Date									Residential	Small Commercial	Large Commercial / Industrial
<sup>2</sup> Pressure Field Readings ("wc)	-0.230		-0.163	-0.004	0.000		0.000				
<b>Detected VOCs (µg/m<sup>3</sup>) Method TO-15</b>											
1,1,1-Trichloroethane	--	--	<36	<2.2	--	<0.33	--	0.21 J	170,000	730,000	2,200,000
1,1,2-Trichloro-1,2,2-trifluoroethane	--	--	<53	<3.2	--	0.63 J	--	0.52 J	170,000	730,000	2,200,000
1,3,5- Trimethylbenzene	--	--	<71	<4.3	--	<0.64	--	0.46 J	2,100	8,700	26,000
1,3-Dichlorobenzene	--	--	<87	<5.2	--	1.0 J	--	<0.39	NS	NS	NS
1,4-Dichlorobenzene	--	--	<86	16	--	26	--	12	87	370	1,100
2-Butanone (MEK)	--	--	<130	<7.9	--	2.9 J	--	2.0 J	170,000	730,000	2,200,000
Acetone	--	--	<740	88 J	--	26 J	--	200	1,100,000	4,700,000	14,000,000
Benzene	--	--	<40	<2.4	--	<0.36	--	0.37 J	120	530	1,600
Bromomethane	--	--	<28	<1.7	--	<0.25	--	0.23 J	170	730	2,200
Butane	--	--	<39	<2.3	--	44	--	4.0	NS	NS	NS
Carbon disulfide	--	--	<21	<1.3	--	<0.19	--	0.29 J	24,000	100,000	310,000
Carbon tetrachloride	--	--	<53	<3.2	--	<0.48	--	0.47 J	160	670	2,000
Chlorodifluoromethane	--	--	<29	6.6 J	--	<0.26	--	2.3	1,700,000	7,300,000	22,000,000
Chloroform	--	--	<41	<2.5	--	48	--	0.50 J	40	180	530
Chloromethane	--	--	<73	<4.4	--	<0.66	--	1.5 J	3,100	13,000	39,000
cis-1,2-Dichloroethene	1,575	485	2,400	<3.2	<8	<0.48	<8	<0.24	NS	NS	NS
Cyclohexane	--	--	<31	6.3 J	--	0.66 J	--	0.50 J	210,000	870,000	2,600,000
Dichlorodifluoromethane	--	--	<75	6.100	--	5.700	--	51	3,300	15,000	44,000
Heptane	--	--	<43	<2.6	--	<0.39	--	0.22 J	14,000	60,000	180,000
Hexane	--	--	<25	<1.5	--	0.28 J	--	1.2 J	24,000	100,000	310,000
Methylene chloride (dichloromethane)	--	--	340 J B	21	--	3.5 J B	--	4.0 B	21,000	87,000	260,000
Styrene	--	--	<55	<3.3	--	0.78 J	--	0.54 J	33,000	150,000	440,000
Tetrachloroethene (PCE)	(14,510)	3,178	(12,000)	1,100	166	270	180	4.0	1,400	6,000	18,000
Toluene	--	--	<100	<6.0	--	<0.90	--	1.9 J	170,000	730,000	2,200,000
Trichloroethene (TCE)	[1,204]	(334)	[1,100]	21	<0.13	1.5 J	<0.13	<0.19	70	290	880
Trichlorofluoromethane	--	--	<31	2.1 J	--	1.8 J	--	1.6	NS	NS	NS

**Notes:**

<sup>1</sup>Vapor Risk Screening Levels (VRSLs) obtained/calculated from the Wisconsin Vapor Quick Look-Up Table based on the November 2017 US EPA Regional  
<sup>2</sup>Pressure Field readings were taken on July 16, 2020 using Infiltec D1 Manometer. Mitigation system was in operation for at least 14 days prior to taking readings.

**VOCs:** Volatile Organic Compounds

**DCM:** Dry Cleaning Machine (former)

**"wc:** Inches of water column

**µg/m<sup>3</sup>:** Micrograms per cubic meter

-- : Not Analyzed

**NS:** No Established Standard

**J:** Result is an estimate value (detected between the laboratory method detection limit and reporting limit)

**B:** Compound was detected in the method blank and in the sample

**xx.x:** Underlined result exceed the sub-slab VRSL for Residential land use

**(xx.x):** Parenthesized results exceed the sub-slab VRSL for both Residential and Small Commercial land use

**[xx.x]:** Bracketed results exceed the sub-slab VRSL for Residential, Small Commercial, and Large Commercial/Industrial land uses

\*Sample points SS-1/SS-1A, SS-2 and SS-3 were installed by Seymour Environmental Services, Inc. Initial samples from these locations were collected by Seymour, Inc.. Sample SS-1 7/19/2018 was collected prior to the installation of the vapor mitigation system on 12/14/2018.

The vapor mitigation system was shut off seven days prior to the collection of Seymour Inc.'s 4/1/19 soil gas samples and Giles' 7/2/20 soil gas samples. Samples were collected for 30 minutes using 6-L summa canister with 200 ml/min flow regulator and a water dam for leak detection.

**Table A.6**  
**Groundwater Elevations**  
Former Bestway Cleaners  
5914 Highway 51  
McFarland, Wisconsin  
BRRTS Number 02-13-583171  
Project Number 1E-2006002

Well ID	Well Elevation		Well Construction		Date Groundwater Measured	Groundwater	
	TOC	Ground Surface	Depth to Bottom	Screen Length		Depth (TOC)	Calculated Elevation
GMW-1	99.92	99.85	9.52	5	7/2/2020	5.02	94.90
					7/16/2020	4.81	95.11
					10/22/2020	5.67	94.25
GMW-2	98.69	99.13	9.71	5	7/2/2020	3.91	94.78
					7/16/2020	3.78	94.91
					10/22/2020	4.64	94.05
GMW-3	99.12	99.48	9.82	5	7/2/2020	4.11	95.01
					7/16/2020	3.98	95.14
					10/22/2020	4.87	94.25
GPZ-1	99.98	99.94	12.74	5	7/2/2020	5.02	94.96
					7/16/2020	4.79	95.19
					10/22/2020	5.67	94.31
GPZ-2	98.86	99.06	17.17	5	7/2/2020	3.81	95.05
					7/16/2020	3.66	95.20
					10/22/2020	4.55	95.20

**Notes:**

**TOC:** Top of casing

All measurements are recorded in feet.

Elevations of the wells were surveyed on 6/23/2020. Survey measurements were tied to a local benchmark, the rear entrance of the northern center door sill, which was assigned an elevation of 100 feet.

## **Attachment B: Figures**

Figure B.1.a Location Map  
Included

Figure B.1.b (1), (2) Detailed Site Map  
Included

Figure B.1.c RR Sites Map  
Included

Figure B.2.a Soil Contamination  
Included

Figure B.2.b Residual Soil Contamination  
Included

Figure B.3.a (1), (2) Geologic Cross-Sections  
Included

Figure B.3.b Groundwater Isoconcentration  
Included

Figure B.3.c Groundwater Flow Direction  
Included

Figure B.3.d Monitoring Wells  
Included

Figure B.4.a Vapor Intrusion Map  
Included

Figure B.4.b Other Media of Concern  
Not included. No other media of concern (e.g. sediment or surface water) were present at the Site.

Figure B.4.c Other  
Not included. No other relevant figures were generated.

Figure B.5 Structural Impediment Photos  
Included. The building structure is an impediment to remediation, however it will act as a performance cap/barrier.



Source: USGS *Madison East, Wisconsin 7.5-Minute Series* (topographic) Quadrangle Map (1959, revised 1969)

Scale: 1:24,000  
 Contour Interval: 10 Feet

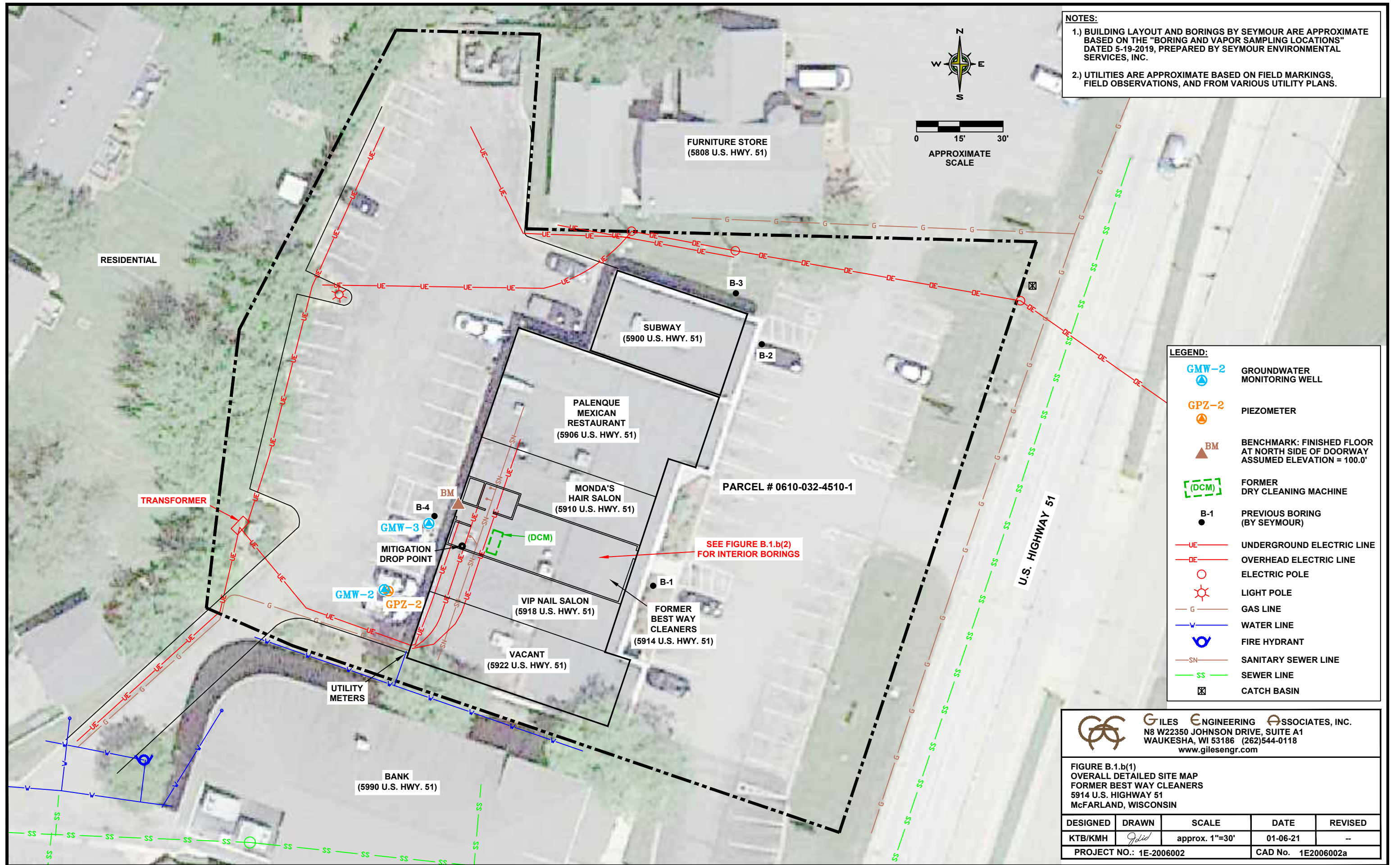
**FIGURE B.1.a**  
**SITE LOCATION**



**Best Way Cleaners**  
 5914 State Highway 51  
 McFarland, Wisconsin  
 Project No. 1E-2060002  
 BRTS No. 02-13-583171



**GILES**  
 ENGINEERING ASSOCIATES, INC.



**NOTES:**

- 1.) BUILDING LAYOUT AND BORINGS BY SEYMOUR ARE APPROXIMATE BASED ON THE "BORING AND VAPOR SAMPLING LOCATIONS" DATED 5-19-2019, PREPARED BY SEYMOUR ENVIRONMENTAL SERVICES, INC.
- 2.) UTILITIES ARE APPROXIMATE BASED ON FIELD MARKINGS, FIELD OBSERVATIONS, AND FROM VARIOUS UTILITY PLANS.

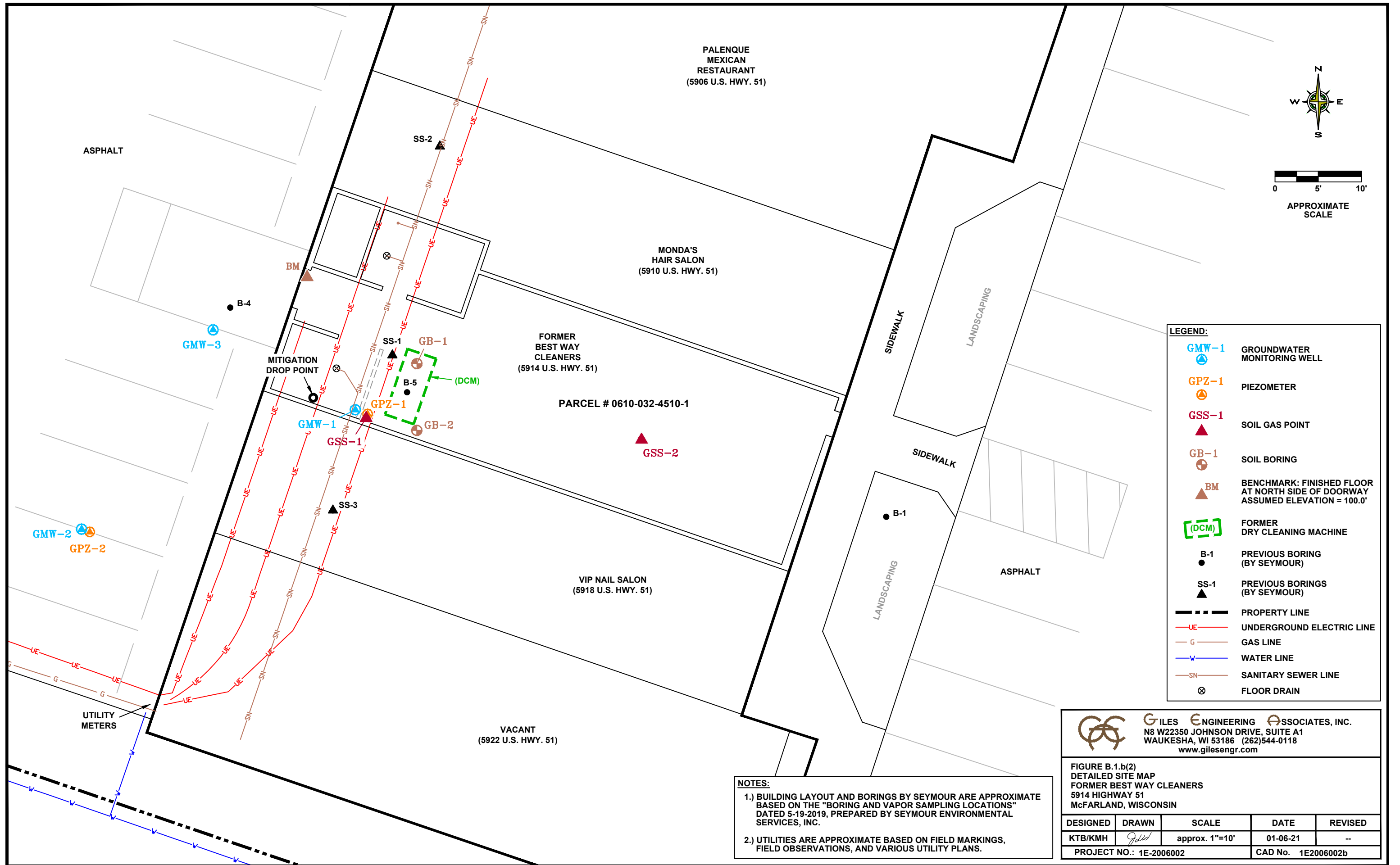
**LEGEND:**

	<b>GMW-2</b>	GROUNDWATER MONITORING WELL
	<b>GPZ-2</b>	PIEZOMETER
	<b>BM</b>	BENCHMARK: FINISHED FLOOR AT NORTH SIDE OF DOORWAY ASSUMED ELEVATION = 100.0'
	<b>(DCM)</b>	FORMER DRY CLEANING MACHINE
	<b>B-1</b>	PREVIOUS BORING (BY SEYMOUR)
	<b>UE</b>	UNDERGROUND ELECTRIC LINE
	<b>OE</b>	OVERHEAD ELECTRIC LINE
	<b>E</b>	ELECTRIC POLE
	<b>☀</b>	LIGHT POLE
	<b>G</b>	GAS LINE
	<b>W</b>	WATER LINE
	<b>FH</b>	FIRE HYDRANT
	<b>SN</b>	SANITARY SEWER LINE
	<b>SS</b>	SEWER LINE
	<b>CB</b>	CATCH BASIN

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**FIGURE B.1.b(1)**  
 OVERALL DETAILED SITE MAP  
 FORMER BEST WAY CLEANERS  
 5914 U.S. HIGHWAY 51  
 MCFARLAND, WISCONSIN

DESIGNED	DRAWN	SCALE	DATE	REVISED
KTB/KMH	<i>Jed</i>	approx. 1"=30'	01-06-21	--
PROJECT NO.: 1E-2006002			CAD No. 1E2006002a	



**LEGEND:**

	<b>GMW-1</b>	GROUNDWATER MONITORING WELL
	<b>GPZ-1</b>	PIEZOMETER
	<b>GSS-1</b>	SOIL GAS POINT
	<b>GB-1</b>	SOIL BORING
	<b>BM</b>	BENCHMARK: FINISHED FLOOR AT NORTH SIDE OF DOORWAY ASSUMED ELEVATION = 100.0'
	<b>(DCM)</b>	FORMER DRY CLEANING MACHINE
	<b>B-1</b>	PREVIOUS BORING (BY SEYMOUR)
	<b>SS-1</b>	PREVIOUS BORINGS (BY SEYMOUR)
		PROPERTY LINE
		UNDERGROUND ELECTRIC LINE
		GAS LINE
		WATER LINE
		SANITARY SEWER LINE
		FLOOR DRAIN

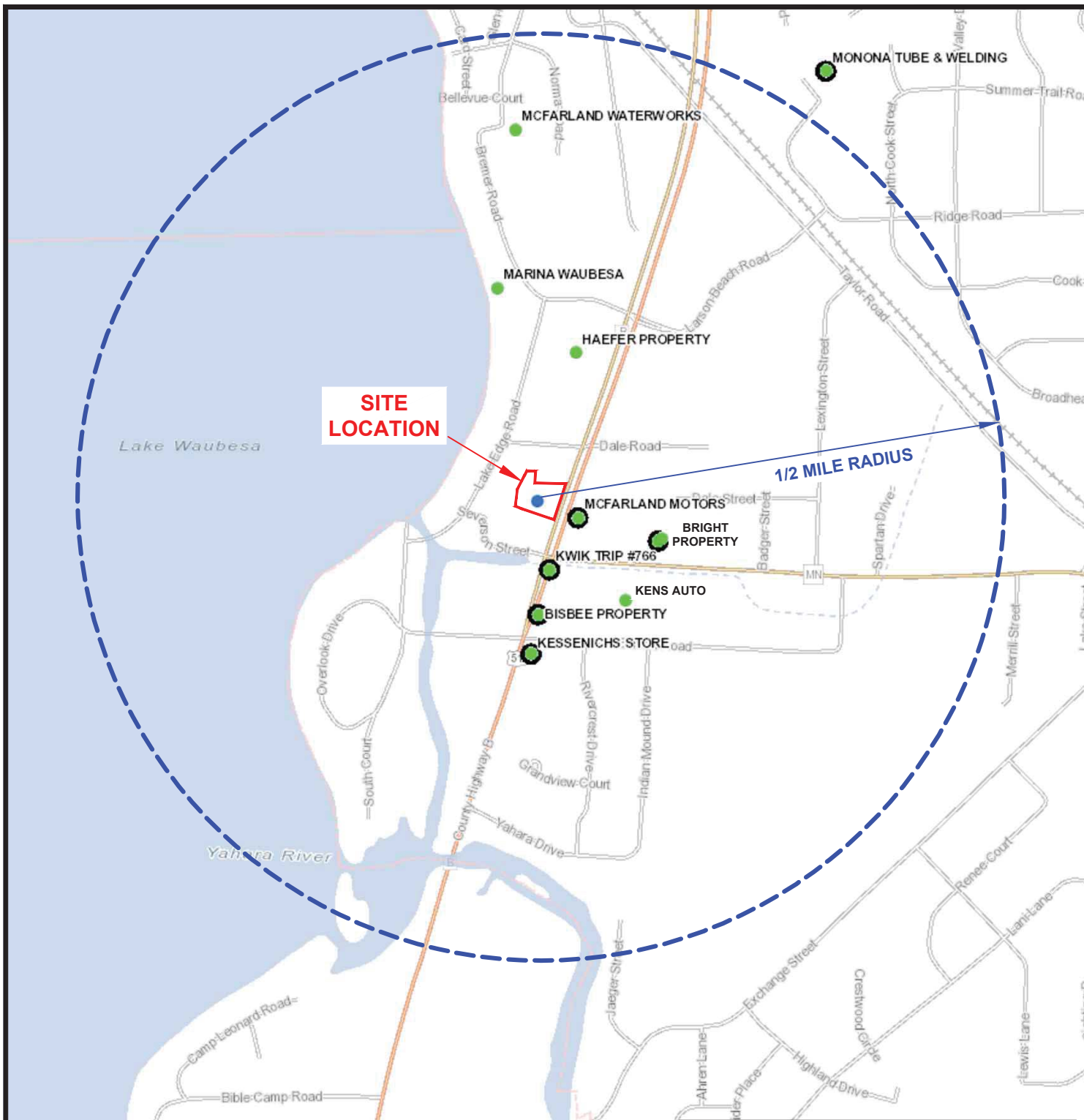
**NOTES:**

- 1.) BUILDING LAYOUT AND BORINGS BY SEYMOUR ARE APPROXIMATE BASED ON THE "BORING AND VAPOR SAMPLING LOCATIONS" DATED 5-19-2019, PREPARED BY SEYMOUR ENVIRONMENTAL SERVICES, INC.
- 2.) UTILITIES ARE APPROXIMATE BASED ON FIELD MARKINGS, FIELD OBSERVATIONS, AND VARIOUS UTILITY PLANS.

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FIGURE B.1.b(2)  
 DETAILED SITE MAP  
 FORMER BEST WAY CLEANERS  
 5914 HIGHWAY 51  
 McFARLAND, WISCONSIN

DESIGNED	DRAWN	SCALE	DATE	REVISED
KTB/KMH	<i>Jed</i>	approx. 1"=10'	01-06-21	--
PROJECT NO.: 1E-2006002			CAD No. 1E2006002b	



**SITE  
LOCATION**

**1/2 MILE RADIUS**

**NOTES:**  
1.) BASE MAP DEVELOPED FROM A MAP ON THE  
ON THE WEB BRRTS TRACKING SYSTEM.



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FIGURE B.1.c  
RR SITES MAP  
FORMER BEST WAY CLEANERS  
5914 HIGHWAY 51  
McFARLAND, WISCONSIN

**Legend**

- Closed Site (completed cleanup)
- Open Site (ongoing cleanup)

DESIGNED	DRAWN	SCALE	DATE	REVISED
KTB/KMH	<i>gild</i>	approx. 1"=800'	12-22-20	--
PROJECT NO.: 1E-2006002			CAD No. 1E2006002c	



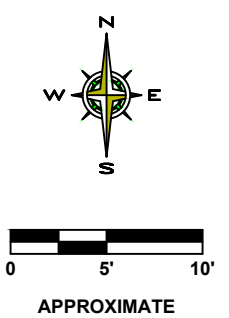
**NOTES:**  
 FIELD PID RESULTS EXPRESSED IN INSTUMENT UNITS  
 VOC RESULTS EXPRESSED IN MICROGRAMS PER KILOGRAM (ug/kg) EQUIVALENT TO PARTS PER BILLION (ppb)  
 J: CONCENTRATION BETWEEN LABORATORY LIMIT OF DETECTION AND QUANTITATION LIMIT.  
 \*: SAMPLE COLLECTED BY SEYMOUR ENVIRONMENTAL SERVICES, INC.  
 RESULTS INDICATED IN BLUE / UNDERLINED EXCEED THE WAC NR 720 RCLs FOR SOIL TO GROUNDWATER PATHWAY  
 THE BUILDING IS A STRUCTURAL IMPEDIMENT FOR THE SITE INVESTIGATION.

**CHEMICAL KEY:**  
 c-DCE: cis-DICHLOROETHENE  
 Napht: NAPHTHALENE  
 T: TOLUENE  
 t-DCE: trans-DICHLOROETHENE

**ABBREVIATIONS:**  
 LOD: LIMIT OF DETECTION  
 NR: NATURAL RESOURCES  
 PID: PHOTOIONIZATION DETECTOR (FIELD)  
 RCLs: RESIDUAL CONTAMINANT LEVELS  
 VOCs: VOLATILE ORGANIC COMPOUNDS  
 WAC: WISCONSIN ADMINISTRATIVE CODE

B-3  
 5' DEPTH \*  
 PID < 5  
 VOCs < LOD

B-2  
 7' DEPTH \*  
 SATURATED



PALENQUE MEXICAN RESTAURANT  
 (5906 U.S. HWY. 51)

MONDA'S HAIR SALON  
 (5910 U.S. HWY. 51)

FORMER BEST WAY CLEANERS  
 (5914 U.S. HWY. 51)

VIP NAIL SALON  
 (5918 U.S. HWY. 51)

VACANT  
 (5922 U.S. HWY. 51)

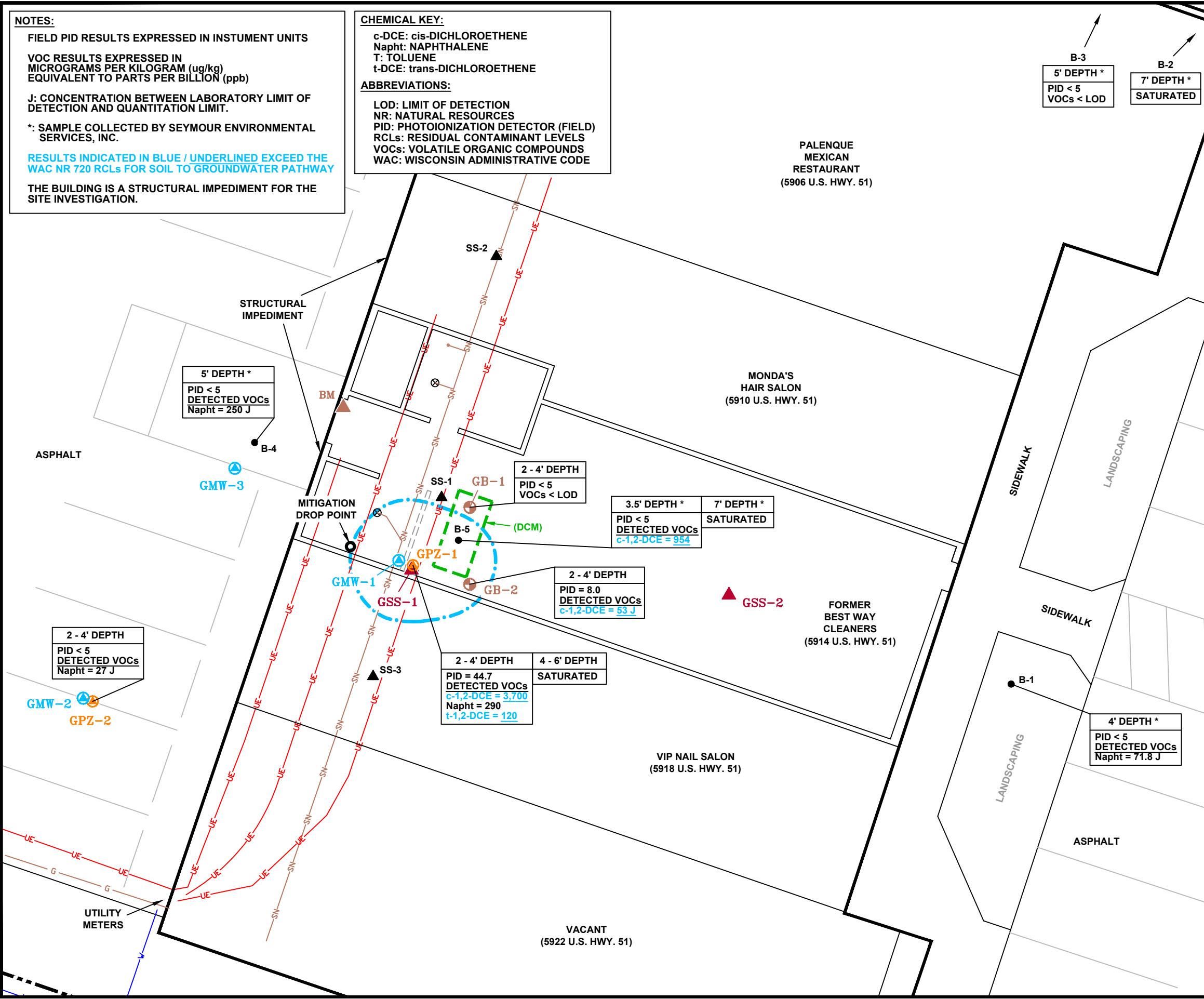
**LEGEND:**

- ESTIMATED EXTENT OF UNSATURATED IMPACTED SOIL EXCEEDING NR 720 RCLs FOR SOIL TO GROUNDWATER PATHWAY
- GMW-1 GROUNDWATER MONITORING WELL
- GPZ-1 PIEZOMETER
- GSS-1 SOIL GAS POINT
- GB-1 SOIL BORING
- BM BENCHMARK: FINISHED FLOOR AT NORTH SIDE OF DOORWAY ASSUMED ELEVATION = 100.0'
- (DCM) FORMER DRY CLEANING MACHINE
- B-1 PREVIOUS BORING (BY SEYMOUR)
- SS-1 PREVIOUS BORINGS (BY SEYMOUR)
- PROPERTY LINE
- UNDERGROUND ELECTRIC LINE
- GAS LINE
- WATER LINE
- SANITARY SEWER LINE
- FLOOR DRAIN

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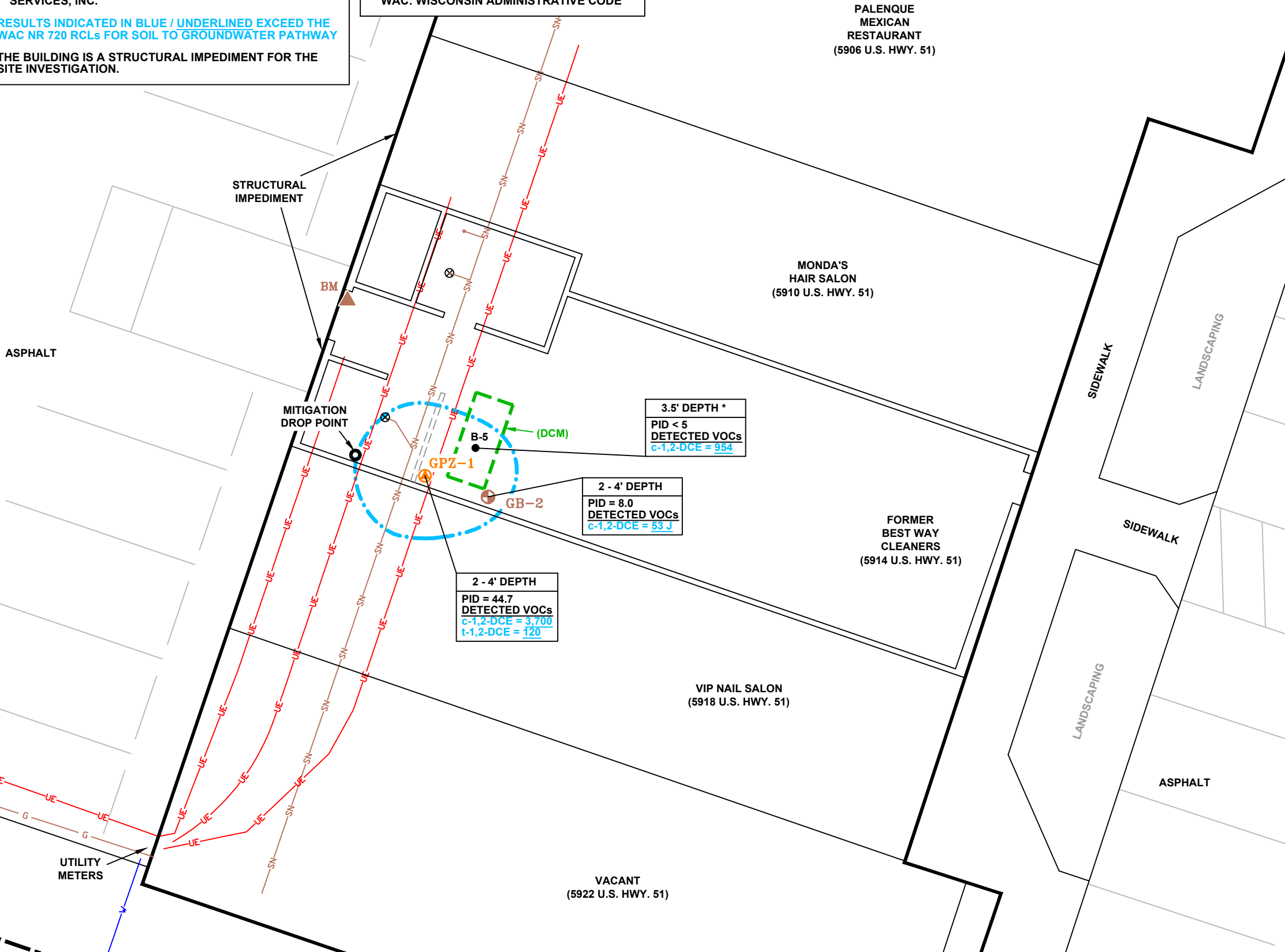
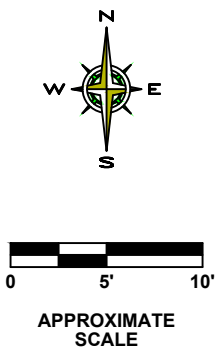
FIGURE B.2.a  
 SOIL CONTAMINATION MAP  
 FORMER BEST WAY CLEANERS  
 5914 HIGHWAY 51  
 McFARLAND, WISCONSIN

DESIGNED	DRAWN	SCALE	DATE	REVISED
KTB/KMH	<i>Jed</i>	approx. 1"=10'	01-06-21	03-30-21
PROJECT NO.: 1E-2006002			CAD No. 1E2006002d	



**NOTES:**  
 FIELD PID RESULTS EXPRESSED IN INSTUMENT UNITS  
 VOC RESULTS EXPRESSED IN MICROGRAMS PER KILOGRAM (ug/kg) EQUIVALENT TO PARTS PER BILLION (ppb)  
 J: CONCENTRATION BETWEEN LABORATORY LIMIT OF DETECTION AND QUANTITATION LIMIT.  
 \*: SAMPLE COLLECTED BY SEYMOUR ENVIRONMENTAL SERVICES, INC.  
**RESULTS INDICATED IN BLUE / UNDERLINED EXCEED THE WAC NR 720 RCLs FOR SOIL TO GROUNDWATER PATHWAY**  
 THE BUILDING IS A STRUCTURAL IMPEDIMENT FOR THE SITE INVESTIGATION.

**CHEMICAL KEY:**  
 c-DCE: cis-DICHLOROETHENE  
 t-DCE: trans-DICHLOROETHENE  
**ABBREVIATIONS:**  
 LOD: LIMIT OF DETECTION  
 NR: NATURAL RESOURCES  
 PID: PHOTOIONIZATION DETECTOR (FIELD)  
 RCLs: RESIDUAL CONTAMINANT LEVELS  
 VOCs: VOLATILE ORGANIC COMPOUNDS  
 WAC: WISCONSIN ADMINISTRATIVE CODE



3.5' DEPTH \*  
 PID < 5  
 DETECTED VOCs  
 c-1,2-DCE = 954

2 - 4' DEPTH  
 PID = 8.0  
 DETECTED VOCs  
 c-1,2-DCE = 53 J

2 - 4' DEPTH  
 PID = 44.7  
 DETECTED VOCs  
 c-1,2-DCE = 3,700  
 t-1,2-DCE = 120

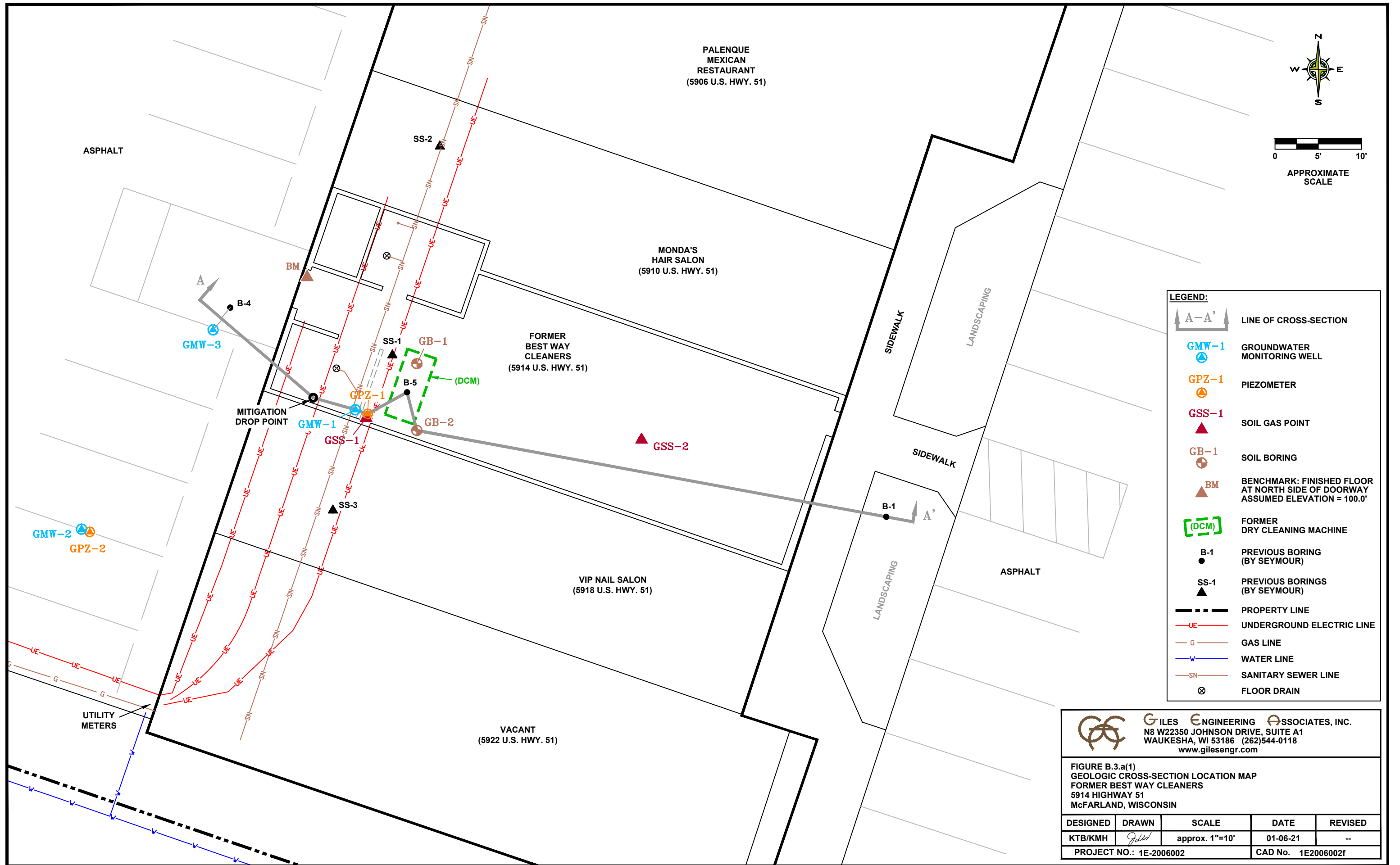
**LEGEND:**

- ESTIMATED EXTENT OF "RESIDUAL" UNSATURATED IMPACTED SOIL EXCEEDING NR 720 RCLs FOR SOIL TO GROUNDWATER PATHWAY
- GPZ-1 PIEZOMETER
- GB-2 SOIL BORING
- BM BENCHMARK: FINISHED FLOOR AT NORTH SIDE OF DOORWAY ASSUMED ELEVATION = 100.0'
- (DCM) FORMER DRY CLEANING MACHINE
- B-5 PREVIOUS BORING (BY SEYMOUR)
- PROPERTY LINE
- UE UNDERGROUND ELECTRIC LINE
- G GAS LINE
- V WATER LINE
- SN SANITARY SEWER LINE
- FLOOR DRAIN

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FIGURE B.2.b  
 RESIDUAL SOIL CONTAMINATION MAP  
 FORMER BEST WAY CLEANERS  
 5914 HIGHWAY 51  
 McFARLAND, WISCONSIN

DESIGNED	DRAWN	SCALE	DATE	REVISED
KTB/KMH	<i>Jed</i>	approx. 1"=10'	01-06-21	03-30-21
PROJECT NO.: 1E-2006002			CAD No. 1E2006002e	



**LEGEND:**

- LINE OF CROSS-SECTION
- GMW-1 GROUNDWATER MONITORING WELL
- GPZ-1 PIEZOMETER
- GSS-1 SOIL GAS POINT
- GB-1 SOIL BORING
- BM BENCHMARK: FINISHED FLOOR AT NORTH SIDE OF DOORWAY ASSUMED ELEVATION = 100.0'
- (DCM) FORMER DRY CLEANING MACHINE
- B-1 PREVIOUS BORING (BY SEYMOUR)
- SS-1 PREVIOUS BORINGS (BY SEYMOUR)
- - - - - PROPERTY LINE
- UE- UNDERGROUND ELECTRIC LINE
- G- GAS LINE
- W- WATER LINE
- SN- SANITARY SEWER LINE
- ⊗ FLOOR DRAIN

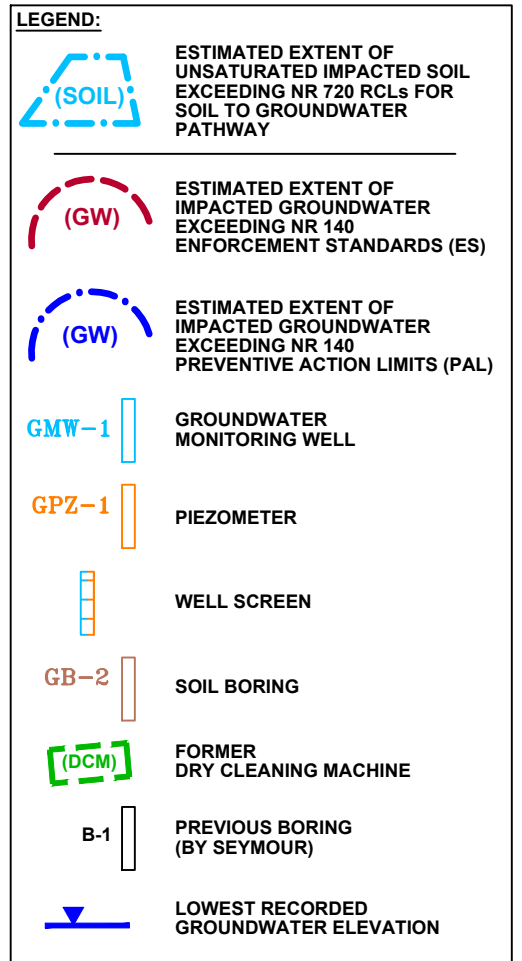
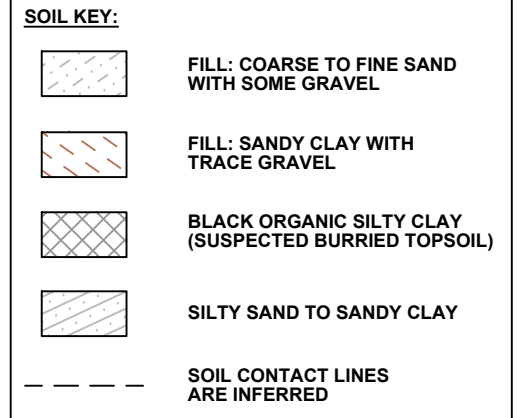
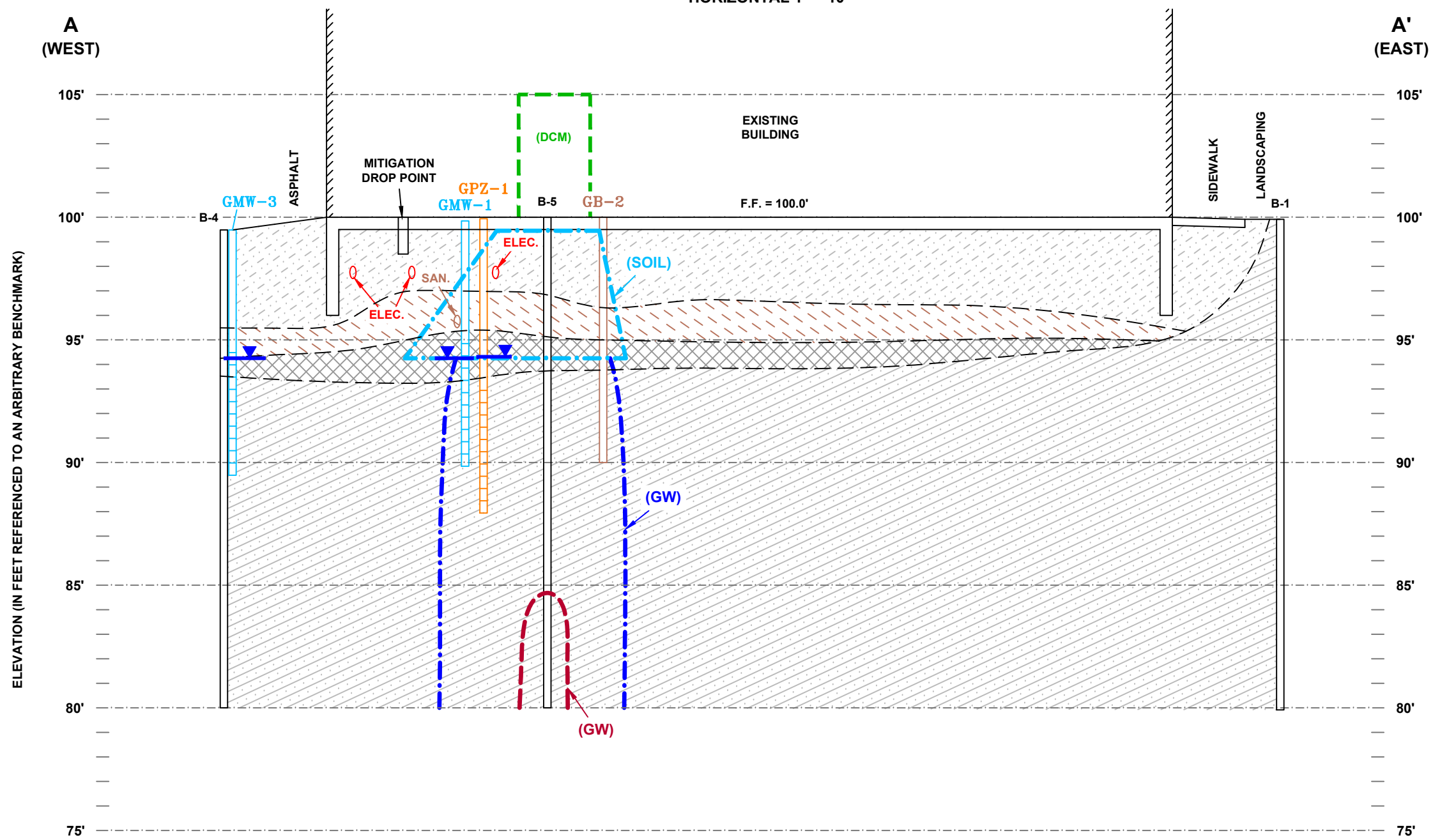
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 N8 W22350 JOHNSON DRIVE, SUITE A1  
 WAUKESHA, WI 53186 (262)544-0118  
 www.gilesengr.com

FIGURE B.3.a(1)  
 GEOLOGIC CROSS-SECTION LOCATION MAP  
 FORMER BEST WAY CLEANERS  
 5914 HIGHWAY 51  
 MCFARLAND, WISCONSIN

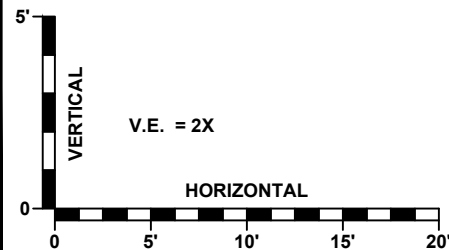
DESIGNED	DRAWN	SCALE	DATE	REVISED
KTB/KMH	<i>Jed</i>	approx. 1"=10'	01-06-21	--
PROJECT NO.: 1E-2006002			CAD No. 1E2006002f	

### CROSS SECTION A-A'

SCALE: VERTICAL 1" = 5'  
HORIZONTAL 1" = 10'



NOTE: DEPTH OF UTILITIES ARE INFERRED.



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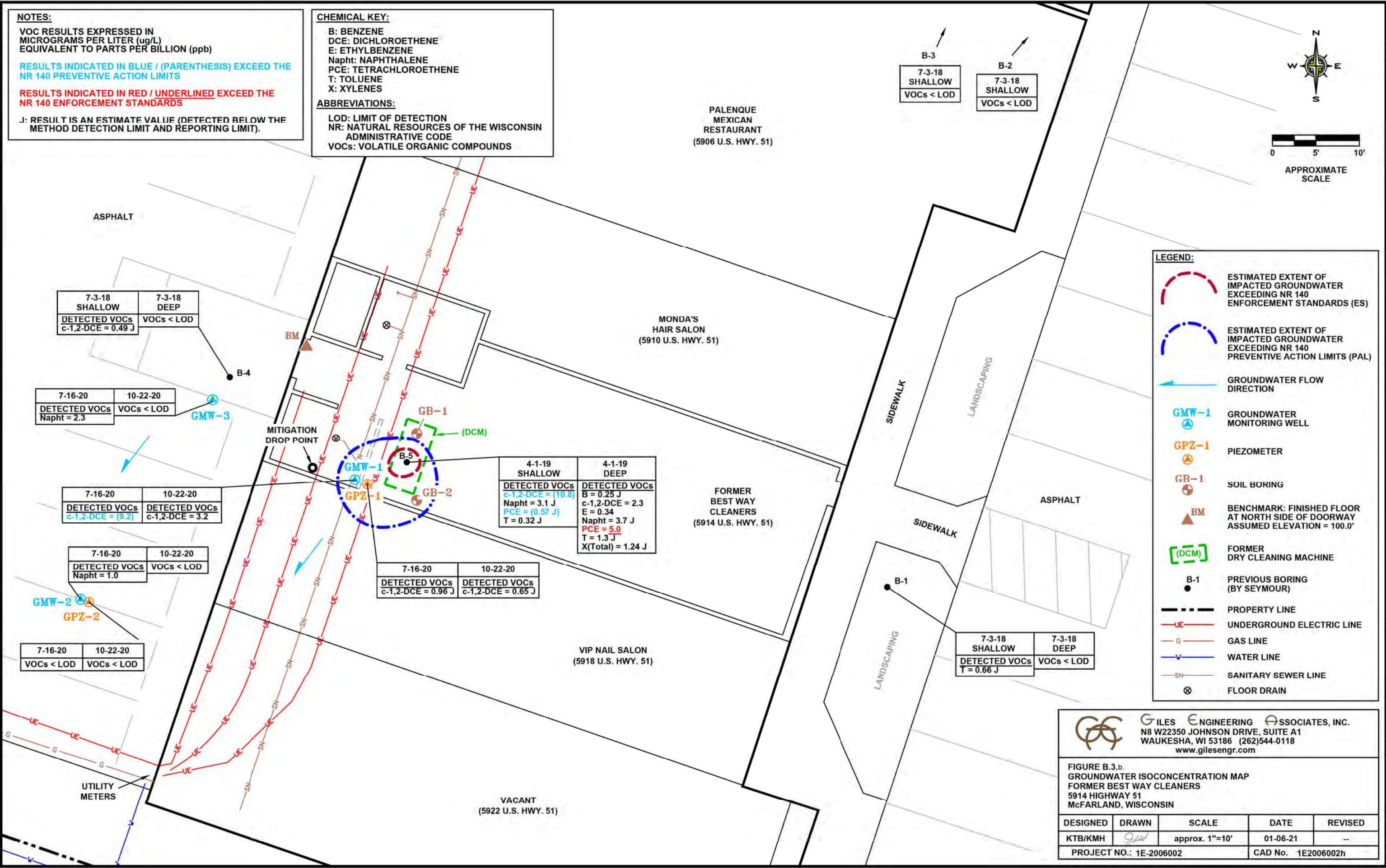
FIGURE B.3.a(2)  
GEOLOGIC CROSS-SECTION A - A'  
FORMER BEST WAY CLEANERS  
5914 HIGHWAY 51  
McFARLAND, WISCONSIN

DESIGNED	DRAWN	SCALE	DATE	REVISED
KTB/KMH	<i>Jed</i>	SEE TITLE	01-06-20	--
PROJECT NO.: 1E-2006002			CAD No. 1E2006002g	

**NOTES:**  
 VOC RESULTS EXPRESSED IN MICROGRAMS PER LITER (ug/L) EQUIVALENT TO PARTS PER BILLION (ppb)  
**RESULTS INDICATED IN BLUE / (PARENTHESIS) EXCEED THE NR 140 PREVENTIVE ACTION LIMITS**  
**RESULTS INDICATED IN RED / UNDERLINED EXCEED THE NR 140 ENFORCEMENT STANDARDS**  
 J: RESULT IS AN ESTIMATE VALUE (DETECTED BELOW THE METHOD DETECTION LIMIT AND REPORTING LIMIT).

**CHEMICAL KEY:**  
 B: BENZENE  
 DCE: DICHLOROETHENE  
 E: ETHYLBENZENE  
 Napht: NAPHTHALENE  
 PCE: TETRACHLOROETHENE  
 T: TOLUENE  
 X: XYLENES

**ABBREVIATIONS:**  
 LOD: LIMIT OF DETECTION  
 NR: NATURAL RESOURCES OF THE WISCONSIN ADMINISTRATIVE CODE  
 VOCs: VOLATILE ORGANIC COMPOUNDS



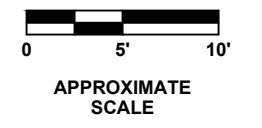
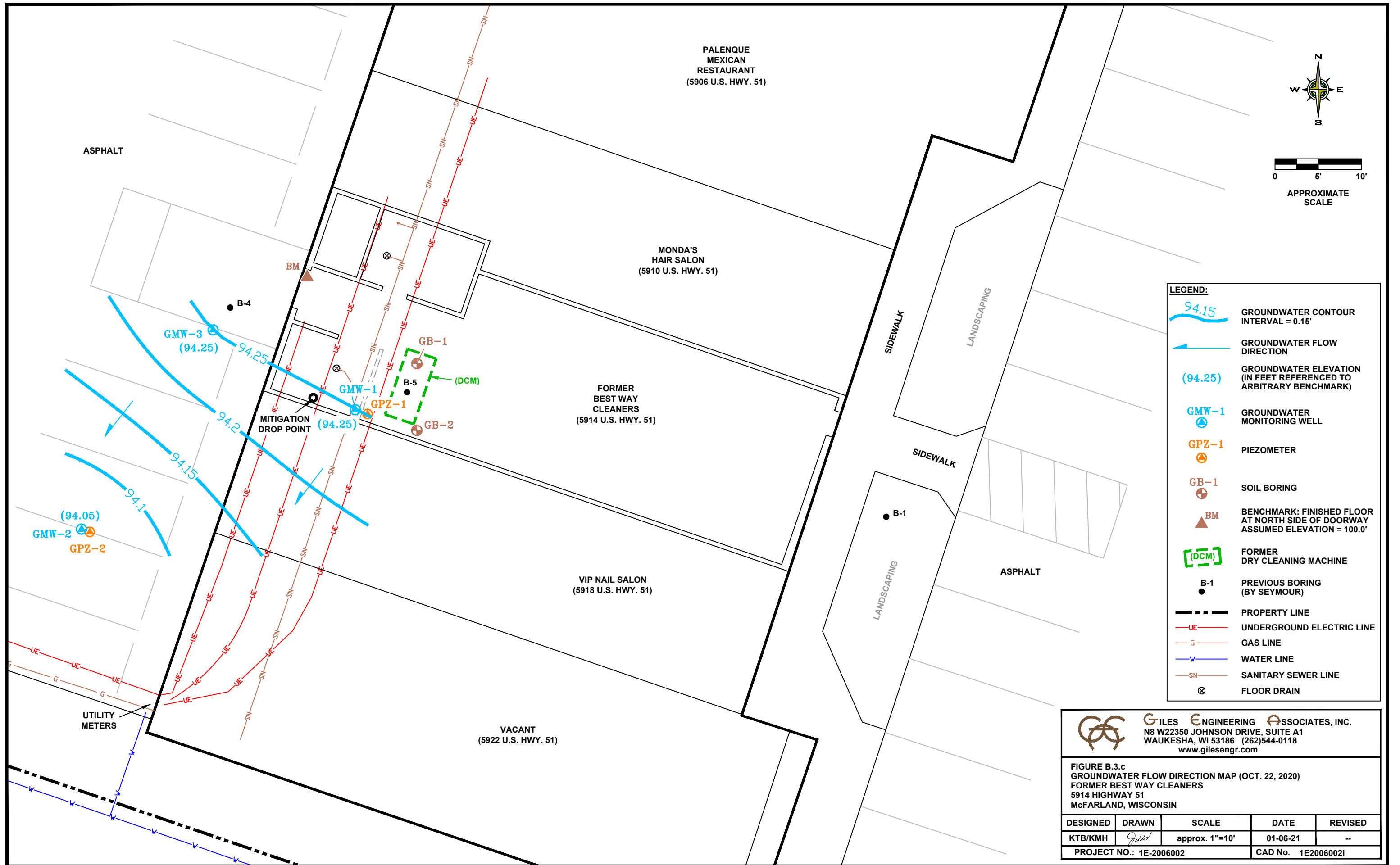
**LEGEND:**

- ESTIMATED EXTENT OF IMPACTED GROUNDWATER EXCEEDING NR 140 ENFORCEMENT STANDARDS (ES)
- ESTIMATED EXTENT OF IMPACTED GROUNDWATER EXCEEDING NR 140 PREVENTIVE ACTION LIMITS (PAL)
- GROUNDWATER FLOW DIRECTION
- GROUNDWATER MONITORING WELL
- PIEZOMETER
- SOIL BORING
- BENCHMARK: FINISHED FLOOR AT NORTH SIDE OF DOORWAY ASSUMED ELEVATION = 100.0'
- FORMER DRY CLEANING MACHINE
- PREVIOUS BORING (BY SEYMOUR)
- PROPERTY LINE
- UNDERGROUND ELECTRIC LINE
- GAS LINE
- WATER LINE
- SANITARY SEWER LINE
- FLOOR DRAIN

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FIGURE B.3.b.  
 GROUNDWATER ISOCONCENTRATION MAP  
 FORMER BEST WAY CLEANERS  
 5914 HIGHWAY 51  
 McFARLAND, WISCONSIN

DESIGNED	DRAWN	SCALE	DATE	REVISED
KTB/KMH	<i>[Signature]</i>	approx. 1"=10'	01-06-21	--
PROJECT NO.: 1E-2006002			CAD No. 1E2006002h	



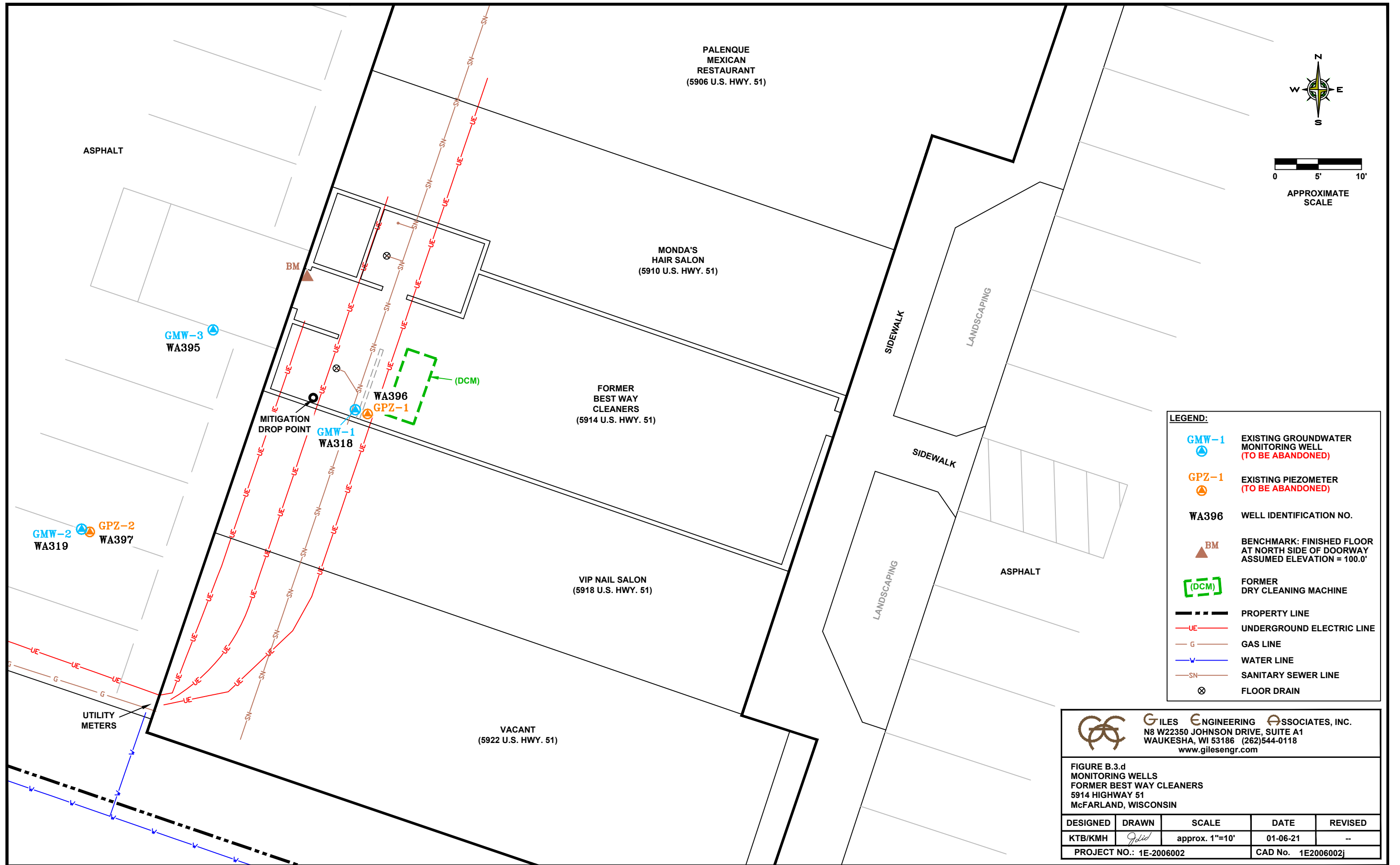
**LEGEND:**

	GROUNDWATER CONTOUR INTERVAL = 0.15'
	GROUNDWATER FLOW DIRECTION
	GROUNDWATER ELEVATION (IN FEET REFERENCED TO ARBITRARY BENCHMARK)
	GROUNDWATER MONITORING WELL
	PIEZOMETER
	SOIL BORING
	BENCHMARK: FINISHED FLOOR AT NORTH SIDE OF DOORWAY ASSUMED ELEVATION = 100.0'
	FORMER DRY CLEANING MACHINE
	PREVIOUS BORING (BY SEYMOUR)
	PROPERTY LINE
	UNDERGROUND ELECTRIC LINE
	GAS LINE
	WATER LINE
	SANITARY SEWER LINE
	FLOOR DRAIN

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FIGURE B.3.c  
 GROUNDWATER FLOW DIRECTION MAP (OCT. 22, 2020)  
 FORMER BEST WAY CLEANERS  
 5914 HIGHWAY 51  
 McFARLAND, WISCONSIN

DESIGNED	DRAWN	SCALE	DATE	REVISED
KTB/KMH	<i>Jed</i>	approx. 1"=10'	01-06-21	--
PROJECT NO.: 1E-2006002			CAD No. 1E2006002i	



**LEGEND:**

	<b>GMW-1</b>	EXISTING GROUNDWATER MONITORING WELL (TO BE ABANDONED)
	<b>GPZ-1</b>	EXISTING PIEZOMETER (TO BE ABANDONED)
	<b>WA396</b>	WELL IDENTIFICATION NO.
	<b>BM</b>	BENCHMARK: FINISHED FLOOR AT NORTH SIDE OF DOORWAY ASSUMED ELEVATION = 100.0'
	<b>(DCM)</b>	FORMER DRY CLEANING MACHINE
		PROPERTY LINE
	<b>UE</b>	UNDERGROUND ELECTRIC LINE
	<b>G</b>	GAS LINE
	<b>W</b>	WATER LINE
	<b>SN</b>	SANITARY SEWER LINE
		FLOOR DRAIN

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**FIGURE B.3.d**  
**MONITORING WELLS**  
**FORMER BEST WAY CLEANERS**  
 5914 HIGHWAY 51  
 McFARLAND, WISCONSIN

DESIGNED	DRAWN	SCALE	DATE	REVISED
KTB/KMH	<i>Jed</i>	approx. 1"=10'	01-06-21	--
PROJECT NO.: 1E-2006002			CAD No. 1E2006002j	

4-1-19	7-2-20
DETECTED VOCs PCE = 166	DETECTED VOCs TC-TF = 0.63 J 1,3-DCBz = 1.0 J 1,4-DCBz = 26 2-Bu = 2.9 J Ace = 26 J Bta = 44 CIF = 48 CyHx = 0.66 J <u>DCDFM = 5,700</u> Hex = 0.28 J MeChl = 3.5 J,B S = 0.78 J PCE = 270 TCE = 1.5 J TCFM = 1.8 J

7-19-18	4-1-19
DETECTED VOCs c-1,2-DCE = 1,575 <u>PCE = (14,510)</u> <u>TCE = [1,204]</u>	DETECTED VOCs c-1,2-DCE = 485 <u>PCE = 3,178</u> <u>TCE = (334)</u>

7-2-20
DETECTED VOCs c-1,2-DCE = 2,400 MeChl = 340 J,B <u>PCE = (12,000)</u> <u>TCE = [1,100]</u>

4-1-19	7-2-20
DETECTED VOCs PCE = 180	DETECTED VOCs 1,1,1-TCA = 0.21 J TC-TF = 0.52 J 1,3,5-TMB = 0.46 J 1,4-DCBz = 12 2-Bu = 2.0 J Ace = 200 B = 0.37 J BrMe = 0.23 J Bta = 4.0 CS2 = 0.29 J CCl4 = 0.47 J ChIDMe = 2.3 CIF = 0.50 J ChlMe = 1.5 J CyHx = 0.50 J DCDFM = 51 Hep = 0.22 J Hex = 1.2 J MeChl = 4.0 B S = 0.54 J PCE = 4 T = 1.9 J TCFM = 1.6

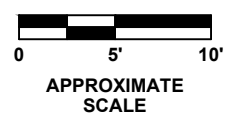
PALENQUE MEXICAN RESTAURANT  
(5906 U.S. HWY. 51)

MONDA'S HAIR SALON  
(5910 U.S. HWY. 51)

FORMER BEST WAY CLEANERS  
(5914 U.S. HWY. 51)

VIP NAIL SALON  
(5918 U.S. HWY. 51)

VACANT  
(5922 U.S. HWY. 51)



**LEGEND:**

- ESTIMATED EXTENT OF SUB-SLAB SOIL GAS EXCEEDING VRSL (LARGE COMMERCIAL / INDUSTRIAL)
- ESTIMATED EXTENT OF SUB-SLAB SOIL GAS EXCEEDING VRSL (SMALL COMMERCIAL)
- ESTIMATED EXTENT OF SUB-SLAB SOIL GAS EXCEEDING VRSL (RESIDENTIAL)
- ESTIMATED EXTENT OF UNSATURATED IMPACTED SOIL EXCEEDING NR 720 RCLs FOR SOIL TO GROUNDWATER PATHWAY
- ESTIMATED EXTENT OF IMPACTED GROUNDWATER EXCEEDING NR 140 PREVENTIVE ACTION LIMITS (PAL) OR ENFORCEMENT STANDARDS (ES)
- GSS-1 SOIL GAS POINT
- BM BENCHMARK: FINISHED FLOOR AT NORTH SIDE OF DOORWAY ASSUMED ELEVATION = 100.0'
- [DCM] FORMER DRY CLEANING MACHINE
- SS-1 PREVIOUS BORINGS (BY SEYMOUR)
- PROPERTY LINE
- UE- UNDERGROUND ELECTRIC LINE
- G- GAS LINE
- W- WATER LINE
- SN- SANITARY SEWER LINE
- FLOOR DRAIN

**ABBREVIATIONS:**  
VOCs: VOLATILE ORGANIC COMPOUNDS  
VRSL: VAPOR RISK SCREENING LEVELS

**NOTES:**  
VOC RESULTS EXPRESSED IN MICROGRAMS PER CUBIC METER (ug/m3)  
**RESULTS INDICATED IN GREEN / UNDERLINE EXCEED THE SUB-SLAB VRSL (RESIDENTIAL)**  
**RESULTS INDICATED IN BLUE / (PARENTHESIS) EXCEED THE SUB-SLAB VRSL (SMALL COMMERCIAL)**  
**RESULTS INDICATED IN RED / [BRACKETS] EXCEED THE SUB-SLAB VRSL (LARGE COMMERCIAL / INDUSTRIAL)**  
J: RESULT IS AN ESTIMATE VALUE (DETECTED BELOW THE METHOD DETECTION LIMIT AND REPORTING LIMIT).  
B: COMPOUND WAS DETECTED IN THE METHOD BLANK AND IN THE SAMPLE.

**CHEMICAL KEY:**  
Ace: ACETONE  
B: BENZENE  
BrMe: BROMOMETHANE  
Bta: BUTANE  
Bu: BUTANONE  
CCl4: CARBON TETRACHLORIDE  
ChIDMe: CHLORODIFLUOROMETHANE  
ChlMe: CHLOROMETHANE  
CIF: CHLOROFORM  
CS2: CARBON DISULFIDE  
CyHx: CYCLOHEXANE  
DCDFM: DICHLORODIFLUOROMETHANE  
DCE: DICHLOROETHENE  
Hep: HEPTANE  
Hex: HEXANE  
MeChl: METHYLENE CHLORIDE  
PCE: TETRACHLOROETHENE  
S: STYRENE  
T: TOLUENE  
TCA: TRICHLOROETHANE  
TCBz: TRICHLOROETHENE  
TCE: TRICHLOROETHENE  
TCFM: TRICHLOROFLUOROMETHANE  
TC-TF: 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE  
TMB: TRIMETHYLBENZENE

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FIGURE B.4.a  
VAPOR INTRUSION MAP  
FORMER BEST WAY CLEANERS  
5914 HIGHWAY 51  
McFARLAND, WISCONSIN

DESIGNED	DRAWN	SCALE	DATE	REVISED
KTB/KMH	<i>Jed</i>	approx. 1"=10'	01-06-21	--
PROJECT NO.: 1E-2006002			CAD No. 1E2006002k	





Photo taken from Google Earth

View of the front of the shopping center building, facing west.



View of the interior of source unit and concrete floor that will act as a performance cap, facing west.

**B.5 STRUCTURAL IMPEDIMENT PHOTOGRAPHS**  
 October 22, 2020

**Best Way Cleaners**  
 5914 U.S. Highway 51  
 McFarland, Wisconsin  
 Project No. 1E-2006002



## **Attachment C: Remedial Action**

### C.1 Site Investigation Documentation

Included:

- Soil Boring Log Forms (4400-122)
- Monitoring Well Construction and Development Forms (4400-113A&B)
- Borehole Filling & Sealing Report Forms (3300-005)
- Laboratory reports from Giles' soil, groundwater, and soil gas sampling
- Summary of Supplemental Investigation

### C.2 Investigative Waste Documentation

Not included. Investigative soil waste from direct-push borings was disposed of in Giles' dumpster as *de minimis* waste, and purge/development water was discharged to the sanitary sewer due to its low level of contamination.

### C.3 Alternate RCL Methodology

Not included. Wisc. Adm. Code NR 720 generic RCLs were used to assess data.

### C.4 Construction Documentation

Does not apply. No constructed remedial action was taken at the Site.

### C.5 Decommissioning of Remedial Systems

Does not apply. No active remediation system was constructed at the Site.

### C.6 Other

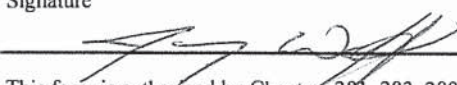
Included. WDNR approval to install NR 141-variance wells.

Route To: Watershed/Wastewater  Waste Management   
Remediation/Redevelopment  Other

Facility/Project Name <b>Former Best Way Cleaners: 5914 Hwy 51</b>			License/Permit/Monitoring Number		Boring Number <b>GB-1</b>	
Boring Drilled By (Firm name and name of crew chief) <b>1E-2006002 Jim Blair, Giles Engineering Associates</b>			Date Drilling Started <b>6/23/2020</b>		Date Drilling Completed <b>6/23/2020</b>	
WI Unique Well No.			DNR Well ID No.		Common Well Name	
Boring Location or Local Grid Origin (Check if estimated: <input type="checkbox"/> ) State Plane <b>SW 1/4 of NW 1/4 of Section 3, T 6 N, R 10 E</b>			Final Static Water Level Feet MSL		Surface Elevation Feet MSL	
Local Grid Location (If applicable)			Lat. _____"		Borehole Diameter <b>2" Inches</b>	
Facility ID <b>0213583171</b>			County <b>Dane</b>		County Code <b>13</b>	
			Civil Town/City/ or Village <b>McFarland</b>			

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties					RQD/Comments
									Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	
DP-1	48/36		1	Concrete	Concrete									
			2	Yellow-Brown coarse to fine Sand and some coarse to fine Gravel (Fill)-Moist				1.8						
DP-2	48/24		3					2.6						
			4	Gray Clayey Silt with trace fine Gravel, thin seam of Black fine Sand and rounded Gravel from 4.2 to 4.4 Feet (Fill)-Wet	CL-ML									
DP-3	24/24		5	Black to Dark Brown Silty Clay, buried Topsoil with Organics(Native)-Moist	OL			2.5						
			6	Gray coarse Sand with little coarse to fine Gravel (Native)-Wet				1.6						
			7											
			8		SW									
			9					1.2						
			10	End of Boring at 10 Feet Below Ground Surface										

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature:  Firm: **Giles Engineering Associates, Inc.**  
N8 W22350 Johnson Drive, Suite A1 Waukesha, WI 53186  
Tel: 262-544-0118 Fax: 262-549-5868

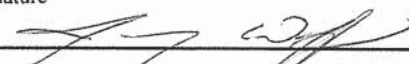
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Route To: Watershed/Wastewater  Waste Management   
Remediation/Redevelopment  Other

Facility/Project Name Former Best Way Cleaners: 5914 Hwy 51			License/Permit/Monitoring Number		Boring Number GB-2	
Boring Drilled By (Firm name and name of crew chief) 1E-2006002 Jim Blair, Giles Engineering Associates			Date Drilling Started 6/23/2020		Date Drilling Completed 6/23/2020	
Drilling Method Direct Push			Final Static Water Level Feet MSL		Surface Elevation Feet MSL	
WI Unique Well No.		DNR Well ID No.	Common Well Name		Borehole Diameter 2" Inches	
Boring Location or Local Grid Origin (Check if estimated: <input type="checkbox"/> ) State Plane SW 1/4 of NW 1/4 of Section 3, T 6 N, R 10 E			Local Grid Location (if applicable) Lat. _____" Long. _____"		<input type="checkbox"/> N <input type="checkbox"/> E <input type="checkbox"/> S <input type="checkbox"/> W	
Facility ID 0213583171		County Dane	County Code 13	Civil Town/City/ or Village McFarland		

Sample	Number and Type	Length Art. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties					RQD/ Comments
										Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	
DP-1	48/36			1	Concrete	Concrete									
				2	Yellow-Brown Coarse to fine Sand with little coarse to fine Gravel (Fill)-Moist	SW			4.4						
DP-2	48/36			3					8.0						
				4	Gray Clayey Silt with trace coarse to fine Gravel over thin seam of Black Sand and rounded Gravel (Fill)-Moist	CL-ML									
DP-3	24/24			5	Fat Black to Dark Brown Silty Clay buried Topsoil with Organics (Native)-Moist	OL			4.1						
				6	Gray coarse Sand with little coarse to fine Gravel (Native)-Wet	SW			1.6						
				7											
				8											
				9	Gray to Brown Sandy Clay with trace fine Gravel (Native)-Moist	CL			2.5						
				10	End of Boring at 10 Feet Below Ground Surface										

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature 	Firm Giles Engineering Associates, Inc. N8 W22350 Johnson Drive, Suite A1 Waukesha, WI 53186	Tel: 262-544-0118 Fax: 262-549-5868
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Route To: Watershed/Wastewater  Waste Management   
Remediation/Redevelopment  Other

Facility/Project Name <b>Former Best Way Cleaners: 5914 Hwy 51</b>			License/Permit/Monitoring Number		Boring Number <b>GMW-1</b>	
Boring Drilled By (Firm name and name of crew chief) <b>1E-2006002 Jim Blair, Giles Engineering Associates</b>			Date Drilling Started <b>6/23/2020</b>		Date Drilling Completed <b>6/23/2020</b>	
Drilling Method <b>Direct Push</b>						
WI Unique Well No. <b>WA318</b>	DNR Well ID No.	Common Well Name	Final Static Water Level Feet MSL	Surface Elevation Feet MSL	Borehole Diameter <b>2" Inches</b>	
Boring Location or Local Grid Origin (Check if estimated: <input type="checkbox"/> ) State Plane <b>SW 1/4 of NW 1/4 of Section 3, T 6 N, R 10 E</b>			Local Grid Location (If applicable) Lat. _____ " _____ " Long. _____ " _____ "		<input type="checkbox"/> N <input type="checkbox"/> E <input type="checkbox"/> S <input type="checkbox"/> W	
Facility ID <b>0213583171</b>		County <b>Dane</b>	County Code <b>13</b>	Civil Town/City/ or Village <b>McFarland</b>		

Sample	Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties					RQD/ Comments	
										Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200		
					Concrete	Concrete										
DP-1		48/36		1	Yellow-Brown coarse to fine Sand with some coarse to fine Gravel (Fill)-Dry	SW			2.6							
				2	Gray fat Clayey Silt with trace fine Gravel (Fill)-Wet	CL-ML			4.3							
DP-2		48/24		5	Black to Dark Brown fat Silty Clay Topsoil with Organics (Native)-Moist	OL			5.6							
				6					8.0							
DP-3		24/24		8	Gray coarse Sand with little coarse to fine Gravel (Native)-Wet	SW			0.5							
				10	End of Boring at 10 Feet Below Ground Surface											

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature 	Firm <b>Giles Engineering Associates, Inc.</b> N8 W22350 Johnson Drive, Suite A1 Waukesha, WI 53186	Tel: 262-544-0118 Fax: 262-549-5868
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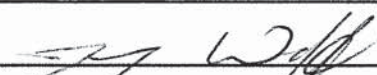
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Route To: Watershed/Wastewater  Waste Management   
Remediation/Redevelopment  Other

Facility/Project Name <b>Former Best Way Cleaners: 5914 Hwy 51</b>		License/Permit/Monitoring Number		Boring Number <b>GMW-2</b>	
Boring Drilled By (Firm name and name of crew chief) <b>1E-2006002 Jim Blair, Giles Engineering Associates</b>		Date Drilling Started <b>6/23/2020</b>		Date Drilling Completed <b>6/23/2020</b>	
Drilling Method <b>Direct Push</b>		WI Unique Well No. <b>WA319</b>		DNR Well ID No.	
Common Well Name		Final Static Water Level <b>Feet MSL</b>		Surface Elevation <b>Feet MSL</b>	
Borehole Diameter <b>2" Inches</b>		Boring Location or Local Grid Origin (Check if estimated: <input type="checkbox"/> ) State Plane <b>SW</b> 1/4 of NW 1/4 of Section <b>3</b> , T <b>6</b> N, R <b>10</b> E		Local Grid Location (If applicable) <input type="checkbox"/> N <input type="checkbox"/> E <input type="checkbox"/> S <input type="checkbox"/> W	
Facility ID <b>0213583171</b>		County <b>Dane</b>		County Code <b>13</b>	
		Civil Town/City/ or Village <b>McFarland</b>			

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties						RQD/ Comments
									Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200		
DP-1	60/42		1	Asphalt	Asphalt			1.8							
			2	Tan to Brown coarse to fine Sand with some coarse to fine Gravel (Fill)-Dry											
DP-2	60/36		3		SW			2.6							
			4												
DP-2	60/36		5	Wet at 4.8 Feet											
			6	Black to Dark Brown fat Silty Clay, buried Topsoil with Organics (Native)-Moist	OL			3.4							
DP-2	60/36		7	Gray coarse Sand with little coarse to fine Gravel (Native)-Wet				2.8							
			8		SW										
DP-2	60/36		9					2.2							
			10	End of Boring at 10 Feet Below Ground Surface											

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature  Firm **Giles Engineering Associates, Inc.** Tel: 262-544-0118  
N8 W22350 Johnson Drive, Suite A1 Waukesha, WI 53186 Fax: 262-549-5868


This form is authorized by Chapters 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats. Completions of this form is mandatory. Failure to file this form may result in forfeiture of between \$10 and \$25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. NOTE: See instructions for more information, including where the completed form should be sent.

Route To: Watershed/Wastewater  Waste Management   
Remediation/Redevelopment  Other

Facility/Project Name Former Best Way Cleaners: 5914 Hwy 51		License/Permit/Monitoring Number		Boring Number GMW-3	
Boring Drilled By (Firm name and name of crew chief) 1E-2006002 Jim Blair, Giles Engineering Associates		Date Drilling Started 6/23/2020		Date Drilling Completed 6/23/2020	
Drilling Method Direct Push		WI Unique Well No. WA395		DNR Well ID No.	
Common Well Name		Final Static Water Level Feet MSL		Surface Elevation Feet MSL	
Borehole Diameter 2" Inches		Boring Location or Local Grid Origin (Check if estimated: <input type="checkbox"/> ) State Plane SW 1/4 of NW 1/4 of Section 3, T 6 N, R 10 E		Local Grid Location (If applicable) <input type="checkbox"/> N <input type="checkbox"/> E <input type="checkbox"/> S <input type="checkbox"/> W	
Facility ID 0213583171		County Dane		County Code 13	
Civil Town/City/ or Village McFarland					

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID/FID	Soil Properties					RQD/ Comments
									Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	
DP-1	60/52		1	Asphalt	Asphalt									
			2	Yellow - Brown coarse to fine Sand with some coarse to fine Gravel (Fill)-Dry	SW			2.0						
DP-2	60/48		3					5.2						
			4	Gray Clayey Silt with thin seam of Black Sand and Gravel from 4 to 4.1 Feet (Fill)-Moist	CL-ML									
			5	Fat Black to Dark Brown Silty Clay buried Topsoil with Organics (Native)-Moist	OL			2.4						
			6	Gray coarse Sand with little coarse to fine Gravel (Native)-Wet				2.2						
			7											
			8		SW									
			9					1.6						
			10	Gray to Brown Sandy Clay with trace fine Gravel (Native)-Moist	CL									
				End of Boring at 10 Feet										

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature:  Firm: Giles Engineering Associates, Inc.  
N8 W22350 Johnson Drive, Suite A1 Waukesha, WI 53186  
Tel: 262-544-0118 Fax: 262-549-5868


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Route To: Watershed/Wastewater  Waste Management   
Remediation/Redevelopment  Other

Facility/Project Name <b>Former Best Way Cleaners: 5914 Hwy 51</b>		License/Permit/Monitoring Number		Boring Number <b>GPZ-1</b>	
Boring Drilled By (Firm name and name of crew chief) <b>1E-2006002 Jim Blair, Giles Engineering Associates</b>		Date Drilling Started <b>6/23/2020</b>		Date Drilling Completed <b>6/23/2020</b>	
Drilling Method <b>Direct Push</b>		WI Unique Well No. <b>WA396</b>		DNR Well ID No.	
Common Well Name		Final Static Water Level <b>Feet MSL</b>		Surface Elevation <b>Feet MSL</b>	
Borehole Diameter <b>2" Inches</b>		Boring Location or Local Grid Origin (Check if estimated: <input type="checkbox"/> ) State Plane <b>S/C/N</b>		Local Grid Location (If applicable). <input type="checkbox"/> N <input type="checkbox"/> E <input type="checkbox"/> S <input type="checkbox"/> W	
SW 1/4 of NW 1/4 of Section 3, T 6 N, R 10 E		Lat. _____"		Long. _____"	
Facility ID <b>0213583171</b>		County <b>Dane</b>		County Code <b>13</b>	
Civil Town/City/ or Village <b>McFarland</b>					

Sample	Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties					RQD/ Comments	
										Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200		
					Concrete	Concrete										
				1	Yellow-Brown coarse to fine Sand with some coarse to fine Gravel ( Fill)-Dry				12.8							
DP-1	48/42			2		SW										
				3					44.2							
				4	Gray Clayey Silt with trace fine Gravel and seam of Black coarse Sand and coarse rounded Gravel at 4.4 feet (Fill)-Moist	CL-ML										
				5					32.2							
DP-2	48/48			6	Black to Dark Brown fat Silty Clay, buried Topsoil with Organics (Native)-Moist	OL										
				7	Gray coarse Sand and little coarse to fine Gravel (Native)-Wet				4.9							
				8		SW										
				9												
				10	Gray to Brown Silty Clay with trace fine Gravel (Native)-Moist				3.0							
DP-3	48/24			11		CL			1.2							
				12					2.3							

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature 	Firm <b>Giles Engineering Associates, Inc.</b> N8 W22350 Johnson Drive, Suite A1 Waukesha, WI 53186	Tel: 262-544-0118 Fax: 262-549-5868
--	---	--

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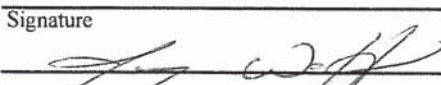


Route To: Watershed/Wastewater  Waste Management   
Remediation/Redevelopment  Other

Facility/Project Name <b>Former Best Way Cleaners: 5914 Hwy 51</b>			License/Permit/Monitoring Number		Boring Number <b>GPZ-2</b>	
Boring Drilled By (Firm name and name of crew chief) <b>1E-2006002 Jim Blair, Giles Engineering Associates</b>			Date Drilling Started <b>6/23/2020</b>		Date Drilling Completed <b>6/23/2020</b>	
Drilling Method <b>Direct Push</b>						
WI Unique Well No. <b>WA397</b>	DNR Well ID No.	Common Well Name	Final Static Water Level Feet MSL	Surface Elevation Feet MSL		Borehole Diameter <b>2" Inches</b>
Boring Location or Local Grid Origin (Check if estimated: <input type="checkbox"/> ) State Plane <b>SW</b> 1/4 of NW 1/4 of Section <b>3</b> , T <b>6</b> N, R <b>10</b> E			Local Grid Location (If applicable)			
Facility ID <b>0213583171</b>			County <b>Dane</b>	County Code <b>13</b>	Civil Town/City/ or Village <b>McFarland</b>	

Sample	Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties					RQD/ Comments	
										Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200		
					Asphalt	Asphalt										
DP-1		60/60		1	Tan Brown coarse to fine Sand with some coarse to fine Gravel (Fill)-Dry				1.7							
				2												
				3		SW			1.8							
				4												
				5	Black to Dark Brown fat Silty Clay burried Topsoil with Organics (Native)-Moist	OL			2.9							
DP-2		60/42		6	Gray coarse Sand with little coarse to fine Gravel (Native)-Wet				2.8							
				7												
				8		SW										
				9					2.2							
				10	Gray to Brown Sandy Clay with trace fine Gravel (Native)-Wet											
				11		CL			1.5							
				12												

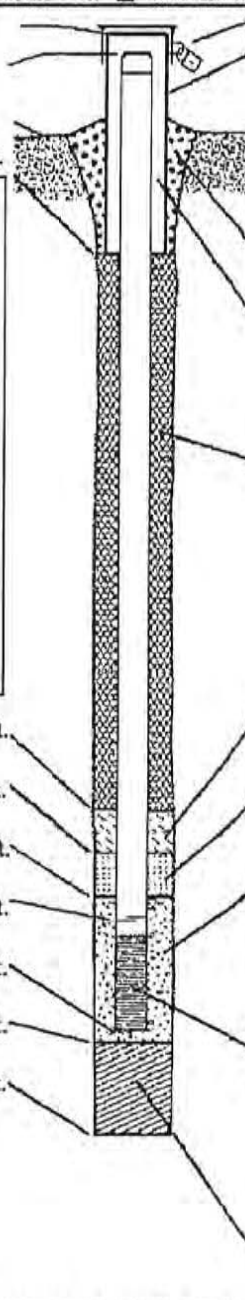
I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature:  Firm: **Giles Engineering Associates, Inc.**  
N8 W22350 Johnson Drive, Suite A1 Waukesha, WI 53186  
Tel: 262-544-0118 Fax: 262-549-5868

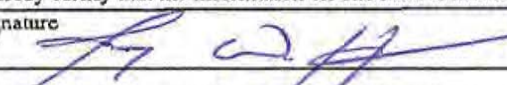
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Facility/Project Name 1E-2006002 Former Best Way Cleaners - 5914 Hwy 51	Local Grid Location of Well _____ ft. <input type="checkbox"/> N. _____ ft. <input type="checkbox"/> E. _____ ft. <input type="checkbox"/> S. _____ ft. <input type="checkbox"/> W.	Well Name GMW-1
Facility License, Permit or Monitoring No.	Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/> ) or Well Location <input type="checkbox"/> Lat. _____ " Long. _____ " or	Wis. Unique Well No. <u>WA318</u> DNR Well ID No. _____
Facility ID <u>0213583171</u>	St. Plane _____ ft. N. _____ ft. E. S/C/N	Date Well Installed <u>06 / 23 / 2020</u> m m d d y y v v y y
Type of Well Well Code <u>11 / mw</u>	Section Location of Waste/Source <u>SW 1/4 of NW 1/4 of Sec. 3 T. 6 N. R. 10</u> <input checked="" type="checkbox"/> E <input type="checkbox"/> W	Well Installed By: Name (first, last) and Firm <u>James Blair</u> <u>Giles Engineering Associates, Inc.</u>
Distance from Waste/Source _____ ft.	Enf. Stds. Apply <input type="checkbox"/>	Location of Well Relative to Waste/Source u <input type="checkbox"/> Upgradient s <input type="checkbox"/> Sidegradient d <input type="checkbox"/> Downgradient n <input type="checkbox"/> Not Known
		Gov. Lot Number _____

<p>A. Protective pipe, top elevation _____ ft. MSL</p> <p>B. Well casing, top elevation _____ ft. MSL</p> <p>C. Land surface elevation _____ ft. MSL</p> <p>D. Surface seal, bottom _____ ft. MSL or <u>1.0</u> ft.</p> <div style="border: 1px solid black; padding: 5px;"> <p>12. USCS classification of soil near screen:                  GP <input type="checkbox"/> GM <input type="checkbox"/> GC <input type="checkbox"/> GW <input type="checkbox"/> SW <input type="checkbox"/> SP <input type="checkbox"/>                  SM <input type="checkbox"/> SC <input type="checkbox"/> ML <input type="checkbox"/> MH <input type="checkbox"/> CL <input checked="" type="checkbox"/> CH <input type="checkbox"/>                  Bedrock <input type="checkbox"/></p> <p>13. Sieve analysis performed? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>14. Drilling method used: Rotary <input type="checkbox"/> 5 0                  Hollow Stem Auger <input type="checkbox"/> 4 1  <u>Direct-Push</u> Other <input checked="" type="checkbox"/></p> <p>15. Drilling fluid used: Water <input type="checkbox"/> 0 2 Air <input type="checkbox"/> 0 1                  Drilling Mud <input type="checkbox"/> 0 3 None <input checked="" type="checkbox"/> 9 9</p> <p>16. Drilling additives used? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No                  Describe _____</p> <p>17. Source of water (attach analysis, if required):                  _____</p> </div> <p>E. Bentonite seal, top _____ ft. MSL or <u>1</u> ft.</p> <p>F. Fine sand, top _____ ft. MSL or <u>4</u> ft.</p> <p>G. Filter pack, top _____ ft. MSL or <u>5</u> ft.</p> <p>H. Screen joint, top _____ ft. MSL or <u>5</u> ft.</p> <p>I. Well bottom _____ ft. MSL or <u>10</u> ft.</p> <p>J. Filter pack, bottom _____ ft. MSL or <u>10</u> ft.</p> <p>K. Borehole, bottom _____ ft. MSL or <u>10</u> ft.</p> <p>L. Borehole, diameter <u>3</u> in.</p> <p>M. O.D. well casing <u>1.7</u> in.</p> <p>N. I.D. well casing <u>1.0</u> in.</p>	 <p>1. Cap and lock? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>2. Protective cover pipe:                  a. Inside diameter: <u>4</u> in.                  b. Length: <u>1</u> ft.                  c. Material: Steel <input checked="" type="checkbox"/> 0 4                  Other <input type="checkbox"/>                  d. Additional protection? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No                  If yes, describe: _____</p> <p>3. Surface seal: Bentonite <input type="checkbox"/> 3 0                  Concrete <input checked="" type="checkbox"/> 0 1                  Other <input type="checkbox"/></p> <p>4. Material between well casing and protective pipe:                  Bentonite <input checked="" type="checkbox"/> 3 0                  Other <input type="checkbox"/></p> <p>5. Annular space seal: a. Granular/Chipped Bentonite <input checked="" type="checkbox"/> 3 3                  b. _____ Lbs/gal mud weight . . . Bentonite-sand slurry <input type="checkbox"/> 3 5                  c. _____ Lbs/gal mud weight . . . . . Bentonite slurry <input type="checkbox"/> 3 1                  d. _____ % Bentonite . . . . . Bentonite-cement grout <input type="checkbox"/> 5 0                  e. _____ Ft<sup>3</sup> volume added for any of the above                  f. How installed: Tremie <input type="checkbox"/> 0 1                  Tremie pumped <input type="checkbox"/> 0 2                  Gravity <input checked="" type="checkbox"/> 0 8</p> <p>6. Bentonite seal: a. Bentonite granules <input type="checkbox"/> 3 3                  b. <input type="checkbox"/> 1/4 in. <input checked="" type="checkbox"/> 3/8 in. <input type="checkbox"/> 1/2 in. Bentonite chips <input checked="" type="checkbox"/> 3 2                  c. _____ Other <input type="checkbox"/></p> <p>7. Fine sand material: Manufacturer, product name &amp; mesh size                  a. _____                  b. Volume added _____ ft<sup>3</sup></p> <p>8. Filter pack material: Manufacturer, product name &amp; mesh size                  a. <u>Monoflex pre-pak 20 x 40 silica sand</u>                  b. Volume added <u>0.02</u> ft<sup>3</sup></p> <p>9. Well casing: Flush threaded PVC schedule 40 <input checked="" type="checkbox"/> 2 3                  Flush threaded PVC schedule 80 <input type="checkbox"/> 2 4                  Other <input type="checkbox"/></p> <p>10. Screen material: <u>PVC</u>                  a. Screen type: Factory cut <input checked="" type="checkbox"/> 1 1                  Continuous slot <input type="checkbox"/> 0 1                  Other <input type="checkbox"/>                  b. Manufacturer <u>Monoflex</u>                  c. Slot size: <u>0.01</u> in.                  d. Slotted length: <u>10</u> ft.</p> <p>11. Backfill material (below filter pack): None <input checked="" type="checkbox"/> 1 4                  Other <input type="checkbox"/></p>
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I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature  Firm Giles Engineering Associates, Inc.

Please complete both Forms 4400-113A and 4400-113B and return them to the appropriate DNR office and bureau. Completion of these reports is required by chs. 160, 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291, 292, 293, 295, and 299, Wis. Stats., failure to file these forms may result in a forfeiture of between \$10 and \$25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on these forms is not intended to be used for any other purpose. NOTE: See the instructions for more information, including where the completed forms should be sent.

Route to: Watershed/Wastewater  Waste Management   
Remediation/Redevelopment  Other

Facility/Project Name E-2006002 Former Best Way Cleaners - 5914 Hwy 51	County Name Dane	Well Name GMW-1
Facility License, Permit or Monitoring Number	County Code 13	Wis. Unique Well Number WA318
		DNR Well ID Number

1. Can this well be purged dry?  Yes  No
2. Well development method
- surged with bailer and bailed  4 1
  - surged with bailer and pumped  6 1
  - surged with block and bailed  4 2
  - surged with block and pumped  6 2
  - surged with block, bailed and pumped  7 0
  - compressed air  2 0
  - bailed only  1 0
  - pumped only  5 1
  - pumped slowly  5 0
  - Other  \_\_\_\_\_
3. Time spent developing well 40 min.
4. Depth of well (from top of well casing) 10 ft.
5. Inside diameter of well 0.75 in.
6. Volume of water in filter pack and well casing \_\_\_\_\_ gal.
7. Volume of water removed from well 1.5 gal.
8. Volume of water added (if any) 0 gal.
9. Source of water added \_\_\_\_\_
10. Analysis performed on water added?  Yes  No  
(If yes, attach results)

- |  | Before Development  | After Development   |
|--|---|---|
| 11. Depth to Water (from top of well casing) | a. <u>5.02</u> ft.  | <u>9.52</u> ft.   |
| Date   | b. <u>07</u> / <u>02</u> / <u>2020</u>  | <u>07</u> / <u>02</u> / <u>2020</u>   |
|  | m m d d y y y y   | m m d d y y y y   |
| Time   | c. <u>12:10</u> <input type="checkbox"/> a.m. <input checked="" type="checkbox"/> p.m.                                | <u>12:50</u> <input type="checkbox"/> a.m. <input checked="" type="checkbox"/> p.m.                             |
| 12. Sediment in well bottom                  | <u>4.32</u> inches  | <u>0</u> inches   |
| 13. Water clarity                            | Clear <input type="checkbox"/> 1 0<br>Turbid <input checked="" type="checkbox"/> 1 5<br>(Describe) <u>opaque gray</u> | Clear <input checked="" type="checkbox"/> 2 0<br>Turbid <input type="checkbox"/> 2 5<br>(Describe) <u>clear</u> |
- Fill in if drilling fluids were used and well is at solid waste facility:
14. Total suspended solids \_\_\_\_\_ mg/l \_\_\_\_\_ mg/l
15. COD \_\_\_\_\_ mg/l \_\_\_\_\_ mg/l

16. Well developed by: Name (first, last) and Firm

First Name: Kelly Last Name: Hayden

Firm: Giles Engineering Associates, Inc.

17. Additional comments on development:

Name and Address of Facility Contact /Owner/Responsible Party

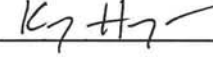
First Name: \_\_\_\_\_ Last Name: \_\_\_\_\_

Facility/Firm: FH of McFarland LLC

Street: 733 N Main Street

City/State/Zip: Oregon, WI 53575

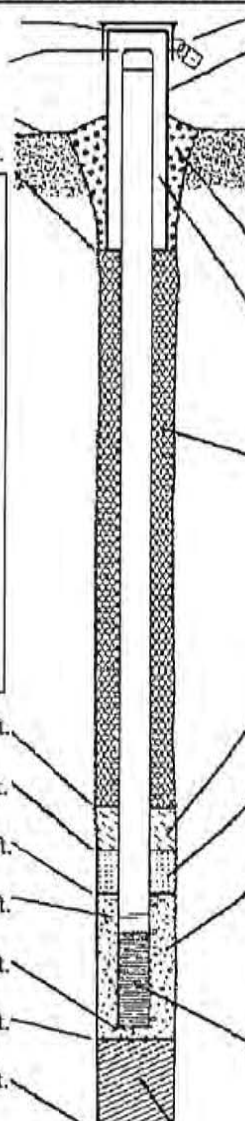
I hereby certify that the above information is true and correct to the best of my knowledge.

Signature: 

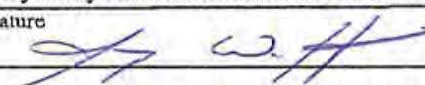
Print Name: Kelly Hayden

Firm: Giles Engineering Associates, Inc.

Facility/Project Name 1E-2006002 Former Best Way Cleaners - 5914 Hwy 51	Local Grid Location of Well _____ ft. <input type="checkbox"/> N. _____ ft. <input type="checkbox"/> E. _____ ft. <input type="checkbox"/> S. _____ ft. <input type="checkbox"/> W.	Well Name GMW-2
Facility License, Permit or Monitoring No.	Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/> ) or Well Location <input type="checkbox"/> Lat. _____ " Long. _____ " or _____ " _____ "	Wis. Unique Well No. WA319
Facility ID 0213583171	St. Plane _____ ft. N, _____ ft. E. S/C/N	Date Well Installed 06 / 23 / 2020 m m d d y y v v y
Type of Well Well Code 11 / mw	Section Location of Waste/Source SW <sub>1</sub> /4 of NW 1/4 of Sec. 3 T. 6 N. R. 10 <input checked="" type="checkbox"/> E <input type="checkbox"/> W	Well Installed By: Name (first, last) and Firm James Blair Giles Engineering Associates, Inc.
Distance from Waste/Source _____ ft.	Enf. Stds. Apply <input type="checkbox"/>	Gov. Lot Number _____
Location of Well Relative to Waste/Source u <input type="checkbox"/> Upgradient s <input type="checkbox"/> Sidegradient d <input type="checkbox"/> Downgradient n <input type="checkbox"/> Not Known		

<p>A. Protective pipe, top elevation _____ ft. MSL</p> <p>B. Well casing, top elevation _____ ft. MSL</p> <p>C. Land surface elevation _____ ft. MSL</p> <p>D. Surface seal, bottom _____ ft. MSL or 1.0 ft.</p> <div style="border: 1px solid black; padding: 5px;"> <p>12. USCS classification of soil near screen: GP <input type="checkbox"/> GM <input type="checkbox"/> GC <input type="checkbox"/> GW <input type="checkbox"/> SW <input type="checkbox"/> SP <input type="checkbox"/> SM <input type="checkbox"/> SC <input type="checkbox"/> ML <input type="checkbox"/> MH <input type="checkbox"/> CL <input checked="" type="checkbox"/> CH <input type="checkbox"/> Bedrock <input type="checkbox"/></p> <p>13. Sieve analysis performed? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>14. Drilling method used: Rotary <input type="checkbox"/> 5 0 Hollow Stem Auger <input type="checkbox"/> 4 1 Direct-Push <input checked="" type="checkbox"/> Other <input type="checkbox"/></p> <p>15. Drilling fluid used: Water <input type="checkbox"/> 0 2 Air <input type="checkbox"/> 0 1 Drilling Mud <input type="checkbox"/> 0 3 None <input checked="" type="checkbox"/> 9 9</p> <p>16. Drilling additives used? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Describe _____</p> <p>17. Source of water (attach analysis, if required): _____</p> </div> <p>E. Bentonite seal, top _____ ft. MSL or 1 ft.</p> <p>F. Fine sand, top _____ ft. MSL or 4 ft.</p> <p>G. Filter pack, top _____ ft. MSL or 5 ft.</p> <p>H. Screen joint, top _____ ft. MSL or 5 ft.</p> <p>I. Well bottom _____ ft. MSL or 10 ft.</p> <p>J. Filter pack, bottom _____ ft. MSL or 10 ft.</p> <p>K. Borehole, bottom _____ ft. MSL or 10 ft.</p> <p>L. Borehole, diameter 3 in.</p> <p>M. O.D. well casing 1.7 in.</p> <p>N. I.D. well casing 1.0 in.</p>	 <p>1. Cap and lock? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>2. Protective cover pipe: a. Inside diameter: 4 in. b. Length: 1 ft. c. Material: Steel <input checked="" type="checkbox"/> 0 4 Other <input type="checkbox"/></p> <p>d. Additional protection? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, describe: _____</p> <p>3. Surface seal: Bentonite <input type="checkbox"/> 3 0 Concrete <input checked="" type="checkbox"/> 0 1 Other <input type="checkbox"/></p> <p>4. Material between well casing and protective pipe: Bentonite <input checked="" type="checkbox"/> 3 0 Other <input type="checkbox"/></p> <p>5. Annular space seal: a. Granular/Chipped Bentonite <input checked="" type="checkbox"/> 3 3 b. _____ Lbs/gal mud weight . . . Bentonite-sand slurry <input type="checkbox"/> 3 5 c. _____ Lbs/gal mud weight . . . Bentonite slurry <input type="checkbox"/> 3 1 d. _____ % Bentonite . . . . Bentonite-cement grout <input type="checkbox"/> 5 0 e. _____ Ft<sup>3</sup> volume added for any of the above f. How installed: Tremie <input type="checkbox"/> 0 1 Tremie pumped <input type="checkbox"/> 0 2 Gravity <input checked="" type="checkbox"/> 0 8</p> <p>6. Bentonite seal: a. Bentonite granules <input type="checkbox"/> 3 3 b. <input type="checkbox"/> 1/4 in. <input checked="" type="checkbox"/> 3/8 in. <input type="checkbox"/> 1/2 in. Bentonite chips <input checked="" type="checkbox"/> 3 2 c. _____ Other <input type="checkbox"/></p> <p>7. Fine sand material: Manufacturer, product name &amp; mesh size a. _____ b. Volume added _____ ft<sup>3</sup></p> <p>8. Filter pack material: Manufacturer, product name &amp; mesh size a. Monoflex pre-pak 20 x 40 silica sand b. Volume added 0.02 ft<sup>3</sup></p> <p>9. Well casing: Flush threaded PVC schedule 40 <input checked="" type="checkbox"/> 2 3 Flush threaded PVC schedule 80 <input type="checkbox"/> 2 4 Other <input type="checkbox"/></p> <p>10. Screen material: PVC a. Screen type: Factory cut <input checked="" type="checkbox"/> 1 1 Continuous slot <input type="checkbox"/> 0 1 Other <input type="checkbox"/></p> <p>b. Manufacturer Monoflex c. Slot size: 0.01 in. d. Slotted length: 10 ft.</p> <p>11. Backfill material (below filter pack): None <input checked="" type="checkbox"/> 1 4 Other <input type="checkbox"/></p>
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I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature  Firm Giles Engineering Associates, Inc.

Please complete both Forms 4400-113A and 4400-113B and return them to the appropriate DNR office and bureau. Completion of these reports is required by chs. 160, 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291, 292, 293, 295, and 299, Wis. Stats., failure to file these forms may result in a forfeiture of between \$10 and \$25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on these forms is not intended to be used for any other purpose. NOTE: See the instructions for more information, including where the completed forms should be sent.

Route to: Watershed/Wastewater  Waste Management   
Remediation/Redevelopment  Other

Facility/Project Name: E-2006002 Former Best Way Cleaners - 5914 Hwy 51	County Name Dane	Well Name GMW-2	
Facility License, Permit or Monitoring Number	County Code 13	Wis. Unique Well Number WA319	DNR Well ID Number

1. Can this well be purged dry?  Yes  No

2. Well development method

surged with bailer and bailed	<input type="checkbox"/>	4 1
surged with bailer and pumped	<input type="checkbox"/>	6 1
surged with block and bailed	<input type="checkbox"/>	4 2
surged with block and pumped	<input type="checkbox"/>	6 2
surged with block, bailed and pumped	<input type="checkbox"/>	7 0
compressed air	<input type="checkbox"/>	2 0
bailed only	<input type="checkbox"/>	1 0
pumped only	<input checked="" type="checkbox"/>	5 1
pumped slowly	<input type="checkbox"/>	5 0
Other _____	<input type="checkbox"/>	

3. Time spent developing well \_\_\_\_\_ 30 \_\_\_\_\_ min.

4. Depth of well (from top of well casing) \_\_\_\_\_ 10 \_\_\_\_\_ ft.

5. Inside diameter of well \_\_\_\_\_ 0,75 \_\_\_\_\_ in.

6. Volume of water in filter pack and well casing \_\_\_\_\_ . . . gal.

7. Volume of water removed from well \_\_\_\_\_ 5 \_\_\_\_\_ gal.

8. Volume of water added (if any) \_\_\_\_\_ 0 \_\_\_\_\_ gal.

9. Source of water added \_\_\_\_\_

10. Analysis performed on water added?  Yes  No  
(If yes, attach results)

	Before Development	After Development
11. Depth to Water (from top of well casing)	a. _____ 3,91 _____ ft.	_____ 9,71 _____ ft.
Date	b. <u>07</u> / <u>02</u> / <u>2020</u>	<u>07</u> / <u>02</u> / <u>2020</u>
	m m d d y y y y	m m d d y y y y
Time	c. _____ 10:30 _____ <input checked="" type="checkbox"/> a.m. _____ <input type="checkbox"/> p.m.	_____ 11:00 _____ <input checked="" type="checkbox"/> a.m. _____ <input type="checkbox"/> p.m.
12. Sediment in well bottom	_____ 0 _____ inches	_____ 0 _____ inches
13. Water clarity	Clear <input type="checkbox"/> 1 0 Turbid <input checked="" type="checkbox"/> 1 5 (Describe) translucent brown	Clear <input checked="" type="checkbox"/> 2 0 Turbid <input type="checkbox"/> 2 5 (Describe) clear

Fill in if drilling fluids were used and well is at solid waste facility:

14. Total suspended solids \_\_\_\_\_ mg/l \_\_\_\_\_ mg/l

15. COD \_\_\_\_\_ mg/l \_\_\_\_\_ mg/l

16. Well developed by: Name (first, last) and Firm

First Name: Kelly Last Name: Hayden

Firm: Giles Engineering Associates, Inc.

17. Additional comments on development:

Name and Address of Facility Contact /Owner/Responsible Party

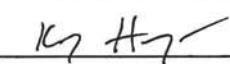
First Name: \_\_\_\_\_ Last Name: \_\_\_\_\_

Facility/Firm: FH of McFarland LLC

Street: 733 N Main Street

City/State/Zip: Oregon, WI 53575

I hereby certify that the above information is true and correct to the best of my knowledge.

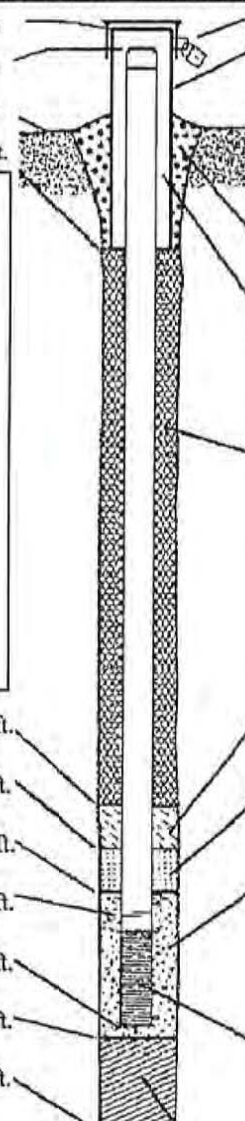
Signature: 

Print Name: Kelly Hayden

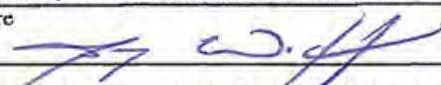
Firm: Giles Engineering Associates, Inc.

NOTE: See instructions for more information including a list of county codes and well type codes.

Facility/Project Name 1E-2006002 Former Best Way Cleaners - 5914 Hwy 51	Local Grid Location of Well _____ ft. <input type="checkbox"/> N. _____ ft. <input type="checkbox"/> E. _____ ft. <input type="checkbox"/> S. _____ ft. <input type="checkbox"/> W.	Well Name GMW-3
Facility License, Permit or Monitoring No.	Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/> ) or Well Location <input type="checkbox"/> Lat. _____ " Long. _____ " or _____	Wis. Unique Well No. WA395
Facility ID 0213583171	St. Plane _____ ft. N. _____ ft. E. S/C/N	Date Well Installed 06 / 23 / 2020 m m d d y y v v
Type of Well Well Code 11 / mw	Section Location of Waste/Source SW 1/4 of NW 1/4 of Sec. 3 T. 6 N. R. 10 <input checked="" type="checkbox"/> E <input type="checkbox"/> W	Well Installed By: Name (first, last) and Firm James Blair Giles Engineering Associates, Inc
Distance from Waste/Source _____ ft.	Location of Well Relative to Waste/Source u <input type="checkbox"/> Upgradient s <input type="checkbox"/> Sidegradient d <input type="checkbox"/> Downgradient n <input type="checkbox"/> Not Known	Gov. Lot Number _____

<p>A. Protective pipe, top elevation _____ ft. MSL</p> <p>B. Well casing, top elevation _____ ft. MSL</p> <p>C. Land surface elevation _____ ft. MSL</p> <p>D. Surface seal, bottom _____ ft. MSL or 1.0 ft.</p> <div style="border: 1px solid black; padding: 5px;"> <p>12. USCS classification of soil near screen: GP <input type="checkbox"/> GM <input type="checkbox"/> GC <input type="checkbox"/> GW <input type="checkbox"/> SW <input type="checkbox"/> SP <input type="checkbox"/> SM <input type="checkbox"/> SC <input type="checkbox"/> ML <input type="checkbox"/> MH <input type="checkbox"/> CL <input checked="" type="checkbox"/> CH <input type="checkbox"/> Bedrock <input type="checkbox"/></p> <p>13. Sieve analysis performed? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>14. Drilling method used: Rotary <input type="checkbox"/> 5 0 Hollow Stem Auger <input type="checkbox"/> 4 1 Direct-Push <input checked="" type="checkbox"/> Other <input type="checkbox"/></p> <p>15. Drilling fluid used: Water <input type="checkbox"/> 0 2 Air <input type="checkbox"/> 0 1 Drilling Mud <input type="checkbox"/> 0 3 None <input checked="" type="checkbox"/> 9 9</p> <p>16. Drilling additives used? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Describe _____</p> <p>17. Source of water (attach analysis, if required): _____</p> </div> <p>E. Bentonite seal, top _____ ft. MSL or 1 ft.</p> <p>F. Fine sand, top _____ ft. MSL or 4 ft.</p> <p>G. Filter pack, top _____ ft. MSL or 5 ft.</p> <p>H. Screen joint, top _____ ft. MSL or 5 ft.</p> <p>I. Well bottom _____ ft. MSL or 10 ft.</p> <p>J. Filter pack, bottom _____ ft. MSL or 10 ft.</p> <p>K. Borehole, bottom _____ ft. MSL or 10 ft.</p> <p>L. Borehole, diameter 3 in.</p> <p>M. O.D. well casing 1.7 in.</p> <p>N. I.D. well casing 1.0 in.</p>	 <p>1. Cap and lock? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>2. Protective cover pipe: a. Inside diameter: 4 in. b. Length: 1 ft. c. Material: Steel <input checked="" type="checkbox"/> 0 4 Other <input type="checkbox"/></p> <p>d. Additional protection? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, describe: _____</p> <p>3. Surface seal: Bentonite <input type="checkbox"/> 3 0 Concrete <input checked="" type="checkbox"/> 0 1 Other <input type="checkbox"/></p> <p>4. Material between well casing and protective pipe: Bentonite <input checked="" type="checkbox"/> 3 0 Other <input type="checkbox"/></p> <p>5. Annular space seal: a. Granular/Chipped Bentonite <input checked="" type="checkbox"/> 3 3 b. _____ Lbs/gal mud weight . . . Bentonite-sand slurry <input type="checkbox"/> 3 5 c. _____ Lbs/gal mud weight . . . . Bentonite slurry <input type="checkbox"/> 3 1 d. _____ % Bentonite . . . . . Bentonite-cement grout <input type="checkbox"/> 5 0 e. _____ Ft<sup>3</sup> volume added for any of the above f. How installed: Tremie <input type="checkbox"/> 0 1 Tremie pumped <input type="checkbox"/> 0 2 Gravity <input checked="" type="checkbox"/> 0 8</p> <p>6. Bentonite seal: a. Bentonite granules <input type="checkbox"/> 3 3 b. <input type="checkbox"/> 1/4 in. <input checked="" type="checkbox"/> 3/8 in. <input type="checkbox"/> 1/2 in. Bentonite chips <input checked="" type="checkbox"/> 3 2 c. _____ Other <input type="checkbox"/></p> <p>7. Fine sand material: Manufacturer, product name &amp; mesh size a. _____ b. Volume added _____ ft<sup>3</sup></p> <p>8. Filter pack material: Manufacturer, product name &amp; mesh size a. Monoflex pre-pak 20 x 40 silica sand b. Volume added 0.02 ft<sup>3</sup></p> <p>9. Well casing: Flush threaded PVC schedule 40 <input checked="" type="checkbox"/> 2 3 Flush threaded PVC schedule 80 <input type="checkbox"/> 2 4 Other <input type="checkbox"/></p> <p>10. Screen material: PVC a. Screen type: Factory cut <input checked="" type="checkbox"/> 1 1 Continuous slot <input type="checkbox"/> 0 1 Other <input type="checkbox"/> b. Manufacturer Monoflex c. Slot size: 0.01 in. d. Slotted length: 10 ft.</p> <p>11. Backfill material (below filter pack): None <input checked="" type="checkbox"/> 1 4 Other <input type="checkbox"/></p>
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I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature  Firm Giles Engineering Associates, Inc.

Please complete both Forms 4400-113A and 4400-113B and return them to the appropriate DNR office and bureau. Completion of these reports is required by chs. 160, 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291, 292, 293, 295, and 299, Wis. Stats., failure to file these forms may result in a forfeiture of between \$10 and \$25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on these forms is not intended to be used for any other purpose. NOTE: See the instructions for more information, including where the completed forms should be sent.



Route to: Watershed/Wastewater  Waste Management   
Remediation/Redevelopment  Other

Facility/Project Name: E-2006002 Former Best Way Cleaners - 5914 Hwy 51	County Name Dane	Well Name GMW-3	
Facility License, Permit or Monitoring Number	County Code 13	Wis. Unique Well Number WA395	DNR Well ID Number

1. Can this well be purged dry?  Yes  No

2. Well development method

surged with bailer and bailed	<input type="checkbox"/>	4 1
surged with bailer and pumped	<input type="checkbox"/>	6 1
surged with block and bailed	<input type="checkbox"/>	4 2
surged with block and pumped	<input type="checkbox"/>	6 2
surged with block, bailed and pumped	<input type="checkbox"/>	7 0
compressed air	<input type="checkbox"/>	2 0
bailed only	<input type="checkbox"/>	1 0
pumped only	<input checked="" type="checkbox"/>	5 1
pumped slowly	<input type="checkbox"/>	5 0
Other _____	<input type="checkbox"/>	

3. Time spent developing well \_\_\_\_\_ 15 \_\_\_\_\_ min.

4. Depth of well (from top of well casing) \_\_\_\_\_ 10 \_\_\_\_\_ ft.

5. Inside diameter of well \_\_\_\_\_ 0.75 \_\_\_\_\_ in.

6. Volume of water in filter pack and well casing \_\_\_\_\_ . \_\_\_\_\_ gal.

7. Volume of water removed from well \_\_\_\_\_ 2.5 \_\_\_\_\_ gal.

8. Volume of water added (if any) \_\_\_\_\_ 0 \_\_\_\_\_ gal.

9. Source of water added \_\_\_\_\_

10. Analysis performed on water added?  Yes  No  
(If yes, attach results)

	Before Development	After Development
11. Depth to Water (from top of well casing)	a. _____ 4.11 _____ ft.	_____ 9.82 _____ ft.
Date	b. <u>07</u> / <u>02</u> / <u>2020</u>	<u>07</u> / <u>02</u> / <u>2020</u>
	m m d d y y y y	m m d d y y y y
Time	c. _____ 11:10 _____ <input checked="" type="checkbox"/> a.m. _____ <input type="checkbox"/> p.m.	_____ 11:25 _____ <input checked="" type="checkbox"/> a.m. _____ <input type="checkbox"/> p.m.
12. Sediment in well bottom	_____ 0 _____ inches	_____ 0 _____ inches
13. Water clarity	Clear <input type="checkbox"/> 1 0 Turbid <input checked="" type="checkbox"/> 1 5 (Describe) _____ opaque gray	Clear <input checked="" type="checkbox"/> 2 0 Turbid <input type="checkbox"/> 2 5 (Describe) _____ clear

Fill in if drilling fluids were used and well is at solid waste facility:

14. Total suspended solids \_\_\_\_\_ mg/l \_\_\_\_\_ mg/l

15. COD \_\_\_\_\_ mg/l \_\_\_\_\_ mg/l

16. Well developed by: Name (first, last) and Firm

First Name: Kelly Last Name: Hayden

Firm: Giles Engineering Associates, Inc.

17. Additional comments on development:

Name and Address of Facility Contact /Owner/Responsible Party

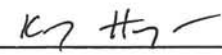
First Name: \_\_\_\_\_ Last Name: \_\_\_\_\_

Facility/Firm: FH of McFarland LLC

Street: 733 N Main St

City/State/Zip: Oregon, WI 53575

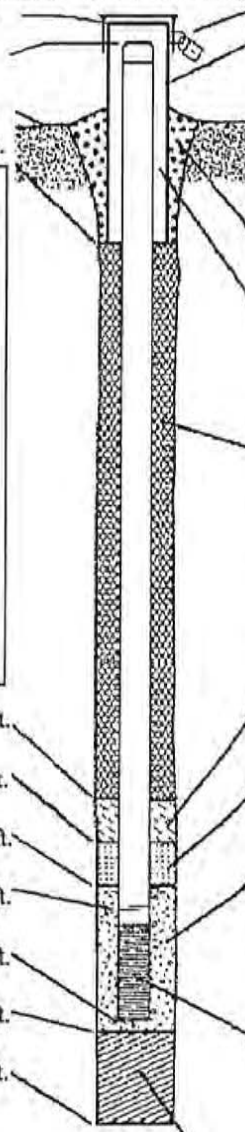
I hereby certify that the above information is true and correct to the best of my knowledge.

Signature: 

Print Name: Kelly Hayden

Firm: Giles Engineering Associates, Inc.

Facility/Project Name 1E-2006002 Former Best Way Cleaners - 5914 Hwy 51	Local Grid Location of Well _____ ft. <input type="checkbox"/> N. _____ ft. <input type="checkbox"/> E. _____ ft. <input type="checkbox"/> S. _____ ft. <input type="checkbox"/> W.	Well Name GPZ-1
Facility License, Permit or Monitoring No.	Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/> ) or Well Location <input type="checkbox"/> Lat. _____ Long. _____ or	Wis. Unique Well No. WA396 DNR Well ID No. _____
Facility ID 0213583171	St. Plane _____ ft. N. _____ ft. E. S/C/N	Date Well Installed 06 / 23 / 2020 m m d d y y y y
Type of Well Well Code 11 / mw	Section Location of Waste/Source SW <sub>1</sub> / <sub>4</sub> of NW <sub>1</sub> / <sub>4</sub> of Sec. 3 T. 6 N. R. 10 <input checked="" type="checkbox"/> E <input type="checkbox"/> W	Well Installed By: Name (first, last) and Firm James Blair Giles Engineering Associates, Inc.
Distance from Waste/ Source _____ ft.	Enf. Stds. Apply <input type="checkbox"/>	Location of Well Relative to Waste/Source u <input type="checkbox"/> Upgradient s <input type="checkbox"/> Sidegradient d <input type="checkbox"/> Downgradient n <input type="checkbox"/> Not Known
		Gov. Lot Number _____

<p>A. Protective pipe, top elevation _____ ft. MSL</p> <p>B. Well casing, top elevation _____ ft. MSL</p> <p>C. Land surface elevation _____ ft. MSL</p> <p>D. Surface seal, bottom _____ ft. MSL or 1.0 ft.</p> <div style="border: 1px solid black; padding: 5px;"> <p>12. USCS classification of soil near screen:                  GP <input type="checkbox"/> GM <input type="checkbox"/> GC <input type="checkbox"/> GW <input type="checkbox"/> SW <input type="checkbox"/> SP <input type="checkbox"/>                  SM <input type="checkbox"/> SC <input type="checkbox"/> ML <input type="checkbox"/> MH <input type="checkbox"/> CL <input checked="" type="checkbox"/> CH <input type="checkbox"/>                  Bedrock <input type="checkbox"/></p> <p>13. Sieve analysis performed? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>14. Drilling method used: Rotary <input type="checkbox"/> 50                  Hollow Stem Auger <input type="checkbox"/> 41                  Direct-Push <input checked="" type="checkbox"/> Other <input checked="" type="checkbox"/></p> <p>15. Drilling fluid used: Water <input type="checkbox"/> 02 Air <input type="checkbox"/> 01                  Drilling Mud <input type="checkbox"/> 03 None <input checked="" type="checkbox"/> 99</p> <p>16. Drilling additives used? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No                  Describe _____</p> <p>17. Source of water (attach analysis, if required):                  _____</p> </div> <p>E. Bentonite seal, top _____ ft. MSL or 1 ft.</p> <p>F. Fine sand, top _____ ft. MSL or 5 ft.</p> <p>G. Filter pack, top _____ ft. MSL or 8 ft.</p> <p>H. Screen joint, top _____ ft. MSL or 8 ft.</p> <p>I. Well bottom _____ ft. MSL or 13 ft.</p> <p>J. Filter pack, bottom _____ ft. MSL or 13 ft.</p> <p>K. Borehole, bottom _____ ft. MSL or 13 ft.</p> <p>L. Borehole, diameter 3 in.</p> <p>M. O.D. well casing 1.7 in.</p> <p>N. I.D. well casing 1.0 in.</p>	 <p>1. Cap and lock? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>2. Protective cover pipe:                  a. Inside diameter: 4 in.                  b. Length: 1 ft.                  c. Material: Steel <input checked="" type="checkbox"/> 04                  Other <input type="checkbox"/></p> <p>d. Additional protection? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No                  If yes, describe: _____</p> <p>3. Surface seal: Bentonite <input type="checkbox"/> 30                  Concrete <input checked="" type="checkbox"/> 01                  Other <input type="checkbox"/></p> <p>4. Material between well casing and protective pipe:                  Bentonite <input checked="" type="checkbox"/> 30                  Other <input type="checkbox"/></p> <p>5. Annular space seal:                  a. Granular/Chipped Bentonite <input checked="" type="checkbox"/> 33                  b. _____ Lbs/gal mud weight . . . Bentonite-sand slurry <input type="checkbox"/> 35                  c. _____ Lbs/gal mud weight . . . Bentonite slurry <input type="checkbox"/> 31                  d. _____ % Bentonite . . . . . Bentonite-cement grout <input type="checkbox"/> 50                  e. _____ Ft<sup>3</sup> volume added for any of the above                  f. How installed: Tremie <input type="checkbox"/> 01                  Tremie pumped <input type="checkbox"/> 02                  Gravity <input checked="" type="checkbox"/> 08</p> <p>6. Bentonite seal:                  a. Bentonite granules <input type="checkbox"/> 33                  b. <input type="checkbox"/> 1/4 in. <input checked="" type="checkbox"/> 3/8 in. <input type="checkbox"/> 1/2 in. Bentonite chips <input checked="" type="checkbox"/> 32                  c. _____ Other <input type="checkbox"/></p> <p>7. Fine sand material: Manufacturer, product name &amp; mesh size                  a. _____                  b. Volume added _____ ft<sup>3</sup></p> <p>8. Filter pack material: Manufacturer, product name &amp; mesh size                  a. Monoflex pre-pak 20 x 40 silica sand                  b. Volume added 0.02 ft<sup>3</sup></p> <p>9. Well casing: Flush threaded PVC schedule 40 <input checked="" type="checkbox"/> 23                  Flush threaded PVC schedule 80 <input type="checkbox"/> 24                  Other <input type="checkbox"/></p> <p>10. Screen material: PVC                  a. Screen type: Factory cut <input checked="" type="checkbox"/> 11                  Continuous slot <input type="checkbox"/> 01                  Other <input type="checkbox"/></p> <p>b. Manufacturer Monoflex                  c. Slot size: 0.01 in.                  d. Slotted length: 10 ft.</p> <p>11. Backfill material (below filter pack): None <input checked="" type="checkbox"/> 14                  Other <input type="checkbox"/></p>
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I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature \_\_\_\_\_ Firm Giles Engineering Associates, Inc.

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Route to: Watershed/Wastewater  Waste Management   
Remediation/Redevelopment  Other

Facility/Project Name E-2006002 Former Best Way Cleaners - 5914 Hwy 51	County Name Dane	Well Name GPZ-1
Facility License, Permit or Monitoring Number	County Code 13	Wis. Unique Well Number WA396
		DNR Well ID Number

1. Can this well be purged dry?  Yes  No
2. Well development method
- surged with bailer and bailed  4 1
  - surged with bailer and pumped  6 1
  - surged with block and bailed  4 2
  - surged with block and pumped  6 2
  - surged with block, bailed and pumped  7 0
  - compressed air  2 0
  - bailed only  1 0
  - pumped only  5 1
  - pumped slowly  5 0
  - Other  \_\_\_\_\_
3. Time spent developing well 25 min.
4. Depth of well (from top of well casing) 13 ft.
5. Inside diameter of well 0,75 in.
6. Volume of water in filter pack and well casing \_\_\_\_\_ gal.
7. Volume of water removed from well 1,5 gal.
8. Volume of water added (if any) 0 gal.
9. Source of water added \_\_\_\_\_
10. Analysis performed on water added?  Yes  No  
(If yes, attach results)

- |  | Before Development   | After Development   |
|--|--|---|
| 11. Depth to Water (from top of well casing) | a. <u>5,02</u> ft.   | <u>11,86</u> ft.  |
| Date   | b. <u>07 / 02 / 2020</u>   | <u>07 / 02 / 2020</u>   |
|  | m m d d y y y y  | m m d d y y y y   |
| Time   | c. <u>11:40</u> <input checked="" type="checkbox"/> a.m. <input type="checkbox"/> p.m.                                 | <u>12:05</u> <input type="checkbox"/> a.m. <input checked="" type="checkbox"/> p.m.                             |
| 12. Sediment in well bottom                  | <u>10,56</u> inches  | <u>0</u> inches   |
| 13. Water clarity                            | Clear <input type="checkbox"/> 1 0<br>Turbid <input checked="" type="checkbox"/> 1 5<br>(Describe) <u>opaque brown</u> | Clear <input checked="" type="checkbox"/> 2 0<br>Turbid <input type="checkbox"/> 2 5<br>(Describe) <u>clear</u> |
- Fill in if drilling fluids were used and well is at solid waste facility:
14. Total suspended solids \_\_\_\_\_ mg/l \_\_\_\_\_ mg/l
15. COD \_\_\_\_\_ mg/l \_\_\_\_\_ mg/l

16. Well developed by: Name (first, last) and Firm

First Name: Kelly Last Name: Hayden

Firm: Giles Engineering Associates, Inc.

17. Additional comments on development:

Name and Address of Facility Contact /Owner/Responsible Party

First Name: \_\_\_\_\_ Last Name: \_\_\_\_\_

Facility/Firm: FH of McFarland LLC

Street: 733 N Main St

City/State/Zip: Oregon, WI 53575

I hereby certify that the above information is true and correct to the best of my knowledge.

Signature: Kelly Hayden

Print Name: Kelly Hayden

Firm: Giles Engineering Associates, Inc.

Facility/Project Name 1E-2006002 Former Best Way Cleaners - 5914 Hwy 51	Local Grid Location of Well _____ ft. <input type="checkbox"/> N. _____ ft. <input type="checkbox"/> E. _____ ft. <input type="checkbox"/> S. _____ ft. <input type="checkbox"/> W.	Well Name GPZ-2
Facility License, Permit or Monitoring No.	Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/> ) or Well Location <input type="checkbox"/> Lat. _____ " Long. _____ " or _____	Wis. Unique Well No. WA397
Facility ID 0213583171	St. Plane _____ ft. N. _____ ft. E. S/C/N	Date Well Installed 06 / 23 / 2020 m m d d y y y y
Type of Well Well Code 11 / mw	Section Location of Waste/Source SW 1/4 of NW 1/4 of Sec. 3 T. 6 N. R. 10 <input checked="" type="checkbox"/> E <input type="checkbox"/> W	Well Installed By: Name (first, last) and Firm James Blair Giles Engineering Associates, Inc
Distance from Waste/Source _____ ft.	Location of Well Relative to Waste/Source u <input type="checkbox"/> Upgradient s <input type="checkbox"/> Sidegradient d <input type="checkbox"/> Downgradient n <input type="checkbox"/> Not Known	Gov. Lot Number _____

A. Protective pipe, top elevation _____ ft. MSL		1. Cap and lock? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
B. Well casing, top elevation _____ ft. MSL		2. Protective cover pipe: a. Inside diameter: _____ in. b. Length: _____ ft. c. Material: Steel <input checked="" type="checkbox"/> 04 Other <input type="checkbox"/> _____ d. Additional protection? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, describe: _____
C. Land surface elevation _____ ft. MSL		3. Surface seal: Bentonite <input type="checkbox"/> 30 Concrete <input checked="" type="checkbox"/> 01 Other <input type="checkbox"/> _____
D. Surface seal, bottom _____ ft. MSL or 1.0 ft.		4. Material between well casing and protective pipe: Bentonite <input checked="" type="checkbox"/> 30 Other <input type="checkbox"/> _____
12. USCS classification of soil near screen: GP <input type="checkbox"/> GM <input type="checkbox"/> GC <input type="checkbox"/> GW <input type="checkbox"/> SW <input type="checkbox"/> SP <input type="checkbox"/> SM <input type="checkbox"/> SC <input type="checkbox"/> ML <input type="checkbox"/> MH <input type="checkbox"/> CL <input checked="" type="checkbox"/> CH <input type="checkbox"/> Bedrock <input type="checkbox"/>		5. Annular space seal: a. Granular/Chipped Bentonite <input checked="" type="checkbox"/> 33 b. _____ Lbs/gal mud weight . . . Bentonite-sand slurry <input type="checkbox"/> 35 c. _____ Lbs/gal mud weight . . . . Bentonite slurry <input type="checkbox"/> 31 d. _____ % Bentonite . . . . . Bentonite-cement grout <input type="checkbox"/> 50 e. _____ Ft <sup>3</sup> volume added for any of the above f. How installed: Tremie <input type="checkbox"/> 01 Tremie pumped <input type="checkbox"/> 02 Gravity <input checked="" type="checkbox"/> 08
13. Sieve analysis performed? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		6. Bentonite seal: a. Bentonite granules <input type="checkbox"/> 33 b. <input type="checkbox"/> 1/4 in. <input checked="" type="checkbox"/> 3/8 in. <input type="checkbox"/> 1/2 in. Bentonite chips <input checked="" type="checkbox"/> 32 c. _____ Other <input type="checkbox"/> _____
14. Drilling method used: Rotary <input type="checkbox"/> 50 Hollow Stem Auger <input type="checkbox"/> 41 Direct-Push _____ Other <input checked="" type="checkbox"/> _____		7. Fine sand material: Manufacturer, product name & mesh size a. _____ b. Volume added _____ ft <sup>3</sup>
15. Drilling fluid used: Water <input type="checkbox"/> 02 Air <input type="checkbox"/> 01 Drilling Mud <input type="checkbox"/> 03 None <input checked="" type="checkbox"/> 99		8. Filter pack material: Manufacturer, product name & mesh size a. Monoflex pre-pak 20 x 40 silica sand b. Volume added 0.02 ft <sup>3</sup>
16. Drilling additives used? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Describe _____		9. Well casing: Flush threaded PVC schedule 40 <input checked="" type="checkbox"/> 23 Flush threaded PVC schedule 80 <input type="checkbox"/> 24 Other <input type="checkbox"/> _____
17. Source of water (attach analysis, if required): _____		10. Screen material: PVC a. Screen type: Factory cut <input checked="" type="checkbox"/> 11 Continuous slot <input type="checkbox"/> 01 Other <input type="checkbox"/> _____ b. Manufacturer Monoflex c. Slot size: 0.01 in. d. Slotted length: 10 ft.
E. Bentonite seal, top _____ ft. MSL or 1 ft.		11. Backfill material (below filter pack): None <input checked="" type="checkbox"/> 14 Other <input type="checkbox"/> _____
F. Fine sand, top _____ ft. MSL or 10 ft.		
G. Filter pack, top _____ ft. MSL or 11 ft.		
H. Screen joint, top _____ ft. MSL or 11 ft.		
I. Well bottom _____ ft. MSL or 16 ft.		
J. Filter pack, bottom _____ ft. MSL or 16 ft.		
K. Borehole, bottom _____ ft. MSL or 16 ft.		
L. Borehole, diameter 3 in.		
M. O.D. well casing 1.7 in.		
N. I.D. well casing 1.0 in.		

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature Firm Giles Engineering Associates, Inc.

Please complete both Forms 4400-113A and 4400-113B and return them to the appropriate DNR office and bureau. Completion of these reports is required by chs. 160, 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291, 292, 293, 295, and 299, Wis. Stats., failure to file these forms may result in a forfeiture of between \$10 and \$25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on these forms is not intended to be used for any other purpose. NOTE: See the instructions for more information, including where the completed forms should be sent.

Route to: Watershed/Wastewater  Waste Management   
Remediation/Redevelopment  Other

Facility/Project Name E-2006002 Former Best Way Cleaners - 5914 Hwy 51	County Name Dane	Well Name GPZ-2
Facility License, Permit or Monitoring Number	County Code 13	Wis. Unique Well Number WA397
		DNR Well ID Number

1. Can this well be purged dry?  Yes  No

2. Well development method

surged with bailer and bailed	<input type="checkbox"/>	4 1
surged with bailer and pumped	<input checked="" type="checkbox"/>	6 1
surged with block and bailed	<input type="checkbox"/>	4 2
surged with block and pumped	<input type="checkbox"/>	6 2
surged with block, bailed and pumped	<input type="checkbox"/>	7 0
compressed air	<input type="checkbox"/>	2 0
bailed only	<input type="checkbox"/>	1 0
pumped only	<input type="checkbox"/>	5 1
pumped slowly	<input type="checkbox"/>	5 0
Other _____	<input type="checkbox"/>	

3. Time spent developing well 30 min.

4. Depth of well (from top of well casing) 16 ft.

5. Inside diameter of well 0.75 in.

6. Volume of water in filter pack and well casing \_\_\_\_\_ gal.

7. Volume of water removed from well 4 gal.

8. Volume of water added (if any) 0 gal.

9. Source of water added \_\_\_\_\_

10. Analysis performed on water added?  Yes  No  
(If yes, attach results)

	Before Development	After Development
11. Depth to Water (from top of well casing)	a. <u>3.81</u> ft.	<u>3.84</u> ft.
Date	b. <u>07</u> / <u>02</u> / <u>2020</u>	<u>07</u> / <u>02</u> / <u>2020</u>
Time	c. <u>9:40</u> <input checked="" type="checkbox"/> a.m. <input type="checkbox"/> p.m.	<u>10:10</u> <input checked="" type="checkbox"/> a.m. <input type="checkbox"/> p.m.
12. Sediment in well bottom	<u>12.96</u> inches	<u>0</u> inches
13. Water clarity	Clear <input type="checkbox"/> 1 0 Turbid <input checked="" type="checkbox"/> 1 5 (Describe) <u>opaque brown</u>	Clear <input checked="" type="checkbox"/> 2 0 Turbid <input type="checkbox"/> 2 5 (Describe) <u>clear</u>
Fill in if drilling fluids were used and well is at solid waste facility:		
14. Total suspended solids	_____ mg/l	_____ mg/l
15. COD	_____ mg/l	_____ mg/l

16. Well developed by: Name (first, last) and Firm

First Name: Kelly Last Name: Hayden

Firm: Giles Engineering Associates, Inc.

17. Additional comments on development:

Name and Address of Facility Contact /Owner/Responsible Party


First Name: \_\_\_\_\_ Last Name: \_\_\_\_\_

Facility/Firm: FH of McFarland LLC

Street: 733 N Main St

City/State/Zip: Oregon, WI 53575

I hereby certify that the above information is true and correct to the best of my knowledge.

Signature: 

Print Name: Kelly Hayden

Firm: Giles Engineering Associates, Inc.

NOTE: See instructions for more information including a list of county codes and well type codes.

**Notice:** Completion of this report is required by chs. 160, 281, 283, 289, 291-293, 295, and 299, Wis. Stats., and chs. NR 141 and 812, Wis. Adm. Code. In accordance with chs. 281, 289, 291-293, 295, and 299, Wis. Stats., failure to file this form may result in a forfeiture of between \$10-25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. Return form to the appropriate DNR office and bureau. See instructions on reverse for more information.

<input type="checkbox"/> <b>Verification Only of Fill and Seal</b>	<b>Route to DNR Bureau:</b>	<input type="checkbox"/> Drinking Water	<input type="checkbox"/> Watershed/Wastewater	<input checked="" type="checkbox"/> Remediation/Redevelopment
		<input type="checkbox"/> Waste Management	<input type="checkbox"/> Other: _____	

1. Well Location Information				2. Facility / Owner Information			
County <b>Dane</b>		WI Unique Well # of Removed Well _____		Hicap # _____		Facility Name <b>Best Way Cleaners</b>	
Latitude / Longitude (see instructions) _____ N _____ W		Format Code <input type="checkbox"/> DD <input type="checkbox"/> DDM		Method Code <input type="checkbox"/> GPS008 <input type="checkbox"/> SCR002 <input type="checkbox"/> OTH001		Facility ID (FID or PWS) <b>GB-1</b>	
License/Permit/Monitoring # _____		Original Well Owner <b>FH of McFarland LLC</b>		Present Well Owner <b>FH of McFarland LLC</b>		Mailing Address of Present Owner <b>733 N Main Street</b>	

1/4 / 1/4 SW		1/4 NW		Section <b>3</b>	Township <b>6 N</b>	Range <b>10</b>	<input checked="" type="checkbox"/> E <input type="checkbox"/> W
Well Street Address <b>5914 HWY 51</b>							
Well City, Village or Town <b>McFarland</b>				Well ZIP Code <b>53558</b>			
Subdivision Name				Lot #		City of Present Owner <b>Oregon</b>	
						State <b>WI</b>	
						ZIP Code <b>53575</b>	

3. Filled & Sealed Well / Drillhole / Borehole Information		4. Pump, Liner, Screen, Casing & Sealing Material			
Reason for Removal from Service <b>Completed Sampling</b>		WI Unique Well # of Replacement Well _____		Pump and piping removed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
<input type="checkbox"/> Monitoring Well		Original Construction Date (mm/dd/yyyy) <b>6/23/2020</b>		Liner(s) removed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
<input type="checkbox"/> Water Well		If a Well Construction Report is available, please attach.		Liner(s) perforated? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
<input checked="" type="checkbox"/> Borehole / Drillhole				Screen removed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Construction Type:				Casing left in place? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
<input type="checkbox"/> Drilled		<input type="checkbox"/> Driven (Sandpoint)		<input type="checkbox"/> Dug	
<input checked="" type="checkbox"/> Other (specify): <b>Direct Push</b>				Was casing cut off below surface? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Formation Type:				Did sealing material rise to surface? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
<input checked="" type="checkbox"/> Unconsolidated Formation		<input type="checkbox"/> Bedrock		Did material settle after 24 hours? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Total Well Depth From Ground Surface (ft.) <b>10</b>		Casing Diameter (in.)		If yes, was hole retopped? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Lower Drillhole Diameter (in.) <b>2</b>		Casing Depth (ft.)		If bentonite chips were used, were they hydrated with water from a known safe source? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Was well annular space grouted? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown				Required Method of Placing Sealing Material	
If yes, to what depth (feet)?		Depth to Water (feet)		<input type="checkbox"/> Conductor Pipe-Gravity	
				<input checked="" type="checkbox"/> Screened & Poured (Bentonite Chips)	
				<input type="checkbox"/> Conductor Pipe-Pumped	
				<input type="checkbox"/> Other (Explain): _____	
				Sealing Materials	
				<input type="checkbox"/> Neat Cement Grout	
				<input type="checkbox"/> Sand-Cement (Concrete) Grout	
				<input checked="" type="checkbox"/> Bentonite Chips	
				<input type="checkbox"/> Concrete	
				For Monitoring Wells and Monitoring Well Boreholes Only:	
				<input type="checkbox"/> Bentonite Chips	
				<input type="checkbox"/> Bentonite - Cement Grout	
				<input type="checkbox"/> Granular Bentonite	
				<input type="checkbox"/> Bentonite - Sand Slurry	

5. Material Used to Fill Well / Drillhole			
From (ft.)	To (ft.)	No. Yards, Sacks Sealant or Volume (circle one)	Mix Ratio or Mud Weight
<b>Concrete</b>	<b>Surface</b>	<b>0.5</b>	
<b>Chipped Bentonite</b>	<b>0.5</b>	<b>10</b>	

6. Comments			

7. Supervision of Work			DNR Use Only		
Name of Person or Firm Doing Filling & Sealing <b>GILES ENGINEERING ASSOC.</b>		License #	Date of Filling & Sealing or Verification (mm/dd/yyyy) <b>6/23/2020</b>	Date Received	Noted By
Street or Route <b>N8 W22350 JOHNSON DRIVE SUITE A1</b>			Telephone Number <b>(262) 544-0118</b>	Comments	
City <b>WAUKESHA</b>	State <b>WI</b>	ZIP Code <b>53186</b>	Signature of Person Doing Work 	Date Signed <b>6/24/2020</b>	

**Notice:** Completion of this report is required by chs. 160, 281, 283, 289, 291-293, 295, and 299, Wis. Stats., and chs. NR 141 and 812, Wis. Adm. Code. In accordance with chs. 281, 289, 291-293, 295, and 299, Wis. Stats., failure to file this form may result in a forfeiture of between \$10-25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. Return form to the appropriate DNR office and bureau. See instructions on reverse for more information.

Verification Only of Fill and Seal

**Route to DNR Bureau:**

- Drinking Water       Watershed/Wastewater       Remediation/Redevelopment  
 Waste Management       Other: \_\_\_\_\_

**1. Well Location Information**

County <b>Dane</b>		WI Unique Well # of Removed Well _____		Hicap # _____	
Latitude / Longitude (see instructions) _____ N _____ W		Format Code <input type="checkbox"/> DD <input type="checkbox"/> DDM	Method Code <input type="checkbox"/> GPS008 <input type="checkbox"/> SCR002 <input type="checkbox"/> OTH001		
1/4 SW or Gov't Lot #	1/4 NW	Section <b>3</b>	Township <b>6 N</b>	Range <b>10</b>	<input checked="" type="checkbox"/> E <input type="checkbox"/> W
Well Street Address <b>5914 HWY 51</b>					
Well City, Village or Town <b>McFarland</b>			Well ZIP Code <b>53558</b>		
Subdivision Name			Lot #		

**2. Facility / Owner Information**

Facility Name <b>Best Way Cleaners</b>		
Facility ID (FID or PWS) <b>GB-2</b>		License/Permit/Monitoring #
Original Well Owner <b>FH of McFarland LLC</b>		
Present Well Owner <b>FH of McFarland LLC</b>		
Mailing Address of Present Owner <b>733 N Main Street</b>		
City of Present Owner <b>Oregon</b>	State <b>WI</b>	ZIP Code <b>53575</b>

Reason for Removal from Service <b>Completed Sampling</b>	WI Unique Well # of Replacement Well _____
--	---

**3. Filled & Sealed Well / Drillhole / Borehole Information**

<input type="checkbox"/> Monitoring Well	Original Construction Date (mm/dd/yyyy) <b>6/23/2020</b>
<input type="checkbox"/> Water Well	
<input checked="" type="checkbox"/> Borehole / Drillhole	If a Well Construction Report is available, please attach.
Construction Type: <input type="checkbox"/> Drilled <input type="checkbox"/> Driven (Sandpoint) <input type="checkbox"/> Dug <input checked="" type="checkbox"/> Other (specify): <b>Direct Push</b>	
Formation Type: <input checked="" type="checkbox"/> Unconsolidated Formation <input type="checkbox"/> Bedrock	
Total Well Depth From Ground Surface (ft.) <b>10</b>	Casing Diameter (in.)
Lower Drillhole Diameter (in.) <b>2</b>	Casing Depth (ft.)
Was well annular space grouted? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown	
If yes, to what depth (feet)?	Depth to Water (feet)

**4. Pump, Liner, Screen, Casing & Sealing Material**

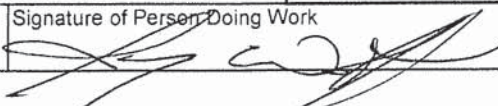
Pump and piping removed?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
Liner(s) removed?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
Liner(s) perforated?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
Screen removed?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
Casing left in place?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
Was casing cut off below surface?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
Did sealing material rise to surface?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
Did material settle after 24 hours?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
If yes, was hole retopped?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
If bentonite chips were used, were they hydrated with water from a known safe source?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
Required Method of Placing Sealing Material	
<input type="checkbox"/> Conductor Pipe-Gravity	<input type="checkbox"/> Conductor Pipe-Pumped
<input checked="" type="checkbox"/> Screened & Poured (Bentonite Chips)	<input type="checkbox"/> Other (Explain): _____
Sealing Materials	
<input type="checkbox"/> Neat Cement Grout	<input type="checkbox"/> Concrete
<input type="checkbox"/> Sand-Cement (Concrete) Grout	<input checked="" type="checkbox"/> Bentonite Chips
For Monitoring Wells and Monitoring Well Boreholes Only:	
<input type="checkbox"/> Bentonite Chips	<input type="checkbox"/> Bentonite - Cement Grout
<input type="checkbox"/> Granular Bentonite	<input type="checkbox"/> Bentonite - Sand Slurry

**5. Material Used to Fill Well / Drillhole**

	From (ft.)	To (ft.)	No. Yards, Sacks Sealant or Volume (circle one)	Mix Ratio or Mud Weight
Concrete	Surface	0.5		
Chipped Bentonite	0.5	10		

**6. Comments**

**7. Supervision of Work**

Name of Person or Firm Doing Filling & Sealing <b>GILES ENGINEERING ASSOC.</b>			License #	Date of Filling & Sealing or Verification (mm/dd/yyyy) <b>6/23/2020</b>	DNR Use Only	
Street or Route <b>N8 W22350 JOHNSON DRIVE SUITE A1</b>			Telephone Number <b>( 262 ) 544-0118</b>		Date Received	Noted By
City <b>WAUKESHA</b>	State <b>WI</b>	ZIP Code <b>53186</b>	Signature of Person Doing Work 			Date Signed <b>6/24/2020</b>

## ANALYTICAL REPORT

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

Laboratory Job ID: 500-184070-1

Client Project/Site: Best Way Cleaners 5914 Hwy 51 1E-  
2006002

**For:**

Giles Engineering Associates  
N8 W 22350 Johnson Road  
Waukesha, Wisconsin 53186

Attn: Mr. Kevin Bugel



*Authorized for release by:  
7/7/2020 4:52:07 PM*

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

### LINKS

Review your project  
results through  
**TotalAccess**

Have a Question?



Visit us at:

[www.eurofinsus.com/Env](http://www.eurofinsus.com/Env)

*The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.*

*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*





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# Case Narrative

Client: Giles Engineering Associates  
Project/Site: Best Way Cleaners 5914 Hwy 51 1E-2006002

Job ID: 500-184070-1

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## Job ID: 500-184070-1

---

Laboratory: Eurofins TestAmerica, Chicago

### Narrative

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#### Job Narrative 500-184070-1

### Comments

No additional comments.

### Receipt

The samples were received on 6/25/2020 9:40 AM; the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 3.3° C.

### GC/MS VOA

Method 8260B: The method blank for analytical batch 550710 contained 1,2,4-Trichlorobenzene above the Method detection limit (MDL) but below reporting limit (RL). 1,2,4-Trichlorobenzene was non-detect in the samples: therefore, re-analysis was not performed and the data have been reported. GB-1 (2-4) (500-184070-1), GB-2 (2-4) (500-184070-2), GPZ-1 (2-4) (500-184070-3) and (MB 500-550710/6)

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

### Metals

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

# Detection Summary

Client: Giles Engineering Associates  
Project/Site: Best Way Cleaners 5914 Hwy 51 1E-2006002

Job ID: 500-184070-1

## Client Sample ID: GB-1 (2-4)

Lab Sample ID: 500-184070-1

No Detections.

## Client Sample ID: GB-2 (2-4)

Lab Sample ID: 500-184070-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	53	J	57	23	ug/Kg	50	☼	8260B	Total/NA

## Client Sample ID: GPZ-1 (2-4)

Lab Sample ID: 500-184070-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	3700		61	25	ug/Kg	50	☼	8260B	Total/NA
Naphthalene	290		61	21	ug/Kg	50	☼	8260B	Total/NA
trans-1,2-Dichloroethene	120		61	22	ug/Kg	50	☼	8260B	Total/NA

## Client Sample ID: GPZ-1 (4-6)

Lab Sample ID: 500-184070-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	2500		140	58	ug/Kg	50	☼	8260B	Total/NA
Naphthalene	450		140	47	ug/Kg	50	☼	8260B	Total/NA
Toluene	31	J	35	21	ug/Kg	50	☼	8260B	Total/NA
trans-1,2-Dichloroethene	78	J	140	50	ug/Kg	50	☼	8260B	Total/NA

## Client Sample ID: GMW-2 (2-4)

Lab Sample ID: 500-184070-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	27	J	57	19	ug/Kg	50	☼	8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

# Method Summary

Client: Giles Engineering Associates  
Project/Site: Best Way Cleaners 5914 Hwy 51 1E-2006002

Job ID: 500-184070-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CHI
Moisture	Percent Moisture	EPA	TAL CHI
5035	Closed System Purge and Trap	SW846	TAL CHI

**Protocol References:**

EPA = US Environmental Protection Agency

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

**Laboratory References:**

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



# Sample Summary

Client: Giles Engineering Associates  
Project/Site: Best Way Cleaners 5914 Hwy 51 1E-2006002

Job ID: 500-184070-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
500-184070-1	GB-1 (2-4)	Solid	06/23/20 12:06	06/25/20 09:40	
500-184070-2	GB-2 (2-4)	Solid	06/23/20 11:28	06/25/20 09:40	
500-184070-3	GPZ-1 (2-4)	Solid	06/23/20 12:52	06/25/20 09:40	
500-184070-4	GPZ-1 (4-6)	Solid	06/23/20 16:30	06/25/20 09:40	
500-184070-5	GMW-2 (2-4)	Solid	06/23/20 10:09	06/25/20 09:40	

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# Client Sample Results

Client: Giles Engineering Associates  
 Project/Site: Best Way Cleaners 5914 Hwy 51 1E-2006002

Job ID: 500-184070-1

**Client Sample ID: GB-1 (2-4)**

**Lab Sample ID: 500-184070-1**

**Date Collected: 06/23/20 12:06**

**Matrix: Solid**

**Date Received: 06/25/20 09:40**

**Percent Solids: 87.8**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<9.2		16	9.2	ug/Kg	☼	06/25/20 12:06	07/06/20 17:12	50
Bromobenzene	<22		63	22	ug/Kg	☼	06/25/20 12:06	07/06/20 17:12	50
Bromochloromethane	<27		63	27	ug/Kg	☼	06/25/20 12:06	07/06/20 17:12	50
Bromodichloromethane	<23		63	23	ug/Kg	☼	06/25/20 12:06	07/06/20 17:12	50
Bromoform	<30		63	30	ug/Kg	☼	06/25/20 12:06	07/06/20 17:12	50
Bromomethane	<50		190	50	ug/Kg	☼	06/25/20 12:06	07/06/20 17:12	50
Carbon tetrachloride	<24		63	24	ug/Kg	☼	06/25/20 12:06	07/06/20 17:12	50
Chlorobenzene	<24		63	24	ug/Kg	☼	06/25/20 12:06	07/06/20 17:12	50
Chloroethane	<32		63	32	ug/Kg	☼	06/25/20 12:06	07/06/20 17:12	50
Chloroform	<23		130	23	ug/Kg	☼	06/25/20 12:06	07/06/20 17:12	50
Chloromethane	<20		63	20	ug/Kg	☼	06/25/20 12:06	07/06/20 17:12	50
2-Chlorotoluene	<20		63	20	ug/Kg	☼	06/25/20 12:06	07/06/20 17:12	50
4-Chlorotoluene	<22		63	22	ug/Kg	☼	06/25/20 12:06	07/06/20 17:12	50
cis-1,2-Dichloroethene	<26		63	26	ug/Kg	☼	06/25/20 12:06	07/06/20 17:12	50
cis-1,3-Dichloropropene	<26		63	26	ug/Kg	☼	06/25/20 12:06	07/06/20 17:12	50
Dibromochloromethane	<31		63	31	ug/Kg	☼	06/25/20 12:06	07/06/20 17:12	50
1,2-Dibromo-3-Chloropropane	<130		310	130	ug/Kg	☼	06/25/20 12:06	07/06/20 17:12	50
1,2-Dibromoethane	<24		63	24	ug/Kg	☼	06/25/20 12:06	07/06/20 17:12	50
Dibromomethane	<17		63	17	ug/Kg	☼	06/25/20 12:06	07/06/20 17:12	50
1,2-Dichlorobenzene	<21		63	21	ug/Kg	☼	06/25/20 12:06	07/06/20 17:12	50
1,3-Dichlorobenzene	<25		63	25	ug/Kg	☼	06/25/20 12:06	07/06/20 17:12	50
1,4-Dichlorobenzene	<23		63	23	ug/Kg	☼	06/25/20 12:06	07/06/20 17:12	50
Dichlorodifluoromethane	<42		190	42	ug/Kg	☼	06/25/20 12:06	07/06/20 17:12	50
1,1-Dichloroethane	<26		63	26	ug/Kg	☼	06/25/20 12:06	07/06/20 17:12	50
1,2-Dichloroethane	<25		63	25	ug/Kg	☼	06/25/20 12:06	07/06/20 17:12	50
1,1-Dichloroethene	<25		63	25	ug/Kg	☼	06/25/20 12:06	07/06/20 17:12	50
1,2-Dichloropropane	<27		63	27	ug/Kg	☼	06/25/20 12:06	07/06/20 17:12	50
1,3-Dichloropropane	<23		63	23	ug/Kg	☼	06/25/20 12:06	07/06/20 17:12	50
2,2-Dichloropropane	<28		63	28	ug/Kg	☼	06/25/20 12:06	07/06/20 17:12	50
1,1-Dichloropropene	<19		63	19	ug/Kg	☼	06/25/20 12:06	07/06/20 17:12	50
Ethylbenzene	<12		16	12	ug/Kg	☼	06/25/20 12:06	07/06/20 17:12	50
Hexachlorobutadiene	<28		63	28	ug/Kg	☼	06/25/20 12:06	07/06/20 17:12	50
Isopropylbenzene	<24		63	24	ug/Kg	☼	06/25/20 12:06	07/06/20 17:12	50
Isopropyl ether	<17		63	17	ug/Kg	☼	06/25/20 12:06	07/06/20 17:12	50
Methylene Chloride	<100		310	100	ug/Kg	☼	06/25/20 12:06	07/06/20 17:12	50
Methyl tert-butyl ether	<25		63	25	ug/Kg	☼	06/25/20 12:06	07/06/20 17:12	50
Naphthalene	<21		63	21	ug/Kg	☼	06/25/20 12:06	07/06/20 17:12	50
n-Butylbenzene	<24		63	24	ug/Kg	☼	06/25/20 12:06	07/06/20 17:12	50
N-Propylbenzene	<26		63	26	ug/Kg	☼	06/25/20 12:06	07/06/20 17:12	50
p-Isopropyltoluene	<23		63	23	ug/Kg	☼	06/25/20 12:06	07/06/20 17:12	50
sec-Butylbenzene	<25		63	25	ug/Kg	☼	06/25/20 12:06	07/06/20 17:12	50
Styrene	<24		63	24	ug/Kg	☼	06/25/20 12:06	07/06/20 17:12	50
tert-Butylbenzene	<25		63	25	ug/Kg	☼	06/25/20 12:06	07/06/20 17:12	50
1,1,1,2-Tetrachloroethane	<29		63	29	ug/Kg	☼	06/25/20 12:06	07/06/20 17:12	50
1,1,2,2-Tetrachloroethane	<25		63	25	ug/Kg	☼	06/25/20 12:06	07/06/20 17:12	50
Tetrachloroethene	<23		63	23	ug/Kg	☼	06/25/20 12:06	07/06/20 17:12	50
Toluene	<9.3		16	9.3	ug/Kg	☼	06/25/20 12:06	07/06/20 17:12	50
trans-1,2-Dichloroethene	<22		63	22	ug/Kg	☼	06/25/20 12:06	07/06/20 17:12	50
trans-1,3-Dichloropropene	<23		63	23	ug/Kg	☼	06/25/20 12:06	07/06/20 17:12	50

# Client Sample Results

Client: Giles Engineering Associates  
 Project/Site: Best Way Cleaners 5914 Hwy 51 1E-2006002

Job ID: 500-184070-1

**Client Sample ID: GB-1 (2-4)**

**Lab Sample ID: 500-184070-1**

**Date Collected: 06/23/20 12:06**

**Matrix: Solid**

**Date Received: 06/25/20 09:40**

**Percent Solids: 87.8**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	<29		63	29	ug/Kg	☼	06/25/20 12:06	07/06/20 17:12	50
1,2,4-Trichlorobenzene	<22		63	22	ug/Kg	☼	06/25/20 12:06	07/06/20 17:12	50
1,1,1-Trichloroethane	<24		63	24	ug/Kg	☼	06/25/20 12:06	07/06/20 17:12	50
1,1,2-Trichloroethane	<22		63	22	ug/Kg	☼	06/25/20 12:06	07/06/20 17:12	50
Trichloroethene	<10		31	10	ug/Kg	☼	06/25/20 12:06	07/06/20 17:12	50
Trichlorofluoromethane	<27		63	27	ug/Kg	☼	06/25/20 12:06	07/06/20 17:12	50
1,2,3-Trichloropropane	<26		130	26	ug/Kg	☼	06/25/20 12:06	07/06/20 17:12	50
1,2,4-Trimethylbenzene	<23		63	23	ug/Kg	☼	06/25/20 12:06	07/06/20 17:12	50
1,3,5-Trimethylbenzene	<24		63	24	ug/Kg	☼	06/25/20 12:06	07/06/20 17:12	50
Vinyl chloride	<16		63	16	ug/Kg	☼	06/25/20 12:06	07/06/20 17:12	50
Xylenes, Total	<14		31	14	ug/Kg	☼	06/25/20 12:06	07/06/20 17:12	50
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	91		72 - 124				06/25/20 12:06	07/06/20 17:12	50
Dibromofluoromethane (Surr)	105		75 - 120				06/25/20 12:06	07/06/20 17:12	50
1,2-Dichloroethane-d4 (Surr)	109		75 - 126				06/25/20 12:06	07/06/20 17:12	50
Toluene-d8 (Surr)	102		75 - 120				06/25/20 12:06	07/06/20 17:12	50

# Client Sample Results

Client: Giles Engineering Associates  
 Project/Site: Best Way Cleaners 5914 Hwy 51 1E-2006002

Job ID: 500-184070-1

**Client Sample ID: GB-2 (2-4)**

**Lab Sample ID: 500-184070-2**

**Date Collected: 06/23/20 11:28**

**Matrix: Solid**

**Date Received: 06/25/20 09:40**

**Percent Solids: 92.7**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<8.4		14	8.4	ug/Kg	☼	06/23/20 11:28	07/06/20 17:38	50
Bromobenzene	<20		57	20	ug/Kg	☼	06/23/20 11:28	07/06/20 17:38	50
Bromochloromethane	<25		57	25	ug/Kg	☼	06/23/20 11:28	07/06/20 17:38	50
Bromodichloromethane	<21		57	21	ug/Kg	☼	06/23/20 11:28	07/06/20 17:38	50
Bromoform	<28		57	28	ug/Kg	☼	06/23/20 11:28	07/06/20 17:38	50
Bromomethane	<46		170	46	ug/Kg	☼	06/23/20 11:28	07/06/20 17:38	50
Carbon tetrachloride	<22		57	22	ug/Kg	☼	06/23/20 11:28	07/06/20 17:38	50
Chlorobenzene	<22		57	22	ug/Kg	☼	06/23/20 11:28	07/06/20 17:38	50
Chloroethane	<29		57	29	ug/Kg	☼	06/23/20 11:28	07/06/20 17:38	50
Chloroform	<21		110	21	ug/Kg	☼	06/23/20 11:28	07/06/20 17:38	50
Chloromethane	<18		57	18	ug/Kg	☼	06/23/20 11:28	07/06/20 17:38	50
2-Chlorotoluene	<18		57	18	ug/Kg	☼	06/23/20 11:28	07/06/20 17:38	50
4-Chlorotoluene	<20		57	20	ug/Kg	☼	06/23/20 11:28	07/06/20 17:38	50
<b>cis-1,2-Dichloroethene</b>	<b>53</b>	<b>J</b>	57	23	ug/Kg	☼	06/23/20 11:28	07/06/20 17:38	50
cis-1,3-Dichloropropene	<24		57	24	ug/Kg	☼	06/23/20 11:28	07/06/20 17:38	50
Dibromochloromethane	<28		57	28	ug/Kg	☼	06/23/20 11:28	07/06/20 17:38	50
1,2-Dibromo-3-Chloropropane	<110		290	110	ug/Kg	☼	06/23/20 11:28	07/06/20 17:38	50
1,2-Dibromoethane	<22		57	22	ug/Kg	☼	06/23/20 11:28	07/06/20 17:38	50
Dibromomethane	<15		57	15	ug/Kg	☼	06/23/20 11:28	07/06/20 17:38	50
1,2-Dichlorobenzene	<19		57	19	ug/Kg	☼	06/23/20 11:28	07/06/20 17:38	50
1,3-Dichlorobenzene	<23		57	23	ug/Kg	☼	06/23/20 11:28	07/06/20 17:38	50
1,4-Dichlorobenzene	<21		57	21	ug/Kg	☼	06/23/20 11:28	07/06/20 17:38	50
Dichlorodifluoromethane	<39		170	39	ug/Kg	☼	06/23/20 11:28	07/06/20 17:38	50
1,1-Dichloroethane	<23		57	23	ug/Kg	☼	06/23/20 11:28	07/06/20 17:38	50
1,2-Dichloroethane	<22		57	22	ug/Kg	☼	06/23/20 11:28	07/06/20 17:38	50
1,1-Dichloroethene	<22		57	22	ug/Kg	☼	06/23/20 11:28	07/06/20 17:38	50
1,2-Dichloropropane	<25		57	25	ug/Kg	☼	06/23/20 11:28	07/06/20 17:38	50
1,3-Dichloropropane	<21		57	21	ug/Kg	☼	06/23/20 11:28	07/06/20 17:38	50
2,2-Dichloropropane	<25		57	25	ug/Kg	☼	06/23/20 11:28	07/06/20 17:38	50
1,1-Dichloropropene	<17		57	17	ug/Kg	☼	06/23/20 11:28	07/06/20 17:38	50
Ethylbenzene	<10		14	10	ug/Kg	☼	06/23/20 11:28	07/06/20 17:38	50
Hexachlorobutadiene	<26		57	26	ug/Kg	☼	06/23/20 11:28	07/06/20 17:38	50
Isopropylbenzene	<22		57	22	ug/Kg	☼	06/23/20 11:28	07/06/20 17:38	50
Isopropyl ether	<16		57	16	ug/Kg	☼	06/23/20 11:28	07/06/20 17:38	50
Methylene Chloride	<93		290	93	ug/Kg	☼	06/23/20 11:28	07/06/20 17:38	50
Methyl tert-butyl ether	<23		57	23	ug/Kg	☼	06/23/20 11:28	07/06/20 17:38	50
Naphthalene	<19		57	19	ug/Kg	☼	06/23/20 11:28	07/06/20 17:38	50
n-Butylbenzene	<22		57	22	ug/Kg	☼	06/23/20 11:28	07/06/20 17:38	50
N-Propylbenzene	<24		57	24	ug/Kg	☼	06/23/20 11:28	07/06/20 17:38	50
p-Isopropyltoluene	<21		57	21	ug/Kg	☼	06/23/20 11:28	07/06/20 17:38	50
sec-Butylbenzene	<23		57	23	ug/Kg	☼	06/23/20 11:28	07/06/20 17:38	50
Styrene	<22		57	22	ug/Kg	☼	06/23/20 11:28	07/06/20 17:38	50
tert-Butylbenzene	<23		57	23	ug/Kg	☼	06/23/20 11:28	07/06/20 17:38	50
1,1,1,2-Tetrachloroethane	<26		57	26	ug/Kg	☼	06/23/20 11:28	07/06/20 17:38	50
1,1,2,2-Tetrachloroethane	<23		57	23	ug/Kg	☼	06/23/20 11:28	07/06/20 17:38	50
Tetrachloroethene	<21		57	21	ug/Kg	☼	06/23/20 11:28	07/06/20 17:38	50
Toluene	<8.4		14	8.4	ug/Kg	☼	06/23/20 11:28	07/06/20 17:38	50
trans-1,2-Dichloroethene	<20		57	20	ug/Kg	☼	06/23/20 11:28	07/06/20 17:38	50
trans-1,3-Dichloropropene	<21		57	21	ug/Kg	☼	06/23/20 11:28	07/06/20 17:38	50

Eurofins TestAmerica, Chicago



# Client Sample Results

Client: Giles Engineering Associates  
 Project/Site: Best Way Cleaners 5914 Hwy 51 1E-2006002

Job ID: 500-184070-1

**Client Sample ID: GB-2 (2-4)**

**Lab Sample ID: 500-184070-2**

**Date Collected: 06/23/20 11:28**

**Matrix: Solid**

**Date Received: 06/25/20 09:40**

**Percent Solids: 92.7**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	<26		57	26	ug/Kg	☼	06/23/20 11:28	07/06/20 17:38	50
1,2,4-Trichlorobenzene	<20		57	20	ug/Kg	☼	06/23/20 11:28	07/06/20 17:38	50
1,1,1-Trichloroethane	<22		57	22	ug/Kg	☼	06/23/20 11:28	07/06/20 17:38	50
1,1,2-Trichloroethane	<20		57	20	ug/Kg	☼	06/23/20 11:28	07/06/20 17:38	50
Trichloroethene	<9.4		29	9.4	ug/Kg	☼	06/23/20 11:28	07/06/20 17:38	50
Trichlorofluoromethane	<25		57	25	ug/Kg	☼	06/23/20 11:28	07/06/20 17:38	50
1,2,3-Trichloropropane	<24		110	24	ug/Kg	☼	06/23/20 11:28	07/06/20 17:38	50
1,2,4-Trimethylbenzene	<21		57	21	ug/Kg	☼	06/23/20 11:28	07/06/20 17:38	50
1,3,5-Trimethylbenzene	<22		57	22	ug/Kg	☼	06/23/20 11:28	07/06/20 17:38	50
Vinyl chloride	<15		57	15	ug/Kg	☼	06/23/20 11:28	07/06/20 17:38	50
Xylenes, Total	<13		29	13	ug/Kg	☼	06/23/20 11:28	07/06/20 17:38	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		72 - 124	06/23/20 11:28	07/06/20 17:38	50
Dibromofluoromethane (Surr)	106		75 - 120	06/23/20 11:28	07/06/20 17:38	50
1,2-Dichloroethane-d4 (Surr)	109		75 - 126	06/23/20 11:28	07/06/20 17:38	50
Toluene-d8 (Surr)	100		75 - 120	06/23/20 11:28	07/06/20 17:38	50

# Client Sample Results

Client: Giles Engineering Associates  
 Project/Site: Best Way Cleaners 5914 Hwy 51 1E-2006002

Job ID: 500-184070-1

**Client Sample ID: GPZ-1 (2-4)**

**Lab Sample ID: 500-184070-3**

**Date Collected: 06/23/20 12:52**

**Matrix: Solid**

**Date Received: 06/25/20 09:40**

**Percent Solids: 89.3**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<9.0		15	9.0	ug/Kg	☼	06/23/20 12:52	07/06/20 18:04	50
Bromobenzene	<22		61	22	ug/Kg	☼	06/23/20 12:52	07/06/20 18:04	50
Bromochloromethane	<26		61	26	ug/Kg	☼	06/23/20 12:52	07/06/20 18:04	50
Bromodichloromethane	<23		61	23	ug/Kg	☼	06/23/20 12:52	07/06/20 18:04	50
Bromoform	<30		61	30	ug/Kg	☼	06/23/20 12:52	07/06/20 18:04	50
Bromomethane	<49		180	49	ug/Kg	☼	06/23/20 12:52	07/06/20 18:04	50
Carbon tetrachloride	<24		61	24	ug/Kg	☼	06/23/20 12:52	07/06/20 18:04	50
Chlorobenzene	<24		61	24	ug/Kg	☼	06/23/20 12:52	07/06/20 18:04	50
Chloroethane	<31		61	31	ug/Kg	☼	06/23/20 12:52	07/06/20 18:04	50
Chloroform	<23		120	23	ug/Kg	☼	06/23/20 12:52	07/06/20 18:04	50
Chloromethane	<20		61	20	ug/Kg	☼	06/23/20 12:52	07/06/20 18:04	50
2-Chlorotoluene	<19		61	19	ug/Kg	☼	06/23/20 12:52	07/06/20 18:04	50
4-Chlorotoluene	<22		61	22	ug/Kg	☼	06/23/20 12:52	07/06/20 18:04	50
<b>cis-1,2-Dichloroethene</b>	<b>3700</b>		61	25	ug/Kg	☼	06/23/20 12:52	07/06/20 18:04	50
cis-1,3-Dichloropropene	<26		61	26	ug/Kg	☼	06/23/20 12:52	07/06/20 18:04	50
Dibromochloromethane	<30		61	30	ug/Kg	☼	06/23/20 12:52	07/06/20 18:04	50
1,2-Dibromo-3-Chloropropane	<120		310	120	ug/Kg	☼	06/23/20 12:52	07/06/20 18:04	50
1,2-Dibromoethane	<24		61	24	ug/Kg	☼	06/23/20 12:52	07/06/20 18:04	50
Dibromomethane	<17		61	17	ug/Kg	☼	06/23/20 12:52	07/06/20 18:04	50
1,2-Dichlorobenzene	<21		61	21	ug/Kg	☼	06/23/20 12:52	07/06/20 18:04	50
1,3-Dichlorobenzene	<25		61	25	ug/Kg	☼	06/23/20 12:52	07/06/20 18:04	50
1,4-Dichlorobenzene	<22		61	22	ug/Kg	☼	06/23/20 12:52	07/06/20 18:04	50
Dichlorodifluoromethane	<41		180	41	ug/Kg	☼	06/23/20 12:52	07/06/20 18:04	50
1,1-Dichloroethane	<25		61	25	ug/Kg	☼	06/23/20 12:52	07/06/20 18:04	50
1,2-Dichloroethane	<24		61	24	ug/Kg	☼	06/23/20 12:52	07/06/20 18:04	50
1,1-Dichloroethene	<24		61	24	ug/Kg	☼	06/23/20 12:52	07/06/20 18:04	50
1,2-Dichloropropane	<26		61	26	ug/Kg	☼	06/23/20 12:52	07/06/20 18:04	50
1,3-Dichloropropane	<22		61	22	ug/Kg	☼	06/23/20 12:52	07/06/20 18:04	50
2,2-Dichloropropane	<27		61	27	ug/Kg	☼	06/23/20 12:52	07/06/20 18:04	50
1,1-Dichloropropene	<18		61	18	ug/Kg	☼	06/23/20 12:52	07/06/20 18:04	50
Ethylbenzene	<11		15	11	ug/Kg	☼	06/23/20 12:52	07/06/20 18:04	50
Hexachlorobutadiene	<27		61	27	ug/Kg	☼	06/23/20 12:52	07/06/20 18:04	50
Isopropylbenzene	<24		61	24	ug/Kg	☼	06/23/20 12:52	07/06/20 18:04	50
Isopropyl ether	<17		61	17	ug/Kg	☼	06/23/20 12:52	07/06/20 18:04	50
Methylene Chloride	<100		310	100	ug/Kg	☼	06/23/20 12:52	07/06/20 18:04	50
Methyl tert-butyl ether	<24		61	24	ug/Kg	☼	06/23/20 12:52	07/06/20 18:04	50
<b>Naphthalene</b>	<b>290</b>		61	21	ug/Kg	☼	06/23/20 12:52	07/06/20 18:04	50
n-Butylbenzene	<24		61	24	ug/Kg	☼	06/23/20 12:52	07/06/20 18:04	50
N-Propylbenzene	<25		61	25	ug/Kg	☼	06/23/20 12:52	07/06/20 18:04	50
p-Isopropyltoluene	<22		61	22	ug/Kg	☼	06/23/20 12:52	07/06/20 18:04	50
sec-Butylbenzene	<24		61	24	ug/Kg	☼	06/23/20 12:52	07/06/20 18:04	50
Styrene	<24		61	24	ug/Kg	☼	06/23/20 12:52	07/06/20 18:04	50
tert-Butylbenzene	<24		61	24	ug/Kg	☼	06/23/20 12:52	07/06/20 18:04	50
1,1,1,2-Tetrachloroethane	<28		61	28	ug/Kg	☼	06/23/20 12:52	07/06/20 18:04	50
1,1,1,2,2-Tetrachloroethane	<24		61	24	ug/Kg	☼	06/23/20 12:52	07/06/20 18:04	50
Tetrachloroethene	<23		61	23	ug/Kg	☼	06/23/20 12:52	07/06/20 18:04	50
Toluene	<9.0		15	9.0	ug/Kg	☼	06/23/20 12:52	07/06/20 18:04	50
<b>trans-1,2-Dichloroethene</b>	<b>120</b>		61	22	ug/Kg	☼	06/23/20 12:52	07/06/20 18:04	50
trans-1,3-Dichloropropene	<22		61	22	ug/Kg	☼	06/23/20 12:52	07/06/20 18:04	50

# Client Sample Results

Client: Giles Engineering Associates  
 Project/Site: Best Way Cleaners 5914 Hwy 51 1E-2006002

Job ID: 500-184070-1

**Client Sample ID: GPZ-1 (2-4)**

**Lab Sample ID: 500-184070-3**

**Date Collected: 06/23/20 12:52**

**Matrix: Solid**

**Date Received: 06/25/20 09:40**

**Percent Solids: 89.3**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	<28		61	28	ug/Kg	☼	06/23/20 12:52	07/06/20 18:04	50
1,2,4-Trichlorobenzene	<21		61	21	ug/Kg	☼	06/23/20 12:52	07/06/20 18:04	50
1,1,1-Trichloroethane	<23		61	23	ug/Kg	☼	06/23/20 12:52	07/06/20 18:04	50
1,1,2-Trichloroethane	<22		61	22	ug/Kg	☼	06/23/20 12:52	07/06/20 18:04	50
Trichloroethene	<10		31	10	ug/Kg	☼	06/23/20 12:52	07/06/20 18:04	50
Trichlorofluoromethane	<26		61	26	ug/Kg	☼	06/23/20 12:52	07/06/20 18:04	50
1,2,3-Trichloropropane	<25		120	25	ug/Kg	☼	06/23/20 12:52	07/06/20 18:04	50
1,2,4-Trimethylbenzene	<22		61	22	ug/Kg	☼	06/23/20 12:52	07/06/20 18:04	50
1,3,5-Trimethylbenzene	<23		61	23	ug/Kg	☼	06/23/20 12:52	07/06/20 18:04	50
Vinyl chloride	<16		61	16	ug/Kg	☼	06/23/20 12:52	07/06/20 18:04	50
Xylenes, Total	<14		31	14	ug/Kg	☼	06/23/20 12:52	07/06/20 18:04	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		72 - 124	06/23/20 12:52	07/06/20 18:04	50
Dibromofluoromethane (Surr)	106		75 - 120	06/23/20 12:52	07/06/20 18:04	50
1,2-Dichloroethane-d4 (Surr)	108		75 - 126	06/23/20 12:52	07/06/20 18:04	50
Toluene-d8 (Surr)	100		75 - 120	06/23/20 12:52	07/06/20 18:04	50

# Client Sample Results

Client: Giles Engineering Associates  
 Project/Site: Best Way Cleaners 5914 Hwy 51 1E-2006002

Job ID: 500-184070-1

**Client Sample ID: GPZ-1 (4-6)**

**Lab Sample ID: 500-184070-4**

**Date Collected: 06/23/20 16:30**

**Matrix: Solid**

**Date Received: 06/25/20 09:40**

**Percent Solids: 52.4**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<21		35	21	ug/Kg	☼	06/23/20 16:30	07/07/20 11:43	50
Bromobenzene	<50		140	50	ug/Kg	☼	06/23/20 16:30	07/07/20 11:43	50
Bromochloromethane	<61		140	61	ug/Kg	☼	06/23/20 16:30	07/07/20 11:43	50
Bromodichloromethane	<53		140	53	ug/Kg	☼	06/23/20 16:30	07/07/20 11:43	50
Bromoform	<69		140	69	ug/Kg	☼	06/23/20 16:30	07/07/20 11:43	50
Bromomethane	<110		430	110	ug/Kg	☼	06/23/20 16:30	07/07/20 11:43	50
Carbon tetrachloride	<54		140	54	ug/Kg	☼	06/23/20 16:30	07/07/20 11:43	50
Chlorobenzene	<55		140	55	ug/Kg	☼	06/23/20 16:30	07/07/20 11:43	50
Chloroethane	<71		140	71	ug/Kg	☼	06/23/20 16:30	07/07/20 11:43	50
Chloroform	<52		280	52	ug/Kg	☼	06/23/20 16:30	07/07/20 11:43	50
Chloromethane	<45		140	45	ug/Kg	☼	06/23/20 16:30	07/07/20 11:43	50
2-Chlorotoluene	<45		140	45	ug/Kg	☼	06/23/20 16:30	07/07/20 11:43	50
4-Chlorotoluene	<50		140	50	ug/Kg	☼	06/23/20 16:30	07/07/20 11:43	50
<b>cis-1,2-Dichloroethene</b>	<b>2500</b>		140	58	ug/Kg	☼	06/23/20 16:30	07/07/20 11:43	50
cis-1,3-Dichloropropene	<59		140	59	ug/Kg	☼	06/23/20 16:30	07/07/20 11:43	50
Dibromochloromethane	<69		140	69	ug/Kg	☼	06/23/20 16:30	07/07/20 11:43	50
1,2-Dibromo-3-Chloropropane	<280		710	280	ug/Kg	☼	06/23/20 16:30	07/07/20 11:43	50
1,2-Dibromoethane	<55		140	55	ug/Kg	☼	06/23/20 16:30	07/07/20 11:43	50
Dibromomethane	<38		140	38	ug/Kg	☼	06/23/20 16:30	07/07/20 11:43	50
1,2-Dichlorobenzene	<47		140	47	ug/Kg	☼	06/23/20 16:30	07/07/20 11:43	50
1,3-Dichlorobenzene	<57		140	57	ug/Kg	☼	06/23/20 16:30	07/07/20 11:43	50
1,4-Dichlorobenzene	<52		140	52	ug/Kg	☼	06/23/20 16:30	07/07/20 11:43	50
Dichlorodifluoromethane	<96		430	96	ug/Kg	☼	06/23/20 16:30	07/07/20 11:43	50
1,1-Dichloroethane	<58		140	58	ug/Kg	☼	06/23/20 16:30	07/07/20 11:43	50
1,2-Dichloroethane	<56		140	56	ug/Kg	☼	06/23/20 16:30	07/07/20 11:43	50
1,1-Dichloroethene	<55		140	55	ug/Kg	☼	06/23/20 16:30	07/07/20 11:43	50
1,2-Dichloropropane	<61		140	61	ug/Kg	☼	06/23/20 16:30	07/07/20 11:43	50
1,3-Dichloropropane	<51		140	51	ug/Kg	☼	06/23/20 16:30	07/07/20 11:43	50
2,2-Dichloropropane	<63		140	63	ug/Kg	☼	06/23/20 16:30	07/07/20 11:43	50
1,1-Dichloropropene	<42		140	42	ug/Kg	☼	06/23/20 16:30	07/07/20 11:43	50
Ethylbenzene	<26		35	26	ug/Kg	☼	06/23/20 16:30	07/07/20 11:43	50
Hexachlorobutadiene	<63		140	63	ug/Kg	☼	06/23/20 16:30	07/07/20 11:43	50
Isopropylbenzene	<54		140	54	ug/Kg	☼	06/23/20 16:30	07/07/20 11:43	50
Isopropyl ether	<39		140	39	ug/Kg	☼	06/23/20 16:30	07/07/20 11:43	50
Methylene Chloride	<230		710	230	ug/Kg	☼	06/23/20 16:30	07/07/20 11:43	50
Methyl tert-butyl ether	<56		140	56	ug/Kg	☼	06/23/20 16:30	07/07/20 11:43	50
<b>Naphthalene</b>	<b>450</b>		140	47	ug/Kg	☼	06/23/20 16:30	07/07/20 11:43	50
n-Butylbenzene	<55		140	55	ug/Kg	☼	06/23/20 16:30	07/07/20 11:43	50
N-Propylbenzene	<59		140	59	ug/Kg	☼	06/23/20 16:30	07/07/20 11:43	50
p-Isopropyltoluene	<51		140	51	ug/Kg	☼	06/23/20 16:30	07/07/20 11:43	50
sec-Butylbenzene	<56		140	56	ug/Kg	☼	06/23/20 16:30	07/07/20 11:43	50
Styrene	<55		140	55	ug/Kg	☼	06/23/20 16:30	07/07/20 11:43	50
tert-Butylbenzene	<56		140	56	ug/Kg	☼	06/23/20 16:30	07/07/20 11:43	50
1,1,1,2-Tetrachloroethane	<66		140	66	ug/Kg	☼	06/23/20 16:30	07/07/20 11:43	50
1,1,1,2,2-Tetrachloroethane	<56		140	56	ug/Kg	☼	06/23/20 16:30	07/07/20 11:43	50
Tetrachloroethene	<52		140	52	ug/Kg	☼	06/23/20 16:30	07/07/20 11:43	50
<b>Toluene</b>	<b>31 J</b>		35	21	ug/Kg	☼	06/23/20 16:30	07/07/20 11:43	50
<b>trans-1,2-Dichloroethene</b>	<b>78 J</b>		140	50	ug/Kg	☼	06/23/20 16:30	07/07/20 11:43	50
trans-1,3-Dichloropropene	<51		140	51	ug/Kg	☼	06/23/20 16:30	07/07/20 11:43	50

# Client Sample Results

Client: Giles Engineering Associates  
 Project/Site: Best Way Cleaners 5914 Hwy 51 1E-2006002

Job ID: 500-184070-1

**Client Sample ID: GPZ-1 (4-6)**

**Lab Sample ID: 500-184070-4**

**Date Collected: 06/23/20 16:30**

**Matrix: Solid**

**Date Received: 06/25/20 09:40**

**Percent Solids: 52.4**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	<65		140	65	ug/Kg	☼	06/23/20 16:30	07/07/20 11:43	50
1,2,4-Trichlorobenzene	<49		140	49	ug/Kg	☼	06/23/20 16:30	07/07/20 11:43	50
1,1,1-Trichloroethane	<54		140	54	ug/Kg	☼	06/23/20 16:30	07/07/20 11:43	50
1,1,2-Trichloroethane	<50		140	50	ug/Kg	☼	06/23/20 16:30	07/07/20 11:43	50
Trichloroethene	<23		71	23	ug/Kg	☼	06/23/20 16:30	07/07/20 11:43	50
Trichlorofluoromethane	<61		140	61	ug/Kg	☼	06/23/20 16:30	07/07/20 11:43	50
1,2,3-Trichloropropane	<59		280	59	ug/Kg	☼	06/23/20 16:30	07/07/20 11:43	50
1,2,4-Trimethylbenzene	<51		140	51	ug/Kg	☼	06/23/20 16:30	07/07/20 11:43	50
1,3,5-Trimethylbenzene	<54		140	54	ug/Kg	☼	06/23/20 16:30	07/07/20 11:43	50
Vinyl chloride	<37		140	37	ug/Kg	☼	06/23/20 16:30	07/07/20 11:43	50
Xylenes, Total	<31		71	31	ug/Kg	☼	06/23/20 16:30	07/07/20 11:43	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		72 - 124	06/23/20 16:30	07/07/20 11:43	50
Dibromofluoromethane (Surr)	97		75 - 120	06/23/20 16:30	07/07/20 11:43	50
1,2-Dichloroethane-d4 (Surr)	109		75 - 126	06/23/20 16:30	07/07/20 11:43	50
Toluene-d8 (Surr)	97		75 - 120	06/23/20 16:30	07/07/20 11:43	50

# Client Sample Results

Client: Giles Engineering Associates  
 Project/Site: Best Way Cleaners 5914 Hwy 51 1E-2006002

Job ID: 500-184070-1

**Client Sample ID: GMW-2 (2-4)**

**Lab Sample ID: 500-184070-5**

**Date Collected: 06/23/20 10:09**

**Matrix: Solid**

**Date Received: 06/25/20 09:40**

**Percent Solids: 90.7**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<8.3		14	8.3	ug/Kg	☼	06/23/20 10:09	07/07/20 12:12	50
Bromobenzene	<20		57	20	ug/Kg	☼	06/23/20 10:09	07/07/20 12:12	50
Bromochloromethane	<24		57	24	ug/Kg	☼	06/23/20 10:09	07/07/20 12:12	50
Bromodichloromethane	<21		57	21	ug/Kg	☼	06/23/20 10:09	07/07/20 12:12	50
Bromoform	<27		57	27	ug/Kg	☼	06/23/20 10:09	07/07/20 12:12	50
Bromomethane	<45		170	45	ug/Kg	☼	06/23/20 10:09	07/07/20 12:12	50
Carbon tetrachloride	<22		57	22	ug/Kg	☼	06/23/20 10:09	07/07/20 12:12	50
Chlorobenzene	<22		57	22	ug/Kg	☼	06/23/20 10:09	07/07/20 12:12	50
Chloroethane	<28		57	28	ug/Kg	☼	06/23/20 10:09	07/07/20 12:12	50
Chloroform	<21		110	21	ug/Kg	☼	06/23/20 10:09	07/07/20 12:12	50
Chloromethane	<18		57	18	ug/Kg	☼	06/23/20 10:09	07/07/20 12:12	50
2-Chlorotoluene	<18		57	18	ug/Kg	☼	06/23/20 10:09	07/07/20 12:12	50
4-Chlorotoluene	<20		57	20	ug/Kg	☼	06/23/20 10:09	07/07/20 12:12	50
cis-1,2-Dichloroethene	<23		57	23	ug/Kg	☼	06/23/20 10:09	07/07/20 12:12	50
cis-1,3-Dichloropropene	<24		57	24	ug/Kg	☼	06/23/20 10:09	07/07/20 12:12	50
Dibromochloromethane	<28		57	28	ug/Kg	☼	06/23/20 10:09	07/07/20 12:12	50
1,2-Dibromo-3-Chloropropane	<110		280	110	ug/Kg	☼	06/23/20 10:09	07/07/20 12:12	50
1,2-Dibromoethane	<22		57	22	ug/Kg	☼	06/23/20 10:09	07/07/20 12:12	50
Dibromomethane	<15		57	15	ug/Kg	☼	06/23/20 10:09	07/07/20 12:12	50
1,2-Dichlorobenzene	<19		57	19	ug/Kg	☼	06/23/20 10:09	07/07/20 12:12	50
1,3-Dichlorobenzene	<23		57	23	ug/Kg	☼	06/23/20 10:09	07/07/20 12:12	50
1,4-Dichlorobenzene	<21		57	21	ug/Kg	☼	06/23/20 10:09	07/07/20 12:12	50
Dichlorodifluoromethane	<38		170	38	ug/Kg	☼	06/23/20 10:09	07/07/20 12:12	50
1,1-Dichloroethane	<23		57	23	ug/Kg	☼	06/23/20 10:09	07/07/20 12:12	50
1,2-Dichloroethane	<22		57	22	ug/Kg	☼	06/23/20 10:09	07/07/20 12:12	50
1,1-Dichloroethene	<22		57	22	ug/Kg	☼	06/23/20 10:09	07/07/20 12:12	50
1,2-Dichloropropane	<24		57	24	ug/Kg	☼	06/23/20 10:09	07/07/20 12:12	50
1,3-Dichloropropane	<20		57	20	ug/Kg	☼	06/23/20 10:09	07/07/20 12:12	50
2,2-Dichloropropane	<25		57	25	ug/Kg	☼	06/23/20 10:09	07/07/20 12:12	50
1,1-Dichloropropene	<17		57	17	ug/Kg	☼	06/23/20 10:09	07/07/20 12:12	50
Ethylbenzene	<10		14	10	ug/Kg	☼	06/23/20 10:09	07/07/20 12:12	50
Hexachlorobutadiene	<25		57	25	ug/Kg	☼	06/23/20 10:09	07/07/20 12:12	50
Isopropylbenzene	<22		57	22	ug/Kg	☼	06/23/20 10:09	07/07/20 12:12	50
Isopropyl ether	<16		57	16	ug/Kg	☼	06/23/20 10:09	07/07/20 12:12	50
Methylene Chloride	<92		280	92	ug/Kg	☼	06/23/20 10:09	07/07/20 12:12	50
Methyl tert-butyl ether	<22		57	22	ug/Kg	☼	06/23/20 10:09	07/07/20 12:12	50
<b>Naphthalene</b>	<b>27</b>	<b>J</b>	57	19	ug/Kg	☼	06/23/20 10:09	07/07/20 12:12	50
n-Butylbenzene	<22		57	22	ug/Kg	☼	06/23/20 10:09	07/07/20 12:12	50
N-Propylbenzene	<23		57	23	ug/Kg	☼	06/23/20 10:09	07/07/20 12:12	50
p-Isopropyltoluene	<20		57	20	ug/Kg	☼	06/23/20 10:09	07/07/20 12:12	50
sec-Butylbenzene	<23		57	23	ug/Kg	☼	06/23/20 10:09	07/07/20 12:12	50
Styrene	<22		57	22	ug/Kg	☼	06/23/20 10:09	07/07/20 12:12	50
tert-Butylbenzene	<23		57	23	ug/Kg	☼	06/23/20 10:09	07/07/20 12:12	50
1,1,1,2-Tetrachloroethane	<26		57	26	ug/Kg	☼	06/23/20 10:09	07/07/20 12:12	50
1,1,1,2-Tetrachloroethane	<23		57	23	ug/Kg	☼	06/23/20 10:09	07/07/20 12:12	50
Tetrachloroethene	<21		57	21	ug/Kg	☼	06/23/20 10:09	07/07/20 12:12	50
Toluene	<8.3		14	8.3	ug/Kg	☼	06/23/20 10:09	07/07/20 12:12	50
trans-1,2-Dichloroethene	<20		57	20	ug/Kg	☼	06/23/20 10:09	07/07/20 12:12	50
trans-1,3-Dichloropropene	<20		57	20	ug/Kg	☼	06/23/20 10:09	07/07/20 12:12	50

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# Client Sample Results

Client: Giles Engineering Associates  
 Project/Site: Best Way Cleaners 5914 Hwy 51 1E-2006002

Job ID: 500-184070-1

**Client Sample ID: GMW-2 (2-4)**

**Lab Sample ID: 500-184070-5**

**Date Collected: 06/23/20 10:09**

**Matrix: Solid**

**Date Received: 06/25/20 09:40**

**Percent Solids: 90.7**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	<26		57	26	ug/Kg	☼	06/23/20 10:09	07/07/20 12:12	50
1,2,4-Trichlorobenzene	<19		57	19	ug/Kg	☼	06/23/20 10:09	07/07/20 12:12	50
1,1,1-Trichloroethane	<21		57	21	ug/Kg	☼	06/23/20 10:09	07/07/20 12:12	50
1,1,2-Trichloroethane	<20		57	20	ug/Kg	☼	06/23/20 10:09	07/07/20 12:12	50
Trichloroethene	<9.3		28	9.3	ug/Kg	☼	06/23/20 10:09	07/07/20 12:12	50
Trichlorofluoromethane	<24		57	24	ug/Kg	☼	06/23/20 10:09	07/07/20 12:12	50
1,2,3-Trichloropropane	<23		110	23	ug/Kg	☼	06/23/20 10:09	07/07/20 12:12	50
1,2,4-Trimethylbenzene	<20		57	20	ug/Kg	☼	06/23/20 10:09	07/07/20 12:12	50
1,3,5-Trimethylbenzene	<21		57	21	ug/Kg	☼	06/23/20 10:09	07/07/20 12:12	50
Vinyl chloride	<15		57	15	ug/Kg	☼	06/23/20 10:09	07/07/20 12:12	50
Xylenes, Total	<12		28	12	ug/Kg	☼	06/23/20 10:09	07/07/20 12:12	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		72 - 124	06/23/20 10:09	07/07/20 12:12	50
Dibromofluoromethane (Surr)	96		75 - 120	06/23/20 10:09	07/07/20 12:12	50
1,2-Dichloroethane-d4 (Surr)	111		75 - 126	06/23/20 10:09	07/07/20 12:12	50
Toluene-d8 (Surr)	97		75 - 120	06/23/20 10:09	07/07/20 12:12	50

# Definitions/Glossary

Client: Giles Engineering Associates  
Project/Site: Best Way Cleaners 5914 Hwy 51 1E-2006002

Job ID: 500-184070-1

## Qualifiers

### GC/MS VOA

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

## Glossary

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



# QC Association Summary

Client: Giles Engineering Associates  
Project/Site: Best Way Cleaners 5914 Hwy 51 1E-2006002

Job ID: 500-184070-1

## GC/MS VOA

### Prep Batch: 550223

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-184070-1	GB-1 (2-4)	Total/NA	Solid	5035	
500-184070-2	GB-2 (2-4)	Total/NA	Solid	5035	
500-184070-3	GPZ-1 (2-4)	Total/NA	Solid	5035	
500-184070-4	GPZ-1 (4-6)	Total/NA	Solid	5035	
500-184070-5	GMW-2 (2-4)	Total/NA	Solid	5035	
LB3 500-550223/19-A	Method Blank	Total/NA	Solid	5035	
LCS 500-550223/20-A	Lab Control Sample	Total/NA	Solid	5035	

### Analysis Batch: 550710

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-184070-1	GB-1 (2-4)	Total/NA	Solid	8260B	550223
500-184070-2	GB-2 (2-4)	Total/NA	Solid	8260B	550223
500-184070-3	GPZ-1 (2-4)	Total/NA	Solid	8260B	550223
MB 500-550710/6	Method Blank	Total/NA	Solid	8260B	
LCS 500-550710/4	Lab Control Sample	Total/NA	Solid	8260B	

### Analysis Batch: 550913

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LB3 500-550223/19-A	Method Blank	Total/NA	Solid	8260B	550223
MB 500-550913/6	Method Blank	Total/NA	Solid	8260B	
LCS 500-550223/20-A	Lab Control Sample	Total/NA	Solid	8260B	550223
LCS 500-550913/4	Lab Control Sample	Total/NA	Solid	8260B	

### Analysis Batch: 550933

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-184070-4	GPZ-1 (4-6)	Total/NA	Solid	8260B	550223
500-184070-5	GMW-2 (2-4)	Total/NA	Solid	8260B	550223
MB 500-550933/7	Method Blank	Total/NA	Solid	8260B	
LCS 500-550933/5	Lab Control Sample	Total/NA	Solid	8260B	

## General Chemistry

### Analysis Batch: 549554

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-184070-1	GB-1 (2-4)	Total/NA	Solid	Moisture	
500-184070-2	GB-2 (2-4)	Total/NA	Solid	Moisture	
500-184070-3	GPZ-1 (2-4)	Total/NA	Solid	Moisture	
500-184070-4	GPZ-1 (4-6)	Total/NA	Solid	Moisture	
500-184070-5	GMW-2 (2-4)	Total/NA	Solid	Moisture	

# Surrogate Summary

Client: Giles Engineering Associates  
 Project/Site: Best Way Cleaners 5914 Hwy 51 1E-2006002

Job ID: 500-184070-1

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

**Matrix: Solid**

**Prep Type: Total/NA**

## Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	BFB	DBFM	DCA	TOL
		(72-124)	(75-120)	(75-126)	(75-120)
500-184070-1	GB-1 (2-4)	91	105	109	102
500-184070-2	GB-2 (2-4)	90	106	109	100
500-184070-3	GPZ-1 (2-4)	87	106	108	100
500-184070-4	GPZ-1 (4-6)	89	97	109	97
500-184070-5	GMW-2 (2-4)	91	96	111	97
LB3 500-550223/19-A	Method Blank	90	85	100	96
LCS 500-550223/20-A	Lab Control Sample	88	94	108	94
LCS 500-550710/4	Lab Control Sample	91	106	105	102
LCS 500-550913/4	Lab Control Sample	90	91	101	97
LCS 500-550933/5	Lab Control Sample	95	100	105	99
MB 500-550710/6	Method Blank	89	105	106	101
MB 500-550913/6	Method Blank	91	89	103	95
MB 500-550933/7	Method Blank	95	98	110	97

### Surrogate Legend

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

# QC Sample Results

Client: Giles Engineering Associates  
 Project/Site: Best Way Cleaners 5914 Hwy 51 1E-2006002

Job ID: 500-184070-1

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

**Lab Sample ID: LB3 500-550223/19-A**  
**Matrix: Solid**  
**Analysis Batch: 550913**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 550223**

Analyte	LB3	LB3	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Benzene	<7.u		1u	7.u	Kg/3g		06/u0/20 2u:55	07/07/20 10:52	50
Bromobenzene	<18		50	18	Kg/3g		06/u0/20 2u:55	07/07/20 10:52	50
Bromochloromethane	<21		50	21	Kg/3g		06/u0/20 2u:55	07/07/20 10:52	50
Bromodichloromethane	<19		50	19	Kg/3g		06/u0/20 2u:55	07/07/20 10:52	50
Bromoform	<24		50	24	Kg/3g		06/u0/20 2u:55	07/07/20 10:52	50
Bromomethane	<40		150	40	Kg/3g		06/u0/20 2u:55	07/07/20 10:52	50
Carbon tetrachloride	<19		50	19	Kg/3g		06/u0/20 2u:55	07/07/20 10:52	50
Chlorobenzene	<19		50	19	Kg/3g		06/u0/20 2u:55	07/07/20 10:52	50
Chloroethane	<25		50	25	Kg/3g		06/u0/20 2u:55	07/07/20 10:52	50
Chloroform	<19		100	19	Kg/3g		06/u0/20 2u:55	07/07/20 10:52	50
Chloromethane	<16		50	16	Kg/3g		06/u0/20 2u:55	07/07/20 10:52	50
2-ChlorotolKene	<16		50	16	Kg/3g		06/u0/20 2u:55	07/07/20 10:52	50
4-ChlorotolKene	<18		50	18	Kg/3g		06/u0/20 2u:55	07/07/20 10:52	50
cis-1,2-Dichloroethene	<20		50	20	Kg/3g		06/u0/20 2u:55	07/07/20 10:52	50
cis-1,u-Dichloropropene	<21		50	21	Kg/3g		06/u0/20 2u:55	07/07/20 10:52	50
Dibromochloromethane	<24		50	24	Kg/3g		06/u0/20 2u:55	07/07/20 10:52	50
1,2-Dibromo-u-Chloropropane	<100		250	100	Kg/3g		06/u0/20 2u:55	07/07/20 10:52	50
1,2-Dibromoethane	<19		50	19	Kg/3g		06/u0/20 2u:55	07/07/20 10:52	50
Dibromomethane	<14		50	14	Kg/3g		06/u0/20 2u:55	07/07/20 10:52	50
1,2-Dichlorobenzene	<17		50	17	Kg/3g		06/u0/20 2u:55	07/07/20 10:52	50
1,u-Dichlorobenzene	<20		50	20	Kg/3g		06/u0/20 2u:55	07/07/20 10:52	50
1,4-Dichlorobenzene	<18		50	18	Kg/3g		06/u0/20 2u:55	07/07/20 10:52	50
DichlorodiflKoromethane	<u4		150	u4	Kg/3g		06/u0/20 2u:55	07/07/20 10:52	50
1,1-Dichloroethane	<21		50	21	Kg/3g		06/u0/20 2u:55	07/07/20 10:52	50
1,2-Dichloroethane	<20		50	20	Kg/3g		06/u0/20 2u:55	07/07/20 10:52	50
1,1-Dichloroethene	<20		50	20	Kg/3g		06/u0/20 2u:55	07/07/20 10:52	50
1,2-Dichloropropane	<21		50	21	Kg/3g		06/u0/20 2u:55	07/07/20 10:52	50
1,u-Dichloropropane	<18		50	18	Kg/3g		06/u0/20 2u:55	07/07/20 10:52	50
2,2-Dichloropropane	<22		50	22	Kg/3g		06/u0/20 2u:55	07/07/20 10:52	50
1,1-Dichloropropene	<15		50	15	Kg/3g		06/u0/20 2u:55	07/07/20 10:52	50
Ethylbenzene	<9.2		1u	9.2	Kg/3g		06/u0/20 2u:55	07/07/20 10:52	50
HexachlorobKtadiene	<22		50	22	Kg/3g		06/u0/20 2u:55	07/07/20 10:52	50
Isopropylbenzene	<19		50	19	Kg/3g		06/u0/20 2u:55	07/07/20 10:52	50
Isopropyl ether	<14		50	14	Kg/3g		06/u0/20 2u:55	07/07/20 10:52	50
Methylene Chloride	<82		250	82	Kg/3g		06/u0/20 2u:55	07/07/20 10:52	50
Methyl tert-bKtyl ether	<20		50	20	Kg/3g		06/u0/20 2u:55	07/07/20 10:52	50
Naphthalene	<17		50	17	Kg/3g		06/u0/20 2u:55	07/07/20 10:52	50
n-BKtylbenzene	<19		50	19	Kg/3g		06/u0/20 2u:55	07/07/20 10:52	50
N-Propylbenzene	<21		50	21	Kg/3g		06/u0/20 2u:55	07/07/20 10:52	50
p-IsopropyltolKene	<18		50	18	Kg/3g		06/u0/20 2u:55	07/07/20 10:52	50
sec-BKtylbenzene	<20		50	20	Kg/3g		06/u0/20 2u:55	07/07/20 10:52	50
Styrene	<19		50	19	Kg/3g		06/u0/20 2u:55	07/07/20 10:52	50
tert-BKtylbenzene	<20		50	20	Kg/3g		06/u0/20 2u:55	07/07/20 10:52	50
1,1,1,2-Tetrachloroethane	<2u		50	2u	Kg/3g		06/u0/20 2u:55	07/07/20 10:52	50
1,1,2,2-Tetrachloroethane	<20		50	20	Kg/3g		06/u0/20 2u:55	07/07/20 10:52	50
Tetrachloroethene	<19		50	19	Kg/3g		06/u0/20 2u:55	07/07/20 10:52	50
TolKene	<7.4		1u	7.4	Kg/3g		06/u0/20 2u:55	07/07/20 10:52	50
trans-1,2-Dichloroethene	<18		50	18	Kg/3g		06/u0/20 2u:55	07/07/20 10:52	50

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# QC Sample Results

Client: Giles Engineering Associates  
 Project/Site: Best Way Cleaners 5914 Hwy 51 1E-2006002

Job ID: 500-184070-1

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

**Lab Sample ID: LB3 500-550223/19-A**  
**Matrix: Solid**  
**Analysis Batch: 550913**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 550223**

Analyte	LB3 Result	LB3 Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,u-Dichloropropene	<18		50	18	Kg/3g		06/u0/20 2u:55	07/07/20 10:52	50
1,2,u-Trichlorobenzene	<2u		50	2u	Kg/3g		06/u0/20 2u:55	07/07/20 10:52	50
1,2,4-Trichlorobenzene	<17		50	17	Kg/3g		06/u0/20 2u:55	07/07/20 10:52	50
1,1,1-Trichloroethane	<19		50	19	Kg/3g		06/u0/20 2u:55	07/07/20 10:52	50
1,1,2-Trichloroethane	<18		50	18	Kg/3g		06/u0/20 2u:55	07/07/20 10:52	50
Trichloroethene	<8.2		25	8.2	Kg/3g		06/u0/20 2u:55	07/07/20 10:52	50
TrichloroflKoromethane	<21		50	21	Kg/3g		06/u0/20 2u:55	07/07/20 10:52	50
1,2,u-Trichloropropane	<21		100	21	Kg/3g		06/u0/20 2u:55	07/07/20 10:52	50
1,2,4-Trimethylbenzene	<18		50	18	Kg/3g		06/u0/20 2u:55	07/07/20 10:52	50
1,u,5-Trimethylbenzene	<19		50	19	Kg/3g		06/u0/20 2u:55	07/07/20 10:52	50
Vinyl chloride	<1u		50	1u	Kg/3g		06/u0/20 2u:55	07/07/20 10:52	50
Xylenes, Total	<11		25	11	Kg/3g		06/u0/20 2u:55	07/07/20 10:52	50

Surrogate	LB3 %Recovery	LB3 Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		72 - 124	06/30/20 23:55	07/07/20 10:52	50
Dibromofluoromethane (Surr)	85		75 - 120	06/30/20 23:55	07/07/20 10:52	50
1,2-Dichloroethane-d4 (Surr)	100		75 - 126	06/30/20 23:55	07/07/20 10:52	50
Toluene-d8 (Surr)	96		75 - 120	06/30/20 23:55	07/07/20 10:52	50

**Lab Sample ID: LCS 500-550223/20-A**  
**Matrix: Solid**  
**Analysis Batch: 550913**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 550223**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Benzene	2500	2700		Kg/3g		108	70 - 120
Bromobenzene	2500	2400		Kg/3g		96	70 - 122
Bromochloromethane	2500	2590		Kg/3g		10u	65 - 122
Bromodichloromethane	2500	2580		Kg/3g		10u	69 - 120
Bromoform	2500	2210		Kg/3g		88	56 - 1u2
Bromomethane	2500	2780		Kg/3g		111	40 - 152
Carbon tetrachloride	2500	2510		Kg/3g		100	59 - 1uu
Chlorobenzene	2500	2640		Kg/3g		106	70 - 120
Chloroethane	2500	27u0		Kg/3g		109	48 - 1u6
Chloroform	2500	2600		Kg/3g		104	70 - 120
Chloromethane	2500	1740		Kg/3g		69	56 - 152
2-ChlorotolKene	2500	2480		Kg/3g		99	70 - 125
4-ChlorotolKene	2500	2550		Kg/3g		102	68 - 124
cis-1,2-Dichloroethene	2500	2590		Kg/3g		104	70 - 125
cis-1,u-Dichloropropene	2500	2410		Kg/3g		96	64 - 127
Dibromochloromethane	2500	2u00		Kg/3g		92	68 - 125
1,2-Dibromo-u-Chloropropane	2500	1850		Kg/3g		74	56 - 12u
1,2-Dibromoethane	2500	2540		Kg/3g		102	70 - 125
Dibromomethane	2500	2820		Kg/3g		11u	70 - 120
1,2-Dichlorobenzene	2500	2540		Kg/3g		101	70 - 125
1,u-Dichlorobenzene	2500	2570		Kg/3g		10u	70 - 125
1,4-Dichlorobenzene	2500	2570		Kg/3g		10u	70 - 120
DichlorodiflKoromethane	2500	1uu0		Kg/3g		5u	40 - 159
1,1-Dichloroethane	2500	2600		Kg/3g		104	70 - 125

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# QC Sample Results

Client: Giles Engineering Associates  
 Project/Site: Best Way Cleaners 5914 Hwy 51 1E-2006002

Job ID: 500-184070-1

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

**Lab Sample ID: LCS 500-550223/20-A**  
**Matrix: Solid**  
**Analysis Batch: 550913**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 550223**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloroethane	2500	u050		Kg/3g		122	68 - 127
1,1-Dichloroethene	2500	2400		Kg/3g		96	67 - 122
1,2-Dichloropropane	2500	28u0		Kg/3g		11u	67 - 1u0
1,u-Dichloropropane	2500	2620		Kg/3g		105	62 - 1u6
2,2-Dichloropropane	2500	2460		Kg/3g		99	58 - 1u9
1,1-Dichloropropene	2500	2600		Kg/3g		104	70 - 121
Ethylbenzene	2500	2770		Kg/3g		111	70 - 12u
HexachlorobKtadiene	2500	u170		Kg/3g		127	51 - 150
Isopropylbenzene	2500	2420		Kg/3g		97	70 - 126
Methylene Chloride	2500	2500		Kg/3g		100	69 - 125
Methyl tert-bKyl ether	2500	u020		Kg/3g		121	55 - 12u
Naphthalene	2500	2420		Kg/3g		97	5u - 144
n-BKylbenzene	2500	2860		Kg/3g		114	68 - 125
N-Propylbenzene	2500	2580		Kg/3g		10u	69 - 127
p-IsopropyltolKene	2500	2710		Kg/3g		109	70 - 125
sec-BKylbenzene	2500	26u0		Kg/3g		105	70 - 12u
Styrene	2500	2700		Kg/3g		108	70 - 120
tert-BKylbenzene	2500	2520		Kg/3g		101	70 - 121
1,1,1,2-Tetrachloroethane	2500	2490		Kg/3g		99	70 - 125
1,1,2,2-Tetrachloroethane	2500	2210		Kg/3g		88	62 - 140
Tetrachloroethene	2500	2750		Kg/3g		110	70 - 128
TolKene	2500	2670		Kg/3g		107	70 - 125
trans-1,2-Dichloroethene	2500	25u0		Kg/3g		101	70 - 125
trans-1,u-Dichloropropene	2500	2420		Kg/3g		97	62 - 128
1,2,u-Trichlorobenzene	2500	2700		Kg/3g		108	51 - 145
1,2,4-Trichlorobenzene	2500	2720		Kg/3g		109	57 - 1u7
1,1,1-Trichloroethane	2500	2610		Kg/3g		105	70 - 125
1,1,2-Trichloroethane	2500	26u0		Kg/3g		105	71 - 1u0
Trichloroethene	2500	2660		Kg/3g		106	70 - 125
TrichloroflKoromethane	2500	2u10		Kg/3g		92	55 - 128
1,2,u-Trichloropropane	2500	2280		Kg/3g		91	50 - 1uu
1,2,4-Trimethylbenzene	2500	2560		Kg/3g		102	70 - 12u
1,u,5-Trimethylbenzene	2500	2520		Kg/3g		101	70 - 12u
Vinyl chloride	2500	2070		Kg/3g		8u	64 - 126
Xylenes, Total	5000	5760		Kg/3g		115	70 - 125

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	88		72 - 124
Dibromofluoromethane (Surr)	94		75 - 120
1,2-Dichloroethane-d4 (Surr)	108		75 - 126
Toluene-d8 (Surr)	94		75 - 120

**Lab Sample ID: MB 500-550710/6**  
**Matrix: Solid**  
**Analysis Batch: 550710**

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.15		0.25	0.15	Kg/3g			07/06/20 09:49	1

EKrofin TestAmerica, Chicago

# QC Sample Results

Client: Giles Engineering Associates  
 Project/Site: Best Way Cleaners 5914 Hwy 51 1E-2006002

Job ID: 500-184070-1

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

**Lab Sample ID: MB 500-550710/6**

**Matrix: Solid**

**Analysis Batch: 550710**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromobenzene	<0.u6		1.0	0.u6	Kg/3g			07/06/20 09:49	1
Bromochloromethane	<0.4u		1.0	0.4u	Kg/3g			07/06/20 09:49	1
Bromodichloromethane	<0.u7		1.0	0.u7	Kg/3g			07/06/20 09:49	1
Bromoform	<0.48		1.0	0.48	Kg/3g			07/06/20 09:49	1
Bromomethane	<0.80		u.0	0.80	Kg/3g			07/06/20 09:49	1
Carbon tetrachloride	<0.u8		1.0	0.u8	Kg/3g			07/06/20 09:49	1
Chlorobenzene	<0.u9		1.0	0.u9	Kg/3g			07/06/20 09:49	1
Chloroethane	<0.50		1.0	0.50	Kg/3g			07/06/20 09:49	1
Chloroform	<0.u7		2.0	0.u7	Kg/3g			07/06/20 09:49	1
Chloromethane	<0.u2		1.0	0.u2	Kg/3g			07/06/20 09:49	1
2-ChlorotolKene	<0.u1		1.0	0.u1	Kg/3g			07/06/20 09:49	1
4-ChlorotolKene	<0.u5		1.0	0.u5	Kg/3g			07/06/20 09:49	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	Kg/3g			07/06/20 09:49	1
cis-1,u-Dichloropropene	<0.42		1.0	0.42	Kg/3g			07/06/20 09:49	1
Dibromochloromethane	<0.49		1.0	0.49	Kg/3g			07/06/20 09:49	1
1,2-Dibromo-u-Chloropropane	<2.0		5.0	2.0	Kg/3g			07/06/20 09:49	1
1,2-Dibromoethane	<0.u9		1.0	0.u9	Kg/3g			07/06/20 09:49	1
Dibromomethane	<0.27		1.0	0.27	Kg/3g			07/06/20 09:49	1
1,2-Dichlorobenzene	<0.uu		1.0	0.uu	Kg/3g			07/06/20 09:49	1
1,u-Dichlorobenzene	<0.40		1.0	0.40	Kg/3g			07/06/20 09:49	1
1,4-Dichlorobenzene	<0.u6		1.0	0.u6	Kg/3g			07/06/20 09:49	1
DichlorodifKoromethane	<0.67		u.0	0.67	Kg/3g			07/06/20 09:49	1
1,1-Dichloroethane	<0.41		1.0	0.41	Kg/3g			07/06/20 09:49	1
1,2-Dichloroethane	<0.u9		1.0	0.u9	Kg/3g			07/06/20 09:49	1
1,1-Dichloroethene	<0.u9		1.0	0.u9	Kg/3g			07/06/20 09:49	1
1,2-Dichloropropane	<0.4u		1.0	0.4u	Kg/3g			07/06/20 09:49	1
1,u-Dichloropropane	<0.u6		1.0	0.u6	Kg/3g			07/06/20 09:49	1
2,2-Dichloropropane	<0.44		1.0	0.44	Kg/3g			07/06/20 09:49	1
1,1-Dichloropropene	<0.u0		1.0	0.u0	Kg/3g			07/06/20 09:49	1
Ethylbenzene	<0.18		0.25	0.18	Kg/3g			07/06/20 09:49	1
HexachlorobKtadiene	<0.45		1.0	0.45	Kg/3g			07/06/20 09:49	1
Isopropylbenzene	<0.u8		1.0	0.u8	Kg/3g			07/06/20 09:49	1
Isopropyl ether	<0.28		1.0	0.28	Kg/3g			07/06/20 09:49	1
Methylene Chloride	<1.6		5.0	1.6	Kg/3g			07/06/20 09:49	1
Methyl tert-bKtyl ether	<0.u9		1.0	0.u9	Kg/3g			07/06/20 09:49	1
Naphthalene	<0.uu		1.0	0.uu	Kg/3g			07/06/20 09:49	1
n-BKtylbenzene	<0.u9		1.0	0.u9	Kg/3g			07/06/20 09:49	1
N-Propylbenzene	<0.41		1.0	0.41	Kg/3g			07/06/20 09:49	1
p-IsopropyltolKene	<0.u6		1.0	0.u6	Kg/3g			07/06/20 09:49	1
sec-BKtylbenzene	<0.40		1.0	0.40	Kg/3g			07/06/20 09:49	1
Styrene	<0.u9		1.0	0.u9	Kg/3g			07/06/20 09:49	1
tert-BKtylbenzene	<0.40		1.0	0.40	Kg/3g			07/06/20 09:49	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	Kg/3g			07/06/20 09:49	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	Kg/3g			07/06/20 09:49	1
Tetrachloroethene	<0.u7		1.0	0.u7	Kg/3g			07/06/20 09:49	1
TolKene	<0.15		0.25	0.15	Kg/3g			07/06/20 09:49	1
trans-1,2-Dichloroethene	<0.u5		1.0	0.u5	Kg/3g			07/06/20 09:49	1
trans-1,u-Dichloropropene	<0.u6		1.0	0.u6	Kg/3g			07/06/20 09:49	1
1,2,u-Trichlorobenzene	<0.46		1.0	0.46	Kg/3g			07/06/20 09:49	1

EKrofin's TestAmerica, Chicago

# QC Sample Results

Client: Giles Engineering Associates  
 Project/Site: Best Way Cleaners 5914 Hwy 51 1E-2006002

Job ID: 500-184070-1

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

**Lab Sample ID: MB 500-550710/6**  
**Matrix: Solid**  
**Analysis Batch: 550710**

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

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,2,4-Trichlorobenzene	0.4u8	J	1.0	0.u4	Kg/3g			07/06/20 09:49	1
1,1,1-Trichloroethane	<0.u8		1.0	0.u8	Kg/3g			07/06/20 09:49	1
1,1,2-Trichloroethane	<0.u5		1.0	0.u5	Kg/3g			07/06/20 09:49	1
Trichloroethene	<0.16		0.50	0.16	Kg/3g			07/06/20 09:49	1
TrichloroflKoromethane	<0.4u		1.0	0.4u	Kg/3g			07/06/20 09:49	1
1,2,u-Trichloropropane	<0.41		2.0	0.41	Kg/3g			07/06/20 09:49	1
1,2,4-Trimethylbenzene	<0.u6		1.0	0.u6	Kg/3g			07/06/20 09:49	1
1,u,5-Trimethylbenzene	<0.u8		1.0	0.u8	Kg/3g			07/06/20 09:49	1
Vinyl chloride	<0.26		1.0	0.26	Kg/3g			07/06/20 09:49	1
Xylenes, Total	<0.22		0.50	0.22	Kg/3g			07/06/20 09:49	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
4-Bromofluorobenzene (Surr)	89		72 - 124		07/06/20 09:49	1
Dibromofluoromethane (Surr)	105		75 - 120		07/06/20 09:49	1
1,2-Dichloroethane-d4 (Surr)	106		75 - 126		07/06/20 09:49	1
Toluene-d8 (Surr)	101		75 - 120		07/06/20 09:49	1

**Lab Sample ID: LCS 500-550710/4**  
**Matrix: Solid**  
**Analysis Batch: 550710**

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Bromobenzene	50.0	46.0		Kg/3g		92	70 - 122
Bromochloromethane	50.0	48.4		Kg/3g		97	65 - 122
Bromodichloromethane	50.0	48.2		Kg/3g		96	69 - 120
Bromoform	50.0	50.4		Kg/3g		101	56 - 1u2
Bromomethane	50.0	68.8		Kg/3g		1u8	40 - 152
Carbon tetrachloride	50.0	51.0		Kg/3g		102	59 - 1uu
Chlorobenzene	50.0	49.8		Kg/3g		100	70 - 120
Chloroethane	50.0	49.5		Kg/3g		99	48 - 1u6
Chloroform	50.0	48.5		Kg/3g		97	70 - 120
Chloromethane	50.0	u2.u		Kg/3g		65	56 - 152
2-ChlorotolKene	50.0	45.8		Kg/3g		92	70 - 125
4-ChlorotolKene	50.0	46.u		Kg/3g		9u	68 - 124
cis-1,2-Dichloroethene	50.0	49.9		Kg/3g		100	70 - 125
cis-1,u-Dichloropropene	50.0	47.8		Kg/3g		96	64 - 127
Dibromochloromethane	50.0	48.7		Kg/3g		97	68 - 125
1,2-Dibromo-u-Chloropropane	50.0	4u.1		Kg/3g		86	56 - 12u
1,2-Dibromoethane	50.0	48.9		Kg/3g		98	70 - 125
Dibromomethane	50.0	49.2		Kg/3g		98	70 - 120
1,2-Dichlorobenzene	50.0	49.0		Kg/3g		98	70 - 125
1,u-Dichlorobenzene	50.0	48.4		Kg/3g		97	70 - 125
1,4-Dichlorobenzene	50.0	48.0		Kg/3g		96	70 - 120
DichlorodiflKoromethane	50.0	u4.2		Kg/3g		68	40 - 159
1,1-Dichloroethane	50.0	47.u		Kg/3g		95	70 - 125
1,2-Dichloroethane	50.0	49.4		Kg/3g		99	68 - 127
1,1-Dichloroethene	50.0	51.8		Kg/3g		104	67 - 122

EKrofin TestAmerica, Chicago

# QC Sample Results

Client: Giles Engineering Associates  
 Project/Site: Best Way Cleaners 5914 Hwy 51 1E-2006002

Job ID: 500-184070-1

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

**Lab Sample ID: LCS 500-550710/4**  
**Matrix: Solid**  
**Analysis Batch: 550710**

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloropropane	50.0	46.5		Kg/3g		9u	67 - 1u0
1,u-Dichloropropane	50.0	47.4		Kg/3g		95	62 - 1u6
2,2-Dichloropropane	50.0	48.5		Kg/3g		97	58 - 1u9
1,1-Dichloropropene	50.0	50.u		Kg/3g		101	70 - 121
Ethylbenzene	50.0	49.6		Kg/3g		99	70 - 12u
HexachlorobKtadiene	50.0	47.8		Kg/3g		96	51 - 150
Isopropylbenzene	50.0	46.u		Kg/3g		9u	70 - 126
Methylene Chloride	50.0	47.7		Kg/3g		95	69 - 125
Methyl tert-bKyl ether	50.0	47.8		Kg/3g		96	55 - 12u
Naphthalene	50.0	4u.4		Kg/3g		87	5u - 144
n-BKylbenzene	50.0	49.u		Kg/3g		99	68 - 125
N-Propylbenzene	50.0	47.4		Kg/3g		95	69 - 127
p-IsopropyltolKene	50.0	46.7		Kg/3g		9u	70 - 125
sec-BKylbenzene	50.0	47.8		Kg/3g		96	70 - 12u
Styrene	50.0	47.8		Kg/3g		96	70 - 120
tert-BKylbenzene	50.0	46.u		Kg/3g		9u	70 - 121
1,1,1,2-Tetrachloroethane	50.0	48.7		Kg/3g		97	70 - 125
1,1,2,2-Tetrachloroethane	50.0	42.9		Kg/3g		86	62 - 140
Tetrachloroethene	50.0	52.9		Kg/3g		106	70 - 128
TolKene	50.0	49.u		Kg/3g		99	70 - 125
trans-1,2-Dichloroethene	50.0	51.4		Kg/3g		10u	70 - 125
trans-1,u-Dichloropropene	50.0	46.6		Kg/3g		9u	62 - 128
1,2,u-Trichlorobenzene	50.0	47.0		Kg/3g		94	51 - 145
1,2,4-Trichlorobenzene	50.0	47.9		Kg/3g		96	57 - 1u7
1,1,1-Trichloroethane	50.0	50.2		Kg/3g		100	70 - 125
1,1,2-Trichloroethane	50.0	46.7		Kg/3g		9u	71 - 1u0
Trichloroethene	50.0	50.6		Kg/3g		101	70 - 125
TrichloroflKoromethane	50.0	49.7		Kg/3g		99	55 - 128
1,2,u-Trichloropropane	50.0	42.2		Kg/3g		84	50 - 1uu
1,2,4-Trimethylbenzene	50.0	46.2		Kg/3g		92	70 - 12u
1,u,5-Trimethylbenzene	50.0	46.4		Kg/3g		9u	70 - 12u
Vinyl chloride	50.0	u9.0		Kg/3g		78	64 - 126
Xylenes, Total	100	98.6		Kg/3g		99	70 - 125

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	91		72 - 124
Dibromofluoromethane (Surr)	106		75 - 120
1,2-Dichloroethane-d4 (Surr)	105		75 - 126
Toluene-d8 (Surr)	102		75 - 120

**Lab Sample ID: MB 500-550913/6**  
**Matrix: Solid**  
**Analysis Batch: 550913**

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.15		0.25	0.15	Kg/3g			07/07/20 10:25	1
Bromobenzene	<0.u6		1.0	0.u6	Kg/3g			07/07/20 10:25	1
Bromochloromethane	<0.4u		1.0	0.4u	Kg/3g			07/07/20 10:25	1

EKrofin TestAmerica, Chicago



# QC Sample Results

Client: Giles Engineering Associates  
 Project/Site: Best Way Cleaners 5914 Hwy 51 1E-2006002

Job ID: 500-184070-1

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

**Lab Sample ID: MB 500-550913/6**  
**Matrix: Solid**  
**Analysis Batch: 550913**

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

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Bromodichloromethane	<0.u7		1.0	0.u7	Kg/3g			07/07/20 10:25	1
Bromoform	<0.48		1.0	0.48	Kg/3g			07/07/20 10:25	1
Bromomethane	<0.80		u.0	0.80	Kg/3g			07/07/20 10:25	1
Carbon tetrachloride	<0.u8		1.0	0.u8	Kg/3g			07/07/20 10:25	1
Chlorobenzene	<0.u9		1.0	0.u9	Kg/3g			07/07/20 10:25	1
Chloroethane	<0.50		1.0	0.50	Kg/3g			07/07/20 10:25	1
Chloroform	<0.u7		2.0	0.u7	Kg/3g			07/07/20 10:25	1
Chloromethane	<0.u2		1.0	0.u2	Kg/3g			07/07/20 10:25	1
2-ChlorotolKene	<0.u1		1.0	0.u1	Kg/3g			07/07/20 10:25	1
4-ChlorotolKene	<0.u5		1.0	0.u5	Kg/3g			07/07/20 10:25	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	Kg/3g			07/07/20 10:25	1
cis-1,u-Dichloropropene	<0.42		1.0	0.42	Kg/3g			07/07/20 10:25	1
Dibromochloromethane	<0.49		1.0	0.49	Kg/3g			07/07/20 10:25	1
1,2-Dibromo-u-Chloropropane	<2.0		5.0	2.0	Kg/3g			07/07/20 10:25	1
1,2-Dibromoethane	<0.u9		1.0	0.u9	Kg/3g			07/07/20 10:25	1
Dibromomethane	<0.27		1.0	0.27	Kg/3g			07/07/20 10:25	1
1,2-Dichlorobenzene	<0.uu		1.0	0.uu	Kg/3g			07/07/20 10:25	1
1,u-Dichlorobenzene	<0.40		1.0	0.40	Kg/3g			07/07/20 10:25	1
1,4-Dichlorobenzene	<0.u6		1.0	0.u6	Kg/3g			07/07/20 10:25	1
DichlorodifKoromethane	<0.67		u.0	0.67	Kg/3g			07/07/20 10:25	1
1,1-Dichloroethane	<0.41		1.0	0.41	Kg/3g			07/07/20 10:25	1
1,2-Dichloroethane	<0.u9		1.0	0.u9	Kg/3g			07/07/20 10:25	1
1,1-Dichloroethene	<0.u9		1.0	0.u9	Kg/3g			07/07/20 10:25	1
1,2-Dichloropropane	<0.4u		1.0	0.4u	Kg/3g			07/07/20 10:25	1
1,u-Dichloropropane	<0.u6		1.0	0.u6	Kg/3g			07/07/20 10:25	1
2,2-Dichloropropane	<0.44		1.0	0.44	Kg/3g			07/07/20 10:25	1
1,1-Dichloropropene	<0.u0		1.0	0.u0	Kg/3g			07/07/20 10:25	1
Ethylbenzene	<0.18		0.25	0.18	Kg/3g			07/07/20 10:25	1
HexachlorobKtadiene	<0.45		1.0	0.45	Kg/3g			07/07/20 10:25	1
Isopropylbenzene	<0.u8		1.0	0.u8	Kg/3g			07/07/20 10:25	1
Isopropyl ether	<0.28		1.0	0.28	Kg/3g			07/07/20 10:25	1
Methylene Chloride	<1.6		5.0	1.6	Kg/3g			07/07/20 10:25	1
Methyl tert-bKtyl ether	<0.u9		1.0	0.u9	Kg/3g			07/07/20 10:25	1
Naphthalene	<0.uu		1.0	0.uu	Kg/3g			07/07/20 10:25	1
n-BKtylbenzene	<0.u9		1.0	0.u9	Kg/3g			07/07/20 10:25	1
N-Propylbenzene	<0.41		1.0	0.41	Kg/3g			07/07/20 10:25	1
p-IsopropyltolKene	<0.u6		1.0	0.u6	Kg/3g			07/07/20 10:25	1
sec-BKtylbenzene	<0.40		1.0	0.40	Kg/3g			07/07/20 10:25	1
Styrene	<0.u9		1.0	0.u9	Kg/3g			07/07/20 10:25	1
tert-BKtylbenzene	<0.40		1.0	0.40	Kg/3g			07/07/20 10:25	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	Kg/3g			07/07/20 10:25	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	Kg/3g			07/07/20 10:25	1
Tetrachloroethene	<0.u7		1.0	0.u7	Kg/3g			07/07/20 10:25	1
TolKene	<0.15		0.25	0.15	Kg/3g			07/07/20 10:25	1
trans-1,2-Dichloroethene	<0.u5		1.0	0.u5	Kg/3g			07/07/20 10:25	1
trans-1,u-Dichloropropene	<0.u6		1.0	0.u6	Kg/3g			07/07/20 10:25	1
1,2,u-Trichlorobenzene	<0.46		1.0	0.46	Kg/3g			07/07/20 10:25	1
1,2,4-Trichlorobenzene	<0.u4		1.0	0.u4	Kg/3g			07/07/20 10:25	1
1,1,1-Trichloroethane	<0.u8		1.0	0.u8	Kg/3g			07/07/20 10:25	1

EKrofins TestAmerica, Chicago

# QC Sample Results

Client: Giles Engineering Associates  
 Project/Site: Best Way Cleaners 5914 Hwy 51 1E-2006002

Job ID: 500-184070-1

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

**Lab Sample ID: MB 500-550913/6**  
**Matrix: Solid**  
**Analysis Batch: 550913**

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

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,1,2-Trichloroethane	<0.u5		1.0	0.u5	Kg/3g			07/07/20 10:25	1
Trichloroethene	<0.16		0.50	0.16	Kg/3g			07/07/20 10:25	1
TrichloroflKoromethane	<0.4u		1.0	0.4u	Kg/3g			07/07/20 10:25	1
1,2,u-Trichloropropane	<0.41		2.0	0.41	Kg/3g			07/07/20 10:25	1
1,2,4-Trimethylbenzene	<0.u6		1.0	0.u6	Kg/3g			07/07/20 10:25	1
1,u,5-Trimethylbenzene	<0.u8		1.0	0.u8	Kg/3g			07/07/20 10:25	1
Vinyl chloride	<0.26		1.0	0.26	Kg/3g			07/07/20 10:25	1
Xylenes, Total	<0.22		0.50	0.22	Kg/3g			07/07/20 10:25	1

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
4-Bromofluorobenzene (Surr)	91		72 - 124		07/07/20 10:25	1
Dibromofluoromethane (Surr)	89		75 - 120		07/07/20 10:25	1
1,2-Dichloroethane-d4 (Surr)	103		75 - 126		07/07/20 10:25	1
Toluene-d8 (Surr)	95		75 - 120		07/07/20 10:25	1

**Lab Sample ID: LCS 500-550913/4**  
**Matrix: Solid**  
**Analysis Batch: 550913**

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

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	%Rec. Limits
		Result	Qualifier				
Benzene	50.0	49.4		Kg/3g		99	70 - 120
Bromobenzene	50.0	45.1		Kg/3g		90	70 - 122
Bromochloromethane	50.0	46.1		Kg/3g		92	65 - 122
Bromodichloromethane	50.0	45.9		Kg/3g		92	69 - 120
Bromoform	50.0	u9.6		Kg/3g		79	56 - 1u2
Bromomethane	50.0	5u.4		Kg/3g		107	40 - 152
Carbon tetrachloride	50.0	47.9		Kg/3g		96	59 - 1uu
Chlorobenzene	50.0	48.4		Kg/3g		97	70 - 120
Chloroethane	50.0	52.u		Kg/3g		105	48 - 1u6
Chloroform	50.0	47.8		Kg/3g		96	70 - 120
Chloromethane	50.0	44.0		Kg/3g		88	56 - 152
2-ChlorotolKene	50.0	48.2		Kg/3g		96	70 - 125
4-ChlorotolKene	50.0	48.9		Kg/3g		98	68 - 124
cis-1,2-Dichloroethene	50.0	47.8		Kg/3g		96	70 - 125
cis-1,u-Dichloropropane	50.0	44.5		Kg/3g		89	64 - 127
Dibromochloromethane	50.0	41.7		Kg/3g		8u	68 - 125
1,2-Dibromo-u-Chloropropane	50.0	u1.9		Kg/3g		64	56 - 12u
1,2-Dibromoethane	50.0	44.2		Kg/3g		88	70 - 125
Dibromomethane	50.0	48.6		Kg/3g		97	70 - 120
1,2-Dichlorobenzene	50.0	47.2		Kg/3g		94	70 - 125
1,u-Dichlorobenzene	50.0	48.4		Kg/3g		97	70 - 125
1,4-Dichlorobenzene	50.0	47.9		Kg/3g		96	70 - 120
DichlorodiflKoromethane	50.0	54.0		Kg/3g		108	40 - 159
1,1-Dichloroethane	50.0	48.1		Kg/3g		96	70 - 125
1,2-Dichloroethane	50.0	5u.u		Kg/3g		107	68 - 127
1,1-Dichloroethene	50.0	47.1		Kg/3g		94	67 - 122
1,2-Dichloropropane	50.0	49.2		Kg/3g		98	67 - 1u0
1,u-Dichloropropane	50.0	45.8		Kg/3g		92	62 - 1u6

EKrofin TestAmerica, Chicago

# QC Sample Results

Client: Giles Engineering Associates  
 Project/Site: Best Way Cleaners 5914 Hwy 51 1E-2006002

Job ID: 500-184070-1

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

**Lab Sample ID: LCS 500-550913/4**  
**Matrix: Solid**  
**Analysis Batch: 550913**

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,2-Dichloropropane	50.0	52.5		Kg/3g		105	58 - 1u9
1,1-Dichloropropene	50.0	50.1		Kg/3g		100	70 - 121
Ethylbenzene	50.0	52.0		Kg/3g		104	70 - 12u
HexachlorobKtadiene	50.0	58.9		Kg/3g		118	51 - 150
Isopropylbenzene	50.0	48.8		Kg/3g		98	70 - 126
Methylene Chloride	50.0	4u.8		Kg/3g		88	69 - 125
Methyl tert-bKyl ether	50.0	50.7		Kg/3g		101	55 - 12u
Naphthalene	50.0	42.1		Kg/3g		84	5u - 144
n-BKylbenzene	50.0	55.7		Kg/3g		111	68 - 125
N-Propylbenzene	50.0	50.9		Kg/3g		102	69 - 127
p-IsopropyltolKene	50.0	5u.u		Kg/3g		107	70 - 125
sec-BKylbenzene	50.0	51.9		Kg/3g		104	70 - 12u
Styrene	50.0	48.1		Kg/3g		96	70 - 120
tert-BKylbenzene	50.0	50.5		Kg/3g		101	70 - 121
1,1,1,2-Tetrachloroethane	50.0	45.6		Kg/3g		91	70 - 125
1,1,2,2-Tetrachloroethane	50.0	u9.4		Kg/3g		79	62 - 140
Tetrachloroethene	50.0	5u.9		Kg/3g		108	70 - 128
TolKene	50.0	50.4		Kg/3g		101	70 - 125
trans-1,2-Dichloroethene	50.0	48.7		Kg/3g		97	70 - 125
trans-1,u-Dichloropropene	50.0	4u.1		Kg/3g		86	62 - 128
1,2,u-Trichlorobenzene	50.0	47.5		Kg/3g		95	51 - 145
1,2,4-Trichlorobenzene	50.0	49.0		Kg/3g		98	57 - 1u7
1,1,1-Trichloroethane	50.0	49.u		Kg/3g		99	70 - 125
1,1,2-Trichloroethane	50.0	46.2		Kg/3g		92	71 - 1u0
Trichloroethene	50.0	49.u		Kg/3g		99	70 - 125
TrichloroflKoromethane	50.0	44.9		Kg/3g		90	55 - 128
1,2,u-Trichloropropane	50.0	40.9		Kg/3g		82	50 - 1uu
1,2,4-Trimethylbenzene	50.0	49.0		Kg/3g		98	70 - 12u
1,u,5-Trimethylbenzene	50.0	49.9		Kg/3g		100	70 - 12u
Vinyl chloride	50.0	47.7		Kg/3g		95	64 - 126
Xylenes, Total	100	107		Kg/3g		107	70 - 125

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	90		72 - 124
Dibromofluoromethane (Surr)	91		75 - 120
1,2-Dichloroethane-d4 (Surr)	101		75 - 126
Toluene-d8 (Surr)	97		75 - 120

**Lab Sample ID: MB 500-550933/7**  
**Matrix: Solid**  
**Analysis Batch: 550933**

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.15		0.25	0.15	Kg/3g			07/07/20 10:46	1
Bromobenzene	<0.u6		1.0	0.u6	Kg/3g			07/07/20 10:46	1
Bromochloromethane	<0.4u		1.0	0.4u	Kg/3g			07/07/20 10:46	1
Bromodichloromethane	<0.u7		1.0	0.u7	Kg/3g			07/07/20 10:46	1
Bromoform	<0.48		1.0	0.48	Kg/3g			07/07/20 10:46	1

EKrofin TestAmerica, Chicago

# QC Sample Results

Client: Giles Engineering Associates  
 Project/Site: Best Way Cleaners 5914 Hwy 51 1E-2006002

Job ID: 500-184070-1

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

**Lab Sample ID: MB 500-550933/7**  
**Matrix: Solid**  
**Analysis Batch: 550933**

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

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Bromomethane	<0.80		u.0	0.80	Kg/3g			07/07/20 10:46	1
Carbon tetrachloride	<0.u8		1.0	0.u8	Kg/3g			07/07/20 10:46	1
Chlorobenzene	<0.u9		1.0	0.u9	Kg/3g			07/07/20 10:46	1
Chloroethane	<0.50		1.0	0.50	Kg/3g			07/07/20 10:46	1
Chloroform	<0.u7		2.0	0.u7	Kg/3g			07/07/20 10:46	1
Chloromethane	<0.u2		1.0	0.u2	Kg/3g			07/07/20 10:46	1
2-ChlorotolKene	<0.u1		1.0	0.u1	Kg/3g			07/07/20 10:46	1
4-ChlorotolKene	<0.u5		1.0	0.u5	Kg/3g			07/07/20 10:46	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	Kg/3g			07/07/20 10:46	1
cis-1,u-Dichloropropene	<0.42		1.0	0.42	Kg/3g			07/07/20 10:46	1
Dibromochloromethane	<0.49		1.0	0.49	Kg/3g			07/07/20 10:46	1
1,2-Dibromo-u-Chloropropane	<2.0		5.0	2.0	Kg/3g			07/07/20 10:46	1
1,2-Dibromoethane	<0.u9		1.0	0.u9	Kg/3g			07/07/20 10:46	1
Dibromomethane	<0.27		1.0	0.27	Kg/3g			07/07/20 10:46	1
1,2-Dichlorobenzene	<0.uu		1.0	0.uu	Kg/3g			07/07/20 10:46	1
1,u-Dichlorobenzene	<0.40		1.0	0.40	Kg/3g			07/07/20 10:46	1
1,4-Dichlorobenzene	<0.u6		1.0	0.u6	Kg/3g			07/07/20 10:46	1
DichlorodifKoromethane	<0.67		u.0	0.67	Kg/3g			07/07/20 10:46	1
1,1-Dichloroethane	<0.41		1.0	0.41	Kg/3g			07/07/20 10:46	1
1,2-Dichloroethane	<0.u9		1.0	0.u9	Kg/3g			07/07/20 10:46	1
1,1-Dichloroethene	<0.u9		1.0	0.u9	Kg/3g			07/07/20 10:46	1
1,2-Dichloropropane	<0.4u		1.0	0.4u	Kg/3g			07/07/20 10:46	1
1,u-Dichloropropane	<0.u6		1.0	0.u6	Kg/3g			07/07/20 10:46	1
2,2-Dichloropropane	<0.44		1.0	0.44	Kg/3g			07/07/20 10:46	1
1,1-Dichloropropene	<0.u0		1.0	0.u0	Kg/3g			07/07/20 10:46	1
Ethylbenzene	<0.18		0.25	0.18	Kg/3g			07/07/20 10:46	1
HexachlorobKtadiene	<0.45		1.0	0.45	Kg/3g			07/07/20 10:46	1
Isopropylbenzene	<0.u8		1.0	0.u8	Kg/3g			07/07/20 10:46	1
Isopropyl ether	<0.28		1.0	0.28	Kg/3g			07/07/20 10:46	1
Methylene Chloride	<1.6		5.0	1.6	Kg/3g			07/07/20 10:46	1
Methyl tert-bKyl ether	<0.u9		1.0	0.u9	Kg/3g			07/07/20 10:46	1
Naphthalene	<0.uu		1.0	0.uu	Kg/3g			07/07/20 10:46	1
n-BKylbenzene	<0.u9		1.0	0.u9	Kg/3g			07/07/20 10:46	1
N-Propylbenzene	<0.41		1.0	0.41	Kg/3g			07/07/20 10:46	1
p-IsopropyltolKene	<0.u6		1.0	0.u6	Kg/3g			07/07/20 10:46	1
sec-BKylbenzene	<0.40		1.0	0.40	Kg/3g			07/07/20 10:46	1
Styrene	<0.u9		1.0	0.u9	Kg/3g			07/07/20 10:46	1
tert-BKylbenzene	<0.40		1.0	0.40	Kg/3g			07/07/20 10:46	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	Kg/3g			07/07/20 10:46	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	Kg/3g			07/07/20 10:46	1
Tetrachloroethene	<0.u7		1.0	0.u7	Kg/3g			07/07/20 10:46	1
TolKene	<0.15		0.25	0.15	Kg/3g			07/07/20 10:46	1
trans-1,2-Dichloroethene	<0.u5		1.0	0.u5	Kg/3g			07/07/20 10:46	1
trans-1,u-Dichloropropene	<0.u6		1.0	0.u6	Kg/3g			07/07/20 10:46	1
1,2,u-Trichlorobenzene	<0.46		1.0	0.46	Kg/3g			07/07/20 10:46	1
1,2,4-Trichlorobenzene	<0.u4		1.0	0.u4	Kg/3g			07/07/20 10:46	1
1,1,1-Trichloroethane	<0.u8		1.0	0.u8	Kg/3g			07/07/20 10:46	1
1,1,2-Trichloroethane	<0.u5		1.0	0.u5	Kg/3g			07/07/20 10:46	1
Trichloroethene	<0.16		0.50	0.16	Kg/3g			07/07/20 10:46	1

EKrofins TestAmerica, Chicago

# QC Sample Results

Client: Giles Engineering Associates  
 Project/Site: Best Way Cleaners 5914 Hwy 51 1E-2006002

Job ID: 500-184070-1

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

**Lab Sample ID: MB 500-550933/7**  
**Matrix: Solid**  
**Analysis Batch: 550933**

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
TrichloroflKoromethane	<0.4u		1.0	0.4u	Kg/3g			07/07/20 10:46	1
1,2,u-Trichloropropane	<0.41		2.0	0.41	Kg/3g			07/07/20 10:46	1
1,2,4-Trimethylbenzene	<0.u6		1.0	0.u6	Kg/3g			07/07/20 10:46	1
1,u,5-Trimethylbenzene	<0.u8		1.0	0.u8	Kg/3g			07/07/20 10:46	1
Vinyl chloride	<0.26		1.0	0.26	Kg/3g			07/07/20 10:46	1
Xylenes, Total	<0.22		0.50	0.22	Kg/3g			07/07/20 10:46	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		72 - 124		07/07/20 10:46	1
Dibromofluoromethane (Surr)	98		75 - 120		07/07/20 10:46	1
1,2-Dichloroethane-d4 (Surr)	110		75 - 126		07/07/20 10:46	1
Toluene-d8 (Surr)	97		75 - 120		07/07/20 10:46	1

**Lab Sample ID: LCS 500-550933/5**  
**Matrix: Solid**  
**Analysis Batch: 550933**

**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	44.2		Kg/3g		88	70 - 120
Bromobenzene	50.0	45.0		Kg/3g		90	70 - 122
Bromochloromethane	50.0	47.u		Kg/3g		95	65 - 122
Bromodichloromethane	50.0	4u.8		Kg/3g		88	69 - 120
Bromoform	50.0	42.u		Kg/3g		85	56 - 1u2
Bromomethane	50.0	54.8		Kg/3g		110	40 - 152
Carbon tetrachloride	50.0	45.0		Kg/3g		90	59 - 1uu
Chlorobenzene	50.0	44.7		Kg/3g		89	70 - 120
Chloroethane	50.0	54.5		Kg/3g		109	48 - 1u6
Chloroform	50.0	41.2		Kg/3g		82	70 - 120
Chloromethane	50.0	u7.7		Kg/3g		75	56 - 152
2-ChlorotolKene	50.0	42.u		Kg/3g		85	70 - 125
4-ChlorotolKene	50.0	42.u		Kg/3g		85	68 - 124
cis-1,2-Dichloroethene	50.0	45.0		Kg/3g		90	70 - 125
cis-1,u-Dichloropropene	50.0	42.9		Kg/3g		86	64 - 127
Dibromochloromethane	50.0	4u.5		Kg/3g		87	68 - 125
1,2-Dibromo-u-Chloropropane	50.0	u6.8		Kg/3g		74	56 - 12u
1,2-Dibromoethane	50.0	46.1		Kg/3g		92	70 - 125
Dibromomethane	50.0	46.7		Kg/3g		9u	70 - 120
1,2-Dichlorobenzene	50.0	44.9		Kg/3g		90	70 - 125
1,u-Dichlorobenzene	50.0	44.u		Kg/3g		89	70 - 125
1,4-Dichlorobenzene	50.0	44.1		Kg/3g		88	70 - 120
DichlorodiflKoromethane	50.0	u5.2		Kg/3g		70	40 - 159
1,1-Dichloroethane	50.0	49.4		Kg/3g		99	70 - 125
1,2-Dichloroethane	50.0	48.1		Kg/3g		96	68 - 127
1,1-Dichloroethene	50.0	4u.9		Kg/3g		88	67 - 122
1,2-Dichloropropane	50.0	52.5		Kg/3g		105	67 - 1u0
1,u-Dichloropropane	50.0	44.9		Kg/3g		90	62 - 1u6
2,2-Dichloropropane	50.0	42.5		Kg/3g		85	58 - 1u9
1,1-Dichloropropene	50.0	4u.u		Kg/3g		87	70 - 121

EKrofin TestAmerica, Chicago

# QC Sample Results

Client: Giles Engineering Associates  
 Project/Site: Best Way Cleaners 5914 Hwy 51 1E-2006002

Job ID: 500-184070-1

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

**Lab Sample ID: LCS 500-550933/5**

**Matrix: Solid**

**Analysis Batch: 550933**

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethylbenzene	50.0	44.2		Kg/3g		88	70 - 12u
HexachlorobKtadiene	50.0	4u.2		Kg/3g		86	51 - 150
Isopropylbenzene	50.0	4u.5		Kg/3g		87	70 - 126
Methylene Chloride	50.0	44.6		Kg/3g		89	69 - 125
Methyl tert-bKtyl ether	50.0	u6.8		Kg/3g		74	55 - 12u
Naphthalene	50.0	44.7		Kg/3g		89	5u - 144
n-BKtylbenzene	50.0	40.5		Kg/3g		81	68 - 125
N-Propylbenzene	50.0	42.9		Kg/3g		86	69 - 127
p-IsopropyltolKene	50.0	41.6		Kg/3g		8u	70 - 125
sec-BKtylbenzene	50.0	41.7		Kg/3g		8u	70 - 12u
Styrene	50.0	4u.4		Kg/3g		87	70 - 120
tert-BKtylbenzene	50.0	41.9		Kg/3g		84	70 - 121
1,1,1,2-Tetrachloroethane	50.0	4u.u		Kg/3g		87	70 - 125
1,1,2,2-Tetrachloroethane	50.0	46.u		Kg/3g		9u	62 - 140
Tetrachloroethene	50.0	47.0		Kg/3g		94	70 - 128
TolKene	50.0	44.9		Kg/3g		90	70 - 125
trans-1,2-Dichloroethene	50.0	44.2		Kg/3g		88	70 - 125
trans-1,u-Dichloropropene	50.0	42.8		Kg/3g		86	62 - 128
1,2,u-Trichlorobenzene	50.0	48.u		Kg/3g		97	51 - 145
1,2,4-Trichlorobenzene	50.0	45.u		Kg/3g		91	57 - 1u7
1,1,1-Trichloroethane	50.0	44.7		Kg/3g		89	70 - 125
1,1,2-Trichloroethane	50.0	46.5		Kg/3g		9u	71 - 1u0
Trichloroethene	50.0	46.5		Kg/3g		9u	70 - 125
TrichloroflKoromethane	50.0	47.0		Kg/3g		94	55 - 128
1,2,u-Trichloropropane	50.0	45.4		Kg/3g		91	50 - 1uu
1,2,4-Trimethylbenzene	50.0	42.0		Kg/3g		84	70 - 12u
1,u,5-Trimethylbenzene	50.0	42.u		Kg/3g		85	70 - 12u
Vinyl chloride	50.0	49.5		Kg/3g		99	64 - 126
Xylenes, Total	100	85.8		Kg/3g		86	70 - 125

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	95		72 - 124
Dibromofluoromethane (Surr)	100		75 - 120
1,2-Dichloroethane-d4 (Surr)	105		75 - 126
Toluene-d8 (Surr)	99		75 - 120

# Lab Chronicle

Client: Giles Engineering Associates  
Project/Site: Best Way Cleaners 5914 Hwy 51 1E-2006002

Job ID: 500-184070-1

## Client Sample ID: GB-1 (2-4)

Date Collected: 06/23/20 12:06

Date Received: 06/25/20 09:40

## Lab Sample ID: 500-184070-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	549554	06/26/20 08:03	LWN	TAL CHI

## Client Sample ID: GB-1 (2-4)

Date Collected: 06/23/20 12:06

Date Received: 06/25/20 09:40

## Lab Sample ID: 500-184070-1

Matrix: Solid

Percent Solids: 87.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			550223	06/25/20 12:06	WRE	TAL CHI
Total/NA	Analysis	8260B		50	550710	07/06/20 17:12	PMF	TAL CHI

## Client Sample ID: GB-2 (2-4)

Date Collected: 06/23/20 11:28

Date Received: 06/25/20 09:40

## Lab Sample ID: 500-184070-2

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	549554	06/26/20 08:03	LWN	TAL CHI

## Client Sample ID: GB-2 (2-4)

Date Collected: 06/23/20 11:28

Date Received: 06/25/20 09:40

## Lab Sample ID: 500-184070-2

Matrix: Solid

Percent Solids: 92.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			550223	06/23/20 11:28	WRE	TAL CHI
Total/NA	Analysis	8260B		50	550710	07/06/20 17:38	PMF	TAL CHI

## Client Sample ID: GPZ-1 (2-4)

Date Collected: 06/23/20 12:52

Date Received: 06/25/20 09:40

## Lab Sample ID: 500-184070-3

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	549554	06/26/20 08:03	LWN	TAL CHI

## Client Sample ID: GPZ-1 (2-4)

Date Collected: 06/23/20 12:52

Date Received: 06/25/20 09:40

## Lab Sample ID: 500-184070-3

Matrix: Solid

Percent Solids: 89.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			550223	06/23/20 12:52	WRE	TAL CHI
Total/NA	Analysis	8260B		50	550710	07/06/20 18:04	PMF	TAL CHI

## Client Sample ID: GPZ-1 (4-6)

Date Collected: 06/23/20 16:30

Date Received: 06/25/20 09:40

## Lab Sample ID: 500-184070-4

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	549554	06/26/20 08:03	LWN	TAL CHI

Eurofins TestAmerica, Chicago

# Lab Chronicle

Client: Giles Engineering Associates  
Project/Site: Best Way Cleaners 5914 Hwy 51 1E-2006002

Job ID: 500-184070-1

## Client Sample ID: GPZ-1 (4-6)

Date Collected: 06/23/20 16:30

Date Received: 06/25/20 09:40

## Lab Sample ID: 500-184070-4

Matrix: Solid

Percent Solids: 52.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			550223	06/23/20 16:30	WRE	TAL CHI
Total/NA	Analysis	8260B		50	550933	07/07/20 11:43	STW	TAL CHI

## Client Sample ID: GMW-2 (2-4)

Date Collected: 06/23/20 10:09

Date Received: 06/25/20 09:40

## Lab Sample ID: 500-184070-5

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	549554	06/26/20 08:03	LWN	TAL CHI

## Client Sample ID: GMW-2 (2-4)

Date Collected: 06/23/20 10:09

Date Received: 06/25/20 09:40

## Lab Sample ID: 500-184070-5

Matrix: Solid

Percent Solids: 90.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			550223	06/23/20 10:09	WRE	TAL CHI
Total/NA	Analysis	8260B		50	550933	07/07/20 12:12	STW	TAL CHI

### Laboratory References:

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



# Accreditation/Certification Summary

Client: Giles Engineering Associates  
Project/Site: Best Way Cleaners 5914 Hwy 51 1E-2006002

Job ID: 500-184070-1

## Laboratory: Eurofins TestAmerica, Chicago

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

Authority	Program	Identification Number	Expiration Date
Wisconsin	State	999580010	08-31-20

- 1
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# Chain of Custody Record

**Eurofins TestAmerica, Chicago**  
2417 Bond Street

University Park, IL 60484-3101  
phone 708.534.5200 fax 708.534.521



**Client Contact**  
Giles Engineering Associates  
N8 W 22350 Johnson Road 500-184070 COC  
Waukesha, WI 53186  
(262)544-0118 Phone  
(xxx) xxx-xxxx FAX  
Project Name: Best Way Cleaners - 5914 Hwy 51  
Site: McFarland, WI  
P.O.# 1E-2006002

**Regulatory Program:**  DW  NPDES  RCRA  Other

**Project Manager:** Kevin Bugel  
Email: kbugel@gilesengr.com  
Tel/Fax: (262)544-0118

**Analysis Turnaround Time**  
 CALENDAR DAYS  WORKING DAYS  
TAT if different from Below \_\_\_ Working Days\_\_\_  
 2 weeks  
 1 week  
 2 days  
 1 day

**TestAmerica Laboratories, Inc. db/a Eurofins TestAmerica**

**COC No.:** 1 of 1 COCs  
**Date:** 6/23/2020  
**Carrier:**  
**Sampler:**  
**For Lab Use Only:**  
Walk-in Client:  
Lab Sampling:  
**Job / SDG No.:** 500-184070

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, F=Inb)	Matrix (N=Water, S=Solid, O=Wastewater, A=Air)	# of Cont.	Preservation Code	Filtered Sample (Y/N)	Perform MS/MSD (Y/N)	VOCs	Sample Specific Notes:
GB-1 (2-4)	6/23/20	1206	G	S	2		N	N	X	
GB-2 (2-4)		1128					N	N	X	
GPZ-1 (2-4)		1252					N	N	X	
GPZ-1 (4-G)		1630					N	N	X	
GMW-2 (2-4)		1009					N	N	X	

**Preservation Used:** 1= Ice, 2= HCl; 3= H2SO4; 4= HNO3; 5= NaOH; 6= Other  
**Possible Hazard Identification:** Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

Non-Hazard  Flammable  Skin Irritant  Poison B  Unknown  
**Special Instructions/QC Requirements & Comments:** Email results to: kbugel@gilesengr.com and jwolske@gilesengr.com

**Custody Seal No.:** 33  
**Relinquished by:** [Signature] Company: GILES ENGR Date/Time: 6/24/20 11:00  
**Relinquished by:** [Signature] Company: TA Date/Time: 6-24-20 17:00  
**Relinquished by:** [Signature] Company: [Signature] Date/Time: 6/25/20 0940

**Therm ID No.:** \_\_\_\_\_  
**Cooler Temp. (C):** Obs'd: \_\_\_\_\_ Corrd: \_\_\_\_\_  
**Received by:** [Signature] Company: TA Date/Time: 6-24-20 1400  
**Received by:** [Signature] Company: [Signature] Date/Time: [Signature] Date/Time: [Signature]

# Login Sample Receipt Checklist

Client: Giles Engineering Associates

Job Number: 500-184070-1

**Login Number: 184070**

**List Source: Eurofins TestAmerica, Chicago**

**List Number: 1**

**Creator: Scott, Sherri L**

Question	Answer	Comment
Radioactivity wasn't checked or is <math>\leq</math> 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	3.3
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 <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



## ANALYTICAL REPORT

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

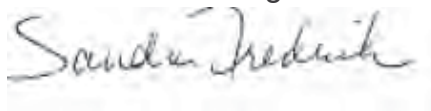
Laboratory Job ID: 500-185078-1

Client Project/Site: Fmr Best Way Cleaners - 1E-2006002

For:

Giles Engineering Associates  
N8 W 22350 Johnson Road  
Waukesha, Wisconsin 53186

Attn: Mr. Kevin Bugel



Authorized for release by:  
7/22/2020 2:00:55 PM

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

### LINKS

Review your project  
results through  
**TotalAccess**

Have a Question?



Visit us at:

[www.eurofinsus.com/Env](http://www.eurofinsus.com/Env)

*The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.*

*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*



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# Case Narrative

Client: Giles Engineering Associates  
Project/Site: Fmr Best Way Cleaners - 1E-2006002

Job ID: 500-185078-1

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## Job ID: 500-185078-1

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Laboratory: Eurofins TestAmerica, Chicago

### Narrative

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#### Job Narrative 500-185078-1

### Comments

No additional comments.

### Receipt

The samples were received on 7/17/2020 9:30 AM; the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 0.1° C.

### GC/MS VOA

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

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# Detection Summary

Client: Giles Engineering Associates  
Project/Site: Fmr Best Way Cleaners - 1E-2006002

Job ID: 500-185078-1

## Client Sample ID: GMW-1

Lab Sample ID: 500-185078-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	9.2		1.0	0.41	ug/L	1		8260B	Total/NA

## Client Sample ID: GMW-2

Lab Sample ID: 500-185078-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	1.0		1.0	0.34	ug/L	1		8260B	Total/NA

## Client Sample ID: GMW-3

Lab Sample ID: 500-185078-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	2.3		1.0	0.34	ug/L	1		8260B	Total/NA

## Client Sample ID: GPZ-1

Lab Sample ID: 500-185078-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	0.96	J	1.0	0.41	ug/L	1		8260B	Total/NA

## Client Sample ID: GPZ-2

Lab Sample ID: 500-185078-5

No Detections.

## Client Sample ID: TRIP BLANK

Lab Sample ID: 500-185078-6

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

# Method Summary

Client: Giles Engineering Associates  
Project/Site: Fmr Best Way Cleaners - 1E-2006002

Job ID: 500-185078-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CHI
5030B	Purge and Trap	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 = Eurofins TestAmerica, Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200





# Sample Summary

Client: Giles Engineering Associates  
Project/Site: Fmr Best Way Cleaners - 1E-2006002

Job ID: 500-185078-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
500-185078-1	GMW-1	Water	07/16/20 12:20	07/17/20 09:30	
500-185078-2	GMW-2	Water	07/16/20 11:35	07/17/20 09:30	
500-185078-3	GMW-3	Water	07/16/20 10:45	07/17/20 09:30	
500-185078-4	GPZ-1	Water	07/16/20 12:00	07/17/20 09:30	
500-185078-5	GPZ-2	Water	07/16/20 11:20	07/17/20 09:30	
500-185078-6	TRIP BLANK	Water	07/16/20 00:00	07/17/20 09:30	

# Client Sample Results

Client: Giles Engineering Associates  
 Project/Site: Fmr Best Way Cleaners - 1E-2006002

Job ID: 500-185078-1

**Client Sample ID: GMW-1**

**Lab Sample ID: 500-185078-1**

**Date Collected: 07/16/20 12:20**

**Matrix: Water**

**Date Received: 07/17/20 09:30**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			07/21/20 11:10	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/21/20 11:10	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			07/21/20 11:10	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/21/20 11:10	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			07/21/20 11:10	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			07/21/20 11:10	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			07/21/20 11:10	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			07/21/20 11:10	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			07/21/20 11:10	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			07/21/20 11:10	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/21/20 11:10	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			07/21/20 11:10	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			07/21/20 11:10	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			07/21/20 11:10	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			07/21/20 11:10	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			07/21/20 11:10	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/21/20 11:10	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			07/21/20 11:10	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			07/21/20 11:10	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			07/21/20 11:10	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			07/21/20 11:10	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			07/21/20 11:10	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			07/21/20 11:10	1
Benzene	<0.15		0.50	0.15	ug/L			07/21/20 11:10	1
Bromobenzene	<0.36		1.0	0.36	ug/L			07/21/20 11:10	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			07/21/20 11:10	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			07/21/20 11:10	1
Bromoform	<0.48		1.0	0.48	ug/L			07/21/20 11:10	1
Bromomethane	<0.80		3.0	0.80	ug/L			07/21/20 11:10	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			07/21/20 11:10	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			07/21/20 11:10	1
Chloroethane	<0.51		1.0	0.51	ug/L			07/21/20 11:10	1
Chloroform	<0.37		2.0	0.37	ug/L			07/21/20 11:10	1
Chloromethane	<0.32		1.0	0.32	ug/L			07/21/20 11:10	1
<b>cis-1,2-Dichloroethene</b>	<b>9.2</b>		1.0	0.41	ug/L			07/21/20 11:10	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			07/21/20 11:10	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			07/21/20 11:10	1
Dibromomethane	<0.27		1.0	0.27	ug/L			07/21/20 11:10	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			07/21/20 11:10	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/21/20 11:10	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			07/21/20 11:10	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			07/21/20 11:10	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			07/21/20 11:10	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/21/20 11:10	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			07/21/20 11:10	1
Naphthalene	<0.34		1.0	0.34	ug/L			07/21/20 11:10	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			07/21/20 11:10	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			07/21/20 11:10	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			07/21/20 11:10	1

# Client Sample Results

Client: Giles Engineering Associates  
 Project/Site: Fmr Best Way Cleaners - 1E-2006002

Job ID: 500-185078-1

**Client Sample ID: GMW-1**

**Lab Sample ID: 500-185078-1**

**Date Collected: 07/16/20 12:20**

**Matrix: Water**

**Date Received: 07/17/20 09:30**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			07/21/20 11:10	1
Styrene	<0.39		1.0	0.39	ug/L			07/21/20 11:10	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			07/21/20 11:10	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			07/21/20 11:10	1
Toluene	<0.15		0.50	0.15	ug/L			07/21/20 11:10	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			07/21/20 11:10	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			07/21/20 11:10	1
Trichloroethene	<0.16		0.50	0.16	ug/L			07/21/20 11:10	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			07/21/20 11:10	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/21/20 11:10	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			07/21/20 11:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (nrS) 9/7/2001	4/)		: 5 r 4B6		/: 3A3/ 948/	4
1,1-Dibromoethene (an) 9/7/2001	,)		: Br 4B)		/: 3A3/ 948/	4
o-Dibromobenzene (nr) 9/7/2001	4/ c		: 5 r 4B/		/: 3A3/ 948/	4
1,1-Dibromoethene (nr) 9/7/2001	4/ 6		: 5 r 4B/		/: 3A3/ 948/	4

# Client Sample Results

Client: Giles Engineering Associates  
 Project/Site: Fmr Best Way Cleaners - 1E-2006002

Job ID: 500-185078-1

**Client Sample ID: GMW-2**

**Lab Sample ID: 500-185078-2**

**Date Collected: 07/16/20 11:35**

**Matrix: Water**

**Date Received: 07/17/20 09:30**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			07/21/20 11:37	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/21/20 11:37	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			07/21/20 11:37	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/21/20 11:37	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			07/21/20 11:37	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			07/21/20 11:37	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			07/21/20 11:37	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			07/21/20 11:37	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			07/21/20 11:37	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			07/21/20 11:37	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/21/20 11:37	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			07/21/20 11:37	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			07/21/20 11:37	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			07/21/20 11:37	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			07/21/20 11:37	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			07/21/20 11:37	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/21/20 11:37	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			07/21/20 11:37	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			07/21/20 11:37	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			07/21/20 11:37	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			07/21/20 11:37	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			07/21/20 11:37	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			07/21/20 11:37	1
Benzene	<0.15		0.50	0.15	ug/L			07/21/20 11:37	1
Bromobenzene	<0.36		1.0	0.36	ug/L			07/21/20 11:37	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			07/21/20 11:37	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			07/21/20 11:37	1
Bromoform	<0.48		1.0	0.48	ug/L			07/21/20 11:37	1
Bromomethane	<0.80		3.0	0.80	ug/L			07/21/20 11:37	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			07/21/20 11:37	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			07/21/20 11:37	1
Chloroethane	<0.51		1.0	0.51	ug/L			07/21/20 11:37	1
Chloroform	<0.37		2.0	0.37	ug/L			07/21/20 11:37	1
Chloromethane	<0.32		1.0	0.32	ug/L			07/21/20 11:37	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			07/21/20 11:37	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			07/21/20 11:37	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			07/21/20 11:37	1
Dibromomethane	<0.27		1.0	0.27	ug/L			07/21/20 11:37	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			07/21/20 11:37	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/21/20 11:37	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			07/21/20 11:37	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			07/21/20 11:37	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			07/21/20 11:37	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/21/20 11:37	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			07/21/20 11:37	1
<b>Naphthalene</b>	<b>1.0</b>		1.0	0.34	ug/L			07/21/20 11:37	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			07/21/20 11:37	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			07/21/20 11:37	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			07/21/20 11:37	1

# Client Sample Results

Client: Giles Engineering Associates  
 Project/Site: Fmr Best Way Cleaners - 1E-2006002

Job ID: 500-185078-1

**Client Sample ID: GMW-2**

**Lab Sample ID: 500-185078-2**

**Date Collected: 07/16/20 11:35**

**Matrix: Water**

**Date Received: 07/17/20 09:30**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			07/21/20 11:37	1
Styrene	<0.39		1.0	0.39	ug/L			07/21/20 11:37	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			07/21/20 11:37	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			07/21/20 11:37	1
Toluene	<0.15		0.50	0.15	ug/L			07/21/20 11:37	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			07/21/20 11:37	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			07/21/20 11:37	1
Trichloroethene	<0.16		0.50	0.16	ug/L			07/21/20 11:37	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			07/21/20 11:37	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/21/20 11:37	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			07/21/20 11:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Brofil ubbnz (nrS) 97 2ee1	4/ B		: 5 r 4B6		/: 343/ 948:	4
) rDebi bt2b6bn( an( n97 2ee1	, )		: B r 4B)		/: 343/ 948:	4
o rDebi bt2b6bi nz ( n97 2ee1	4/ 4		: 5 r 4B/		/: 343/ 948:	4
dbi2n( nrST97 2ee1	4/ 6		: 5 r 4B/		/: 343/ 948:	4

# Client Sample Results

Client: Giles Engineering Associates  
 Project/Site: Fmr Best Way Cleaners - 1E-2006002

Job ID: 500-185078-1

**Client Sample ID: GMW-3**

**Lab Sample ID: 500-185078-3**

**Date Collected: 07/16/20 10:45**

**Matrix: Water**

**Date Received: 07/17/20 09:30**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			07/21/20 12:04	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/21/20 12:04	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			07/21/20 12:04	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/21/20 12:04	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			07/21/20 12:04	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			07/21/20 12:04	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			07/21/20 12:04	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			07/21/20 12:04	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			07/21/20 12:04	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			07/21/20 12:04	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/21/20 12:04	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			07/21/20 12:04	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			07/21/20 12:04	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			07/21/20 12:04	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			07/21/20 12:04	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			07/21/20 12:04	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/21/20 12:04	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			07/21/20 12:04	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			07/21/20 12:04	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			07/21/20 12:04	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			07/21/20 12:04	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			07/21/20 12:04	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			07/21/20 12:04	1
Benzene	<0.15		0.50	0.15	ug/L			07/21/20 12:04	1
Bromobenzene	<0.36		1.0	0.36	ug/L			07/21/20 12:04	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			07/21/20 12:04	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			07/21/20 12:04	1
Bromoform	<0.48		1.0	0.48	ug/L			07/21/20 12:04	1
Bromomethane	<0.80		3.0	0.80	ug/L			07/21/20 12:04	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			07/21/20 12:04	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			07/21/20 12:04	1
Chloroethane	<0.51		1.0	0.51	ug/L			07/21/20 12:04	1
Chloroform	<0.37		2.0	0.37	ug/L			07/21/20 12:04	1
Chloromethane	<0.32		1.0	0.32	ug/L			07/21/20 12:04	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			07/21/20 12:04	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			07/21/20 12:04	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			07/21/20 12:04	1
Dibromomethane	<0.27		1.0	0.27	ug/L			07/21/20 12:04	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			07/21/20 12:04	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/21/20 12:04	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			07/21/20 12:04	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			07/21/20 12:04	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			07/21/20 12:04	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/21/20 12:04	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			07/21/20 12:04	1
<b>Naphthalene</b>	<b>2.3</b>		1.0	0.34	ug/L			07/21/20 12:04	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			07/21/20 12:04	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			07/21/20 12:04	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			07/21/20 12:04	1

# Client Sample Results

Client: Giles Engineering Associates  
 Project/Site: Fmr Best Way Cleaners - 1E-2006002

Job ID: 500-185078-1

**Client Sample ID: GMW-3**

**Lab Sample ID: 500-185078-3**

**Date Collected: 07/16/20 10:45**

**Matrix: Water**

**Date Received: 07/17/20 09:30**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			07/21/20 12:04	1
Styrene	<0.39		1.0	0.39	ug/L			07/21/20 12:04	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			07/21/20 12:04	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			07/21/20 12:04	1
Toluene	<0.15		0.50	0.15	ug/L			07/21/20 12:04	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			07/21/20 12:04	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			07/21/20 12:04	1
Trichloroethene	<0.16		0.50	0.16	ug/L			07/21/20 12:04	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			07/21/20 12:04	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/21/20 12:04	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			07/21/20 12:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Brofil ubbnz (nrS) 97 2ee1	4/ 6		: 5 r 4B6		/: 3A3/ 9AB8)	4
) rDebi btu2bebhn( an( n97 2ee1	, c		: Br 4B)		/: 3A3/ 9AB8)	4
o rDebi btu2bebni nz ( n97 2ee1	4/ 5		: 5 r 4B/		/: 3A3/ 9AB8)	4
dbi2n( nrST97 2ee1	4/ 6		: 5 r 4B/		/: 3A3/ 9AB8)	4

# Client Sample Results

Client: Giles Engineering Associates  
 Project/Site: Fmr Best Way Cleaners - 1E-2006002

Job ID: 500-185078-1

**Client Sample ID: GPZ-1**  
**Date Collected: 07/16/20 12:00**  
**Date Received: 07/17/20 09:30**

**Lab Sample ID: 500-185078-4**  
**Matrix: Water**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			07/21/20 12:31	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/21/20 12:31	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			07/21/20 12:31	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/21/20 12:31	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			07/21/20 12:31	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			07/21/20 12:31	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			07/21/20 12:31	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			07/21/20 12:31	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			07/21/20 12:31	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			07/21/20 12:31	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/21/20 12:31	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			07/21/20 12:31	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			07/21/20 12:31	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			07/21/20 12:31	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			07/21/20 12:31	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			07/21/20 12:31	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/21/20 12:31	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			07/21/20 12:31	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			07/21/20 12:31	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			07/21/20 12:31	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			07/21/20 12:31	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			07/21/20 12:31	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			07/21/20 12:31	1
Benzene	<0.15		0.50	0.15	ug/L			07/21/20 12:31	1
Bromobenzene	<0.36		1.0	0.36	ug/L			07/21/20 12:31	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			07/21/20 12:31	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			07/21/20 12:31	1
Bromoform	<0.48		1.0	0.48	ug/L			07/21/20 12:31	1
Bromomethane	<0.80		3.0	0.80	ug/L			07/21/20 12:31	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			07/21/20 12:31	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			07/21/20 12:31	1
Chloroethane	<0.51		1.0	0.51	ug/L			07/21/20 12:31	1
Chloroform	<0.37		2.0	0.37	ug/L			07/21/20 12:31	1
Chloromethane	<0.32		1.0	0.32	ug/L			07/21/20 12:31	1
<b>cis-1,2-Dichloroethene</b>	<b>0.96 J</b>		1.0	0.41	ug/L			07/21/20 12:31	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			07/21/20 12:31	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			07/21/20 12:31	1
Dibromomethane	<0.27		1.0	0.27	ug/L			07/21/20 12:31	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			07/21/20 12:31	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/21/20 12:31	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			07/21/20 12:31	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			07/21/20 12:31	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			07/21/20 12:31	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/21/20 12:31	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			07/21/20 12:31	1
Naphthalene	<0.34		1.0	0.34	ug/L			07/21/20 12:31	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			07/21/20 12:31	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			07/21/20 12:31	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			07/21/20 12:31	1



# Client Sample Results

Client: Giles Engineering Associates  
 Project/Site: Fmr Best Way Cleaners - 1E-2006002

Job ID: 500-185078-1

**Client Sample ID: GPZ-1**  
**Date Collected: 07/16/20 12:00**  
**Date Received: 07/17/20 09:30**

**Lab Sample ID: 500-185078-4**  
**Matrix: Water**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			07/21/20 12:31	1
Styrene	<0.39		1.0	0.39	ug/L			07/21/20 12:31	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			07/21/20 12:31	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			07/21/20 12:31	1
Toluene	<0.15		0.50	0.15	ug/L			07/21/20 12:31	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			07/21/20 12:31	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			07/21/20 12:31	1
Trichloroethene	<0.16		0.50	0.16	ug/L			07/21/20 12:31	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			07/21/20 12:31	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/21/20 12:31	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			07/21/20 12:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Brofil ubbnz (nrS) 97 2ee1	4/ B		: 5 r 4B6		/: 3A3/ 9AB&4	4
) rDebi btu2bebhn( an( n97 2ee1	, B		: Br 4B)		/: 3A3/ 9AB&4	4
o rDebi btu2bebi nz ( n97 2ee1	4/ 5		: 5 r 4B/		/: 3A3/ 9AB&4	4
dbi2n( nrST97 2ee1	4/ B		: 5 r 4B/		/: 3A3/ 9AB&4	4

# Client Sample Results

Client: Giles Engineering Associates  
 Project/Site: Fmr Best Way Cleaners - 1E-2006002

Job ID: 500-185078-1

**Client Sample ID: GPZ-2**

**Lab Sample ID: 500-185078-5**

**Date Collected: 07/16/20 11:20**

**Matrix: Water**

**Date Received: 07/17/20 09:30**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			07/21/20 12:58	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/21/20 12:58	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			07/21/20 12:58	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/21/20 12:58	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			07/21/20 12:58	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			07/21/20 12:58	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			07/21/20 12:58	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			07/21/20 12:58	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			07/21/20 12:58	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			07/21/20 12:58	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/21/20 12:58	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			07/21/20 12:58	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			07/21/20 12:58	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			07/21/20 12:58	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			07/21/20 12:58	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			07/21/20 12:58	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/21/20 12:58	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			07/21/20 12:58	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			07/21/20 12:58	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			07/21/20 12:58	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			07/21/20 12:58	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			07/21/20 12:58	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			07/21/20 12:58	1
Benzene	<0.15		0.50	0.15	ug/L			07/21/20 12:58	1
Bromobenzene	<0.36		1.0	0.36	ug/L			07/21/20 12:58	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			07/21/20 12:58	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			07/21/20 12:58	1
Bromoform	<0.48		1.0	0.48	ug/L			07/21/20 12:58	1
Bromomethane	<0.80		3.0	0.80	ug/L			07/21/20 12:58	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			07/21/20 12:58	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			07/21/20 12:58	1
Chloroethane	<0.51		1.0	0.51	ug/L			07/21/20 12:58	1
Chloroform	<0.37		2.0	0.37	ug/L			07/21/20 12:58	1
Chloromethane	<0.32		1.0	0.32	ug/L			07/21/20 12:58	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			07/21/20 12:58	1
cis-1,3-Dichloropropane	<0.42		1.0	0.42	ug/L			07/21/20 12:58	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			07/21/20 12:58	1
Dibromomethane	<0.27		1.0	0.27	ug/L			07/21/20 12:58	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			07/21/20 12:58	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/21/20 12:58	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			07/21/20 12:58	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			07/21/20 12:58	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			07/21/20 12:58	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/21/20 12:58	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			07/21/20 12:58	1
Naphthalene	<0.34		1.0	0.34	ug/L			07/21/20 12:58	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			07/21/20 12:58	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			07/21/20 12:58	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			07/21/20 12:58	1

# Client Sample Results

Client: Giles Engineering Associates  
 Project/Site: Fmr Best Way Cleaners - 1E-2006002

Job ID: 500-185078-1

**Client Sample ID: GPZ-2**

**Lab Sample ID: 500-185078-5**

**Date Collected: 07/16/20 11:20**

**Matrix: Water**

**Date Received: 07/17/20 09:30**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			07/21/20 12:58	1
Styrene	<0.39		1.0	0.39	ug/L			07/21/20 12:58	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			07/21/20 12:58	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			07/21/20 12:58	1
Toluene	<0.15		0.50	0.15	ug/L			07/21/20 12:58	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			07/21/20 12:58	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			07/21/20 12:58	1
Trichloroethene	<0.16		0.50	0.16	ug/L			07/21/20 12:58	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			07/21/20 12:58	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/21/20 12:58	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			07/21/20 12:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Brofil ubebnz (nrS) 97 2ee1	4/)		: 5 r 4B6		/: 3A3/ 9AB5T	4
) rDebi btu2bebhn( an( n97 2ee1	, 6		: Br 4B)		/: 3A3/ 9AB5T	4
o rDebi btu2bebni nz ( n97 2ee1	4/ 5		: 5 r 4B/		/: 3A3/ 9AB5T	4
dbu2n( nrST97 2ee1	4/)		: 5 r 4B/		/: 3A3/ 9AB5T	4

# Client Sample Results

Client: Giles Engineering Associates  
 Project/Site: Fmr Best Way Cleaners - 1E-2006002

Job ID: 500-185078-1

**Client Sample ID: TRIP BLANK**

**Lab Sample ID: 500-185078-6**

**Date Collected: 07/16/20 00:00**

**Matrix: Water**

**Date Received: 07/17/20 09:30**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			07/21/20 10:44	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/21/20 10:44	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			07/21/20 10:44	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/21/20 10:44	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			07/21/20 10:44	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			07/21/20 10:44	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			07/21/20 10:44	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			07/21/20 10:44	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			07/21/20 10:44	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			07/21/20 10:44	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/21/20 10:44	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			07/21/20 10:44	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			07/21/20 10:44	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			07/21/20 10:44	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			07/21/20 10:44	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			07/21/20 10:44	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/21/20 10:44	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			07/21/20 10:44	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			07/21/20 10:44	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			07/21/20 10:44	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			07/21/20 10:44	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			07/21/20 10:44	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			07/21/20 10:44	1
Benzene	<0.15		0.50	0.15	ug/L			07/21/20 10:44	1
Bromobenzene	<0.36		1.0	0.36	ug/L			07/21/20 10:44	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			07/21/20 10:44	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			07/21/20 10:44	1
Bromoform	<0.48		1.0	0.48	ug/L			07/21/20 10:44	1
Bromomethane	<0.80		3.0	0.80	ug/L			07/21/20 10:44	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			07/21/20 10:44	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			07/21/20 10:44	1
Chloroethane	<0.51		1.0	0.51	ug/L			07/21/20 10:44	1
Chloroform	<0.37		2.0	0.37	ug/L			07/21/20 10:44	1
Chloromethane	<0.32		1.0	0.32	ug/L			07/21/20 10:44	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			07/21/20 10:44	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			07/21/20 10:44	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			07/21/20 10:44	1
Dibromomethane	<0.27		1.0	0.27	ug/L			07/21/20 10:44	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			07/21/20 10:44	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/21/20 10:44	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			07/21/20 10:44	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			07/21/20 10:44	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			07/21/20 10:44	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/21/20 10:44	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			07/21/20 10:44	1
Naphthalene	<0.34		1.0	0.34	ug/L			07/21/20 10:44	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			07/21/20 10:44	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			07/21/20 10:44	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			07/21/20 10:44	1

# Client Sample Results

Client: Giles Engineering Associates  
 Project/Site: Fmr Best Way Cleaners - 1E-2006002

Job ID: 500-185078-1

**Client Sample ID: TRIP BLANK**

**Lab Sample ID: 500-185078-6**

Date Collected: 07/16/20 00:00

Matrix: Water

Date Received: 07/17/20 09:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			07/21/20 10:44	1
Styrene	<0.39		1.0	0.39	ug/L			07/21/20 10:44	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			07/21/20 10:44	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			07/21/20 10:44	1
Toluene	<0.15		0.50	0.15	ug/L			07/21/20 10:44	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			07/21/20 10:44	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			07/21/20 10:44	1
Trichloroethene	<0.16		0.50	0.16	ug/L			07/21/20 10:44	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			07/21/20 10:44	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/21/20 10:44	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			07/21/20 10:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Brofil ubbnz (nrS) 97 2ee1	4/6		: 5 r 4B6		/: 3A3/ 9/ 8)	4
) rDebi btu2bebhn( an( n97 2ee1	, /		: Br 4B)		/: 3A3/ 9/ 8)	4
o rDebi btu2beb n2 ( n97 2ee1	4/)		: 5 r 4B/		/: 3A3/ 9/ 8)	4
dbu2n( nrST97 2ee1	4/ c		: 5 r 4B/		/: 3A3/ 9/ 8)	4

# Definitions/Glossary

Client: Giles Engineering Associates  
Project/Site: Fmr Best Way Cleaners - 1E-2006002

Job ID: 500-185078-1

## Qualifiers

### GC/MS VOA

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

## Glossary

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

# QC Association Summary

Client: Giles Engineering Associates  
Project/Site: Fmr Best Way Cleaners - 1E-2006002

Job ID: 500-185078-1

## GC/MS VOA

### Analysis Batch: 552990

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-185078-1	GMW-1	Total/NA	Water	8260B	
500-185078-2	GMW-2	Total/NA	Water	8260B	
500-185078-3	GMW-3	Total/NA	Water	8260B	
500-185078-4	GPZ-1	Total/NA	Water	8260B	
500-185078-5	GPZ-2	Total/NA	Water	8260B	
500-185078-6	TRIP BLANK	Total/NA	Water	8260B	
MB 500-552990/6	Method Blank	Total/NA	Water	8260B	
LCS 500-552990/4	Lab Control Sample	Total/NA	Water	8260B	

# Surrogate Summary

Client: Giles Engineering Associates  
Project/Site: Fmr Best Way Cleaners - 1E-2006002

Job ID: 500-185078-1

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

**Matrix: Water**

**Prep Type: Total/NA**

## Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	DCA	BFB	DBFM	TOL
		(75-126)	(72-124)	(75-120)	(75-120)
500-185078-1	GMW-1	104	94	103	106
500-185078-2	GMW-2	102	94	101	106
500-185078-3	GMW-3	106	93	105	106
500-185078-4	GPZ-1	102	92	105	102
500-185078-5	GPZ-2	104	96	105	104
500-185078-6	TRIP BLANK	106	90	104	103
LCS 500-552990/4	Lab Control Sample	101	95	103	104
MB 500-552990/6	Method Blank	107	91	104	104

### Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

DBFM = Dibromofluoromethane (Surr)

TOL = Toluene-d8 (Surr)



# QC Sample Results

Client: Giles Engineering Associates  
 Project/Site: Fmr Best Way Cleaners - 1E-2006002

Job ID: 500-185078-1

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

**Lab Sample ID: MB 500-552990/6**  
**Matrix: Water**  
**Analysis Batch: 552990**

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			07/21/20 10:17	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/21/20 10:17	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			07/21/20 10:17	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/21/20 10:17	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			07/21/20 10:17	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			07/21/20 10:17	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			07/21/20 10:17	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			07/21/20 10:17	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			07/21/20 10:17	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			07/21/20 10:17	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/21/20 10:17	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			07/21/20 10:17	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			07/21/20 10:17	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			07/21/20 10:17	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			07/21/20 10:17	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			07/21/20 10:17	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/21/20 10:17	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			07/21/20 10:17	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			07/21/20 10:17	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			07/21/20 10:17	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			07/21/20 10:17	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			07/21/20 10:17	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			07/21/20 10:17	1
Benzene	<0.15		0.50	0.15	ug/L			07/21/20 10:17	1
Bromobenzene	<0.36		1.0	0.36	ug/L			07/21/20 10:17	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			07/21/20 10:17	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			07/21/20 10:17	1
Bromoform	<0.48		1.0	0.48	ug/L			07/21/20 10:17	1
Bromomethane	<0.80		3.0	0.80	ug/L			07/21/20 10:17	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			07/21/20 10:17	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			07/21/20 10:17	1
Chloroethane	<0.51		1.0	0.51	ug/L			07/21/20 10:17	1
Chloroform	<0.37		2.0	0.37	ug/L			07/21/20 10:17	1
Chloromethane	<0.32		1.0	0.32	ug/L			07/21/20 10:17	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			07/21/20 10:17	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			07/21/20 10:17	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			07/21/20 10:17	1
Dibromomethane	<0.27		1.0	0.27	ug/L			07/21/20 10:17	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			07/21/20 10:17	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/21/20 10:17	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			07/21/20 10:17	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			07/21/20 10:17	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			07/21/20 10:17	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/21/20 10:17	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			07/21/20 10:17	1
Naphthalene	<0.34		1.0	0.34	ug/L			07/21/20 10:17	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			07/21/20 10:17	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			07/21/20 10:17	1

Eurofins TestAmerica, Chicago

# QC Sample Results

Client: Giles Engineering Associates  
 Project/Site: Fmr Best Way Cleaners - 1E-2006002

Job ID: 500-185078-1

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

**Lab Sample ID: MB 500-552990/6**  
**Matrix: Water**  
**Analysis Batch: 552990**

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

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			07/21/20 10:17	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			07/21/20 10:17	1
Styrene	<0.39		1.0	0.39	ug/L			07/21/20 10:17	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			07/21/20 10:17	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			07/21/20 10:17	1
Toluene	<0.15		0.50	0.15	ug/L			07/21/20 10:17	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			07/21/20 10:17	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			07/21/20 10:17	1
Trichloroethene	<0.16		0.50	0.16	ug/L			07/21/20 10:17	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			07/21/20 10:17	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/21/20 10:17	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			07/21/20 10:17	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1,2-Dichloroethane-d4 (Surr)	107		75 - 126		07/21/20 10:17	1
4-Bromofluorobenzene (Surr)	91		72 - 124		07/21/20 10:17	1
Dibromofluoromethane (Surr)	104		75 - 120		07/21/20 10:17	1
Toluene-d8 (Surr)	104		75 - 120		07/21/20 10:17	1

**Lab Sample ID: LCS 500-552990/4**  
**Matrix: Water**  
**Analysis Batch: 552990**

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.
							Limits
1,1,1,2-Tetrachloroethane	50.0	47.1		ug/L		94	70 - 125
1,1,1-Trichloroethane	50.0	47.9		ug/L		96	70 - 125
1,1,2,2-Tetrachloroethane	50.0	44.4		ug/L		89	62 - 140
1,1,2-Trichloroethane	50.0	44.9		ug/L		90	71 - 130
1,1-Dichloroethane	50.0	45.0		ug/L		90	70 - 125
1,1-Dichloroethene	50.0	48.6		ug/L		97	67 - 122
1,1-Dichloropropene	50.0	47.0		ug/L		94	70 - 121
1,2,3-Trichlorobenzene	50.0	50.1		ug/L		100	51 - 145
1,2,3-Trichloropropane	50.0	43.1		ug/L		86	50 - 133
1,2,4-Trichlorobenzene	50.0	50.0		ug/L		100	57 - 137
1,2,4-Trimethylbenzene	50.0	46.8		ug/L		94	70 - 123
1,2-Dibromo-3-Chloropropane	50.0	44.7		ug/L		89	56 - 123
1,2-Dibromoethane	50.0	46.7		ug/L		93	70 - 125
1,2-Dichlorobenzene	50.0	45.9		ug/L		92	70 - 125
1,2-Dichloroethane	50.0	48.7		ug/L		97	68 - 127
1,2-Dichloropropane	50.0	45.1		ug/L		90	67 - 130
1,3,5-Trimethylbenzene	50.0	47.4		ug/L		95	70 - 123
1,3-Dichlorobenzene	50.0	45.9		ug/L		92	70 - 125
1,3-Dichloropropane	50.0	46.6		ug/L		93	62 - 136
1,4-Dichlorobenzene	50.0	45.1		ug/L		90	70 - 120
2,2-Dichloropropane	50.0	45.7		ug/L		91	58 - 139
2-Chlorotoluene	50.0	46.4		ug/L		93	70 - 125
4-Chlorotoluene	50.0	46.6		ug/L		93	68 - 124
Benzene	50.0	46.9		ug/L		94	70 - 120

Eurofins TestAmerica, Chicago

# QC Sample Results

Client: Giles Engineering Associates  
 Project/Site: Fmr Best Way Cleaners - 1E-2006002

Job ID: 500-185078-1

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

**Lab Sample ID: LCS 500-552990/4**  
**Matrix: Water**  
**Analysis Batch: 552990**

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Bromobenzene	50.0	44.0		ug/L		88	70 - 122
Bromochloromethane	50.0	45.3		ug/L		91	65 - 122
Bromodichloromethane	50.0	46.7		ug/L		93	69 - 120
Bromoform	50.0	44.7		ug/L		89	56 - 132
Bromomethane	50.0	60.0		ug/L		120	40 - 152
Carbon tetrachloride	50.0	48.3		ug/L		97	59 - 133
Chlorobenzene	50.0	48.6		ug/L		97	70 - 120
Chloroethane	50.0	53.3		ug/L		107	48 - 136
Chloroform	50.0	45.0		ug/L		90	70 - 120
Chloromethane	50.0	36.3		ug/L		73	56 - 152
cis-1,2-Dichloroethene	50.0	45.8		ug/L		92	70 - 125
cis-1,3-Dichloropropene	50.0	46.2		ug/L		92	64 - 127
Dibromochloromethane	50.0	47.6		ug/L		95	68 - 125
Dibromomethane	50.0	47.9		ug/L		96	70 - 120
Dichlorodifluoromethane	50.0	42.9		ug/L		86	40 - 159
Ethylbenzene	50.0	49.9		ug/L		100	70 - 123
Hexachlorobutadiene	50.0	49.1		ug/L		98	51 - 150
Isopropylbenzene	50.0	47.3		ug/L		95	70 - 126
Methyl tert-butyl ether	50.0	47.6		ug/L		95	55 - 123
Methylene Chloride	50.0	47.6		ug/L		95	69 - 125
Naphthalene	50.0	46.2		ug/L		92	53 - 144
n-Butylbenzene	50.0	49.3		ug/L		99	68 - 125
N-Propylbenzene	50.0	47.3		ug/L		95	69 - 127
p-Isopropyltoluene	50.0	47.7		ug/L		95	70 - 125
sec-Butylbenzene	50.0	48.3		ug/L		97	70 - 123
Styrene	50.0	45.6		ug/L		91	70 - 120
tert-Butylbenzene	50.0	47.2		ug/L		94	70 - 121
Tetrachloroethene	50.0	47.5		ug/L		95	70 - 128
Toluene	50.0	48.4		ug/L		97	70 - 125
trans-1,2-Dichloroethene	50.0	48.8		ug/L		98	70 - 125
trans-1,3-Dichloropropene	50.0	45.2		ug/L		90	62 - 128
Trichloroethene	50.0	49.1		ug/L		98	70 - 125
Trichlorofluoromethane	50.0	49.7		ug/L		99	55 - 128
Vinyl chloride	50.0	42.1		ug/L		84	64 - 126
Xylenes, Total	100	94.9		ug/L		95	70 - 125

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	101		75 - 126
4-Bromofluorobenzene (Surr)	95		72 - 124
Dibromofluoromethane (Surr)	103		75 - 120
Toluene-d8 (Surr)	104		75 - 120

# Lab Chronicle

Client: Giles Engineering Associates  
Project/Site: Fmr Best Way Cleaners - 1E-2006002

Job ID: 500-185078-1

## Client Sample ID: GMW-1

Date Collected: 07/16/20 12:20

Date Received: 07/17/20 09:30

## Lab Sample ID: 500-185078-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	552990	07/21/20 11:10	JDD	TAL CHI

## Client Sample ID: GMW-2

Date Collected: 07/16/20 11:35

Date Received: 07/17/20 09:30

## Lab Sample ID: 500-185078-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	552990	07/21/20 11:37	JDD	TAL CHI

## Client Sample ID: GMW-3

Date Collected: 07/16/20 10:45

Date Received: 07/17/20 09:30

## Lab Sample ID: 500-185078-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	552990	07/21/20 12:04	JDD	TAL CHI

## Client Sample ID: GPZ-1

Date Collected: 07/16/20 12:00

Date Received: 07/17/20 09:30

## Lab Sample ID: 500-185078-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	552990	07/21/20 12:31	JDD	TAL CHI

## Client Sample ID: GPZ-2

Date Collected: 07/16/20 11:20

Date Received: 07/17/20 09:30

## Lab Sample ID: 500-185078-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	552990	07/21/20 12:58	JDD	TAL CHI

## Client Sample ID: TRIP BLANK

Date Collected: 07/16/20 00:00

Date Received: 07/17/20 09:30

## Lab Sample ID: 500-185078-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	552990	07/21/20 10:44	JDD	TAL CHI

### Laboratory References:

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

# Accreditation/Certification Summary

Client: Giles Engineering Associates  
Project/Site: Fmr Best Way Cleaners - 1E-2006002

Job ID: 500-185078-1

## Laboratory: Eurofins TestAmerica, Chicago

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

Authority	Program	Identification Number	Expiration Date
Wisconsin	State	999580010	08-31-20

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# Login Sample Receipt Checklist

Client: Giles Engineering Associates

Job Number: 500-185078-1

**Login Number: 185078**

**List Source: Eurofins TestAmerica, Chicago**

**List Number: 1**

**Creator: James, Jeff A**

Question	Answer	Comment
Radioactivity wasn't checked or is <math>\leq</math> 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	0.1
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 <math><6\text{mm}</math> (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



## ANALYTICAL REPORT

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

Laboratory Job ID: 500-189985-1

Client Project/Site: Best Way Cleaners - 1E-2006002

**For:**

Giles Engineering Associates  
N8 W 22350 Johnson Road  
Waukesha, Wisconsin 53186

Attn: Mr. Kevin Bugel



Authorized for release by:  
11/2/2020 11:17:42 AM

Sandie Fredrick, Project Manager II  
(920)261-1660  
[sandra.fredrick@eurofinset.com](mailto:sandra.fredrick@eurofinset.com)

### LINKS

Review your project  
results through  
**TotalAccess**

Have a Question?



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[www.eurofinsus.com/Env](http://www.eurofinsus.com/Env)

*The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.*

*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*



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# Case Narrative

Client: Giles Engineering Associates  
Project/Site: Best Way Cleaners - 1E-2006002

Job ID: 500-189985-1

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## Job ID: 500-189985-1

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Laboratory: Eurofins TestAmerica, Chicago

### Narrative

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Job Narrative  
500-189985-1

### Comments

No additional comments.

### Receipt

The samples were received on 10/23/2020 10:00 AM; the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 1.2° C.

### GC/MS VOA

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

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# Detection Summary

Client: Giles Engineering Associates  
Project/Site: Best Way Cleaners - 1E-2006002

Job ID: 500-189985-1

## Client Sample ID: GMW-1

Lab Sample ID: 500-189985-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	3.2		1.0	0.41	ug/L	1		8260B	Total/NA

## Client Sample ID: GPZ-1

Lab Sample ID: 500-189985-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	0.65	J	1.0	0.41	ug/L	1		8260B	Total/NA

## Client Sample ID: GMW-2

Lab Sample ID: 500-189985-3

No Detections.

## Client Sample ID: GPZ-2

Lab Sample ID: 500-189985-4

No Detections.

## Client Sample ID: GMW-3

Lab Sample ID: 500-189985-5

No Detections.

## Client Sample ID: TRIP BLANK

Lab Sample ID: 500-189985-6

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

# Method Summary

Client: Giles Engineering Associates  
Project/Site: Best Way Cleaners - 1E-2006002

Job ID: 500-189985-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CHI
5030B	Purge and Trap	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 = Eurofins TestAmerica, Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

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# Sample Summary

Client: Giles Engineering Associates  
Project/Site: Best Way Cleaners - 1E-2006002

Job ID: 500-189985-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
500-189985-1	GMW-1	Water	10/22/20 12:10	10/23/20 10:00	
500-189985-2	GPZ-1	Water	10/22/20 12:45	10/23/20 10:00	
500-189985-3	GMW-2	Water	10/22/20 10:55	10/23/20 10:00	
500-189985-4	GPZ-2	Water	10/22/20 11:15	10/23/20 10:00	
500-189985-5	GMW-3	Water	10/22/20 11:40	10/23/20 10:00	
500-189985-6	TRIP BLANK	Water	10/22/20 00:00	10/23/20 10:00	

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# Client Sample Results

Client: Giles Engineering Associates  
 Project/Site: Best Way Cleaners - 1E-2006002

Job ID: 500-189985-1

**Client Sample ID: GMW-1**

**Lab Sample ID: 500-189985-1**

**Date Collected: 10/22/20 12:10**

**Matrix: Water**

**Date Received: 10/23/20 10:00**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			10/31/20 12:18	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			10/31/20 12:18	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			10/31/20 12:18	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			10/31/20 12:18	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			10/31/20 12:18	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			10/31/20 12:18	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			10/31/20 12:18	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			10/31/20 12:18	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			10/31/20 12:18	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			10/31/20 12:18	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			10/31/20 12:18	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			10/31/20 12:18	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			10/31/20 12:18	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			10/31/20 12:18	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			10/31/20 12:18	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			10/31/20 12:18	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			10/31/20 12:18	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			10/31/20 12:18	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			10/31/20 12:18	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			10/31/20 12:18	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			10/31/20 12:18	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			10/31/20 12:18	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			10/31/20 12:18	1
Benzene	<0.15		0.50	0.15	ug/L			10/31/20 12:18	1
Bromobenzene	<0.36		1.0	0.36	ug/L			10/31/20 12:18	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			10/31/20 12:18	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			10/31/20 12:18	1
Bromoform	<0.48		1.0	0.48	ug/L			10/31/20 12:18	1
Bromomethane	<0.80		3.0	0.80	ug/L			10/31/20 12:18	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			10/31/20 12:18	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			10/31/20 12:18	1
Chloroethane	<0.51		1.0	0.51	ug/L			10/31/20 12:18	1
Chloroform	<0.37		2.0	0.37	ug/L			10/31/20 12:18	1
Chloromethane	<0.32		1.0	0.32	ug/L			10/31/20 12:18	1
<b>cis-1,2-Dichloroethene</b>	<b>3.2</b>		1.0	0.41	ug/L			10/31/20 12:18	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			10/31/20 12:18	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			10/31/20 12:18	1
Dibromomethane	<0.27		1.0	0.27	ug/L			10/31/20 12:18	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			10/31/20 12:18	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			10/31/20 12:18	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			10/31/20 12:18	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			10/31/20 12:18	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			10/31/20 12:18	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			10/31/20 12:18	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			10/31/20 12:18	1
Naphthalene	<0.34		1.0	0.34	ug/L			10/31/20 12:18	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			10/31/20 12:18	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			10/31/20 12:18	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			10/31/20 12:18	1

# Client Sample Results

Client: Giles Engineering Associates  
 Project/Site: Best Way Cleaners - 1E-2006002

Job ID: 500-189985-1

**Client Sample ID: GMW-1**  
**Date Collected: 10/22/20 12:10**  
**Date Received: 10/23/20 10:00**

**Lab Sample ID: 500-189985-1**  
**Matrix: Water**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			10/31/20 12:18	1
Styrene	<0.39		1.0	0.39	ug/L			10/31/20 12:18	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			10/31/20 12:18	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			10/31/20 12:18	1
Toluene	<0.15		0.50	0.15	ug/L			10/31/20 12:18	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			10/31/20 12:18	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			10/31/20 12:18	1
Trichloroethene	<0.16		0.50	0.16	ug/L			10/31/20 12:18	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			10/31/20 12:18	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			10/31/20 12:18	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			10/31/20 12:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	117		75 - 126		10/31/20 12:18	1
4-Bromofluorobenzene (Surr)	106		72 - 124		10/31/20 12:18	1
Dibromofluoromethane (Surr)	103		75 - 120		10/31/20 12:18	1
Toluene-d8 (Surr)	98		75 - 120		10/31/20 12:18	1

# Client Sample Results

Client: Giles Engineering Associates  
 Project/Site: Best Way Cleaners - 1E-2006002

Job ID: 500-189985-1

**Client Sample ID: GPZ-1**

**Lab Sample ID: 500-189985-2**

**Date Collected: 10/22/20 12:45**

**Matrix: Water**

**Date Received: 10/23/20 10:00**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			10/31/20 12:45	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			10/31/20 12:45	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			10/31/20 12:45	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			10/31/20 12:45	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			10/31/20 12:45	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			10/31/20 12:45	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			10/31/20 12:45	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			10/31/20 12:45	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			10/31/20 12:45	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			10/31/20 12:45	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			10/31/20 12:45	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			10/31/20 12:45	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			10/31/20 12:45	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			10/31/20 12:45	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			10/31/20 12:45	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			10/31/20 12:45	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			10/31/20 12:45	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			10/31/20 12:45	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			10/31/20 12:45	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			10/31/20 12:45	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			10/31/20 12:45	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			10/31/20 12:45	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			10/31/20 12:45	1
Benzene	<0.15		0.50	0.15	ug/L			10/31/20 12:45	1
Bromobenzene	<0.36		1.0	0.36	ug/L			10/31/20 12:45	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			10/31/20 12:45	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			10/31/20 12:45	1
Bromoform	<0.48		1.0	0.48	ug/L			10/31/20 12:45	1
Bromomethane	<0.80		3.0	0.80	ug/L			10/31/20 12:45	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			10/31/20 12:45	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			10/31/20 12:45	1
Chloroethane	<0.51		1.0	0.51	ug/L			10/31/20 12:45	1
Chloroform	<0.37		2.0	0.37	ug/L			10/31/20 12:45	1
Chloromethane	<0.32		1.0	0.32	ug/L			10/31/20 12:45	1
<b>cis-1,2-Dichloroethene</b>	<b>0.65 J</b>		1.0	0.41	ug/L			10/31/20 12:45	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			10/31/20 12:45	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			10/31/20 12:45	1
Dibromomethane	<0.27		1.0	0.27	ug/L			10/31/20 12:45	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			10/31/20 12:45	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			10/31/20 12:45	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			10/31/20 12:45	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			10/31/20 12:45	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			10/31/20 12:45	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			10/31/20 12:45	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			10/31/20 12:45	1
Naphthalene	<0.34		1.0	0.34	ug/L			10/31/20 12:45	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			10/31/20 12:45	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			10/31/20 12:45	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			10/31/20 12:45	1



# Client Sample Results

Client: Giles Engineering Associates  
 Project/Site: Best Way Cleaners - 1E-2006002

Job ID: 500-189985-1

**Client Sample ID: GPZ-1**

**Lab Sample ID: 500-189985-2**

**Date Collected: 10/22/20 12:45**

**Matrix: Water**

**Date Received: 10/23/20 10:00**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			10/31/20 12:45	1
Styrene	<0.39		1.0	0.39	ug/L			10/31/20 12:45	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			10/31/20 12:45	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			10/31/20 12:45	1
Toluene	<0.15		0.50	0.15	ug/L			10/31/20 12:45	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			10/31/20 12:45	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			10/31/20 12:45	1
Trichloroethene	<0.16		0.50	0.16	ug/L			10/31/20 12:45	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			10/31/20 12:45	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			10/31/20 12:45	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			10/31/20 12:45	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	119		75 - 126		10/31/20 12:45	1
4-Bromofluorobenzene (Surr)	110		72 - 124		10/31/20 12:45	1
Dibromofluoromethane (Surr)	102		75 - 120		10/31/20 12:45	1
Toluene-d8 (Surr)	97		75 - 120		10/31/20 12:45	1

# Client Sample Results

Client: Giles Engineering Associates  
 Project/Site: Best Way Cleaners - 1E-2006002

Job ID: 500-189985-1

**Client Sample ID: GMW-2**

**Lab Sample ID: 500-189985-3**

**Date Collected: 10/22/20 10:55**

**Matrix: Water**

**Date Received: 10/23/20 10:00**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			10/31/20 13:11	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			10/31/20 13:11	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			10/31/20 13:11	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			10/31/20 13:11	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			10/31/20 13:11	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			10/31/20 13:11	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			10/31/20 13:11	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			10/31/20 13:11	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			10/31/20 13:11	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			10/31/20 13:11	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			10/31/20 13:11	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			10/31/20 13:11	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			10/31/20 13:11	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			10/31/20 13:11	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			10/31/20 13:11	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			10/31/20 13:11	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			10/31/20 13:11	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			10/31/20 13:11	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			10/31/20 13:11	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			10/31/20 13:11	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			10/31/20 13:11	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			10/31/20 13:11	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			10/31/20 13:11	1
Benzene	<0.15		0.50	0.15	ug/L			10/31/20 13:11	1
Bromobenzene	<0.36		1.0	0.36	ug/L			10/31/20 13:11	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			10/31/20 13:11	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			10/31/20 13:11	1
Bromoform	<0.48		1.0	0.48	ug/L			10/31/20 13:11	1
Bromomethane	<0.80		3.0	0.80	ug/L			10/31/20 13:11	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			10/31/20 13:11	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			10/31/20 13:11	1
Chloroethane	<0.51		1.0	0.51	ug/L			10/31/20 13:11	1
Chloroform	<0.37		2.0	0.37	ug/L			10/31/20 13:11	1
Chloromethane	<0.32		1.0	0.32	ug/L			10/31/20 13:11	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			10/31/20 13:11	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			10/31/20 13:11	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			10/31/20 13:11	1
Dibromomethane	<0.27		1.0	0.27	ug/L			10/31/20 13:11	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			10/31/20 13:11	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			10/31/20 13:11	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			10/31/20 13:11	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			10/31/20 13:11	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			10/31/20 13:11	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			10/31/20 13:11	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			10/31/20 13:11	1
Naphthalene	<0.34		1.0	0.34	ug/L			10/31/20 13:11	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			10/31/20 13:11	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			10/31/20 13:11	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			10/31/20 13:11	1

# Client Sample Results

Client: Giles Engineering Associates  
 Project/Site: Best Way Cleaners - 1E-2006002

Job ID: 500-189985-1

**Client Sample ID: GMW-2**  
**Date Collected: 10/22/20 10:55**  
**Date Received: 10/23/20 10:00**

**Lab Sample ID: 500-189985-3**  
**Matrix: Water**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			10/31/20 13:11	1
Styrene	<0.39		1.0	0.39	ug/L			10/31/20 13:11	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			10/31/20 13:11	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			10/31/20 13:11	1
Toluene	<0.15		0.50	0.15	ug/L			10/31/20 13:11	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			10/31/20 13:11	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			10/31/20 13:11	1
Trichloroethene	<0.16		0.50	0.16	ug/L			10/31/20 13:11	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			10/31/20 13:11	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			10/31/20 13:11	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			10/31/20 13:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	117		75 - 126		10/31/20 13:11	1
4-Bromofluorobenzene (Surr)	107		72 - 124		10/31/20 13:11	1
Dibromofluoromethane (Surr)	101		75 - 120		10/31/20 13:11	1
Toluene-d8 (Surr)	100		75 - 120		10/31/20 13:11	1

# Client Sample Results

Client: Giles Engineering Associates  
 Project/Site: Best Way Cleaners - 1E-2006002

Job ID: 500-189985-1

**Client Sample ID: GPZ-2**

**Lab Sample ID: 500-189985-4**

**Date Collected: 10/22/20 11:15**

**Matrix: Water**

**Date Received: 10/23/20 10:00**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			10/31/20 13:38	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			10/31/20 13:38	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			10/31/20 13:38	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			10/31/20 13:38	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			10/31/20 13:38	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			10/31/20 13:38	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			10/31/20 13:38	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			10/31/20 13:38	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			10/31/20 13:38	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			10/31/20 13:38	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			10/31/20 13:38	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			10/31/20 13:38	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			10/31/20 13:38	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			10/31/20 13:38	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			10/31/20 13:38	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			10/31/20 13:38	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			10/31/20 13:38	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			10/31/20 13:38	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			10/31/20 13:38	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			10/31/20 13:38	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			10/31/20 13:38	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			10/31/20 13:38	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			10/31/20 13:38	1
Benzene	<0.15		0.50	0.15	ug/L			10/31/20 13:38	1
Bromobenzene	<0.36		1.0	0.36	ug/L			10/31/20 13:38	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			10/31/20 13:38	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			10/31/20 13:38	1
Bromoform	<0.48		1.0	0.48	ug/L			10/31/20 13:38	1
Bromomethane	<0.80		3.0	0.80	ug/L			10/31/20 13:38	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			10/31/20 13:38	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			10/31/20 13:38	1
Chloroethane	<0.51		1.0	0.51	ug/L			10/31/20 13:38	1
Chloroform	<0.37		2.0	0.37	ug/L			10/31/20 13:38	1
Chloromethane	<0.32		1.0	0.32	ug/L			10/31/20 13:38	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			10/31/20 13:38	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			10/31/20 13:38	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			10/31/20 13:38	1
Dibromomethane	<0.27		1.0	0.27	ug/L			10/31/20 13:38	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			10/31/20 13:38	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			10/31/20 13:38	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			10/31/20 13:38	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			10/31/20 13:38	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			10/31/20 13:38	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			10/31/20 13:38	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			10/31/20 13:38	1
Naphthalene	<0.34		1.0	0.34	ug/L			10/31/20 13:38	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			10/31/20 13:38	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			10/31/20 13:38	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			10/31/20 13:38	1

# Client Sample Results

Client: Giles Engineering Associates  
 Project/Site: Best Way Cleaners - 1E-2006002

Job ID: 500-189985-1

**Client Sample ID: GPZ-2**  
**Date Collected: 10/22/20 11:15**  
**Date Received: 10/23/20 10:00**

**Lab Sample ID: 500-189985-4**  
**Matrix: Water**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			10/31/20 13:38	1
Styrene	<0.39		1.0	0.39	ug/L			10/31/20 13:38	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			10/31/20 13:38	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			10/31/20 13:38	1
Toluene	<0.15		0.50	0.15	ug/L			10/31/20 13:38	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			10/31/20 13:38	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			10/31/20 13:38	1
Trichloroethene	<0.16		0.50	0.16	ug/L			10/31/20 13:38	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			10/31/20 13:38	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			10/31/20 13:38	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			10/31/20 13:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	120		75 - 126		10/31/20 13:38	1
4-Bromofluorobenzene (Surr)	108		72 - 124		10/31/20 13:38	1
Dibromofluoromethane (Surr)	103		75 - 120		10/31/20 13:38	1
Toluene-d8 (Surr)	96		75 - 120		10/31/20 13:38	1

# Client Sample Results

Client: Giles Engineering Associates  
 Project/Site: Best Way Cleaners - 1E-2006002

Job ID: 500-189985-1

**Client Sample ID: GMW-3**

**Lab Sample ID: 500-189985-5**

**Date Collected: 10/22/20 11:40**

**Matrix: Water**

**Date Received: 10/23/20 10:00**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			10/31/20 14:05	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			10/31/20 14:05	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			10/31/20 14:05	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			10/31/20 14:05	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			10/31/20 14:05	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			10/31/20 14:05	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			10/31/20 14:05	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			10/31/20 14:05	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			10/31/20 14:05	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			10/31/20 14:05	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			10/31/20 14:05	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			10/31/20 14:05	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			10/31/20 14:05	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			10/31/20 14:05	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			10/31/20 14:05	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			10/31/20 14:05	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			10/31/20 14:05	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			10/31/20 14:05	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			10/31/20 14:05	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			10/31/20 14:05	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			10/31/20 14:05	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			10/31/20 14:05	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			10/31/20 14:05	1
Benzene	<0.15		0.50	0.15	ug/L			10/31/20 14:05	1
Bromobenzene	<0.36		1.0	0.36	ug/L			10/31/20 14:05	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			10/31/20 14:05	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			10/31/20 14:05	1
Bromoform	<0.48		1.0	0.48	ug/L			10/31/20 14:05	1
Bromomethane	<0.80		3.0	0.80	ug/L			10/31/20 14:05	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			10/31/20 14:05	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			10/31/20 14:05	1
Chloroethane	<0.51		1.0	0.51	ug/L			10/31/20 14:05	1
Chloroform	<0.37		2.0	0.37	ug/L			10/31/20 14:05	1
Chloromethane	<0.32		1.0	0.32	ug/L			10/31/20 14:05	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			10/31/20 14:05	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			10/31/20 14:05	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			10/31/20 14:05	1
Dibromomethane	<0.27		1.0	0.27	ug/L			10/31/20 14:05	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			10/31/20 14:05	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			10/31/20 14:05	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			10/31/20 14:05	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			10/31/20 14:05	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			10/31/20 14:05	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			10/31/20 14:05	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			10/31/20 14:05	1
Naphthalene	<0.34		1.0	0.34	ug/L			10/31/20 14:05	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			10/31/20 14:05	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			10/31/20 14:05	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			10/31/20 14:05	1

# Client Sample Results

Client: Giles Engineering Associates  
 Project/Site: Best Way Cleaners - 1E-2006002

Job ID: 500-189985-1

**Client Sample ID: GMW-3**  
**Date Collected: 10/22/20 11:40**  
**Date Received: 10/23/20 10:00**

**Lab Sample ID: 500-189985-5**  
**Matrix: Water**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			10/31/20 14:05	1
Styrene	<0.39		1.0	0.39	ug/L			10/31/20 14:05	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			10/31/20 14:05	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			10/31/20 14:05	1
Toluene	<0.15		0.50	0.15	ug/L			10/31/20 14:05	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			10/31/20 14:05	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			10/31/20 14:05	1
Trichloroethene	<0.16		0.50	0.16	ug/L			10/31/20 14:05	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			10/31/20 14:05	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			10/31/20 14:05	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			10/31/20 14:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	119		75 - 126		10/31/20 14:05	1
4-Bromofluorobenzene (Surr)	109		72 - 124		10/31/20 14:05	1
Dibromofluoromethane (Surr)	103		75 - 120		10/31/20 14:05	1
Toluene-d8 (Surr)	97		75 - 120		10/31/20 14:05	1

# Client Sample Results

Client: Giles Engineering Associates  
 Project/Site: Best Way Cleaners - 1E-2006002

Job ID: 500-189985-1

**Client Sample ID: TRIP BLANK**

**Lab Sample ID: 500-189985-6**

Date Collected: 10/22/20 00:00

Matrix: Water

Date Received: 10/23/20 10:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			10/31/20 11:24	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			10/31/20 11:24	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			10/31/20 11:24	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			10/31/20 11:24	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			10/31/20 11:24	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			10/31/20 11:24	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			10/31/20 11:24	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			10/31/20 11:24	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			10/31/20 11:24	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			10/31/20 11:24	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			10/31/20 11:24	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			10/31/20 11:24	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			10/31/20 11:24	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			10/31/20 11:24	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			10/31/20 11:24	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			10/31/20 11:24	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			10/31/20 11:24	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			10/31/20 11:24	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			10/31/20 11:24	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			10/31/20 11:24	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			10/31/20 11:24	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			10/31/20 11:24	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			10/31/20 11:24	1
Benzene	<0.15		0.50	0.15	ug/L			10/31/20 11:24	1
Bromobenzene	<0.36		1.0	0.36	ug/L			10/31/20 11:24	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			10/31/20 11:24	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			10/31/20 11:24	1
Bromoform	<0.48		1.0	0.48	ug/L			10/31/20 11:24	1
Bromomethane	<0.80		3.0	0.80	ug/L			10/31/20 11:24	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			10/31/20 11:24	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			10/31/20 11:24	1
Chloroethane	<0.51		1.0	0.51	ug/L			10/31/20 11:24	1
Chloroform	<0.37		2.0	0.37	ug/L			10/31/20 11:24	1
Chloromethane	<0.32		1.0	0.32	ug/L			10/31/20 11:24	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			10/31/20 11:24	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			10/31/20 11:24	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			10/31/20 11:24	1
Dibromomethane	<0.27		1.0	0.27	ug/L			10/31/20 11:24	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			10/31/20 11:24	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			10/31/20 11:24	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			10/31/20 11:24	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			10/31/20 11:24	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			10/31/20 11:24	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			10/31/20 11:24	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			10/31/20 11:24	1
Naphthalene	<0.34		1.0	0.34	ug/L			10/31/20 11:24	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			10/31/20 11:24	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			10/31/20 11:24	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			10/31/20 11:24	1



# Client Sample Results

Client: Giles Engineering Associates  
 Project/Site: Best Way Cleaners - 1E-2006002

Job ID: 500-189985-1

**Client Sample ID: TRIP BLANK**

**Lab Sample ID: 500-189985-6**

**Date Collected: 10/22/20 00:00**

**Matrix: Water**

**Date Received: 10/23/20 10:00**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			10/31/20 11:24	1
Styrene	<0.39		1.0	0.39	ug/L			10/31/20 11:24	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			10/31/20 11:24	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			10/31/20 11:24	1
Toluene	<0.15		0.50	0.15	ug/L			10/31/20 11:24	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			10/31/20 11:24	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			10/31/20 11:24	1
Trichloroethene	<0.16		0.50	0.16	ug/L			10/31/20 11:24	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			10/31/20 11:24	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			10/31/20 11:24	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			10/31/20 11:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	118		75 - 126		10/31/20 11:24	1
4-Bromofluorobenzene (Surr)	107		72 - 124		10/31/20 11:24	1
Dibromofluoromethane (Surr)	100		75 - 120		10/31/20 11:24	1
Toluene-d8 (Surr)	100		75 - 120		10/31/20 11:24	1

# Definitions/Glossary

Client: Giles Engineering Associates  
Project/Site: Best Way Cleaners - 1E-2006002

Job ID: 500-189985-1

## Qualifiers

### GC/MS VOA

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

## Glossary

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

# QC Association Summary

Client: Giles Engineering Associates  
Project/Site: Best Way Cleaners - 1E-2006002

Job ID: 500-189985-1

## GC/MS VOA

### Analysis Batch: 569588

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-189985-1	GMW-1	Total/NA	Water	8260B	
500-189985-2	GPZ-1	Total/NA	Water	8260B	
500-189985-3	GMW-2	Total/NA	Water	8260B	
500-189985-4	GPZ-2	Total/NA	Water	8260B	
500-189985-5	GMW-3	Total/NA	Water	8260B	
500-189985-6	TRIP BLANK	Total/NA	Water	8260B	
MB 500-569588/6	Method Blank	Total/NA	Water	8260B	
LCS 500-569588/4	Lab Control Sample	Total/NA	Water	8260B	

# Surrogate Summary

Client: Giles Engineering Associates  
Project/Site: Best Way Cleaners - 1E-2006002

Job ID: 500-189985-1

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

**Matrix: Water**

**Prep Type: Total/NA**

## Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	DCA	BFB	DBFM	TOL
		(75-126)	(72-124)	(75-120)	(75-120)
500-189985-1	GMW-1	117	106	103	98
500-189985-2	GPZ-1	119	110	102	97
500-189985-3	GMW-2	117	107	101	100
500-189985-4	GPZ-2	120	108	103	96
500-189985-5	GMW-3	119	109	103	97
500-189985-6	TRIP BLANK	118	107	100	100
LCS 500-569588/4	Lab Control Sample	114	107	99	101
MB 500-569588/6	Method Blank	116	112	101	99

### Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

DBFM = Dibromofluoromethane (Surr)

TOL = Toluene-d8 (Surr)

# QC Sample Results

Client: Giles Engineering Associates  
 Project/Site: Best Way Cleaners - 1E-2006002

Job ID: 500-189985-1

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

**Lab Sample ID: MB 500-569588/6**  
**Matrix: Water**  
**Analysis Batch: 569588**

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

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			10/31/20 10:58	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			10/31/20 10:58	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			10/31/20 10:58	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			10/31/20 10:58	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			10/31/20 10:58	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			10/31/20 10:58	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			10/31/20 10:58	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			10/31/20 10:58	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			10/31/20 10:58	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			10/31/20 10:58	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			10/31/20 10:58	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			10/31/20 10:58	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			10/31/20 10:58	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			10/31/20 10:58	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			10/31/20 10:58	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			10/31/20 10:58	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			10/31/20 10:58	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			10/31/20 10:58	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			10/31/20 10:58	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			10/31/20 10:58	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			10/31/20 10:58	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			10/31/20 10:58	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			10/31/20 10:58	1
Benzene	<0.15		0.50	0.15	ug/L			10/31/20 10:58	1
Bromobenzene	<0.36		1.0	0.36	ug/L			10/31/20 10:58	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			10/31/20 10:58	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			10/31/20 10:58	1
Bromoform	<0.48		1.0	0.48	ug/L			10/31/20 10:58	1
Bromomethane	<0.80		3.0	0.80	ug/L			10/31/20 10:58	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			10/31/20 10:58	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			10/31/20 10:58	1
Chloroethane	<0.51		1.0	0.51	ug/L			10/31/20 10:58	1
Chloroform	<0.37		2.0	0.37	ug/L			10/31/20 10:58	1
Chloromethane	<0.32		1.0	0.32	ug/L			10/31/20 10:58	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			10/31/20 10:58	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			10/31/20 10:58	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			10/31/20 10:58	1
Dibromomethane	<0.27		1.0	0.27	ug/L			10/31/20 10:58	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			10/31/20 10:58	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			10/31/20 10:58	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			10/31/20 10:58	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			10/31/20 10:58	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			10/31/20 10:58	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			10/31/20 10:58	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			10/31/20 10:58	1
Naphthalene	<0.34		1.0	0.34	ug/L			10/31/20 10:58	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			10/31/20 10:58	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			10/31/20 10:58	1

# QC Sample Results

Client: Giles Engineering Associates  
 Project/Site: Best Way Cleaners - 1E-2006002

Job ID: 500-189985-1

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

**Lab Sample ID: MB 500-569588/6**  
**Matrix: Water**  
**Analysis Batch: 569588**

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

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			10/31/20 10:58	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			10/31/20 10:58	1
Styrene	<0.39		1.0	0.39	ug/L			10/31/20 10:58	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			10/31/20 10:58	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			10/31/20 10:58	1
Toluene	<0.15		0.50	0.15	ug/L			10/31/20 10:58	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			10/31/20 10:58	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			10/31/20 10:58	1
Trichloroethene	<0.16		0.50	0.16	ug/L			10/31/20 10:58	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			10/31/20 10:58	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			10/31/20 10:58	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			10/31/20 10:58	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1,2-Dichloroethane-d4 (Surr)	117		56 - 127		10/31/20 10:68	1
4-Bromofluorobenzene (Surr)	112		52 - 124		10/31/20 10:68	1
Dibromofluoromethane (Surr)	101		56 - 120		10/31/20 10:68	1
9oluene-d8 (Surr)	TT		56 - 120		10/31/20 10:68	1

**Lab Sample ID: LCS 500-569588/4**  
**Matrix: Water**  
**Analysis Batch: 569588**

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	50.0	43.7		ug/L		87	70 - 125
1,1,1,2-Tetrachloroethane	50.0	45.4		ug/L		91	62 - 140
1,1,2-Trichloroethane	50.0	47.5		ug/L		95	71 - 130
1,1-Dichloroethane	50.0	45.5		ug/L		91	70 - 125
1,1-Dichloroethene	50.0	39.0		ug/L		78	67 - 122
1,1-Dichloropropene	50.0	46.1		ug/L		92	70 - 121
1,2,3-Trichlorobenzene	50.0	40.2		ug/L		80	51 - 145
1,2,3-Trichloropropane	50.0	53.7		ug/L		107	50 - 133
1,2,4-Trichlorobenzene	50.0	40.2		ug/L		80	57 - 137
1,2,4-Trimethylbenzene	50.0	44.5		ug/L		89	70 - 123
1,2-Dibromo-3-Chloropropane	50.0	47.1		ug/L		94	56 - 123
1,2-Dibromoethane	50.0	47.5		ug/L		95	70 - 125
1,2-Dichlorobenzene	50.0	42.0		ug/L		84	70 - 125
1,2-Dichloroethane	50.0	52.8		ug/L		106	68 - 127
1,2-Dichloropropane	50.0	51.2		ug/L		102	67 - 130
1,3,5-Trimethylbenzene	50.0	44.3		ug/L		89	70 - 123
1,3-Dichlorobenzene	50.0	46.0		ug/L		92	70 - 125
1,3-Dichloropropane	50.0	47.6		ug/L		95	62 - 136
1,4-Dichlorobenzene	50.0	45.6		ug/L		91	70 - 120
2,2-Dichloropropane	50.0	44.9		ug/L		90	58 - 139
2-Chlorotoluene	50.0	44.8		ug/L		90	70 - 125
4-Chlorotoluene	50.0	46.5		ug/L		93	68 - 124
Benzene	50.0	43.8		ug/L		88	70 - 120

Eurofins TestAmerica, Chicago

# QC Sample Results

Client: Giles Engineering Associates  
 Project/Site: Best Way Cleaners - 1E-2006002

Job ID: 500-189985-1

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

Lab Sample ID: LCS 500-569588/4  
 Matrix: Water  
 Analysis Batch: 569588

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Bromobenzene	50.0	45.7		ug/L		91	70 - 122
Bromochloromethane	50.0	44.8		ug/L		90	65 - 122
Bromodichloromethane	50.0	45.8		ug/L		92	69 - 120
Bromoform	50.0	47.7		ug/L		95	56 - 132
Bromomethane	50.0	32.9		ug/L		66	40 - 152
Carbon tetrachloride	50.0	43.0		ug/L		86	59 - 133
Chlorobenzene	50.0	47.2		ug/L		94	70 - 120
Chloroethane	50.0	52.2		ug/L		104	48 - 136
Chloroform	50.0	42.6		ug/L		85	70 - 120
Chloromethane	50.0	52.4		ug/L		105	56 - 152
cis-1,2-Dichloroethene	50.0	42.3		ug/L		85	70 - 125
cis-1,3-Dichloropropene	50.0	45.7		ug/L		91	64 - 127
Dibromochloromethane	50.0	44.8		ug/L		90	68 - 125
Dibromomethane	50.0	46.8		ug/L		94	70 - 120
Dichlorodifluoromethane	50.0	52.6		ug/L		105	40 - 159
Ethylbenzene	50.0	45.9		ug/L		92	70 - 123
Hexachlorobutadiene	50.0	39.9		ug/L		80	51 - 150
Isopropylbenzene	50.0	44.9		ug/L		90	70 - 126
Methyl tert-butyl ether	50.0	39.9		ug/L		80	55 - 123
Methylene Chloride	50.0	41.3		ug/L		83	69 - 125
Naphthalene	50.0	42.2		ug/L		84	53 - 144
n-Butylbenzene	50.0	44.3		ug/L		89	68 - 125
N-Propylbenzene	50.0	46.7		ug/L		93	69 - 127
p-Isopropyltoluene	50.0	45.9		ug/L		92	70 - 125
sec-Butylbenzene	50.0	44.8		ug/L		90	70 - 123
Styrene	50.0	49.0		ug/L		98	70 - 120
tert-Butylbenzene	50.0	45.7		ug/L		91	70 - 121
Tetrachloroethene	50.0	45.2		ug/L		90	70 - 128
Toluene	50.0	45.4		ug/L		91	70 - 125
trans-1,2-Dichloroethene	50.0	40.9		ug/L		82	70 - 125
trans-1,3-Dichloropropene	50.0	47.9		ug/L		96	62 - 128
Trichloroethene	50.0	49.6		ug/L		99	70 - 125
Trichlorofluoromethane	50.0	40.6		ug/L		81	55 - 128
Vinyl chloride	50.0	49.2		ug/L		98	64 - 126
Xylenes, Total	100	87.0		ug/L		87	70 - 125

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	114		56 - 127
4-Bromofluorobenzene (Surr)	105		52 - 124
Dibromofluoromethane (Surr)	TT		56 - 120
9oluene-d8 (Surr)	101		56 - 120

# Lab Chronicle

Client: Giles Engineering Associates  
Project/Site: Best Way Cleaners - 1E-2006002

Job ID: 500-189985-1

## Client Sample ID: GMW-1

Date Collected: 10/22/20 12:10

Date Received: 10/23/20 10:00

Lab Sample ID: 500-189985-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	569588	10/31/20 12:18	STW	TAL CHI

## Client Sample ID: GPZ-1

Date Collected: 10/22/20 12:45

Date Received: 10/23/20 10:00

Lab Sample ID: 500-189985-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	569588	10/31/20 12:45	STW	TAL CHI

## Client Sample ID: GMW-2

Date Collected: 10/22/20 10:55

Date Received: 10/23/20 10:00

Lab Sample ID: 500-189985-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	569588	10/31/20 13:11	STW	TAL CHI

## Client Sample ID: GPZ-2

Date Collected: 10/22/20 11:15

Date Received: 10/23/20 10:00

Lab Sample ID: 500-189985-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	569588	10/31/20 13:38	STW	TAL CHI

## Client Sample ID: GMW-3

Date Collected: 10/22/20 11:40

Date Received: 10/23/20 10:00

Lab Sample ID: 500-189985-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	569588	10/31/20 14:05	STW	TAL CHI

## Client Sample ID: TRIP BLANK

Date Collected: 10/22/20 00:00

Date Received: 10/23/20 10:00

Lab Sample ID: 500-189985-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	569588	10/31/20 11:24	STW	TAL CHI

### Laboratory References:

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



# Accreditation/Certification Summary

Client: Giles Engineering Associates  
Project/Site: Best Way Cleaners - 1E-2006002

Job ID: 500-189985-1

## Laboratory: Eurofins TestAmerica, Chicago

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

Authority	Program	Identification Number	Expiration Date
Wisconsin	State	999580010	08-31-21

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



# Login Sample Receipt Checklist

Client: Giles Engineering Associates

Job Number: 500-189985-1

**Login Number: 189985**

**List Source: Eurofins TestAmerica, Chicago**

**List Number: 1**

**Creator: Hernandez, Stephanie**

Question	Answer	Comment
Radioactivity wasn't checked or is <math>\leq</math> 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	1.2
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 <math><6\text{mm}</math> (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



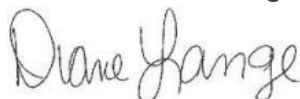
## ANALYTICAL REPORT

Eurofins TestAmerica, Knoxville  
5815 Middlebrook Pike  
Knoxville, TN 37921  
Tel: (865)291-3000

Laboratory Job ID: 140-19578-1  
Client Project/Site: FORMER BEST WAY  
CLEANERS/McFARLAND,WI/1E

For:  
Giles Engineering Associates  
N8 W 22350 Johnson Road  
Waukesha, Wisconsin 53186

Attn: Mr. Kevin Bugel



Authorized for release by:  
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*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*



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# Definitions/Glossary

Client: Giles Engineering Associates  
Project/Site: FORMER BEST WAY  
CLEANERS/McFARLAND, WI/1E

Job ID: 140-19578-1

## Qualifiers

### Air - GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
B	Compound was found in the blank and sample.
E	Result exceeded calibration range.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

## Glossary

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

# Case Narrative

Client: Giles Engineering Associates  
Project/Site: FORMER BEST WAY CLEANERS/McFARLAND,WI/

Job ID: 140-19578-1

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## Job ID: 140-19578-1

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Laboratory: Eurofins TestAmerica, Knoxville

### Narrative

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#### Job Narrative 140-19578-1

#### Comments

No additional comments.

#### Receipt

The samples were received on 7/3/2020 9:00 AM; the samples arrived in good condition, and where required, properly preserved and on ice.

#### Air - GC/MS VOA

Methods TO 15 LL, TO-14A, TO-15: EPA methods TO-14A and TO-15 specify the use of humidified "zero air" as the blank reagent for canister cleaning, instrument calibration and sample analysis. Ultra-high purity humidified nitrogen from a cryogenic reservoir is used in place of "zero air" by TestAmerica Knoxville.

Method TO-15: The continuing calibration verification (CCV) associated with batch 140-40799 exhibited % difference of > 30% for the following analyte(s) 1,2,4-Trichlorobenzene, Naphthalene and Undecane; however, the results were within the LCS acceptance limits. The EPA method requires that all target analytes in the continuing calibration verification standard be within 30% difference from the initial calibration. According to the laboratory standard operating procedure, the continuing calibration is acceptable if it meets the laboratory control sample acceptance criteria.

Method TO-15: The following analyte(s) recovered outside control limits for the LCS associated with analytical batch 140-40799: 1,2,4-Trichlorobenzene. This is not indicative of a systematic control problem because this was random marginal exceedance. Qualified results have been reported.

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

# Detection Summary

Client: Giles Engineering Associates  
 Project/Site: FORMER BEST WAY  
 CLEANERS/McFARLAND,WI/1E

Job ID: 140-19578-1

## Client Sample ID: GSS-1

## Lab Sample ID: 140-19578-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	2400		180	53	ug/m3	27.79		TO-15	Total/NA
Methylene Chloride	340	J B	770	250	ug/m3	27.79		TO-15	Total/NA
Tetrachloroethene	12000		300	60	ug/m3	27.79		TO-15	Total/NA
Trichloroethene	1100		240	43	ug/m3	27.79		TO-15	Total/NA

## Client Sample ID: GSS-2

## Lab Sample ID: 140-19578-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dichlorobenzene	16		16	5.1	ug/m3	1		TO-15	Total/NA
Acetone	88	J	240	44	ug/m3	1		TO-15	Total/NA
Chlorodifluoromethane	6.6	J	9.4	1.7	ug/m3	1		TO-15	Total/NA
Cyclohexane	6.3	J	18	1.8	ug/m3	1		TO-15	Total/NA
Dichlorodifluoromethane	9700	E	13	4.5	ug/m3	1		TO-15	Total/NA
Methylene Chloride	21	J B	46	15	ug/m3	1		TO-15	Total/NA
Tetrachloroethene	1100		18	3.6	ug/m3	1		TO-15	Total/NA
Trichloroethene	21		14	2.6	ug/m3	1		TO-15	Total/NA
Trichlorofluoromethane	2.1	J	15	1.9	ug/m3	1		TO-15	Total/NA
Dichlorodifluoromethane - DL	6100		65	22	ug/m3	3.29		TO-15	Total/NA

## Client Sample ID: SS-2

## Lab Sample ID: 140-19578-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,2-Trichloro-1,2,2-trifluoroethane	0.63	J	3.1	0.48	ug/m3	1		TO-15	Total/NA
1,3-Dichlorobenzene	1.0	J	2.4	0.78	ug/m3	1		TO-15	Total/NA
1,4-Dichlorobenzene	26		2.4	0.77	ug/m3	1		TO-15	Total/NA
2-Butanone (MEK)	2.9	J	5.9	1.2	ug/m3	1		TO-15	Total/NA
Acetone	26	J	36	6.7	ug/m3	1		TO-15	Total/NA
Butane	44		4.8	0.35	ug/m3	1		TO-15	Total/NA
Chloroform	48		2.0	0.37	ug/m3	1		TO-15	Total/NA
Cyclohexane	0.66	J	2.8	0.28	ug/m3	1		TO-15	Total/NA
Dichlorodifluoromethane	3900	E	2.0	0.67	ug/m3	1		TO-15	Total/NA
Hexane	0.28	J	2.8	0.23	ug/m3	1		TO-15	Total/NA
Methylene Chloride	3.5	J B	6.9	2.2	ug/m3	1		TO-15	Total/NA
Styrene	0.78	J	1.7	0.49	ug/m3	1		TO-15	Total/NA
Tetrachloroethene	270		2.7	0.54	ug/m3	1		TO-15	Total/NA
Trichloroethene	1.5	J	2.1	0.39	ug/m3	1		TO-15	Total/NA
Trichlorofluoromethane	1.8	J	2.2	0.28	ug/m3	1		TO-15	Total/NA
Dichlorodifluoromethane - DL	5700		42	14	ug/m3	3.15		TO-15	Total/NA

## Client Sample ID: SS-3

## Lab Sample ID: 140-19578-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	0.21	J	1.1	0.16	ug/m3	1		TO-15	Total/NA
1,1,2-Trichloro-1,2,2-trifluoroethane	0.52	J	1.5	0.24	ug/m3	1		TO-15	Total/NA
1,3,5-Trimethylbenzene	0.46	J	0.98	0.32	ug/m3	1		TO-15	Total/NA
1,4-Dichlorobenzene	12		1.2	0.38	ug/m3	1		TO-15	Total/NA
2-Butanone (MEK)	2.0	J	2.9	0.59	ug/m3	1		TO-15	Total/NA
Acetone	200		18	3.3	ug/m3	1		TO-15	Total/NA
Benzene	0.37	J	0.64	0.18	ug/m3	1		TO-15	Total/NA
Bromomethane	0.23	J	0.78	0.12	ug/m3	1		TO-15	Total/NA
Butane	4.0		2.4	0.17	ug/m3	1		TO-15	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Knoxville



# Detection Summary

Client: Giles Engineering Associates  
Project/Site: FORMER BEST WAY  
CLEANERS/McFARLAND,WI/1E

Job ID: 140-19578-1

Client Sample ID: SS-3 (Continued)

Lab Sample ID: 140-19578-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon disulfide	0.29	J	1.2	0.097	ug/m3	1		TO-15	Total/NA
Carbon tetrachloride	0.47	J	1.3	0.24	ug/m3	1		TO-15	Total/NA
Chlorodifluoromethane	2.3		0.71	0.13	ug/m3	1		TO-15	Total/NA
Chloroform	0.50	J	0.98	0.19	ug/m3	1		TO-15	Total/NA
Chloromethane	1.5	J	2.1	0.33	ug/m3	1		TO-15	Total/NA
Cyclohexane	0.50	J	1.4	0.14	ug/m3	1		TO-15	Total/NA
Dichlorodifluoromethane	51		0.99	0.34	ug/m3	1		TO-15	Total/NA
Heptane	0.22	J	1.6	0.19	ug/m3	1		TO-15	Total/NA
Hexane	1.2	J	1.4	0.11	ug/m3	1		TO-15	Total/NA
Methylene Chloride	4.0	B	3.5	1.1	ug/m3	1		TO-15	Total/NA
Styrene	0.54	J	0.85	0.25	ug/m3	1		TO-15	Total/NA
Tetrachloroethene	4.0		1.4	0.27	ug/m3	1		TO-15	Total/NA
Toluene	1.9	J	3.8	0.45	ug/m3	1		TO-15	Total/NA
Trichlorofluoromethane	1.6		1.1	0.14	ug/m3	1		TO-15	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Knoxville

# Client Sample Results

Client: Giles Engineering Associates  
 Project/Site: FORMER BEST WAY  
 CLEANERS/McFARLAND,WI/1E

Job ID: 140-19578-1

**Client Sample ID: GSS-1**

**Lab Sample ID: 140-19578-1**

**Date Collected: 07/02/20 12:33**

**Matrix: Air**

**Date Received: 07/03/20 09:00**

**Sample Container: Summa Canister 6L**

**Method: TO-15 - Volatile Organic Compounds in Ambient Air**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		240	36	ug/m3			07/07/20 13:05	27.79
1,1,2,2-Tetrachloroethane	ND		310	93	ug/m3			07/07/20 13:05	27.79
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		340	53	ug/m3			07/07/20 13:05	27.79
1,1,2-Trichloroethane	ND		240	63	ug/m3			07/07/20 13:05	27.79
1,1-Dichloroethane	ND		180	23	ug/m3			07/07/20 13:05	27.79
1,1-Dichloroethene	ND		180	30	ug/m3			07/07/20 13:05	27.79
1,2,4-Trichlorobenzene	ND	*	1600	160	ug/m3			07/07/20 13:05	27.79
1,2,4-Trimethylbenzene	ND		220	69	ug/m3			07/07/20 13:05	27.79
1,2-Dibromoethane (EDB)	ND		340	75	ug/m3			07/07/20 13:05	27.79
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND		310	50	ug/m3			07/07/20 13:05	27.79
1,2-Dichlorobenzene	ND		530	94	ug/m3			07/07/20 13:05	27.79
1,2-Dichloroethane	ND		180	42	ug/m3			07/07/20 13:05	27.79
1,2-Dichloropropane	ND		210	53	ug/m3			07/07/20 13:05	27.79
1,3,5-Trimethylbenzene	ND		220	71	ug/m3			07/07/20 13:05	27.79
1,3-Butadiene	ND		200	31	ug/m3			07/07/20 13:05	27.79
1,3-Dichlorobenzene	ND		270	87	ug/m3			07/07/20 13:05	27.79
1,4-Dichlorobenzene	ND		270	86	ug/m3			07/07/20 13:05	27.79
2-Butanone (MEK)	ND		660	130	ug/m3			07/07/20 13:05	27.79
2-Hexanone	ND		360	53	ug/m3			07/07/20 13:05	27.79
3-Chloropropene	ND		140	33	ug/m3			07/07/20 13:05	27.79
4-Methyl-2-pentanone (MIBK)	ND		910	180	ug/m3			07/07/20 13:05	27.79
Acetone	ND		4000	740	ug/m3			07/07/20 13:05	27.79
Acrylonitrile	ND		970	97	ug/m3			07/07/20 13:05	27.79
Benzene	ND		140	40	ug/m3			07/07/20 13:05	27.79
Benzyl chloride	ND		460	90	ug/m3			07/07/20 13:05	27.79
Bromodichloromethane	ND		300	66	ug/m3			07/07/20 13:05	27.79
Bromoform	ND		460	110	ug/m3			07/07/20 13:05	27.79
Bromomethane	ND		170	28	ug/m3			07/07/20 13:05	27.79
Butane	ND		530	39	ug/m3			07/07/20 13:05	27.79
Carbon disulfide	ND		280	21	ug/m3			07/07/20 13:05	27.79
Carbon tetrachloride	ND		280	53	ug/m3			07/07/20 13:05	27.79
Chlorobenzene	ND		200	50	ug/m3			07/07/20 13:05	27.79
Chlorodifluoromethane	ND		160	29	ug/m3			07/07/20 13:05	27.79
Chloroethane	ND		120	21	ug/m3			07/07/20 13:05	27.79
Chloroform	ND		220	41	ug/m3			07/07/20 13:05	27.79
Chloromethane	ND		460	73	ug/m3			07/07/20 13:05	27.79
<b>cis-1,2-Dichloroethene</b>	<b>2400</b>		180	53	ug/m3			07/07/20 13:05	27.79
cis-1,3-Dichloropropene	ND		400	75	ug/m3			07/07/20 13:05	27.79
Cyclohexane	ND		310	31	ug/m3			07/07/20 13:05	27.79
Dibromochloromethane	ND		380	80	ug/m3			07/07/20 13:05	27.79
Dibromomethane	ND		630	63	ug/m3			07/07/20 13:05	27.79
Dichlorodifluoromethane	ND		220	75	ug/m3			07/07/20 13:05	27.79
Ethylbenzene	ND		190	66	ug/m3			07/07/20 13:05	27.79
Heptane	ND		360	43	ug/m3			07/07/20 13:05	27.79
Hexachlorobutadiene	ND		2400	180	ug/m3			07/07/20 13:05	27.79
Hexane	ND		310	25	ug/m3			07/07/20 13:05	27.79
Isopropylbenzene	ND		440	66	ug/m3			07/07/20 13:05	27.79

# Client Sample Results

Client: Giles Engineering Associates  
 Project/Site: FORMER BEST WAY  
 CLEANERS/McFARLAND,WI/1E

Job ID: 140-19578-1

**Client Sample ID: GSS-1**

**Lab Sample ID: 140-19578-1**

**Date Collected: 07/02/20 12:33**

**Matrix: Air**

**Date Received: 07/03/20 09:00**

**Sample Container: Summa Canister 6L**

**Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		800	140	ug/m3			07/07/20 13:05	27.79
<b>Methylene Chloride</b>	<b>340</b>	<b>J B</b>	770	250	ug/m3			07/07/20 13:05	27.79
m-Xylene & p-Xylene	ND		190	120	ug/m3			07/07/20 13:05	27.79
Naphthalene	ND		470	100	ug/m3			07/07/20 13:05	27.79
o-Xylene	ND		190	59	ug/m3			07/07/20 13:05	27.79
Propylbenzene	ND		440	61	ug/m3			07/07/20 13:05	27.79
Styrene	ND		190	55	ug/m3			07/07/20 13:05	27.79
<b>Tetrachloroethene</b>	<b>12000</b>		300	60	ug/m3			07/07/20 13:05	27.79
Toluene	ND		840	100	ug/m3			07/07/20 13:05	27.79
trans-1,2-Dichloroethene	ND		180	44	ug/m3			07/07/20 13:05	27.79
trans-1,3-Dichloropropene	ND		200	48	ug/m3			07/07/20 13:05	27.79
<b>Trichloroethene</b>	<b>1100</b>		240	43	ug/m3			07/07/20 13:05	27.79
Trichlorofluoromethane	ND		250	31	ug/m3			07/07/20 13:05	27.79
Vinyl chloride	ND		230	40	ug/m3			07/07/20 13:05	27.79
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	95		60 - 140					07/07/20 13:05	27.79

**Client Sample ID: GSS-2**

**Lab Sample ID: 140-19578-2**

**Date Collected: 07/02/20 12:38**

**Matrix: Air**

**Date Received: 07/03/20 09:00**

**Sample Container: Summa Canister 6L**

**Method: TO-15 - Volatile Organic Compounds in Ambient Air**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		15	2.2	ug/m3			07/07/20 13:56	1
1,1,2,2-Tetrachloroethane	ND		18	5.6	ug/m3			07/07/20 13:56	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		20	3.2	ug/m3			07/07/20 13:56	1
1,1,2-Trichloroethane	ND		15	3.8	ug/m3			07/07/20 13:56	1
1,1-Dichloroethane	ND		11	1.4	ug/m3			07/07/20 13:56	1
1,1-Dichloroethene	ND		11	1.8	ug/m3			07/07/20 13:56	1
1,2,4-Trichlorobenzene	ND *		99	9.7	ug/m3			07/07/20 13:56	1
1,2,4-Trimethylbenzene	ND		13	4.1	ug/m3			07/07/20 13:56	1
1,2-Dibromoethane (EDB)	ND		20	4.5	ug/m3			07/07/20 13:56	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND		19	3.0	ug/m3			07/07/20 13:56	1
1,2-Dichlorobenzene	ND		32	5.6	ug/m3			07/07/20 13:56	1
1,2-Dichloroethane	ND		11	2.5	ug/m3			07/07/20 13:56	1
1,2-Dichloropropane	ND		12	3.2	ug/m3			07/07/20 13:56	1
1,3,5-Trimethylbenzene	ND		13	4.3	ug/m3			07/07/20 13:56	1
1,3-Butadiene	ND		12	1.9	ug/m3			07/07/20 13:56	1
1,3-Dichlorobenzene	ND		16	5.2	ug/m3			07/07/20 13:56	1
<b>1,4-Dichlorobenzene</b>	<b>16</b>		16	5.1	ug/m3			07/07/20 13:56	1
2-Butanone (MEK)	ND		39	7.9	ug/m3			07/07/20 13:56	1
2-Hexanone	ND		22	3.2	ug/m3			07/07/20 13:56	1
3-Chloropropene	ND		8.3	2.0	ug/m3			07/07/20 13:56	1
4-Methyl-2-pentanone (MIBK)	ND		55	11	ug/m3			07/07/20 13:56	1
<b>Acetone</b>	<b>88 J</b>		240	44	ug/m3			07/07/20 13:56	1
Acrylonitrile	ND		58	5.8	ug/m3			07/07/20 13:56	1

Eurofins TestAmerica, Knoxville

# Client Sample Results

Client: Giles Engineering Associates  
 Project/Site: FORMER BEST WAY  
 CLEANERS/McFARLAND,WI/1E

Job ID: 140-19578-1

**Client Sample ID: GSS-2**

**Lab Sample ID: 140-19578-2**

Date Collected: 07/02/20 12:38

Matrix: Air

Date Received: 07/03/20 09:00

Sample Container: Summa Canister 6L

**Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		8.5	2.4	ug/m3			07/07/20 13:56	1
Benzyl chloride	ND		28	5.4	ug/m3			07/07/20 13:56	1
Bromodichloromethane	ND		18	3.9	ug/m3			07/07/20 13:56	1
Bromoform	ND		28	6.6	ug/m3			07/07/20 13:56	1
Bromomethane	ND		10	1.7	ug/m3			07/07/20 13:56	1
Butane	ND		32	2.3	ug/m3			07/07/20 13:56	1
Carbon disulfide	ND		17	1.3	ug/m3			07/07/20 13:56	1
Carbon tetrachloride	ND		17	3.2	ug/m3			07/07/20 13:56	1
Chlorobenzene	ND		12	3.0	ug/m3			07/07/20 13:56	1
<b>Chlorodifluoromethane</b>	<b>6.6</b>	<b>J</b>	9.4	1.7	ug/m3			07/07/20 13:56	1
Chloroethane	ND		7.0	1.2	ug/m3			07/07/20 13:56	1
Chloroform	ND		13	2.5	ug/m3			07/07/20 13:56	1
Chloromethane	ND		28	4.4	ug/m3			07/07/20 13:56	1
cis-1,2-Dichloroethene	ND		11	3.2	ug/m3			07/07/20 13:56	1
cis-1,3-Dichloropropene	ND		24	4.5	ug/m3			07/07/20 13:56	1
<b>Cyclohexane</b>	<b>6.3</b>	<b>J</b>	18	1.8	ug/m3			07/07/20 13:56	1
Dibromochloromethane	ND		23	4.8	ug/m3			07/07/20 13:56	1
Dibromomethane	ND		38	3.8	ug/m3			07/07/20 13:56	1
<b>Dichlorodifluoromethane</b>	<b>9700</b>	<b>E</b>	13	4.5	ug/m3			07/07/20 13:56	1
Ethylbenzene	ND		12	3.9	ug/m3			07/07/20 13:56	1
Heptane	ND		22	2.6	ug/m3			07/07/20 13:56	1
Hexachlorobutadiene	ND		140	11	ug/m3			07/07/20 13:56	1
Hexane	ND		19	1.5	ug/m3			07/07/20 13:56	1
Isopropylbenzene	ND		26	3.9	ug/m3			07/07/20 13:56	1
Methyl tert-butyl ether	ND		48	8.2	ug/m3			07/07/20 13:56	1
<b>Methylene Chloride</b>	<b>21</b>	<b>J B</b>	46	15	ug/m3			07/07/20 13:56	1
m-Xylene & p-Xylene	ND		12	6.9	ug/m3			07/07/20 13:56	1
Naphthalene	ND		28	6.3	ug/m3			07/07/20 13:56	1
o-Xylene	ND		12	3.5	ug/m3			07/07/20 13:56	1
Propylbenzene	ND		26	3.7	ug/m3			07/07/20 13:56	1
Styrene	ND		11	3.3	ug/m3			07/07/20 13:56	1
<b>Tetrachloroethene</b>	<b>1100</b>		18	3.6	ug/m3			07/07/20 13:56	1
Toluene	ND		50	6.0	ug/m3			07/07/20 13:56	1
trans-1,2-Dichloroethene	ND		11	2.6	ug/m3			07/07/20 13:56	1
trans-1,3-Dichloropropene	ND		12	2.9	ug/m3			07/07/20 13:56	1
<b>Trichloroethene</b>	<b>21</b>		14	2.6	ug/m3			07/07/20 13:56	1
<b>Trichlorofluoromethane</b>	<b>2.1</b>	<b>J</b>	15	1.9	ug/m3			07/07/20 13:56	1
Vinyl chloride	ND		14	2.4	ug/m3			07/07/20 13:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		60 - 140		07/07/20 13:56	1

**Method: TO-15 - Volatile Organic Compounds in Ambient Air - DL**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Dichlorodifluoromethane</b>	<b>6100</b>		65	22	ug/m3			07/08/20 18:32	3.29

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		60 - 140		07/08/20 18:32	3.29

Eurofins TestAmerica, Knoxville

# Client Sample Results

Client: Giles Engineering Associates  
 Project/Site: FORMER BEST WAY  
 CLEANERS/McFARLAND,WI/1E

Job ID: 140-19578-1

**Client Sample ID: SS-2**

**Lab Sample ID: 140-19578-3**

**Date Collected: 07/02/20 13:25**

**Matrix: Air**

**Date Received: 07/03/20 09:00**

**Sample Container: Summa Canister 6L**

**Method: TO-15 - Volatile Organic Compounds in Ambient Air**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		2.2	0.33	ug/m3			07/07/20 14:50	1
1,1,2,2-Tetrachloroethane	ND		2.7	0.84	ug/m3			07/07/20 14:50	1
<b>1,1,2-Trichloro-1,2,2-trifluoroethane</b>	<b>0.63</b>	<b>J</b>	3.1	0.48	ug/m3			07/07/20 14:50	1
1,1,2-Trichloroethane	ND		2.2	0.57	ug/m3			07/07/20 14:50	1
1,1-Dichloroethane	ND		1.6	0.21	ug/m3			07/07/20 14:50	1
1,1-Dichloroethene	ND		1.6	0.27	ug/m3			07/07/20 14:50	1
1,2,4-Trichlorobenzene	ND	*	15	1.5	ug/m3			07/07/20 14:50	1
1,2,4-Trimethylbenzene	ND		2.0	0.62	ug/m3			07/07/20 14:50	1
1,2-Dibromoethane (EDB)	ND		3.1	0.68	ug/m3			07/07/20 14:50	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND		2.8	0.45	ug/m3			07/07/20 14:50	1
1,2-Dichlorobenzene	ND		4.8	0.84	ug/m3			07/07/20 14:50	1
1,2-Dichloroethane	ND		1.6	0.38	ug/m3			07/07/20 14:50	1
1,2-Dichloropropane	ND		1.8	0.48	ug/m3			07/07/20 14:50	1
1,3,5-Trimethylbenzene	ND		2.0	0.64	ug/m3			07/07/20 14:50	1
1,3-Butadiene	ND		1.8	0.28	ug/m3			07/07/20 14:50	1
<b>1,3-Dichlorobenzene</b>	<b>1.0</b>	<b>J</b>	2.4	0.78	ug/m3			07/07/20 14:50	1
<b>1,4-Dichlorobenzene</b>	<b>26</b>		2.4	0.77	ug/m3			07/07/20 14:50	1
<b>2-Butanone (MEK)</b>	<b>2.9</b>	<b>J</b>	5.9	1.2	ug/m3			07/07/20 14:50	1
2-Hexanone	ND		3.3	0.48	ug/m3			07/07/20 14:50	1
3-Chloropropene	ND		1.3	0.30	ug/m3			07/07/20 14:50	1
4-Methyl-2-pentanone (MIBK)	ND		8.2	1.6	ug/m3			07/07/20 14:50	1
<b>Acetone</b>	<b>26</b>	<b>J</b>	36	6.7	ug/m3			07/07/20 14:50	1
Acrylonitrile	ND		8.7	0.87	ug/m3			07/07/20 14:50	1
Benzene	ND		1.3	0.36	ug/m3			07/07/20 14:50	1
Benzyl chloride	ND		4.1	0.81	ug/m3			07/07/20 14:50	1
Bromodichloromethane	ND		2.7	0.59	ug/m3			07/07/20 14:50	1
Bromoform	ND		4.1	0.99	ug/m3			07/07/20 14:50	1
Bromomethane	ND		1.6	0.25	ug/m3			07/07/20 14:50	1
<b>Butane</b>	<b>44</b>		4.8	0.35	ug/m3			07/07/20 14:50	1
Carbon disulfide	ND		2.5	0.19	ug/m3			07/07/20 14:50	1
Carbon tetrachloride	ND		2.5	0.48	ug/m3			07/07/20 14:50	1
Chlorobenzene	ND		1.8	0.45	ug/m3			07/07/20 14:50	1
Chlorodifluoromethane	ND		1.4	0.26	ug/m3			07/07/20 14:50	1
Chloroethane	ND		1.1	0.18	ug/m3			07/07/20 14:50	1
<b>Chloroform</b>	<b>48</b>		2.0	0.37	ug/m3			07/07/20 14:50	1
Chloromethane	ND		4.1	0.66	ug/m3			07/07/20 14:50	1
cis-1,2-Dichloroethene	ND		1.6	0.48	ug/m3			07/07/20 14:50	1
cis-1,3-Dichloropropene	ND		3.6	0.67	ug/m3			07/07/20 14:50	1
<b>Cyclohexane</b>	<b>0.66</b>	<b>J</b>	2.8	0.28	ug/m3			07/07/20 14:50	1
Dibromochloromethane	ND		3.4	0.72	ug/m3			07/07/20 14:50	1
Dibromomethane	ND		5.7	0.57	ug/m3			07/07/20 14:50	1
<b>Dichlorodifluoromethane</b>	<b>3900</b>	<b>E</b>	2.0	0.67	ug/m3			07/07/20 14:50	1
Ethylbenzene	ND		1.7	0.59	ug/m3			07/07/20 14:50	1
Heptane	ND		3.3	0.39	ug/m3			07/07/20 14:50	1
Hexachlorobutadiene	ND		21	1.7	ug/m3			07/07/20 14:50	1
<b>Hexane</b>	<b>0.28</b>	<b>J</b>	2.8	0.23	ug/m3			07/07/20 14:50	1
Isopropylbenzene	ND		3.9	0.59	ug/m3			07/07/20 14:50	1

Eurofins TestAmerica, Knoxville

# Client Sample Results

Client: Giles Engineering Associates  
 Project/Site: FORMER BEST WAY  
 CLEANERS/McFARLAND,WI/1E

Job ID: 140-19578-1

**Client Sample ID: SS-2**

**Lab Sample ID: 140-19578-3**

Date Collected: 07/02/20 13:25

Matrix: Air

Date Received: 07/03/20 09:00

Sample Container: Summa Canister 6L

**Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		7.2	1.2	ug/m3			07/07/20 14:50	1
<b>Methylene Chloride</b>	<b>3.5</b>	<b>J B</b>	6.9	2.2	ug/m3			07/07/20 14:50	1
m-Xylene & p-Xylene	ND		1.7	1.0	ug/m3			07/07/20 14:50	1
Naphthalene	ND		4.2	0.94	ug/m3			07/07/20 14:50	1
o-Xylene	ND		1.7	0.53	ug/m3			07/07/20 14:50	1
Propylbenzene	ND		3.9	0.55	ug/m3			07/07/20 14:50	1
<b>Styrene</b>	<b>0.78</b>	<b>J</b>	1.7	0.49	ug/m3			07/07/20 14:50	1
<b>Tetrachloroethene</b>	<b>270</b>		2.7	0.54	ug/m3			07/07/20 14:50	1
Toluene	ND		7.5	0.90	ug/m3			07/07/20 14:50	1
trans-1,2-Dichloroethene	ND		1.6	0.40	ug/m3			07/07/20 14:50	1
trans-1,3-Dichloropropene	ND		1.8	0.44	ug/m3			07/07/20 14:50	1
<b>Trichloroethene</b>	<b>1.5</b>	<b>J</b>	2.1	0.39	ug/m3			07/07/20 14:50	1
<b>Trichlorofluoromethane</b>	<b>1.8</b>	<b>J</b>	2.2	0.28	ug/m3			07/07/20 14:50	1
Vinyl chloride	ND		2.0	0.36	ug/m3			07/07/20 14:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		60 - 140		07/07/20 14:50	1

**Method: TO-15 - Volatile Organic Compounds in Ambient Air - DL**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Dichlorodifluoromethane</b>	<b>5700</b>		42	14	ug/m3			07/08/20 19:24	3.15

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		60 - 140		07/08/20 19:24	3.15

**Client Sample ID: SS-3**

**Lab Sample ID: 140-19578-4**

Date Collected: 07/02/20 13:15

Matrix: Air

Date Received: 07/03/20 09:00

Sample Container: Summa Canister 6L

**Method: TO-15 - Volatile Organic Compounds in Ambient Air**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>1,1,1-Trichloroethane</b>	<b>0.21</b>	<b>J</b>	1.1	0.16	ug/m3			07/08/20 20:18	1
1,1,1,2-Tetrachloroethane	ND		1.4	0.42	ug/m3			07/08/20 20:18	1
<b>1,1,2-Trichloro-1,1,2,2-trifluoroethane</b>	<b>0.52</b>	<b>J</b>	1.5	0.24	ug/m3			07/08/20 20:18	1
1,1,2-Trichloroethane	ND		1.1	0.28	ug/m3			07/08/20 20:18	1
1,1-Dichloroethane	ND		0.81	0.11	ug/m3			07/08/20 20:18	1
1,1-Dichloroethene	ND		0.79	0.13	ug/m3			07/08/20 20:18	1
1,2,4-Trichlorobenzene	ND		7.4	0.73	ug/m3			07/08/20 20:18	1
1,2,4-Trimethylbenzene	ND		0.98	0.31	ug/m3			07/08/20 20:18	1
1,2-Dibromoethane (EDB)	ND		1.5	0.34	ug/m3			07/08/20 20:18	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND		1.4	0.22	ug/m3			07/08/20 20:18	1
1,2-Dichlorobenzene	ND		2.4	0.42	ug/m3			07/08/20 20:18	1
1,2-Dichloroethane	ND		0.81	0.19	ug/m3			07/08/20 20:18	1
1,2-Dichloropropane	ND		0.92	0.24	ug/m3			07/08/20 20:18	1
<b>1,3,5-Trimethylbenzene</b>	<b>0.46</b>	<b>J</b>	0.98	0.32	ug/m3			07/08/20 20:18	1
1,3-Butadiene	ND		0.88	0.14	ug/m3			07/08/20 20:18	1
1,3-Dichlorobenzene	ND		1.2	0.39	ug/m3			07/08/20 20:18	1

Eurofins TestAmerica, Knoxville

# Client Sample Results

Client: Giles Engineering Associates  
 Project/Site: FORMER BEST WAY  
 CLEANERS/McFARLAND,WI/1E

Job ID: 140-19578-1

**Client Sample ID: SS-3**

**Lab Sample ID: 140-19578-4**

Date Collected: 07/02/20 13:15

Matrix: Air

Date Received: 07/03/20 09:00

Sample Container: Summa Canister 6L

**Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	12		1.2	0.38	ug/m3			07/08/20 20:18	1
2-Butanone (MEK)	2.0	J	2.9	0.59	ug/m3			07/08/20 20:18	1
2-Hexanone	ND		1.6	0.24	ug/m3			07/08/20 20:18	1
3-Chloropropene	ND		0.63	0.15	ug/m3			07/08/20 20:18	1
4-Methyl-2-pentanone (MIBK)	ND		4.1	0.80	ug/m3			07/08/20 20:18	1
Acetone	200		18	3.3	ug/m3			07/08/20 20:18	1
Acrylonitrile	ND		4.3	0.43	ug/m3			07/08/20 20:18	1
Benzene	0.37	J	0.64	0.18	ug/m3			07/08/20 20:18	1
Benzyl chloride	ND		2.1	0.40	ug/m3			07/08/20 20:18	1
Bromodichloromethane	ND		1.3	0.29	ug/m3			07/08/20 20:18	1
Bromoform	ND		2.1	0.50	ug/m3			07/08/20 20:18	1
Bromomethane	0.23	J	0.78	0.12	ug/m3			07/08/20 20:18	1
Butane	4.0		2.4	0.17	ug/m3			07/08/20 20:18	1
Carbon disulfide	0.29	J	1.2	0.097	ug/m3			07/08/20 20:18	1
Carbon tetrachloride	0.47	J	1.3	0.24	ug/m3			07/08/20 20:18	1
Chlorobenzene	ND		0.92	0.23	ug/m3			07/08/20 20:18	1
Chlorodifluoromethane	2.3		0.71	0.13	ug/m3			07/08/20 20:18	1
Chloroethane	ND		0.53	0.092	ug/m3			07/08/20 20:18	1
Chloroform	0.50	J	0.98	0.19	ug/m3			07/08/20 20:18	1
Chloromethane	1.5	J	2.1	0.33	ug/m3			07/08/20 20:18	1
cis-1,2-Dichloroethene	ND		0.79	0.24	ug/m3			07/08/20 20:18	1
cis-1,3-Dichloropropene	ND		1.8	0.34	ug/m3			07/08/20 20:18	1
Cyclohexane	0.50	J	1.4	0.14	ug/m3			07/08/20 20:18	1
Dibromochloromethane	ND		1.7	0.36	ug/m3			07/08/20 20:18	1
Dibromomethane	ND		2.8	0.28	ug/m3			07/08/20 20:18	1
Dichlorodifluoromethane	51		0.99	0.34	ug/m3			07/08/20 20:18	1
Ethylbenzene	ND		0.87	0.30	ug/m3			07/08/20 20:18	1
Heptane	0.22	J	1.6	0.19	ug/m3			07/08/20 20:18	1
Hexachlorobutadiene	ND		11	0.83	ug/m3			07/08/20 20:18	1
Hexane	1.2	J	1.4	0.11	ug/m3			07/08/20 20:18	1
Isopropylbenzene	ND		2.0	0.29	ug/m3			07/08/20 20:18	1
Methyl tert-butyl ether	ND		3.6	0.61	ug/m3			07/08/20 20:18	1
Methylene Chloride	4.0	B	3.5	1.1	ug/m3			07/08/20 20:18	1
m-Xylene & p-Xylene	ND		0.87	0.52	ug/m3			07/08/20 20:18	1
Naphthalene	ND		2.1	0.47	ug/m3			07/08/20 20:18	1
o-Xylene	ND		0.87	0.26	ug/m3			07/08/20 20:18	1
Propylbenzene	ND		2.0	0.28	ug/m3			07/08/20 20:18	1
Styrene	0.54	J	0.85	0.25	ug/m3			07/08/20 20:18	1
Tetrachloroethene	4.0		1.4	0.27	ug/m3			07/08/20 20:18	1
Toluene	1.9	J	3.8	0.45	ug/m3			07/08/20 20:18	1
trans-1,2-Dichloroethene	ND		0.79	0.20	ug/m3			07/08/20 20:18	1
trans-1,3-Dichloropropene	ND		0.91	0.22	ug/m3			07/08/20 20:18	1
Trichloroethene	ND		1.1	0.19	ug/m3			07/08/20 20:18	1
Trichlorofluoromethane	1.6		1.1	0.14	ug/m3			07/08/20 20:18	1
Vinyl chloride	ND		1.0	0.18	ug/m3			07/08/20 20:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		60 - 140		07/08/20 20:18	1

Eurofins TestAmerica, Knoxville

## Default Detection Limits

Client: Giles Engineering Associates  
 Project/Site: FORMER BEST WAY CLEANERS/McFARLAND,

Job ID: 140-19578-1

### Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	RL	MDL	Units
1,1,1-Trichloroethane	1.1	0.16	ug/m3
1,1,2,2-Tetrachloroethane	1.4	0.42	ug/m3
1,1,2-Trichloro-1,2,2-trifluoroethane	1.5	0.24	ug/m3
1,1,2-Trichloroethane	1.1	0.28	ug/m3
1,1-Dichloroethane	0.81	0.11	ug/m3
1,1-Dichloroethene	0.79	0.13	ug/m3
1,2,4-Trichlorobenzene	7.4	0.73	ug/m3
1,2,4-Trimethylbenzene	0.98	0.31	ug/m3
1,2-Dibromoethane (EDB)	1.5	0.34	ug/m3
1,2-Dichloro-1,1,2,2-tetrafluoroethane	1.4	0.22	ug/m3
1,2-Dichlorobenzene	2.4	0.42	ug/m3
1,2-Dichloroethane	0.81	0.19	ug/m3
1,2-Dichloropropane	0.92	0.24	ug/m3
1,3,5-Trimethylbenzene	0.98	0.32	ug/m3
1,3-Butadiene	0.88	0.14	ug/m3
1,3-Dichlorobenzene	1.2	0.39	ug/m3
1,4-Dichlorobenzene	1.2	0.38	ug/m3
2-Butanone (MEK)	2.9	0.59	ug/m3
2-Hexanone	1.6	0.24	ug/m3
3-Chloropropene	0.63	0.15	ug/m3
4-Methyl-2-pentanone (MIBK)	4.1	0.80	ug/m3
Acetone	18	3.3	ug/m3
Acrylonitrile	4.3	0.43	ug/m3
Benzene	0.64	0.18	ug/m3
Benzyl chloride	2.1	0.40	ug/m3
Bromodichloromethane	1.3	0.29	ug/m3
Bromoform	2.1	0.50	ug/m3
Bromomethane	0.78	0.12	ug/m3
Butane	2.4	0.17	ug/m3
Carbon disulfide	1.2	0.097	ug/m3
Carbon tetrachloride	1.3	0.24	ug/m3
Chlorobenzene	0.92	0.23	ug/m3
Chlorodifluoromethane	0.71	0.13	ug/m3
Chloroethane	0.53	0.092	ug/m3
Chloroform	0.98	0.19	ug/m3
Chloromethane	2.1	0.33	ug/m3
cis-1,2-Dichloroethene	0.79	0.24	ug/m3
cis-1,3-Dichloropropene	1.8	0.34	ug/m3
Cyclohexane	1.4	0.14	ug/m3
Dibromochloromethane	1.7	0.36	ug/m3
Dibromomethane	2.8	0.28	ug/m3
Dichlorodifluoromethane	0.99	0.34	ug/m3
Ethylbenzene	0.87	0.30	ug/m3
Heptane	1.6	0.19	ug/m3
Hexachlorobutadiene	11	0.83	ug/m3
Hexane	1.4	0.11	ug/m3
Isopropylbenzene	2.0	0.29	ug/m3
Methyl tert-butyl ether	3.6	0.61	ug/m3
Methylene Chloride	3.5	1.1	ug/m3
m-Xylene & p-Xylene	0.87	0.52	ug/m3
Naphthalene	2.1	0.47	ug/m3
o-Xylene	0.87	0.26	ug/m3
Propylbenzene	2.0	0.28	ug/m3

Eurofins TestAmerica, Knoxville



# Default Detection Limits

Client: Giles Engineering Associates  
Project/Site: FORMER BEST WAY CLEANERS/McFARLAND,

Job ID: 140-19578-1

## Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	RL	MDL	Units
Styrene	0.85	0.25	ug/m3
Tetrachloroethene	1.4	0.27	ug/m3
Toluene	3.8	0.45	ug/m3
trans-1,2-Dichloroethene	0.79	0.20	ug/m3
trans-1,3-Dichloropropene	0.91	0.22	ug/m3
Trichloroethene	1.1	0.19	ug/m3
Trichlorofluoromethane	1.1	0.14	ug/m3
Vinyl chloride	1.0	0.18	ug/m3



# Surrogate Summary

Client: Giles Engineering Associates  
Project/Site: FORMER BEST WAY  
CLEANERS/McFARLAND,WI/1E

Job ID: 140-19578-1

## Method: TO-15 - Volatile Organic Compounds in Ambient Air

Matrix: Air

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	BFB (60-140)
140-19578-1	GSS-1	95
140-19578-2	GSS-2	94
140-19578-2 - DL	GSS-2	94
140-19578-3	SS-2	101
140-19578-3 - DL	SS-2	96
140-19578-4	SS-3	101
LCS 140-40799/1002	Lab Control Sample	118
LCS 140-40834/1002	Lab Control Sample	111
MB 140-40799/4	Method Blank	97
MB 140-40834/14	Method Blank	95

#### Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

# QC Sample Results

Client: Giles Engineering Associates  
 Project/Site: FORMER BEST WAY  
 CLEANERS/McFARLAND,WI/1E

Job ID: 140-19578-1

## Method: TO-15 - Volatile Organic Compounds in Ambient Air

**Lab Sample ID: MB 140-40799/4**  
**Matrix: Air**  
**Analysis Batch: 40799**

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.1	0.16	ug/m3			07/07/20 11:17	1
1,1,2,2-Tetrachloroethane	ND		1.4	0.42	ug/m3			07/07/20 11:17	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.5	0.24	ug/m3			07/07/20 11:17	1
1,1,2-Trichloroethane	ND		1.1	0.28	ug/m3			07/07/20 11:17	1
1,1-Dichloroethane	ND		0.81	0.11	ug/m3			07/07/20 11:17	1
1,1-Dichloroethene	ND		0.79	0.13	ug/m3			07/07/20 11:17	1
1,2,4-Trichlorobenzene	ND		7.4	0.73	ug/m3			07/07/20 11:17	1
1,2,4-Trimethylbenzene	ND		0.98	0.31	ug/m3			07/07/20 11:17	1
1,2-Dibromoethane (EDB)	ND		1.5	0.34	ug/m3			07/07/20 11:17	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND		1.4	0.22	ug/m3			07/07/20 11:17	1
1,2-Dichlorobenzene	ND		2.4	0.42	ug/m3			07/07/20 11:17	1
1,2-Dichloroethane	ND		0.81	0.19	ug/m3			07/07/20 11:17	1
1,2-Dichloropropane	ND		0.92	0.24	ug/m3			07/07/20 11:17	1
1,3,5-Trimethylbenzene	ND		0.98	0.32	ug/m3			07/07/20 11:17	1
1,3-Butadiene	ND		0.88	0.14	ug/m3			07/07/20 11:17	1
1,3-Dichlorobenzene	ND		1.2	0.39	ug/m3			07/07/20 11:17	1
1,4-Dichlorobenzene	ND		1.2	0.38	ug/m3			07/07/20 11:17	1
2-Butanone (MEK)	ND		2.9	0.59	ug/m3			07/07/20 11:17	1
2-Hexanone	ND		1.6	0.24	ug/m3			07/07/20 11:17	1
3-Chloropropene	ND		0.63	0.15	ug/m3			07/07/20 11:17	1
4-Methyl-2-pentanone (MIBK)	ND		4.1	0.80	ug/m3			07/07/20 11:17	1
Acetone	ND		18	3.3	ug/m3			07/07/20 11:17	1
Acrylonitrile	ND		4.3	0.43	ug/m3			07/07/20 11:17	1
Benzene	ND		0.64	0.18	ug/m3			07/07/20 11:17	1
Benzyl chloride	ND		2.1	0.40	ug/m3			07/07/20 11:17	1
Bromodichloromethane	ND		1.3	0.29	ug/m3			07/07/20 11:17	1
Bromoform	ND		2.1	0.50	ug/m3			07/07/20 11:17	1
Bromomethane	ND		0.78	0.12	ug/m3			07/07/20 11:17	1
Butane	ND		2.4	0.17	ug/m3			07/07/20 11:17	1
Carbon disulfide	ND		1.2	0.097	ug/m3			07/07/20 11:17	1
Carbon tetrachloride	ND		1.3	0.24	ug/m3			07/07/20 11:17	1
Chlorobenzene	ND		0.92	0.23	ug/m3			07/07/20 11:17	1
Chlorodifluoromethane	ND		0.71	0.13	ug/m3			07/07/20 11:17	1
Chloroethane	ND		0.53	0.092	ug/m3			07/07/20 11:17	1
Chloroform	ND		0.98	0.19	ug/m3			07/07/20 11:17	1
Chloromethane	ND		2.1	0.33	ug/m3			07/07/20 11:17	1
cis-1,2-Dichloroethene	ND		0.79	0.24	ug/m3			07/07/20 11:17	1
cis-1,3-Dichloropropene	ND		1.8	0.34	ug/m3			07/07/20 11:17	1
Cyclohexane	ND		1.4	0.14	ug/m3			07/07/20 11:17	1
Dibromochloromethane	ND		1.7	0.36	ug/m3			07/07/20 11:17	1
Dibromomethane	ND		2.8	0.28	ug/m3			07/07/20 11:17	1
Dichlorodifluoromethane	ND		0.99	0.34	ug/m3			07/07/20 11:17	1
Ethylbenzene	ND		0.87	0.30	ug/m3			07/07/20 11:17	1
Heptane	ND		1.6	0.19	ug/m3			07/07/20 11:17	1
Hexachlorobutadiene	ND		11	0.83	ug/m3			07/07/20 11:17	1
Hexane	ND		1.4	0.11	ug/m3			07/07/20 11:17	1
Isopropylbenzene	ND		2.0	0.29	ug/m3			07/07/20 11:17	1

Eurofins TestAmerica, Knoxville

# QC Sample Results

Client: Giles Engineering Associates  
 Project/Site: FORMER BEST WAY  
 CLEANERS/McFARLAND,WI/1E

Job ID: 140-19578-1

## Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

**Lab Sample ID: MB 140-40799/4**  
**Matrix: Air**  
**Analysis Batch: 40799**

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

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Methyl tert-butyl ether	ND		3.6	0.61	ug/m3			07/07/20 11:17	1
Methylene Chloride	1.81	J	3.5	1.1	ug/m3			07/07/20 11:17	1
m-Xylene & p-Xylene	ND		0.87	0.52	ug/m3			07/07/20 11:17	1
Naphthalene	ND		2.1	0.47	ug/m3			07/07/20 11:17	1
o-Xylene	ND		0.87	0.26	ug/m3			07/07/20 11:17	1
Propylbenzene	ND		2.0	0.28	ug/m3			07/07/20 11:17	1
Styrene	ND		0.85	0.25	ug/m3			07/07/20 11:17	1
Tetrachloroethene	ND		1.4	0.27	ug/m3			07/07/20 11:17	1
Toluene	ND		3.8	0.45	ug/m3			07/07/20 11:17	1
trans-1,2-Dichloroethene	ND		0.79	0.20	ug/m3			07/07/20 11:17	1
trans-1,3-Dichloropropene	ND		0.91	0.22	ug/m3			07/07/20 11:17	1
Trichloroethene	ND		1.1	0.19	ug/m3			07/07/20 11:17	1
Trichlorofluoromethane	ND		1.1	0.14	ug/m3			07/07/20 11:17	1
Vinyl chloride	ND		1.0	0.18	ug/m3			07/07/20 11:17	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
4-Bromofluorobenzene (Surr)	97		60 - 140		07/07/20 11:17	1

**Lab Sample ID: LCS 140-40799/1002**  
**Matrix: Air**  
**Analysis Batch: 40799**

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,2,2-Tetrachloroethane	15.1	17.4		ug/m3		115	70 - 130
1,1,2-Trichloro-1,2,2-trifluoroethane	16.9	19.5		ug/m3		116	70 - 130
1,1,2-Trichloroethane	12.0	12.6		ug/m3		105	70 - 130
1,1-Dichloroethane	8.90	9.55		ug/m3		107	70 - 130
1,1-Dichloroethene	8.72	9.26		ug/m3		106	70 - 130
1,2,4-Trichlorobenzene	16.3	23.3 *		ug/m3		143	60 - 140
1,2,4-Trimethylbenzene	10.8	13.7		ug/m3		127	70 - 130
1,2-Dibromoethane (EDB)	16.9	19.0		ug/m3		112	70 - 130
1,2-Dichloro-1,1,2,2-tetrafluoroethane	15.4	14.2		ug/m3		92	60 - 140
1,2-Dichlorobenzene	13.2	16.7		ug/m3		126	70 - 130
1,2-Dichloroethane	8.90	9.52		ug/m3		107	70 - 130
1,2-Dichloropropane	10.2	10.2		ug/m3		101	70 - 130
1,3,5-Trimethylbenzene	10.8	12.4		ug/m3		115	70 - 130
1,3-Butadiene	4.87	5.07		ug/m3		104	60 - 140
1,3-Dichlorobenzene	13.2	16.7		ug/m3		126	70 - 130
1,4-Dichlorobenzene	13.2	17.2		ug/m3		130	70 - 130
2-Butanone (MEK)	6.49	6.86		ug/m3		106	60 - 140
2-Hexanone	9.02	9.58		ug/m3		106	60 - 140
3-Chloropropene	6.89	8.86		ug/m3		129	60 - 140
4-Methyl-2-pentanone (MIBK)	9.01	11.1		ug/m3		123	60 - 140
Acetone	15.7	18.4		ug/m3		117	60 - 140
Acrylonitrile	4.78	5.70		ug/m3		119	60 - 140

Eurofins TestAmerica, Knoxville

# QC Sample Results

Client: Giles Engineering Associates  
 Project/Site: FORMER BEST WAY  
 CLEANERS/McFARLAND,WI/1E

Job ID: 140-19578-1

## Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: LCS 140-40799/1002

Client Sample ID: Lab Control Sample

Matrix: Air

Prep Type: Total/NA

Analysis Batch: 40799

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	7.03	6.94		ug/m3		99	70 - 130
Benzyl chloride	11.4	13.1		ug/m3		115	70 - 130
Bromodichloromethane	14.7	16.1		ug/m3		109	70 - 130
Bromoform	22.7	27.7		ug/m3		122	60 - 140
Bromomethane	8.54	8.22		ug/m3		96	70 - 130
Butane	5.23	6.11		ug/m3		117	60 - 140
Carbon disulfide	6.85	7.83		ug/m3		114	70 - 130
Carbon tetrachloride	13.8	15.5		ug/m3		112	70 - 130
Chlorobenzene	10.1	10.5		ug/m3		104	70 - 130
Chlorodifluoromethane	7.78	8.72		ug/m3		112	60 - 140
Chloroethane	5.81	5.87		ug/m3		101	70 - 130
Chloroform	10.7	11.9		ug/m3		111	70 - 130
Chloromethane	4.54	4.29		ug/m3		94	60 - 140
cis-1,2-Dichloroethene	8.72	9.47		ug/m3		109	70 - 130
cis-1,3-Dichloropropene	9.99	11.1		ug/m3		112	70 - 130
Cyclohexane	7.57	7.71		ug/m3		102	70 - 130
Dibromochloromethane	18.7	22.5		ug/m3		120	70 - 130
Dibromomethane	15.6	16.2		ug/m3		104	70 - 130
Dichlorodifluoromethane	10.9	10.8		ug/m3		99	60 - 140
Ethylbenzene	9.55	10.5		ug/m3		110	70 - 130
Heptane	9.02	9.03		ug/m3		100	70 - 130
Hexachlorobutadiene	23.5	27.2		ug/m3		116	60 - 140
Hexane	7.75	8.87		ug/m3		114	70 - 130
Isopropylbenzene	10.8	12.8		ug/m3		118	70 - 130
Methyl tert-butyl ether	7.93	8.43		ug/m3		106	60 - 140
Methylene Chloride	7.64	9.69		ug/m3		127	70 - 130
m-Xylene & p-Xylene	19.1	22.6		ug/m3		118	70 - 130
Naphthalene	11.5	16.2		ug/m3		140	60 - 140
o-Xylene	9.55	11.6		ug/m3		121	70 - 130
Propylbenzene	10.8	12.8		ug/m3		119	70 - 130
Styrene	9.37	10.3		ug/m3		110	70 - 130
Tetrachloroethene	14.9	15.9		ug/m3		107	70 - 130
Toluene	8.29	8.66		ug/m3		104	70 - 130
trans-1,2-Dichloroethene	8.72	9.41		ug/m3		108	70 - 130
trans-1,3-Dichloropropene	9.99	11.0		ug/m3		110	70 - 130
Trichloroethene	11.8	12.1		ug/m3		103	70 - 130
Trichlorofluoromethane	12.4	14.3		ug/m3		116	60 - 140
Vinyl chloride	5.62	5.42		ug/m3		96	70 - 130

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	118		60 - 140

# QC Sample Results

Client: Giles Engineering Associates  
 Project/Site: FORMER BEST WAY  
 CLEANERS/McFARLAND,WI/1E

Job ID: 140-19578-1

## Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

**Lab Sample ID: MB 140-40834/14**  
**Matrix: Air**  
**Analysis Batch: 40834**

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.1	0.16	ug/m3			07/08/20 15:54	1
1,1,2,2-Tetrachloroethane	ND		1.4	0.42	ug/m3			07/08/20 15:54	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.5	0.24	ug/m3			07/08/20 15:54	1
1,1,2-Trichloroethane	ND		1.1	0.28	ug/m3			07/08/20 15:54	1
1,1-Dichloroethane	ND		0.81	0.11	ug/m3			07/08/20 15:54	1
1,1-Dichloroethene	ND		0.79	0.13	ug/m3			07/08/20 15:54	1
1,2,4-Trichlorobenzene	ND		7.4	0.73	ug/m3			07/08/20 15:54	1
1,2,4-Trimethylbenzene	ND		0.98	0.31	ug/m3			07/08/20 15:54	1
1,2-Dibromoethane (EDB)	ND		1.5	0.34	ug/m3			07/08/20 15:54	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND		1.4	0.22	ug/m3			07/08/20 15:54	1
1,2-Dichlorobenzene	ND		2.4	0.42	ug/m3			07/08/20 15:54	1
1,2-Dichloroethane	ND		0.81	0.19	ug/m3			07/08/20 15:54	1
1,2-Dichloropropane	ND		0.92	0.24	ug/m3			07/08/20 15:54	1
1,3,5-Trimethylbenzene	ND		0.98	0.32	ug/m3			07/08/20 15:54	1
1,3-Butadiene	ND		0.88	0.14	ug/m3			07/08/20 15:54	1
1,3-Dichlorobenzene	ND		1.2	0.39	ug/m3			07/08/20 15:54	1
1,4-Dichlorobenzene	ND		1.2	0.38	ug/m3			07/08/20 15:54	1
2-Butanone (MEK)	ND		2.9	0.59	ug/m3			07/08/20 15:54	1
2-Hexanone	ND		1.6	0.24	ug/m3			07/08/20 15:54	1
3-Chloropropene	ND		0.63	0.15	ug/m3			07/08/20 15:54	1
4-Methyl-2-pentanone (MIBK)	ND		4.1	0.80	ug/m3			07/08/20 15:54	1
Acetone	ND		18	3.3	ug/m3			07/08/20 15:54	1
Acrylonitrile	ND		4.3	0.43	ug/m3			07/08/20 15:54	1
Benzene	ND		0.64	0.18	ug/m3			07/08/20 15:54	1
Benzyl chloride	ND		2.1	0.40	ug/m3			07/08/20 15:54	1
Bromodichloromethane	ND		1.3	0.29	ug/m3			07/08/20 15:54	1
Bromoform	ND		2.1	0.50	ug/m3			07/08/20 15:54	1
Bromomethane	ND		0.78	0.12	ug/m3			07/08/20 15:54	1
Butane	ND		2.4	0.17	ug/m3			07/08/20 15:54	1
Carbon disulfide	ND		1.2	0.097	ug/m3			07/08/20 15:54	1
Carbon tetrachloride	ND		1.3	0.24	ug/m3			07/08/20 15:54	1
Chlorobenzene	ND		0.92	0.23	ug/m3			07/08/20 15:54	1
Chlorodifluoromethane	ND		0.71	0.13	ug/m3			07/08/20 15:54	1
Chloroethane	ND		0.53	0.092	ug/m3			07/08/20 15:54	1
Chloroform	ND		0.98	0.19	ug/m3			07/08/20 15:54	1
Chloromethane	ND		2.1	0.33	ug/m3			07/08/20 15:54	1
cis-1,2-Dichloroethene	ND		0.79	0.24	ug/m3			07/08/20 15:54	1
cis-1,3-Dichloropropene	ND		1.8	0.34	ug/m3			07/08/20 15:54	1
Cyclohexane	ND		1.4	0.14	ug/m3			07/08/20 15:54	1
Dibromochloromethane	ND		1.7	0.36	ug/m3			07/08/20 15:54	1
Dibromomethane	ND		2.8	0.28	ug/m3			07/08/20 15:54	1
Dichlorodifluoromethane	ND		0.99	0.34	ug/m3			07/08/20 15:54	1
Ethylbenzene	ND		0.87	0.30	ug/m3			07/08/20 15:54	1
Heptane	ND		1.6	0.19	ug/m3			07/08/20 15:54	1
Hexachlorobutadiene	ND		11	0.83	ug/m3			07/08/20 15:54	1
Hexane	ND		1.4	0.11	ug/m3			07/08/20 15:54	1
Isopropylbenzene	ND		2.0	0.29	ug/m3			07/08/20 15:54	1

Eurofins TestAmerica, Knoxville

# QC Sample Results

Client: Giles Engineering Associates  
 Project/Site: FORMER BEST WAY  
 CLEANERS/McFARLAND,WI/1E

Job ID: 140-19578-1

## Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

**Lab Sample ID: MB 140-40834/14**  
**Matrix: Air**  
**Analysis Batch: 40834**

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

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Methyl tert-butyl ether	ND		3.6	0.61	ug/m3			07/08/20 15:54	1
Methylene Chloride	1.53	J	3.5	1.1	ug/m3			07/08/20 15:54	1
m-Xylene & p-Xylene	ND		0.87	0.52	ug/m3			07/08/20 15:54	1
Naphthalene	ND		2.1	0.47	ug/m3			07/08/20 15:54	1
o-Xylene	ND		0.87	0.26	ug/m3			07/08/20 15:54	1
Propylbenzene	ND		2.0	0.28	ug/m3			07/08/20 15:54	1
Styrene	ND		0.85	0.25	ug/m3			07/08/20 15:54	1
Tetrachloroethene	ND		1.4	0.27	ug/m3			07/08/20 15:54	1
Toluene	ND		3.8	0.45	ug/m3			07/08/20 15:54	1
trans-1,2-Dichloroethene	ND		0.79	0.20	ug/m3			07/08/20 15:54	1
trans-1,3-Dichloropropene	ND		0.91	0.22	ug/m3			07/08/20 15:54	1
Trichloroethene	ND		1.1	0.19	ug/m3			07/08/20 15:54	1
Trichlorofluoromethane	ND		1.1	0.14	ug/m3			07/08/20 15:54	1
Vinyl chloride	ND		1.0	0.18	ug/m3			07/08/20 15:54	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
4-Bromofluorobenzene (Surr)	95		60 - 140		07/08/20 15:54	1

**Lab Sample ID: LCS 140-40834/1002**  
**Matrix: Air**  
**Analysis Batch: 40834**

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,2,2-Tetrachloroethane	15.1	14.3		ug/m3		95	70 - 130
1,1,2-Trichloro-1,2,2-trifluoroethane	16.9	16.0		ug/m3		95	70 - 130
1,1,2-Trichloroethane	12.0	10.7		ug/m3		89	70 - 130
1,1-Dichloroethane	8.90	8.02		ug/m3		90	70 - 130
1,1-Dichloroethene	8.72	7.72		ug/m3		88	70 - 130
1,2,4-Trichlorobenzene	16.3	19.7		ug/m3		121	60 - 140
1,2,4-Trimethylbenzene	10.8	11.1		ug/m3		103	70 - 130
1,2-Dibromoethane (EDB)	16.9	15.8		ug/m3		93	70 - 130
1,2-Dichloro-1,1,2,2-tetrafluoroethane	15.4	11.6		ug/m3		75	60 - 140
1,2-Dichlorobenzene	13.2	13.6		ug/m3		103	70 - 130
1,2-Dichloroethane	8.90	7.88		ug/m3		88	70 - 130
1,2-Dichloropropane	10.2	8.26		ug/m3		81	70 - 130
1,3,5-Trimethylbenzene	10.8	10.2		ug/m3		94	70 - 130
1,3-Butadiene	4.87	4.22		ug/m3		87	60 - 140
1,3-Dichlorobenzene	13.2	13.7		ug/m3		104	70 - 130
1,4-Dichlorobenzene	13.2	13.9		ug/m3		105	70 - 130
2-Butanone (MEK)	6.49	5.74		ug/m3		88	60 - 140
2-Hexanone	9.02	8.11		ug/m3		90	60 - 140
3-Chloropropene	6.89	7.70		ug/m3		112	60 - 140
4-Methyl-2-pentanone (MIBK)	9.01	9.08		ug/m3		101	60 - 140
Acetone	15.7	15.2		ug/m3		97	60 - 140
Acrylonitrile	4.78	4.78		ug/m3		100	60 - 140

Eurofins TestAmerica, Knoxville

# QC Sample Results

Client: Giles Engineering Associates  
 Project/Site: FORMER BEST WAY  
 CLEANERS/McFARLAND,WI/1E

Job ID: 140-19578-1

## Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: LCS 140-40834/1002

Client Sample ID: Lab Control Sample

Matrix: Air

Prep Type: Total/NA

Analysis Batch: 40834

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	7.03	5.63		ug/m3		80	70 - 130
Benzyl chloride	11.4	10.8		ug/m3		95	70 - 130
Bromodichloromethane	14.7	13.0		ug/m3		88	70 - 130
Bromoform	22.7	23.3		ug/m3		103	60 - 140
Bromomethane	8.54	6.86		ug/m3		80	70 - 130
Butane	5.23	5.01		ug/m3		96	60 - 140
Carbon disulfide	6.85	6.37		ug/m3		93	70 - 130
Carbon tetrachloride	13.8	12.6		ug/m3		91	70 - 130
Chlorobenzene	10.1	8.84		ug/m3		87	70 - 130
Chlorodifluoromethane	7.78	7.37		ug/m3		95	60 - 140
Chloroethane	5.81	4.75		ug/m3		82	70 - 130
Chloroform	10.7	9.99		ug/m3		93	70 - 130
Chloromethane	4.54	3.63		ug/m3		80	60 - 140
cis-1,2-Dichloroethene	8.72	7.99		ug/m3		92	70 - 130
cis-1,3-Dichloropropene	9.99	8.95		ug/m3		90	70 - 130
Cyclohexane	7.57	6.37		ug/m3		84	70 - 130
Dibromochloromethane	18.7	18.9		ug/m3		101	70 - 130
Dibromomethane	15.6	13.0		ug/m3		83	70 - 130
Dichlorodifluoromethane	10.9	9.13		ug/m3		84	60 - 140
Ethylbenzene	9.55	8.80		ug/m3		92	70 - 130
Heptane	9.02	7.49		ug/m3		83	70 - 130
Hexachlorobutadiene	23.5	22.0		ug/m3		94	60 - 140
Hexane	7.75	7.44		ug/m3		96	70 - 130
Isopropylbenzene	10.8	10.4		ug/m3		97	70 - 130
Methyl tert-butyl ether	7.93	7.27		ug/m3		92	60 - 140
Methylene Chloride	7.64	8.11		ug/m3		106	70 - 130
m-Xylene & p-Xylene	19.1	18.7		ug/m3		98	70 - 130
Naphthalene	11.5	14.0		ug/m3		121	60 - 140
o-Xylene	9.55	9.60		ug/m3		101	70 - 130
Propylbenzene	10.8	10.6		ug/m3		98	70 - 130
Styrene	9.37	8.63		ug/m3		92	70 - 130
Tetrachloroethene	14.9	13.6		ug/m3		91	70 - 130
Toluene	8.29	7.31		ug/m3		88	70 - 130
trans-1,2-Dichloroethene	8.72	7.91		ug/m3		91	70 - 130
trans-1,3-Dichloropropene	9.99	9.50		ug/m3		95	70 - 130
Trichloroethene	11.8	10.0		ug/m3		85	70 - 130
Trichlorofluoromethane	12.4	12.0		ug/m3		97	60 - 140
Vinyl chloride	5.62	4.31		ug/m3		77	70 - 130

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	111		60 - 140



# QC Association Summary

Client: Giles Engineering Associates  
Project/Site: FORMER BEST WAY  
CLEANERS/McFARLAND,WI/1E

Job ID: 140-19578-1

## Air - GC/MS VOA

### Analysis Batch: 40799

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-19578-1	GSS-1	Total/NA	Air	TO-15	
140-19578-2	GSS-2	Total/NA	Air	TO-15	
140-19578-3	SS-2	Total/NA	Air	TO-15	
MB 140-40799/4	Method Blank	Total/NA	Air	TO-15	
LCS 140-40799/1002	Lab Control Sample	Total/NA	Air	TO-15	

### Analysis Batch: 40834

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-19578-2 - DL	GSS-2	Total/NA	Air	TO-15	
140-19578-3 - DL	SS-2	Total/NA	Air	TO-15	
140-19578-4	SS-3	Total/NA	Air	TO-15	
MB 140-40834/14	Method Blank	Total/NA	Air	TO-15	
LCS 140-40834/1002	Lab Control Sample	Total/NA	Air	TO-15	

# Lab Chronicle

Client: Giles Engineering Associates  
 Project/Site: FORMER BEST WAY  
 CLEANERS/McFARLAND,WI/1E

Job ID: 140-19578-1

## Client Sample ID: GSS-1

Lab Sample ID: 140-19578-1

Date Collected: 07/02/20 12:33

Matrix: Air

Date Received: 07/03/20 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		27.79	25 mL	500 mL	40799	07/07/20 13:05	S1K	TAL KNX
Instrument ID: MH										

## Client Sample ID: GSS-2

Lab Sample ID: 140-19578-2

Date Collected: 07/02/20 12:38

Matrix: Air

Date Received: 07/03/20 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		1	15 mL	500 mL	40799	07/07/20 13:56	S1K	TAL KNX
Instrument ID: MH										
Total/NA	Analysis	TO-15	DL	3.29	10 mL	500 mL	40834	07/08/20 18:32	S1K	TAL KNX
Instrument ID: MH										

## Client Sample ID: SS-2

Lab Sample ID: 140-19578-3

Date Collected: 07/02/20 13:25

Matrix: Air

Date Received: 07/03/20 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		1	100 mL	500 mL	40799	07/07/20 14:50	S1K	TAL KNX
Instrument ID: MH										
Total/NA	Analysis	TO-15	DL	3.15	15 mL	500 mL	40834	07/08/20 19:24	S1K	TAL KNX
Instrument ID: MH										

## Client Sample ID: SS-3

Lab Sample ID: 140-19578-4

Date Collected: 07/02/20 13:15

Matrix: Air

Date Received: 07/03/20 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		1	200 mL	500 mL	40834	07/08/20 20:18	S1K	TAL KNX
Instrument ID: MH										

## Client Sample ID: Method Blank

Lab Sample ID: MB 140-40799/4

Date Collected: N/A

Matrix: Air

Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		1	200 mL	500 mL	40799	07/07/20 11:17	S1K	TAL KNX
Instrument ID: MH										

# Lab Chronicle

Client: Giles Engineering Associates  
Project/Site: FORMER BEST WAY  
CLEANERS/McFARLAND,WI/1E

Job ID: 140-19578-1

**Client Sample ID: Method Blank**

**Lab Sample ID: MB 140-40834/14**

Date Collected: N/A

Matrix: Air

Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		1	200 mL	500 mL	40834	07/08/20 15:54	S1K	TAL KNX
Instrument ID: MH										

**Client Sample ID: Lab Control Sample**

**Lab Sample ID: LCS 140-40799/1002**

Date Collected: N/A

Matrix: Air

Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		1	500 mL	500 mL	40799	07/07/20 08:41	S1K	TAL KNX
Instrument ID: MH										

**Client Sample ID: Lab Control Sample**

**Lab Sample ID: LCS 140-40834/1002**

Date Collected: N/A

Matrix: Air

Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		1	500 mL	500 mL	40834	07/08/20 08:32	S1K	TAL KNX
Instrument ID: MH										

## Laboratory References:

TAL KNX = Eurofins TestAmerica, Knoxville, 5815 Middlebrook Pike, Knoxville, TN 37921, TEL (865)291-3000

# Accreditation/Certification Summary

Client: Giles Engineering Associates  
 Project/Site: FORMER BEST WAY  
 CLEANERS/McFARLAND,WI/1E

Job ID: 140-19578-1

## Laboratory: Eurofins TestAmerica, Knoxville

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

Authority	Program	Identification Number	Expiration Date
	AFCEE	N/A	
ANAB	Dept. of Defense ELAP	L2311	02-13-22
ANAB	Dept. of Energy	L2311.01	02-13-22
ANAB	ISO/IEC 17025	L2311	02-13-22
ANAB	ISO/IEC 17025	L2311	02-14-22
Arkansas DEQ	State	88-0688	06-17-21
California	State	2423	06-30-21
Colorado	State	TN00009	02-28-21
Connecticut	State	PH-0223	09-30-21
Florida	NELAP	E87177	07-01-21
Georgia (DW)	State	906	12-11-22
Hawaii	State	NA	12-11-21
Kansas	NELAP	E-10349	11-01-20
Kentucky (DW)	State	90101	01-01-21
Louisiana	NELAP	LA110001	12-31-12 *
Louisiana	NELAP	83979	06-30-21
Louisiana (DW)	State	LA019	12-31-20
Maryland	State	277	03-31-21
Michigan	State	9933	12-11-22
Nevada	State	TN00009	07-31-20
New Hampshire	NELAP	299919	01-17-21
New Jersey	NELAP	TN001	07-01-21
New York	NELAP	10781	03-31-21
North Carolina (DW)	State	21705	07-31-20
North Carolina (WW/SW)	State	64	12-31-20
Ohio VAP	State	CL0059	06-02-23
Oklahoma	State	9415	09-01-20
Oregon	NELAP	TNI0189	01-02-21
Pennsylvania	NELAP	68-00576	12-31-20
Tennessee	State	02014	12-11-22
Texas	NELAP	T104704380-18-12	08-31-20
US Fish & Wildlife	US Federal Programs	058448	07-31-20
USDA	US Federal Programs	P330-19-00236	08-20-22
Utah	NELAP	TN00009	07-31-20
Virginia	NELAP	460176	09-15-20
Washington	State	C593	01-19-21
West Virginia (DW)	State	9955C	01-01-21
West Virginia DEP	State	345	05-01-21
Wisconsin	State	998044300	08-31-20

\* Accreditation/Certification renewal pending - accreditation/certification considered valid.

# Method Summary

Client: Giles Engineering Associates  
Project/Site: FORMER BEST WAY  
CLEANERS/McFARLAND,WI/1E

Job ID: 140-19578-1

Method	Method Description	Protocol	Laboratory
TO-15	Volatile Organic Compounds in Ambient Air	EPA	TAL KNX

**Protocol References:**

EPA = US Environmental Protection Agency

**Laboratory References:**

TAL KNX = Eurofins TestAmerica, Knoxville, 5815 Middlebrook Pike, Knoxville, TN 37921, TEL (865)291-3000

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# Sample Summary

Client: Giles Engineering Associates  
Project/Site: FORMER BEST WAY  
CLEANERS/McFARLAND,WI/1E

Job ID: 140-19578-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
140-19578-1	GSS-1	Air	07/02/20 12:33	07/03/20 09:00	Air Canister (6-Liter) #10269
140-19578-2	GSS-2	Air	07/02/20 12:38	07/03/20 09:00	Air Canister (6-Liter) #34000691
140-19578-3	SS-2	Air	07/02/20 13:25	07/03/20 09:00	Air Canister (6-Liter) #12100
140-19578-4	SS-3	Air	07/02/20 13:15	07/03/20 09:00	Air Canister (6-Liter) #09757

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**TAL Knoxville**

5815 Middlebrook Pike  
 Knoxville, TN 37921  
 phone 865-291-3000 fax 865-584-4315

**Canister Samples Chain of Custody Record**

TestAmerica assumes no liability with respect to the collection and shipment of these samples.



140-19578 Chain of Custody



<b>Client Contact Information</b>	Project Manager: Kevin Bugel	1 of 1 COCs	
Company: Giles Engineering Associates	Phone:		
Address: N8 W22350 Johnson Dr., Suite A1	Site Contact:		
City/State/Zip: Waukesha, WI 53186	TAL Contact:		
Phone: 262.544.0118			
FAX: 262.549.5868			
Project Name: Former Best Way Cleaners	<b>Analysis Turnaround Time</b>		
Site/location: McFarland, WI	Standard (Specify)		
PO # 1E-2006002	Rush (Specify) 7 day		

Sample Identification	Sample Date(s)	Time Start	Time Stop	Canister Vacuum in Field, "Hg (Start)	Canister Vacuum in Field, "Hg (Stop)	Flow Controller ID	Canister ID	TO-15	TO-14A	EPA 3C	EPA 25C	ASTM D-1946	Other (Please specify in notes section)	Sample Type	Indoor Air	Ambient Air	Soil Gas	Landfill Gas	Other (Please specify in notes section)
GSS-1	7/2/20	1156	1233	-30	-4	10929	10269	X											
GSS-2		1200	1238	-30	-4	10904	3400004	X											
SS-2		1245	1325	-29	-4	10947	12100	X											
SS-3		1245	1315	-29	-4	10896	09757	X											

Sampled by:	Temperature (Fahrenheit)		Received @ ambient, 1 box Fedex Po, Custody seal intact trk# 1738 7785 0225
	Interior	Ambient	
	Start		
	Stop		

	Pressure (inches of Hg)		KW 7/3/20
	Interior	Ambient	
	Start		
	Stop		

Special Instructions/QC Requirements & Comments:  
 email Kevin, Kelly, Jody

Canisters Shipped by: Ky H	Date/Time: 7/2/20 1445	Canisters Received by: KLM	Date/Time: ETA 7/3/20 0900
Samples Relinquished by:	Date/Time:	Received by:	
Relinquished by:	Date/Time:	Received by:	4 cans, 4 KR

Lab Use Only Shipper Name: Opened by: Condition:

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7/13/2020



EUROFINS/TESTAMERICA KNOXVILLE SAMPLE RECEIPT/CONDITION UPON RECEIPT ANOMALY CHECKLIST

Log In Number:

Loc: 140  
19578

Review Items	Yes	No	NA	If No, what was the problem?	Comments/Actions Taken
1. Are the shipping containers intact?	/			<input type="checkbox"/> Containers, Broken	
2. Were ambient air containers received intact?			/	<input checked="" type="checkbox"/> Checked in lab	
3. The coolers/containers custody seal if present, is it intact?	/			<input type="checkbox"/> Yes <input type="checkbox"/> NA	
4. Is the cooler temperature within limits? (> freezing temp. of water to 6°C, VOST: 10°C) Thermometer ID : _____ Correction factor: _____			/	<input type="checkbox"/> Cooler Out of Temp, Client Contacted, Proceed/Cancel <input type="checkbox"/> Cooler Out of Temp, Same Day Receipt	
5. Were all of the sample containers received intact?	/			<input type="checkbox"/> Containers, Broken	
6. Were samples received in appropriate containers?	/			<input type="checkbox"/> Containers, Improper; Client Contacted; Proceed/Cancel	
7. Do sample container labels match COC? (IDs, Dates, Times)	/			<input type="checkbox"/> COC & Samples Do Not Match <input type="checkbox"/> COC Incorrect/Incomplete <input type="checkbox"/> COC Not Received	
8. Were all of the samples listed on the COC received?	/			<input type="checkbox"/> Sample Received, Not on COC <input type="checkbox"/> Sample on COC, Not Received	
9. Is the date/time of sample collection noted?	/			<input type="checkbox"/> COC; No Date/Time; Client Contacted	Labeling Verified by: _____ Date: _____
10. Was the sampler identified on the COC?	/			<input type="checkbox"/> Sampler Not Listed on COC	pH test strip lot number: _____
11. Is the client and project name/# identified?	/			<input type="checkbox"/> COC Incorrect/Incomplete	
12. Are tests/parameters listed for each sample?	/			<input type="checkbox"/> COC No tests on COC	
13. Is the matrix of the samples noted?	/			<input type="checkbox"/> COC Incorrect/Incomplete	
14. Was COC relinquished? (Signed/Dated/Timed)	/			<input type="checkbox"/> COC Incorrect/Incomplete	Box 16A: pH Preservation Box 18A: Residual Chlorine
15. Were samples received within holding time?	/			<input type="checkbox"/> Holding Time - Receipt	Preservative: _____
16. Were samples received with correct chemical preservative (excluding Encore)?			/	<input type="checkbox"/> pH Adjusted, pH Included (See box 16A) <input type="checkbox"/> Incorrect Preservative	Lot Number: _____
17. Were VOA samples received without headspace?			/	<input type="checkbox"/> Headspace (VOA only)	Exp Date: _____
18. Did you check for residual chlorine, if necessary? (e.g. 1613B, 1668) Chlorine test strip lot number: _____			/	<input type="checkbox"/> Residual Chlorine	Analyst: _____
19. For 1613B water samples is pH<9?			/	<input type="checkbox"/> If no, notify lab to adjust	Date: _____
20. For rad samples was sample activity info. Provided?			/	<input type="checkbox"/> Project missing info	Time: _____
Project #: <u>14001840</u> PM Instructions: _____					

Sample Receiving Associate: Ke W Date: 7/3/20

QA026R32.doc, 062719







## Summa Canister Dilution Worksheet

Client: Giles Engineering Associates  
 Project/Site: FORMER BEST WAY CLEANERS/McFARLAND,WI/1E

Job No.: 140-19578-1

Lab Sample ID	Canister Volume (L)	Preadjusted Pressure ("Hg)	Preadjusted Pressure (atm)	Preadjusted Volume (L)	Adjusted Pressure (psig)	Adjusted Pressure (atm)	Adjusted Volume (L)	Initial Volume (mL)	Dilution Factor	Final Dilution Factor	Pressure Gauge ID	Date	Analyst Initials
140-19578-1	6	-3.0	0.90	5.40	29.6	3.01	18.08		3.35	3.35	G5	07/06/20 12:39	BRS
140-19578-1	6	0.0	1.00	6.00	30.8	3.10	18.57		3.10	10.37	G5	07/06/20 12:53	BRS
140-19578-1	6	0.0	1.00	6.00	24.7	2.68	16.08		2.68	27.79	G5	07/06/20 13:03	BRS
140-19578-2	6	-2.8	0.91	5.44	29.1	2.98	17.88		3.29	3.29	G5	07/08/20 10:41	HMT
140-19578-3	6	-3.4	0.89	5.32	26.3	2.79	16.73		3.15	3.15	G5	07/08/20 10:42	HMT

**Formulae:**

Preadjusted Volume (L) = ( Preadjusted Pressure ("Hg) + 29.92 "Hg \* Vol L ) / 29.92 "Hg

Adjusted Volume (L) = ( Adjusted Pressure (psig) + 14.7 psig \* Vol L ) / 14.7 psig

Dilution Factor = Adjusted Volume (L) / Preadjusted Volume (L)

**Where:**

29.92 "Hg = Standard atmospheric pressure in inches of Mercury ("Hg)

14.7 psig = Standard atmospheric pressure in pounds per square inch gauge (psig)



## Kelly Hayden

---

**To:** cynthia.koepke@wisconsin.gov  
**Cc:** Kevin Bugel; Troy E. Giles  
**Subject:** RE: Former Best Way Cleaners - scope of work and N R 141 variance

---

**From:** Kelly Hayden  
**Sent:** Wednesday, August 19, 2020 1:58 PM  
**To:** [cynthia.koepke@wisconsin.gov](mailto:cynthia.koepke@wisconsin.gov)  
**Cc:** Kevin Bugel; Troy E. Giles  
**Subject:** FW: Former Best Way Cleaners - scope of work and N R 141 variance

Good afternoon Cindy

The following email provides a brief update of the analytical data collected to date at the former Best Way Cleaners. A reference Figure and Table set are also attached.

### Soil

- The results from the soil sampling showed the presence of cis and trans 1,2-DCE (degradation products of PCE), but similar to the results obtained by the prior consultant (Seymour), no PCE was detected in the soil samples. Soil does exceed the RCL for groundwater protection but is below the RCL for direct contact for both cis and trans 1,2-DCE.
- Minor petroleum constituents were also detected but at levels well below their respective RCLs.

### Groundwater

- Groundwater was sampled on July 16, 2020. Cis-1,2 DCE was detected above the PAL in GMW-1, located near the former dry cleaning machine. The detected concentration is similar to the concentration in samples collected by Seymour. Unlike the Seymour samples, Giles' water samples did not contain PCE.

### Soil Gas

- PCE and TCE were detected at levels exceeding their respective small commercial VRSLs in the sample collected from GSS-1. The PCE and TCE results in the Giles sample GSS-1 were similar to those collected by Seymour (SS-1) in July 2018.
- Several other VOCs were detected, however the detected concentrations did not exceed their respective small commercial VRSL.

### Mitigation System Pressure Field Test

- Pressure readings were measured at each sub-slab vapor point to evaluate the effective influence of the current vapor mitigation system. The system appears to be creating sufficient negative pressure beneath the slab of the Best Way tenant space but does not presently appear to create a negative pressure beneath the units to the north and south.

### Conclusions

- PCE and TCE were found in the soil gas but not in the soil or groundwater samples collected by Giles or Seymour. Based on the lack of a clear source of the contamination, it is Giles' opinion that the contamination may be within the sand and gravel base course material immediately beneath the building slab.

Giles has completed the scope of work originally proposed to continue the investigation with the exception of the second groundwater sampling event, which is scheduled for October 2020. We would appreciate the opportunity to discuss what additional sampling or remediation may be necessary to move the site towards closure. We would like to set up a conference call to discuss at your earliest convenience.

Thank you and please let me know if you need anything else before the discussion.

-Kelly

Kelly Hayden  
Environmental Scientist II



N8 W22350 Johnson Dr., Suite A1

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## Kelly Hayden

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**To:** Koepke, Cynthia L - DNR; Kevin Bugel  
**Cc:** Charles V. Sweeney; Troy E. Giles; Martin, Steven L - DNR  
**Subject:** RE: Former Best Way Cleaners - scope of work and NR 141 variance

**From:** Koepke, Cynthia L - DNR [<mailto:Cynthia.Koepke@wisconsin.gov>]  
**Sent:** Monday, June 15, 2020 10:55 AM  
**To:** Kevin Bugel; Kelly Hayden  
**Cc:** Charles V. Sweeney; Troy E. Giles; Martin, Steven L - DNR  
**Subject:** Former Best Way Cleaners - scope of work and NR 141 variance

I've looked over the scope of work, map, and well construction info you sent last week. The scope you've proposed addresses the items we discussed with Mr. Locke, Attorney Sweeney, and Seymour Environmental at our March 4 meeting.

DNR strongly recommends that you leave the wells and sub-slab sampling points in place until we've reviewed the data with you. In the event the results differ significantly from past sampling, additional sampling could be needed.

Also, we've found some issues at other sites with inadequate leak testing being done for sub-slab vapor sampling. This is a friendly reminder to be sure to leak-test both the probe seal and the sampling train. Happy to discuss further if you have questions.

Under section NR 141.31, Wis. Adm. Code, the Department grants Best Way Cleaners a variance to the monitoring well construction requirements of ch. NR 141 to permit monitoring well construction as described below in the June 9, 2020 email from Kelly Hayden, Giles Engineering, to Cindy Koepke, DNR. This is a one-time variance and applies only to the wells to be installed as part of the June 9, 2020 scope of work.

Thank you, and please proceed promptly. Don't hesitate to contact me with any questions or concerns.

**We are committed to service excellence.**

Visit our survey at <http://dnr.wi.gov/customersurvey> to evaluate how I did.

Cindy Koepke, P.G.

**TEMPORARY PHONE NUMBER: 608-622-6741**

Phone: 608-275-3257 ←voice mail only while working from home

Email: [cynthia.koepke@wisconsin.gov](mailto:cynthia.koepke@wisconsin.gov)

---

**From:** Kevin Bugel <[kbugel@gilesengr.com](mailto:kbugel@gilesengr.com)>  
**Sent:** Friday, June 12, 2020 3:53 PM  
**To:** Koepke, Cynthia L - DNR <[Cynthia.Koepke@wisconsin.gov](mailto:Cynthia.Koepke@wisconsin.gov)>; Kelly Hayden <[khayden@gilesengr.com](mailto:khayden@gilesengr.com)>  
**Subject:** RE: Former Best Way Cleaners - proposed scope of work

Hi Cindy:

After seeing Kelly's email, realized that a figure was not included, but went off the radar screen, I think it arrived as you sent out your email. Our approach to a WDNR variance water-table well is a well intersecting the water table, and consists of a 1-inch id, factory prepack PVC well screen followed by sections of 1-inch id riser piping. The prepack screen section is backfilled with filter sand to 1 foot above the screen, and the riser sections are backfilled with bentonite, and finished with a protector cover. The variance is the inside diameter of the well, and the ratio of the annular space materials where 1" direct-push well is 1:3 ratio; and a 2" HSA well is at a 2:8 ratio, equivalent to a 1:4 ratio. We can still

get water levels and infield groundwater quality data with a one inch well, but they do not allow for slug testing. I hope this makes sense.

This e-mail, including its attachments, contains privileged and confidential information made with the fullest expectation of legal protection and made solely for the use of the intended recipient. As unintended recipient, you are notified that copying, distribution/dissemination, or action taken relating to the e-mail's content is prohibited and may be unlawful. If you received this e-mail in error, please notify Giles Engineering Associates, Inc. (Giles), permanently delete the original, and destroy printed copies. If representations are made herein concerning matters of a client of Giles, such representations are not those of the client and cannot purport to bind them.

## **Attachment D: Maintenance Plans and Photographs**

### **Engineered Cap**

D.1(1) Cap Maintenance Plan

Included

D.2(1) Location Map

Included

D.3(1) Photographs

Included

D.4(1) Inspection Log

Included

### **Vapor Mitigation System**

D.1(2) Vapor Mitigation System Maintenance Plan

Included

D.2(2) Location Map

Included

D.3(2) Photographs

Included

D.4(2) Inspection Log

Included

## D.1(1) Description of Cap Maintenance Plan For:

**Best Way Cleaners  
5914 U.S. Highway 51  
McFarland, Wisconsin**

**WDNR BRRTS # 02-13-583171  
December 2020**

### **Legal Description:**

SW ¼ of the NW ¼ of Section 3, Township 6 North, Range 10 East, in the Village of McFarland, Dane County, Wisconsin. Tax Key No. 154/0610-032-4510-1.

### **Introduction**

This document is the maintenance plan for an integrated cap at the above-referenced property (the Site) in accordance with the requirements of s. NR 724.13 (2), Wis. Adm. Code. The maintenance activities relate to the existing concrete floor slab which occupies the area over the residual contaminated soil and groundwater.

More site-specific information about this Site may be found:

- In the case file in the Wisconsin Department of Natural Resources (WDNR) South Central office.
- From the WDNR project manager for Dane County.
- BRRTS on the Web (WDNR's internet-based database of contaminated sites) and the RR Sites Map (map view of the Site and surrounding properties) at the link: <http://dnr.wi.gov/topic/Brownfields/wrrd.html>. Both BRRTs on the Web and the RR Sites Map provide PDFs of site-specific information and details regarding continuing obligations for the Site.

### Description of Contamination

Residual dry cleaning-related volatile organic compound (VOC)-impacted soil remains on Site near the former Best Way Cleaners former dry cleaning machine (DCM). The residual VOC soil impacts exceed the NR 720 Residual Contaminant Levels (RCLs) for groundwater protection. Soil impacts are present from beneath the building slab to the water table, approximately 5 feet below ground surface (bgs). Additionally, limited VOC-impacted groundwater is present beneath the footprint of the former DCM. When last sampled in 2019, the concentration of one VOC was at the NR 140 Enforcement Standard (ES). The extent of soil and groundwater impacts are shown on the attached Figure D.2(1).

### Cap Description and Purpose

The contamination is limited to the vicinity of the former DCM that had been located within the Best Way Cleaners lease space. Therefore, the cap consists of the concrete floor slab of the existing shopping center building that overlies the contaminated soil. The floor slab over the area of residual VOC contamination is approximately 6-inch thick and will act as a cap to protect against direct contact with the contaminated soil, and act as an infiltration barrier. Based on the current commercial use of the property, the cap should function as intended unless disturbed.



### Annual Inspection

The cap overlying the impacted soil as shown on Attachment D.2(1) must be inspected once a year for deterioration, cracks, and other potential problems that can cause additional surface water infiltration. The inspections will be performed by the property owner or their designated representative. The inspections will be performed to evaluate damage due to settling, wear from traffic, increasing age, and other factors. Any area where contaminated soil has become or is likely to become exposed will be documented.

A log of the inspections and any repairs will be maintained by the property owner. The Continuing Obligations Inspection and Maintenance Log (Form 4400-305) is included as Case Closure Attachment D.4(1). The log will include recommendations for necessary repair of any areas where infiltration from the surface will not be effectively minimized. Completed repairs will be documented in the inspection log. A copy of the maintenance plan and inspection log will be kept at the Site or, if there is no acceptable place to keep it at the Site, at the address of the property owner. The log must be available for submittal or inspection by WDNR representatives upon request. If required in the case closure letter, a copy of the inspection log must be submitted electronically to the WDNR after every inspection, at least annually.

### Maintenance Activities

If problems in the cap are noted during the annual inspections, or at any other time during the year, repairs will be scheduled and completed as soon as practicable. Repairs can include patching and filling, larger resurfacing, or construction operations. The owner must also sample/laboratory analyze soil that is generated from below the cap to properly characterize the soil for off-site disposal or placement in another area of the Site. The soil must be treated, stored, and disposed of by the property owner in accordance with applicable local, state, and federal law.

In the event the floor slab overlying the contaminated soil is removed or replaced, the replacement cap must be equally impervious. Any replacement cap will be subject to the same maintenance and inspection guidelines as outlined in this maintenance plan unless indicated otherwise by the WDNR or its successor.

### Prohibition of Activities and Notification of DNR Prior to Actions Affecting the Cap

The following activities are prohibited on any portion of the property where the cap is required as shown on the attached Figure D.2(1), unless prior written approval has been obtained from the WDNR: 1) removal of the existing cap; 2) replacement with another cap; 3) excavating or grading of the land surface; 4) filling on capped areas; 5) plowing for agricultural cultivation; or 6) construction or placement of a building or other structure.

If removal, replacement or other changes to the cap are considered, the property owner will contact the WDNR at least 45 days before taking such an action, to determine whether further action may be necessary to protect human health, safety, or welfare or the environment, in accordance with s. NR 727.07, Wis. Adm. Code.

### Amendment or Withdrawal of Maintenance Plan

This Maintenance Plan can be amended or withdrawn by the property owner and its successors with the written approval of WDNR.

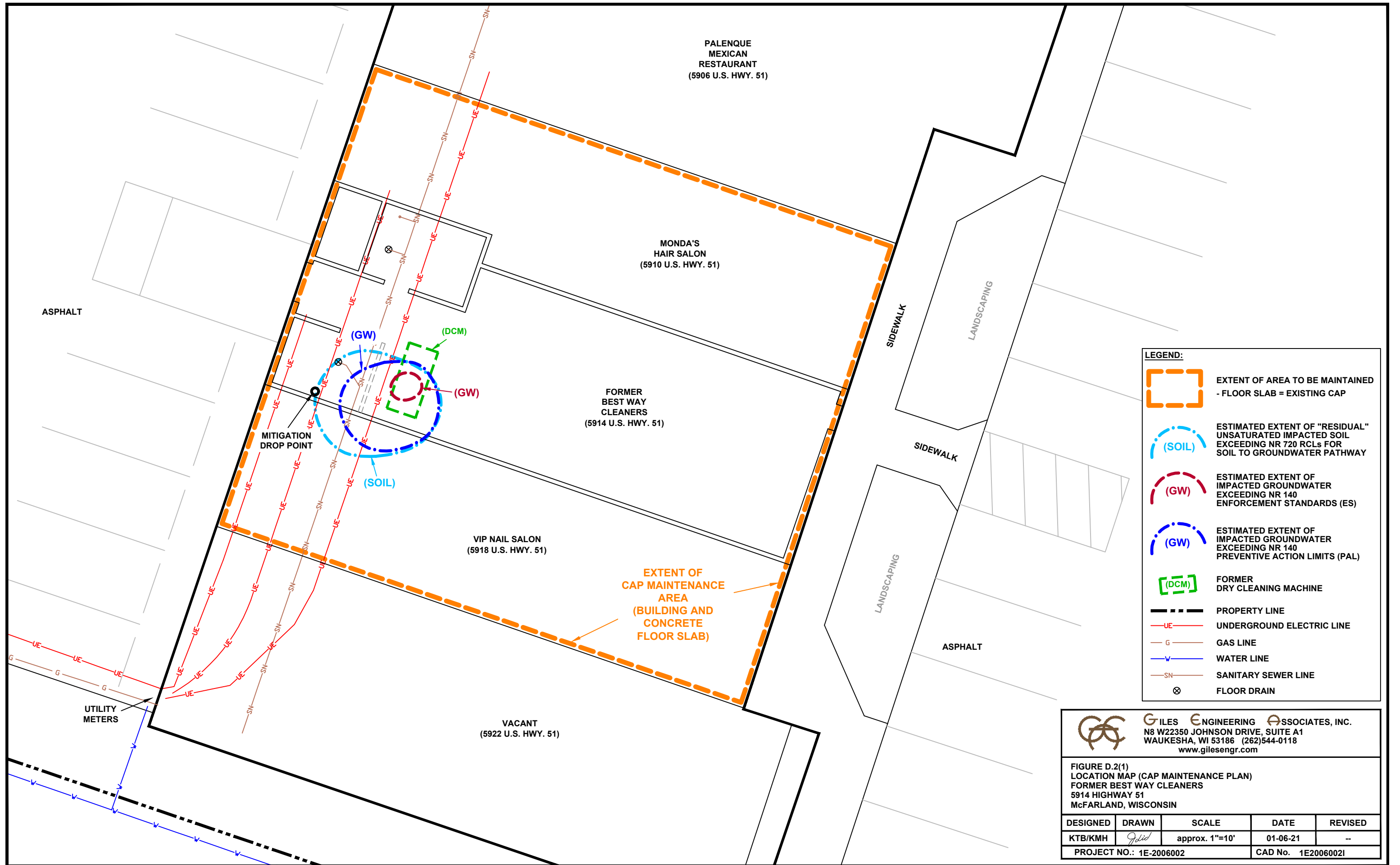
D.1(1) Cap Maintenance Plan  
Best Way Cleaners  
BRRTS No. 02-13-583171

Contact Information (as of December 2020)












Site Owner and Operator: One Community Bank  
733 North Main Street  
Oregon, WI 53575  
Attention: Steve Peotter  
(608) 835-3168

Consultants: Giles Engineering Associates, Inc.  
N8 W 22350 Johnson Road  
Waukesha, WI 53186  
Attention: Kevin T. Bugel  
(262) 544-0118

WDNR: Wisconsin Department of Natural Resources  
3911 Fish Hatchery Road  
Madison, Wisconsin 53711  
Attention: Cynthia Koepke  
(608) 219-2181



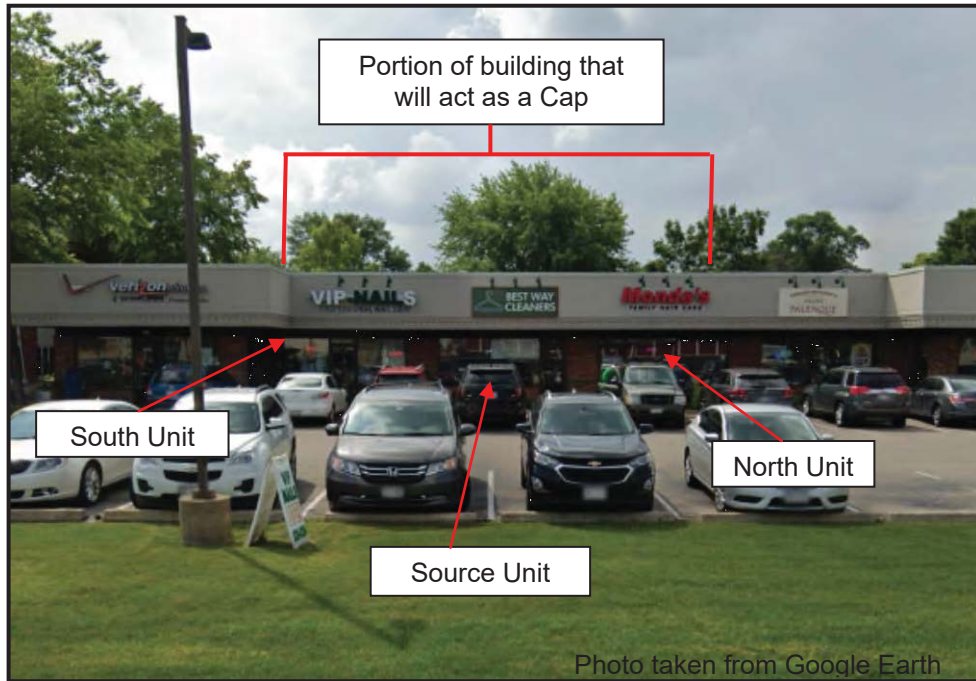
**LEGEND:**

-  EXTENT OF AREA TO BE MAINTAINED - FLOOR SLAB = EXISTING CAP
-  ESTIMATED EXTENT OF "RESIDUAL" UNSATURATED IMPACTED SOIL EXCEEDING NR 720 RCLs FOR SOIL TO GROUNDWATER PATHWAY
-  ESTIMATED EXTENT OF IMPACTED GROUNDWATER EXCEEDING NR 140 ENFORCEMENT STANDARDS (ES)
-  ESTIMATED EXTENT OF IMPACTED GROUNDWATER EXCEEDING NR 140 PREVENTIVE ACTION LIMITS (PAL)
-  FORMER DRY CLEANING MACHINE
-  PROPERTY LINE
-  UNDERGROUND ELECTRIC LINE
-  GAS LINE
-  WATER LINE
-  SANITARY SEWER LINE
-  FLOOR DRAIN

 GILES ENGINEERING ASSOCIATES, INC.  
 N8 W22350 JOHNSON DRIVE, SUITE A1  
 WAUKESHA, WI 53186 (262)544-0118  
 www.gilesengr.com

FIGURE D.2(1)  
 LOCATION MAP (CAP MAINTENANCE PLAN)  
 FORMER BEST WAY CLEANERS  
 5914 HIGHWAY 51  
 McFARLAND, WISCONSIN

DESIGNED	DRAWN	SCALE	DATE	REVISED
KTB/KMH	<i>Jed</i>	approx. 1"=10'	01-06-21	--
PROJECT NO.: 1E-2006002			CAD No. 1E2006002I	



View of the front of the shopping center building along U.S. Highway 51, facing west.



View of the back of the shopping center building, facing southwest.

**D.3(1) CAP PHOTOGRAPHS**

October 22, 2020

**Best Way Cleaners**  
 5914 U.S. Highway 51  
 McFarland, Wisconsin  
 Project No. 1E-2006002  
 BRRTS No. 02-13-583171



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View of the interior of source unit and typical concrete floor to be maintained, facing east.



View of the interior of source unit and typical concrete floor to be maintained, facing west.

### D.3(1) CAP PHOTOGRAPHS

October 22, 2020

**Best Way Cleaners**  
5914 U.S. Highway 51  
McFarland, Wisconsin  
Project No. 1E-2006002  
BRRTS No. 02-13-583171



**GILES**  
ENGINEERING ASSOCIATES, INC.

**Directions:** In accordance with s. NR 727.05 (1) (b) 3., Wis. Adm. Code, use of this form for documenting the inspections and maintenance of certain continuing obligations is required. Personal information collected will be used for administrative purposes and may be provided to requesters to the extent required by Wisconsin's Open Records law [ss. 19.31-19.39, Wis. Stats.]. When using this form, identify the condition that is being inspected. See the closure approval letter for this site for requirements regarding the submittal of this form to the Department of Natural Resources. A copy of this inspection log is required to be maintained either on the property, or at a location specified in the closure approval letter. Do NOT delete previous inspection results. This form was developed to provide a continuous history of site inspection results. The Department of Natural Resources project manager is identified in the closure letter. The project manager may also be identified from the database, BRRTS on the Web, at <http://dnr.wi.gov/botw/SetUpBasicSearchForm.do>, by searching for the site using the BRRTS ID number, and then looking in the "Who" section.

Activity (Site) Name Best Way Cleaners	BRRTS No. 02-13-583171
---	---------------------------

Inspections are required to be conducted (see closure approval letter):

annually  
 semi-annually  
 other – specify \_\_\_\_\_

When submittal of this form is required, submit the form electronically to the DNR project manager. An electronic version of this filled out form, or a scanned version may be sent to the following email address (see closure approval letter):

Inspection Date	Inspector Name	Item	Describe the condition of the item that is being inspected	Recommendations for repair or maintenance	Previous recommendations implemented?	Photographs taken and attached?
		<input type="checkbox"/> monitoring well <input type="checkbox"/> cover/barrier <input type="checkbox"/> vapor mitigation system <input type="checkbox"/> other:			<input type="radio"/> Y <input type="radio"/> N	<input type="radio"/> Y <input type="radio"/> N
		<input type="checkbox"/> monitoring well <input type="checkbox"/> cover/barrier <input type="checkbox"/> vapor mitigation system <input type="checkbox"/> other:			<input type="radio"/> Y <input type="radio"/> N	<input type="radio"/> Y <input type="radio"/> N
		<input type="checkbox"/> monitoring well <input type="checkbox"/> cover/barrier <input type="checkbox"/> vapor mitigation system <input type="checkbox"/> other:			<input type="radio"/> Y <input type="radio"/> N	<input type="radio"/> Y <input type="radio"/> N
		<input type="checkbox"/> monitoring well <input type="checkbox"/> cover/barrier <input type="checkbox"/> vapor mitigation system <input type="checkbox"/> other:			<input type="radio"/> Y <input type="radio"/> N	<input type="radio"/> Y <input type="radio"/> N
		<input type="checkbox"/> monitoring well <input type="checkbox"/> cover/barrier <input type="checkbox"/> vapor mitigation system <input type="checkbox"/> other:			<input type="radio"/> Y <input type="radio"/> N	<input type="radio"/> Y <input type="radio"/> N
		<input type="checkbox"/> monitoring well <input type="checkbox"/> cover/barrier <input type="checkbox"/> vapor mitigation system <input type="checkbox"/> other:			<input type="radio"/> Y <input type="radio"/> N	<input type="radio"/> Y <input type="radio"/> N

{Click to Add/Edit Image}

Date added:

Title:

{Click to Add/Edit Image}

Date added:

Title:

## **D.1(2) Description of Vapor Mitigation System Maintenance Plan For:**

**Best Way Cleaners  
5914 U.S. Highway 51  
McFarland, Wisconsin**

**WDNR BRRTS # 02-13-583171  
December 2020**

### **Legal Description:**

SW ¼ of the NW ¼ of Section 3, Township 6 North, Range 10 East, in the Village of McFarland, Dane County, Wisconsin. Tax Key No. 154/0610-032-4510-1.

### **Introduction**

This document is the maintenance plan for a sub-slab depressurization system at the above-referenced property (the Site) in accordance with the requirements of s. NR 724.13 (2), Wis. Adm. Code. The maintenance activities relate to the existing system installed within the former Best Way Cleaners lease space.

More site-specific information about this site may be found:

- In the case file in the Wisconsin Department of Natural Resources (WDNR) South Central office.
- From the WDNR project manager for Dane County.
- BRRTS on the Web (WDNR's internet-based database of contaminated sites) and the RR Sites Map (map view of the Site and surrounding properties) at the link: <http://dnr.wi.gov/topic/Brownfields/wrrd.html>. Both BRRTs on the Web and the RR Sites Map provide PDFs of site-specific information and details regarding continuing obligations for the Site.

### Description of Contamination

Dry cleaning-related volatile organic compound (VOC)-impacted soil gas remains on Site near the former Best Way Cleaners former dry cleaning machine (DCM). The residual VOC soil gas impacts exceed the Sub-Slab Vapor Risk Screening Levels (VRSL) for small commercial properties. The extent of sub-slab soil gas impact is shown on the attached Figure D.2(2). A sub-slab depressurization system was installed in December 2018 to mitigate the vapor intrusion risk posed by the presence of the VOC-impacted soil gas beneath the building slab.

### Vapor mitigation System Description and Purpose

The sub-slab depressurization system consists of a roof-mounted ventilation blower, a drop point within the source unit (former Best Way Cleaners), and connective piping. The drop point is located near the source of the impacted soil gas, the former DCM. The point penetrates the building's approximately 6-inch thick floor slab and terminates within the underlying base course material. The blower creates a negative pressure beneath the floor slab to reduce the potential for sub-slab vapors to infiltrate the building. Vapors extracted by the system are vented to the atmosphere through stacks located on the roof of the existing building.



### Vapor Mitigation System Design and Construction

The sub-slab depressurization system was designed to create a negative pressure beneath the floor slab near the source area, the former DCM. The ventilation blower is a RadonAway Model GP-501 with the capacity to create a vacuum of up to 4 inches of water. The system was designed with an inlet vacuum of 3.5 inches of water and vents approximately 27 cubic feet per minute (cfm) of air from beneath the slab. The rooftop exhaust vent is located at least 20 feet from the roof-mounted HVAC equipment.

### System Maintenance

The sub-slab depressurization system requires minimal maintenance. The system's thermal overload protection is equipped with an automatic reset, and the system has a design life cycle of 15 years.

### Annual Inspection

The sub-slab depressurization system will be inspected once a year. Inspections will be performed in the late fall or early winter when the HVAC system is switched between heating to cooling operations. The inspection will be performed by the property owner or their designated representative. The inspections will be performed to evaluate the induced negative pressure from the mitigation system. Specifically, the vacuum at the drop point on the manometer should be checked. The exterior venting system should be checked for damage due exposure to the weather, increasing age and other factors. A log of the inspections and any repairs will be maintained by the property owner and is attached. The log will include recommendations for necessary repairs made during annual inspections. Once repairs are completed, they will be documented in the inspection log. A copy of the inspection log will be kept at the address of the property owner and made available for submittal or inspection by the Wisconsin Department of Natural Resources (WDNR) representatives upon their request.

### Maintenance Activities

If problems are noted during the annual inspections or at any other time during the year, repairs will be scheduled as soon as practicable. Repairs can include normal maintenance of the drop point floor seal, piping, or replacement of the ventilation blower unit. If replacement of the ventilation blower is required, the replacement unit must be able to provide similar air flow rates as the existing unit (~27 cfm at 3.5-inch water vacuum). Any replacement system equipment will be subject to the same maintenance and inspection guidelines as outlined in this Maintenance Plan unless indicated otherwise by WDNR or its successor. The property owner, in order to maintain the integrity of the sub-slab depressurization system, will maintain a copy of this Maintenance Plan on-site and make it available to all interested parties (i.e. on-site employees, contractors, future property owners, etc.) for viewing.

### Amendment or Withdrawal of Maintenance Plan

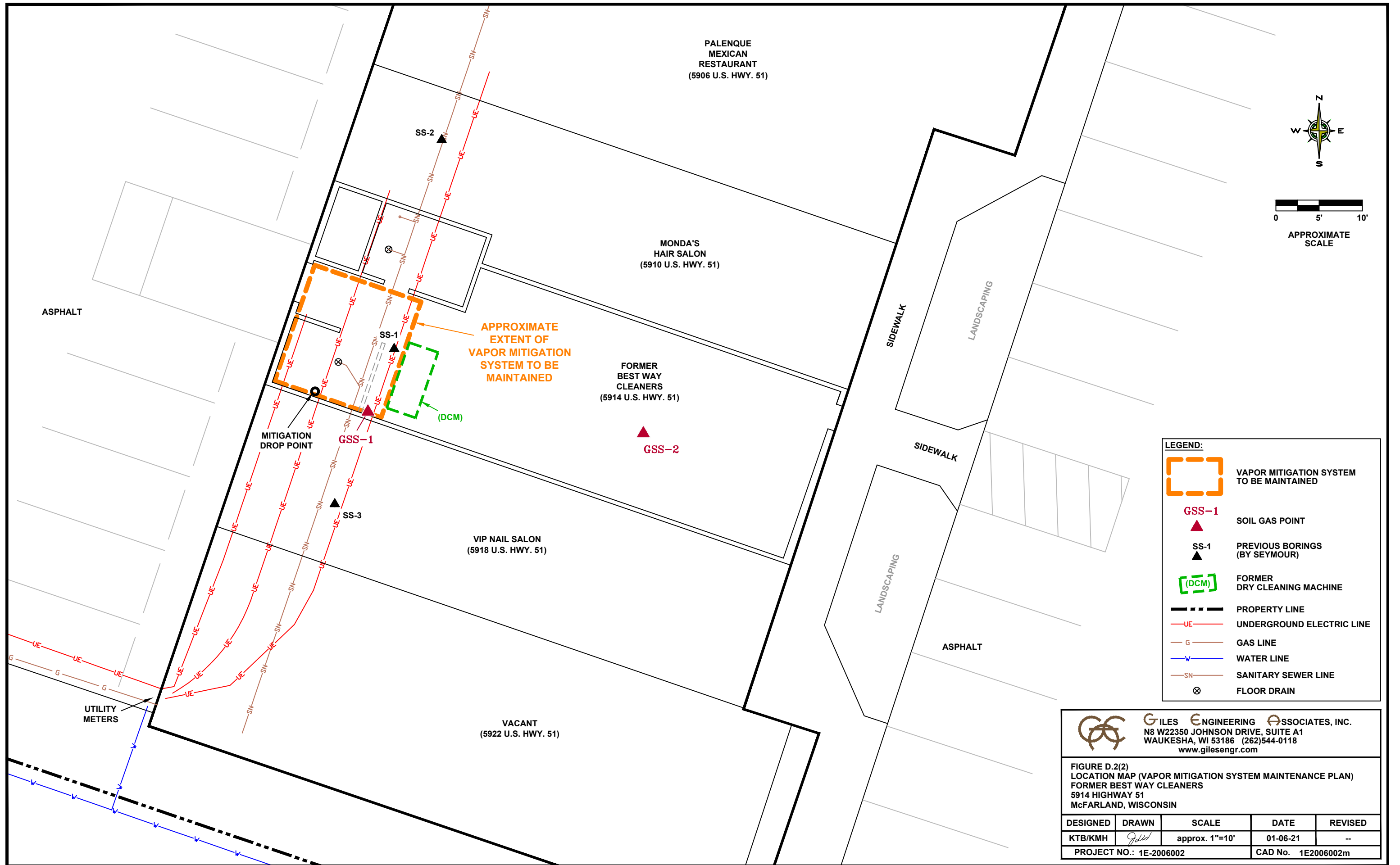
This Maintenance Plan can be amended or withdrawn by the property owner and its successors with the written approval of WDNR.

Contact Information (as of December 2020)











Site Owner and Operator: One Community Bank  
733 North Main Street  
Oregon, WI 53575  
Attention: Steve Peotter  
(608) 835-3168

Consultants: Giles Engineering Associates, Inc.  
N8 W 22350 Johnson Road  
Waukesha, WI 53186  
Attention: Kevin T. Bugel  
(262) 544-0118

WDNR: Wisconsin Department of Natural Resources  
3911 Fish Hatchery Road  
Madison, Wisconsin 53711  
Attention: Cynthia Koepke  
(608) 219-2181



**LEGEND:**

-  VAPOR MITIGATION SYSTEM TO BE MAINTAINED
-  GSS-1 SOIL GAS POINT
-  SS-1 PREVIOUS BORINGS (BY SEYMOUR)
-  (DCM) FORMER DRY CLEANING MACHINE
-  PROPERTY LINE
-  -UE- UNDERGROUND ELECTRIC LINE
-  -G- GAS LINE
-  -W- WATER LINE
-  -SN- SANITARY SEWER LINE
-  FLOOR DRAIN

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 N8 W22350 JOHNSON DRIVE, SUITE A1  
 WAUKESHA, WI 53186 (262)544-0118  
 www.gilesengr.com

FIGURE D.2(2)  
 LOCATION MAP (VAPOR MITIGATION SYSTEM MAINTENANCE PLAN)  
 FORMER BEST WAY CLEANERS  
 5914 HIGHWAY 51  
 McFARLAND, WISCONSIN

DESIGNED	DRAWN	SCALE	DATE	REVISED
KTB/KMH	<i>Jed</i>	approx. 1"=10'	01-06-21	--
PROJECT NO.: 1E-2006002			CAD No. 1E2006002m	



View of the roof-mounted ventilation blower.



View of the mitigation system piping penetrating the concrete floor slab.

**D.3(2) PHOTOGRAPHS**

December 14, 2018

Photographs taken from Seymour Environmental Services, Inc.

Vapor Mitigation System Inspection Log

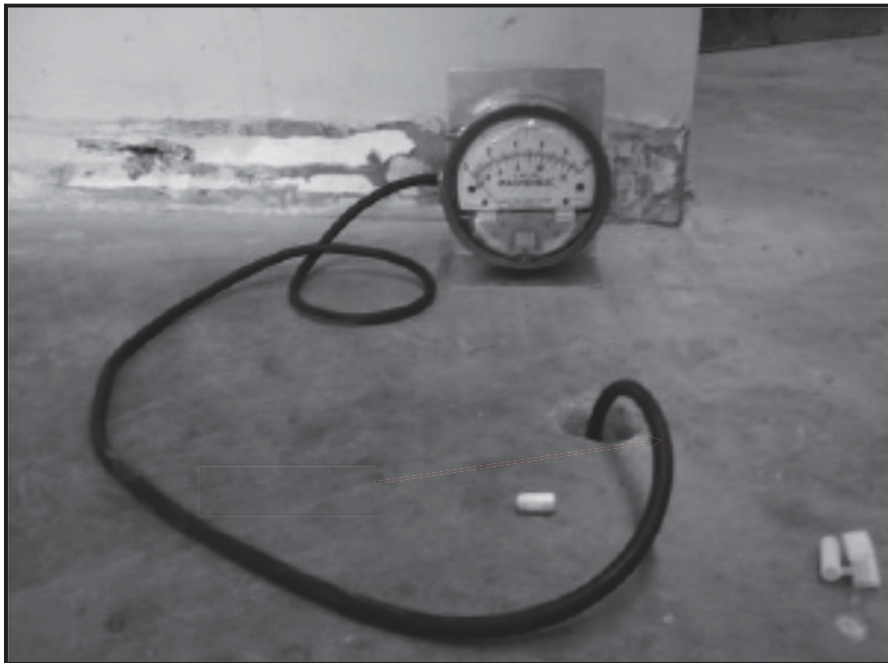
**Best Way Cleaners**  
5914 U.S. Highway 51  
McFarland, Wisconsin  
Project No. 1E-2006002  
BRRTS No. 02-13-583171



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View of the manometer reading 4 inches of water.



View of a manometer reading at SS-1 showing negative pressure of 0.2 inches of water.

### D.3(2) PHOTOGRAPHS

December 14, 2018

Photographs taken from Seymour Environmental Services, Inc.

Vapor Mitigation System Inspection Log

**Best Way Cleaners**  
5914 U.S. Highway 51  
McFarland, Wisconsin  
Project No. 1E-2006002  
BRRS No. 02-13-583171



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**Notice:** In accordance with s. NR 727.05 (1) (b) 3., Wis. Adm. Code, use of this form for documenting the inspections and maintenance of certain vapor-related continuing obligations is required. Personal information collected will be used for administrative purposes and may be provided to requesters to the extent required by Wisconsin's Public Records law [ss. 19.31-19.39, Wis. Stats.].

**Directions:** This form was developed to provide the results of a site inspection of a vapor related continuing obligation, typically a vapor mitigation system. See the closure approval letter for this site for requirements regarding the submittal of this form to the Department of Natural Resources. A copy of this inspection log is required to be maintained either on the property, or at a location specified in the closure approval letter. The closure letter may be found in the database, [BRRTS on the Web](#), by searching for the site using the BRRTS ID number, and then looking in the "Action" section, for code 56.

Activity (Site) Name: Best Way Cleaners

BRRTS No. 02-13-583171

Date of Inspection: \_\_\_\_\_

When submittal of this form is required, submit an electronic version or a scanned copy of this completed form to the [RR Submittal Portal](#).

SYSTEM COMPONENT	WHAT DOES IT DO?	WHAT DO I CHECK?	WHAT SHOULD I SEE?	DATE:
NAME				WHAT TO FIX?
<b>Manometer or Differential Pressure Gauge</b>	Measures differential pressure between vacuum side of vent pipe and indoor space.  This measurement confirms there is a vacuum being pulled by the fan.	Liquid Level on Manometer or Gauge	Liquid level in manometer should be offset (not level with each other).	A change in liquid level indicates a change in the vacuum below foundation. This could be caused by failure of fan, blockage of vent pipe, change in water level below building, or other conditions.  Hire a professional to identify cause and repair if needed.

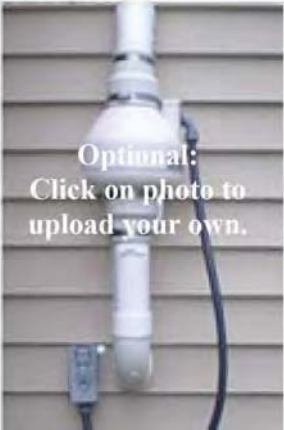


**NOTES:** (Record the reading on the gauge. Identify specific building and location description:)

Not Applicable

SYSTEM COMPONENT		WHAT DO I CHECK?	WHAT SHOULD I SEE?	DATE:
NAME	WHAT DOES IT DO?			WHAT TO FIX?
<b>Fan</b>	<p>Fan creates a vacuum and lowers pressure below foundation.</p> <p>The fan also removes soil gases from below foundation for discharge to atmosphere.</p>	<p>Fan Operation</p> <p>Fan Location</p> <p>Motor Noise</p>	<p>Fan is on.</p> <p>Fan mounted outside &amp; secure.</p> <p>Fan motor is quiet (loud motor may indicate problem).</p>	<p>Replace the fan immediately once the fan stops running. Fans typically run for 10-20 years, but it may be less.</p> <p>Replacement fan to have similar specifications as original with respect to flow and vacuum.</p> <p>After a fan is replaced, the system should be evaluated by a mitigation professional to verify effectiveness, which includes pressure readings.</p> <p><b>Original Fan Make and Model:</b></p>



PHOTO



Optional:  
Click on photo to upload your own.


**NOTES:** (Identify specific building and location description:)

Not Applicable


SYSTEM COMPONENT		WHAT DO I CHECK?	WHAT SHOULD I SEE?	DATE:
NAME	WHAT DOES IT DO?			WHAT TO FIX?
<b>Suction Drop Point w/ Vent Pipe</b>		Suction Point Seal  Vent Pipe Condition	Seal is air tight around pipe penetration.  Vent pipe is connected to fan, has not cracked.	Suction point seal or vent pipe may need to be sealed or replaced if cracks or leaks appear.  If any piping or sealing of the system is altered or replaced, the system should be evaluated by a mitigation professional to verify effectiveness, which includes pressure readings.
PHOTO  <p>Optional: Click on photo to upload your own.</p>		NOTES: (Identify specific building and location description:) <input type="checkbox"/> Not Applicable		
<b>Sealed Sump w/Vent Pipe</b>		Suction Point Seal  Vent Pipe Seal Condition	Seal is airtight to floor.  Vent pipe is connected to the sump cover and is not cracked.	Sump cover or vent pipe may need to be sealed or replaced if cracks or leaks appear.  If any piping or sealing of the system is altered or replaced, the system should be evaluated by a plumber or a mitigation professional to verify effectiveness, which includes pressure readings.
PHOTO  <p>Optional: Click on photo to upload your own.</p>		NOTES: (Identify specific building and location description:) <input type="checkbox"/> Not Applicable		



SYSTEM COMPONENT	WHAT DOES IT DO?	WHAT DO I CHECK?	WHAT SHOULD I SEE?	DATE:
NAME				WHAT TO FIX?
<b>Outdoor Vent Pipe</b>	Pipe transports the soil gas from beneath the foundation for discharge to the atmosphere.	Vent Pipe Condition  Vent Pipe Location	Vent pipe remains connected to fan. End of pipe free from obstructions. The exhaust is more than 15 feet from windows or air intakes.	Vent pipe may require replacement, or cleaning to remove ice or debris. If any piping or sealing of the system is altered or replaced, the system should be evaluated by a mitigation professional to verify effectiveness, which includes pressure readings.

<p>PHOTO</p>  <p>Optional: Click on photo to upload your own.</p>	<p><b>NOTES:</b> (Identify specific building and location description:)</p> <p><input type="checkbox"/> Not Applicable</p>
--	--

<b>Foundation Floor</b>	Foundation is a barrier that minimizes soil gas entry into building, and helps fan to work efficiently.	Foundation Condition  Foundation Footprint	No penetrating cracks or holes in foundation.  Check if there have been alterations or additions to building or footprint.	Seal cracks or other penetrations as you would to prevent water from entering.  If building floor plan has changed, notify DNR and contact a mitigation professional to evaluate if modifications to the vapor mitigation system are necessary.
-------------------------	---	--	--	---

<p>PHOTO</p>  <p>Optional: Click on photo to upload your own.</p>	<p><b>NOTES:</b> (Identify specific building and location description:)</p> <p><input type="checkbox"/> Not Applicable</p>
--	--

SYSTEM COMPONENT				DATE:
NAME	WHAT DOES IT DO?	WHAT DO I CHECK?	WHAT SHOULD I SEE?	WHAT TO FIX?
Sub Slab Vapor Port	This is a sample port to measure vacuum or take sample of soil gas if needed. It needs to remain sealed when not in use to prevent soil gas entry into the home.	Port Seal/Cap	If able to measure the vacuum with a micromanometer, the pressure differential should be at least 0.004 inches of H <sub>2</sub> O or at least one Pascal.	Repair or replace the seal and cover as needed.
		Port Condition	Port is sealed and capped when not in use.	Permanently seal hole if sample port is ever removed.

PHOTO



Optional:  
Click on photo to upload  
your own.

**NOTES:** (If taken, record the pressure differential reading. Identify specific building and location description:)

Not Applicable

02-13-583171  
BRRTS #

Best Way Cleaners  
Activity (Site) Name

### **Attachment E: Monitoring Well Information**

Not included. All monitoring wells will be abandoned after Case Closure is granted.

02-13-583171  
BRRTS #

Best Way Cleaners  
Activity (Site) Name

## **Attachment F: Source Legal Documents**

### F.1 Deed

Included

### F.2 Certified Survey Map

Included

### F.3 Verification of Zoning

Included

### F.4 Signed Statement

Included. The property's legal description has not changed since the statement was signed in September 2019.

STATE BAR OF WISCONSIN FORM 2 - 1998  
WARRANTY DEED

DANE COUNTY  
REGISTER OF DEEDS

Document Number

**3338317**

06-25-2001 2:22 PM

Trans. Fee 2202.90

Rec. Fee 14.00  
Pages 3

This Deed, made between McFarland Joint Venture, now McFarland Joint Venture, LLP, a Wisconsin limited liability partnership

and FH of McFarland, Inc., a Wisconsin corporation, Grantor,

Grantor, for a valuable consideration, conveys and warrants to Grantee the following described real estate in Dane County, State of Wisconsin:

Described on Exhibit A attached.

Recording Area

Name and Return Address  
FH of McFarland, Inc.  
c/o E. David Locke  
5911 Main Street  
McFarland, WI 53558

001369

See Exhibit A

Parcel Identification Number (PIN)

This is not homestead property.  
(is) (is not)

Exceptions to warranties: the right-of-way to US Highway 51.

Dated this 1st day of June, 2001

McFARLAND JOINT VENTURE, LLP

\_\_\_\_\_  
(SEAL)

Bruce Neviasser (SEAL)

\* Bruce Neviasser, Managing Partner

\_\_\_\_\_  
(SEAL)

\_\_\_\_\_  
(SEAL)

AUTHENTICATION

ACKNOWLEDGMENT

Signature(s) \_\_\_\_\_

State of Wisconsin,

Dane

County.

ss.

authenticated this \_\_\_\_\_ day of \_\_\_\_\_

Personally came before me this 1st day of

June, 2001, the above named Bruce Neviasser, Managing Partner

TITLE: MEMBER STATE BAR OF WISCONSIN

(If not, \_\_\_\_\_  
authorized by §706.06, Wis. Stats.)

THIS INSTRUMENT WAS DRAFTED BY

Thomas G. Ragatz, Lawyer

**WENDY J. HANSEN**  
Notary Public  
STATE OF WISCONSIN

Wendy J. Hansen

Notary Public, State of Wisconsin

My commission is permanent. (If not, state expiration date:

April 27 2005)

(Signatures may be authenticated or acknowledged. Both are not necessary.)

\* Names of persons signing in any capacity must be typed or printed below their signature.

3114

**LEGAL DESCRIPTION**  
*Stonefield Mall (Furnished)*  
*McFarland, Wisconsin*

001370

Parcel A

Lots Five (5) and Six (6), Block One (1), Severson Subdivision, in the Village of McFarland, Dane County, Wisconsin.

And

A parcel of land located between Block 1 and Block 2, Severson Subdivision, being a part of Severson Road, Village of McFarland, Dane County, Wisconsin, more fully described as follows:

Beginning at the Southwest corner of Lot 5 of said Block 1, thence South  $81^{\circ}42'00''$  East, along the South line of said Lot 5, 51.00 feet; thence South  $8^{\circ}18'00''$  West, 14.00 feet; thence North  $81^{\circ}42'00''$  West, 51.00 feet; thence North  $8^{\circ}18'11''$  East, 14.00 feet to the point of beginning.

And

A parcel of land located between Block 1 and Block 2, Severson Subdivision, being a part of Severson Road, Village of McFarland, Dane County, Wisconsin, more fully described as follows:

Commencing at the Southwest corner of Lot 5 of said Block 1, thence South  $81^{\circ}42'00''$  East, along the South line of said Lot 5, 51.00 feet to the point of beginning; thence continue South  $81^{\circ}42'00''$  East, along said South line and the South line of Lot 6 of said Block 1, 175.81 feet to the Westerly right-of-way of U.S. Highway 51; thence South  $19^{\circ}52'13''$  West, along said Westerly right-of-way, 33.69 feet to the former centerline of Severson Road, as platted; thence North  $81^{\circ}42'00''$  West, along said centerline, 169.05 feet; thence North  $8^{\circ}18'00''$  East, 33.00 feet to the point of beginning.

Parcel B

Part of Outlot Fifty (50), Assessor's Plat of the Village of McFarland, in the Village of McFarland, Dane County, Wisconsin, and described more fully as follows:

Beginning at the Southwest corner of said Outlot 50; thence East along the South line of said Outlot, 206.7 feet to the centerline of U.S. Highway 51; thence North  $19^{\circ}47'$  East along said centerline, 83.5 feet; thence West parallel to the South line of said Outlot 50, 226.6 feet to an iron stake on the West line of said Outlot 50; thence Southerly along said West line 80 feet to the point of beginning.

EXCEPTING from all the above land conveyed by Warranty Deed in Volume 16141 of records, Page 49, as Document No. 2270460, and EXCEPT lands conveyed by Quit Claim Deed in Volume 33034 of Records, Page 8, as Document No. 2766694.

Parcel C

Easement for ingress and egress as set forth in Easement Agreement dated November 20, 1995 and recorded May 30, 1996 in the Office of the Register of Deeds for Dane County, Wisconsin in Volume 33034 of Records, Page 9, as Document No. 2766695.

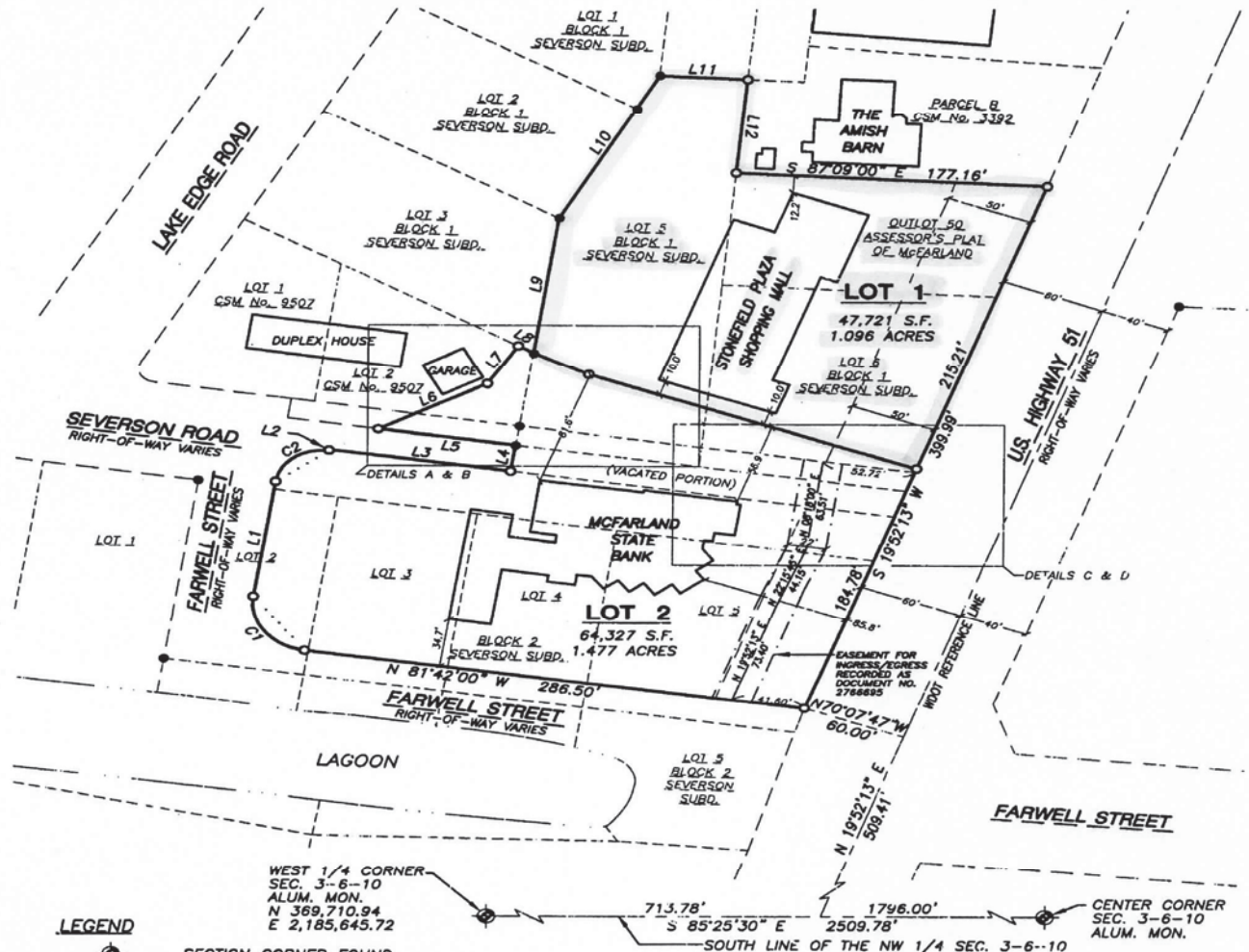
Said Parcel being more particularly described as follows:

Commencing at the northwesterly corner of Lot Two (2), Block Two (2), of said Severson Subdivision; thence along the northerly line of said Lot Two (2), S 81°42'00" E, 43.44 feet; thence N 8°18'00" E, 5.50 feet; thence 41.63 feet along the arc of a curve to the right with a radius of 26.50 feet and a chord which bears N 53°18'00" E, 37.48 feet; thence N 8°18'00" E, 1.00 feet to the centerline of partially vacated Severson Road; thence along said centerline S 81°42'00" E, 104.10 feet; thence N 8°18'00" E, 32.97 feet to the southwesterly corner of Lot Five (5), Block One (1) of said Severson Subdivision, also being the point of beginning; thence along the westerly line of said Lot Five(5), N 8°18'00" E, 150.20 feet; thence continuing along said westerly line N 28°54'00" E, 116.80 feet to the northwesterly corner of said Lot Five (5); thence along the northerly line of said Lot Five (5), S 87°01'00" E, 50.00 feet to the northeasterly corner of said Lot Five (5); thence along the easterly line of said Lot Five (5), S 5°22'00" W, 67.39 feet; thence S 87°09'00" E, 177.16 feet to the westerly right-of-way line of State Trunk Highway Fifty-One (51); thence along said westerly right-of-way line, S 19°52'13" W, 218.12 feet to the southerly line of said Lot Six (6), Severson Subdivision; thence along the southerly line of said Lot Six (6) and said Lot Five (5), Severson Subdivision, N 81°42'00" W, 226.94 feet to the point of beginning.

Said parcel contains 53778.05 square feet, or 1.235 acres.

# CERTIFIED SURVEY MAP NO. 10584

A PARCEL OF LAND BEING PART OF LOT 5 AND LOT 6 OF BLOCK 1 OF SEVERSON SUBDIVISION, PART OF OUTLOT 50 OF THE ASSESSOR'S PLAT OF McFARLAND, PART OF LOT 2, LOT 3, LOT 4 AND LOT 5 OF BLOCK 2 OF SEVERSON SUBDIVISION, AND THE VACATED PORTION OF SEVERSON ROAD, ALL LOCATED IN GOVERNMENT LOT 1, SECTION 3, TOWN 6 NORTH, RANGE 10 EAST, VILLAGE OF McFARLAND, DANE COUNTY, WISCONSIN



**LEGEND**

- SECTION CORNER FOUND
- PROPERTY CORNER FOUND
- PROPERTY CORNER SET (3/4" x 30" REBAR WEIGHING 1.50 LBS/FT.)
- SECTION LINE
- PROPERTY LINE
- - - ORIGINAL PLATTED LOT LINE
- - - RIGHT-OF-WAY LINE
- - - HIGHWAY REFERENCE LINE
- - - EASEMENT LINE
- - - EDGE OF WATER
- - - WDOT BUILDING SETBACK LINE
- ▭ BUILDING

WEST 1/4 CORNER  
SEC. 3-6-10  
ALUM. MON.  
N 369,710.94  
E 2,185,645.72

CENTER CORNER  
SEC. 3-6-10  
ALUM. MON.

CURVE TABLE						
CURVE	LENGTH	RADIUS	DELTA ANGLE	TANGENT	CHORD BEARING	CHORD
C1	54.19'	34.50'	90°00'00"	34.50'	N36°42'00"W	48.79'
C2	41.63'	26.50'	89°59'34"	26.50'	N53°18'00"E	37.48'

LINE TABLE		
LINE	BEARING	LENGTH
L1	N08°18'00"E	83.26'
L2	N08°18'00"E	1.00'
L3	S81°42'00"E	104.10'
L4	N08°16'38"E	18.91'
L5	N81°42'00"W	78.83'
L6	N61°46'17"E	69.97'
L7	N32°26'08"E	32.42'
L8	S60°21'00"E	10.00'
L9	N08°16'38"E	96.60'
L10	N28°54'00"E	116.80'
L11	S87°01'00"E	50.00'
L12	S05°22'00"W	67.39'
L13	N70°02'13"W	198.22'
L14	N63°57'13"W	35.02'



**NOTES**

- SURVEY PERFORMED BY JENKINS SURVEY & DESIGN, INC. ON JANUARY 15, 2002.
- BEARINGS ARE REFERENCED TO THE WISCONSIN STATE PLANE COORDINATE SYSTEM, SOUTH ZONE, NAD 27.
- SUBJECT TO ALL EASEMENTS AND RESTRICTIONS BOTH RECORDED AND UNRECORDED.



**Jenkins Survey & Design, Inc.**

245 Horizon Drive, Suite #108  
Verona, Wisconsin 53593  
608-848-5060

**SURVEYED FOR:**

McFarland State Bank  
5911 Main Street  
McFarland, Wisconsin 53558  
608.838.3141

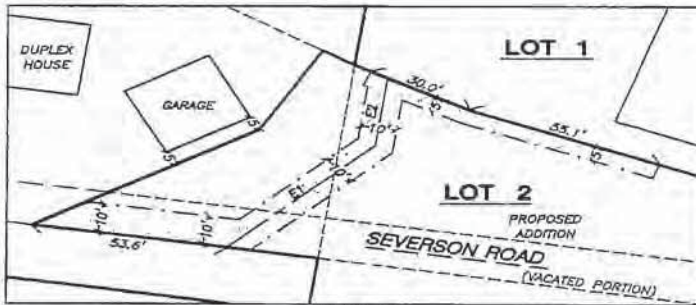
SHEET 1 OF 5

C.S.M. NO. 10584  
DOC. NO. 3586456  
VOL. 102 PAGE 328



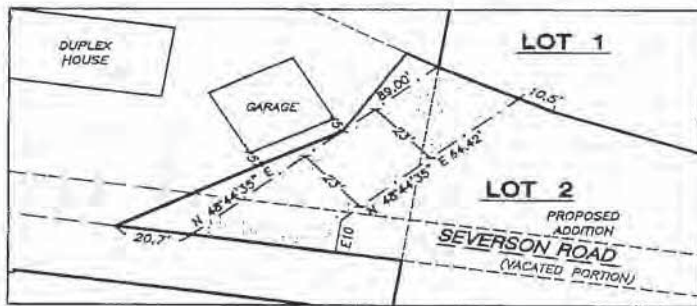
# CERTIFIED SURVEY MAP NO. 10584

A PARCEL OF LAND BEING PART OF LOT 5 AND LOT 6 OF BLOCK 1 OF SEVERSON SUBDIVISION, PART OF OUTLOT 50 OF THE ASSESSOR'S PLAT OF McFARLAND, PART OF LOT 2, LOT 3, LOT 4 AND LOT 5 OF BLOCK 2 OF SEVERSON SUBDIVISION, AND THE VACATED PORTION OF SEVERSON ROAD, ALL LOCATED IN GOVERNMENT LOT 1, SECTION 3, TOWN 6 NORTH, RANGE 10 EAST, VILLAGE OF McFARLAND, DANE COUNTY, WISCONSIN



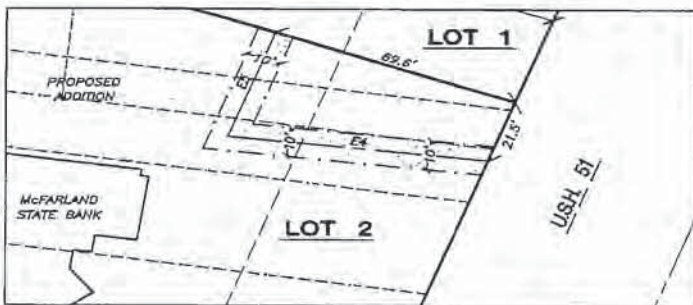
DETAIL A  
SCALE: 1"=50'

PRIVATE WATERMAIN EASEMENT, AS SHOWN ON DETAIL A, TO CONSTRUCT, MAINTAIN, REPAIR AND REPLACE A WATER MAIN AND ASSOCIATED APPURTENANCES IN AND ACROSS LOT 2 FOR THE SOLE BENEFIT OF LOT 1. SAID EASEMENT TO BE AS SHOWN HEREON.



DETAIL B  
SCALE: 1"=50'

PRIVATE EASEMENT, AS SHOWN ON DETAIL B, FOR THE PURPOSE OF INGRESS AND EGRESS OVER AND ACROSS A PART OF LOT 2 AS SHOWN HEREON.



DETAIL C  
SCALE: 1"=50'

PRIVATE SANITARY SEWER EASEMENT, AS SHOWN ON DETAIL C, TO CONSTRUCT, MAINTAIN, REPAIR AND REPLACE A SANITARY SEWER LINE AND ONE MANHOLE IN AND ACROSS LOT 2 FOR THE SOLE BENEFIT OF LOT 1. SAID EASEMENT TO BE AS SHOWN HEREON.



DETAIL D  
SCALE: 1"=50'

EASEMENT, AS SHOWN ON DETAIL D, FOR THE PURPOSE OF INGRESS AND EGRESS OVER AND ACROSS A PART OF LOT 2 AS SHOWN HEREON.

EASEMENT LINE TABLE		
LINE	LENGTH	BEARING
E1	53.68'	N 48°44'42" E
E2	23.69'	N 08°06'01" E
E3	11.08'	N 08°09'36" E
E4	71.55'	N 83°28'06" W
E5	39.11'	N 19°51'38" E
E6	10.21'	S 30°08'03" W
E7	28.00'	N 81°42'00" W
E8	15.88'	N 11°34'31" E
E9	31.54'	S 70°02'15" E

**Jenkins Survey & Design, Inc.**

245 Horizon Drive, Suite #108  
Verona, Wisconsin 53593  
608-848-5060

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5911 Main Street  
McFarland, Wisconsin 53558  
608.838.3141

SHEET 2 OF 5

C.S.M. NO. 10584  
DOC. NO. 3586456  
VOL. 122 PAGE 329

J:\Projects\McFarland Bank\DWG\F-2564.dwg

**CERTIFIED SURVEY MAP NO. 10584**

A PARCEL OF LAND BEING PART OF LOT 5 AND LOT 6 OF BLOCK 1 OF SEVERSON SUBDIVISION, PART OF OUTLOT 50 OF THE ASSESSOR'S PLAT OF MCFARLAND, PART OF LOT 2, LOT 3, LOT 4 AND LOT 5 OF BLOCK 2 OF SEVERSON SUBDIVISION, AND THE VACATED PORTION OF SEVERSON ROAD, ALL LOCATED IN GOVERNMENT LOT 1, SECTION 3, TOWN 6 NORTH, RANGE 10 EAST, VILLAGE OF MCFARLAND, DANE COUNTY, WISCONSIN

**LEGAL DESCRIPTION**

A PARCEL OF LAND LOCATED IN THE SOUTHWEST ¼ OF THE NORTHWEST ¼ OF SECTION 3, TOWN 6 NORTH, RANGE 10 EAST, BEING PART OF LOT 5 AND LOT 6 OF BLOCK 1 OF SEVERSON SUBDIVISION, PART OF OUTLOT 50 OF THE ASSESSOR'S PLAT OF MCFARLAND, PART OF LOT 2, LOT 3, LOT 4 AND LOT 5 OF BLOCK 2 OF SEVERSON SUBDIVISION, AND THE VACATED PORTION OF SEVERSON ROAD, VILLAGE OF MCFARLAND, DANE COUNTY, WISCONSIN, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE WEST ¼ CORNER OF SAID SECTION 3, THENCE ALONG THE SOUTH LINE OF THE NORTHWEST ¼ OF SAID SECTION 3, S 85°25'30" E, 713.78 FEET TO THE REFERENCE LINE OF U.S. HIGHWAY 51; THENCE ALONG SAID REFERENCE LINE, N 19°52'13" E, 509.41 FEET; THENCE N 70°07'47" W, 60.00 FEET TO THE WESTERLY RIGHT-OF-WAY LINE OF SAID U.S. HIGHWAY 51 AND THE NORTHERLY RIGHT-OF-WAY LINE OF FARWELL STREET, SAID POINT BEING THE POINT OF BEGINNING; THENCE ALONG SAID NORTHERLY RIGHT-OF-WAY LINE OF FARWELL STREET, N 81°42'00" W, 286.50 FEET; THENCE 54.19 FEET ALONG THE ARC OF A CURVE TO THE RIGHT WITH A RADIUS OF 34.50 FEET, WHOSE LONG CHORD BEARS N 36°42'00" W, 48.79 FEET TO THE EASTERLY RIGHT-OF-WAY LINE OF FARWELL STREET; THENCE ALONG SAID EASTERLY RIGHT-OF-WAY LINE, N 08°18'00" E, 83.26 FEET; THENCE 41.63 FEET ALONG THE ARC OF A CURVE TO THE RIGHT WITH A RADIUS OF 26.50 FEET, WHOSE LONG CHORD BEARS N 53°18'00" E, 37.48 FEET; THENCE N 08°18'00" E, 1.00 FEET TO THE SOUTHERLY RIGHT-OF-WAY LINE OF SEVERSON ROAD; THENCE ALONG SAID SOUTHERLY RIGHT-OF-WAY LINE, S 81°42'00" E, 104.10 FEET; THENCE N 08°16'38" E, 18.91 FEET TO THE NORTHERLY RIGHT-OF-WAY LINE OF SEVERSON ROAD; THENCE ALONG SAID NORTHERLY RIGHT-OF-WAY LINE, N 81°42'00" W, 78.83 FEET; THENCE N 61°46'17" E, 69.97 FEET; THENCE N 32°26'08" E, 32.42 FEET TO THE SOUTHERLY LINE OF LOT 3, BLOCK 1 OF SEVERSON SUBDIVISION; THENCE ALONG SAID SOUTHERLY LINE, S 60°21'00" E, 10.00 FEET TO THE SOUTHWESTERLY CORNER OF LOT 5, BLOCK 1 OF SEVERSON SUBDIVISION; THENCE ALONG THE WESTERLY LINE OF SAID LOT 5, N 08°16'38" E, 96.60 FEET; THENCE CONTINUING ALONG SAID WESTERLY LINE, N 28°54'00" E, 116.80 FEET TO THE NORTHWESTERLY CORNER OF SAID LOT 5; THENCE ALONG THE NORTHERLY LINE OF SAID LOT 5, S 87°01'00" E, 50.00 FEET TO THE NORTHEASTERLY CORNER OF SAID LOT 5; THENCE ALONG THE EASTERLY LINE OF SAID LOT 5, S 05°22'00" W, 67.39 FEET TO THE NORTHWESTERLY CORNER OF OUTLOT 50 OF THE ASSESSOR'S PLAT OF MCFARLAND; THENCE ALONG THE NORTHERLY LINE OF SAID OUTLOT 50, S 87°09'00" E, 177.16 FEET TO THE WESTERLY RIGHT-OF-WAY LINE OF U.S. HIGHWAY 51; THENCE ALONG SAID WESTERLY RIGHT-OF-WAY LINE, S 19°52'13" W, 399.99 FEET TO THE POINT OF BEGINNING.

SAID PARCEL CONTAINS 112,048 SQUARE FEET OR 2.572 ACRES.

**SURVEYOR'S CERTIFICATE**

I, DAVE M. JENKINS, REGISTERED LAND SURVEYOR, S-2255, DO HEREBY CERTIFY THAT I HAVE SURVEYED, DIVIDED, AND MAPPED THE LANDS DESCRIBED HEREIN AND THAT THE MAP IS A CORRECT REPRESENTATION IN ACCORDANCE WITH THE INFORMATION PROVIDED. I FURTHER CERTIFY THAT THIS CERTIFIED SURVEY MAP IS IN FULL COMPLIANCE WITH CHAPTER 236.34 OF THE WISCONSIN STATUTES AND THE SUBDIVISION REGULATIONS OF THE VILLAGE OF MCFARLAND, DANE COUNTY, WISCONSIN.

DATE: 10/28/02

*Dave M. Jenkins*  
 DAVE M. JENKINS, S-2255  
 REGISTERED LAND SURVEYOR



**Jenkins Survey & Design, Inc.**

245 Horizon Drive, Suite #108  
 Verona, Wisconsin 53593  
 608-848-5060

**SURVEYED FOR:**

McFarland State Bank  
 5911 Main Street  
 McFarland, Wisconsin 53558  
 608.938.3141

SHEET 3 OF 5

C.S.M. NO. 10584  
 DOC. NO. 35864516  
 VOL. 102 PAGE 330

**CERTIFIED SURVEY MAP NO. 10584**

A PARCEL OF LAND BEING PART OF LOT 5 AND LOT 6 OF BLOCK 1 OF SEVERSON SUBDIVISION, PART OF OUTLOT 50 OF THE ASSESSOR'S PLAT OF MCFARLAND, PART OF LOT 2, LOT 3, LOT 4 AND LOT 5 OF BLOCK 2 OF SEVERSON SUBDIVISION, AND THE VACATED PORTION OF SEVERSON ROAD, ALL LOCATED IN GOVERNMENT LOT 1, SECTION 3, TOWN 6 NORTH, RANGE 10 EAST, VILLAGE OF MCFARLAND, DANE COUNTY, WISCONSIN

CORPORATE OWNER'S CERTIFICATE

NORTHERN BANK SHARES, INC., A WISCONSIN CORPORATION, DOES HEREBY CERTIFY THAT SAID CORPORATION CAUSED THE LAND DESCRIBED ON THIS CERTIFIED SURVEY MAP TO BE SURVEYED, DIVIDED, AND MAPPED AS REPRESENTED ON THIS CERTIFIED SURVEY MAP, AND TO BE SUBMITTED TO THE VILLAGE OF MCFARLAND PLAN COMMISSION FOR APPROVAL.

E. David Locke 11/1/02  
E. DAVID LOCKE, PRESIDENT DATE  
NORTHERN BANKSHARES, INC.

Richard Southern 11-1-02  
RICHARD SOUTHERN, SECRETARY DATE  
NORTHERN BANKSHARES, INC.

NOTARY PUBLIC, DANE COUNTY, WISCONSIN

STATE OF WISCONSIN) SS  
DANE COUNTY ) SS

PERSONALLY CAME BEFORE ME THIS 4<sup>th</sup> DAY OF November, 2002, THE ABOVE-NAMED E. DAVID LOCKE, THE PRESIDENT OF NORTHERN BANKSHARES, INC., AND RICHARD SOUTHERN, SECRETARY OF NORTHERN BANKSHARES, INC., TO ME KNOWN TO BE THE PERSONS WHO EXECUTED THE FOREGOING INSTRUMENT AND ACKNOWLEDGED THE SAME.

Cinda Schwedrosky  
NOTARY PUBLIC, DANE COUNTY, WISCONSIN

MY COMMISSION EXPIRES Aug 21, 2005.

CORPORATE OWNER'S CERTIFICATE

FH OF MCFARLAND, A WISCONSIN CORPORATION, DOES HEREBY CERTIFY THAT SAID CORPORATION CAUSED THE LAND DESCRIBED ON THIS CERTIFIED SURVEY MAP TO BE SURVEYED, DIVIDED, AND MAPPED AS REPRESENTED ON THIS CERTIFIED SURVEY MAP, AND TO BE SUBMITTED TO THE VILLAGE OF MCFARLAND PLAN COMMISSION FOR APPROVAL.

E. David Locke 11/1/02  
E. DAVID LOCKE, PRESIDENT DATE  
FH OF MCFARLAND, INC.

Steven A. Swanson 11/1/02  
STEVEN A. SWANSON, VICE PRESIDENT DATE  
FH OF MCFARLAND, INC.

NOTARY PUBLIC, DANE COUNTY, WISCONSIN

STATE OF WISCONSIN) SS  
DANE COUNTY ) SS

PERSONALLY CAME BEFORE ME THIS 4<sup>th</sup> DAY OF November, 2002, THE ABOVE-NAMED E. DAVID LOCKE, PRESIDENT OF FH OF MCFARLAND, INC., AND STEVEN A. SWANSON, VICE PRESIDENT OF FH OF MCFARLAND, INC., TO ME KNOWN TO BE THE PERSONS WHO EXECUTED THE FOREGOING INSTRUMENT AND ACKNOWLEDGED THE SAME.

Cinda Schwedrosky  
NOTARY PUBLIC, DANE COUNTY, WISCONSIN

MY COMMISSION EXPIRES Aug 21, 2005.



**Jenkins Survey & Design, Inc.**  
245 Horizon Drive, Suite #108  
Verona, Wisconsin 53593  
608-848-5060

SURVEYED FOR:  
McFarland State Bank  
5911 Main Street  
McFarland, Wisconsin 53558  
608.838.3141

A:\Project\Mcfarland Box\005147-Cert.dwg

**CERTIFIED SURVEY MAP NO. 10584**

A PARCEL OF LAND BEING PART OF LOT 5 AND LOT 6 OF BLOCK 1 OF SEVERSON SUBDIVISION, PART OF OUTLOT 50 OF THE ASSESSOR'S PLAT OF MCFARLAND, PART OF LOT 2, LOT 3, LOT 4 AND LOT 5 OF BLOCK 2 OF SEVERSON SUBDIVISION, AND THE VACATED PORTION OF SEVERSON ROAD, ALL LOCATED IN GOVERNMENT LOT 1, SECTION 3, TOWN 6 NORTH, RANGE 10 EAST, VILLAGE OF MCFARLAND, DANE COUNTY, WISCONSIN

VILLAGE OF MCFARLAND PLAN COMMISSION

APPROVED FOR RECORDING PER VILLAGE OF MCFARLAND PLAN COMMISSION THIS 20<sup>th</sup> DAY OF May, 2002.

Don Peterson  
DON PETERSON, VILLAGE ADMINISTRATOR

CERTIFICATE OF VILLAGE TREASURER

STATE OF WISCONSIN)  
DANE COUNTY) SS

I, DON PETERSON, BEING THE DULY ELECTED, QUALIFIED AND ACTING VILLAGE TREASURER OF THE VILLAGE OF MCFARLAND, DO HEREBY CERTIFY THAT IN ACCORDANCE WITH THE RECORDS IN MY OFFICE, THERE ARE NO UNPAID TAXES OR UNPAID SPECIAL ASSESSMENTS AS OF November 5, 2002 ON ANY OF THE LAND INCLUDED IN THIS CERTIFIED SURVEY MAP.

Don Peterson 11-5-02  
DON PETERSON DATE:  
VILLAGE OF MCFARLAND TREASURER

DANE COUNTY REGISTER OF DEEDS

RECEIVED FOR RECORDING THIS 8<sup>th</sup> DAY OF November, 2002 AT 5:23 O'CLOCK P.M. AND RECORDED IN VOLUME 62 OF DANE COUNTY CERTIFIED SURVEY MAPS ON PAGES 328 TO 332 DOCUMENT NUMBER 3586456, CERTIFIED SURVEY MAP NUMBER 10584

Jane C. Light by Janeth Gray, deputy  
JANE C. LIGHT  
REGISTER OF DEEDS

**Jenkins Survey  
& Design, Inc.**

245 Horizon Drive, Suite #108  
Verona, Wisconsin 53593  
608-848-5060

SURVEYED FOR:

McFarland State Bank  
5911 Main Street  
McFarland, Wisconsin 53558  
608.838.3141

SHEET 5 OF 5

C.S.M. NO. 10584  
DOC. NO. 3586456  
VOL. 62 PAGE 332



Source: Village of McFarland Zoning Map

Scale: Not Available

**Figure F.3**  
**Verification of Zoning**

**Best Way Cleaners**  
 5914 U.S. Highway 51  
 McFarland, Wisconsin  
 Project No. 1E-2006002  
 BRRS No. 02-13-583171

Zoning Districts			
<span style="color: green;">■</span> A-1	Exclusive Agricultural	<span style="color: lightpink;">■</span> C-G	General Commercial
<span style="color: lightgreen;">■</span> CO	Conservancy	<span style="color: red;">■</span> C-C	Central Commercial
<span style="color: yellow;">■</span> R-1	Single Family Residence	<span style="color: lightcoral;">■</span> C-H	Highway Commercial
<span style="color: lightyellow;">■</span> R-1A	Single Family Residence	<span style="color: magenta;">■</span> C-P	Commercial Park
<span style="color: brown;">■</span> R-1B	Single Family Residence	<span style="color: purple;">■</span> C-L	Limited Commercial
<span style="color: gold;">■</span> R-2	Single & Two-Family Residence	<span style="color: grey;">■</span> M-IC	Manufactured-Intensive
<span style="color: orange;">■</span> R-3	General Residence	<span style="color: cyan;">■</span> PD	Planned Development
<span style="color: darkred;">■</span> R-E	Elderly Residence	<span style="color: teal;">■</span> PD-I	Planned Development Infill
<span style="color: blue;">■</span> RH-1	Rural Homes		



**GILES**  
 ENGINEERING ASSOCIATES, INC.

## F.4 Signed Statement

### Certification of Legal Description

Best Way Cleaners  
5914 U.S. Highway 51  
McFarland, Wisconsin  
BRRTS No. 02-13-583171

To the best of my knowledge the legal description and parcel information attached to this package are accurate.

Signature:  \_\_\_\_\_

Printed Name: Steve Peotter

Title: President, One Community Bank

Date: 4.4.2021

02-13-583171  
BRRTS #

Best Way Cleaners  
Activity (Site) Name

### **Attachment G: Notifications**

Not included. The residual impacts to soil and groundwater are limited to the vicinity of the former dry cleaning machine and do not extend off Site.