CA RICH
ENVIRONMENTAL SPECIALISTS

Sub-Slab Depressurization System
Quarterly Monitoring Report
Elks Plaza, LLC
157-189 West Merrick Road
Freeport, NY
NYSDEC Site No.: 130193

October 2012

Prepared for:

Elks Plaza, LLC
c/o Galaxy Management, Inc.
28 Campbell Drive
Dix Hills, NY 11746-7902

Prepared by:

CA RICH CONSULTANTS, INC.
17 Dupont Street
Plainview, NY 11803-1614

CA RICH
ENVIRONMENTAL SPECIALISTS

e-mail: eweinstock@carichinc.com

October 23, 2012

NYSDEC
Division of Hazardous Waste Remediation
625 Broadway
Albany, New York 12207-2942

Attention: Melissa Sweet, Project Manager

Re: **Sub-Slab Depressurization System**
Quarterly Monitoring Report
Elks Plaza, LLC
157-189 West Merrick Road
Freeport, NY
NYSDEC Site No.: 130193

Dear Ms. Sweet:

CA RICH Consultants, Inc. (CA RICH) is pleased to present this Sub-Slab Depressurization (SSD) System, Quarterly Monitoring Report for Elks Plaza, LLC at 157-189 West Merrick Road Freeport, NY. A Site Plan with Property Boundaries is included as Figure 1.

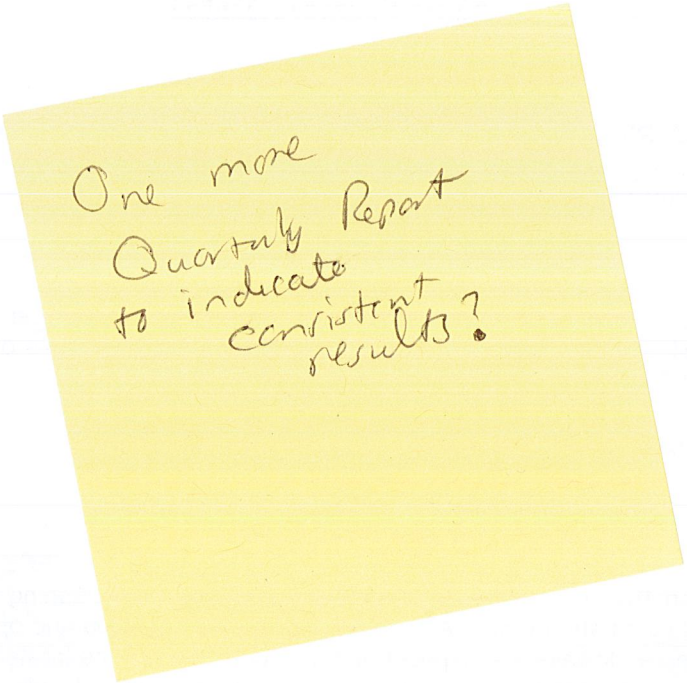
Introduction

The property has been the subject of a series of investigations that have included testing and analysis of the groundwater, soil, soil vapor and indoor air at the property. The results of these investigations are summarized in the following documents (Refs. 1 and 2).

- Site Characterization Report, Elks Plaza LLC — March 2010
- Supplemental Soil Vapor Investigation, Elks Plaza LLC — June 2010

Based on the results of those investigations elevated levels of perchloroethene (PCE) were identified below the units 179 and 181. Unit 181 was the former location of a dry cleaning tenant. This space is currently occupied by a Laundromat. An SSD was designed, installed and operated to address these subsurface vapors. Initially, the exhaust of the SSD system will be treated using vapor-phase carbon canisters. As the operation of the system continues and the levels of PCE and its degradation products in the raw soil vapor before carbon treatment decrease below NYSDEC and NYSDOH emission guidance, the system will be operated without carbon treatment. A summary of the design for the SSD system were included in the following references (Refs. 3 and 4).

- Pilot Test Report and Interim Remedial Measures Work Plan — January 2012
- Revised Pilot Test Report and Interim Remedial Measures Work Plan Addendum #1 — March 2012


One more
Quarterly Report
to indicate
consistent
results?

Description of Remedy

The remedy included in this IRM included a SSD system. The system consists of the four vents installed for the pilot test which were converted into permanent sub-slab depressurization vents. Four-inch diameter sheet metal ducts were extended and connected above the existing Laundromat. These were, in turn, connected to a six-inch diameter riser. Initially, the four-inch diameter ducts transitioned to four-inch diameter PVC pipe which was extend along the roof to the stair well at unit 175. The four-inch pipe was extended down through the roof and into the stair well. It was connected to a moisture knock drum and then to a Fuji Model VFC40 1 HP regenerative blower. The extracted soil vapor is then passed through two 55-gallon vapor phase carbon units. The treated vapor is then connected to a four-inch pipe that extends through the roof of the stair well for a height of six feet above the roof. The blower was connected to the electric panel of the shopping center.

A magnehelic-type vacuum gauge equipped with a red LED low-vacuum indicator light was installed on the vertical riser closest to the office of the Laundromat. The LED light is connected to the power supply of the shopping center. The tenant was instructed to call CA RICH for service if the red indicator light is illuminated.

The Annual Cavity Impact (Cc) will be recalculated after each round of quarterly monitoring round and compared to the AGC standard. Once the untreated soil vapor is less than the AGC standard, we will petition the NYSDEC to turn off the Fuji Blower and replace it with a Fantech fan model HP220. The four-inch diameter PVC pipe will be removed and the Fantech fan will be connected directly to the six-inch riser set above the roof.

Operations, Maintenance and Monitoring the SSD System

The site was visited weekly for the first month, monthly for the first three months and then quarterly thereafter. During each visit, the moisture knockout drum was drained and a PID was used to check the VOCs before the carbon units, between the two carbon units and after the carbon units. SUMMA canisters were used to collect samples of the untreated and treated soil vapor for laboratory analysis after one month and then on a quarterly basis. These results are submitted in this report as Table 1 and in Appendix A.

Maintenance Log

Dates	Activity	Comments
June 21, 2012	System Start-Up	Equipment working properly
June 27, 2012	Weekly Check	Elevated PID levels between drums Blower turned off
July 3, 2012	Weekly Check	Replaced first carbon drum Blower turned on
July 13, 2012	Monthly Check	Collected SUMMA Canisters Equipment working properly
July 17, 2012	Weekly Check	Equipment working properly
July 26, 2012	Weekly Check	Equipment working properly
August 28, 2012	Monthly Check	Equipment working properly

Maintenance Log (Continued)

September 20, 2012	Quarterly Check	Collected SUMMA Canisters Equipment working properly

Emission Calculations

Using the results of the raw soil vapor collected in the SUMMA Canisters, emission calculations were performed for the July 13th and September 20th sample results to determine if the regenerative blower could be replaced with a SSD fan without carbon treatment. These are presented below.

Data for July 13, 2012:

Concentration	= 4,050 ug/m^3 of tetrachloroethene
Rate	= 50 CFM at a building height of 16 feet
h_b	= Height of building in feet
Q	= Hourly emission rate
Qa	= Annual emission rate

Formula:

$$C_C = \frac{1.72 \times Qa}{(h_b)^2}$$

$$C_{CST} = \frac{90400 \times Q}{(h_b)^2}$$

Q = 4,050 x 50 ft^3/min. x 1gram/1.0 x 10^6 ug x 1 lb./436 grams X 60 min./hr. x 1 m^3/35 ft^3 = 8.0 x 10^{-4} lb./hr.

Qa = 8.0 x 10^{-4} lb./hr. x 24 hr./day x 360 days/yr. = 7.0 lb./yr.

$$C_C = \frac{1.72 \times 7.0 \text{ lb./yr}}{(16)^2} = 0.05 \text{ ug/m}^3 \quad \text{less than } 1.0 \text{ ug/m}^3$$

$$C_{CST} = \frac{90400 \times 8.0 \times 10^{-4} \text{ lb./hr.}}{(16)^2} = 0.3 \text{ ug/m}^3 \quad \text{less than } 1.0 \times 10^3 \text{ ug/m}^3$$

Are you sure you want to take this out? It acting as a default SVE system - 1000 is minimum - Brad's calculate

Data for September 20, 2012:

Concentration	= 3,380 ug/m^3 of tetrachloroethene
Rate	= 50 CFM at a building height of 16
h_b	= Height of building in feet
Q	= Hourly emission rate
Qa	= Annual emission rate

Formula:

$$C_C = \frac{1.72 \times Qa}{(h_b)^2}$$

$$C_{CST} = \frac{90400 \times Q}{(h_b)^2}$$

Q = 3,380 ug/m^3 x 50 ft^3/min. x 1gram/1.0 x 10^6 ug x 1 lb./436 grams X 60 min./hr. x 1 m^3/35 ft^3 = 6.6 x 10^{-4} lb./hr.

Qa = 6.6 x 10^{-4} lb./hr. x 24 hr./day x 365 days/yr. = 5.8 lb./yr.

$$C_C = \frac{1.72 \times 5.8 \text{ lb./yr}}{(16)^2} = 0.04 \text{ ug/m}^3 \quad \text{less than } 1.0 \text{ ug/m}^3$$

$$C_{CST} = \frac{90400 \times 6.6 \times 10^{-4} \text{ lb./hr.}}{(16)^2} = 0.23 \text{ ug/m}^3 \quad \text{less than } 1.0 \times 10^3 \text{ ug/m}^3$$

Conclusions

- The SSD system has been working properly during the past quarter of operation.
- One carbon drum was replaced during this reporting period, a copy of the disposal manifest is attached.
- There was no water in the moisture knock-out drum during the past quarter.
- The level of PCE in the raw soil vapor decreased from an initial concentration of 210,335 ug/m^3 to 4,050 ug/m^3 after one month and 3,380 ug/m^3 after three months of operation.
- Based on the laboratory data collected during the past quarter, the Annual Cavity Impact (Cc) was recalculated after each round of monitoring and compared to the AGC standard. The calculations after one and three months of operation were both below the AGC standard and a decreasing trend was established. As such, we request permission to disconnect the regenerative blower and carbon units and replace it with a Fantech model HP220 fan as outlined in the IRM Work Plan.

If you have any questions regarding this plan, please do not hesitate to call our office.

Respectfully,

CA RICH CONSULTANTS, INC.

Jason T. Cooper
Project Environmental Scientist

Stephen J. Osmundsen, P.E.
Senior Engineer

Eric A. Weinstock
Vice President

Attachments

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Suzanne Avena
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References

1. Preferred Environmental Services March 2010, Site Characterization Report, Elks Plaza LLC - Site # 130193, 157 -189 West Merrick Road, Freeport, NY.

2. Preferred Environmental Services June 2010, Supplemental Soil Vapor Investigation, Elks Plaza LLC - Site # 130193, 157 -189 West Merrick Road, Freeport, NY.

3. CA RICH, January 2012, Pilot Test Report and Interim Remedial Measures Work Plan,Elks Plaza, LLC, 157-189 West Merrick Road, Freeport, NY

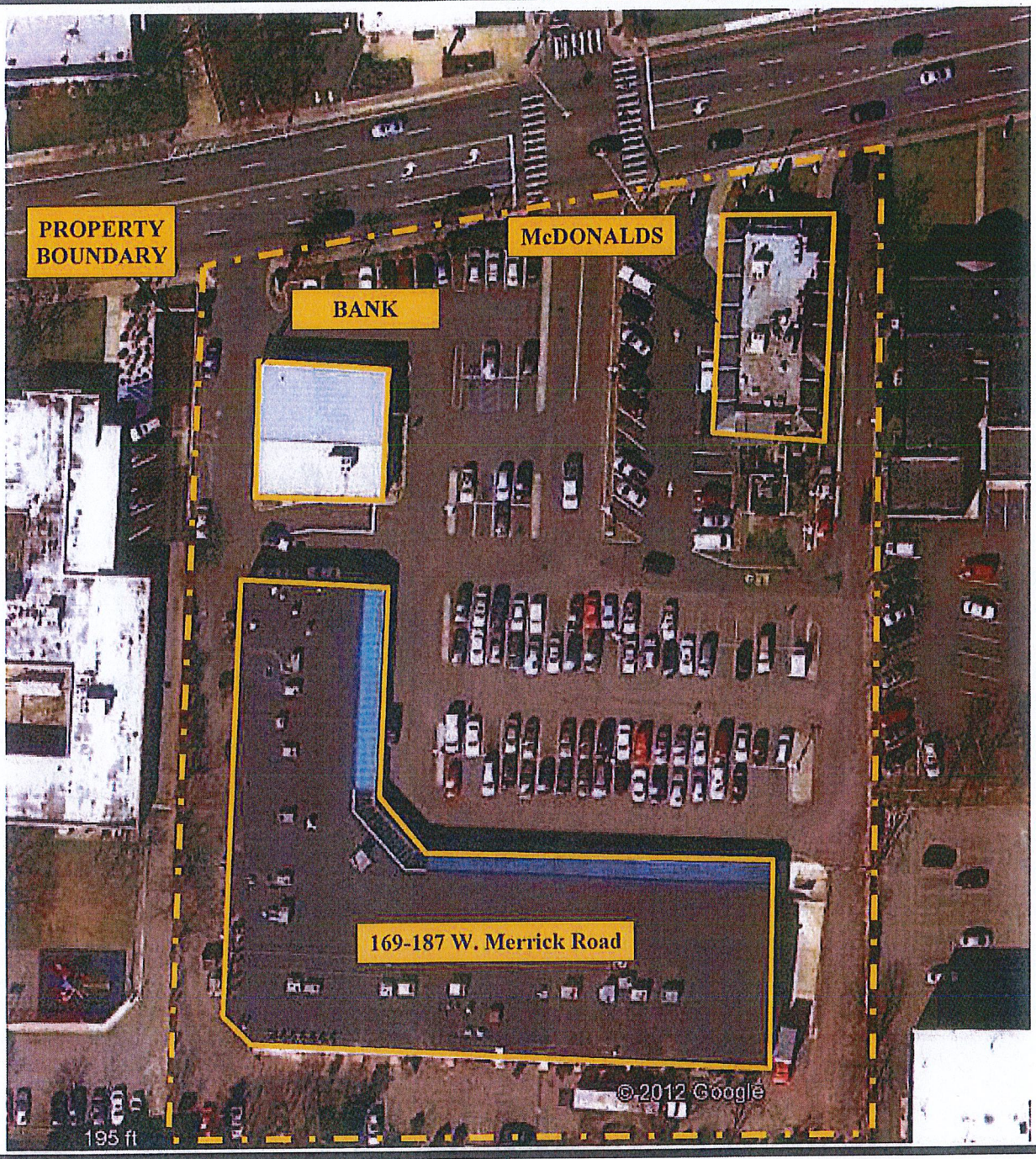
4. CA RICH, March 2012, Revised Pilot Test Report and Interim Remedial Measures Work Plan Addendum #1, Elks Plaza, LLC, 157-189 West Merrick Road, Freeport, NY

Figures

Tables

Appendices

Figures



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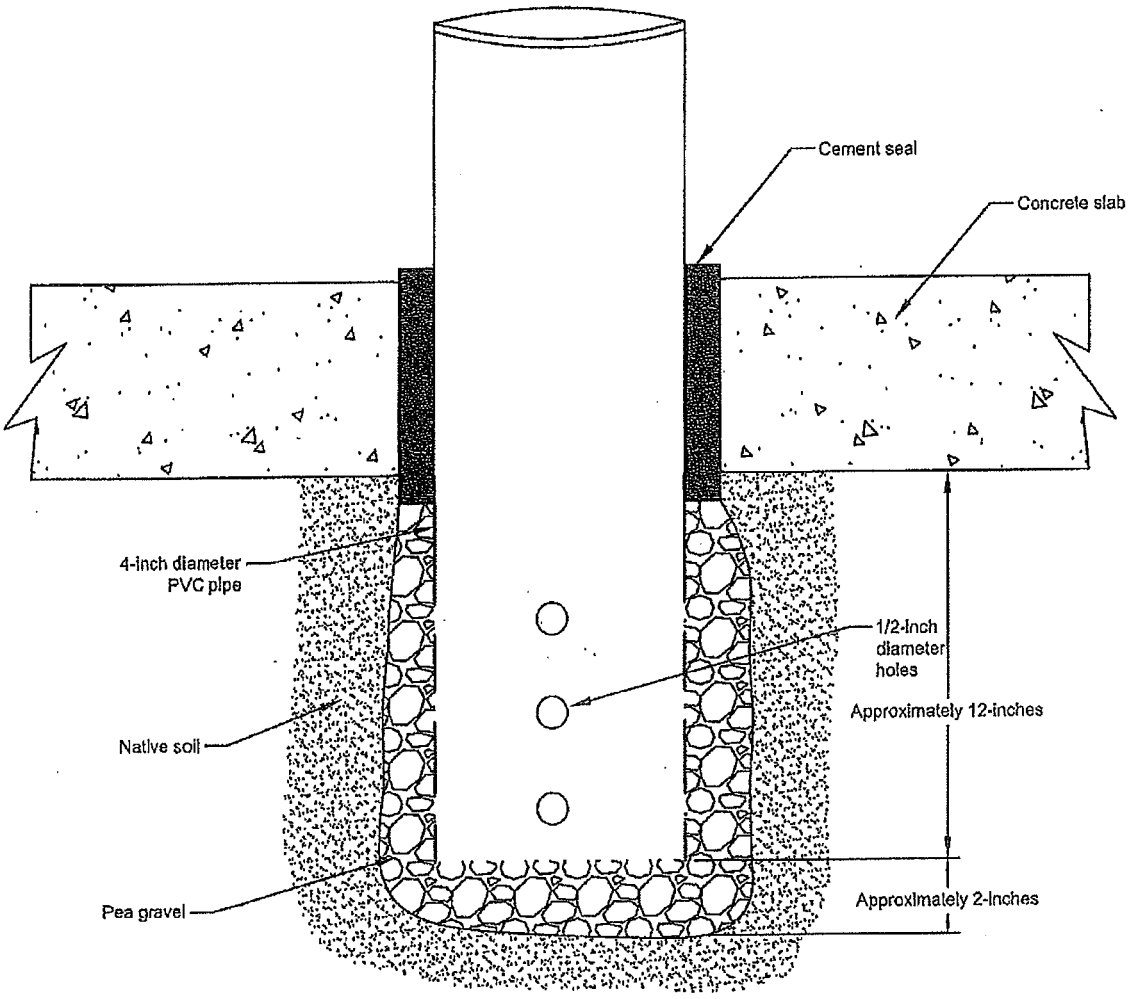
Adapted from Google Earth 2012

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

TITLE: **SITE PLAN WITH PROPERTY BOUNDARIES**	DATE: **6/8/2012**
	SCALE: **Not to scale**
FIGURE: **1**	**Elks Plaza, LLC** **157-189 W. Merrick Road** **Freeport, New York**
DRAWING:	DRAWN BY: **JTC**
	APPR. BY: **EAW**



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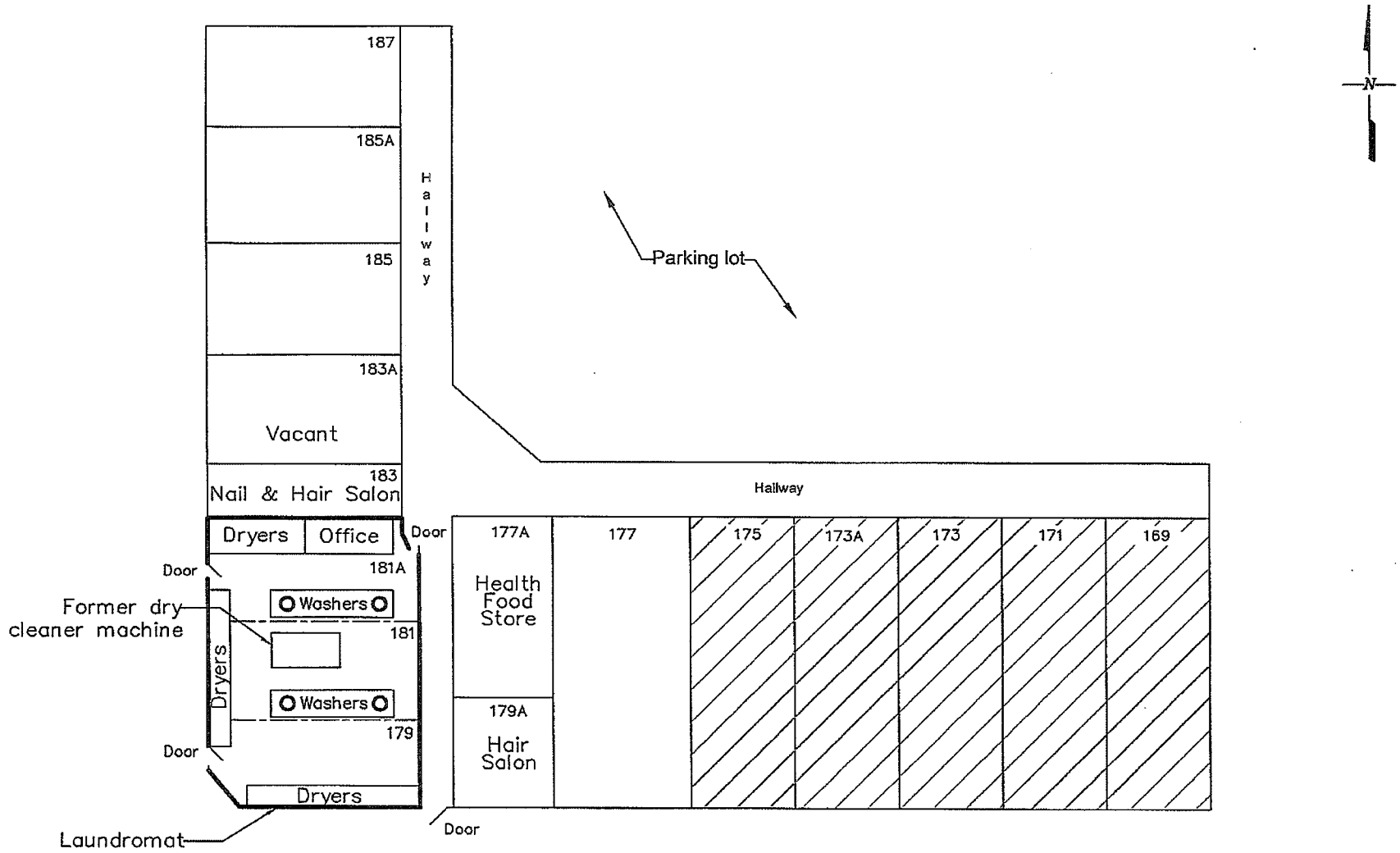
Environmental Specialists Since 1982

17 Dupont Street, Plainview, New York 11803

TITLE: Typical Soil Vapor Vent		DATE: 9/22/2011
		SCALE: N.T.S.
FIGURE: 2	Elks Plaza, LLC 157-189 W. Merrick Road Freeport, New York	DRAWN BY: J.T.C.
DRAWING NO: 2011-M4		APPR. BY: E.A.W.



LEGEND

O Sub slab vent

Units have basement, basement unit is # 165

0 20 40 60

Graphic Scale in Feet

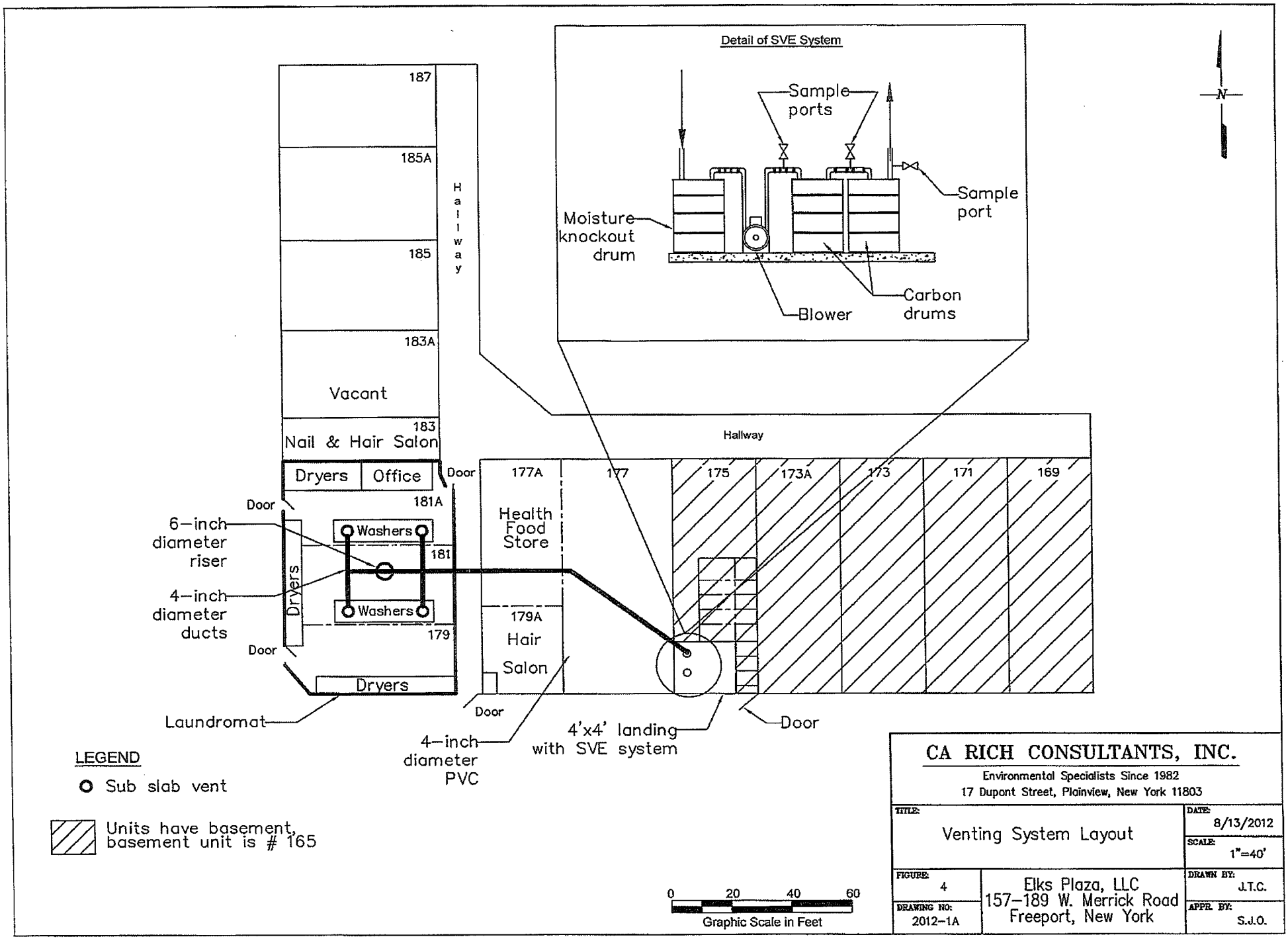
CA RICH CONSULTANTS, INC.

Environmental Specialists Since 1982

17 Dupont Street, Plainview, New York 11803

TITLE: Layout of Sub Slab Vents	DATE: 8/13/2012
	SCALE: 1"=40'
FIGURE: 3	DRAWN BY: J.T.C.
DRAWING NO: 2012-6	APPR. BY: E.A.W.

Elks Plaza, LLC
157-189 W. Merrick Road
Freeport, New York



CA RICH CONSULTANTS, INC.

Environmental Specialists Since 1982

17 Dupont Street, Plainview, New York 11803

TITLE: Venting System Layout	DATE: 8/13/2012
	SCALE: 1"=40'
FIGURE: 4	DRAWN BY: J.T.C.
DRAWING NO: 2012-1A	APPR. BY: S.J.O.

Elks Plaza, LLC
157-189 W. Merrick Road
Freeport, New York

Tables

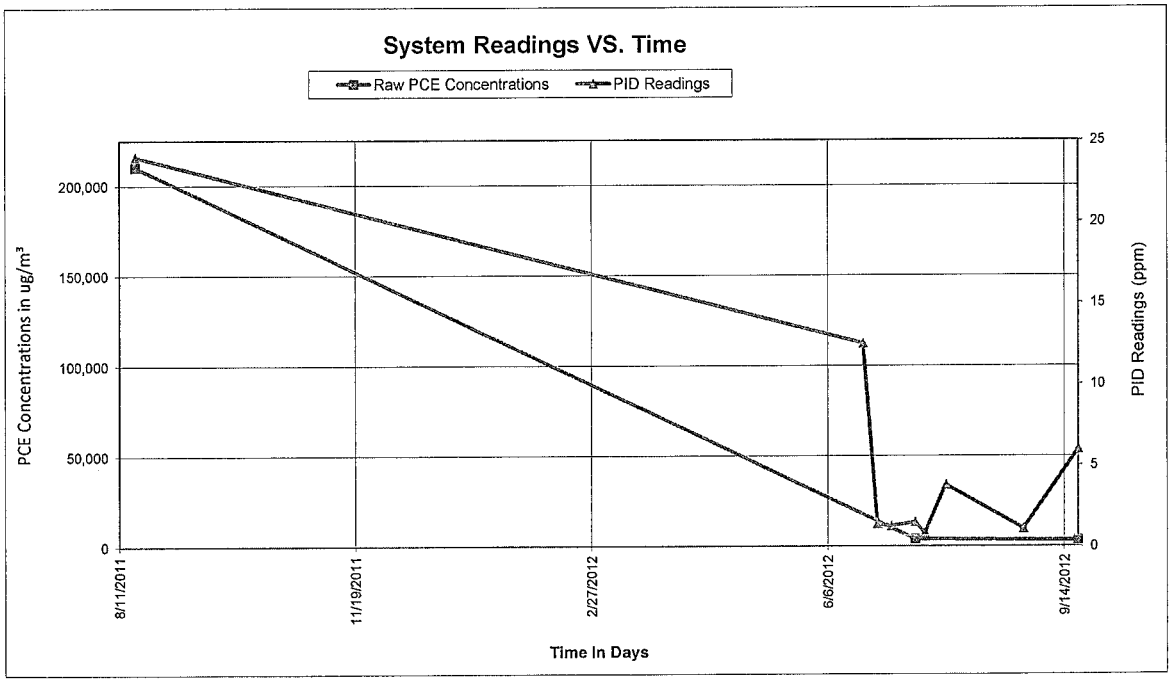
Table 1

Elks Plaza
157-189 West Merrick Road
Freeport, New York
Site No. 130193

PID Readings and
Summary of Laboratory Data

Date	Days Since System Start Up	PID Readings in Parts Per Million (PPM)			PCE in Raw Soil Vapor	PCE in Treated Soil Vapor	Comments
		Raw	Mid	Treated	ug/m³	ug/m³	
8/18/2011	-315	24	NA	NA	210,335	NA	Pilot test
6/21/2012	0	12.5	0.7	2.7	NA	NA	System startup
6/27/2012	6	1.4	1,000	45	NA	NA	System check
7/3/2012	12	1.25	0.0	0.0	NA	NA	System check/carbon changeout
7/13/2012	22	1.5	0.0	0.5	4,050	ND	Monthly system sample
7/17/2012	26	0.85	0.0	0.0	NA	NA	System check
7/26/2012	35	3.8	3.6	0.0	NA	NA	System check
8/28/2012	67	1.1	0.0	0.0	NA	NA	System check
9/20/2012	89	6.0	1.9	0.0	3,380	1.2	Quarterly system sample

Notes: ..
ND - Non-detect
NA - Not applicable
Time 0 = System activation date- 6/28/2012



Appendix A

Sample Summary

C. A. Rich Consultants

Job No: JB11375

Elks Plaza, Freeport, NY
Project No: GALAXY/ELKS PLAZA/SSD

Sample Number	Collected Date	Time	By	Received	Matrix Code	Matrix Type	Client Sample ID
JB11375-1	07/13/12	14:20	JTC	07/17/12	AIR	Air	SVE SYSTEM RAW
JB11375-2	07/13/12	14:22	JTC	07/17/12	AIR	Air	SVE SYSTEM EXHAUST

Report of Analysis

Client Sample ID:	SVE SYSTEM RAW		
Lab Sample ID:	JB11375-1	**Date Sampled:**	07/13/12
Matrix:	AIR - Air Summa ID: A298	**Date Received:**	07/17/12
Method:	TO-15	**Percent Solids:**	n/a
Project:	Elks Plaza, Freeport, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3W29372.D	1.15	07/30/12	YXC	n/a	n/a	V3W1147
Run #2	3W29372A.D	1.15	07/30/12	YXC	n/a	n/a	V3W1147

	Initial Volume
Run #1	115 ml
Run #2	20.0 ml

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	Units
67-64-1	58.08	Acetone	156 [a]	4.6	0.83	ppbv		371 [a]	11	ug/m3
106-99-0	54.09	1,3-Butadiene	ND	0.80	0.097	ppbv		ND	1.8	ug/m3
71-43-2	78.11	Benzene	0.47	0.80	0.18	ppbv	J	1.5	2.6	ug/m3
75-27-4	163.8	Bromodichloromethane	ND	0.80	0.12	ppbv		ND	5.4	ug/m3
75-25-2	252.8	Bromoform	ND	0.80	0.15	ppbv		ND	8.3	ug/m3
74-83-9	94.94	Bromomethane	ND	0.80	0.15	ppbv		ND	3.1	ug/m3
593-60-2	106.9	Bromoethene	ND	0.80	0.15	ppbv		ND	3.5	ug/m3
100-44-7	126	Benzyl Chloride	ND	0.80	0.16	ppbv		ND	4.1	ug/m3
75-15-0	76.14	Carbon disulfide	ND	0.80	0.13	ppbv		ND	2.5	ug/m3
108-90-7	112.6	Chlorobenzene	ND	0.80	0.11	ppbv		ND	3.7	ug/m3
75-00-3	64.52	Chloroethane	ND	0.80	0.16	ppbv		ND	2.1	ug/m3
67-66-3	119.4	Chloroform	0.80	0.80	0.11	ppbv		3.9	3.9	ug/m3
74-87-3	50.49	Chloromethane	0.43	0.80	0.15	ppbv	J	0.89	1.7	ug/m3
107-05-1	76.53	3-Chloropropene	ND	0.80	0.17	ppbv		ND	2.5	ug/m3
95-49-8	126.6	2-Chlorotoluene	ND	0.80	0.12	ppbv		ND	4.1	ug/m3
56-23-5	153.8	Carbon tetrachloride	ND	0.80	0.16	ppbv		ND	5.0	ug/m3
110-82-7	84.16	Cyclohexane	ND	0.80	0.13	ppbv		ND	2.8	ug/m3
75-34-3	98.96	1,1-Dichloroethane	ND	0.80	0.11	ppbv		ND	3.2	ug/m3
75-35-4	96.94	1,1-Dichloroethylene	ND	0.80	0.18	ppbv		ND	3.2	ug/m3
106-93-4	187.9	1,2-Dibromoethane	ND	0.80	0.11	ppbv		ND	6.1	ug/m3
107-06-2	98.96	1,2-Dichloroethane	ND	0.80	0.17	ppbv		ND	3.2	ug/m3
78-87-5	113	1,2-Dichloropropane	ND	0.80	0.15	ppbv		ND	3.7	ug/m3
123-91-1	88.12	1,4-Dioxane	ND	0.80	0.22	ppbv		ND	2.9	ug/m3
75-71-8	120.9	Dichlorodifluoromethane	0.49	0.80	0.15	ppbv	J	2.4	4.0	ug/m3
124-48-1	208.3	Dibromochloromethane	ND	0.80	0.11	ppbv		ND	6.8	ug/m3
156-60-5	96.94	trans-1,2-Dichloroethylene	ND	0.80	0.13	ppbv		ND	3.2	ug/m3
156-59-2	96.94	cis-1,2-Dichloroethylene	2.0	0.80	0.15	ppbv		7.9	3.2	ug/m3
10061-01-5	111	cis-1,3-Dichloropropene	ND	0.80	0.17	ppbv		ND	3.6	ug/m3
541-73-1	147	m-Dichlorobenzene	ND	0.80	0.15	ppbv		ND	4.8	ug/m3
95-50-1	147	o-Dichlorobenzene	ND	0.80	0.11	ppbv		ND	4.8	ug/m3
106-46-7	147	p-Dichlorobenzene	0.39	0.80	0.10	ppbv	J	2.3	4.8	ug/m3
10061-02-6	111	trans-1,3-Dichloropropene	ND	0.80	0.16	ppbv		ND	3.6	ug/m3

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: SVE SYSTEM RAW
Lab Sample ID: JB11375-1
Matrix: AIR - Air Summa ID: A298
Method: TO-15
Project: Elks Plaza, Freeport, NY

Date Sampled: 07/13/12
Date Received: 07/17/12
Percent Solids: n/a

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	Units
64-17-5	46.07	Ethanol	17.1	2.0	0.38	ppbv		32.2	3.8	ug/m3
100-41-4	106.2	Ethylbenzene	0.47	0.80	0.12	ppbv	J	2.0	3.5	ug/m3
141-78-6	88	Ethyl Acetate	5.2	0.80	0.24	ppbv		19	2.9	ug/m3
622-96-8	120.2	4-Ethyltoluene	ND	0.80	0.096	ppbv		ND	3.9	ug/m3
76-13-1	187.4	Freon 113	ND	0.80	0.14	ppbv		ND	6.1	ug/m3
76-14-2	170.9	Freon 114	ND	0.80	0.12	ppbv		ND	5.6	ug/m3
142-82-5	100.2	Heptane	ND	0.80	0.13	ppbv		ND	3.3	ug/m3
87-68-3	260.8	Hexachlorobutadiene	ND	0.80	0.18	ppbv		ND	8.5	ug/m3
110-54-3	86.17	Hexane	ND	0.80	0.18	ppbv		ND	2.8	ug/m3
591-78-6	100	2-Hexanone	ND	0.80	0.17	ppbv		ND	3.3	ug/m3
67-63-0	60.1	Isopropyl Alcohol	3.0	0.80	0.23	ppbv		7.4	2.0	ug/m3
75-09-2	84.94	Methylene chloride	ND	0.80	0.11	ppbv		ND	2.8	ug/m3
78-93-3	72.11	Methyl ethyl ketone	1.3	0.80	0.19	ppbv		3.8	2.4	ug/m3
108-10-1	100.2	Methyl Isobutyl Ketone	ND	0.80	0.14	ppbv		ND	3.3	ug/m3
1634-04-4	88.15	Methyl Tert Butyl Ether	ND	0.80	0.11	ppbv		ND	2.9	ug/m3
80-62-6	100.12	Methylmethacrylate	13.5	0.80	0.17	ppbv		55.3	3.3	ug/m3
115-07-1	42	Propylene	ND	2.0	0.28	ppbv		ND	3.4	ug/m3
100-42-5	104.1	Styrene	ND	0.80	0.11	ppbv		ND	3.4	ug/m3
71-55-6	133.4	1,1,1-Trichloroethane	ND	0.80	0.088	ppbv		ND	4.4	ug/m3
79-34-5	167.9	1,1,2,2-Tetrachloroethane	ND	0.80	0.12	ppbv		ND	5.5	ug/m3
79-00-5	133.4	1,1,2-Trichloroethane	ND	0.80	0.12	ppbv		ND	4.4	ug/m3
120-82-1	181.5	1,2,4-Trichlorobenzene	ND	0.80	0.20	ppbv		ND	5.9	ug/m3
95-63-6	120.2	1,2,4-Trimethylbenzene	0.81	0.80	0.096	ppbv		4.0	3.9	ug/m3
108-67-8	120.2	1,3,5-Trimethylbenzene	ND	0.80	0.11	ppbv		ND	3.9	ug/m3
540-84-1	114.2	2,2,4-Trimethylpentane	ND	0.80	0.11	ppbv		ND	3.7	ug/m3
75-65-0	74.12	Tertiary Butyl Alcohol	ND	0.80	0.13	ppbv		ND	2.4	ug/m3
127-18-4	165.8	Tetrachloroethylene	597 [a]	0.92	0.65	ppbv		4050 [a]	6.2	ug/m3
109-99-9	72.11	Tetrahydrofuran	0.86	0.80	0.19	ppbv		2.5	2.4	ug/m3
108-88-3	92.14	Toluene	2.5	0.80	0.16	ppbv		9.4	3.0	ug/m3
79-01-6	131.4	Trichloroethylene	7.1	0.16	0.13	ppbv		38	0.86	ug/m3
75-69-4	137.4	Trichlorofluoromethane	1.2	0.80	0.17	ppbv		6.7	4.5	ug/m3
75-01-4	62.5	Vinyl chloride	ND	0.80	0.13	ppbv		ND	2.0	ug/m3
108-05-4	86	Vinyl Acetate	ND	0.80	0.23	ppbv		ND	2.8	ug/m3
	106.2	m,p-Xylene	1.5	0.80	0.12	ppbv		6.5	3.5	ug/m3
95-47-6	106.2	o-Xylene	0.57	0.80	0.12	ppbv	J	2.5	3.5	ug/m3
1330-20-7	106.2	Xylenes (total)	2.1	0.80	0.12	ppbv		9.1	3.5	ug/m3

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	99%	96%	65-128%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SVE SYSTEM RAW		
Lab Sample ID:	JB11375-1	**Date Sampled:**	07/13/12
Matrix:	AIR - Air Summa ID: A298	**Date Received:**	07/17/12
Method:	TO-15	**Percent Solids:**	n/a
Project:	Elks Plaza, Freeport, NY		

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	Units

(a) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: SVE SYSTEM EXHAUST
Lab Sample ID: JB11375-2
Matrix: AIR - Air Summa ID: A021
Method: TO-15
Project: Elks Plaza, Freeport, NY

Date Sampled: 07/13/12
Date Received: 07/17/12
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3W29371.D	1.12	07/30/12	YXC	n/a	n/a	V3W1147
Run #2							

	Initial Volume
Run #1	112 ml
Run #2	

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	Units
67-64-1	58.08	Acetone	15.2	0.80	0.15	ppbv		36.1	1.9	ug/m3
106-99-0	54.09	1,3-Butadiene	ND	0.80	0.097	ppbv		ND	1.8	ug/m3
71-43-2	78.11	Benzene	ND	0.80	0.18	ppbv		ND	2.6	ug/m3
75-27-4	163.8	Bromodichloromethane	ND	0.80	0.12	ppbv		ND	5.4	ug/m3
75-25-2	252.8	Bromoform	ND	0.80	0.15	ppbv		ND	8.3	ug/m3
74-83-9	94.94	Bromomethane	ND	0.80	0.15	ppbv		ND	3.1	ug/m3
593-60-2	106.9	Bromoethene	ND	0.80	0.15	ppbv		ND	3.5	ug/m3
100-44-7	126	Benzyl Chloride	ND	0.80	0.16	ppbv		ND	4.1	ug/m3
75-15-0	76.14	Carbon disulfide	ND	0.80	0.13	ppbv		ND	2.5	ug/m3
108-90-7	112.6	Chlorobenzene	ND	0.80	0.11	ppbv		ND	3.7	ug/m3
75-00-3	64.52	Chloroethane	ND	0.80	0.16	ppbv		ND	2.1	ug/m3
67-66-3	119.4	Chloroform	ND	0.80	0.11	ppbv		ND	3.9	ug/m3
74-87-3	50.49	Chloromethane	0.46	0.80	0.15	ppbv	J	0.95	1.7	ug/m3
107-05-1	76.53	3-Chloropropene	ND	0.80	0.17	ppbv		ND	2.5	ug/m3
95-49-8	126.6	2-Chlorotoluene	ND	0.80	0.12	ppbv		ND	4.1	ug/m3
56-23-5	153.8	Carbon tetrachloride	ND	0.80	0.16	ppbv		ND	5.0	ug/m3
110-82-7	84.16	Cyclohexane	ND	0.80	0.13	ppbv		ND	2.8	ug/m3
75-34-3	98.96	1,1-Dichloroethane	ND	0.80	0.11	ppbv		ND	3.2	ug/m3
75-35-4	96.94	1,1-Dichloroethylene	ND	0.80	0.18	ppbv		ND	3.2	ug/m3
106-93-4	187.9	1,2-Dibromoethane	ND	0.80	0.11	ppbv		ND	6.1	ug/m3
107-06-2	98.96	1,2-Dichloroethane	ND	0.80	0.17	ppbv		ND	3.2	ug/m3
78-87-5	113	1,2-Dichloropropane	ND	0.80	0.15	ppbv		ND	3.7	ug/m3
123-91-1	88.12	1,4-Dioxane	ND	0.80	0.22	ppbv		ND	2.9	ug/m3
75-71-8	120.9	Dichlorodifluoromethane	0.67	0.80	0.15	ppbv	J	3.3	4.0	ug/m3
124-48-1	208.3	Dibromochloromethane	ND	0.80	0.11	ppbv		ND	6.8	ug/m3
156-60-5	96.94	trans-1,2-Dichloroethylene	ND	0.80	0.13	ppbv		ND	3.2	ug/m3
156-59-2	96.94	cis-1,2-Dichloroethylene	ND	0.80	0.15	ppbv		ND	3.2	ug/m3
10061-01-5	111	cis-1,3-Dichloropropene	ND	0.80	0.17	ppbv		ND	3.6	ug/m3
541-73-1	147	m-Dichlorobenzene	ND	0.80	0.15	ppbv		ND	4.8	ug/m3
95-50-1	147	o-Dichlorobenzene	ND	0.80	0.11	ppbv		ND	4.8	ug/m3
106-46-7	147	p-Dichlorobenzene	ND	0.80	0.10	ppbv		ND	4.8	ug/m3
10061-02-6	111	trans-1,3-Dichloropropene	ND	0.80	0.16	ppbv		ND	3.6	ug/m3

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SVE SYSTEM EXHAUST		
Lab Sample ID:	JB11375-2	**Date Sampled:**	07/13/12
Matrix:	AIR - Air Summa ID: A021	**Date Received:**	07/17/12
Method:	TO-15	**Percent Solids:**	n/a
Project:	Elks Plaza, Freeport, NY		

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	Units
64-17-5	46.07	Ethanol	36.3	2.0	0.38	ppbv		68.4	3.8	ug/m3
100-41-4	106.2	Ethylbenzene	ND	0.80	0.12	ppbv		ND	3.5	ug/m3
141-78-6	88	Ethyl Acetate	ND	0.80	0.24	ppbv		ND	2.9	ug/m3
622-96-8	120.2	4-Ethyltoluene	ND	0.80	0.096	ppbv		ND	3.9	ug/m3
76-13-1	187.4	Freon 113	ND	0.80	0.14	ppbv		ND	6.1	ug/m3
76-14-2	170.9	Freon 114	ND	0.80	0.12	ppbv		ND	5.6	ug/m3
142-82-5	100.2	Heptane	ND	0.80	0.13	ppbv		ND	3.3	ug/m3
87-68-3	260.8	Hexachlorobutadiene	ND	0.80	0.18	ppbv		ND	8.5	ug/m3
110-54-3	86.17	Hexane	ND	0.80	0.18	ppbv		ND	2.8	ug/m3
591-78-6	100	2-Hexanone	ND	0.80	0.17	ppbv		ND	3.3	ug/m3
67-63-0	60.1	Isopropyl Alcohol	0.61	0.80	0.23	ppbv	J	1.5	2.0	ug/m3
75-09-2	84.94	Methylene chloride	0.97	0.80	0.11	ppbv		3.4	2.8	ug/m3
78-93-3	72.11	Methyl ethyl ketone	2.0	0.80	0.19	ppbv		5.9	2.4	ug/m3
108-10-1	100.2	Methyl Isobutyl Ketone	ND	0.80	0.14	ppbv		ND	3.3	ug/m3
1634-04-4	88.15	Methyl Tert Butyl Ether	ND	0.80	0.11	ppbv		ND	2.9	ug/m3
80-62-6	100.12	Methylmethacrylate	ND	0.80	0.17	ppbv		ND	3.3	ug/m3
115-07-1	42	Propylene	ND	2.0	0.28	ppbv		ND	3.4	ug/m3
100-42-5	104.1	Styrene	ND	0.80	0.11	ppbv		ND	3.4	ug/m3
71-55-6	133.4	1,1,1-Trichloroethane	ND	0.80	0.088	ppbv		ND	4.4	ug/m3
79-34-5	167.9	1,1,2,2-Tetrachloroethane	ND	0.80	0.12	ppbv		ND	5.5	ug/m3
79-00-5	133.4	1,1,2-Trichloroethane	ND	0.80	0.12	ppbv		ND	4.4	ug/m3
120-82-1	181.5	1,2,4-Trichlorobenzene	ND	0.80	0.20	ppbv		ND	5.9	ug/m3
95-63-6	120.2	1,2,4-Trimethylbenzene	0.55	0.80	0.096	ppbv	J	2.7	3.9	ug/m3
108-67-8	120.2	1,3,5-Trimethylbenzene	ND	0.80	0.11	ppbv		ND	3.9	ug/m3
540-84-1	114.2	2,2,4-Trimethylpentane	ND	0.80	0.11	ppbv		ND	3.7	ug/m3
75-65-0	74.12	Tertiary Butyl Alcohol	ND	0.80	0.13	ppbv		ND	2.4	ug/m3
127-18-4	165.8	Tetrachloroethylene	ND	0.16	0.11	ppbv		ND	1.1	ug/m3
109-99-9	72.11	Tetrahydrofuran	ND	0.80	0.19	ppbv		ND	2.4	ug/m3
108-88-3	92.14	Toluene	0.66	0.80	0.16	ppbv	J	2.5	3.0	ug/m3
79-01-6	131.4	Trichloroethylene	ND	0.16	0.13	ppbv		ND	0.86	ug/m3
75-69-4	137.4	Trichlorofluoromethane	ND	0.80	0.17	ppbv		ND	4.5	ug/m3
75-01-4	62.5	Vinyl chloride	ND	0.80	0.13	ppbv		ND	2.0	ug/m3
108-05-4	86	Vinyl Acetate	ND	0.80	0.23	ppbv		ND	2.8	ug/m3
	106.2	m,p-Xylene	0.72	0.80	0.12	ppbv	J	3.1	3.5	ug/m3
95-47-6	106.2	o-Xylene	ND	0.80	0.12	ppbv		ND	3.5	ug/m3
1330-20-7	106.2	Xylenes (total)	0.72	0.80	0.12	ppbv	J	3.1	3.5	ug/m3

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	100%		65-128%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

CHAIN OF CUSTODY

ACCUTEST LABORATORIES

Air Sampling Field Data Sheet

2235 US Highway 130, Dayton, NJ 08810
Tel: 732.329.0200 Fax: 732.329.3499

FED-EX Tracking #	Bottle Order Control #	PAGE 1 OF 1
400325179375	TE-7/3/2012-3	
Lab Quote #	Lab Job #	
	JB11375	

Client / Reporting Information

Company Name: CA Rich Consultants' Inc.	Project Name: Elks Plaza
Address: 17 Dupont Street	Street: Merrick Rd
City: Plainview State: NY Zip: 11803	City: Freeport State: NY
Project Contact: Jason Cooper E-mail: jcooper@carichinc.com	Project #:
Phone #: 516-576-8844 Fax #:	Client Purchase Order #:
Sampler(s) Name(s): Jason T. Cooper	

Weather Parameters

Temperature (Fahrenheit)
Start: 1420→1422 Maximum: 90 of
Stop: Minimum:

Atmosphpheric Pressure (inches of Hg)
Start: 1420→ Maximum:
Stop: 1422 Minimum:

Other weather comment:

Lab Sample #	Field ID / Point of Collection	Air Type: Indoor (I) Soil Vap (SV) Ambient(A)	Sampling Equipment Info: Canister Serial #	Canister Size 6L or 1L	Flow Controller Serial #	Start Sampling Information: Date	Time (24 hr clock)	Canister Pressure ("Hg)	Interior Temp (F)	Sampler Init.	Stop Sampling Information: Date	Time (24 hr clock)	Canister Pressure ("Hg)	Interior Temp (F)	Sampler Init.	Requested Analysis: TO-15
-1	SVE System Raw	System	A2798	6L	—	7/3/12	1420	—	90	JTC	7/3/12	1420	—	90	JTC	X
-2	SVE System Exhaust	System	A021	6L	—	7/3/12	1422	—	90	JTC	7/3/12	1422	—	90	JTC	X

54 7/7/12

Turnaround Time (Business Days)

Standard - 15 Days	X
10 Day	
5 Day	
3 Day	
2 Day	
1 Day	
Other	

Approved By:_____

Date:_____

Data Deliverable Information

All NJDEP TO-15 is mandatory Full T1

Comm A	0
Comm B	
Reduced T2	
Full T1	
Other:	

Comments / Remarks

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Laboratory:	Date Time:	Received by:	Relinquished by:	Date Time:	Received by:
1 Ray Mancuso 14:00	7/3/12	1 FedEx	2 FedEx		2
Relinquished by:	Date Time:	Received by:	Relinquished by:	Date Time:	Received by:
3	7/6/12	3 FedEx	4 FedEx	7/7/12 1100	4
Relinquished by:	Date Time:	Received by:	Custody Seal #		
5		5			

20

ACCUTEST LABORATORIES

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: JB11375 **Client:** _____ **Project:** _____

Date / Time Received: 7/17/2012 **Delivery Method:** _____ **Airbill #'s:** _____

Cooler Temps (Initial/Adjusted):

Cooler Security	Y	or	N		Y	or	N
1. Custody Seals Present:	☑		☐	3. COC Present:	☑		☐
2. Custody Seals Intact:	☑		☐	4. Smpl Dates/Time OK	☑		☐

Cooler Temperature	Y	or	N
1. Temp criteria achieved:	☑		☐
2. Cooler temp verification:			
3. Cooler media:			
4. No. Coolers:	0		

Quality Control Preservation	Y	or	N	N/A
1. Trip Blank present / cooler:	☐		☑	☐
2. Trip Blank listed on COC:	☐		☑	☐
3. Samples preserved properly:	☑		☐	
4. VOCs headspace free:	☐		☐	☑

Sample Integrity - Documentation	Y	or	N
1. Sample labels present on bottles:	☑		☐
2. Container labeling complete:	☑		☐
3. Sample container label / COC agree:	☑		☐

Sample Integrity - Condition	Y	or	N
1. Sample recvd within HT:	☑		☐
2. All containers accounted for:	☑		☐
3. Condition of sample:	Intact		

Sample Integrity - Instructions	Y	or	N	N/A
1. Analysis requested is clear:	☑		☐	
2. Bottles received for unspecified tests	☐		☑	
3. Sufficient volume recvd for analysis:	☑		☐	
4. Compositing instructions clear:	☐		☐	☑
5. Filtering instructions clear:	☐		☐	☑

Comments

Accutest Laboratories
V:732.329.0200

2235 US Highway 130
F: 732.329.3499

Dayton, New Jersey
www/accutest.com

JB11375: Chain of Custody
Page 2 of 2

Sample Summary

C. A. Rich Consultants

Job No: JB17242

Elks Plaza, Freeport, NY
Project No: GALAXY/ELKS PLAZA/SSD

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
JB17242-1	09/20/12	10:00	JC	09/25/12	AIR	Air	SYSTEM RAW
JB17242-2	09/20/12	10:10	JC	09/25/12	AIR	Air	SYSTEM EXHAUST

Report of Analysis

Client Sample ID:	SYSTEM RAW	Date Sampled:	09/20/12
Lab Sample ID:	JB17242-1	Date Received:	09/25/12
Matrix:	AIR - Air Summa ID: A244	Percent Solids:	n/a
Method:	TO-15		
Project:	Elks Plaza, Freeport, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2W36218.D	1	09/28/12	YMH	n/a	n/a	V2W1517
Run #2	2W36250.D	1	10/01/12	YMH	n/a	n/a	V2W1519

	Initial Volume
Run #1	50.0 ml
Run #2	25.0 ml

VOA TO15 List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	Units
67-64-1	58.08	Acetone	63.6	1.6	0.29	ppbv		151	3.8	ug/m3
106-99-0	54.09	1,3-Butadiene	ND	1.6	0.19	ppbv		ND	3.5	ug/m3
71-43-2	78.11	Benzene	2.1	1.6	0.37	ppbv		6.7	5.1	ug/m3
75-27-4	163.8	Bromodichloromethane	ND	1.6	0.24	ppbv		ND	11	ug/m3
75-25-2	252.8	Bromoform	ND	1.6	0.30	ppbv		ND	17	ug/m3
74-83-9	94.94	Bromomethane	ND	1.6	0.29	ppbv		ND	6.2	ug/m3
593-60-2	106.9	Bromoethene	ND	1.6	0.29	ppbv		ND	7.0	ug/m3
100-44-7	126	Benzyl Chloride	ND	1.6	0.33	ppbv		ND	8.2	ug/m3
75-15-0	76.14	Carbon disulfide	ND	1.6	0.26	ppbv		ND	5.0	ug/m3
108-90-7	112.6	Chlorobenzene	ND	1.6	0.22	ppbv		ND	7.4	ug/m3
75-00-3	64.52	Chloroethane	ND	1.6	0.31	ppbv		ND	4.2	ug/m3
67-66-3	119.4	Chloroform	1.6	1.6	0.22	ppbv		7.8	7.8	ug/m3
74-87-3	50.49	Chloromethane	ND	1.6	0.30	ppbv		ND	3.3	ug/m3
107-05-1	76.53	3-Chloropropene	ND	1.6	0.33	ppbv		ND	5.0	ug/m3
95-49-8	126.6	2-Chlorotoluene	ND	1.6	0.25	ppbv		ND	8.3	ug/m3
56-23-5	153.8	Carbon tetrachloride	ND	1.6	0.32	ppbv		ND	10	ug/m3
110-82-7	84.16	Cyclohexane	ND	1.6	0.27	ppbv		ND	5.5	ug/m3
75-34-3	98.96	1,1-Dichloroethane	ND	1.6	0.22	ppbv		ND	6.5	ug/m3
75-35-4	96.94	1,1-Dichloroethylene	ND	1.6	0.37	ppbv		ND	6.3	ug/m3
106-93-4	187.9	1,2-Dibromoethane	ND	1.6	0.22	ppbv		ND	12	ug/m3
107-06-2	98.96	1,2-Dichloroethane	ND	1.6	0.35	ppbv		ND	6.5	ug/m3
78-87-5	113	1,2-Dichloropropane	ND	1.6	0.31	ppbv		ND	7.4	ug/m3
123-91-1	88.12	1,4-Dioxane	ND	1.6	0.45	ppbv		ND	5.8	ug/m3
75-71-8	120.9	Dichlorodifluoromethane	ND	1.6	0.30	ppbv		ND	7.9	ug/m3
124-48-1	208.3	Dibromochloromethane	ND	1.6	0.22	ppbv		ND	14	ug/m3
156-60-5	96.94	trans-1,2-Dichloroethylene	ND	1.6	0.26	ppbv		ND	6.3	ug/m3
156-59-2	96.94	cis-1,2-Dichloroethylene	3.0	1.6	0.30	ppbv		12	6.3	ug/m3
10061-01-5	111	cis-1,3-Dichloropropene	ND	1.6	0.34	ppbv		ND	7.3	ug/m3
541-73-1	147	m-Dichlorobenzene	ND	1.6	0.30	ppbv		ND	9.6	ug/m3
95-50-1	147	o-Dichlorobenzene	ND	1.6	0.21	ppbv		ND	9.6	ug/m3
106-46-7	147	p-Dichlorobenzene	ND	1.6	0.20	ppbv		ND	9.6	ug/m3
10061-02-6	111	trans-1,3-Dichloropropene	ND	1.6	0.31	ppbv		ND	7.3	ug/m3

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SYSTEM RAW		
Lab Sample ID:	JB17242-1	Date Sampled:	09/20/12
Matrix:	AIR - Air Summa ID: A244	Date Received:	09/25/12
Method:	TO-15	Percent Solids:	n/a
Project:	Elks Plaza, Freeport, NY		

VOA TO15 List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	Units
64-17-5	46.07	Ethanol	90.3	4.0	0.76	ppbv		170	7.5	ug/m3
100-41-4	106.2	Ethylbenzene	ND	1.6	0.24	ppbv		ND	6.9	ug/m3
141-78-6	88	Ethyl Acetate	ND	1.6	0.49	ppbv		ND	5.8	ug/m3
622-96-8	120.2	4-Ethyltoluene	ND	1.6	0.19	ppbv		ND	7.9	ug/m3
76-13-1	187.4	Freon 113	ND	1.6	0.27	ppbv		ND	12	ug/m3
76-14-2	170.9	Freon 114	ND	1.6	0.25	ppbv		ND	11	ug/m3
142-82-5	100.2	Heptane	ND	1.6	0.27	ppbv		ND	6.6	ug/m3
87-68-3	260.8	Hexachlorobutadiene	ND	1.6	0.37	ppbv		ND	17	ug/m3
110-54-3	86.17	Hexane	ND	1.6	0.35	ppbv		ND	5.6	ug/m3
591-78-6	100	2-Hexanone	ND	1.6	0.34	ppbv		ND	6.5	ug/m3
67-63-0	60.1	Isopropyl Alcohol	17.3	1.6	0.47	ppbv		42.5	3.9	ug/m3
75-09-2	84.94	Methylene chloride	ND	1.6	0.22	ppbv		ND	5.6	ug/m3
78-93-3	72.11	Methyl ethyl ketone	ND	1.6	0.38	ppbv		ND	4.7	ug/m3
108-10-1	100.2	Methyl Isobutyl Ketone	ND	1.6	0.29	ppbv		ND	6.6	ug/m3
1634-04-4	88.15	Methyl Tert Butyl Ether	ND	1.6	0.22	ppbv		ND	5.8	ug/m3
80-62-6	100.12	Methylmethacrylate	6.3	1.6	0.34	ppbv		26	6.6	ug/m3
115-07-1	42	Propylene	ND	4.0	0.56	ppbv		ND	6.9	ug/m3
100-42-5	104.1	Styrene	ND	1.6	0.22	ppbv		ND	6.8	ug/m3
71-55-6	133.4	1,1,1-Trichloroethane	ND	1.6	0.18	ppbv		ND	8.7	ug/m3
79-34-5	167.9	1,1,2,2-Tetrachloroethane	ND	1.6	0.24	ppbv		ND	11	ug/m3
79-00-5	133.4	1,1,2-Trichloroethane	ND	1.6	0.24	ppbv		ND	8.7	ug/m3
120-82-1	181.5	1,2,4-Trichlorobenzene	ND	1.6	0.41	ppbv		ND	12	ug/m3
95-63-6	120.2	1,2,4-Trimethylbenzene	ND	1.6	0.19	ppbv		ND	7.9	ug/m3
108-67-8	120.2	1,3,5-Trimethylbenzene	ND	1.6	0.22	ppbv		ND	7.9	ug/m3
540-84-1	114.2	2,2,4-Trimethylpentane	ND	1.6	0.23	ppbv		ND	7.5	ug/m3
75-65-0	74.12	Tertiary Butyl Alcohol	ND	1.6	0.26	ppbv		ND	4.9	ug/m3
127-18-4	165.8	Tetrachloroethylene	498 [a]	0.64	0.45	ppbv		3380 [a]	4.3	ug/m3
109-99-9	72.11	Tetrahydrofuran	ND	1.6	0.37	ppbv		ND	4.7	ug/m3
108-88-3	92.14	Toluene	2.7	1.6	0.32	ppbv		10	6.0	ug/m3
79-01-6	131.4	Trichloroethylene	10.1	0.32	0.26	ppbv		54.3	1.7	ug/m3
75-69-4	137.4	Trichlorofluoromethane	2.0	1.6	0.34	ppbv		11	9.0	ug/m3
75-01-4	62.5	Vinyl chloride	ND	1.6	0.26	ppbv		ND	4.1	ug/m3
108-05-4	86	Vinyl Acetate	ND	1.6	0.45	ppbv		ND	5.6	ug/m3
	106.2	m,p-Xylene	ND	1.6	0.25	ppbv		ND	6.9	ug/m3
95-47-6	106.2	o-Xylene	ND	1.6	0.25	ppbv		ND	6.9	ug/m3
1330-20-7	106.2	Xylenes (total)	ND	1.6	0.25	ppbv		ND	6.9	ug/m3

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	79%	81%	65-128%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SYSTEM RAW		
Lab Sample ID:	JB17242-1	Date Sampled:	09/20/12
Matrix:	AIR - Air Summa ID: A244	Date Received:	09/25/12
Method:	TO-15	Percent Solids:	n/a
Project:	Elks Plaza, Freeport, NY		

VOA TO15 List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	Units

(a) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SYSTEM EXHAUST		
Lab Sample ID:	JB17242-2	Date Sampled:	09/20/12
Matrix:	AIR - Air Summa ID: A291	Date Received:	09/25/12
Method:	TO-15	Percent Solids:	n/a
Project:	Elks Plaza, Freeport, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2W36219.D	1	09/28/12	YMH	n/a	n/a	V2W1517
Run #2							

	Initial Volume
Run #1	400 ml
Run #2	

VOA TO15 List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	Units
67-64-1	58.08	Acetone	8.4	0.20	0.036	ppbv		20	0.48	ug/m3
106-99-0	54.09	1,3-Butadiene	ND	0.20	0.024	ppbv		ND	0.44	ug/m3
71-43-2	78.11	Benzene	0.15	0.20	0.046	ppbv	J	0.48	0.64	ug/m3
75-27-4	163.8	Bromodichloromethane	ND	0.20	0.030	ppbv		ND	1.3	ug/m3
75-25-2	252.8	Bromoform	ND	0.20	0.037	ppbv		ND	2.1	ug/m3
74-83-9	94.94	Bromomethane	ND	0.20	0.037	ppbv		ND	0.78	ug/m3
593-60-2	106.9	Bromoethene	ND	0.20	0.037	ppbv		ND	0.87	ug/m3
100-44-7	126	Benzyl Chloride	ND	0.20	0.041	ppbv		ND	1.0	ug/m3
75-15-0	76.14	Carbon disulfide	ND	0.20	0.032	ppbv		ND	0.62	ug/m3
108-90-7	112.6	Chlorobenzene	ND	0.20	0.027	ppbv		ND	0.92	ug/m3
75-00-3	64.52	Chloroethane	ND	0.20	0.039	ppbv		ND	0.53	ug/m3
67-66-3	119.4	Chloroform	ND	0.20	0.028	ppbv		ND	0.98	ug/m3
74-87-3	50.49	Chloromethane	ND	0.20	0.037	ppbv		ND	0.41	ug/m3
107-05-1	76.53	3-Chloropropene	ND	0.20	0.041	ppbv		ND	0.63	ug/m3
95-49-8	126.6	2-Chlorotoluene	ND	0.20	0.031	ppbv		ND	1.0	ug/m3
56-23-5	153.8	Carbon tetrachloride	ND	0.20	0.040	ppbv		ND	1.3	ug/m3
110-82-7	84.16	Cyclohexane	ND	0.20	0.034	ppbv		ND	0.69	ug/m3
75-34-3	98.96	1,1-Dichloroethane	ND	0.20	0.028	ppbv		ND	0.81	ug/m3
75-35-4	96.94	1,1-Dichloroethylene	ND	0.20	0.046	ppbv		ND	0.79	ug/m3
106-93-4	187.9	1,2-Dibromoethane	ND	0.20	0.027	ppbv		ND	1.5	ug/m3
107-06-2	98.96	1,2-Dichloroethane	ND	0.20	0.043	ppbv		ND	0.81	ug/m3
78-87-5	113	1,2-Dichloropropane	ND	0.20	0.038	ppbv		ND	0.92	ug/m3
123-91-1	88.12	1,4-Dioxane	ND	0.20	0.056	ppbv		ND	0.72	ug/m3
75-71-8	120.9	Dichlorodifluoromethane	0.89	0.20	0.038	ppbv		4.4	0.99	ug/m3
124-48-1	208.3	Dibromochloromethane	ND	0.20	0.027	ppbv		ND	1.7	ug/m3
156-60-5	96.94	trans-1,2-Dichloroethylene	ND	0.20	0.033	ppbv		ND	0.79	ug/m3
156-59-2	96.94	cis-1,2-Dichloroethylene	0.18	0.20	0.038	ppbv	J	0.71	0.79	ug/m3
10061-01-5	111	cis-1,3-Dichloropropene	ND	0.20	0.043	ppbv		ND	0.91	ug/m3
541-73-1	147	m-Dichlorobenzene	ND	0.20	0.037	ppbv		ND	1.2	ug/m3
95-50-1	147	o-Dichlorobenzene	ND	0.20	0.027	ppbv		ND	1.2	ug/m3
106-46-7	147	p-Dichlorobenzene	ND	0.20	0.025	ppbv		ND	1.2	ug/m3
10061-02-6	111	trans-1,3-Dichloropropene	ND	0.20	0.039	ppbv		ND	0.91	ug/m3

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SYSTEM EXHAUST		
Lab Sample ID:	JB17242-2	Date Sampled:	09/20/12
Matrix:	AIR - Air Summa ID: A291	Date Received:	09/25/12
Method:	TO-15	Percent Solids:	n/a
Project:	Elks Plaza, Freeport, NY		

VOA TO15 List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	Units
64-17-5	46.07	Ethanol	3.5	0.50	0.095	ppbv		6.6	0.94	ug/m3
100-41-4	106.2	Ethylbenzene	0.31	0.20	0.031	ppbv		1.3	0.87	ug/m3
141-78-6	88	Ethyl Acetate	ND	0.20	0.061	ppbv		ND	0.72	ug/m3
622-96-8	120.2	4-Ethyltoluene	2.0	0.20	0.024	ppbv		9.8	0.98	ug/m3
76-13-1	187.4	Freon 113	ND	0.20	0.034	ppbv		ND	1.5	ug/m3
76-14-2	170.9	Freon 114	ND	0.20	0.031	ppbv		ND	1.4	ug/m3
142-82-5	100.2	Heptane	ND	0.20	0.033	ppbv		ND	0.82	ug/m3
87-68-3	260.8	Hexachlorobutadiene	ND	0.20	0.046	ppbv		ND	2.1	ug/m3
110-54-3	86.17	Hexane	ND	0.20	0.044	ppbv		ND	0.70	ug/m3
591-78-6	100	2-Hexanone	ND	0.20	0.043	ppbv		ND	0.82	ug/m3
67-63-0	60.1	Isopropyl Alcohol	2.4	0.20	0.059	ppbv		5.9	0.49	ug/m3
75-09-2	84.94	Methylene chloride	0.26	0.20	0.027	ppbv		0.90	0.69	ug/m3
78-93-3	72.11	Methyl ethyl ketone	0.35	0.20	0.048	ppbv		1.0	0.59	ug/m3
108-10-1	100.2	Methyl Isobutyl Ketone	ND	0.20	0.036	ppbv		ND	0.82	ug/m3
1634-04-4	88.15	Methyl Tert Butyl Ether	ND	0.20	0.027	ppbv		ND	0.72	ug/m3
80-62-6	100.12	Methylmethacrylate	ND	0.20	0.043	ppbv		ND	0.82	ug/m3
115-07-1	42	Propylene	ND	0.50	0.070	ppbv		ND	0.86	ug/m3
100-42-5	104.1	Styrene	ND	0.20	0.027	ppbv		ND	0.85	ug/m3
71-55-6	133.4	1,1,1-Trichloroethane	ND	0.20	0.022	ppbv		ND	1.1	ug/m3
79-34-5	167.9	1,1,2,2-Tetrachloroethane	ND	0.20	0.030	ppbv		ND	1.4	ug/m3
79-00-5	133.4	1,1,2-Trichloroethane	ND	0.20	0.030	ppbv		ND	1.1	ug/m3
120-82-1	181.5	1,2,4-Trichlorobenzene	ND	0.20	0.051	ppbv		ND	1.5	ug/m3
95-63-6	120.2	1,2,4-Trimethylbenzene	2.6	0.20	0.024	ppbv		13	0.98	ug/m3
108-67-8	120.2	1,3,5-Trimethylbenzene	0.94	0.20	0.028	ppbv		4.6	0.98	ug/m3
540-84-1	114.2	2,2,4-Trimethylpentane	ND	0.20	0.028	ppbv		ND	0.93	ug/m3
75-65-0	74.12	Tertiary Butyl Alcohol	ND	0.20	0.032	ppbv		ND	0.61	ug/m3
127-18-4	165.8	Tetrachloroethylene	0.17	0.040	0.028	ppbv		1.2	0.27	ug/m3
109-99-9	72.11	Tetrahydrofuran	0.94	0.20	0.047	ppbv		2.8	0.59	ug/m3
108-88-3	92.14	Toluene	0.32	0.20	0.040	ppbv		1.2	0.75	ug/m3
79-01-6	131.4	Trichloroethylene	ND	0.040	0.033	ppbv		ND	0.21	ug/m3
75-69-4	137.4	Trichlorofluoromethane	2.1	0.20	0.042	ppbv		12	1.1	ug/m3
75-01-4	62.5	Vinyl chloride	ND	0.20	0.032	ppbv		ND	0.51	ug/m3
108-05-4	86	Vinyl Acetate	ND	0.20	0.057	ppbv		ND	0.70	ug/m3
	106.2	m,p-Xylene	0.87	0.20	0.031	ppbv		3.8	0.87	ug/m3
95-47-6	106.2	o-Xylene	0.49	0.20	0.031	ppbv		2.1	0.87	ug/m3
1330-20-7	106.2	Xylenes (total)	1.4	0.20	0.031	ppbv		6.1	0.87	ug/m3

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	92%		65-128%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

CHAIN OF CUSTODY
Air Sampling Field Data Sheet

ACCUTEST LABORATORIES
2235 US Highway 130, Dayton, NJ 08810
Tel: 732.329.0200 Fax: 732.329.3499

FED-EX Tracking #: 7090 3269 3725 | Bottle Order Control #: MC-9/6/2012-13 | PAGE 1 OF 1
Lab Quote #: | Lab Job #: JB17242

Client / Reporting Information

Company Name: CA Rich Consultants, Inc.
Address: 17 Dupont Street
City: Plainview State: NY Zip: 11803
Project Contact: Jason Cooper E-mail: jcooper@carichinc.com
Phone #: 516-576-8844 Fax #: 516-576-0093
Sampler(s) Name(s): Jason Cooper

Project Name: Elks Plaza
Street: W. Merrick Road
City: Freeport State: NY
Project #:
Client Purchase Order #:

Weather Parameters

Temperature (Fahrenheit)
Start: 75°F Maximum:
Stop: 70°F Minimum:
Atmoshpheric Pressure (inches of Hg)
Start: Maximum:
Stop: Minimum:
Other weather comment:

Requested Analysis

TO-15

Lab Sample #	Field ID / Point of Collection	Air Type: Indoor (I) Soil Vap (SV) Ambient(A)	Sampling Equipment Info: Canister Serial #	Canister Size 6L or 1L	Flow Controller Serial #	Start Sampling Information: Date	Time (24 hr clock)	Canister Pressure ("Hg)	Interior Temp (F)	Sampler Init.	Stop Sampling Information: Date	Time (24 hr clock)	Canister Pressure ("Hg)	Interior Temp (F)	Sampler Init.	Requested Analysis
-1	System Raw	System	A244	6	NA	9/20/12	1000	NA	70°F	JTC	9/20/12	1000	NA	70°F	JTC	X
-2	System Exhaust	System	A296	6	NA	9/20/12	1010	NA	70°F	JTC	9/20/12	1010	NA	70°F	JTC	X

Turnaround Time (Business-Days)

Standard - 15 Days	X
10 Day	
5 Day	
3 Day	
2 Day	
1 Day	
Other	

Approved By:
Date:

Data Deliverable Information

All NJDEP TO-15 is mandatory Full T1

Comm A	X
Comm B	
Reduced T2	
Full T1	
Other:	

Comments / Remarks

JCMHA

Sample Custody must be documented below each time samples change possession, including courier delivery.

	Relinquished by	Date Time	Received by
1	Greg Mancuso	9/6/12 17:00	Jon T. Cooper
2	Jon T. Cooper	9/24/12	FedEx
3	FEDEX	9/25/12 0830	Snyder
4			
5			

Custody Seal #:

wmk

JB17242: Chain of Custody
Page 1 of 2

ACCUTEST LABORATORIES

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: JB17242 **Client:** _____ **Project:** _____

Date / Time Received: 9/25/2012 **Delivery Method:** _____ **Airbill #'s:** _____

Cooler Temps (Initial/Adjusted):

Cooler Security	Y	or	N		Y	or	N
1. Custody Seals Present:	☑		☐	3. COC Present:	☑		☐
2. Custody Seals Intact:	☑		☐	4. Smpl Dates/Time OK	☑		☐

Cooler Temperature	Y	or	N
1. Temp criteria achieved:	☑		☐
2. Cooler temp verification:			
3. Cooler media:			
4. No. Coolers:			

Quality Control Preservation	Y	or	N	N/A
1. Trip Blank present / cooler:	☐		☑	☐
2. Trip Blank listed on COC:	☐		☑	☐
3. Samples preserved properly:	☑		☐	
4. VOCs headspace free:	☐		☐	☑

Sample Integrity - Documentation	Y	or	N
1. Sample labels present on bottles:	☑		☐
2. Container labeling complete:	☑		☐
3. Sample container label / COC agree:	☑		☐

Sample Integrity - Condition	Y	or	N
1. Sample recvd within HT:	☑		☐
2. All containers accounted for:	☑		☐
3. Condition of sample:	Intact		

Sample Integrity - Instructions	Y	or	N	N/A
1. Analysis requested is clear:	☑		☐	
2. Bottles received for unspecified tests	☐		☑	
3. Sufficient volume recvd for analysis:	☑		☐	
4. Compositing instructions clear:	☐		☐	☑
5. Filtering instructions clear:	☐		☐	☑

Comments

Accutest Laboratories
V:732.329.0200

2235 US Highway 130
F: 732.329.3499

Dayton, New Jersey
www/accutest.com

JB17242: Chain of Custody
Page 2 of 2

Appendix B

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: NYD982183568
2. Page 1 of: 1
3. Emergency Response Phone: 516-818-4765
4. Manifest Tracking Number: 009182208 JJK

GENERATOR

5. Generator's Name and Mailing Address
Elite Plaza
157-189 West Merrick Road
Freeport, NY 11520
Generator's Phone: 516-576-8844

Generator's Site Address (if different than mailing address)

6. Transporter 1 Company Name: Freehold Cartage, Inc.
U.S. EPA ID Number: NJD054126164

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address
Chemtron Corporation
35550 Schneider Court
Avon, OH 44011 USA
U.S. EPA ID Number: OHD086060309
Facility's Phone: 440-937-6348

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes		
X	1. NA3077, RQ, Hazardous Waste Solid, N.O.S., 9, PGIII, (D039,F002)(Tetrachloroethylene) ERG#171 D56127 1	1	DM	175	P	D039	F002	E
	2.							
	3.							
	4.							

14. Special Handling Instructions and Additional Information
9b.1) 20120803-026 Plate # 1726597 ME D56127
Certificate of Disposal Required
16/707

15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: John Dull on behalf of CA Rich
Signature: On behalf of CA Rich
Month: 8 Day: 23 Year: 12

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: Michael Brochon
Signature:
Month: 08 Day: 23 Year: 12
Transporter 2 Printed/Typed Name
Signature
Month Day Year

DESIGNATED FACILITY

18. Discrepancy
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number:
U.S. EPA ID Number
18b. Alternate Facility (or Generator)
Facility's Phone:
18c. Signature of Alternate Facility (or Generator)
Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)
1. H141 2. 3. 4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a
Printed/Typed Name: Joseph J. Kiska
Signature:
Month: 09 Day: 07 Year: 12

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO GENERATOR STATE (IF REQUIRED)

NON-HAZARDOUS WASTE MANIFEST

Please print or type (Form designed for use on elite (12 pitch) typewriter)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: NYD982183568

Manifest Document No.: 38339

2. Page 1 of 1

3. Generator's Name and Mailing Address
Elks Plaza
157-189 West Merrick Road
Freeport, NY 11520
4. Generator's Phone (516) 576-8844

5. Transporter 1 Company Name: Freehold Cartage, Inc.

6. US EPA ID Number: NJD054126164

A. State Transporter's ID: 1726597 NE

B. Transporter 1 Phone: (732)462-1001

7. Transporter 2 Company Name:

8. US EPA ID Number:

C. State Transporter's ID:

D. Transporter 2 Phone:

9. Designated Facility Name and Site Address
Vexor Technology, Inc.
955 West Smith Road
Medina, OH 44256

10. US EPA ID Number: OHD077772895

E. State Facility's ID:

F. Facility's Phone: (330)721-9773

11. WASTE DESCRIPTION	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt./Vol.
a. Non Hazardous Soil Non-DOT Regulated Material DS NOEP 103179	1	DM	425	P
b. 4/v 81714				
c.				
d.				

G. Additional Descriptions for Materials Listed Above

H. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
11a) VEX23656
Certificate of Disposal Required

16. GENERATOR'S CERTIFICATION: I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.

Printed/Typed Name: John Dull on behalf of CA Rich
Signature: John on behalf of CA Rich
Date: Month 8 Day 23 Year 12

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: Michael Brochon
Signature:
Date: Month 08 Day 23 Year 12

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name:
Signature:
Date: Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator; Certification of receipt of the waste materials covered by this manifest, except as noted in item 19.

Printed/Typed Name: JOE MANNINO
Signature:
Date: Month 9 Day 7 Year 12

GENERATOR
TRANSPORTER
FACILITY
NON-HAZARDOUS WASTE

Rev. 3/95