
CORRECTIVE MEASURES WORK PLAN

for

**RIVER PLACE II
WEST 42ND STREET
NEW YORK, NEW YORK
NYSDEC BCP Site No. C231012**

Prepared For:

**New York State Department of Environmental Conservation
Division of Environmental Remediation
Bureau of Technical Support, 11th Floor
625 Broadway
Albany, NY 12233**

Prepared By:

**Langan Engineering, Environmental, Surveying
and Landscape Architecture, D.P.C.
21 Penn Plaza
360 West 31st Street, 8th Floor
New York, New York 10001**



**Jason Hayes, P.E.
Senior Associate**

**December 5, 2014
Langan Project No. 170040901**

LANGAN

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1.0 INTRODUCTION

Langan Engineering, Environmental, Surveying and Landscape Architecture, D.P.C. (Langan) prepared this Corrective Measures Work Plan (CMWP) to address water intrusion observed in isolated areas of the sub-cellar at River Place II ("the site") in New York, New York. The site is owned by River Place II, LLC and is improved with a 59-story, high-rise residential apartment building with two cellar levels. The site was remediated under the New York State Department of Environmental Conservation (NYSDEC) Brownfield Cleanup Program (BCP Site C231012) and is managed under the July 2006 Site Management Plan (SMP). This CMWP has been completed in accordance with the requirements of the SMP and incorporates corrective measure discussions between Langan, NYSDEC, and River Place II, LLC in September and October 2014.

This CMWP provides a brief site background, a description of the observation of water intrusion in the sub-cellar, the proposed investigation, potential corrective measure, and a schedule for implementation of the potential corrective measure.

2.0 BACKGROUND

The site was historically utilized as a manufactured gas plant (MGP) between the 1860s and 1920s. The site was developed as a railroad yard in the 1930s and was converted into a parking lot by 1980. Consolidated Edison entered into a Brownfield Cleanup Agreement (BCA) with the NYSDEC for the site, and NYSDEC approved a remedial work plan in March 2005. Remediation was completed between August 2005 and February 2006 and included the removal and off-site disposal of approximately 79,000 tons of MGP-impacted soil, the placement of an engineered composite cover, and the installation of a vapor barrier/waterproofing membrane. The composite cover serves as a physical barrier between site occupants and residual soil and groundwater impacts remaining at the site and the vapor barrier/waterproofing membrane prevents intrusion of impacted groundwater and soil vapors from residual impacted groundwater and soil at the site. The composite cover and vapor barrier/waterproofing membrane serve as permanent engineering controls (EC) for the site. NYSDEC issued a Brownfield Cleanup Program (BCP) Certificate of Completion for remediation of the site on June 19, 2007.

The July 2006 SMP prepared by Dvirka and Batrilucci Consulting Engineers established an annual monitoring plan to inspect and certify the site ECs. Langan completed a Periodic

Review Report (PRR) documenting the results of the 2014 annual inspection. The 2014 PRR is pending revision per completion of the potential corrective measures presented herein.

3.0 ENGINEERING CONTROL ASSESSMENT

Langan completed the annual site-wide inspection at River Place II on August 12, 2014. Cracks, evidence of liquid seepage and staining were observed on sub cellar walls. These observations may indicate water intrusion. The observed water intrusion may be the result of a domestic water source, such as a leaking water pipe, located within the building envelope. Photographs of sub-cellar water intrusion are provided as Appendix A.

Based on the observed seepage, River Place II, LLC retained GCI Environmental Advisory, Inc. (GCI) to perform an indoor air quality evaluation to determine if soil vapors were accumulating in the site building. On August 25, 2014, three indoor air samples were collected in the sub cellar area and three indoor air samples were collected from the cellar area. An outdoor air sample was collected from the 10th floor setback for quality assurance/quality control purposes. Samples were collected into laboratory certified, six-liter SUMMA canisters using calibrated regulators to allow for an eight-hour sampling duration.

Samples were transported to EMSL Analytical Laboratory of Cinnaminson, New Jersey; a New York State Department of Health (NYSDOH) environmental laboratory accreditation program (ELAP) certified laboratory. The samples were analyzed for volatile organic compounds (VOC) via the United States Environmental Protection Agency (USEPA) Standard Method TO15.

VOCs were detected in air samples collected from the cellar and sub cellar sampling locations. Several of the detected compounds, including freon, acetone, isopropanol and ethanol, are associated with the use of cleaning and refrigeration products. The other detected VOCs are found in the fuel oil that is used for space heating in the building. The concentrations detected are consistent with the NYSDOH Study of Volatile Organic Chemicals in Air of Fuel Oil Heated Homes, 2003 (NYSDOH 2003 Fuel Oil Study) of indoor air background data for fuel oil heated homes. All detections were below the NYSDOH 2003 Fuel Oil Study Upper Fence values for indoor air. The GCI indoor air quality evaluation report is provided as Appendix B.

The comparison with existing studies indicates e that VOCs detected in the indoor air samples are likely due to typical building operations (e.g., use of cleaning products, fuel oil storage, boiler operation).

4.0 POTENTIAL CORRECTIVE MEASURES

The following section presents the potential corrective measures for mitigating water intrusion. The mitigation plan will be implemented in two phases. Phase 1 will consist of investigation activities to determine the extent of water intrusion and potential mitigation options based on investigation findings. Phase 2 will include implementation of the selected method, as required based on the findings of Phase I.

Phase 1 will consist of the following tasks:

- Inspect and evaluate existing water intrusion conditions. Conduct interviews with building staff to determine duration and extent of water intrusion;
- Review of drawings, reports and photographs for previous subsurface work conducted at the site (i.e. street services/utilities and foundation construction);
- Preparation of three dimensional model mapping existing water intrusion conditions; and
- Preparation of a report that describes investigation activities and observations including identification of water intrusion areas and correlation with existing construction. Conclusions and recommendations will be provided for potential mitigation.

Phase 2 will consist of the following tasks, as required:

- Implementation of preferred mitigation plan;
- A performance evaluation of the repair; and
- Preparation of a report that summarizes observations made during implementation of the mitigation plan.

5.0 SCHEDULE

Phase 1 is anticipated to be completed prior to December 31, 2014 and Phase 2 is anticipated to begin in early 2015.

APPENDIX A
PHOTOGRAPHS OF WATER INTRUSION



Photo 1: Walls of River Place II sub-cellar showing observed intrusion

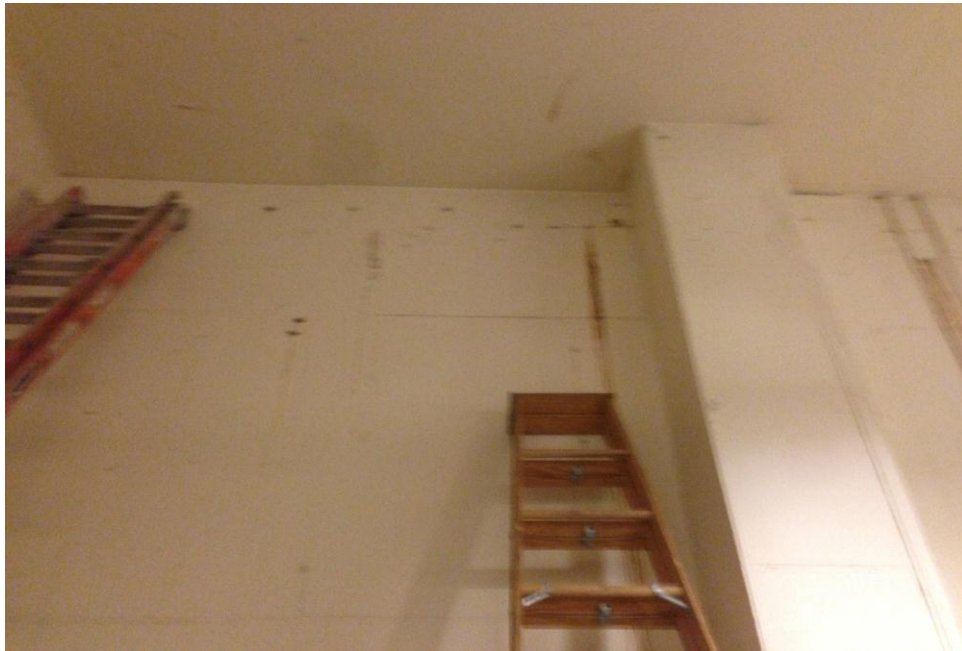


Photo 2: Walls of River Place II sub-cellar showing intrusion



Photo 3: Walls of River Place II sub-cellar showing intrusion.

APPENDIX B
GCI ENVIRONMENTAL ADVISORY, INC.
INDOOR AIR QUALITY REPORT

September 4, 2014

Mr. Bill Dacunto
Silverstein Properties, Inc.
7 World Trade Center
New York, NY 10007

RE: 620 West 42nd Street, NYC (a.k.a. Silver Towers)

Dear Mr. Adamski,

GCI Environmental Advisory, Inc.'s (GCI) Certified Industrial Hygienist, Mr. James Grond, MSPH, CIH, LEED AP conducted a limited visual inspection and collected Total Volatile Organic Compounds (TVOCs) air samples within and exterior to the above referenced building on August 27, 2014. Samples were placed into the following areas to measure TVOCs:

- Outside Air - 10th floor setback
- Cellar - Middle of Compactor Room
- Cellar - East side - Outside Gas Meter Room
- Cellar - Southeast section - Outside door to Sub-cellar Boiler Room
- Sub-cellar - East side hallway - North of Boiler Room entrance
- Sub-cellar - Boiler Room - Southeast section
- Sub-cellar - Boiler Room - Northwest section

The purpose of the sampling was to respond to the issues identified within the August 25, 2014 email correspondence from Mr. Daniel Carrus, PE, LEED AP regarding water intrusion noted within the Sub-cellar boiler room. Langan was concerned that Volatile Organic Compounds (VOC) were being released into the building as a result of this water seepage and the VOCs identified from their ground water sampling events. The standing water observed within the Sub-Cellar Boiler Room appeared clear with no visible organic stains or sheens noted. The areas chosen for sampling were based in or adjacent to areas of standing water in the Sub-cellar and areas located above or in proximity to the Sub-cellar samples. An outdoor air sample was collected from the 10th floor setback as a baseline sample.

Evacuated SUMMA Canisters were placed into each area approximately four (4) feet above floor level. A laboratory supplied, eight (8) hour calibrated regulator, was attached to each canister and the location, start time and initial pressure reading was recorded with a non-VOC emitting writing device. Upon completing the approximately eight (8) hour sampling event, the final pressure reading and stop times were recorded. A sample data sheet and Chain of Custody were prepared and the SUMMA Canisters, pressure regulators and paperwork were packaged and delivered via overnight carrier to EMSL Analytical Laboratory, a fully licensed and accredited laboratory.

The samples were analyzed for Total Volatile Organic Compounds (VOCs) utilizing Gas Chromatography for identification via the Environmental Protection Agency (EPA) Standard Method TO15.

Laboratory analysis detected n-Butane, Ethanol, Isopropyl Alcohol, Acetone and Chloroform at extremely low levels (parts per billion) which are well current Occupational Safety and Health Administrations (OSHA) Permissible Exposure Levels (PELs). The following tables indicate the volatile organic compounds levels detected in concentrations greater than 10 micrograms per cubic meter of collected air ($10 \mu\text{g}/\text{m}^3$) for each area and the detected levels in the outside air:

PARAMETER	OUTSIDE AIR	Cellar - Middle of Compactor Room ($\mu\text{g}/\text{m}^3$)	Cellar - East side - Outside Gas Meter Room ($\mu\text{g}/\text{m}^3$)	Cellar - Southeast section - Outside door to Sub-cellar Boiler Room ($\mu\text{g}/\text{m}^3$)
n-Butane	$10 \mu\text{g}/\text{m}^3$	$32 \mu\text{g}/\text{m}^3$	$43 \mu\text{g}/\text{m}^3$	$34 \mu\text{g}/\text{m}^3$
Ethanol	$19 \mu\text{g}/\text{m}^3$	$460 \mu\text{g}/\text{m}^3$	$420 \mu\text{g}/\text{m}^3$	$450 \mu\text{g}/\text{m}^3$
Isopropyl Alcohol	$<10 \mu\text{g}/\text{m}^3$	$130 \mu\text{g}/\text{m}^3$	$87 \mu\text{g}/\text{m}^3$	$78 \mu\text{g}/\text{m}^3$
Acetone	$18 \mu\text{g}/\text{m}^3$	$35 \mu\text{g}/\text{m}^3$	$39 \mu\text{g}/\text{m}^3$	$37 \mu\text{g}/\text{m}^3$
Chloroform	$<10 \mu\text{g}/\text{m}^3$	$10 \mu\text{g}/\text{m}^3$	$<10 \mu\text{g}/\text{m}^3$	$<10 \mu\text{g}/\text{m}^3$
Xylene	ND	$<10 \mu\text{g}/\text{m}^3$	$<10 \mu\text{g}/\text{m}^3$	$<10 \mu\text{g}/\text{m}^3$

PARAMETER	OUTSIDE AIR	Sub-cellar - East side hallway - North of Boiler Room entrance ($\mu\text{g}/\text{m}^3$)	Sub-cellar - Boiler Room - Southeast section ($\mu\text{g}/\text{m}^3$)	Sub-cellar - Boiler Room - Northwest section ($\mu\text{g}/\text{m}^3$)
n-Butane	$10 \mu\text{g}/\text{m}^3$	$25 \mu\text{g}/\text{m}^3$	$12 \mu\text{g}/\text{m}^3$	$11 \mu\text{g}/\text{m}^3$
Ethanol	$19 \mu\text{g}/\text{m}^3$	$190 \mu\text{g}/\text{m}^3$	$38 \mu\text{g}/\text{m}^3$	$43 \mu\text{g}/\text{m}^3$
Isopropyl Alcohol	$<10 \mu\text{g}/\text{m}^3$	$28 \mu\text{g}/\text{m}^3$	$24 \mu\text{g}/\text{m}^3$	$19 \mu\text{g}/\text{m}^3$
Acetone	$18 \mu\text{g}/\text{m}^3$	$23 \mu\text{g}/\text{m}^3$	$24 \mu\text{g}/\text{m}^3$	$20 \mu\text{g}/\text{m}^3$
Chloroform	$<10 \mu\text{g}/\text{m}^3$	$<10 \mu\text{g}/\text{m}^3$	$<10 \mu\text{g}/\text{m}^3$	$<10 \mu\text{g}/\text{m}^3$
Xylene	ND	$10 \mu\text{g}/\text{m}^3$	$<10 \mu\text{g}/\text{m}^3$	$<10 \mu\text{g}/\text{m}^3$

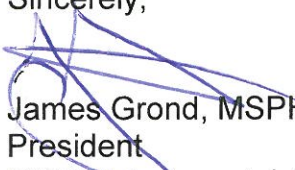
$\mu\text{g}/\text{m}^3$ - micrograms per cubic meter of collected air
 ND - Non-Detected

In reviewing the analytical data, the airborne levels detected within the Cellar level were most likely due to the presence of typical consumer products and the impact of the Compactor Room on the samples. The relatively low readings within the Sub-cellar Boiler Room and adjacent hallways seem to indicate that the water intrusion is not creating a pathway for volatile organic compounds to enter the building and impact the living and habitable spaces of the building envelope.

The observed water intrusion, based upon visible observations and lack of any detectable smells or odors, would indicate a domestic water source such as a leaking water main and it is recommended that the water be tested for Fluoride and Chlorine.

I have attached a copy of the laboratory analysis for each area for your review and should you require additional information please contact me at (212) 986-9460.

Sincerely,



James Grond, MSPH, CIH, LEED AP
President
GCI Environmental Advisory, Inc

att.

JFG/gj

APPENDIX A
OUTSIDE AIR - 10th FLOOR SETBACK

**EMSL Analytical**

200 Route 130 North, Cinnaminson, NJ 08077
 Phone/Fax: (856)858-4800 / (856)858-4571
<http://www.EMSL.com> to15lab@EMSL.com

EMSL Order #: **491400791**
 EMSL Sample #: **491400791-1**
 Customer ID: **GCIE50**
 Customer PO: **Not Available**

Attn: **James Grond**
GCI Environmental Advisory, Inc.
655 Third Ave
New York, NY 10017

Phone: **212-986-9460**
 Fax: **212-986-9464**
 Collected: **08/27/2014**
 Received: **08/28/2014**

Project: **Silver Tower**

Sample ID: **ST-1**

<u>Analysis</u>	<u>Analysis Date</u>	<u>Analyst Init.</u>	<u>Lab File ID</u>	<u>Canister ID</u>	<u>Sample Vol.</u>	<u>Dil. Factor</u>
Initial	09/02/2014	MTH	M6064.D	E0492	250 cc	1

Target Compound Results Summary

Target Compounds	CAS#	MW	Result ppbv	RL ppbv	Q	Result ug/m3	RL ug/m3	Comments
Propylene	115-07-1	42.08	ND	1.0		ND	1.7	
Freon 12(Dichlorodifluoromethane)	75-71-8	120.9	0.56	0.50		2.8	2.5	
Freon 114(1,2-Dichlorotetrafluoroethan	76-14-2	170.9	ND	0.50		ND	3.5	
Chloromethane	74-87-3	50.49	0.69	0.50		1.4	1.0	
n-Butane	106-97-8	58.12	4.3	0.50		10	1.2	
Vinyl chloride	75-01-4	62.50	ND	0.50		ND	1.3	
1,3-Butadiene	106-99-0	54.09	ND	0.50		ND	1.1	
Bromomethane	74-83-9	94.94	ND	0.50		ND	1.9	
Chloroethane	75-00-3	64.52	ND	0.50		ND	1.3	
Ethanol	64-17-5	46.07	10	0.50		19	0.94	
Bromoethene(Vinyl bromide)	593-60-2	106.9	ND	0.50		ND	2.2	
Freon 11(Trichlorofluoromethane)	75-69-4	137.4	ND	0.50		ND	2.8	
Isopropyl alcohol(2-Propanol)	67-63-0	60.10	2.8	0.50		6.9	1.2	
Freon 113(1,1,2-Trichlorotrifluoroethan	76-13-1	187.4	ND	0.50		ND	3.8	
Acetone	67-64-1	58.08	7.5	0.50		18	1.2	
1,1-Dichloroethene	75-35-4	96.94	ND	0.50		ND	2.0	
Acetonitrile	75-05-8	41.00	ND	0.50		ND	0.84	
Tertiary butyl alcohol(TBA)	75-65-0	74.12	ND	0.50		ND	1.5	
Bromoethane(Ethyl bromide)	74-96-4	108.0	ND	0.50		ND	2.2	
3-Chloropropene(Allyl chloride)	107-05-1	76.53	ND	0.50		ND	1.6	
Carbon disulfide	75-15-0	76.14	ND	0.50		ND	1.6	
Methylene chloride	75-09-2	84.94	ND	0.50		ND	1.7	
Acrylonitrile	107-13-1	53.00	ND	0.50		ND	1.1	
Methyl-tert-butyl ether(MTBE)	1634-04-4	88.15	ND	0.50		ND	1.8	
trans-1,2-Dichloroethene	156-60-5	96.94	ND	0.50		ND	2.0	
n-Hexane	110-54-3	86.17	ND	0.50		ND	1.8	
1,1-Dichloroethane	75-34-3	98.96	ND	0.50		ND	2.0	
Vinyl acetate	108-05-4	86.00	ND	0.50		ND	1.8	
2-Butanone(MEK)	78-93-3	72.10	0.81	0.50		2.4	1.5	
cis-1,2-Dichloroethene	156-59-2	96.94	ND	0.50		ND	2.0	
Ethyl acetate	141-78-6	88.10	0.81	0.50		2.9	1.8	
Chloroform	67-66-3	119.4	ND	0.50		ND	2.4	
Tetrahydrofuran	109-99-9	72.11	ND	0.50		ND	1.5	
1,1,1-Trichloroethane	71-55-6	133.4	ND	0.50		ND	2.7	
Cyclohexane	110-82-7	84.16	ND	0.50		ND	1.7	
2,2,4-Trimethylpentane(Isooctane)	540-84-1	114.2	ND	0.50		ND	2.3	
Carbon tetrachloride	56-23-5	153.8	ND	0.50		ND	3.1	
n-Heptane	142-82-5	100.2	ND	0.50		ND	2.0	
1,2-Dichloroethane	107-06-2	98.96	ND	0.50		ND	2.0	
Benzene	71-43-2	78.11	ND	0.50		ND	1.6	
Trichloroethene	79-01-6	131.4	ND	0.50		ND	2.7	
1,2-Dichloropropane	78-87-5	113.0	ND	0.50		ND	2.3	
Methyl Methacrylate	80-62-6	100.12	ND	0.50		ND	2.0	
Bromodichloromethane	75-27-4	163.8	ND	0.50		ND	3.3	
1,4-Dioxane	123-91-1	88.12	ND	0.50		ND	1.8	
4-Methyl-2-pentanone(MIBK)	108-10-1	100.2	ND	0.50		ND	2.0	

**EMSL Analytical**

200 Route 130 North, Cinnaminson, NJ 08077
Phone/Fax: (856)858-4800 / (856)858-4571
<http://www.EMSL.com> to15lab@EMSL.com

EMSL Order #: **491400791**
EMSL Sample #: **491400791-1**
Customer ID: **GCIE50**
Customer PO: **Not Available**

Attn: **James Grond**
GCI Environmental Advisory, Inc.
655 Third Ave
New York, NY 10017

Phone: **212-986-9460**
Fax: **212-986-9464**
Collected: **08/27/2014**
Received: **08/28/2014**

Project: **Silver Tower**

Sample ID: **ST-1**

Analysis	Analysis Date	Analyst Init.	Lab File ID	Canister ID	Sample Vol.	Dil. Factor
Initial	09/02/2014	MTH	M6064.D	E0492	250 cc	1

Target Compound Results Summary

Target Compounds	CAS#	MW	Result ppbv	RL ppbv	Q	Result ug/m3	RL ug/m3	Comments
cis-1,3-Dichloropropene	10061-01-5	111.0	ND	0.50		ND	2.3	
Toluene	108-88-3	92.14	0.69	0.50		2.6	1.9	
trans-1,3-Dichloropropene	10061-02-6	111.0	ND	0.50		ND	2.3	
1,1,2-Trichloroethane	79-00-5	133.4	ND	0.50		ND	2.7	
2-Hexanone(MBK)	591-78-6	100.1	ND	0.50		ND	2.0	
Tetrachloroethene	127-18-4	165.8	ND	0.50		ND	3.4	
Dibromochloromethane	124-48-1	208.3	ND	0.50		ND	4.3	
1,2-Dibromoethane	106-93-4	187.8	ND	0.50		ND	3.8	
Chlorobenzene	108-90-7	112.6	ND	0.50		ND	2.3	
Ethylbenzene	100-41-4	106.2	ND	0.50		ND	2.2	
Xylene (p,m)	1330-20-7	106.2	ND	1.0		ND	4.3	
Xylene (Ortho)	95-47-6	106.2	ND	0.50		ND	2.2	
Styrene	100-42-5	104.1	ND	0.50		ND	2.1	
Isopropylbenzene (cumene)	98-82-8	120.19	ND	0.50		ND	2.5	
Bromoform	75-25-2	252.8	ND	0.50		ND	5.2	
1,1,2,2-Tetrachloroethane	79-34-5	167.9	ND	0.50		ND	3.4	
4-Ethyltoluene	622-96-8	120.2	ND	0.50		ND	2.5	
1,3,5-Trimethylbenzene	108-67-8	120.2	ND	0.50		ND	2.5	
2-Chlorotoluene	95-49-8	126.6	ND	0.50		ND	2.6	
1,2,4-Trimethylbenzene	95-63-6	120.2	ND	0.50		ND	2.5	
1,3-Dichlorobenzene	541-73-1	147.0	ND	0.50		ND	3.0	
1,4-Dichlorobenzene	106-46-7	147.0	ND	0.50		ND	3.0	
Benzyl chloride	100-44-7	126.0	ND	0.50		ND	2.6	
1,2-Dichlorobenzene	95-50-1	147.0	ND	0.50		ND	3.0	
1,2,4-Trichlorobenzene	120-82-1	181.5	ND	0.50		ND	3.7	
Hexachloro-1,3-butadiene	87-68-3	260.8	ND	0.50		ND	5.3	
Naphthalene	91-20-3	128.17	ND	0.50		ND	2.6	
Total Target Compound Concentrations:			28	ppbv		66	ug/m3	

Surrogate

4-Bromofluorobenzene

Result

6.4

Spike

10

Recovery

64%

Qualifier Definitions

ND = Non Detect

B = Compound also found in method blank.

E = Estimated concentration exceeding upper calibration range.

D = Result reported from diluted analysis.

Method Reference

USEPA: Compendium Method TO-15, "Determination of Volatile Organic Compounds (VOCs) in Air..." Collected in Specially-Prepared Canisters and Analyzed by Gas Chromatography/Mass Spectrometry (GC/MS), January 1999, (EPA/625/R-96/010b).



NJDEP Certification #: 03036

APPENDIX B
CELLAR - MIDDLE OF COMPACTOR ROOM

**EMSL Analytical**

200 Route 130 North, Cinnaminson, NJ 08077
 Phone/Fax: (856)858-4800 / (856)858-4571
<http://www.EMSL.com> to15lab@EMSL.com

EMSL Order #: **491400791**
 EMSL Sample #: **491400791-7**
 Customer ID: **GCIE50**
 Customer PO: **Not Available**

Attn: **James Grond**
GCI Environmental Advisory, Inc.
655 Third Ave
New York, NY 10017

Phone: **212-986-9460**
 Fax: **212-986-9464**
 Collected: **08/27/2014**
 Received: **08/28/2014**

Project: **Silver Tower**

Sample ID: **ST-2**

Analysis Initial **Analysis Date** 09/03/2014 **Analyst Init.** MTH **Lab File ID** M6071.D **Canister ID** E15629 **Sample Vol.** 522 cc **Dil. Factor** 1

cellar - middle of compactor room

Target Compound Results Summary

Target Compounds	CAS#	MW	Result ppbv	RL ppbv	Q	Result ug/m3	RL ug/m3	Comments
Propylene	115-07-1	42.08	ND	1.0		ND	1.7	
Freon 12(Dichlorodifluoromethane)	75-71-8	120.9	0.51	0.50		2.5	2.5	
Freon 114(1,2-Dichlorotetrafluoroethane)	76-14-2	170.9	ND	0.50		ND	3.5	
Chloromethane	74-87-3	50.49	0.79	0.50		1.6	1.0	
n-Butane	106-97-8	58.12	14	0.50		32	1.2	
Vinyl chloride	75-01-4	62.50	ND	0.50		ND	1.3	
1,3-Butadiene	106-99-0	54.09	ND	0.50		ND	1.1	
Bromomethane	74-83-9	94.94	ND	0.50		ND	1.9	
Chloroethane	75-00-3	64.52	ND	0.50		ND	1.3	
Ethanol	64-17-5	46.07	240	0.50	E	460	0.94	
Bromoethene(Vinyl bromide)	593-60-2	106.9	ND	0.50		ND	2.2	
Freon 11(Trichlorofluoromethane)	75-69-4	137.4	ND	0.50		ND	2.8	
Isopropyl alcohol(2-Propanol)	67-63-0	60.10	51	0.50	E	130	1.2	
Freon 113(1,1,2-Trichlorotrifluoroethane)	76-13-1	187.4	ND	0.50		ND	3.8	
Acetone	67-64-1	58.08	15	0.50		35	1.2	
1,1-Dichloroethene	75-35-4	96.94	ND	0.50		ND	2.0	
Acetonitrile	75-05-8	41.00	ND	0.50		ND	0.84	
Tertiary butyl alcohol(TBA)	75-65-0	74.12	ND	0.50		ND	1.5	
Bromoethane(Ethyl bromide)	74-96-4	108.0	ND	0.50		ND	2.2	
3-Chloropropene(Allyl chloride)	107-05-1	76.53	ND	0.50		ND	1.6	
Carbon disulfide	75-15-0	76.14	ND	0.50		ND	1.6	
Methylene chloride	75-09-2	84.94	ND	0.50		ND	1.7	
Acrylonitrile	107-13-1	53.00	ND	0.50		ND	1.1	
Methyl-tert-butyl ether(MTBE)	1634-04-4	88.15	ND	0.50		ND	1.8	
trans-1,2-Dichloroethene	156-60-5	96.94	ND	0.50		ND	2.0	
n-Hexane	110-54-3	86.17	0.92	0.50		3.2	1.8	
1,1-Dichloroethane	75-34-3	98.96	ND	0.50		ND	2.0	
Vinyl acetate	108-05-4	86.00	ND	0.50		ND	1.8	
2-Butanone(MEK)	78-93-3	72.10	1.1	0.50		3.2	1.5	
cis-1,2-Dichloroethene	156-59-2	96.94	ND	0.50		ND	2.0	
Ethyl acetate	141-78-6	88.10	2.8	0.50		10	1.8	
Chloroform	67-66-3	119.4	0.73	0.50		3.6	2.4	
Tetrahydrofuran	109-99-9	72.11	ND	0.50		ND	1.5	
1,1,1-Trichloroethane	71-55-6	133.4	ND	0.50		ND	2.7	
Cyclohexane	110-82-7	84.16	ND	0.50		ND	1.7	
2,2,4-Trimethylpentane(Isooctane)	540-84-1	114.2	1.4	0.50		6.6	2.3	
Carbon tetrachloride	56-23-5	153.8	ND	0.50		ND	3.1	
n-Heptane	142-82-5	100.2	ND	0.50		ND	2.0	
1,2-Dichloroethane	107-06-2	98.96	ND	0.50		ND	2.0	
Benzene	71-43-2	78.11	0.98	0.50		3.1	1.6	
Trichloroethene	79-01-6	131.4	ND	0.50		ND	2.7	
1,2-Dichloropropane	78-87-5	113.0	ND	0.50		ND	2.3	
Methyl Methacrylate	80-62-6	100.12	ND	0.50		ND	2.0	
Bromodichloromethane	75-27-4	163.8	ND	0.50		ND	3.3	
1,4-Dioxane	123-91-1	88.12	ND	0.50		ND	1.8	
4-Methyl-2-pentanone(MIBK)	108-10-1	100.2	ND	0.50		ND	2.0	

**EMSL Analytical**

200 Route 130 North, Cinnaminson, NJ 08077
 Phone/Fax: (856)858-4800 / (856)858-4571
<http://www.EMSL.com> to15lab@EMSL.com

EMSL Order #: **491400791**
 EMSL Sample #: **491400791-7**
 Customer ID: **GCIE50**
 Customer PO: **Not Available**

Attn: **James Grond**
GCI Environmental Advisory, Inc.
655 Third Ave
New York, NY 10017

Phone: **212-986-9460**
 Fax: **212-986-9464**
 Collected: **08/27/2014**
 Received: **08/28/2014**

Project: **Silver Tower**

Sample ID: **ST-2**

Analysis	Analysis Date	Analyst Init.	Lab File ID	Canister ID	Sample Vol.	Dil. Factor
Initial	09/03/2014	MTH	M6071.D	E15629	522 cc	1

Target Compound Results Summary

Target Compounds	CAS#	MW	Result ppbv	RL ppbv	Q	Result ug/m3	RL ug/m3	Comments
cis-1,3-Dichloropropene	10061-01-5	111.0	ND	0.50		ND	2.3	
Toluene	108-88-3	92.14	2.5	0.50		9.3	1.9	
trans-1,3-Dichloropropene	10061-02-6	111.0	ND	0.50		ND	2.3	
1,1,2-Trichloroethane	79-00-5	133.4	ND	0.50		ND	2.7	
2-Hexanone(MBK)	591-78-6	100.1	ND	0.50		ND	2.0	
Tetrachloroethene	127-18-4	165.8	ND	0.50		ND	3.4	
Dibromochloromethane	124-48-1	208.3	ND	0.50		ND	4.3	
1,2-Dibromoethane	106-93-4	187.8	ND	0.50		ND	3.8	
Chlorobenzene	108-90-7	112.6	ND	0.50		ND	2.3	
Ethylbenzene	100-41-4	106.2	0.72	0.50		3.1	2.2	
Xylene (p,m)	1330-20-7	106.2	2.0	1.0		8.5	4.3	
Xylene (Ortho)	95-47-6	106.2	0.76	0.50		3.3	2.2	
Styrene	100-42-5	104.1	ND	0.50		ND	2.1	
Isopropylbenzene (cumene)	98-82-8	120.19	ND	0.50		ND	2.5	
Bromoform	75-25-2	252.8	ND	0.50		ND	5.2	
1,1,2,2-Tetrachloroethane	79-34-5	167.9	ND	0.50		ND	3.4	
4-Ethyltoluene	622-96-8	120.2	0.63	0.50		3.1	2.5	
1,3,5-Trimethylbenzene	108-67-8	120.2	ND	0.50		ND	2.5	
2-Chlorotoluene	95-49-8	126.6	ND	0.50		ND	2.6	
1,2,4-Trimethylbenzene	95-63-6	120.2	0.65	0.50		3.2	2.5	
1,3-Dichlorobenzene	541-73-1	147.0	ND	0.50		ND	3.0	
1,4-Dichlorobenzene	106-46-7	147.0	ND	0.50		ND	3.0	
Benzyl chloride	100-44-7	126.0	ND	0.50		ND	2.6	
1,2-Dichlorobenzene	95-50-1	147.0	ND	0.50		ND	3.0	
1,2,4-Trichlorobenzene	120-82-1	181.5	ND	0.50		ND	3.7	
Hexachloro-1,3-butadiene	87-68-3	260.8	ND	0.50		ND	5.3	
Naphthalene	91-20-3	128.17	ND	0.50		ND	2.6	
Total Target Compound Concentrations:			340	ppbv		720	ug/m3	

Surrogate

4-Bromofluorobenzene

Result

7.2

Spike

10

Recovery

72%

Qualifier Definitions

ND = Non Detect

B = Compound also found in method blank.

E = Estimated concentration exceeding upper calibration range.

D = Result reported from diluted analysis.

Method Reference

USEPA: Compendium Method TO-15, "Determination of Volatile Organic Compounds (VOCs) in Air..." Collected in Specially-Prepared Canisters and Analyzed by Gas Chromatography/Mass Spectrometry (GC/MS), January 1999, (EPA/625/R-96/010b).



NJDEP Certification #: 03036

APPENDIX C
CELLAR - EAST SIDE
OUTSIDE GAS METER ROOM

**EMSL Analytical**

200 Route 130 North, Cinnaminson, NJ 08077
 Phone/Fax: (856)858-4800 / (856)858-4571
<http://www.EMSL.com> to15lab@EMSL.com

EMSL Order #: **491400791**
 EMSL Sample #: **491400791-2**
 Customer ID: **GCIE50**
 Customer PO: **Not Available**

Attn: **James Grond**
GCI Environmental Advisory, Inc.
655 Third Ave
New York, NY 10017

Phone: **212-986-9460**
 Fax: **212-986-9464**
 Collected: **08/27/2014**
 Received: **08/28/2014**

Project: **Silver Tower**

Sample ID: **ST-3**

<u>Analysis</u>	<u>Analysis Date</u>	<u>Analyst Init.</u>	<u>Lab File ID</u>	<u>Canister ID</u>	<u>Sample Vol.</u>	<u>Dil. Factor</u>
Initial	09/02/2014	MTH	M6065.D	E0444	250 cc	1

cellar - east side - outside gas meter room

Target Compound Results Summary

Target Compounds	CAS#	MW	Result ppbv	RL ppbv	Q	Result ug/m3	RL ug/m3	Comments
Propylene	115-07-1	42.08	ND	1.0		ND	1.7	
Freon 12(Dichlorodifluoromethane)	75-71-8	120.9	0.53	0.50		2.6	2.5	
Freon 114(1,2-Dichlorotetrafluoroethane)	76-14-2	170.9	ND	0.50		ND	3.5	
Chloromethane	74-87-3	50.49	0.77	0.50		1.6	1.0	
n-Butane	106-97-8	58.12	18	0.50		43	1.2	
Vinyl chloride	75-01-4	62.50	ND	0.50		ND	1.3	
1,3-Butadiene	106-99-0	54.09	ND	0.50		ND	1.1	
Bromomethane	74-83-9	94.94	ND	0.50		ND	1.9	
Chloroethane	75-00-3	64.52	ND	0.50		ND	1.3	
Ethanol	64-17-5	46.07	220	0.50	E	420	0.94	
Bromoethene(Vinyl bromide)	593-60-2	106.9	ND	0.50		ND	2.2	
Freon 11(Trichlorofluoromethane)	75-69-4	137.4	ND	0.50		ND	2.8	
Isopropyl alcohol(2-Propanol)	67-63-0	60.10	36	0.50		87	1.2	
Freon 113(1,1,2-Trichlorotrifluoroethane)	76-13-1	187.4	ND	0.50		ND	3.8	
Acetone	67-64-1	58.08	16	0.50		39	1.2	
1,1-Dichloroethene	75-35-4	96.94	ND	0.50		ND	2.0	
Acetonitrile	75-05-8	41.00	ND	0.50		ND	0.84	
Tertiary butyl alcohol(TBA)	75-65-0	74.12	ND	0.50		ND	1.5	
Bromoethane(Ethyl bromide)	74-96-4	108.0	ND	0.50		ND	2.2	
3-Chloropropene(Allyl chloride)	107-05-1	76.53	ND	0.50		ND	1.6	
Carbon disulfide	75-15-0	76.14	ND	0.50		ND	1.6	
Methylene chloride	75-09-2	84.94	ND	0.50		ND	1.7	
Acrylonitrile	107-13-1	53.00	ND	0.50		ND	1.1	
Methyl-tert-butyl ether(MTBE)	1634-04-4	88.15	ND	0.50		ND	1.8	
trans-1,2-Dichloroethene	156-60-5	96.94	ND	0.50		ND	2.0	
n-Hexane	110-54-3	86.17	0.73	0.50		2.6	1.8	
1,1-Dichloroethane	75-34-3	98.96	ND	0.50		ND	2.0	
Vinyl acetate	108-05-4	86.00	ND	0.50		ND	1.8	
2-Butanone(MEK)	78-93-3	72.10	1.3	0.50		3.8	1.5	
cis-1,2-Dichloroethene	156-59-2	96.94	ND	0.50		ND	2.0	
Ethyl acetate	141-78-6	88.10	2.4	0.50		8.7	1.8	
Chloroform	67-66-3	119.4	0.67	0.50		3.3	2.4	
Tetrahydrofuran	109-99-9	72.11	ND	0.50		ND	1.5	
1,1,1-Trichloroethane	71-55-6	133.4	ND	0.50		ND	2.7	
Cyclohexane	110-82-7	84.16	ND	0.50		ND	1.7	
2,2,4-Trimethylpentane(Isooctane)	540-84-1	114.2	0.76	0.50		3.5	2.3	
Carbon tetrachloride	56-23-5	153.8	ND	0.50		ND	3.1	
n-Heptane	142-82-5	100.2	ND	0.50		ND	2.0	
1,2-Dichloroethane	107-06-2	98.96	ND	0.50		ND	2.0	
Benzene	71-43-2	78.11	0.61	0.50		1.9	1.6	
Trichloroethene	79-01-6	131.4	ND	0.50		ND	2.7	
1,2-Dichloropropane	78-87-5	113.0	ND	0.50		ND	2.3	
Methyl Methacrylate	80-62-6	100.12	ND	0.50		ND	2.0	
Bromodichloromethane	75-27-4	163.8	ND	0.50		ND	3.3	
1,4-Dioxane	123-91-1	88.12	ND	0.50		ND	1.8	
4-Methyl-2-pentanone(MIBK)	108-10-1	100.2	ND	0.50		ND	2.0	

**EMSL Analytical**

200 Route 130 North, Cinnaminson, NJ 08077
 Phone/Fax: (856)858-4800 / (856)858-4571
<http://www.EMSL.com> to15lab@EMSL.com

EMSL Order #: **491400791**
 EMSL Sample #: **491400791-2**
 Customer ID: **GCIE50**
 Customer PO: **Not Available**

Attn: **James Grond**
GCI Environmental Advisory, Inc.
655 Third Ave
New York, NY 10017

Phone: **212-986-9460**
 Fax: **212-986-9464**
 Collected: **08/27/2014**
 Received: **08/28/2014**

Project: **Silver Tower**

Sample ID: **ST-3**

Analysis	Analysis Date	Analyst Init.	Lab File ID	Canister ID	Sample Vol.	Dil. Factor
Initial	09/02/2014	MTH	M6065.D	E0444	250 cc	1

Target Compound Results Summary

Target Compounds	CAS#	MW	Result ppbv	RL ppbv	Q	Result ug/m3	RL ug/m3	Comments
cis-1,3-Dichloropropene	10061-01-5	111.0	ND	0.50		ND	2.3	
Toluene	108-88-3	92.14	1.9	0.50		7.0	1.9	
trans-1,3-Dichloropropene	10061-02-6	111.0	ND	0.50		ND	2.3	
1,1,2-Trichloroethane	79-00-5	133.4	ND	0.50		ND	2.7	
2-Hexanone(MBK)	591-78-6	100.1	ND	0.50		ND	2.0	
Tetrachloroethene	127-18-4	165.8	ND	0.50		ND	3.4	
Dibromochloromethane	124-48-1	208.3	ND	0.50		ND	4.3	
1,2-Dibromoethane	106-93-4	187.8	ND	0.50		ND	3.8	
Chlorobenzene	108-90-7	112.6	ND	0.50		ND	2.3	
Ethylbenzene	100-41-4	106.2	0.68	0.50		3.0	2.2	
Xylene (p,m)	1330-20-7	106.2	1.8	1.0		7.8	4.3	
Xylene (Ortho)	95-47-6	106.2	0.62	0.50		2.7	2.2	
Styrene	100-42-5	104.1	ND	0.50		ND	2.1	
Isopropylbenzene (cumene)	98-82-8	120.19	ND	0.50		ND	2.5	
Bromoform	75-25-2	252.8	ND	0.50		ND	5.2	
1,1,2,2-Tetrachloroethane	79-34-5	167.9	ND	0.50		ND	3.4	
4-Ethyltoluene	622-96-8	120.2	ND	0.50		ND	2.5	
1,3,5-Trimethylbenzene	108-67-8	120.2	ND	0.50		ND	2.5	
2-Chlorotoluene	95-49-8	126.6	ND	0.50		ND	2.6	
1,2,4-Trimethylbenzene	95-63-6	120.2	ND	0.50		ND	2.5	
1,3-Dichlorobenzene	541-73-1	147.0	ND	0.50		ND	3.0	
1,4-Dichlorobenzene	106-46-7	147.0	ND	0.50		ND	3.0	
Benzyl chloride	100-44-7	126.0	ND	0.50		ND	2.6	
1,2-Dichlorobenzene	95-50-1	147.0	ND	0.50		ND	3.0	
1,2,4-Trichlorobenzene	120-82-1	181.5	ND	0.50		ND	3.7	
Hexachloro-1,3-butadiene	87-68-3	260.8	ND	0.50		ND	5.3	
Naphthalene	91-20-3	128.17	ND	0.50		ND	2.6	
Total Target Compound Concentrations:			300	ppbv		640	ug/m3	

Surrogate

4-Bromofluorobenzene

Result

7.1

Spike

10

Recovery

71%

Qualifier Definitions

ND = Non Detect

B = Compound also found in method blank.

E = Estimated concentration exceeding upper calibration range.

D = Result reported from diluted analysis.

Method Reference

USEPA: Compendium Method TO-15, "Determination of Volatile Organic Compounds (VOCs) in Air..." Collected in Specially-Prepared Canisters and Analyzed by Gas Chromatography/Mass Spectrometry (GC/MS), January 1999, (EPA/625/R-96/010b).



NJDEP Certification #: 03036

APPENDIX D
CELLAR - SOUTHEAST SECTION
OUTSIDE DOOR TO BOILER ROOM

**EMSL Analytical**

200 Route 130 North, Cinnaminson, NJ 08077
 Phone/Fax: (856)858-4800 / (856)858-4571
<http://www.EMSL.com> to15lab@EMSL.com

EMSL Order #: **491400791**
 EMSL Sample #: **491400791-6**
 Customer ID: **GCIE50**
 Customer PO: **Not Available**

Attn: **James Grond**
GCI Environmental Advisory, Inc.
655 Third Ave
New York, NY 10017

Phone: **212-986-9460**
 Fax: **212-986-9464**
 Collected: **08/27/2014**
 Received: **08/28/2014**

Project: **Silver Tower**

Sample ID: **ST-4**

<u>Analysis</u>	<u>Analysis Date</u>	<u>Analyst Init.</u>	<u>Lab File ID</u>	<u>Canister ID</u>	<u>Sample Vol.</u>	<u>Dil. Factor</u>
Initial	09/02/2014	MTH	M6069.D	E0644	250 cc	1

Target Compound Results Summary

Target Compounds	CAS#	MW	Result ppbv	RL ppbv	Q	Result ug/m3	RL ug/m3	Comments
Propylene	115-07-1	42.08	ND	1.0		ND	1.7	
Freon 12(Dichlorodifluoromethane)	75-71-8	120.9	0.59	0.50		2.9	2.5	
Freon 114(1,2-Dichlorotetrafluoroethan	76-14-2	170.9	ND	0.50		ND	3.5	
Chloromethane	74-87-3	50.49	0.76	0.50		1.6	1.0	
n-Butane	106-97-8	58.12	14	0.50		34	1.2	
Vinyl chloride	75-01-4	62.50	ND	0.50		ND	1.3	
1,3-Butadiene	106-99-0	54.09	ND	0.50		ND	1.1	
Bromomethane	74-83-9	94.94	ND	0.50		ND	1.9	
Chloroethane	75-00-3	64.52	ND	0.50		ND	1.3	
Ethanol	64-17-5	46.07	240	0.50	E	450	0.94	
Bromoethene(Vinyl bromide)	593-60-2	106.9	ND	0.50		ND	2.2	
Freon 11(Trichlorofluoromethane)	75-69-4	137.4	ND	0.50		ND	2.8	
Isopropyl alcohol(2-Propanol)	67-63-0	60.10	32	0.50		78	1.2	
Freon 113(1,1,2-Trichlorotrifluoroethan	76-13-1	187.4	ND	0.50		ND	3.8	
Acetone	67-64-1	58.08	16	0.50		37	1.2	
1,1-Dichloroethene	75-35-4	96.94	ND	0.50		ND	2.0	
Acetonitrile	75-05-8	41.00	ND	0.50		ND	0.84	
Tertiary butyl alcohol(TBA)	75-65-0	74.12	ND	0.50		ND	1.5	
Bromoethane(Ethyl bromide)	74-96-4	108.0	ND	0.50		ND	2.2	
3-Chloropropene(Allyl chloride)	107-05-1	76.53	ND	0.50		ND	1.6	
Carbon disulfide	75-15-0	76.14	ND	0.50		ND	1.6	
Methylene chloride	75-09-2	84.94	ND	0.50		ND	1.7	
Acrylonitrile	107-13-1	53.00	ND	0.50		ND	1.1	
Methyl-tert-butyl ether(MTBE)	1634-04-4	88.15	ND	0.50		ND	1.8	
trans-1,2-Dichloroethene	156-60-5	96.94	ND	0.50		ND	2.0	
n-Hexane	110-54-3	86.17	0.64	0.50		2.2	1.8	
1,1-Dichloroethane	75-34-3	98.96	ND	0.50		ND	2.0	
Vinyl acetate	108-05-4	86.00	ND	0.50		ND	1.8	
2-Butanone(MEK)	78-93-3	72.10	1.2	0.50		3.6	1.5	
cis-1,2-Dichloroethene	156-59-2	96.94	ND	0.50		ND	2.0	
Ethyl acetate	141-78-6	88.10	2.4	0.50		8.8	1.8	
Chloroform	67-66-3	119.4	0.54	0.50		2.7	2.4	
Tetrahydrofuran	109-99-9	72.11	ND	0.50		ND	1.5	
1,1,1-Trichloroethane	71-55-6	133.4	ND	0.50		ND	2.7	
Cyclohexane	110-82-7	84.16	ND	0.50		ND	1.7	
2,2,4-Trimethylpentane(Isooctane)	540-84-1	114.2	0.56	0.50		2.6	2.3	
Carbon tetrachloride	56-23-5	153.8	ND	0.50		ND	3.1	
n-Heptane	142-82-5	100.2	ND	0.50		ND	2.0	
1,2-Dichloroethane	107-06-2	98.96	ND	0.50		ND	2.0	
Benzene	71-43-2	78.11	0.55	0.50		1.7	1.6	
Trichloroethene	79-01-6	131.4	ND	0.50		ND	2.7	
1,2-Dichloropropane	78-87-5	113.0	ND	0.50		ND	2.3	
Methyl Methacrylate	80-62-6	100.12	ND	0.50		ND	2.0	
Bromodichloromethane	75-27-4	163.8	ND	0.50		ND	3.3	
1,4-Dioxane	123-91-1	88.12	ND	0.50		ND	1.8	
4-Methyl-2-pentanone(MIBK)	108-10-1	100.2	ND	0.50		ND	2.0	

**EMSL Analytical**

200 Route 130 North, Cinnaminson, NJ 08077
 Phone/Fax: (856)858-4800 / (856)858-4571
<http://www.EMSL.com> to15lab@EMSL.com

EMSL Order #: **491400791**
 EMSL Sample #: **491400791-6**
 Customer ID: **GCIE50**
 Customer PO: **Not Available**

Attn: **James Grond**
GCI Environmental Advisory, Inc.
655 Third Ave
New York, NY 10017

Phone: **212-986-9460**
 Fax: **212-986-9464**
 Collected: **08/27/2014**
 Received: **08/28/2014**

Project: **Silver Tower**

Sample ID: **ST-4**

Analysis	Analysis Date	Analyst Init.	Lab File ID	Canister ID	Sample Vol.	Dil. Factor
Initial	09/02/2014	MTH	M6069.D	E0644	250 cc	1

Target Compound Results Summary

Target Compounds	CAS#	MW	Result ppbv	RL ppbv	Q	Result ug/m3	RL ug/m3	Comments
cis-1,3-Dichloropropene	10061-01-5	111.0	ND	0.50		ND	2.3	
Toluene	108-88-3	92.14	1.5	0.50		5.8	1.9	
trans-1,3-Dichloropropene	10061-02-6	111.0	ND	0.50		ND	2.3	
1,1,2-Trichloroethane	79-00-5	133.4	ND	0.50		ND	2.7	
2-Hexanone(MBK)	591-78-6	100.1	ND	0.50		ND	2.0	
Tetrachloroethene	127-18-4	165.8	ND	0.50		ND	3.4	
Dibromochloromethane	124-48-1	208.3	ND	0.50		ND	4.3	
1,2-Dibromoethane	106-93-4	187.8	ND	0.50		ND	3.8	
Chlorobenzene	108-90-7	112.6	ND	0.50		ND	2.3	
Ethylbenzene	100-41-4	106.2	ND	0.50		ND	2.2	
Xylene (p,m)	1330-20-7	106.2	ND	1.0		ND	4.3	
Xylene (Ortho)	95-47-6	106.2	ND	0.50		ND	2.2	
Styrene	100-42-5	104.1	ND	0.50		ND	2.1	
Isopropylbenzene (cumene)	98-82-8	120.19	ND	0.50		ND	2.5	
Bromoform	75-25-2	252.8	ND	0.50		ND	5.2	
1,1,2,2-Tetrachloroethane	79-34-5	167.9	ND	0.50		ND	3.4	
4-Ethyltoluene	622-96-8	120.2	ND	0.50		ND	2.5	
1,3,5-Trimethylbenzene	108-67-8	120.2	ND	0.50		ND	2.5	
2-Chlorotoluene	95-49-8	126.6	ND	0.50		ND	2.6	
1,2,4-Trimethylbenzene	95-63-6	120.2	ND	0.50		ND	2.5	
1,3-Dichlorobenzene	541-73-1	147.0	ND	0.50		ND	3.0	
1,4-Dichlorobenzene	106-46-7	147.0	ND	0.50		ND	3.0	
Benzyl chloride	100-44-7	126.0	ND	0.50		ND	2.6	
1,2-Dichlorobenzene	95-50-1	147.0	ND	0.50		ND	3.0	
1,2,4-Trichlorobenzene	120-82-1	181.5	ND	0.50		ND	3.7	
Hexachloro-1,3-butadiene	87-68-3	260.8	ND	0.50		ND	5.3	
Naphthalene	91-20-3	128.17	ND	0.50		ND	2.6	
Total Target Compound Concentrations:			310	ppbv		630	ug/m3	

Surrogate

4-Bromofluorobenzene

Result

7.1

Spike

10

Recovery

71%

Qualifier Definitions

ND = Non Detect

B = Compound also found in method blank.

E = Estimated concentration exceeding upper calibration range.

D = Result reported from diluted analysis.

Method Reference

USEPA: Compendium Method TO-15, "Determination of Volatile Organic Compounds (VOCs) in Air..." Collected in Specially-Prepared Canisters and Analyzed by Gas Chromatography/Mass Spectrometry (GC/MS), January 1999, (EPA/625/R-96/010b).



NJDEP Certification #: 03036

APPENDIX E
SUB-CELLAR - EAST SIDE HALLWAY
NORTH OF BOILER ROOM ENTRANCE

**EMSL Analytical**

200 Route 130 North, Cinnaminson, NJ 08077
 Phone/Fax: (856)858-4800 / (856)858-4571
<http://www.EMSL.com> to15lab@EMSL.com

EMSL Order #: **491400791**
 EMSL Sample #: **491400791-4**
 Customer ID: **GCIE50**
 Customer PO: **Not Available**

Attn: **James Grond**
GCI Environmental Advisory, Inc.
655 Third Ave
New York, NY 10017

Phone: **212-986-9460**
 Fax: **212-986-9464**
 Collected: **08/27/2014**
 Received: **08/28/2014**

Project: **Silver Tower**

Sample ID: **ST-5**

<u>Analysis</u>	<u>Analysis Date</u>	<u>Analyst Init.</u>	<u>Lab File ID</u>	<u>Canister ID</u>	<u>Sample Vol.</u>	<u>Dil. Factor</u>
Initial	09/02/2014	MTH	M6067.D	E0452	250 cc	1

Target Compound Results Summary

Target Compounds	CAS#	MW	Result ppbv	RL ppbv	Q	Result ug/m3	RL ug/m3	Comments
Propylene	115-07-1	42.08	ND	1.0		ND	1.7	
Freon 12(Dichlorodifluoromethane)	75-71-8	120.9	0.53	0.50		2.6	2.5	
Freon 114(1,2-Dichlorotetrafluoroethan	76-14-2	170.9	ND	0.50		ND	3.5	
Chloromethane	74-87-3	50.49	0.76	0.50		1.6	1.0	
n-Butane	106-97-8	58.12	10	0.50		25	1.2	
Vinyl chloride	75-01-4	62.50	ND	0.50		ND	1.3	
1,3-Butadiene	106-99-0	54.09	ND	0.50		ND	1.1	
Bromomethane	74-83-9	94.94	ND	0.50		ND	1.9	
Chloroethane	75-00-3	64.52	ND	0.50		ND	1.3	
Ethanol	64-17-5	46.07	100	0.50	E	190	0.94	
Bromoethene(Vinyl bromide)	593-60-2	106.9	ND	0.50		ND	2.2	
Freon 11(Trichlorofluoromethane)	75-69-4	137.4	ND	0.50		ND	2.8	
Isopropyl alcohol(2-Propanol)	67-63-0	60.10	11	0.50		28	1.2	
Freon 113(1,1,2-Trichlorotrifluoroethan	76-13-1	187.4	ND	0.50		ND	3.8	
Acetone	67-64-1	58.08	9.9	0.50		23	1.2	
1,1-Dichloroethene	75-35-4	96.94	ND	0.50		ND	2.0	
Acetonitrile	75-05-8	41.00	ND	0.50		ND	0.84	
Tertiary butyl alcohol(TBA)	75-65-0	74.12	ND	0.50		ND	1.5	
Bromoethane(Ethyl bromide)	74-96-4	108.0	ND	0.50		ND	2.2	
3-Chloropropene(Allyl chloride)	107-05-1	76.53	ND	0.50		ND	1.6	
Carbon disulfide	75-15-0	76.14	ND	0.50		ND	1.6	
Methylene chloride	75-09-2	84.94	0.66	0.50		2.3	1.7	
Acrylonitrile	107-13-1	53.00	ND	0.50		ND	1.1	
Methyl-tert-butyl ether(MTBE)	1634-04-4	88.15	ND	0.50		ND	1.8	
trans-1,2-Dichloroethene	156-60-5	96.94	ND	0.50		ND	2.0	
n-Hexane	110-54-3	86.17	0.56	0.50		2.0	1.8	
1,1-Dichloroethane	75-34-3	98.96	ND	0.50		ND	2.0	
Vinyl acetate	108-05-4	86.00	ND	0.50		ND	1.8	
2-Butanone(MEK)	78-93-3	72.10	0.93	0.50		2.8	1.5	
cis-1,2-Dichloroethene	156-59-2	96.94	ND	0.50		ND	2.0	
Ethyl acetate	141-78-6	88.10	1.3	0.50		4.6	1.8	
Chloroform	67-66-3	119.4	ND	0.50		ND	2.4	
Tetrahydrofuran	109-99-9	72.11	ND	0.50		ND	1.5	
1,1,1-Trichloroethane	71-55-6	133.4	ND	0.50		ND	2.7	
Cyclohexane	110-82-7	84.16	ND	0.50		ND	1.7	
2,2,4-Trimethylpentane(Isooctane)	540-84-1	114.2	ND	0.50		ND	2.3	
Carbon tetrachloride	56-23-5	153.8	ND	0.50		ND	3.1	
n-Heptane	142-82-5	100.2	ND	0.50		ND	2.0	
1,2-Dichloroethane	107-06-2	98.96	ND	0.50		ND	2.0	
Benzene	71-43-2	78.11	ND	0.50		ND	1.6	
Trichloroethene	79-01-6	131.4	ND	0.50		ND	2.7	
1,2-Dichloropropane	78-87-5	113.0	ND	0.50		ND	2.3	
Methyl Methacrylate	80-62-6	100.12	ND	0.50		ND	2.0	
Bromodichloromethane	75-27-4	163.8	ND	0.50		ND	3.3	
1,4-Dioxane	123-91-1	88.12	ND	0.50		ND	1.8	
4-Methyl-2-pentanone(MIBK)	108-10-1	100.2	ND	0.50		ND	2.0	

**EMSL Analytical**

200 Route 130 North, Cinnaminson, NJ 08077
 Phone/Fax: (856)858-4800 / (856)858-4571
<http://www.EMSL.com> to15lab@EMSL.com

EMSL Order #: **491400791**
 EMSL Sample #: **491400791-4**
 Customer ID: **GCIE50**
 Customer PO: **Not Available**

Attn: **James Grond**
GCI Environmental Advisory, Inc.
655 Third Ave
New York, NY 10017

Phone: **212-986-9460**
 Fax: **212-986-9464**
 Collected: **08/27/2014**
 Received: **08/28/2014**

Project: **Silver Tower**

Sample ID: **ST-5**

Analysis	Analysis Date	Analyst Init.	Lab File ID	Canister ID	Sample Vol.	Dil. Factor
Initial	09/02/2014	MTH	M6067.D	E0452	250 cc	1

Target Compound Results Summary

Target Compounds	CAS#	MW	Result ppbv	RL ppbv	Q	Result ug/m3	RL ug/m3	Comments
cis-1,3-Dichloropropene	10061-01-5	111.0	ND	0.50		ND	2.3	
Toluene	108-88-3	92.14	1.1	0.50		4.1	1.9	
trans-1,3-Dichloropropene	10061-02-6	111.0	ND	0.50		ND	2.3	
1,1,2-Trichloroethane	79-00-5	133.4	ND	0.50		ND	2.7	
2-Hexanone(MBK)	591-78-6	100.1	ND	0.50		ND	2.0	
Tetrachloroethene	127-18-4	165.8	ND	0.50		ND	3.4	
Dibromochloromethane	124-48-1	208.3	ND	0.50		ND	4.3	
1,2-Dibromoethane	106-93-4	187.8	ND	0.50		ND	3.8	
Chlorobenzene	108-90-7	112.6	ND	0.50		ND	2.3	
Ethylbenzene	100-41-4	106.2	0.80	0.50		3.5	2.2	
Xylene (p,m)	1330-20-7	106.2	2.2	1.0		10	4.3	
Xylene (Ortho)	95-47-6	106.2	0.72	0.50		3.1	2.2	
Styrene	100-42-5	104.1	ND	0.50		ND	2.1	
Isopropylbenzene (cumene)	98-82-8	120.19	ND	0.50		ND	2.5	
Bromoform	75-25-2	252.8	ND	0.50		ND	5.2	
1,1,2,2-Tetrachloroethane	79-34-5	167.9	ND	0.50		ND	3.4	
4-Ethyltoluene	622-96-8	120.2	0.62	0.50		3.1	2.5	
1,3,5-Trimethylbenzene	108-67-8	120.2	ND	0.50		ND	2.5	
2-Chlorotoluene	95-49-8	126.6	ND	0.50		ND	2.6	
1,2,4-Trimethylbenzene	95-63-6	120.2	0.56	0.50		2.7	2.5	
1,3-Dichlorobenzene	541-73-1	147.0	ND	0.50		ND	3.0	
1,4-Dichlorobenzene	106-46-7	147.0	ND	0.50		ND	3.0	
Benzyl chloride	100-44-7	126.0	ND	0.50		ND	2.6	
1,2-Dichlorobenzene	95-50-1	147.0	0.76	0.50		4.6	3.0	
1,2,4-Trichlorobenzene	120-82-1	181.5	ND	0.50		ND	3.7	
Hexachloro-1,3-butadiene	87-68-3	260.8	ND	0.50		ND	5.3	
Naphthalene	91-20-3	128.17	ND	0.50		ND	2.6	

Total Target Compound Concentrations:

140	ppbv	310	ug/m3
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Surrogate

4-Bromofluorobenzene

Result
6.9

Spike
10

Recovery
69%

Qualifier Definitions

ND = Non Detect

B = Compound also found in method blank.

E= Estimated concentration exceeding upper calibration range.

D= Result reported from diluted analysis.

Method Reference

USEPA: Compendium Method TO-15, "Determination of Volatile Organic Compounds (VOCs) in Air..." Collected in Specially-Prepared Canisters and Analyzed by Gas Chromatography/Mass Spectrometry (GC/MS), January 1999, (EPA/625/R-96/010b).



NJDEP Certification #: 03036

APPENDIX F
SUB-CELLAR - BOILER ROOM
SOUTHEAST SECTION

**EMSL Analytical**

200 Route 130 North, Cinnaminson, NJ 08077
 Phone/Fax: (856)858-4800 / (856)858-4571
<http://www.EMSL.com> to15lab@EMSL.com

EMSL Order #: **491400791**
 EMSL Sample #: **491400791-3**
 Customer ID: **GCIE50**
 Customer PO: **Not Available**

Attn: **James Grond**
GCI Environmental Advisory, Inc.
655 Third Ave
New York, NY 10017

Phone: **212-986-9460**
 Fax: **212-986-9464**
 Collected: **08/27/2014**
 Received: **08/28/2014**

Project: **Silver Tower**

Sample ID: **ST-6**

Analysis	Analysis Date	Analyst Init.	Lab File ID	Canister ID	Sample Vol.	Dil. Factor
Initial	09/02/2014	MTH	M6066.D	E0261	250 cc	1

Target Compound Results Summary

Target Compounds	CAS#	MW	Result ppbv	RL ppbv	Q	Result ug/m3	RL ug/m3	Comments
Propylene	115-07-1	42.08	ND	1.0		ND	1.7	
Freon 12(Dichlorodifluoromethane)	75-71-8	120.9	0.58	0.50		2.9	2.5	
Freon 114(1,2-Dichlorotetrafluoroethan	76-14-2	170.9	ND	0.50		ND	3.5	
Chloromethane	74-87-3	50.49	0.75	0.50		1.5	1.0	
n-Butane	106-97-8	58.12	5.0	0.50		12	1.2	
Vinyl chloride	75-01-4	62.50	ND	0.50		ND	1.3	
1,3-Butadiene	106-99-0	54.09	ND	0.50		ND	1.1	
Bromomethane	74-83-9	94.94	ND	0.50		ND	1.9	
Chloroethane	75-00-3	64.52	ND	0.50		ND	1.3	
Ethanol	64-17-5	46.07	20	0.50		38	0.94	
Bromoethene(Vinyl bromide)	593-60-2	106.9	ND	0.50		ND	2.2	
Freon 11(Trichlorofluoromethane)	75-69-4	137.4	ND	0.50		ND	2.8	
Isopropyl alcohol(2-Propanol)	67-63-0	60.10	2.6	0.50		6.3	1.2	
Freon 113(1,1,2-Trichlorotrifluoroethan	76-13-1	187.4	ND	0.50		ND	3.8	
Acetone	67-64-1	58.08	9.9	0.50		24	1.2	
1,1-Dichloroethene	75-35-4	96.94	ND	0.50		ND	2.0	
Acetonitrile	75-05-8	41.00	ND	0.50		ND	0.84	
Tertiary butyl alcohol(TBA)	75-65-0	74.12	ND	0.50		ND	1.5	
Bromoethane(Ethyl bromide)	74-96-4	108.0	ND	0.50		ND	2.2	
3-Chloropropene(Allyl chloride)	107-05-1	76.53	ND	0.50		ND	1.6	
Carbon disulfide	75-15-0	76.14	ND	0.50		ND	1.6	
Methylene chloride	75-09-2	84.94	ND	0.50		ND	1.7	
Acrylonitrile	107-13-1	53.00	ND	0.50		ND	1.1	
Methyl-tert-butyl ether(MTBE)	1634-04-4	88.15	ND	0.50		ND	1.8	
trans-1,2-Dichloroethene	156-60-5	96.94	ND	0.50		ND	2.0	
n-Hexane	110-54-3	86.17	0.65	0.50		2.3	1.8	
1,1-Dichloroethane	75-34-3	98.96	ND	0.50		ND	2.0	
Vinyl acetate	108-05-4	86.00	ND	0.50		ND	1.8	
2-Butanone(MEK)	78-93-3	72.10	1.1	0.50		3.3	1.5	
cis-1,2-Dichloroethene	156-59-2	96.94	ND	0.50		ND	2.0	
Ethyl acetate	141-78-6	88.10	1.7	0.50		6.2	1.8	
Chloroform	67-66-3	119.4	ND	0.50		ND	2.4	
Tetrahydrofuran	109-99-9	72.11	ND	0.50		ND	1.5	
1,1,1-Trichloroethane	71-55-6	133.4	ND	0.50		ND	2.7	
Cyclohexane	110-82-7	84.16	ND	0.50		ND	1.7	
2,2,4-Trimethylpentane(Isooctane)	540-84-1	114.2	1.2	0.50		5.5	2.3	
Carbon tetrachloride	56-23-5	153.8	ND	0.50		ND	3.1	
n-Heptane	142-82-5	100.2	ND	0.50		ND	2.0	
1,2-Dichloroethane	107-06-2	98.96	ND	0.50		ND	2.0	
Benzene	71-43-2	78.11	0.58	0.50		1.9	1.6	
Trichloroethene	79-01-6	131.4	ND	0.50		ND	2.7	
1,2-Dichloropropane	78-87-5	113.0	ND	0.50		ND	2.3	
Methyl Methacrylate	80-62-6	100.12	ND	0.50		ND	2.0	
Bromodichloromethane	75-27-4	163.8	ND	0.50		ND	3.3	
1,4-Dioxane	123-91-1	88.12	ND	0.50		ND	1.8	
4-Methyl-2-pentanone(MIBK)	108-10-1	100.2	ND	0.50		ND	2.0	

**EMSL Analytical**

200 Route 130 North, Cinnaminson, NJ 08077
Phone/Fax: (856)858-4800 / (856)858-4571
<http://www.EMSL.com> to15lab@EMSL.com

EMSL Order #: **491400791**
EMSL Sample #: **491400791-3**
Customer ID: **GCIE50**
Customer PO: **Not Available**

Attn: **James Grond**
GCI Environmental Advisory, Inc.
655 Third Ave
New York, NY 10017

Phone: **212-986-9460**
Fax: **212-986-9464**
Collected: **08/27/2014**
Received: **08/28/2014**

Project: **Silver Tower**

Sample ID: **ST-6**

Analysis	Analysis Date	Analyst Init.	Lab File ID	Canister ID	Sample Vol.	Dil. Factor
Initial	09/02/2014	MTH	M6066.D	E0261	250 cc	1

Target Compound Results Summary

Target Compounds	CAS#	MW	Result ppbv	RL ppbv	Q	Result ug/m3	RL ug/m3	Comments
cis-1,3-Dichloropropene	10061-01-5	111.0	ND	0.50		ND	2.3	
Toluene	108-88-3	92.14	1.4	0.50		5.1	1.9	
trans-1,3-Dichloropropene	10061-02-6	111.0	ND	0.50		ND	2.3	
1,1,2-Trichloroethane	79-00-5	133.4	ND	0.50		ND	2.7	
2-Hexanone(MBK)	591-78-6	100.1	ND	0.50		ND	2.0	
Tetrachloroethene	127-18-4	165.8	ND	0.50		ND	3.4	
Dibromochloromethane	124-48-1	208.3	ND	0.50		ND	4.3	
1,2-Dibromoethane	106-93-4	187.8	ND	0.50		ND	3.8	
Chlorobenzene	108-90-7	112.6	ND	0.50		ND	2.3	
Ethylbenzene	100-41-4	106.2	0.50	0.50		2.2	2.2	
Xylene (p,m)	1330-20-7	106.2	1.4	1.0		6.2	4.3	
Xylene (Ortho)	95-47-6	106.2	0.55	0.50		2.4	2.2	
Styrene	100-42-5	104.1	ND	0.50		ND	2.1	
Isopropylbenzene (cumene)	98-82-8	120.19	ND	0.50		ND	2.5	
Bromoform	75-25-2	252.8	ND	0.50		ND	5.2	
1,1,2,2-Tetrachloroethane	79-34-5	167.9	ND	0.50		ND	3.4	
4-Ethyltoluene	622-96-8	120.2	ND	0.50		ND	2.5	
1,3,5-Trimethylbenzene	108-67-8	120.2	ND	0.50		ND	2.5	
2-Chlorotoluene	95-49-8	126.6	ND	0.50		ND	2.6	
1,2,4-Trimethylbenzene	95-63-6	120.2	ND	0.50		ND	2.5	
1,3-Dichlorobenzene	541-73-1	147.0	ND	0.50		ND	3.0	
1,4-Dichlorobenzene	106-46-7	147.0	ND	0.50		ND	3.0	
Benzyl chloride	100-44-7	126.0	ND	0.50		ND	2.6	
1,2-Dichlorobenzene	95-50-1	147.0	ND	0.50		ND	3.0	
1,2,4-Trichlorobenzene	120-82-1	181.5	ND	0.50		ND	3.7	
Hexachloro-1,3-butadiene	87-68-3	260.8	ND	0.50		ND	5.3	
Naphthalene	91-20-3	128.17	ND	0.50		ND	2.6	
Total Target Compound Concentrations:			48	ppbv		120	ug/m3	

Surrogate

4-Bromofluorobenzene

Result

6.7

Spike

10

Recovery

67%

Qualifier Definitions

ND = Non Detect

B = Compound also found in method blank.

E = Estimated concentration exceeding upper calibration range.

D = Result reported from diluted analysis.

Method Reference

USEPA: Compendium Method TO-15, "Determination of Volatile Organic Compounds (VOCs) in Air..." Collected in Specially-Prepared Canisters and Analyzed by Gas Chromatography/Mass Spectrometry (GC/MS), January 1999, (EPA/625/R-96/010b).



NJDEP Certification #: 03036

APPENDIX G
SUB-CELLAR - BOILER ROOM
NORTHWEST SECTION

**EMSL Analytical**

200 Route 130 North, Cinnaminson, NJ 08077
 Phone/Fax: (856)858-4800 / (856)858-4571
<http://www.EMSL.com> to15lab@EMSL.com

EMSL Order #: **491400791**
 EMSL Sample #: **491400791-5**
 Customer ID: **GCIE50**
 Customer PO: **Not Available**

Attn: **James Grond**
GCI Environmental Advisory, Inc.
655 Third Ave
New York, NY 10017

Phone: **212-986-9460**
 Fax: **212-986-9464**
 Collected: **08/27/2014**
 Received: **08/28/2014**

Project: **Silver Tower**

Sample ID: **ST-7**

Analysis	Analysis Date	Analyst Init.	Lab File ID	Canister ID	Sample Vol.	Dil. Factor
Initial	09/02/2014	MTH	M6068.D	E15330	250 cc	1

Target Compound Results Summary

Target Compounds	CAS#	MW	Result ppbv	RL ppbv	Q	Result ug/m3	RL ug/m3	Comments
Propylene	115-07-1	42.08	ND	1.0		ND	1.7	
Freon 12(Dichlorodifluoromethane)	75-71-8	120.9	0.55	0.50		2.7	2.5	
Freon 114(1,2-Dichlorotetrafluoroethan	76-14-2	170.9	ND	0.50		ND	3.5	
Chloromethane	74-87-3	50.49	0.79	0.50		1.6	1.0	
n-Butane	106-97-8	58.12	4.4	0.50		11	1.2	
Vinyl chloride	75-01-4	62.50	ND	0.50		ND	1.3	
1,3-Butadiene	106-99-0	54.09	ND	0.50		ND	1.1	
Bromomethane	74-83-9	94.94	ND	0.50		ND	1.9	
Chloroethane	75-00-3	64.52	ND	0.50		ND	1.3	
Ethanol	64-17-5	46.07	23	0.50		43	0.94	
Bromoethene(Vinyl bromide)	593-60-2	106.9	ND	0.50		ND	2.2	
Freon 11(Trichlorofluoromethane)	75-69-4	137.4	ND	0.50		ND	2.8	
Isopropyl alcohol(2-Propanol)	67-63-0	60.10	7.6	0.50		19	1.2	
Freon 113(1,1,2-Trichlorotrifluoroethan	76-13-1	187.4	ND	0.50		ND	3.8	
Acetone	67-64-1	58.08	8.6	0.50		20	1.2	
1,1-Dichloroethene	75-35-4	96.94	ND	0.50		ND	2.0	
Acetonitrile	75-05-8	41.00	ND	0.50		ND	0.84	
Tertiary butyl alcohol(TBA)	75-65-0	74.12	ND	0.50		ND	1.5	
Bromoethane(Ethyl bromide)	74-96-4	108.0	ND	0.50		ND	2.2	
3-Chloropropene(Allyl chloride)	107-05-1	76.53	ND	0.50		ND	1.6	
Carbon disulfide	75-15-0	76.14	ND	0.50		ND	1.6	
Methylene chloride	75-09-2	84.94	0.90	0.50		3.1	1.7	
Acrylonitrile	107-13-1	53.00	ND	0.50		ND	1.1	
Methyl-tert-butyl ether(MTBE)	1634-04-4	88.15	ND	0.50		ND	1.8	
trans-1,2-Dichloroethene	156-60-5	96.94	ND	0.50		ND	2.0	
n-Hexane	110-54-3	86.17	0.54	0.50		1.9	1.8	
1,1-Dichloroethane	75-34-3	98.96	ND	0.50		ND	2.0	
Vinyl acetate	108-05-4	86.00	ND	0.50		ND	1.8	
2-Butanone(MEK)	78-93-3	72.10	0.84	0.50		2.5	1.5	
cis-1,2-Dichloroethene	156-59-2	96.94	ND	0.50		ND	2.0	
Ethyl acetate	141-78-6	88.10	1.9	0.50		7.0	1.8	
Chloroform	67-66-3	119.4	ND	0.50		ND	2.4	
Tetrahydrofuran	109-99-9	72.11	ND	0.50		ND	1.5	
1,1,1-Trichloroethane	71-55-6	133.4	ND	0.50		ND	2.7	
Cyclohexane	110-82-7	84.16	ND	0.50		ND	1.7	
2,2,4-Trimethylpentane(Isooctane)	540-84-1	114.2	ND	0.50		ND	2.3	
Carbon tetrachloride	56-23-5	153.8	ND	0.50		ND	3.1	
n-Heptane	142-82-5	100.2	ND	0.50		ND	2.0	
1,2-Dichloroethane	107-06-2	98.96	ND	0.50		ND	2.0	
Benzene	71-43-2	78.11	ND	0.50		ND	1.6	
Trichloroethene	79-01-6	131.4	ND	0.50		ND	2.7	
1,2-Dichloropropane	78-87-5	113.0	ND	0.50		ND	2.3	
Methyl Methacrylate	80-62-6	100.12	ND	0.50		ND	2.0	
Bromodichloromethane	75-27-4	163.8	ND	0.50		ND	3.3	
1,4-Dioxane	123-91-1	88.12	ND	0.50		ND	1.8	
4-Methyl-2-pentanone(MIBK)	108-10-1	100.2	ND	0.50		ND	2.0	

**EMSL Analytical**

200 Route 130 North, Cinnaminson, NJ 08077
 Phone/Fax: (856)858-4800 / (856)858-4571
<http://www.EMSL.com> to15lab@EMSL.com

EMSL Order #: **491400791**
 EMSL Sample #: **491400791-5**
 Customer ID: **GCIE50**
 Customer PO: **Not Available**

Attn: **James Grond**
GCI Environmental Advisory, Inc.
655 Third Ave
New York, NY 10017

Phone: **212-986-9460**
 Fax: **212-986-9464**
 Collected: **08/27/2014**
 Received: **08/28/2014**

Project: **Silver Tower**

Sample ID: **ST-7**

Analysis	Analysis Date	Analyst Init.	Lab File ID	Canister ID	Sample Vol.	Dil. Factor
Initial	09/02/2014	MTH	M6068.D	E15330	250 cc	1

Target Compound Results Summary

Target Compounds	CAS#	MW	Result ppbv	RL ppbv	Q	Result ug/m3	RL ug/m3	Comments
cis-1,3-Dichloropropene	10061-01-5	111.0	ND	0.50		ND	2.3	
Toluene	108-88-3	92.14	0.77	0.50		2.9	1.9	
trans-1,3-Dichloropropene	10061-02-6	111.0	ND	0.50		ND	2.3	
1,1,2-Trichloroethane	79-00-5	133.4	ND	0.50		ND	2.7	
2-Hexanone(MBK)	591-78-6	100.1	ND	0.50		ND	2.0	
Tetrachloroethene	127-18-4	165.8	ND	0.50		ND	3.4	
Dibromochloromethane	124-48-1	208.3	ND	0.50		ND	4.3	
1,2-Dibromoethane	106-93-4	187.8	ND	0.50		ND	3.8	
Chlorobenzene	108-90-7	112.6	ND	0.50		ND	2.3	
Ethylbenzene	100-41-4	106.2	ND	0.50		ND	2.2	
Xylene (p,m)	1330-20-7	106.2	ND	1.0		ND	4.3	
Xylene (Ortho)	95-47-6	106.2	ND	0.50		ND	2.2	
Styrene	100-42-5	104.1	ND	0.50		ND	2.1	
Isopropylbenzene (cumene)	98-82-8	120.19	ND	0.50		ND	2.5	
Bromoform	75-25-2	252.8	ND	0.50		ND	5.2	
1,1,2,2-Tetrachloroethane	79-34-5	167.9	ND	0.50		ND	3.4	
4-Ethyltoluene	622-96-8	120.2	ND	0.50		ND	2.5	
1,3,5-Trimethylbenzene	108-67-8	120.2	ND	0.50		ND	2.5	
2-Chlorotoluene	95-49-8	126.6	ND	0.50		ND	2.6	
1,2,4-Trimethylbenzene	95-63-6	120.2	ND	0.50		ND	2.5	
1,3-Dichlorobenzene	541-73-1	147.0	ND	0.50		ND	3.0	
1,4-Dichlorobenzene	106-46-7	147.0	ND	0.50		ND	3.0	
Benzyl chloride	100-44-7	126.0	ND	0.50		ND	2.6	
1,2-Dichlorobenzene	95-50-1	147.0	ND	0.50		ND	3.0	
1,2,4-Trichlorobenzene	120-82-1	181.5	ND	0.50		ND	3.7	
Hexachloro-1,3-butadiene	87-68-3	260.8	ND	0.50		ND	5.3	
Naphthalene	91-20-3	128.17	ND	0.50		ND	2.6	

Total Target Compound Concentrations:

50

ppbv

110

ug/m3

Surrogate

4-Bromofluorobenzene

Result

6.7

Spike

10

Recovery

67%

Qualifier Definitions

ND = Non Detect

B = Compound also found in method blank.

E= Estimated concentration exceeding upper calibration range.

D= Result reported from diluted analysis.

Method Reference

USEPA: Compendium Method TO-15, "Determination of Volatile Organic Compounds (VOCs) in Air..." Collected in Specially-Prepared Canisters and Analyzed by Gas Chromatography/Mass Spectrometry (GC/MS), January 1999, (EPA/625/R-96/010b).



NJDEP Certification #: 03036



EMSL ANALYTICAL, INC.
LABORATORY PRODUCTS - TRAINING

EMSL Order Number (Lab Use Only):

USEPA TO-15

External Chain of Custody/ Field Test Data Sheet

EMSL Analytical, Inc.
200 Route 130 North
Cinnaminson, NJ 08077
Ph. (800) 220-3675
Fax (856) 786-0327

Order ID: 491400791

Report To Contact Name: <u>JAMES GRON</u>	Bill To Company:	Sampled By (Sign): <u>[Signature]</u>
Company Name: <u>GCE Environmental</u>	Attention To:	Sampled By (Name): <u>JAMES GRON</u>
Address 1: <u>655 4th Ave</u>	Address 1:	Total # of Samples: <u>7</u>
Address 2: <u>NEW YORK</u>	Address 2:	Date Shipped: <u>8/27/14</u>
Phone No.: <u>212-986-9466</u>	Phone No.:	Sample Collection Zip Code:
Email Results To: <u>Jim.Gron@verizon.net</u>	Project Name: <u>RESILIENT TOWN</u>	Purchase Order:

Turnaround Time (in Business Days): <input type="checkbox"/> 10 Day Standard <input type="checkbox"/> 5 Day <input type="checkbox"/> 4 Day <input checked="" type="checkbox"/> 3 Day <input type="checkbox"/> 2 Day <input type="checkbox"/> 1 Day <input type="checkbox"/> Other	Reporting Format: <input type="checkbox"/> Results Only (Standard Lab Report) <input type="checkbox"/> Full Deliverables (Surcharge may apply) <input type="checkbox"/> Other	Analysis	Matrix
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Field Use - All Information Required																Lab Use Only				USEPA TO-15	NJDEP LLTO-15	EMSL SEARCH	Other (Specify)	Indoor/ Ambient	Soil Gas	Landfill/ Vent
Client Field Sample Identification	Sampling Start Information				Sampling Stop Information				Canister Information					Flow Controller												
	Barometric Pres. ("Hg):		Canister Pressure ("Hg)	Interior Temp. (F)	Barometric Pres. ("Hg):		Canister Pressure ("Hg)	Interior Temp. (F)	Canister ID	Size (L)	Can Cert Batch ID	Outgoing Pressure ("Hg)	Incoming Pressure ("Hg)	Reg. ID	Cal Flow (ml/min)											
Start Date	Time (24 hr clock)	Stop Date			Time (24 hr clock)																					
ST-1	8/27/14	8:12	30	85	8/27/14	15:52	4	85	E0491	6	12970	-30.0		3678	10.4	X										
ST-1 ST-3	8/27/14	8:04	30		8/27/14	15:50	2	80	E0444					3520	10.3	X										
ST-6	8/27/14	7:42	30	85	8/27/14	16:08	2	85	E0262					3582	11.0	X										
ST-5	8/27/14	8:47	30	80	8/27/14	16:05	2	80	E0452					3715	10.8	X										
ST-7	8/27/14	7:42	29	85	8/27/14	16:10	0	85	E15330					3696	11.0	X										
ST-4	8/27/14	8:02	30	80	8/27/14	16:01	7	80	E0644					3654	10.5	X										
ST-2	8/27/14	8:00	30	80	8/27/14	15:56	1.8	80	E15629					3737	10.5	X										

Comments:	EX: 7801 3861 1393				Lab Canister Certification				
				Analyst Signature (TO-15):					
Relinquished by:	Date/Time	Received by:	Date/Time	Affixed Seal #	Reason for Exchange (circle appropriate)				
<u>[Signature]</u>	8/25/14 1630	<u>[Signature]</u>	8/26/14	5, 6	Shipping	Courier	Receiving	Sampling	Other:
<u>[Signature]</u>	8/27/14 1	<u>[Signature]</u>	8/28 9:30		Shipping	Courier	Receiving	Sampling	Other:
<u>[Signature]</u>	8/28 9:30	<u>[Signature]</u>	8/28 9:30		Shipping	Courier	Receiving	Sampling	Other:
<u>[Signature]</u>	8/28 9:30	<u>[Signature]</u>	8/28 9:30		Shipping	Courier	Receiving	Sampling	Other:
					Shipping	Courier	Receiving	Sampling	Other:

491400791

TO-15 Sample Information

Please fill out this worksheet in addition to the Chain of Custody form. This information helps us to best analyze your samples and achieve requested TAT

Company: GCT Environmental Advisory Inc.	
Contact Person:	
Name: Jim Grand	
E-mail: jim.grand@verizon.net	
Additional E-mails:	
Telephone #: 212-986-9460	Fax #: 212-986-9464

Do you want your results emailed? ☒ YES ☐ NO

Library Search requested: ☐ YES ☐ NO

A library search will identify up to 20 of the largest, non-target peaks that are not part of the standard TO-15 list of 74 compounds. If you are performing an Indoor Air Quality or odor investigation the library search is recommended. If you will need help interpreting your report the library search is REQUIRED.

Sample Type:

☒ Indoor Air Quality (Home/Office) ☐ Vent Gas ☐ Soil Gas
☐ IAQ (Industrial) ☐ Other: _____

Description of sample (Important for the lab to achieve your requested turnaround time):

Are there any special detection limits, specific set of compounds, or any other specifics you need in your report?

<input type="checkbox"/> OSHA/NIOSH RELS	<input type="checkbox"/> Possible Sources of Contaminants
<input type="checkbox"/> EPA PELs - Circle one: Residential Industrial	<input type="checkbox"/> TVOC
<input type="checkbox"/> NJ DEP - Circle one: Indoor Air Soil Gas	
<input type="checkbox"/> NC DNER - Circle one: Residential Industrial	<input type="checkbox"/> Other (Please list or attach separate sheet)
<input type="checkbox"/> PA DEP - Circle one: Residential Industrial	<input type="checkbox"/> NONE

Do you need any additional analysis on the canister sample? Indicate below (additional charges will apply)

Draeger CMS Analyzer:

☐ CO; ☐ CO₂; ☐ SO₂; ☐ EtO; ☐ NH₃; ☐ Cl₂; ☐ H₂S
☐ NO₂; ☐ NO_x; ☐ O₂; ☐ Petroleum hydrocarbons; ☐ Phosgene; ☐ Phosphene

US EPA TO-3 (choose one below):

☐ C₁-C₆ hydrocarbons
☐ Methane only

ASTM-D5504 (choose one below):

☐ Sulfur Scan (H₂S, COS, MeSH, EtSH, DMS)
☐ H₂S only

Sample Retention Policy: All canisters are guaranteed to be retained for one day after results are reported. Please review your results promptly to ensure that your project scope is fully addressed. Cans may be retained for a longer period of time but arrangements to hold your cans must be made through your customer account representative quickly. Thank you.

2014 AUG 28 A 11:01

RECEIVED
 EMSL
 CINNAMINSON, NJ