L.A.B. Validation Corp. 14 West Point Drive, East Northport, N.Y. 11731

DATA USABILITY SUMMARY REPORT (DUSR)

ORGANIC ANALYSIS

EPA Compendium Method TO-15
VOLATILES BY GC/MS

For Indoor Air/Soil Gas Samples Collected
December 17, 2012
For Citizen Development Company/Flower Fashion Site
47 Northern Boulevard, Great Neck, New York
By CA Rich Consultants, Inc.

SAMPLE DELIVERY GROUP NUMBER: 12L0657
York Analytical Laboratories (ELAP #10854)

SUBMITTED TO:

Mr. Eric Weinstock
CA Rich Consultants, Inc.
17 Dupont Street
Plainview, New York 11803

May 03, 2013

PREPARED BY:

Lori A. Beyer/President
L.A.B. Validation Corp.
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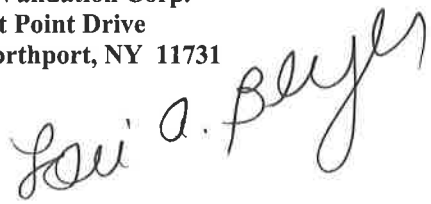
East Northport, NY 11731



Phone (516) 523-7891 email LABValidation@aol.com

CDC/Flower Fashion Site, 47 Northern Boulevard, Great Neck, New York; December 2012.
Data Validation Report: Volatile Organics

Table of Contents:

Introduction:

A validation was performed on six (6) air samples for Volatile Organic analysis collected by CA Rich Consultants and submitted to York Analytical Laboratories for subsequent analysis under chain of custody documentation. This report contains the laboratory and validation results for the six (6) field samples itemized below. The samples were collected on December 17, 2012.

The samples were analyzed by York utilizing EPA Method TO-15 and in accordance with NYSDEC Analytical Services Protocol (2005) and submitted under NYSDEC ASP Category B equivalent deliverable requirements for the associated analytical methodology employed. The analytical testing consisted of the selected TO-15 Target Compound List (TCL) of analytes for Volatile Organics listed in Appendix A.

The data was evaluated in accordance with the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (Publication 9240.1-05), EPA SOP #HW31 (Revision 4-Updated 2009) and in conjunction with the analytical methodology for which the samples were analyzed, where applicable and relevant.

The data validation report pertains to the following field soil gas/air samples:

Sample Identification	Laboratory Identification(s)	Sample Matrix (Air Type)	Collection Date
PDM-1	12L0657-01	Indoor Ambient Air	12/17/12
PDM-2	12L0657-02	Indoor Ambient Air	12/17/12
PDM-4	12L0657-03	Indoor Ambient Air	12/17/12
PDM-5	12L0657-04	Indoor Ambient Air	12/17/12
PDM-6	12L0657-05	Outdoor Ambient Air	12/17/12
SS-01	12L0657-06	Soil Vapor	12/17/12

Data Qualifier Definitions:

The following definitions provide brief explanations of the qualifiers assigned to results in the data review process.

U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

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 reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

R - The sample results are rejected due to deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

N - The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification."

NJ - The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate quantity.

K - The analyte is present. The reported value may be biased high. The actual value is expected to be lower than reported.

L - The analyte is present. The reported value may be biased low. The actual value is expected to be higher than reported.

UL - The analyte was not detected and the reported quantitation limit is most likely higher than reported.

Sample Receipt:

The Chain of Custody document from 12/17/12 indicates that six (6) air samples were delivered to York and received on 12/18/12 following completion of the sampling event. Sample login notes and the chain of custody indicate that at the Validated Time of Sample Receipt (VTSR) at the laboratory no discrepancies were notated and therefore the integrity of the summa canister samples is assumed to be good.

The data summary tables included in Appendix A includes all usable (qualified) and unusable (rejected) results for the samples identified above. These tables summarize the detailed narrative section of the report. All data validation qualifications have been reported on the Form I's for ease of review and verification.

NOTE:
L.A.B. Validation Corp. believes it is appropriate to note that the data validation criteria utilized for data evaluation is different than the method requirements utilized by the laboratory. Qualified data does not necessarily mean that the laboratory was non-compliant in the analysis that was performed.

Volatile Organics by EPA Compendium Method TO-15

The following method criteria were reviewed: holding times, surrogate standards, LCS, Blanks, Tunes, Calibrations, Internal Standards, Target Component Identification and Quantitation, Reported Quantitation Limits and Overall System Performance. The volatile results were considered to be valid and useable as noted on the data summary tables in Appendix A and within the following text:

1.1 Holding Time

The amount of an analyte in a sample can change with time due to chemical instability, degradation, volatilization, etc. If the technical holding time is exceeded, the data may not be considered valid. Those analytes detected in the samples whose holding time has been exceeded will be qualified as estimates, "J". The non-detects (sample quantitation limits) are required to be flagged as estimated, "J", or unusable, "R", if the holding times are grossly exceeded.

Air samples pertaining to this SDG were performed within the method and technical required holding times of thirty (30) days from sample collection for analysis. No qualifications were required based upon holding time criteria.

Canister pressure gauge was within requirements of 30 psi prior to sampling.

1.2 Surrogate Standards

All samples are spiked with surrogate compounds prior to sample analysis to evaluate overall laboratory performance and efficiency of the analytical technique. If the measure of surrogate concentrations is outside contract specification, qualifications are required to be applied to associated samples and analytes.

Recoveries for 4-Bromofluorobenzene fell within in house established ranges of 70-130% for all analyses pertaining to this SDG.

1.3 Matrix Spikes (MS)/ Matrix Spike Duplicates (MSD)/Duplicate Analysis

The MS/MSD data are generated to determine the long-term precision and accuracy of the analytical method in various matrices.

Matrix Spike/Matrix Spike Duplicate analysis was not performed on samples pertaining to this SDG. The laboratory performed a blank spike and all recovery values were determined to be acceptable for all compounds with the exception of Vinyl Acetate which recovered low (45.7%). Non-detects for all samples must be considered estimated, "UJ."

Field Duplicate analysis was not collected for this SDG. Acceptable precision for air samples is 25%. The following criteria are utilized for Field Duplicate analysis:

Criteria	Detected Compounds	Non-Detected Compounds
The RPD is within the limits of 0 and 25%	No qualification	No qualification
The RPD >25%	J in the parent and duplicate samples	Not applicable
The RPD could not be calculated since the compound was only detected in either the parent of duplicate sample. However, the detected concentration was </=2x the reporting limit	No qualification	No qualification
The RPD could not be calculated since the compound was only detected in either the parent or duplicate sample However, the detected concentration was >2x the reporting limit.	J in the parent or duplicate sample	UJ in the parent of duplicate sample

1.4 Laboratory Control Sample

The LCS data for laboratory control samples (LCS) are generated to provide information on the accuracy of the analytical method and on the laboratory performance.

Additional QC samples were not analyzed which is acceptable per the method since a blank spike was analyzed. Vinyl Acetate was qualified as estimated, "UJ" based on LCS/Blank spike data as detailed in Section 1.3 above.

1.5 Blank Contamination

Quality assurance (QA) blanks; i.e. method, trip and field blanks are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Trip blanks measure cross-contamination of samples during shipment. Field blanks measure cross-contamination of samples during field operations. Storage blanks measure cross-contamination during sample storage of the field samples. Canister blanks measure cross-contamination from the sampling media.

The following table was utilized to qualify target analyte results due to contamination. The largest value from all the associated blanks is required to be utilized:

For:	Flag Sample Result with a "U" when:	Report CRQL & Qualify "U" when:	No Qualification is Needed when:
Methylene Chloride, Acetone, Toluene & 2-Butanone	Sample Conc. Is >CRQL, but </=10x blank value	Sample Conc. is <CRQL and </=10x blank value	Sample Conc. is >CRQL and >10x blank value
Other Contaminants	Sample Conc. Is >CRQL, but </=5x blank value	Sample Conc. Is <CRQL and </=5x blank value	Sample Conc. is >CRQL and >5x blank value

Below is a summary of the compounds in the sample and the associated qualifications that have been applied:

A) **Method Blank Contamination:**

Method and Canister blanks were determined to be free of any contamination.

Canister cleaning documentation was not submitted in the data package.

B) **Field Blank Contamination:**

Field Blank analysis was not conducted for this SDG.

C) **Trip Blank Contamination:**

Trip Blank analysis was not submitted with this SDG.

D) **Storage Blank Contamination:**

Storage blanks were not submitted for this SDG. It should be noted that storage blanks are not mandated by EPA Method TO-15.

1.6 GC/MS Instrument Performance Check

Tuning and performance criteria are established to ensure adequate mass resolution, proper identification of compounds and to some degree, sufficient instrument sensitivity. These criteria are not sample specific. Instrument performance is determined using standard materials. Therefore, these criteria should be met in all circumstances. The Tuning standard for volatile organics is Bromofluorobenzene (BFB).

Instrument performance was generated within acceptable limits and frequency (24 hours) for Bromofluorobenzene (BFB) for all analyses conducted for this SDG.

1.7 Initial and Continuing Calibrations

Satisfactory instrument calibration is established to ensure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of giving acceptable performance at the beginning of an experimental sequence. The continuing calibration checks document that the instrument is giving satisfactory daily performance.

A) Response Factor GC/MS:
The response factor measures the instrument's response to specific chemical compounds. The response factor for all compounds must be >/= 0.05 in both initial and continuing calibrations. A value <0.05 indicates a serious detection and quantitation problem (poor sensitivity). Analytes detected in the sample will be qualified as estimated, "J". All non-detects for that compound in the corresponding samples will be rejected, "R".

The following compounds are allowed to be >0.01 without qualification:
2-Butanone
Carbon Disulfide
Chloroethane
Chloromethane
1,2-Dibromoethane
1,2-Dichloropropane
1,4-Dioxane
1,2-Dibromo-3-chloroproane
Methylene Chloride

All the response factors for the target analytes reported were found to be within acceptable limits (>/=0.05) [or >/=0.01 for the 9 compounds above], for the initial and continuing calibrations.

B) Percent Relative Standard Deviation (%RSD) and Percent Difference (%D):
Percent RSD is calculated from the initial calibration and is used to indicate the stability of the specific compound response factor over increasing concentrations. Percent D compares the response factor of the continuing calibration check to the mean response factor (RRF) from the initial calibration. Percent D is a measure of the instrument's daily performance. Percent RSD must be <30% and %D must be <30%. A value outside of these limits indicates potential detection and quantitation errors. For these reasons, all positive results are flagged as estimated, "J" and non-detects are flagged "UJ". If %RSD and %D grossly exceed QC criteria (>90%), non-detect data may be qualified, "R", unusable. Additionally, in cases where the %RSD is >30% and eliminating either the high or the low point of the curve does not restore the %RSD to less than or equal to 30% then positive results are qualified, "J". In cases where removal of either the low or high point restores the linearity, then only low or high level results will be qualified, "J" in the portion of the curve where non linearity exists.

Initial Calibrations: The initial calibrations provided and the %RSD were within acceptable limits (30%) for all target compounds with the following exceptions:

Isopropanol – 37.6%' "UJ" non-detects in all samples and "J" any hits
Hexachlorobutadiene – 31.1% "UJ" non-detects in all samples

Continuing Calibrations: The continuing calibrations provided and the %D was within acceptable limits (30%) for all target compounds with the following exceptions:

Isopropanol – 46.6%; results were previously qualified due to ICAL. No additional qualifications to the data are required.

1,2,4-Trichlorobenzene – 34.4%; "UJ" all non-detects for all samples.

1.8 Internal Standards

Internal Standards (IS) performance criteria ensure that the GC/MS sensitivity and response are stable during every experimental run. The internal standard area count must not vary by more than a factor of 2 (-40% to +40%) from the associated continuing calibration standard. The retention time of the internal standard must not vary more than +/- 20 seconds from the associated continuing calibration standard. If the area count is outside the (-40% to +40%) range of the associated standard, all of the positive results for compounds quantitated using that IS are qualified as estimated, "J", and all non-detects as "UJ", or "R" if there is a severe loss of sensitivity.

If an internal standard retention time varies by more than 20 seconds, professional judgment will be used to determine either partial or total rejection of the data for that sample fraction.

Internal Standard area responses met QC requirements for all analysis pertaining to this data set.

1.9 Target Compound List Identification

TCL compounds are identified on the GC/MS by using the analyte's relative retention time (RRT) and by comparison to the ion spectra obtained from known standards. For the results to be a positive hit, the sample peak must be within =/- 0.06RRT units of the standard compound and have an ion spectra which has a ratio of the primary and secondary m/e intensities within 20% of that in the standard compound.

GC/MS spectra met the qualitative criteria for identification. All retention times were within required specifications.

1.10 Tentatively Identified Compounds (TICs)

TICs were reported in accordance with the project requirements. The identification must be considered tentative (both quantitative and qualitative) due to the lack of required compound specific response factors. Consequently all concentrations should be considered estimated, "J" and as a result of the qualitative uncertainty should be qualified, "N" where an identification has been made.

TICs were not submitted with this data set.

1.11 Compound Quantification and Reported Detection Limits

GC/MS quantitative analysis is considered to be acceptable. Correct internal standards and response factors and air volumes were used to calculate final concentrations.

Sample results have been presented in ug/m3 by the laboratory on the Form I's.

All samples were initially analyzed undiluted (400mls). Acetone concentration was determined to be over calibration range in PDM-1. Reanalysis at an additional 1:2 dilution was performed. Results have been hybridized by the laboratory on the reporting sheets.

The laboratory software has qualified all detected compounds for all samples with a "D" qualifier since the calculated "factor" was not 1 and all "D" qualifiers should be negated/ignored for sample analysis.

1.12 Overall System Performance

GC/MS analytical methodology was acceptable for this analysis except where explained in the laboratory SDG Narrative and the detailed validation report. The data reported agrees with the raw data provided in the final report. The laboratory provided a complete data package and reported all data using acceptable protocols and laboratory qualifiers as defined in the report package.

Reviewer's Signature Lori A. Beyer **Date** 05/06/13

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Appendix A
Data Summary
Form I's
With Qualifications

FORM I

ORGANIC ANALYSIS DATA SHEET

EPA Compendium TO-15

PDM-1

Laboratory:	York Analytical Laboratories, Inc.			SDG:	12L0657
Client:	C.A. Rich Associates			Project:	CDC
Matrix:	Indoor Ambient Air	Laboratory ID:	12L0657-01	File ID:	TO06048.D
Sampled:	12/17/12 15:00	Prepared:	12/20/12 09:00	Analyzed:	12/21/12 00:20
Solids:		Preparation:	EPA TO15 PREP	Initial/Final:	400 mL / 400 mL
Batch:	BL20974	Sequence:	Y2L2702	Calibration:	YL20001

Instrument: GC/MS TO15

CAS NO.	COMPOUND	DILUTION	CONC. (ug/m³)	Q
75-01-4	Vinyl Chloride	0.667	0.17	U
108-05-4	Vinyl acetate	0.667	0.24	U J
79-01-6	Trichloroethylene	0.667	0.77	D
10061-02-6	trans-1,3-Dichloropropylene	0.667	0.31	U
156-60-5	trans-1,2-Dichloroethylene	0.667	0.27	U
108-88-3	Toluene	0.667	13	D
109-99-9	Tetrahydrofuran	0.667	1.2	D
127-18-4	Tetrachloroethylene	0.667	53	D
100-42-5	Styrene	0.667	1.4	D
115-07-01	Propylene	0.667	0.12	U
622-96-8	p-Ethyltoluene	0.667	1.7	U
1330-20-7P/M	p- & m- Xylenes	0.667	3.9	D
95-47-6	o-Xylene	0.667	1.6	D
110-54-3	n-Hexane	0.667	3.5	D
142-82-5	n-Heptane	0.667	1.4	D
75-09-2	Methylene chloride	0.667	4.5	D
1634-04-4	Methyl tert-butyl ether (MTBE)	0.667	0.24	U
108-10-1	4-Methyl-2-pentanone	0.667	1.1	D
67-63-0	Isopropanol	0.667	6.4	D J
87-68-3	Hexachlorobutadiene	0.667	0.72	U J
100-41-4	Ethyl Benzene	0.667	1.5	D
141-78-6	Ethyl acetate	0.667	2.2	D
110-82-7	Cyclohexane	0.667	2.3	D
10061-01-5	cis-1,3-Dichloropropylene	0.667	0.31	U
156-59-2	cis-1,2-Dichloroethylene	0.667	0.27	U
74-87-3	Chloromethane	0.667	2.3	D
67-66-3	Chloroform	0.667	0.50	D
75-00-3	Chloroethane	0.667	0.18	U
56-23-5	Carbon tetrachloride	0.667	1.2	D
75-15-0	Carbon disulfide	0.667	8.9	D
74-83-9	Bromomethane	0.667	0.26	U
75-25-2	Bromoform	0.667	0.70	U
75-27-4	Bromodichloromethane	0.667	0.42	U
100-44-7	Benzyl chloride	0.667	0.35	U
71-43-2	Benzene	0.667	2.3	D
67-64-1	Acetone	1.33	15	D
591-78-6	2-Hexanone	0.667	0.28	U
78-93-3	2-Butanone	0.667	3.5	D
123-91-1	1,4-Dioxane	0.667	0.24	U
106-46-7	1,4-Dichlorobenzene	0.667	2.4	D

5/3/13

FORM I **ORGANIC ANALYSIS DATA SHEET**

EPA Compendium TO-15

PDM-1

Laboratory:	York Analytical Laboratories, Inc.			SDG:	12L0657
Client:	C.A. Rich Associates			Project:	CDC
Matrix:	Indoor Ambient Air	Laboratory ID:	12L0657-01	File ID:	TO06048.D
Sampled:	12/17/12 15:00	Prepared:	12/20/12 09:00	Analyzed:	12/21/12 00:20
Solids:		Preparation:	EPA TO15 PREP	Initial/Final:	400 mL / 400 mL
Batch:	BL20974	Sequence:	Y2L2702	Calibration:	YL20001
Instrument:	GC/MS TO15				

CAS NO.	COMPOUND	DILUTION	CONC. (ug/m³)	Q
541-73-1	1,3-Dichlorobenzene	0.667	0.41	U
106-99-0	1,3-Butadiene	0.667	0.29	U
108-67-8	1,3,5-Trimethylbenzene	0.667	0.77	~~D~~
76-14-2	1,2-Dichlorotetrafluoroethane	0.667	0.47	U
78-87-5	1,2-Dichloropropane	0.667	0.31	U
107-06-2	1,2-Dichloroethane	0.667	0.27	U
95-50-1	1,2-Dichlorobenzene	0.667	0.41	U
95-63-6	1,2,4-Trimethylbenzene	0.667	1.4	~~D~~
120-82-1	1,2,4-Trichlorobenzene	0.667	0.50	U J
75-35-4	1,1-Dichloroethylene	0.667	0.27	U
75-34-3	1,1-Dichloroethane	0.667	0.27	U
75-69-4	Trichlorofluoromethane (Freon 11)	0.667	2.6	~~D~~
79-00-5	1,1,2-Trichloroethane	0.667	0.37	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.667	1.8	~~D~~
79-34-5	1,1,2,2-Tetrachloroethane	0.667	0.47	U
71-55-6	1,1,1-Trichloroethane	0.667	0.55	~~D~~
75-71-8	Dichlorodifluoromethane	0.667	4.9	~~D~~
106-93-4	1,2-Dibromoethane	0.667	0.52	U
124-48-1	Dibromochloromethane	0.667	0.54	U
80-62-6	Methyl Methacrylate	0.667	0.28	U
108-90-7	Chlorobenzene	0.667	0.31	U

SYSTEM MONITORING COMPOUND	ADDED (ppbv)	CONC (ppbv)	% REC	QC LIMITS	Q
p-Bromofluorobenzene	10.0	9.48	94.8	70 - 130	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Bromochloromethane	443235	12.374	461649	12.374	
1,4-Difluorobenzene	1745294	13.944	1861949	13.938	
d5-Chlorobenzene	1261080	19.172	1682361	19.172	

* Values outside of QC limits

JA 5/13/13

FORM I **ORGANIC ANALYSIS DATA SHEET**

EPA Compendium TO-15

PDM-2

Laboratory: York Analytical Laboratories, Inc. SDG: 12L0657

Client: C.A. Rich Associates Project: CDC

Matrix: Indoor Ambient Air Laboratory ID: 12L0657-02 File ID: TQ06049.D

Sampled: 12/17/12 15:00 Prepared: 12/20/12 09:00 Analyzed: 12/21/12 01:13

Solids: Preparation: EPA TO15 PREP Initial/Final: 400 mL / 400 mL

Batch: BL20974 Sequence: Y2L2702 Calibration: YL20001 Instrument: GC/MS TO15

CAS NO.	COMPOUND	DILUTION	CONC. (ug/m³)	Q
75-01-4	Vinyl Chloride	0.667	0.17	U
108-05-4	Vinyl acetate	0.667	0.24	U J
79-01-6	Trichloroethylene	0.667	1.4	D
10061-02-6	trans-1,3-Dichloropropylene	0.667	0.31	U
156-60-5	trans-1,2-Dichloroethylene	0.667	0.27	U
108-88-3	Toluene	0.667	4.9	D
109-99-9	Tetrahydrofuran	0.667	0.20	U
127-18-4	Tetrachloroethylene	0.667	15	D
100-42-5	Styrene	0.667	0.46	D
115-07-01	Propylene	0.667	0.12	U
622-96-8	p-Ethyltoluene	0.667	1.7	U
1330-20-7P/M	p- & m- Xylenes	0.667	1.5	D
95-47-6	o-Xylene	0.667	0.59	D
110-54-3	n-Hexane	0.667	1.3	D
142-82-5	n-Heptane	0.667	0.64	D
75-09-2	Methylene chloride	0.667	2.0	D
1634-04-4	Methyl tert-butyl ether (MTBE)	0.667	0.24	U
108-10-1	4-Methyl-2-pentanone	0.667	0.28	U
67-63-0	Isopropanol	0.667	0.17	U J
87-68-3	Hexachlorobutadiene	0.667	0.72	U J
100-41-4	Ethyl Benzene	0.667	0.59	D
141-78-6	Ethyl acetate	0.667	0.24	U
110-82-7	Cyclohexane	0.667	0.93	D
10061-01-5	cis-1,3-Dichloropropylene	0.667	0.31	U
156-59-2	cis-1,2-Dichloroethylene	0.667	0.27	U
74-87-3	Chloromethane	0.667	1.2	D
67-66-3	Chloroform	0.667	0.33	U
75-00-3	Chloroethane	0.667	0.18	U
56-23-5	Carbon tetrachloride	0.667	0.21	U
75-15-0	Carbon disulfide	0.667	4.1	D
74-83-9	Bromomethane	0.667	0.26	U
75-25-2	Bromoform	0.667	0.70	U
75-27-4	Bromodichloromethane	0.667	0.42	U
100-44-7	Benzyl chloride	0.667	0.35	U
71-43-2	Benzene	0.667	1.1	D
67-64-1	Acetone	0.667	15	D
591-78-6	2-Hexanone	0.667	0.28	U
78-93-3	2-Butanone	0.667	1.5	D
123-91-1	1,4-Dioxane	0.667	0.24	U
106-46-7	1,4-Dichlorobenzene	0.667	0.94	D

5/3/13

FORM I **ORGANIC ANALYSIS DATA SHEET**

EPA Compendium TO-15

PDM-2

Laboratory:	York Analytical Laboratories, Inc.			SDG:	12L0657
Client:	C.A. Rich Associates			Project:	CDC
Matrix:	Indoor Ambient Air	Laboratory ID:	12L0657-02	File ID:	TO06049.D
Sampled:	12/17/12 15:00	Prepared:	12/20/12 09:00	Analyzed:	12/21/12 01:13
Solids:		Preparation:	EPA TO15 PREP	Initial/Final:	400 mL / 400 mL

Batch: BL20974 Sequence: Y2L2702 Calibration: YL20001 Instrument: GC/MS TO15

CAS NO.	COMPOUND	DILUTION	CONC. (ug/m³)	Q
541-73-1	1,3-Dichlorobenzene	0.667	0.41	U
106-99-0	1,3-Butadiene	0.667	0.29	U
108-67-8	1,3,5-Trimethylbenzene	0.667	0.40	~~D~~
76-14-2	1,2-Dichlorotetrafluoroethane	0.667	0.47	U
78-87-5	1,2-Dichloropropane	0.667	0.31	U
107-06-2	1,2-Dichloroethane	0.667	0.27	U
95-50-1	1,2-Dichlorobenzene	0.667	0.41	U
95-63-6	1,2,4-Trimethylbenzene	0.667	0.67	~~D~~
120-82-1	1,2,4-Trichlorobenzene	0.667	0.50	U J
75-35-4	1,1-Dichloroethylene	0.667	0.27	U
75-34-3	1,1-Dichloroethane	0.667	0.27	U
75-69-4	Trichlorofluoromethane (Freon 11)	0.667	1.5	~~D~~
79-00-5	1,1,2-Trichloroethane	0.667	0.37	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.667	0.52	U
79-34-5	1,1,2,2-Tetrachloroethane	0.667	0.47	U
71-55-6	1,1,1-Trichloroethane	0.667	0.37	U
75-71-8	Dichlorodifluoromethane	0.667	2.7	~~D~~
106-93-4	1,2-Dibromoethane	0.667	0.52	U
124-48-1	Dibromochloromethane	0.667	0.54	U
80-62-6	Methyl Methacrylate	0.667	0.28	U
108-90-7	Chlorobenzene	0.667	0.31	U

SYSTEM MONITORING COMPOUND	ADDED (ppbv)	CONC (ppbv)	% REC	QC LIMITS	Q
p-Bromofluorobenzene	10.0	8.31	83.1	70 - 130	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Bromochloromethane	434200	12.374	461649	12.374	
1,4-Difluorobenzene	1768569	13.938	1861949	13.938	
d5-Chlorobenzene	1540719	19.172	1682361	19.172	

* Values outside of QC limits

5/13/13

FORM I

ORGANIC ANALYSIS DATA SHEET

EPA Compendium TO-15

PDM-4

Laboratory:	York Analytical Laboratories, Inc.			SDG:	12L0657
Client:	C.A. Rich Associates			Project:	CDC
Matrix:	Indoor Ambient Air	Laboratory ID:	12L0657-03	File ID:	TO06050.D
Sampled:	12/17/12 15:00	Prepared:	12/20/12 09:00	Analyzed:	12/21/12 02:08
Solids:		Preparation:	EPA TO15 PREP	Initial/Final:	400 mL / 400 mL
Batch:	BL20974	Sequence:	Y2L2702	Calibration:	YL20001
Instrument:	GC/MS TO15				

CAS NO.	COMPOUND	DILUTION	CONC. (ug/m³)	Q
75-01-4	Vinyl Chloride	0.667	0.17	U
108-05-4	Vinyl acetate	0.667	0.24	U J
79-01-6	Trichloroethylene	0.667	0.18	U
10061-02-6	trans-1,3-Dichloropropylene	0.667	0.31	U
156-60-5	trans-1,2-Dichloroethylene	0.667	0.27	U
108-88-3	Toluene	0.667	5.4	D
109-99-9	Tetrahydrofuran	0.667	1.3	D
127-18-4	Tetrachloroethylene	0.667	37	D
100-42-5	Styrene	0.667	0.75	D
115-07-01	Propylene	0.667	0.12	U
622-96-8	p-Ethyltoluene	0.667	1.7	U
1330-20-7P/M	p- & m- Xylenes	0.667	3.5	D
95-47-6	o-Xylene	0.667	1.3	D
110-54-3	n-Hexane	0.667	1.6	D
142-82-5	n-Heptane	0.667	1.0	D
75-09-2	Methylene chloride	0.667	2.8	D
1634-04-4	Methyl tert-butyl ether (MTBE)	0.667	0.24	U
108-10-1	4-Methyl-2-pentanone	0.667	0.83	D
67-63-0	Isopropanol	0.667	11	D J
87-68-3	Hexachlorobutadiene	0.667	0.72	U J
100-41-4	Ethyl Benzene	0.667	1.1	D
141-78-6	Ethyl acetate	0.667	4.8	D
110-82-7	Cyclohexane	0.667	0.40	D
10061-01-5	cis-1,3-Dichloropropylene	0.667	0.31	U
156-59-2	cis-1,2-Dichloroethylene	0.667	0.27	U
74-87-3	Chloromethane	0.667	1.1	D
67-66-3	Chloroform	0.667	0.56	D
75-00-3	Chloroethane	0.667	0.18	U
56-23-5	Carbon tetrachloride	0.667	0.21	U
75-15-0	Carbon disulfide	0.667	3.8	D
74-83-9	Bromomethane	0.667	0.26	U
75-25-2	Bromoform	0.667	0.70	U
75-27-4	Bromodichloromethane	0.667	0.42	U
100-44-7	Benzyl chloride	0.667	0.35	U
71-43-2	Benzene	0.667	1.1	D
67-64-1	Acetone	0.667	17	D
591-78-6	2-Hexanone	0.667	0.28	U
78-93-3	2-Butanone	0.667	2.5	D
123-91-1	1,4-Dioxane	0.667	0.24	U
106-46-7	1,4-Dichlorobenzene	0.667	0.82	D

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FORM I **ORGANIC ANALYSIS DATA SHEET**

EPA Compendium TO-15

PDM-4

Laboratory:	York Analytical Laboratories, Inc.			SDG:	12L0657
Client:	C.A. Rich Associates			Project:	CDC
Matrix:	Indoor Ambient Air	Laboratory ID:	12L0657-03	File ID:	TO06050.D
Sampled:	12/17/12 15:00	Prepared:	12/20/12 09:00	Analyzed:	12/21/12 02:08
Solids:		Preparation:	EPA TO15 PREP	Initial/Final:	400 mL / 400 mL

Batch: BL20974 Sequence: Y2L2702 Calibration: YL20001 Instrument: GC/MS TO15

CAS NO.	COMPOUND	DILUTION	CONC. (ug/m³)	Q
541-73-1	1,3-Dichlorobenzene	0.667	0.41	U
106-99-0	1,3-Butadiene	0.667	0.29	U
108-67-8	1,3,5-Trimethylbenzene	0.667	0.70	~~D~~
76-14-2	1,2-Dichlorotetrafluoroethane	0.667	0.47	U
78-87-5	1,2-Dichloropropane	0.667	0.31	U
107-06-2	1,2-Dichloroethane	0.667	0.27	U
95-50-1	1,2-Dichlorobenzene	0.667	0.41	U
95-63-6	1,2,4-Trimethylbenzene	0.667	1.7	~~D~~
120-82-1	1,2,4-Trichlorobenzene	0.667	0.50	U J
75-35-4	1,1-Dichloroethylene	0.667	0.27	U
75-34-3	1,1-Dichloroethane	0.667	0.27	U
75-69-4	Trichlorofluoromethane (Freon 11)	0.667	1.5	~~D~~
79-00-5	1,1,2-Trichloroethane	0.667	0.37	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.667	0.99	~~D~~
79-34-5	1,1,2,2-Tetrachloroethane	0.667	0.47	U
71-55-6	1,1,1-Trichloroethane	0.667	0.37	U
75-71-8	Dichlorodifluoromethane	0.667	2.6	~~D~~
106-93-4	1,2-Dibromoethane	0.667	0.52	U
124-48-1	Dibromochloromethane	0.667	0.54	U
80-62-6	Methyl Methacrylate	0.667	0.28	U
108-90-7	Chlorobenzene	0.667	0.31	U

SYSTEM MONITORING COMPOUND	ADDED (ppbv)	CONC (ppbv)	% REC	QC LIMITS	Q
p-Bromofluorobenzene	10.0	10.1	101	70 - 130	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Bromochloromethane	466734	12.38	461649	12.374	
1,4-Difluorobenzene	1869720	13.938	1861949	13.938	
d5-Chlorobenzene	1350467	19.172	1682361	19.172	

* Values outside of QC limits

JA 5/3/13

FORM I

ORGANIC ANALYSIS DATA SHEET

EPA Compendium TO-15

PDM-5

Laboratory:	York Analytical Laboratories, Inc.			SDG:	12L0657
Client:	C.A. Rich Associates			Project:	CDC
Matrix:	Indoor Ambient Air	Laboratory ID:	12L0657-04	File ID:	TO06051.D
Sampled:	12/17/12 15:00	Prepared:	12/20/12 09:00	Analyzed:	12/21/12 03:02
Solids:		Preparation:	EPA TO15 PREP	Initial/Final:	400 mL / 400 mL
Batch:	BL20974	Sequence:	Y2L2702	Calibration:	YL20001
Instrument:	GC/MS TO15				

CAS NO.	COMPOUND	DILUTION	CONC. (ug/m³)	Q
75-01-4	Vinyl Chloride	0.667	0.17	U
108-05-4	Vinyl acetate	0.667	0.24	U J
79-01-6	Trichloroethylene	0.667	0.62	~~D~~
10061-02-6	trans-1,3-Dichloropropylene	0.667	0.31	U
156-60-5	trans-1,2-Dichloroethylene	0.667	0.27	U
108-88-3	Toluene	0.667	5.7	~~D~~
109-99-9	Tetrahydrofuran	0.667	1.4	~~D~~
127-18-4	Tetrachloroethylene	0.667	48	~~D~~
100-42-5	Styrene	0.667	0.84	~~D~~
115-07-01	Propylene	0.667	0.12	U
622-96-8	p-Ethyltoluene	0.667	1.7	U
1330-20-7P/M	p- & m- Xylenes	0.667	3.8	~~D~~
95-47-6	o-Xylene	0.667	1.4	~~D~~
110-54-3	n-Hexane	0.667	1.9	~~D~~
142-82-5	n-Heptane	0.667	1.3	~~D~~
75-09-2	Methylene chloride	0.667	2.8	~~D~~
1634-04-4	Methyl tert-butyl ether (MTBE)	0.667	0.24	U
108-10-1	4-Methyl-2-pentanone	0.667	0.89	~~D~~
67-63-0	Isopropanol	0.667	5.6	~~D~~ J
87-68-3	Hexachlorobutadiene	0.667	0.72	U J
100-41-4	Ethyl Benzene	0.667	1.3	~~D~~
141-78-6	Ethyl acetate	0.667	4.2	~~D~~
110-82-7	Cyclohexane	0.667	0.49	~~D~~
10061-01-5	cis-1,3-Dichloropropylene	0.667	0.31	U
156-59-2	cis-1,2-Dichloroethylene	0.667	0.27	U
74-87-3	Chloromethane	0.667	1.2	~~D~~
67-66-3	Chloroform	0.667	0.70	~~D~~
75-00-3	Chloroethane	0.667	0.18	U
56-23-5	Carbon tetrachloride	0.667	0.21	U
75-15-0	Carbon disulfide	0.667	4.0	~~D~~
74-83-9	Bromomethane	0.667	0.26	U
75-25-2	Bromoform	0.667	0.70	U
75-27-4	Bromodichloromethane	0.667	0.42	U
100-44-7	Benzyl chloride	0.667	0.35	U
71-43-2	Benzene	0.667	1.2	~~D~~
67-64-1	Acetone	0.667	16	~~D~~
591-78-6	2-Hexanone	0.667	0.28	U
78-93-3	2-Butanone	0.667	3.2	~~D~~
123-91-1	1,4-Dioxane	0.667	0.24	U
106-46-7	1,4-Dichlorobenzene	0.667	0.65	~~D~~

JCK 5/13/13

FORM I **ORGANIC ANALYSIS DATA SHEET**

EPA Compendium TO-15

PDM-5

Laboratory:	York Analytical Laboratories, Inc.			SDG:	12L0657
Client:	C.A. Rich Associates			Project:	CDC
Matrix:	Indoor Ambient Air	Laboratory ID:	12L0657-04	File ID:	TO06051.D
Sampled:	12/17/12 15:00	Prepared:	12/20/12 09:00	Analyzed:	12/21/12 03:02
Solids:		Preparation:	EPA TO15 PREP	Initial/Final:	400 mL / 400 mL

Batch: BL20974 Sequence: Y2L2702 Calibration: YL20001 Instrument: GC/MS TO15

CAS NO.	COMPOUND	DILUTION	CONC. (ug/m³)	Q
541-73-1	1,3-Dichlorobenzene	0.667	0.41	U
106-99-0	1,3-Butadiene	0.667	0.29	U
108-67-8	1,3,5-Trimethylbenzene	0.667	0.63	~~D~~
76-14-2	1,2-Dichlorotetrafluoroethane	0.667	0.47	U
78-87-5	1,2-Dichloropropane	0.667	0.31	U
107-06-2	1,2-Dichloroethane	0.667	0.27	U
95-50-1	1,2-Dichlorobenzene	0.667	0.41	U
95-63-6	1,2,4-Trimethylbenzene	0.667	1.3	~~D~~
120-82-1	1,2,4-Trichlorobenzene	0.667	0.50	U J
75-35-4	1,1-Dichloroethylene	0.667	0.27	U
75-34-3	1,1-Dichloroethane	0.667	0.27	U
75-69-4	Trichlorofluoromethane (Freon 11)	0.667	1.7	~~D~~
79-00-5	1,1,2-Trichloroethane	0.667	0.37	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.667	1.2	~~D~~
79-34-5	1,1,2,2-Tetrachloroethane	0.667	0.47	U
71-55-6	1,1,1-Trichloroethane	0.667	0.37	U
75-71-8	Dichlorodifluoromethane	0.667	2.9	~~D~~
106-93-4	1,2-Dibromoethane	0.667	0.52	U
124-48-1	Dibromochloromethane	0.667	0.54	U
80-62-6	Methyl Methacrylate	0.667	0.28	U
108-90-7	Chlorobenzene	0.667	0.31	U

SYSTEM MONITORING COMPOUND	ADDED (ppbv)	CONC (ppbv)	% REC	QC LIMITS	Q
p-Bromofluorobenzene	10.0	10.0	100	70 - 130	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Bromochloromethane	422407	12.374	461649	12.374	
1,4-Difluorobenzene	1717440	13.938	1861949	13.938	
d5-Chlorobenzene	1260065	19.172	1682361	19.172	

* Values outside of QC limits

JA 1/3/13

FORM I **ORGANIC ANALYSIS DATA SHEET**

EPA Compendium TO-15

PDM-6

Laboratory:	York Analytical Laboratories, Inc.			SDG:	12L0657
Client:	C.A. Rich Associates			Project:	CDC
Matrix:	Outdoor Ambient Air	Laboratory ID:	12L0657-05	File ID:	TO06052.D
Sampled:	12/17/12 15:00	Prepared:	12/20/12 09:00	Analyzed:	12/21/12 03:53
Solids:		Preparation:	EPA TO15 PREP	Initial/Final:	400 mL / 400 mL
Batch:	BL20974	Sequence:	Y2L2702	Calibration:	YL20001
				Instrument:	GC/MS TO15

CAS NO.	COMPOUND	DILUTION	CONC. (ug/m³)	Q
75-01-4	Vinyl Chloride	0.667	0.17	U
108-05-4	Vinyl acetate	0.667	0.24	U J
79-01-6	Trichloroethylene	0.667	0.18	U
10061-02-6	trans-1,3-Dichloropropylene	0.667	0.31	U
156-60-5	trans-1,2-Dichloroethylene	0.667	0.27	U
108-88-3	Toluene	0.667	2.0	~~D~~
109-99-9	Tetrahydrofuran	0.667	0.20	U
127-18-4	Tetrachloroethylene	0.667	2.0	~~D~~
100-42-5	Styrene	0.667	0.29	U
115-07-01	Propylene	0.667	0.12	U
622-96-8	p-Ethyltoluene	0.667	1.7	U
1330-20-7P/M	p- & m- Xylenes	0.667	1.5	~~D~~
95-47-6	o-Xylene	0.667	0.62	~~D~~
110-54-3	n-Hexane	0.667	0.65	~~D~~
142-82-5	n-Heptane	0.667	0.50	~~D~~
75-09-2	Methylene chloride	0.667	0.94	~~D~~
1634-04-4	Methyl tert-butyl ether (MTBE)	0.667	0.24	U
108-10-1	4-Methyl-2-pentanone	0.667	0.28	U
67-63-0	Isopropanol	0.667	0.17	U J
87-68-3	Hexachlorobutadiene	0.667	0.72	U J
100-41-4	Ethyl Benzene	0.667	0.56	~~D~~
141-78-6	Ethyl acetate	0.667	0.24	U
110-82-7	Cyclohexane	0.667	0.23	U
10061-01-5	cis-1,3-Dichloropropylene	0.667	0.31	U
156-59-2	cis-1,2-Dichloroethylene	0.667	0.27	U
74-87-3	Chloromethane	0.667	1.2	~~D~~
67-66-3	Chloroform	0.667	0.33	U
75-00-3	Chloroethane	0.667	0.18	U
56-23-5	Carbon tetrachloride	0.667	0.21	U
75-15-0	Carbon disulfide	0.667	3.1	~~D~~
74-83-9	Bromomethane	0.667	0.26	U
75-25-2	Bromoform	0.667	0.70	U
75-27-4	Bromodichloromethane	0.667	0.42	U
100-44-7	Benzyl chloride	0.667	0.35	U
71-43-2	Benzene	0.667	1.1	~~D~~
67-64-1	Acetone	0.667	5.1	~~D~~
591-78-6	2-Hexanone	0.667	0.28	U
78-93-3	2-Butanone	0.667	0.84	~~D~~
123-91-1	1,4-Dioxane	0.667	0.24	U
106-46-7	1,4-Dichlorobenzene	0.667	0.41	U

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FORM I **ORGANIC ANALYSIS DATA SHEET**

EPA Compendium TO-15

PDM-6

Laboratory:	York Analytical Laboratories, Inc.			SDG:	12L0657
Client:	C.A. Rich Associates			Project:	CDC
Matrix:	Outdoor Ambient Air	Laboratory ID:	12L0657-05	File ID:	TO06052.D
Sampled:	12/17/12 15:00	Prepared:	12/20/12 09:00	Analyzed:	12/21/12 03:53
Solids:		Preparation:	EPA TO15 PREP	Initial/Final:	400 mL / 400 mL
Batch:	BL20974	Sequence:	Y2L2702	Calibration:	YL20001

Instrument: GC/MS TO15

CAS NO.	COMPOUND	DILUTION	CONC. (ug/m³)	Q
541-73-1	1,3-Dichlorobenzene	0.667	0.41	U
106-99-0	1,3-Butadiene	0.667	0.29	U
108-67-8	1,3,5-Trimethylbenzene	0.667	0.37	~~D~~
76-14-2	1,2-Dichlorotetrafluoroethane	0.667	0.47	U
78-87-5	1,2-Dichloropropane	0.667	0.31	U
107-06-2	1,2-Dichloroethane	0.667	0.27	U
95-50-1	1,2-Dichlorobenzene	0.667	0.41	U
95-63-6	1,2,4-Trimethylbenzene	0.667	0.60	~~D~~
120-82-1	1,2,4-Trichlorobenzene	0.667	0.50	U J
75-35-4	1,1-Dichloroethylene	0.667	0.27	U
75-34-3	1,1-Dichloroethane	0.667	0.27	U
75-69-4	Trichlorofluoromethane (Freon 11)	0.667	1.5	~~D~~
79-00-5	1,1,2-Trichloroethane	0.667	0.37	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.667	0.52	U
79-34-5	1,1,2,2-Tetrachloroethane	0.667	0.47	U
71-55-6	1,1,1-Trichloroethane	0.667	0.37	U
75-71-8	Dichlorodifluoromethane	0.667	2.9	~~D~~
106-93-4	1,2-Dibromoethane	0.667	0.52	U
124-48-1	Dibromochloromethane	0.667	0.54	U
80-62-6	Methyl Methacrylate	0.667	0.28	U
108-90-7	Chlorobenzene	0.667	0.31	U

SYSTEM MONITORING COMPOUND	ADDED (ppbv)	CONC (ppbv)	% REC	QC LIMITS	Q
p-Bromofluorobenzene	10.0	10.2	102	70 - 130	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Bromochloromethane	407821	12.374	461649	12.374	
1,4-Difluorobenzene	1622041	13.938	1861949	13.938	
d5-Chlorobenzene	1222562	19.172	1682361	19.172	

* Values outside of QC limits

JA 5/3/13

FORM I

ORGANIC ANALYSIS DATA SHEET

EPA Compendium TO-15

SS-01

Laboratory:	York Analytical Laboratories, Inc.			SDG:	12L0657
Client:	C.A. Rich Associates			Project:	CDC
Matrix:	Soil Vapor	Laboratory ID:	12L0657-06	File ID:	TO06057.D
Sampled:	12/17/12 15:00	Prepared:	12/20/12 09:00	Analyzed:	12/21/12 10:02
Solids:		Preparation:	EPA TO15 PREP	Initial/Final:	400 mL / 400 mL
Batch:	BL20974	Sequence:	Y2L2702	Calibration:	YL20001
Instrument:	GC/MS TO15				

CAS NO.	COMPOUND	DILUTION	CONC. (ug/m³)	Q
75-01-4	Vinyl Chloride	2.04	0.53	U
108-05-4	Vinyl acetate	2.04	0.73	U J
79-01-6	Trichloroethylene	2.04	2.5	~~D~~
10061-02-6	trans-1,3-Dichloropropylene	2.04	0.94	U
156-60-5	trans-1,2-Dichloroethylene	2.04	0.82	U
108-88-3	Toluene	2.04	3.0	~~D~~
109-99-9	Tetrahydrofuran	2.04	6.2	~~D~~
127-18-4	Tetrachloroethylene	2.04	42	~~D~~
100-42-5	Styrene	2.04	0.88	U
115-07-01	Propylene	2.04	0.36	U
622-96-8	p-Ethyltoluene	2.04	5.1	U
1330-20-7P/M	p- & m- Xylenes	2.04	0.90	U
95-47-6	o-Xylene	2.04	0.90	U
110-54-3	n-Hexane	2.04	13	~~D~~
142-82-5	n-Heptane	2.04	2.1	~~D~~
75-09-2	Methylene chloride	2.04	1.9	~~D~~
1634-04-4	Methyl tert-butyl ether (MTBE)	2.04	0.75	U
108-10-1	4-Methyl-2-pentanone	2.04	0.85	U
67-63-0	Isopropanol	2.04	0.51	U J
87-68-3	Hexachlorobutadiene	2.04	2.2	U J
100-41-4	Ethyl Benzene	2.04	0.90	U
141-78-6	Ethyl acetate	2.04	0.75	U
110-82-7	Cyclohexane	2.04	0.71	U
10061-01-5	cis-1,3-Dichloropropylene	2.04	0.94	U
156-59-2	cis-1,2-Dichloroethylene	2.04	0.82	U
74-87-3	Chloromethane	2.04	0.43	U
67-66-3	Chloroform	2.04	1.0	U
75-00-3	Chloroethane	2.04	0.55	U
56-23-5	Carbon tetrachloride	2.04	0.65	U
75-15-0	Carbon disulfide	2.04	3.9	~~D~~
74-83-9	Bromomethane	2.04	0.81	U
75-25-2	Bromoform	2.04	2.1	U
75-27-4	Bromodichloromethane	2.04	1.3	U
100-44-7	Benzyl chloride	2.04	1.1	U
71-43-2	Benzene	2.04	4.4	~~D~~
67-64-1	Acetone	2.04	26	~~D~~
591-78-6	2-Hexanone	2.04	0.85	U
78-93-3	2-Butanone	2.04	6.9	~~D~~
123-91-1	1,4-Dioxane	2.04	0.75	U
106-46-7	1,4-Dichlorobenzene	2.04	1.2	U

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FORM I **ORGANIC ANALYSIS DATA SHEET**

EPA Compendium TO-15

SS-01

Laboratory:	York Analytical Laboratories, Inc.			SDG:	12L0657
Client:	C.A. Rich Associates			Project:	CDC
Matrix:	Soil Vapor	Laboratory ID:	12L0657-06	File ID:	TO06057.D
Sampled:	12/17/12 15:00	Prepared:	12/20/12 09:00	Analyzed:	12/21/12 10:02
Solids:		Preparation:	EPA TO15 PREP	Initial/Final:	400 mL / 400 mL

Batch: BL20974 Sequence: Y2L2702 Calibration: YL20001 Instrument: GC/MS TO15

CAS NO.	COMPOUND	DILUTION	CONC. (ug/m³)	Q
541-73-1	1,3-Dichlorobenzene	2.04	1.2	U
106-99-0	1,3-Butadiene	2.04	9.3	~~D~~
108-67-8	1,3,5-Trimethylbenzene	2.04	1.0	U
76-14-2	1,2-Dichlorotetrafluoroethane	2.04	1.5	U
78-87-5	1,2-Dichloropropane	2.04	0.96	U
107-06-2	1,2-Dichloroethane	2.04	0.84	U
95-50-1	1,2-Dichlorobenzene	2.04	1.2	U
95-63-6	1,2,4-Trimethylbenzene	2.04	1.0	U
120-82-1	1,2,4-Trichlorobenzene	2.04	1.5	U J
75-35-4	1,1-Dichloroethylene	2.04	0.82	U
75-34-3	1,1-Dichloroethane	2.04	0.84	U
75-69-4	Trichlorofluoromethane (Freon 11)	2.04	1.7	~~D~~
79-00-5	1,1,2-Trichloroethane	2.04	1.1	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	2.04	1.6	U
79-34-5	1,1,2,2-Tetrachloroethane	2.04	1.4	U
71-55-6	1,1,1-Trichloroethane	2.04	1.1	U
75-71-8	Dichlorodifluoromethane	2.04	3.4	~~D~~
106-93-4	1,2-Dibromoethane	2.04	1.6	U
124-48-1	Dibromochloromethane	2.04	1.7	U
80-62-6	Methyl Methacrylate	2.04	0.85	U
108-90-7	Chlorobenzene	2.04	0.96	U

SYSTEM MONITORING COMPOUND	ADDED (ppbv)	CONC (ppbv)	% REC	QC LIMITS	Q
p-Bromofluorobenzene	10.0	8.85	88.5	70 - 130	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Bromochloromethane	451954	12.374	461649	12.374	
1,4-Difluorobenzene	1781791	13.938	1861949	13.938	
d5-Chlorobenzene	1550524	19.172	1682361	19.172	

* Values outside of QC limits

5/13/13

Appendix B
Chain of Custody

YORK
ANALYTICAL LABORATORIES, INC.

120 RESEARCH DR. STRATFORD, CT 06615
(203) 325-1371 FAX (203) 357-0166

Field Chain-of-Custody Record - AIR

NOTE: York's Std. Terms & Conditions are listed on the back side of this document.
This document serves as your written authorization to York to proceed with the analyses requested and your signature binds you to York's Std. Terms & Conditions unless superseded by written contract.

York Project No. 12L0657

YOUR Information	Report To:	Invoice To:	YOUR Project ID	Turn-Around Time	Report Type/Deliverables
Company: CA Rich Consultants	Company: SAME	Company: SAME	CDC	RUSH - Same Day ☐	Summary Report ☐
Address: 17 Dupont St.	Address:	Address:		RUSH - Next Day ☐	Summary w/ QA ☐
Plainview, NY 11803			Purchase Order No.	RUSH - Two Day ☐	CT RCP Package ☐
Phone No: 516 576 8842	Phone No:	Phone No:		RUSH - Three Day ☐	NY ASP A Package ☐
Contact Person: Eric Weinstock	Attention:	Attention:		RUSH - Four Day ☐	NY ASP B CLP Pkg ☒
E-Mail Address: EricCstock@earthlink.com	E-Mail Address:	E-Mail Address:	Samples from CT ☐ NY ☒ NJ ☐	Standard(5-7 Days) ☒	NJDEP Reduced ☐
					Electronic Deliverables
					EDD (Specify Type) ☐
					Standard Excel ☐
					Regulatory Comparison Table ☐

Print Clearly and Legibly. All Information must be complete. Samples will NOT be logged in and the turn-around time clock will not begin until any questions by York are resolved.

Michael Yager
Samples Collected/Authorized By (Signature)

Michael Yager
Name (printed)

Air Matrix Codes
AI - INDOOR Ambient Air
AO - OUTDOOR Ambient Air
AE - Vapor Extraction Well Process Gas/Effluent
AS - SOIL Vapor Sub-Slab

TO15 Volatiles and Other Gas Analyses
EPA TO-15 List
EPA TO-15A List
NYSDEC VI list
Tentatively Identified Compounds
NYSDEC STARS List
Air VPH
Project Specific List by TO-15
Helium
NJDEP Target List
Methane
CTDEP RCP Target List
OTHER

Detection Limits Required
≤ 1 ug/m³
NYSDEC VI Limits
NJDEP low level
Routine
Other

Special Instructions

Sample Identification	Date Sampled	AIR Matrix	Canister Vacuum Before Sampling (in. Hg)	Canister Vacuum After Sampling (in. Hg)	Cannister Analyses Needed from the Matrix Above and Enter Below	Sampling Media
PDM-1	12/17/12	AI	24	7	EPA TO-15 List	6 Liter Summa canister X / Tedlar Bag
PDM-2	12/17/12	AI	29	7	EPA TO-15 List	6 Liter Summa canister X / Tedlar Bag
PDM-4	12/17/12	AI	30	9	EPA TO-15 List	6 Liter Summa canister X / Tedlar Bag
PDM-5	12/17/12	AI	29	8	EPA TO-15 List	6 Liter Summa canister X / Tedlar Bag
PDM-6	12/17/12	AO	25	0	EPA TO-15 List	6 Liter Summa canister X / Tedlar Bag
SS-01	12/17/12	AS	30	7	EPA TO-15 List	6 Liter Summa canister X / Tedlar Bag
						6 Liter Summa canister ☐ / Tedlar Bag
						6 Liter Summa canister ☐ / Tedlar Bag
						6 Liter Summa canister ☐ / Tedlar Bag
						6 Liter Summa canister ☐ / Tedlar Bag

Comments

Michael Yager 12/18/12 0800
Samples Relinquished By Date/Time

Samples Relinquished By Date/Time

K Barker 12-18-12 1530
Samples Received By Date/Time

12/18/12 16:20
Samples Received in LAB By Date/Time

Appendix C
SDG Narrative

Report Date: 02/12/2013
Client Project ID: CDC
York Project (SDG) No.: 12L0657

C.A. Rich Associates
17 Dupont Street
Plainview NY, 11803
Attention: Eric Weinstock

Purpose and Results

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on December 18, 2012 and listed below. The project was identified as your project: **CDC**.

The analyses were conducted utilizing appropriate EPA, Standard Methods, and ASTM methods as detailed in the data summary tables.

All samples were received in proper condition meeting the customary acceptance requirements for environmental samples except those indicated under the Notes section of this report.

All analyses met the method and laboratory standard operating procedure requirements except as indicated by any data flags, the meaning of which are explained in the attachment to this report, and case narrative if applicable.

The results of the analyses, which are all reported on dry weight basis (soils) unless otherwise noted, are detailed in the following pages.

Please contact Client Services at 203.325.1371 with any questions regarding this report.

York Sample ID	Client Sample ID	Matrix	Date Collected	Date Received
12L0657-01	PDM-1	Indoor Ambient Air	12/17/2012	12/18/2012
12L0657-02	PDM-2	Indoor Ambient Air	12/17/2012	12/18/2012
12L0657-03	PDM-4	Indoor Ambient Air	12/17/2012	12/18/2012
12L0657-04	PDM-5	Indoor Ambient Air	12/17/2012	12/18/2012
12L0657-05	PDM-6	Outdoor Ambient Air	12/17/2012	12/18/2012
12L0657-06	SS-01	Soil Vapor	12/17/2012	12/18/2012

General Notes for York Project (SDG) No.: 12L0657

1. The RLs and MDLs (Reporting Limit and Method Detection Limit respectively) reported are adjusted for any dilution necessary due to the levels of target and/or non-target analytes and matrix interference. The RL(REPORTING LIMIT) is based upon the lowest standard utilized for the calibration where applicable.
2. Samples are retained for a period of thirty days after submittal of report, unless other arrangements are made.
3. York's liability for the above data is limited to the dollar value paid to York for the referenced project.
4. This report shall not be reproduced without the written approval of York Analytical Laboratories, Inc.
5. All samples were received in proper condition for analysis with proper documentation, unless otherwise noted.
6. All analyses conducted met method or Laboratory SOP requirements. See the Qualifiers and/or Narrative sections for further information.
7. It is noted that no analyses reported herein were subcontracted to another laboratory, unless noted in the report.
8. This report reflects results that relate only to the samples submitted on the attached chain-of-custody form(s) received by York.

Approved By: 

Date: 02/12/2013

Robert Q. Bradley
Laboratory Director

YORK

Case Narrative

Client: C.A. Rich Associates
Client Project ID: CDC
Prepared for: Eric Weinstock

Introduction

This Case Narrative applies only to the following samples submitted to our laboratory on **12/18/2012 4:20:00 PM** :

PDM-1 Air
PDM-2 Air
PDM-4 Air
PDM-5 Air
PDM-6 Air
SS-01 Air

The 6 sample(s) were received intact. Chain-of-custody was maintained from receipt through analysis in the laboratory.

Methodology

All preparation and analyses were conducted according to the methods referenced in the body of the lab report.

Sample and Analysis Qualifiers

PDM-1	Air	No qualifiers
PDM-2	Air	No qualifiers
PDM-4	Air	No qualifiers
PDM-5	Air	No qualifiers
PDM-6	Air	No qualifiers
SS-01	Air	No qualifiers

Analysis Issues (Calibration, Others)

No problems encountered.

York Project/SDG no.: 12L0657 Statement

We certify that these data are in compliance with SOP requirements both technically and for completeness for other than the conditions stated above. Release of the data contained in the hard copy report and any electronic deliverables has been authorized by the Laboratory Manager as verified by the signature on this laboratory report.

Approved by: *Robert Q. Bradley* *February 11, 2013*
Laboratory Director

York Analytical Laboratories, Inc.

Formulae Used for Sample Calculations

VOLATILE ORGANICS

1. Volatiles in Air-ppbv

Cx (ppbv) = Compound concentration, ppbv (parts per billion by volume)

$$Cx = \frac{(Ax)(Cis)(DF)}{(Ais)(RRF)}$$

2. Volatiles in Air-ug/m3

Cx (ug/m3)= Compound concentration in ug/m3

$$Cx\ (ug/m3) = \frac{(ppbv \times Molecular\ wt.)}{(24.040)}$$

3. Volatile Organics (water and soil), ug/L or ug/kG

Soils/Waters

$$Cx = \frac{(Ax)(IS)(DF)}{(Ais)(RRF)(V)(\%solids)}$$

Medium Level Soils

$$Cx = \frac{(Ax)(IS)(VT)(1000)(DF)}{(Ais)(RRF)(VA)(V)(\%solids)}$$

4. Semi-Volatiles (waters and soils)

$$Cx = \frac{(Ax)(IS)(VE)(DF)}{(Ais)(RRF)(Volume\ injected,\ uL)(V)(\%solids)}$$

5. Pesticides/PCB (waters and soils), DRO, CTETPH

$$Cx = \frac{(Ax)(VE)(DF)}{(CF)(Volume\ injected,\ uL)(V)(\%solids)}$$

WHERE:

Cx = concentration of analyte as ug/L or ug/kG
Ax = Area of the characteristic ion for the compound to be measured, counts.
Ais = Area of the characteristic ion for the specific internal standard, counts.
IS = Concentration of the internal standard spiking mixture, ng
RRF= Mean relative response factor from the initial calibration.
DF = Dilution factor calculated as described in section 2. If no dilution is performed, DF= 1
V= Volume for liquids in ml, weight for soils/solids in grams.
VA= volume of MeOH aliquot for medium level soils

VE= final volume of concentrated extract
VT= volume of MeOH for volatiles medium level soils
CF= calibration factor for external calibration used in GC pest/pcb
Cis = Concentration of the internal standard spiking mixture, ppbv