

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.

William J. Fitchett

Project Environmental Scientist

Reviewed by:

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).

		roun
02140003	6/14/17	
IPEP QEP No.	Date	Signature

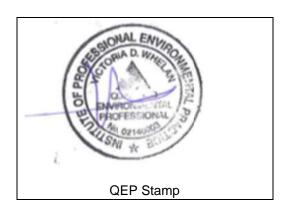


TABLE OF CONTENTS

Section	1	<u>Page</u>
1.0	Introduction and Purpose	1
2.0	Physical Site Characteristics	2
3.0	Summary of Work Activities	3
4.0	Summary of Off-Site Investigation Results	7
5.0	Conclusions and Recommendations	8
6.0	References	9

FIGURES

- 1. Property Location Map
- 2. Off-Site Soil Vapor Evaluation Sample Locations

TABLES

- 1. Validated Volatile Organic Compounds in Sidewalk Soil Vapor
- Validated Volatile Organic Compounds in Sub-Slab Soil Vapor, Indoor Air and Outdoor Air (37-29 32nd Street)
- Validated Volatile Organic Compounds in Sub-Slab Soil Vapor, Indoor Air and Outdoor Air (37-21 31st Street)

APPENDICES

- A. Access Letters
- B. NYSDOH Indoor Air Quality Questionnaire and Building Inventory Forms
- C. Typical Sub-Slab Soil Vapor Point
- D. Data Usability Summary Report

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** <u>Sidewalk:</u> 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** <u>37-29 32nd Street</u>: 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 subslab 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

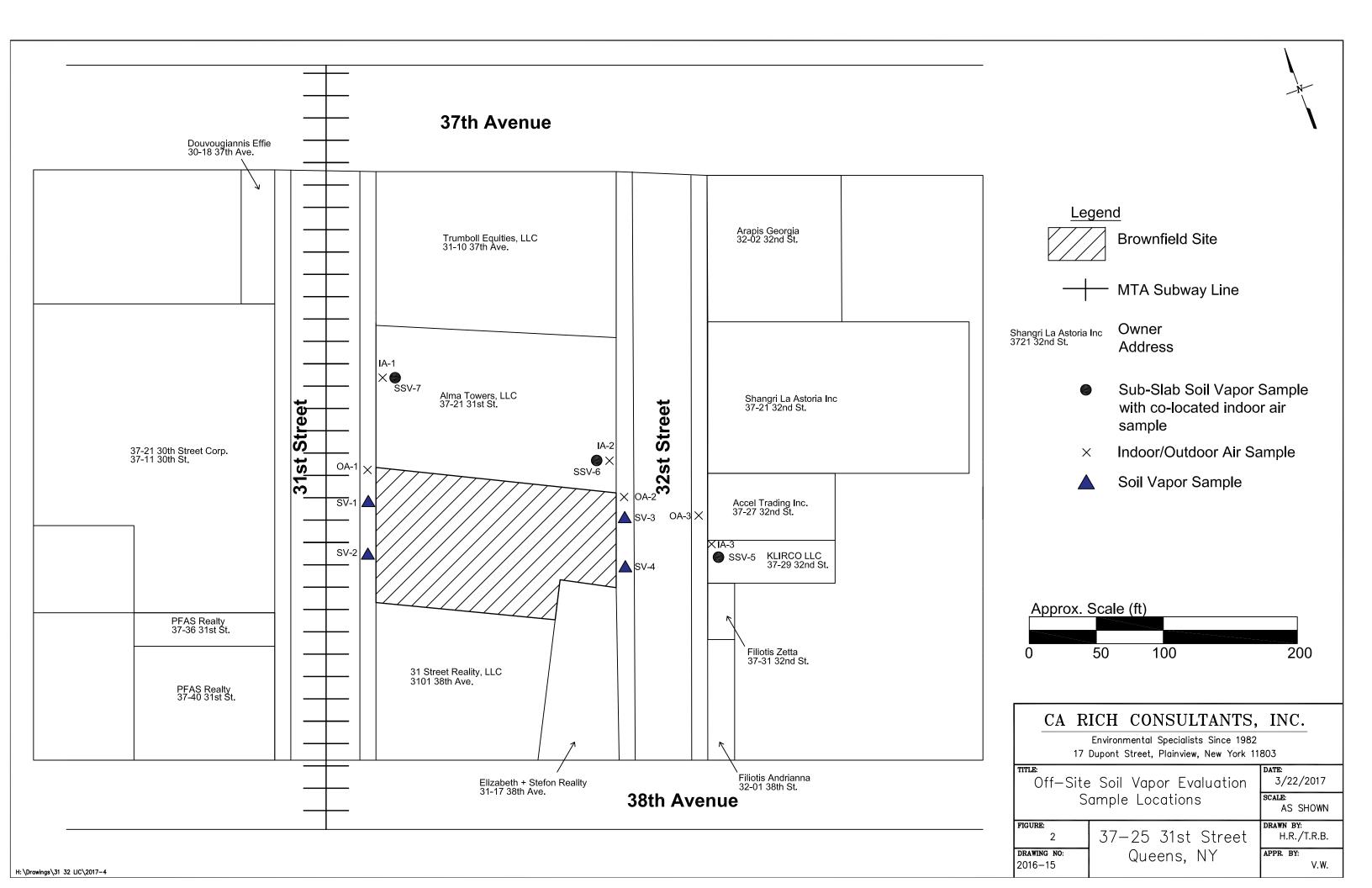
- The owners of nine properties surrounding the Site were contacted and asked if they
 would grant permission to have indoor air and sub-slab soil vapor samples collected at
 their buildings. Two of the nine property owners agreed to grant access for the collection
 of these samples.
- 37-29 32nd Street 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





TABLES

Table 1

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

LOCATION SAMPLING DATE SAMPLE TYPE	SV-1 2/22/2017 Soil Vapor		SV-2 2/22/2017 Soil Vapor		SV-3 2/22/2017 Soil Vapor		SV-4 2/22/2017 Soil Vapor		SV-X 2/22/2017 Soil Vapor		*NYSDOH 2006 Matrix1/Matrix 2 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 .c								
Vinyl chloride	0.511	U	<5								
1,3-Butadiene Bromomethane	0.442 0.777	U	NS NS								
Chloroethane	0.777	U	NS NS								
Ethanol	70.5	U	60.1	U	68.2	U	66.9	U	0.526 52.4	U	NS NS
Vinyl bromide	0.874	U	NS NS								
Acetone	138	٥	60.8	٥	38.7	U	51.5	U	80.1	U	NS NS
Trichlorofluoromethane	1.3		1.41		1.31		1.3		1.48		NS NS
Isopropanol	2.4		2		2.14		1.9		2.19		NS NS
1,1-Dichloroethene	0.793	U	<100								
Tertiary butyl Alcohol	1.52	Ü	1.52	Ü	1.52	U	1.52	Ü	1.52	Ü	NS
Methylene chloride	1.74	Ü	1.74	Ü	1.74	Ü	15.4	Ŭ	1.74	Ü	NS
3-Chloropropene	0.626	Ü	0.626	Ü	0.626	U	0.626	U	0.626	Ü	NS
Carbon disulfide	0.623	Ü	2.15	Ŭ	0.623	Ü	0.623	Ü	2.25	J	NS
Freon-113	1.53	Ü	1.53	U	1.53	Ü	1.53	Ü	1.53	U	NS
trans-1,2-Dichloroethene	0.793	Ü	NS								
1,1-Dichloroethane	0.809	Ū	NS								
Methyl tert butyl ether	0.721	Ū	0.721	U	0.721	U	0.721	U	0.721	Ū	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 Dibromochloromethane	0.82 1.7	U	NS NS								
1,2-Dibromoethane	1.54	U	1.54	U	1.54	U	1.54	U	1.7	U	NS NS
Tetrachloroethene	2.16	U	4.54	U	1.39	U	1.93	U	4.81	U	<100
Chlorobenzene	0.921	U	4.54 0.921	U	0.921	U	0.921	U	0.921	U	<100 NS
Ethylbenzene	5.73	٥	6.25	٥	6.95	U	6.08	U	6.69	U	NS NS
p/m-Xylene	20.8		22.7		25.5		21.9		24.7		NS NS
Bromoform	2.07	U	NS NS								
Styrene	0.852	U	NS NS								
1,1,2,2-Tetrachloroethane	1.37	Ü	1.37	U	1.37	U	1.37	U	1.37	U	NS NS
o-Xylene	8.25	Ŭ	8.95	Ŭ	9.95	Ŭ	8.56	Ŭ	9.86	Ŭ	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	Ü	NS								
1,4-Dichlorobenzene	1.2	Ü	NS								
1,2-Dichlorobenzene	1.2	Ü	NS								
1,2,4-Trichlorobenzene	1.48	Ü	NS								
Hexachlorobutadiene	2.13	U	NS								
Note:											

Note:

ug/m3 - microgams 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 SAMPLING DATE		SSV-5 2/23/2017		*NYSDOH 2006 Matrix1/Matrix 2	IA-3 2/23/2017	,	*NYSDOH 2006 Matrix1/Matrix 2	OA-3	,	
SAMPLING DATE SAMPLE TYPE		Sub-Slab Soil V	anor	Sub-Slab Vapor	Indoor Ai		Ambient Air	2/23/2017 Outdoor Air		
SAME EE TITE	Units		Q	Sub-Slab vapor	ug/m3	Q	Ambient Am	ug/m3	.11	
Volatile Organics in Air	Cinto	ag/iiio	V		ug/1110	V		ug/mo		
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		
Vinyl chloride		0.511	U	<5	0.051	U	< 0.25	0.051		
1,3-Butadiene		0.442	U	NS	0.442	U	NS	0.442		
Bromomethane		0.777	U	NS	0.777	U	NS	0.777		
Chloroethane		0.528	U	NS	0.528	U	NS	0.528		
Ethanol		159		NS	71.2		NS	38.3		
Vinyl bromide		0.874	U	NS	0.874	U	NS	0.874		
Acetone		30.9		NS	26.8		NS	21.2		
Trichlorofluoromethane		3.46		NS	5.23		NS	1.42		
sopropanol		2.97		NS	12.7		NS	6.44		
1,1-Dichloroethene		0.793	U	<100	0.079	U	<3	0.079		
Tertiary butyl Alcohol		1.52	U	NS	1.52	U	NS	1.52		
Methylene chloride		1.74	U	NS	2.95		NS	2.98		
3-Chloropropene		0.626	U	NS	0.626	U	NS	0.626		
Carbon disulfide		0.623	U	NS	0.623	U	NS	0.623		
Freon-113		1.53	U	NS	1.53	U	NS	1.53		
rans-1,2-Dichloroethene		0.793	U	NS	0.793	U	NS	0.793		
,1-Dichloroethane		0.809	U	NS	0.809	U	NS	0.809		
Methyl tert butyl ether		0.721	U	NS	0.721	U	NS	0.721		
2-Butanone		6.37		NS	2.29		NS	1.47		
cis-1,2-Dichloroethene		0.793	U	<100	0.079	U	<3	0.079		
Ethyl Acetate		1.8	U	NS	1.8	U	NS	2.39		
Chloroform		0.977	U	NS	0.977	U	NS	0.977		
etrahydrofuran		1.97		NS	1.47	U	NS	1.47		
,2-Dichloroethane		0.809	U	NS	0.809	U	NS	0.809		
n-Hexane		7.82		NS	1.59		NS	1.62		
1,1,1-Trichloroethane		3.15		<100	0.109	U	<3	0.109		
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		
2-Dichloropropane,		0.924	U	NS	0.924	U	NS	0.924		
Bromodichloromethane		1.34	U	NS	1.34	U	NS	1.34		
1,4-Dioxane		0.721	U	NS	0.721	U	NS	0.721		
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		
I-Methyl-2-pentanone		2.05	U	NS	2.05	U	NS	2.05		
rans-1,3-Dichloropropene		0.908	U	NS	0.908	U	NS	0.908		
,1,2-Trichloroethane		1.09	U	NS	1.09	U	NS	1.09		
oluene		47.5		NS	9.46		NS	7.01		
?-Hexanone		0.82	U	NS	0.82	U	NS	0.82		
Dibromochloromethane		1.7	U	NS	1.7	U	NS	1.7		
,2-Dibromoethane		1.54	U	NS	1.54	U	NS	1.54		
Tetrachloroethene		3.01		<100	2.2		<3	2.44		
Chlorobenzene		0.921	U	NS	0.921	U	NS	0.921		
Ethylbenzene		7.77		NS	1.39		NS	0.969		
/m-Xylene		27.9		NS	5.04		NS	3.41		
Bromoform		2.07	U	NS	2.07	U	NS	2.07		
Styrene		0.852	U	NS	0.852	U	NS	0.852		
,1,2,2-Tetrachloroethane		1.37	Ū	NS	1.37	Ū	NS	1.37		
-Xylene		10.9	-	NS	1.94	-	NS	1.22		
-Ethyltoluene		2.67		NS	0.983	U	NS	0.983		
,3,5-Trimethylbenzene		2.26		NS	0.983	Ü	NS	0.983		
,2,4-Trimethylbenzene		8.75		NS	2.65	·	NS	1.14		
Benzyl chloride		1.04	U	NS	1.04	U	NS	1.04		
,3-Dichlorobenzene		1.2	U	NS	1.2	Ü	NS	1.2		
,4-Dichlorobenzene		1.2	U	NS NS	1.2	U	NS NS	1.2		
,2-Dichlorobenzene		1.2	U	NS NS	1.2	U	NS NS	1.2		
,2,4-Trichlorobenzene		1.48	U	NS NS	1.48	U	NS NS	1.48		
, <u>,</u> , , , , , , , , , , , , , , , , , , 		2.13	U	NS NS	2.13	U	NS NS	1.40		

Note:

ug/m3 - microgams 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 SAMPLING DATE		SSV-6 2/23/2017		SSV-7 2/23/2017		*NYSDOH 2006 Matrix1/Matrix 2	IA-1 2/23/2017		IA-2 2/23/2017		*NYSDOH 2006 Matrix1/Matrix 2	OA-1 2/23/2017		OA-2 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	Q	ug/m3	Q	ug/m3	ug/m3	Q	ug/m3	Q	ug/m3	ug/m3	Q	ug/m3	Q
Volatile Organics in Air		0.00		2 222		NO	4.00		4.40		110	4.70		4.70	
Dichlorodifluoromethane		2.28		0.989	U U	NS	1.38		1.42		NS	1.72		1.79	
Chloromethane		0.413	U U	0.413	U	NS	1.19	U	1.26	U	NS	1.08		1.3	U
Freon-114		1.4	U	1.4	U	NS	1.4	IJ	1.4	U	NS 0.05	1.4	U	1.4	U
Vinyl chloride		0.511	U	0.511	U	<5 NC	0.051	IJ	0.051	U	<0.25	0.051	U	0.051	U
1,3-Butadiene Bromomethane		0.442 0.777	U	0.442 0.777	U	NS NS	0.442 0.777	U	0.442 0.777	U	NS NS	0.442 0.777	U	0.442 0.777	U
Chloroethane		0.528	IJ	0.777	U	NS	0.777	IJ	0.777	IJ	NS NS	0.777	U	0.777	U
Ethanol		98.9	U	123	U	NS NS	60.7	U	86.3	U	NS NS	33.4	U	36	U
Vinyl bromide		0.874	U	0.874	U	NS	0.874	U	0.874	U	NS NS	0.874	U	0.874	U
Acetone		112	U	20.4	U	NS	202	U	120	J	NS NS	20.9	U	21.1	U
Trichlorofluoromethane		1.8		1.12	U	NS	1.33		1.41	J	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	U	0.793	U	<100	0.079	U	0.079	U	<3	0.079	U	0.079	U
Tertiary butyl Alcohol		1.52	Ü	1.52	Ü	NS	1.52	U	1.52	IJ	NS	1.52	Ü	1.52	Ü
Methylene chloride		2.7	٠	1.74	Ü	NS	5	Ŭ	3.26	٠	NS	2.03	Ŭ	1.99	·
3-Chloropropene		0.626	U	0.626	U	NS	0.626	U	0.626	U	NS	0.626	U	0.626	U
Carbon disulfide		3.1	Ŭ	0.623	Ü	NS	0.623	U	0.623	Ü	NS	0.623	Ü	0.623	Ü
Freon-113		1.53	U	1.53	Ü	NS	1.53	U	1.53	Ü	NS	1.53	Ü	1.53	Ü
trans-1,2-Dichloroethene		0.793	Ŭ	0.793	Ŭ	NS	0.793	Ü	0.793	Ü	NS	0.793	Ü	0.793	Ü
1,1-Dichloroethane		0.809	Ū	0.809	Ū	NS	0.809	Ü	0.809	Ū	NS	0.809	Ü	0.809	Ū
Methyl tert butyl ether		0.721	U	0.721	Ū	NS	0.721	Ü	0.721	Ū	NS	0.721	Ü	0.721	Ū
2-Butanone		7.2		5.78		NS	3.48		3.66		NS	1.47	U	1.47	Ū
cis-1.2-Dichloroethene		0.793	U	0.793	U	<100	0.079	U	0.079	U	<3	0.079	Ü	0.079	Ū
Ethyl Acetate		1.8	U	1.8	Ū	NS	6.09		8.32		NS	2.3		2.52	
Chloroform		0.977	U	0.977	U	NS	0.977	U	0.977	U	NS	0.977	U	0.977	U
Tetrahydrofuran		1.73		1.6		NS	1.47	U	1.47	U	NS	1.47	U	1.47	U
1,2-Dichloroethane		0.809	U	0.809	U	NS	0.809	U	0.809	U	NS	0.809	U	0.809	U
n-Hexane		11.1		6.48		NS	18.7		11.9		NS	1.57		1.55	
1,1,1-Trichloroethane		1.09	U	1.09	U	<100	0.109	U	0.109	U	<3	0.109	U	0.109	U
Benzene		7.03		7.86		NS	2.31		3.39		NS	1.44		1.65	
Carbon tetrachloride		1.26	U	1.26	U	<5	0.365		0.371		< 0.25	0.371		0.396	
Cyclohexane		2.34		1.76		NS	2.57		2.08		NS	0.688	U	0.688	U
1,2-Dichloropropane		0.924	U	0.924	U	NS	0.924	U	0.924	U	NS	0.924	U	0.924	U
Bromodichloromethane		1.34	U	1.34	U	NS	1.34	U	1.34	U	NS	1.34	U	1.34	U
1,4-Dioxane		0.721	U	0.721	U	NS	0.721	U	0.721	U	NS	0.721	U	0.721	U
Trichloroethene		25.6		16.4		<5	0.527		0.688		<0.25	0.113		0.226	
2,2,4-Trimethylpentane		2.62		1.96		NS	0.934	UJ	0.934	UJ	NS	1.24		1.47	
Heptane		6.15		3.72		NS	8.48		5.37		NS	1.09		1.16	
cis-1,3-Dichloropropene		0.908	U	0.908	U	NS	0.908	U	0.908	U	NS	0.908	U	0.908	U
4-Methyl-2-pentanone		2.05	U	2.05	U	NS	5.66		3.48		NS	2.05	U	2.05	U
trans-1,3-Dichloropropene		0.908	U	0.908	U	NS	0.908	U	0.908	U	NS	0.908	U	0.908	U
1,1,2-Trichloroethane		1.09	U	1.09	U	NS	1.09	U	1.09	U	NS	1.09	U	1.09	U
Toluene		52.4	,,,	47.9	U	NS NC	125	,,	70.5		NS	8.03		7.65	
2-Hexanone		0.82	U	0.82		NS NC	0.82	U	0.82	U	NS	0.82	U	0.82	U
Dibromochloromethane		1.7	U	1.7	U U	NS NS	1.7	U	1.7	U	NS NS	1.7	U	1.7	U
1,2-Dibromoethane Tetrachloroethene		1.54 15.1	U	1.54 6.78	U	NS <100	1.54 2.31	U	1.54 2.16	U	NS <3	1.54 2.57	U	1.54 2.56	U
			U		U		0.921	U		U	<3 NS				U
Chlorobenzene Ethylbenzene		0.921 8.25	U	0.921 8.34	U	NS NS	0.921 4.01	U	0.921 3.68	U	NS NS	0.921 1.03	U	0.921 0.877	U
Ethylbenzene n/m-Yylene		8.25 29.7		8.34 30		NS NS	4.01 17.3		3.68 14.6		NS NS	3.69		3.15	
p/m-Xylene Bromoform		29.7	U	30 2.07	U	NS NS	17.3 2.07	U	2.07	U	NS NS	3.69 2.07	U	3.15 2.07	U
Styrene		0.852	U	0.852	U	NS NS	0.852	U	0.852	U	NS NS	0.852	U	0.852	U
1,1,2,2-Tetrachloroethane		1.37	U	1.37	U	NS	1.37	U	1.37	IJ	NS	1.37	U	1.37	U
o-Xylene		11.7	U	11.9	U	NS NS	6.12	٥	5.04	0	NS	1.32	٥	1.1	0
4-Ethyltoluene		2.81		2.87		NS	0.983	U	0.983	U	NS NS	0.983	U	0.983	U
1,3,5-Trimethylbenzene		2.53		2.63		NS NS	1.08	U	1.11	U	NS NS	0.983	U	0.983	U
1,2,4-Trimethylbenzene		2.53		10.7		NS	3.87		3.9		NS NS	1.09	U	0.983	U
Benzyl chloride		1.04	U	1.04	U	NS NS	1.04	U	1.04	U	NS NS	1.09	U	1.04	U
1,3-Dichlorobenzene		1.04	IJ	1.04	U	NS NS	1.04	IJ	1.04	U	NS NS	1.04	U	1.04	U
1,4-Dichlorobenzene		1.2	U	1.2	U	NS NS	1.2	U	1.2	U	NS NS	1.2	U	1.2	U
1,2-Dichlorobenzene		1.2	IJ	1.2	U	NS NS	1.2	II	1.2	U	NS NS	1.2	U	1.2	U
		1.48	U	1.48	U	NS NS	1.48	U	1.48	U	NS NS	1.48	U	1.48	U
1,2,4-Trichlorobenzene Hexachlorobutadiene		2.13	U	2.13	U	NS NS	2.13	IJ	2.13	U	NS NS	2.13	U	2.13	U
i iexaciliorobulauiene		۷.13	U	2.13	U	СИI	۷.13	U	2.13	U	GVI	2.13	U	2.13	U

Note:
ug/m3 - microgams per cubic meter
Q - Qualifier
U- Not detected at or above laboratory detection limits.

*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

UJ - The analyte was not detected above the sample reporting limit; and the reporting limit is approximate. NS- No standard for specific compound

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

Appendix A



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.

VADUN

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



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.

VADUN

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



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.

Vasur

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



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



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.

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.

Vasur

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



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.

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: 37-21 31st Street

Agreed

Signature:_____

Printed Name:_____

Date: _____

Telephone No. (Day)_____

Telephone No. (Evening)

cc: Caroline Eigenbrodt, NYSDEC Stephanie Selmer, NYSDOH



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

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 37-27 32nd 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: 37-27 32nd Street

Agreed
Signature:
Printed Name:
Date:
Telephone No. (Day)
Telephone No. (Evening)

cc: Caroline Eigenbrodt, NYSDEC Stephanie Selmer, NYSDOH



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.

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.

Ca RICH Environmental Specialists

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: 37-29 32nd Street

Agreed	
Signature:	
Printed Name:	
Date:	
Felephone No. (Day)	
Felephone 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

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 37-31 32nd 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-

Ca RICH Environmental Specialists

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: 37-31 32nd Street

Agreed	
Signature:	
Printed Name:	
Date:	
Telephone No. (Day)	
Telephone No. (Evening)	

cc: Caroline Eigenbrodt, NYSDEC Stephanie Selmer, NYSDOH

U.S. Postal Service™

U.S. Postal Service

		D MAIL RECEIPT Only; No Insurance Coverage		
4497	Article Sent To:	upaut 37-3/32 ^M S	H. Queens	
D31	Postage	\$ 465 11-2	6	
2	Certified Fee	3.00	Postmark	
П	Return Receipt Fee (Endorsement Required)	300	Here	
0015	Restricted Delivery Fee (Endorsement Required)		- 6	
3400	Total Postage & Fees	\$ 6.465		
m T	Name (Please Print Clearly	the Gorphiad What is,	ine.	
	Street, Apt. No.; or POTOX Dupont Street			
709	City, State, ZIP-4 Plainview, New York 11800			
	PS Form 3800, July 1999	See	Reverse for Instructions	

	CERTIFIED	MAIL™ REC	EIPT overage Provided)
3363		tion visit our website a	
F29	Postage	\$ 465	11-26
0000	Certified Fee Return Receipt Fee (Endorsement Required) Restricted Delivery Fee	3.00	Postmark Here
250 0	(Endorsement Required) Total Postage & Fees	\$ 6.46.5	
7013 Ei	Sent To Control Street, Apt. No.; or PO Box No. 37-0	Decupant 40 31st Stu	<u>च</u>
MIPPIN DUV. TITO			See Reverse for Instructions

낕	(Domestic Mail Or	MAIL™ RECE nly; No Insurance Cov	Perage Provided)
333	For delivery informa	tion visit our website at	JSE
F296	Postage Certified Fee	\$ 46.5	11-26-16 Postmark
0000	Return Receipt Fee (Endorsement Required) Restricted Delivery Fee (Endorsement Required)	300	Here
250	Total Postage & Fees	\$ 6,46,5	
7013 2	Sent To 31 O5 38 Sireet, Apt. No.; or PO Box No. City, State, ZIP+4 (Vec.IS PS Form 3800, August	th Ave / Carry	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 Consultant, he Phone No. 516-576-8844
Purpose of Investigation Off-Site Soil vapor intrusion investigações For BCP Site # C24/1/82
1. OCCUPANT: Valco Building Materials, Inc.
Interviewed: Y
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, Carp.
Interviewed: Y/N
Last Name:First Name:
Last Name:First Name: Address:
County: Queens
Home Phone: Office Phone: Office Phone:
3. BUILDING CHARACTERISTICS
Type of Building: (Circle appropriate response)
Residential School Commercial/Multi-use Industrial Church Other:

If the property is residential,	type? (Circle ap	propriate respo	onse)	
Ranch Raised Ranch Cape Cod Duplex Modular	2-Family Split Level Contemporary Apartment Hou Log Home	ise Town		
If multiple units, how many?			2	
If the property is commercial	, type?			
Business Type(s)	dwarking.	shap		
Does it include residences	(i.e., multi-use)?	D LN	If yes, how many?	
Other characteristics:				
Number of floors		Building age_		
Is the building insulated? Y	/ N	How air tight?	? Tight / Average / Not Tight	
4. AIRFLOW				
Use air current tubes or trace	r smoke to evalu	ıate airflow pa	atterns and qualitatively describe:	
Airflow between floors				
			-	
Airflow near source				
Outdoor air infiltration	e e			
Infiltration into air ducts				

	3								
5.	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 finish	ed				
	j. Sump present?	YI							
	k. Water in sump?	not applicable							
Bas	sement/Lowest level depth below	grade: <u>~/5</u>	(feet)						
Ide	Identify potential soil vapor entry points and approximate size (e.g., cracks, utility ports, drains)								
	Some cracks in slab								
_									
6	HEATING, VENTING and AII	CONDITIONIN	NG (Circle all	that annly)					
	be of heating system(s) used in the		90 2 0)				
1 11	or of heating system(s) used in the	ns bunding. (en e	ic an that ap	pry note primary	<i>)</i> .				
Hot air circulation		Heat pump		water baseboard					
		Stream radiatio Wood stove		iant floor door wood boiler	Other				
The	e primary type of fuel used is:	11000000							
			457400						
	Natural Gas	Fuel Oil		osene					
	Electric Wood	Propane Coal	Sola	ır					
Dor									
וטעו	nestic hot water tank fueled by:				omestic not water tank fucied by.				

Boiler/furnace located in:

Air conditioning:

Basement

Central Air

Outdoors

Window units

Main Floor

Open Windows

Other____

None

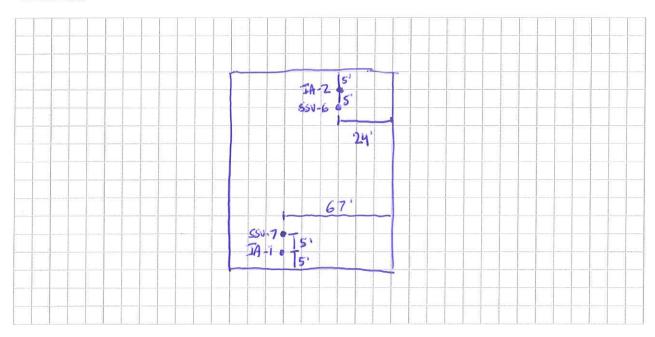
Are there air	distribution ducts present? Y/N		
Describe the supply and cold air return ductwork, and its condition where visible, including whether there is a cold air return and the tightness of duct joints. Indicate the locations on the floor plan diagram.			
V			
7. OCCUPA	ANCV		
		asionally Seldom Almost Never	
	•	om, bedroom, laundry, workshop, storage)	
Level		*	
Basement	Woodworking shap	age + strage over	
1st Floor	Woodworking shap		
2 nd Floor	residential apartments		
3 rd Floor	residential apartments		
4 th Floor	residential apartments		
e EACTOR	S THAT MAY INFLUENCE INDOOR AIR (
	an attached garage?	E 120	
		QRDNote ventilated packing garage inbasement Y/N/NA	
	garage have a separate heating unit?	QIN/NA	
	bleum-powered machines or vehicles the garage (e.g., lawnmower, atv, car)	Please specify	
d. Has the l	ouilding ever had a fire?	Y / When?	
e. Is a keros	sene or unvented gas space heater present?	Y/X Where?	
f. Is there a	workshop or hobby/craft area?	ON Where & Type? 15+ Flor woodworking	
g. Is there s	moking in the building?	Y / N How frequently?	
h. Have clea	aning products been used recently?	Y / When & Type?	
i. Have cosı	netic products been used recently?	Y/N When & Type?	

j. Has painting/staining been done in the last 6 months?	Y / Where & When?
k. Is there new carpet, drapes or other textiles?	Y/M Where & When?
l. Have air fresheners been used recently?	Y / When & Type?
m. Is there a kitchen exhaust fan?	Y / V If yes, where vented?
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 / When & Type?
Are there odors in the building? If yes, please describe:	Y/Q
Do any of the building occupants use solvents at work? (e.g., chemical manufacturing or laboratory, auto mechanic or a 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 response)	dry-cleaning service? (Circle appropriate
Yes, use dry-cleaning regularly (weekly) Yes, use dry-cleaning infrequently (monthly or less) Yes, work at a dry-cleaning service	No Unknown
Is there a radon mitigation system for the building/structure Is the system active or passive? Active/Passive	? Y / Date of Installation:
9. WATER AND SEWAGE	
Water Supply: Public Water Drilled Well Driven	Well Dug Well Other:
Sewage Disposal: Public Sewer Septic Tank Leach I	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 friend	nds/family relocate to hotel/motel
c. Responsibility for costs associated with reimbursement	explained? Y/N
d. Relocation package provided and explained to resident	s? Y/N

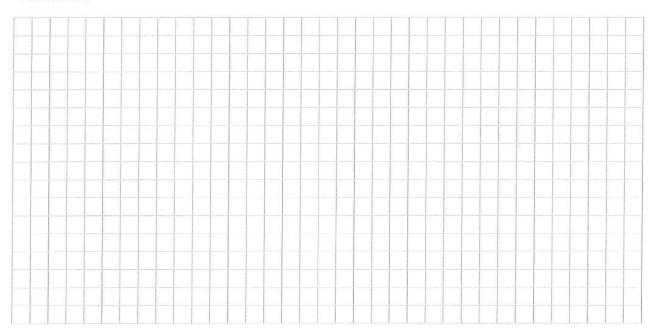
11. FLOOR PLANS

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:



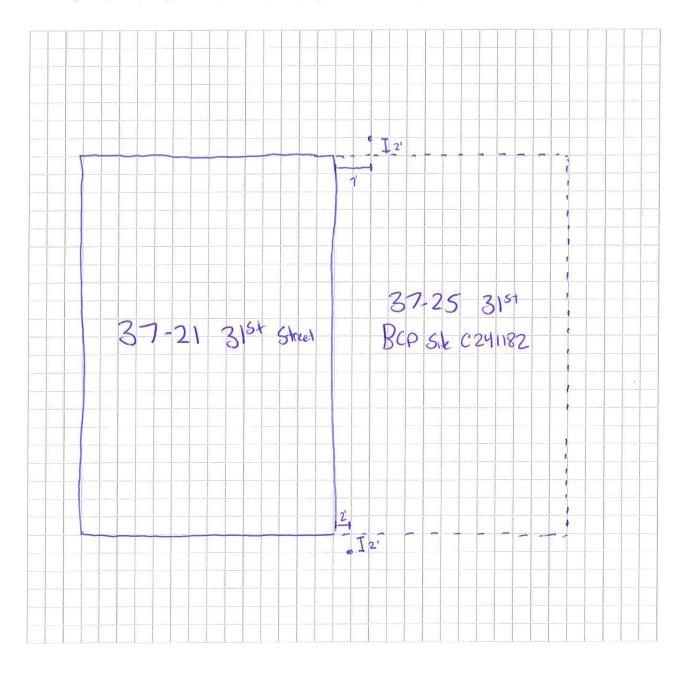
First Floor:



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.



13	PRC	DUCT	INVENT	ORY FORM	VI
----	-----	------	--------	----------	----

Make & Model of field instrument used: _	

List specific products found in the residence that have the potential to affect indoor air quality.

Field Photo ** Instrument Size Condition* **Chemical Ingredients** Location **Product Description** (units) Y/N Reading (units) NW corner Extended Life Antificere NW corner Royal Purple Mater Oil
NW corner Mobile I motoroil

^{*} Describe the condition of the product containers as Unopened (UO), Used (U), or Deteriorated (D)
** Photographs of the front and back of product containers can replace the handwritten list of chemical ingredients. However, the photographs must be of good quality and ingredient labels must be legible.

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 3/3/11
Preparer's Affiliation CARICH Consultants, Inc. Phone No. 516-576-8844
Purpose of Investigation Off-site Soil Varpor 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:
Number of Occupants/persons at this location 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 School Commercial/Multi-use Industrial Church Other: storage warehouse

If the property is residential,	type? (Circle appropria	te response)
Ranch Raised Ranch Cape Cod Duplex Modular	2-Family Split Level Contemporary Apartment House Log Home	3-Family Colonial Mobile Home Townhouses/Condos Other:
If multiple units, how many?		
If the property is commercial	, type?	
Business Type(s)	torage ware	hause
Does it include residences	(i.e., multi-use)? Y	If yes, how many?
Other characteristics:		
Number of floors	Build	ing age
Is the building insulated? Y	How a	air tight? Tight / Average / Not Tight
4. AIRFLOW		
Use air current tubes or trace	er smoke to evaluate ai	rflow patterns and qualitatively describe:
Airflow between floors		
Airflow near source		
Outdoor air infiltration		,
nfiltration into air ducts		

		3		
5. BASEMENT AND CONSTRUC	CTION CHARA	CTERISTICS	(Circle all that a	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 finisl	hed
j. Sump present?	YN			
	not applicable			
Basement/Lowest level depth below a	grade:	(feet) Noba	sement	
Identify potential soil vapor entry po	ints and approx	kimate size (e.g.	., cracks, utility	ports, drains)
a few cracks noted	in slab.			
6. HEATING, VENTING and AIR	CONDITIONIN	NG (Circle all th	nat apply)	
Type of heating system(s) used in this				y)
Hot air circulation	Heat pump		ater baseboard	
Space Heaters Electric baseboard	Stream radiation Wood stove		nt floor oor wood boiler	Other
The primary type of fuel used is:				
Natural Gas	Fuel Oil	Keros	ene	
Electric Wood	Propane Coal	Solar		
Domestic hot water tank fueled by:	Jour			

	*		
Are there air	distribution ducts present? Y		
	upply and cold air return ductwork, and its call air return and the tightness of duct joints. It		r
-			
7. OCCUPA	NCV		
	•	sionally Seldom Almost Never	
Level	General Use of Each Floor (e.g., familyroon	om, bedroom, laundry, workshop, storage)	į
Basement	No basement		
1 st Floor	No basement Commercial storage avorchouse	w) office in rear	
2 nd Floor			
3 rd Floor			
4 th Floor	<u></u>		
8. FACTORS	THAT MAY INFLUENCE INDOOR AIR Q	-	
a. Is there ar	attached garage?	Y/ Note: tenent's con is s inside bullding	dore
b. Does the g	arage have a separate heating unit?	Y/N/NA	
	cum-powered machines or vehicles he garage (e.g., lawnmower, atv, car)	Y / N / NA Please specify	
d. Has the bu	uilding ever had a fire?	Y / When?	
e. Is a kerose	ne or unvented gas space heater present?	Y / Where?	
f. Is there a v	vorkshop or hobby/craft area?	Y / Where & Type?	
g. Is there sn	noking in the building?	Y / W How frequently?	

Y / When & Type? _____

Y/M When & Type?

h. Have cleaning products been used recently?

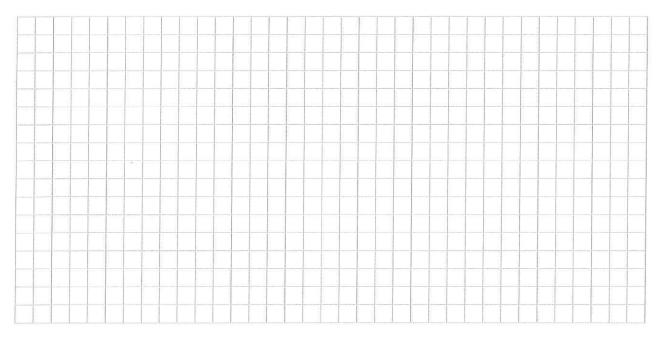
i. Have cosmetic products been used recently?

j. Has painting/staining bee	n done in the last 6 m	onths? Y / W	Where & Wh	nen?
k. Is there new carpet, drap	es or other textiles?	Y / 🔯	Where & Wh	nen?
l. Have air fresheners been	used recently?	Y / 😢	When & Typ	e?
m. Is there a kitchen exhaus	st fan?	Y / 🔯	If yes, where	vented? No Kitche
n. Is there a bathroom exh	aust fan?	Y / 🔯	If yes, where	vented?
o. Is there a clothes dryer?		Y/10	If yes, is it ve	ented outside? Y / N
p. Has there been a pesticid	e application?	Y /	When & Typ	e?
Are there odors in the build If yes, please describe:		Y 102		
Do any of the building occupa (e.g., chemical manufacturing o boiler mechanic, pesticide appli	r laboratory, auto mecl			, fuel oil delivery,
If yes, what types of solvents	are used?			
If yes, are their clothes washe	d at work?	Y/W		
Do any of the building occuparesponse)	nts regularly use or w	vork at a dry-clear	ning service?	(Circle appropriate
Yes, use dry-cleaning re Yes, use dry-cleaning in Yes, work at a dry-clean	frequently (monthly or	r less)	Mo Unknown	
Is there a radon mitigation sys Is the system active or passive			Date of Instal	lation:
9. WATER AND SEWAGE				
Water Supply: Public V	Water Drilled Well	Driven Well	Dug Well	Other:
Sewage Disposal: Public S	Sewer Septic Tank	Leach Field	Dry Well	Other:
10. RELOCATION INFORMA	ATION (for oil spill r	esidential emerger	icy)	
a. Provide reasons why rele	ocation is recommend	led:		
b. Residents choose to: rem	ain in home reloca	ate to friends/famil	y reloca	te to hotel/motel
c. Responsibility for costs a	ssociated with reimb	ursement explaine	ed? Y/N	
d. Relocation package prov	ided and explained to	residents?	Y/N	

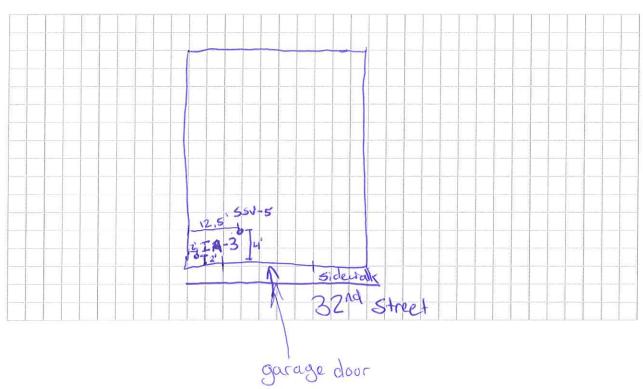
11. FLOOR PLANS

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:



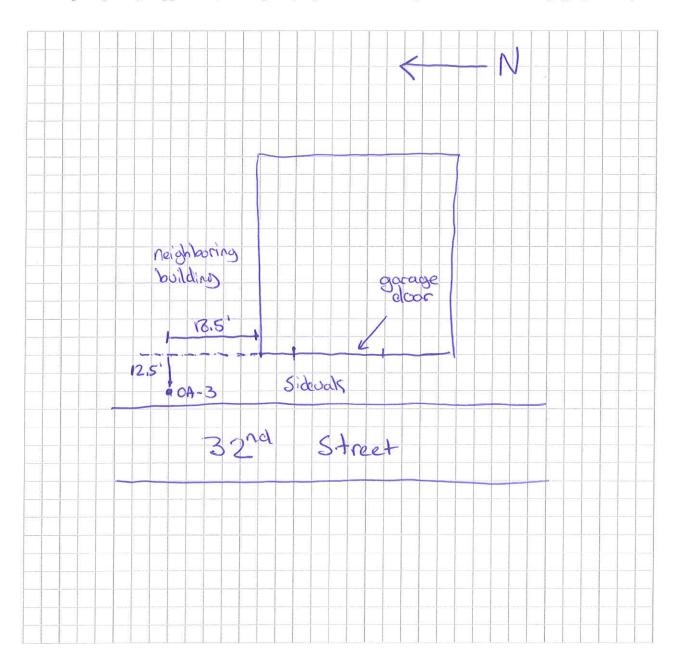
First Floor:



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.



4 4		TO TE T COPIE	WINTER THE WATER	A TO W.T.	TOO BY
13.	PRO	DIJC.I.	INVENT	ORY	HO KIN

Make & Model of field instrument used:	

List specific products found in the residence that have the potential to affect indoor air quality.

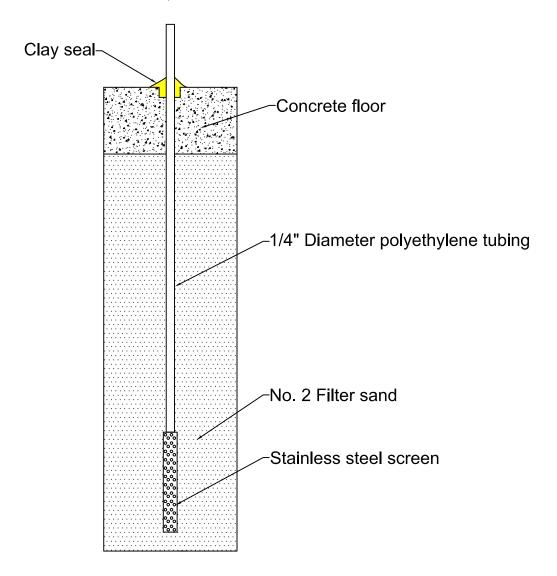
Location	Product Description	Size (units)	Condition*	Chemical Ingredients	Field Instrument Reading (units)	Photo ** Y/N
Nucorner	Spray bottle of Austoleum	1202	U		=	
55						
		8				

^{*} Describe the condition of the product containers as Unopened (UO), Used (U), or Deteriorated (D)

^{**} Photographs of the **front and back** of product containers can replace the handwritten list of chemical ingredients. However, the photographs must be of good quality and ingredient labels must be legible.

Appendix C

<u>Typical Sub-Slab</u> <u>Soil Vapor Point</u>



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:	ical Sub-Slab Soil	DATE: 5/5/2017
'yp	Vapor Point	SCALE:
	vapor vonte	N.T.S.
FIGURE:	77 05 74 1 01 1	DRAWN BY:
Appendix C	37-25 31st Street	J.T.C.
DRAWING NO:	Queens, NY	APPR. BY:
2017-6	Q G O O I I O , I V I	W.F.

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:

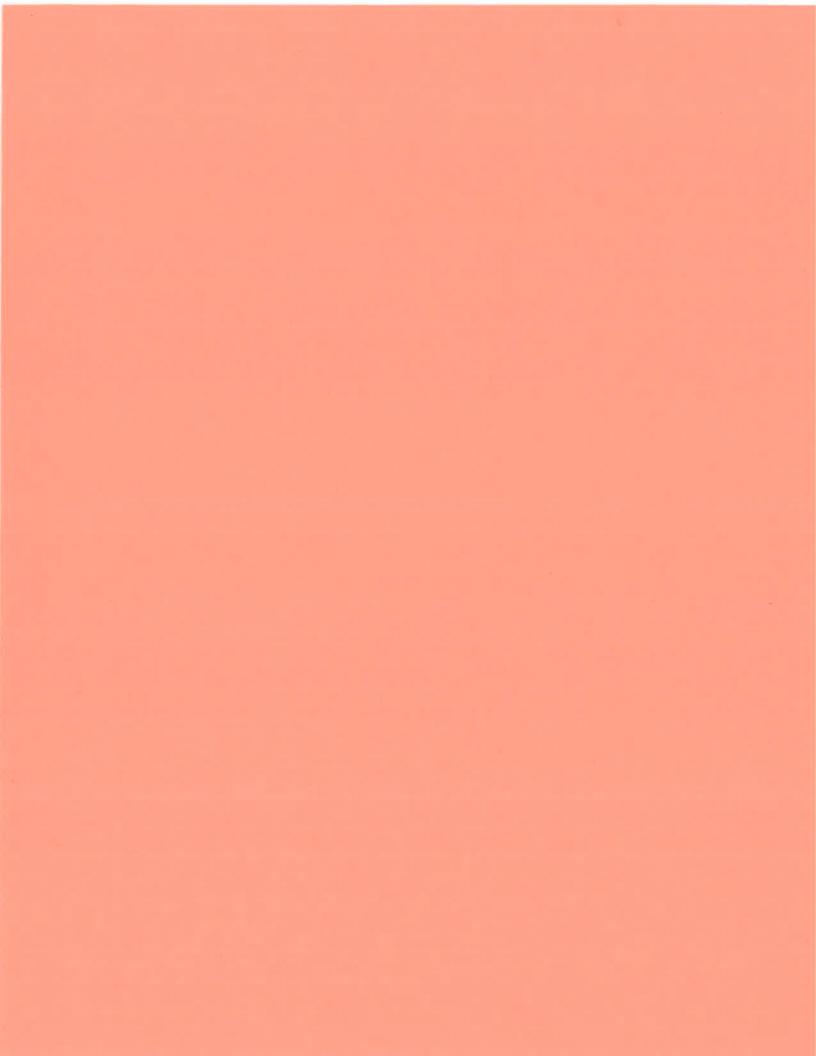
Mancy Weaver
Senior Chemist

Dated: 31717

Dated: 31717

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.



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

ug/m3 ppbV MDL MDL Qualifier Results RL Results RL CAS NO. **Parameter** 0.989 75-71-8 Dichlorodifluoromethane 0.354 0.200 1.75 74-87-3 Chloromethane 0.405 0.200 0.836 0.413 76-14-2 Freon-114 ND 1.40 U ND 0.200 --75-01-4 Vinyl chloride ND 0.200 ND 0.511 .. U -ND 0.200 0.442 U 106-99-0 1,3-Butadiene ND ... ** 0.777 U 74-83-9 **Bromomethane** ND 0.200 ** ND .. 0.528 u 75-00-3 Chloroethane ND 0.200 ... ND ... 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 0.200 1.30 1.12 75-69-4 Trichlorofluoromethane 0.232 ... 67-63-0 Isopropanol 0.975 0.500 2.40 1.23 ND 0.793 U 75-35-4 1,1-Dichloroethene ND 0.200 U 75-65-0 Tertiary butyl Alcohol ND 0.500 ND 1.52 75-09-2 Methylene chloride ND 0.500 ND 1.74 U 0.626 U 107-05-1 3-Chloropropene ND 0.200 --ND Carbon disulfide ND ND 0.623 U 75-15-0 0.200 ** --U 76-13-1 Freon-113 ND 0.200 ND 1.53 ---П ND 0.793 156-60-5 trans-1,2-Dichloroethene 0.200 22 ND ** U 75-34-3 1,1-Dichloroethane ND 0.200 .. ND 0.809 .. 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 ND ND 0.793 U 156-59-2 cis-1,2-Dichloroethene 0.200 --U 141-78-6 **Ethyl Acetate** ND 0.500 .. ND 1.80 U ND 0.200 ND 0.977 67-66-3 Chloroform U 109-99-9 Tetrahydrofuran ND 0.500 ND 1.47 107-06-2 1,2-Dichloroethane ND 0.200 ND 0.809 U 7.33 0.705 110-54-3 n-Hexane 2.08 0.200



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

			ppbV		ug/m3				
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	
71-55-6	1,1,1-Trichloroethane	ND	0.200) 4.0	ND	1.09	3 588 8	U	
71-43-2	Benzene	5.86	0.200	144	18.7	0.639	:(++):		
56-23-5	Carbon tetrachloride	ND	0.200	934	ND	1.26	22 3	U	
110-82-7	Cyclohexane	0.474	0.200		1.63	0.688	₩.		
78-87-5	1,2-Dichloropropane	ND	0.200	/ 51	ND	0.924	775	U	
75-27-4	Bromodichloromethane	ND	0.200	144	ND	1.34	#6:	U	
123-91-1	1,4-Dioxane	ND	0.200	944	ND	0.721	220	U	
79-01-6	Trichloroethene	0.542	0.200	•	2.91	1.07	*		
540-84-1	2,2,4-Trimethylpentane	0.516	0.200	S ***	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	144	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	O 7.7	ND	0.908	##D	U	
79-00-5	1,1,2-Trichloroethane	ND	0.200		ND	1.09	***	U	
108-88-3	Toluene	7.89	0.200	144	29.7	0.754			
591-78-6	2-Hexanone	ND	0.200	\ <u>**</u>	ND	0.820		U	
124-48-1	Dibromochloromethane	ND	0.200	11557	ND	1.70	960	U	
106-93-4	1,2-Dibromoethane	ND	0.200	N 900 02	ND	1.54	**	U	
127-18-4	Tetrachloroethene	0.319	0.200	(44)	2.16	1.36	(***)		
108-90-7	Chlorobenzene	ND	0.200	0240	ND	0.921	120	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	:511:		
75-25-2	Bromoform	ND	0.200	440	ND	2.07	(H) :	U	
100-42-5	Styrene	ND	0.200	** :	ND	0.852	:e#	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	1.77		
622-96-8	4-Ethyltoluene	0.388	0.200		1.91	0.983			
108-67-8	1,3,5-Trimethylbenzene	0.353	0.200	323	1.74	0.983	044		



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 Received : 02/23/17

Date Analyzed : 02/25/17 21:50

Dilution Factor : 1 Analyst : ME

Analyst : MB Instrument ID : AIRLAB11

GC Column : RTX-1

Parameter	ppbV			ug/m3				
	Results	RL	MDL	Results	RL	MDL	Qualifier	
1,2,4-Trimethylbenzene	1.40	0.200		6.88	0.983	***		
Benzyl chloride	ND	0.200	••	ND	1.04	**	U	
1,3-Dichlorobenzene	ND	0.200	7.22	ND	1.20	95	U	
1,4-Dichlorobenzene	ND	0.200		ND	1.20		U	
1,2-Dichlorobenzene	ND	0.200	855	ND	1.20	##E	U	
1,2,4-Trichlorobenzene	ND	0.200		ND	1.48	**:	U	
Hexachlorobutadiene	ND	0.200	244	ND	2.13	257	U	
	1,2,4-Trimethylbenzene Benzyl chloride 1,3-Dichlorobenzene 1,4-Dichlorobenzene 1,2-Dichlorobenzene 1,2,4-Trichlorobenzene	1,2,4-Trimethylbenzene 1.40 Benzyl chloride ND 1,3-Dichlorobenzene ND 1,4-Dichlorobenzene ND 1,2-Dichlorobenzene ND 1,2,4-Trichlorobenzene ND	Parameter Results RL 1,2,4-Trimethylbenzene 1.40 0.200 Benzyl chloride ND 0.200 1,3-Dichlorobenzene ND 0.200 1,4-Dichlorobenzene ND 0.200 1,2-Dichlorobenzene ND 0.200 1,2,4-Trichlorobenzene ND 0.200	Parameter Results RL MDL 1,2,4-Trimethylbenzene 1.40 0.200 Benzyl chloride ND 0.200 1,3-Dichlorobenzene ND 0.200 1,4-Dichlorobenzene ND 0.200 1,2-Dichlorobenzene ND 0.200 1,2,4-Trichlorobenzene ND 0.200	Parameter Results RL MDL Results 1,2,4-Trimethylbenzene 1.40 0.200 6.88 Benzyl chloride ND 0.200 ND 1,3-Dichlorobenzene ND 0.200 ND 1,4-Dichlorobenzene ND 0.200 ND 1,2-Dichlorobenzene ND 0.200 ND 1,2,4-Trichlorobenzene ND 0.200 ND	Parameter Results RL MDL Results RL 1,2,4-Trimethylbenzene 1.40 0.200 6.88 0.983 Benzyl chloride ND 0.200 ND 1.04 1,3-Dichlorobenzene ND 0.200 ND 1.20 1,4-Dichlorobenzene ND 0.200 ND 1.20 1,2-Dichlorobenzene ND 0.200 ND 1.20 1,2,4-Trichlorobenzene ND 0.200 ND 1.48	Parameter Results RL MDL Results RL MDL 1,2,4-Trimethylbenzene 1.40 0.200 6.88 0.983 Benzyl chloride ND 0.200 ND 1.04 1,3-Dichlorobenzene ND 0.200 ND 1.20 1,4-Dichlorobenzene ND 0.200 ND 1.20 1,2-Dichlorobenzene ND 0.200 ND 1.20 1,2,4-Trichlorobenzene ND 0.200 ND 1.48	Parameter Results RL MDL Results RL MDL Qualifier 1,2,4-Trimethylbenzene 1.40 0.200 6.88 0.983 Benzyl chloride ND 0.200 ND 1.04 U 1,3-Dichlorobenzene ND 0.200 ND 1.20 U 1,4-Dichlorobenzene ND 0.200 ND 1.20 U 1,2-Dichlorobenzene ND 0.200 ND 1.20 U 1,2,4-Trichlorobenzene ND 0.200 ND 1.48 U



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

Sample Amount . 250 mi					GC Column		* DIV-I	
		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
75-71-8	Dichlorodifluoromethane	0.302	0.200	:**	1.49	0.989	Det X	
74-87-3	Chloromethane	ND	0.200	798	ND	0.413	# #(0	U
76-14-2	Freon-114	ND	0.200		ND	1.40	1220	υ
75-01-4	Vinyl chloride	ND	0.200	••	ND	0.511	₩	U
106-99-0	1,3-Butadiene	ND	0.200	(**)	ND	0.442	558	U
74-83-9	Bromomethane	ND	0.200		ND	0.777	***	U
75-00-3	Chloroethane	ND	0.200	122	ND	0.528	125	U
64-17-5	Ethanol	31.9	5.00	199	60.1	9.42	₩.	
593-60-2	Vinyl bromide	ND	0.200	5 412	ND	0.874	***	U
67-64-1	Acetone	25.6	1.00	188	60.8	2.38	**3	
75-69-4	Trichlorofluoromethane	0.251	0.200	144	1.41	1.12	**	
67-63-0	Isopropanol	0.812	0.500	<u></u>	2.00	1.23	#V	
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	344	ND	0.626	W24	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	15 44	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	(iii	ND	0.721		U
78-93-3	2-Butanone	1.37	0.500	Si st	4.04	1.47	ene:	
156-59-2	cis-1,2-Dichloroethene	ND	0.200		ND	0.793	#*	U
141-78-6	Ethyl Acetate	ND	0.500	822	ND	1.80	-	U
67-66-3	Chloroform	0.360	0.200	(#)	1.76	0.977	j#	
109-99-9	Tetrahydrofuran	ND	0.500	Same	ND	1.47	188	U
107-06-2	1,2-Dichloroethane	ND	0.200	(3 88));	ND	0.809	:**	U
110-54-3	n-Hexane	0.993	0.200	28462	3.50	0.705		



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

Sample Amount . 250 mi		ppbV			ug/m3		* U17	·- I
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
71-55-6	1,1,1-Trichloroethane	ND	0.200		ND	1.09	E 99	U
71-43-2	Benzene	5.09	0.200		16.3	0.639	1344	
56-23-5	Carbon tetrachloride	ND	0.200	••	ND	1.26	721	U
110-82-7	Cyclohexane	0.251	0.200		0.864	0.688	**	
78-87-5	1,2-Dichloropropane	ND	0.200	188	ND	0.924	1000	U
75-27-4	Bromodichloromethane	ND	0.200		ND	1.34	S	U
123-91-1	1,4-Dioxane	ND	0.200	:	ND	0.721	174407	U
79-01-6	Trichloroethene	1.17	0.200	•	6.29	1.07	\ 0	
540-84-1	2,2,4-Trimethylpentane	0.208	0.200	**	0.972	0.934	3 111 8	
142-82-5	Heptane	0.390	0.200	••	1.60	0.820	**	
10061-01-5	cis-1,3-Dichloropropene	ND	0.200	1942	ND	0.908	449	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	1.77	ND	0.908	##S	U
79-00-5	1,1,2-Trichloroethane	ND	0.200	(#8	ND	1.09	***	U
108-88-3	Toluene	7.76	0.200	199	29.2	0.754	₩₩	
591-78-6	2-Hexanone	ND	0.200) 🚑	ND	0.820	**	U
124-48-1	Dibromochloromethane	ND	0.200	155	ND	1.70	## 4	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	H#S	
108-90-7	Chlorobenzene	ND	0.200	722	ND	0.921	229	U
100-41-4	Ethylbenzene	1.44	0.200	**	6.25	0.869	•	
179601-23-1	p/m-Xylene	5.23	0.400	299	22.7	1.74	35	
75-25-2	Bromoform	ND	0.200		ND	2.07	**:	U
100-42-5	Styrene	ND	0.200	6 44	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	880	8.95	0.869	88	
622-96-8	4-Ethyltoluene	0.421	0.200	(***	2.07	0.983	**	
108-67-8	1,3,5-Trimethylbenzene	0.393	0.200	(7 110 5	1.93	0.983		



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

	Parameter	ppbV				ug/m3			
CAS NO.		Results	RL	MDL	Results	RL	MDL	Qualifier	
95-63-6	1,2,4-Trimethylbenzene	1.54	0.200		7.57	0.983	***		
100-44-7	Benzyl chloride	ND	0.200	144	ND	1.04	440	U	
541-73-1	1,3-Dichlorobenzene	ND	0.200	**	ND	1.20	**	U	
106-46-7	1,4-Dichlorobenzene	ND	0.200	0.55	ND	1.20		U	
95-50-1	1,2-Dichlorobenzene	ND	0.200	= 11	ND	1.20	**	U	
120-82-1	1,2,4-Trichlorobenzene	ND	0.200	5-44	ND	1.48	(A)(C)	U	
87-68-3	Hexachlorobutadiene	ND	0.200	720	ND	2.13		U	

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

	Parameter	ppbV				ug/m3			
CAS NO.		Results	RL	MDL	Results	RL	MDL	Qualifier	
75-71-8	Dichlorodifluoromethane	0.335	0.200		1.66	0.989	2585		
74-87-3	Chloromethane	ND	0.200	140	ND	0.413	10##00	U	
76-14-2	Freon-114	ND	0.200	•	ND	1.40	724S	U	
75-01-4	Vinyl chloride	ND	0.200	••	ND	0.511	#3	U	
106-99-0	1,3-Butadiene	ND	0.200	1.75	ND	0.442	***	U	
74-83-9	Bromomethane	ND	0.200	**	ND	0.777	***	U	
75-00-3	Chloroethane	ND	0.200	122	ND	0.528	** !	υ	
64-17-5	Ethanol	36.2	5.00		68.2	9.42	••		
593-60-2	Vinyl bromide	ND	0.200	1.55	ND	0.874	mt.	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	** 3		
67-63-0	Isopropanol	0.871	0.500	£	2.14	1.23	223		
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	744	ND	1.74		U	
107-05-1	3-Chloropropene	ND	0.200	(iii	ND	0.626		U	
75-15-0	Carbon disulfide	ND	0.200	g. 	ND	0.623	3	U	
76-13-1	Freon-113	ND	0.200	(***)	ND	1.53	864	U	
156-60-5	trans-1,2-Dichloroethene	ND	0.200	## (/	ND	0.793	(-0)	U	
75-34-3	1,1-Dichloroethane	ND	0.200	**	ND	0.809	(22)	υ	
1634-04-4	Methyl tert butyl ether	ND	0.200	-	ND	0.721	•	U	
78-93-3	2-Butanone	1.58	0.500	111 2	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	440	ND	1.80	172	U	
67-66-3	Chloroform	0.286	0.200	•	1.40	0.977) de		
109-99-9	Tetrahydrofuran	ND	0.500		ND	1.47	-	U	
107-06-2	1,2-Dichloroethane	ND	0.200	**:	ND	0.809	2. 411	U	
110-54-3	n-Hexane	1.12	0.200	947	3.95	0.705			
									_



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 : 02/25/17 22:59

Date Analyzed

Dilution Factor

: 1

Analyst

: MB

Instrument ID

: AIRLAB11

GC Column

: RTX-1

Sample Amount : 250 mi					GC CC	Julilli	iniz	V- I
		9	ppbV			ug/m3		
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
71-55-6	1,1,1-Trichloroethane	ND	0.200	::::::	ND	1.09		U
71-43-2	Benzene	5.36	0.200	1986	17.1	0.639	(## .0	
56-23-5	Carbon tetrachloride	ND	0.200	724	ND	1.26	929	U
110-82-7	Cyclohexane	0.291	0.200	*	1.00	0.688	**	
78-87-5	1,2-Dichloropropane	ND	0.200	1378	ND	0.924	ME.C	U
75-27-4	Bromodichloromethane	ND	0.200	100	ND	1.34	##3	U
123-91-1	1,4-Dioxane	ND	0.200	244	ND	0.721	**	U
79-01-6	Trichloroethene	2.44	0.200	(#	13.1	1.07	112)	
540-84-1	2,2,4-Trimethylpentane	0.224	0.200	277	1.05	0.934	**	
142-82-5	Heptane	0.445	0.200	7. 18	1.82	0.820	***	
10061-01-5	cis-1,3-Dichloropropene	ND	0.200	.5 11	ND	0.908	**	U
108-10-1	4-Methyl-2-pentanone	ND	0.500	X22	ND	2.05		U
10061-02-6	trans-1,3-Dichloropropene	ND	0.200	V 50 0	ND	0.908		U
79-00-5	1,1,2-Trichloroethane	ND	0.200	(lee)	ND	1.09	***	U
108-88-3	Toluene	9.38	0.200	0,880	35.3	0.754	360	
591-78-6	2-Hexanone	ND	0.200	••	ND	0.820	912	U
124-48-1	Dibromochloromethane	ND	0.200	. 	ND	1.70		U
106-93-4	1,2-Dibromoethane	ND	0.200	** 8	ND	1.54	: 21 1	U
127-18-4	Tetrachloroethene	0.205	0.200	***	1.39	1.36	•	
108-90-7	Chlorobenzene	ND	0.200	11 29	ND	0.921	124	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	300	U
100-42-5	Styrene	ND	0.200	##0	ND	0.852) 24	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	844	
108-67-8	1,3,5-Trimethylbenzene	0.447	0.200	***	2.20	0.983	:: **	



Client : CA RICH CONSULTANTS, INC.

Project Name : 3132 LIC LLC

Lab ID : L1705766-03

Client ID : SV-3

Sample Amount

Sample Location : 37-25 31ST ST., LIC, NY

: 250 ml

Sample Matrix : SOIL_VAPOR Analytical Method : 48,TO-15 Lab File ID : R1118731 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

			ppbV	ppbV					
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	
95-63-6	1,2,4-Trimethylbenzene	1.80	0.200	3 ++	8.85	0.983			
100-44-7	Benzyl chloride	ND	0.200	3 4 1	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	2970	ND	1.20		υ	
95-50-1	1,2-Dichlorobenzene	ND	0.200	(##).	ND	1.20		U	
120-82-1	1,2,4-Trichlorobenzene	ND	0.200	R##3	ND	1.48	**	U	
87-68-3	Hexachlorobutadiene	ND	0.200	744	ND	2.13	9.5	U	



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

Janiq	Sample Amount . 250 mil						* H1X-1		
		ppbV				ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	
75-71-8	Dichlorodifluoromethane	0.332	0.200	7. 000	1.64	0.989	***		
74-87-3	Chloromethane	ND	0.200	E 44	ND	0.413	***	U	
76-14-2	Freon-114	ND	0.200	7-22	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	S##	ND	0.442	***	U	
74-83-9	Bromomethane	ND	0.200	3 84	ND	0.777	-	U	
75-00-3	Chloroethane	ND	0.200	244	ND	0.528	145	U	
64-17-5	Ethanol	35.5	5.00	(€	66.9	9.42	-		
593-60-2	Vinyl bromide	ND	0.200	S## 1	ND	0.874		U	
67-64-1	Acetone	21.7	1.00	D##01	51.5	2.38	He:		
75-69-4	Trichlorofluoromethane	0.231	0.200		1.30	1.12	**5		
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	IRAN	15.4	1.74	S H ¥G		
107-05-1	3-Chloropropene	ND	0.200	20%	ND	0.626	725	U	
75-15-0	Carbon disulfide	ND	0.200	57 0	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	#6	ND	0.793	(##)	U	
75-34-3	1,1-Dichloroethane	ND	0.200		ND	0.809	150	υ	
1634-04-4	Methyl tert butyl ether	ND	0.200	#	ND	0.721		U	
78-93-3	2-Butanone	1.44	0.500	##3	4.25	1.47	SHI		
156-59-2	cis-1,2-Dichloroethene	ND	0.200	***	ND	0.793	: : ::::::::::::::::::::::::::::::::::	U	
141-78-6	Ethyl Acetate	ND	0.500	440	ND	1.80	144	U	
67-66-3	Chloroform	ND	0.200	***	ND	0.977	•	U	
109-99-9	Tetrahydrofuran	ND	0.500	721	ND	1.47	.en	U	
107-06-2	1,2-Dichloroethane	ND	0.200	300)	ND	0.809	(≇#	U	
110-54-3	n-Hexane	1.37	0.200	W	4.83	0.705	5300		



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

Jampi	e Amount . 250 mi		GC CC	/IGITIII	. 11174-1			
			ppbV			ug/m3		
AS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
1-55-6	1,1,1-Trichloroethane	ND	0.200	200	ND	1.09	***	υ
1-43-2	Benzene	3.37	0.200	544	10.8	0.639	22:1	
6-23-5	Carbon tetrachloride	ND	0.200	<u> </u>	ND	1.26		U
10-82-7	Cyclohexane	0.341	0.200	125	1.17	0.688	37.0	
8-87-5	1,2-Dichloropropane	ND	0.200	;e#	ND	0.924	***	U
5-27-4	Bromodichloromethane	ND	0.200	7##	ND	1.34		U
23-91-1	1,4-Dioxane	ND	0.200	1	ND	0.721	440	U
9-01-6	Trichloroethene	15.0	0.200	7.7	80.6	1.07	••	
40-84-1	2,2,4-Trimethylpentane	0.285	0.200	? 218	1.33	0.934	**	
42-82-5	Heptane	0.518	0.200	***	2.12	0.820	**	
0061-01-5	cis-1,3-Dichloropropene	ND	0.200	0.00	ND	0.908	=	U
08-10-1	4-Methyl-2-pentanone	ND	0.500	-	ND	2.05	#	U
0061-02-6	trans-1,3-Dichloropropene	ND	0.200	(51	ND	0.908		U
9-00-5	1,1,2-Trichloroethane	ND	0.200	294	ND	1.09	-	U
08-88-3	Toluene	8.69	0.200	944	32.7	0.754	••	
91-78-6	2-Hexanone	ND	0.200	(ND	0.820		U
24-48-1	Dibromochloromethane	ND	0.200	6 55	ND	1.70	-	U
06-93-4	1,2-Dibromoethane	ND	0.200		ND	1.54	: ** :	U
27-18-4	Tetrachloroethene	0.284	0.200	2440	1.93	1.36	••	
08-90-7	Chlorobenzene	ND	0.200	(#)	ND	0.921	*	U
00-41-4	Ethylbenzene	1.40	0.200	(,**)	6.08	0.869	-	
79601-23-1	p/m-Xylene	5.04	0.400		21.9	1.74	**	
'5-25-2	Bromoform	ND	0.200	¥47),	ND	2.07		U
00-42-5	Styrene	ND	0.200	227	ND	0.852		U
9-34-5	1,1,2,2-Tetrachloroethane	ND	0.200		ND	1.37	*	U
5-47-6	o-Xylene	1.97	0.200	•••	8.56	0.869		
22-96-8	4-Ethyltoluene	0.414	0.200	** **	2.04	0.983	1000	
08-67-8	1,3,5-Trimethylbenzene	0.372	0.200	¥43	1.83	0.983	124	



Client : CA RICH CONSULTANTS, INC.

Project Name : 3132 LIC LLC Lab ID : L1705766-04

Client ID : SV-4

Sample Amount

Sample Location : 37-25 31ST ST., LIC, NY

: 250 ml

Sample Matrix : SOIL_VAPOR Analytical Method: 48,TO-15 Lab File ID : R1118732

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 : RTX-1

GC Column

		ppbV			ug/m3				
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	
95-63-6	1,2,4-Trimethylbenzene	1.51	0.200	344	7.42	0.983	**(0		
100-44-7	Benzyl chloride	ND	0.200	632	ND	1.04	## 8	U	
541-73-1	1,3-Dichlorobenzene	ND	0.200	36	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	724	ND	1.48	##6	U	
87-68-3	Hexachlorobutadiene	ND	0.200	*	ND	2.13	**	U	



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

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

Samp	Sample Amount : 250 mi					Julilit	. 117	K-1
			ppbV			ug/m3		0
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
75-71-8	Dichlorodifluoromethane	0.473	0.200		2.34	0.989	***	
74-87-3	Chloromethane	0.200	0.200	448	0.413	0.413		
76-14-2	Freon-114	ND	0.200	₩)	ND	1.40	*	U
75-01-4	Vinyl chloride	ND	0.200	11 8	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	5 0)	ND	0.528	124	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	#61	30.9	2.38	1 21	
75-69-4	Trichlorofluoromethane	0.615	0.200	227	3.46	1.12	122	
67-63-0	Isopropanol	1.21	0.500	•	2.97	1.23	150	
75-35-4	1,1-Dichloroethene	ND	0.200	55 0.	ND	0.793	:57	U
75-65-0	Tertiary butyl Alcohol	ND	0.500		ND	1.52	198	U
75-09-2	Methylene chloride	ND	0.500	20	ND	1.74	- 	U
107-05-1	3-Chloropropene	ND	0.200	#6	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	246	ND	0.793	((44	U
75-34-3	1,1-Dichloroethane	ND	0.200		ND	0.809	102	U
1634-04-4	Methyl tert butyl ether	ND	0.200	••	ND	0.721	1.00	U
78-93 - 3	2-Butanone	2.16	0.500	•	6.37	1.47	S MAN	
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	225	U
67-66-3	Chloroform	ND	0.200		ND	0.977		U
109-99-9	Tetrahydrofuran	0.667	0.500	S 911 .	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	¥#3	



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

Janipi	e Amount . 250 mi				40 00	/ CITILI			
			ppbV			ug/m3			
AS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	
1-55-6	1,1,1-Trichloroethane	0.577	0.200	S 44	3.15	1.09	100		
1-43-2	Benzene	3.24	0.200	348	10.4	0.639	**:		
6-23-5	Carbon tetrachloride	ND	0.200	0314	ND	1.26	<u> 22</u> 9	U	
10-82-7	Cyclohexane	0.751	0.200		2.59	0.688	€0		
8-87-5	1,2-Dichloropropane	ND	0.200	1888	ND	0.924	***	U	
5-27-4	Bromodichloromethane	ND	0.200	748	ND	1.34	**	U	
23-91-1	1,4-Dioxane	ND	0.200	1948	ND	0.721	***	υ	
9-01-6	Trichloroethene	4.15	0.200		22.3	1.07	•		
40-84-1	2,2,4-Trimethylpentane	0.663	0.200	248	3.10	0.934			
42-82-5	Heptane	1.16	0.200		4.75	0.820	**		
0061-01-5	cis-1,3-Dichloropropene	ND	0.200	844	ND	0.908	##	U	
08-10-1	4-Methyl-2-pentanone	ND	0.500	Æ	ND	2.05	-	U	
0061-02-6	trans-1,3-Dichloropropene	ND	0.200	200	ND	0.908	æ.	U	
9-00-5	1,1,2-Trichloroethane	ND	0.200	830	ND	1.09	**	U	
08-88-3	Toluene	12.6	0.200	K au	47.5	0.754	**		
91-78-6	2-Hexanone	ND	0.200	/ = /	ND	0.820	-11-1	U	
24-48-1	Dibromochloromethane	ND	0.200	0.507	ND	1.70	**	U	
06-93-4	1,2-Dibromoethane	ND	0.200		ND	1.54	(88)	U	
27-18-4	Tetrachloroethene	0.444	0.200	(344)	3.01	1.36	U##)		
08-90-7	Chlorobenzene	ND	0.200	1220	ND	0.921	22	U	
00-41-4	Ethylbenzene	1.79	0.200	= 2	7.77	0.869	**		
79601-23-1	p/m-Xylene	6.42	0.400	***	27.9	1.74			
75-25-2	Bromoform	ND	0.200	**)	ND	2.07		U	
00-42-5	Styrene	ND	0.200	220	ND	0.852	:44	U	
9-34-5	1,1,2,2-Tetrachloroethane	ND	0.200	*	ND	1.37	199	U	
5-47-6	o-Xylene	2.52	0.200	at ta	10.9	0.869	.57		
22-96-8	4-Ethyltoluene	0.544	0.200	**	2.67	0.983	2.44		
108-67-8	1,3,5-Trimethylbenzene	0.460	0.200	44 3	2.26	0.983	344	ž(



Client : CA RICH CONSULTANTS, INC.

Project Name : 3132 LIC LLC Lab ID : L1705766-05

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

		ppbV			ug/m3				
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	
95-63-6	1,2,4-Trimethylbenzene	1.78	0.200	:	8.75	0.983	***		
100-44-7	Benzyl chloride	ND	0.200	: 44	ND	1.04	***	U	
541-73-1	1,3-Dichlorobenzene	ND	0.200	- 11	ND	1.20	**	U	
106-46-7	1,4-Dichlorobenzene	ND	0.200	5	ND	1.20		U	
95-50-1	1,2-Dichlorobenzene	ND	0.200	2.89	ND	1.20	#5	U	
120-82-1	1,2,4-Trichlorobenzene	ND	0.200		ND	1.48		U	
87-68-3	Hexachlorobutadiene	ND	0.200	744	ND	2.13	227	U	



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

	Parameter		ppbV			ug/m3		
CAS NO.		Results	RL	MDL	Results	RL	MDL	Qualifier
75-71-8	Dichlorodifluoromethane	0.461	0.200	**	2.28	0.989	::##	
74-87-3	Chloromethane	ND	0.200	220	ND	0.413		U
76-14-2	Freon-114	ND	0.200		ND	1.40		U
75-01-4	Vinyl chloride	ND	0.200	574	ND	0.511	<u> </u>	υ
106-99-0	1,3-Butadiene	ND	0.200	•	ND	0.442	2 91	U
74-83-9	Bromomethane	ND	0.200	(##)	ND	0.777		U
75-00-3	Chloroethane	ND	0.200	•	ND	0.528	122	U
64-17-5	Ethanol	52.5	5.00	-	98.9	9.42		
593-60-2	Vinyl bromide	ND	0.200		ND	0.874	888	U
67-64-1	Acetone	47.3	1.00	(##	112	2.38	**	
75-69-4	Trichlorofluoromethane	0.321	0.200	1225	1.80	1.12	744	=
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	322	2.70	1.74	#3	
107-05-1	3-Chloropropene	ND	0.200	15	ND	0.626		U
75-15-0	Carbon disulfide	0.996	0.200	1.5%	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	94B	ND	0.793	**1	U
75-34-3	1,1-Dichloroethane	ND	0.200		ND	0.809	#¥V	U
1634-04-4	Methyl tert butyl ether	ND	0.200	1.55	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	744	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	. T T	
107-06-2	1,2-Dichloroethane	ND	0.200	7944	ND	0.809		U
110-54-3	n-Hexane	3.16	0.200	PG4	11.1	0.705	222	





6

Client : CA RICH CONSULTANTS, INC.

Project Name : 3132 LIC LLC Lab ID : L1705766-06

Client ID : L1705766-0

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

	Parameter	\	ppbV			ug/m3		
CAS NO.		Results	RL	MDL	Results	RL	MDL	Qualifier
71-55-6	1,1,1-Trichloroethane	ND	0.200	(89)	ND	1.09	{{ +	U
71-43-2	Benzene	2.20	0.200	948	7.03	0.639	8##	
56-23-5	Carbon tetrachloride	ND	0.200		ND	1.26	(***	U
110-82-7	Cyclohexane	0.679	0.200	166	2.34	0.688	1/52	
78-87-5	1,2-Dichloropropane	ND	0.200	:**	ND	0.924	9 110 3	U
75-27-4	Bromodichloromethane	ND	0.200		ND	1.34	340	U
123-91-1	1,4-Dioxane	ND	0.200	**	ND	0.721	220	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	##X	
142-82-5	Heptane	1.50	0.200	388	6.15	0.820	***	
10061-01-5	cis-1,3-Dichloropropene	ND	0.200	:22	ND	0.908	40	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	188	ND	0.908	1.00 #\$5	U
79-00-5	1,1,2-Trichloroethane	ND	0.200	186	ND	1.09		U
108-88-3	Toluene	13.9	0.200	19 3 3	52.4	0.754	463	
591-78-6	2-Hexanone	ND	0.200		ND	0.820	<u>#</u>	U
124-48-1	Dibromochloromethane	ND	0.200	1275	ND	1.70	###	U
106-93-4	1,2-Dibromoethane	МD	0.200		ND	1.54		U
127-18-4	Tetrachloroethene	2.22	0.200	892	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	H=:	U
100-42-5	Styrene	ND	0.200	740	ND	0.852		U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.200	7. 5 7 r	ND	1.37	*	U
95-47-6	o-Xylene	2.69	0.200	X *** >	11.7	0.869	-	
622-96-8	4-Ethyltoluene	0.572	0.200	0,446.3	2.81	0.983	***	
108-67-8	1,3,5-Trimethylbenzene	0.515	0.200	-	2.53	0.983	-	
	· · · · · · · · · · · · · · · · · · ·							





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

	Parameter	ppbV			ug/m3				
CAS NO.		Results	RL	MDL	Results	RL	MDL	Qualifier	
95-63-6	1,2,4-Trimethylbenzene	2.09	0.200	-	10.3	0.983	2 94 0		
100-44-7	Benzyl chloride	ND	0.200	-	ND	1.04	1469	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	MU.	U	
95-50-1	1,2-Dichlorobenzene	ND	0.200)ee	ND	1.20	(0 0)	U	
120-82-1	1,2,4-Trichlorobenzene	ND	0.200	194	ND	1.48	22 0	U	
87-68-3	Hexachlorobutadiene	ND	0.200		ND	2.13	20	U	



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

: L1705766 Lab Number

Project Number :

Date Collected : 02/23/17 11:20 **Date Received** : 02/23/17 : 02/26/17 01:18 **Date Analyzed**

Dilution Factor : 1

Analyst : MB

Instrument ID : AIRLAB11

CAS NO.	Parameter	ppbV			ug/m3			
		Results	RL	MDL	Results	RL	MDL	Qualifier
75-71-8	Dichlorodifluoromethane	ND	0.200	•	ND	0.989	⊃##01	U
4-87-3	Chloromethane	ND	0.200	:20	ND	0.413	443	U
6-14-2	Freon-114	ND	0.200	••	ND	1.40	•	U
'5-01-4	Vinyl chloride	ND	0.200	(48)	ND	0.511	***	U
06-99-0	1,3-Butadiene	ND	0.200	***	ND	0.442	** :	U
4-83-9	Bromomethane	ND	0.200	122	ND	0.777	44.5	U
5-00-3	Chloroethane	ND	0.200	*	ND	0.528	#8	U
64-17-5	Ethanol	65.4	5.00	175	123	9.42	777	
93-60-2	Vinyl bromide	ND	0.200		ND	0.874	**	U
67-64-1	Acetone	8.57	1.00	742	20.4	2.38	**	
'5-69-4	Trichlorofluoromethane	ND	0.200	() 	ND	1.12	222	U
7-63-0	Isopropanol	0.930	0.500	275	2.29	1.23	**	
'5-35-4	1,1-Dichloroethene	ND	0.200	**	ND	0.793	**************************************	U
5-65-0	Tertiary butyl Alcohol	ND	0.500	5 48	ND	1.52	**	U
75-09-2	Methylene chloride	ND	0.500		ND	1.74	22	U
07-05-1	3-Chloropropene	ND	0.200	16	ND	0.626		U
75-15-0	Carbon disulfide	ND	0.200	1. 98	ND	0.623	550	U
76-13-1	Freon-113	ND	0.200	(C#H	ND	1.53	-	U
56-60-5	trans-1,2-Dichloroethene	ND	0.200	**	ND	0.793	1242	U
' 5-34-3	1,1-Dichloroethane	ND	0.200		ND	0.809	*	U
634-04-4	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	223	ND	0.793	:==	U
41-78-6	Ethyl Acetate	ND	0.500	*	ND	1.80	(22	U
67-66-3	Chloroform	ND	0.200		ND	0.977		U
09-99-9	Tetrahydrofuran	0.543	0.500	***:	1.60	1.47	2.00	
07-06-2	1,2-Dichloroethane	ND	0.200	##:	ND	0.809	1.44	U
110-54-3	n-Hexane	1.84	0.200		6.48	0.705		



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

Sample Amount . 250 mil					Julili		·- •	
_	-							
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	
1,1,1-Trichloroethane	ND	0.200) =1	ND	1.09	663	U	
Benzene	2.46	0.200	:##	7.86	0.639	***		
Carbon tetrachloride	ND	0.200	V <u>214</u>	ND	1.26	229	U	
Cyclohexane	0.512	0.200	+	1.76	0.688	₩.		
1,2-Dichloropropane	ND	0.200	3.55	ND	0.924	Ma	U	
Bromodichloromethane	ND	0.200	***	ND	1.34		U	
1,4-Dioxane	ND	0.200	144	ND	0.721	es:	บ	
Trichloroethene	3.05	0.200	3	16.4	1.07			
2,2,4-Trimethylpentane	0.420	0.200		1.96	0.934	##:		
Heptane	0.907	0.200	1.00	3.72	0.820	H=2		
cis-1,3-Dichloropropene	ND	0.200	248	ND	0.908	***	U	
4-Methyl-2-pentanone	ND	0.500	æ	ND	2.05	#	U	
trans-1,3-Dichloropropene	ND	0.200	8.00	ND	0.908	-	U	
1,1,2-Trichloroethane	ND	0.200	(1 000)	ND	1.09	**	U	
Toluene	12.7	0.200	1,94	47.9	0.754	**		
2-Hexanone	ND	0.200	-	ND	0.820	-	U	
Dibromochloromethane	ND	0.200	1.00	ND	1.70	•	U	
1,2-Dibromoethane	ND	0.200	HE/0	ND	1.54	(55)	U	
Tetrachloroethene	1.00	0.200	***	6.78	1.36	3 €# 3		
Chlorobenzene	ND	0.200	***	ND	0.921	744	U	
Ethylbenzene	1.92	0.200	-	8.34	0.869			
p/m-Xylene	6.90	0.400	***	30.0	1.74	:**		
Bromoform	ND	0.200	***	ND	2.07	(**)	U	
Styrene	ND	0.200	-	ND	0.852	-	U	
1,1,2,2-Tetrachloroethane	ND	0.200		ND	1.37		U	
o-Xylene	2.73	0.200		11.9	0.869	150		
4-Ethyltoluene	0.583	0.200	•••	2.87	0.983	: 34		
1,3,5-Trimethylbenzene	0.535	0.200	-	2.63	0.983	:##		
	Parameter 1,1,1-Trichloroethane Benzene Carbon tetrachloride Cyclohexane 1,2-Dichloropropane Bromodichloromethane 1,4-Dioxane Trichloroethene 2,2,4-Trimethylpentane Heptane cis-1,3-Dichloropropene 4-Methyl-2-pentanone trans-1,3-Dichloropropene 1,1,2-Trichloroethane Toluene 2-Hexanone Dibromochloromethane 1,2-Dibromoethane Tetrachloroethene Chlorobenzene Ethylbenzene p/m-Xylene Bromoform Styrene 1,1,2,2-Tetrachloroethane 0-Xylene 4-Ethyltoluene	ParameterResults1,1,1-TrichloroethaneNDBenzene2.46Carbon tetrachlorideNDCyclohexane0.5121,2-DichloropropaneNDBromodichloromethaneND1,4-DioxaneNDTrichloroethene3.052,2,4-Trimethylpentane0.420Heptane0.907cis-1,3-DichloropropeneND4-Methyl-2-pentanoneNDtrans-1,3-DichloropropeneND1,1,2-TrichloroethaneNDToluene12.72-HexanoneNDDibromochloromethaneND1,2-DibromoethaneNDTetrachloroethene1.00ChlorobenzeneNDEthylbenzene1.92p/m-Xylene6.90BromoformNDStyreneND1,1,2,2-TetrachloroethaneNDo-Xylene2.734-Ethyltoluene0.583	Parameter Results RL 1,1,1-Trichloroethane ND 0.200 Benzene 2.46 0.200 Carbon tetrachloride ND 0.200 Cyclohexane 0.512 0.200 1,2-Dichloropropane ND 0.200 Bromodichloromethane ND 0.200 1,4-Dioxane ND 0.200 Trichloroethene 3.05 0.200 2,2,4-Trimethylpentane 0.420 0.200 Heptane 0.907 0.200 cis-1,3-Dichloropropene ND 0.200 4-Methyl-2-pentanone ND 0.200 trans-1,3-Dichloropropene ND 0.200 1,1,2-Trichloroethane ND 0.200 Toluene 12.7 0.200 2-Hexanone ND 0.200 Dibromochloromethane ND 0.200 Tetrachloroethane ND 0.200 Ethylbenzene 1.92 0.200 Ethylbenzene 1.92 0.200	Parameter Results RL MDL 1,1,1-Trichloroethane ND 0.200 Benzene 2.46 0.200 Carbon tetrachloride ND 0.200 Cyclohexane 0.512 0.200 1,2-Dichloropropane ND 0.200 Bromodichloromethane ND 0.200 1,4-Dioxane ND 0.200 1,4-Dioxane ND 0.200 Trichloroethene 3.05 0.200 2,2,4-Trimethylpentane 0.420 0.200 Heptane 0.907 0.200 cis-1,3-Dichloropropene ND 0.200 trans-1,3-Dichloropropene ND 0.200 1,1,2-Trichloroethane ND 0.200 Toluene 12.7 0.200 2-Hexanone ND 0.200 Dibromochloromethane ND	Parameter Results RL MDL Results 1,1,1-Trichloroethane ND 0.200 ND Benzene 2.46 0.200 ND Carbon tetrachloride ND 0.200 ND Cyclohexane 0.512 0.200 ND 1,2-Dichloropropane ND 0.200 ND Bromodichloromethane ND 0.200 ND 1,4-Dioxane ND 0.200 ND 1,4-Dioxane ND 0.200 ND Trichloroethene 3.05 0.200 ND Heptane 0.907 0.200 1.96 Heptane 0.907 0.200 ND 4-Methyl-2-pentanone ND 0.200 ND trans-1,3-Dichloropropene ND 0.200 ND 1,1,2-Trichloroethane ND 0.200 ND <td>Parameter Results RL MDL Results RL 1,1,1-Trichloroethane ND 0.200 ND 1.09 Benzene 2.46 0.200 ND 1.26 Carbon tetrachloride ND 0.200 ND 1.26 Cyclohexane 0.512 0.200 ND 0.924 Bromodichloromethane ND 0.200 ND 0.924 Bromodichloromethane ND 0.200 ND 0.721 1,4-Dioxane ND 0.200 ND 0.721 Trichloroethane 3.05 0.200 ND 0.721 Heptane 0.907 0.200 1.96 0.934 Heptane 0.907 0.200 ND 0.908 4-Methyl-2-pentanone ND 0.500 ND 0.908 1,1,2-Trichloroethane ND 0.200 ND</td> <td>Parameter Results RL MDL Results RL MDL 1,1,1-Trichloroethane ND 0.200 ND 1.09 Benzene 2.46 0.200 NBO 1.26 Carbon tetrachloride ND 0.200 ND 1.26 Cyclohexane 0.512 0.200 ND 0.924 1,2-Dichloropropane ND 0.200 ND 0.924 1,4-Dioxane ND 0.200 ND 0.721 1,4-Dioxane ND 0.200 </td>	Parameter Results RL MDL Results RL 1,1,1-Trichloroethane ND 0.200 ND 1.09 Benzene 2.46 0.200 ND 1.26 Carbon tetrachloride ND 0.200 ND 1.26 Cyclohexane 0.512 0.200 ND 0.924 Bromodichloromethane ND 0.200 ND 0.924 Bromodichloromethane ND 0.200 ND 0.721 1,4-Dioxane ND 0.200 ND 0.721 Trichloroethane 3.05 0.200 ND 0.721 Heptane 0.907 0.200 1.96 0.934 Heptane 0.907 0.200 ND 0.908 4-Methyl-2-pentanone ND 0.500 ND 0.908 1,1,2-Trichloroethane ND 0.200 ND	Parameter Results RL MDL Results RL MDL 1,1,1-Trichloroethane ND 0.200 ND 1.09 Benzene 2.46 0.200 NBO 1.26 Carbon tetrachloride ND 0.200 ND 1.26 Cyclohexane 0.512 0.200 ND 0.924 1,2-Dichloropropane ND 0.200 ND 0.924 1,4-Dioxane ND 0.200 ND 0.721 1,4-Dioxane ND 0.200	



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

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

		ppbV				ug/m3	_		
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	
95-63-6	1,2,4-Trimethylbenzene	2.17	0.200	744	10.7	0.983	 :		
100-44-7	Benzyl chloride	ND	0.200		ND	1.04	227	U	
541-73-1	1,3-Dichlorobenzene	ND	0.200	<u> </u>	ND	1.20	€	U	
106-46-7	1,4-Dichlorobenzene	ND	0.200	: 111	ND	1.20	**1	U	
95-50-1	1,2-Dichlorobenzene	ND	0.200	9 ,44	ND	1.20	9	U	
120-82-1	1,2,4-Trichlorobenzene	ND	0.200	122	ND	1.48	35)	U	
87-68-3	Hexachlorobutadiene	ND	0.200	••	ND	2.13	**	U	



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

Sample Amount . 250 mil					40 00		2 111X 1		
		ppbV				ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	
' 5-71-8	Dichlorodifluoromethane	0.225	0.200	2-11	1.11	0.989	***		
4-87-3	Chloromethane	ND	0.200	***	ND	0.413	**	U	
6-14-2	Freon-114	ND	0.200	122	ND	1.40	745	U	
75-01-4	Vinyl chloride	ND	0.200	•	ND	0.511		U	
06-99-0	1,3-Butadiene	ND	0.200	8.42	ND	0.442	ne.	U	
74-83-9	Bromomethane	ND	0.200	: **	ND	0.777	**:	U	
75-00-3	Chloroethane	ND	0.200	244	ND	0.528		U	
64-17-5	Ethanol	27.8	5.00	()	52.4	9.42			
593-60-2	Vinyl bromide	ND	0.200	i e	ND	0.874		U	
67-64-1	Acetone	33.7	1.00	(#H))	80.1	2.38	**		
75-69-4	Trichlorofluoromethane	0.264	0.200	10##67	1.48	1.12			
67-63-0	Isopropanol	0.890	0.500	₩°	2.19	1.23	225		
'5-35-4	1,1-Dichloroethene	ND	0.200	/52/	ND	0.793	**	U	
75-65-0	Tertiary butyl Alcohol	ND	0.500	88 6	ND	1.52		U	
75-09-2	Methylene chloride	ND	0.500	-	ND	1.74	:**	U	
107-05-1	3-Chloropropene	ND	0.200	227	ND	0.626	828	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	188	U	
156-60-5	trans-1,2-Dichloroethene	ND	0.200	**:	ND	0.793) == -)	U	
75-34-3	1,1-Dichloroethane	ND	0.200	22.5	ND	0.809	844	U	
1634-04-4	Methyl tert butyl ether	ND	0.200	•	ND	0.721	<u>.</u>	U	
78-93-3	2-Butanone	1.59	0.500	***	4.69	1.47	1.55		
156-59-2	cis-1,2-Dichloroethene	ND	0.200	**:	ND	0.793	lee.	U	
141-78-6	Ethyl Acetate	ND	0.500	22	ND	1.80	124	U	
67-66-3	Chloroform	0.384	0.200		1.88	0.977	7.		
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	5944		



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

	Parameter		ppbV			ug/m3		
CAS NO.		Results	RL	MDL	Results	RL	MDL	Qualifier
71-55-6	1,1,1-Trichloroethane	ND	0.200	3 88 93	ND	1.09	##2	U
71-43-2	Benzene	7.12	0.200	8 44 0	22.7	0.639	(4.6)	
56-23-5	Carbon tetrachloride	ND	0.200	447.	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	35	U
75-27-4	Bromodichloromethane	ND	0.200	##12	ND	1.34	**	U
123-91-1	1,4-Dioxane	ND	0.200	440	ND	0.721	34:	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		υ
108-10-1	4-Methyl-2-pentanone	ND	0.500	•	ND	2.05	**	υ
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	¥6	30.3	0.754	144	
591-78-6	2-Hexanone	ND	0.200		ND	0.820	122	U
124-48-1	Dibromochloromethane	ND	0.200	775	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	522	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	311	
75-25-2	Bromoform	ND	0.200		ND	2.07	1944	U
100-42-5	Styrene	ND	0.200	84.5	ND	0.852	244	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	19 1 7	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	188	2.15	0.983		



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 : 02/26/17 01:53 **Date Analyzed**

Dilution Factor : 1

Analyst : MB Instrument ID : AIRLAB11

	ppbV	ug/m3					
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
1,2,4-Trimethylbenzene	1.74	0.200	244	8.55	0.983	(0 414 0)	
Benzyl chloride	ND	0.200		ND	1.04	:146	U
1,3-Dichlorobenzene	ND	0.200		ND	1.20	⊕)	U
1,4-Dichlorobenzene	ND	0.200	(***	ND	1.20	858	U
1,2-Dichlorobenzene	ND	0.200	188	ND	1.20	₩2	U
1,2,4-Trichlorobenzene	ND	0.200	144	ND	1.48	11 2	U
Hexachlorobutadiene	ND	0.200	148	ND	2.13		U
	1,2,4-Trimethylbenzene Benzyl chloride 1,3-Dichlorobenzene 1,4-Dichlorobenzene 1,2-Dichlorobenzene 1,2,4-Trichlorobenzene	1,2,4-Trimethylbenzene 1.74 Benzyl chloride ND 1,3-Dichlorobenzene ND 1,4-Dichlorobenzene ND 1,2-Dichlorobenzene ND 1,2,4-Trichlorobenzene ND	1,2,4-Trimethylbenzene 1.74 0.200 Benzyl chloride ND 0.200 1,3-Dichlorobenzene ND 0.200 1,4-Dichlorobenzene ND 0.200 1,2-Dichlorobenzene ND 0.200 1,2,4-Trichlorobenzene ND 0.200	1,2,4-Trimethylbenzene 1.74 0.200 Benzyl chloride ND 0.200 1,3-Dichlorobenzene ND 0.200 1,4-Dichlorobenzene ND 0.200 1,2-Dichlorobenzene ND 0.200 1,2,4-Trichlorobenzene ND 0.200	1,2,4-Trimethylbenzene 1.74 0.200 8.55 Benzyl chloride ND 0.200 ND 1,3-Dichlorobenzene ND 0.200 ND 1,4-Dichlorobenzene ND 0.200 ND 1,2-Dichlorobenzene ND 0.200 ND 1,2,4-Trichlorobenzene ND 0.200 ND	1,2,4-Trimethylbenzene 1.74 0.200 8.55 0.983 Benzyl chloride ND 0.200 ND 1.04 1,3-Dichlorobenzene ND 0.200 ND 1.20 1,4-Dichlorobenzene ND 0.200 ND 1.20 1,2-Dichlorobenzene ND 0.200 ND 1.20 1,2,4-Trichlorobenzene ND 0.200 ND 1.48	1,2,4-Trimethylbenzene 1.74 0.200 8.55 0.983 Benzyl chloride ND 0.200 ND 1.04 1,3-Dichlorobenzene ND 0.200 ND 1.20 1,4-Dichlorobenzene ND 0.200 ND 1.20 1,2-Dichlorobenzene ND 0.200 ND 1.48 1,2,4-Trichlorobenzene ND 0.200 ND 1.48





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

Sample Amount . 250 mil						numm	11 I Z	V- I
		ppbV				ug/m3		
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
75-71-8	Dichlorodifluoromethane	0.280	0.200	**	1.38	0.989	***	
74-87-3	Chloromethane	0.576	0.200	222	1.19	0.413	X4:	
76-14-2	Freon-114	ND	0.200		ND	1.40	-	U
106-99-0	1,3-Butadiene	ND	0.200		ND	0.442	- RE	U
74-83-9	Bromomethane	ND	0.200	200	ND	0.777	##1	U
75-00-3	Chloroethane	ND	0.200	574450	ND	0.528	-	U
64-17-5	Ethanol	32.2	5.00	*	60.7	9.42	1225	
593-60-2	Vinyl bromide	ND	0.200	57	ND	0.874	•	U
67-64-1	Acetone	85.0	1.00	Ke A	202	2.38		
75-69-4	Trichlorofluoromethane	0.236	0.200	440	1.33	1.12	**	
67-63-0	Isopropanol	4.20	0.500	=	10.3	1.23	(111)	
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) == 0	U
75-15-0	Carbon disulfide	ND	0.200	25	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	57A	U
75-34-3	1,1-Dichloroethane	ND	0.200	**	ND	0.809	S##	U
1634-04-4	Methyl tert butyl ether	ND	0.200	iii ii	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	V 	
67-66-3	Chloroform	ND	0.200	••	ND	0.977	See	U
109-99-9	Tetrahydrofuran	ND	0.500		ND	1.47	(T AN	U
107-06-2	1,2-Dichloroethane	ND	0.200	•	ND	0.809	0.22	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	Lee:	
110-82-7	Cyclohexane	0.747	0.200		2.57	0.688	**	
78-87-5	1,2-Dichloropropane	ND	0.200	286	ND	0.924	EE:	U



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

: R1118724

Lab File ID Sample Amount

: 250 ml

Lab Number

Project Number :

Date Collected

: 02/23/17 11:24

Date Received

: 02/23/17 : 02/25/17 18:56

: L1705766

Date Analyzed Dilution Factor

: 1

: MB

Instrument ID

Analyst

: AIRLAB11

CAS NO.	Parameter	ppbV			ug/m3			
		Results	RL	MDL	Results	RL	MDL	Qualifier
75-27-4	Bromodichloromethane	ND	0.200	••	ND	1.34	(988.)	U
123-91-1	1,4-Dioxane	ND	0.200	128	ND	0.721	23460	U
540-84-1	2,2,4-Trimethylpentane	NR MJ	0.200	**	ND UJ	0.934	**	U
142-82-5	Heptane	2.07	0.200		8.48	0.820	1,550	
10061-01-5	cis-1,3-Dichloropropene	ND	0.200	-	ND	0.908	HE O	U
108-10-1	4-Methyl-2-pentanone	1.38	0.500	144	5.66	2.05	84 0	
10061-02-6	trans-1,3-Dichloropropene	ND	0.200	144	ND	0.908	226	U
79-00-5	1,1,2-Trichloroethane	ND	0.200	650.	ND	1.09	ÆS	U
108-88-3	Toluene	33.3	0.200		125	0.754	***	
591-78-6	2-Hexanone	ND	0.200	(a)	ND	0.820	**:	U
124-48-1	Dibromochloromethane	ND	0.200		ND	1.70	20 5	U
106-93-4	1,2-Dibromoethane	ND	0.200	•	ND	1.54		U
108-90-7	Chlorobenzene	ND	0.200	S et	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	245	
75-25-2	Bromoform	ND	0.200		ND	2.07	-	U
100-42-5	Styrene	ND	0.200	1.55	ND	0.852		U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.200	1000	ND	1.37	••	U
95-47-6	o-Xylene	1.41	0.200	844	6.12	0.869	44	
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	0,000	3.87	0.983		
100-44-7	Benzyl chloride	ND	0.200	0##6	ND	1.04		U
541-73-1	1,3-Dichlorobenzene	ND	0.200	V 0	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	#80	ND	1.20		U
120-82-1	1,2,4-Trichlorobenzene	ND	0.200	66 0	ND	1.48	**	U
87-68-3	Hexachlorobutadiene	ND	0.200	###@	ND	2.13		U





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 : 0

Date Collected : 02/23/17 11:35 Date Received : 02/23/17 Date Analyzed : 02/25/17 19:31

Dilution Factor : 1

Analyst : MB

Sample Amount : 250 mi					GC CO		: 612	K- I
		ppbV Results RL MDL			D It	ug/m3	MDL	O1141
CAS NO.	Parameter	Results	KL	MDL	Results	RL	MDL	Qualifier
75-71-8	Dichlorodifluoromethane	0.287	0.200		1.42	0.989	**01	
74-87-3	Chloromethane	0.612	0.200	122	1.26	0.413	22	
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
'4-83-9	Bromomethane	ND	0.200	744	ND	0.777		υ
75-00-3	Chloroethane	ND	0.200	724	ND	0.528	120	U
64-17-5	Ethanol	45.8	5.00		86.3	9.42		
93-60-2	Vinyl bromide	ND	0.200	8.55	ND	0.874	573	U
67-64-1	Acetone	50.7 🥣	1.00	-	120 🧻	2.38	**:	
75-69-4	Trichlorofluoromethane	0.251	0.200	-	1.41	1.12	¥#:	
67-63-0	Isopropanol	8.27	0.500	Æ	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	2.00	3.26	1.74	••	
107-05-1	3-Chloropropene	ND	0.200	3##	ND	0.626	HE	U
75-15-0	Carbon disulfide	ND	0.200	A <u>#4</u>	ND	0.623	125	U
76-13-1	Freon-113	ND	0.200	n 22	ND	1.53	€	U
156-60-5	trans-1,2-Dichloroethene	ND	0.200	79 18 77	ND	0.793	155	U
75-34-3	1,1-Dichloroethane	ND	0.200	2000	ND	0.809	**	U
1634-04-4	Methyl tert butyl ether	ND	0.200	724	ND	0.721	7 <u>88</u> 5	U
78-93-3	2-Butanone	1.24	0.500	. 80	3.66	1.47		
141-78-6	Ethyl Acetate	2.31	0.500	***	8.32	1.80	159	
67-66-3	Chloroform	ND	0.200	100 0	ND	0.977	••	U
109-99-9	Tetrahydrofuran	ND	0.500	##S	ND	1.47		U
107-06-2	1,2-Dichloroethane	ND	0.200		ND	0.809	2#	U
110-54-3	n-Hexane	3.37	0.200	# 8	11.9	0.705	6.55	
71-43-2	Benzene	1.06	0.200	***	3.39	0.639	3 27	
110-82-7	Cyclohexane	0.604	0.200	610	2.08	0.688	(##	
78-87-5	1,2-Dichloropropane	ND	0.200	#	ND	0.924	<i>ي</i> نتو	U



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 : 02/23/17

Date Received : 02/23/17 Date Analyzed : 02/25/17 19:31

Dilution Factor : 1

Analyst : MB Instrument ID : AIRLAB11 GC Column : RTX-1

Odinip	- Fullount					11n/m2			
CAS NO.	Parameter	ppbV Results RL MDL			Results	ug/m3 RL	MDL Qualifier		
CAS NO.	raiailletei	nesuits	nL	WIDE	nesuits	nL .	MDL	Qualifier	
75-27-4	Bromodichloromethane	ND	0.200	::	ND	1.34	**	U	
123-91-1	1,4-Dioxane	ND	0.200	042	ND	0.721	129	U	
540-84-1	2,2,4-Trimethylpentane	ND UJ	0.200	5	Th an	0.934	•	U	
142-82-5	Heptane	1.31	0.200	547	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	222	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	385	ND	1.09	775	U	
108-88-3	Toluene	18.7	0.200	֥	70.5	0.754	***		
591-78-6	2-Hexanone	ND	0.200	R## 3	ND	0.820	(¥• 5	U	
124-48-1	Dibromochloromethane	ND	0.200	741	ND	1.70	141	U	
106-93-4	1,2-Dibromoethane	ND	0.200	1/100/2	ND	1.54	**	υ	
108-90-7	Chlorobenzene	ND	0.200	9 110 25	ND	0.921	⊞ 5	U	
100-41-4	Ethylbenzene	0.848	0.200	3440	3.68	0.869	(**)		
179601-23-1	p/m-Xylene	3.37	0.400	220	14.6	1.74	2		
75-25-2	Bromoform	ND	0.200	•	ND	2.07	*	U	
100-42-5	Styrene	ND	0.200	##8	ND	0.852	1881	U	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.200	##D5	ND	1.37	**	U	
95-47-6	o-Xylene	1.16	0.200	445	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	155		
95-63-6	1,2,4-Trimethylbenzene	0.794	0.200	••	3.90	0.983			
100-44-7	Benzyl chloride	ND	0.200	20 2	ND	1.04	-	U	
541-73-1	1,3-Dichlorobenzene	ND	0.200	#0	ND	1.20	-	U	
106-46-7	1,4-Dichlorobenzene	ND	0.200		ND	1.20	<u> </u>	U	
95-50-1	1,2-Dichlorobenzene	ND	0.200	**	ND	1.20	255	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	622	U	



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

Sample Amount . 250 mil					GC CC	Julili	* UTV-1		
		ppbV			ug/m3				
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	
75-71-8	Dichlorodifluoromethane	0.682	0.200		3.37	0.989	: **		
74-87-3	Chloromethane	0.639	0.200	(84)	1.32	0.413	<u>825</u>		
76-14-2	Freon-114	ND	0.200		ND	1.40		U	
106-99-0	1,3-Butadiene	ND	0.200		ND	0.442		υ	
74-83-9	Bromomethane	ND	0.200		ND	0.777	\ 	U	
75-00-3	Chloroethane	ND	0.200	122	ND	0.528	(++):	U	
64-17-5	Ethanol	37.8	5.00	••	71.2	9.42	140		
593-60-2	Vinyl bromide	ND	0.200		ND	0.874	â	υ	
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	320	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	1. 2.8	2.95	1.74	***		
107-05-1	3-Chloropropene	ND	0.200	-	ND	0.626		U	
75-15-0	Carbon disulfide	ND	0.200	(1.41e) 4. 41e)	ND	0.623	¥#8	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	89 0	U	
1634-04-4	Methyl tert butyl ether	ND	0.200		ND	0.721	64 3	U	
78-93-3	2-Butanone	0.775	0.500		2.29	1.47	**		
141-78-6	Ethyl Acetate	ND	0.500	8.55	ND	1.80	**	U	
67-66-3	Chloroform	ND	0.200	33**	ND	0.977	••	U	
109-99-9	Tetrahydrofuran	ND	0.500	:44	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	lo ga	1.59	0.705	2		
71-43-2	Benzene	0.773	0.200	A(10)	2.47	0.639	:::::::::::::::::::::::::::::::::::::::		
110-82-7	Cyclohexane	0.200	0.200	200	0.688	0.688	3 4 8		
78-87-5	1,2-Dichloropropane	ND	0.200	(22)	ND	0.924	183	U	



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

Sample Amount 250 mi					GC Column		∯ D1Z	·- 1
	_	1	ppbV			ug/m3		
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
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	2**	1.42	0.820	-	
10061-01-5	cis-1,3-Dichloropropene	ND	0.200	ुम≭	ND	0.908	##	U
108-10-1	4-Methyl-2-pentanone	ND	0.500	:22	ND	2.05	960	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	5 70	ND	1.09	••	U
108-88-3	Toluene	2.51	0.200	0.99	9.46	0.754	75	
591-78-6	2-Hexanone	ND	0.200		ND	0.820	•••	U
124-48-1	Dibromochloromethane	ND	0.200	124	ND	1.70	(44)	U
106-93-4	1,2-Dibromoethane	ND	0.200	.8	ND	1.54	36 3	U
108-90-7	Chlorobenzene	ND	0.200	1,980	ND	0.921	35 3	U
100-41-4	Ethylbenzene	0.321	0.200	**	1.39	0.869		
179601-23-1	p/m-Xylene	1.16	0.400	223	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		υ
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.200	**	ND	1.37	3##	U
95-47-6	o-Xylene	0.447	0.200	#FS	1.94	0.869	(44)	
622-96-8	4-Ethyltoluene	ND	0.200	#	ND	0.983	124	U
108-67-8	1,3,5-Trimethylbenzene	ND	0.200	57 5	ND	0.983		บ
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	Sas	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	2867	υ



: CA RICH CONSULTANTS, INC. Client

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

Samp	Allount 230 mi					, attiii	Λ-1	
		ppbV				ug/m3		
AS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
5-71-8	Dichlorodiffuoromethane	0.347	0.200	(44	1.72	0.989	**	
4-87-3	Chloromethane	0.522	0.200	000	1.08	0.413	**	
6-14-2	Freon-114	ND	0.200	3#	ND	1.40		U
06-99-0	1,3-Butadiene	ND	0.200	1188	ND	0.442		U
4-83-9	Bromomethane	ND	0.200	-	ND	0.777		U
5-00-3	Chloroethane	ND	0.200	8445	ND	0.528	••	U
4-17-5	Ethanol	17.7	5.00	(⊕)	33.4	9.42	**	
93-60-2	Vinyl bromide	ND	0.200	J##2	ND	0.874	1071	U
67-64-1	Acetone	8.80	1.00	**	20.9	2.38	**	
' 5-69-4	Trichlorofluoromethane	0.226	0.200	22%	1.27	1.12		
7-63-0	Isopropanol	2.47	0.500	•	6.07	1.23	188	
'5-65-0	Tertiary butyl Alcohol	ND	0.500	m//	ND	1.52	•	U
75-09-2	Methylene chloride	0.584	0.500		2.03	1.74). .	
07-05-1	3-Chloropropene	ND	0.200	##1	ND	0.626	***	U
75-15-0	Carbon disulfide	ND	0.200	25	ND	0.623	122	U
76-13-1	Freon-113	ND	0.200		ND	1.53		U
156-60-5	trans-1,2-Dichloroethene	ND	0.200	**1	ND	0.793	2 7 7	U
75-34-3	1,1-Dichloroethane	ND	0.200	**	ND	0.809	***	U
1634-04-4	Methyl tert butyl ether	ND	0.200	44	ND	0.721	844	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	0.00	U
109-99-9	Tetrahydrofuran	ND	0.500	122	ND	1.47	1122	U
107-06-2	1,2-Dichloroethane	ND	0.200		ND	0.809	722	U
110-54-3	n-Hexane	0.446	0.200	3 1 75	1.57	0.705	(1887)	
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



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

Sample Amount 250 mi					GC C	Julili		-1
		ppbV			-	ug/m3		
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
75-27-4	Bromodichloromethane	ND	0.200	: - 111	ND	1.34	## P	U
123-91-1	1,4-Dioxane	ND	0.200	538	ND	0.721	900	U
540-84-1	2,2,4-Trimethylpentane	0.265	0.200	(22	1.24	0.934	466	
142-82-5	Heptane	0.265	0.200		1.09	0.820		
10061-01-5	cis-1,3-Dichloropropene	ND	0.200	848	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	844	ND	0.908	-	U
79-00-5	1,1,2-Trichloroethane	ND	0.200		ND	1.09	<u></u>	U
108-88-3	Toluene	2.13	0.200	S ta	8.03	0.754		
591-78-6	2-Hexanone	ND	0.200		ND	0.820	3 12 3	U
124-48-1	Dibromochloromethane	ND	0.200	2220	ND	1.70	H-0	U
106-93-4	1,2-Dibromoethane	ND	0.200	•	ND	1.54		U
108-90-7	Chlorobenzene	ND	0.200	MT-C	ND	0.921	=	U
100-41-4	Ethylbenzene	0.238	0.200	•••	1.03	0.869	:=0	
179601-23-1	p/m-Xylene	0.849	0.400	447	3.69	1.74	(##)	
75-25-2	Bromoform	ND	0.200		ND	2.07		υ
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	5.555	υ
95-47-6	o-Xylene	0.303	0.200	H=1	1.32	0.869	788	
622-96-8	4-Ethyltoluene	ND	0.200	421	ND	0.983		υ
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	2.55	
100-44-7	Benzyl chloride	ND	0.200	***	ND	1.04		U
541-73-1	1,3-Dichlorobenzene	ND	0.200	247	ND	1.20	244	U
106-46-7	1,4-Dichlorobenzene	ND	0.200	•	ND	1.20	(E	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	(i de	U
87-68-3	Hexachlorobutadiene	ND	0.200	-	ND	2.13	10 46 01	U



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

Sample Amount : 250 mi					GC Column		: HIX-1	
		0	ppbV			ug/m3		
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
75-71 - 8	Dichlorodifluoromethane	0.361	0.200		1.79	0.989	••	
74-87-3	Chloromethane	0.628	0.200	(##	1.30	0.413	¥#5	
76-14-2	Freon-114	ND	0.200		ND	1.40	*	U
106-99-0	1,3-Butadiene	ND	0.200	9.55	ND	0.442	75%	U
74-83-9	Bromomethane	ND	0.200	**	ND	0.777	FB 2	U
75-00-3	Chloroethane	ND	0.200	544	ND	0.528	## (U
64-17-5	Ethanol	19.1	5.00	N##	36.0	9.42	-	
593-60-2	Vinyl bromide	ND	0.200	1989	ND	0.874		U
67-64-1	Acetone	8.89	1.00	A. 944	21.1	2.38	***	
75-69-4	Trichloroffuoromethane	0.262	0.200	(1949)	1.47	1.12	**:	
67-63-0	Isopropanol	2.64	0.500	-	6.49	1.23	(22)	
75-65-0	Tertiary butyl Alcohol	ND	0.500	(ND	1.52		U
75-09-2	Methylene chloride	0.572	0.500	2. 88 .0	1.99	1.74	5 5 5	
107-05-1	3-Chloropropene	ND	0.200	***	ND	0.626	-	U
75-15-0	Carbon disulfide	ND	0.200	24 8	ND	0.623	24	U
76-13-1	Freon-113	ND	0.200	<u>₩</u>	ND	1.53		υ
156-60-5	trans-1,2-Dichloroethene	ND	0.200	556	ND	0.793	177	U
75-34-3	1,1-Dichloroethane	ND	0.200	**:	ND	0.809	(*(*)	U
1634-04-4	Methyl tert butyl ether	ND	0.200	225	ND	0.721	(**	U
78-93-3	2-Butanone	ND	0.500	B	ND	1.47		U
141-78-6	Ethyl Acetate	0.698	0.500		2.52	1.80	: 511 .	
67-66-3	Chloroform	ND	0.200	**:	ND	0.977	2.98	U
109-99-9	Tetrahydrofuran	ND	0.500	245	ND	1.47	344	U
107-06-2	1,2-Dichloroethane	ND	0.200	<u>ge</u>	ND	0.809	721	U
110-54-3	n-Hexane	0.439	0.200	10	1.55	0.705	•••	
71-43-2	Benzene	0.515	0.200	(110)	1.65	0.639	:::	
110-82-7	Cyclohexane	ND	0.200	**	ND	0.688		υ
78-87-5	1,2-Dichloropropane	ND	0.200		ND	0.924	334	U



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

: L1705766 Lab Number

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

Sample Amount 250 mi					40 00		* 1112	• 11174-1		
		ppbV				ug/m3	MOL	0		
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier		
75-27-4	Bromodichloromethane	ND	0.200	-	ND	1.34	**1	U		
123-91-1	1,4-Dioxane	ND	0.200	((44	ND	0.721	•••	U		
540-84-1	2,2,4-Trimethylpentane	0.314	0.200	N ui	1.47	0.934	401			
142-82-5	Heptane	0.284	0.200	30575	1.16	0.820	#			
10061-01-5	cis-1,3-Dichloropropene	ND	0.200	Omm 2	ND	0.908	**	U		
108-10-1	4-Methyl-2-pentanone	ND	0.500	(144)	ND	2.05) ** 0	U		
10061-02-6	trans-1,3-Dichloropropene	ND	0.200	140	ND	0.908	24	U		
79-00-5	1,1,2-Trichloroethane	ND	0.200	(**)	ND	1.09		U		
108-88-3	Toluene	2.03	0.200	150	7.65	0.754	ane:			
591-78-6	2-Hexanone	ND	0.200	**	ND	0.820		U		
124-48-1	Dibromochloromethane	ND	0.200	18 8	ND	1.70	-	U		
106-93-4	1,2-Dibromoethane	ND	0.200		ND	1.54	=	U		
108-90-7	Chlorobenzene	ND	0.200	MAS .	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	¥4.6	3.15	1.74				
75-25-2	Bromoform	ND	0.200	*	ND	2.07	722	U		
100-42-5	Styrene	ND	0.200		ND	0.852	痩	U		
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.200	***	ND	1.37	iee.	U		
95-47-6	o-Xylene	0.254	0.200	***	1.10	0.869	***			
622-96-8	4-Ethyltoluene	ND	0.200	227	ND	0.983	EME	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	S 57	U		
100-44-7	Benzyl chloride	ND	0.200	** 3	ND	1.04		U		
541-73-1	1,3-Dichlorobenzene	ND	0.200		ND	1.20	844	U		
106-46-7	1,4-Dichlorobenzene	ND	0.200		ND	1.20	12	U		
95-50-1	1,2-Dichlorobenzene	ND	0.200	85	ND	1.20	7 *** 1	U		
120-82-1	1,2,4-Trichlorobenzene	ND	0.200	3940	ND	1.48	0'**	U		
87-68-3	Hexachlorobutadiene	ND	0.200	448	ND	2.13	2.00	U		



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

Sample Amount . 250 mil				40 00	/IGITIII	* IIIX-1		
	ppbV				ug/m3			
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	
Dichlorodifluoromethane	0.364	0.200		1.80	0.989	HE .6		
Chloromethane	0.583	0.200	144	1.20	0.413	ga n		
Freon-114	ND	0.200		ND	1.40	220	U	
1,3-Butadiene	ND	0.200	177	ND	0.442	2 0	U	
Bromomethane	ND	0.200	:**	ND	0.777	##8	U	
Chloroethane	ND	0.200	1944	ND	0.528	**	U	
Ethanol	20.3	5.00	122	38.3	9.42	22.5		
Vinyl bromide	ND	0.200	•	ND	0.874		U	
Acetone	8.92	1.00	1.55	21.2	2.38	*		
Trichlorofluoromethane	0.252	0.200	:**	1.42	1.12	***		
Isopropanol	2.62	0.500	644	6.44	1.23	¥e		
Tertiary butyl Alcohol	ND	0.500	·	ND	1.52		U	
Methylene chloride	0.857	0.500	8.55	2.98	1.74			
3-Chloropropene	ND	0.200	3. 00	ND	0.626	** :	υ	
Carbon disulfide	ND	0.200	948	ND	0.623	1885	U	
Freon-113	ND	0.200	<u> </u>	ND	1.53	95	U	
trans-1,2-Dichloroethene	ND	0.200	1.88	ND	0.793		U	
1,1-Dichloroethane	ND	0.200	O. ***	ND	0.809	391	U	
Methyl tert butyl ether	ND	0.200	(144)	ND	0.721	5 H= 3	U	
2-Butanone	ND	0.500	7,50	ND	1.47	42	U	
Ethyl Acetate	0.663	0.500	550	2.39	1.80	-		
Chloroform	ND	0.200	87 00	ND	0.977	Leff)	U	
Tetrahydrofuran	ND	0.500	***	ND	1.47	:##:	U	
1,2-Dichloroethane	ND	0.200		ND	0.809	1991	U	
n-Hexane	0.461	0.200	€ (1.62	0.705	•		
Benzene	0.543	0.200	***	1.73	0.639	598		
Cyclohexane	ND	0.200	•••	ND	0.688	••	U	
1,2-Dichloropropane	ND	0.200	W.	ND	0.924	:#¥	U	
	Parameter Dichlorodifluoromethane Chloromethane Freon-114 1,3-Butadiene Bromomethane Chloroethane Ethanol Vinyl bromide Acetone Trichlorofluoromethane Isopropanol Tertiary butyl Alcohol Methylene chloride 3-Chloropropene Carbon disulfide Freon-113 trans-1,2-Dichloroethane 1,1-Dichloroethane Methyl tert butyl ether 2-Butanone Ethyl Acetate Chloroform Tetrahydrofuran 1,2-Dichloroethane n-Hexane Benzene Cyclohexane	Parameter Results Dichlorodifluoromethane 0.364 Chloromethane 0.583 Freon-114 ND 1,3-Butadiene ND Bromomethane ND Chloroethane ND Ethanol 20.3 Vinyl bromide ND Acetone 8.92 Trichlorofluoromethane 0.252 Isopropanol 2.62 Tertiary butyl Alcohol ND Methylene chloride 0.857 3-Chloropropene ND Carbon disulfide ND Freon-113 ND trans-1,2-Dichloroethene ND 1,1-Dichloroethane ND Methyl tert butyl ether ND 2-Butanone ND Ethyl Acetate 0.663 Chloroform ND Tetrahydrofuran ND 1,2-Dichloroethane ND n-Hexane 0.461 Benzene 0.543 Cyclohexane ND	Parameter Results RL Dichlorodifluoromethane 0.364 0.200 Chloromethane 0.583 0.200 Freon-114 ND 0.200 1,3-Butadiene ND 0.200 Bromomethane ND 0.200 Chloroethane ND 0.200 Ethanol 20.3 5.00 Vinyl bromide ND 0.200 Acetone 8.92 1.00 Trichlorofluoromethane 0.252 0.200 Isopropanol 2.62 0.500 Tertiary butyl Alcohol ND 0.500 Methylene chloride 0.857 0.500 3-Chloropropene ND 0.200 Freon-113 ND 0.200 Freon-113 ND 0.200 1,1-Dichloroethane ND 0.200 Methyl tert butyl ether ND 0.200 Ethyl Acetate 0.663 0.500 Chloroform ND 0.200 Tetrahydrofuran N	Parameter Results RL MDL Dichlorodifluoromethane 0.364 0.200 Chloromethane 0.583 0.200 Freon-114 ND 0.200 1,3-Butadiene ND 0.200 Bromomethane ND 0.200 Chloroethane ND 0.200 Ethanol 20.3 5.00 Vinyl bromide ND 0.200 Acetone 8.92 1.00 Isopropanol 2.62 0.500 Isopropanol 2.62 0.500 Tertiary butyl Alcohol ND 0.500 Methylene chloride 0.857 0.500 3-Chloropropene ND 0.200 Carbon disulfide ND 0.200 Freon-113 ND 0.200 trans-1,2-Dichloroethane ND 0.200	Parameter Results RL MDL Results Dichlorodifluoromethane 0.364 0.200 1.80 Chloromethane 0.583 0.200 1.20 Freon-114 ND 0.200 ND 1,3-Butadiene ND 0.200 ND Bromomethane ND 0.200 ND Chloroethane ND 0.200 ND Ethanol 20.3 5.00 ND Ethanol ND 0.200 ND Acetone 8.92 1.00 21.2 Trichlorofluoromethane 0.252 0.200 1.42 Isopropanol 2.62 0.500 6.44 Tertiary butyl Alcohol ND 0.500 ND Methylene chloride 0.857 0.500 ND Carbon disutfide ND 0.200 ND	Parameter Results RL MDL Results RL Dichlorodifiluoromethane 0.364 0.200 1.80 0.989 Chloromethane 0.583 0.200 1.20 0.413 Freon-114 ND 0.200 ND 0.42 Bromomethane ND 0.200 ND 0.777 Chloroethane ND 0.200 ND 0.528 Ethanol 20.3 5.00 ND 0.524 Vinyl bromide ND 0.200 ND 0.874 Acetone 8.92 1.00 ND 0.874 Trichlorof	Parameter Para	Parameter Para



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

: 02/25/17 18:22 **Date Analyzed**

Dilution Factor : 1 Analyst : MB

Sample Amount 5 250 mil					GC Column		. 1117	λ- I
			ppbV			ug/m3		
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
75-27 - 4	Bromodichloromethane	ND	0.200	-	ND	1.34	••):	U
123-91-1	1,4-Dioxane	ND	0.200	-22	ND	0.721	94);	U
540-84-1	2,2,4-Trimethylpentane	0.333	0.200	188	1.56	0.934	#0	
142-82-5	Heptane	0.231	0.200	1.55	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	(in)	ND	2.05	46	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.200		ND	0.908	25 .	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	544	ND	0.820	**	U
124-48-1	Dibromochloromethane	ND	0.200	022	ND	1.70	¥#3	U
106-93-4	1,2-Dibromoethane	ND	0.200	25	ND	1.54	轰	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	S 44	3.41	1.74	5445	
75-25-2	Bromoform	ND	0.200	(#	ND	2.07	£	U
100-42-5	Styrene	ND	0.200	8##2	ND	0.852		U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.200	** (0	ND	1.37	: **	U
95-47-6	o-Xylene	0.281	0.200	223	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	# 5 3	ND	0.983	- 858	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	722	U
106-46-7	1,4-Dichlorobenzene	ND	0.200	88V.	ND	1.20	**	U
95-50-1	1,2-Dichlorobenzene	ND	0.200	**	ND	1.20	04H	U
120-82-1	1,2,4-Trichlorobenzene	ND	0.200	463	ND	1.48	••	U
87-68-3	Hexachlorobutadiene	ND	0.200	-	ND	2.13		U

