



Proactive by Design

GEOTECHNICAL

ENVIRONMENTAL

ECOLOGICAL

WATER

CONSTRUCTION  
MANAGEMENT

GZA GeoEnvironmental of NY  
535 Washington Street  
11th Floor  
Buffalo, NY 14203  
T: 716.685.2300  
F: 716.685.3629  
www.gza.com



## VIA EMAIL

August 25, 2016  
File No. 21.0056367.70

Mr. Matthew Roland  
Iskalo Development Corporation  
Harbinger Square  
5166 Main Street  
Williamsville, NY 14221  
email: [msroland@islako.com](mailto:msroland@islako.com)

Re: Soil Gas Sampling and Analysis  
Former Signore, Inc.  
55-57 Jefferson Street  
Ellicottville, New York (Site)  
NYSDEC Site No. C905034

Dear Mr. Roland,

As requested by Iskalo Development Corporation (Iskalo) and in accordance with our proposal dated April 26, 2016, GZA GeoEnvironmental of New York (GZA) completed soil gas sampling and analysis at the Site in support of New York State Department of Environmental Conservation (NYSDEC) and New York State Department of Health (NYSDOH) efforts to reconcile the Superfund and Brownfield Cleanup Program (BCP) Site boundaries.

## FIELD METHODS

### *Sampling Point Installations*

The soil gas sampling points were installed on June 9, 2016. Two outdoor soil gas sampling points (designated as SG-1 and SG-2) were installed north of the BCP Site boundary using direct push technology at the locations depicted on **Figure 1**. A new and decontaminated soil gas stainless steel sampling point was installed approximately one to two feet above the groundwater table at each location. The water level at the proximate groundwater monitoring well MW-2I was measured to be approximately 13 feet below ground surface (ft. bgs). During the installation of SG-1, evidence of saturated soils was observed at approximately 13 ft. bgs. The sampling point at SG-1 was installed at an approximate depth of 11 ft. bgs. During the installation of SG-2, evidence of saturated soils was observed at approximately 6 ft. bgs. The sampling point at SG-2 was installed at an approximate depth of 5 ft. bgs.

Each stainless steel sampling point was connected to new ¼-inch polyethylene tubing. Porous, inert backfill material (i.e. glass beads) was used to create a ½-foot vertical sampling zone, and a bentonite seal (#8 crumbles) was placed in the annular space above the sampling zone (i.e. above the glass beads to ground surface). The bentonite seal was slowly hydrated during construction for proper seal formation. Each sampling point was finished at the surface with a concrete-set road box.



### *Soil Gas Sampling*

Soil gas sampling was conducted on June 15, 2016. Each sample (SG-1 and SG-2) was collected utilizing a 1-Liter canister that contained negative pressure and equipped with an 8-hour low-flow regulator. Both sampling points were tested using helium as a tracer gas to verify that the surface seal was intact. Helium was released into an enclosure placed over the top of the sampling point and maintained at a concentration of over 85% by air volume for at least three minutes. A helium detector (Radio Detection, MGD-2002) equipped with an internal pump was utilized to monitor the concentration of helium within the enclosure.

Following the three minutes of helium accumulation under the enclosure, the helium detector sample probe was placed into the soil gas sampling point tubing. The NYSDOH Guidance Document allows for up to 10% of the tracer gas to be detected within the sampling system and still be considered acceptable. The recorded value was less than 1% helium (10,000 ppm) at both locations, indicating that exterior air was not infiltrating into the subsurface at the sampling points.

During the sampling event a MiniRAE 3000 photoionization detector (PID), was used to obtain background levels for organic vapors in the general area of the sampling locations. The meter was calibrated and “zeroed” prior to arrival on site. Background readings were non-detect.

The canisters were submitted to Centek Laboratories for analysis for volatile organic compounds (VOCs) via USEPA Test Method TO-15.

### **DATA ANALYSIS**

#### *USEPA Guidance Based on Health Risk*

Concentrations of VOCs detected in the soil gas samples were compared with the United States Environmental Protection Agency (USEPA) risk-based Target Exterior Soil Gas Concentrations for residential exposure for a carcinogenic target risk of  $10^{-6}$  (excess cancer risk of one in 1,000,000) or for a non-cancer risk (adverse health effects that are not cancer) assuming a target hazard quotient and hazard index of 1, whichever was the lower value (carcinogenic or non-cancer value). For chemical concentrations associated with a target hazard quotient greater than 1, adverse health effects are possible from exposure to that chemical. For chemical concentrations associated with a hazard index of 1, it is assumed that no other chemicals are affecting the same target organ or organ system.

The USEPA’s Vapor Intrusion Screening Level (VISL) calculator developed as part of their June 2015 vapor intrusion guidance takes the Target Indoor Air Concentrations for Resident Ambient Air and divides these values by a conservative generic soil gas to indoor air attenuation factor to calculate risk-based target soil gas concentrations.

For select solvents, concentrations detected in the sub-slab soil vapor and related indoor air samples are typically compared with the NYSDOH decision matrices (Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York, October 2006) and subsequent updates. Based on the concentrations detected, the NYSDOH guidance provides recommendations ranging from “no further action” to “mitigate” for each solvent. GZA notes that NYSDOH does not provide specific guidance for soil gas sample concentrations.



## RESULTS AND CONCLUSIONS

Analytes detected in the soil gas samples are summarized in Table 1. The full laboratory report is attached to this letter. None of the analytes detected in the soil gas samples were present at concentrations above the USEPA Target Exterior Soil Gas Concentrations.

Thank you for the opportunity to work with you on this project. If you have any questions about this report, please call Jim Richert at (716) 844-7048.

Sincerely,

A handwritten signature in blue ink that reads "Thomas Bohlen".

Thomas Bohlen  
Project Manager

A handwritten signature in blue ink that reads "Bart A. Klettke".

Bart Klettke, P.E.  
Principal in Charge

A handwritten signature in blue ink that reads "Jim Richert".

James J. Richert, P.G.  
Senior Project Manager

Attachments: Table 1  
Figure 1  
Analytical Laboratory Report



## **ATTACHMENT 1 – TABLE 1**

**Table 1**  
Exterior Soil Gas Analytical Testing Results Summary  
Volatile Organic Compounds  
Former Signore Inc. Ellicottville, New York

Parameter	EXTERIOR SOIL GAS		
	Target Exterior Soil Gas Concentration - Residential	SG-1	SG-2
<b>Volatile Organic Compounds - EPA Method TO-15 (<math>\mu\text{g}/\text{m}^3</math>)</b>			
1,2,4-Trimethylbenzene	<b>2.4E+02</b>	44	1.4
1,3,5-Trimethylbenzene	<b>NV</b>	14	2.5
Acetone	<b>1.1E+06</b>	120	43
Benzene	<b>1.2E+01</b>	1.1	0.86
Bromodichloromethane	<b>2.5E+00</b>	0.94 J	0.67 J
Carbon disulfide	<b>2.4E+04</b>	3.3	2.4
Chloroform	<b>4.1E+00</b>	1.5	1.2
4-ethyltoluene	<b>NV</b>	9.1	ND
Ethyl acetate	<b>2.4E+03</b>	ND	0.83 J
Ethylbenzene	<b>3.7E+01</b>	2.8	1.3
Freon 11	<b>NV</b>	1.0	1.2
Freon 113	<b>1.0E+06</b>	0.84 J	ND
Freon 12	<b>3.5E+03</b>	1.8	2.0
m&p-Xylene	<b>3.5E+03</b>	11	2.0
Methyl Ethyl Ketone	<b>1.7E+05</b>	21	5.0
Methyl Isobutyl Ketone	<b>1.0E+05</b>	ND	2.9
Methylene chloride	<b>3.4E+03</b>	1.6	0.90
o-Xylene	<b>3.5E+03</b>	8.6	2.3
Tetrahydrofuran	<b>7.0E+04</b>	2.0	2.0
Tetrachloroethylene	<b>3.6E+02</b>	4.8	71
Toluene	<b>1.7E+05</b>	4.8	3.1
Trichloroethene	<b>1.6E+01</b>	ND	0.70 J

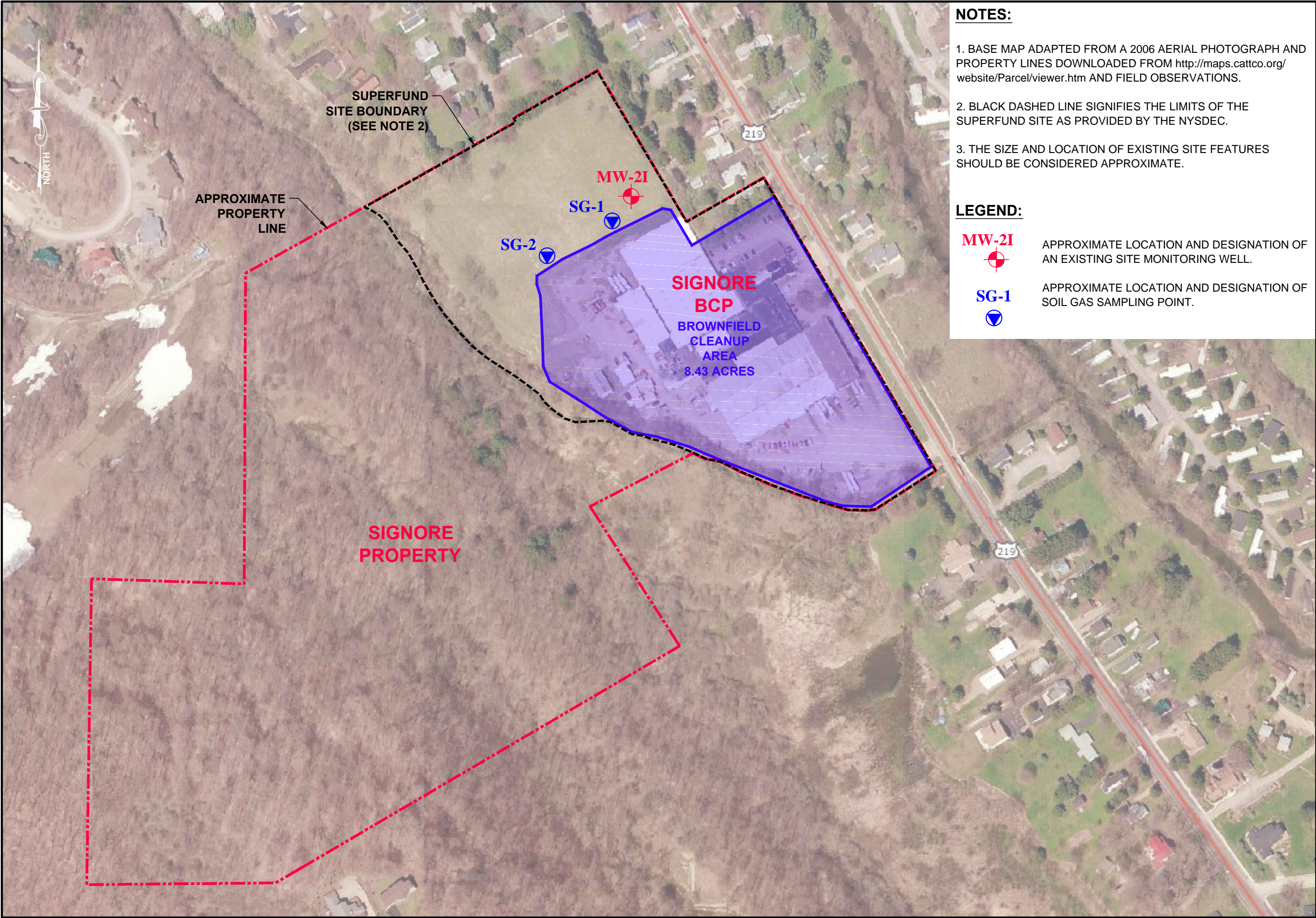
Notes:

- Compounds detected in one or more samples are presented on this table. Refer to the full laboratory report for list of all compounds included in analysis.
- Analytical testing completed by Centek Laboratories, LLC in Syracuse, New York.
- $\mu\text{g}/\text{m}^3$  = micrograms per cubic meter
- NV = No value. ND = concentrations were below method detection limits.
- J = Analyte detected below quantitation limit.
- Target Exterior Soil Gas Concentration - USEPA June 2015 Guidance, VISL Calculator, Residential; based on Target Indoor Air Concentrations in footnote 6.
- Bold** indicates exceedance of Target Exterior Soil Gas Concentration (no exceedances).



## **ATTACHMENT 2 – FIGURE 1**





**NOTES:**

1. BASE MAP ADAPTED FROM A 2006 AERIAL PHOTOGRAPH AND PROPERTY LINES DOWNLOADED FROM <http://maps.cattco.org/website/Parcel/viewer.htm> AND FIELD OBSERVATIONS.



2. BLACK DASHED LINE SIGNIFIES THE LIMITS OF THE SUPERFUND SITE AS PROVIDED BY THE NYSDEC.

3. THE SIZE AND LOCATION OF EXISTING SITE FEATURES SHOULD BE CONSIDERED APPROXIMATE.

**LEGEND:**

**MW-2I**  
APPROXIMATE LOCATION AND DESIGNATION OF AN EXISTING SITE MONITORING WELL.

**SG-1**  
APPROXIMATE LOCATION AND DESIGNATION OF SOIL GAS SAMPLING POINT.

<div>DRAWN BY: DEW</div> <div>DATE: AUGUST 2016</div>		<div></div> <div>GZA GeoEnvironmental of New York</div>	
<div>APPROXIMATE SCALE IN FEET</div> <div><div>0100200400</div></div>			
<div>SOIL GAS SAMPLING AND ANALYSIS</div> <div>FORMER SIGNORE, INC. ELLICOTTVILLE, NEW YORK BROWNFIELD CLEANUP PROGRAM SITE NO. C905034</div>		<div>SAMPLE LOCATIONS</div>	
<div>PROJECT No.</div> <div>21.0056367.70</div>			
<div>FIGURE No.</div> <div>1</div>			





## **ATTACHMENT 3 – ANALYTICAL LABORATORY REPORT**





## CEN TEK LABORATORIES, LLC

143 Midler Park Drive \* Syracuse, NY 13206

Phone (315) 431-9730 \* Emergency 24/7 (315) 416-2752

NYSDOH ELAP

Certificate No. 11830

### **Analytical Report**

Thomas Bohlen  
GZA GeoEnvironmental, Inc.  
535 Washington Street, 11th Floor  
Buffalo, NY 14203

Thursday, June 23, 2016  
Order No.: C1606056

TEL: 716-685-2300

FAX 716-685-3629

RE: Former Signore

Dear Thomas Bohlen:

Centek Laboratories, LLC received 2 sample(s) on 6/16/2016 for the analyses presented in the following report.

I certify that this data package is in compliance with the terms and conditions of the Contract, both technically and for completeness. Release of the data contained in this hardcopy data package and/or in the computer readable data submitted has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Centek Laboratories performs all analyses according to EPA, NIOSH or OSHA-approved analytical methods. Centek Laboratories is dedicated to providing quality analyses and exceptional customer service. All method blanks, laboratory spikes, and/or matrix spikes met quality assurance objective except as indicated in the case narrative. All samples were received and analyzed within the EPA recommended holding times. Test results are not Method Blank (MB) corrected for contamination.

We do our best to make our reporting format clear and understandable and hope you are thoroughly satisfied with our services. Please contact your client service representative at (315) 431-9730 or myself, if you would like any additional information regarding this report.

Thank you for using Centek Laboratories. This report can not be reproduced except in its entirety, without prior written authorization.

Sincerely,

William Dobbin  
Lead Technical Director

Disclaimer: The test results and procedures utilized, and laboratory interpretations of the data obtained by Centek as contained in this report are believed by Centek to be accurate and reliable

for sample(s) tested. In accepting this report, the customer agrees that the full extent of any and all liability for actual and consequential damages of Centek for the services performed shall be equal to the fee charged to the customer for the services as liquidated damages. ELAP does not offer certification for the following parameters by this method at present time, they are: 4-ethyltoluene, ethyl acetate, propylene, tetrahydrofuran, 4-PCH, sulfur derived and silicon series compounds.

## Centek Laboratories, LLC Terms and Conditions

### Sample Submission

All samples sent to Centek Laboratories should be accompanied by our Request for Analysis Form or Chain of Custody Form. A Chain of Custody will be provided with each order shipped for all sampling events, or if needed, one is available at our website [www.CentekLabs.com](http://www.CentekLabs.com). Samples received after 3:00pm are considered to be a part of the next day's business.

### Sample Media

Samples can be collected in an canister or a Tedlar bag. Depending on your analytical needs, Centek Laboratories may receive a bulk, liquid, soil or other matrix sample for headspace analysis.

### Blanks

Every sample is run with a surrogate or tracer compound at a pre-established concentration. The surrogate compound run with each sample is used as a standard to measure the performance of each run of the instrument. If required, a Minican can be provided containing nitrogen to be run as a trip blank with your samples.

### Sampling Equipment

Centek Laboratories will be happy to provide the canisters to carry-out your sampling event at no charge. The necessary accessories, such as regulators, tubing or personal sampling belts, are also provided to meet your sampling needs. The customer is responsible for all shipping charges to the client's destination and return shipping to the laboratory. Client assumes all responsibility for lost, stolen and any damages of equipment.

### Turn Around time (TAT)

Centek Laboratories will provide results to its clients in one business-week by 6:00pm EST after receipt of samples. For example, if samples are received on a Monday they are due on the following Monday by 6:00pm EST. Results are faxed or emailed to the requested location indicated on the Chain of Custody. Non-routine analysis may require more than the one business-week turnaround time. Please confirm non-routine sample turnaround times.

### Reporting

Results are emailed or faxed at no additional charge. A hard copy of the result report is mailed within 24 hours of the faxing or emailing of your results. Cat "B" like packages are within 3-4 weeks from time of analysis. Standard Electronic Disk Deliverables (EDD) is also available at no additional charge.

### Payment Terms

Payment for all purchases shall be due within 30 days from date of invoice. The client agrees to pay a finance charge of 1.5% per month on the overdue balance and cost of collection, including attorney fees, if collection proceedings are necessary. You must have a completed credit

application on file to extend credit. Purchase orders or checks information must be submitted for us to release results

#### Rush Turnaround Samples

Expedited turn around times is available. Please confirm rush turnaround times with Client Services before submitting samples.

#### Applicable Surcharges for Rush Turnaround Samples:

Same day TAT = 200%

Next business day TAT by Noon = 150%

Next business day TAT by 6:00pm = 100%

Second business day TAT by 6:00pm = 75%

Third business day TAT by 6:00pm = 50%

Fourth business day TAT by 6:00pm = 35%

Fifth business day = Standard

#### Statement of Confidentiality

Centek Laboratories, LLC is aware of the importance of the confidentiality of results to many of our clients. Your name and data will be held in the strictest of confidence. We will not accept business that may constitute a conflict of interest. We commonly sign Confidential Nondisclosure Agreements with clients prior to beginning work. All research, results and reports will be kept strictly confidential. Secrecy Agreements and Disclosure Statements will be signed for the client if so specified. Results will be provided only to the addressee specified on the Chain of Custody Form submitted with the samples unless law requires release. Written permission is required from the addressee to release results to any other party.

#### Limitation on Liability

Centek Laboratories, LLC warrants the test results to be accurate to the methodology and sample type for each sample submitted to Centek Laboratories, LLC. In no event shall Centek Laboratories, LLC be liable for direct, indirect, special, punitive, incidental, exemplary or consequential damages, or any damages whatsoever, even if Centek Laboratories, LLC has been previously advised of the possibility of such damages whether in an action under contract, negligence, or any other theory, arising out of or in connection with the use, inability to use or performance of the information, services, products and materials available from the laboratory or this site. These limitations shall apply notwithstanding any failure of essential purpose of any limited remedy. Because some jurisdictions do not allow limitations on how long an implied warranty lasts, or the exclusion or limitation of liability for consequential or incidental damages, the above limitations may not apply to you. This is a comprehensive limitation of liability that applies to all damages of any kind, including (without limitation) compensatory, direct, indirect or consequential damages, loss of data, income or profit and or loss of or damage to property and claims of third parties.



**CEN TEK LABORATORIES, LLC**

**Date:** 28-Jun-16

**CLIENT:** GZA GeoEnvironmental, Inc.

**Project:** Former Signore

**Lab Order:** C1606056

## **CASE NARRATIVE**

---

Samples were analyzed using the methods outlined in the following references:

Centek Laboratories, LLC SOP TS-80

Compendium of Methods for the Determination of Toxic Organic Compounds, Compendium Method TO-15, January 1999

All method blanks, laboratory spikes, and/or matrix spikes met quality assurance objective except as indicated in the corrective action report(s). All samples were received and analyzed within the EPA recommended holding times. Test results are not Method Blank (MB) corrected for contamination.

### **NYSDEC ASP samples:**

Canisters should be evacuated to a reading of less than or equal to 50 millitorr prior to shipment to sampling personnel. The vacuum in the canister will be field checked prior to sampling, and must read 28" of Hg ( $\pm 2$ ", vacuum, absolute) before a sample can be collected. After the sample has been collected, the pressure of the canister will be read and recorded again, and must be 5" of Hg ( $\pm 1$ ", vacuum, absolute) for the sample to be valid. Once received at the laboratory, the canister vacuum should be confirmed to be 5" of Hg,  $\pm 1$ ". Please record and report the pressure/vacuum of received canisters on the sample receipt paperwork. A pressure/vacuum reading should also be taken just prior to the withdrawal of sample from the canister, and recorded on the sample preparation log sheet. All regulators are calibrated to meet these requirements before they leave the laboratory. However, due to environmental conditions and use of the equipment Centek can not guarantee that this criteria can always be achieved.







# CENTEK LABORATORIES, LLC

## Sample Receipt Checklist

Client Name **GZA - BUFFALO**

Date and Time Receive

**6/16/2016**

Work Order Number **C1606056**

Received by **JDS**

Checklist completed by

Signature

Date

Reviewed by

Initials

Date

Matrix:

Carrier name **FedEx Ground**

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on shipping container/cooler?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Custody seals intact on sample bottles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Container/Temp Blank temperature in compliance?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Water - VOA vials have zero headspace?	No VOA vials submitted <input checked="" type="checkbox"/>	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	

Adjusted?

Checked by

Any No and/or NA (not applicable) response must be detailed in the comments section below

Client contacted

Date contacted:

Person contacted

Contacted by:

Regarding:

Comments:

Corrective Action



Date: 28-Jun-16

## CENTEK LABORATORIES, LLC

**CLIENT:** GZA GeoEnvironmental, Inc.  
**Project:** Former Signore  
**Lab Order:** C1606056

### Work Order Sample Summary

Lab Sample ID	Client Sample ID	Tag Number	Collection Date	Date Received
C1606056-001A	SG-1-061516	326,1162	6/15/2016	6/16/2016
C1606056-002A	SG-2-061516	161,277	6/15/2016	6/16/2016

Lab Order: C1606056  
 Client: GZA GeoEnvironmental, Inc.  
 Project: Former Signore

# DATES REPORT

Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCCLP Date	Prep Date	Analysis Date
C1606056-001A	SG-1-061516	6/15/2016	Air	lug/M3 by Method TO15			6/22/2016
				lug/M3 by Method TO15			6/21/2016
				lug/M3 by Method TO15			6/21/2016
				lug/M3 by Method TO15			6/21/2016
C1606056-002A	SG-2-061516			lug/M3 by Method TO15			6/21/2016
				lug/M3 by Method TO15			6/21/2016



# Centek Laboratories, LLC

Date: 23-Jun-16

**CLIENT:** GZA GeoEnvironmental, Inc.  
**Lab Order:** C1606056  
**Project:** Former Signore  
**Lab ID:** C1606056-001A

**Client Sample ID:** SG-1-061516  
**Tag Number:** 326,1162  
**Collection Date:** 6/15/2016  
**Matrix:** AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
<b>FIELD PARAMETERS</b>		<b>FLD</b>		Analyst:		
Lab Vacuum In	-6			"Hg		6/16/2016
Lab Vacuum Out	-30			"Hg		6/16/2016
<b>1UG/M3 BY METHOD TO15</b>		<b>TO-15</b>		Analyst: <b>RJP</b>		
1,1,1-Trichloroethane	< 0.15	0.15		ppbV	1	6/21/2016 4:45:00 AM
1,1,2,2-Tetrachloroethane	< 0.15	0.15		ppbV	1	6/21/2016 4:45:00 AM
1,1,2-Trichloroethane	< 0.15	0.15		ppbV	1	6/21/2016 4:45:00 AM
1,1-Dichloroethane	< 0.15	0.15		ppbV	1	6/21/2016 4:45:00 AM
1,1-Dichloroethene	< 0.15	0.15		ppbV	1	6/21/2016 4:45:00 AM
1,2,4-Trichlorobenzene	< 0.15	0.15		ppbV	1	6/21/2016 4:45:00 AM
1,2,4-Trimethylbenzene	8.9	1.5		ppbV	10	6/21/2016 10:25:00 PM
1,2-Dibromoethane	< 0.15	0.15		ppbV	1	6/21/2016 4:45:00 AM
1,2-Dichlorobenzene	< 0.15	0.15		ppbV	1	6/21/2016 4:45:00 AM
1,2-Dichloroethane	< 0.15	0.15		ppbV	1	6/21/2016 4:45:00 AM
1,2-Dichloropropane	< 0.15	0.15		ppbV	1	6/21/2016 4:45:00 AM
1,3,5-Trimethylbenzene	2.8	1.5		ppbV	10	6/21/2016 10:25:00 PM
1,3-butadiene	< 0.15	0.15		ppbV	1	6/21/2016 4:45:00 AM
1,3-Dichlorobenzene	< 0.15	0.15		ppbV	1	6/21/2016 4:45:00 AM
1,4-Dichlorobenzene	< 0.15	0.15		ppbV	1	6/21/2016 4:45:00 AM
1,4-Dioxane	< 0.30	0.30		ppbV	1	6/21/2016 4:45:00 AM
2,2,4-trimethylpentane	< 0.15	0.15		ppbV	1	6/21/2016 4:45:00 AM
4-ethyltoluene	1.9	0.15		ppbV	1	6/21/2016 4:45:00 AM
Acetone	52	12		ppbV	40	6/22/2016 7:02:00 AM
Allyl chloride	< 0.15	0.15		ppbV	1	6/21/2016 4:45:00 AM
Benzene	0.33	0.15		ppbV	1	6/21/2016 4:45:00 AM
Benzyl chloride	< 0.15	0.15		ppbV	1	6/21/2016 4:45:00 AM
Bromodichloromethane	0.14	0.15	J	ppbV	1	6/21/2016 4:45:00 AM
Bromoform	< 0.15	0.15		ppbV	1	6/21/2016 4:45:00 AM
Bromomethane	< 0.15	0.15		ppbV	1	6/21/2016 4:45:00 AM
Carbon disulfide	1.0	0.15		ppbV	1	6/21/2016 4:45:00 AM
Carbon tetrachloride	< 0.15	0.15		ppbV	1	6/21/2016 4:45:00 AM
Chlorobenzene	< 0.15	0.15		ppbV	1	6/21/2016 4:45:00 AM
Chloroethane	< 0.15	0.15		ppbV	1	6/21/2016 4:45:00 AM
Chloroform	0.30	0.15		ppbV	1	6/21/2016 4:45:00 AM
Chloromethane	< 0.15	0.15		ppbV	1	6/21/2016 4:45:00 AM
cis-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	6/21/2016 4:45:00 AM
cis-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	6/21/2016 4:45:00 AM
Cyclohexane	< 0.15	0.15		ppbV	1	6/21/2016 4:45:00 AM
Dibromochloromethane	< 0.15	0.15		ppbV	1	6/21/2016 4:45:00 AM
Ethyl acetate	< 0.25	0.25		ppbV	1	6/21/2016 4:45:00 AM

<b>Qualifiers:</b>	**	Quantitation Limit	.	Results reported are not blank corrected
	B	Analyte detected in the associated Method Blank	E	Estimated Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
	JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
	S	Spike Recovery outside accepted recovery limits		

# Centek Laboratories, LLC

Date: 23-Jun-16

**CLIENT:** GZA GeoEnvironmental, Inc.  
**Lab Order:** C1606056  
**Project:** Former Signore  
**Lab ID:** C1606056-001A

**Client Sample ID:** SG-1-061516  
**Tag Number:** 326,1162  
**Collection Date:** 6/15/2016  
**Matrix:** AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
<b>1UG/M3 BY METHOD TO15</b>		<b>TO-15</b>		Analyst: <b>RJP</b>		
Ethylbenzene	0.65	0.15		ppbV	1	6/21/2016 4:45:00 AM
Freon 11	0.18	0.15		ppbV	1	6/21/2016 4:45:00 AM
Freon 113	0.11	0.15	J	ppbV	1	6/21/2016 4:45:00 AM
Freon 114	< 0.15	0.15		ppbV	1	6/21/2016 4:45:00 AM
Freon 12	0.36	0.15		ppbV	1	6/21/2016 4:45:00 AM
Heptane	< 0.15	0.15		ppbV	1	6/21/2016 4:45:00 AM
Hexachloro-1,3-butadiene	< 0.15	0.15		ppbV	1	6/21/2016 4:45:00 AM
Hexane	< 0.15	0.15		ppbV	1	6/21/2016 4:45:00 AM
Isopropyl alcohol	< 0.15	0.15		ppbV	1	6/21/2016 4:45:00 AM
m&p-Xylene	2.5	0.30		ppbV	1	6/21/2016 4:45:00 AM
Methyl Butyl Ketone	< 0.30	0.30		ppbV	1	6/21/2016 4:45:00 AM
Methyl Ethyl Ketone	7.1	3.0		ppbV	10	6/21/2016 10:25:00 PM
Methyl Isobutyl Ketone	< 0.30	0.30		ppbV	1	6/21/2016 4:45:00 AM
Methyl tert-butyl ether	< 0.15	0.15		ppbV	1	6/21/2016 4:45:00 AM
Methylene chloride	0.45	0.15		ppbV	1	6/21/2016 4:45:00 AM
o-Xylene	2.0	0.15		ppbV	1	6/21/2016 4:45:00 AM
Propylene	< 0.15	0.15		ppbV	1	6/21/2016 4:45:00 AM
Styrene	< 0.15	0.15		ppbV	1	6/21/2016 4:45:00 AM
Tetrachloroethylene	0.71	0.15		ppbV	1	6/21/2016 4:45:00 AM
Tetrahydrofuran	0.68	0.15		ppbV	1	6/21/2016 4:45:00 AM
Toluene	1.3	0.15		ppbV	1	6/21/2016 4:45:00 AM
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	6/21/2016 4:45:00 AM
trans-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	6/21/2016 4:45:00 AM
Trichloroethene	< 0.15	0.15		ppbV	1	6/21/2016 4:45:00 AM
Vinyl acetate	< 0.15	0.15		ppbV	1	6/21/2016 4:45:00 AM
Vinyl Bromide	< 0.15	0.15		ppbV	1	6/21/2016 4:45:00 AM
Vinyl chloride	< 0.15	0.15		ppbV	1	6/21/2016 4:45:00 AM
Surr: Bromofluorobenzene	113	70-130		%REC	1	6/21/2016 4:45:00 AM

<b>Qualifiers:</b>	**	Quantitation Limit	.	Results reported are not blank corrected
	B	Analyte detected in the associated Method Blank	E	Estimated Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
	JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
	S	Spike Recovery outside accepted recovery limits		

# Centek Laboratories, LLC

Date: 23-Jun-16

**CLIENT:** GZA GeoEnvironmental, Inc.  
**Lab Order:** C1606056  
**Project:** Former Signore  
**Lab ID:** C1606056-002A

**Client Sample ID:** SG-2-061516  
**Tag Number:** 161,277  
**Collection Date:** 6/15/2016  
**Matrix:** AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
<b>FIELD PARAMETERS</b>		<b>FLD</b>		Analyst:		
Lab Vacuum In	-8			"Hg		6/16/2016
Lab Vacuum Out	-30			"Hg		6/16/2016
<b>1UG/M3 BY METHOD TO15</b>		<b>TO-15</b>		Analyst: <b>RJP</b>		
1,1,1-Trichloroethane	< 0.15	0.15		ppbV	1	6/21/2016 5:28:00 AM
1,1,2,2-Tetrachloroethane	< 0.15	0.15		ppbV	1	6/21/2016 5:28:00 AM
1,1,2-Trichloroethane	< 0.15	0.15		ppbV	1	6/21/2016 5:28:00 AM
1,1-Dichloroethane	< 0.15	0.15		ppbV	1	6/21/2016 5:28:00 AM
1,1-Dichloroethene	< 0.15	0.15		ppbV	1	6/21/2016 5:28:00 AM
1,2,4-Trichlorobenzene	< 0.15	0.15		ppbV	1	6/21/2016 5:28:00 AM
1,2,4-Trimethylbenzene	0.28	0.15		ppbV	1	6/21/2016 5:28:00 AM
1,2-Dibromoethane	< 0.15	0.15		ppbV	1	6/21/2016 5:28:00 AM
1,2-Dichlorobenzene	< 0.15	0.15		ppbV	1	6/21/2016 5:28:00 AM
1,2-Dichloroethane	< 0.15	0.15		ppbV	1	6/21/2016 5:28:00 AM
1,2-Dichloropropane	< 0.15	0.15		ppbV	1	6/21/2016 5:28:00 AM
1,3,5-Trimethylbenzene	0.51	0.15		ppbV	1	6/21/2016 5:28:00 AM
1,3-butadiene	< 0.15	0.15		ppbV	1	6/21/2016 5:28:00 AM
1,3-Dichlorobenzene	< 0.15	0.15		ppbV	1	6/21/2016 5:28:00 AM
1,4-Dichlorobenzene	< 0.15	0.15		ppbV	1	6/21/2016 5:28:00 AM
1,4-Dioxane	< 0.30	0.30		ppbV	1	6/21/2016 5:28:00 AM
2,2,4-trimethylpentane	< 0.15	0.15		ppbV	1	6/21/2016 5:28:00 AM
4-ethyltoluene	< 0.15	0.15		ppbV	1	6/21/2016 5:28:00 AM
Acetone	18	3.0		ppbV	10	6/21/2016 11:02:00 PM
Allyl chloride	< 0.15	0.15		ppbV	1	6/21/2016 5:28:00 AM
Benzene	0.27	0.15		ppbV	1	6/21/2016 5:28:00 AM
Benzyl chloride	< 0.15	0.15		ppbV	1	6/21/2016 5:28:00 AM
Bromodichloromethane	0.10	0.15	J	ppbV	1	6/21/2016 5:28:00 AM
Bromoform	< 0.15	0.15		ppbV	1	6/21/2016 5:28:00 AM
Bromomethane	< 0.15	0.15		ppbV	1	6/21/2016 5:28:00 AM
Carbon disulfide	0.77	0.15		ppbV	1	6/21/2016 5:28:00 AM
Carbon tetrachloride	< 0.15	0.15		ppbV	1	6/21/2016 5:28:00 AM
Chlorobenzene	< 0.15	0.15		ppbV	1	6/21/2016 5:28:00 AM
Chloroethane	< 0.15	0.15		ppbV	1	6/21/2016 5:28:00 AM
Chloroform	0.24	0.15		ppbV	1	6/21/2016 5:28:00 AM
Chloromethane	< 0.15	0.15		ppbV	1	6/21/2016 5:28:00 AM
cis-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	6/21/2016 5:28:00 AM
cis-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	6/21/2016 5:28:00 AM
Cyclohexane	< 0.15	0.15		ppbV	1	6/21/2016 5:28:00 AM
Dibromochloromethane	< 0.15	0.15		ppbV	1	6/21/2016 5:28:00 AM
Ethyl acetate	0.23	0.25	J	ppbV	1	6/21/2016 5:28:00 AM

<b>Qualifiers:</b>	**	Quantitation Limit	.	Results reported are not blank corrected
	B	Analyte detected in the associated Method Blank	E	Estimated Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
	JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
	S	Spike Recovery outside accepted recovery limits		

# Centek Laboratories, LLC

Date: 23-Jun-16

**CLIENT:** GZA GeoEnvironmental, Inc.  
**Lab Order:** C1606056  
**Project:** Former Signore  
**Lab ID:** C1606056-002A

**Client Sample ID:** SG-2-061516  
**Tag Number:** 161,277  
**Collection Date:** 6/15/2016  
**Matrix:** AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
<b>1UG/M3 BY METHOD TO15</b>		<b>TO-15</b>		Analyst: <b>RJP</b>		
Ethylbenzene	0.30	0.15		ppbV	1	6/21/2016 5:28:00 AM
Freon 11	0.21	0.15		ppbV	1	6/21/2016 5:28:00 AM
Freon 113	< 0.15	0.15		ppbV	1	6/21/2016 5:28:00 AM
Freon 114	< 0.15	0.15		ppbV	1	6/21/2016 5:28:00 AM
Freon 12	0.40	0.15		ppbV	1	6/21/2016 5:28:00 AM
Heptane	< 0.15	0.15		ppbV	1	6/21/2016 5:28:00 AM
Hexachloro-1,3-butadiene	< 0.15	0.15		ppbV	1	6/21/2016 5:28:00 AM
Hexane	< 0.15	0.15		ppbV	1	6/21/2016 5:28:00 AM
Isopropyl alcohol	< 0.15	0.15		ppbV	1	6/21/2016 5:28:00 AM
m&p-Xylene	0.46	0.30		ppbV	1	6/21/2016 5:28:00 AM
Methyl Butyl Ketone	< 0.30	0.30		ppbV	1	6/21/2016 5:28:00 AM
Methyl Ethyl Ketone	1.7	0.30		ppbV	1	6/21/2016 5:28:00 AM
Methyl Isobutyl Ketone	0.70	0.30		ppbV	1	6/21/2016 5:28:00 AM
Methyl tert-butyl ether	< 0.15	0.15		ppbV	1	6/21/2016 5:28:00 AM
Methylene chloride	0.26	0.15		ppbV	1	6/21/2016 5:28:00 AM
o-Xylene	0.54	0.15		ppbV	1	6/21/2016 5:28:00 AM
Propylene	< 0.15	0.15		ppbV	1	6/21/2016 5:28:00 AM
Styrene	< 0.15	0.15		ppbV	1	6/21/2016 5:28:00 AM
Tetrachloroethylene	10	1.5		ppbV	10	6/21/2016 11:02:00 PM
Tetrahydrofuran	0.68	0.15		ppbV	1	6/21/2016 5:28:00 AM
Toluene	0.82	0.15		ppbV	1	6/21/2016 5:28:00 AM
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	6/21/2016 5:28:00 AM
trans-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	6/21/2016 5:28:00 AM
Trichloroethene	0.13	0.15	J	ppbV	1	6/21/2016 5:28:00 AM
Vinyl acetate	< 0.15	0.15		ppbV	1	6/21/2016 5:28:00 AM
Vinyl Bromide	< 0.15	0.15		ppbV	1	6/21/2016 5:28:00 AM
Vinyl chloride	< 0.15	0.15		ppbV	1	6/21/2016 5:28:00 AM
Surr: Bromofluorobenzene	98.0	70-130		%REC	1	6/21/2016 5:28:00 AM

<b>Qualifiers:</b>	**	Quantitation Limit	.	Results reported are not blank corrected
	B	Analyte detected in the associated Method Blank	E	Estimated Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
	JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
	S	Spike Recovery outside accepted recovery limits		



# Centek Laboratories, LLC

Date: 23-Jun-16

**CLIENT:** GZA GeoEnvironmental, Inc.  
**Lab Order:** C1606056  
**Project:** Former Signore  
**Lab ID:** C1606056-001A

**Client Sample ID:** SG-1-061516  
**Tag Number:** 326,1162  
**Collection Date:** 6/15/2016  
**Matrix:** AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
<b>1UG/M3 BY METHOD TO15</b>		<b>TO-15</b>		Analyst: <b>RJP</b>		
1,1,1-Trichloroethane	< 0.82	0.82		ug/m3	1	6/21/2016 4:45:00 AM
1,1,2,2-Tetrachloroethane	< 1.0	1.0		ug/m3	1	6/21/2016 4:45:00 AM
1,1,2-Trichloroethane	< 0.82	0.82		ug/m3	1	6/21/2016 4:45:00 AM
1,1-Dichloroethane	< 0.61	0.61		ug/m3	1	6/21/2016 4:45:00 AM
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	6/21/2016 4:45:00 AM
1,2,4-Trichlorobenzene	< 1.1	1.1		ug/m3	1	6/21/2016 4:45:00 AM
1,2,4-Trimethylbenzene	44	7.4		ug/m3	10	6/21/2016 10:25:00 PM
1,2-Dibromoethane	< 1.2	1.2		ug/m3	1	6/21/2016 4:45:00 AM
1,2-Dichlorobenzene	< 0.90	0.90		ug/m3	1	6/21/2016 4:45:00 AM
1,2-Dichloroethane	< 0.61	0.61		ug/m3	1	6/21/2016 4:45:00 AM
1,2-Dichloropropane	< 0.69	0.69		ug/m3	1	6/21/2016 4:45:00 AM
1,3,5-Trimethylbenzene	14	7.4		ug/m3	10	6/21/2016 10:25:00 PM
1,3-butadiene	< 0.33	0.33		ug/m3	1	6/21/2016 4:45:00 AM
1,3-Dichlorobenzene	< 0.90	0.90		ug/m3	1	6/21/2016 4:45:00 AM
1,4-Dichlorobenzene	< 0.90	0.90		ug/m3	1	6/21/2016 4:45:00 AM
1,4-Dioxane	< 1.1	1.1		ug/m3	1	6/21/2016 4:45:00 AM
2,2,4-trimethylpentane	< 0.70	0.70		ug/m3	1	6/21/2016 4:45:00 AM
4-ethyltoluene	9.1	0.74		ug/m3	1	6/21/2016 4:45:00 AM
Acetone	120	28		ug/m3	40	6/22/2016 7:02:00 AM
Allyl chloride	< 0.47	0.47		ug/m3	1	6/21/2016 4:45:00 AM
Benzene	1.1	0.48		ug/m3	1	6/21/2016 4:45:00 AM
Benzyl chloride	< 0.86	0.86		ug/m3	1	6/21/2016 4:45:00 AM
Bromodichloromethane	0.94	1.0	J	ug/m3	1	6/21/2016 4:45:00 AM
Bromoform	< 1.6	1.6		ug/m3	1	6/21/2016 4:45:00 AM
Bromomethane	< 0.58	0.58		ug/m3	1	6/21/2016 4:45:00 AM
Carbon disulfide	3.3	0.47		ug/m3	1	6/21/2016 4:45:00 AM
Carbon tetrachloride	< 0.94	0.94		ug/m3	1	6/21/2016 4:45:00 AM
Chlorobenzene	< 0.69	0.69		ug/m3	1	6/21/2016 4:45:00 AM
Chloroethane	< 0.40	0.40		ug/m3	1	6/21/2016 4:45:00 AM
Chloroform	1.5	0.73		ug/m3	1	6/21/2016 4:45:00 AM
Chloromethane	< 0.31	0.31		ug/m3	1	6/21/2016 4:45:00 AM
cis-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	6/21/2016 4:45:00 AM
cis-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	6/21/2016 4:45:00 AM
Cyclohexane	< 0.52	0.52		ug/m3	1	6/21/2016 4:45:00 AM
Dibromochloromethane	< 1.3	1.3		ug/m3	1	6/21/2016 4:45:00 AM
Ethyl acetate	< 0.90	0.90		ug/m3	1	6/21/2016 4:45:00 AM
Ethylbenzene	2.8	0.65		ug/m3	1	6/21/2016 4:45:00 AM
Freon 11	1.0	0.84		ug/m3	1	6/21/2016 4:45:00 AM
Freon 113	0.84	1.1	J	ug/m3	1	6/21/2016 4:45:00 AM
Freon 114	< 1.0	1.0		ug/m3	1	6/21/2016 4:45:00 AM

<b>Qualifiers:</b>	**	Quantitation Limit	.	Results reported are not blank corrected
	B	Analyte detected in the associated Method Blank	E	Estimated Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
	JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
	S	Spike Recovery outside accepted recovery limits		

**Centek Laboratories, LLC****Date:** 23-Jun-16**CLIENT:** GZA GeoEnvironmental, Inc.**Client Sample ID:** SG-1-061516**Lab Order:** C1606056**Tag Number:** 326,1162**Project:** Former Signore**Collection Date:** 6/15/2016**Lab ID:** C1606056-001A**Matrix:** AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
<b>1UG/M3 BY METHOD TO15</b>		<b>TO-15</b>		Analyst: <b>RJP</b>		
Freon 12	1.8	0.74		ug/m3	1	6/21/2016 4:45:00 AM
Heptane	< 0.61	0.61		ug/m3	1	6/21/2016 4:45:00 AM
Hexachloro-1,3-butadiene	< 1.6	1.6		ug/m3	1	6/21/2016 4:45:00 AM
Hexane	< 0.53	0.53		ug/m3	1	6/21/2016 4:45:00 AM
Isopropyl alcohol	< 0.37	0.37		ug/m3	1	6/21/2016 4:45:00 AM
m&p-Xylene	11	1.3		ug/m3	1	6/21/2016 4:45:00 AM
Methyl Butyl Ketone	< 1.2	1.2		ug/m3	1	6/21/2016 4:45:00 AM
Methyl Ethyl Ketone	21	8.8		ug/m3	10	6/21/2016 10:25:00 PM
Methyl Isobutyl Ketone	< 1.2	1.2		ug/m3	1	6/21/2016 4:45:00 AM
Methyl tert-butyl ether	< 0.54	0.54		ug/m3	1	6/21/2016 4:45:00 AM
Methylene chloride	1.6	0.52		ug/m3	1	6/21/2016 4:45:00 AM
o-Xylene	8.6	0.65		ug/m3	1	6/21/2016 4:45:00 AM
Propylene	< 0.26	0.26		ug/m3	1	6/21/2016 4:45:00 AM
Styrene	< 0.64	0.64		ug/m3	1	6/21/2016 4:45:00 AM
Tetrachloroethylene	4.8	1.0		ug/m3	1	6/21/2016 4:45:00 AM
Tetrahydrofuran	2.0	0.44		ug/m3	1	6/21/2016 4:45:00 AM
Toluene	4.8	0.57		ug/m3	1	6/21/2016 4:45:00 AM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	6/21/2016 4:45:00 AM
trans-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	6/21/2016 4:45:00 AM
Trichloroethene	< 0.81	0.81		ug/m3	1	6/21/2016 4:45:00 AM
Vinyl acetate	< 0.53	0.53		ug/m3	1	6/21/2016 4:45:00 AM
Vinyl Bromide	< 0.66	0.66		ug/m3	1	6/21/2016 4:45:00 AM
Vinyl chloride	< 0.38	0.38		ug/m3	1	6/21/2016 4:45:00 AM

<b>Qualifiers:</b>	**	Quantitation Limit	.	Results reported are not blank corrected
	B	Analyte detected in the associated Method Blank	E	Estimated Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
	JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
	S	Spike Recovery outside accepted recovery limits		

Page 2 of 4

# Centek Laboratories, LLC

Date: 23-Jun-16

**CLIENT:** GZA GeoEnvironmental, Inc.  
**Lab Order:** C1606056  
**Project:** Former Signore  
**Lab ID:** C1606056-002A

**Client Sample ID:** SG-2-061516  
**Tag Number:** 161,277  
**Collection Date:** 6/15/2016  
**Matrix:** AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
<b>1UG/M3 BY METHOD TO15</b>			<b>TO-15</b>		Analyst: <b>RJP</b>	
1,1,1-Trichloroethane	< 0.82	0.82		ug/m3	1	6/21/2016 5:28:00 AM
1,1,2,2-Tetrachloroethane	< 1.0	1.0		ug/m3	1	6/21/2016 5:28:00 AM
1,1,2-Trichloroethane	< 0.82	0.82		ug/m3	1	6/21/2016 5:28:00 AM
1,1-Dichloroethane	< 0.61	0.61		ug/m3	1	6/21/2016 5:28:00 AM
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	6/21/2016 5:28:00 AM
1,2,4-Trichlorobenzene	< 1.1	1.1		ug/m3	1	6/21/2016 5:28:00 AM
1,2,4-Trimethylbenzene	1.4	0.74		ug/m3	1	6/21/2016 5:28:00 AM
1,2-Dibromoethane	< 1.2	1.2		ug/m3	1	6/21/2016 5:28:00 AM
1,2-Dichlorobenzene	< 0.90	0.90		ug/m3	1	6/21/2016 5:28:00 AM
1,2-Dichloroethane	< 0.61	0.61		ug/m3	1	6/21/2016 5:28:00 AM
1,2-Dichloropropane	< 0.69	0.69		ug/m3	1	6/21/2016 5:28:00 AM
1,3,5-Trimethylbenzene	2.5	0.74		ug/m3	1	6/21/2016 5:28:00 AM
1,3-butadiene	< 0.33	0.33		ug/m3	1	6/21/2016 5:28:00 AM
1,3-Dichlorobenzene	< 0.90	0.90		ug/m3	1	6/21/2016 5:28:00 AM
1,4-Dichlorobenzene	< 0.90	0.90		ug/m3	1	6/21/2016 5:28:00 AM
1,4-Dioxane	< 1.1	1.1		ug/m3	1	6/21/2016 5:28:00 AM
2,2,4-trimethylpentane	< 0.70	0.70		ug/m3	1	6/21/2016 5:28:00 AM
4-ethyltoluene	< 0.74	0.74		ug/m3	1	6/21/2016 5:28:00 AM
Acetone	43	7.1		ug/m3	10	6/21/2016 11:02:00 PM
Allyl chloride	< 0.47	0.47		ug/m3	1	6/21/2016 5:28:00 AM
Benzene	0.86	0.48		ug/m3	1	6/21/2016 5:28:00 AM
Benzyl chloride	< 0.86	0.86		ug/m3	1	6/21/2016 5:28:00 AM
Bromodichloromethane	0.67	1.0	J	ug/m3	1	6/21/2016 5:28:00 AM
Bromoform	< 1.6	1.6		ug/m3	1	6/21/2016 5:28:00 AM
Bromomethane	< 0.58	0.58		ug/m3	1	6/21/2016 5:28:00 AM
Carbon disulfide	2.4	0.47		ug/m3	1	6/21/2016 5:28:00 AM
Carbon tetrachloride	< 0.94	0.94		ug/m3	1	6/21/2016 5:28:00 AM
Chlorobenzene	< 0.69	0.69		ug/m3	1	6/21/2016 5:28:00 AM
Chloroethane	< 0.40	0.40		ug/m3	1	6/21/2016 5:28:00 AM
Chloroform	1.2	0.73		ug/m3	1	6/21/2016 5:28:00 AM
Chloromethane	< 0.31	0.31		ug/m3	1	6/21/2016 5:28:00 AM
cis-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	6/21/2016 5:28:00 AM
cis-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	6/21/2016 5:28:00 AM
Cyclohexane	< 0.52	0.52		ug/m3	1	6/21/2016 5:28:00 AM
Dibromochloromethane	< 1.3	1.3		ug/m3	1	6/21/2016 5:28:00 AM
Ethyl acetate	0.83	0.90	J	ug/m3	1	6/21/2016 5:28:00 AM
Ethylbenzene	1.3	0.65		ug/m3	1	6/21/2016 5:28:00 AM
Freon 11	1.2	0.84		ug/m3	1	6/21/2016 5:28:00 AM
Freon 113	< 1.1	1.1		ug/m3	1	6/21/2016 5:28:00 AM
Freon 114	< 1.0	1.0		ug/m3	1	6/21/2016 5:28:00 AM

<b>Qualifiers:</b>	**	Quantitation Limit	.	Results reported are not blank corrected
	B	Analyte detected in the associated Method Blank	E	Estimated Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
	JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
	S	Spike Recovery outside accepted recovery limits		

# Centek Laboratories, LLC

Date: 23-Jun-16

**CLIENT:** GZA GeoEnvironmental, Inc.  
**Lab Order:** C1606056  
**Project:** Former Signore  
**Lab ID:** C1606056-002A

**Client Sample ID:** SG-2-061516  
**Tag Number:** 161,277  
**Collection Date:** 6/15/2016  
**Matrix:** AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
<b>1UG/M3 BY METHOD TO15</b>		<b>TO-15</b>		Analyst: <b>RJP</b>		
Freon 12	2.0	0.74		ug/m3	1	6/21/2016 5:28:00 AM
Heptane	< 0.61	0.61		ug/m3	1	6/21/2016 5:28:00 AM
Hexachloro-1,3-butadiene	< 1.6	1.6		ug/m3	1	6/21/2016 5:28:00 AM
Hexane	< 0.53	0.53		ug/m3	1	6/21/2016 5:28:00 AM
Isopropyl alcohol	< 0.37	0.37		ug/m3	1	6/21/2016 5:28:00 AM
m&p-Xylene	2.0	1.3		ug/m3	1	6/21/2016 5:28:00 AM
Methyl Butyl Ketone	< 1.2	1.2		ug/m3	1	6/21/2016 5:28:00 AM
Methyl Ethyl Ketone	5.0	0.88		ug/m3	1	6/21/2016 5:28:00 AM
Methyl Isobutyl Ketone	2.9	1.2		ug/m3	1	6/21/2016 5:28:00 AM
Methyl tert-butyl ether	< 0.54	0.54		ug/m3	1	6/21/2016 5:28:00 AM
Methylene chloride	0.90	0.52		ug/m3	1	6/21/2016 5:28:00 AM
o-Xylene	2.3	0.65		ug/m3	1	6/21/2016 5:28:00 AM
Propylene	< 0.26	0.26		ug/m3	1	6/21/2016 5:28:00 AM
Styrene	< 0.64	0.64		ug/m3	1	6/21/2016 5:28:00 AM
Tetrachloroethylene	71	10		ug/m3	10	6/21/2016 11:02:00 PM
Tetrahydrofuran	2.0	0.44		ug/m3	1	6/21/2016 5:28:00 AM
Toluene	3.1	0.57		ug/m3	1	6/21/2016 5:28:00 AM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	6/21/2016 5:28:00 AM
trans-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	6/21/2016 5:28:00 AM
Trichloroethene	0.70	0.81	J	ug/m3	1	6/21/2016 5:28:00 AM
Vinyl acetate	< 0.53	0.53		ug/m3	1	6/21/2016 5:28:00 AM
Vinyl Bromide	< 0.66	0.66		ug/m3	1	6/21/2016 5:28:00 AM
Vinyl chloride	< 0.38	0.38		ug/m3	1	6/21/2016 5:28:00 AM

<b>Qualifiers:</b>	**	Quantitation Limit	.	Results reported are not blank corrected
	B	Analyte detected in the associated Method Blank	E	Estimated Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
	JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
	S	Spike Recovery outside accepted recovery limits		