



**Brownfield Cleanup Program
Off-Site Investigation Report**

for

**31/32 LIC LLC
37-25 31ST STREET
LONG ISLAND CITY, NEW YORK**

BCP SITE #C241182

June 2017

Prepared for:

**New York State Department of
Environmental Conservation
Division of Environmental Remediation
625 Broadway
Albany, NY 12233-7020**

On Behalf of:

**31/32 LIC LLC
100 Ring Road West, Suite 101
Garden City, New York 11530**

Prepared by:

**CA RICH Consultants, Inc.
17 Dupont Street
Plainview, NY 11803
(516) 576-8844**



May 5, 2017
REVISED: June 14, 2017

**New York State Department of
Environmental Conservation**
625 Broadway, 12th Floor
Albany, NY 12233-7020

Attention: Caroline Eigenbrodt, Project Manager

Re: Off-Site Investigation Work Plan
31/32 LIC LLC/#C241182
37-25 31st Street
Long Island City, New York

Dear Ms. Eigenbrodt:

CA RICH Consultants, Inc. (CA RICH) is pleased to provide you with this Off-Site Investigation Report (OIR) for the above-referenced project. The work discussed in this Report was conducted in accordance with procedures and plans approved by the NYSDEC in the November 2016 Off-Site Investigation Work Plan, and the April 2016 Remedial Investigation Work Plan which includes the Quality Assurance Project Plan and Health & Safety Plan prepared for this Site. This Report addresses comments received in your letter dated June 12, 2017.

If you have questions or require any additional detail, please do not hesitate to call our Office.

Respectfully submitted,

CA RICH CONSULTANTS, INC.

A handwritten signature in black ink that reads 'William J. Fitchett'.

William J. Fitchett
Project Environmental Scientist

Reviewed by:

A handwritten signature in black ink that reads 'Victoria Whelan'.

Victoria Whelan, QEP, CPG
Associate

cc: Guy Bobersky, NYSDEC via email
Fredric Oliver, Volunteer via email
Stephanie Selmer, NYSDOH via email
Justin Deming, NYSDOH via email
Richard Izzo, CA RICH via email
Karen Mintzer, NYSDEC via email
Larry Schnapf, Schnapf Law, via email

Off-Site Investigation Report

“31/32 LIC LLC”

37-25 31ST STREET

LONG ISLAND CITY, NEW YORK

BCP SITE #C241182

CERTIFICATION

I, Victoria Whelan, certify that I am currently a Qualified Environmental Professional as defined in 6 NYCRR Part 375 and that this Off-Site Investigation Report was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the DER Technical Guidance for Site Investigation and Remediation (DER-10).

02140003

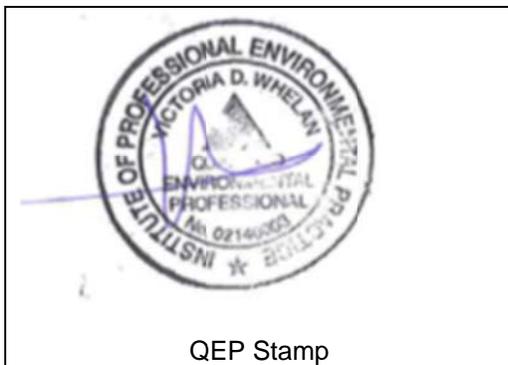
IPEP QEP No.

6/14/17

Date

Victoria Whelan

Signature



QEP Stamp

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1.0 INTRODUCTION AND PURPOSE

This Off-Site Investigation Report (OIR) was prepared by CA RICH Consultants, Inc. (CA RICH) of Plainview, NY on behalf of 31/32 LIC LLC, for the Brownfield Cleanup Program (BCP), Site #C241182 relative to the planned residential redevelopment and improvement of 37-25 31st Street in Long Island City, Queens, New York, (hereinafter referred to as the 'Site' or the 'Property'). The Volunteer was accepted into the BCP in March 2016. This Off-Site Investigation Report is based upon the guidelines set forth in Section 3 of NYSDEC's Draft Brownfield Cleanup Program Guide dated May 2004 (Ref. 1); NYSDEC's DER-10 Technical Guidance for Site Investigation and Remediation (Ref. 2); and the New York State Department of Health "Guidance for Evaluating Soil Vapor Intrusion in the State of New York" dated October 2006 (Ref. 3). The work discussed in this Report was conducted in accordance with procedures and plans approved by the NYSDEC in the November 2016 Off-site Investigation Work Plan (Ref. 4), and the April 2016 Remedial Investigation Work Plan (Ref. 5) which includes the Quality Assurance Project Plan and Health & Safety Plan prepared for this Site.

This OIR addresses the off-site investigation activities completed as a further characterization and follow up investigation based upon the results already reported from three subsurface investigations performed on the Property: 1) Limited Remedial Investigation Report dated February 2015 conducted by GZA Geo Environmental Inc. (Ref. 6); 2) Remedial Investigation Report dated October 2015 conducted by CA RICH (Ref. 7); and 3) BCP Remedial Investigation Report dated July 2016 by CA RICH (Ref. 8). The OIR has been prepared to document the following items:

- Soil vapor sampling in the sidewalk bordering the Property and two off-site properties;
- Collection of three off-site indoor air samples collected concurrently with the sub-slab sampling; and
- Collection of three off-site outdoor air samples collected concurrently with the sub-slab sampling.

A Remedial Action Work Plan (RAWP) was prepared for the Site. As part of the RAWP, an off-site soil vapor intrusion investigation is required, thus is the subject of this Report. The purpose of this investigation was to determine if soil vapor has intruded, or has the potential to intrude, into structures located near the Property. To achieve this, access requests were mailed to nine NYSDOH approved neighboring property owners and current occupants. Of these nine, two

agreed to grant CA RICH access for sampling purposes. The following properties were included in this investigation:

- 37-29 32nd Street
- 37-21 31st Street

The investigation was performed by sampling sub-slab soil vapor probes set in the ground floor of 37-29 32nd Street and the basement of 37-21 31st Street with concurrent indoor air samples and outdoor air samples. Additionally, four soil vapor samples were collected from the sidewalks surrounding the Property. Further details of the investigation are presented in Section 3.

1.0 PHYSICAL SITE CHARACTERISTICS

2.1 Site Description

The subject Site consists of a .40 acre, irregularly-shaped tax lot. The Site address is 37-25 31st Street, Queens NY, 11101 (formerly 37-26 32nd Street and 37-27 31st Street). The New York City Tax map identifies the Site as Block: 373 Lot: 6. The Property has frontage on both 31st Street and 32nd Street and is located between 37th and 38th Avenue. The Site recently underwent demolition and is vacant, the old building slab remains in place as directed by the NYSDEC.

The current zoning designation is M1-2/R6A which includes light manufacturing and residential use. The proposed use is consistent with existing zoning for the Property. The Site is relatively flat and has no natural or artificial surface water bodies or impoundments. Water from rain events runs off into street storm drains. The depth to shallow groundwater ranges from 22 to 23 feet below grade. A Property Location Map is included as Figure 1.

2.2 Surrounding Land Use

The Site is bordered by a six-story, mixed-use residential and commercial building (zoned M1-2/R6A for mixed residential and commercial) to the north, 32nd Street to the east, several one-story industrial buildings (zoned M1-2/R6A for industrial, manufacturing and transportation utility) to the south, and 31st Street to the west. There are no schools, hospitals, or daycare centers within a 500-foot radius of the Property.

2.3 Hydrogeologic Setting

The Site is relatively flat and has no natural or artificial surface water bodies or impoundments. Water from rain events runs off into street storm drains. The depth to shallow groundwater ranges from 22 to 23 feet below grade. Shallow groundwater beneath the Site flows to the

southwest towards the East River and Dutch Kills. Underlying groundwater in this area of Queens is not used for potable supply purposes. New York City currently utilizes upstate reservoirs for its potable water supply. As the underlying groundwater is not used for potable supply purposes, no potable resources appear to be threatened by local groundwater contamination. According to maps and reports published by the United States Geological Survey (USGS), the Property is underlain by Quaternary age glacial and alluvial deposits with Harrison Gneiss underlying. The Site is underlain by medium grained sand and fill.

3.0 SUMMARY OF WORK ACTIVITIES

3.1 Objectives

The objective of the off-site investigation was to determine the nature, extent and potential sources of impacted soil vapor near the Site. The scope of the investigation included installation of temporary soil vapor points, sub-slab soil vapor, indoor air, and outdoor air sample collection.

3.2 Request for Access

Nine buildings were selected for the off-site soil vapor intrusion evaluation. A request to perform testing was mailed to each property owner. However, not all of the parties agreed to grant CA RICH access to perform the testing. A summary of our efforts to obtain access is listed below:

- 37-31 32nd Street (multi-family residential building) – A request to perform testing was mailed to the Property owner on November 28, 2016 via certified mail. A response was not received. We visited the Property on December 20, 2016 and the tenant refused to discuss the sampling with CA RICH. We visited the property again on January 25, 2017 and there was no answer at the door. Access to this property was not granted.
- 37-29 32nd Street (warehouse) – A request to perform testing was mailed to the Property owner on November 28, 2016 via certified mail. CA RICH received a signed access agreement on December 12, 2016. On December 20, 2016, CA RICH visited the Property to discuss accessibility. Access to this property was granted and sampling was conducted.
- 37-27 32nd Street (commercial building) – A request to perform testing was mailed to the Property owner on November 28, 2016 via certified mail. A response was not received. CA RICH visited the property on December 20, 2016 and there was no answer at the door. A phone number listed for the property was called and found to be

disconnected. CA RICH visited the property again on January 25, 2017 and there was no answer at the door. Access to this property was not granted.

- 37-21 31st Street (mixed use – commercial and residential building) – A request to perform testing was mailed to the Property owner on November 28, 2016 via certified mail. A response was not received. CA RICH visited the property on December 20, 2016 and spoke with the property owner. The property owner indicated that he would consider our request. On January 16, 2017 the property owner agreed to grant us access. On February 15, 2017 an access agreement was signed by CA RICH and the property owner. Access to this property was granted and sampling was conducted.
- 37-11 30th Street (commercial building) – A request to perform testing was mailed to the Property owner on November 28, 2016 via certified mail. A response was not received. CA RICH visited the property on December 20, 2016 and spoke with the tenant who gave CA RICH the owner's contact information. CA RICH emailed the property owner on January 5, 2017 and did not receive a response. CA RICH visited the property again on January 25, 2017 and has not received a response. Access to this property was not granted.
- 37-36 31st Street & 37-40 31st Street (commercial building) – A request to perform testing was sent to the Property owner on November 28, 2016 via certified mail. A response was not received. CA RICH visited the property on December 20, 2016 and spoke with the property owner who indicated he would consider granting access. CA RICH emailed the property owner on January 5, 2017 and did not receive a response. CA RICH visited the property again on January 25, 2017 and the property owner declined to provide access. Access to this property was not granted.
- 31-01 38th Avenue (gasoline station) – A request to perform testing was sent to the Property owner on November 28, 2016 via certified mail. A response was not received. We visited the property on December 20, 2016 and spoke with the property owner who declined to grant access. Access to this property was not granted.
- 31-17 38th Avenue (commercial building) – A request to perform testing was sent to the property owner on November 28, 2016 via certified mail. A response was not received. We visited the property on December 20, 2016 and there was no response. CA RICH emailed the property owner on January 5, 2017 and there was no response. CA RICH revisited the property on January 24, 2017 and the owner indicated they would respond

in February. CA RICH did not receive a response. Access to this property was not granted.

The access letters are attached in Appendix A.

3.3 Product Inventory

The pre-sampling building inspection including a product inventory was performed prior to sampling on February 22, 2017. Chemicals used or stored in each building that may contain volatile organic compounds were logged and the approximate volume stored, estimated usage and product constituents were recorded.

- 37-29 32nd Street (warehouse) – one 12oz. spray bottle of rustoleum and a small open bag of rock salt. It should be noted that a car parked with exhaust facing away from the sample canister. The car was not running during the majority of sample collection.
- 37-21 31st Street (mixed use – commercial and residential building) – Extended Life antifreeze (1-gal.), Royal Purple motor Oil (1-qt.), Mobile One motor oil (1 qt.). It should be noted that the basement is an active parking garage.

NYSDOH Indoor Air Quality Questionnaire and Building Inventory forms for each property are attached in Appendix B.

3.4 Sampling Point Installation and Sampling

On February 21, 2017 four temporary soil vapor points were installed approximately two inches beneath the sidewalks surrounding the Site. In addition, three sub-slab soil vapor sample points were installed in neighboring properties that previously agreed to grant CA RICH access. All points were installed utilizing a Bosch™ Hammer Drill in accordance with the NYSDOH “Guidance for Evaluating Soil Vapor Intrusion in the State of New York” dated October 2006 and were constructed of stainless steel screen connected to ¼-inch poly tubing. The annular space was packed with coarse sand, creating a sampling zone two inches beneath the existing concrete slab/sidewalk. A clay seal was then placed at the surface of the concrete. Co-located indoor air samples were collected concurrently with all sub-slab vapor samples. In addition, one outdoor air sample was collected concurrently with each indoor air sample.

Prior to sampling, one to three volumes of soil gas were purged from each soil vapor point using a calibrated air sampling pump. A bucket was placed over the sample assembly and helium gas was used to enrich the atmosphere around the sample location in combination with real-time air monitoring (for helium) to verify that ambient air was not infiltrating the sampling assembly during purging and sampling.

Once confirmed that ambient air was not being drawn into the assembly, the soil vapor was screened for the presence of VOCs using a Photo-Ionization Detector (PID). No elevated PID readings were observed. The SUMMA canister regulators for the sub-slab vapor, indoor air and outdoor air samples were set to restrict the sample collection not to exceed 0.2 liters per minute over a 24-hour time period. The soil vapor sample regulators located in the sidewalks were set to restrict the sample collection not to exceed 0.2 liters per minute over an eight-hour period. The canisters were then submitted to Alpha Analytical Laboratories, NYSDOH-certified laboratory for analysis of VOCs via EPA method TO-15 under chain-of-custody documentation.

A sample soil vapor point installation log is included as Appendix C. No local condition(s) occurred during the sampling that may influence interpretation of the results (ie. weather). The sampling locations are illustrated on Figure 2.

3.5 Sampling QA/QC Protocol

Field notes including observations of soil conditions, pertinent observations, diagrams (if appropriate) were maintained and appropriate photographs taken. A record of each sample, including any pertinent observations about the sample, was kept in the field notebook.

Samples were collected in laboratory-issued SUMMA canisters by CA RICH personnel and shipped to CA RICH's subcontracted State-certified laboratory. Additional field and laboratory QA/QC protocols are included in the Site QAPP, which is included as an Appendix to the approved RIWP. A Data Usability Summary Report was prepared and is included as Appendix D of this Report.

3.6 Health & Safety

A site-specific Health and Safety Plan (HASP) has been prepared and approved for the field portion of the Investigation. The HASP covers all activities, as well as emergency procedures and available emergency services in proximity to the Site. All work discussed in this Report was conducted in accordance with the HASP, which is included as an Appendix to the approved RIWP.

4.0 SUMMARY OF OFF-SITE INVESTIGATION RESULTS

4.1 Sidewalk: Trichloroethene (TCE) was detected at 6.29 ug/m³ in SV-2, 13.1 ug/m³ in SV-3, and 80.6 ug/m³ in SV-4. The NYSDOH Matrix parameter for TCE is 5 ug/m³. TCE was also detected in SV-1 at 2.91 ug/m³. Several other compounds were detected at low levels. The results of these samples are presented on Table 1.

4.2 37-29 32nd Street: Carbon tetrachloride was detected at 0.491 ug/m³ in the indoor air, above its NYSDOH Decision Matrix of 0.25 ug/m³. Carbon tetrachloride was not detected in sub-slab soil vapor, but was detected at 0.384 ug/m³ in the outdoor air. According to the NYSDOH Decision Matrices, reasonable and practical actions should be taken to identify source(s) and reduce exposures.

Additionally, TCE was detected at 22.3 ug/m³ in sub-slab soil vapor, and 0.349 ug/m³ in indoor air, above its NYSDOH Decision Matrices of 5 ug/m³ and 0.25 ug/m³, respectively. TCE was also detected at 0.124 ug/m³ in outdoor air. According to the NYSDOH Decision Matrices, further monitoring is recommended. The results of these samples are presented on Table 2.

4.3 37-21 31st Street: Carbon tetrachloride was detected at 0.365 ug/m³ in indoor air sample IA-1 and 0.371 ug/m³ in indoor air sample IA-2, above its' NYSDOH Decision Matrix of 0.25 ug/m³. Carbon tetrachloride was not detected in sub-slab soil vapor, but was detected at 0.371 ug/m³ in outdoor air sample OA-1 and 0.396 ug/m³ in outdoor air sample OA-2. According to the NYSDOH Decision Matrices, reasonable and practical actions should be taken to identify source(s) and reduce exposures.

Additionally, TCE was detected at 25.6 ug/m³ in sub-slab soil vapor sample SSV-6 and 16.4 ug/m³ in sub-slab soil vapor sample SSV-7, above its' NYSDOH Decision Matrix of 5 ug/m³. Additionally, TCE was detected at 0.527 ug/m³ in indoor air sample IA-1 and 0.688 ug/m³ in indoor air sample IA-2, above its' NYSDOH Decision Matrix of 0.25 ug/m³. TCE was detected at 0.113 ug/m³ in outdoor air sample OA-1 and 0.226 ug/m³ in outdoor air sample OA-2. According to the NYSDOH Decision Matrices, further monitoring is recommended. The results of these samples are presented on Table 3.

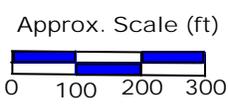
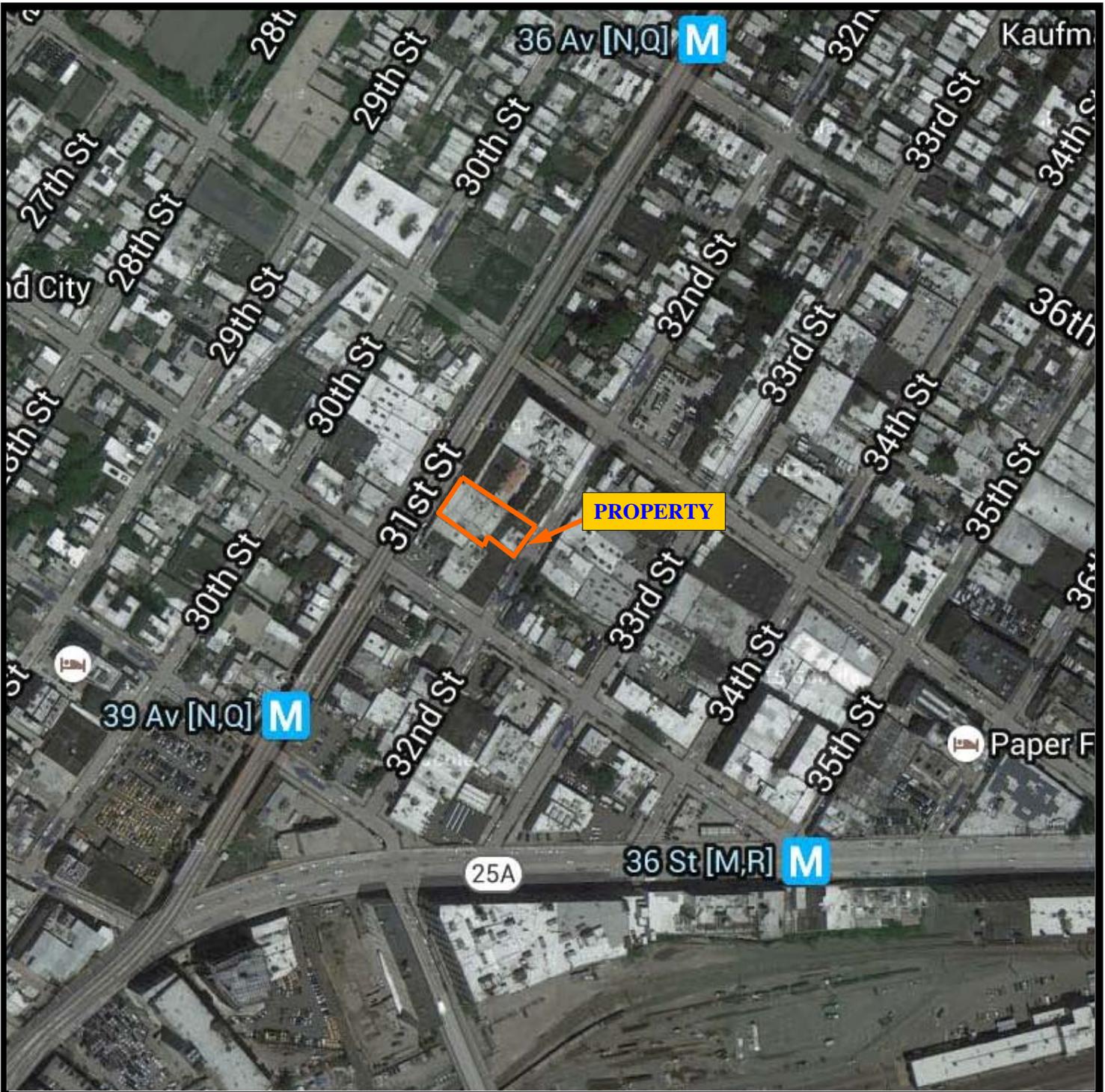
5.0 CONCLUSIONS AND RECOMMENDATIONS

- The owners of nine properties surrounding the Site were contacted and asked if they would grant permission to have indoor air and sub-slab soil vapor samples collected at their buildings. Two of the nine property owners agreed to grant access for the collection of these samples.
- 37-29 32nd Street – TCE was detected at 0.349 ug/m³ in the indoor air sample and at 22.3 ug/m³ in the sub-slab sample collected from 37-29 32nd Street. Based on the NYSDOH Guidance matrix, further monitoring is recommended at this property. Additionally, Carbon tetrachloride was detected at 0.491 ug/m³ in indoor air. According to the NYSDOH decision matrices, reasonable and practical actions should be taken to identify the source and reduce exposure. Carbon tetrachloride was also detected in outdoor air at 0.384 ug/m³. Based upon the levels detected, a potential source is the outdoor air.
- 37-21 31st Street – TCE was detected at 0.527 ug/m³ and at 0.688 ug/m³ in the indoor air samples and at 25.6 ug/m³ in sub-slab soil vapor sample SSV-6 and 16.4 ug/m³ in the sub-slab soil vapor sample SSV-7. Based on the NYSDOH Guidance matrix, further monitoring is recommended at this property. Additionally, Carbon tetrachloride was detected at 0.365 ug/m³ in indoor air sample IA-1 and 0.371 ug/m³ in indoor air sample IA-2. According to the NYSDOH decision matrices, reasonable and practical actions should be taken to identify the source and reduce exposure. Carbon tetrachloride was also detected in outdoor air sample OA-1 at 0.371 ug/m³ and outdoor air sample OA-2 at 0.396 ug/m³. Based upon the levels detected, a potential source is the outdoor air.

6.0 REFERENCES

1. NYSDEC, May 2004, Draft Brownfield Cleanup Program Guide
2. NYSDEC, December 2002, Draft DER-10 Technical Guidance for Site Investigation and Remediation.
3. NYSDOH "Guidance for Evaluating Soil Vapor Intrusion in the State of New York" dated October 2006.
4. CA RICH Consultants, Inc., Off-Site Investigation Work Plan, 37-25 31st Street, Queens, New York, November 2016
5. CA RICH Consultants, Inc., Remedial Investigation Work Plan, 37-27 31st Street and 37-26 32nd Street, Queens, NY, April 2016.
6. GZA Geo Environmental, Inc., Limited Remedial Investigation Report, 37-27 31st Street and 37-26 32nd Street, Long Island City, NY, February 2015.
7. CA RICH Consultants, Inc., Remedial Investigation Report, 37-27 31st Street and 37-26 32nd Street, Queens, NY, October 2015.
8. CA RICH Consultants, Inc., Remedial Investigation Report, 37-25 31st, Queens, NY, July 2016.

FIGURES

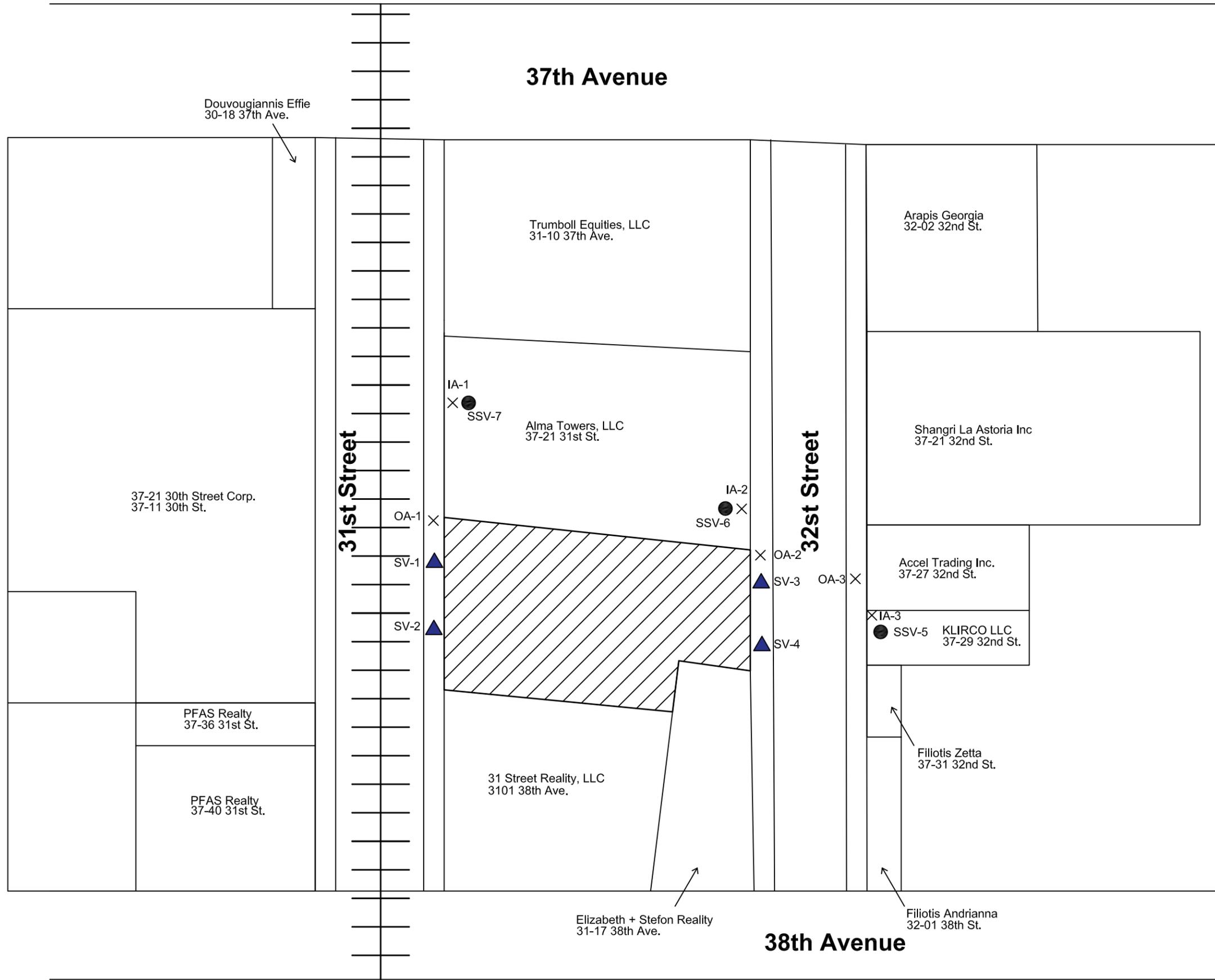


Adapted from Google Maps



CA RICH CONSULTANTS, INC.
 17 Dupont Street,
 Plainview, NY 11803

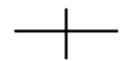
TITLE: Property Location Map		DATE: 6/6/2016
		SCALE: As Shown
FIGURE: 1	37-25 31st Street Queens, New York	
DRAWING:		DRAWN BY: TRB
		APPR. BY: VW



Legend



Brownfield Site



MTA Subway Line

Shangri La Astoria Inc
3721 32nd St.

**Owner
Address**



**Sub-Slab Soil Vapor Sample
with co-located indoor air
sample**



Indoor/Outdoor Air Sample



Soil Vapor Sample

Approx. Scale (ft)



CA RICH CONSULTANTS, INC.

Environmental Specialists Since 1982
17 Dupont Street, Plainview, New York 11803

TITLE: Off-Site Soil Vapor Evaluation Sample Locations		DATE: 3/22/2017
FIGURE: 2		SCALE: AS SHOWN
DRAWING NO.: 2016-15	37-25 31st Street Queens, NY	DRAWN BY: H.R./T.R.B.
		APPR. BY: V.W.

TABLES

Table 1
Validated Volatile Organic Compounds in Sidewalk Soil Vapor
37-25 31st Street
Long Island City, New York
BCP Site #C241182

LOCATION	SV-1		SV-2		SV-3		SV-4		SV-X		*NYSDOH 2006
SAMPLING DATE	2/22/2017		2/22/2017		2/22/2017		2/22/2017		2/22/2017		Matrix 1/Matrix 2
SAMPLE TYPE	Soil Vapor		Sub-Slab Vapor								
Units	ug/m3	Q	ug/m3								
Volatile Organics in Air											
Dichlorodifluoromethane	1.75		1.49		1.66		1.64		1.11		NS
Chloromethane	0.836		0.413	U	0.413	U	0.413	U	0.413	U	NS
Freon-114	1.4	U	NS								
Vinyl chloride	0.511	U	<5								
1,3-Butadiene	0.442	U	NS								
Bromomethane	0.777	U	NS								
Chloroethane	0.528	U	NS								
Ethanol	70.5		60.1		68.2		66.9		52.4		NS
Vinyl bromide	0.874	U	NS								
Acetone	138		60.8		38.7		51.5		80.1		NS
Trichlorofluoromethane	1.3		1.41		1.31		1.3		1.48		NS
Isopropanol	2.4		2		2.14		1.9		2.19		NS
1,1-Dichloroethene	0.793	U	<100								
Tertiary butyl Alcohol	1.52	U	NS								
Methylene chloride	1.74	U	NS								
3-Chloropropene	0.626	U	NS								
Carbon disulfide	0.623	U	2.15		0.623	U	0.623	U	2.25		NS
Freon-113	1.53	U	NS								
trans-1,2-Dichloroethene	0.793	U	NS								
1,1-Dichloroethane	0.809	U	NS								
Methyl tert butyl ether	0.721	U	NS								
2-Butanone	4.98		4.04		4.66		4.25		4.69		NS
cis-1,2-Dichloroethene	0.793	U	<100								
Ethyl Acetate	1.8	U	NS								
Chloroform	0.977	U	1.76		1.4		0.977	U	1.88		NS
Tetrahydrofuran	1.47	U	NS								
1,2-Dichloroethane	0.809	U	NS								
n-Hexane	7.33		3.5		3.95		4.83		4.37		NS
1,1,1-Trichloroethane	1.09	U	<100								
Benzene	18.7		16.3		17.1		10.8		22.7		NS
Carbon tetrachloride	1.26	U	<5								
Cyclohexane	1.63		0.864		1		1.17		0.819		NS
1,2-Dichloropropane	0.924	U	NS								
Bromodichloromethane	1.34	U	NS								
1,4-Dioxane	0.721	U	NS								
Trichloroethene	2.91		6.29		13.1		80.6		6.66		<5
2,2,4-Trimethylpentane	2.41		0.972		1.05		1.33		0.934	U	NS
Heptane	3.34		1.6		1.82		2.12		1.57		NS
cis-1,3-Dichloropropene	0.908	U	NS								
4-Methyl-2-pentanone	2.05	U	NS								
trans-1,3-Dichloropropene	0.908	U	NS								
1,1,2-Trichloroethane	1.09	U	NS								
Toluene	29.7		29.2		35.3		32.7		30.3		NS
2-Hexanone	0.82	U	NS								
Dibromochloromethane	1.7	U	NS								
1,2-Dibromoethane	1.54	U	NS								
Tetrachloroethene	2.16		4.54		1.39		1.93		4.81		<100
Chlorobenzene	0.921	U	NS								
Ethylbenzene	5.73		6.25		6.95		6.08		6.69		NS
p/m-Xylene	20.8		22.7		25.5		21.9		24.7		NS
Bromoform	2.07	U	NS								
Styrene	0.852	U	NS								
1,1,2,2-Tetrachloroethane	1.37	U	NS								
o-Xylene	8.25		8.95		9.95		8.56		9.86		NS
4-Ethyltoluene	1.91		2.07		2.47		2.04		2.42		NS
1,3,5-Trimethylbenzene	1.74		1.93		2.2		1.83		2.15		NS
1,2,4-Trimethylbenzene	6.88		7.57		8.85		7.42		8.55		NS
Benzyl chloride	1.04	U	NS								
1,3-Dichlorobenzene	1.2	U	NS								
1,4-Dichlorobenzene	1.2	U	NS								
1,2-Dichlorobenzene	1.2	U	NS								
1,2,4-Trichlorobenzene	1.48	U	NS								
Hexachlorobutadiene	2.13	U	NS								

Note:

ug/m3 - micrograms per cubic meter

Q - Qualifier

U- Not detected at or above laboratory detection limits.

NS- No standard for specific compound

*NYSDOH Guidance for Evaluating Soil Vapor in the State of New York Oct. 2006 Matrix 1 & 2 levels for "No Further Action" Samples collected over a period of approximately 8 hours SV-X is a duplicate of SV-2

Table 2
Validated Volatile Organic Compounds in Sub-Slab Soil Vapor, Indoor Air and Outdoor Air
37-29 32nd Street
Long Island City, New York

LOCATION	SSV-5		*NYSDOH 2006		IA-3		*NYSDOH 2006		OA-3	
SAMPLING DATE	2/23/2017		Matrix1/Matrix 2		2/23/2017		Matrix1/Matrix 2		2/23/2017	
SAMPLE TYPE	Sub-Slab Soil Vapor		Sub-Slab Vapor		Indoor Air		Ambient Air		Outdoor Air	
	Units	ug/m3	Q		ug/m3	Q			ug/m3	Q
Volatile Organics in Air										
Dichlorodifluoromethane		2.34		NS	3.37		NS		1.8	
Chloromethane		0.413		NS	1.32		NS		1.2	
Freon-114		1.4	U	NS	1.4	U	NS		1.4	U
Vinyl chloride		0.511	U	<5	0.051	U	<0.25		0.051	U
1,3-Butadiene		0.442	U	NS	0.442	U	NS		0.442	U
Bromomethane		0.777	U	NS	0.777	U	NS		0.777	U
Chloroethane		0.528	U	NS	0.528	U	NS		0.528	U
Ethanol		159		NS	71.2		NS		38.3	
Vinyl bromide		0.874	U	NS	0.874	U	NS		0.874	U
Acetone		30.9		NS	26.8		NS		21.2	
Trichlorofluoromethane		3.46		NS	5.23		NS		1.42	
Isopropanol		2.97		NS	12.7		NS		6.44	
1,1-Dichloroethene		0.793	U	<100	0.079	U	<3		0.079	U
Tertiary butyl Alcohol		1.52	U	NS	1.52	U	NS		1.52	U
Methylene chloride		1.74	U	NS	2.95	U	NS		2.98	U
3-Chloropropene		0.626	U	NS	0.626	U	NS		0.626	U
Carbon disulfide		0.623	U	NS	0.623	U	NS		0.623	U
Freon-113		1.53	U	NS	1.53	U	NS		1.53	U
trans-1,2-Dichloroethene		0.793	U	NS	0.793	U	NS		0.793	U
1,1-Dichloroethane		0.809	U	NS	0.809	U	NS		0.809	U
Methyl tert butyl ether		0.721	U	NS	0.721	U	NS		0.721	U
2-Butanone		6.37		NS	2.29		NS		1.47	U
cis-1,2-Dichloroethene		0.793	U	<100	0.079	U	<3		0.079	U
Ethyl Acetate		1.8	U	NS	1.8	U	NS		2.39	U
Chloroform		0.977	U	NS	0.977	U	NS		0.977	U
Tetrahydrofuran		1.97		NS	1.47	U	NS		1.47	U
1,2-Dichloroethane		0.809	U	NS	0.809	U	NS		0.809	U
n-Hexane		7.82		NS	1.59		NS		1.62	
1,1,1-Trichloroethane		3.15		<100	0.109	U	<3		0.109	U
Benzene		10.4		NS	2.47		NS		1.73	
Carbon tetrachloride		1.26	U	<5	0.491		<0.25		0.384	
Cyclohexane		2.59		NS	0.688		NS		0.688	U
1,2-Dichloropropane		0.924	U	NS	0.924	U	NS		0.924	U
Bromodichloromethane		1.34	U	NS	1.34	U	NS		1.34	U
1,4-Dioxane		0.721	U	NS	0.721	U	NS		0.721	U
Trichloroethene		22.3		<5	0.349		<0.25		0.124	
2,2,4-Trimethylpentane		3.1		NS	1.35		NS		1.56	
Heptane		4.75		NS	1.42		NS		0.947	
cis-1,3-Dichloropropene		0.908	U	NS	0.908	U	NS		0.908	U
4-Methyl-2-pentanone		2.05	U	NS	2.05	U	NS		2.05	U
trans-1,3-Dichloropropene		0.908	U	NS	0.908	U	NS		0.908	U
1,1,2-Trichloroethane		1.09	U	NS	1.09	U	NS		1.09	U
Toluene		47.5		NS	9.46		NS		7.01	
2-Hexanone		0.82	U	NS	0.82	U	NS		0.82	U
Dibromochloromethane		1.7	U	NS	1.7	U	NS		1.7	U
1,2-Dibromoethane		1.54	U	NS	1.54	U	NS		1.54	U
Tetrachloroethene		3.01		<100	2.2		<3		2.44	
Chlorobenzene		0.921	U	NS	0.921	U	NS		0.921	U
Ethylbenzene		7.77		NS	1.39		NS		0.969	
p/m-Xylene		27.9		NS	5.04		NS		3.41	
Bromoform		2.07	U	NS	2.07	U	NS		2.07	U
Styrene		0.852	U	NS	0.852	U	NS		0.852	U
1,1,2,2-Tetrachloroethane		1.37	U	NS	1.37	U	NS		1.37	U
o-Xylene		10.9		NS	1.94		NS		1.22	
4-Ethyltoluene		2.67		NS	0.983	U	NS		0.983	U
1,3,5-Trimethylbenzene		2.26		NS	0.983	U	NS		0.983	U
1,2,4-Trimethylbenzene		8.75		NS	2.65		NS		1.14	
Benzyl chloride		1.04	U	NS	1.04	U	NS		1.04	U
1,3-Dichlorobenzene		1.2	U	NS	1.2	U	NS		1.2	U
1,4-Dichlorobenzene		1.2	U	NS	1.2	U	NS		1.2	U
1,2-Dichlorobenzene		1.2	U	NS	1.2	U	NS		1.2	U
1,2,4-Trichlorobenzene		1.48	U	NS	1.48	U	NS		1.48	U
Hexachlorobutadiene		2.13	U	NS	2.13	U	NS		2.13	U

Note:

ug/m3 - micrograms per cubic meter

Q - Qualifier

U- Not detected at or above laboratory detection limits.

NS- No standard for specific compound

*NYSDOH Guidance for Evaluating Soil Vapor in the State of New York Oct. 2006 Matrix 1 & 2 levels for "No Further Action"
Samples collected over a period of approximately 24 hours

Table 3
Validated Volatile Organic Compounds in Sub-Slab Soil Vapor, Indoor Air and Outdoor Air
37-21 31st Street
Long Island City, New York

LOCATION	SSV-6	SSV-7	*NYSDOH 2006	IA-1	IA-2	*NYSDOH 2006	OA-1	OA-2	
SAMPLING DATE	2/23/2017	2/23/2017	Matrix1/Matrix 2	2/23/2017	2/23/2017	Matrix1/Matrix 2	2/23/2017	2/23/2017	
SAMPLE TYPE	Sub-Slab Vapor	Sub-Slab Vapor	Sub-Slab Vapor	Indoor Air	Indoor Air	Ambient Air	Outdoor Air	Outdoor Air	
Units	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	
	Q	Q	Q	Q	Q	Q	Q	Q	
Volatile Organics in Air									
Dichlorodifluoromethane	2.28	0.989	U	NS	1.38	1.42	NS	1.72	1.79
Chloromethane	0.413	0.413	U	NS	1.19	1.26	NS	1.08	1.3
Freon-114	1.4	1.4	U	NS	1.4	1.4	NS	1.4	1.4
Vinyl chloride	0.511	0.511	U	<5	0.051	0.051	U	<0.25	0.051
1,3-Butadiene	0.442	0.442	U	NS	0.442	0.442	U	NS	0.442
Bromomethane	0.777	0.777	U	NS	0.777	0.777	U	NS	0.777
Chloroethane	0.528	0.528	U	NS	0.528	0.528	U	NS	0.528
Ethanol	98.9	123	U	NS	60.7	86.3	NS	33.4	36
Vinyl bromide	0.874	0.874	U	NS	0.874	0.874	U	NS	0.874
Acetone	112	20.4	U	NS	202	120	J	NS	20.9
Trichlorofluoromethane	1.8	1.12	U	NS	1.33	1.41	NS	1.27	1.47
Isopropanol	4.1	2.29	U	NS	10.3	20.3	NS	6.07	6.49
1,1-Dichloroethene	0.793	0.793	U	<100	0.079	0.079	U	<3	0.079
Tertiary butyl Alcohol	1.52	1.52	U	NS	1.52	1.52	U	NS	1.52
Methylene chloride	2.7	1.74	U	NS	5	3.26	NS	2.03	1.99
3-Chloropropene	0.626	0.626	U	NS	0.626	0.626	U	NS	0.626
Carbon disulfide	3.1	0.623	U	NS	0.623	0.623	U	NS	0.623
Freon-113	1.53	1.53	U	NS	1.53	1.53	U	NS	1.53
trans-1,2-Dichloroethene	0.793	0.793	U	NS	0.793	0.793	U	NS	0.793
1,1-Dichloroethane	0.809	0.809	U	NS	0.809	0.809	U	NS	0.809
Methyl tert butyl ether	0.721	0.721	U	NS	0.721	0.721	U	NS	0.721
2-Butanone	7.2	5.78	U	NS	3.48	3.66	NS	1.47	1.47
cis-1,2-Dichloroethene	0.793	0.793	U	<100	0.079	0.079	U	<3	0.079
Ethyl Acetate	1.8	1.8	U	NS	6.09	8.32	NS	2.3	2.52
Chloroform	0.977	0.977	U	NS	0.977	0.977	U	NS	0.977
Tetrahydrofuran	1.73	1.6	U	NS	1.47	1.47	U	NS	1.47
1,2-Dichloroethane	0.809	0.809	U	NS	0.809	0.809	U	NS	0.809
n-Hexane	11.1	6.48	U	NS	18.7	11.9	NS	1.57	1.55
1,1,1-Trichloroethane	1.09	1.09	U	<100	0.109	0.109	U	<3	0.109
Benzene	7.03	7.86	U	NS	2.31	3.39	NS	1.44	1.65
Carbon tetrachloride	1.26	1.26	U	<5	0.365	0.371	<0.25	0.371	0.396
Cyclohexane	2.34	1.76	U	NS	2.57	2.08	NS	0.688	0.688
1,2-Dichloropropane	0.924	0.924	U	NS	0.924	0.924	U	NS	0.924
Bromodichloromethane	1.34	1.34	U	NS	1.34	1.34	U	NS	1.34
1,4-Dioxane	0.721	0.721	U	NS	0.721	0.721	U	NS	0.721
Trichloroethene	25.6	16.4	U	<5	0.527	0.688	<0.25	0.113	0.226
2,2,4-Trimethylpentane	2.62	1.96	U	NS	0.934	0.934	U	NS	1.24
Heptane	6.15	3.72	U	NS	8.48	5.37	NS	1.09	1.16
cis-1,3-Dichloropropene	0.908	0.908	U	NS	0.908	0.908	U	NS	0.908
4-Methyl-2-pentanone	2.05	2.05	U	NS	5.66	3.48	NS	2.05	2.05
trans-1,3-Dichloropropene	0.908	0.908	U	NS	0.908	0.908	U	NS	0.908
1,1,2-Trichloroethane	1.09	1.09	U	NS	1.09	1.09	U	NS	1.09
Toluene	52.4	47.9	U	NS	125	70.5	NS	8.03	7.65
2-Hexanone	0.82	0.82	U	NS	0.82	0.82	U	NS	0.82
Dibromochloromethane	1.7	1.7	U	NS	1.7	1.7	U	NS	1.7
1,2-Dibromoethane	1.54	1.54	U	NS	1.54	1.54	U	NS	1.54
Tetrachloroethene	15.1	6.78	U	<100	2.31	2.16	<3	2.57	2.56
Chlorobenzene	0.921	0.921	U	NS	0.921	0.921	U	NS	0.921
Ethylbenzene	8.25	8.34	U	NS	4.01	3.68	NS	1.03	0.877
p/m-Xylene	29.7	30	U	NS	17.3	14.6	NS	3.69	3.15
Bromoform	2.07	2.07	U	NS	2.07	2.07	U	NS	2.07
Styrene	0.852	0.852	U	NS	0.852	0.852	U	NS	0.852
1,1,2,2-Tetrachloroethane	1.37	1.37	U	NS	1.37	1.37	U	NS	1.37
o-Xylene	11.7	11.9	U	NS	6.12	5.04	NS	1.32	1.1
4-Ethyltoluene	2.81	2.87	U	NS	0.983	0.983	U	NS	0.983
1,3,5-Trimethylbenzene	2.53	2.63	U	NS	1.08	1.11	NS	0.983	0.983
1,2,4-Trimethylbenzene	10.3	10.7	U	NS	3.87	3.9	NS	1.09	0.983
Benzyl chloride	1.04	1.04	U	NS	1.04	1.04	U	NS	1.04
1,3-Dichlorobenzene	1.2	1.2	U	NS	1.2	1.2	U	NS	1.2
1,4-Dichlorobenzene	1.2	1.2	U	NS	1.2	1.2	U	NS	1.2
1,2-Dichlorobenzene	1.2	1.2	U	NS	1.2	1.2	U	NS	1.2
1,2,4-Trichlorobenzene	1.48	1.48	U	NS	1.48	1.48	U	NS	1.48
Hexachlorobutadiene	2.13	2.13	U	NS	2.13	2.13	U	NS	2.13

Note:
ug/m3 - micrograms per cubic meter
Q - Qualifier
U - Not detected at or above laboratory detection limits.
UJ - The analyte was not detected above the sample reporting limit; and the reporting limit is approximate.
NS- No standard for specific compound

*NYSDOH Guidance for Evaluating Soil Vapor in the State of New York Oct. 2006 Matrix 1 & 2 levels for "No Further Action"
Samples collected over a period of approximately 24 hours

IA-1 was collected co-located with SSV-7
IA-2 was collected co-located with SSV-6

Appendix A



Certified Mail/RRR

November 28, 2016

Current Owner/Occupant

31-17 38th Avenue
Queens, NY 11101

Re: **Request for Access to Perform
Indoor and Outdoor Air
and Sub-Slab Soil Vapor Testing
31-17 38th Avenue
Queens, NY 11101**

To Whom It May Concern,

At the direction of the New York State Department of Environmental Conservation (NYSDEC) and the New York State Department of Health (NYSDOH), CA RICH Consultants, Inc. (CA RICH) is performing a soil vapor intrusion investigation at several properties in your area. The investigation is being conducted as part of the New York State Brownfield Cleanup Program (NYSBCP) for the site located at 37-25 31st Street, (NYSDEC Site #: C241182). The NYSDEC and the NYSDOH instructed CA RICH to include 31-17 38th Avenue in this investigation.

We request permission to enter your premises to collect indoor air, outdoor air and sub-slab soil vapor samples. The sample is collected over a twenty-four hour period. Once the sample is collected, the tube will be removed and the hole will be permanently sealed. The installation procedure should take about one to two hours to complete.

The sub-slab vapor sample is collected by drilling a small diameter hole into basement floor or if your home has no basement, through the foundation slab. Tubing is then inserted through the hole so that a sample can be obtained of the 'vapor' under your premises. In addition, we will be obtaining indoor and outdoor air samples, which are collected over a twenty-four hour period with a collection canister. No drilling is required to conduct these samples.

The work will be done in such a manner to minimize interference with the use of your premises. Any debris generated as part of this work will be properly removed.

You will not be charged for this work and the results of any laboratory samples taken at your home will be provided to you, free of charge.

We ask for your agreement to allow us access to your property to conduct this investigation. Please sign below to indicate your agreement and return it to us in the enclosed stamped/self-addressed envelope. A second copy of this letter is included for your records. Upon receiving the signed agreement, we will call you to schedule the collection of the samples at your convenience.

You may also call Caroline Eigenbrodt of the NYSDEC at 518-402-9621 or Stephanie Selmer at the New York State Department of Health (NYSDOH) at 518-402-7860 for more information.

Thank you for your cooperation.

Respectfully,

CA RICH CONSULTANTS, INC.



Victoria Whelan
Project Manger

Location: 31-17 38th Avenue

Agreed

Signature: _____

Printed Name: _____

Date: _____

Telephone No. (Day) _____

Telephone No. (Evening) _____

cc: Caroline Eigenbrodt, NYSDEC
Stephanie Selmer, NYSDOH



Certified Mail/RRR

November 28, 2016

Current Owner/Occupant

31-01 38th Avenue
Queens, NY 11101

Re: **Request for Access to Perform
Indoor and Outdoor Air
and Sub-Slab Soil Vapor Testing
31-01 38th Avenue
Queens, NY 11101**

To whom this may concern,

At the direction of the New York State Department of Environmental Conservation (NYSDEC) and the New York State Department of Health (NYSDOH), CA RICH Consultants, Inc. (CA RICH) is performing a soil vapor intrusion investigation at several properties in your area. The investigation is being conducted as part of the New York State Brownfield Cleanup Program (NYSBCP) for the site located at 37-25 31st Street, (NYSDEC Site #: C241182). The NYSDEC and the NYSDOH instructed CA RICH to include 31-01 38th Avenue in this investigation.

We request permission to enter your premises to collect indoor air, outdoor air and sub-slab soil vapor samples. The sample is collected over a twenty-four hour period. Once the sample is collected, the tube will be removed and the hole will be permanently sealed. The installation procedure should take about one to two hours to complete.

The sub-slab vapor sample is collected by drilling a small diameter hole into basement floor or if your home has no basement, through the foundation slab. Tubing is then inserted through the hole so that a sample can be obtained of the 'vapor' under your premises. In addition, we will be obtaining indoor and outdoor air samples, which are collected over a twenty-four hour period with a collection canister. No drilling is required to conduct these samples.

The work will be done in such a manner to minimize interference with the use of your premises. Any debris generated as part of this work will be properly removed.

You will not be charged for this work and the results of any laboratory samples taken at your home will be provided to you, free of charge.

We ask for your agreement to allow us access to your property to conduct this investigation. Please sign below to indicate your agreement and return it to us in the enclosed stamped/self-

addressed envelope. A second copy of this letter is included for your records. Upon receiving the signed agreement, we will call you to schedule the collection of the samples at your convenience.

You may also call Caroline Eigenbrodt of the NYSDEC at 518-402-9621 or Stephanie Selmer at the New York State Department of Health (NYSDOH) at 518-402-7860 for more information.

Thank you for your cooperation.

Respectfully,

CA RICH CONSULTANTS, INC.



Victoria Whelan
Project Manger

Location: 31-01 38th Avenue

Agreed

Signature: _____

Printed Name: _____

Date: _____

Telephone No. (Day) _____

Telephone No. (Evening) _____

cc: Caroline Eigenbrodt, NYSDEC
Stephanie Selmer, NYSDOH



Certified Mail/RRR

November 28, 2016

Current Owner/Occupant

31-05 38th Avenue
Queens, NY 11101

Re: **Request for Access to Perform
Indoor and Outdoor Air
and Sub-Slab Soil Vapor Testing
31-01 38th Avenue
Queens, NY 11101**

To Whom It May Concern,

At the direction of the New York State Department of Environmental Conservation (NYSDEC) and the New York State Department of Health (NYSDOH), CA RICH Consultants, Inc. (CA RICH) is performing a soil vapor intrusion investigation at several properties in your area. The investigation is being conducted as part of the New York State Brownfield Cleanup Program (NYSBCP) for the site located at 37-25 31st Street, (NYSDEC Site #: C241182). The NYSDEC and the NYSDOH instructed CA RICH to include 31-01 38th Avenue in this investigation.

We request permission to enter your premises to collect indoor air, outdoor air and sub-slab soil vapor samples. The sample is collected over a twenty-four hour period. Once the sample is collected, the tube will be removed and the hole will be permanently sealed. The installation procedure should take about one to two hours to complete.

The sub-slab vapor sample is collected by drilling a small diameter hole into basement floor or if your home has no basement, through the foundation slab. Tubing is then inserted through the hole so that a sample can be obtained of the 'vapor' under your premises. In addition, we will be obtaining indoor and outdoor air samples, which are collected over a twenty-four hour period with a collection canister. No drilling is required to conduct these samples.

The work will be done in such a manner to minimize interference with the use of your premises. Any debris generated as part of this work will be properly removed.

You will not be charged for this work and the results of any laboratory samples taken at your home will be provided to you, free of charge.

We ask for your agreement to allow us access to your property to conduct this investigation. Please sign below to indicate your agreement and return it to us in the enclosed stamped/self-addressed envelope. A second copy of this letter is included for your records. Upon receiving the signed agreement, we will call you to schedule the collection of the samples at your convenience.

You may also call Caroline Eigenbrodt of the NYSDEC at 518-402-9621 or Stephanie Selmer at the New York State Department of Health (NYSDOH) at 518-402-7860 for more information.

Thank you for your cooperation.

Respectfully,

CA RICH CONSULTANTS, INC.



Victoria Whelan
Project Manger

Location: 31-01 38th Avenue

Agreed

Signature: _____

Printed Name: _____

Date: _____

Telephone No. (Day) _____

Telephone No. (Evening) _____

cc: Caroline Eigenbrodt, NYSDEC
Stephanie Selmer, NYSDOH



Certified Mail/RRR

November 28, 2016

Current Owner/Occupant

37-40 31st Street
Queens, NY 11101

Re: **Request for Access to Perform
Indoor and Outdoor Air
and Sub-Slab Soil Vapor Testing
37-40 31st Street
Queens, NY 11101**

To Whom It May Concern,

At the direction of the New York State Department of Environmental Conservation (NYSDEC) and the New York State Department of Health (NYSDOH), CA RICH Consultants, Inc. (CA RICH) is performing a soil vapor intrusion investigation at several properties in your area. The investigation is being conducted as part of the New York State Brownfield Cleanup Program (NYSBCP) for the site located at 37-25 31st Street, (NYSDEC Site #: C241182). The NYSDEC and the NYSDOH instructed CA RICH to include 37-40 31st Street in this investigation.

We request permission to enter your premises to collect indoor air, outdoor air and sub-slab soil vapor samples. The sample is collected over a twenty-four hour period. Once the sample is collected, the tube will be removed and the hole will be permanently sealed. The installation procedure should take about one to two hours to complete.

The sub-slab vapor sample is collected by drilling a small diameter hole into basement floor or if your home has no basement, through the foundation slab. Tubing is then inserted through the hole so that a sample can be obtained of the 'vapor' under your premises. In addition, we will be obtaining indoor and outdoor air samples, which are collected over a twenty-four hour period with a collection canister. No drilling is required to conduct these samples.

The work will be done in such a manner to minimize interference with the use of your premises. Any debris generated as part of this work will be properly removed.

You will not be charged for this work and the results of any laboratory samples taken at your home will be provided to you, free of charge.

We ask for your agreement to allow us access to your property to conduct this investigation. Please sign below to indicate your agreement and return it to us in the enclosed stamped/self-

addressed envelope. A second copy of this letter is included for your records. Upon receiving the signed agreement, we will call you to schedule the collection of the samples at your convenience.

You may also call Caroline Eigenbrodt of the NYSDEC at 518-402-9621 or Stephanie Selmer at the New York State Department of Health (NYSDOH) at 518-402-7860 for more information.

Thank you for your cooperation.

Respectfully,

CA RICH CONSULTANTS, INC.



Victoria Whelan
Project Manger

Location: 37-40 31st Street

Agreed

Signature: _____

Printed Name: _____

Date: _____

Telephone No. (Day) _____

Telephone No. (Evening) _____

cc: Caroline Eigenbrodt, NYSDEC
Stephanie Selmer, NYSDOH



Certified Mail/RRR

November 28, 2016

Current Owner/Occupant

37-11 30th Street
Queens, NY 11101

Re: **Request for Access to Perform
Indoor and Outdoor Air
and Sub-Slab Soil Vapor Testing
37-11 30th Street
Queens, NY 11101**

To Whom It May Concern,

At the direction of the New York State Department of Environmental Conservation (NYSDEC) and the New York State Department of Health (NYSDOH), CA RICH Consultants, Inc. (CA RICH) is performing a soil vapor intrusion investigation at several properties in your area. The investigation is being conducted as part of the New York State Brownfield Cleanup Program (NYSBCP) for the site located at 37-25 31st Street, (NYSDEC Site #: C241182). The NYSDEC and the NYSDOH instructed CA RICH to include 37-11 30th Street in this investigation.

We request permission to enter your premises to collect indoor air, outdoor air and sub-slab soil vapor samples. The sample is collected over a twenty-four hour period. Once the sample is collected, the tube will be removed and the hole will be permanently sealed. The installation procedure should take about one to two hours to complete.

The sub-slab vapor sample is collected by drilling a small diameter hole into basement floor or if your home has no basement, through the foundation slab. Tubing is then inserted through the hole so that a sample can be obtained of the 'vapor' under your premises. In addition, we will be obtaining indoor and outdoor air samples, which are collected over a twenty-four hour period with a collection canister. No drilling is required to conduct these samples.

The work will be done in such a manner to minimize interference with the use of your premises. Any debris generated as part of this work will be properly removed.

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You may also call Caroline Eigenbrodt of the NYSDEC at 518-402-9621 or Stephanie Selmer at the New York State Department of Health (NYSDOH) at 518-402-7860 for more information.

Thank you for your cooperation.

Respectfully,

CA RICH CONSULTANTS, INC.



Victoria Whelan
Project Manger

Location: 37-11 30th Street

Agreed

Signature: _____

Printed Name: _____

Date: _____

Telephone No. (Day) _____

Telephone No. (Evening) _____

cc: Caroline Eigenbrodt, NYSDEC
Stephanie Selmer, NYSDOH



Certified Mail/RRR

November 28, 2016

Current Owner/Occupant

37-21 31st Street
Queens, NY 11101

Re: **Request for Access to Perform
Indoor and Outdoor Air
and Sub-Slab Soil Vapor Testing
37-31 31st Street
Queens, NY 11101**

To Whom It May Concern,

At the direction of the New York State Department of Environmental Conservation (NYSDEC) and the New York State Department of Health (NYSDOH), CA RICH Consultants, Inc. (CA RICH) is performing a soil vapor intrusion investigation at several properties in your area. The investigation is being conducted as part of the New York State Brownfield Cleanup Program (NYSBCP) for the site located at 37-25 31st Street, (NYSDEC Site #: C241182). The NYSDEC and the NYSDOH instructed CA RICH to include 37-21 31st Street in this investigation.

We request permission to enter your premises to collect indoor air, outdoor air and sub-slab soil vapor samples. The sample is collected over a twenty-four hour period. Once the sample is collected, the tube will be removed and the hole will be permanently sealed. The installation procedure should take about one to two hours to complete.

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Respectfully,

CA RICH CONSULTANTS, INC.



Victoria Whelan
Project Manger

Location: 37-21 31st Street

Agreed

Signature: _____

Printed Name: _____

Date: _____

Telephone No. (Day) _____

Telephone No. (Evening) _____

cc: Caroline Eigenbrodt, NYSDEC
Stephanie Selmer, NYSDOH



Certified Mail/RRR

November 28, 2016

Current Owner/Occupant

37-27 32nd Street
Queens, NY 11101

Re: **Request for Access to Perform
Indoor and Outdoor Air
and Sub-Slab Soil Vapor Testing
37-27 32nd Street
Queens, NY 11101**

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Respectfully,

CA RICH CONSULTANTS, INC.



Victoria Whelan
Project Manger

Location: 37-27 32nd Street

Agreed

Signature: _____

Printed Name: _____

Date: _____

Telephone No. (Day) _____

Telephone No. (Evening) _____

cc: Caroline Eigenbrodt, NYSDEC
Stephanie Selmer, NYSDOH



Certified Mail/RRR

November 28, 2016

Klirou LLC
Current owner/occupant
37-29 32nd Street
Queens, NY 11101

Re: **Request for Access to Perform
Indoor and Outdoor Air
and Sub-Slab Soil Vapor Testing
37-29 32nd Street
Queens, NY 11101**

To Whom It May Concern,

At the direction of the New York State Department of Environmental Conservation (NYSDEC) and the New York State Department of Health (NYSDOH), CA RICH Consultants, Inc. (CA RICH) is performing a soil vapor intrusion investigation at several properties in your area. The investigation is being conducted as part of the New York State Brownfield Cleanup Program (NYSBCP) for the site located at 37-25 31st Street, (NYSDEC Site #: C241182). The NYSDEC and the NYSDOH instructed CA RICH to include 37-29 32nd Street in this investigation.

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You may also call Caroline Eigenbrodt of the NYSDEC at 518-402-9621 or Stephanie Selmer at the New York State Department of Health (NYSDOH) at 518-402-7860 for more information.

Thank you for your cooperation.

Respectfully,

CA RICH CONSULTANTS, INC.



Victoria Whelan
Project Manger

Location: 37-29 32nd Street

Agreed

Signature: _____

Printed Name: _____

Date: _____

Telephone No. (Day) _____

Telephone No. (Evening) _____

cc: Caroline Eigenbrodt, NYSDEC
Stephanie Selmer, NYSDOH



Certified Mail/RRR

November 28, 2016

Current Owner/Occupant

37-31 32nd Street
Queens, NY 11101

Re: **Request for Access to Perform
Indoor and Outdoor Air
and Sub-Slab Soil Vapor Testing
37-31 32nd Street
Queens, NY 11101**

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Thank you for your cooperation.

Respectfully,

CA RICH CONSULTANTS, INC.



Victoria Whelan
Project Manger

Location: 37-31 32nd Street

Agreed

Signature: _____

Printed Name: _____

Date: _____

Telephone No. (Day) _____

Telephone No. (Evening) _____

cc: Caroline Eigenbrodt, NYSDEC
Stephanie Selmer, NYSDOH

7013 2250 0000 9673 3356

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Certified Fee	3.00
Return Receipt Fee (Endorsement Required)	3.00
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$ 646.5

11-26

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 Street, Apt. No.; or PO Box No.: 31-01 38th Avenue
 City, State, ZIP+4: Queens, N.Y. 11101

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Certified Fee	3.00
Return Receipt Fee (Endorsement Required)	3.00
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$ 646.5

11-26

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Sent To: Owner/Occupant
 Street, Apt. No.; or PO Box No.: 31-07 38 Avenue
 City, State, ZIP+4: Queens, N.Y. 11101

PS Form 3800, August 2006 See Reverse for Instructions

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Certified Fee	3.00
Return Receipt Fee (Endorsement Required)	3.00
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$ 646.5

11-26

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Sent To: Owner/Occupant
 Street, Apt. No.; or PO Box No.: 37-11 30th Street
 City, State, ZIP+4: Queens, N.Y. 11101

PS Form 3800, August 2006 See Reverse for Instructions

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Certified Fee	3.00
Return Receipt Fee (Endorsement Required)	3.00
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$ 646.5

11-26

Postmark Here

Sent To: Owner/Occupant
 Street, Apt. No.; or PO Box No.: 37-21 31st Street
 City, State, ZIP+4: Queens, N.Y. 11101

PS Form 3800, August 2006 See Reverse for Instructions

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Certified Fee	3.00
Return Receipt Fee (Endorsement Required)	3.00
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$ 646.5

11-26

Postmark Here

Sent To: Owner/Occupant
 Street, Apt. No.; or PO Box No.: 37-27 32nd Street
 City, State, ZIP+4: Queens, N.Y. 11101

PS Form 3800, August 2006 See Reverse for Instructions

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OFFICIAL USE

Postage	\$ 46.5
Certified Fee	3.00
Return Receipt Fee (Endorsement Required)	3.00
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$ 646.5

11-26

Postmark Here

Sent To: Girou LLC Owner/Occupant
 Street, Apt. No.; or PO Box No.: 37-29 32nd Street
 City, State, ZIP+4: Queens, N.Y. 11101

PS Form 3800, August 2006 See Reverse for Instructions

7099 3400 0012 5031 4497

U.S. Postal Service
CERTIFIED MAIL RECEIPT
(Domestic Mail Only; No Insurance Coverage Provided)

Article Sent To:
Owner/Occupant 37-31 32nd St. Queens

Postage	\$ 46.5	11-26 Postmark Here
Certified Fee	3.00	
Return Receipt Fee (Endorsement Required)	3.00	
Restricted Delivery Fee (Endorsement Required)		
Total Postage & Fees	\$ 6.46 ⁵	

Name (Please Print Clearly to be completed by addressee)
 CA Rich Consultants, Inc.
 Street, Apt. No., or PO Box No. 17 Dupont Street
 City, State, ZIP+4 Plainview, New York 11800
 PS Form 3800, July 1999 See Reverse for Instructions

7013 2250 0000 9673 3363

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Postage	\$ 46.5	11-26 Postmark Here
Certified Fee	3.00	
Return Receipt Fee (Endorsement Required)	3.00	
Restricted Delivery Fee (Endorsement Required)		
Total Postage & Fees	\$ 6.46.5	

Sent To
 Owner/Occupant
 Street, Apt. No., or PO Box No. 37-40 31st Street
 City, State, ZIP+4 Queens, N.Y. 11101
 PS Form 3800, August 2006 See Reverse for Instructions

7013 2250 0000 9673 3332

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For delivery information visit our website at www.usps.com®
OFFICIAL USE

Postage	\$ 46.5	11-26-16 Postmark Here
Certified Fee	3.00	
Return Receipt Fee (Endorsement Required)	3.00	
Restricted Delivery Fee (Endorsement Required)		
Total Postage & Fees	\$ 6.46.5	

Sent To
 31 05 38th Ave / Owner/Occupant
 Street, Apt. No., or PO Box No.
 City, State, ZIP+4 Queens NY 11101
 PS Form 3800, August 2006 See Reverse for Instructions

Appendix B

NEW YORK STATE DEPARTMENT OF HEALTH
INDOOR AIR QUALITY QUESTIONNAIRE AND BUILDING INVENTORY
CENTER FOR ENVIRONMENTAL HEALTH

This form must be completed for each residence involved in indoor air testing.

Preparer's Name William J Fitchett Date/Time Prepared 3/3/17
Preparer's Affiliation CA RICH Consultants, Inc. Phone No. 516-576-8844

Purpose of Investigation Off-site soil vapor intrusion investigation for BCP Site # C241182

1. OCCUPANT: Valco Building Materials, Inc.

Interviewed: Y N

Last Name: _____ First Name: _____

Address: 37-21 31st Street

County: Queens

Home Phone: _____ Office Phone: _____

Number of Occupants/persons at this location _____ Age of Occupants _____

2. OWNER OR LANDLORD: (Check if same as occupant) Alma Realty, Corp.

Interviewed: Y / N

Last Name: _____ First Name: _____

Address: 31-10 37th Avenue

County: Queens

Home Phone: _____ Office Phone: 718-267-0300

3. BUILDING CHARACTERISTICS

Type of Building: (Circle appropriate response)

- Residential
- Industrial
- School
- Church
- Commercial/Multi-use
- Other: _____

If the property is residential, type? (Circle appropriate response)

- | | | |
|--------------|-----------------|--------------------------------------|
| Ranch | 2-Family | 3-Family |
| Raised Ranch | Split Level | Colonial |
| Cape Cod | Contemporary | Mobile Home |
| Duplex | Apartment House | Townhouses/Condos |
| Modular | Log Home | Other: <u>residential apartments</u> |

If multiple units, how many? _____

If the property is commercial, type?

Business Type(s) Woodworking shop

Does it include residences (i.e., multi-use)? Y/N If yes, how many? _____

Other characteristics:

Number of floors 6

Building age _____

Is the building insulated? Y / N

How air tight? Tight / Average / Not Tight

4. AIRFLOW

Use air current tubes or tracer smoke to evaluate airflow patterns and qualitatively describe:

Airflow between floors

Airflow near source

Outdoor air infiltration

Infiltration into air ducts

5. BASEMENT AND CONSTRUCTION CHARACTERISTICS (Circle all that apply)

- a. Above grade construction: wood frame concrete stone brick
- b. Basement type: full crawlspace slab other _____
- c. Basement floor: concrete dirt stone other _____
- d. Basement floor: uncovered covered covered with _____
- e. Concrete floor: unsealed sealed sealed with _____
- f. Foundation walls: poured block stone other _____
- g. Foundation walls: unsealed sealed sealed with _____
- h. The basement is: wet damp dry moldy
- i. The basement is: finished unfinished partially finished
- j. Sump present? Y / N
- k. Water in sump? Y / N / not applicable

Basement/Lowest level depth below grade: ~15 (feet)

Identify potential soil vapor entry points and approximate size (e.g., cracks, utility ports, drains)

Some cracks in slab

6. HEATING, VENTING and AIR CONDITIONING (Circle all that apply)

Type of heating system(s) used in this building: (circle all that apply – note primary)

- Hot air circulation
- Space Heaters
- Electric baseboard
- Heat pump
- Stream radiation
- Wood stove
- Hot water baseboard
- Radiant floor
- Outdoor wood boiler
- Other _____

The primary type of fuel used is:

- Natural Gas
- Electric
- Wood
- Fuel Oil
- Propane
- Coal
- Kerosene
- Solar

Domestic hot water tank fueled by: _____

Boiler/furnace located in: Basement Outdoors Main Floor Other _____

Air conditioning: Central Air Window units Open Windows None

Are there air distribution ducts present? Y / N

Describe the supply and cold air return ductwork, and its condition where visible, including whether there is a cold air return and the tightness of duct joints. Indicate the locations on the floor plan diagram.

Four horizontal lines for describing ductwork.

7. OCCUPANCY

Is basement/lowest level occupied? Full-time Occasionally Seldom Almost Never

Level General Use of Each Floor (e.g., familyroom, bedroom, laundry, workshop, storage)

Basement ventilated parking garage + storage area
1st Floor woodworking shop
2nd Floor residential apartments
3rd Floor residential apartments
4th Floor residential apartments

8. FACTORS THAT MAY INFLUENCE INDOOR AIR QUALITY

- a. Is there an attached garage? Note ventilated parking garage in basement
b. Does the garage have a separate heating unit?
c. Are petroleum-powered machines or vehicles stored in the garage (e.g., lawnmower, atv, car)
d. Has the building ever had a fire?
e. Is a kerosene or unvented gas space heater present?
f. Is there a workshop or hobby/craft area? 1st floor woodworking
g. Is there smoking in the building?
h. Have cleaning products been used recently?
i. Have cosmetic products been used recently?

j. Has painting/staining been done in the last 6 months? Y / Where & When? _____

k. Is there new carpet, drapes or other textiles? Y / Where & When? _____

l. Have air fresheners been used recently? Y / When & Type? _____

m. Is there a kitchen exhaust fan? Y / If yes, where vented? _____

n. Is there a bathroom exhaust fan? Y / If yes, where vented? _____

o. Is there a clothes dryer? Y / If yes, is it vented outside? Y / N

p. Has there been a pesticide application? Y / When & Type? _____

Are there odors in the building? Y /
If yes, please describe: _____

Do any of the building occupants use solvents at work? Y /
(e.g., chemical manufacturing or laboratory, auto mechanic or auto body shop, painting, fuel oil delivery, boiler mechanic, pesticide application, cosmetologist)

If yes, what types of solvents are used? _____

If yes, are their clothes washed at work? Y / N

Do any of the building occupants regularly use or work at a dry-cleaning service? (Circle appropriate response)

- Yes, use dry-cleaning regularly (weekly) No
- Yes, use dry-cleaning infrequently (monthly or less) Unknown
- Yes, work at a dry-cleaning service

Is there a radon mitigation system for the building/structure? Y / Date of Installation: _____
Is the system active or passive? Active/Passive

9. WATER AND SEWAGE

Water Supply: Public Water Drilled Well Driven Well Dug Well Other: _____

Sewage Disposal: Public Sewer Septic Tank Leach Field Dry Well Other: _____

10. RELOCATION INFORMATION (for oil spill residential emergency)

a. Provide reasons why relocation is recommended: _____

b. Residents choose to: remain in home relocate to friends/family relocate to hotel/motel

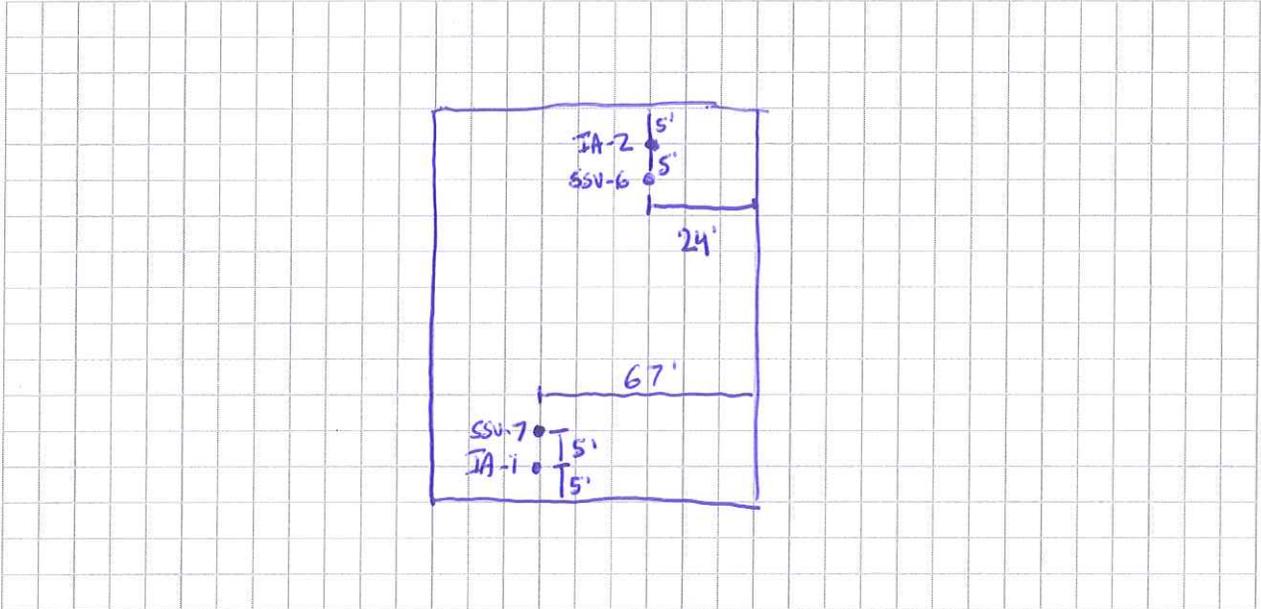
c. Responsibility for costs associated with reimbursement explained? Y / N

d. Relocation package provided and explained to residents? Y / N

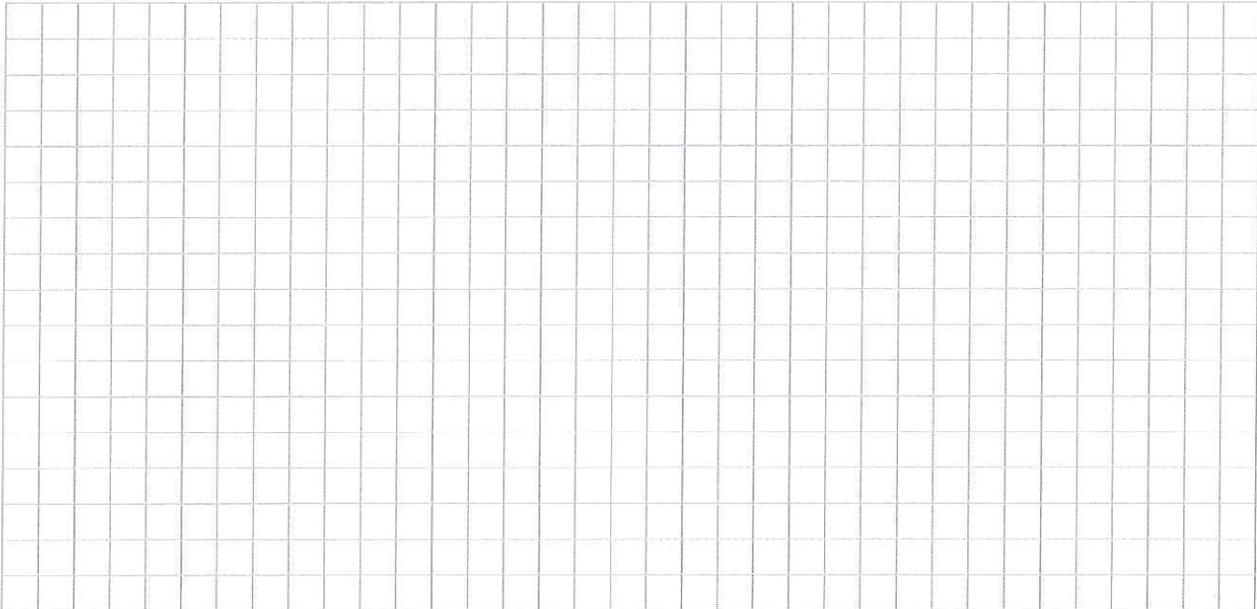
11. FLOOR PLANS

Draw a plan view sketch of the basement and first floor of the building. Indicate air sampling locations, possible indoor air pollution sources and PID meter readings. If the building does not have a basement, please note.

Basement:



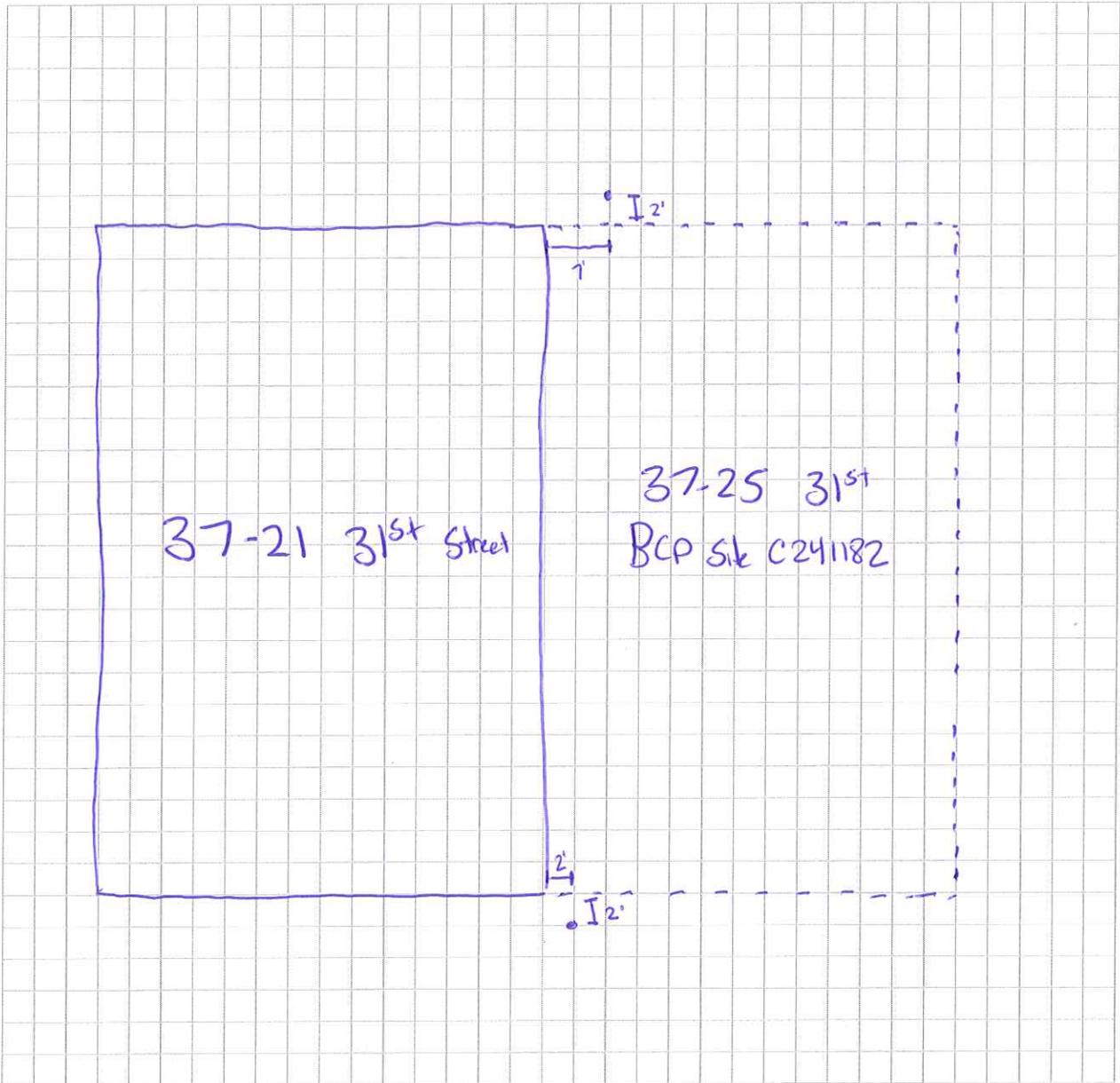
First Floor:



12. OUTDOOR PLOT

Draw a sketch of the area surrounding the building being sampled. If applicable, provide information on spill locations, potential air contamination sources (industries, gas stations, repair shops, landfills, etc.), outdoor air sampling location(s) and PID meter readings.

Also indicate compass direction, wind direction and speed during sampling, the locations of the well and septic system, if applicable, and a qualifying statement to help locate the site on a topographic map.



**NEW YORK STATE DEPARTMENT OF HEALTH
INDOOR AIR QUALITY QUESTIONNAIRE AND BUILDING INVENTORY
CENTER FOR ENVIRONMENTAL HEALTH**

This form must be completed for each residence involved in indoor air testing.

Preparer's Name William J Fitchett Date/Time Prepared 3/3/17
Preparer's Affiliation CA RICH Consultants, Inc Phone No. 516-576-8844

Purpose of Investigation off-site soil vapor intrusion investigation
for BCP site # C241182

1. OCCUPANT: Commercial Warehouse utilized for storage

Interviewed: Y N

Last Name: _____ First Name: _____

Address: 37-29 32nd Street

County: Queens

Home Phone: _____ Office Phone: 718-383-7336

Number of Occupants/persons at this location 1 Age of Occupants _____

2. OWNER OR LANDLORD: (Check if same as occupant) Christo Fifth Avenue

Interviewed: Y / N

Last Name: _____ First Name: _____

Address: 35 West 45th Street, 3rd Floor

County: New York

Home Phone: _____ Office Phone: 917-836-4841

3. BUILDING CHARACTERISTICS

Type of Building: (Circle appropriate response)

Residential
Industrial

School
Church

Commercial/Multi-use
Other: storage warehouse

If the property is residential, type? (Circle appropriate response)

- | | | |
|--------------|-----------------|-------------------|
| Ranch | 2-Family | 3-Family |
| Raised Ranch | Split Level | Colonial |
| Cape Cod | Contemporary | Mobile Home |
| Duplex | Apartment House | Townhouses/Condos |
| Modular | Log Home | Other: _____ |

If multiple units, how many? _____

If the property is commercial, type?

Business Type(s) storage warehouse

Does it include residences (i.e., multi-use)? Y N If yes, how many? _____

Other characteristics:

Number of floors 1

Building age _____

Is the building insulated? Y N

How air tight? Tight / Average / Not Tight

4. AIRFLOW

Use air current tubes or tracer smoke to evaluate airflow patterns and qualitatively describe:

Airflow between floors

Airflow near source

Outdoor air infiltration

Infiltration into air ducts

5. BASEMENT AND CONSTRUCTION CHARACTERISTICS (Circle all that apply)

- a. Above grade construction: wood frame concrete stone brick
- b. Basement type: full crawlspace slab other _____
- c. Basement floor: concrete dirt stone other _____
- d. Basement floor: uncovered covered covered with _____
- e. Concrete floor: unsealed sealed sealed with _____
- f. Foundation walls: poured block stone other _____
- g. Foundation walls: unsealed sealed sealed with _____
- h. The basement is: wet damp dry moldy
- i. The basement is: finished unfinished partially finished
- j. Sump present? Y / N
- k. Water in sump? Y / N not applicable

Basement/Lowest level depth below grade: _____ (feet) no basement

Identify potential soil vapor entry points and approximate size (e.g., cracks, utility ports, drains)

a few cracks noted in slab.

6. HEATING, VENTING and AIR CONDITIONING (Circle all that apply)

Type of heating system(s) used in this building: (circle all that apply – note primary)

- Hot air circulation Heat pump Hot water baseboard
- Space Heaters Stream radiation Radiant floor
- Electric baseboard Wood stove Outdoor wood boiler Other _____

The primary type of fuel used is:

- Natural Gas Fuel Oil Kerosene
- Electric Propane Solar
- Wood Coal

Domestic hot water tank fueled by: _____

Boiler/furnace located in: Basement Outdoors Main Floor Other _____

Air conditioning: Central Air Window units Open Windows None

Are there air distribution ducts present? Y / N

Describe the supply and cold air return ductwork, and its condition where visible, including whether there is a cold air return and the tightness of duct joints. Indicate the locations on the floor plan diagram.

7. OCCUPANCY

Is basement/lowest level occupied? Full-time Occasionally Seldom Almost Never

Level General Use of Each Floor (e.g., familyroom, bedroom, laundry, workshop, storage)

Basement No basement

1st Floor Commercial storage warehouse w/ office in rear

2nd Floor _____

3rd Floor _____

4th Floor _____

8. FACTORS THAT MAY INFLUENCE INDOOR AIR QUALITY

a. Is there an attached garage? Y / N Note: tenant's car is stored inside building

b. Does the garage have a separate heating unit? Y / N / NA

c. Are petroleum-powered machines or vehicles stored in the garage (e.g., lawnmower, atv, car) Y / N / NA
Please specify _____

d. Has the building ever had a fire? Y / N When? _____

e. Is a kerosene or unvented gas space heater present? Y / N Where? _____

f. Is there a workshop or hobby/craft area? Y / N Where & Type? _____

g. Is there smoking in the building? Y / N How frequently? _____

h. Have cleaning products been used recently? Y / N When & Type? _____

i. Have cosmetic products been used recently? Y / N When & Type? _____

j. Has painting/staining been done in the last 6 months? Y / N Where & When? _____

k. Is there new carpet, drapes or other textiles? Y / N Where & When? _____

l. Have air fresheners been used recently? Y / N When & Type? _____

m. Is there a kitchen exhaust fan? Y / N If yes, where vented? NO Kitchen

n. Is there a bathroom exhaust fan? Y / N If yes, where vented? _____

o. Is there a clothes dryer? Y / N If yes, is it vented outside? Y / N

p. Has there been a pesticide application? Y / N When & Type? _____

Are there odors in the building? Y / N
If yes, please describe: _____

Do any of the building occupants use solvents at work? Y / N
(e.g., chemical manufacturing or laboratory, auto mechanic or auto body shop, painting, fuel oil delivery, boiler mechanic, pesticide application, cosmetologist)

If yes, what types of solvents are used? _____

If yes, are their clothes washed at work? Y / N

Do any of the building occupants regularly use or work at a dry-cleaning service? (Circle appropriate response)

Yes, use dry-cleaning regularly (weekly) No
Yes, use dry-cleaning infrequently (monthly or less) Unknown
Yes, work at a dry-cleaning service

Is there a radon mitigation system for the building/structure? Y / N Date of Installation: _____
Is the system active or passive? Active/Passive

9. WATER AND SEWAGE

Water Supply: Public Water Drilled Well Driven Well Dug Well Other: _____

Sewage Disposal: Public Sewer Septic Tank Leach Field Dry Well Other: _____

10. RELOCATION INFORMATION (for oil spill residential emergency)

a. Provide reasons why relocation is recommended: _____

b. Residents choose to: remain in home relocate to friends/family relocate to hotel/motel

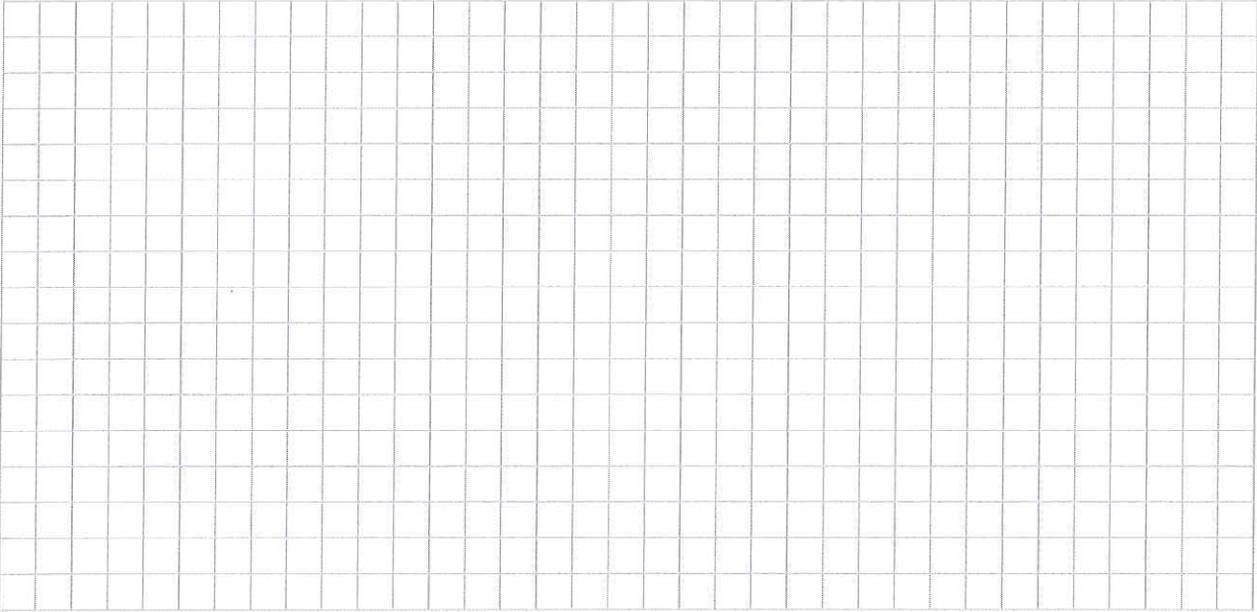
c. Responsibility for costs associated with reimbursement explained? Y / N

d. Relocation package provided and explained to residents? Y / N

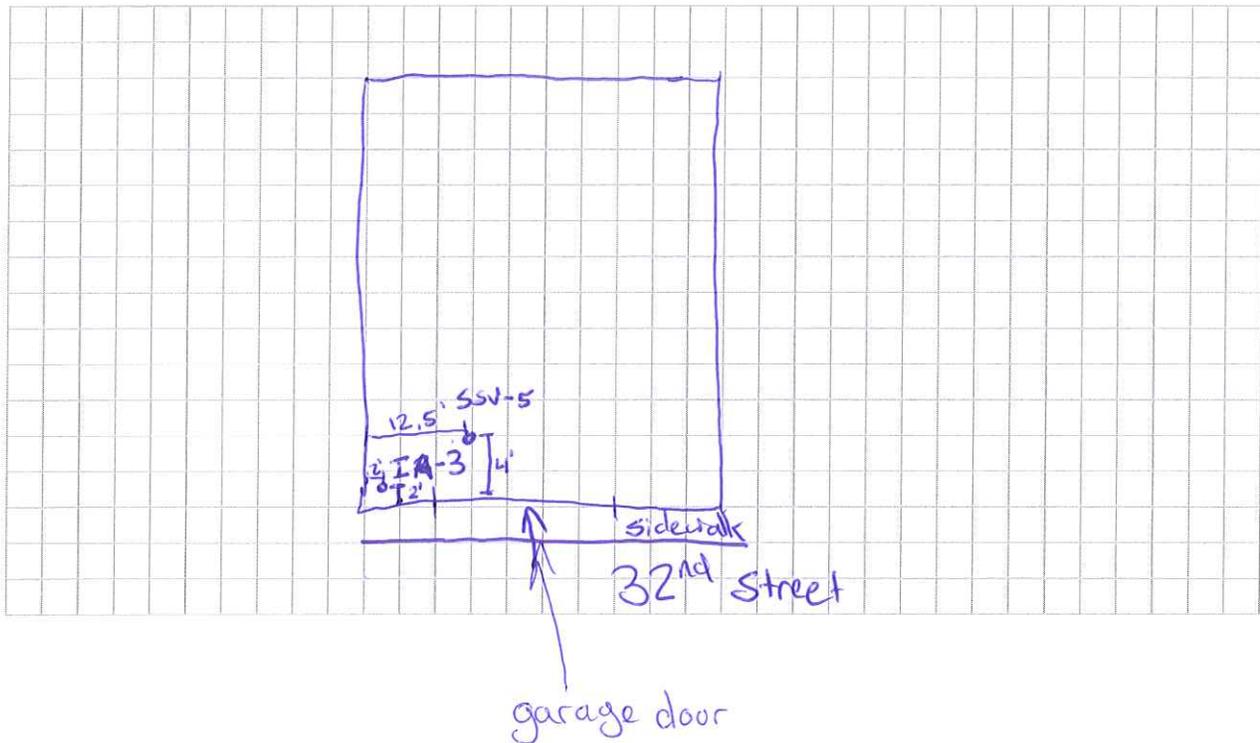
11. FLOOR PLANS

Draw a plan view sketch of the basement and first floor of the building. Indicate air sampling locations, possible indoor air pollution sources and PID meter readings. If the building does not have a basement, please note.

Basement:



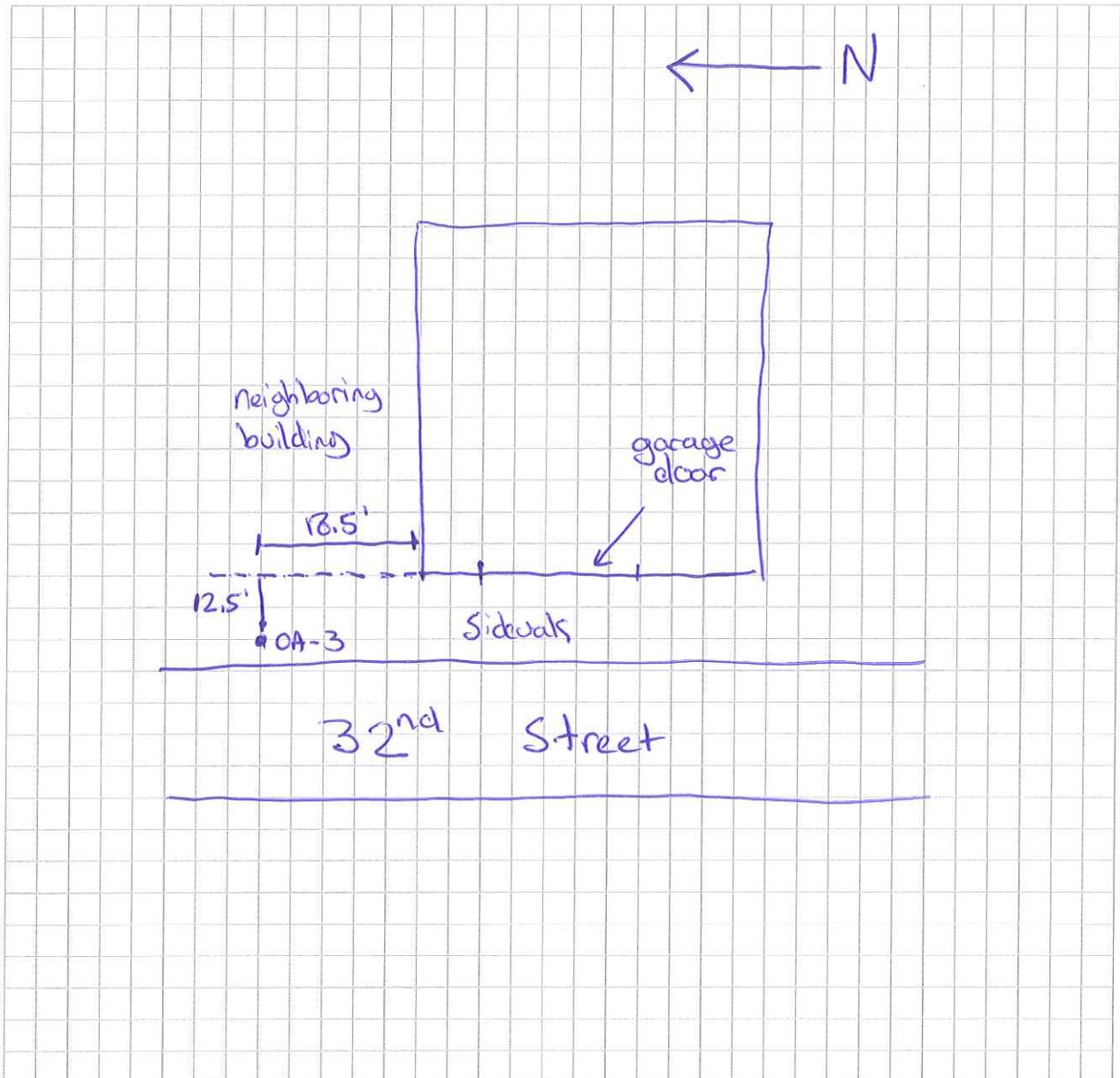
First Floor:



12. OUTDOOR PLOT

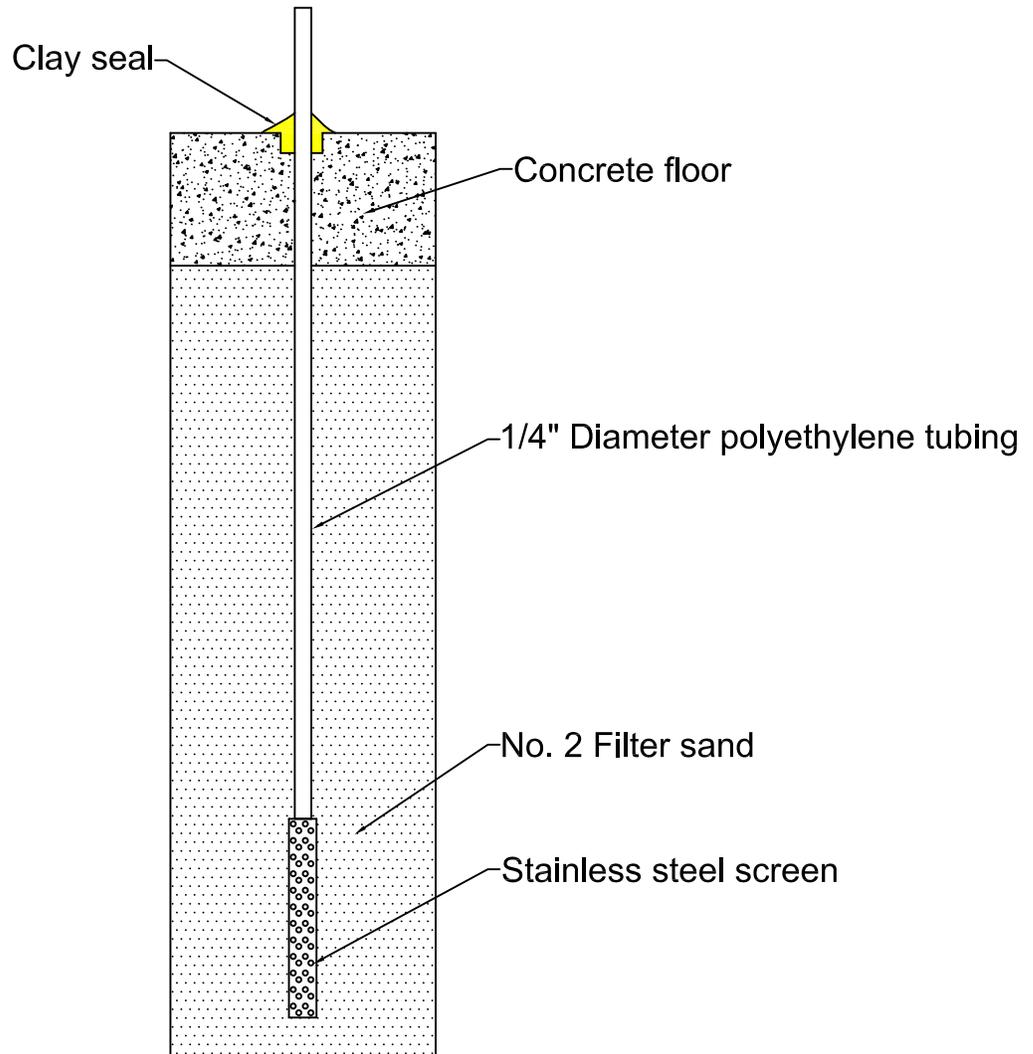
Draw a sketch of the area surrounding the building being sampled. If applicable, provide information on spill locations, potential air contamination sources (industries, gas stations, repair shops, landfills, etc.), outdoor air sampling location(s) and PID meter readings.

Also indicate compass direction, wind direction and speed during sampling, the locations of the well and septic system, if applicable, and a qualifying statement to help locate the site on a topographic map.



Appendix C

Typical Sub-Slab
Soil Vapor Point



Note:
The sub-slab soil vapor point is installed to approximately 2-inches below the bottom of the concrete slab.

CA RICH CONSULTANTS, INC.	
Environmental Specialists Since 1982 17 Dupont Street, Plainview, New York 11803	
TITLE:	DATE:
Typical Sub-Slab Soil Vapor Point	5/5/2017
	SCALE:
	N.T.S.
FIGURE:	DRAWN BY:
Appendix C	J.T.C.
DRAWING NO:	APPR. BY:
2017-6	W.F.
37-25 31st Street Queens, NY	

Appendix D

**DATA USABILITY SUMMARY REPORT
3132 LIC LLC, NEW YORK**

Client: CA Rich Consultants, Inc., Plainview, New York
SDG: L1705766
Laboratory: American Analytical Laboratories, Farmingdale, New York
Site: 37-25 31st Street, Long Island City, New York
Date: March 15, 2017

EDS ID	Client ID	Laboratory ID	Matrix
1	SV-1	L1705766-01	Air
2	SV-2	L1705766-02	Air
3	SV-3	L1705766-03	Air
4	SV-4	L1705766-04	Air
5	SSV-5	L1705766-05	Air
6	SSV-6	L1705766-06	Air
7	SSV-7	L1705766-07	Air
8	SV-X	L1705766-08	Air
9	IA-1	L1705766-09	Air
10	IA-2	L1705766-10	Air
11	IA-3	L1705766-11	Air
12	OA-1	L1705766-12	Air
13	OA-2	L1705766-13	Air
14	OA-3	L1705766-14	Air

A Data Usability Summary Review was performed on the analytical data for fourteen air samples collected on February 22-23, 2017 by CA Rich Consultants at the 3132 LIC LLC site in Long Island City, New York. The samples were analyzed under “*Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air, Second Edition January 1999, EPA/625/R-96/010B*”, 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)*”.

The data have been evaluated according to the protocols and quality control (QC) requirements of the USEPA Region II Data Review Standard Operating Procedure (SOP) Number HW-31, Revision 6, June 2014: Analysis of Volatile Organic Compounds in Air Contained in Canisters by Method TO-15, and the reviewer's professional judgment.

Organics

The following items/criteria were reviewed for this report:

- Data Completeness
- Cover letter, Narrative, and Data Reporting Forms
- Canister Certification Blanks

- Canister Certification Pressures Differences
- Chains-of-Custody and Traffic Reports
- Holding Times and sample preservation
- Laboratory Control Sample (LCS) recoveries
- GC/MS Tuning
- Method Blank Contamination
- Initial and Continuing Calibration Summaries
- Compound Quantitation
- Internal Standard (IS) Area Performance
- Field Duplicate Sample Precision

Overall Evaluation of Data and Potential Usability Issues

There were no rejections of data.

Overall the data is acceptable for the intended purposes. There were no qualifications.

Data Completeness

- The data is a complete Category B data package as defined under the requirements for the NYS Department of Environmental Conservation Analytical Services Protocol.

Cover letter, Narrative, and Data Reporting Forms

- All criteria were met

Canister Certification Blanks

- The batch blank checks were non-detect or < RL.

Canister Certification Pressures Differences

- All criteria were met.

Chains-of-Custody and Traffic Reports

- All criteria were met

Holding Times

- All samples were analyzed within 30 days for air samples.

Laboratory Control Samples

- The LCS samples exhibited acceptable percent recoveries (%R).

GC/MS Tuning

- All criteria were met.

Method Blank

- The method blanks were free of contamination.

Initial Calibration

- The initial calibrations exhibited acceptable %RSD and/or correlation coefficients and mean RRF values.

Continuing Calibration

- The continuing calibrations exhibited acceptable %D and RRF values.

Compound Quantitation

- The presence of 2,2,4-trimethylpentane could not be determined in EDS Samples 9 or 10 due to a non-target compound interfering with the identification and quantification of this compound. The reviewer qualified this compound as estimated (UJ) in both samples.
- Acetone in EDS Sample 10 was qualified as estimated (J) due to co-elution with a non-target compound peak.

Internal Standard (IS) Area Performance

- All internal standards met response and retention time (RT) criteria.

Field Duplicate Sample Precision

- Field duplicate results are summarized below. The precision was acceptable.

Compound	SV-2 ppbV	SV-X ppbV	RPD	Qualifier
Dichlorodifluoromethane	0.302	0.225	29%	None
Ethanol	31.9	27.8	14%	
Acetone	25.6	33.7	27%	
Trichlorofluoromethane	0.251	0.264	5%	
Isopropanol	0.812	0.890	9%	
Carbon Disulfide	0.691	0.724	5%	
2-Butanone	1.37	1.59	15%	
Chloroform	0.360	0.384	6%	
n-Hexane	0.993	1.24	22%	
Benzene	5.09	7.12	33%	
Cyclohexane	0.251	0.238	5%	
Trichloroethene	1.17	1.24	6%	
2,2,4-Trimethylpentane	0.208	0.200U	NC	
Heptane	0.390	0.383	2%	
Toluene	7.76	8.05	4%	
Tetrachloroethene	0.669	0.710	6%	
Ethylbenzene	1.44	1.54	7%	
p,m-Xylene	5.23	5.69	8%	
o-Xylene	2.06	2.27	10%	
4-Ethyltoluene	0.421	0.493	16%	
1,3,5-Trimethylbenzene	0.393	0.438	11%	
1,2,4-Trimethylbenzene	1.54	1.74	12%	

Please contact the undersigned at (757) 564-0090 if you have any questions or need further information.

Signed:

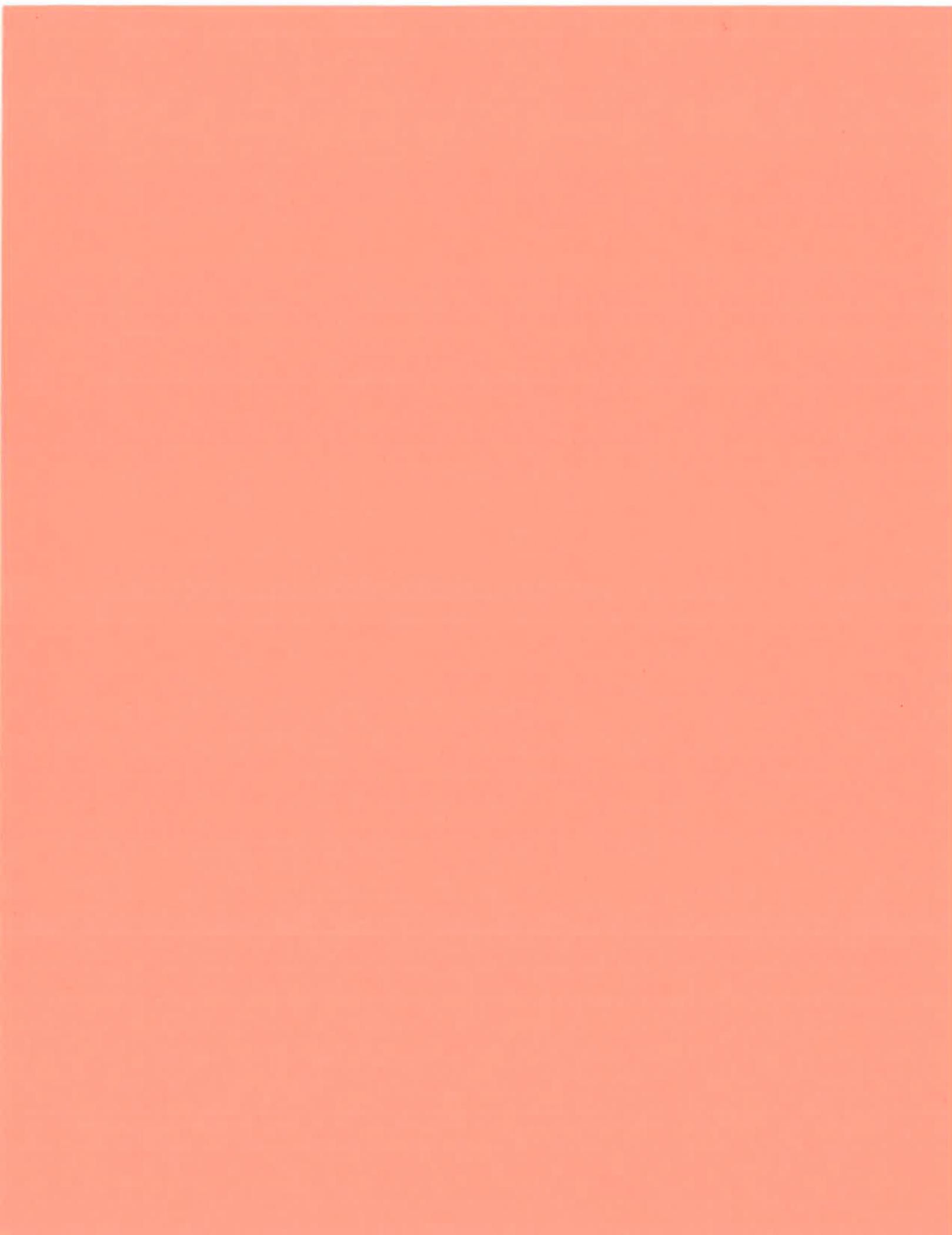


Dated: 3/17/17

Nancy Weaver
Senior Chemist

Data Qualifiers

- J = The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- UJ = The analyte was not detected above the sample reporting limit; and the reporting limit is approximate.
- U = The analyte was analyzed for, but was not detected above the sample reporting limit.
- R = The sample results is rejected due to serious deficiencies. The presence or absence of the analyte cannot be verified.



Form 1 Volatile Organics

Client : CA RICH CONSULTANTS, INC.
 Project Name : 3132 LIC LLC
 Lab ID : L1705766-01
 Client ID : SV-1
 Sample Location : 37-25 31ST ST., LIC, NY
 Sample Matrix : SOIL_VAPOR
 Analytical Method : 48,TO-15
 Lab File ID : R1118729
 Sample Amount : 250 ml

Lab Number : L1705766
 Project Number :
 Date Collected : 02/22/17 14:38
 Date Received : 02/23/17
 Date Analyzed : 02/25/17 21:50
 Dilution Factor : 1
 Analyst : MB
 Instrument ID : AIRLAB11
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
75-71-8	Dichlorodifluoromethane	0.354	0.200	--	1.75	0.989	--	
74-87-3	Chloromethane	0.405	0.200	--	0.836	0.413	--	
76-14-2	Freon-114	ND	0.200	--	ND	1.40	--	U
75-01-4	Vinyl chloride	ND	0.200	--	ND	0.511	--	U
106-99-0	1,3-Butadiene	ND	0.200	--	ND	0.442	--	U
74-83-9	Bromomethane	ND	0.200	--	ND	0.777	--	U
75-00-3	Chloroethane	ND	0.200	--	ND	0.528	--	U
64-17-5	Ethanol	37.4	5.00	--	70.5	9.42	--	
593-60-2	Vinyl bromide	ND	0.200	--	ND	0.874	--	U
67-64-1	Acetone	57.9	1.00	--	138	2.38	--	
75-69-4	Trichlorofluoromethane	0.232	0.200	--	1.30	1.12	--	
67-63-0	Isopropanol	0.975	0.500	--	2.40	1.23	--	
75-35-4	1,1-Dichloroethene	ND	0.200	--	ND	0.793	--	U
75-65-0	Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--	U
75-09-2	Methylene chloride	ND	0.500	--	ND	1.74	--	U
107-05-1	3-Chloropropene	ND	0.200	--	ND	0.626	--	U
75-15-0	Carbon disulfide	ND	0.200	--	ND	0.623	--	U
76-13-1	Freon-113	ND	0.200	--	ND	1.53	--	U
156-60-5	trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--	U
75-34-3	1,1-Dichloroethane	ND	0.200	--	ND	0.809	--	U
1634-04-4	Methyl tert butyl ether	ND	0.200	--	ND	0.721	--	U
78-93-3	2-Butanone	1.69	0.500	--	4.98	1.47	--	
156-59-2	cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--	U
141-78-6	Ethyl Acetate	ND	0.500	--	ND	1.80	--	U
67-66-3	Chloroform	ND	0.200	--	ND	0.977	--	U
109-99-9	Tetrahydrofuran	ND	0.500	--	ND	1.47	--	U
107-06-2	1,2-Dichloroethane	ND	0.200	--	ND	0.809	--	U
110-54-3	n-Hexane	2.08	0.200	--	7.33	0.705	--	

NW 31517



Form 1 Volatile Organics

Client : CA RICH CONSULTANTS, INC.
 Project Name : 3132 LIC LLC
 Lab ID : L1705766-01
 Client ID : SV-1
 Sample Location : 37-25 31ST ST., LIC, NY
 Sample Matrix : SOIL_VAPOR
 Analytical Method : 48,TO-15
 Lab File ID : R1118729
 Sample Amount : 250 ml

Lab Number : L1705766
 Project Number :
 Date Collected : 02/22/17 14:38
 Date Received : 02/23/17
 Date Analyzed : 02/25/17 21:50
 Dilution Factor : 1
 Analyst : MB
 Instrument ID : AIRLAB11
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
71-55-6	1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--	U
71-43-2	Benzene	5.86	0.200	--	18.7	0.639	--	
56-23-5	Carbon tetrachloride	ND	0.200	--	ND	1.26	--	U
110-82-7	Cyclohexane	0.474	0.200	--	1.63	0.688	--	
78-87-5	1,2-Dichloropropane	ND	0.200	--	ND	0.924	--	U
75-27-4	Bromodichloromethane	ND	0.200	--	ND	1.34	--	U
123-91-1	1,4-Dioxane	ND	0.200	--	ND	0.721	--	U
79-01-6	Trichloroethene	0.542	0.200	--	2.91	1.07	--	
540-84-1	2,2,4-Trimethylpentane	0.516	0.200	--	2.41	0.934	--	
142-82-5	Heptane	0.815	0.200	--	3.34	0.820	--	
10061-01-5	cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
108-10-1	4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
79-00-5	1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--	U
108-88-3	Toluene	7.89	0.200	--	29.7	0.754	--	
591-78-6	2-Hexanone	ND	0.200	--	ND	0.820	--	U
124-48-1	Dibromochloromethane	ND	0.200	--	ND	1.70	--	U
106-93-4	1,2-Dibromoethane	ND	0.200	--	ND	1.54	--	U
127-18-4	Tetrachloroethene	0.319	0.200	--	2.16	1.36	--	
108-90-7	Chlorobenzene	ND	0.200	--	ND	0.921	--	U
100-41-4	Ethylbenzene	1.32	0.200	--	5.73	0.869	--	
179601-23-1	p/m-Xylene	4.80	0.400	--	20.8	1.74	--	
75-25-2	Bromoform	ND	0.200	--	ND	2.07	--	U
100-42-5	Styrene	ND	0.200	--	ND	0.852	--	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--	U
95-47-6	o-Xylene	1.90	0.200	--	8.25	0.869	--	
622-96-8	4-Ethyltoluene	0.388	0.200	--	1.91	0.983	--	
108-67-8	1,3,5-Trimethylbenzene	0.353	0.200	--	1.74	0.983	--	

w 3/15/17



Form 1 Volatile Organics

Client : CA RICH CONSULTANTS, INC.
 Project Name : 3132 LIC LLC
 Lab ID : L1705766-01
 Client ID : SV-1
 Sample Location : 37-25 31ST ST., LIC, NY
 Sample Matrix : SOIL_VAPOR
 Analytical Method : 48,TO-15
 Lab File ID : R1118729
 Sample Amount : 250 ml

Lab Number : L1705766
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 Date Analyzed : 02/25/17 21:50
 Dilution Factor : 1
 Analyst : MB
 Instrument ID : AIRLAB11
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
95-63-6	1,2,4-Trimethylbenzene	1.40	0.200	--	6.88	0.983	--	
100-44-7	Benzyl chloride	ND	0.200	--	ND	1.04	--	U
541-73-1	1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
106-46-7	1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
95-50-1	1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
120-82-1	1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--	U
87-68-3	Hexachlorobutadiene	ND	0.200	--	ND	2.13	--	U

NW 3/15/17



Form 1 Volatile Organics

2

Client : CA RICH CONSULTANTS, INC.
 Project Name : 3132 LIC LLC
 Lab ID : L1705766-02
 Client ID : SV-2
 Sample Location : 37-25 31ST ST., LIC, NY
 Sample Matrix : SOIL_VAPOR
 Analytical Method : 48,TO-15
 Lab File ID : R1118730
 Sample Amount : 250 ml

Lab Number : L1705766
 Project Number :
 Date Collected : 02/22/17 14:48
 Date Received : 02/23/17
 Date Analyzed : 02/25/17 22:24
 Dilution Factor : 1
 Analyst : MB
 Instrument ID : AIRLAB11
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
75-71-8	Dichlorodifluoromethane	0.302	0.200	--	1.49	0.989	--	
74-87-3	Chloromethane	ND	0.200	--	ND	0.413	--	U
76-14-2	Freon-114	ND	0.200	--	ND	1.40	--	U
75-01-4	Vinyl chloride	ND	0.200	--	ND	0.511	--	U
106-99-0	1,3-Butadiene	ND	0.200	--	ND	0.442	--	U
74-83-9	Bromomethane	ND	0.200	--	ND	0.777	--	U
75-00-3	Chloroethane	ND	0.200	--	ND	0.528	--	U
64-17-5	Ethanol	31.9	5.00	--	60.1	9.42	--	
593-60-2	Vinyl bromide	ND	0.200	--	ND	0.874	--	U
67-64-1	Acetone	25.6	1.00	--	60.8	2.38	--	
75-69-4	Trichlorofluoromethane	0.251	0.200	--	1.41	1.12	--	
67-63-0	Isopropanol	0.812	0.500	--	2.00	1.23	--	
75-35-4	1,1-Dichloroethene	ND	0.200	--	ND	0.793	--	U
75-65-0	Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--	U
75-09-2	Methylene chloride	ND	0.500	--	ND	1.74	--	U
107-05-1	3-Chloropropene	ND	0.200	--	ND	0.626	--	U
75-15-0	Carbon disulfide	0.691	0.200	--	2.15	0.623	--	
76-13-1	Freon-113	ND	0.200	--	ND	1.53	--	U
156-60-5	trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--	U
75-34-3	1,1-Dichloroethane	ND	0.200	--	ND	0.809	--	U
1634-04-4	Methyl tert butyl ether	ND	0.200	--	ND	0.721	--	U
78-93-3	2-Butanone	1.37	0.500	--	4.04	1.47	--	
156-59-2	cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--	U
141-78-6	Ethyl Acetate	ND	0.500	--	ND	1.80	--	U
67-66-3	Chloroform	0.360	0.200	--	1.76	0.977	--	
109-99-9	Tetrahydrofuran	ND	0.500	--	ND	1.47	--	U
107-06-2	1,2-Dichloroethane	ND	0.200	--	ND	0.809	--	U
110-54-3	n-Hexane	0.993	0.200	--	3.50	0.705	--	

NW 3115117



Form 1 Volatile Organics

2

Client : CA RICH CONSULTANTS, INC.
 Project Name : 3132 LIC LLC
 Lab ID : L1705766-02
 Client ID : SV-2
 Sample Location : 37-25 31ST ST., LIC, NY
 Sample Matrix : SOIL_VAPOR
 Analytical Method : 48,TO-15
 Lab File ID : R1118730
 Sample Amount : 250 ml

Lab Number : L1705766
 Project Number :
 Date Collected : 02/22/17 14:48
 Date Received : 02/23/17
 Date Analyzed : 02/25/17 22:24
 Dilution Factor : 1
 Analyst : MB
 Instrument ID : AIRLAB11
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
71-55-6	1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--	U
71-43-2	Benzene	5.09	0.200	--	16.3	0.639	--	
56-23-5	Carbon tetrachloride	ND	0.200	--	ND	1.26	--	U
110-82-7	Cyclohexane	0.251	0.200	--	0.864	0.688	--	
78-87-5	1,2-Dichloropropane	ND	0.200	--	ND	0.924	--	U
75-27-4	Bromodichloromethane	ND	0.200	--	ND	1.34	--	U
123-91-1	1,4-Dioxane	ND	0.200	--	ND	0.721	--	U
79-01-6	Trichloroethene	1.17	0.200	--	6.29	1.07	--	
540-84-1	2,2,4-Trimethylpentane	0.208	0.200	--	0.972	0.934	--	
142-82-5	Heptane	0.390	0.200	--	1.60	0.820	--	
10061-01-5	cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
108-10-1	4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
79-00-5	1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--	U
108-88-3	Toluene	7.76	0.200	--	29.2	0.754	--	
591-78-6	2-Hexanone	ND	0.200	--	ND	0.820	--	U
124-48-1	Dibromochloromethane	ND	0.200	--	ND	1.70	--	U
106-93-4	1,2-Dibromoethane	ND	0.200	--	ND	1.54	--	U
127-18-4	Tetrachloroethene	0.669	0.200	--	4.54	1.36	--	
108-90-7	Chlorobenzene	ND	0.200	--	ND	0.921	--	U
100-41-4	Ethylbenzene	1.44	0.200	--	6.25	0.869	--	
179601-23-1	p/m-Xylene	5.23	0.400	--	22.7	1.74	--	
75-25-2	Bromoform	ND	0.200	--	ND	2.07	--	U
100-42-5	Styrene	ND	0.200	--	ND	0.852	--	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--	U
95-47-6	o-Xylene	2.06	0.200	--	8.95	0.869	--	
622-96-8	4-Ethyltoluene	0.421	0.200	--	2.07	0.983	--	
108-67-8	1,3,5-Trimethylbenzene	0.393	0.200	--	1.93	0.983	--	

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Form 1 Volatile Organics

2

Client : CA RICH CONSULTANTS, INC.
 Project Name : 3132 LIC LLC
 Lab ID : L1705766-02
 Client ID : SV-2
 Sample Location : 37-25 31ST ST., LIC, NY
 Sample Matrix : SOIL_VAPOR
 Analytical Method : 48,TO-15
 Lab File ID : R1118730
 Sample Amount : 250 ml

Lab Number : L1705766
 Project Number :
 Date Collected : 02/22/17 14:48
 Date Received : 02/23/17
 Date Analyzed : 02/25/17 22:24
 Dilution Factor : 1
 Analyst : MB
 Instrument ID : AIRLAB11
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
95-63-6	1,2,4-Trimethylbenzene	1.54	0.200	--	7.57	0.983	--	
100-44-7	Benzyl chloride	ND	0.200	--	ND	1.04	--	U
541-73-1	1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
106-46-7	1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
95-50-1	1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
120-82-1	1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--	U
87-68-3	Hexachlorobutadiene	ND	0.200	--	ND	2.13	--	U

NW 3/15/17



Form 1 Volatile Organics

3

Client : CA RICH CONSULTANTS, INC.
 Project Name : 3132 LIC LLC
 Lab ID : L1705766-03
 Client ID : SV-3
 Sample Location : 37-25 31ST ST., LIC, NY
 Sample Matrix : SOIL_VAPOR
 Analytical Method : 48,TO-15
 Lab File ID : R1118731
 Sample Amount : 250 ml

Lab Number : L1705766
 Project Number :
 Date Collected : 02/22/17 15:23
 Date Received : 02/23/17
 Date Analyzed : 02/25/17 22:59
 Dilution Factor : 1
 Analyst : MB
 Instrument ID : AIRLAB11
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
75-71-8	Dichlorodifluoromethane	0.335	0.200	--	1.66	0.989	--	
74-87-3	Chloromethane	ND	0.200	--	ND	0.413	--	U
76-14-2	Freon-114	ND	0.200	--	ND	1.40	--	U
75-01-4	Vinyl chloride	ND	0.200	--	ND	0.511	--	U
106-99-0	1,3-Butadiene	ND	0.200	--	ND	0.442	--	U
74-83-9	Bromomethane	ND	0.200	--	ND	0.777	--	U
75-00-3	Chloroethane	ND	0.200	--	ND	0.528	--	U
64-17-5	Ethanol	36.2	5.00	--	68.2	9.42	--	
593-60-2	Vinyl bromide	ND	0.200	--	ND	0.874	--	U
67-64-1	Acetone	16.3	1.00	--	38.7	2.38	--	
75-69-4	Trichlorofluoromethane	0.233	0.200	--	1.31	1.12	--	
67-63-0	Isopropanol	0.871	0.500	--	2.14	1.23	--	
75-35-4	1,1-Dichloroethene	ND	0.200	--	ND	0.793	--	U
75-65-0	Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--	U
75-09-2	Methylene chloride	ND	0.500	--	ND	1.74	--	U
107-05-1	3-Chloropropene	ND	0.200	--	ND	0.626	--	U
75-15-0	Carbon disulfide	ND	0.200	--	ND	0.623	--	U
76-13-1	Freon-113	ND	0.200	--	ND	1.53	--	U
156-60-5	trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--	U
75-34-3	1,1-Dichloroethane	ND	0.200	--	ND	0.809	--	U
1634-04-4	Methyl tert butyl ether	ND	0.200	--	ND	0.721	--	U
78-93-3	2-Butanone	1.58	0.500	--	4.66	1.47	--	
156-59-2	cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--	U
141-78-6	Ethyl Acetate	ND	0.500	--	ND	1.80	--	U
67-66-3	Chloroform	0.286	0.200	--	1.40	0.977	--	
109-99-9	Tetrahydrofuran	ND	0.500	--	ND	1.47	--	U
107-06-2	1,2-Dichloroethane	ND	0.200	--	ND	0.809	--	U
110-54-3	n-Hexane	1.12	0.200	--	3.95	0.705	--	

mw 3/15/17



Form 1 Volatile Organics

3

Client : CA RICH CONSULTANTS, INC.
 Project Name : 3132 LIC LLC
 Lab ID : L1705766-03
 Client ID : SV-3
 Sample Location : 37-25 31ST ST., LIC, NY
 Sample Matrix : SOIL_VAPOR
 Analytical Method : 48,TO-15
 Lab File ID : R1118731
 Sample Amount : 250 ml

Lab Number : L1705766
 Project Number :
 Date Collected : 02/22/17 15:23
 Date Received : 02/23/17
 Date Analyzed : 02/25/17 22:59
 Dilution Factor : 1
 Analyst : MB
 Instrument ID : AIRLAB11
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
71-55-6	1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--	U
71-43-2	Benzene	5.36	0.200	--	17.1	0.639	--	
56-23-5	Carbon tetrachloride	ND	0.200	--	ND	1.26	--	U
110-82-7	Cyclohexane	0.291	0.200	--	1.00	0.688	--	
78-87-5	1,2-Dichloropropane	ND	0.200	--	ND	0.924	--	U
75-27-4	Bromodichloromethane	ND	0.200	--	ND	1.34	--	U
123-91-1	1,4-Dioxane	ND	0.200	--	ND	0.721	--	U
79-01-6	Trichloroethene	2.44	0.200	--	13.1	1.07	--	
540-84-1	2,2,4-Trimethylpentane	0.224	0.200	--	1.05	0.934	--	
142-82-5	Heptane	0.445	0.200	--	1.82	0.820	--	
10061-01-5	cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
108-10-1	4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
79-00-5	1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--	U
108-88-3	Toluene	9.38	0.200	--	35.3	0.754	--	
591-78-6	2-Hexanone	ND	0.200	--	ND	0.820	--	U
124-48-1	Dibromochloromethane	ND	0.200	--	ND	1.70	--	U
106-93-4	1,2-Dibromoethane	ND	0.200	--	ND	1.54	--	U
127-18-4	Tetrachloroethene	0.205	0.200	--	1.39	1.36	--	
108-90-7	Chlorobenzene	ND	0.200	--	ND	0.921	--	U
100-41-4	Ethylbenzene	1.60	0.200	--	6.95	0.869	--	
179601-23-1	p/m-Xylene	5.86	0.400	--	25.5	1.74	--	
75-25-2	Bromoform	ND	0.200	--	ND	2.07	--	U
100-42-5	Styrene	ND	0.200	--	ND	0.852	--	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--	U
95-47-6	o-Xylene	2.29	0.200	--	9.95	0.869	--	
622-96-8	4-Ethyltoluene	0.503	0.200	--	2.47	0.983	--	
108-67-8	1,3,5-Trimethylbenzene	0.447	0.200	--	2.20	0.983	--	

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Form 1 Volatile Organics

3

Client : CA RICH CONSULTANTS, INC.
 Project Name : 3132 LIC LLC
 Lab ID : L1705766-03
 Client ID : SV-3
 Sample Location : 37-25 31ST ST., LIC, NY
 Sample Matrix : SOIL_VAPOR
 Analytical Method : 48,TO-15
 Lab File ID : R1118731
 Sample Amount : 250 ml

Lab Number : L1705766
 Project Number :
 Date Collected : 02/22/17 15:23
 Date Received : 02/23/17
 Date Analyzed : 02/25/17 22:59
 Dilution Factor : 1
 Analyst : MB
 Instrument ID : AIRLAB11
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
95-63-6	1,2,4-Trimethylbenzene	1.80	0.200	--	8.85	0.983	--	
100-44-7	Benzyl chloride	ND	0.200	--	ND	1.04	--	U
541-73-1	1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
106-46-7	1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
95-50-1	1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
120-82-1	1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--	U
87-68-3	Hexachlorobutadiene	ND	0.200	--	ND	2.13	--	U

new 3/15/17



Form 1 Volatile Organics

4

Client : CA RICH CONSULTANTS, INC.
 Project Name : 3132 LIC LLC
 Lab ID : L1705766-04
 Client ID : SV-4
 Sample Location : 37-25 31ST ST., LIC, NY
 Sample Matrix : SOIL_VAPOR
 Analytical Method : 48,TO-15
 Lab File ID : R1118732
 Sample Amount : 250 ml

Lab Number : L1705766
 Project Number :
 Date Collected : 02/22/17 13:34
 Date Received : 02/23/17
 Date Analyzed : 02/25/17 23:34
 Dilution Factor : 1
 Analyst : MB
 Instrument ID : AIRLAB11
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
75-71-8	Dichlorodifluoromethane	0.332	0.200	--	1.64	0.989	--	
74-87-3	Chloromethane	ND	0.200	--	ND	0.413	--	U
76-14-2	Freon-114	ND	0.200	--	ND	1.40	--	U
75-01-4	Vinyl chloride	ND	0.200	--	ND	0.511	--	U
106-99-0	1,3-Butadiene	ND	0.200	--	ND	0.442	--	U
74-83-9	Bromomethane	ND	0.200	--	ND	0.777	--	U
75-00-3	Chloroethane	ND	0.200	--	ND	0.528	--	U
64-17-5	Ethanol	35.5	5.00	--	66.9	9.42	--	
593-60-2	Vinyl bromide	ND	0.200	--	ND	0.874	--	U
67-64-1	Acetone	21.7	1.00	--	51.5	2.38	--	
75-69-4	Trichlorofluoromethane	0.231	0.200	--	1.30	1.12	--	
67-63-0	Isopropanol	0.772	0.500	--	1.90	1.23	--	
75-35-4	1,1-Dichloroethene	ND	0.200	--	ND	0.793	--	U
75-65-0	Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--	U
75-09-2	Methylene chloride	4.43	0.500	--	15.4	1.74	--	
107-05-1	3-Chloropropene	ND	0.200	--	ND	0.626	--	U
75-15-0	Carbon disulfide	ND	0.200	--	ND	0.623	--	U
76-13-1	Freon-113	ND	0.200	--	ND	1.53	--	U
156-60-5	trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--	U
75-34-3	1,1-Dichloroethane	ND	0.200	--	ND	0.809	--	U
1634-04-4	Methyl tert butyl ether	ND	0.200	--	ND	0.721	--	U
78-93-3	2-Butanone	1.44	0.500	--	4.25	1.47	--	
156-59-2	cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--	U
141-78-6	Ethyl Acetate	ND	0.500	--	ND	1.80	--	U
67-66-3	Chloroform	ND	0.200	--	ND	0.977	--	U
109-99-9	Tetrahydrofuran	ND	0.500	--	ND	1.47	--	U
107-06-2	1,2-Dichloroethane	ND	0.200	--	ND	0.809	--	U
110-54-3	n-Hexane	1.37	0.200	--	4.83	0.705	--	

mw 3/15/17



Form 1 Volatile Organics

4

Client : CA RICH CONSULTANTS, INC.
 Project Name : 3132 LIC LLC
 Lab ID : L1705766-04
 Client ID : SV-4
 Sample Location : 37-25 31ST ST., LIC, NY
 Sample Matrix : SOIL_VAPOR
 Analytical Method : 48,TO-15
 Lab File ID : R1118732
 Sample Amount : 250 ml

Lab Number : L1705766
 Project Number :
 Date Collected : 02/22/17 13:34
 Date Received : 02/23/17
 Date Analyzed : 02/25/17 23:34
 Dilution Factor : 1
 Analyst : MB
 Instrument ID : AIRLAB11
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
71-55-6	1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--	U
71-43-2	Benzene	3.37	0.200	--	10.8	0.639	--	
56-23-5	Carbon tetrachloride	ND	0.200	--	ND	1.26	--	U
110-82-7	Cyclohexane	0.341	0.200	--	1.17	0.688	--	
78-87-5	1,2-Dichloropropane	ND	0.200	--	ND	0.924	--	U
75-27-4	Bromodichloromethane	ND	0.200	--	ND	1.34	--	U
123-91-1	1,4-Dioxane	ND	0.200	--	ND	0.721	--	U
79-01-6	Trichloroethene	15.0	0.200	--	80.6	1.07	--	
540-84-1	2,2,4-Trimethylpentane	0.285	0.200	--	1.33	0.934	--	
142-82-5	Heptane	0.518	0.200	--	2.12	0.820	--	
10061-01-5	cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
108-10-1	4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
79-00-5	1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--	U
108-88-3	Toluene	8.69	0.200	--	32.7	0.754	--	
591-78-6	2-Hexanone	ND	0.200	--	ND	0.820	--	U
124-48-1	Dibromochloromethane	ND	0.200	--	ND	1.70	--	U
106-93-4	1,2-Dibromoethane	ND	0.200	--	ND	1.54	--	U
127-18-4	Tetrachloroethene	0.284	0.200	--	1.93	1.36	--	
108-90-7	Chlorobenzene	ND	0.200	--	ND	0.921	--	U
100-41-4	Ethylbenzene	1.40	0.200	--	6.08	0.869	--	
179601-23-1	p/m-Xylene	5.04	0.400	--	21.9	1.74	--	
75-25-2	Bromoform	ND	0.200	--	ND	2.07	--	U
100-42-5	Styrene	ND	0.200	--	ND	0.852	--	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--	U
95-47-6	o-Xylene	1.97	0.200	--	8.56	0.869	--	
622-96-8	4-Ethyltoluene	0.414	0.200	--	2.04	0.983	--	
108-67-8	1,3,5-Trimethylbenzene	0.372	0.200	--	1.83	0.983	--	

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Form 1 Volatile Organics

4

Client : CA RICH CONSULTANTS, INC.
Project Name : 3132 LIC LLC
Lab ID : L1705766-04
Client ID : SV-4
Sample Location : 37-25 31ST ST., LIC, NY
Sample Matrix : SOIL_VAPOR
Analytical Method : 48,TO-15
Lab File ID : R1118732
Sample Amount : 250 ml

Lab Number : L1705766
Project Number :
Date Collected : 02/22/17 13:34
Date Received : 02/23/17
Date Analyzed : 02/25/17 23:34
Dilution Factor : 1
Analyst : MB
Instrument ID : AIRLAB11
GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
95-63-6	1,2,4-Trimethylbenzene	1.51	0.200	--	7.42	0.983	--	
100-44-7	Benzyl chloride	ND	0.200	--	ND	1.04	--	U
541-73-1	1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
106-46-7	1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
95-50-1	1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
120-82-1	1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--	U
87-68-3	Hexachlorobutadiene	ND	0.200	--	ND	2.13	--	U

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Form 1 Volatile Organics

5

Client : CA RICH CONSULTANTS, INC.
 Project Name : 3132 LIC LLC
 Lab ID : L1705766-05
 Client ID : SSV-5
 Sample Location : 37-25 31ST ST., LIC, NY
 Sample Matrix : SOIL_VAPOR
 Analytical Method : 48,TO-15
 Lab File ID : R1118733
 Sample Amount : 250 ml

Lab Number : L1705766
 Project Number :
 Date Collected : 02/23/17 12:39
 Date Received : 02/23/17
 Date Analyzed : 02/26/17 00:08
 Dilution Factor : 1
 Analyst : MB
 Instrument ID : AIRLAB11
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
75-71-8	Dichlorodifluoromethane	0.473	0.200	--	2.34	0.989	--	
74-87-3	Chloromethane	0.200	0.200	--	0.413	0.413	--	
76-14-2	Freon-114	ND	0.200	--	ND	1.40	--	U
75-01-4	Vinyl chloride	ND	0.200	--	ND	0.511	--	U
106-99-0	1,3-Butadiene	ND	0.200	--	ND	0.442	--	U
74-83-9	Bromomethane	ND	0.200	--	ND	0.777	--	U
75-00-3	Chloroethane	ND	0.200	--	ND	0.528	--	U
64-17-5	Ethanol	84.3	5.00	--	159	9.42	--	
593-60-2	Vinyl bromide	ND	0.200	--	ND	0.874	--	U
67-64-1	Acetone	13.0	1.00	--	30.9	2.38	--	
75-69-4	Trichlorofluoromethane	0.615	0.200	--	3.46	1.12	--	
67-63-0	Isopropanol	1.21	0.500	--	2.97	1.23	--	
75-35-4	1,1-Dichloroethene	ND	0.200	--	ND	0.793	--	U
75-65-0	Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--	U
75-09-2	Methylene chloride	ND	0.500	--	ND	1.74	--	U
107-05-1	3-Chloropropene	ND	0.200	--	ND	0.626	--	U
75-15-0	Carbon disulfide	ND	0.200	--	ND	0.623	--	U
76-13-1	Freon-113	ND	0.200	--	ND	1.53	--	U
156-60-5	trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--	U
75-34-3	1,1-Dichloroethane	ND	0.200	--	ND	0.809	--	U
1634-04-4	Methyl tert butyl ether	ND	0.200	--	ND	0.721	--	U
78-93-3	2-Butanone	2.16	0.500	--	6.37	1.47	--	
156-59-2	cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--	U
141-78-6	Ethyl Acetate	ND	0.500	--	ND	1.80	--	U
67-66-3	Chloroform	ND	0.200	--	ND	0.977	--	U
109-99-9	Tetrahydrofuran	0.667	0.500	--	1.97	1.47	--	
107-06-2	1,2-Dichloroethane	ND	0.200	--	ND	0.809	--	U
110-54-3	n-Hexane	2.22	0.200	--	7.82	0.705	--	

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Form 1 Volatile Organics

5

Client : CA RICH CONSULTANTS, INC.
 Project Name : 3132 LIC LLC
 Lab ID : L1705766-05
 Client ID : SSV-5
 Sample Location : 37-25 31ST ST., LIC, NY
 Sample Matrix : SOIL_VAPOR
 Analytical Method : 48,TO-15
 Lab File ID : R1118733
 Sample Amount : 250 ml

Lab Number : L1705766
 Project Number :
 Date Collected : 02/23/17 12:39
 Date Received : 02/23/17
 Date Analyzed : 02/26/17 00:08
 Dilution Factor : 1
 Analyst : MB
 Instrument ID : AIRLAB11
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
71-55-6	1,1,1-Trichloroethane	0.577	0.200	--	3.15	1.09	--	
71-43-2	Benzene	3.24	0.200	--	10.4	0.639	--	
56-23-5	Carbon tetrachloride	ND	0.200	--	ND	1.26	--	U
110-82-7	Cyclohexane	0.751	0.200	--	2.59	0.688	--	
78-87-5	1,2-Dichloropropane	ND	0.200	--	ND	0.924	--	U
75-27-4	Bromodichloromethane	ND	0.200	--	ND	1.34	--	U
123-91-1	1,4-Dioxane	ND	0.200	--	ND	0.721	--	U
79-01-6	Trichloroethene	4.15	0.200	--	22.3	1.07	--	
540-84-1	2,2,4-Trimethylpentane	0.663	0.200	--	3.10	0.934	--	
142-82-5	Heptane	1.16	0.200	--	4.75	0.820	--	
10061-01-5	cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
108-10-1	4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
79-00-5	1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--	U
108-88-3	Toluene	12.6	0.200	--	47.5	0.754	--	
591-78-6	2-Hexanone	ND	0.200	--	ND	0.820	--	U
124-48-1	Dibromochloromethane	ND	0.200	--	ND	1.70	--	U
106-93-4	1,2-Dibromoethane	ND	0.200	--	ND	1.54	--	U
127-18-4	Tetrachloroethene	0.444	0.200	--	3.01	1.36	--	
108-90-7	Chlorobenzene	ND	0.200	--	ND	0.921	--	U
100-41-4	Ethylbenzene	1.79	0.200	--	7.77	0.869	--	
179601-23-1	p/m-Xylene	6.42	0.400	--	27.9	1.74	--	
75-25-2	Bromoform	ND	0.200	--	ND	2.07	--	U
100-42-5	Styrene	ND	0.200	--	ND	0.852	--	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--	U
95-47-6	o-Xylene	2.52	0.200	--	10.9	0.869	--	
622-96-8	4-Ethyltoluene	0.544	0.200	--	2.67	0.983	--	
108-67-8	1,3,5-Trimethylbenzene	0.460	0.200	--	2.26	0.983	--	

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Form 1 Volatile Organics

5

Client : CA RICH CONSULTANTS, INC.
 Project Name : 3132 LIC LLC
 Lab ID : L1705766-05
 Client ID : SSV-5
 Sample Location : 37-25 31ST ST., LIC, NY
 Sample Matrix : SOIL_VAPOR
 Analytical Method : 48,TO-15
 Lab File ID : R1118733
 Sample Amount : 250 ml

Lab Number : L1705766
 Project Number :
 Date Collected : 02/23/17 12:39
 Date Received : 02/23/17
 Date Analyzed : 02/26/17 00:08
 Dilution Factor : 1
 Analyst : MB
 Instrument ID : AIRLAB11
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
95-63-6	1,2,4-Trimethylbenzene	1.76	0.200	--	8.75	0.983	--	
100-44-7	Benzyl chloride	ND	0.200	--	ND	1.04	--	U
541-73-1	1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
106-46-7	1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
95-50-1	1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
120-82-1	1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--	U
87-68-3	Hexachlorobutadiene	ND	0.200	--	ND	2.13	--	U

R1118733



Form 1 Volatile Organics

6

Client : CA RICH CONSULTANTS, INC.
 Project Name : 3132 LIC LLC
 Lab ID : L1705766-06
 Client ID : SSV-6
 Sample Location : 37-25 31ST ST., LIC, NY
 Sample Matrix : SOIL_VAPOR
 Analytical Method : 48,TO-15
 Lab File ID : R1118734
 Sample Amount : 250 ml

Lab Number : L1705766
 Project Number :
 Date Collected : 02/23/17 11:15
 Date Received : 02/23/17
 Date Analyzed : 02/26/17 00:43
 Dilution Factor : 1
 Analyst : MB
 Instrument ID : AIRLAB11
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
75-71-8	Dichlorodifluoromethane	0.461	0.200	--	2.28	0.989	--	
74-87-3	Chloromethane	ND	0.200	--	ND	0.413	--	U
76-14-2	Freon-114	ND	0.200	--	ND	1.40	--	U
75-01-4	Vinyl chloride	ND	0.200	--	ND	0.511	--	U
106-99-0	1,3-Butadiene	ND	0.200	--	ND	0.442	--	U
74-83-9	Bromomethane	ND	0.200	--	ND	0.777	--	U
75-00-3	Chloroethane	ND	0.200	--	ND	0.528	--	U
64-17-5	Ethanol	52.5	5.00	--	98.9	9.42	--	
593-60-2	Vinyl bromide	ND	0.200	--	ND	0.874	--	U
67-64-1	Acetone	47.3	1.00	--	112	2.38	--	
75-69-4	Trichlorofluoromethane	0.321	0.200	--	1.80	1.12	--	
67-63-0	Isopropanol	1.67	0.500	--	4.10	1.23	--	
75-35-4	1,1-Dichloroethene	ND	0.200	--	ND	0.793	--	U
75-65-0	Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--	U
75-09-2	Methylene chloride	0.777	0.500	--	2.70	1.74	--	
107-05-1	3-Chloropropene	ND	0.200	--	ND	0.626	--	U
75-15-0	Carbon disulfide	0.996	0.200	--	3.10	0.623	--	
76-13-1	Freon-113	ND	0.200	--	ND	1.53	--	U
156-60-5	trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--	U
75-34-3	1,1-Dichloroethane	ND	0.200	--	ND	0.809	--	U
1634-04-4	Methyl tert butyl ether	ND	0.200	--	ND	0.721	--	U
78-93-3	2-Butanone	2.44	0.500	--	7.20	1.47	--	
156-59-2	cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--	U
141-78-6	Ethyl Acetate	ND	0.500	--	ND	1.80	--	U
67-66-3	Chloroform	ND	0.200	--	ND	0.977	--	U
109-99-9	Tetrahydrofuran	0.586	0.500	--	1.73	1.47	--	
107-06-2	1,2-Dichloroethane	ND	0.200	--	ND	0.809	--	U
110-54-3	n-Hexane	3.16	0.200	--	11.1	0.705	--	

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Form 1 Volatile Organics

6

Client : CA RICH CONSULTANTS, INC.
 Project Name : 3132 LIC LLC
 Lab ID : L1705766-06
 Client ID : SSV-6
 Sample Location : 37-25 31ST ST., LIC, NY
 Sample Matrix : SOIL_VAPOR
 Analytical Method : 48,TO-15
 Lab File ID : R1118734
 Sample Amount : 250 ml

Lab Number : L1705766
 Project Number :
 Date Collected : 02/23/17 11:15
 Date Received : 02/23/17
 Date Analyzed : 02/26/17 00:43
 Dilution Factor : 1
 Analyst : MB
 Instrument ID : AIRLAB11
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
71-55-6	1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--	U
71-43-2	Benzene	2.20	0.200	--	7.03	0.639	--	
56-23-5	Carbon tetrachloride	ND	0.200	--	ND	1.26	--	U
110-82-7	Cyclohexane	0.679	0.200	--	2.34	0.688	--	
78-87-5	1,2-Dichloropropane	ND	0.200	--	ND	0.924	--	U
75-27-4	Bromodichloromethane	ND	0.200	--	ND	1.34	--	U
123-91-1	1,4-Dioxane	ND	0.200	--	ND	0.721	--	U
79-01-6	Trichloroethene	4.76	0.200	--	25.6	1.07	--	
540-84-1	2,2,4-Trimethylpentane	0.560	0.200	--	2.62	0.934	--	
142-82-5	Heptane	1.50	0.200	--	6.15	0.820	--	
10061-01-5	cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
108-10-1	4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
79-00-5	1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--	U
108-88-3	Toluene	13.9	0.200	--	52.4	0.754	--	
591-78-6	2-Hexanone	ND	0.200	--	ND	0.820	--	U
124-48-1	Dibromochloromethane	ND	0.200	--	ND	1.70	--	U
106-93-4	1,2-Dibromoethane	ND	0.200	--	ND	1.54	--	U
127-18-4	Tetrachloroethene	2.22	0.200	--	15.1	1.36	--	
108-90-7	Chlorobenzene	ND	0.200	--	ND	0.921	--	U
100-41-4	Ethylbenzene	1.90	0.200	--	8.25	0.869	--	
179601-23-1	p/m-Xylene	6.84	0.400	--	29.7	1.74	--	
75-25-2	Bromoform	ND	0.200	--	ND	2.07	--	U
100-42-5	Styrene	ND	0.200	--	ND	0.852	--	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--	U
95-47-6	o-Xylene	2.69	0.200	--	11.7	0.869	--	
622-96-8	4-Ethyltoluene	0.572	0.200	--	2.81	0.983	--	
108-67-8	1,3,5-Trimethylbenzene	0.515	0.200	--	2.53	0.983	--	

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Form 1 Volatile Organics

6

Client : CA RICH CONSULTANTS, INC.
Project Name : 3132 LIC LLC
Lab ID : L1705766-06
Client ID : SSV-6
Sample Location : 37-25 31ST ST., LIC, NY
Sample Matrix : SOIL_VAPOR
Analytical Method : 48,TO-15
Lab File ID : R1118734
Sample Amount : 250 ml

Lab Number : L1705766
Project Number :
Date Collected : 02/23/17 11:15
Date Received : 02/23/17
Date Analyzed : 02/26/17 00:43
Dilution Factor : 1
Analyst : MB
Instrument ID : AIRLAB11
GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
95-63-6	1,2,4-Trimethylbenzene	2.09	0.200	--	10.3	0.983	--	
100-44-7	Benzyl chloride	ND	0.200	--	ND	1.04	--	U
541-73-1	1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
106-46-7	1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
95-50-1	1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
120-82-1	1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--	U
87-68-3	Hexachlorobutadiene	ND	0.200	--	ND	2.13	--	U

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Form 1 Volatile Organics

7

Client : CA RICH CONSULTANTS, INC.
 Project Name : 3132 LIC LLC
 Lab ID : L1705766-07
 Client ID : SSV-7
 Sample Location : 37-25 31ST ST., LIC, NY
 Sample Matrix : SOIL_VAPOR
 Analytical Method : 48,TO-15
 Lab File ID : R1118735
 Sample Amount : 250 ml

Lab Number : L1705766
 Project Number :
 Date Collected : 02/23/17 11:20
 Date Received : 02/23/17
 Date Analyzed : 02/26/17 01:18
 Dilution Factor : 1
 Analyst : MB
 Instrument ID : AIRLAB11
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
75-71-8	Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--	U
74-87-3	Chloromethane	ND	0.200	--	ND	0.413	--	U
76-14-2	Freon-114	ND	0.200	--	ND	1.40	--	U
75-01-4	Vinyl chloride	ND	0.200	--	ND	0.511	--	U
106-99-0	1,3-Butadiene	ND	0.200	--	ND	0.442	--	U
74-83-9	Bromomethane	ND	0.200	--	ND	0.777	--	U
75-00-3	Chloroethane	ND	0.200	--	ND	0.528	--	U
64-17-5	Ethanol	65.4	5.00	--	123	9.42	--	
593-60-2	Vinyl bromide	ND	0.200	--	ND	0.874	--	U
67-64-1	Acetone	8.57	1.00	--	20.4	2.38	--	
75-69-4	Trichlorofluoromethane	ND	0.200	--	ND	1.12	--	U
67-63-0	Isopropanol	0.930	0.500	--	2.29	1.23	--	
75-35-4	1,1-Dichloroethene	ND	0.200	--	ND	0.793	--	U
75-65-0	Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--	U
75-09-2	Methylene chloride	ND	0.500	--	ND	1.74	--	U
107-05-1	3-Chloropropene	ND	0.200	--	ND	0.626	--	U
75-15-0	Carbon disulfide	ND	0.200	--	ND	0.623	--	U
76-13-1	Freon-113	ND	0.200	--	ND	1.53	--	U
156-60-5	trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--	U
75-34-3	1,1-Dichloroethane	ND	0.200	--	ND	0.809	--	U
1634-04-4	Methyl tert butyl ether	ND	0.200	--	ND	0.721	--	U
78-93-3	2-Butanone	1.96	0.500	--	5.78	1.47	--	
156-59-2	cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--	U
141-78-6	Ethyl Acetate	ND	0.500	--	ND	1.80	--	U
67-66-3	Chloroform	ND	0.200	--	ND	0.977	--	U
109-99-9	Tetrahydrofuran	0.543	0.500	--	1.60	1.47	--	
107-06-2	1,2-Dichloroethane	ND	0.200	--	ND	0.809	--	U
110-54-3	n-Hexane	1.84	0.200	--	6.48	0.705	--	

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Form 1 Volatile Organics

7

Client : CA RICH CONSULTANTS, INC.
 Project Name : 3132 LIC LLC
 Lab ID : L1705766-07
 Client ID : SSV-7
 Sample Location : 37-25 31ST ST., LIC, NY
 Sample Matrix : SOIL_VAPOR
 Analytical Method : 48,TO-15
 Lab File ID : R1118735
 Sample Amount : 250 ml

Lab Number : L1705766
 Project Number :
 Date Collected : 02/23/17 11:20
 Date Received : 02/23/17
 Date Analyzed : 02/26/17 01:18
 Dilution Factor : 1
 Analyst : MB
 Instrument ID : AIRLAB11
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
71-55-6	1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--	U
71-43-2	Benzene	2.46	0.200	--	7.86	0.639	--	
56-23-5	Carbon tetrachloride	ND	0.200	--	ND	1.26	--	U
110-82-7	Cyclohexane	0.512	0.200	--	1.76	0.688	--	
78-87-5	1,2-Dichloropropane	ND	0.200	--	ND	0.924	--	U
75-27-4	Bromodichloromethane	ND	0.200	--	ND	1.34	--	U
123-91-1	1,4-Dioxane	ND	0.200	--	ND	0.721	--	U
79-01-6	Trichloroethene	3.05	0.200	--	16.4	1.07	--	
540-84-1	2,2,4-Trimethylpentane	0.420	0.200	--	1.96	0.934	--	
142-82-5	Heptane	0.907	0.200	--	3.72	0.820	--	
10061-01-5	cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
108-10-1	4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
79-00-5	1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--	U
108-88-3	Toluene	12.7	0.200	--	47.9	0.754	--	
591-78-6	2-Hexanone	ND	0.200	--	ND	0.820	--	U
124-48-1	Dibromochloromethane	ND	0.200	--	ND	1.70	--	U
106-93-4	1,2-Dibromoethane	ND	0.200	--	ND	1.54	--	U
127-18-4	Tetrachloroethene	1.00	0.200	--	6.78	1.36	--	
108-90-7	Chlorobenzene	ND	0.200	--	ND	0.921	--	U
100-41-4	Ethylbenzene	1.92	0.200	--	8.34	0.869	--	
179601-23-1	p/m-Xylene	6.90	0.400	--	30.0	1.74	--	
75-25-2	Bromoform	ND	0.200	--	ND	2.07	--	U
100-42-5	Styrene	ND	0.200	--	ND	0.852	--	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--	U
95-47-6	o-Xylene	2.73	0.200	--	11.9	0.869	--	
622-96-8	4-Ethyltoluene	0.583	0.200	--	2.87	0.983	--	
108-67-8	1,3,5-Trimethylbenzene	0.535	0.200	--	2.63	0.983	--	

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7

Client : CA RICH CONSULTANTS, INC.
Project Name : 3132 LIC LLC
Lab ID : L1705766-07
Client ID : SSV-7
Sample Location : 37-25 31ST ST., LIC, NY
Sample Matrix : SOIL_VAPOR
Analytical Method : 48,TO-15
Lab File ID : R1118735
Sample Amount : 250 ml

Lab Number : L1705766
Project Number :
Date Collected : 02/23/17 11:20
Date Received : 02/23/17
Date Analyzed : 02/26/17 01:18
Dilution Factor : 1
Analyst : MB
Instrument ID : AIRLAB11
GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
95-63-6	1,2,4-Trimethylbenzene	2.17	0.200	--	10.7	0.983	--	
100-44-7	Benzyl chloride	ND	0.200	--	ND	1.04	--	U
541-73-1	1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
106-46-7	1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
95-50-1	1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
120-82-1	1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--	U
87-68-3	Hexachlorobutadiene	ND	0.200	--	ND	2.13	--	U

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8

Client : CA RICH CONSULTANTS, INC.
 Project Name : 3132 LIC LLC
 Lab ID : L1705766-08
 Client ID : SV-X
 Sample Location : 37-25 31ST ST., LIC, NY
 Sample Matrix : SOIL_VAPOR
 Analytical Method : 48,TO-15
 Lab File ID : R1118736
 Sample Amount : 250 ml

Lab Number : L1705766
 Project Number :
 Date Collected : 02/22/17 14:48
 Date Received : 02/23/17
 Date Analyzed : 02/26/17 01:53
 Dilution Factor : 1
 Analyst : MB
 Instrument ID : AIRLAB11
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
75-71-8	Dichlorodifluoromethane	0.225	0.200	--	1.11	0.989	--	
74-87-3	Chloromethane	ND	0.200	--	ND	0.413	--	U
76-14-2	Freon-114	ND	0.200	--	ND	1.40	--	U
75-01-4	Vinyl chloride	ND	0.200	--	ND	0.511	--	U
106-99-0	1,3-Butadiene	ND	0.200	--	ND	0.442	--	U
74-83-9	Bromomethane	ND	0.200	--	ND	0.777	--	U
75-00-3	Chloroethane	ND	0.200	--	ND	0.528	--	U
64-17-5	Ethanol	27.8	5.00	--	52.4	9.42	--	
593-60-2	Vinyl bromide	ND	0.200	--	ND	0.874	--	U
67-64-1	Acetone	33.7	1.00	--	80.1	2.38	--	
75-69-4	Trichlorofluoromethane	0.264	0.200	--	1.48	1.12	--	
67-63-0	Isopropanol	0.890	0.500	--	2.19	1.23	--	
75-35-4	1,1-Dichloroethene	ND	0.200	--	ND	0.793	--	U
75-65-0	Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--	U
75-09-2	Methylene chloride	ND	0.500	--	ND	1.74	--	U
107-05-1	3-Chloropropene	ND	0.200	--	ND	0.626	--	U
75-15-0	Carbon disulfide	0.724	0.200	--	2.25	0.623	--	
76-13-1	Freon-113	ND	0.200	--	ND	1.53	--	U
156-60-5	trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--	U
75-34-3	1,1-Dichloroethane	ND	0.200	--	ND	0.809	--	U
1634-04-4	Methyl tert butyl ether	ND	0.200	--	ND	0.721	--	U
78-93-3	2-Butanone	1.59	0.500	--	4.69	1.47	--	
156-59-2	cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--	U
141-78-6	Ethyl Acetate	ND	0.500	--	ND	1.80	--	U
67-66-3	Chloroform	0.384	0.200	--	1.88	0.977	--	
109-99-9	Tetrahydrofuran	ND	0.500	--	ND	1.47	--	U
107-06-2	1,2-Dichloroethane	ND	0.200	--	ND	0.809	--	U
110-54-3	n-Hexane	1.24	0.200	--	4.37	0.705	--	

nw 3/15/17



Form 1 Volatile Organics

8

Client : CA RICH CONSULTANTS, INC.
 Project Name : 3132 LIC LLC
 Lab ID : L1705766-08
 Client ID : SV-X
 Sample Location : 37-25 31ST ST., LIC, NY
 Sample Matrix : SOIL_VAPOR
 Analytical Method : 48,TO-15
 Lab File ID : R1118736
 Sample Amount : 250 ml

Lab Number : L1705766
 Project Number :
 Date Collected : 02/22/17 14:48
 Date Received : 02/23/17
 Date Analyzed : 02/26/17 01:53
 Dilution Factor : 1
 Analyst : MB
 Instrument ID : AIRLAB11
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
71-55-6	1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--	U
71-43-2	Benzene	7.12	0.200	--	22.7	0.639	--	
56-23-5	Carbon tetrachloride	ND	0.200	--	ND	1.26	--	U
110-82-7	Cyclohexane	0.238	0.200	--	0.819	0.688	--	
78-87-5	1,2-Dichloropropane	ND	0.200	--	ND	0.924	--	U
75-27-4	Bromodichloromethane	ND	0.200	--	ND	1.34	--	U
123-91-1	1,4-Dioxane	ND	0.200	--	ND	0.721	--	U
79-01-6	Trichloroethene	1.24	0.200	--	6.66	1.07	--	
540-84-1	2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--	U
142-82-5	Heptane	0.383	0.200	--	1.57	0.820	--	
10061-01-5	cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
108-10-1	4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
79-00-5	1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--	U
108-88-3	Toluene	8.05	0.200	--	30.3	0.754	--	
591-78-6	2-Hexanone	ND	0.200	--	ND	0.820	--	U
124-48-1	Dibromochloromethane	ND	0.200	--	ND	1.70	--	U
106-93-4	1,2-Dibromoethane	ND	0.200	--	ND	1.54	--	U
127-18-4	Tetrachloroethene	0.710	0.200	--	4.81	1.36	--	
108-90-7	Chlorobenzene	ND	0.200	--	ND	0.921	--	U
100-41-4	Ethylbenzene	1.54	0.200	--	6.69	0.869	--	
179601-23-1	p/m-Xylene	5.69	0.400	--	24.7	1.74	--	
75-25-2	Bromoform	ND	0.200	--	ND	2.07	--	U
100-42-5	Styrene	ND	0.200	--	ND	0.852	--	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--	U
95-47-6	o-Xylene	2.27	0.200	--	9.86	0.869	--	
622-96-8	4-Ethyltoluene	0.493	0.200	--	2.42	0.983	--	
108-67-8	1,3,5-Trimethylbenzene	0.438	0.200	--	2.15	0.983	--	

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Form 1 Volatile Organics

8

Client : CA RICH CONSULTANTS, INC.
Project Name : 3132 LIC LLC
Lab ID : L1705766-08
Client ID : SV-X
Sample Location : 37-25 31ST ST., LIC, NY
Sample Matrix : SOIL_VAPOR
Analytical Method : 48,TO-15
Lab File ID : R1118736
Sample Amount : 250 ml

Lab Number : L1705766
Project Number :
Date Collected : 02/22/17 14:48
Date Received : 02/23/17
Date Analyzed : 02/26/17 01:53
Dilution Factor : 1
Analyst : MB
Instrument ID : AIRLAB11
GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
95-63-6	1,2,4-Trimethylbenzene	1.74	0.200	--	8.55	0.983	--	
100-44-7	Benzyl chloride	ND	0.200	--	ND	1.04	--	U
541-73-1	1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
106-46-7	1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
95-50-1	1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
120-82-1	1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--	U
87-68-3	Hexachlorobutadiene	ND	0.200	--	ND	2.13	--	U

m 3/15/17



Form 1 Volatile Organics

9

Client : CA RICH CONSULTANTS, INC.
 Project Name : 3132 LIC LLC
 Lab ID : L1705766-09
 Client ID : IA-1
 Sample Location : 37-25 31ST ST., LIC, NY
 Sample Matrix : AIR
 Analytical Method : 48,TO-15
 Lab File ID : R1118724
 Sample Amount : 250 ml

Lab Number : L1705766
 Project Number :
 Date Collected : 02/23/17 11:24
 Date Received : 02/23/17
 Date Analyzed : 02/25/17 18:56
 Dilution Factor : 1
 Analyst : MB
 Instrument ID : AIRLAB11
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
75-71-8	Dichlorodifluoromethane	0.280	0.200	--	1.38	0.989	--	
74-87-3	Chloromethane	0.576	0.200	--	1.19	0.413	--	
76-14-2	Freon-114	ND	0.200	--	ND	1.40	--	U
106-99-0	1,3-Butadiene	ND	0.200	--	ND	0.442	--	U
74-83-9	Bromomethane	ND	0.200	--	ND	0.777	--	U
75-00-3	Chloroethane	ND	0.200	--	ND	0.528	--	U
64-17-5	Ethanol	32.2	5.00	--	60.7	9.42	--	
593-60-2	Vinyl bromide	ND	0.200	--	ND	0.874	--	U
67-64-1	Acetone	85.0	1.00	--	202	2.38	--	
75-69-4	Trichlorofluoromethane	0.236	0.200	--	1.33	1.12	--	
67-63-0	Isopropanol	4.20	0.500	--	10.3	1.23	--	
75-65-0	Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--	U
75-09-2	Methylene chloride	1.44	0.500	--	5.00	1.74	--	
107-05-1	3-Chloropropene	ND	0.200	--	ND	0.626	--	U
75-15-0	Carbon disulfide	ND	0.200	--	ND	0.623	--	U
76-13-1	Freon-113	ND	0.200	--	ND	1.53	--	U
156-60-5	trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--	U
75-34-3	1,1-Dichloroethane	ND	0.200	--	ND	0.809	--	U
1634-04-4	Methyl tert butyl ether	ND	0.200	--	ND	0.721	--	U
78-93-3	2-Butanone	1.18	0.500	--	3.48	1.47	--	
141-78-6	Ethyl Acetate	1.69	0.500	--	6.09	1.80	--	
67-66-3	Chloroform	ND	0.200	--	ND	0.977	--	U
109-99-9	Tetrahydrofuran	ND	0.500	--	ND	1.47	--	U
107-06-2	1,2-Dichloroethane	ND	0.200	--	ND	0.809	--	U
110-54-3	n-Hexane	5.30	0.200	--	18.7	0.705	--	
71-43-2	Benzene	0.723	0.200	--	2.31	0.639	--	
110-82-7	Cyclohexane	0.747	0.200	--	2.57	0.688	--	
78-87-5	1,2-Dichloropropane	ND	0.200	--	ND	0.924	--	U

mw 3/15/17



Form 1 Volatile Organics

9

Client : CA RICH CONSULTANTS, INC.
 Project Name : 3132 LIC LLC
 Lab ID : L1705766-09
 Client ID : IA-1
 Sample Location : 37-25 31ST ST., LIC, NY
 Sample Matrix : AIR
 Analytical Method : 48,TO-15
 Lab File ID : R1118724
 Sample Amount : 250 ml

Lab Number : L1705766
 Project Number :
 Date Collected : 02/23/17 11:24
 Date Received : 02/23/17
 Date Analyzed : 02/25/17 18:56
 Dilution Factor : 1
 Analyst : MB
 Instrument ID : AIRLAB11
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
75-27-4	Bromodichloromethane	ND	0.200	--	ND	1.34	--	U
123-91-1	1,4-Dioxane	ND	0.200	--	ND	0.721	--	U
540-84-1	2,2,4-Trimethylpentane	ND <i>WJ</i>	0.200	--	ND <i>WJ</i>	0.934	--	U
142-82-5	Heptane	2.07	0.200	--	8.48	0.820	--	
10061-01-5	cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
108-10-1	4-Methyl-2-pentanone	1.38	0.500	--	5.66	2.05	--	
10061-02-6	trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
79-00-5	1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--	U
108-88-3	Toluene	33.3	0.200	--	125	0.754	--	
591-78-6	2-Hexanone	ND	0.200	--	ND	0.820	--	U
124-48-1	Dibromochloromethane	ND	0.200	--	ND	1.70	--	U
106-93-4	1,2-Dibromoethane	ND	0.200	--	ND	1.54	--	U
108-90-7	Chlorobenzene	ND	0.200	--	ND	0.921	--	U
100-41-4	Ethylbenzene	0.924	0.200	--	4.01	0.869	--	
179601-23-1	p/m-Xylene	3.98	0.400	--	17.3	1.74	--	
75-25-2	Bromoform	ND	0.200	--	ND	2.07	--	U
100-42-5	Styrene	ND	0.200	--	ND	0.852	--	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--	U
95-47-6	o-Xylene	1.41	0.200	--	6.12	0.869	--	
622-96-8	4-Ethyltoluene	ND	0.200	--	ND	0.983	--	U
108-67-8	1,3,5-Trimethylbenzene	0.220	0.200	--	1.08	0.983	--	
95-63-6	1,2,4-Trimethylbenzene	0.788	0.200	--	3.87	0.983	--	
100-44-7	Benzyl chloride	ND	0.200	--	ND	1.04	--	U
541-73-1	1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
106-46-7	1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
95-50-1	1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
120-82-1	1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--	U
87-68-3	Hexachlorobutadiene	ND	0.200	--	ND	2.13	--	U

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Form 1 Volatile Organics

10

Client : CA RICH CONSULTANTS, INC.
 Project Name : 3132 LIC LLC
 Lab ID : L1705766-10
 Client ID : IA-2
 Sample Location : 37-25 31ST ST., LIC, NY
 Sample Matrix : AIR
 Analytical Method : 48,TO-15
 Lab File ID : R1118725
 Sample Amount : 250 ml

Lab Number : L1705766
 Project Number :
 Date Collected : 02/23/17 11:35
 Date Received : 02/23/17
 Date Analyzed : 02/25/17 19:31
 Dilution Factor : 1
 Analyst : MB
 Instrument ID : AIRLAB11
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
75-71-8	Dichlorodifluoromethane	0.287	0.200	--	1.42	0.989	--	
74-87-3	Chloromethane	0.612	0.200	--	1.26	0.413	--	
76-14-2	Freon-114	ND	0.200	--	ND	1.40	--	U
106-99-0	1,3-Butadiene	ND	0.200	--	ND	0.442	--	U
74-83-9	Bromomethane	ND	0.200	--	ND	0.777	--	U
75-00-3	Chloroethane	ND	0.200	--	ND	0.528	--	U
64-17-5	Ethanol	45.8	5.00	--	86.3	9.42	--	
593-60-2	Vinyl bromide	ND	0.200	--	ND	0.874	--	U
67-64-1	Acetone	50.7 J	1.00	--	120 J	2.38	--	
75-69-4	Trichlorofluoromethane	0.251	0.200	--	1.41	1.12	--	
67-63-0	Isopropanol	8.27	0.500	--	20.3	1.23	--	
75-65-0	Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--	U
75-09-2	Methylene chloride	0.939	0.500	--	3.26	1.74	--	
107-05-1	3-Chloropropene	ND	0.200	--	ND	0.626	--	U
75-15-0	Carbon disulfide	ND	0.200	--	ND	0.623	--	U
76-13-1	Freon-113	ND	0.200	--	ND	1.53	--	U
156-60-5	trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--	U
75-34-3	1,1-Dichloroethane	ND	0.200	--	ND	0.809	--	U
1634-04-4	Methyl tert butyl ether	ND	0.200	--	ND	0.721	--	U
78-93-3	2-Butanone	1.24	0.500	--	3.66	1.47	--	
141-78-6	Ethyl Acetate	2.31	0.500	--	8.32	1.80	--	
67-66-3	Chloroform	ND	0.200	--	ND	0.977	--	U
109-99-9	Tetrahydrofuran	ND	0.500	--	ND	1.47	--	U
107-06-2	1,2-Dichloroethane	ND	0.200	--	ND	0.809	--	U
110-54-3	n-Hexane	3.37	0.200	--	11.9	0.705	--	
71-43-2	Benzene	1.06	0.200	--	3.39	0.639	--	
110-82-7	Cyclohexane	0.604	0.200	--	2.08	0.688	--	
78-87-5	1,2-Dichloropropane	ND	0.200	--	ND	0.924	--	U

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Form 1 Volatile Organics

10

Client : CA RICH CONSULTANTS, INC.
 Project Name : 3132 LIC LLC
 Lab ID : L1705766-10
 Client ID : IA-2
 Sample Location : 37-25 31ST ST., LIC, NY
 Sample Matrix : AIR
 Analytical Method : 48,TO-15
 Lab File ID : R1118725
 Sample Amount : 250 ml

Lab Number : L1705766
 Project Number :
 Date Collected : 02/23/17 11:35
 Date Received : 02/23/17
 Date Analyzed : 02/25/17 19:31
 Dilution Factor : 1
 Analyst : MB
 Instrument ID : AIRLAB11
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
75-27-4	Bromodichloromethane	ND	0.200	--	ND	1.34	--	U
123-91-1	1,4-Dioxane	ND	0.200	--	ND	0.721	--	U
540-84-1	2,2,4-Trimethylpentane	ND <i>UJ</i>	0.200	--	ND <i>UJ</i>	0.934	--	U
142-82-5	Heptane	1.31	0.200	--	5.37	0.820	--	
10061-01-5	cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
108-10-1	4-Methyl-2-pentanone	0.848	0.500	--	3.48	2.05	--	
10061-02-6	trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
79-00-5	1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--	U
108-88-3	Toluene	18.7	0.200	--	70.5	0.754	--	
591-78-6	2-Hexanone	ND	0.200	--	ND	0.820	--	U
124-48-1	Dibromochloromethane	ND	0.200	--	ND	1.70	--	U
106-93-4	1,2-Dibromoethane	ND	0.200	--	ND	1.54	--	U
108-90-7	Chlorobenzene	ND	0.200	--	ND	0.921	--	U
100-41-4	Ethylbenzene	0.848	0.200	--	3.68	0.869	--	
179601-23-1	p/m-Xylene	3.37	0.400	--	14.6	1.74	--	
75-25-2	Bromoform	ND	0.200	--	ND	2.07	--	U
100-42-5	Styrene	ND	0.200	--	ND	0.852	--	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--	U
95-47-6	o-Xylene	1.16	0.200	--	5.04	0.869	--	
622-96-8	4-Ethyltoluene	ND	0.200	--	ND	0.983	--	U
108-67-8	1,3,5-Trimethylbenzene	0.225	0.200	--	1.11	0.983	--	
95-63-6	1,2,4-Trimethylbenzene	0.794	0.200	--	3.90	0.983	--	
100-44-7	Benzyl chloride	ND	0.200	--	ND	1.04	--	U
541-73-1	1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
106-46-7	1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
95-50-1	1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
120-82-1	1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--	U
87-68-3	Hexachlorobutadiene	ND	0.200	--	ND	2.13	--	U

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Form 1 Volatile Organics

11

Client : CA RICH CONSULTANTS, INC.
 Project Name : 3132 LIC LLC
 Lab ID : L1705766-11
 Client ID : IA-3
 Sample Location : 37-25 31ST ST., LIC, NY
 Sample Matrix : AIR
 Analytical Method : 48,TO-15
 Lab File ID : R1118726
 Sample Amount : 250 ml

Lab Number : L1705766
 Project Number :
 Date Collected : 02/23/17 12:40
 Date Received : 02/23/17
 Date Analyzed : 02/25/17 20:06
 Dilution Factor : 1
 Analyst : MB
 Instrument ID : AIRLAB11
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
75-71-8	Dichlorodifluoromethane	0.682	0.200	--	3.37	0.989	--	
74-87-3	Chloromethane	0.639	0.200	--	1.32	0.413	--	
76-14-2	Freon-114	ND	0.200	--	ND	1.40	--	U
106-99-0	1,3-Butadiene	ND	0.200	--	ND	0.442	--	U
74-83-9	Bromomethane	ND	0.200	--	ND	0.777	--	U
75-00-3	Chloroethane	ND	0.200	--	ND	0.528	--	U
64-17-5	Ethanol	37.8	5.00	--	71.2	9.42	--	
593-60-2	Vinyl bromide	ND	0.200	--	ND	0.874	--	U
67-64-1	Acetone	11.3	1.00	--	26.8	2.38	--	
75-69-4	Trichlorofluoromethane	0.930	0.200	--	5.23	1.12	--	
67-63-0	Isopropanol	5.16	0.500	--	12.7	1.23	--	
75-65-0	Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--	U
75-09-2	Methylene chloride	0.849	0.500	--	2.95	1.74	--	
107-05-1	3-Chloropropene	ND	0.200	--	ND	0.626	--	U
75-15-0	Carbon disulfide	ND	0.200	--	ND	0.623	--	U
76-13-1	Freon-113	ND	0.200	--	ND	1.53	--	U
156-60-5	trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--	U
75-34-3	1,1-Dichloroethane	ND	0.200	--	ND	0.809	--	U
1634-04-4	Methyl tert butyl ether	ND	0.200	--	ND	0.721	--	U
78-93-3	2-Butanone	0.775	0.500	--	2.29	1.47	--	
141-78-6	Ethyl Acetate	ND	0.500	--	ND	1.80	--	U
67-66-3	Chloroform	ND	0.200	--	ND	0.977	--	U
109-99-9	Tetrahydrofuran	ND	0.500	--	ND	1.47	--	U
107-06-2	1,2-Dichloroethane	ND	0.200	--	ND	0.809	--	U
110-54-3	n-Hexane	0.452	0.200	--	1.59	0.705	--	
71-43-2	Benzene	0.773	0.200	--	2.47	0.639	--	
110-82-7	Cyclohexane	0.200	0.200	--	0.688	0.688	--	
78-87-5	1,2-Dichloropropane	ND	0.200	--	ND	0.924	--	U

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Form 1 Volatile Organics

11

Client : CA RICH CONSULTANTS, INC.
 Project Name : 3132 LIC LLC
 Lab ID : L1705766-11
 Client ID : IA-3
 Sample Location : 37-25 31ST ST., LIC, NY
 Sample Matrix : AIR
 Analytical Method : 48,TO-15
 Lab File ID : R1118726
 Sample Amount : 250 ml

Lab Number : L1705766
 Project Number :
 Date Collected : 02/23/17 12:40
 Date Received : 02/23/17
 Date Analyzed : 02/25/17 20:06
 Dilution Factor : 1
 Analyst : MB
 Instrument ID : AIRLAB11
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
75-27-4	Bromodichloromethane	ND	0.200	--	ND	1.34	--	U
123-91-1	1,4-Dioxane	ND	0.200	--	ND	0.721	--	U
540-84-1	2,2,4-Trimethylpentane	0.290	0.200	--	1.35	0.934	--	
142-82-5	Heptane	0.347	0.200	--	1.42	0.820	--	
10061-01-5	cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
108-10-1	4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
79-00-5	1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--	U
108-88-3	Toluene	2.51	0.200	--	9.46	0.754	--	
591-78-6	2-Hexanone	ND	0.200	--	ND	0.820	--	U
124-48-1	Dibromochloromethane	ND	0.200	--	ND	1.70	--	U
106-93-4	1,2-Dibromoethane	ND	0.200	--	ND	1.54	--	U
108-90-7	Chlorobenzene	ND	0.200	--	ND	0.921	--	U
100-41-4	Ethylbenzene	0.321	0.200	--	1.39	0.869	--	
179601-23-1	p/m-Xylene	1.16	0.400	--	5.04	1.74	--	
75-25-2	Bromoform	ND	0.200	--	ND	2.07	--	U
100-42-5	Styrene	ND	0.200	--	ND	0.852	--	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--	U
95-47-6	o-Xylene	0.447	0.200	--	1.94	0.869	--	
622-96-8	4-Ethyltoluene	ND	0.200	--	ND	0.983	--	U
108-67-8	1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--	U
95-63-6	1,2,4-Trimethylbenzene	0.540	0.200	--	2.65	0.983	--	
100-44-7	Benzyl chloride	ND	0.200	--	ND	1.04	--	U
541-73-1	1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
106-46-7	1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
95-50-1	1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
120-82-1	1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--	U
87-68-3	Hexachlorobutadiene	ND	0.200	--	ND	2.13	--	U

NW 3/15/17



Form 1 Volatile Organics

12

Client : CA RICH CONSULTANTS, INC.
 Project Name : 3132 LIC LLC
 Lab ID : L1705766-12
 Client ID : OA-1
 Sample Location : 37-25 31ST ST., LIC, NY
 Sample Matrix : AIR
 Analytical Method : 48,TO-15
 Lab File ID : R1118721
 Sample Amount : 250 ml

Lab Number : L1705766
 Project Number :
 Date Collected : 02/23/17 12:06
 Date Received : 02/23/17
 Date Analyzed : 02/25/17 17:12
 Dilution Factor : 1
 Analyst : MB
 Instrument ID : AIRLAB11
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
75-71-8	Dichlorodifluoromethane	0.347	0.200	--	1.72	0.989	--	
74-87-3	Chloromethane	0.522	0.200	--	1.08	0.413	--	
76-14-2	Freon-114	ND	0.200	--	ND	1.40	--	U
106-99-0	1,3-Butadiene	ND	0.200	--	ND	0.442	--	U
74-83-9	Bromomethane	ND	0.200	--	ND	0.777	--	U
75-00-3	Chloroethane	ND	0.200	--	ND	0.528	--	U
64-17-5	Ethanol	17.7	5.00	--	33.4	9.42	--	
593-60-2	Vinyl bromide	ND	0.200	--	ND	0.874	--	U
67-64-1	Acetone	8.80	1.00	--	20.9	2.38	--	
75-69-4	Trichlorofluoromethane	0.226	0.200	--	1.27	1.12	--	
67-63-0	Isopropanol	2.47	0.500	--	6.07	1.23	--	
75-65-0	Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--	U
75-09-2	Methylene chloride	0.584	0.500	--	2.03	1.74	--	
107-05-1	3-Chloropropene	ND	0.200	--	ND	0.626	--	U
75-15-0	Carbon disulfide	ND	0.200	--	ND	0.623	--	U
76-13-1	Freon-113	ND	0.200	--	ND	1.53	--	U
156-60-5	trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--	U
75-34-3	1,1-Dichloroethane	ND	0.200	--	ND	0.809	--	U
1634-04-4	Methyl tert butyl ether	ND	0.200	--	ND	0.721	--	U
78-93-3	2-Butanone	ND	0.500	--	ND	1.47	--	U
141-78-6	Ethyl Acetate	0.638	0.500	--	2.30	1.80	--	
67-66-3	Chloroform	ND	0.200	--	ND	0.977	--	U
109-99-9	Tetrahydrofuran	ND	0.500	--	ND	1.47	--	U
107-06-2	1,2-Dichloroethane	ND	0.200	--	ND	0.809	--	U
110-54-3	n-Hexane	0.446	0.200	--	1.57	0.705	--	
71-43-2	Benzene	0.451	0.200	--	1.44	0.639	--	
110-82-7	Cyclohexane	ND	0.200	--	ND	0.688	--	U
78-87-5	1,2-Dichloropropane	ND	0.200	--	ND	0.924	--	U

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Form 1 Volatile Organics

12

Client : CA RICH CONSULTANTS, INC.
 Project Name : 3132 LIC LLC
 Lab ID : L1705766-12
 Client ID : OA-1
 Sample Location : 37-25 31ST ST., LIC, NY
 Sample Matrix : AIR
 Analytical Method : 48,TO-15
 Lab File ID : R1118721
 Sample Amount : 250 ml

Lab Number : L1705766
 Project Number :
 Date Collected : 02/23/17 12:06
 Date Received : 02/23/17
 Date Analyzed : 02/25/17 17:12
 Dilution Factor : 1
 Analyst : MB
 Instrument ID : AIRLAB11
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
75-27-4	Bromodichloromethane	ND	0.200	--	ND	1.34	--	U
123-91-1	1,4-Dioxane	ND	0.200	--	ND	0.721	--	U
540-84-1	2,2,4-Trimethylpentane	0.265	0.200	--	1.24	0.934	--	
142-82-5	Heptane	0.265	0.200	--	1.09	0.820	--	
10061-01-5	cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
108-10-1	4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
79-00-5	1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--	U
108-88-3	Toluene	2.13	0.200	--	8.03	0.754	--	
591-78-6	2-Hexanone	ND	0.200	--	ND	0.820	--	U
124-48-1	Dibromochloromethane	ND	0.200	--	ND	1.70	--	U
106-93-4	1,2-Dibromoethane	ND	0.200	--	ND	1.54	--	U
108-90-7	Chlorobenzene	ND	0.200	--	ND	0.921	--	U
100-41-4	Ethylbenzene	0.238	0.200	--	1.03	0.869	--	
179601-23-1	p/m-Xylene	0.849	0.400	--	3.69	1.74	--	
75-25-2	Bromoform	ND	0.200	--	ND	2.07	--	U
100-42-5	Styrene	ND	0.200	--	ND	0.852	--	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--	U
95-47-6	o-Xylene	0.303	0.200	--	1.32	0.869	--	
622-96-8	4-Ethyltoluene	ND	0.200	--	ND	0.983	--	U
108-67-8	1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--	U
95-63-6	1,2,4-Trimethylbenzene	0.221	0.200	--	1.09	0.983	--	
100-44-7	Benzyl chloride	ND	0.200	--	ND	1.04	--	U
541-73-1	1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
106-46-7	1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
95-50-1	1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
120-82-1	1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--	U
87-68-3	Hexachlorobutadiene	ND	0.200	--	ND	2.13	--	U

see 3/15/17



Form 1 Volatile Organics

13

Client : CA RICH CONSULTANTS, INC.
 Project Name : 3132 LIC LLC
 Lab ID : L1705766-13
 Client ID : OA-2
 Sample Location : 37-25 31ST ST., LIC, NY
 Sample Matrix : AIR
 Analytical Method : 48,TO-15
 Lab File ID : R1118722
 Sample Amount : 250 ml

Lab Number : L1705766
 Project Number :
 Date Collected : 02/23/17 11:57
 Date Received : 02/23/17
 Date Analyzed : 02/25/17 17:47
 Dilution Factor : 1
 Analyst : MB
 Instrument ID : AIRLAB11
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
75-71-8	Dichlorodifluoromethane	0.361	0.200	--	1.79	0.989	--	
74-87-3	Chloromethane	0.628	0.200	--	1.30	0.413	--	
76-14-2	Freon-114	ND	0.200	--	ND	1.40	--	U
106-99-0	1,3-Butadiene	ND	0.200	--	ND	0.442	--	U
74-83-9	Bromomethane	ND	0.200	--	ND	0.777	--	U
75-00-3	Chloroethane	ND	0.200	--	ND	0.528	--	U
64-17-5	Ethanol	19.1	5.00	--	36.0	9.42	--	
593-60-2	Vinyl bromide	ND	0.200	--	ND	0.874	--	U
67-64-1	Acetone	8.89	1.00	--	21.1	2.38	--	
75-69-4	Trichlorofluoromethane	0.262	0.200	--	1.47	1.12	--	
67-63-0	Isopropanol	2.64	0.500	--	6.49	1.23	--	
75-65-0	Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--	U
75-09-2	Methylene chloride	0.572	0.500	--	1.99	1.74	--	
107-05-1	3-Chloropropene	ND	0.200	--	ND	0.626	--	U
75-15-0	Carbon disulfide	ND	0.200	--	ND	0.623	--	U
76-13-1	Freon-113	ND	0.200	--	ND	1.53	--	U
156-60-5	trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--	U
75-34-3	1,1-Dichloroethane	ND	0.200	--	ND	0.809	--	U
1634-04-4	Methyl tert butyl ether	ND	0.200	--	ND	0.721	--	U
78-93-3	2-Butanone	ND	0.500	--	ND	1.47	--	U
141-78-6	Ethyl Acetate	0.698	0.500	--	2.52	1.80	--	
67-66-3	Chloroform	ND	0.200	--	ND	0.977	--	U
109-99-9	Tetrahydrofuran	ND	0.500	--	ND	1.47	--	U
107-06-2	1,2-Dichloroethane	ND	0.200	--	ND	0.809	--	U
110-54-3	n-Hexane	0.439	0.200	--	1.55	0.705	--	
71-43-2	Benzene	0.515	0.200	--	1.65	0.639	--	
110-82-7	Cyclohexane	ND	0.200	--	ND	0.688	--	U
78-87-5	1,2-Dichloropropane	ND	0.200	--	ND	0.924	--	U

w/3/15/17



Form 1 Volatile Organics

13

Client : CA RICH CONSULTANTS, INC.
 Project Name : 3132 LIC LLC
 Lab ID : L1705766-13
 Client ID : OA-2
 Sample Location : 37-25 31ST ST., LIC, NY
 Sample Matrix : AIR
 Analytical Method : 48,TO-15
 Lab File ID : R1118722
 Sample Amount : 250 ml

Lab Number : L1705766
 Project Number :
 Date Collected : 02/23/17 11:57
 Date Received : 02/23/17
 Date Analyzed : 02/25/17 17:47
 Dilution Factor : 1
 Analyst : MB
 Instrument ID : AIRLAB11
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
75-27-4	Bromodichloromethane	ND	0.200	--	ND	1.34	--	U
123-91-1	1,4-Dioxane	ND	0.200	--	ND	0.721	--	U
540-84-1	2,2,4-Trimethylpentane	0.314	0.200	--	1.47	0.934	--	
142-82-5	Heptane	0.284	0.200	--	1.16	0.820	--	
10061-01-5	cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
108-10-1	4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
79-00-5	1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--	U
108-88-3	Toluene	2.03	0.200	--	7.65	0.754	--	
591-78-6	2-Hexanone	ND	0.200	--	ND	0.820	--	U
124-48-1	Dibromochloromethane	ND	0.200	--	ND	1.70	--	U
106-93-4	1,2-Dibromoethane	ND	0.200	--	ND	1.54	--	U
108-90-7	Chlorobenzene	ND	0.200	--	ND	0.921	--	U
100-41-4	Ethylbenzene	0.202	0.200	--	0.877	0.869	--	
179601-23-1	p/m-Xylene	0.725	0.400	--	3.15	1.74	--	
75-25-2	Bromoform	ND	0.200	--	ND	2.07	--	U
100-42-5	Styrene	ND	0.200	--	ND	0.852	--	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--	U
95-47-6	o-Xylene	0.254	0.200	--	1.10	0.869	--	
622-96-8	4-Ethyltoluene	ND	0.200	--	ND	0.983	--	U
108-67-8	1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--	U
95-63-6	1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--	U
100-44-7	Benzyl chloride	ND	0.200	--	ND	1.04	--	U
541-73-1	1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
106-46-7	1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
95-50-1	1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
120-82-1	1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--	U
87-68-3	Hexachlorobutadiene	ND	0.200	--	ND	2.13	--	U

L1705766



Form 1 Volatile Organics

14

Client : CA RICH CONSULTANTS, INC.
 Project Name : 3132 LIC LLC
 Lab ID : L1705766-14
 Client ID : OA-3
 Sample Location : 37-25 31ST ST., LIC, NY
 Sample Matrix : AIR
 Analytical Method : 48,TO-15
 Lab File ID : R1118723
 Sample Amount : 250 ml

Lab Number : L1705766
 Project Number :
 Date Collected : 02/23/17 12:08
 Date Received : 02/23/17
 Date Analyzed : 02/25/17 18:22
 Dilution Factor : 1
 Analyst : MB
 Instrument ID : AIRLAB11
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
75-71-8	Dichlorodifluoromethane	0.364	0.200	--	1.80	0.989	--	
74-87-3	Chloromethane	0.583	0.200	--	1.20	0.413	--	
76-14-2	Freon-114	ND	0.200	--	ND	1.40	--	U
106-99-0	1,3-Butadiene	ND	0.200	--	ND	0.442	--	U
74-83-9	Bromomethane	ND	0.200	--	ND	0.777	--	U
75-00-3	Chloroethane	ND	0.200	--	ND	0.528	--	U
64-17-5	Ethanol	20.3	5.00	--	38.3	9.42	--	
593-60-2	Vinyl bromide	ND	0.200	--	ND	0.874	--	U
67-64-1	Acetone	8.92	1.00	--	21.2	2.38	--	
75-69-4	Trichlorofluoromethane	0.252	0.200	--	1.42	1.12	--	
67-63-0	Isopropanol	2.62	0.500	--	6.44	1.23	--	
75-65-0	Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--	U
75-09-2	Methylene chloride	0.857	0.500	--	2.98	1.74	--	
107-05-1	3-Chloropropene	ND	0.200	--	ND	0.626	--	U
75-15-0	Carbon disulfide	ND	0.200	--	ND	0.623	--	U
76-13-1	Freon-113	ND	0.200	--	ND	1.53	--	U
156-60-5	trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--	U
75-34-3	1,1-Dichloroethane	ND	0.200	--	ND	0.809	--	U
1634-04-4	Methyl tert butyl ether	ND	0.200	--	ND	0.721	--	U
78-93-3	2-Butanone	ND	0.500	--	ND	1.47	--	U
141-78-6	Ethyl Acetate	0.663	0.500	--	2.39	1.80	--	
67-66-3	Chloroform	ND	0.200	--	ND	0.977	--	U
109-99-9	Tetrahydrofuran	ND	0.500	--	ND	1.47	--	U
107-06-2	1,2-Dichloroethane	ND	0.200	--	ND	0.809	--	U
110-54-3	n-Hexane	0.461	0.200	--	1.62	0.705	--	
71-43-2	Benzene	0.543	0.200	--	1.73	0.639	--	
110-82-7	Cyclohexane	ND	0.200	--	ND	0.688	--	U
78-87-5	1,2-Dichloropropane	ND	0.200	--	ND	0.924	--	U

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Form 1 Volatile Organics

14

Client : CA RICH CONSULTANTS, INC.
 Project Name : 3132 LIC LLC
 Lab ID : L1705766-14
 Client ID : OA-3
 Sample Location : 37-25 31ST ST., LIC, NY
 Sample Matrix : AIR
 Analytical Method : 48,TO-15
 Lab File ID : R1118723
 Sample Amount : 250 ml

Lab Number : L1705766
 Project Number :
 Date Collected : 02/23/17 12:08
 Date Received : 02/23/17
 Date Analyzed : 02/25/17 18:22
 Dilution Factor : 1
 Analyst : MB
 Instrument ID : AIRLAB11
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
75-27-4	Bromodichloromethane	ND	0.200	--	ND	1.34	--	U
123-91-1	1,4-Dioxane	ND	0.200	--	ND	0.721	--	U
540-84-1	2,2,4-Trimethylpentane	0.333	0.200	--	1.56	0.934	--	
142-82-5	Heptane	0.231	0.200	--	0.947	0.820	--	
10061-01-5	cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
108-10-1	4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
79-00-5	1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--	U
108-88-3	Toluene	1.86	0.200	--	7.01	0.754	--	
591-78-6	2-Hexanone	ND	0.200	--	ND	0.820	--	U
124-48-1	Dibromochloromethane	ND	0.200	--	ND	1.70	--	U
106-93-4	1,2-Dibromoethane	ND	0.200	--	ND	1.54	--	U
108-90-7	Chlorobenzene	ND	0.200	--	ND	0.921	--	U
100-41-4	Ethylbenzene	0.223	0.200	--	0.969	0.869	--	
179601-23-1	p/m-Xylene	0.786	0.400	--	3.41	1.74	--	
75-25-2	Bromoform	ND	0.200	--	ND	2.07	--	U
100-42-5	Styrene	ND	0.200	--	ND	0.852	--	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--	U
95-47-6	o-Xylene	0.281	0.200	--	1.22	0.869	--	
622-96-8	4-Ethyltoluene	ND	0.200	--	ND	0.983	--	U
108-67-8	1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--	U
95-63-6	1,2,4-Trimethylbenzene	0.232	0.200	--	1.14	0.983	--	
100-44-7	Benzyl chloride	ND	0.200	--	ND	1.04	--	U
541-73-1	1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
106-46-7	1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
95-50-1	1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
120-82-1	1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--	U
87-68-3	Hexachlorobutadiene	ND	0.200	--	ND	2.13	--	U

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