



# **Supplemental Site Investigation Results Summary**

**Martinizing Dry Cleaning Site  
1730 State Street  
Racine, Wisconsin**

**Prepared For:**

**BMP Reality  
Racine, Wisconsin**

**February 7, 2012  
Project No. 1E-0909013**



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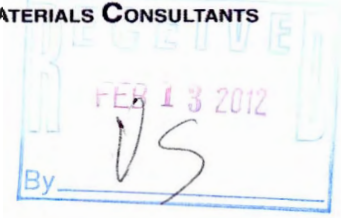
# GILES

ENGINEERING ASSOCIATES, INC.

GEOTECHNICAL, ENVIRONMENTAL & CONSTRUCTION MATERIALS CONSULTANTS

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- Orlando, FL

February 7, 2012



Wisconsin Department of Natural Resources  
2300 North Dr. Martin Luther King Drive  
Milwaukee, WI 53212

Attention: Ms. Shanna Laube-Anderson

Subject: Supplemental Site Investigation Results Summary  
Martinizing Dry Cleaning Site  
1730 State Street  
Racine, Wisconsin  
Project No. 1E-0909013  
BRRTS No. 02-52-549890/FID No. 252251010

Dear Ms. Laube:

Giles Engineering Associates, Inc. (Giles) has prepared this Supplemental Site Investigation (SI) Results Summary on behalf of Mr. Douglas Berry, owner of Martinizing Racine (herein referred to as the "Site"), located at 1730 State Street, in Racine, Wisconsin (Figure 1). This SI Summary was prepared to provide the Wisconsin Department of Natural Resources (WDNR) with results from the sub-slab soil vapor sampling, and results from the soil sampling along the utility trench near the northeast corner of the building in an effort to evaluate the potential for contaminant migration along the utilities. The activities were performed in accordance with Giles Change Order Request #2, dated August 16, 2011, approved by the WDNR in their correspondence dated October 14, 2011. Important information about this geoenvironmental report is included as attachment A.

### Scope of Services Completed

- Completed one exterior direct-push boring and collected one soil sample for laboratory analysis of volatile organic compounds (VOCs). One soil boring was selected due to the relatively short distance from the building to the property line. The boring location is shown on Figure 2.
- Installed two sub-slab vapor points with a hammer drill; one vapor point was installed in the vicinity of the former dry cleaning machine (DCM) and a second vapor point was installed in

the eastern portion of the building where coin operated wet-laundry operations currently exist.

- Collected sub-slab vapor samples from the newly established vapor points within the building to assess the potential for vapor intrusion. Each sub-slab vapor point was purged at a rate of approximately 1 Liter per minute for five minutes with an air sampling bladder pump. Following the purging, a laboratory supplied 6-Liter Suma canister with a 200 milliliter per minute flow regulator was used to collect a vapor sample from each vapor point for approximately 25 to 30 minutes. The Suma canisters were submitted for analysis of VOCs by EPA Method TO-15.

## **Results**

### Soil Results

No organic vapors were detected in soil samples collected from GP-8. Tetrachloroethene (PCE) and cis-1,2-Dichloroethene (cis-1,2-DCE) were reported in the soil sample from boring GP-8 at a depth of 2 to 4 feet bgs; PCE was reported at a concentration exceeding the U.S. EPA calculated soil screening level. Soil analytical results are summarized in the attached Table 1. The soil boring log and abandonment forms are included in Attachment B. A copy of the soil laboratory analytical results is included in Attachment C.

### Sub-slab Vapor Sample Results

Sub-slab vapor samples were collected on October 28, 2011. Sub-slab vapor samples were collected from sample ports in the dry cleaner building near the DCM (VP-1) and in the coin-operated laundry room (VP-2). PCE was detected in vapor samples collected from VP-1 and VP-2 at concentrations exceeding the WDNR target sub-slab screening level. Sub-slab vapor analytical results are summarized in the attached Table 2. A copy of the sub-slab soil vapor laboratory analytical results is included in Attachment D.

## **Summary**

VOCs-impacted soil is present within the utility trench at concentrations exceeding regulatory criterion for direct contact. However, the highest concentrations were observed in association with MW-2, located at the northwest side of the building. It does not appear that the utility trench is acting as a migration pathway for contamination.

Sub-slab vapor concentrations exceed the WDNR's target screening level in October 2011. Therefore, it would be prudent to establish a sub-slab depressurization system within the






Supplemental Site Investigation Results Summary  
Martinizing Racine  
Racine, Wisconsin  
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Page 3

building during the current phase of work, or during the remediation phase scoping to mitigate the potential for vapor intrusion into the building.

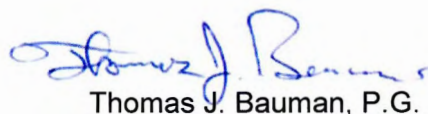
Please contact the undersigned with any questions.

Very truly yours,

GILES ENGINEERING ASSOCIATES, INC.



Kevin T. Bugel, P.G., C.P.G.  
Environmental Division Manager



Thomas J. Bauman, P.G.  
Project Hydrogeologist

Figure 1; Site Location Map  
Figure 2; Site Plan  
Table 1; Soil Analytical Results (VOCs)  
Table 2; Sub-slab Soil Vapor Results Summary  
Attachment A; Important information about Your Geoenvironmental Report  
Attachment B; Soil Boring Logs & Abandonment Forms  
Attachment C; Soil Laboratory Analytical Report  
Attachment D; Sub-slab Soil Vapor Laboratory Analytical Report

Distribution: Wisconsin Department of Natural Resources  
Attn: Ms. Shanna Laube-Anderson (1)  
BMP Realty  
Attn: Mr. Douglas Berry (1)

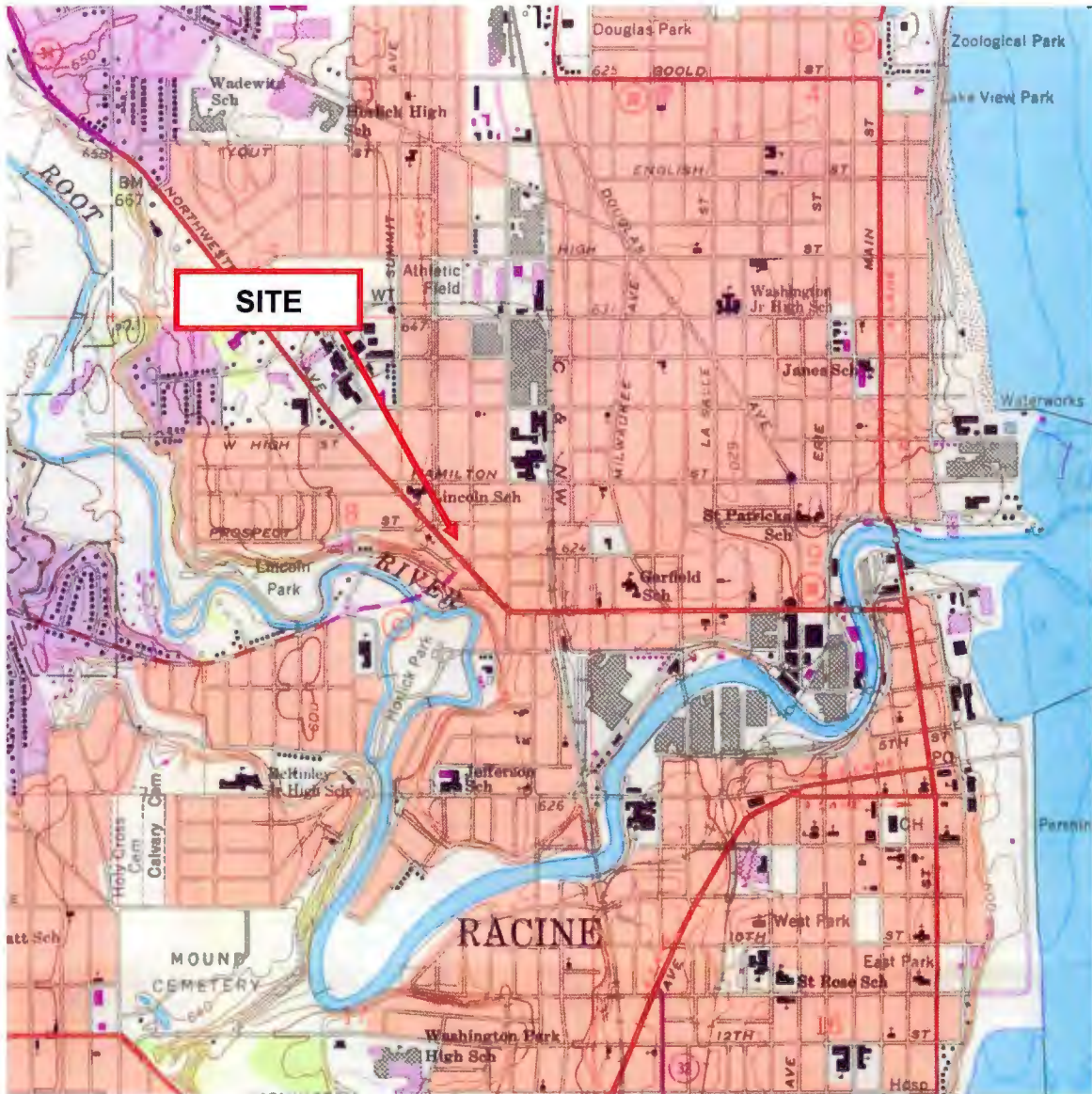
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Martinizing Racine 02-06-2012 Summary.doc



## FIGURES





Source: USGS *Racine South, Wisconsin* 7.5-Minute Series (topographic) Quadrangle Map (1958; photorevised in 1971 and 1976)

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

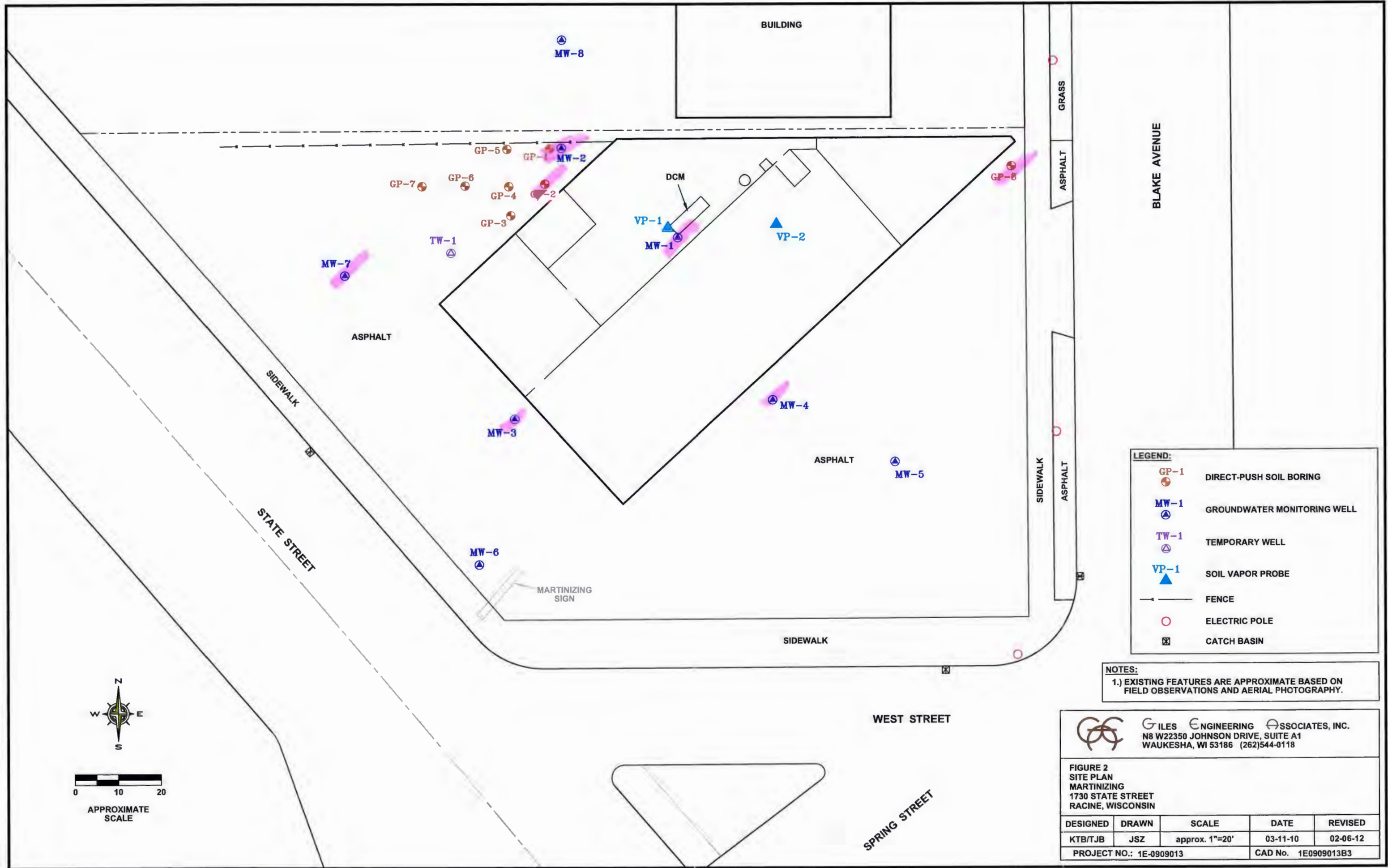


**FIGURE 1**  
**SITE LOCATION MAP**

**Martinizing Racine**  
**1730 State Street**  
**Racine, Wisconsin**  
**Project No. 1E-0909013**



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**LEGEND:**

- GP-1 DIRECT-PUSH SOIL BORING
- MW-1 GROUNDWATER MONITORING WELL
- TW-1 TEMPORARY WELL
- VP-1 SOIL VAPOR PROBE
- FENCE
- ELECTRIC POLE
- ☒ CATCH BASIN

**NOTES:**  
 1.) EXISTING FEATURES ARE APPROXIMATE BASED ON FIELD OBSERVATIONS AND AERIAL PHOTOGRAPHY.

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

**FIGURE 2**  
**SITE PLAN**  
**MARTINIZING**  
 1730 STATE STREET  
 RACINE, WISCONSIN

DESIGNED	DRAWN	SCALE	DATE	REVISED
KTB/TJB	JSZ	approx. 1"=20'	03-11-10	02-06-12
PROJECT NO.: 1E-0909013			CAD No. 1E0909013B3	

## **TABLES**



**TABLE 1  
SOIL ANALYTICAL RESULTS (VOCs)**

Martinzing Racine  
1730 State Street  
Racine, Wisconsin  
1E-0909013

Analyte	Sample Location																								NR 720.09 RCLs	NR 746.06 Table 1 (Product Indicator)	Calculated EPA SSL	WDNR Landfill Disposal Limit Contaminated-Out Non-Hazardous		
	TW-1	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	GP-1	GP-2	GP-3	GP-4	GP-5	GP-6	GP-7	GP-8													
Sample Depth (feet)	6 - 8	0 - 2	10 - 12	0 - 2	6 - 8	2 - 4	2 - 4	10 - 12	2 - 4	2 - 4	2 - 4	2 - 3	4 - 6	8 - 10	12 - 14	4 - 6	8 - 10	2 - 4	6 - 8	4 - 6	6 - 8	4 - 6	6 - 8	2 - 4						
Sample Date	1/21/10	1/21/10	1/21/10	1/21/10	1/21/10	1/21/10	1/21/10	1/21/10	7/23/10	7/23/10	7/23/10	7/23/10	6/23/10	6/23/10	6/23/10	6/23/10	6/23/10	6/23/10	6/23/10	6/23/10	6/23/10	6/23/10	6/23/10	10/28/10						
PID	14	11	12	420	42	BDL	BDL	BDL	BDL	16	7	BDL	86	188	152	498	228	BDL	BDL	246	28	13	9	71	50	50				
Detected VOCs (µg/kg)																														
n-Butylbenzene	<29	<28	<58	<14000	<300	<27	<31	<29	<31	<31	<31	<34	<290	<2900	<290	<580	<1400	<31	<29	780	<29	<31	<29	<28	290	<30	NS	NS	NC	NS
sec-Butylbenzene	130	29	<58	<14000	<300	<27	<31	<29	<31	<31	<31	<34	<290	<2900	<290	<580	<1400	<31	<29	860	43	<31	<29	<28	170	<30	6,000	8,500	NC	NS
cis-1,2-Dichloroethene	<29	7300	1900	19000	<300	<27	<31	34	<31	<31	<31	<34	<290	<2900	770	5500	2300	<31	<29	<31	58	220	220	<28	<31	45j	NS	NS	156,000	NS
trans-1,2-Dichloroethene	<29	45	<58	<14000	<300	<27	<31	<29	<31	<31	<31	<34	<290	<2900	<290	<580	<1400	<31	<29	<31	<29	<31	<29	<28	<31	<30	NS	NS	NC	NS
Ethylbenzene	<29	41	<58	<14000	<300	<27	<31	<29	<31	<31	<31	<34	<290	<2900	<290	<580	<1400	<31	<29	<31	<29	<31	<29	<28	<31	<30	2,900	4,600	NC	NS
Isopropylbenzene	110	<28	<58	<14000	<300	<27	<31	<29	<31	<31	<31	<34	<290	<2900	<290	<580	<1400	<31	<29	94	<29	<31	<29	<28	290	<30	NS	NS	NC	NS
p-Isopropyltoluene	<29	61	<58	<14000	<300	<27	<31	<29	<31	<31	<31	<34	<290	<2900	<290	<580	<1400	<31	<29	<31	<29	<31	<29	<28	<31	<30	NS	NS	NC	NS
Naphthalene	<58	340	<120	<28000	<610	230	<63	<57	<62	<61	<62	80	<590	<5800	<570	<1200	<2900	<62	<58	<61	<58	<63	<58	<57	140	<30	NS	2,700	NC	NS
n-Propylbenzene	62	41	<58	<14000	<300	<27	<31	<29	<31	<31	<31	<34	<290	<2900	<290	<580	<1400	<31	<29	45	<29	<31	<29	<28	390	<30	NS	NS	NC	NS
Tetrachloroethene	41	570	10000	{520000}	{59000}	33	73	82	<31	<31	530	<34	{62000}	{510000}	{47000}	{97000}	{250000}	<31	<29	32	<29	78	<29	150	<31	#4,100#	NS	NS	1,230	33,000
Toluene	<29	32	<58	<14000	<300	<27	<31	<29	<31	<31	<31	<34	<290	<2900	<290	<580	<1400	<31	<29	<31	<29	<31	<29	<28	<31	<30	1,500	36,000	NC	NS
Trichloroethene	<29	83	2700	{420000}	2200	<27	<31	<29	<31	<31	44	<34	1200	9300	380	5300	5500	<31	<29	<31	<29	41	<29	<28	<31	<30	NS	NS	850	14,000
1,2,4-Trimethylbenzene	<29	320	<58	<14000	<300	<27	<31	<29	<31	<31	<31	55	<290	<2900	<290	<580	<1400	<31	<29	<31	<29	<31	<29	<28	<31	<30	NS	NS	NC	NS
1,3,5-Trimethylbenzene	<29	110	<58	<14000	<300	<27	<31	<29	<31	<31	<31	<34	<290	<2900	<290	<580	<1400	<31	<29	<31	<29	<31	<29	<28	<31	<30	NS	NS	NC	NS
Vinyl chloride	<41	210	<82	<20000	<420	<38	<44	<40	<44	<43	<43	<47	<410	<4100	<400	<810	<2000	<43	<41	<43	41	<44	<40	<40	<43	<30	NS	NS	NC	NS
total Xylenes	<99	220	<200	<47000	<1000	<93	<110	<98	<110	<100	<110	<110	<1000	<9900	<980	<2000	<4900	<110	<99	<100	<99	<110	<98	<97	<100	<89	4,100	42,000	NC	NS

**NOTES:**  
 PID: Photoionization Detector  
 BDL: Below Detection Limit  
 TPH: Total Petroleum Hydrocarbons (TX 1005 Method)  
 VOCs: Volatile organic compounds  
 ODEQ: Oklahoma Department of Environmental Quality  
 mg/kg: Milligrams per kilogram; equivalent to parts per million (ppm)  
 µg/kg: Micrograms per kilogram; equivalent to parts per billion (ppb)  
 j: Result is below the method quantitation limit (MQL)  
 Results indicated in red/underlined exceed the Tier 1 Generic Cleanup Level (Residential)  
 Results indicated in purple/{...} exceed the WDNR landfill standard for Contaminated-Out, Non-Hazardous Material  
 Results indicated in brown/#...# exceed the Calculated Soil Screening Level Using the US EPA Web-based Calculator

**TABLE 2  
SUB-SLAB SOIL VAPOR RESULTS SUMMARY  
DETECTED VOCS**

Martinzin Cleaners  
1730 State Street  
Racine, Wisconsin  
Giles Project No. 1E-0909013

Detected Volatile Organic Compounds (VOCs) (ug/m <sup>3</sup> )		
Sample Location	Sample Date	PCE
VP-1	10/28/11	170,000
VP-2	10/28/11	58,000
<b>Target Sub-slab Vapor Screening Level</b>		<b>210</b>

**Notes:**

**VOCs:** Volatile Organic Compounds

**PCE:** Tetrachloroethene

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

**" -- ":** No data collected

**NS:** No Established Standard

**WDNR:** Wisconsin Department of Natural Resources

**US EPA:** United States Environmental Protection Agency

**WDNR Target Sub-slab Vapor Screening Level for Protection against Vapor Intrusion  
(100X the US EPA Region III Target Industrial Air Screening Level)**

## **ATTACHMENT A**

### **Important Information Regarding Your Geoenvironmental Report**

# Important Information About Your Geoenvironmental Report

Geoenvironmental studies are commissioned to gain information about environmental conditions on and beneath the surface of a site. The more comprehensive the study, the more reliable the assessment is likely to be. But remember: Any such assessment is to a greater or lesser extent based on professional opinions about conditions that cannot be seen or tested. Accordingly, no matter how many data are developed, risks created by unanticipated conditions will always remain. *Have realistic expectations.* Work with your geoenvironmental consultant to manage known and unknown risks. Part of that process should already have been accomplished, through the risk allocation provisions you and your geoenvironmental professional discussed and included in your contract's general terms and conditions. This document is intended to explain some of the concepts that may be included in your agreement, and to pass along information and suggestions to help you manage your risk.

## **Beware of Change; Keep Your Geoenvironmental Professional Advised**

The design of a geoenvironmental study considers a variety of factors that are subject to change. Changes can undermine the applicability of a report's findings, conclusions, and recommendations. *Advise your geoenvironmental professional about any changes you become aware of.* Geoenvironmental professionals cannot accept responsibility or liability for problems that occur because a report fails to consider conditions that did not exist when the study was designed. Ask your geoenvironmental professional about the types of changes you should be particularly alert to. Some of the most common include:

- modification of the proposed development or ownership group,
- sale or other property transfer,
- replacement of or additions to the financing entity,
- amendment of existing regulations or introduction of new ones, or
- changes in the use or condition of adjacent property.

Should you become aware of any change, *do not rely on a geoenvironmental report.* Advise your geoenvironmental professional immediately; follow the professional's advice.

## **Recognize the Impact of Time**

A geoenvironmental professional's findings, recommendations, and conclusions cannot remain valid indefinitely. The more time that passes, the more likely it is that important latent changes will occur. *Do not rely on a geoenvironmental report if too much time has elapsed since it was completed.* Ask your environmental professional to define "too much time." In the case of Phase I Environmental Site Assessments (ESAs), for example, more than 180 days after submission is generally considered "too much."

## **Prepare To Deal with Unanticipated Conditions**

The findings, recommendations, and conclusions of a Phase I ESA report typically are based on a review of historical information, interviews, a site "walkover," and other forms of noninvasive research. When site subsurface conditions are not sampled in any way, the risk of unanticipated conditions is higher than it would otherwise be.

While borings, installation of monitoring wells, and similar invasive test methods can help reduce the risk of unanticipated conditions, *do not overvalue the effectiveness of testing.* Testing provides information about actual conditions only at the precise locations where samples are taken, and only when they are taken. Your geoenvironmental professional has applied that specific information to develop a general opinion about environmental conditions. *Actual conditions in areas not sampled may differ (sometimes sharply) from those predicted in a report.* For example, a site may contain an unregistered underground storage tank that shows no surface trace of its existence. *Even conditions in areas that were tested can change, sometimes suddenly, due to any number of events, not the least of which include occurrences at*



adjacent sites. Recognize, too, that *even some conditions in tested areas may go undiscovered*, because the tests or analytical methods used were designed to detect only those conditions assumed to exist.

Manage your risks by retaining your geoenvironmental professional to work with you as the project proceeds. Establish a contingency fund or other means to enable your geoenvironmental professional to respond rapidly, in order to limit the impact of unforeseen conditions. And to help prevent any misunderstanding, identify those empowered to authorize changes and the administrative procedures that should be followed.

### **Do Not Permit Any Other Party To Rely on the Report**

Geoenvironmental professionals design their studies and prepare their reports to meet the specific needs of the clients who retain them, in light of the risk management methods that the client and geoenvironmental professional agree to, and the statutory, regulatory, or other requirements that apply. The study designed for a developer may differ sharply from one designed for a lender, insurer, public agency...or even another developer. *Unless the report specifically states otherwise, it was developed for you and only you.* Do not unilaterally permit any other party to rely on it. The report and the study underlying it may not be adequate for another party's needs, and you could be held liable for shortcomings your geoenvironmental professional was powerless to prevent or anticipate. Inform your geoenvironmental professional when you know or expect that someone else—a third-party—will want to use or rely on the report. *Do not permit third-party use or reliance until you first confer with the geoenvironmental professional who prepared the report.* Additional testing, analysis, or study may be required and, in any event, appropriate terms and conditions should be agreed to so both you and your geoenvironmental professional are protected from third-party risks. *Any party who relies on a geoenvironmental report without the express written permission of the professional who prepared it and the client for whom it was prepared may be solely liable for any problems that arise.*

### **Avoid Misinterpretation of the Report**

Design professionals and other parties may want to rely on the report in developing plans and specifications. They need to be advised, in writing, that their needs may not have been considered when the study's scope was developed, and, even if their needs were considered, they might misinterpret geoenvironmental findings, conclusions, and recommendations. *Commission your geoenvironmental professional to explain pertinent elements of the report to others who are permitted to rely on it, and to review any plans, specifications or other instruments of professional service that incorporate any of the report's findings, conclusions, or recommendations.* Your geoenvironmental professional has the best understanding of the issues involved, including the fundamental assumptions that underpinned the study's scope.

### **Give Contractors Access to the Report**

Reduce the risk of delays, claims, and disputes by giving contractors access to the full report, *providing that it is accompanied by a letter of transmittal that can protect you* by making it unquestionably clear that: 1) the study was not conducted and the report was not prepared for purposes of bid development, and 2) the findings, conclusions, and recommendations included in the report are based on a variety of opinions, inferences, and assumptions and are subject to interpretation. Use the letter to also advise contractors to consult with your geoenvironmental professional to obtain clarifications, interpretations, and guidance (a fee may be required for this service), and that—in any event—they should conduct additional studies to obtain the specific type and extent of information each prefers for preparing a bid or cost estimate. Providing access to the full report, with the appropriate caveats, helps prevent formation of adversarial attitudes and claims of concealed or differing conditions. If a contractor elects to ignore the warnings and advice in the letter of transmittal, it would do so at its own risk. Your geoenvironmental professional should be able to help you prepare an effective letter.

### **Do Not Separate Documentation from the Report**

Geoenvironmental reports often include supplemental documentation, such as maps and copies of regulatory files, permits, registrations, citations, and correspondence with regulatory agencies. If subsurface explorations were performed, the report may contain final boring logs and copies of laboratory data. If remediation activities occurred on site, the report may include: copies of daily field reports; waste manifests; and information about the disturbance of subsurface materials, the type and thickness of any fill placed on site, and fill placement practices, among other types of documentation. *Do not separate supplemental documentation from the report. Do not, and do not permit any other party to redraw or modify any of the supplemental documentation for incorporation into other professionals' instruments of service.*

### **Understand the Role of Standards**

Unless they are incorporated into statutes or regulations, standard practices and standard guides developed by the American Society for Testing and Materials (ASTM) and other recognized standards-developing organizations (SDOs) are little more than aspirational methods agreed to by a consensus of a committee. The committees that develop standards may not comprise those best-qualified to establish methods and, no matter what, no standard method can possibly consider the infinite client- and project-specific variables that fly in the face of the theoretical "standard conditions" to which standard practices and standard guides apply. In fact, these variables can be so pronounced that geoenvironmental professionals who comply with every directive of an ASTM or other standard procedure could run afoul of local custom and practice, thus violating the standard of care.

Accordingly, when geoenvironmental professionals indicate in their reports that they have performed a service "in general compliance" with one standard or another, it means they have applied professional judgement in creating and implementing a scope of service designed for the specific client and project involved, and which follows some of the general precepts laid out in the referenced standard. To the extent that a report indicates "general compliance" with a standard, you may wish to speak with your geoenvironmental professional to learn more about what was and was not done. *Do not assume a given standard was followed to the letter.* Research indicates that that seldom is the case.

### **Realize That Recommendations May Not Be Final**

The technical recommendations included in a geoenvironmental report are based on assumptions about actual conditions, and so are preliminary or tentative. Final recommendations can be prepared only by observing actual conditions as they are exposed. For that reason, you should retain the geoenvironmental professional of record to observe construction and/or remediation activities on site, to permit rapid response to unanticipated conditions. *The geoenvironmental professional who prepared the report cannot assume responsibility or liability for the report's recommendations if that professional is not retained to observe relevant site operations.*

### **Understand That Geotechnical Issues Have Not Been Addressed**

Unless geotechnical engineering was specifically included in the scope of professional service, a report is not likely to relate any findings, conclusions, or recommendations about the suitability of subsurface materials for construction purposes, especially when site remediation has been accomplished through the removal, replacement, encapsulation, or chemical treatment of on-site soils. The

equipment, techniques, and testing used by geotechnical engineers differ markedly from those used by geoenvironmental professionals; their education, training, and experience are also significantly different. If you plan to build on the subject site, but have not yet had a geotechnical engineering study conducted, your geoenvironmental professional should be able to provide guidance about the next steps you should take. The same firm may provide the services you need.

### **Read Responsibility Provisions Closely**

Geoenvironmental studies cannot be exact; they are based on professional judgement and opinion. Nonetheless, some clients, contractors, and others assume geoenvironmental reports are or certainly should be unerringly precise. Such assumptions have created unrealistic expectations that have led to wholly unwarranted claims and disputes. To help prevent such problems, geoenvironmental professionals have developed a number of report provisions and contract terms that explain who is responsible for what, and how risks are to be allocated. Some people mistake these for "exculpatory clauses," that is, provisions whose purpose is to transfer one party's rightful responsibilities and liabilities to someone else. Read the responsibility provisions included in a report and in the contract you and your geoenvironmental professional agreed to. *Responsibility provisions are not "boilerplate."* They are important.

### **Rely on Your Geoenvironmental Professional for Additional Assistance**

Membership in ASFE exposes geoenvironmental professionals to a wide array of risk management techniques that can be of genuine benefit for everyone involved with a geoenvironmental project. Confer with your ASFE-member geoenvironmental professional for more information.



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## **APPENDIX B**

### **Soil Boring Logs & Well/Borehole Abandonment Forms**



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

Facility/Project Name 1216 Douglas Avenue - Racine, Wisconsin - 1E-0807027A			License/Permit/Monitoring Number		Boring Number GP-8		
Boring Drilled By (Firm name and name of crew chief) Giles Engineering Associates, Inc. - Jim Blair			Date Drilling Started 10/21/2011		Date Drilling Completed 10/21/2011		
Drilling Method GeoProbe		WI Unique Well No.		DNR Well ID No.		Common Well Name	
Final Static Water Level Feet MSL		Surface Elevation Feet MSL		Borehole Diameter Inches			
Boring Location or Local Grid Origin (Check if estimated: <input checked="" type="checkbox"/> ) State Plane S/C/N SW 1/4 of NE 1/4 of Section 8, T 3 N, R 23			Lat. ° ' "		Local Grid Location (If applicable)		
Long. ° ' "		Feet <input type="checkbox"/> N <input type="checkbox"/> E		Feet <input type="checkbox"/> S <input type="checkbox"/> W			
Facility ID		County Racine		County Code 52		Civil Town/City/ or Village	

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		
	24		0	4"± Asphalt				BDL							
			1	Brown fine to coarse Sand (Fill)-Moist											
	24		2					BDL							
			3												
			4	Boring Terminated at 5 Feet				BDL							
	12		5												

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
-----------	--------------------------------------------------------------------------------------------------------	----------------------------------------

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.



Notice: Completion of this report is required by chs. 160, 281, 283, 289, 291-293, 295, and 299, Wis. Stats., and ch. NR 141, 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:

Drinking Water       Watershed/Wastewater       Remediation/Redevelopment

Waste Management       Other: \_\_\_\_\_

<b>1. Well Location Information</b>				<b>2. Facility / Owner Information</b>			
County <i>Racine</i>		WI Unique Well # of Removed Well _____		Hicap # _____		Facility Name <i>Martinez</i>	
Latitude / Longitude (Degrees and Minutes) ____ ° ____ ' N ____ ° ____ ' W		Method Code (see instructions) _____		Facility ID (FID or PWS) <i>02-52-549890</i>		License/Permit/Monitoring # <i>GP-6</i>	
Gov't Lot # _____		Section <i>8</i>		Township <i>3 N</i>		Range <i>23</i>	
Well Street Address <i>1730 state street</i>		Well ZIP Code _____		Original Well Owner <i>Doug Berry</i>		Present Well Owner _____	
Well City, Village or Town <i>Racine</i>		Subdivision Name _____		Mailing Address of Present Owner <i>1730 state street</i>		City of Present Owner <i>Racine</i>	
Lot # _____		State <i>WI</i>		ZIP Code _____			

Reason For Removal From Service: *Sampling Completed*

WI Unique Well # of Replacement Well: \_\_\_\_\_

**Well / Drillhole / Borehole Information**

Monitoring Well       Water Well       Borehole / Drillhole

Original Construction Date (mm/dd/yyyy): *10/21/11*

If a Well Construction Report is available, please attach. \_\_\_\_\_

Construction Type:

Drilled       Driven (Sandpoint)       Dug

Other (specify): *Direct Push*

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

Pump and piping removed?       Yes       No       N/A

Liner(s) removed?       Yes       No       N/A

Screen removed?       Yes       No       N/A

Casing left in place?       Yes       No       N/A

Was casing cut off below surface?       Yes       No       N/A

Did sealing material rise to surface?       Yes       No       N/A

Did material settle after 24 hours?       Yes       No       N/A

If yes, was hole retopped?       Yes       No       N/A

If bentonite chips were used, were they hydrated with water from a known safe source?       Yes       No       N/A

Formation Type:

Unconsolidated Formation       Bedrock

Total Well Depth From Ground Surface (ft.): *5*

Casing Diameter (in.): *2*

Lower Drillhole Diameter (in.): *2*

Casing Depth (ft.): *5*

Was well annular space grouted?       Yes       No       Unknown

If Yes, to what depth (feet)? \_\_\_\_\_

Depth to Water (feet): \_\_\_\_\_

Required Method of Placing Sealing Material

Conductor Pipe-Gravity       Conductor Pipe-Pumped

Screened & Poured (Bentonite Chips)       Other (Explain): *Gravity*

Sealing Materials

Neat Cement Grout       Clay-Sand Slurry (11 lb./gal. wt.)

Sand-Cement (Concrete) Grout       Bentonite-Sand Slurry " "

Concrete       Bentonite Chips

For Monitoring Wells and Monitoring Well Boreholes Only:

Bentonite Chips       Bentonite - Cement Grout

Granular Bentonite       Bentonite - Sand Slurry

Material Used To Fill Well / Drillhole	From (ft.)	To (ft.)	No. Yards, Sacks Sealant or Volume (circle one)	Mix Ratio or Mud Weight
<i>Concrete</i>	<i>Surface</i>	<i>.5</i>	<i>.1</i>	
<i>Bentonite</i>	<i>.5</i>	<i>5</i>	<i>.25</i>	

**Comments**

\_\_\_\_\_

<b>Supervision of Work</b>				<b>DNR Use Only</b>	
Name of Person or Firm Doing Filling & Sealing <i>Giles Engineering Associates</i>		License # _____	Date of Filling & Sealing (mm/dd/yyyy) <i>10/21/11</i>	Date Received	Noted By
Street or Route <i>NB W22350 Johnson Dr.</i>		Telephone Number <i>(262) 5448118</i>		Comments	
City <i>Waukesha</i>	State <i>WI</i>	ZIP Code <i>53186</i>	Signature of Person Doing Work <i>[Signature]</i>	Date Signed	

## **APPENDIX C**

### **Soil Laboratory Analytical Reports and Chain-of-Custody Documentation**

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Watertown

1101 Industrial Drive, Suites 9 & 10

Watertown, WI 53094

Tel: 800-833-7036

TestAmerica Job ID: WUJ0696

Client Project/Site: 1730 State Street

Client Project Description: 1E-0909013 Racine, WI

For:

GILES ENGINEERING - WISCONSIN

N8 W22350 Johnson Road

Waukesha, WI 53186

Attn: Mr. Kevin Bugel

*Karri Warnock*

Authorized for release by:

10/28/2011 07:46:10 AM

Karri Warnock

Lab Manager

[Karri.Warnock@testamericainc.com](mailto:Karri.Warnock@testamericainc.com)

Designee for

Dan F. Milewsky

Project Manager

[Dan.Milewsky@testamericainc.com](mailto:Dan.Milewsky@testamericainc.com)

### LINKS

Review your project  
results through

**Total Access**

Have a Question?



**Ask  
The  
Expert**

Visit us at:

[www.testamericainc.com](http://www.testamericainc.com)

*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.*

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## Definitions/Glossary

Client: GILES ENGINEERING - WISCONSIN  
Project/Site: 1730 State Street

TestAmerica Job ID: WUJ0696

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### Qualifiers

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#### GCMS Volatiles

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

---

### Glossary

---

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
RL	Reporting Limit
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

## Detection Summary

Client: GILES ENGINEERING - WISCONSIN  
Project/Site: 1730 State Street

TestAmerica Job ID: WUJ0696

**Client Sample ID: GP-8 (2-4')**

**Lab Sample ID: WUJ0696-01**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	45	J	120	30	ug/kg dry	1.0	*	SW 8260B	Total
Tetrachloroethene	4100		120	30	ug/kg dry	1.0	*	SW 8260B	Total

**Client Sample ID: MeOH Blank**

**Lab Sample ID: WUJ0696-02**

No Detections

# Client Sample Results

Client: GILES ENGINEERING - WISCONSIN  
 Project/Site: 1730 State Street

TestAmerica Job ID: WUJ0696

**Client Sample ID: GP-8 (2-4')**

**Lab Sample ID: WUJ0696-01**

**Date Collected: 10/21/11 12:30**

**Matrix: Soil**

**Date Received: 10/24/11 13:50**

**Percent Solids: 84.7**

**Method: SW 8260B - VOCs by SW8260B**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<30		120	30	ug/kg dry	✱	10/25/11 14:38	10/25/11 20:06	1.0
Bromobenzene	<30		120	30	ug/kg dry	✱	10/25/11 14:38	10/25/11 20:06	1.0
Bromochloromethane	<30		120	30	ug/kg dry	✱	10/25/11 14:38	10/25/11 20:06	1.0
Bromodichloromethane	<30		120	30	ug/kg dry	✱	10/25/11 14:38	10/25/11 20:06	1.0
Bromoform	<30		120	30	ug/kg dry	✱	10/25/11 14:38	10/25/11 20:06	1.0
Bromomethane	<120		300	120	ug/kg dry	✱	10/25/11 14:38	10/25/11 20:06	1.0
n-Butylbenzene	<30		120	30	ug/kg dry	✱	10/25/11 14:38	10/25/11 20:06	1.0
sec-Butylbenzene	<30		120	30	ug/kg dry	✱	10/25/11 14:38	10/25/11 20:06	1.0
tert-Butylbenzene	<30		120	30	ug/kg dry	✱	10/25/11 14:38	10/25/11 20:06	1.0
Carbon Tetrachloride	<30		120	30	ug/kg dry	✱	10/25/11 14:38	10/25/11 20:06	1.0
Chlorobenzene	<30		120	30	ug/kg dry	✱	10/25/11 14:38	10/25/11 20:06	1.0
Chlorodibromomethane	<30		120	30	ug/kg dry	✱	10/25/11 14:38	10/25/11 20:06	1.0
Chloroethane	<59		120	59	ug/kg dry	✱	10/25/11 14:38	10/25/11 20:06	1.0
Chloroform	<30		120	30	ug/kg dry	✱	10/25/11 14:38	10/25/11 20:06	1.0
Chloromethane	<59		120	59	ug/kg dry	✱	10/25/11 14:38	10/25/11 20:06	1.0
2-Chlorotoluene	<59		120	59	ug/kg dry	✱	10/25/11 14:38	10/25/11 20:06	1.0
4-Chlorotoluene	<30		120	30	ug/kg dry	✱	10/25/11 14:38	10/25/11 20:06	1.0
1,2-Dibromo-3-chloropropane	<59		120	59	ug/kg dry	✱	10/25/11 14:38	10/25/11 20:06	1.0
1,2-Dibromoethane (EDB)	<30		120	30	ug/kg dry	✱	10/25/11 14:38	10/25/11 20:06	1.0
Dibromomethane	<30		120	30	ug/kg dry	✱	10/25/11 14:38	10/25/11 20:06	1.0
1,2-Dichlorobenzene	<30		120	30	ug/kg dry	✱	10/25/11 14:38	10/25/11 20:06	1.0
1,3-Dichlorobenzene	<30		120	30	ug/kg dry	✱	10/25/11 14:38	10/25/11 20:06	1.0
1,4-Dichlorobenzene	<30		120	30	ug/kg dry	✱	10/25/11 14:38	10/25/11 20:06	1.0
Dichlorodifluoromethane	<59		120	59	ug/kg dry	✱	10/25/11 14:38	10/25/11 20:06	1.0
1,1-Dichloroethane	<30		120	30	ug/kg dry	✱	10/25/11 14:38	10/25/11 20:06	1.0
1,2-Dichloroethane	<30		120	30	ug/kg dry	✱	10/25/11 14:38	10/25/11 20:06	1.0
1,1-Dichloroethene	<30		120	30	ug/kg dry	✱	10/25/11 14:38	10/25/11 20:06	1.0
<b>cis-1,2-Dichloroethene</b>	<b>45</b>	<b>J</b>	120	30	ug/kg dry	✱	10/25/11 14:38	10/25/11 20:06	1.0
trans-1,2-Dichloroethene	<30		120	30	ug/kg dry	✱	10/25/11 14:38	10/25/11 20:06	1.0
1,2-Dichloropropane	<30		120	30	ug/kg dry	✱	10/25/11 14:38	10/25/11 20:06	1.0
1,3-Dichloropropane	<30		120	30	ug/kg dry	✱	10/25/11 14:38	10/25/11 20:06	1.0
2,2-Dichloropropane	<30		120	30	ug/kg dry	✱	10/25/11 14:38	10/25/11 20:06	1.0
1,1-Dichloropropene	<30		120	30	ug/kg dry	✱	10/25/11 14:38	10/25/11 20:06	1.0
cis-1,3-Dichloropropene	<30		120	30	ug/kg dry	✱	10/25/11 14:38	10/25/11 20:06	1.0
trans-1,3-Dichloropropene	<30		120	30	ug/kg dry	✱	10/25/11 14:38	10/25/11 20:06	1.0
Isopropyl Ether	<30		120	30	ug/kg dry	✱	10/25/11 14:38	10/25/11 20:06	1.0
Ethylbenzene	<30		120	30	ug/kg dry	✱	10/25/11 14:38	10/25/11 20:06	1.0
Hexachlorobutadiene	<30		120	30	ug/kg dry	✱	10/25/11 14:38	10/25/11 20:06	1.0
Isopropylbenzene	<30		120	30	ug/kg dry	✱	10/25/11 14:38	10/25/11 20:06	1.0
p-Isopropyltoluene	<30		120	30	ug/kg dry	✱	10/25/11 14:38	10/25/11 20:06	1.0
Methylene Chloride	<59		120	59	ug/kg dry	✱	10/25/11 14:38	10/25/11 20:06	1.0
Methyl tert-Butyl Ether	<30		120	30	ug/kg dry	✱	10/25/11 14:38	10/25/11 20:06	1.0
Naphthalene	<59		120	59	ug/kg dry	✱	10/25/11 14:38	10/25/11 20:06	1.0
n-Propylbenzene	<30		120	30	ug/kg dry	✱	10/25/11 14:38	10/25/11 20:06	1.0
Styrene	<59		120	59	ug/kg dry	✱	10/25/11 14:38	10/25/11 20:06	1.0
1,1,1,2-Tetrachloroethane	<30		120	30	ug/kg dry	✱	10/25/11 14:38	10/25/11 20:06	1.0
1,1,2,2-Tetrachloroethane	<30		120	30	ug/kg dry	✱	10/25/11 14:38	10/25/11 20:06	1.0
<b>Tetrachloroethene</b>	<b>4100</b>		120	30	ug/kg dry	✱	10/25/11 14:38	10/25/11 20:06	1.0
Toluene	<30		120	30	ug/kg dry	✱	10/25/11 14:38	10/25/11 20:06	1.0
1,2,3-Trichlorobenzene	<30		120	30	ug/kg dry	✱	10/25/11 14:38	10/25/11 20:06	1.0



## Client Sample Results

Client: GILES ENGINEERING - WISCONSIN  
Project/Site: 1730 State Street

TestAmerica Job ID: WUJ0696

**Client Sample ID: GP-8 (2-4')**

**Lab Sample ID: WUJ0696-01**

Date Collected: 10/21/11 12:30

Matrix: Soil

Date Received: 10/24/11 13:50

Percent Solids: 84.7

**Method: SW 8260B - VOCs by SW8260B (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<30		120	30	ug/kg dry	☼	10/25/11 14:38	10/25/11 20:06	1.0
1,1,1-Trichloroethane	<30		120	30	ug/kg dry	☼	10/25/11 14:38	10/25/11 20:06	1.0
1,1,2-Trichloroethane	<30		120	30	ug/kg dry	☼	10/25/11 14:38	10/25/11 20:06	1.0
Trichloroethene	<30		120	30	ug/kg dry	☼	10/25/11 14:38	10/25/11 20:06	1.0
Trichlorofluoromethane	<30		120	30	ug/kg dry	☼	10/25/11 14:38	10/25/11 20:06	1.0
1,2,3-Trichloropropane	<59		120	59	ug/kg dry	☼	10/25/11 14:38	10/25/11 20:06	1.0
1,2,4-Trimethylbenzene	<30		120	30	ug/kg dry	☼	10/25/11 14:38	10/25/11 20:06	1.0
1,3,5-Trimethylbenzene	<30		120	30	ug/kg dry	☼	10/25/11 14:38	10/25/11 20:06	1.0
Vinyl chloride	<30		120	30	ug/kg dry	☼	10/25/11 14:38	10/25/11 20:06	1.0
Xylenes, total	<89		350	89	ug/kg dry	☼	10/25/11 14:38	10/25/11 20:06	1.0
<b>Surrogate</b>	<b>% Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Dibromofluoromethane	98		80 - 120				10/25/11 14:38	10/25/11 20:06	1.0
Toluene-d8	100		80 - 120				10/25/11 14:38	10/25/11 20:06	1.0
4-Bromofluorobenzene	100		80 - 120				10/25/11 14:38	10/25/11 20:06	1.0

**Client Sample ID: MeOH Blank**

**Lab Sample ID: WUJ0696-02**

Date Collected: 10/21/11 00:00

Matrix: Solid/Soil

Date Received: 10/24/11 13:50

**Method: SW 8260B - VOCs by SW8260B**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<25		100	25	ug/kg wet		10/25/11 14:38	10/25/11 20:33	1.0
Bromobenzene	<25		100	25	ug/kg wet		10/25/11 14:38	10/25/11 20:33	1.0
Bromochloromethane	<25		100	25	ug/kg wet		10/25/11 14:38	10/25/11 20:33	1.0
Bromodichloromethane	<25		100	25	ug/kg wet		10/25/11 14:38	10/25/11 20:33	1.0
Bromoform	<25		100	25	ug/kg wet		10/25/11 14:38	10/25/11 20:33	1.0
Bromomethane	<100		250	100	ug/kg wet		10/25/11 14:38	10/25/11 20:33	1.0
n-Butylbenzene	<25		100	25	ug/kg wet		10/25/11 14:38	10/25/11 20:33	1.0
sec-Butylbenzene	<25		100	25	ug/kg wet		10/25/11 14:38	10/25/11 20:33	1.0
tert-Butylbenzene	<25		100	25	ug/kg wet		10/25/11 14:38	10/25/11 20:33	1.0
Carbon Tetrachloride	<25		100	25	ug/kg wet		10/25/11 14:38	10/25/11 20:33	1.0
Chlorobenzene	<25		100	25	ug/kg wet		10/25/11 14:38	10/25/11 20:33	1.0
Chlorodibromomethane	<25		100	25	ug/kg wet		10/25/11 14:38	10/25/11 20:33	1.0
Chloroethane	<50		100	50	ug/kg wet		10/25/11 14:38	10/25/11 20:33	1.0
Chloroform	<25		100	25	ug/kg wet		10/25/11 14:38	10/25/11 20:33	1.0
Chloromethane	<50		100	50	ug/kg wet		10/25/11 14:38	10/25/11 20:33	1.0
2-Chlorotoluene	<50		100	50	ug/kg wet		10/25/11 14:38	10/25/11 20:33	1.0
4-Chlorotoluene	<25		100	25	ug/kg wet		10/25/11 14:38	10/25/11 20:33	1.0
1,2-Dibromo-3-chloropropane	<50		100	50	ug/kg wet		10/25/11 14:38	10/25/11 20:33	1.0
1,2-Dibromoethane (EDB)	<25		100	25	ug/kg wet		10/25/11 14:38	10/25/11 20:33	1.0
Dibromomethane	<25		100	25	ug/kg wet		10/25/11 14:38	10/25/11 20:33	1.0
1,2-Dichlorobenzene	<25		100	25	ug/kg wet		10/25/11 14:38	10/25/11 20:33	1.0
1,3-Dichlorobenzene	<25		100	25	ug/kg wet		10/25/11 14:38	10/25/11 20:33	1.0
1,4-Dichlorobenzene	<25		100	25	ug/kg wet		10/25/11 14:38	10/25/11 20:33	1.0
Dichlorodifluoromethane	<50		100	50	ug/kg wet		10/25/11 14:38	10/25/11 20:33	1.0
1,1-Dichloroethane	<25		100	25	ug/kg wet		10/25/11 14:38	10/25/11 20:33	1.0
1,2-Dichloroethane	<25		100	25	ug/kg wet		10/25/11 14:38	10/25/11 20:33	1.0
1,1-Dichloroethene	<25		100	25	ug/kg wet		10/25/11 14:38	10/25/11 20:33	1.0
cis-1,2-Dichloroethene	<25		100	25	ug/kg wet		10/25/11 14:38	10/25/11 20:33	1.0

# Client Sample Results

Client: GILES ENGINEERING - WISCONSIN  
 Project/Site: 1730 State Street

TestAmerica Job ID: WUJ0696

**Client Sample ID: MeOH Blank**

**Lab Sample ID: WUJ0696-02**

Date Collected: 10/21/11 00:00

Matrix: Solid/Soil

Date Received: 10/24/11 13:50

**Method: SW 8260B - VOCs by SW8260B (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	<25		100	25	ug/kg wet		10/25/11 14:38	10/25/11 20:33	1.0
1,2-Dichloropropane	<25		100	25	ug/kg wet		10/25/11 14:38	10/25/11 20:33	1.0
1,3-Dichloropropane	<25		100	25	ug/kg wet		10/25/11 14:38	10/25/11 20:33	1.0
2,2-Dichloropropane	<25		100	25	ug/kg wet		10/25/11 14:38	10/25/11 20:33	1.0
1,1-Dichloropropene	<25		100	25	ug/kg wet		10/25/11 14:38	10/25/11 20:33	1.0
cis-1,3-Dichloropropene	<25		100	25	ug/kg wet		10/25/11 14:38	10/25/11 20:33	1.0
trans-1,3-Dichloropropene	<25		100	25	ug/kg wet		10/25/11 14:38	10/25/11 20:33	1.0
Isopropyl Ether	<25		100	25	ug/kg wet		10/25/11 14:38	10/25/11 20:33	1.0
Ethylbenzene	<25		100	25	ug/kg wet		10/25/11 14:38	10/25/11 20:33	1.0
Hexachlorobutadiene	<25		100	25	ug/kg wet		10/25/11 14:38	10/25/11 20:33	1.0
Isopropylbenzene	<25		100	25	ug/kg wet		10/25/11 14:38	10/25/11 20:33	1.0
p-Isopropyltoluene	<25		100	25	ug/kg wet		10/25/11 14:38	10/25/11 20:33	1.0
Methylene Chloride	<50		100	50	ug/kg wet		10/25/11 14:38	10/25/11 20:33	1.0
Methyl tert-Butyl Ether	<25		100	25	ug/kg wet		10/25/11 14:38	10/25/11 20:33	1.0
Naphthalene	<50		100	50	ug/kg wet		10/25/11 14:38	10/25/11 20:33	1.0
n-Propylbenzene	<25		100	25	ug/kg wet		10/25/11 14:38	10/25/11 20:33	1.0
Styrene	<50		100	50	ug/kg wet		10/25/11 14:38	10/25/11 20:33	1.0
1,1,1,2-Tetrachloroethane	<25		100	25	ug/kg wet		10/25/11 14:38	10/25/11 20:33	1.0
1,1,1,2,2-Tetrachloroethane	<25		100	25	ug/kg wet		10/25/11 14:38	10/25/11 20:33	1.0
Tetrachloroethene	<25		100	25	ug/kg wet		10/25/11 14:38	10/25/11 20:33	1.0
Toluene	<25		100	25	ug/kg wet		10/25/11 14:38	10/25/11 20:33	1.0
1,2,3-Trichlorobenzene	<25		100	25	ug/kg wet		10/25/11 14:38	10/25/11 20:33	1.0
1,2,4-Trichlorobenzene	<25		100	25	ug/kg wet		10/25/11 14:38	10/25/11 20:33	1.0
1,1,1-Trichloroethane	<25		100	25	ug/kg wet		10/25/11 14:38	10/25/11 20:33	1.0
1,1,2-Trichloroethane	<25		100	25	ug/kg wet		10/25/11 14:38	10/25/11 20:33	1.0
Trichloroethene	<25		100	25	ug/kg wet		10/25/11 14:38	10/25/11 20:33	1.0
Trichlorofluoromethane	<25		100	25	ug/kg wet		10/25/11 14:38	10/25/11 20:33	1.0
1,2,3-Trichloropropane	<50		100	50	ug/kg wet		10/25/11 14:38	10/25/11 20:33	1.0
1,2,4-Trimethylbenzene	<25		100	25	ug/kg wet		10/25/11 14:38	10/25/11 20:33	1.0
1,3,5-Trimethylbenzene	<25		100	25	ug/kg wet		10/25/11 14:38	10/25/11 20:33	1.0
Vinyl chloride	<25		100	25	ug/kg wet		10/25/11 14:38	10/25/11 20:33	1.0
Xylenes, total	<75		300	75	ug/kg wet		10/25/11 14:38	10/25/11 20:33	1.0

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane	97		80 - 120	10/25/11 14:38	10/25/11 20:33	1.0
Toluene-d8	99		80 - 120	10/25/11 14:38	10/25/11 20:33	1.0
4-Bromofluorobenzene	99		80 - 120	10/25/11 14:38	10/25/11 20:33	1.0



# Surrogate Summary

Client: GILES ENGINEERING - WISCONSIN  
Project/Site: 1730 State Street

TestAmerica Job ID: WUJ0696

## Method: SW 8260B - VOCs by SW8260B

Matrix: Soil

Prep Type: Total

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		DBFM (80-120)	TOL (80-120)	BFB (80-120)
WUJ0696-01	GP-8 (2-4')	98	100	100

### Surrogate Legend

DBFM = Dibromofluoromethane

TOL = Toluene-d8

BFB = 4-Bromofluorobenzene

## Method: SW 8260B - VOCs by SW8260B

Matrix: Solid/Soil

Prep Type: Total

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		DBFM (80-120)	TOL (80-120)	BFB (80-120)
11J0357-BLK1	Method Blank	101	100	99
11J0357-BS1	Lab Control Sample	100	101	98
11J0357-MS1	Matrix Spike	98	101	99
11J0357-MSD1	Matrix Spike Duplicate	98	101	99
WUJ0696-02	MeOH Blank	97	99	99

### Surrogate Legend

DBFM = Dibromofluoromethane

TOL = Toluene-d8

BFB = 4-Bromofluorobenzene

# QC Sample Results

Client: GILES ENGINEERING - WISCONSIN  
 Project/Site: 1730 State Street

TestAmerica Job ID: WUJ0696

## Method: SW 8260B - VOCs by SW8260B

Lab Sample ID: 11J0357-BLK1

Matrix: Solid/Soil

Analysis Batch: U001323

Client Sample ID: Method Blank

Prep Type: Total

Prep Batch: 11J0357\_P

Analyte	Blank	Blank	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Benzene	<25		100	25	ug/kg wet		10/25/11 08:25	10/25/11 14:18	1.00
Bromobenzene	<25		100	25	ug/kg wet		10/25/11 08:25	10/25/11 14:18	1.00
Bromochloromethane	<25		100	25	ug/kg wet		10/25/11 08:25	10/25/11 14:18	1.00
Bromodichloromethane	<25		100	25	ug/kg wet		10/25/11 08:25	10/25/11 14:18	1.00
Bromoform	<25		100	25	ug/kg wet		10/25/11 08:25	10/25/11 14:18	1.00
Bromomethane	<100		250	100	ug/kg wet		10/25/11 08:25	10/25/11 14:18	1.00
n-Butylbenzene	<25		100	25	ug/kg wet		10/25/11 08:25	10/25/11 14:18	1.00
sec-Butylbenzene	<25		100	25	ug/kg wet		10/25/11 08:25	10/25/11 14:18	1.00
tert-Butylbenzene	<25		100	25	ug/kg wet		10/25/11 08:25	10/25/11 14:18	1.00
Carbon Tetrachloride	<25		100	25	ug/kg wet		10/25/11 08:25	10/25/11 14:18	1.00
Chlorobenzene	<25		100	25	ug/kg wet		10/25/11 08:25	10/25/11 14:18	1.00
Chlorodibromomethane	<25		100	25	ug/kg wet		10/25/11 08:25	10/25/11 14:18	1.00
Chloroethane	<50		100	50	ug/kg wet		10/25/11 08:25	10/25/11 14:18	1.00
Chloroform	<25		100	25	ug/kg wet		10/25/11 08:25	10/25/11 14:18	1.00
Chloromethane	<50		100	50	ug/kg wet		10/25/11 08:25	10/25/11 14:18	1.00
2-Chlorotoluene	<50		100	50	ug/kg wet		10/25/11 08:25	10/25/11 14:18	1.00
4-Chlorotoluene	<25		100	25	ug/kg wet		10/25/11 08:25	10/25/11 14:18	1.00
1,2-Dibromo-3-chloropropane	<50		100	50	ug/kg wet		10/25/11 08:25	10/25/11 14:18	1.00
1,2-Dibromoethane (EDB)	<25		100	25	ug/kg wet		10/25/11 08:25	10/25/11 14:18	1.00
Dibromomethane	<25		100	25	ug/kg wet		10/25/11 08:25	10/25/11 14:18	1.00
1,2-Dichlorobenzene	<25		100	25	ug/kg wet		10/25/11 08:25	10/25/11 14:18	1.00
1,3-Dichlorobenzene	<25		100	25	ug/kg wet		10/25/11 08:25	10/25/11 14:18	1.00
1,4-Dichlorobenzene	<25		100	25	ug/kg wet		10/25/11 08:25	10/25/11 14:18	1.00
Dichlorodifluoromethane	<50		100	50	ug/kg wet		10/25/11 08:25	10/25/11 14:18	1.00
1,1-Dichloroethane	<25		100	25	ug/kg wet		10/25/11 08:25	10/25/11 14:18	1.00
1,2-Dichloroethane	<25		100	25	ug/kg wet		10/25/11 08:25	10/25/11 14:18	1.00
1,1-Dichloroethene	<25		100	25	ug/kg wet		10/25/11 08:25	10/25/11 14:18	1.00
cis-1,2-Dichloroethene	<25		100	25	ug/kg wet		10/25/11 08:25	10/25/11 14:18	1.00
trans-1,2-Dichloroethene	<25		100	25	ug/kg wet		10/25/11 08:25	10/25/11 14:18	1.00
1,2-Dichloropropane	<25		100	25	ug/kg wet		10/25/11 08:25	10/25/11 14:18	1.00
1,3-Dichloropropane	<25		100	25	ug/kg wet		10/25/11 08:25	10/25/11 14:18	1.00
2,2-Dichloropropane	<25		100	25	ug/kg wet		10/25/11 08:25	10/25/11 14:18	1.00
1,1-Dichloropropene	<25		100	25	ug/kg wet		10/25/11 08:25	10/25/11 14:18	1.00
cis-1,3-Dichloropropene	<25		100	25	ug/kg wet		10/25/11 08:25	10/25/11 14:18	1.00
trans-1,3-Dichloropropene	<25		100	25	ug/kg wet		10/25/11 08:25	10/25/11 14:18	1.00
Isopropyl Ether	<25		100	25	ug/kg wet		10/25/11 08:25	10/25/11 14:18	1.00
Ethylbenzene	<25		100	25	ug/kg wet		10/25/11 08:25	10/25/11 14:18	1.00
Hexachlorobutadiene	<25		100	25	ug/kg wet		10/25/11 08:25	10/25/11 14:18	1.00
Isopropylbenzene	<25		100	25	ug/kg wet		10/25/11 08:25	10/25/11 14:18	1.00
p-Isopropyltoluene	<25		100	25	ug/kg wet		10/25/11 08:25	10/25/11 14:18	1.00
Methylene Chloride	<50		100	50	ug/kg wet		10/25/11 08:25	10/25/11 14:18	1.00
Methyl tert-Butyl Ether	<25		100	25	ug/kg wet		10/25/11 08:25	10/25/11 14:18	1.00
Naphthalene	<50		100	50	ug/kg wet		10/25/11 08:25	10/25/11 14:18	1.00
n-Propylbenzene	<25		100	25	ug/kg wet		10/25/11 08:25	10/25/11 14:18	1.00
Styrene	<50		100	50	ug/kg wet		10/25/11 08:25	10/25/11 14:18	1.00
1,1,1,2-Tetrachloroethane	<25		100	25	ug/kg wet		10/25/11 08:25	10/25/11 14:18	1.00
1,1,2,2-Tetrachloroethane	<25		100	25	ug/kg wet		10/25/11 08:25	10/25/11 14:18	1.00
Tetrachloroethene	<25		100	25	ug/kg wet		10/25/11 08:25	10/25/11 14:18	1.00
Toluene	<25		100	25	ug/kg wet		10/25/11 08:25	10/25/11 14:18	1.00



# QC Sample Results

Client: GILES ENGINEERING - WISCONSIN  
 Project/Site: 1730 State Street

TestAmerica Job ID: WUJ0696

## Method: SW 8260B - VOCs by SW8260B (Continued)

**Lab Sample ID: 11J0357-BLK1**  
**Matrix: Solid/Soil**  
**Analysis Batch: U001323**

**Client Sample ID: Method Blank**  
**Prep Type: Total**  
**Prep Batch: 11J0357\_P**

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	<25		100	25	ug/kg wet		10/25/11 08:25	10/25/11 14:18	1.00
1,2,4-Trichlorobenzene	<25		100	25	ug/kg wet		10/25/11 08:25	10/25/11 14:18	1.00
1,1,1-Trichloroethane	<25		100	25	ug/kg wet		10/25/11 08:25	10/25/11 14:18	1.00
1,1,2-Trichloroethane	<25		100	25	ug/kg wet		10/25/11 08:25	10/25/11 14:18	1.00
Trichloroethene	<25		100	25	ug/kg wet		10/25/11 08:25	10/25/11 14:18	1.00
Trichlorofluoromethane	<25		100	25	ug/kg wet		10/25/11 08:25	10/25/11 14:18	1.00
1,2,3-Trichloropropane	<50		100	50	ug/kg wet		10/25/11 08:25	10/25/11 14:18	1.00
1,2,4-Trimethylbenzene	<25		100	25	ug/kg wet		10/25/11 08:25	10/25/11 14:18	1.00
1,3,5-Trimethylbenzene	<25		100	25	ug/kg wet		10/25/11 08:25	10/25/11 14:18	1.00
Vinyl chloride	<25		100	25	ug/kg wet		10/25/11 08:25	10/25/11 14:18	1.00
Xylenes, total	<75		300	75	ug/kg wet		10/25/11 08:25	10/25/11 14:18	1.00

Surrogate	Blank % Recovery	Blank Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane	101		80 - 120	10/25/11 08:25	10/25/11 14:18	1.00
Toluene-d8	100		80 - 120	10/25/11 08:25	10/25/11 14:18	1.00
4-Bromofluorobenzene	99		80 - 120	10/25/11 08:25	10/25/11 14:18	1.00

**Lab Sample ID: 11J0357-BS1**  
**Matrix: Solid/Soil**  
**Analysis Batch: U001323**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total**  
**Prep Batch: 11J0357\_P**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits
Benzene	2500.0	2220		ug/kg		89	80 - 120
Bromobenzene	2500.0	2260		ug/kg		90	80 - 120
Bromochloromethane	2500.0	2290		ug/kg		91	80 - 120
Bromodichloromethane	2500.0	2230		ug/kg		89	80 - 120
Bromoform	2500.0	2300		ug/kg		92	80 - 120
Bromomethane	2500.0	2010		ug/kg		81	60 - 140
n-Butylbenzene	2500.0	2160		ug/kg		86	80 - 120
sec-Butylbenzene	2500.0	2190		ug/kg		88	80 - 120
tert-Butylbenzene	2500.0	2210		ug/kg		88	80 - 120
Carbon Tetrachloride	2500.0	2120		ug/kg		85	60 - 140
Chlorobenzene	2500.0	2260		ug/kg		91	80 - 120
Chlorodibromomethane	2500.0	2260		ug/kg		90	80 - 120
Chloroethane	2500.0	2030		ug/kg		81	60 - 140
Chloroform	2500.0	2200		ug/kg		88	80 - 120
Chloromethane	2500.0	2120		ug/kg		85	60 - 140
2-Chlorotoluene	2500.0	2270		ug/kg		91	80 - 120
4-Chlorotoluene	2500.0	2300		ug/kg		92	80 - 120
1,2-Dibromo-3-chloropropane	2500.0	2120		ug/kg		85	60 - 140
1,2-Dibromoethane (EDB)	2500.0	2270		ug/kg		91	80 - 120
Dibromomethane	2500.0	2330		ug/kg		93	80 - 120
1,2-Dichlorobenzene	2500.0	2300		ug/kg		92	80 - 120
1,3-Dichlorobenzene	2500.0	2260		ug/kg		90	80 - 120
1,4-Dichlorobenzene	2500.0	2240		ug/kg		90	80 - 120
Dichlorodifluoromethane	2500.0	2050		ug/kg		82	60 - 140
1,1-Dichloroethane	2500.0	2220		ug/kg		89	80 - 120
1,2-Dichloroethane	2500.0	2280		ug/kg		91	80 - 120
1,1-Dichloroethene	2500.0	2140		ug/kg		86	80 - 120

# QC Sample Results

Client: GILES ENGINEERING - WISCONSIN  
 Project/Site: 1730 State Street

TestAmerica Job ID: WUJ0696

## Method: SW 8260B - VOCs by SW8260B (Continued)

**Lab Sample ID: 11J0357-BS1**

**Matrix: Solid/Soil**

**Analysis Batch: U001323**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total**

**Prep Batch: 11J0357\_P**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec.	
							Limits	
cis-1,2-Dichloroethene	2500.0	2230		ug/kg		89	80 - 120	
trans-1,2-Dichloroethene	2500.0	2240		ug/kg		89	80 - 120	
1,2-Dichloropropane	2500.0	2270		ug/kg		91	80 - 120	
1,3-Dichloropropane	2500.0	2280		ug/kg		91	80 - 120	
2,2-Dichloropropane	2500.0	2140		ug/kg		85	60 - 140	
1,1-Dichloropropene	2500.0	2170		ug/kg		87	80 - 120	
cis-1,3-Dichloropropene	2500.0	2240		ug/kg		89	80 - 120	
trans-1,3-Dichloropropene	2500.0	2260		ug/kg		90	80 - 120	
Isopropyl Ether	2500.0	2290		ug/kg		92	80 - 120	
Ethylbenzene	2500.0	2200		ug/kg		88	80 - 120	
Hexachlorobutadiene	2500.0	2110		ug/kg		84	60 - 140	
Isopropylbenzene	2500.0	2160		ug/kg		86	80 - 120	
p-Isopropyltoluene	2500.0	2230		ug/kg		89	80 - 120	
Methylene Chloride	2500.0	2170		ug/kg		87	80 - 120	
Methyl tert-Butyl Ether	2500.0	2340		ug/kg		94	80 - 120	
Naphthalene	2500.0	2280		ug/kg		91	60 - 140	
n-Propylbenzene	2500.0	2230		ug/kg		89	80 - 120	
Styrene	2500.0	2210		ug/kg		89	80 - 120	
1,1,1,2-Tetrachloroethane	2500.0	2220		ug/kg		89	80 - 120	
1,1,2,2-Tetrachloroethane	2500.0	2340		ug/kg		94	80 - 120	
Tetrachloroethene	2500.0	2170		ug/kg		87	80 - 120	
Toluene	2500.0	2230		ug/kg		89	80 - 120	
1,2,3-Trichlorobenzene	2500.0	2200		ug/kg		88	80 - 120	
1,2,4-Trichlorobenzene	2500.0	2240		ug/kg		89	80 - 120	
1,1,1-Trichloroethane	2500.0	2120		ug/kg		85	80 - 120	
1,1,2-Trichloroethane	2500.0	2290		ug/kg		92	80 - 120	
Trichloroethene	2500.0	2180		ug/kg		87	80 - 120	
Trichlorofluoromethane	2500.0	2110		ug/kg		84	80 - 120	
1,2,3-Trichloropropane	2500.0	2190		ug/kg		88	80 - 120	
1,2,4-Trimethylbenzene	2500.0	2240		ug/kg		90	80 - 120	
1,3,5-Trimethylbenzene	2500.0	2230		ug/kg		89	80 - 120	
Vinyl chloride	2500.0	2130		ug/kg		85	80 - 120	
Xylenes, total	7500.0	6610		ug/kg		88	80 - 120	

Surrogate	LCS LCS		Limits
	% Recovery	Qualifier	
Dibromofluoromethane	100		80 - 120
Toluene-d8	101		80 - 120
4-Bromofluorobenzene	98		80 - 120

**Lab Sample ID: 11J0357-MS1**

**Matrix: Solid/Soil**

**Analysis Batch: U001323**

**Client Sample ID: Matrix Spike**

**Prep Type: Total**

**Prep Batch: 11J0357\_P**

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Result	Matrix Spike Qualifier	Unit	D	% Rec	% Rec.	
									Limits	
Benzene	<28.8		2500.0	2390		ug/kg	*	95	80 - 120	
Bromobenzene	<28.8		2500.0	2370		ug/kg	*	95	80 - 120	
Bromochloromethane	<28.8		2500.0	2360		ug/kg	*	94	80 - 120	
Bromodichloromethane	<28.8		2500.0	2360		ug/kg	*	94	80 - 120	
Bromoform	<28.8		2500.0	2390		ug/kg	*	95	80 - 120	



# QC Sample Results

Client: GILES ENGINEERING - WISCONSIN  
 Project/Site: 1730 State Street

TestAmerica Job ID: WUJ0696

## Method: SW 8260B - VOCs by SW8260B (Continued)

Lab Sample ID: 11J0357-MS1

Matrix: Solid/Soil

Analysis Batch: U001323

Client Sample ID: Matrix Spike

Prep Type: Total

Prep Batch: 11J0357\_P

Analyte	Sample	Sample	Spike	Matrix Spike	Matrix Spike	Unit	D	% Rec	% Rec. Limits
	Result	Qualifier	Added	Result	Qualifier				
Bromomethane	<115		2500.0	2120		ug/kg	*	85	60 - 140
n-Butylbenzene	<28.8		2500.0	2390		ug/kg	*	96	80 - 120
sec-Butylbenzene	<28.8		2500.0	2390		ug/kg	*	95	80 - 120
tert-Butylbenzene	<28.8		2500.0	2380		ug/kg	*	95	80 - 120
Carbon Tetrachloride	<28.8		2500.0	2350		ug/kg	*	94	60 - 140
Chlorobenzene	<28.8		2500.0	2450		ug/kg	*	98	80 - 120
Chlorodibromomethane	<28.8		2500.0	2420		ug/kg	*	97	80 - 120
Chloroethane	<57.7		2500.0	2190		ug/kg	*	87	60 - 140
Chloroform	<28.8		2500.0	2340		ug/kg	*	94	80 - 120
Chloromethane	<57.7		2500.0	2250		ug/kg	*	90	60 - 140
2-Chlorotoluene	<57.7		2500.0	2400		ug/kg	*	96	80 - 120
4-Chlorotoluene	<28.8		2500.0	2390		ug/kg	*	96	80 - 120
1,2-Dibromo-3-chloropropane	<57.7		2500.0	2280		ug/kg	*	91	60 - 140
1,2-Dibromoethane (EDB)	<28.8		2500.0	2380		ug/kg	*	95	80 - 120
Dibromomethane	<28.8		2500.0	2410		ug/kg	*	96	80 - 120
1,2-Dichlorobenzene	<28.8		2500.0	2430		ug/kg	*	97	80 - 120
1,3-Dichlorobenzene	<28.8		2500.0	2400		ug/kg	*	96	80 - 120
1,4-Dichlorobenzene	<28.8		2500.0	2400		ug/kg	*	96	80 - 120
Dichlorodifluoromethane	<57.7		2500.0	2190		ug/kg	*	88	60 - 140
1,1-Dichloroethane	<28.8		2500.0	2350		ug/kg	*	94	80 - 120
1,2-Dichloroethane	<28.8		2500.0	2360		ug/kg	*	95	80 - 120
1,1-Dichloroethene	<28.8		2500.0	2320		ug/kg	*	93	80 - 120
cis-1,2-Dichloroethene	<28.8		2500.0	2340		ug/kg	*	94	80 - 120
trans-1,2-Dichloroethene	<28.8		2500.0	2370		ug/kg	*	95	80 - 120
1,2-Dichloropropane	<28.8		2500.0	2380		ug/kg	*	95	80 - 120
1,3-Dichloropropane	<28.8		2500.0	2400		ug/kg	*	96	80 - 120
2,2-Dichloropropane	<28.8		2500.0	2330		ug/kg	*	93	60 - 140
1,1-Dichloropropene	<28.8		2500.0	2350		ug/kg	*	94	80 - 120
cis-1,3-Dichloropropene	<28.8		2500.0	2380		ug/kg	*	95	80 - 120
trans-1,3-Dichloropropene	<28.8		2500.0	2350		ug/kg	*	94	80 - 120
Isopropyl Ether	<28.8		2500.0	2380		ug/kg	*	95	80 - 120
Ethylbenzene	<28.8		2500.0	2410		ug/kg	*	96	80 - 120
Hexachlorobutadiene	<28.8		2500.0	2390		ug/kg	*	96	60 - 140
Isopropylbenzene	<28.8		2500.0	2400		ug/kg	*	96	80 - 120
p-Isopropyltoluene	<28.8		2500.0	2420		ug/kg	*	97	80 - 120
Methylene Chloride	<57.7		2500.0	2260		ug/kg	*	90	80 - 120
Methyl tert-Butyl Ether	<28.8		2500.0	2370		ug/kg	*	95	80 - 120
Naphthalene	<57.7		2500.0	2490		ug/kg	*	100	60 - 140
n-Propylbenzene	<28.8		2500.0	2370		ug/kg	*	95	80 - 120
Styrene	<57.7		2500.0	2430		ug/kg	*	97	80 - 120
1,1,1,2-Tetrachloroethane	<28.8		2500.0	2420		ug/kg	*	97	80 - 120
1,1,2,2-Tetrachloroethane	<28.8		2500.0	2350		ug/kg	*	94	80 - 120
Tetrachloroethene	<28.8		2500.0	2390		ug/kg	*	96	80 - 120
Toluene	<28.8		2500.0	2410		ug/kg	*	96	80 - 120
1,2,3-Trichlorobenzene	<28.8		2500.0	2430		ug/kg	*	97	80 - 120
1,2,4-Trichlorobenzene	<28.8		2500.0	2450		ug/kg	*	98	80 - 120
1,1,1-Trichloroethane	<28.8		2500.0	2260		ug/kg	*	90	80 - 120
1,1,2-Trichloroethane	<28.8		2500.0	2370		ug/kg	*	95	80 - 120
Trichloroethene	<28.8		2500.0	2370		ug/kg	*	95	80 - 120
Trichlorofluoromethane	<28.8		2500.0	2290		ug/kg	*	92	80 - 120



# QC Sample Results

Client: GILES ENGINEERING - WISCONSIN  
Project/Site: 1730 State Street

TestAmerica Job ID: WUJ0696

## Method: SW 8260B - VOCs by SW8260B (Continued)

**Lab Sample ID: 11J0357-MS1**

**Matrix: Solid/Soil**

**Analysis Batch: U001323**

**Client Sample ID: Matrix Spike**

**Prep Type: Total**

**Prep Batch: 11J0357\_P**

Analyte	Sample	Sample	Spike	Matrix Spike	Matrix Spike	Unit	D	% Rec	% Rec.	
	Result	Qualifier	Added	Result	Qualifier				Limits	Limits
1,2,3-Trichloropropane	<57.7		2500.0	2360		ug/kg	☼	94	80 - 120	
1,2,4-Trimethylbenzene	<28.8		2500.0	2390		ug/kg	☼	96	80 - 120	
1,3,5-Trimethylbenzene	<28.8		2500.0	2380		ug/kg	☼	95	80 - 120	
Vinyl chloride	<28.8		2500.0	2270		ug/kg	☼	91	80 - 120	
Xylenes, total	<86.5		7500.0	7270		ug/kg	☼	97	80 - 120	

Surrogate	Matrix Spike	Matrix Spike	Limits
	% Recovery	Qualifier	
Dibromofluoromethane	98		80 - 120
Toluene-d8	101		80 - 120
4-Bromofluorobenzene	99		80 - 120

**Lab Sample ID: 11J0357-MSD1**

**Matrix: Solid/Soil**

**Analysis Batch: U001323**

**Client Sample ID: Matrix Spike Duplicate**

**Prep Type: Total**

**Prep Batch: 11J0357\_P**

Analyte	Sample	Sample	Spike	Matrix Spike Dup	Matrix Spike Dup	Unit	D	% Rec	% Rec.		RPD	
	Result	Qualifier	Added	Result	Qualifier				Limits	Limits	RPD	Limit
Benzene	<28.8		2500.0	2480		ug/kg	☼	99	80 - 120	4	20	
Bromobenzene	<28.8		2500.0	2370		ug/kg	☼	95	80 - 120	0.2	20	
Bromochloromethane	<28.8		2500.0	2420		ug/kg	☼	97	80 - 120	3	20	
Bromodichloromethane	<28.8		2500.0	2390		ug/kg	☼	96	80 - 120	1	20	
Bromoform	<28.8		2500.0	2410		ug/kg	☼	96	80 - 120	0.9	20	
Bromomethane	<115		2500.0	2300		ug/kg	☼	92	60 - 140	8	20	
n-Butylbenzene	<28.8		2500.0	2430		ug/kg	☼	97	80 - 120	2	20	
sec-Butylbenzene	<28.8		2500.0	2450		ug/kg	☼	98	80 - 120	2	20	
tert-Butylbenzene	<28.8		2500.0	2460		ug/kg	☼	98	80 - 120	3	20	
Carbon Tetrachloride	<28.8		2500.0	2470		ug/kg	☼	99	60 - 140	5	20	
Chlorobenzene	<28.8		2500.0	2480		ug/kg	☼	99	80 - 120	1	20	
Chlorodibromomethane	<28.8		2500.0	2420		ug/kg	☼	97	80 - 120	0.3	20	
Chloroethane	<57.7		2500.0	2320		ug/kg	☼	93	60 - 140	6	20	
Chloroform	<28.8		2500.0	2420		ug/kg	☼	97	80 - 120	3	20	
Chloromethane	<57.7		2500.0	2390		ug/kg	☼	96	60 - 140	6	20	
2-Chlorotoluene	<57.7		2500.0	2450		ug/kg	☼	98	80 - 120	2	20	
4-Chlorotoluene	<28.8		2500.0	2410		ug/kg	☼	96	80 - 120	0.7	20	
1,2-Dibromo-3-chloropropane	<57.7		2500.0	2290		ug/kg	☼	91	60 - 140	0.4	20	
1,2-Dibromoethane (EDB)	<28.8		2500.0	2430		ug/kg	☼	97	80 - 120	2	20	
Dibromomethane	<28.8		2500.0	2460		ug/kg	☼	98	80 - 120	2	20	
1,2-Dichlorobenzene	<28.8		2500.0	2440		ug/kg	☼	97	80 - 120	0.3	20	
1,3-Dichlorobenzene	<28.8		2500.0	2400		ug/kg	☼	96	80 - 120	0.1	20	
1,4-Dichlorobenzene	<28.8		2500.0	2400		ug/kg	☼	96	80 - 120	0.08	20	
Dichlorodifluoromethane	<57.7		2500.0	2370		ug/kg	☼	95	60 - 140	8	20	
1,1-Dichloroethane	<28.8		2500.0	2430		ug/kg	☼	97	80 - 120	4	20	
1,2-Dichloroethane	<28.8		2500.0	2380		ug/kg	☼	95	80 - 120	0.6	20	
1,1-Dichloroethene	<28.8		2500.0	2440		ug/kg	☼	98	80 - 120	5	20	
cis-1,2-Dichloroethene	<28.8		2500.0	2420		ug/kg	☼	97	80 - 120	3	20	
trans-1,2-Dichloroethene	<28.8		2500.0	2430		ug/kg	☼	97	80 - 120	2	20	
1,2-Dichloropropane	<28.8		2500.0	2450		ug/kg	☼	98	80 - 120	3	20	
1,3-Dichloropropane	<28.8		2500.0	2430		ug/kg	☼	97	80 - 120	1	20	
2,2-Dichloropropane	<28.8		2500.0	2450		ug/kg	☼	98	60 - 140	5	20	
1,1-Dichloropropene	<28.8		2500.0	2510		ug/kg	☼	100	80 - 120	7	20	

# QC Sample Results

Client: GILES ENGINEERING - WISCONSIN  
 Project/Site: 1730 State Street

TestAmerica Job ID: WUJ0696

## Method: SW 8260B - VOCs by SW8260B (Continued)

Lab Sample ID: 11J0357-MSD1

Matrix: Solid/Soil

Analysis Batch: U001323

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total

Prep Batch: 11J0357\_P

Analyte	Sample	Sample	Spike	Matrix Spike Dup	Matrix Spike Dup	Unit	D	% Rec	% Rec.	Limits	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier							
cis-1,3-Dichloropropene	<28.8		2500.0	2420		ug/kg	✱	97	80 - 120	2	20	
trans-1,3-Dichloropropene	<28.8		2500.0	2410		ug/kg	✱	96	80 - 120	2	20	
Isopropyl Ether	<28.8		2500.0	2430		ug/kg	✱	97	80 - 120	2	20	
Ethylbenzene	<28.8		2500.0	2500		ug/kg	✱	100	80 - 120	4	20	
Hexachlorobutadiene	<28.8		2500.0	2460		ug/kg	✱	98	60 - 140	3	20	
Isopropylbenzene	<28.8		2500.0	2500		ug/kg	✱	100	80 - 120	4	20	
p-Isopropyltoluene	<28.8		2500.0	2450		ug/kg	✱	98	80 - 120	1	20	
Methylene Chloride	<57.7		2500.0	2340		ug/kg	✱	93	80 - 120	3	20	
Methyl tert-Butyl Ether	<28.8		2500.0	2390		ug/kg	✱	96	80 - 120	1	20	
Naphthalene	<57.7		2500.0	2470		ug/kg	✱	99	60 - 140	0.6	20	
n-Propylbenzene	<28.8		2500.0	2450		ug/kg	✱	98	80 - 120	3	20	
Styrene	<57.7		2500.0	2470		ug/kg	✱	99	80 - 120	1	20	
1,1,1,2-Tetrachloroethane	<28.8		2500.0	2460		ug/kg	✱	98	80 - 120	2	20	
1,1,1,2,2-Tetrachloroethane	<28.8		2500.0	2370		ug/kg	✱	95	80 - 120	0.6	20	
Tetrachloroethane	<28.8		2500.0	2480		ug/kg	✱	99	80 - 120	4	20	
Toluene	<28.8		2500.0	2490		ug/kg	✱	99	80 - 120	3	20	
1,2,3-Trichlorobenzene	<28.8		2500.0	2390		ug/kg	✱	96	80 - 120	2	20	
1,2,4-Trichlorobenzene	<28.8		2500.0	2430		ug/kg	✱	97	80 - 120	1	20	
1,1,1-Trichloroethane	<28.8		2500.0	2400		ug/kg	✱	96	80 - 120	6	20	
1,1,2-Trichloroethane	<28.8		2500.0	2390		ug/kg	✱	96	80 - 120	1	20	
Trichloroethene	<28.8		2500.0	2490		ug/kg	✱	100	80 - 120	5	20	
Trichlorofluoromethane	<28.8		2500.0	2460		ug/kg	✱	98	80 - 120	7	20	
1,2,3-Trichloropropane	<57.7		2500.0	2320		ug/kg	✱	93	80 - 120	1	20	
1,2,4-Trimethylbenzene	<28.8		2500.0	2410		ug/kg	✱	96	80 - 120	0.8	20	
1,3,5-Trimethylbenzene	<28.8		2500.0	2420		ug/kg	✱	97	80 - 120	1	20	
Vinyl chloride	<28.8		2500.0	2490		ug/kg	✱	99	80 - 120	9	20	
Xylenes, total	<86.5		7500.0	7510		ug/kg	✱	100	80 - 120	3	20	

**Matrix Spike Dup    Matrix Spike Dup**

Surrogate	% Recovery	Qualifier	Limits
Dibromofluoromethane	98		80 - 120
Toluene-d8	101		80 - 120
4-Bromofluorobenzene	99		80 - 120

## QC Association Summary

Client: GILES ENGINEERING - WISCONSIN  
 Project/Site: 1730 State Street

TestAmerica Job ID: WUJ0696

### GCMS Volatiles

#### Analysis Batch: U001323

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11J0357-BLK1	Method Blank	Total	Solid/Soil	SW 8260B	11J0357_P
11J0357-BS1	Lab Control Sample	Total	Solid/Soil	SW 8260B	11J0357_P
11J0357-MS1	Matrix Spike	Total	Solid/Soil	SW 8260B	11J0357_P
11J0357-MSD1	Matrix Spike Duplicate	Total	Solid/Soil	SW 8260B	11J0357_P
WUJ0696-01	GP-8 (2-4')	Total	Soil	SW 8260B	11J0357_P
WUJ0696-02	MeOH Blank	Total	Solid/Soil	SW 8260B	11J0357_P

#### Prep Batch: 11J0357\_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11J0357-BLK1	Method Blank	Total	Solid/Soil	SW 5035	
11J0357-BS1	Lab Control Sample	Total	Solid/Soil	SW 5035	
11J0357-MS1	Matrix Spike	Total	Solid/Soil	SW 5035	
11J0357-MSD1	Matrix Spike Duplicate	Total	Solid/Soil	SW 5035	
WUJ0696-01	GP-8 (2-4')	Total	Soil	SW 5035	
WUJ0696-02	MeOH Blank	Total	Solid/Soil	SW 5035	

### WetChem

#### Analysis Batch: 11J0362

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11J0362-DUP1	Duplicate	Total	Solid/Soil	SM 2540G	11J0362_P
11J0362-DUP2	GP-8 (2-4')	Total	Solid/Soil	SM 2540G	11J0362_P
WUJ0696-01	GP-8 (2-4')	Total	Soil	SM 2540G	11J0362_P

#### Prep Batch: 11J0362\_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11J0362-DUP1	Duplicate	Total	Solid/Soil	NO PREP - WET CHEM	
11J0362-DUP2	GP-8 (2-4')	Total	Solid/Soil	NO PREP - WET CHEM	
WUJ0696-01	GP-8 (2-4')	Total	Soil	NO PREP - WET CHEM	



# Lab Chronicle

Client: GILES ENGINEERING - WISCONSIN  
 Project/Site: 1730 State Street

TestAmerica Job ID: WUJ0696

**Client Sample ID: GP-8 (2-4')**

**Lab Sample ID: WUJ0696-01**

Date Collected: 10/21/11 12:30

Matrix: Soil

Date Received: 10/24/11 13:50

Percent Solids: 84.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total	Prep	SW 5035		1.0	11J0357_P	10/25/11 14:38	ABA	TAL WT
Total	Analysis	SW 8260B		1.0	U001323	10/25/11 20:06	ABA	TAL WT
Total	Prep	NO PREP - WET CHEM		1.0	11J0362_P	10/25/11 14:38	MMM	TAL WT
Total	Analysis	SM 2540G		1.0	11J0362	10/26/11 08:10	MMM	TAL WT

**Client Sample ID: MeOH Blank**

**Lab Sample ID: WUJ0696-02**

Date Collected: 10/21/11 00:00

Matrix: Solid/Soil

Date Received: 10/24/11 13:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total	Prep	SW 5035		1.0	11J0357_P	10/25/11 14:38	ABA	TAL WT
Total	Analysis	SW 8260B		1.0	U001323	10/25/11 20:33	ABA	TAL WT

**Laboratory References:**

TAL WT = TestAmerica Watertown, 1101 Industrial Drive, Suites 9 & 10, Watertown, WI 53094, TEL 800-833-7036

# Certification Summary

Client: GILES ENGINEERING - WISCONSIN  
Project/Site: 1730 State Street

TestAmerica Job ID: WUJ0696

Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica Watertown		WI Dept of Agriculture (Micro)		105-266
TestAmerica Watertown	Illinois	NELAC	5	100453
TestAmerica Watertown	Minnesota	NELAC	5	055-999-366
TestAmerica Watertown	Wisconsin	State Program	5	128053530

Accreditation may not be offered or required for all methods and analytes reported in this package. Please contact your project manager for the laboratory's current list of certified methods and analytes.



# Method Summary

Client: GILES ENGINEERING - WISCONSIN  
Project/Site: 1730 State Street

TestAmerica Job ID: WUJ0696

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Method	Method Description	Protocol	Laboratory
SW 8260B	VOCs by SW8260B		TAL WT
SM 2540G	General Chemistry Parameters		TAL WT

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**Protocol References:**

**Laboratory References:**

TAL WT = TestAmerica Watertown, 1101 Industrial Drive, Suites 9 & 10, Watertown, WI 53094, TEL 800-833-7036

# Sample Summary

Client: GILES ENGINEERING - WISCONSIN  
Project/Site: 1730 State Street

TestAmerica Job ID: WUJ0696

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Lab Sample ID	Client Sample ID	Matrix	Collected	Received
WUJ0696-01	GP-8 (2-4')	Soil	10/21/11 12:30	10/24/11 13:50
WUJ0696-02	MeOH Blank	Solid/Soil	10/21/11 00:00	10/24/11 13:50

1

# Giles Engineering Associates, Inc.

CHAIN-OF-CUSTODY WUJ0696

Site \_\_\_\_\_

- N8 W22350 Johnson Road Suite A1, Waukesha, WI 53186
- 4875 East La Palma Avenue, Suite 607, Anaheim, CA 92807
- 8300 Guilford Road, Suite F1, Columbia, MD 21046
- 10722 North Stemmons Freeway, Dallas, TX 75220
- 2830 Agriculture Drive, Madison, WI 53718
- 3990 Flowers Road, Suite 530, Atlanta, GA 30360

- tel: 414-544-0118
- tel: 714-779-0052
- tel: 410-312-9950
- tel: 214-358-5885
- tel: 608-223-1853
- tel: 770-458-3399
- fax: 414-549-5868
- fax: 714-779-0068
- fax: 410-312-9955
- fax: 214-358-5884
- fax: 608-223-1854
- fax: 770-458-3998

- closure sample
- confirmation required (NR720)
- RUSH

Address 1730 state street  
Racine, Wisconsin

POSSIBLE HAZARDS: \_\_\_\_\_

Sample Collector <u>Ereg Roanhouse</u>	Project Manager <u>Kevin Bugel</u>	Project Number <u>IE-0909013</u>
Laboratory Used <u>Test America</u>	Lab Contact <u>Don M.</u>	Lab Job Number _____

Sample Description	(Sample Depth)	Sample Matrix (Soil, Water, etc.)	Date Collected	Time Collected	Field Screen	Analysis Required					Number and Type of Containers	Sample Preservative	Due Date	Lab ID	Temp
						GRO	DRO	VOC	PVOC	BTEX					
<u>GP-8</u>	<u>2-4'</u>	<u>S</u>	<u>10/24/11</u>	<u>12:30 AM</u>	<u>BDC</u>			<u>X</u>			<u>1C, 1H</u>	<u>MWH</u>	<u>STO</u>		
<u>Trip Blank</u>				<u>AM</u>				<u>X</u>			<u>1D</u>	<u>BWH</u>	<u>STA</u>		
				<u>PM</u>											
				<u>AM</u>											
				<u>PM</u>											
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				<u>PM</u>											
				<u>AM</u>											
				<u>PM</u>											

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container code:  
A = 8 oz/250 ml  
B = 4 oz/120 ml

C = 2 oz/ 60 ml MWH  
D = 40 mL VOA vial MWH

E = 1 L Amber  
F = 250 mL plastic

G = poly bag  
H = plastic

I = \_\_\_\_\_  
J = \_\_\_\_\_

Relinquished By	Date	Time	Received By
<u>[Signature]</u>	<u>10/21/11</u>	<u>6:45 AM</u>	<u>Ray Wynn</u>
<u>Ray Wynn</u>	<u>10/24/11</u>	<u>12:25 PM</u>	<u>[Signature]</u>

INVOICE TO:  Send copy to Project Manager

Giles Engineering Associates, Inc.

REPORT TO:  same  PM

Giles Engineering Associates, Inc.

Page 1  
of 1

Att: Kevin Bugel

10/28/2011

### Cooler Receipt Log

Work Order: WUJ0696 Client Name/Project: GILLES # of Coolers: 1

1. How did samples arrive?  Dunham  Fed-Ex  UPS  TestAmerica  Client  USPS  Speedee  \_\_\_\_\_

Date/time cooler was opened: 10/24/11 12:25 By: Roy TEMP. 3.1°C

2. Were custody seals intact, signed and dated correctly?.....  Intact  Broken  NA
3. TAT (Turn Around Time) .....  SUBCONTRACTED  HOLD  STANDARD  RUSH
4. Were samples on ice? .....  Yes  No  Water  Ice & Water
5. Bottles supplied by Test America? .....  Yes  No
6. Number of containers are noted on COC (Chain of Custody) ? .....  Yes  No
7. Matrix is identified on COC ? .....  Yes  No
8. Did all sample containers arrive in good condition? .....  OK  Broken  Frozen  Slushy
9. Are there any short hold time tests ? (48hrs or less) .....  No  Yes
- Past Hold?.....  No  Yes

24 hours or less	48 hours	7 days
Coliform Bacteria		Aqueous Organic Prep
Fecal Bacteria (orange)	BOD      CBOD	BNA 8270      DRO (HCL amber)
Total Bacteria (blue)		Herbs      PAH (NT amber)
MPN Bacteria (black)	Nitrite NO2      Nitrate NO3	PCBs      Pest/PCBs
SPC/HPC (standard plate count/ Hydrophilic plate count – yellow)	OrthoPhosphate or OrthoPhosphorus	PNA
T. Residual Chlorine (NT bottle)	Surfactants (MBAS)	TS (Total Solids)      TDS
CR3 or CR6 (Hex Chromium VI – NT bottle)	Sulfite	TSS (Total Suspended Solids)
Dissolved Oxygen (DO)	Turbidity	Sulfide
		Volatile Solids

10. Ops Mgr, PM or Analyst informed of short hold? .... Who \_\_\_\_\_ When \_\_\_\_\_
11. Other than short hold test, were any samples within 2 days of their hold date .....  No  Yes  
     Or past their expiration of hold time .....  No  Yes
12. Is the date and time of collection recorded on COC? Date.....  Yes  No on the containers  Yes  No  
     Time .....  Yes  No on the containers  Yes  No
13. Are dissolved parameters field filtered or being filtered in the lab? .....  Field  Lab  NA
14. Are sample volumes adequate and preservatives correct for test requested? Vol.  Yes  No  
     Preservatives...  Yes  No
15. Were correct containers used for the analysis requested? .....  Yes  No
16. Do VOC samples have air bubbles >6mm ? .....  No  Yes  NA
17. Is an aqueous Trip Blank included?.....  Yes  No  NA
18. If received, how were DRO soil samples received? .....  Weighed glass jar  Packed jar
19. Is a Methanol Trip Blank included? .....  Yes  glass jar  vial .....  No  NA
20. How were VOC soils received?  Methanol  Sodium Bisulfate  Packed Jar  Encore  Other  Water (see options\*\*\*)  
     \*\*\*  Within 48hrs of sampling  Past 48hrs of sampling  Frozen  Not Frozen
21. Were all sample containers received and match the Sample Ids listed on COC?  Yes  No

If any changes are made to this Work Order after Login, or if comments must be made regarding this cooler, explain them below:

all field sample labels state 10/20/11, COC says 10/21/11



# Giles Engineering Associates, Inc.

CHAIN-OF-CUSTODY

WUJ0696

Site \_\_\_\_\_

- N8 W22350 Johnson Road Suite A1, Waukesha, WI 53186
- 4875 East La Palma Avenue, Suite 607, Anaheim, CA 92807
- 8300 Guilford Road, Suite F1, Columbia, MD 21046
- 10722 North Stemmons Freeway, Dallas, TX 75220
- 2830 Agriculture Drive, Madison, WI 53718
- 3990 Flowers Road, Suite 530, Atlanta, GA, 30360

tel: 414-544-0118  
tel: 714-779-0052  
tel: 410-312-9950  
tel: 214-358-5885  
tel: 608-223-1853  
tel: 770-458-3399

fax: 414-549-5868  
fax: 714-779-0068  
fax: 410-312-9955  
fax: 214-358-5884  
fax: 608-223-1854  
fax: 770-458-3998

- closure sample
- confirmation required (NR720)
- RUSH

Address 1730 State Street  
Racine, Wisconsin

POSSIBLE HAZARDS: \_\_\_\_\_

Sample Collector <u>Ereg Rauhousi</u>	Project Manager <u>Kevin Bugel</u>	Project Number <u>1E-0909013</u>
Laboratory Used <u>Test America</u>	Lab Contact <u>Dan M.</u>	Lab Job Number _____

Sample Description	(Sample Depth)	Sample Matrix (Soil, Water, etc.)	Date Collected	Time Collected	Field Screen	Analysis Required					Number and Type of Containers	Sample Preservative	Due Date	Lab ID	Temp
						GRO	DRO	VOC	PVOC	BTEX					
<u>GP-8</u>	<u>2-4'</u>	<u>S</u>	<u>10/24/11</u>	<u>12:30 AM</u>	<u>BDC</u>			<u>X</u>			<u>1C, 1H</u>	<u>MWH</u>	<u>570</u>		
<u>Trip Blank</u>				<u>AM</u>			<u>X</u>				<u>1D</u>	<u>MWH</u>	<u>570</u>		
				<u>PM</u>											
				<u>AM</u>											
				<u>PM</u>											
				<u>AM</u>											
				<u>PM</u>											
				<u>AM</u>											
				<u>PM</u>											
				<u>AM</u>											
				<u>PM</u>											
				<u>AM</u>											
				<u>PM</u>											

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container code: A = 8 oz/250 ml    C = 2 oz/ 60 ml MWH    E = 1 L Amber    G = poly bag    I = \_\_\_\_\_  
 B = 4 oz/ 120 ml    D = 40 mL VOA vial MWH    F = 250 mL plastic    H = plastic    J = \_\_\_\_\_

Relinquished By	Date	Time	Received By
<u>[Signature]</u>	<u>10/21/11</u>	<u>6:45 AM</u>	<u>Ray Wynn</u> <u>10/24/11</u>
<u>Ray Wynn</u>	<u>10/24/11</u>	<u>12:25 PM</u>	<u>[Signature]</u> <u>10/24/11</u>
		<u>AM</u>	
		<u>PM</u>	
		<u>AM</u>	
		<u>PM</u>	

INVOICE TO:  Send copy to Project Manager

Giles Engineering Associates, Inc.

REPORT TO:  same  PM

Giles Engineering Associates, Inc.

Page 1  
of 1

Attn: Kevin Bugel



### Cooler Receipt Log

Work Order: WUJ0696 Client Name/Project: GILLES # of Coolers 1

1. How did samples arrive?  Dunham  Fed-Ex  UPS  TestAmerica  Client  USPS  Speedee  \_\_\_\_\_

Date/time cooler was opened: 10/24/11 12:25 By: Roy TEMP. 21°C

2. Were custody seals intact, signed and dated correctly?.....  Intact  Broken  NA
3. TAT (Turn Around Time) .....  SUBCONTRACTED  HOLD  STANDARD  RUSH
4. Were samples on ice? .....  Yes  No  Water  Ice & Water
5. Bottles supplied by Test America? .....  Yes  No
6. Number of containers are noted on COC (Chain of Custody) ? .....  Yes  No
7. Matrix is identified on COC ? .....  Yes  No
8. Did all sample containers arrive in good condition? .....  OK  Broken  Frozen  Slushy
9. Are there any short hold time tests ? (48hrs or less) .....  No  Yes
- Past Hold?.....  No  Yes

24 hours or less	48 hours	7 days
Coliform Bacteria		Aqueous Organic Prep
Fecal Bacteria (orange)	BOD CBOD	BNA 8270 DRO (HCL amber)
Total Bacteria (blue)		Herbs PAH (NT amber)
MPN Bacteria (black)	Nitrite NO2 Nitrate NO3	PCBs Pest/PCBs
SPC/HPC (standard plate count/ Hydrophilic plate count – yellow)	OrthoPhosphate or OrthoPhosphorus	PNA
T. Residual Chlorine (NT bottle)	Surfactants (MBAS)	TS (Total Solids) TDS
CR3 or CR6 (Hex Chromium VI – NT bottle)	Sulfite	TSS (Total Suspended Solids)
Dissolved Oxygen (DO)	Turbidity	Sulfide
		Volatile Solids

10. Ops Mgr, PM or Analyst informed of short hold? .... Who \_\_\_\_\_ When \_\_\_\_\_
11. Other than short hold test, were any samples within 2 days of their hold date .....  No  Yes  
 Or past their expiration of hold time .....  No  Yes
12. Is the date and time of collection recorded on COC? Date.....  Yes  No on the containers  Yes  No  
 Time .....  Yes  No on the containers  Yes  No
13. Are dissolved parameters field filtered or being filtered in the lab? .....  Field  Lab  NA
14. Are sample volumes adequate and preservatives correct for test requested? Vol.  Yes  No  
 Preservatives...  Yes  No
15. Were correct containers used for the analysis requested? .....  Yes  No
16. Do VOC samples have air bubbles >6mm ? .....  No  Yes  NA
17. Is an aqueous Trip Blank included?.....  Yes  No  NA
18. If received, how were DRO soil samples received? .....  Weighed glass jar  Packed jar
19. Is a Methanol Trip Blank included? .....  Yes  glass jar  vial .....  No  NA
20. How were VOC soils received?  Methanol  Sodium Bisulfate  Packed Jar  Encore  Other  Water (see options\*\*\*)  
 \*\*\*  Within 48hrs of sampling  Past 48hrs of sampling  Frozen  Not Frozen
21. Were all sample containers received and match the Sample Ids listed on COC?  Yes  No

If any changes are made to this Work Order after Login, or if comments must be made regarding this cooler, explain them below:

all field sample labels state 10/20/11, COC says 10/21/11.

## **APPENDIX D**

### **Sub-slab Soil Vapor Laboratory Analytical Reports and Chain-of-Custody Documentation**

## ANALYTICAL REPORT

Job Number: 200-7689-1

Job Description: Racine Martinizing

For:

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

Attention: Mr. Kevin Bugel

Approved for release.  
Don C Dawicki  
Project Manager II  
11/3/2011 3:58 PM

---

Don C Dawicki  
Project Manager II  
don.dawicki@testamericainc.com  
11/03/2011

The test results in this report relate only to sample(s) as received by the laboratory. These test results were derived under a quality system that adheres to the requirements of NELAC. Pursuant to NELAC, this report may not be produced in full without written approval from the laboratory

## CASE NARRATIVE

**Client: Giles Engineering Associates**

**Project: Racine Martinizing**

**Report Number: 200-7689-1**

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

### RECEIPT

The samples were received on 10/22/2011; the samples arrived in good condition.

The COC was received via fax on 10/24/11 and signed with sample receipt date and time of 10/22/11 @ 920.

### VOLATILE ORGANIC COMPOUNDS

Samples VP-1 and VP-2 were analyzed for Volatile Organic Compounds in accordance with EPA Method TO-15. The samples were analyzed on 10/28/2011.

Samples VP-1[993X] and VP-2[648X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No difficulties were encountered during the VOC analyses.

All quality control parameters were within the acceptance limits.



## EXECUTIVE SUMMARY - Detections

Client: Giles Engineering Associates

Job Number: 200-7689-1

Lab Sample ID Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
<b>200-7689-1</b>	<b>VP-1</b>					
Tetrachloroethene		26000		200	ppb v/v	TO-15
Tetrachloroethene		170000		1300	ug/m3	TO-15
<b>200-7689-2</b>	<b>VP-2</b>					
Tetrachloroethene		8600		130	ppb v/v	TO-15
Tetrachloroethene		58000		880	ug/m3	TO-15
Trichloroethene		410		130	ppb v/v	TO-15
Trichloroethene		2200		700	ug/m3	TO-15

# METHOD SUMMARY

Client: Giles Engineering Associates

Job Number: 200-7689-1

<b>Description</b>	<b>Lab Location</b>	<b>Method</b>	<b>Preparation Method</b>
<b>Matrix: Air</b>			
Volatile Organic Compounds in Ambient Air	TAL BUR	EPA TO-15	
Collection via Summa Canister	TAL BUR		Summa Canister

### Lab References:

TAL BUR = TestAmerica Burlington

### Method References:

EPA = US Environmental Protection Agency

**METHOD / ANALYST SUMMARY**

Client: Giles Engineering Associates

Job Number: 200-7689-1

<b>Method</b>	<b>Analyst</b>	<b>Analyst ID</b>
EPA TO-15	Daigle, Paul A	PAD

# SAMPLE SUMMARY

Client: Giles Engineering Associates

Job Number: 200-7689-1

<b>Lab Sample ID</b>	<b>Client Sample ID</b>	<b>Client Matrix</b>	<b>Date/Time Sampled</b>	<b>Date/Time Received</b>
200-7689-1	VP-1	Air	10/21/2011 1413	10/22/2011 0920
200-7689-2	VP-2	Air	10/21/2011 1248	10/22/2011 0920



# SAMPLE RESULTS

# Analytical Data

Client: Giles Engineering Associates

Job Number: 200-7689-1

Client Sample ID: VP-1

Lab Sample ID: 200-7689-1

Date Sampled: 10/21/2011 1413

Client Matrix: Air

Date Received: 10/22/2011 0920

## TO-15 Volatile Organic Compounds in Ambient Air

Analysis Method:	TO-15	Analysis Batch:	200-27790	Instrument ID:	G.i
Prep Method:	Summa Canister	Prep Batch:	N/A	Lab File ID:	ggcb008.d
Dilution:	993			Initial Weight/Volume:	12 mL
Analysis Date:	10/28/2011 1751			Final Weight/Volume:	200 mL
Prep Date:	10/28/2011 1751			Injection Volume:	200 mL

Analyte	Result (ppb v/v)	Qualifier	RL	RL
Acetone	5000	U	5000	5000
Benzene	200	U	200	200
Benzyl chloride	200	U	200	200
Bromodichloromethane	200	U	200	200
Bromoethene(Vinyl Bromide)	200	U	200	200
Bromoform	200	U	200	200
Bromomethane	200	U	200	200
1,3-Butadiene	200	U	200	200
Carbon disulfide	500	U	500	500
Carbon tetrachloride	200	U	200	200
Chlorobenzene	200	U	200	200
Chloroethane	500	U	500	500
Chloroform	200	U	200	200
Chloromethane	500	U	500	500
3-Chloropropene	500	U	500	500
2-Chlorotoluene	200	U	200	200
cis-1,2-Dichloroethene	200	U	200	200
cis-1,3-Dichloropropene	200	U	200	200
Cumene	200	U	200	200
Cyclohexane	200	U	200	200
Dibromochloromethane	200	U	200	200
1,2-Dibromoethane	200	U	200	200
1,3-Dichlorobenzene	200	U	200	200
1,4-Dichlorobenzene	200	U	200	200
1,2-Dichlorobenzene	200	U	200	200
Dichlorodifluoromethane	500	U	500	500
1,1-Dichloroethane	200	U	200	200
1,2-Dichloroethane	200	U	200	200
1,1-Dichloroethene	200	U	200	200
1,2-Dichloroethene, Total	200	U	200	200
1,2-Dichloropropane	200	U	200	200
1,2-Dichlorotetrafluoroethane	200	U	200	200
1,4-Dioxane	5000	U	5000	5000
Ethylbenzene	200	U	200	200
4-Ethyltoluene	200	U	200	200
Freon 22	500	U	500	500
Freon TF	200	U	200	200
Hexachlorobutadiene	200	U	200	200
Isopropyl alcohol	5000	U	5000	5000
4-Isopropyltoluene	200	U	200	200
Methyl Butyl Ketone (2-Hexanone)	500	U	500	500
Methylene Chloride	500	U	500	500
Methyl Ethyl Ketone	500	U	500	500
methyl isobutyl ketone	500	U	500	500
Methyl methacrylate	500	U	500	500
Methyl tert-butyl ether	200	U	200	200

Client: Giles Engineering Associates

Job Number: 200-7689-1

Client Sample ID: VP-1

Lab Sample ID: 200-7689-1

Date Sampled: 10/21/2011 1413

Client Matrix: Air

Date Received: 10/22/2011 0920

## TO-15 Volatile Organic Compounds in Ambient Air

Analysis Method:	TO-15	Analysis Batch:	200-27790	Instrument ID:	G.i
Prep Method:	Summa Canister	Prep Batch:	N/A	Lab File ID:	ggcb008.d
Dilution:	993			Initial Weight/Volume:	12 mL
Analysis Date:	10/28/2011 1751			Final Weight/Volume:	200 mL
Prep Date:	10/28/2011 1751			Injection Volume:	200 mL

Analyte	Result (ppb v/v)	Qualifier	RL	RL
m,p-Xylene	500	U	500	500
Naphthalene	500	U	500	500
n-Butane	500	U	500	500
n-Butylbenzene	200	U	200	200
n-Heptane	200	U	200	200
n-Hexane	200	U	200	200
n-Propylbenzene	200	U	200	200
sec-Butylbenzene	200	U	200	200
Styrene	200	U	200	200
tert-Butyl alcohol	5000	U	5000	5000
tert-Butylbenzene	200	U	200	200
1,1,2,2-Tetrachloroethane	200	U	200	200
Tetrachloroethene	26000		200	200
Tetrahydrofuran	5000	U	5000	5000
Toluene	200	U	200	200
trans-1,2-Dichloroethene	200	U	200	200
trans-1,3-Dichloropropene	200	U	200	200
1,2,4-Trichlorobenzene	500	U	500	500
1,1,1-Trichloroethane	200	U	200	200
1,1,2-Trichloroethane	200	U	200	200
Trichloroethene	200	U	200	200
Trichlorofluoromethane	200	U	200	200
1,3,5-Trimethylbenzene	200	U	200	200
1,2,4-Trimethylbenzene	200	U	200	200
2,2,4-Trimethylpentane	200	U	200	200
Vinyl chloride	200	U	200	200
Xylene, o-	200	U	200	200
Xylene (total)	200	U	200	200

Analyte	Result (ug/m3)	Qualifier	RL	RL
Acetone	12000	U	12000	12000
Benzene	630	U	630	630
Benzyl chloride	1000	U	1000	1000
Bromodichloromethane	1300	U	1300	1300
Bromoethene(Vinyl Bromide)	870	U	870	870
Bromoform	2100	U	2100	2100
Bromomethane	770	U	770	770
1,3-Butadiene	440	U	440	440
Carbon disulfide	1500	U	1500	1500
Carbon tetrachloride	1200	U	1200	1200
Chlorobenzene	910	U	910	910
Chloroethane	1300	U	1300	1300
Chloroform	970	U	970	970
Chloromethane	1000	U	1000	1000
3-Chloropropene	1600	U	1600	1600
2-Chlorotoluene	1000	U	1000	1000

Client: Giles Engineering Associates

Job Number: 200-7689-1

Client Sample ID: VP-1

Lab Sample ID: 200-7689-1

Date Sampled: 10/21/2011 1413

Client Matrix: Air

Date Received: 10/22/2011 0920

## TO-15 Volatile Organic Compounds in Ambient Air

Analysis Method:	TO-15	Analysis Batch:	200-27790	Instrument ID:	G.i
Prep Method:	Summa Canister	Prep Batch:	N/A	Lab File ID:	ggcb008.d
Dilution:	993			Initial Weight/Volume:	12 mL
Analysis Date:	10/28/2011 1751			Final Weight/Volume:	200 mL
Prep Date:	10/28/2011 1751			Injection Volume:	200 mL

Analyte	Result (ug/m3)	Qualifier	RL	RL
cis-1,2-Dichloroethene	790	U	790	790
cis-1,3-Dichloropropene	900	U	900	900
Cumene	980	U	980	980
Cyclohexane	680	U	680	680
Dibromochloromethane	1700	U	1700	1700
1,2-Dibromoethane	1500	U	1500	1500
1,3-Dichlorobenzene	1200	U	1200	1200
1,4-Dichlorobenzene	1200	U	1200	1200
1,2-Dichlorobenzene	1200	U	1200	1200
Dichlorodifluoromethane	2500	U	2500	2500
1,1-Dichloroethane	800	U	800	800
1,2-Dichloroethane	800	U	800	800
1,1-Dichloroethene	790	U	790	790
1,2-Dichloroethene, Total	790	U	790	790
1,2-Dichloropropane	920	U	920	920
1,2-Dichlorotetrafluoroethane	1400	U	1400	1400
1,4-Dioxane	18000	U	18000	18000
Ethylbenzene	860	U	860	860
4-Ethyltoluene	980	U	980	980
Freon 22	1800	U	1800	1800
Freon TF	1500	U	1500	1500
Hexachlorobutadiene	2100	U	2100	2100
Isopropyl alcohol	12000	U	12000	12000
4-Isopropyltoluene	1100	U	1100	1100
Methyl Butyl Ketone (2-Hexanone)	2000	U	2000	2000
Methylene Chloride	1700	U	1700	1700
Methyl Ethyl Ketone	1500	U	1500	1500
methyl isobutyl ketone	2000	U	2000	2000
Methyl methacrylate	2000	U	2000	2000
Methyl tert-butyl ether	720	U	720	720
m,p-Xylene	2200	U	2200	2200
Naphthalene	2600	U	2600	2600
n-Butane	1200	U	1200	1200
n-Butylbenzene	1100	U	1100	1100
n-Heptane	810	U	810	810
n-Hexane	700	U	700	700
n-Propylbenzene	980	U	980	980
sec-Butylbenzene	1100	U	1100	1100
Styrene	850	U	850	850
tert-Butyl alcohol	15000	U	15000	15000
tert-Butylbenzene	1100	U	1100	1100
1,1,1,2-Tetrachloroethane	1400	U	1400	1400
Tetrachloroethene	170000		1300	1300
Tetrahydrofuran	15000	U	15000	15000
Toluene	750	U	750	750
trans-1,2-Dichloroethene	790	U	790	790



Client: Giles Engineering Associates

Job Number: 200-7689-1

Client Sample ID: VP-1

Lab Sample ID: 200-7689-1

Date Sampled: 10/21/2011 1413

Client Matrix: Air

Date Received: 10/22/2011 0920

TO-15 Volatile Organic Compounds in Ambient Air

Analysis Method:	TO-15	Analysis Batch:	200-27790	Instrument ID:	G.i
Prep Method:	Summa Canister	Prep Batch:	N/A	Lab File ID:	ggcb008.d
Dilution:	993			Initial Weight/Volume:	12 mL
Analysis Date:	10/28/2011 1751			Final Weight/Volume:	200 mL
Prep Date:	10/28/2011 1751			Injection Volume:	200 mL

Analyte	Result (ug/m3)	Qualifier	RL	RL
trans-1,3-Dichloropropene	900	U	900	900
1,2,4-Trichlorobenzene	3700	U	3700	3700
1,1,1-Trichloroethane	1100	U	1100	1100
1,1,2-Trichloroethane	1100	U	1100	1100
Trichloroethene	1100	U	1100	1100
Trichlorofluoromethane	1100	U	1100	1100
1,3,5-Trimethylbenzene	980	U	980	980
1,2,4-Trimethylbenzene	980	U	980	980
2,2,4-Trimethylpentane	930	U	930	930
Vinyl chloride	510	U	510	510
Xylene, o-	860	U	860	860
Xylene (total)	860	U	860	860

Client: Giles Engineering Associates

Job Number: 200-7689-1

Client Sample ID: VP-2

Lab Sample ID: 200-7689-2

Date Sampled: 10/21/2011 1248

Client Matrix: Air

Date Received: 10/22/2011 0920

## TO-15 Volatile Organic Compounds in Ambient Air

Analysis Method:	TO-15	Analysis Batch:	200-27790	Instrument ID:	G.i
Prep Method:	Summa Canister	Prep Batch:	N/A	Lab File ID:	ggcb009.d
Dilution:	648			Initial Weight/Volume:	18 mL
Analysis Date:	10/28/2011 1840			Final Weight/Volume:	200 mL
Prep Date:	10/28/2011 1840			Injection Volume:	200 mL

Analyte	Result (ppb v/v)	Qualifier	RL	RL
Acetone	3200	U	3200	3200
Benzene	130	U	130	130
Benzyl chloride	130	U	130	130
Bromodichloromethane	130	U	130	130
Bromoethene(Vinyl Bromide)	130	U	130	130
Bromoform	130	U	130	130
Bromomethane	130	U	130	130
1,3-Butadiene	130	U	130	130
Carbon disulfide	320	U	320	320
Carbon tetrachloride	130	U	130	130
Chlorobenzene	130	U	130	130
Chloroethane	320	U	320	320
Chloroform	130	U	130	130
Chloromethane	320	U	320	320
3-Chloropropene	320	U	320	320
2-Chlorotoluene	130	U	130	130
cis-1,2-Dichloroethene	130	U	130	130
cis-1,3-Dichloropropene	130	U	130	130
Cumene	130	U	130	130
Cyclohexane	130	U	130	130
Dibromochloromethane	130	U	130	130
1,2-Dibromoethane	130	U	130	130
1,3-Dichlorobenzene	130	U	130	130
1,4-Dichlorobenzene	130	U	130	130
1,2-Dichlorobenzene	130	U	130	130
Dichlorodifluoromethane	320	U	320	320
1,1-Dichloroethane	130	U	130	130
1,2-Dichloroethane	130	U	130	130
1,1-Dichloroethene	130	U	130	130
1,2-Dichloroethene, Total	130	U	130	130
1,2-Dichloropropane	130	U	130	130
1,2-Dichlorotetrafluoroethane	130	U	130	130
1,4-Dioxane	3200	U	3200	3200
Ethylbenzene	130	U	130	130
4-Ethyltoluene	130	U	130	130
Freon 22	320	U	320	320
Freon TF	130	U	130	130
Hexachlorobutadiene	130	U	130	130
Isopropyl alcohol	3200	U	3200	3200
4-Isopropyltoluene	130	U	130	130
Methyl Butyl Ketone (2-Hexanone)	320	U	320	320
Methylene Chloride	320	U	320	320
Methyl Ethyl Ketone	320	U	320	320
methyl isobutyl ketone	320	U	320	320
Methyl methacrylate	320	U	320	320
Methyl tert-butyl ether	130	U	130	130

Client: Giles Engineering Associates

Job Number: 200-7689-1

Client Sample ID: VP-2

Lab Sample ID: 200-7689-2

Date Sampled: 10/21/2011 1248

Client Matrix: Air

Date Received: 10/22/2011 0920

TO-15 Volatile Organic Compounds in Ambient Air

Analysis Method:	TO-15	Analysis Batch:	200-27790	Instrument ID:	G.i
Prep Method:	Summa Canister	Prep Batch:	N/A	Lab File ID:	ggcb009.d
Dilution:	648			Initial Weight/Volume:	18 mL
Analysis Date:	10/28/2011 1840			Final Weight/Volume:	200 mL
Prep Date:	10/28/2011 1840			Injection Volume:	200 mL

Analyte	Result (ppb v/v)	Qualifier	RL	RL
m,p-Xylene	320	U	320	320
Naphthalene	320	U	320	320
n-Butane	320	U	320	320
n-Butylbenzene	130	U	130	130
n-Heptane	130	U	130	130
n-Hexane	130	U	130	130
n-Propylbenzene	130	U	130	130
sec-Butylbenzene	130	U	130	130
Styrene	130	U	130	130
tert-Butyl alcohol	3200	U	3200	3200
tert-Butylbenzene	130	U	130	130
1,1,2,2-Tetrachloroethane	130	U	130	130
Tetrachloroethene	8600		130	130
Tetrahydrofuran	3200	U	3200	3200
Toluene	130	U	130	130
trans-1,2-Dichloroethene	130	U	130	130
trans-1,3-Dichloropropene	130	U	130	130
1,2,4-Trichlorobenzene	320	U	320	320
1,1,1-Trichloroethane	130	U	130	130
1,1,2-Trichloroethane	130	U	130	130
Trichloroethene	410		130	130
Trichlorofluoromethane	130	U	130	130
1,3,5-Trimethylbenzene	130	U	130	130
1,2,4-Trimethylbenzene	130	U	130	130
2,2,4-Trimethylpentane	130	U	130	130
Vinyl chloride	130	U	130	130
Xylene, o-	130	U	130	130
Xylene (total)	130	U	130	130

Analyte	Result (ug/m3)	Qualifier	RL	RL
Acetone	7700	U	7700	7700
Benzene	410	U	410	410
Benzyl chloride	670	U	670	670
Bromodichloromethane	870	U	870	870
Bromoethene(Vinyl Bromide)	570	U	570	570
Bromoform	1300	U	1300	1300
Bromomethane	500	U	500	500
1,3-Butadiene	290	U	290	290
Carbon disulfide	1000	U	1000	1000
Carbon tetrachloride	820	U	820	820
Chlorobenzene	600	U	600	600
Chloroethane	850	U	850	850
Chloroform	630	U	630	630
Chloromethane	670	U	670	670
3-Chloropropene	1000	U	1000	1000
2-Chlorotoluene	670	U	670	670

Analytical Data

Client: Giles Engineering Associates

Job Number: 200-7689-1

Client Sample ID: VP-2

Lab Sample ID: 200-7689-2

Date Sampled: 10/21/2011 1248

Client Matrix: Air

Date Received: 10/22/2011 0920

TO-15 Volatile Organic Compounds in Ambient Air

Analysis Method:	TO-15	Analysis Batch:	200-27790	Instrument ID:	G.i
Prep Method:	Summa Canister	Prep Batch:	N/A	Lab File ID:	ggcb009.d
Dilution:	648			Initial Weight/Volume:	18 mL
Analysis Date:	10/28/2011 1840			Final Weight/Volume:	200 mL
Prep Date:	10/28/2011 1840			Injection Volume:	200 mL

Analyte	Result (ug/m3)	Qualifier	RL	RL
cis-1,2-Dichloroethene	510	U	510	510
cis-1,3-Dichloropropene	590	U	590	590
Cumene	640	U	640	640
Cyclohexane	450	U	450	450
Dibromochloromethane	1100	U	1100	1100
1,2-Dibromoethane	1000	U	1000	1000
1,3-Dichlorobenzene	780	U	780	780
1,4-Dichlorobenzene	780	U	780	780
1,2-Dichlorobenzene	780	U	780	780
Dichlorodifluoromethane	1600	U	1600	1600
1,1-Dichloroethane	520	U	520	520
1,2-Dichloroethane	520	U	520	520
1,1-Dichloroethene	510	U	510	510
1,2-Dichloroethene, total	510	U	510	510
1,2-Dichloropropane	600	U	600	600
1,2-Dichlorotetrafluoroethane	910	U	910	910
1,4-Dioxane	12000	U	12000	12000
Ethylbenzene	560	U	560	560
4-Ethyltoluene	640	U	640	640
Freon 22	1100	U	1100	1100
Freon TF	990	U	990	990
Hexachlorobutadiene	1400	U	1400	1400
Isopropyl alcohol	8000	U	8000	8000
4-Isopropyltoluene	710	U	710	710
Methyl Butyl Ketone (2-Hexanone)	1300	U	1300	1300
Methylene Chloride	1100	U	1100	1100
Methyl Ethyl Ketone	960	U	960	960
methyl isobutyl ketone	1300	U	1300	1300
Methyl methacrylate	1300	U	1300	1300
Methyl tert-butyl ether	470	U	470	470
m,p-Xylene	1400	U	1400	1400
Naphthalene	1700	U	1700	1700
n-Butane	770	U	770	770
n-Butylbenzene	710	U	710	710
n-Heptane	530	U	530	530
n-Hexane	460	U	460	460
n-Propylbenzene	640	U	640	640
sec-Butylbenzene	710	U	710	710
Styrene	550	U	550	550
tert-Butyl alcohol	9800	U	9800	9800
tert-Butylbenzene	710	U	710	710
1,1,1,2,2-Tetrachloroethane	890	U	890	890
Tetrachloroethene	58000		880	880
Tetrahydrofuran	9600	U	9600	9600
Toluene	490	U	490	490
trans-1,2-Dichloroethene	510	U	510	510



**Analytical Data**

Client: Giles Engineering Associates

Job Number: 200-7689-1

Client Sample ID: VP-2

Lab Sample ID: 200-7689-2

Date Sampled: 10/21/2011 1248

Client Matrix: Air

Date Received: 10/22/2011 0920

**TO-15 Volatile Organic Compounds in Ambient Air**

Analysis Method:	TO-15	Analysis Batch:	200-27790	Instrument ID:	G.i
Prep Method:	Summa Canister	Prep Batch:	N/A	Lab File ID:	ggcb009.d
Dilution:	648			Initial Weight/Volume:	18 mL
Analysis Date:	10/28/2011 1840			Final Weight/Volume:	200 mL
Prep Date:	10/28/2011 1840			Injection Volume:	200 mL

Analyte	Result (ug/m3)	Qualifier	RL	RL
trans-1,3-Dichloropropene	590	U	590	590
1,2,4-Trichlorobenzene	2400	U	2400	2400
1,1,1-Trichloroethane	710	U	710	710
1,1,2-Trichloroethane	710	U	710	710
Trichloroethene	2200		700	700
Trichlorofluoromethane	730	U	730	730
1,3,5-Trimethylbenzene	640	U	640	640
1,2,4-Trimethylbenzene	640	U	640	640
2,2,4-Trimethylpentane	610	U	610	610
Vinyl chloride	330	U	330	330
Xylene, o-	560	U	560	560
Xylene (total)	560	U	560	560

## DATA REPORTING QUALIFIERS

Client: Giles Engineering Associates

Job Number: 200-7689-1

<b>Lab Section</b>	<b>Qualifier</b>	<b>Description</b>
Air - GC/MS VOA	U	Indicates the analyte was analyzed for but not detected.

# QUALITY CONTROL RESULTS

## Quality Control Results

Client: Giles Engineering Associates

Job Number: 200-7689-1

### QC Association Summary

<u>Lab Sample ID</u>	<u>Client Sample ID</u>	<u>Report Basis</u>	<u>Client Matrix</u>	<u>Method</u>	<u>Prep Batch</u>
<b>Air - GC/MS VOA</b>					
<b>Analysis Batch: 200-27790</b>					
LCS 200-27790/4	Lab Control Sample	T	Air	TO-15	
MB 200-27790/5	Method Blank	T	Air	TO-15	
200-7689-1	VP-1	T	Air	TO-15	
200-7689-2	VP-2	T	Air	TO-15	

#### Report Basis

T = Total



## Quality Control Results

Client: Giles Engineering Associates

Job Number: 200-7689-1

**Method Blank - Batch: 200-27790**

Lab Sample ID: MB 200-27790/5  
 Client Matrix: Air  
 Dilution: 1.0  
 Analysis Date: 10/28/2011 1523  
 Prep Date: 10/28/2011 1523  
 Leach Date: N/A

Analysis Batch: 200-27790  
 Prep Batch: N/A  
 Leach Batch: N/A  
 Units: ppb v/v

**Method: TO-15**

**Preparation: Summa Canister**

Instrument ID: G.i  
 Lab File ID: ggcb005.d  
 Initial Weight/Volume: 200 mL  
 Final Weight/Volume: 200 mL  
 Injection Volume: 200 mL

Analyte	Result	Qual	RL	RL
Acetone	5.0	U	5.0	5.0
Benzene	0.20	U	0.20	0.20
Benzyl chloride	0.20	U	0.20	0.20
Bromodichloromethane	0.20	U	0.20	0.20
Bromoethene(Vinyl Bromide)	0.20	U	0.20	0.20
Bromoform	0.20	U	0.20	0.20
Bromomethane	0.20	U	0.20	0.20
1,3-Butadiene	0.20	U	0.20	0.20
Carbon disulfide	0.50	U	0.50	0.50
Carbon tetrachloride	0.20	U	0.20	0.20
Chlorobenzene	0.20	U	0.20	0.20
Chloroethane	0.50	U	0.50	0.50
Chloroform	0.20	U	0.20	0.20
Chloromethane	0.50	U	0.50	0.50
3-Chloropropene	0.50	U	0.50	0.50
2-Chlorotoluene	0.20	U	0.20	0.20
cis-1,2-Dichloroethene	0.20	U	0.20	0.20
cis-1,3-Dichloropropene	0.20	U	0.20	0.20
Cumene	0.20	U	0.20	0.20
Cyclohexane	0.20	U	0.20	0.20
Dibromochloromethane	0.20	U	0.20	0.20
1,2-Dibromoethane	0.20	U	0.20	0.20
1,3-Dichlorobenzene	0.20	U	0.20	0.20
1,4-Dichlorobenzene	0.20	U	0.20	0.20
1,2-Dichlorobenzene	0.20	U	0.20	0.20
Dichlorodifluoromethane	0.50	U	0.50	0.50
1,1-Dichloroethane	0.20	U	0.20	0.20
1,2-Dichloroethane	0.20	U	0.20	0.20
1,1-Dichloroethene	0.20	U	0.20	0.20
1,2-Dichloroethene, Total	0.20	U	0.20	0.20
1,2-Dichloropropane	0.20	U	0.20	0.20
1,2-Dichlorotetrafluoroethane	0.20	U	0.20	0.20
1,4-Dioxane	5.0	U	5.0	5.0
Ethylbenzene	0.20	U	0.20	0.20
4-Ethyltoluene	0.20	U	0.20	0.20
Freon 22	0.50	U	0.50	0.50
Freon TF	0.20	U	0.20	0.20
Hexachlorobutadiene	0.20	U	0.20	0.20
Isopropyl alcohol	5.0	U	5.0	5.0
4-Isopropyltoluene	0.20	U	0.20	0.20
Methyl Butyl Ketone (2-Hexanone)	0.50	U	0.50	0.50
Methylene Chloride	0.50	U	0.50	0.50
Methyl Ethyl Ketone	0.50	U	0.50	0.50
methyl isobutyl ketone	0.50	U	0.50	0.50
Methyl methacrylate	0.50	U	0.50	0.50

Quality Control Results

Client: Giles Engineering Associates

Job Number: 200-7689-1

Method Blank - Batch: 200-27790

Method: TO-15

Preparation: Summa Canister

Lab Sample ID: MB 200-27790/5  
 Client Matrix: Air  
 Dilution: 1.0  
 Analysis Date: 10/28/2011 1523  
 Prep Date: 10/28/2011 1523  
 Leach Date: N/A

Analysis Batch: 200-27790  
 Prep Batch: N/A  
 Leach Batch: N/A  
 Units: ppb v/v

Instrument ID: G.i  
 Lab File ID: ggcb005.d  
 Initial Weight/Volume: 200 mL  
 Final Weight/Volume: 200 mL  
 Injection Volume: 200 mL

Analyte	Result	Qual	RL	RL
Methyl tert-butyl ether	0.20	U	0.20	0.20
m,p-Xylene	0.50	U	0.50	0.50
Naphthalene	0.50	U	0.50	0.50
n-Butane	0.50	U	0.50	0.50
n-Butylbenzene	0.20	U	0.20	0.20
n-Heptane	0.20	U	0.20	0.20
n-Hexane	0.20	U	0.20	0.20
n-Propylbenzene	0.20	U	0.20	0.20
sec-Butylbenzene	0.20	U	0.20	0.20
Styrene	0.20	U	0.20	0.20
tert-Butyl alcohol	5.0	U	5.0	5.0
tert-Butylbenzene	0.20	U	0.20	0.20
1,1,2,2-Tetrachloroethane	0.20	U	0.20	0.20
Tetrachloroethene	0.20	U	0.20	0.20
Tetrahydrofuran	5.0	U	5.0	5.0
Toluene	0.20	U	0.20	0.20
trans-1,2-Dichloroethene	0.20	U	0.20	0.20
trans-1,3-Dichloropropene	0.20	U	0.20	0.20
1,2,4-Trichlorobenzene	0.50	U	0.50	0.50
1,1,1-Trichloroethane	0.20	U	0.20	0.20
1,1,2-Trichloroethane	0.20	U	0.20	0.20
Trichloroethene	0.20	U	0.20	0.20
Trichlorofluoromethane	0.20	U	0.20	0.20
1,3,5-Trimethylbenzene	0.20	U	0.20	0.20
1,2,4-Trimethylbenzene	0.20	U	0.20	0.20
2,2,4-Trimethylpentane	0.20	U	0.20	0.20
Vinyl chloride	0.20	U	0.20	0.20
Xylene, o-	0.20	U	0.20	0.20
Xylene (total)	0.20	U	0.20	0.20

## Quality Control Results

Client: Giles Engineering Associates

Job Number: 200-7689-1

**Method Blank - Batch: 200-27790**

Lab Sample ID: MB 200-27790/5  
 Client Matrix: Air  
 Dilution: 1.0  
 Analysis Date: 10/28/2011 1523  
 Prep Date: 10/28/2011 1523  
 Leach Date: N/A

Analysis Batch: 200-27790  
 Prep Batch: N/A  
 Leach Batch: N/A  
 Units: ug/m3

**Method: TO-15**

**Preparation: Summa Canister**

Instrument ID: G.i  
 Lab File ID: ggcb005.d  
 Initial Weight/Volume: 200 mL  
 Final Weight/Volume: 200 mL  
 Injection Volume: 200 mL

Analyte	Result	Qual	RL	RL
Acetone	12	U	12	12
Benzene	0.64	U	0.64	0.64
Benzyl chloride	1.0	U	1.0	1.0
Bromodichloromethane	1.3	U	1.3	1.3
Bromoethene(Vinyl Bromide)	0.87	U	0.87	0.87
Bromoform	2.1	U	2.1	2.1
Bromomethane	0.78	U	0.78	0.78
1,3-Butadiene	0.44	U	0.44	0.44
Carbon disulfide	1.6	U	1.6	1.6
Carbon tetrachloride	1.3	U	1.3	1.3
Chlorobenzene	0.92	U	0.92	0.92
Chloroethane	1.3	U	1.3	1.3
Chloroform	0.98	U	0.98	0.98
Chloromethane	1.0	U	1.0	1.0
3-Chloropropene	1.6	U	1.6	1.6
2-Chlorotoluene	1.0	U	1.0	1.0
cis-1,2-Dichloroethene	0.79	U	0.79	0.79
cis-1,3-Dichloropropene	0.91	U	0.91	0.91
Cumene	0.98	U	0.98	0.98
Cyclohexane	0.69	U	0.69	0.69
Dibromochloromethane	1.7	U	1.7	1.7
1,2-Dibromoethane	1.5	U	1.5	1.5
1,3-Dichlorobenzene	1.2	U	1.2	1.2
1,4-Dichlorobenzene	1.2	U	1.2	1.2
1,2-Dichlorobenzene	1.2	U	1.2	1.2
Dichlorodifluoromethane	2.5	U	2.5	2.5
1,1-Dichloroethane	0.81	U	0.81	0.81
1,2-Dichloroethane	0.81	U	0.81	0.81
1,1-Dichloroethene	0.79	U	0.79	0.79
1,2-Dichloroethene, Total	0.79	U	0.79	0.79
1,2-Dichloropropane	0.92	U	0.92	0.92
1,2-Dichlorotetrafluoroethane	1.4	U	1.4	1.4
1,4-Dioxane	18	U	18	18
Ethylbenzene	0.87	U	0.87	0.87
4-Ethyltoluene	0.98	U	0.98	0.98
Freon 22	1.8	U	1.8	1.8
Freon TF	1.5	U	1.5	1.5
Hexachlorobutadiene	2.1	U	2.1	2.1
Isopropyl alcohol	12	U	12	12
4-Isopropyltoluene	1.1	U	1.1	1.1
Methyl Butyl Ketone (2-Hexanone)	2.0	U	2.0	2.0
Methylene Chloride	1.7	U	1.7	1.7
Methyl Ethyl Ketone	1.5	U	1.5	1.5
methyl isobutyl ketone	2.0	U	2.0	2.0
Methyl methacrylate	2.0	U	2.0	2.0

## Quality Control Results

Client: Giles Engineering Associates

Job Number: 200-7689-1

**Method Blank - Batch: 200-27790**

Lab Sample ID: MB 200-27790/5  
 Client Matrix: Air  
 Dilution: 1.0  
 Analysis Date: 10/28/2011 1523  
 Prep Date: 10/28/2011 1523  
 Leach Date: N/A

Analysis Batch: 200-27790  
 Prep Batch: N/A  
 Leach Batch: N/A  
 Units: ug/m3

**Method: TO-15**

**Preparation: Summa Canister**

Instrument ID: G.i  
 Lab File ID: ggcb005.d  
 Initial Weight/Volume: 200 mL  
 Final Weight/Volume: 200 mL  
 Injection Volume: 200 mL

Analyte	Result	Qual	RL	RL
Methyl tert-butyl ether	0.72	U	0.72	0.72
m,p-Xylene	2.2	U	2.2	2.2
Naphthalene	2.6	U	2.6	2.6
n-Butane	1.2	U	1.2	1.2
n-Butylbenzene	1.1	U	1.1	1.1
n-Heptane	0.82	U	0.82	0.82
n-Hexane	0.70	U	0.70	0.70
n-Propylbenzene	0.98	U	0.98	0.98
sec-Butylbenzene	1.1	U	1.1	1.1
Styrene	0.85	U	0.85	0.85
tert-Butyl alcohol	15	U	15	15
tert-Butylbenzene	1.1	U	1.1	1.1
1,1,2,2-Tetrachloroethane	1.4	U	1.4	1.4
Tetrachloroethene	1.4	U	1.4	1.4
Tetrahydrofuran	15	U	15	15
Toluene	0.75	U	0.75	0.75
trans-1,2-Dichloroethene	0.79	U	0.79	0.79
trans-1,3-Dichloropropene	0.91	U	0.91	0.91
1,2,4-Trichlorobenzene	3.7	U	3.7	3.7
1,1,1-Trichloroethane	1.1	U	1.1	1.1
1,1,2-Trichloroethane	1.1	U	1.1	1.1
Trichloroethene	1.1	U	1.1	1.1
Trichlorofluoromethane	1.1	U	1.1	1.1
1,3,5-Trimethylbenzene	0.98	U	0.98	0.98
1,2,4-Trimethylbenzene	0.98	U	0.98	0.98
2,2,4-Trimethylpentane	0.93	U	0.93	0.93
Vinyl chloride	0.51	U	0.51	0.51
Xylene, o-	0.87	U	0.87	0.87
Xylene (total)	0.87	U	0.87	0.87



Quality Control Results

Client: Giles Engineering Associates

Job Number: 200-7689-1

Lab Control Sample - Batch: 200-27790

Method: TO-15

Preparation: Summa Canister

Lab Sample ID:	LCS 200-27790/4	Analysis Batch:	200-27790	Instrument ID:	G.i
Client Matrix:	Air	Prep Batch:	N/A	Lab File ID:	ggcb004.d
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	200 mL
Analysis Date:	10/28/2011 1434	Units:	ppb v/v	Final Weight/Volume:	200 mL
Prep Date:	10/28/2011 1434			Injection Volume:	200 mL
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Acetone	10.0	10.5	105	70 - 130	
Benzene	10.0	10.2	102	70 - 130	
Benzyl chloride	10.0	10.3	103	70 - 130	
Bromodichloromethane	10.0	10.4	104	70 - 130	
Bromoethene(Vinyl Bromide)	10.0	10.8	108	70 - 130	
Bromoform	10.0	10.3	103	70 - 130	
Bromomethane	10.0	10.3	103	70 - 130	
1,3-Butadiene	10.0	10.6	106	70 - 130	
Carbon disulfide	10.0	10.8	108	70 - 130	
Carbon tetrachloride	10.0	10.9	109	70 - 130	
Chlorobenzene	10.0	9.32	93	70 - 130	
Chloroethane	10.0	10.3	103	70 - 130	
Chloroform	10.0	10.4	104	70 - 130	
Chloromethane	10.0	10.2	102	70 - 130	
3-Chloropropene	10.0	10.3	103	70 - 130	
2-Chlorotoluene	10.0	10.7	107	70 - 130	
cis-1,2-Dichloroethene	10.0	10.7	107	70 - 130	
cis-1,3-Dichloropropene	10.0	9.34	93	70 - 130	
Cumene	10.0	10.5	105	70 - 130	
Cyclohexane	10.0	10.9	109	70 - 130	
Dibromochloromethane	10.0	10.3	103	70 - 130	
1,2-Dibromoethane	10.0	9.25	93	70 - 130	
1,3-Dichlorobenzene	10.0	9.81	98	70 - 130	
1,4-Dichlorobenzene	10.0	9.76	98	70 - 130	
1,2-Dichlorobenzene	10.0	9.55	96	70 - 130	
Dichlorodifluoromethane	10.0	10.8	108	70 - 130	
1,1-Dichloroethane	10.0	10.4	104	70 - 130	
1,2-Dichloroethane	10.0	10.4	104	70 - 130	
1,1-Dichloroethene	10.0	11.4	114	70 - 130	
1,2-Dichloropropane	10.0	9.49	95	70 - 130	
1,2-Dichlorotetrafluoroethane	10.0	10.1	101	70 - 130	
1,4-Dioxane	10.0	8.03	80	70 - 130	
Ethylbenzene	10.0	9.90	99	70 - 130	
4-Ethyltoluene	10.0	10.8	108	70 - 130	
Freon 22	10.0	10.4	104	70 - 130	
Freon TF	10.0	11.6	116	70 - 130	
Hexachlorobutadiene	10.0	10.2	102	70 - 130	
Isopropyl alcohol	10.0	9.19	92	70 - 130	
4-Isopropyltoluene	10.0	10.7	107	70 - 130	
Methyl Butyl Ketone (2-Hexanone)	10.0	9.97	100	70 - 130	
Methylene Chloride	10.0	10.9	109	70 - 130	

**Quality Control Results**

Client: Giles Engineering Associates

Job Number: 200-7689-1

**Lab Control Sample - Batch: 200-27790**

**Method: TO-15**

**Preparation: Summa Canister**

Lab Sample ID:	LCS 200-27790/4	Analysis Batch:	200-27790	Instrument ID:	G.i
Client Matrix:	Air	Prep Batch:	N/A	Lab File ID:	ggcb004.d
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	200 mL
Analysis Date:	10/28/2011 1434	Units:	ppb v/v	Final Weight/Volume:	200 mL
Prep Date:	10/28/2011 1434			Injection Volume:	200 mL
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Methyl Ethyl Ketone	10.0	9.62	96	70 - 130	
methyl isobutyl ketone	10.0	9.99	100	70 - 130	
Methyl methacrylate	10.0	9.73	97	70 - 130	
Methyl tert-butyl ether	10.0	10.2	102	70 - 130	
m,p-Xylene	20.0	19.7	99	70 - 130	
Naphthalene	10.0	9.99	100	70 - 130	
n-Butane	10.0	10.1	101	70 - 130	
n-Butylbenzene	10.0	10.6	106	70 - 130	
n-Heptane	10.0	10.1	101	70 - 130	
n-Hexane	10.0	10.4	104	70 - 130	
n-Propylbenzene	10.0	10.6	106	70 - 130	
sec-Butylbenzene	10.0	10.6	106	70 - 130	
Styrene	10.0	9.73	97	70 - 130	
tert-Butyl alcohol	10.0	9.66	97	70 - 130	
tert-Butylbenzene	10.0	10.4	104	70 - 130	
1,1,2,2-Tetrachloroethane	10.0	9.35	93	70 - 130	
Tetrachloroethene	10.0	9.91	99	70 - 130	
Tetrahydrofuran	10.0	9.83	98	70 - 130	
Toluene	10.0	9.00	90	70 - 130	
trans-1,2-Dichloroethene	10.0	10.2	103	70 - 130	
trans-1,3-Dichloropropene	10.0	9.64	96	70 - 130	
1,2,4-Trichlorobenzene	10.0	9.87	99	70 - 130	
1,1,1-Trichloroethane	10.0	10.9	109	70 - 130	
1,1,2-Trichloroethane	10.0	9.08	91	70 - 130	
Trichloroethene	10.0	10.6	106	70 - 130	
Trichlorofluoromethane	10.0	10.8	108	70 - 130	
1,3,5-Trimethylbenzene	10.0	10.1	101	70 - 130	
1,2,4-Trimethylbenzene	10.0	9.97	100	70 - 130	
2,2,4-Trimethylpentane	10.0	10.5	105	70 - 130	
Vinyl chloride	10.0	10.3	103	70 - 130	
Xylene, o-	10.0	9.70	97	70 - 130	

# Canister Samples Chain of Custody Record

30 Community Drive  
 Suite 11  
 South Burlington, VT 05403  
 phone 802-680-1990 fax 802-660-1919

TestAmerica Analytical Testing Corp. assumes no liability with respect to the collection and shipment of these samples.

Client Contact Information		Project Manager: <u>Kevin Bugel</u>				Samples Collected By: <u>LR</u>				( of 1 COCs																																									
Company: <u>Gil's Engineering Associates, Inc.</u>		Phone: <u>262 544 0118</u>																																																	
Address: <u>18 W223rd Johnson Dr.</u>		Email: <u>Kbugel@gilseengr.com</u>																																																	
City/State/Zip: <u>Waukesha, WI 53186</u>		Site Contact: <u>Kevin Bugel</u>																																																	
Phone: <u>262 544 0118</u>		TA Contact: <u>Das Dardak</u>																																																	
FAX: <u>262 549 5868</u>		Project Name: <u>Mercurizing</u>				Analysis Turnaround Time																																													
Site: <u>1730 State Street Racine WI</u>		Standard (Specify) <u>X</u>																																																	
PO #: <u>1E-0909013</u>		Rush (Specify)																																																	
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)																																
<u>VP-1</u>	<u>10/21/11</u>	<u>1:43</u>	<u>2:13</u>	<u>30</u>	<u>4</u>	<u>4640</u>	<u>4544</u>	<u>X</u>																																											
<u>VP-2</u>	<u>10/21/11</u>	<u>12:10</u>	<u>12:48</u>	<u>27</u>	<u>4</u>	<u>4588</u>	<u>3071</u>	<u>X</u>																																											
<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th colspan="4">Temperature (Fahrenheit)</th> </tr> <tr> <td></td> <td>Interior</td> <td colspan="2">Ambient</td> </tr> <tr> <td>Start</td> <td></td> <td colspan="2"></td> </tr> <tr> <td>Stop</td> <td></td> <td colspan="2"></td> </tr> <tr> <th colspan="4">Pressure (Inches of Hg)</th> </tr> <tr> <td></td> <td>Interior</td> <td colspan="2">Ambient</td> </tr> <tr> <td>Start</td> <td></td> <td colspan="2"></td> </tr> <tr> <td>Stop</td> <td></td> <td colspan="2"></td> </tr> </table>																				Temperature (Fahrenheit)					Interior	Ambient		Start				Stop				Pressure (Inches of Hg)					Interior	Ambient		Start				Stop			
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	Interior	Ambient																																																	
Start																																																			
Stop																																																			
Special Instructions/QC Requirements & Comments:																																																			
Samples Shipped by: <u>Ella Bradshaw</u>				Date/Time: <u>10/21/11</u>				Samples Received by: <u>[Signature]</u>				Date/Time: <u>10/27/11 920</u>																																							
Samples Relinquished by: <u>[Signature]</u>				Date/Time: <u>10/21/11</u>				Received by: <u>[Signature]</u>																																											
Relinquished by:				Date/Time:				Received by:																																											

Lab Use Only: Shipper Name: \_\_\_\_\_ Opened by: \_\_\_\_\_ Condition: \_\_\_\_\_



# GILES



## ENGINEERING ASSOCIATES, INC.

- 3990 Flowers Road, Suite 530 / Atlanta, GA 30360 / 770-458-3399 / FAX: 770-458-3998
- 10553 Olympic Drive, Suite 102 / Dallas, TX 75220 / 214-358-5885 / FAX: 214-358-5884
- 1521 E. Orangethorpe Avenue, Suite B / Fullerton, CA 92831 / 714/879-8436 / FAX: 714-879-4582
- N8 W22350 Johnson Drive, Suite A1 / Waukesha, WI 53186 / 262-544-0118 / FAX: 262-549-5868
- 514 Progress Drive, Suite J / Linthicum, MD 21090 / 410-636-9320 / FAX: 410-636-9325
- 4155 St. Johns Parkway, Suite 1200 / Sanford, FL 32771 / 407-321-5356 / FAX: 407-321-6604
- Corporate Office & Accounting / 262-544-0118 / FAX: 262-544-0501

TO:	<i>Das D.</i>	FROM:	<i>Greg</i>
FAX NO:		DATE/TIME:	
REFERENCE:	<i>COC D Air sample</i>		

THIS TRANSMISSION WILL CONSIST OF 2 PAGE(S) (INCLUDING THIS SHEET)  
 IF THERE ARE ANY PROBLEMS WITH THIS TRANSMISSION,  
 PLEASE CONTACT US AT THE ABOVE REFERENCED OFFICE

**MESSAGE:**

*Forward to Das D*

*→ COC For Air sent Friday*

*LR*

## Login Sample Receipt Checklist

Client: Giles Engineering Associates

Job Number: 200-7689-1

Login Number: 7689

List Source: TestAmerica Burlington

List Number: 1

Creator: Holt, Jamie

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	Lab does not accept radioactive samples.
The cooler's custody seal, if present, is intact.	N/A	Not present
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	Thermal preservation not required.
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	AMBIENT
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 sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	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.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



From: (202) 544-0118  
Kris Hagen  
Giles Engineering Associates, Inc.  
N8 W22350 Johnson Drive  
Suite A1  
Waukeesa, WI 53188

Origin ID: ZMLA



J11201108050225

Ship Date: 21OCT11  
ActWgt: 0.0 LB  
CAD: 5687471/NET3210  
Dims: 10 X 16 X 20 IN

Delivery Address Bar Code



SHIP TO: (802) 898-1898  
**Don Dawick**  
**TestAmerica Burlington**  
**30 COMMUNITY DR STE 11**  
  
**SOUTH BURLINGTON, VT 05403**

BILL SENDER

Ref #  
Invoice #  
PO #  
Dept #

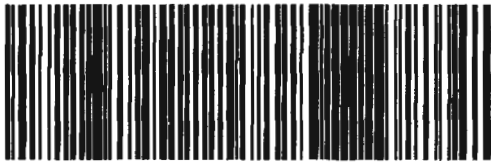
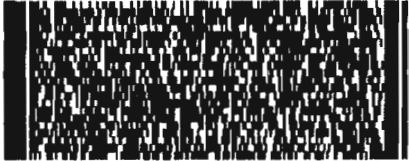
**### SATURDAY ### A4**  
**PRIORITY OVERNIGHT**

TRK# 7953 2398 0840

6291

**05403**  
VT-US  
**BTV**

**X0 BTVA**



5DFG1A013F5F4

**After printing this label:**

1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

**Warning:** Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.

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