CONRAD GEOSCIENCE CORP.
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Wayne

August 10, 2011

Wayne Mizerak
New York State Dept. of Environmental Conservation
Division of Environmental Remediation
625 Broadway, 11th Floor
Albany, New York 12233-7014

AUG 16 2011

Re: **January/February 2011 Vapor Intrusion Sampling Results;**
Apple Valley Shopping Center Superfund Site, LaGrange, New York
Index No. II-CERCLA-10224
NYSDEC Site #3-14-084
Conrad Geoscience File #AL030070

Dear Mr. Mizerak:

In January and February 2011, Conrad Geoscience Corp. conducted annual vapor intrusion sampling at the Apple Valley Shopping Center in LaGrange, New York (Figure 1). Locations designated for vapor intrusion monitoring include the existing sample points and indoor air at Ciccio's Pizzeria and Dollar Value. An ambient outdoor air sample is also collected at an upwind location. Field activities, procedures, and results are summarized below.

SUB-SLAB VAPOR AND INDOOR AIR QUALITY MONITORING

On January 19 and 20, 2011, Conrad Geoscience collected one sub-slab vapor sample from Ciccio's Pizzeria (formerly Absolute Pizza and Pizza Pete's) and one sub-slab vapor sample from the recently-vacated Dollar Value (and formerly LaGrange Pharmacy). Prior to sample collection, each sampling port was purged by attaching a peristaltic sampling pump to the threaded coupling and evacuating the vapors into two 1-liter Tedlar® bags. The contents of each Tedlar® bag were screened with a photoionization detector (PID). which detects total volatile organic compounds (VOCs), and a 4-gas meter, which measures percent oxygen (% O_2), percent of lower explosive limit (% LEL), carbon monoxide (CO), and hydrogen sulfide (H_2S).

After purging, Conrad Geoscience collected sub-slab vapor samples by connecting each sampling port to a flow controller with dedicated tubing. The flow controller was set to collect the sample over a 24-hour period, then connected to the 1-liter Summa canister.

Simultaneous ambient indoor air samples were collected at each of the two sub-slab sample locations using identical Summa canisters. One ambient indoor air sample was collected in Ciccio's Pizzeria (IAAP-1) (Figure 2) and one ambient indoor air sample was collected in the former Dollar Value (IALP-1) (Figure 3).

An ambient outdoor air sample was collected using a 1-liter Summa canister, simultaneously with other air samples. Wind direction at the time of deployment was from the northwest and Outdoor Air Sample (OA-11) was collected at the southwestern corner of the building (Figure 3).

The sub-slab depressurization systems in Ciccio's Pizzeria and Walgreens remained in operation during the sampling event. Manometers on the systems indicated negative pressure was being maintained beneath the slab at those locations.

Summa canisters were retrieved on January 20, 2011, at the end of the 24-hour sampling period. Canisters were shipped via overnight delivery to Paradigm Environmental Services in Rochester, New York, a NYSDOH-certified laboratory, on January 20, 2011. Samples were analyzed for Tetrachloroethene (PCE); Trichloroethene (TCE); cis-1,2-Dichloroethene; and Vinyl Chloride via USEPA Method TO-15.

Following analysis by Paradigm Environmental Services, it was determined that the regulator for IAAP-1 had collected the sample over only five hours. Due to this significantly shortened sampling period, NYSDOH and NYSDEC required resampling at IAAP-1 and collection of a background ambient outdoor air sample. On February 7, 2011, Conrad Geoscience collected IAAP-1, SVAP-1, and the outdoor air sample (OA-12). Sampling and shipping procedures during this sampling event were followed as outlined previously.

Sample numbers are as follows:

Location	Sub-Slab Vapor	Indoor Air	Outdoor Air
Ciccio's Pizzeria	SVAP-1	IAAP-1	
Former Dollar Value	SVLP-1	IALP-1	
Outdoor Air			OA-11 and OA-12

RESULTS

Sample results are summarized below and in Table 1. Copies of laboratory reports are attached.

Outdoor Air

Outdoor Air Sample OA-11 contained PCE (2.05 $\mu g/m^3$). TCE; cis-1,2-Dichloroethene; and Vinyl Chloride were not detected in the outdoor air sample.

Outdoor Air Sample OA-12 contained TCE (0.288 $\mu g/m^3$). PCE; cis-1,2-Dichloroethene; and Vinyl Chloride were not detected in the outdoor air sample.

Ciccio's Pizzeria

Sub-Slab Sample SVAP-1 contained PCE (1.37 $\mu g/m^3$) and TCE (0.284 $\mu g/m^3$). Cis-1,2-Dichloroethene and Vinyl Chloride were not detected in the sub-slab vapor sample.

Indoor Air Sample IAAP-1 contained PCE (1.16 $\mu g/m^3$). TCE; cis-1,2-Dichloroethene; and Vinyl Chloride were not detected in the indoor air sample.

Former Dollar Value

Sub-Slab Sample SVLP-1 contained PCE (15.4 $\mu g/m^3$) and TCE (0.750 $\mu g/m^3$). Neither cis-1,2-Dichloroethene nor Vinyl Chloride were detected in the sub-slab vapor sample.

Indoor Air Sample IALP-1 contained PCE (1.84 $\mu g/m^3$). TCE; cis-1,2-Dichloroethene; and Vinyl Chloride were not detected in the indoor air sample.

DISCUSSION

Outdoor Air

One target compound, PCE, was detected in Outdoor Air Sample OA-11 (2.05 $\mu g/m^3$). One target compound, TCE, was detected in Outdoor Air Sample OA-12 (0.288 $\mu g/m^3$). Target compounds have been present in upwind outdoor air samples at low concentrations during previous sampling events (Table 1). While these samples were positioned at a location that was upwind at the time of deployment, wind directions may have varied over the 24-hour period, or these low concentrations originated from an off-site source.

Ciccio's Pizzeria

A sub-slab depressurization system (SSDS) was installed at Ciccio's Pizzeria in 2006 to

prevent vapors from accumulating beneath the floor slab or in indoor air. The SSDS at the pizzeria is inspected biweekly to confirm its continuous operation.

Analytical results from the February 2011 sampling indicate that PCE was present in both sub-slab and indoor air samples, SVAP-1 and IAAP-1. The detected values are consistent with previous vapor samples collected at this location since 2007. TCE was present in sub-slab sample SVAP-1, but not present in indoor air. Cis-1,2-Dichloroethene and Vinyl Chloride remained undetected in both sub-slab and indoor air samples.

Following is a summary table of vapor monitoring results for the Ciccio's Pizzeria tenant space since 2007:

Date	Constituent	SVAP-1	IAAP-1
1-16-07	PCE	2.86	1.82
	TCE	0.316	ND
	DCE	ND	ND
	VC	ND	ND
1-28-08	PCE	5.59	2.67
	TCE	1.85	0.329
	DCE	ND	ND
	VC	ND	ND
1-15-09	PCE	ND	ND
	TCE	ND	ND
	DCE	ND	ND
	VC	ND	ND
3-1-10	PCE	1.36	1.33
	TCE	ND	ND
	DCE	ND	ND
	VC	ND	ND
2-7-11	PCE	1.37	1.16
	TCE	0.284	ND
	DCE	ND	ND
	VC	ND	ND

Former Dollar Value

Analytical results from the January 2011 sampling indicate that PCE and TCE were present in the sub-slab sample, SVLP-1, only. PCE was present in the indoor air sample, IALP-1. PCE was also present in the outdoor air sample collected simultaneously with sub-slab and indoor air samples. Given that PCE was present in both outdoor and indoor air, a potential contribution from the outdoor air cannot be ruled out.

The detected values are consistent with previous vapor samples. Neither cis-1,2-Dichloroethene nor Vinyl Chloride were present in either indoor air or sub-slab vapor sample.

Following is a summary table of vapor monitoring results for the Dollar Value tenant space since 2007:

Date	Constituent	SVLP-1	IALP-1
1-16-07	PCE	213	22.9
	TCE	7.44	0.457
	DCE	ND	1.16
	VC	ND	ND
1-28-08	PCE	219	2.14
	TCE	11.0	4.26
	DCE	ND	ND
	VC	ND	ND
1-15-09	PCE	23.1	1.03
	TCE	1.35	ND
	DCE	ND	ND
	VC	ND	ND
3-1-10	PCE	12.1	1.40
	TCE	2.45	ND
	DCE	ND	ND
	VC	ND	ND
1-19-11	PCE	15.4	1.84
	TCE	0.750	ND
	DCE	ND	ND
	VC	ND	ND

CONCLUSION

Operation of the groundwater remediation system and sub-slab depressurization systems has significantly lowered the VOC concentrations in the sub-slab and indoor air.

If you have any questions please feel free to contact me.

Sincerely,

CONRAD GEOSCIENCE CORP.

Christopher B. Brown, CPG
Vice President\Senior Hydrogeologist

CBB/tla

attachments

cc: James A. Klein, Apple Valley
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Mark Millspaugh, Sterling Environmental
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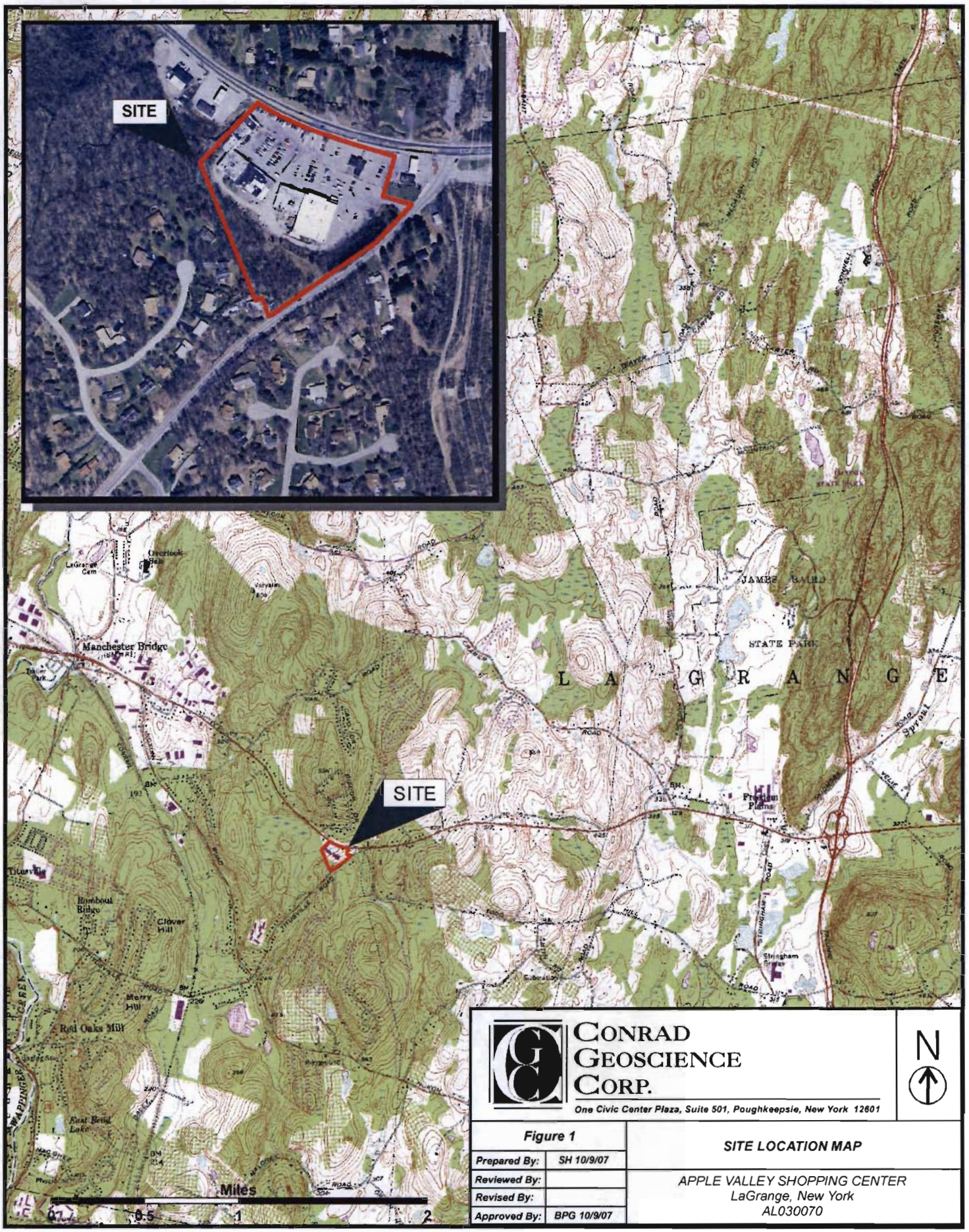

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Figure 1		SITE LOCATION MAP
Prepared By:	SH 10/9/07	
Reviewed By:		APPLE VALLEY SHOPPING CENTER LaGrange, New York AL030070
Revised By:		
Approved By:	BPG 10/9/07	

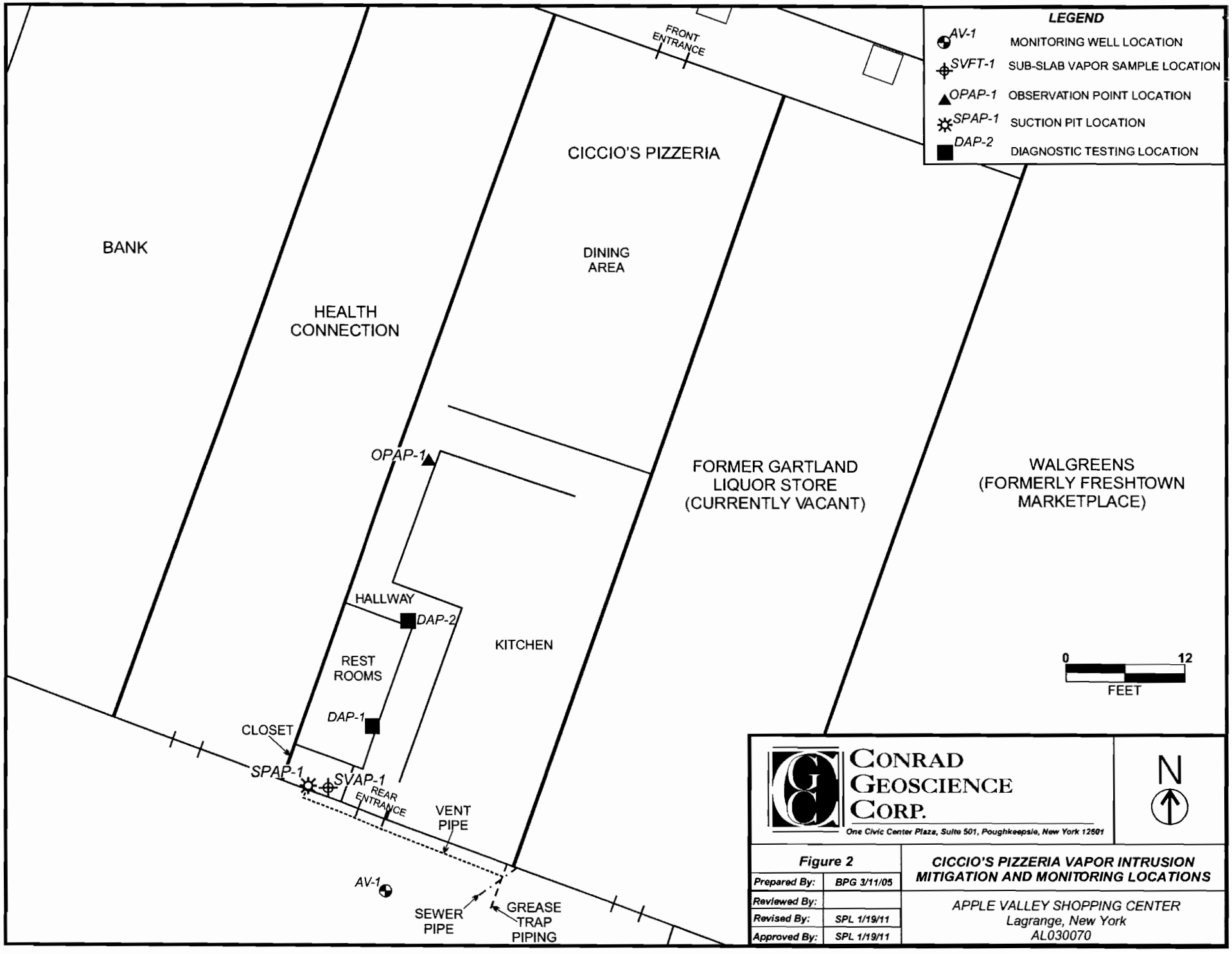

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Figure 2		CICCIO'S PIZZERIA VAPOR INTRUSION MITIGATION AND MONITORING LOCATIONS
Prepared By:	BPG 3/11/05	
Reviewed By:		APPLE VALLEY SHOPPING CENTER Lagrange, New York AL030070
Revised By:	SPL 1/19/11	
Approved By:	SPL 1/19/11	

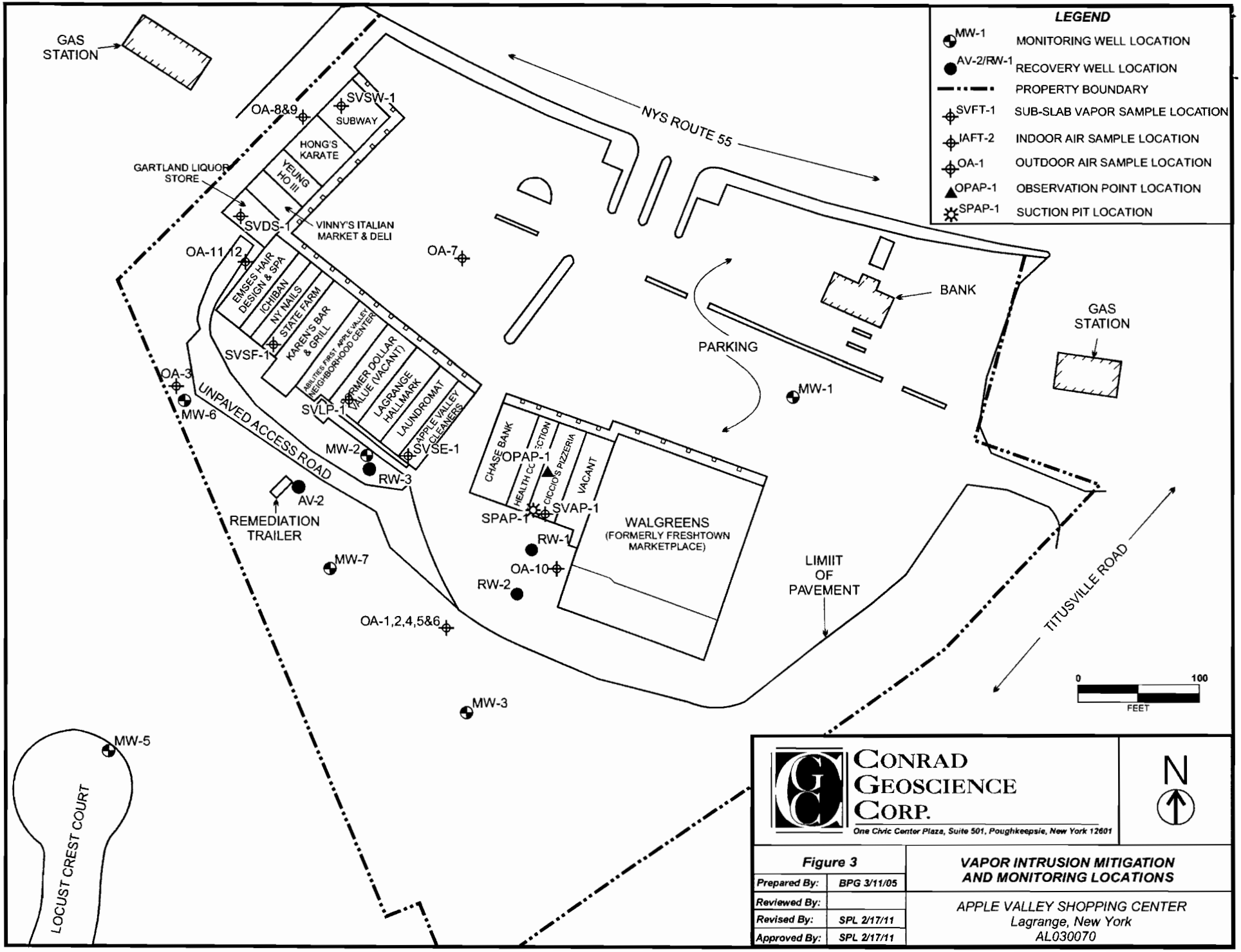

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Figure 3		VAPOR INTRUSION MITIGATION AND MONITORING LOCATIONS
Prepared By:	BPG 3/11/05	
Reviewed By:		APPLE VALLEY SHOPPING CENTER Lagrange, New York AL030070
Revised By:	SPL 2/17/11	
Approved By:	SPL 2/17/11	

Table 1. **Volatile Organic Compounds (VOCs) in Ciccio's Pizzeria and Dollar Value Sub-Slab Vapor, Ambient Indoor Air, and Ambient Outdoor Air Samples;** USEPA TO-15; collected **January 2005 through February 2011;** Apple Valley Shopping Center, Lagrange, New York;
Conrad Geoscience File #AL030070

Sample Identification		Dates Sampled	Constituent			
			Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
Volatile Organic Compounds						
Ciccio's Pizzeria (formerly Pizza Pete's and Absolute Pizza)	SVAP-1	1-26-05	***160***	3.6	ND < 0.79	ND < 0.79
		1-17-06	***307,000 E***	***8,990 E***	277	ND < 1.27
		6-1-06	***119,000 E***	***3,550 E***	269	ND < 5.07
		8-7-06	***20,800 E***	***643 E***	34.5	ND < 7.25
		1-16-07	2.86	0.316	ND < 0.483	ND < 0.312
		1-28-08	6.59	1.85	ND< 0.412	ND< 0.266
		1-15-09	ND<0.671	ND<0.250	ND<0.393	ND<0.254
		3-1-10	1.36	ND<0.250	ND<0.393	ND<0.254
		2-7-11	1.37	0.284	ND<0.393	ND<0.254
	IAAP-1	1-26-05	***26***	ND < 0.84	ND < 0.84	ND < 0.84
		1-17-06	***584 E***	***7.39***	ND < 1.96	ND < 1.27
		6-1-06	***57.1***	***1.38***	ND < 2.49	ND < 1.61
		8-7-06	***44.7***	ND < 4.05	ND < 11.2	ND < 7.25
		1-16-07	1.82	ND < 0.294	ND < 0.463	ND < 0.299
		1-28-08	2.67	0.329	ND< 0.400	ND< 0.259
		1-15-09	ND<0.669	ND<0.249	ND<0.392	ND<0.253
		3-1-10	1.33	ND<0.250	ND<0.393	ND<0.254
		2-7-11	1.16	ND<0.250	ND<0.393	ND<0.254

Notes:
All units are ug/m^3 unless otherwise noted;
Boldface and italic type indicates need for ongoing monitoring or other action;
IA prefix represents ambient indoor air samples;
OA prefix represents ambient outdoor air samples;
SV prefix represents sub-slab vapor samples;
E = Exceeds calibration range.

Table 1 cont'd. **Volatile Organic Compounds (VOCs) in Ciccio's Pizzeria and Dollar Value Sub-Slab Vapor, Ambient Indoor Air, and Ambient Outdoor Air Samples;** USEPA TO-15; collected **January 2005 through February 2011;** Apple Valley Shopping Center, Lagrange, New York; Conrad Geoscience File #AL030070

Sample Identification		Dates Sampled	Constituent			
			Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
Volatile Organic Compounds						
Dollar Value (formerly Lagrange Pharmacy)	SVLP-1	1-26-05	***220***	10	ND < 0.85	ND < 0.85
		1-17-06	***166***	***42.1***	4.67	ND < 1.27
		6-1-06	***235***	***17.0***	ND < 7.85	ND < 5.07
		1-16-07	***213***	***7.44***	ND < 7.46	ND < 4.82
		1-28-08	**219 E**	***11.0***	ND< 0.475	ND< 0.307
		1-15-09	23.1	1.35	ND<0.393	ND<0.254
		3-1-10	12.1	2.45	ND<0.400	ND<0.259
		1-19-11	15.4	0.750	ND<0.416	ND<0.269
	IALP-1	1-26-05	1.5	ND < 1.5	ND < 1.5	ND < 1.5
		1-17-06	***172***	4.62	ND < 1.96	ND < 1.27
		6-1-06	1.18	***0.261***	ND < 0.392	ND < 0.253
		1-16-07	***22.9***	***0.457***	1.16	ND < 0.330
		1-28-08	2.14	***4.26***	ND< 0.561	ND< 0.363
		1-15-09	1.03	ND<0.256	ND<0.400	ND<0.259
		3-1-10	1.40	ND<0.256	ND<0.400	ND<0.259
		1-19-11	1.84	ND<0.256	ND<0.400	ND<0.259

Notes:
All units are ug/m^3 unless otherwise noted;
Boldface and italic type indicates need for ongoing monitoring or other action;
IA prefix represents ambient indoor air samples;
OA prefix represents ambient outdoor air samples;
SV prefix represents sub-slab vapor samples;
E = Exceeds calibration range.

Table 1 cont'd. **Volatile Organic Compounds (VOCs) in Ciccio's Pizzeria and Dollar Value Sub-Slab Vapor, Ambient Indoor Air, and Ambient Outdoor Air Samples;** USEPA TO-15; collected **January 2005 through February 2011;** Apple Valley Shopping Center, Lagrange, New York; Conrad Geoscience File #AL030070

Sample Identification		Dates Sampled	Constituent			
			Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
Volatile Organic Compounds						
Outdoor Air	OA-1	1-26-05	ND < 0.69	ND < 0.69	ND < 0.69	ND < 0.69
	OA-2	4-29-05	ND < 0.72	ND < 0.72	ND < 0.72	ND < 0.72
	OA-3	11-29-05	ND < 3.35	ND < 2.66	ND < 1.96	ND < 1.27
	OA-4	1-17-06	10.5	ND < 2.66	ND < 1.96	ND < 1.27
	OA-5	6-1-06	530	12.4	ND < 7.85	ND < 5.07
	OA-6	8-7-06	1.77	ND < 0.242	ND < 0.671	ND < 0.434
	OA-7	1-16-07	ND < 0.669	ND < 0.249	ND < 0.392	ND < 0.253
	OA-8	1-28-08	ND< 0.691	ND< 0.256	ND< 0.404	ND< 0.261
	OA-9	1-15-09	ND<0.704	0.29	ND<0.412	ND<0.266
	OA-10	3-1-10	0.812	ND<0.250	ND<0.393	ND<0.254
	OA-11	1-19-11	2.05	ND<0.263	ND<0.412	ND<0.266
	OA-12	2-7-11	ND<0.691	0.288	ND<0.404	ND<0.261

Notes:
All units are ug/m^3 unless otherwise noted;
Boldface and italic type indicates need for ongoing monitoring or other action;
IA prefix represents ambient indoor air samples;
OA prefix represents ambient outdoor air samples;
SV prefix represents sub-slab vapor samples;
E = Exceeds calibration range.

Table 3.2 General format of a decision matrix

	Indoor Air Concentration of Volatile Chemical (mcg/m^3)		
Sub-slab Vapor Concentration of Volatile Chemical (mcg/m^3)	Concentration Range 1	Concentration Range 2	Concentration Range 3
Concentration Range 1	ACTION	ACTION	ACTION
Concentration Range 2	ACTION	ACTION	ACTION
Concentration Range 3	ACTION	ACTION	ACTION

Indoor air and sub-slab vapor concentration ranges in a matrix are selected based on a number of considerations in addition to health risks. For example, factors that are considered when selecting the ranges include, but are not limited to, the following:

a. human health risks (i.e., cancer and non-cancer health effects) associated with exposure to the volatile chemical in air;

b. the NYSDOH's guidelines for volatile chemicals in air [Table 3.1];

c. background concentrations of volatile chemicals in air [Section 3.2.4];

d. analytical capabilities currently available; and

e. attenuation factors (i.e., the ratio of indoor air to sub-slab vapor concentrations).

3.4.2 Matrices

The NYSDOH has developed two matrices, which are included at the end of Section 3.4, to use as tools in making decisions when soil vapor may be entering buildings. The first decision matrix was originally developed for TCE and the second for PCE. As summarized in Table 3.3, four chemicals have been assigned to the two matrices to date.

Table 3.3 Volatile chemicals and their decision matrices

Chemical	**Soil Vapor/Indoor Air Matrix***
Carbon tetrachloride	Matrix 1
Tetrachloroethene (PCE)	Matrix 2
1,1,1-Trichloroethane (1,1,1-TCA)	Matrix 2
Trichloroethene (TCE)	Matrix 1

*The decision matrices are available at the end of Section 3.4.

Because the matrices are risk management tools and consider a number of factors, the NYSDOH intends to assign chemicals to one of these two matrices, if possible. For example, if a chemical other than those already assigned to a matrix is identified as a chemical of concern during a soil vapor intrusion investigation, assignment of that chemical into one of the existing decision matrices will be considered by the NYSDOH. Factors that will be considered in assigning a chemical to a matrix include, but are not limited to, the following:

a. human health risks, including such factors as a chemical's ability to cause cancer, reproductive, developmental, liver, kidney, nervous system, immune system or other effects, in animals and humans and the doses that may cause those effects;

b. the data gaps in its toxicologic database;

c. background concentrations of volatile chemicals in indoor air [Section 3.2.4]; and

d. analytical capabilities currently available.

If the NYSDOH determines that the assignment of the chemical into an existing matrix is inappropriate, then the NYSDOH will either modify an existing matrix or develop a new matrix.

To use the matrices appropriately as a tool in the decision-making process, the following should be considered:

a. The matrices are generic. As such, it may be appropriate to modify a recommended action to accommodate building-specific conditions (e.g., dirt floor in basement, crawl spaces, etc.) and/or factors provided in Section 3.2 of the guidance (e.g., current land use, environmental conditions, etc.). For example, resampling may be recommended when the matrix indicates "no further action" for a particular building, but the results of adjacent buildings (especially sub-slab vapor results) indicate a need to take actions to address exposures related to soil vapor intrusion. Additionally, actions more protective of public health than those specified within the matrix may be proposed at any time. For example, the party implementing the actions may decide to install sub-slab depressurization systems on buildings where the matrix indicates "no further action" or "monitoring." Such an action is usually undertaken for reasons other than public health (e.g., seeking community acceptance, reducing excessive costs, etc.).

b. Indoor air concentrations detected in samples collected from the building's basement or, if the building has a slab-on-grade foundation, from the building's lowest occupied living space should be used.

c. Actions provided in the matrix are specific to addressing human exposures. Implementation of these actions does not preclude investigating possible sources of vapor contamination, nor does it preclude remediating contaminated soil vapors or the source of soil vapor contamination.

d. When current exposures are attributed to sources other than vapor intrusion, the agencies should be provided documentation(e.g., applicable environmental data, completed indoor air sampling questionnaire, digital photographs, etc.) to support a proposed action other than that provided in the matrix and to support assessment and follow-up by the agencies.

3.4.3 Description of recommended actions

Actions recommended in the matrix are based on the relationship between sub-slab vapor concentrations and corresponding indoor air concentrations. They are intended to address both potential and current human exposures and include the following:

a. *No further action*

When the volatile chemical is not detected in the indoor air sample and the concentration detected in the corresponding sub-slab vapor sample is not expected to substantially affect indoor air quality.

b. *Take reasonable and practical actions to identify source(s) and reduce exposures*

The concentration detected in the indoor air sample is likely due to indoor and/or outdoor sources rather than soil vapor intrusion given the concentration detected in the sub-slab vapor sample. Therefore, steps should be taken to identify potential source(s) and to reduce exposures accordingly (e.g., by keeping containers tightly capped or by storing volatile chemical-containing products in places where people do not spend much time, such as a garage or shed). Resampling may also be recommended to demonstrate the effectiveness of actions taken to reduce exposures.

d. *Monitor*

Monitoring, including sub-slab vapor, basement air, lowest occupied living space air, and outdoor air sampling, is appropriate to determine whether concentrations in the indoor air or sub-slab vapor have changed. Monitoring may also be appropriate to determine whether existing building conditions (e.g., positive pressure HVAC systems) are maintaining the desired mitigation endpoint and to determine whether changes are appropriate.

The type and frequency of monitoring is determined on a site-specific and building-specific basis, taking into account applicable environmental data and building operating conditions.

e. *Mitigate*

Mitigation is appropriate to minimize current or potential exposures associated with soil vapor intrusion. Methods to mitigate exposures related to soil vapor intrusion are described in Section 4.

f. *Monitor / Mitigate*

Monitoring or mitigation may be recommended after considering the magnitude of sub-slab vapor and indoor air concentrations along with building- and site-specific conditions.

Soil Vapor/Indoor Air Matrix 1

October 2006

	INDOOR AIR CONCENTRATION of COMPOUND (mcg/m^3)			
SUB-SLAB VAPOR CONCENTRATION of COMPOUND (mcg/m^3)	< 0.25	0.25 to < 1	1 to < 5.0	5.0 and above
< 5	1. No further action	2. Take reasonable and practical actions to identify source(s) and reduce exposures	3. Take reasonable and practical actions to identify source(s) and reduce exposures	4. Take reasonable and practical actions to identify source(s) and reduce exposures
5 to < 50	5. No further action	6. MONITOR	7. MONITOR	8. MITIGATE
50 to < 250	9. MONITOR	10. MONITOR / MITIGATE	11. MITIGATE	12. MITIGATE
250 and above	13. MITIGATE	14. MITIGATE	15. MITIGATE	16. MITIGATE

No further action:
Given that the compound was not detected in the indoor air sample and that the concentration detected in the sub-slab vapor sample is not expected to significantly affect indoor air quality, no additional actions are needed to address human exposures.

Take reasonable and practical actions to identify source(s) and reduce exposures:
The concentration detected in the indoor air sample is likely due to indoor and/or outdoor sources rather than soil vapor intrusion given the concentration detected in the sub-slab vapor sample. Therefore, steps should be taken to identify potential source(s) and to reduce exposures accordingly (e.g., by keeping containers tightly capped or by storing volatile organic compound-containing products in places where people do not spend much time, such as a garage or outdoor shed). Resampling may be recommended to demonstrate the effectiveness of actions taken to reduce exposures.

MONITOR:
Monitoring, including sub-slab vapor, basement air, lowest occupied living space air, and outdoor air sampling, is needed to determine whether concentrations in the indoor air or sub-slab vapor have changed. Monitoring may also be needed to determine whether existing building conditions (e.g., positive pressure heating, ventilation and air-conditioning systems) are maintaining the desired mitigation endpoint and to determine whether changes are needed. The type and frequency of monitoring is determined on a site-specific and building-specific basis, taking into account applicable environmental data and building operating conditions. Monitoring is an interim measure required to evaluate exposures related to soil vapor intrusion until contaminated environmental media are remediated.

MITIGATE:
Mitigation is needed to minimize current or potential exposures associated with soil vapor intrusion. The most common mitigation methods are sealing preferential pathways in conjunction with installing a sub-slab depressurization system, and changing the pressurization of the building in conjunction with monitoring. The type, or combination of types, of mitigation is determined on a building-specific basis, taking into account building construction and operating conditions. Mitigation is considered a temporary measure implemented to address exposures related to soil vapor intrusion until contaminated environmental media are remediated.

MONITOR / MITIGATE:
Monitoring or mitigation may be recommended after considering the magnitude of sub-slab vapor and indoor air concentrations along with building- and site-specific conditions.

See additional notes on page 2.

ADDITIONAL NOTES FOR MATRIX 1

This matrix summarizes the minimum actions recommended to address current and potential exposures related to soil vapor intrusion. To use the matrix appropriately as a tool in the decision-making process, the following should be noted:

[1] The matrix is generic. As such, it may be appropriate to modify a recommended action to accommodate building-specific conditions (e.g., dirt floor in basement, crawl spaces, etc.) and/or factors provided in Section 3.2 of the guidance (e.g., current land use, environmental conditions, etc.). For example, resampling may be recommended when the matrix indicates "no further action" for a particular building, but the results of adjacent buildings (especially sub-slab vapor results) indicate a need to take actions to address exposures related to soil vapor intrusion. Additionally, actions more protective of public health than those specified within the matrix may be proposed at any time. For example, the party implementing the actions may decide to install sub-slab depressurization systems on buildings where the matrix indicates "no further action" or "monitoring." Such an action is usually undertaken for reasons other than public health (e.g., seeking community acceptance, reducing excessive costs, etc.).

[2] Actions provided in the matrix are specific to addressing human exposures. Implementation of these actions does not preclude investigating possible sources of vapor contamination, nor does it preclude remediating contaminated soil vapors or the source of soil vapor contamination.

[3] Appropriate care should be taken during all aspects of sample collection to ensure that high quality data are obtained. Since the data are being used in the decision-making process, the laboratory analyzing the environmental samples must have current Environmental Laboratory Approval Program (ELAP) certification for the appropriate analyte and environmental matrix combinations. Furthermore, samples should be analyzed by methods that can achieve a minimum reporting limit of 0.25 microgram per cubic meter for indoor and outdoor air samples. For sub-slab vapor samples, a minimum reporting limit of 5 micrograms per cubic meter is recommended for buildings with full slab foundations, and 1 microgram per cubic meter for buildings with less than a full slab foundation.

[4] Sub-slab vapor and indoor air samples are typically collected when the likelihood of soil vapor intrusion to occur is considered to be the greatest (i.e., worst-case conditions). If samples are collected at other times (typically, samples collected outside of the heating season), then resampling during worst-case conditions may be appropriate to verify that actions taken to address exposures related to soil vapor intrusion are protective of human health.

[5] When current exposures are attributed to sources other than soil vapor intrusion, the agencies should be given documentation (e.g., applicable environmental data, completed indoor air sampling questionnaire, digital photographs, etc.) to support a proposed action other than that provided in the matrix box and to support agency assessment and follow-up.

[6] The party responsible for implementing the recommended actions will differ depending upon several factors, including the identified source of the volatile chemicals, the environmental remediation program, and site-specific and building-specific conditions. For example, to the extent that all site data and site conditions demonstrate that soil vapor intrusion is not occurring and that the potential for soil vapor intrusion to occur is not likely, the soil vapor intrusion investigation would be considered complete. In general, if indoor exposures represent a concern due to indoor sources, then the State will provide guidance to the property owner and/or tenant on ways to reduce their exposure. If indoor exposures represent a concern due to outdoor sources, then the NYSDEC will decide who is responsible for further investigation and any necessary remediation. Depending upon the outdoor source, this responsibility may or may not fall upon the party conducting the soil vapor intrusion investigation.

Soil Vapor/Indoor Air Matrix 2

October 2006

	INDOOR AIR CONCENTRATION of COMPOUND (mcg/m^3)			
SUB-SLAB VAPOR CONCENTRATION of COMPOUND (mcg/m^3)	< 3	3 to < 30	30 to < 100	100 and above
< 100	1. No further action	2. Take reasonable and practical actions to identify source(s) and reduce exposures	3. Take reasonable and practical actions to identify source(s) and reduce exposures	4. Take reasonable and practical actions to identify source(s) and reduce exposures
100 to < 1,000	5. MONITOR	6. MONITOR / MITIGATE	7. MITIGATE	8. MITIGATE
1,000 and above	9. MITIGATE	10. MITIGATE	11. MITIGATE	12. MITIGATE

No further action:
Given that the compound was not detected in the indoor air sample and that the concentration detected in the sub-slab vapor sample is not expected to significantly affect indoor air quality, no additional actions are needed to address human exposures.

Take reasonable and practical actions to identify source(s) and reduce exposures:
The concentration detected in the indoor air sample is likely due to indoor and/or outdoor sources rather than soil vapor intrusion given the concentration detected in the sub-slab vapor sample. Therefore, steps should be taken to identify potential source(s) and to reduce exposures accordingly (e.g., by keeping containers tightly capped or by storing volatile organic compound-containing products in places where people do not spend much time, such as a garage or outdoor shed). Resampling may be recommended to demonstrate the effectiveness of actions taken to reduce exposures.

MONITOR:
Monitoring, including sub-slab vapor, basement air, lowest occupied living space air, and outdoor air sampling, is needed to determine whether concentrations in the indoor air or sub-slab vapor have changed. Monitoring may also be needed to determine whether existing building conditions (e.g., positive pressure heating, ventilation and air-conditioning systems) are maintaining the desired mitigation endpoint and to determine whether changes are needed. The type and frequency of monitoring is determined on a site-specific and building-specific basis, taking into account applicable environmental data and building operating conditions. Monitoring is an interim measure required to evaluate exposures related to soil vapor intrusion until contaminated environmental media are remediated.

MITIGATE:
Mitigation is needed to minimize current or potential exposures associated with soil vapor intrusion. The most common mitigation methods are sealing preferential pathways in conjunction with installing a sub-slab depressurization system, and changing the pressurization of the building in conjunction with monitoring. The type, or combination of types, of mitigation is determined on a building-specific basis, taking into account building construction and operating conditions. Mitigation is considered a temporary measure implemented to address exposures related to soil vapor intrusion until contaminated environmental media are remediated.

MONITOR / MITIGATE:
Monitoring or mitigation may be recommended after considering the magnitude of sub-slab vapor and indoor air concentrations along with building- and site-specific conditions.

See additional notes on page 2.

ADDITIONAL NOTES FOR MATRIX 2

This matrix summarizes the minimum actions recommended to address current and potential exposures related to soil vapor intrusion. To use the matrix appropriately as a tool in the decision-making process, the following should be noted:

[1] The matrix is generic. As such, it may be appropriate to modify a recommended action to accommodate building-specific conditions (e.g., dirt floor in basement, crawl spaces, etc.) and/or factors provided in Section 3.2 of the guidance (e.g., current land use, environmental conditions, etc.). For example, resampling may be recommended when the matrix indicates "no further action" for a particular building, but the results of adjacent buildings (especially sub-slab vapor results) indicate a need to take actions to address exposures related to soil vapor intrusion. Additionally, actions more protective of public health than those specified within the matrix may be proposed at any time. For example, the party implementing the actions may decide to install sub-slab depressurization systems on buildings where the matrix indicates "no further action" or "monitoring." Such an action is usually undertaken for reasons other than public health (e.g., seeking community acceptance, reducing excessive costs, etc.).

[2] Actions provided in the matrix are specific to addressing human exposures. Implementation of these actions does not preclude investigating possible sources of vapor contamination, nor does it preclude remediating contaminated soil vapors or the source of soil vapor contamination.

[3] Appropriate care should be taken during all aspects of sample collection to ensure that high quality data are obtained. Since the data are being used in the decision-making process, the laboratory analyzing the environmental samples must have current Environmental Laboratory Approval Program (ELAP) certification for the appropriate analyte and environmental matrix combinations. Furthermore, samples should be analyzed by methods that can achieve a minimum reporting limit of 3 micrograms per cubic meter for indoor and outdoor air samples. For sub-slab vapor samples, a minimum reporting limit of 5 micrograms per cubic meter is recommended.

[4] Sub-slab vapor and indoor air samples are typically collected when the likelihood of soil vapor intrusion to occur is considered to be the greatest (i.e., worst-case conditions). If samples are collected at other times (typically, samples collected outside of the heating season), then resampling during worst-case conditions may be appropriate to verify that actions taken to address exposures related to soil vapor intrusion are protective of human health.

[5] When current exposures are attributed to sources other than soil vapor intrusion, the agencies should be given documentation (e.g., applicable environmental data, completed indoor air sampling questionnaire, digital photographs, etc.) to support a proposed action other than that provided in the matrix box and to support agency assessment and follow-up.

[6] The party responsible for implementing the recommended actions will differ depending upon several factors, including the identified source of the volatile chemicals, the environmental remediation program, and site-specific and building-specific conditions. For example, to the extent that all site data and site conditions demonstrate that soil vapor intrusion is not occurring and that the potential for soil vapor intrusion to occur is not likely, the soil vapor intrusion investigation would be considered complete. In general, if indoor exposures represent a concern due to indoor sources, then the State will provide guidance to the property owner and/or tenant on ways to reduce their exposure. If indoor exposures represent a concern due to outdoor sources, then the NYSDEC will decide who is responsible for further investigation and any necessary remediation. Depending upon the outdoor source, this responsibility may or may not fall upon the party conducting the soil vapor intrusion investigation.

PARADIGM

ENVIRONMENTAL SERVICES, INC.

Analytical Report Cover Page

Conrad Geoscience

For Lab Project # 11-0354
Issued January 28, 2011
This report contains a total of 9 pages

The reported results relate only to the samples as they have been received by the laboratory.

Any noncompliant QC parameters having impact on the data are flagged or documented on the final report.

All soil/sludge samples have been reported on a dry weight basis, unless qualified "reported as received". Other solids are reported as received.

The Chain of Custody provides additional information, including compliance with sample condition requirements upon receipt. Sample condition requirements are defined under the 2003 NELAC Standard, sections 5.5.8.3.1 and 5.5.8.3.2.

NYSDOH ELAP does not certify for all parameters. Paradigm Environmental Services or the indicated subcontracted laboratory does hold certification for all analytes where certification is offered by ELAP unless otherwise specified.

Data qualifiers are used, when necessary, to provide additional information about the data. This information may be communicated as a flag or as text at the bottom of the report. Please refer to the following list of frequently used data flags and their meaning:

"<" = analyzed for but not detected at or above the reporting limit.
"E" = Result has been estimated, calibration limit exceeded.
"Z" = See case narrative.
"D" = Duplicate results outside QC limits. May indicate a non-homogenous matrix.
"M" = Matrix spike recoveries outside QC limits. Matrix bias indicated.
"B" = Method blank contained trace levels of analyte. Refer to included method blank report.

PARADIGM
ENVIRONMENTAL SERVICES, INC.
179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Volatile Analysis Report for Air

Client: Conrad Geoscience

Client Job Site:	Apple Valley Shopping Center LaGrange	**Lab Project Number:**	11-0354
		Lab Sample Number:	1802
Client Job Number:	AL030071		
Field Location:	SVLP-1	**Date Sampled:**	01/19/2011
Field ID Number:	C-1010	**Date Received:**	01/24/2011
Sample Type:	Air	**Date Analyzed:**	01/26/2011

Compound	PPBv	ug / m3
cis-1,2-Dichloroethene	< 0.106	< 0.416
Tetrachloroethene	2.30	15.4

Compound	PPBv	ug / m3
Trichloroethene	0.141	0.750
Vinyl Chloride	< 0.106	< 0.269

ELAP Number 10958 Method: EPA TO-15 Data File: A4799.d

Comments: ug / m3 = microgram per cubic meter

Signature: [signature]
Bruce Hoogesteger: Technical Director

PARADIGM
179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Volatile Analysis Report for Air

Client: Conrad Geoscience

Client Job Site:	Apple Valley Shopping Center LaGrange	**Lab Project Number:**	11-0354
		Lab Sample Number:	1803
Client Job Number:	AL030071		
Field Location:	IALP-1	**Date Sampled:**	01/19/2011
Field ID Number:	C-1022	**Date Received:**	01/24/2011
Sample Type:	Air	**Date Analyzed:**	01/26/2011

Compound	PPBv	ug / m3
cis-1,2-Dichloroethene	< 0.102	< 0.400
Tetrachloroethene	0.274	1.84

Compound	PPBv	ug / m3
Trichloroethene	< 0.0481	< 0.256
Vinyl Chloride	< 0.102	< 0.259

ELAP Number 10958 Method: EPA TO-15 Data File: A4800.d

Comments: ug / m3 = microgram per cubic meter

Signature: Val M Mulvihill for

Bruce Hoogesteger: Technical Director

PARADIGM
179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Volatile Analysis Report for Air

Client: Conrad Geoscience

Client Job Site:	Apple Valley Shopping Center LaGrange	**Lab Project Number:**	11-0354
		Lab Sample Number:	1804
Client Job Number:	AL030071		
Field Location:	SVAP-1	**Date Sampled:**	01/19/2011
Field ID Number:	C-1019	**Date Received:**	01/24/2011
Sample Type:	Air	**Date Analyzed:**	01/26/2011

Compound	PPBv	ug / m3
cis-1,2-Dichloroethene	< 0.100	< 0.393
Tetrachloroethene	0.281	1.88

Compound	PPBv	ug / m3
Trichloroethene	< 0.0470	< 0.250
Vinyl Chloride	< 0.100	< 0.254

ELAP Number 10958 Method: EPA TO-15 Data File: A4801.d

Comments: ug / m3 = microgram per cubic meter

Signature: Val Mhmh for:

Bruce Hoogesteger: Technical Director

PARADIGM
179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Volatile Analysis Report for Air

Client: Conrad Geoscience

Client Job Site:	Apple Valley Shopping Center LaGrange	**Lab Project Number:**	11-0354
		Lab Sample Number:	1805
Client Job Number:	AL030071		
Field Location:	IAAP-1	**Date Sampled:**	01/19/2011
Field ID Number:	C-1018	**Date Received:**	01/24/2011
Sample Type:	Air	**Date Analyzed:**	01/26/2011

Compound	PPBv	ug / m3
cis-1,2-Dichloroethene	< 0.0998	< 0.392
Tetrachloroethene	0.328	2.20

Compound	PPBv	ug / m3
Trichloroethene	< 0.0469	< 0.249
Vinyl Chloride	< 0.0998	< 0.253

ELAP Number 10958 Method: EPA TO-15 Data File: A4802.d

Comments: ug / m3 = microgram per cubic meter

Signature: _____

Bruce Hoogesteger: Technical Director

PARADIGM
179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Volatile Analysis Report for Air

Client: Conrad Geoscience

Client Job Site:	Apple Valley Shopping Center LaGrange	**Lab Project Number:**	11-0354
		Lab Sample Number:	1806
Client Job Number:	AL030071		
Field Location:	OA-11	**Date Sampled:**	01/19/2011
Field ID Number:	C-1018	**Date Received:**	01/24/2011
Sample Type:	Air	**Date Analyzed:**	01/26/2011

Compound	PPBv	ug / m3
cis-1,2-Dichloroethene	< 0.105	< 0.412
Tetrachloroethene	0.305	2.05

Compound	PPBv	ug / m3
Trichloroethene	< 0.0494	< 0.263
Vinyl Chloride	< 0.105	< 0.266

ELAP Number 10958 Method: EPA TO-15 Data File: A4803.d

Comments: ug / m3 = microgram per cubic meter

Signature: _____
Bruce Hoogesteger: Technical Director

PARADIGM
179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Volatile Analysis Report for Air

Client: Conrad Geoscience

Client Job Site:	Apple Valley Shopping Center LaGrange	**Lab Project Number:**	11-0354
		Lab Sample Number:	Method Blank
Client Job Number:	AL030071		
Field Location:	N/A	**Date Sampled:**	N/A
Field ID Number:	N/A	**Date Received:**	N/A
Sample Type:	Air	**Date Analyzed:**	01/26/2011

Compound	PPBv	ug / m3
cis-1,2-Dichloroethene	< 0.106	< 0.416
Tetrachloroethene	< 0.106	< 0.711

Compound	PPBv	ug / m3
Trichloroethene	< 0.0499	< 0.265
Vinyl Chloride	< 0.106	< 0.269

ELAP Number 10958 Method: EPA TO-15 Data File: A4796.d

Comments: ug / m3 = microgram per cubic meter

Signature: _____

Bruce Hoogesteger: Technical Director

PARADIGM ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue
Rochester, NY 14608
(585) 647-2530 * (800) 724-1997

TO-15 CHAIN OF CUSTODY

REPORT TO:

COMPANY: Conrad Geoscience
ADDRESS: One Civic Center Plaza, Suite 501
CITY: Poughkeepsie STATE: NY ZIP: 12601
PHONE: 845-454-2544 FAX: -2655
ATTN: Stephanie LaRose
COMMENTS: Please return cooler.

INVOICE TO:

COMPANY: Same
ADDRESS:
CITY: STATE: ZIP:
PHONE: FAX:
ATTN: Tara Alvarado

LAB PROJECT #: 11-0354
CLIENT PROJECT #: AL030071

TURNAROUND TIME: (WORKING DAYS)
STD OTHER
☐ 3 ☐ 5 ☒ 7 ☐

Quotation # JD110705

PROJECT NAME/SITE NAME: Apple Valley Shopping Center-La Grange

Sampling Procedure

DATE	SAMPLE LOCATION/FIELD ID	MATRIX	CANISTER	REGULATOR	START VACUUM	START TIME	END TIME	END DATE	END VACUUM	ANALYSIS: TCL	ANALYSIS: Halo	ANALYSIS: PCE, TCE, Site Specific DCE, VC	RETURN VACUUM	PARADIGM LAB SAMPLE NUMBER
1/19/11	SVLP-1	AIR	C 1010	R 505	30	11:46	11:46	1/20/11	14			X	14	18025
↓	IALP-1	AIR	C 1022	R 506	30	11:47	11:47	1/20/11	10			X	9	18036
↓	SVAP-1	AIR	C 1019	R 514	29	12:20	12:20	1/20/11	12			X	11	18047
↓	IAAP-1	AIR	C 1018	R 502	30	12:21	10:45	1/20/11	0			X	0	18058
↓	OA-11	AIR	C 1008	R 515	30	12:40	12:40	1/20/11	11			X	10	18069
		AIR	C	R										
		AIR	C	R										
		AIR	C	R										
		AIR	C	R										
		AIR	C	R										

Remarks:
Regulator on IAAP-1 went to zero before 24 hours passed. Please let us know ~~how long this is~~ the duration of that sample.

Canister C-1017 was not used.
EAH 1/24

LAB USE ONLY BELOW THIS LINE

1-20-11/12:40
Sampled By Date/Time

1-20-11/17:00
Relinquished By Date/Time

Total Cost:

Received By Date/Time

Elizabeth A. Honck 1/24/11 1220
Received @ Lab By Date/Time

P.I.F.

09

PARADIGM ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue
Rochester, NY 14608
(585) 647-2530 * (800) 724-1997

TO-15 EQUIPMENT CHAIN OF CUSTODY

REPORT TO		INVOICE TO	
COMPANY:	Conrad Geoscience	COMPANY:	Same
ADDRESS:	One Civic Center Plaza Suite 501	ADDRESS:	
CITY:	Poughkeepsie	STATE: NY	ZIP: 12601
PHONE:	845-454-2544	FAX:	-2655
ATTN:	Stephanie LaRose	ATTN:	Tara Alvarado
COMMENTS:			

LAB PROJECT #: 11-0354
CLIENT PROJECT #: AL030071

TURNAROUND TIME: (WORKING DAYS)
STD ☒ 7 ☐ 5 ☐ 3 OTHER ☐

Quotation # SD110705

PROJECT NAME/SITE NAME: Apple Valley Shopping Center-LaGrange

Equipment Tracking

	CANISTER	SHIPPED VACUUM	CANISTER	SHIPPED VACUUM	CANISTER	SHIPPED VACUUM
✓	C 1019	28	C		C	
✓	C 1022	28	C		C	
✓	C 1017	28	C		C	
✓	C 1015	28	C		C	
✓	C 1008	28	C		C	
✓	C 1014	28	C		C	
	C		C		C	
	C		C		C	
	C		C		C	
	C		C		C	

Equipment Tracking

	REGULATOR	FLOW	DURATION	REGULATOR	FLOW	DURATION	REGULATOR	FLOW	DURATION	HAND GUAGE
✓	R 5114	0.50		R			R			
✓	R 5022	0.51		R			R			
✓	R 5115	0.51		R			R			
✓	R 5055	0.52		R			R			
✓	R 5000	0.57		R			R			
✓	R 5077	0.51		R			R			
	R			R			R			
	R			R			R			
	R			R			R			
	R			R			R			

Remarks: All equipment returned in good condition.
EAH 1/24/11

"LAB USE ONLY BELOW THIS LINE"

Stephanie LaRose 1-17-11/12:00
Picked up By — Date/Time

1-20-11/17:00
Returned By — Date/Time

Total Cost:

Received By — Date/Time

P.I.F.

Elizabeth A Honch 1/24/11 1220
Received @ Lab By — Date/Time

PARADIGM

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Analytical Report Cover Page

Conrad Geoscience

For Lab Project # 11-0582
Issued February 14, 2011
This report contains a total of 7 pages

The reported results relate only to the samples as they have been received by the laboratory.

Any noncompliant QC parameters having impact on the data are flagged or documented on the final report.

All soil/sludge samples have been reported on a dry weight basis, unless qualified "reported as received". Other solids are reported as received.

The Chain of Custody provides additional information, including compliance with sample condition requirements upon receipt. Sample condition requirements are defined under the 2003 NELAC Standard, sections 5.5.8.3.1 and 5.5.8.3.2.

NYSDOH ELAP does not certify for all parameters. Paradigm Environmental Services or the indicated subcontracted laboratory does hold certification for all analytes where certification is offered by ELAP unless otherwise specified.

Data qualifiers are used, when necessary, to provide additional information about the data. This information may be communicated as a flag or as text at the bottom of the report. Please refer to the following list of frequently used data flags and their meaning:

"<" = analyzed for but not detected at or above the reporting limit.
"E" = Result has been estimated, calibration limit exceeded.
"Z" = See case narrative.
"D" = Duplicate results outside QC limits. May indicate a non-homogenous matrix.
"M" = Matrix spike recoveries outside QC limits. Matrix bias indicated.
"B" = Method blank contained trace levels of analyte. Refer to included method blank report.

PARADIGM
ENVIRONMENTAL SERVICES, INC.
179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Volatile Analysis Report for Air

Client: Conrad Geoscience

Client Job Site:	Apple Valley Shopping Center	**Lab Project Number:**	11-0582
		Lab Sample Number:	2464
Client Job Number:	AL030070		
Field Location:	SVAP-1	**Date Sampled:**	02/07/2011
Field ID Number:	C-1002	**Date Received:**	02/09/2011
Sample Type:	Air	**Date Analyzed:**	02/10/2011

Compound	PPBv	ug / m3
cis-1,2-Dichloroethene	< 0.100	< 0.393
Tetrachloroethene	0.204	1.37

Compound	PPBv	ug / m3
Trichloroethene	0.0535	0.284
Vinyl Chloride	< 0.100	< 0.254

ELAP Number 10958 Method: EPA TO-15 Data File: A4833.d

Comments: ug / m3 = microgram per cubic meter

Signature: _____

Bruce Hoogesteger: Technical Director

PARADIGM
179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Volatile Analysis Report for Air

Client: Conrad Geoscience

Client Job Site:	Apple Valley Shopping Center	**Lab Project Number:**	11-0582
		Lab Sample Number:	2465
Client Job Number:	AL030070		
Field Location:	IAAP-1	**Date Sampled:**	02/07/2011
Field ID Number:	C-1011	**Date Received:**	02/09/2011
Sample Type:	Air	**Date Analyzed:**	02/10/2011

Compound	PPBv	ug / m3
cis-1,2-Dichloroethene	< 0.100	< 0.393
Tetrachloroethene	0.173	1.16

Compound	PPBv	ug / m3
Trichloroethene	< 0.0470	< 0.250
Vinyl Chloride	< 0.100	< 0.254

ELAP Number 10958 Method: EPA TO-15 Data File: A4834.d

Comments: ug / m3 = microgram per cubic meter

Signature: _____

Bruce Hoogesteger: Technical Director

PARADIGM
179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Volatile Analysis Report for Air

Client: Conrad Geoscience

Client Job Site:	Apple Valley Shopping Center	**Lab Project Number:**	11-0582
		Lab Sample Number:	2466
Client Job Number:	AL030070		
Field Location:	OA-12	**Date Sampled:**	02/07/2011
Field ID Number:	C-1001	**Date Received:**	02/09/2011
Sample Type:	Air	**Date Analyzed:**	02/10/2011

Compound	PPBv	ug / m3
cis-1,2-Dichloroethene	< 0.103	< 0.404
Tetrachloroethene	< 0.103	< 0.691

Compound	PPBv	ug / m3
Trichloroethene	0.0541	0.288
Vinyl Chloride	< 0.103	< 0.261

ELAP Number 10958 Method: EPA TO-15 Data File: A4835.d

Comments: ug / m3 = microgram per cubic meter

Signature: _____

Bruce Hoogesteger: Technical Director

PARADIGM
179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Volatile Analysis Report for Air

Client: Conrad Geoscience

Client Job Site:	Apple Valley Shopping Center	**Lab Project Number:**	11-0582
		Lab Sample Number:	Method Blank
Client Job Number:	AL030070		
Field Location:	N/A	**Date Sampled:**	N/A
Field ID Number:	N/A	**Date Received:**	N/A
Sample Type:	Air	**Date Analyzed:**	02/10/2011

Compound	PPBv	ug / m3
cis-1,2-Dichloroethene	< 0.103	< 0.404
Tetrachloroethene	< 0.103	< 0.691

Compound	PPBv	ug / m3
Trichloroethene	< 0.0482	< 0.256
Vinyl Chloride	< 0.103	< 0.261

ELAP Number 10958 Method: EPA TO-15 Data File: A4832.d

Comments: ug / m3 = microgram per cubic meter

Signature: _____

Bruce Hoogesteger: Technical Director

PARADIGM ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue
Rochester, NY 14608
(585) 647-2530 * (800) 724-1997

TO-15 CHAIN OF CUSTODY

REPORT TO:		INVOICE TO:	
COMPANY:	Conrad Geoscience	COMPANY:	SAME
ADDRESS:	One Civic Center Plaza Suite 501	ADDRESS:	
CITY:	Poughkeepsie STATE: NY ZIP: 12601	CITY: STATE: ZIP:	
PHONE:	845-454-2594 FAX: -2655	PHONE: FAX:	
ATTN:	Stephenie LaRose	ATTN:	Tara Alvarado
COMMENTS:	Please return cooler		

LAB PROJECT #: 11-0582
CLIENT PROJECT #: AL030070

TURNAROUND TIME: (WORKING DAYS)
STD ☒ 7 ☐ 5 ☐ 3 OTHER ☐

PROJECT NAME/SITE NAME: Triple Valley Shopping Center

Quotation # JD110705

Sampling Procedure

DATE	SAMPLE LOCATION/FIELD ID	MATRIX	CANISTER	REGULATOR	START VACUUM	START TIME	END TIME	END DATE	END VACUUM	ANALYSIS: TCL	ANALYSIS: Halo	ANALYSIS: Site Specific	RETURN VACUUM	PARADIGM LAB SAMPLE NUMBER
2/7/11	~~SVAP-1~~ SVAP-1	AIR	C 1002	R 515	30	11:26	10:55	2/8/11	15			X	14	24644
↓	IAAP-1	AIR	C 1011	R 500	30	11:24	10:53	2/8/11	11			X	11	24645
↓	OA-12	AIR	C 1001	R 518	30	11:41	10:41	2/8/11	10			X	9	24646
		AIR	C	R										ee EAH 2/9
		AIR	C	R										
		AIR	C	R										
		AIR	C	R										
		AIR	C	R										
		AIR	C	R										
		AIR	C	R										

Remarks: C-1003 was not used.
EAH 2/9/11

Sampled By	2-8-11 / 10:55 Date/Time	Total Cost:
Relinquished By	2-8-11 / 12:30 Date/Time	
Received By	Date/Time	P.I.F.
Elizabeth A Hanch	2/9/11 1800 Date/Time	
Received @ Lab By		

PARADIGM ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue
Rochester, NY 14608
(585) 647-2530 * (800) 724-1997

TO-15 EQUIPMENT CHAIN OF CUSTODY

REPORT TO:		INVOICE TO:	
COMPANY:	Conrad Geoscience	COMPANY:	
ADDRESS:	One Civic Center Plaza, suite 501	ADDRESS:	
CITY:	Poughkeepsie STATE: NY ZIP: 12601	CITY: STATE: ZIP:	
PHONE:	845-454-2655 FAX: -2655	PHONE: FAX:	
ATTN:	Stephanie LaRose	ATTN:	
COMMENTS:	Please return cooler		

LAB PROJECT #: 11-0582
CLIENT PROJECT #: AL030070
TURNAROUND TIME: (WORKING DAYS) STD [ ]3 [ ]5 [X]7 OTHER [ ]
Quotation # JD110705

PROJECT NAME/SITE NAME: Apple Valley Shopping Center

Equipment Tracking

	CANISTER	SHIPPED VACUUM	REGULATOR	FLOW	DURATION	HAND GUAGE
C	1101	2c	R 518		24	
C	1201	3c	R 500		24	
C	1202	2c	R 515		24	
C	1203	3c	R 514		24	
C			R			
C			R			
C			R			
C			R			
C			R			
C			R			

Remarks:

All equipment returned in good condition.
EAH 2/9

Picked up By	2/3/11 / 14:00 Date/Time	Total Cost:
Returned By	2-8-11 / 12:30 Date/Time	
Received By	Date/Time	P.I.F.
Elizabeth A Honch 2/9/11 1800 Received @ Lab By	Date/Time	