

Ambient Air Monitoring Report #4  
September 20, 2007

**Countywide Recycling & Disposal Facility  
Ambient Air Monitoring  
Monthly Report #4  
September 20, 2007**

**To Fulfill the Requirements Set Forth in Order 5.A. of the Ohio EPA  
Director's Findings and Orders Dated March 28, 2007**

**Republic Services of Ohio II, LLC  
Countywide Recycling & Disposal Facility  
3619 Gracemont Street SW  
East Sparta, Ohio 44262**

Prepared by  
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975 Eastwind Drive, Suite 190  
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**Countywide Recycling & Disposal Facility  
Ambient Air Monitoring  
Monthly Report #4  
September 20, 2007  
Monitoring Events #13 through 16**

**1.0 INTRODUCTION**

Beginning on Monday May 21, 2007 ambient air sampling is being conducted every six days as mandated by Order 5.A. of the Ohio EPA Director's Findings and Orders dated March 28, 2007. This report covers the analytical results from the following Monitoring Events.

- Event #13: Thursday August 2 to Friday August 3.
- Event #14: Wednesday August 8 to Thursday August 9.
- Event #15: Tuesday August 14 to Wednesday August 15.
- Event #16: Monday August 20 to Tuesday August 21.

Air samples were collected over a 24-hour period at four locations: Bolivar Elementary School; the cell tower on the Countywide facility; near the top of the hill at the KOA campground to the northeast of the landfill; and near the small bridge along the road that borders the wetland area immediately to the east of the landfill (Figure 1). The road is the specified route for the trucks entering Countywide facility. The wetland is consistently in the area of maximum impact predicted by the air model. Since there are no people working or residing in the wetland, it is being considered a temporary location until such time as the Agency specifies a fourth permanent monitoring location. The campground is also frequently in the area of impact predicted by the air model.

As specified by the Ohio EPA in Bryan Zima's March 28, 2007 letter to Jason Perdion of Baker & Hostetler, air samples were analyzed for the following groups of compounds:

- Volatile Organic Compounds (VOCs): EPA Method TO-15 modified with Tentatively Identified Compounds (TICs)
- Sulfur Compounds: EPA Method TO-15 modified
- Aldehydes and Ketones: EPA Method TO-11A
- Hydrogen Fluoride and Hydrogen Chloride: NIOSH Method 7903

All analyses were performed by Integrated Analytical Laboratory (IAL), Randolph, NJ. Certification numbers: ELAP-11402; NJDEP-14751; AIHA-100201.

As a conservative first evaluation, the concentrations of chemicals detected in the air samples were compared to the corresponding USEPA Region 9 Preliminary Remediation Goals (PRGs). The USEPA Region 9 PRG is the concentration of a chemical in the ambient air that is estimated to be without significant risk to a person who would breathe

that level of chemical continuously over many decades. The Region 9 PRGs are derived using conservative mathematical formulas and do not represent the level of a chemical in the air (or other environmental media) where health effects are likely to occur. Region 9 PRGs are generally accepted as conservative screening values, such that if the concentration of a chemical in the air is less than the corresponding PRG, most public health officials and regulators are confident that there is no risk to human health. On the other hand, an analytical result that exceeds the corresponding PRG does not mean that there is an unacceptable risk to public health. The chemical that were detected in these Monitoring Events are commonly found at low levels in ambient air. For some compounds such as benzene, the mathematically-derived Region 9 PRG of 0.25 ug/m<sup>3</sup> is lower than the average background concentration of 1.96 ug/m<sup>3</sup> in ambient air in Ohio (Ohio EPA, *Portsmouth Ohio Air Quality Study 2003*). Consequently, finding certain chemicals in ambient air at levels above PRGs that are very close to analytical detection limits is not uncommon and may simply reflect fluctuations in background sources. It should be noted that not all of the compounds found in the air samples have corresponding PRGs.

Ambient environmental/climate conditions are discussed in Section 2.0. Results of the monitoring are discussed in Section 3.0 and summarized in Section 4.0 of this report. Analytical results from the laboratory are provided in the Appendices.

## **2.0 AMBIENT CONDITIONS**

The descriptions of ambient conditions are taken from the Daily Odor Monitoring Summary compiled by Countywide's consultant, Diversified Engineering.

### Event #13, August 02/03, 2007:

Average temperature in degrees F: 77, Max. 89, Min. 66

Winds were calm with maximum speeds of 8 mph out of the S.

Average relative humidity 78% with fog. No precipitation.

Complaints: One complaint from a resident at the Briggles Avenue, East Sparta at approximately 10:11 AM on 8/2. Anchor trenching in area C, completion of a 24-inch main header line, roto-sonic drilling, and leachate pump maintenance was being conducted at the time.

### Event #14, August 08/09, 2007:

Average temperature in degrees F: 82, Max. 90, Min. 73

Winds were calm with maximum speeds of 10 mph out of the WSW.

Average relative humidity: 78%. Rain and thunderstorms.

Complaints: None.

Event #15: August 14/15, 2007:

Average temperature in degrees F: 64, Max. 78, Min. 51  
Winds were calm with maximum speeds of 6 mph out of the SW.  
Average relative humidity was 100% with fog.  
Complaints: None.

Event #16: August 20/21, 2007:

Average temperature in degrees F: 67, Max. 75, Min. 59  
Winds average 2 mph with maximum speeds of 17 mph out of the SE/SW.  
Average relative humidity was 90% with no rain and thunderstorms.  
Complaints: None.

### **3.0 ANALYTICAL RESULTS**

The laboratory analyzed the air samples for a large number of chemicals. Only those results that exceeded Region 9 PRGs will be discussed in the body of the report. Other compounds may have been detected in a sample, but were quantified at concentrations below the respective PRG. All of the analytical results from the laboratory are provided in the Appendices.

#### **3.1 Volatile Organic Compounds**

Compounds detected by Method TO-15 modified are summarized in Tables 1 through 4. Method TO-15 analyzes air samples collected in a summa canister for the presence of an extensive list of volatile organic compounds. In addition to a "standard analyte" list, this method also has the capability to tentatively identify and estimate the concentration of numerous compounds that are not on the "standard" list. These Tentatively Identified Compounds (TICs) include some compounds for which there are other specific analytical methods. Of particular relevance to interpreting the data from this monitoring effort is the fact that Method TO-15 identifies acetaldehyde, a carbonyl compound that is a specific target for Method TO-11A. All results for acetaldehyde will be discussed in Section 3.3. Data reports from the analytical laboratory are provided in the Appendices. Results that exceeded corresponding Region 9 PRGs and any other relevant findings are discussed below. Chemicals that were detected below PRGs will not be discussed unless those particular results help to explain other findings.

Event #13, August 02/03, 2007:

Analytical results for Method TO-15 for Event #13 are summarized in Table 1 and provided in Appendix A. Two compounds were measured at levels above their respective PRGs.

**Event #13: VOCs Detected Above PRGs**  
**Concentrations in ug/m3**

<b>Compound</b>	<b>PRG</b>	<b>School</b>	<b>Cell Tower</b>	<b>Campground</b>	<b>Wetland</b>
Methylene chloride	<b>4.1</b>	<b>45</b>	3.2	ND	4.5
Acetonitrile (TIC)	<b>62</b>	<b>77</b>	12	<b>97</b>	8.9

Event #14, August 08/09, 2007:

Analytical results for Method TO-15 for Event #14 are summarized in Table 2 and provided in Appendix B. No VOCs were detected at concentrations exceeding PRGs.

Event #15, August 15/16, 2007:

Analytical results for Method TO-15 for Event #15 are summarized in Table 3 and provided in Appendix C. One compound was measured at levels above its respective PRG.

**Event #15: VOCs Detected Above PRGs**  
**Concentrations in ug/m3**

<b>Compound</b>	<b>PRG</b>	<b>School</b>	<b>Cell Tower</b>	<b>Campground</b>	<b>Wetland</b>
Acetonitrile (TIC)	<b>62</b>	<b>129</b>	8.9	25	54

Event #16, August 20/21, 2007:

Analytical results for Method TO-15 for Event #16 are summarized in Table 4 and provided in Appendix D. One compound was measured at levels above its respective PRG.

**Event #16: VOCs Detected Above PRGs**  
**Concentrations in ug/m3**

<b>Compound</b>	<b>PRG</b>	<b>School</b>	<b>Cell Tower</b>	<b>Campground</b>	<b>Wetland</b>
Acetonitrile (TIC)	<b>62</b>	<b>82</b>	ND	ND	<b>72</b>

### 3.2 Sulfur Compounds

No sulfur compounds were detected at any location during these three monitoring events.

### 3.3 Aldehydes and Ketones

In order to obtain a continuous 24 hours of data, three separate gel collection tubes were sequentially exposed to ambient air for a period of approximately 8 hours each. Consequently there are three separate sample results for each location for each monitoring event.

Event #13, August 02/03, 2007:

Analytical results for aldehydes are summarized below. Formaldehyde was detected in one sample from the school, three samples from the cell tower, and two samples from the campground. Acetaldehyde was detected above the PRG by Method TO-15 (but not by Method TO-11A) at the school and at the campground. Butyraldehyde was detected in one sample from the campground but this aldehyde does not have an associated PRG. Analytical results are in Appendix A.

**Event #13: Aldehydes  
Concentrations in ug/m3**

Aldehyde	PRG	School			Cell Tower			Campground			Wetland		
		1	2	3	1	2	3	1	2	3	1	2	3
Formaldehyde	<b>0.15</b>	ND	ND	<b>.52</b>	<b>1.5</b>	<b>.28</b>	<b>.23</b>	<b>1.2</b>	ND	<b>.32</b>	ND	ND	ND
Acetaldehyde TO-15 (TIC)	<b>.87</b>	<b>3.4</b>			ND			<b>3.6</b>			ND		
Butyraldehyde	NA	.42	ND	ND	ND	ND	ND	.27	ND	ND	ND	ND	ND

Event #14, August 08/09, 2007:

Analytical results for aldehydes are summarized below. Formaldehyde was detected in two samples from the school, three samples from the cell tower, two samples from the campground, and three samples from the wetland. Acetaldehyde was detected at a concentration above the PRG by Method TO-15 (but not by Method TO-11A) in the sample from the campground. Analytical results are in Appendix B.

**Event #14: Aldehydes  
Concentrations in ug/m3**

Aldehyde	PRG	School			Cell Tower			Campground			Wetland		
		1	2	3	1	2	3	1	2	3	1	2	3
Formaldehyde	<b>0.15</b>	ND	<b>.58</b>	<b>.28</b>	<b>.58</b>	<b>.27</b>	<b>.32</b>	ND	<b>.38</b>	<b>.34</b>	<b>.83</b>	<b>1.0</b>	<b>.66</b>
Acetaldehyde TO-11A	0.87	ND	.24	ND									
Acetaldehyde TO-15 (TIC)	<b>0.87</b>	ND			ND			<b>6.7</b>			ND		

Event #15, August 14/15, 2007:

Analytical results for aldehydes are summarized below. Formaldehyde was detected in two samples from the school and one sample from the campground, but not in any other samples. Measurable levels of acetaldehyde were below the PRG. Analytical results are in Appendix C.

**Event #15: Aldehydes  
 Concentrations in ug/m3**

Aldehyde	PRG	School			Cell Tower			Campground			Wetland		
		1	2	3	1	2	3	1	2	3	1	2	3
Formaldehyde	<b>0.15</b>	<b>.24</b>	<b>.34</b>	ND	<b>.37</b>	ND	ND	ND	<b>1.2</b>	ND	ND	ND	ND
Acetaldehyde TO-11A	0.87	.24	.23	.58	ND	ND	ND	ND	.46	ND	ND	ND	ND

Event #16, August 20/21, 2007:

Analytical results for aldehydes are summarized below. Formaldehyde was detected in two samples from the school, two samples from the campground, and one sample from the wetland. Acetaldehyde was detected in one sample from the school, two samples from the cell tower, two samples from the campground, and one sample from the wetland. Although acetaldehyde was not detected at the school by Method TO-15, it was quantified at this location by Method TO-11A at a concentration exceeding the PRG. Analytical results are in Appendix D.

**Event #16: Aldehydes  
 Concentrations in ug/m3**

Aldehyde	PRG	School			Cell Tower			Campground			Wetland		
		1	2	3	1	2	3	1	2	3	1	2	3
Formaldehyde	<b>0.15</b>	ND	<b>.31</b>	<b>.45</b>	<b>.33</b>	<b>.28</b>	ND	ND	ND	ND	ND	<b>.21</b>	ND
Acetaldehyde TO-11A	<b>0.87</b>	ND	ND	<b>1.0</b>	.28	.24	ND	.35	.31	ND	ND	ND	.27

**3.4 Hydrogen Chloride and Hydrogen Fluoride**

As with the aldehyde and ketone samples, three separate gel collection tubes were sequentially exposed to ambient air for a period of approximately 8 hours each. Consequently there are three separate sample results for each location for each monitoring event. The concentrations of HF and HCl in the air are quantified based on the mass of fluoride and chloride ion captured on the gel inside the tubes and the volume of air that was passed through the tube.

Analytical results for sampling events #13 through #16 are summarized below. All detected concentrations are very low, and were orders of magnitude below the PRG for HCl.

Event #13, August 02/03, 2007:

Analytical results are in Appendix A.

**Event #13: Hydrogen Fluoride and Hydrogen Chloride  
 Concentrations in ug/m3**

Compound	PRG	School	Cell Tower	Campground	Wetland
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		1	2	3	1	2	3	1	2	3	1	2	3
HF	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
HCl	210	ND	ND	ND	1.4	0.86	1.0	ND	ND	ND	ND	1.0	ND

Event #14, August 08/09, 2007:  
Analytical results are in Appendix B.

**Event #14: Hydrogen Fluoride and Hydrogen Chloride  
Concentrations in ug/m3**

Compound	PRG	School			Cell Tower			Campground			Wetland		
		1	2	3	1	2	3	1	2	3	1	2	3
HF	NA	ND	ND	4.5*	ND	ND	4.5*	ND	ND	ND	ND	ND	ND
HCl	210	ND	2.4	13*	ND	ND	12*	ND	ND	2.8*	ND	ND	ND

\*Denotes breakthrough from the front to the back of the sorbent tube.

Event #15, August 14/15, 2007:  
Analytical results are in Appendix C.

**Event #15: Hydrogen Fluoride and Hydrogen Chloride  
Concentrations in ug/m3**

Compound	PRG	School			Cell Tower			Campground			Wetland		
		1	2	3	1	2	3	1	2	3	1	2	3
HF	NA	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND
HCl	210	2.4	ND	1.0	2.8*	2.4	1.5*	1.3	ND	0.85	0.95	ND	1.1

\*Denotes breakthrough from the front to the back of the sorbent tube for chloride.

Event #16, August 20/21, 2007:  
Analytical results are in Appendix D.

**Event #16: Hydrogen Fluoride and Hydrogen Chloride  
Concentrations in ug/m3**

Compound	PRG	School			Cell Tower			Campground			Wetland		
		1	2	3	1	2	3	1	2	3	1	2	3
HF	NA	ND	3.2	ND	ND	ND	ND	ND	ND	ND	ND	2.4	ND
HCl	210	ND	8.1*	7.7*	ND	2.6*	ND	ND	1.7	1.3*	1.2	20*	4.5*

\*Denotes breakthrough from the front to the back of the sorbent tube for chloride.

**4.0 SUMMARY**

Relatively few compounds were detected at concentrations exceeding the respective conservative Region 9 PRGs for long-term continuous exposure. However, because of constantly changing environmental conditions related to the weather, exposures to any individual person are transient-such that the real risks are much, much lower than a

simple comparison to the PRGs might suggest. There are multiple potential sources for most of the compounds that were found in the monitoring samples. In addition to the landfill, common consumer products, building materials and automotive emissions could have contributed to presence of the chemicals that were measured in the air samples.

Relevant findings from the ambient air sampling conducted so far are summarized below.

- The analytical results from the 13<sup>th</sup> through 16<sup>th</sup> rounds of sampling are consistent with previous findings.
- The following compounds were detected above PRGs on one or more occasions: methylene chloride; acetonitrile; formaldehyde and acetaldehyde.
- All quantifiable analytical results for formaldehyde are above its PRG, and many of the results for acetaldehyde are above its PRG. There are two immediately apparent reasons for these findings. The first is that the PRGs for formaldehyde and acetaldehyde are risk-based numbers that were derived using extremely conservative assumptions. The second is the fact that the laboratory detection limits for both compounds are only slightly lower than the PRGs. Consequently, any measurable amount of formaldehyde (by Integrated Analytical Laboratories) is almost certain to translate into an air concentration that exceeds the PRG and even very low concentrations of acetaldehyde are likely to be above its PRG.
- Although some of the higher concentrations of compounds were found at the Bolivar Elementary school, this location was upwind of the landfill during all four monitoring events. This suggests that there are other sources close by the school which may be responsible for the analytical findings.
- All sample results for hydrogen fluoride and hydrogen chloride are orders of magnitude below any health based standards. Furthermore, there does not seem to be a discernable pattern to the results which would point to a particular source. It is recommended that sampling for these parameters be eliminated.
- To date, the findings of the air monitoring program do not suggest either an immediate or a long-term threat to public health.

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**EPA Method TO-15 SUMMARY TABLES**

Countywide Recycling & Disposal Facility					
EPA Method TO-15 Modified: Volatile Organic Compounds					
Table 1: Event #13 Aug 02/03, 2007					
Analyte	Monitoring Location				
	PRG	School	Cell Tower	Campground	Wetland
All results in ug/m3					
<b>Method TO-15 Modified</b>					
Acetone	3300	7.4	21	ND	13
t-Butyl-alcohol	NA	ND	ND	ND	ND
Carbon disulfide	730	ND	ND	ND	ND
Chloromethane	95	ND	ND	ND	ND
Ethylbenzene	1100	ND	ND	ND	ND
Hexane	210	ND	ND	ND	ND
Methyl ethyl ketone	5100	ND	2.1	1.8	2.7
Methylene Chloride	<b>4.1</b>	45	3.2	ND	4.5
Toluene	400	ND	ND	ND	ND
m/p-Xylene	110	7.8	3.8	6.1	3.3
o-Xylene	110	2.7	ND	2.2	ND
<b>Tentatively Identified Compounds</b>					
Acetonitrile	<b>62</b>	77	12	97	8.9
Acetaldehyde	<b>0.87</b>	3.4	ND	3.6	ND
Butane	NA	3.3	8.1	7.6	ND
2-Methyl butane	NA	3.2	ND	24	ND
1,3-Butadiene,2-methyl	NA	5	10	10	9.5
Pentane, 2-methyl	NA	3.5	6.7	6.3	3.9
Formaldehyde, dimethylhydazone	NA	10	ND	ND	ND
2-Propanol, 1-methoxyl	NA	12	ND	ND	ND
Propane	NA	ND	ND	5.9	ND
Pentane	NA	ND	4.7	4.4	ND
Cyclotrisiloxane, hexamethyl	NA	ND	30	15	29
Cycloheptane	NA	ND	ND	25	ND
3-Carene	NA	ND	ND	ND	11
ND = Not Detected					
NA = Not Availabe					
Shading indicates result exceeds PRG					

Countywide Recycling & Disposal Facility					
EPA Method TO-15 Modified: Volatile Organic Compounds					
Table 2: Event #14 August 08/09, 2007					
Analyte	Monitoring Location				
	PRG	School	Cell Tower	Campground	Wetland
All results in ug/m3					
<b>Method TO-15 Modified</b>					
Acetone	3300	ND	ND	15	ND
<b>Tentatively Identified Compounds</b>					
Acetaldehyde	<b>0.87</b>	ND	ND	6.7	ND
Hexadecane, 2,6,10,14-tetramethyl	NA	404	ND	ND	ND
ND = Not Detected					
NA = Not Available					
Shading indicates result exceeds PRG					

Countywide Recycling & Disposal Facility					
EPA Method TO-15 Modified: Volatile Organic Compounds					
Table 3: Event #15 August 14/15, 2007					
Analyte	Monitoring Location				
	PRG	School	Cell Tower	Campground	Wetland
All results in ug/m3					
<b>Method TO-15 Modified</b>					
Dichlorodifluoromethane	210	3.8	4.1	4	3.3
m/p-Xylene	110	ND	ND	ND	4.8
<b>Tentatively Identified Compounds</b>					
Acetonitrile	62	129	8.9	25	54
Isobutane	NA	9.7	9.5	9.5	9.5
Butane	NA	9.5	11	10	11
2-Methyl butane	NA	ND	28	38	ND
Pentane	NA	ND	4.1	13	ND
Pentane, 2-methyl	NA	ND	ND	5.6	5.6
1,4-Pentadiene	NA	ND	8.4	ND	ND
Dodecane	NA	ND	ND	202	ND
ND = Not Detected					
NA = Not Available					
Shading indicates result exceeds PRG					

<b>Countywide Recycling &amp; Disposal Facility</b>					
<b>EPA Method TO-15 Modified: Volatile Organic Compounds</b>					
<b>Table 4: Event #16 August 20/21, 2007</b>					
<b>Analyte</b>	<b>Monitoring Location</b>				
	<b>PRG</b>	<b>School</b>	<b>Cell Tower</b>	<b>Campground</b>	<b>Wetland</b>
All results in ug/m3					
<b>Method TO-15 Modified</b>					
Dichlorodifluoromethane	210	2.7	4	2.6	4.9
m/p-Xylene	110	ND	3.5	2.5	4.8
<b>Tentatively Identified Compounds</b>					
Acetonitrile	62	82	ND	ND	72
Ethanol	NA	4.7	ND	ND	ND
3-Butenoic acid	NA	ND	ND	ND	ND
Butane	NA	8.1	ND	ND	13
2-Methyl butane	NA	ND	ND	11	ND
Cyclotrisiloxane, hexamethyl	NA	43	ND	ND	25
Tetradecane	NA	13	ND	ND	ND
Cyclotetrasiloxane, octamethyl	NA	62	ND	ND	ND
Octadecane	NA	73	ND	ND	ND
Betamide, 2,2,3,3,4,4,4-hepta	NA	52	ND	ND	ND
Pentadecane	NA	ND	ND	ND	10
1,3-Butadiene, 2-methyl	NA	ND	ND	ND	23
ND = Not Detected					
NA = Not Available					
Shading indicates result exceeds PRG					

Countywide Recycling & Disposal Facility					
EPA Method TO-15 Modified: Volatile Organic Compounds					
Table 4: Event #16 August 20/21, 2007					
Analyte	Monitoring Location				
	PRG	School	Cell Tower	Campground	Wetland
All results in ug/m3					
<b>Method TO-15 Modified</b>					
Dichlorodifluoromethane	210	2.7	4	2.6	4.9
m/p-Xylene	110	ND	3.5	2.5	4.8
<b>Tentatively Identified Compounds</b>					
Acetonitrile	62	82	ND	ND	72
Ethanol	NA	4.7	ND	ND	ND
3-Butenoic acid	NA	ND	ND	ND	ND
Butane	NA	8.1	ND	ND	13
2-Methyl butane	NA	ND	ND	11	ND
Cyclotrisiloxane, hexamethyl	NA	43	ND	ND	25
Tetradecane	NA	13	ND	ND	ND
Cyclotetrasiloxane, octamethyl	NA	62	ND	ND	ND
Octadecane	NA	73	ND	ND	ND
Betamide, 2,2,3,3,4,4,4-hepta	NA	52	ND	ND	ND
Pentadecane	NA	ND	ND	ND	10
1,3-Butadiene, 2-methyl	NA	ND	ND	ND	23
ND = Not Detected					
NA = Not Available					
Shading indicates result exceeds PRG					

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**APPENDIX A**

**Laboratory Analytical Results from August 02/03, 2007**

## *Certificate of Analysis*

### **CLIENT INFORMATION**

**Lawhon and Associates, Inc.**  
975 Eastwind Drive, Suite 190  
Westerville, OH 43081  
Attn: Shawn Ansbro

Project#/Project Site: 07-0082/Countywide  
Client Sample ID Nos:  
SU-S0802, SU-G0802, SU-W0802, SU-C0802

### **LABORATORY INFORMATION**

Contact: Michael H. Leftin, Ph.D.  
IAL Job No.: E07-08158  
Date Received: 8/7/07

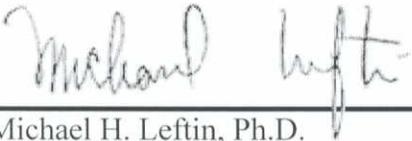
Sample Nos.:  
E07-08158-01, E07-08158-02, E07-  
08158-03, E07-08158-04

Samples for this analysis were received in good condition with a chain of custody.

All work recorded herein has been done in accordance with normal professional standards using accepted testing methodologies, quality assurance and quality control procedures except where otherwise agreed to by the client and testing company in writing.

Once analysis has been performed on canisters that meets regulatory criteria, samples are recycled for future use, unless other provisions have been made by the client.

Analysis conducted at Integrated Analytical Laboratory, Randolph NJ  
ELAP lab number - 11402  
NJDEP number - 14751  
AIHA number - 100201



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Michael H. Leftin, Ph.D.  
Laboratory Director

**Princeton Analytical  
Summary of Results**

Lawhon and Associates, Inc.  
975 Eastwind Drive, Suite 190  
Westerville, OD 43081  
Attn: Shawn Ansbro  
Project: 07-0082  
Site: Countywide

Report Date: 9/6/07  
Job Number: E07-08158  
Date Received: 8/7/07  
Date Analyzed: 8/17/07  
Data File: 081706  
Summa ID: 2155

Analysis: Volatile Organic Compounds by EPA Method TO-15m

<u>Compound</u>	<u>CAS #</u>	<u>SU-S0802</u>		<u>Reporting Limits</u>		
		<u>PAL ID:</u>	<u>ppbv</u>	<u>ug/m3</u>	<u>ppbv</u>	<u>ug/m3</u>
Acetone	67-64-1		3.1	7.4	0.5	1.2
Benzene	71-43-2	ND	ND	ND	0.5	1.6
Bromodichloromethane	75-27-4	ND	ND	ND	0.5	3.3
Bromoethene	593-60-2	ND	ND	ND	0.5	2.2
Bromoform	75-25-2	ND	ND	ND	0.5	5.2
Bromomethane	74-83-9	ND	ND	ND	0.5	1.9
1,3-Butadiene	106-99-0	ND	ND	ND	0.5	1.1
tert-Butyl alcohol	75-65-0	ND	ND	ND	0.5	1.5
Carbon disulfide	75-15-0	ND	ND	ND	0.5	1.6
Carbon tetrachloride	56-23-5	ND	ND	ND	0.5	3.1
Chlorobenzene	108-90-7	ND	ND	ND	0.5	2.3
Chloroethane	75-00-3	ND	ND	ND	0.5	1.3
Chloroform	67-66-3	ND	ND	ND	0.5	2.4
Chloromethane	74-87-3	ND	ND	ND	0.5	1.0
3-Chloropropene	107-05-1	ND	ND	ND	0.5	1.6
2-Chlorotoluene	95-49-8	ND	ND	ND	0.5	2.6
Cyclohexane	110-82-7	ND	ND	ND	0.5	1.7
Dibromochloromethane	124-48-1	ND	ND	ND	0.5	4.3
1,2-Dibromoethane	106-93-4	ND	ND	ND	0.5	3.8
1,2-Dichlorobenzene	95-50-1	ND	ND	ND	0.5	3.0
1,3-Dichlorobenzene	541-73-1	ND	ND	ND	0.5	3.0
1,4-Dichlorobenzene	106-46-7	ND	ND	ND	0.5	3.0
Dichlorodifluoromethane	75-71-8	ND	ND	ND	0.5	2.5
1,1-Dichloroethane	75-34-3	ND	ND	ND	0.5	2.0
1,2-Dichloroethane	107-06-2	ND	ND	ND	0.5	2.0
1,1-Dichloroethylene	75-35-4	ND	ND	ND	0.5	2.0
cis-1,2-Dichloroethylene	156-59-2	ND	ND	ND	0.5	2.0
trans-1,2-Dichloroethylene	156-60-5	ND	ND	ND	0.5	2.0
1,2-Dichloropropane	78-87-5	ND	ND	ND	0.5	2.3
cis-1,3-Dichloropropene	10061-01-5	ND	ND	ND	0.5	2.3
trans-1,3-Dichloropropene	10061-02-6	ND	ND	ND	0.5	2.3
Dichlorotetrafluoroethane	76-14-2	ND	ND	ND	0.5	3.5
Ethylbenzene	100-41-4	ND	ND	ND	0.5	2.2
4-Ethyltoluene	622-96-8	ND	ND	ND	0.5	2.5
Heptane	142-82-5	ND	ND	ND	0.5	2.0
Hexachlorobutadiene	87-68-3	ND	ND	ND	0.5	5.3
Hexane	110-54-3	ND	ND	ND	0.5	1.8
Isopropyl alcohol	67-63-0	ND	ND	ND	0.5	1.2
Methyl ethyl ketone	78-93-3	ND	ND	ND	0.5	1.5
Methyl isobutyl ketone	108-10-1	ND	ND	ND	0.5	2.0
Methylene chloride	75-09-2	13	45	ND	0.5	1.7
Methyl-t-butyl ether	1634-04-4	ND	ND	ND	0.5	1.8
Styrene	100-42-5	ND	ND	ND	0.5	2.1
1,1,2,2-Tetrachloroethane	79-34-5	ND	ND	ND	0.5	3.4
Tetrachloroethylene	127-18-4	ND	ND	ND	0.5	3.4
Toluene	108-88-3	ND	ND	ND	0.5	1.9
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	ND	ND	ND	0.5	3.8
1,2,4-Trichlorobenzene	120-82-1	ND	ND	ND	0.5	3.7
1,1,1-Trichloroethane	71-55-6	ND	ND	ND	0.5	2.7
1,1,2-Trichloroethane	79-00-5	ND	ND	ND	0.5	2.7
Trichloroethylene	79-01-6	ND	ND	ND	0.5	2.7
Trichlorofluoromethane	75-69-4	ND	ND	ND	0.5	2.8
1,2,4-Trimethylbenzene	95-63-6	ND	ND	ND	0.5	2.5
1,3,5-Trimethylbenzene	108-67-8	ND	ND	ND	0.5	2.5
2,2,4-Trimethylpentane	540-84-1	ND	ND	ND	0.5	2.3
Vinyl chloride	75-01-4	ND	ND	ND	0.5	1.3
m or p-Xylene	1330-20-7	1.8	7.8	ND	0.5	2.2
o-Xylene	95-47-6	0.61	2.7	ND	0.5	2.2

**Princeton Analytical  
Summary of Results**

Lawhon and Associates, Inc.  
975 Eastwind Drive, Suite 190  
Westerville, OD 43081  
Attn: Shawn Ansbro  
Project: 07-0082  
Site: Countywide

Report Date: 9/6/07  
Job Number: E07-08158  
Date Received: 8/7/07  
Date Analyzed: 8/20/07  
Data File: 082005  
Summa ID: 2068

Analysis: Volatile Organic Compounds by EPA Method TO-15m

<u>Compound</u>	<u>CAS #</u>	<u>Sample Name: SU-G0802</u>		<u>Reporting Limits</u>		
		<u>PAL ID:</u>	<u>ppbv</u>	<u>ug/m3</u>	<u>ppbv</u>	<u>ug/m3</u>
Acetone	67-64-1	E07-08158-02	ND	ND	0.5	1.2
Benzene	71-43-2		ND	ND	0.5	1.6
Bromodichloromethane	75-27-4		ND	ND	0.5	3.3
Bromoethene	593-60-2		ND	ND	0.5	2.2
Bromoform	75-25-2		ND	ND	0.5	5.2
Bromomethane	74-83-9		ND	ND	0.5	1.9
1,3-Butadiene	106-99-0		ND	ND	0.5	1.1
tert-Butyl alcohol	75-65-0		ND	ND	0.5	1.5
Carbon disulfide	75-15-0		ND	ND	0.5	1.6
Carbon tetrachloride	56-23-5		ND	ND	0.5	3.1
Chlorobenzene	108-90-7		ND	ND	0.5	2.3
Chloroethane	75-00-3		ND	ND	0.5	1.3
Chloroform	67-66-3		ND	ND	0.5	2.4
Chloromethane	74-87-3		ND	ND	0.5	1.0
3-Chloropropene	107-05-1		ND	ND	0.5	1.6
2-Chlorotoluene	95-49-8		ND	ND	0.5	2.6
Cyclohexane	110-82-7		ND	ND	0.5	1.7
Dibromochloromethane	124-48-1		ND	ND	0.5	4.3
1,2-Dibromoethane	106-93-4		ND	ND	0.5	3.8
1,2-Dichlorobenzene	95-50-1		ND	ND	0.5	3.0
1,3-Dichlorobenzene	541-73-1		ND	ND	0.5	3.0
1,4-Dichlorobenzene	106-46-7		ND	ND	0.5	3.0
Dichlorodifluoromethane	75-71-8		ND	ND	0.5	2.5
1,1-Dichloroethane	75-34-3		ND	ND	0.5	2.0
1,2-Dichloroethane	107-06-2		ND	ND	0.5	2.0
1,1-Dichloroethylene	75-35-4		ND	ND	0.5	2.0
cis-1,2-Dichloroethylene	156-59-2		ND	ND	0.5	2.0
trans-1,2-Dichloroethylene	156-60-5		ND	ND	0.5	2.0
1,2-Dichloropropane	78-87-5		ND	ND	0.5	2.3
cis-1,3-Dichloropropene	10061-01-5		ND	ND	0.5	2.3
trans-1,3-Dichloropropene	10061-02-6		ND	ND	0.5	2.3
Dichlorotetrafluoroethane	76-14-2		ND	ND	0.5	3.5
Ethylbenzene	100-41-4		ND	ND	0.5	2.2
4-Ethyltoluene	622-96-8		ND	ND	0.5	2.5
Heptane	142-82-5		ND	ND	0.5	2.0
Hexachlorobutadiene	87-68-3		ND	ND	0.5	5.3
Hexane	110-54-3		ND	ND	0.5	1.8
Isopropyl alcohol	67-63-0		ND	ND	0.5	1.2
Methyl ethyl ketone	78-93-3		0.62	1.8	0.5	1.5
Methyl isobutyl ketone	108-10-1		ND	ND	0.5	2.0
Methylene chloride	75-09-2		ND	ND	0.5	1.7
Methyl-t-butyl ether	1634-04-4		ND	ND	0.5	1.8
Styrene	100-42-5		ND	ND	0.5	2.1
1,1,2,2-Tetrachloroethane	79-34-5		ND	ND	0.5	3.4
Tetrachloroethylene	127-18-4		ND	ND	0.5	3.4
Toluene	108-88-3		ND	ND	0.5	1.9
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1		ND	ND	0.5	3.8
1,2,4-Trichlorobenzene	120-82-1		ND	ND	0.5	3.7
1,1,1-Trichloroethane	71-55-6		ND	ND	0.5	2.7
1,1,2-Trichloroethane	79-00-5		ND	ND	0.5	2.7
Trichloroethylene	79-01-6		ND	ND	0.5	2.7
Trichlorofluoromethane	75-69-4		ND	ND	0.5	2.8
1,2,4-Trimethylbenzene	95-63-6		ND	ND	0.5	2.5
1,3,5-Trimethylbenzene	108-67-8		ND	ND	0.5	2.5
2,2,4-Trimethylpentane	540-84-1		ND	ND	0.5	2.3
Vinyl chloride	75-01-4		ND	ND	0.5	1.3
m or p-Xylene	1330-20-7		1.4	6.1	0.5	2.2
o-Xylene	95-47-6		0.50	2.2	0.5	2.2

**Princeton Analytical  
Summary of Results**

Lawhon and Associates, Inc.  
975 Eastwind Drive, Suite 190  
Westerville, OD 43081  
Attn: Shawn Ansbro  
Project: 07-0082  
Site: Countywide

Report Date: 9/6/07  
Job Number: E07-08158  
Date Received: 8/7/07  
Date Analyzed: 8/16/07  
Data File: 081510  
Summa ID: 3288

Analysis: Volatile Organic Compounds by EPA Method TO-15m

<u>Compound</u>	<u>CAS #</u>	<u>Sample Name: SU-W0802</u>		<u>Reporting Limits</u>		
		<u>PAL ID:</u>	<u>ppbv</u>	<u>ug/m3</u>	<u>ppbv</u>	<u>ug/m3</u>
Acetone	67-64-1		5.6	13	0.5	1.2
Benzene	71-43-2		ND	ND	0.5	1.6
Bromodichloromethane	75-27-4		ND	ND	0.5	3.3
Bromoethene	593-60-2		ND	ND	0.5	2.2
Bromoform	75-25-2		ND	ND	0.5	5.2
Bromomethane	74-83-9		ND	ND	0.5	1.9
1,3-Butadiene	106-99-0		ND	ND	0.5	1.1
tert-Butyl alcohol	75-65-0		ND	ND	0.5	1.5
Carbon disulfide	75-15-0		ND	ND	0.5	1.6
Carbon tetrachloride	56-23-5		ND	ND	0.5	3.1
Chlorobenzene	108-90-7		ND	ND	0.5	2.3
Chloroethane	75-00-3		ND	ND	0.5	1.3
Chloroform	67-66-3		ND	ND	0.5	2.4
Chloromethane	74-87-3		ND	ND	0.5	1.0
3-Chloropropene	107-05-1		ND	ND	0.5	1.6
2-Chlorotoluene	95-49-8		ND	ND	0.5	2.6
Cyclohexane	110-82-7		ND	ND	0.5	1.7
Dibromochloromethane	124-48-1		ND	ND	0.5	4.3
1,2-Dibromoethane	106-93-4		ND	ND	0.5	3.8
1,2-Dichlorobenzene	95-50-1		ND	ND	0.5	3.0
1,3-Dichlorobenzene	541-73-1		ND	ND	0.5	3.0
1,4-Dichlorobenzene	106-46-7		ND	ND	0.5	3.0
Dichlorodifluoromethane	75-71-8		ND	ND	0.5	2.5
1,1-Dichloroethane	75-34-3		ND	ND	0.5	2.0
1,2-Dichloroethane	107-06-2		ND	ND	0.5	2.0
1,1-Dichloroethylene	75-35-4		ND	ND	0.5	2.0
cis-1,2-Dichloroethylene	156-59-2		ND	ND	0.5	2.0
trans-1,2-Dichloroethylene	156-60-5		ND	ND	0.5	2.0
1,2-Dichloropropane	78-87-5		ND	ND	0.5	2.3
cis-1,3-Dichloropropene	10061-01-5		ND	ND	0.5	2.3
trans-1,3-Dichloropropene	10061-02-6		ND	ND	0.5	2.3
Dichlorotetrafluoroethane	76-14-2		ND	ND	0.5	3.5
Ethylbenzene	100-41-4		ND	ND	0.5	2.2
4-Ethyltoluene	622-96-8		ND	ND	0.5	2.5
Heptane	142-82-5		ND	ND	0.5	2.0
Hexachlorobutadiene	87-68-3		ND	ND	0.5	5.3
Hexane	110-54-3		ND	ND	0.5	1.8
Isopropyl alcohol	67-63-0		ND	ND	0.5	1.2
Methyl ethyl ketone	78-93-3		0.90	2.7	0.5	1.5
Methyl isobutyl ketone	108-10-1		ND	ND	0.5	2.0
Methylene chloride	75-09-2		1.3	4.5	0.5	1.7
Methyl-t-butyl ether	1634-04-4		ND	ND	0.5	1.8
Styrene	100-42-5		ND	ND	0.5	2.1
1,1,2,2-Tetrachloroethane	79-34-5		ND	ND	0.5	3.4
Tetrachloroethylene	127-18-4		ND	ND	0.5	3.4
Toluene	108-88-3		ND	ND	0.5	1.9
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1		ND	ND	0.5	3.8
1,2,4-Trichlorobenzene	120-82-1		ND	ND	0.5	3.7
1,1,1-Trichloroethane	71-55-6		ND	ND	0.5	2.7
1,1,2-Trichloroethane	79-00-5		ND	ND	0.5	2.7
Trichloroethylene	79-01-6		ND	ND	0.5	2.7
Trichlorofluoromethane	75-69-4		ND	ND	0.5	2.8
1,2,4-Trimethylbenzene	95-63-6		ND	ND	0.5	2.5
1,3,5-Trimethylbenzene	108-67-8		ND	ND	0.5	2.5
2,2,4-Trimethylpentane	540-84-1		ND	ND	0.5	2.3
Vinyl chloride	75-01-4		ND	ND	0.5	1.3
m or p-Xylene	1330-20-7		0.77	3.3	0.5	2.2
o-Xylene	95-47-6		ND	ND	0.5	2.2

**Princeton Analytical  
Summary of Results**

Lawhon and Associates, Inc.  
975 Eastwind Drive, Suite 190  
Westerville, OD 43081  
Attn: Shawn Ansbro  
Project: 07-0082  
Site: Countywide

Report Date: 9/6/07  
Job Number: E07-08158  
Date Received: 8/7/07  
Date Analyzed: 8/21/07  
Data File: 082101  
Summa ID: 2095

Analysis: Volatile Organic Compounds by EPA Method TO-15m

<u>Compound</u>	<u>CAS #</u>	<u>Sample Name:</u> <u>PAL ID:</u>		<u>Reporting Limits</u>	
		<u>ppbv</u>	<u>ug/m3</u>	<u>ppbv</u>	<u>ug/m3</u>
Acetone	67-64-1	8.7	21	0.5	1.2
Benzene	71-43-2	ND	ND	0.5	1.6
Bromodichloromethane	75-27-4	ND	ND	0.5	3.3
Bromoethene	593-60-2	ND	ND	0.5	2.2
Bromoform	75-25-2	ND	ND	0.5	5.2
Bromomethane	74-83-9	ND	ND	0.5	1.9
1,3-Butadiene	106-99-0	ND	ND	0.5	1.1
tert-Butyl alcohol	75-65-0	ND	ND	0.5	1.5
Carbon disulfide	75-15-0	ND	ND	0.5	1.6
Carbon tetrachloride	56-23-5	ND	ND	0.5	3.1
Chlorobenzene	108-90-7	ND	ND	0.5	2.3
Chloroethane	75-00-3	ND	ND	0.5	1.3
Chloroform	67-66-3	ND	ND	0.5	2.4
Chloromethane	74-87-3	ND	ND	0.5	1.0
3-Chloropropene	107-05-1	ND	ND	0.5	1.6
2-Chlorotoluene	95-49-8	ND	ND	0.5	2.6
Cyclohexane	110-82-7	ND	ND	0.5	1.7
Dibromochloromethane	124-48-1	ND	ND	0.5	4.3
1,2-Dibromoethane	106-93-4	ND	ND	0.5	3.8
1,2-Dichlorobenzene	95-50-1	ND	ND	0.5	3.0
1,3-Dichlorobenzene	541-73-1	ND	ND	0.5	3.0
1,4-Dichlorobenzene	106-46-7	ND	ND	0.5	3.0
Dichlorodifluoromethane	75-71-8	ND	ND	0.5	2.5
1,1-Dichloroethane	75-34-3	ND	ND	0.5	2.0
1,2-Dichloroethane	107-06-2	ND	ND	0.5	2.0
1,1-Dichloroethylene	75-35-4	ND	ND	0.5	2.0
cis-1,2-Dichloroethylene	156-59-2	ND	ND	0.5	2.0
trans-1,2-Dichloroethylene	156-60-5	ND	ND	0.5	2.0
1,2-Dichloropropane	78-87-5	ND	ND	0.5	2.3
cis-1,3-Dichloropropene	10061-01-5	ND	ND	0.5	2.3
trans-1,3-Dichloropropene	10061-02-6	ND	ND	0.5	2.3
Dichlorotetrafluoroethane	76-14-2	ND	ND	0.5	3.5
Ethylbenzene	100-41-4	ND	ND	0.5	2.2
4-Ethyltoluene	622-96-8	ND	ND	0.5	2.5
Heptane	142-82-5	ND	ND	0.5	2.0
Hexachlorobutadiene	87-68-3	ND	ND	0.5	5.3
Hexane	110-54-3	ND	ND	0.5	1.8
Isopropyl alcohol	67-63-0	ND	ND	0.5	1.2
Methyl ethyl ketone	78-93-3	0.72	2.1	0.5	1.5
Methyl isobutyl ketone	108-10-1	ND	ND	0.5	2.0
Methylene chloride	75-09-2	0.91	3.2	0.5	1.7
Methyl-t-butyl ether	1634-04-4	ND	ND	0.5	1.8
Styrene	100-42-5	ND	ND	0.5	2.1
1,1,2,2-Tetrachloroethane	79-34-5	ND	ND	0.5	3.4
Tetrachloroethylene	127-18-4	ND	ND	0.5	3.4
Toluene	108-88-3	ND	ND	0.5	1.9
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	ND	ND	0.5	3.8
1,2,4-Trichlorobenzene	120-82-1	ND	ND	0.5	3.7
1,1,1-Trichloroethane	71-55-6	ND	ND	0.5	2.7
1,1,2-Trichloroethane	79-00-5	ND	ND	0.5	2.7
Trichloroethylene	79-01-6	ND	ND	0.5	2.7
Trichlorofluoromethane	75-69-4	ND	ND	0.5	2.8
1,2,4-Trimethylbenzene	95-63-6	ND	ND	0.5	2.5
1,3,5-Trimethylbenzene	108-67-8	ND	ND	0.5	2.5
2,2,4-Trimethylpentane	540-84-1	ND	ND	0.5	2.3
Vinyl chloride	75-01-4	ND	ND	0.5	1.3
m or p-Xylene	1330-20-7	0.88	3.8	0.5	2.2
o-Xylene	95-47-6	ND	ND	0.5	2.2

## Summary of Results

Lawhon and Associates, Inc.  
 975 Eastwind Drive, Suite 190  
 Westerville, OH 43081  
 Attn: Shawn Ansbro  
 Project: 07-0082, Countrywide

Report Date: 8/22/2007  
 Job Number: E07-08158  
 Date Received: 8/7/2007  
 Date Analyzed: 8/15-8/21/07

Analysis: Tentatively Identified Compounds by Library Search

Sample Name: SU-S0802  
 IAL ID: E07-08158-01

Data File: 081706  
 Canister ID: 2155

Chemical Name	CAS Number	Qual %	Estimated in ppb	Estimated in $\mu\text{g}/\text{m}^3$
Acetaldehyde	75-07-0	56	1.9	3.4
Butane	106-97-8	9	1.4	3.3
Acetonitrile	75-05-8	42	46	77
Butane, 2-methyl-	78-78-4	33	1.1	3.2
1,3-Butadiene, 2-methyl-	78-79-5	91	1.8	5.0
Pentane, 2-methyl-	107-83-5	47	1.0	3.5
Formaldehyde, dimethylhydrazone	2035-89-4	59	1.2	3.5
2-Propanol, 1-methoxy-	107-98-2	78	2.8	10
Benzene, 1,2,4,5-tetramethyl-	95-93-2	53	2.1	12

Sample Name: SU-G0802  
 IAL ID: E07-08158-02

Data File: 082005  
 Canister ID: 2068

Chemical Name	CAS Number	Qual %	Estimated in ppb	Estimated in $\mu\text{g}/\text{m}^3$
Propane	74-98-6	78	3.3	5.9
Acetaldehyde	75-07-0	72	2.0	3.6
Butane	106-97-8	64	3.2	7.6
Acetonitrile	75-05-8	9	58	97
Butane, 2-methyl-	78-78-4	43	8.3	24
Pentane	109-66-0	86	1.5	4.4
1,3-Butadiene, 2-methyl-	78-79-5	91	3.7	10
Pentane, 2-methyl-	107-83-5	80	1.8	6.3
Cyclotrisiloxane, hexamethyl-	541-05-9	86	1.6	15
Cycloheptane	291-64-5	60	6.2	25

## Summary of Results

Lawhon and Associates, Inc.  
975 Eastwind Drive, Suite 190  
Westerville, OH 43081  
Attn: Shawn Ansbro  
Project: 07-0082, Countrywide

Report Date: 8/22/2007  
Job Number: E07-08158  
Date Received: 8/7/2007  
Date Analyzed: 8/15-8/21/07

Analysis: Tentatively Identified Compounds by Library Search

Sample Name: SU-W0802  
IAL ID: E07-08158-03

Data File: 81510  
Canister ID: 3288

Chemical Name	CAS Number	Qual %	Estimated in ppb	Estimated in µg/m3
Acetonitrile	75-05-8	42	5.3	8.9
1,3-Butadiene, 2-methyl-	78-79-5	91	3.4	9.5
Pentane, 2-methyl-	107-83-5	45	1.1	3.9
Cyclotrisiloxane, hexamethyl-	541-05-9	64	3.2	29
3-Carene	13466-78-9	87	2.0	11

Sample Name: SU-C0802  
IAL ID: E07-08158-04

Data File: 082101  
Canister ID: 2095

Chemical Name	CAS Number	Qual %	Estimated in ppb	Estimated in µg/m3
Butane	106-97-8	64	3.4	8.1
Acetonitrile	75-05-8	40	7.2	12
Pentane	109-66-0	72	1.6	4.7
1,3-Butadiene, 2-methyl-	78-79-5	94	3.7	10
Pentane, 2-methyl-	107-83-5	59	1.9	6.7
Cyclotrisiloxane, hexamethyl-	541-05-9	95	3.3	30

## Summary of Results

Lawhon & Associates, Inc.  
 975 Eastwind Drive Suite 190  
 Westerville, OH 43081  
 Att: Shawn Ansbro  
 Jobsite: Countywide  
 Project: #07-0082

Report Date: 8/16/07  
 Job Number: E07-08158  
 Date Received: 8/07/07  
 Date Analyzed: 8/14/07

Analysis: Aldehydes and Ketones, EPA Method TO-11a

Sample Name:	S0802-01H		S0802-02H		S0802-03H		Reporting Limits
IAL ID:	E07-08158-17		E07-08158-18		E07-08158-19		
Compound	ug	ug/m3	ug	ug/m3	ug	ug/m3	ug
Formaldehyde	< 0.1	< 0.2	< 0.1	< 0.2	0.24	0.52	0.1
Acetaldehyde	< 0.1	< 0.2	< 0.1	< 0.2	< 0.1	< 0.2	0.1
Acetone	< 0.1	< 0.2	< 0.1	< 0.2	< 0.1	< 0.2	0.1
Acrolein	< 0.1	< 0.2	< 0.1	< 0.2	< 0.1	< 0.2	0.1
Propionaldehyde	< 0.1	< 0.2	< 0.1	< 0.2	< 0.1	< 0.2	0.1
Crotonaldehyde	< 0.1	< 0.2	< 0.1	< 0.2	< 0.1	< 0.2	0.1
Butyraldehyde	0.19	0.42	< 0.1	< 0.2	< 0.1	< 0.2	0.1
Benzaldehyde	< 0.1	< 0.2	< 0.1	< 0.2	< 0.1	< 0.2	0.1
Isovaleraldehyde	< 0.6	< 1.3	< 0.6	< 1.3	< 0.6	< 1.3	0.6
Valeraldehyde	< 0.2	< 0.4	< 0.2	< 0.4	< 0.2	< 0.4	0.2
o-Tolualdehyde	< 0.2	< 0.4	< 0.2	< 0.4	< 0.2	< 0.4	0.2
m- and p-Tolualdehyde	< 0.1	< 0.2	< 0.1	< 0.2	< 0.1	< 0.2	0.1
Hexaldehyde	< 0.1	< 0.2	< 0.1	< 0.2	< 0.1	< 0.2	0.1

Sample Name:	G0802-01H		G0802-02H		G0802-03H		Reporting Limits
IAL ID:	E07-08158-20		E07-08158-21		E07-08158-22		
Compound	ug	ug/m3	ug	ug/m3	ug	ug/m3	ug
Formaldehyde	0.24	1.2	< 0.1	< 0.3	0.15	0.32	0.1
Acetaldehyde	< 0.1	< 0.5	< 0.1	< 0.3	< 0.1	< 0.2	0.1
Acetone	< 0.1	< 0.5	< 0.1	< 0.3	< 0.1	< 0.2	0.1
Acrolein	< 0.1	< 0.5	< 0.1	< 0.3	< 0.1	< 0.2	0.1
Propionaldehyde	< 0.1	< 0.5	< 0.1	< 0.3	< 0.1	< 0.2	0.1
Crotonaldehyde	< 0.1	< 0.5	< 0.1	< 0.3	< 0.1	< 0.2	0.1
Butyraldehyde	< 0.1	< 0.5	< 0.1	< 0.3	< 0.1	< 0.2	0.1

Benzaldehyde	< 0.1	< 0.5	< 0.1	< 0.3	< 0.1	< 0.2	0.1
Isovaleraldehyde	< 0.6	< 3.1	< 0.6	< 1.8	< 0.6	< 1.3	0.6
Valeraldehyde	< 0.2	< 1.0	< 0.2	< 0.6	< 0.2	< 0.4	0.2
o-Tolualdehyde	< 0.2	< 1.0	< 0.2	< 0.6	< 0.2	< 0.4	0.2
m- and p-Tolualdehyde	< 0.1	< 0.5	< 0.1	< 0.3	< 0.1	< 0.2	0.1
Hexaldehyde	< 0.1	< 0.5	< 0.1	< 0.3	< 0.1	< 0.2	0.1

Page 1 of 2

Lawhon & Associates, Inc.  
 Jobsite: Countywide  
 Project: #07-0082

Job Number: E07-08158

Analysis: Aldehydes and Ketones, EPA Method TO-11a

Sample Name:	W0802-01H		W0802-02H		W0802-03H		Reporting
IAL ID:	E07-08158-23		E07-08158-24		E07-08158-25		Limits
Compound	ug	ug/m3	ug	ug/m3	ug	ug/m3	ug
Formaldehyde	< 0.1	< 0.2	< 0.1	< 0.2	< 0.1	< 0.2	0.1
Acetaldehyde	< 0.1	< 0.2	< 0.1	< 0.2	< 0.1	< 0.2	0.1
Acetone	< 0.1	< 0.2	< 0.1	< 0.2	< 0.1	< 0.2	0.1
Acrolein	< 0.1	< 0.2	< 0.1	< 0.2	< 0.1	< 0.2	0.1
Propionaldehyde	< 0.1	< 0.2	< 0.1	< 0.2	< 0.1	< 0.2	0.1
Crotonaldehyde	< 0.1	< 0.2	< 0.1	< 0.2	< 0.1	< 0.2	0.1
Butyraldehyde	< 0.1	< 0.2	< 0.1	< 0.2	< 0.1	< 0.2	0.1
Benzaldehyde	< 0.1	< 0.2	< 0.1	< 0.2	< 0.1	< 0.2	0.1
Isovaleraldehyde	< 0.6	< 1.4	< 0.6	< 1.3	< 0.6	< 1.3	0.6
Valeraldehyde	< 0.2	< 0.5	< 0.2	< 0.4	< 0.2	< 0.4	0.2
o-Tolualdehyde	< 0.2	< 0.5	< 0.2	< 0.4	< 0.2	< 0.4	0.2
m- and p-Tolualdehyde	< 0.1	< 0.2	< 0.1	< 0.2	< 0.1	< 0.2	0.1
Hexaldehyde	< 0.1	< 0.2	< 0.1	< 0.2	< 0.1	< 0.2	0.1

Sample Name:	C0802-01H		C0802-02H		C0802-03H		Reporting
IAL ID:	E07-08158-26		E07-08158-27		E07-08158-28		Limits
Compound	ug	ug/m3	ug	ug/m3	ug	ug/m3	ug
Formaldehyde	0.58	1.55	0.13	0.28	0.10	0.23	0.1
Acetaldehyde	< 0.1	< 0.3	< 0.1	< 0.2	< 0.1	< 0.2	0.1
Acetone	< 0.1	< 0.3	< 0.1	< 0.2	< 0.1	< 0.2	0.1

Acrolein	< 0.1	< 0.3	< 0.1	< 0.2	< 0.1	< 0.2	0.1
Propionaldehyde	< 0.1	< 0.3	< 0.1	< 0.2	< 0.1	< 0.2	0.1
Crotonaldehyde	< 0.1	< 0.3	< 0.1	< 0.2	< 0.1	< 0.2	0.1
Butyraldehyde	< 0.1	< 0.3	< 0.1	< 0.2	< 0.1	< 0.2	0.1
Benzaldehyde	< 0.1	< 0.3	< 0.1	< 0.2	< 0.1	< 0.2	0.1
Isovaleraldehyde	< 0.6	< 1.6	< 0.6	< 1.3	< 0.6	< 1.3	0.6
Valeraldehyde	< 0.2	< 0.5	< 0.2	< 0.4	< 0.2	< 0.4	0.2
o-Tolualdehyde	< 0.2	< 0.5	< 0.2	< 0.4	< 0.2	< 0.4	0.2
m- and p-Tolualdehyde	< 0.1	< 0.3	< 0.1	< 0.2	< 0.1	< 0.2	0.1
Hexaldehyde	< 0.1	< 0.3	< 0.1	< 0.2	< 0.1	< 0.2	0.1

\*Denotes breakthrough from front to back of sorbent tube for Formaldehyde.

Notes: Calculations of concentrations in air are based upon air sampling data reported by client.

Analytical results relate only to the samples as received at the laboratory.

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Michael H. Leftin, Ph.D.  
Laboratory Director

Page 2 of 2

Analyst: D. Mitchell

## Summary of Results

Lawhon and Associates, Inc.  
 975 Eastwind Drive, Suite 190  
 Westerville, OH 43081  
 Attn: Shawn Ansbro

Report Date: 08/21/07  
 Job Number: E07-08158  
 Date Received: 08/07/07  
 Date Analyzed: 08/16/07

Project: Countywide  
 Project #: 07-0082

Analysis: Hydrogen Chloride and Hydrogen Fluoride, NIOSH 7903

<u>Sample ID</u>	<u>IAL ID</u>	<u>Hydrogen Fluoride</u>		<u>Hydrogen Chloride</u>	
		<u>ug</u>	<u>ug/m3</u>	<u>ug</u>	<u>ug/m3</u>
S0802-01H	E07-08158-05	< 0.6	< 1.4	< 0.4	< 0.9
S0802-02H	E07-08158-06	< 0.6	< 1.4	< 0.4	< 0.8
S0802-03H	E07-08158-07	< 0.6	< 1.4	< 0.4	< 0.8
G0802-01H	E07-08158-08	< 0.6	< 3.2	< 0.4	< 2.0
G0802-02H	E07-08158-09	< 0.6	< 1.9	< 0.4	< 1.2
G0802-03H	E07-08158-10	< 0.6	< 1.4	< 0.4	< 0.8
W0802-01H	E07-08158-11	< 0.6	< 1.4	< 0.4	< 0.9
W0802-02H	E07-08158-12	< 0.6	< 1.4	0.46	1.0
W0802-03H	E07-08158-13	< 0.6	< 1.4	< 0.4	< 0.8
C0802-01H	E07-08158-14	< 0.6	< 1.7	0.51	1.4
C0802-02H	E07-08158-15	< 0.6	< 1.4	0.40	0.86
C0802-03H	E07-08158-16	< 0.6	< 1.4	0.48	1.0
Reporting Limit		0.6		0.4	

Note: Calculations of concentrations in air are based upon air sampling data reported by client.  
 Analytical results relate only to the samples as received at the laboratory.

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Michael H. Leftin, Ph.D.  
 Laboratory Director

Analyst: D. Mitchell

**Countywide Recycling & Disposal Facility  
Ambient Air Monitoring  
Monthly Report #4**

September 20, 2007

**APPENDIX B**

**Laboratory Analytical Results from August 08/09, 2007**

## *Certificate of Analysis*

### **CLIENT INFORMATION**

**Lawhon and Associates, Inc.**

975 Eastwind Drive, Suite 190

Westerville, OH 43081

Attn: Shawn Ansbro

Project#/Project Site: 07-0082/Countywide

Client Sample ID Nos:

SU-S0808, SU-G0808, SU-W0808, SU-C0808

### **LABORATORY INFORMATION**

Contact: Michael H. Leftin, Ph.D.

IAL Job No.: E07-08351

Date Received: 8/10/07

Sample Nos.:

E07-08351-01, E07-08351-02, E07-08351-03, E07-08351-04

Samples for this analysis were received in good condition with a chain of custody.

All work recorded herein has been done in accordance with normal professional standards using accepted testing methodologies, quality assurance and quality control procedures except where otherwise agreed to by the client and testing company in writing.

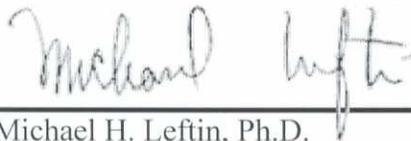
Once analysis has been performed on canisters that meets regulatory criteria, samples are recycled for future use, unless other provisions have been made by the client.

Analysis conducted at Integrated Analytical Laboratory, Randolph NJ

ELAP lab number - 11402

NJDEP number - 14751

AIHA number - 100201



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Michael H. Leftin, Ph.D.

Laboratory Director

**Princeton Analytical  
Summary of Results**

Lawton and Associates, Inc.  
975 Eastwind Drive, Suite 190  
Westerville, OD 43081  
Attn: Shawn Ansbro  
Project: 07-0082  
Site: Countywide

Report Date: 9/6/07  
Job Number: E07-08351  
Date Received: 8/10/07  
Date Analyzed: 9/1/07  
Data File: 083117  
Summa ID: 2896B

Analysis: Volatile Organic Compounds by EPA Method TO-15m

Compound	Sample Name: SU-S0808		Reporting Limits	
	CAS#	PAL ID: E07-08351-01	ppby	ug/m3
Acetone	67-64-1	ND	5.0	11.9
Benzene	71-43-2	ND	5.0	16.0
Bromodichloromethane	75-27-4	ND	5.0	33.5
Bromoethene	593-60-2	ND	5.0	21.9
Bromoform	75-25-2	ND	5.0	51.7
Bromomethane	74-83-9	ND	5.0	19.4
1,3-Butadiene	106-99-0	ND	5.0	11.1
tert-Butyl alcohol	75-65-0	ND	5.0	15.2
Carbon disulfide	75-15-0	ND	5.0	15.6
Carbon tetrachloride	56-23-5	ND	5.0	31.5
Chlorobenzene	108-90-7	ND	5.0	23.0
Chloroethane	75-00-3	ND	5.0	13.2
Chloroform	67-66-3	ND	5.0	24.4
Chloromethane	74-87-3	ND	5.0	10.3
3-Chloropropene	107-05-1	ND	5.0	15.6
2-Chlorotoluene	95-49-8	ND	5.0	25.9
Cyclohexane	110-82-7	ND	5.0	17.2
Dibromochloromethane	124-48-1	ND	5.0	42.6
1,2-Dibromoethane	106-93-4	ND	5.0	38.4
1,2-Dichlorobenzene	95-50-1	ND	5.0	30.1
1,3-Dichlorobenzene	541-73-1	ND	5.0	30.1
1,4-Dichlorobenzene	106-46-7	ND	5.0	30.1
Dichlorodifluoromethane	75-71-8	ND	5.0	24.7
1,1-Dichloroethane	75-34-3	ND	5.0	20.2
1,2-Dichloroethane	107-06-2	ND	5.0	20.2
1,1-Dichloroethylene	75-35-4	ND	5.0	19.8
cis-1,2-Dichloroethylene	156-59-2	ND	5.0	19.8
trans-1,2-Dichloroethylene	156-60-5	ND	5.0	19.8
1,2-Dichloropropane	78-87-5	ND	5.0	23.1
cis-1,3-Dichloropropene	10061-01-5	ND	5.0	22.7
trans-1,3-Dichloropropene	10061-02-6	ND	5.0	22.7
Dichlorotetrafluoroethane	76-14-2	ND	5.0	34.9
Ethylbenzene	100-41-4	ND	5.0	21.7
4-Ethyltoluene	622-96-8	ND	5.0	106.20
Heptane	142-82-5	ND	5.0	24.6
Hexachlorobutadiene	87-68-3	ND	5.0	20.5
Hexane	110-54-3	ND	5.0	53.3
Isopropyl alcohol	67-63-0	ND	5.0	17.6
Methyl ethyl ketone	78-93-3	ND	5.0	12.3
Methyl isobutyl ketone	108-10-1	ND	5.0	14.7
Methylene chloride	75-09-2	ND	5.0	20.5
		ND	5.0	17.4

D = Extra dilution required for this compound

page 2 of 9

Analyst: J. Schmitt

**Princeton Analytical  
Summary of Results**

Lawhon and Associates, Inc.  
975 Eastwind Drive, Suite 190  
Westerville, OD 43081  
Attn: Shawn Ansbro  
Project: 07-0082  
Site: Countywide

Report Date: 9/6/07  
Job Number: E07-08351  
Date Received: 8/10/07  
Date Analyzed: 9/1/07  
Data File: 083117  
Summa ID: 2896B

Analysis: Volatile Organic Compounds by EPA Method TO-15m

Compound	Sample Name:		Reporting Limits	
	CAS #	PAL ID:	ppbv	ug/m3
Methyl-t-butyl ether	1634-04-4	SU-S0808	ND	18.0
Styrene	100-42-5	E07-08351-01	ND	21.3
1,1,2,2-Tetrachloroethane	79-34-5		ND	34.3
Tetrachloroethylene	127-18-4		ND	33.9
Toluene	108-88-3		ND	18.8
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1		ND	38.3
1,2,4-Trichlorobenzene	120-82-1		ND	181.50
1,1,1-Trichloroethane	71-55-6		ND	133.40
1,1,2-Trichloroethane	79-00-5		ND	133.40
Trichloroethylene	79-01-6		ND	131.40
Trichlorofluoromethane	75-69-4		ND	137.40
1,2,4-Trimethylbenzene	95-63-6		ND	24.6
1,3,5-Trimethylbenzene	108-67-8		ND	24.6
2,2,4-Trimethylpentane	540-84-1		ND	23.4
Vinyl chloride	75-01-4		ND	12.8
m or p-Xylene	1330-20-7		ND	21.7
o-Xylene	95-47-6		ND	106.20

**Princeton Analytical  
Summary of Results**

Lawhon and Associates, Inc.  
975 Eastwind Drive, Suite 190  
Westerville, OD 43081  
Attn: Shawn Ansbro  
Project: 07-0082  
Site: Countywide

Report Date: 9/6/07  
Job Number: E07-08351  
Date Received: 8/10/07  
Date Analyzed: 8/31/07  
Data File: 083017  
Summa ID: 2768

Analysis: Volatile Organic Compounds by EPA Method TO-15m

Compound	Sample Name: SU-G0808		Reporting Limits	
	CAS#	E07-08351-02	ppby	ug/m3
Acetone	67-64-1	15	5.0	11.9
Benzene	71-43-2	ND	5.0	16.0
Bromodichloromethane	75-27-4	ND	5.0	33.5
Bromoethene	593-60-2	ND	5.0	21.9
Bromoform	75-25-2	ND	5.0	51.7
Bromomethane	74-83-9	ND	5.0	19.4
1,3-Butadiene	106-99-0	ND	5.0	11.1
tert-Butyl alcohol	75-65-0	ND	5.0	15.2
Carbon disulfide	75-15-0	ND	5.0	15.6
Carbon tetrachloride	56-23-5	ND	5.0	31.5
Chlorobenzene	108-90-7	ND	5.0	23.0
Chloroethane	75-00-3	ND	5.0	13.2
Chloroform	67-66-3	ND	5.0	24.4
Chloromethane	74-87-3	ND	5.0	10.3
3-Chloropropene	107-05-1	ND	5.0	15.6
2-Chlorotoluene	95-49-8	ND	5.0	25.9
Cyclohexane	110-82-7	ND	5.0	17.2
Dibromochloromethane	124-48-1	ND	5.0	42.6
1,2-Dibromoethane	106-93-4	ND	5.0	38.4
1,2-Dichlorobenzene	95-50-1	ND	5.0	30.1
1,3-Dichlorobenzene	541-73-1	ND	5.0	30.1
1,4-Dichlorobenzene	106-46-7	ND	5.0	30.1
Dichlorodifluoromethane	75-71-8	ND	5.0	24.7
1,1-Dichloroethane	75-34-3	ND	5.0	20.2
1,2-Dichloroethane	107-06-2	ND	5.0	20.2
1,1-Dichloroethylene	75-35-4	ND	5.0	19.8
cis-1,2-Dichloroethylene	156-59-2	ND	5.0	19.8
trans-1,2-Dichloroethylene	156-60-5	ND	5.0	19.8
1,2-Dichloropropane	78-87-5	ND	5.0	23.1
cis-1,3-Dichloropropene	10061-01-5	ND	5.0	22.7
trans-1,3-Dichloropropene	10061-02-6	ND	5.0	22.7
Dichlorotetrafluoroethane	76-14-2	ND	5.0	34.9
Ethylbenzene	100-41-4	ND	5.0	21.7
4-Ethyltoluene	622-96-8	ND	5.0	106.20
Heptane	142-82-5	ND	5.0	24.6
Hexachlorobutadiene	87-68-3	ND	5.0	20.5
Hexane	110-54-3	ND	5.0	53.3
Isopropyl alcohol	67-63-0	ND	5.0	17.6
Methyl ethyl ketone	78-93-3	ND	5.0	12.3
Methyl isobutyl ketone	108-10-1	ND	5.0	14.7
Methylene chloride	75-09-2	ND	5.0	20.5
		ND	5.0	17.4

D = Extra dilution required for this compound

page 4 of 9

Analyst: J. Schmitt

**Princeton Analytical  
Summary of Results**

Lawhon and Associates, Inc.  
975 Eastwind Drive, Suite 190  
Westerville, OD 43081  
Attn: Shawn Ansbro  
Project: 07-0082  
Site: Countywide

Report Date: 9/6/07  
Job Number: E07-08351  
Date Received: 8/10/07  
Date Analyzed: 8/31/07  
Data File: 083017  
Summa ID: 2768

Analysis: Volatile Organic Compounds by EPA Method TO-15m

Compound	Sample Name: SU-G0808		Reporting Limits	
	CAS #	PAL ID: E07-08351-02	ppbv	ug/m3
Methyl-t-butyl ether	1634-04-4	ND	5.0	18.0
Styrene	100-42-5	ND	5.0	21.3
1,1,2,2-Tetrachloroethane	79-34-5	ND	5.0	34.3
Tetrachloroethylene	127-18-4	ND	5.0	33.9
Toluene	108-88-3	ND	5.0	18.8
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	ND	5.0	38.3
1,2,4-Trichlorobenzene	120-82-1	ND	5.0	37.1
1,1,1-Trichloroethane	71-55-6	ND	5.0	27.3
1,1,2-Trichloroethane	79-00-5	ND	5.0	27.3
Trichloroethylene	79-01-6	ND	5.0	26.9
Trichlorofluoromethane	75-69-4	ND	5.0	28.1
1,2,4-Trimethylbenzene	95-63-6	ND	5.0	24.6
1,3,5-Trimethylbenzene	108-67-8	ND	5.0	24.6
2,2,4-Trimethylpentane	540-84-1	ND	5.0	23.4
Vinyl chloride	75-01-4	ND	5.0	12.8
m or p-Xylene	1330-20-7	ND	5.0	21.7
o-Xylene	95-47-6	ND	5.0	106.20

**Princeton Analytical  
Summary of Results**

Lawhon and Associates, Inc.  
975 Eastwind Drive, Suite 190  
Westerville, OD 43081  
Attn: Shawn Ansbro  
Project: 07-0082  
Site: Countywide

Report Date: 9/6/07  
Job Number: E07-08351  
Date Received: 8/10/07  
Date Analyzed: 8/31/07  
Data File: 083018  
Summa ID: 3289

Analysis: Volatile Organic Compounds by EPA Method TO-15m

Compound	Sample Name: SU-W0808		PAL ID: E07-08351-03		Reporting Limits	
	CAS#	ppby	ug/m3	ppby	ug/m3	
Acetone	67-64-1	ND	ND	5.0	11.9	58.08
Benzene	71-43-2	ND	ND	5.0	16.0	78.11
Bromodichloromethane	75-27-4	ND	ND	5.0	33.5	163.80
Bromoethene	593-60-2	ND	ND	5.0	21.9	107.00
Bromoform	75-25-2	ND	ND	5.0	51.7	252.80
Bromomethane	74-83-9	ND	ND	5.0	19.4	94.94
1,3-Butadiene	106-99-0	ND	ND	5.0	11.1	54.09
tert-Butyl alcohol	75-65-0	ND	ND	5.0	15.2	74.14
Carbon disulfide	75-15-0	ND	ND	5.0	15.6	76.14
Carbon tetrachloride	56-23-5	ND	ND	5.0	31.5	153.80
Chlorobenzene	108-90-7	ND	ND	5.0	23.0	112.60
Chloroethane	75-00-3	ND	ND	5.0	13.2	64.52
Chloroform	67-66-3	ND	ND	5.0	24.4	119.40
Chloromethane	74-87-3	ND	ND	5.0	10.3	50.49
3-Chloropropene	107-05-1	ND	ND	5.0	15.6	76.49
2-Chlorotoluene	95-49-8	ND	ND	5.0	25.9	126.60
Cyclohexane	110-82-7	ND	ND	5.0	17.2	84.16
Dibromochloromethane	124-48-1	ND	ND	5.0	42.6	208.30
1,2-Dibromoethane	106-93-4	ND	ND	5.0	38.4	187.90
1,2-Dichlorobenzene	95-50-1	ND	ND	5.0	30.1	147.00
1,3-Dichlorobenzene	541-73-1	ND	ND	5.0	30.1	147.00
1,4-Dichlorobenzene	106-46-7	ND	ND	5.0	30.1	147.00
Dichlorodifluoromethane	75-71-8	ND	ND	5.0	24.7	120.90
1,1-Dichloroethane	75-34-3	ND	ND	5.0	20.2	98.96
1,2-Dichloroethane	107-06-2	ND	ND	5.0	20.2	98.96
1,1-Dichloroethylene	75-35-4	ND	ND	5.0	19.8	96.94
cis-1,2-Dichloroethylene	156-59-2	ND	ND	5.0	19.8	96.94
trans-1,2-Dichloroethylene	156-60-5	ND	ND	5.0	19.8	96.94
1,2-Dichloropropane	78-87-5	ND	ND	5.0	23.1	113.00
cis-1,3-Dichloropropene	10061-01-5	ND	ND	5.0	22.7	111.00
trans-1,3-Dichloropropene	10061-02-6	ND	ND	5.0	22.7	111.00
Dichlorotetrafluoroethane	76-14-2	ND	ND	5.0	34.9	170.90
Ethylbenzene	100-41-4	ND	ND	5.0	21.7	106.20
4-Ethyltoluene	622-96-8	ND	ND	5.0	24.6	120.20
Heptane	142-82-5	ND	ND	5.0	20.5	100.20
Hexachlorobutadiene	87-68-3	ND	ND	5.0	53.3	260.80
Hexane	110-54-3	ND	ND	5.0	17.6	86.17
Isopropyl alcohol	67-63-0	ND	ND	5.0	12.3	60.10
Methyl ethyl ketone	78-93-3	ND	ND	5.0	14.7	72.11
Methyl isobutyl ketone	108-10-1	ND	ND	5.0	20.5	100.20
Methylene chloride	75-09-2	ND	ND	5.0	17.4	84.94

D = Extra dilution required for this compound

**Princeton Analytical  
Summary of Results**

Lawhon and Associates, Inc.  
975 Eastwind Drive, Suite 190  
Westerville, OD 43081  
Attn: Shawn Ansbro  
Project: 07-0082  
Site: Countywide

Report Date: 9/6/07  
Job Number: E07-08351  
Date Received: 8/10/07  
Date Analyzed: 8/31/07  
Data File: 083018  
Summa ID: 3289

Analysis: Volatile Organic Compounds by EPA Method TO-15m

Compound	Sample Name: SU-W0808		Reporting Limits	
	CAS #	PAL ID: E07-08351-03	ppbv	ug/m3
Methyl-t-butyl ether	1634-04-4	ND	5.0	18.0
Styrene	100-42-5	ND	5.0	21.3
1,1,2,2-Tetrachloroethane	79-34-5	ND	5.0	34.3
Tetrachloroethylene	127-18-4	ND	5.0	33.9
Toluene	108-88-3	ND	5.0	18.8
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	ND	5.0	38.3
1,2,4-Trichlorobenzene	120-82-1	ND	5.0	37.1
1,1,1-Trichloroethane	71-55-6	ND	5.0	27.3
1,1,2-Trichloroethane	79-00-5	ND	5.0	27.3
Trichloroethylene	79-01-6	ND	5.0	26.9
Trichlorofluoromethane	75-69-4	ND	5.0	28.1
1,2,4-Trimethylbenzene	95-63-6	ND	5.0	24.6
1,3,5-Trimethylbenzene	108-67-8	ND	5.0	24.6
2,2,4-Trimethylpentane	540-84-1	ND	5.0	23.4
Vinyl chloride	75-01-4	ND	5.0	12.8
m or p-Xylene	1330-20-7	ND	5.0	21.7
o-Xylene	95-47-6	ND	5.0	21.7

**Princeton Analytical  
Summary of Results**

Lawton and Associates, Inc.  
975 Eastwind Drive, Suite 190  
Westerville, OD 43081  
Attn: Shawn Ansbro  
Project: 07-0082  
Site: Countywide

Report Date: 9/6/07  
Job Number: E07-08351  
Date Received: 8/10/07  
Date Analyzed: 8/31/07  
Data File: 083019  
Summa ID: 2901

Analysis: Volatile Organic Compounds by EPA Method TO-15m

Compound	Sample Name:		Reporting Limits	
	CAS#	PAL ID:	ppbv	ug/m3
Acetone	67-64-1	SU-C0808	5.0	11.9
Benzene	71-43-2	E07-08351-04	5.0	16.0
Bromodichloromethane	75-27-4		5.0	33.5
Bromoethene	593-60-2		5.0	21.9
Bromoform	75-25-2		5.0	51.7
Bromomethane	74-83-9		5.0	19.4
1,3-Butadiene	106-99-0		5.0	11.1
tert-Butyl alcohol	75-65-0		5.0	15.2
Carbon disulfide	75-15-0		5.0	15.6
Carbon tetrachloride	56-23-5		5.0	31.5
Chlorobenzene	108-90-7		5.0	23.0
Chloroethane	75-00-3		5.0	13.2
Chloroform	67-66-3		5.0	24.4
Chloromethane	74-87-3		5.0	10.3
3-Chloropropene	107-05-1		5.0	15.6
2-Chlorotoluene	95-49-8		5.0	25.9
Cyclohexane	110-82-7		5.0	17.2
Dibromochloromethane	124-48-1		5.0	42.6
1,2-Dibromoethane	106-93-4		5.0	38.4
1,2-Dichlorobenzene	95-50-1		5.0	30.1
1,3-Dichlorobenzene	541-73-1		5.0	30.1
1,4-Dichlorobenzene	106-46-7		5.0	30.1
Dichlorodifluoromethane	75-71-8		5.0	24.7
1,1-Dichloroethane	75-34-3		5.0	20.2
1,2-Dichloroethane	107-06-2		5.0	20.2
1,1-Dichloroethylene	75-35-4		5.0	19.8
cis-1,2-Dichloroethylene	156-59-2		5.0	19.8
trans-1,2-Dichloroethylene	156-60-5		5.0	19.8
1,2-Dichloropropane	78-87-5		5.0	23.1
cis-1,3-Dichloropropene	10061-01-5		5.0	22.7
trans-1,3-Dichloropropene	10061-02-6		5.0	22.7
Dichlorotetrafluoroethane	76-14-2		5.0	34.9
Ethylbenzene	100-41-4		5.0	21.7
4-Ethyltoluene	622-96-8		5.0	24.6
Heptane	142-82-5		5.0	20.5
Hexachlorobutadiene	87-68-3		5.0	53.3
Hexane	110-54-3		5.0	17.6
Isopropyl alcohol	67-63-0		5.0	12.3
Methyl ethyl ketone	78-93-3		5.0	14.7
Methyl isobutyl ketone	108-10-1		5.0	20.5
Methylene chloride	75-09-2		5.0	17.4

D = Extra dilution required for this compound

page 8 of 9

Analyst: J. Schmitt

**Princeton Analytical  
Summary of Results**

Lawhon and Associates, Inc.  
975 Eastwind Drive, Suite 190  
Westerville, OD 43081  
Attn: Shawn Ansbro  
Project: 07-0082  
Site: Countywide

Report Date: 9/6/07  
Job Number: E07-08351  
Date Received: 8/10/07  
Date Analyzed: 8/31/07  
Data File: 083019  
Summa ID: 2901

**Analysis: Volatile Organic Compounds by EPA Method TO-15m**

Compound	Sample Name: SU-C0808		Reporting Limits	
	CAS #	PAL ID: E07-08351-04	ppbv	ug/m3
Methyl-t-butyl ether	1634-04-4	ND	5.0	18.0
Styrene	100-42-5	ND	5.0	21.3
1,1,2,2-Tetrachloroethane	79-34-5	ND	5.0	34.3
Tetrachloroethylene	127-18-4	ND	5.0	33.9
Toluene	108-88-3	ND	5.0	18.8
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	ND	5.0	38.3
1,2,4-Trichlorobenzene	120-82-1	ND	5.0	37.1
1,1,1-Trichloroethane	71-55-6	ND	5.0	27.3
1,1,2-Trichloroethane	79-00-5	ND	5.0	27.3
Trichloroethylene	79-01-6	ND	5.0	26.9
Trichlorofluoromethane	75-69-4	ND	5.0	28.1
1,2,4-Trimethylbenzene	95-63-6	ND	5.0	24.6
1,3,5-Trimethylbenzene	108-67-8	ND	5.0	24.6
2,2,4-Trimethylpentane	540-84-1	ND	5.0	23.4
Vinyl chloride	75-01-4	ND	5.0	12.8
m or p-Xylene	1330-20-7	ND	5.0	21.7
o-Xylene	95-47-6	ND	5.0	21.7

## Summary of Results

Lawhon and Associates, Inc.  
975 Eastwind Drive, Suite 190  
Westerville, OH 43081  
Attn: Shawn Ansbro  
Project: 07-0082, Countrywide

Report Date: 8/31/2007  
Job Number: E07-08351  
Date Received: 8/10/2007  
Date Analyzed: 8/28-8/31/07

Analysis: Tentatively Identified Compounds by Library Search

Sample Name: SU-S0808  
IAL ID: E07-08351-01

x 10 dil

Data File: 083117  
Canister ID: 2896B

Chemical Name	CAS Number	Qual %	Estimated in ppb	Estimated in µg/m3
Hexadecane, 2,6,10,14-tetramethyl-	638-36-8	62	35	404

Sample Name: SU-G0808  
IAL ID: E07-08351-02

x 10 dil

Data File: 083017  
Canister ID: 2768

Chemical Name	CAS Number	Qual %	Estimated in ppb	Estimated in µg/m3
Acetaldehyde	75-07-0	7	3.7	6.7

Sample Name: SU-W0808  
IAL ID: E07-08351-03

x 10 dil

Data File: 083018  
Canister ID: 3289

Chemical Name	CAS Number	Qual %	Estimated in ppb	Estimated in µg/m3
No TICS detected				

Sample Name: SU-C0808  
IAL ID: E07-08351-04

x 10 dil

Data File: 083019  
Canister ID: 2901

Chemical Name	CAS Number	Qual %	Estimated in ppb	Estimated in µg/m3
No TICS detected				

## Summary of Results

Lawhon & Associates, Inc.  
 975 Eastwind Drive Suite 190  
 Westerville, OH 43081  
 Att: Shawn Ansbro  
 Jobsite: Countywide  
 Project: #07-0082

Report Date: 8/21/07  
 Job Number: E07-08351  
 Date Received: 8/10/07  
 Date Analyzed: 8/20/07

Analysis: Aldehydes and Ketones, EPA Method TO-11a

Sample Name:	S0808-01H		S0808-02H		S0808-03H		Reporting Limits
IAL ID:	E07-08351-17		E07-08351-18		E07-08351-19		
<u>Compound</u>	<u>ug</u>	<u>ug/m3</u>	<u>ug</u>	<u>ug/m3</u>	<u>ug</u>	<u>ug/m3</u>	<u>ug</u>
Formaldehyde	< 0.1	< 0.3	0.26	0.58	0.13	0.28	0.1
Acetaldehyde	< 0.1	< 0.3	0.11	0.24	< 0.1	< 0.2	0.1
Acetone	< 0.1	< 0.3	< 0.1	< 0.2	< 0.1	< 0.2	0.1
Acrolein	< 0.1	< 0.3	< 0.1	< 0.2	< 0.1	< 0.2	0.1
Propionaldehyde	< 0.1	< 0.3	< 0.1	< 0.2	< 0.1	< 0.2	0.1
Crotonaldehyde	< 0.1	< 0.3	< 0.1	< 0.2	< 0.1	< 0.2	0.1
Butyraldehyde	< 0.1	< 0.3	< 0.1	< 0.2	< 0.1	< 0.2	0.1
Benzaldehyde	< 0.1	< 0.3	< 0.1	< 0.2	< 0.1	< 0.2	0.1
Isovaleraldehyde	< 0.6	< 2.1	< 0.6	< 1.3	< 0.6	< 1.3	0.6
Valeraldehyde	< 0.2	< 0.7	< 0.2	< 0.4	< 0.2	< 0.4	0.2
o-Tolualdehyde	< 0.2	< 0.7	< 0.2	< 0.4	< 0.2	< 0.4	0.2
m- and p-Tolualdehyde	< 0.1	< 0.3	< 0.1	< 0.2	< 0.1	< 0.2	0.1
Hexaldehyde	< 0.1	< 0.3	< 0.1	< 0.2	< 0.1	< 0.2	0.1

Sample Name:	G0808-01H		G0808-02H		G0808-03H		Reporting Limits
IAL ID:	E07-08351-20		E07-08351-21		E07-08351-22		
<u>Compound</u>	<u>ug</u>	<u>ug/m3</u>	<u>ug</u>	<u>ug/m3</u>	<u>ug</u>	<u>ug/m3</u>	<u>ug</u>
Formaldehyde	< 0.1	< 0.2	0.17	0.38	0.15	0.34	0.1
Acetaldehyde	< 0.1	< 0.2	< 0.1	< 0.2	< 0.1	< 0.2	0.1
Acetone	< 0.1	< 0.2	< 0.1	< 0.2	< 0.1	< 0.2	0.1
Acrolein	< 0.1	< 0.2	< 0.1	< 0.2	< 0.1	< 0.2	0.1
Propionaldehyde	< 0.1	< 0.2	< 0.1	< 0.2	< 0.1	< 0.2	0.1
Crotonaldehyde	< 0.1	< 0.2	< 0.1	< 0.2	< 0.1	< 0.2	0.1
Butyraldehyde	< 0.1	< 0.2	< 0.1	< 0.2	< 0.1	< 0.2	0.1

Benzaldehyde	< 0.1	< 0.2	< 0.1	< 0.2	< 0.1	< 0.2	0.1
Isovaleraldehyde	< 0.6	< 1.3	< 0.6	< 1.3	< 0.6	< 1.3	0.6
Valeraldehyde	< 0.2	< 0.4	< 0.2	< 0.4	< 0.2	< 0.4	0.2
o-Tolualdehyde	< 0.2	< 0.4	< 0.2	< 0.4	< 0.2	< 0.4	0.2
m- and p-Tolualdehyde	< 0.1	< 0.2	< 0.1	< 0.2	< 0.1	< 0.2	0.1
Hexaldehyde	< 0.1	< 0.2	< 0.1	< 0.2	< 0.1	< 0.2	0.1

Page 1 of 2

Lawhon & Associates, Inc.

Job Number: E07-08351

Jobsite: Countywide

Project: #07-0082

Analysis: Aldehydes and Ketones, EPA Method TO-11a

Sample Name:	W0808-01H		W0808-02H		W0808-03H*		Reporting
IAL ID:	E07-08351-23		E07-08351-24		E07-08351-25		Limits
Compound	ug	ug/m3	ug	ug/m3	ug	ug/m3	ug
Formaldehyde	0.14	0.83	0.34	1.0	0.30	0.66	0.1
Acetaldehyde	< 0.1	< 0.6	< 0.1	< 0.3	< 0.1	< 0.2	0.1
Acetone	< 0.1	< 0.6	< 0.1	< 0.3	< 0.1	< 0.2	0.1
Acrolein	< 0.1	< 0.6	< 0.1	< 0.3	< 0.1	< 0.2	0.1
Propionaldehyde	< 0.1	< 0.6	< 0.1	< 0.3	< 0.1	< 0.2	0.1
Crotonaldehyde	0.11	0.63	< 0.1	< 0.3	< 0.1	< 0.2	0.1
Butyraldehyde	< 0.1	< 0.6	< 0.1	< 0.3	< 0.1	< 0.2	0.1
Benzaldehyde	< 0.1	< 0.6	< 0.1	< 0.3	< 0.1	< 0.2	0.1
Isovaleraldehyde	< 0.6	< 3.6	< 0.6	< 1.8	< 0.6	< 1.3	0.6
Valeraldehyde	< 0.2	< 1.2	< 0.2	< 0.6	< 0.2	< 0.4	0.2
o-Tolualdehyde	< 0.2	< 1.2	< 0.2	< 0.6	< 0.2	< 0.4	0.2
m- and p-Tolualdehyde	< 0.1	< 0.6	< 0.1	< 0.3	< 0.1	< 0.2	0.1
Hexaldehyde	< 0.1	< 0.6	< 0.1	< 0.3	< 0.1	< 0.2	0.1

Sample Name:	C0808-01H		C0808-02H		C0808-03H		Reporting
IAL ID:	E07-08351-26		E07-08351-27		E07-08351-28		Limits
Compound	ug	ug/m3	ug	ug/m3	ug	ug/m3	ug
Formaldehyde	0.26	0.58	0.12	0.27	0.15	0.32	0.1
Acetaldehyde	< 0.1	< 0.2	< 0.1	< 0.2	< 0.1	< 0.2	0.1
Acetone	< 0.1	< 0.2	< 0.1	< 0.2	< 0.1	< 0.2	0.1

Acrolein	< 0.1	< 0.2	< 0.1	< 0.2	< 0.1	< 0.2	0.1
Propionaldehyde	< 0.1	< 0.2	< 0.1	< 0.2	< 0.1	< 0.2	0.1
Crotonaldehyde	< 0.1	< 0.2	< 0.1	< 0.2	< 0.1	< 0.2	0.1
Butyraldehyde	< 0.1	< 0.2	< 0.1	< 0.2	< 0.1	< 0.2	0.1
Benzaldehyde	< 0.1	< 0.2	< 0.1	< 0.2	< 0.1	< 0.2	0.1
Isovaleraldehyde	< 0.6	< 1.3	< 0.6	< 1.3	< 0.6	< 1.3	0.6
Valeraldehyde	< 0.2	< 0.4	< 0.2	< 0.4	< 0.2	< 0.4	0.2
o-Tolualdehyde	< 0.2	< 0.4	< 0.2	< 0.4	< 0.2	< 0.4	0.2
m- and p-Tolualdehyde	< 0.1	< 0.2	< 0.1	< 0.2	< 0.1	< 0.2	0.1
Hexaldehyde	< 0.1	< 0.2	< 0.1	< 0.2	< 0.1	< 0.2	0.1

\*Denotes breakthrough from front to back of sorbent tube for Formaldehyde.

Notes: Calculations of concentrations in air are based upon air sampling data reported by client.

Analytical results relate only to the samples as received at the laboratory.

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Michael H. Leftin, Ph.D.  
Laboratory Director

Page 2 of 2

Analyst: D. Mitchell

## Summary of Results

Lawhon and Associates, Inc.  
 975 Eastwind Drive, Suite 190  
 Westerville, OH 43081  
 Attn: Shawn Ansbro

Report Date: 08/22/07  
 Job Number: E07-08351  
 Date Received: 08/10/07  
 Date Analyzed: 08/20/07

Project: Countywide  
 Project #: 07-0082

Analysis: Hydrogen Chloride and Hydrogen Fluoride, NIOSH 7903

Sample ID	IAL ID	Hydrogen Fluoride		Hydrogen Chloride	
		ug	ug/m <sup>3</sup>	ug	ug/m <sup>3</sup>
S0808-01H	E07-08351-05	< 0.6	< 2.2	< 0.4	< 1.3
S0808-02H	E07-08351-06	< 0.6	< 1.4	< 0.4	< 0.9
S0808-03H*	E07-08351-07	2.1	4.5	5.8	13
G0808-01H	E07-08351-08	< 0.6	< 1.3	< 0.4	< 0.8
G0808-02H	E07-08351-09	< 0.6	< 1.4	< 0.4	< 0.9
G0808-03H*	E07-08351-10	< 0.6	< 1.4	1.3	2.8
W0808-01H	E07-08351-11	< 0.6	< 3.7	< 0.4	< 2.3
W0808-02H	E07-08351-12	< 0.6	< 1.9	< 0.4	< 1.2
W0808-03H	E07-08351-13	< 0.6	< 1.4	< 0.4	< 0.8
C0808-01H	E07-08351-14	< 0.6	< 1.4	< 0.4	< 0.9
C0808-02H	E07-08351-15	< 0.6	< 1.4	< 0.4	< 0.8
C0808-03H*	E07-08351-16	2.0	4.5	5.7	12
Reporting Limit		0.6		0.4	

\*Denotes breakthrough from the front to the back of the sorbent tube. The media within these sorbent tubes was saturated when received.

Note: Calculations of concentrations in air are based upon air sampling data reported by client.  
 Analytical results relate only to the samples as received at the laboratory.

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Michael H. Leftin, Ph.D.  
 Laboratory Director

Analyst: D. Mitchell

**Countywide Recycling & Disposal Facility  
Ambient Air Monitoring  
Monthly Report #4**

September 20, 2007

**APPENDIX C**

**Laboratory Analytical Results from August 14/15, 2007**

## *Certificate of Analysis*

### **CLIENT INFORMATION**

**Lawhon and Associates, Inc.**  
975 Eastwind Drive, Suite 190  
Westerville, OH 43081  
Attn: Shawn Ansbro

Project#/Project Site: 07-0082/Countywide  
Client Sample ID Nos:  
SU-S0814, SU-G0814, SU-W0814, SU-C0814

### **LABORATORY INFORMATION**

Contact: Michael H. Leftin, Ph.D.  
IAL Job No.: E07-08684  
Date Received: 8/20/07

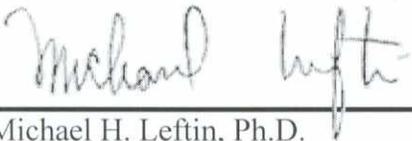
Sample Nos.:  
E07-08684-01, E07-08684-02, E07-  
08684-03, E07-08684-04

Samples for this analysis were received in good condition with a chain of custody.

All work recorded herein has been done in accordance with normal professional standards using accepted testing methodologies, quality assurance and quality control procedures except where otherwise agreed to by the client and testing company in writing.

Once analysis has been performed on canisters that meets regulatory criteria, samples are recycled for future use, unless other provisions have been made by the client.

Analysis conducted at Integrated Analytical Laboratory, Randolph NJ  
ELAP lab number - 11402  
NJDEP number - 14751  
AIHA number - 100201



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Michael H. Leftin, Ph.D.  
Laboratory Director

**Princeton Analytical  
Summary of Results**

Lawhon and Associates, Inc.  
975 Eastwind Drive, Suite 190  
Westerville, OD 43081  
Attn: Shawn Ansbro  
Project: 07-0082  
Site: Countywide

Report Date: 9/6/07  
Job Number: E07-08684  
Date Received: 8/20/07  
Date Analyzed: 8/31/07  
Data File: 083110  
Summa ID: 3009

Analysis: Volatile Organic Compounds by EPA Method TO-15m

<u>Compound</u>	<u>CAS #</u>	<u>Sample Name: SU-S0814</u>		<u>Reporting Limits</u>		
		<u>PAL ID: E07-08684-01</u>	<u>ppbv</u>	<u>ug/m3</u>	<u>ppbv</u>	<u>ug/m3</u>
Acetone	67-64-1		ND	ND	0.5	1.2
Benzene	71-43-2		ND	ND	0.5	1.6
Bromodichloromethane	75-27-4		ND	ND	0.5	3.3
Bromoethene	593-60-2		ND	ND	0.5	2.2
Bromoform	75-25-2		ND	ND	0.5	5.2
Bromomethane	74-83-9		ND	ND	0.5	1.9
1,3-Butadiene	106-99-0		ND	ND	0.5	1.1
tert-Butyl alcohol	75-65-0		ND	ND	0.5	1.5
Carbon disulfide	75-15-0		ND	ND	0.5	1.6
Carbon tetrachloride	56-23-5		ND	ND	0.5	3.1
Chlorobenzene	108-90-7		ND	ND	0.5	2.3
Chloroethane	75-00-3		ND	ND	0.5	1.3
Chloroform	67-66-3		ND	ND	0.5	2.4
Chloromethane	74-87-3		ND	ND	0.5	1.0
3-Chloropropene	107-05-1		ND	ND	0.5	1.6
2-Chlorotoluene	95-49-8		ND	ND	0.5	2.6
Cyclohexane	110-82-7		ND	ND	0.5	1.7
Dibromochloromethane	124-48-1		ND	ND	0.5	4.3
1,2-Dibromoethane	106-93-4		ND	ND	0.5	3.8
1,2-Dichlorobenzene	95-50-1		ND	ND	0.5	3.0
1,3-Dichlorobenzene	541-73-1		ND	ND	0.5	3.0
1,4-Dichlorobenzene	106-46-7		ND	ND	0.5	3.0
Dichlorodifluoromethane	75-71-8	0.76		3.8	0.5	2.5
1,1-Dichloroethane	75-34-3		ND	ND	0.5	2.0
1,2-Dichloroethane	107-06-2		ND	ND	0.5	2.0
1,1-Dichloroethylene	75-35-4		ND	ND	0.5	2.0
cis-1,2-Dichloroethylene	156-59-2		ND	ND	0.5	2.0
trans-1,2-Dichloroethylene	156-60-5		ND	ND	0.5	2.0
1,2-Dichloropropane	78-87-5		ND	ND	0.5	2.3
cis-1,3-Dichloropropene	10061-01-5		ND	ND	0.5	2.3
trans-1,3-Dichloropropene	10061-02-6		ND	ND	0.5	2.3
Dichlorotetrafluoroethane	76-14-2		ND	ND	0.5	3.5
Ethylbenzene	100-41-4		ND	ND	0.5	2.2
4-Ethyltoluene	622-96-8		ND	ND	0.5	2.5
Heptane	142-82-5		ND	ND	0.5	2.0
Hexachlorobutadiene	87-68-3		ND	ND	0.5	5.3
Hexane	110-54-3		ND	ND	0.5	1.8
Isopropyl alcohol	67-63-0		ND	ND	0.5	1.2
Methyl ethyl ketone	78-93-3		ND	ND	0.5	1.5
Methyl isobutyl ketone	108-10-1		ND	ND	0.5	2.0
Methylene chloride	75-09-2		ND	ND	0.5	1.7
Methyl-t-butyl ether	1634-04-4		ND	ND	0.5	1.8
Styrene	100-42-5		ND	ND	0.5	2.1
1,1,2,2-Tetrachloroethane	79-34-5		ND	ND	0.5	3.4
Tetrachloroethylene	127-18-4		ND	ND	0.5	3.4
Toluene	108-88-3		ND	ND	0.5	1.9
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1		ND	ND	0.5	3.8
1,2,4-Trichlorobenzene	120-82-1		ND	ND	0.5	3.7
1,1,1-Trichloroethane	71-55-6		ND	ND	0.5	2.7
1,1,2-Trichloroethane	79-00-5		ND	ND	0.5	2.7
Trichloroethylene	79-01-6		ND	ND	0.5	2.7
Trichlorofluoromethane	75-69-4		ND	ND	0.5	2.8
1,2,4-Trimethylbenzene	95-63-6		ND	ND	0.5	2.5
1,3,5-Trimethylbenzene	108-67-8		ND	ND	0.5	2.5
2,2,4-Trimethylpentane	540-84-1		ND	ND	0.5	2.3
Vinyl chloride	75-01-4		ND	ND	0.5	1.3
m or p-Xylene	1330-20-7		ND	ND	0.5	2.2
o-Xylene	95-47-6		ND	ND	0.5	2.2

**Princeton Analytical  
Summary of Results**

Lawhon and Associates, Inc.  
975 Eastwind Drive, Suite 190  
Westerville, OD 43081  
Attn: Shawn Ansbro  
Project: 07-0082  
Site: Countywide

Report Date: 9/6/07  
Job Number: E07-08684  
Date Received: 8/20/07  
Date Analyzed: 8/31/07  
Data File: 083111  
Summa ID: 3278

Analysis: Volatile Organic Compounds by EPA Method TO-15m

<u>Compound</u>	<u>CAS #</u>	<u>Sample Name: SU-G0814</u>		<u>Reporting Limits</u>		
		<u>PAL ID: E07-08684-02</u>	<u>ppbv</u>	<u>ug/m3</u>	<u>ppbv</u>	<u>ug/m3</u>
Acetone	67-64-1		ND	ND	0.5	1.2
Benzene	71-43-2		ND	ND	0.5	1.6
Bromodichloromethane	75-27-4		ND	ND	0.5	3.3
Bromoethene	593-60-2		ND	ND	0.5	2.2
Bromoform	75-25-2		ND	ND	0.5	5.2
Bromomethane	74-83-9		ND	ND	0.5	1.9
1,3-Butadiene	106-99-0		ND	ND	0.5	1.1
tert-Butyl alcohol	75-65-0		ND	ND	0.5	1.5
Carbon disulfide	75-15-0		ND	ND	0.5	1.6
Carbon tetrachloride	56-23-5		ND	ND	0.5	3.1
Chlorobenzene	108-90-7		ND	ND	0.5	2.3
Chloroethane	75-00-3		ND	ND	0.5	1.3
Chloroform	67-66-3		ND	ND	0.5	2.4
Chloromethane	74-87-3		ND	ND	0.5	1.0
3-Chloropropene	107-05-1		ND	ND	0.5	1.6
2-Chlorotoluene	95-49-8		ND	ND	0.5	2.6
Cyclohexane	110-82-7		ND	ND	0.5	1.7
Dibromochloromethane	124-48-1		ND	ND	0.5	4.3
1,2-Dibromoethane	106-93-4		ND	ND	0.5	3.8
1,2-Dichlorobenzene	95-50-1		ND	ND	0.5	3.0
1,3-Dichlorobenzene	541-73-1		ND	ND	0.5	3.0
1,4-Dichlorobenzene	106-46-7		ND	ND	0.5	3.0
Dichlorodifluoromethane	75-71-8	0.81		4.0	0.5	2.5
1,1-Dichloroethane	75-34-3		ND	ND	0.5	2.0
1,2-Dichloroethane	107-06-2		ND	ND	0.5	2.0
1,1-Dichloroethylene	75-35-4		ND	ND	0.5	2.0
cis-1,2-Dichloroethylene	156-59-2		ND	ND	0.5	2.0
trans-1,2-Dichloroethylene	156-60-5		ND	ND	0.5	2.0
1,2-Dichloropropane	78-87-5		ND	ND	0.5	2.3
cis-1,3-Dichloropropene	10061-01-5		ND	ND	0.5	2.3
trans-1,3-Dichloropropene	10061-02-6		ND	ND	0.5	2.3
Dichlorotetrafluoroethane	76-14-2		ND	ND	0.5	3.5
Ethylbenzene	100-41-4		ND	ND	0.5	2.2
4-Ethyltoluene	622-96-8		ND	ND	0.5	2.5
Heptane	142-82-5		ND	ND	0.5	2.0
Hexachlorobutadiene	87-68-3		ND	ND	0.5	5.3
Hexane	110-54-3		ND	ND	0.5	1.8
Isopropyl alcohol	67-63-0		ND	ND	0.5	1.2
Methyl ethyl ketone	78-93-3		ND	ND	0.5	1.5
Methyl isobutyl ketone	108-10-1		ND	ND	0.5	2.0
Methylene chloride	75-09-2		ND	ND	0.5	1.7
Methyl-t-butyl ether	1634-04-4		ND	ND	0.5	1.8
Styrene	100-42-5		ND	ND	0.5	2.1
1,1,2,2-Tetrachloroethane	79-34-5		ND	ND	0.5	3.4
Tetrachloroethylene	127-18-4		ND	ND	0.5	3.4
Toluene	108-88-3		ND	ND	0.5	1.9
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1		ND	ND	0.5	3.8
1,2,4-Trichlorobenzene	120-82-1		ND	ND	0.5	3.7
1,1,1-Trichloroethane	71-55-6		ND	ND	0.5	2.7
1,1,2-Trichloroethane	79-00-5		ND	ND	0.5	2.7
Trichloroethylene	79-01-6		ND	ND	0.5	2.7
Trichlorofluoromethane	75-69-4		ND	ND	0.5	2.8
1,2,4-Trimethylbenzene	95-63-6		ND	ND	0.5	2.5
1,3,5-Trimethylbenzene	108-67-8		ND	ND	0.5	2.5
2,2,4-Trimethylpentane	540-84-1		ND	ND	0.5	2.3
Vinyl chloride	75-01-4		ND	ND	0.5	1.3
m or p-Xylene	1330-20-7		ND	ND	0.5	2.2
o-Xylene	95-47-6		ND	ND	0.5	2.2

**Princeton Analytical  
Summary of Results**

Lawhon and Associates, Inc.  
975 Eastwind Drive, Suite 190  
Westerville, OD 43081  
Attn: Shawn Ansbro  
Project: 07-0082  
Site: Countywide

Report Date: 9/6/07  
Job Number: E07-08684  
Date Received: 8/20/07  
Date Analyzed: 8/31/07  
Data File: 083112  
Summa ID: 3292

Analysis: Volatile Organic Compounds by EPA Method TO-15m

<u>Compound</u>	<u>CAS #</u>	<u>Sample Name: SU-W0814</u>		<u>Reporting Limits</u>		
		<u>PAL ID: E07-08684-03</u>	<u>ppbv</u>	<u>ug/m3</u>	<u>ppbv</u>	<u>ug/m3</u>
Acetone	67-64-1		ND	ND	0.5	1.2
Benzene	71-43-2		ND	ND	0.5	1.6
Bromodichloromethane	75-27-4		ND	ND	0.5	3.3
Bromoethene	593-60-2		ND	ND	0.5	2.2
Bromoform	75-25-2		ND	ND	0.5	5.2
Bromomethane	74-83-9		ND	ND	0.5	1.9
1,3-Butadiene	106-99-0		ND	ND	0.5	1.1
tert-Butyl alcohol	75-65-0		ND	ND	0.5	1.5
Carbon disulfide	75-15-0		ND	ND	0.5	1.6
Carbon tetrachloride	56-23-5		ND	ND	0.5	3.1
Chlorobenzene	108-90-7		ND	ND	0.5	2.3
Chloroethane	75-00-3		ND	ND	0.5	1.3
Chloroform	67-66-3		ND	ND	0.5	2.4
Chloromethane	74-87-3		ND	ND	0.5	1.0
3-Chloropropene	107-05-1		ND	ND	0.5	1.6
2-Chlorotoluene	95-49-8		ND	ND	0.5	2.6
Cyclohexane	110-82-7		ND	ND	0.5	1.7
Dibromochloromethane	124-48-1		ND	ND	0.5	4.3
1,2-Dibromoethane	106-93-4		ND	ND	0.5	3.8
1,2-Dichlorobenzene	95-50-1		ND	ND	0.5	3.0
1,3-Dichlorobenzene	541-73-1		ND	ND	0.5	3.0
1,4-Dichlorobenzene	106-46-7		ND	ND	0.5	3.0
Dichlorodifluoromethane	75-71-8		0.67	3.3	0.5	2.5
1,1-Dichloroethane	75-34-3		ND	ND	0.5	2.0
1,2-Dichloroethane	107-06-2		ND	ND	0.5	2.0
1,1-Dichloroethylene	75-35-4		ND	ND	0.5	2.0
cis-1,2-Dichloroethylene	156-59-2		ND	ND	0.5	2.0
trans-1,2-Dichloroethylene	156-60-5		ND	ND	0.5	2.0
1,2-Dichloropropane	78-87-5		ND	ND	0.5	2.3
cis-1,3-Dichloropropene	10061-01-5		ND	ND	0.5	2.3
trans-1,3-Dichloropropene	10061-02-6		ND	ND	0.5	2.3
Dichlorotetrafluoroethane	76-14-2		ND	ND	0.5	3.5
Ethylbenzene	100-41-4		ND	ND	0.5	2.2
4-Ethyltoluene	622-96-8		ND	ND	0.5	2.5
Heptane	142-82-5		ND	ND	0.5	2.0
Hexachlorobutadiene	87-68-3		ND	ND	0.5	5.3
Hexane	110-54-3		ND	ND	0.5	1.8
Isopropyl alcohol	67-63-0		ND	ND	0.5	1.2
Methyl ethyl ketone	78-93-3		ND	ND	0.5	1.5
Methyl isobutyl ketone	108-10-1		ND	ND	0.5	2.0
Methylene chloride	75-09-2		ND	ND	0.5	1.7
Methyl-t-butyl ether	1634-04-4		ND	ND	0.5	1.8
Styrene	100-42-5		ND	ND	0.5	2.1
1,1,2,2-Tetrachloroethane	79-34-5		ND	ND	0.5	3.4
Tetrachloroethylene	127-18-4		ND	ND	0.5	3.4
Toluene	108-88-3		ND	ND	0.5	1.9
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1		ND	ND	0.5	3.8
1,2,4-Trichlorobenzene	120-82-1		ND	ND	0.5	3.7
1,1,1-Trichloroethane	71-55-6		ND	ND	0.5	2.7
1,1,2-Trichloroethane	79-00-5		ND	ND	0.5	2.7
Trichloroethylene	79-01-6		ND	ND	0.5	2.7
Trichlorofluoromethane	75-69-4		ND	ND	0.5	2.8
1,2,4-Trimethylbenzene	95-63-6		ND	ND	0.5	2.5
1,3,5-Trimethylbenzene	108-67-8		ND	ND	0.5	2.5
2,2,4-Trimethylpentane	540-84-1		ND	ND	0.5	2.3
Vinyl chloride	75-01-4		ND	ND	0.5	1.3
m or p-Xylene	1330-20-7		1.1	4.8	0.5	2.2
o-Xylene	95-47-6		ND	ND	0.5	2.2

**Princeton Analytical  
Summary of Results**

Lawhon and Associates, Inc.  
975 Eastwind Drive, Suite 190  
Westerville, OD 43081  
Attn: Shawn Ansbro  
Project: 07-0082  
Site: Countywide

Report Date: 9/6/07  
Job Number: E07-08684  
Date Received: 8/20/07  
Date Analyzed: 8/31/07  
Data File: 083113  
Summa ID: 2885

Analysis: Volatile Organic Compounds by EPA Method TO-15m

<u>Compound</u>	<u>CAS #</u>	<u>Sample Name:</u> <u>PAL ID:</u>		<u>Reporting Limits</u>	
		<u>ppbv</u>	<u>ug/m3</u>	<u>ppbv</u>	<u>ug/m3</u>
Acetone	67-64-1	ND	ND	0.5	1.2
Benzene	71-43-2	ND	ND	0.5	1.6
Bromodichloromethane	75-27-4	ND	ND	0.5	3.3
Bromoethene	593-60-2	ND	ND	0.5	2.2
Bromoform	75-25-2	ND	ND	0.5	5.2
Bromomethane	74-83-9	ND	ND	0.5	1.9
1,3-Butadiene	106-99-0	ND	ND	0.5	1.1
tert-Butyl alcohol	75-65-0	ND	ND	0.5	1.5
Carbon disulfide	75-15-0	ND	ND	0.5	1.6
Carbon tetrachloride	56-23-5	ND	ND	0.5	3.1
Chlorobenzene	108-90-7	ND	ND	0.5	2.3
Chloroethane	75-00-3	ND	ND	0.5	1.3
Chloroform	67-66-3	ND	ND	0.5	2.4
Chloromethane	74-87-3	ND	ND	0.5	1.0
3-Chloropropene	107-05-1	ND	ND	0.5	1.6
2-Chlorotoluene	95-49-8	ND	ND	0.5	2.6
Cyclohexane	110-82-7	ND	ND	0.5	1.7
Dibromochloromethane	124-48-1	ND	ND	0.5	4.3
1,2-Dibromoethane	106-93-4	ND	ND	0.5	3.8
1,2-Dichlorobenzene	95-50-1	ND	ND	0.5	3.0
1,3-Dichlorobenzene	541-73-1	ND	ND	0.5	3.0
1,4-Dichlorobenzene	106-46-7	ND	ND	0.5	3.0
Dichlorodifluoromethane	75-71-8	0.83	4.1	0.5	2.5
1,1-Dichloroethane	75-34-3	ND	ND	0.5	2.0
1,2-Dichloroethane	107-06-2	ND	ND	0.5	2.0
1,1-Dichloroethylene	75-35-4	ND	ND	0.5	2.0
cis-1,2-Dichloroethylene	156-59-2	ND	ND	0.5	2.0
trans-1,2-Dichloroethylene	156-60-5	ND	ND	0.5	2.0
1,2-Dichloropropane	78-87-5	ND	ND	0.5	2.3
cis-1,3-Dichloropropene	10061-01-5	ND	ND	0.5	2.3
trans-1,3-Dichloropropene	10061-02-6	ND	ND	0.5	2.3
Dichlorotetrafluoroethane	76-14-2	ND	ND	0.5	3.5
Ethylbenzene	100-41-4	ND	ND	0.5	2.2
4-Ethyltoluene	622-96-8	ND	ND	0.5	2.5
Heptane	142-82-5	ND	ND	0.5	2.0
Hexachlorobutadiene	87-68-3	ND	ND	0.5	5.3
Hexane	110-54-3	ND	ND	0.5	1.8
Isopropyl alcohol	67-63-0	ND	ND	0.5	1.2
Methyl ethyl ketone	78-93-3	ND	ND	0.5	1.5
Methyl isobutyl ketone	108-10-1	ND	ND	0.5	2.0
Methylene chloride	75-09-2	ND	ND	0.5	1.7
Methyl-t-butyl ether	1634-04-4	ND	ND	0.5	1.8
Styrene	100-42-5	ND	ND	0.5	2.1
1,1,2,2-Tetrachloroethane	79-34-5	ND	ND	0.5	3.4
Tetrachloroethylene	127-18-4	ND	ND	0.5	3.4
Toluene	108-88-3	ND	ND	0.5	1.9
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	ND	ND	0.5	3.8
1,2,4-Trichlorobenzene	120-82-1	ND	ND	0.5	3.7
1,1,1-Trichloroethane	71-55-6	ND	ND	0.5	2.7
1,1,2-Trichloroethane	79-00-5	ND	ND	0.5	2.7
Trichloroethylene	79-01-6	ND	ND	0.5	2.7
Trichlorofluoromethane	75-69-4	ND	ND	0.5	2.8
1,2,4-Trimethylbenzene	95-63-6	ND	ND	0.5	2.5
1,3,5-Trimethylbenzene	108-67-8	ND	ND	0.5	2.5
2,2,4-Trimethylpentane	540-84-1	ND	ND	0.5	2.3
Vinyl chloride	75-01-4	ND	ND	0.5	1.3
m or p-Xylene	1330-20-7	ND	ND	0.5	2.2
o-Xylene	95-47-6	ND	ND	0.5	2.2

## Summary of Results

Lawhon and Associates, Inc.  
975 Eastwind Drive, Suite 190  
Westerville, OH 43081  
Attn: Shawn Ansbro  
Project: 07-0082, Countrywide

Report Date: 9/4/2007  
Job Number: E07-08684  
Date Received: 8/20/2007  
Date Analyzed: 8/31/2007

Analysis: Tentatively Identified Compounds by Library Search

Sample Name: SU-W0814  
IAL ID: E07-08684-03

Data File: 083112  
Canister ID: 3292

<b>Chemical Name</b>	<b>CAS Number</b>	<b>Qual %</b>	<b>Estimated in ppb</b>	<b>Estimated in µg/m3</b>
Isobutane	75-28-5	4	4.0	9.5
Butane	106-97-8	59	4.6	11
Acetonitrile	75-05-8	40	32	54
Pentane	109-66-0	72	5.1	15
Pentane, 2-methyl-	107-83-5	87	1.6	5.6

Sample Name: SU-C0814  
IAL ID: E07-08684-04

Data File: 083113  
Canister ID: 2885

<b>Chemical Name</b>	<b>CAS Number</b>	<b>Qual %</b>	<b>Estimated in ppb</b>	<b>Estimated in µg/m3</b>
Isobutane	75-28-5	64	4.0	9.5
Butane	106-97-8	59	4.5	11
Acetonitrile	75-05-8	40	5.3	8.9
Butane, 2-methyl-	78-78-4	38	9.4	28
Pentane	109-66-0	90	1.4	4.1
1,4-Pentadiene	591-93-5	91	2.4	8.4

## Summary of Results

Lawhon and Associates, Inc.  
975 Eastwind Drive, Suite 190  
Westerville, OH 43081  
Attn: Shawn Ansbro  
Project: 07-0082, Countrywide

Analysis: Tentatively Identified Compounds by Library Search

Sample Name: SU-S0814  
IAL ID: E07-08684-01

<b>Chemical Name</b>	<b>CAS Number</b>	<b>Qual %</b>
Isobutane	75-28-5	50
Butane	106-97-8	45
Acetonitrile	75-05-8	64

Sample Name: SU-G0814  
IAL ID: E07-08684-02

<b>Chemical Name</b>	<b>CAS Number</b>	<b>Qual %</b>
Isobutane	75-28-5	72
Butane	106-97-8	50
Acetonitrile	75-05-8	40
Butane, 2-methyl-	78-78-4	64
Pentane	109-66-0	72
Pentane, 2-methyl-	107-83-5	91
Dodecane	112-40-3	70

Report Date: 9/4/2007  
Job Number: E07-08684  
Date Received: 8/20/2007  
Date Analyzed: 8/31/2007

Data File: 083110  
Canister ID 3009

<b>Estimated in ppb</b>	<b>Estimated in <math>\mu\text{g}/\text{m}^3</math></b>
4.1	9.7
4.0	9.5
77	129

Data File: 083111  
Canister ID 3278

<b>Estimated in ppb</b>	<b>Estimated in <math>\mu\text{g}/\text{m}^3</math></b>
4.0	9.5
4.4	10
15	25
13	38
4.5	13
1.6	5.6
29	202

### Summary of Results

Lawhon & Associates, Inc.  
 975 Eastwind Drive Suite 190  
 Westerville, OH 43081  
 Att: Shawn Ansbro  
 Jobsite: Countywide  
 Project: #07-0082

Report Date: 8/28/07  
 Job Number: E07-08684  
 Date Received: 8/20/07  
 Date Analyzed: 8/22/07

Analysis: Aldehydes and Ketones, EPA Method TO-11a

Sample Name: IAL ID:	S0814-01H E07-08684-17		S0814-02H E07-08684-18		S0814-03H E07-08684-19		Reporting Limits
	ug	ug/m3	ug	ug/m3	ug	ug/m3	
Formaldehyde	0.11	0.24	0.16	0.34	< 0.1	< 0.2	0.1
Acetaldehyde	0.11	0.24	0.11	0.23	< 0.1	< 0.2	0.1
Acetone	< 0.1	< 0.2	< 0.1	< 0.2	< 0.1	< 0.2	0.1
Acrolein	< 0.1	< 0.2	< 0.1	< 0.2	< 0.1	< 0.2	0.1
Propionaldehyde	< 0.1	< 0.2	< 0.1	< 0.2	< 0.1	< 0.2	0.1
Crotonaldehyde	< 0.1	< 0.2	< 0.1	< 0.2	< 0.1	< 0.2	0.1
Butyraldehyde	< 0.1	< 0.2	< 0.1	< 0.2	< 0.1	< 0.2	0.1
Benzaldehyde	< 0.1	< 0.2	< 0.1	< 0.2	< 0.1	< 0.2	0.1
Isovaleraldehyde	< 0.6	< 1.3	< 0.6	< 1.3	< 0.6	< 1.3	0.6
Valeraldehyde	< 0.2	< 0.4	< 0.2	< 0.4	< 0.2	< 0.4	0.2
o-Tolualdehyde	< 0.2	< 0.4	< 0.2	< 0.4	< 0.2	< 0.4	0.2
m- and p-Tolualdehyde	< 0.1	< 0.2	< 0.1	< 0.2	< 0.1	< 0.2	0.1
Hexaldehyde	< 0.1	< 0.2	< 0.1	< 0.2	< 0.1	< 0.2	0.1

Sample Name: IAL ID:	G0814-01H E07-08684-20		G0814-02H E07-08684-21		G0814-03H E07-08684-22		Reporting Limits
	ug	ug/m3	ug	ug/m3	ug	ug/m3	
Formaldehyde	< 0.1	< 0.2	0.58	1.2	< 0.1	< 0.2	0.1
Acetaldehyde	0.13	0.30	0.22	0.46	< 0.1	< 0.2	0.1
Acetone	< 0.1	< 0.2	< 0.1	< 0.2	< 0.1	< 0.2	0.1
Acrolein	< 0.1	< 0.2	< 0.1	< 0.2	< 0.1	< 0.2	0.1
Propionaldehyde	< 0.1	< 0.2	< 0.1	< 0.2	< 0.1	< 0.2	0.1
Crotonaldehyde	< 0.1	< 0.2	< 0.1	< 0.2	< 0.1	< 0.2	0.1
Butyraldehyde	< 0.1	< 0.2	< 0.1	< 0.2	< 0.1	< 0.2	0.1

Benzaldehyde	< 0.1	< 0.2	< 0.1	< 0.2	< 0.1	< 0.2	0.1
Isovaleraldehyde	< 0.6	< 1.3	< 0.6	< 1.3	< 0.6	< 1.3	0.6
Valeraldehyde	< 0.2	< 0.4	< 0.2	< 0.4	< 0.2	< 0.4	0.2
o-Tolualdehyde	< 0.2	< 0.4	< 0.2	< 0.4	< 0.2	< 0.4	0.2
m- and p-Tolualdehyde	< 0.1	< 0.2	< 0.1	< 0.2	< 0.1	< 0.2	0.1
Hexaldehyde	< 0.1	< 0.2	< 0.1	< 0.2	< 0.1	< 0.2	0.1

Page 1 of 2

Lawhon & Associates, Inc.

Job Number: E07-08684

Jobsite: Countywide

Project: #07-0082

Analysis: Aldehydes and Ketones, EPA Method TO-11a

Sample Name:	W0814-01H		W0814-02H		W0814-03H		Reporting
IAL ID:	E07-08684-23		E07-08684-24		E07-08684-25		Limits
<u>Compound</u>	<u>ug</u>	<u>ug/m3</u>	<u>ug</u>	<u>ug/m3</u>	<u>ug</u>	<u>ug/m3</u>	<u>ug</u>
Formaldehyde	< 0.1	< 0.2	< 0.1	< 0.2	< 0.1	< 0.2	0.1
Acetaldehyde	< 0.1	< 0.2	< 0.1	< 0.2	< 0.1	< 0.2	0.1
Acetone	< 0.1	< 0.2	< 0.1	< 0.2	< 0.1	< 0.2	0.1
Acrolein	< 0.1	< 0.2	< 0.1	< 0.2	< 0.1	< 0.2	0.1
Propionaldehyde	< 0.1	< 0.2	< 0.1	< 0.2	< 0.1	< 0.2	0.1
Crotonaldehyde	< 0.1	< 0.2	< 0.1	< 0.2	< 0.1	< 0.2	0.1
Butyraldehyde	< 0.1	< 0.2	< 0.1	< 0.2	< 0.1	< 0.2	0.1
Benzaldehyde	< 0.1	< 0.2	< 0.1	< 0.2	< 0.1	< 0.2	0.1
Isovaleraldehyde	< 0.6	< 1.3	< 0.6	< 1.2	< 0.6	< 1.3	0.6
Valeraldehyde	< 0.2	< 0.4	< 0.2	< 0.4	< 0.2	< 0.4	0.2
o-Tolualdehyde	< 0.2	< 0.4	< 0.2	< 0.4	< 0.2	< 0.4	0.2
m- and p-Tolualdehyde	< 0.1	< 0.2	< 0.1	< 0.2	< 0.1	< 0.2	0.1
Hexaldehyde	< 0.1	< 0.2	< 0.1	< 0.2	< 0.1	< 0.2	0.1

Sample Name:	C0814-01H		C0814-02H		C0814-03H		Reporting
IAL ID:	E07-08684-26		E07-08684-27		E07-08684-28		Limits
<u>Compound</u>	<u>ug</u>	<u>ug/m3</u>	<u>ug</u>	<u>ug/m3</u>	<u>ug</u>	<u>ug/m3</u>	<u>ug</u>
Formaldehyde	< 0.1	< 0.2	< 0.1	< 0.2	< 0.1	< 0.2	0.1
Acetaldehyde	< 0.1	< 0.2	< 0.1	< 0.2	< 0.1	< 0.2	0.1
Acetone	< 0.1	< 0.2	< 0.1	< 0.2	< 0.1	< 0.2	0.1

Acrolein	< 0.1	< 0.2	< 0.1	< 0.2	< 0.1	< 0.2	0.1
Propionaldehyde	< 0.1	< 0.2	< 0.1	< 0.2	< 0.1	< 0.2	0.1
Crotonaldehyde	< 0.1	< 0.2	< 0.1	< 0.2	< 0.1	< 0.2	0.1
Butyraldehyde	< 0.1	< 0.2	< 0.1	< 0.2	< 0.1	< 0.2	0.1
Benzaldehyde	< 0.1	< 0.2	< 0.1	< 0.2	< 0.1	< 0.2	0.1
Isovaleraldehyde	< 0.6	< 1.3	< 0.6	< 1.3	< 0.6	< 1.3	0.6
Valeraldehyde	< 0.2	< 0.4	< 0.2	< 0.4	< 0.2	< 0.4	0.2
o-Tolualdehyde	< 0.2	< 0.4	< 0.2	< 0.4	< 0.2	< 0.4	0.2
m- and p-Tolualdehyde	< 0.1	< 0.2	< 0.1	< 0.2	< 0.1	< 0.2	0.1
Hexaldehyde	< 0.1	< 0.2	< 0.1	< 0.2	< 0.1	< 0.2	0.1

Notes: Calculations of concentrations in air are based upon air sampling data reported by client.  
Analytical results relate only to the samples as received at the laboratory.

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Michael H. Leftin, Ph.D.  
Laboratory Director

Analyst: D. Mitchell

## Summary of Results

Lawhon and Associates, Inc.  
975 Eastwind Drive, Suite 190  
Westerville, OH 43081  
Attn: Shawn Ansbro

Report Date: 08/28/07  
Job Number: E07-08684  
Date Received: 08/20/07  
Date Analyzed: 08/23/07

Project: Countywide  
Project #: 07-0082

Analysis: Hydrogen Chloride and Hydrogen Fluoride, NIOSH 7903

Sample ID	IAL ID	Hydrogen Fluoride		Hydrogen Chloride	
		ug	ug/m <sup>3</sup>	ug	ug/m <sup>3</sup>
S0814-01H	E07-08684-05	< 0.6	< 1.4	1.1	2.4
S0814-02H	E07-08684-06	< 0.6	< 1.3	< 0.4	< 0.8
S0814-03H	E07-08684-07	< 0.6	< 1.4	0.45	1.0
G0814-01H	E07-08684-08	< 0.6	< 1.4	0.57	1.3
G0814-02H	E07-08684-09	< 0.6	< 1.3	< 0.4	< 0.8
G0814-03H	E07-08684-10	< 0.6	< 1.3	0.40	0.85
W0814-01H	E07-08684-11	< 0.6	< 1.4	0.42	0.95
W0814-02H	E07-08684-12	< 0.6	< 1.3	< 0.4	< 0.8
W0814-03H	E07-08684-13	< 0.6	< 1.3	0.50	1.1
C0814-01H*	E07-08684-14	< 0.6	< 1.4	1.3	2.8
C0814-02H	E07-08684-15	< 0.6	< 1.3	1.1	2.4
C0814-03H*	E07-08684-16	< 0.6	< 1.3	0.72	1.5
Reporting Limit		0.6		0.4	

\* Denotes breakthrough from the front to the back of the sorbent tube for chloride.

Note: Calculations of concentrations in air are based upon air sampling data reported by client.

Analytical results relate only to the samples as received at the laboratory.

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Michael H. Leftin, Ph.D.  
Laboratory Director

Analyst: D. Mitchell

**Countywide Recycling & Disposal Facility  
Ambient Air Monitoring  
Monthly Report #4**

September 20, 2007

**APPENDIX D**

**Laboratory Analytical Results from August 20/21, 2007**

## *Certificate of Analysis*

### **CLIENT INFORMATION**

**Lawhon and Associates, Inc.**

975 Eastwind Drive, Suite 190

Westerville, OH 43081

Attn: Shawn Ansbro

Project#/Project Site: 07-0082/Countywide

Client Sample ID Nos:

SU-S0820, SU-G0820, SU-W0820, SU-C0820

### **LABORATORY INFORMATION**

Contact: Michael H. Leftin, Ph.D.

IAL Job No.: E07-08749

Date Received: 8/22/07

Sample Nos.:

E07-08749-01, E07-08749-02, E07-08749-03, E07-08749-04

Samples for this analysis were received in good condition with a chain of custody.

All work recorded herein has been done in accordance with normal professional standards using accepted testing methodologies, quality assurance and quality control procedures except where otherwise agreed to by the client and testing company in writing.

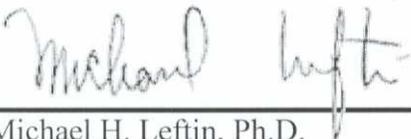
Once analysis has been performed on canisters that meets regulatory criteria, samples are recycled for future use, unless other provisions have been made by the client.

Analysis conducted at Integrated Analytical Laboratory, Randolph NJ

ELAP lab number - 11402

NJDEP number - 14751

AIHA number - 100201



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Michael H. Leftin, Ph.D.

Laboratory Director

**Princeton Analytical  
Summary of Results**

Lawhon and Associates, Inc.  
975 Eastwind Drive, Suite 190  
Westerville, OD 43081  
Attn: Shawn Ansbro  
Project: 07-0082  
Site: Countywide

Report Date: 9/6/07  
Job Number: E07-08749  
Date Received: 8/22/07  
Date Analyzed: 9/4/07  
Data File: 090404  
Summa ID: 3293

Analysis: Volatile Organic Compounds by EPA Method TO-15m

<u>Compound</u>	<u>CAS #</u>	<u>Sample Name: SU-S0820</u>		<u>Reporting Limits</u>		
		<u>PAL ID: E07-08749-01</u>	<u>ppbv</u>	<u>ug/m3</u>	<u>ppbv</u>	<u>ug/m3</u>
Acetone	67-64-1		ND	ND	0.5	1.2
Benzene	71-43-2		ND	ND	0.5	1.6
Bromodichloromethane	75-27-4		ND	ND	0.5	3.3
Bromoethene	593-60-2		ND	ND	0.5	2.2
Bromoform	75-25-2		ND	ND	0.5	5.2
Bromomethane	74-83-9		ND	ND	0.5	1.9
1,3-Butadiene	106-99-0		ND	ND	0.5	1.1
tert-Butyl alcohol	75-65-0		ND	ND	0.5	1.5
Carbon disulfide	75-15-0		ND	ND	0.5	1.6
Carbon tetrachloride	56-23-5		ND	ND	0.5	3.1
Chlorobenzene	108-90-7		ND	ND	0.5	2.3
Chloroethane	75-00-3		ND	ND	0.5	1.3
Chloroform	67-66-3		ND	ND	0.5	2.4
Chloromethane	74-87-3		ND	ND	0.5	1.0
3-Chloropropene	107-05-1		ND	ND	0.5	1.6
2-Chlorotoluene	95-49-8		ND	ND	0.5	2.6
Cyclohexane	110-82-7		ND	ND	0.5	1.7
Dibromochloromethane	124-48-1		ND	ND	0.5	4.3
1,2-Dibromoethane	106-93-4		ND	ND	0.5	3.8
1,2-Dichlorobenzene	95-50-1		ND	ND	0.5	3.0
1,3-Dichlorobenzene	541-73-1		ND	ND	0.5	3.0
1,4-Dichlorobenzene	106-46-7		ND	ND	0.5	3.0
Dichlorodifluoromethane	75-71-8	0.54		2.7	0.5	2.5
1,1-Dichloroethane	75-34-3		ND	ND	0.5	2.0
1,2-Dichloroethane	107-06-2		ND	ND	0.5	2.0
1,1-Dichloroethylene	75-35-4		ND	ND	0.5	2.0
cis-1,2-Dichloroethylene	156-59-2		ND	ND	0.5	2.0
trans-1,2-Dichloroethylene	156-60-5		ND	ND	0.5	2.0
1,2-Dichloropropane	78-87-5		ND	ND	0.5	2.3
cis-1,3-Dichloropropene	10061-01-5		ND	ND	0.5	2.3
trans-1,3-Dichloropropene	10061-02-6		ND	ND	0.5	2.3
Dichlorotetrafluoroethane	76-14-2		ND	ND	0.5	3.5
Ethylbenzene	100-41-4		ND	ND	0.5	2.2
4-Ethyltoluene	622-96-8		ND	ND	0.5	2.5
Heptane	142-82-5		ND	ND	0.5	2.0
Hexachlorobutadiene	87-68-3		ND	ND	0.5	5.3
Hexane	110-54-3		ND	ND	0.5	1.8
Isopropyl alcohol	67-63-0		ND	ND	0.5	1.2
Methyl ethyl ketone	78-93-3		ND	ND	0.5	1.5
Methyl isobutyl ketone	108-10-1		ND	ND	0.5	2.0
Methylene chloride	75-09-2		ND	ND	0.5	1.7
Methyl-t-butyl ether	1634-04-4		ND	ND	0.5	1.8
Styrene	100-42-5		ND	ND	0.5	2.1
1,1,2,2-Tetrachloroethane	79-34-5		ND	ND	0.5	3.4
Tetrachloroethylene	127-18-4		ND	ND	0.5	3.4
Toluene	108-88-3		ND	ND	0.5	1.9
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1		ND	ND	0.5	3.8
1,2,4-Trichlorobenzene	120-82-1		ND	ND	0.5	3.7
1,1,1-Trichloroethane	71-55-6		ND	ND	0.5	2.7
1,1,2-Trichloroethane	79-00-5		ND	ND	0.5	2.7
Trichloroethylene	79-01-6		ND	ND	0.5	2.7
Trichlorofluoromethane	75-69-4		ND	ND	0.5	2.8
1,2,4-Trimethylbenzene	95-63-6		ND	ND	0.5	2.5
1,3,5-Trimethylbenzene	108-67-8		ND	ND	0.5	2.5
2,2,4-Trimethylpentane	540-84-1		ND	ND	0.5	2.3
Vinyl chloride	75-01-4		ND	ND	0.5	1.3
m or p-Xylene	1330-20-7		ND	ND	0.5	2.2
o-Xylene	95-47-6		ND	ND	0.5	2.2

**Princeton Analytical  
Summary of Results**

Lawhon and Associates, Inc.  
975 Eastwind Drive, Suite 190  
Westerville, OD 43081  
Attn: Shawn Ansbro  
Project: 07-0082  
Site: Countywide

Report Date: 9/6/07  
Job Number: E07-08749  
Date Received: 8/22/07  
Date Analyzed: 9/5/07  
Data File: 090501  
Summa ID: 2755

Analysis: Volatile Organic Compounds by EPA Method TO-15m

<u>Compound</u>	<u>CAS #</u>	<u>Sample Name: SU-G0820</u>		<u>Reporting Limits</u>		
		<u>PAL ID: E07-08749-02</u>	<u>ppbv</u>	<u>ug/m3</u>	<u>ppbv</u>	<u>ug/m3</u>
Acetone	67-64-1		ND	ND	0.5	1.2
Benzene	71-43-2		ND	ND	0.5	1.6
Bromodichloromethane	75-27-4		ND	ND	0.5	3.3
Bromoethene	593-60-2		ND	ND	0.5	2.2
Bromoform	75-25-2		ND	ND	0.5	5.2
Bromomethane	74-83-9		ND	ND	0.5	1.9
1,3-Butadiene	106-99-0		ND	ND	0.5	1.1
tert-Butyl alcohol	75-65-0		ND	ND	0.5	1.5
Carbon disulfide	75-15-0		ND	ND	0.5	1.6
Carbon tetrachloride	56-23-5		ND	ND	0.5	3.1
Chlorobenzene	108-90-7		ND	ND	0.5	2.3
Chloroethane	75-00-3		ND	ND	0.5	1.3
Chloroform	67-66-3		ND	ND	0.5	2.4
Chloromethane	74-87-3		ND	ND	0.5	1.0
3-Chloropropene	107-05-1		ND	ND	0.5	1.6
2-Chlorotoluene	95-49-8		ND	ND	0.5	2.6
Cyclohexane	110-82-7		ND	ND	0.5	1.7
Dibromochloromethane	124-48-1		ND	ND	0.5	4.3
1,2-Dibromoethane	106-93-4		ND	ND	0.5	3.8
1,2-Dichlorobenzene	95-50-1		ND	ND	0.5	3.0
1,3-Dichlorobenzene	541-73-1		ND	ND	0.5	3.0
1,4-Dichlorobenzene	106-46-7		ND	ND	0.5	3.0
Dichlorodifluoromethane	75-71-8		0.52	2.6	0.5	2.5
1,1-Dichloroethane	75-34-3		ND	ND	0.5	2.0
1,2-Dichloroethane	107-06-2		ND	ND	0.5	2.0
1,1-Dichloroethylene	75-35-4		ND	ND	0.5	2.0
cis-1,2-Dichloroethylene	156-59-2		ND	ND	0.5	2.0
trans-1,2-Dichloroethylene	156-60-5		ND	ND	0.5	2.0
1,2-Dichloropropane	78-87-5		ND	ND	0.5	2.3
cis-1,3-Dichloropropene	10061-01-5		ND	ND	0.5	2.3
trans-1,3-Dichloropropene	10061-02-6		ND	ND	0.5	2.3
Dichlorotetrafluoroethane	76-14-2		ND	ND	0.5	3.5
Ethylbenzene	100-41-4		ND	ND	0.5	2.2
4-Ethyltoluene	622-96-8		ND	ND	0.5	2.5
Heptane	142-82-5		ND	ND	0.5	2.0
Hexachlorobutadiene	87-68-3		ND	ND	0.5	5.3
Hexane	110-54-3		ND	ND	0.5	1.8
Isopropyl alcohol	67-63-0		ND	ND	0.5	1.2
Methyl ethyl ketone	78-93-3		ND	ND	0.5	1.5
Methyl isobutyl ketone	108-10-1		ND	ND	0.5	2.0
Methylene chloride	75-09-2		ND	ND	0.5	1.7
Methyl-t-butyl ether	1634-04-4		ND	ND	0.5	1.8
Styrene	100-42-5		ND	ND	0.5	2.1
1,1,2,2-Tetrachloroethane	79-34-5		ND	ND	0.5	3.4
Tetrachloroethylene	127-18-4		ND	ND	0.5	3.4
Toluene	108-88-3		ND	ND	0.5	1.9
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1		ND	ND	0.5	3.8
1,2,4-Trichlorobenzene	120-82-1		ND	ND	0.5	3.7
1,1,1-Trichloroethane	71-55-6		ND	ND	0.5	2.7
1,1,2-Trichloroethane	79-00-5		ND	ND	0.5	2.7
Trichloroethylene	79-01-6		ND	ND	0.5	2.7
Trichlorofluoromethane	75-69-4		ND	ND	0.5	2.8
1,2,4-Trimethylbenzene	95-63-6		ND	ND	0.5	2.5
1,3,5-Trimethylbenzene	108-67-8		ND	ND	0.5	2.5
2,2,4-Trimethylpentane	540-84-1		ND	ND	0.5	2.3
Vinyl chloride	75-01-4		ND	ND	0.5	1.3
m or p-Xylene	1330-20-7		0.57	2.5	0.5	2.2
o-Xylene	95-47-6		ND	ND	0.5	2.2

**Princeton Analytical  
Summary of Results**

Lawhon and Associates, Inc.  
975 Eastwind Drive, Suite 190  
Westerville, OD 43081  
Attn: Shawn Ansbro  
Project: 07-0082  
Site: Countywide

Report Date: 9/6/07  
Job Number: E07-08749  
Date Received: 8/22/07  
Date Analyzed: 9/4/07  
Data File: 090406  
Summa ID: 2066

Analysis: Volatile Organic Compounds by EPA Method TO-15m

<u>Compound</u>	<u>CAS #</u>	<u>Sample Name: SU-W0820</u>		<u>Reporting Limits</u>		
		<u>PAL ID: E07-08749-03</u>	<u>ppbv</u>	<u>ug/m3</u>	<u>ppbv</u>	<u>ug/m3</u>
Acetone	67-64-1		ND	ND	0.5	1.2
Benzene	71-43-2		ND	ND	0.5	1.6
Bromodichloromethane	75-27-4		ND	ND	0.5	3.3
Bromoethene	593-60-2		ND	ND	0.5	2.2
Bromoform	75-25-2		ND	ND	0.5	5.2
Bromomethane	74-83-9		ND	ND	0.5	1.9
1,3-Butadiene	106-99-0		ND	ND	0.5	1.1
tert-Butyl alcohol	75-65-0		ND	ND	0.5	1.5
Carbon disulfide	75-15-0		ND	ND	0.5	1.6
Carbon tetrachloride	56-23-5		ND	ND	0.5	3.1
Chlorobenzene	108-90-7		ND	ND	0.5	2.3
Chloroethane	75-00-3		ND	ND	0.5	1.3
Chloroform	67-66-3		ND	ND	0.5	2.4
Chloromethane	74-87-3		ND	ND	0.5	1.0
3-Chloropropene	107-05-1		ND	ND	0.5	1.6
2-Chlorotoluene	95-49-8		ND	ND	0.5	2.6
Cyclohexane	110-82-7		ND	ND	0.5	1.7
Dibromochloromethane	124-48-1		ND	ND	0.5	4.3
1,2-Dibromoethane	106-93-4		ND	ND	0.5	3.8
1,2-Dichlorobenzene	95-50-1		ND	ND	0.5	3.0
1,3-Dichlorobenzene	541-73-1		ND	ND	0.5	3.0
1,4-Dichlorobenzene	106-46-7		ND	ND	0.5	3.0
Dichlorodifluoromethane	75-71-8	0.98		4.9	0.5	2.5
1,1-Dichloroethane	75-34-3		ND	ND	0.5	2.0
1,2-Dichloroethane	107-06-2		ND	ND	0.5	2.0
1,1-Dichloroethylene	75-35-4		ND	ND	0.5	2.0
cis-1,2-Dichloroethylene	156-59-2		ND	ND	0.5	2.0
trans-1,2-Dichloroethylene	156-60-5		ND	ND	0.5	2.0
1,2-Dichloropropane	78-87-5		ND	ND	0.5	2.3
cis-1,3-Dichloropropene	10061-01-5		ND	ND	0.5	2.3
trans-1,3-Dichloropropene	10061-02-6		ND	ND	0.5	2.3
Dichlorotetrafluoroethane	76-14-2		ND	ND	0.5	3.5
Ethylbenzene	100-41-4		ND	ND	0.5	2.2
4-Ethyltoluene	622-96-8		ND	ND	0.5	2.5
Heptane	142-82-5		ND	ND	0.5	2.0
Hexachlorobutadiene	87-68-3		ND	ND	0.5	5.3
Hexane	110-54-3		ND	ND	0.5	1.8
Isopropyl alcohol	67-63-0		ND	ND	0.5	1.2
Methyl ethyl ketone	78-93-3		ND	ND	0.5	1.5
Methyl isobutyl ketone	108-10-1		ND	ND	0.5	2.0
Methylene chloride	75-09-2		ND	ND	0.5	1.7
Methyl-t-butyl ether	1634-04-4		ND	ND	0.5	1.8
Styrene	100-42-5		ND	ND	0.5	2.1
1,1,2,2-Tetrachloroethane	79-34-5		ND	ND	0.5	3.4
Tetrachloroethylene	127-18-4		ND	ND	0.5	3.4
Toluene	108-88-3		ND	ND	0.5	1.9
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1		ND	ND	0.5	3.8
1,2,4-Trichlorobenzene	120-82-1		ND	ND	0.5	3.7
1,1,1-Trichloroethane	71-55-6		ND	ND	0.5	2.7
1,1,2-Trichloroethane	79-00-5		ND	ND	0.5	2.7
Trichloroethylene	79-01-6		ND	ND	0.5	2.7
Trichlorofluoromethane	75-69-4		ND	ND	0.5	2.8
1,2,4-Trimethylbenzene	95-63-6		ND	ND	0.5	2.5
1,3,5-Trimethylbenzene	108-67-8		ND	ND	0.5	2.5
2,2,4-Trimethylpentane	540-84-1		ND	ND	0.5	2.3
Vinyl chloride	75-01-4		ND	ND	0.5	1.3
m or p-Xylene	1330-20-7	1.1		4.8	0.5	2.2
o-Xylene	95-47-6		ND	ND	0.5	2.2

**Princeton Analytical  
Summary of Results**

Lawhon and Associates, Inc.  
975 Eastwind Drive, Suite 190  
Westerville, OD 43081  
Attn: Shawn Ansbro  
Project: 07-0082  
Site: Countywide

Report Date: 9/6/07  
Job Number: E07-08749  
Date Received: 8/22/07  
Date Analyzed: 9/5/07  
Data File: 090502  
Summa ID: 3045

Analysis: Volatile Organic Compounds by EPA Method TO-15m

<u>Compound</u>	<u>CAS #</u>	<u>Sample Name: SU-C0820</u>		<u>Reporting Limits</u>		
		<u>PAL ID: E07-08749-04</u>	<u>ppbv</u>	<u>ug/m3</u>	<u>ppbv</u>	<u>ug/m3</u>
Acetone	67-64-1		1.7	4.0	0.5	1.2
Benzene	71-43-2		ND	ND	0.5	1.6
Bromodichloromethane	75-27-4		ND	ND	0.5	3.3
Bromoethene	593-60-2		ND	ND	0.5	2.2
Bromoform	75-25-2		ND	ND	0.5	5.2
Bromomethane	74-83-9		ND	ND	0.5	1.9
1,3-Butadiene	106-99-0		ND	ND	0.5	1.1
tert-Butyl alcohol	75-65-0		ND	ND	0.5	1.5
Carbon disulfide	75-15-0		ND	ND	0.5	1.6
Carbon tetrachloride	56-23-5		ND	ND	0.5	3.1
Chlorobenzene	108-90-7		ND	ND	0.5	2.3
Chloroethane	75-00-3		ND	ND	0.5	1.3
Chloroform	67-66-3		ND	ND	0.5	2.4
Chloromethane	74-87-3		ND	ND	0.5	1.0
3-Chloropropene	107-05-1		ND	ND	0.5	1.6
2-Chlorotoluene	95-49-8		ND	ND	0.5	2.6
Cyclohexane	110-82-7		ND	ND	0.5	1.7
Dibromochloromethane	124-48-1		ND	ND	0.5	4.3
1,2-Dibromoethane	106-93-4		ND	ND	0.5	3.8
1,2-Dichlorobenzene	95-50-1		ND	ND	0.5	3.0
1,3-Dichlorobenzene	541-73-1		ND	ND	0.5	3.0
1,4-Dichlorobenzene	106-46-7		ND	ND	0.5	3.0
Dichlorodifluoromethane	75-71-8		ND	ND	0.5	2.5
1,1-Dichloroethane	75-34-3		ND	ND	0.5	2.0
1,2-Dichloroethane	107-06-2		ND	ND	0.5	2.0
1,1-Dichloroethylene	75-35-4		ND	ND	0.5	2.0
cis-1,2-Dichloroethylene	156-59-2		ND	ND	0.5	2.0
trans-1,2-Dichloroethylene	156-60-5		ND	ND	0.5	2.0
1,2-Dichloropropane	78-87-5		ND	ND	0.5	2.3
cis-1,3-Dichloropropene	10061-01-5		ND	ND	0.5	2.3
trans-1,3-Dichloropropene	10061-02-6		ND	ND	0.5	2.3
Dichlorotetrafluoroethane	76-14-2		ND	ND	0.5	3.5
Ethylbenzene	100-41-4		ND	ND	0.5	2.2
4-Ethyltoluene	622-96-8		ND	ND	0.5	2.5
Heptane	142-82-5		ND	ND	0.5	2.0
Hexachlorobutadiene	87-68-3		ND	ND	0.5	5.3
Hexane	110-54-3		ND	ND	0.5	1.8
Isopropyl alcohol	67-63-0		ND	ND	0.5	1.2
Methyl ethyl ketone	78-93-3		ND	ND	0.5	1.5
Methyl isobutyl ketone	108-10-1		ND	ND	0.5	2.0
Methylene chloride	75-09-2		ND	ND	0.5	1.7
Methyl-t-butyl ether	1634-04-4		ND	ND	0.5	1.8
Styrene	100-42-5		ND	ND	0.5	2.1
1,1,2,2-Tetrachloroethane	79-34-5		ND	ND	0.5	3.4
Tetrachloroethylene	127-18-4		ND	ND	0.5	3.4
Toluene	108-88-3		ND	ND	0.5	1.9
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1		ND	ND	0.5	3.8
1,2,4-Trichlorobenzene	120-82-1		ND	ND	0.5	3.7
1,1,1-Trichloroethane	71-55-6		ND	ND	0.5	2.7
1,1,2-Trichloroethane	79-00-5		ND	ND	0.5	2.7
Trichloroethylene	79-01-6		ND	ND	0.5	2.7
Trichlorofluoromethane	75-69-4		ND	ND	0.5	2.8
1,2,4-Trimethylbenzene	95-63-6		ND	ND	0.5	2.5
1,3,5-Trimethylbenzene	108-67-8		ND	ND	0.5	2.5
2,2,4-Trimethylpentane	540-84-1		ND	ND	0.5	2.3
Vinyl chloride	75-01-4		ND	ND	0.5	1.3
m or p-Xylene	1330-20-7		0.80	3.5	0.5	2.2
o-Xylene	95-47-6		ND	ND	0.5	2.2

## Summary of Results

Lawhon and Associates, Inc.  
975 Eastwind Drive, Suite 190  
Westerville, OH 43081  
Attn: Shawn Ansbro  
Project: 07-0082, Countrywide

Report Date: 9/6/2007  
Job Number: E07-08749  
Date Received: 8/22/2007  
Date Analyzed: 9/5/2007

Analysis: Tentatively Identified Compounds by Library Search

Sample Name: SU-S0820  
IAL ID: E07-08749-01

Data File: 090404  
Canister ID: 3293

<b>Chemical Name</b>	<b>CAS Number</b>	<b>Qual %</b>	<b>Estimated in ppb</b>	<b>Estimated in µg/m3</b>
Butane	106-97-8	42	3.4	8.1
Ethanol	64-17-5	80	2.5	4.7
Acetonitrile	75-05-8	42	49	82
Cyclotrisiloxane, hexamethyl-	541-05-9	91	4.7	43
Tetradecane	629-59-4	97	1.6	13
Cyclotetrasiloxane, octamethyl-	556-67-2	58	5.1	62
Octadecane	593-45-3	94	7.0	73
Butanamide, 2,2,3,3,4,4,4-heptaf...	55471-01-7	64	2.6	52

Sample Name: SU-G0820  
IAL ID: E07-08749-02

Data File: 090501  
Canister ID: 2755

<b>Chemical Name</b>	<b>CAS Number</b>	<b>Qual %</b>	<b>Estimated in ppb</b>	<b>Estimated in µg/m3</b>
Butane, 2-methyl-	78-78-4	38	3.9	11

## Summary of Results

Lawhon and Associates, Inc.  
975 Eastwind Drive, Suite 190  
Westerville, OH 43081  
Attn: Shawn Ansbro  
Project: 07-0082, Countrywide

Report Date 9/6/2007  
Job Number E07-08749  
Date Received 8/22/2007  
Date Analyzed 9/5/2007

Analysis: Tentatively Identified Compounds by Library Search

Sample Name: SU-W0820  
IAL ID: E07-08749-03

Data File: 090406  
Canister ID 2066

Chemical Name	CAS Number	Qual %	Estimated in ppb	Estimated in µg/m3
Butane	106-97-8	38	5.4	13
Acetonitrile	75-05-8	38	43	72
1,3-Butadiene, 2-methyl-	78-79-5	91	7.8	23
Cyclotrisiloxane, hexamethyl-	541-05-9	90	2.7	25
Pentadecane	629-62-9	97	1.1	10

Sample Name: SU-C0820  
IAL ID: E07-08749-04

Data File: 090502  
Canister ID 3045

Chemical Name	CAS Number	Qual %	Estimated in ppb	Estimated in µg/m3
No TICs Detected				

## Summary of Results

Lawhon & Associates, Inc.  
 975 Eastwind Drive Suite 190  
 Westerville, OH 43081  
 Att: Shawn Ansbro  
 Jobsite: Countywide  
 Project: #07-0082

Report Date: 9/05/07  
 Job Number: E07-08749  
 Date Received: 8/22/07  
 Date Analyzed: 8/28/07

Analysis: Aldehydes and Ketones, EPA Method TO-11a

Sample Name:	S0820-01H		S0820-02H		S0820-03H*		Reporting
IAL ID:	E07-08749-17		E07-08749-18		E07-08749-19		Limits
Compound	ug	ug/m3	ug	ug/m3	ug	ug/m3	ug
Formaldehyde	< 0.1	< 0.3	0.15	0.31	0.15	0.45	0.1
Acetaldehyde	< 0.1	< 0.3	< 0.1	< 0.2	0.34	1.0	0.1
Acetone	< 0.1	< 0.3	< 0.1	< 0.2	< 0.1	< 0.3	0.1
Acrolein	< 0.1	< 0.3	< 0.1	< 0.2	< 0.1	< 0.3	0.1
Propionaldehyde	< 0.1	< 0.3	< 0.1	< 0.2	< 0.1	< 0.3	0.1
Crotonaldehyde	< 0.1	< 0.3	< 0.1	< 0.2	< 0.1	< 0.3	0.1
Butyraldehyde	< 0.1	< 0.3	< 0.1	< 0.2	< 0.1	< 0.3	0.1
Benzaldehyde	< 0.1	< 0.3	< 0.1	< 0.2	< 0.1	< 0.3	0.1
Isovaleraldehyde	< 0.6	< 1.9	< 0.6	< 1.2	< 0.6	< 1.8	0.6
Valeraldehyde	< 0.2	< 0.6	< 0.2	< 0.4	< 0.2	< 0.6	0.2
o-Tolualdehyde	< 0.2	< 0.6	< 0.2	< 0.4	< 0.2	< 0.6	0.2
m- and p-Tolualdehyde	< 0.1	< 0.3	< 0.1	< 0.2	< 0.1	< 0.3	...
Hexaldehyde	< 0.1	< 0.3	< 0.1	< 0.2	< 0.1	< 0.3	0.1

Sample Name:	G0820-01H		G0820-02H		G0820-03H		Reporting
IAL ID:	E07-08749-20		E07-08749-21		E07-08749-22		Limits
Compound	ug	ug/m3	ug	ug/m3	ug	ug/m3	ug
Formaldehyde	< 0.1	< 0.3	< 0.1	< 0.2	< 0.1	< 0.2	0.1
Acetaldehyde	0.12	0.35	0.15	0.31	< 0.1	< 0.2	0.1
Acetone	< 0.1	< 0.3	< 0.1	< 0.2	< 0.1	< 0.2	0.1
Acrolein	< 0.1	< 0.3	< 0.1	< 0.2	< 0.1	< 0.2	0.1
Propionaldehyde	< 0.1	< 0.3	< 0.1	< 0.2	< 0.1	< 0.2	0.1
Crotonaldehyde	< 0.1	< 0.3	< 0.1	< 0.2	< 0.1	< 0.2	0.1
Butyraldehyde	< 0.1	< 0.3	< 0.1	< 0.2	< 0.1	< 0.2	0.1

Benzaldehyde	< 0.1	< 0.3	< 0.1	< 0.2	< 0.1	< 0.2	0.1
Isovaleraldehyde	< 0.6	< 1.8	< 0.6	< 1.3	< 0.6	< 1.3	0.6
Valeraldehyde	< 0.2	< 0.6	< 0.2	< 0.4	< 0.2	< 0.4	0.2
o-Tolualdehyde	< 0.2	< 0.6	< 0.2	< 0.4	< 0.2	< 0.4	0.2
m- and p-Tolualdehyde	< 0.1	< 0.3	< 0.1	< 0.2	< 0.1	< 0.2	0.1
Hexaldehyde	< 0.1	< 0.3	< 0.1	< 0.2	< 0.1	< 0.2	0.1

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Lawhon & Associates, Inc.

Job Number: E07-08749

Jobsite: Countywide

Project: #07-0082

Analysis: Aldehydes and Ketones, EPA Method TO-11a

Sample Name:	W0820-01H		W0820-02H		W0820-03H		Reporting
IAL ID:	E07-08749-23		E07-08749-24		E07-08749-25		Limits
Compound	ug	ug/m3	ug	ug/m3	ug	ug/m3	ug
Formaldehyde	< 0.1	< 0.2	0.10	0.21	< 0.1	< 0.2	0.1
Acetaldehyde	< 0.1	< 0.2	< 0.1	< 0.2	0.12	0.27	0.1
Acetone	< 0.1	< 0.2	< 0.1	< 0.2	< 0.1	< 0.2	0.1
Acrolein	< 0.1	< 0.2	< 0.1	< 0.2	< 0.1	< 0.2	0.1
Propionaldehyde	< 0.1	< 0.2	< 0.1	< 0.2	< 0.1	< 0.2	0.1
Crotonaldehyde	< 0.1	< 0.2	< 0.1	< 0.2	< 0.1	< 0.2	0.1
Butyraldehyde	< 0.1	< 0.2	< 0.1	< 0.2	< 0.1	< 0.2	0.1
Benzaldehyde	< 0.1	< 0.2	< 0.1	< 0.2	< 0.1	< 0.2	0.1
Isovaleraldehyde	< 0.6	< 1.3	< 0.6	< 1.2	< 0.6	< 1.3	0.6
Valeraldehyde	< 0.2	< 0.4	< 0.2	< 0.4	< 0.2	< 0.4	0.2
o-Tolualdehyde	< 0.2	< 0.4	< 0.2	< 0.4	< 0.2	< 0.4	0.2
m- and p-Tolualdehyde	< 0.1	< 0.2	< 0.1	< 0.2	< 0.1	< 0.2	0.1
Hexaldehyde	< 0.1	< 0.2	< 0.1	< 0.2	< 0.1	< 0.2	0.1

Sample Name:	C0820-01H		C0820-02H		C0820-03H		Reporting
IAL ID:	E07-08749-26		E07-08749-27		E07-08749-28		Limits
Compound	ug	ug/m3	ug	ug/m3	ug	ug/m3	ug
Formaldehyde	0.15	0.33	0.13	0.28	< 0.1	< 0.3	0.1
Acetaldehyde	0.13	0.28	0.11	0.24	< 0.1	< 0.3	0.1
Acetone	< 0.1	< 0.2	< 0.1	< 0.2	< 0.1	< 0.3	0.1

Acrolein	< 0.1	< 0.2	< 0.1	< 0.2	< 0.1	< 0.3	0.1
Propionaldehyde	< 0.1	< 0.2	< 0.1	< 0.2	< 0.1	< 0.3	0.1
Crotonaldehyde	< 0.1	< 0.2	< 0.1	< 0.2	< 0.1	< 0.3	0.1
Butyraldehyde	< 0.1	< 0.2	< 0.1	< 0.2	< 0.1	< 0.3	0.1
Benzaldehyde	< 0.1	< 0.2	< 0.1	< 0.2	< 0.1	< 0.3	0.1
Isovaleraldehyde	< 0.6	< 1.3	< 0.6	< 1.3	< 0.6	< 1.5	0.6
Valeraldehyde	< 0.2	< 0.4	< 0.2	< 0.4	< 0.2	< 0.5	0.2
o-Tolualdehyde	< 0.2	< 0.4	< 0.2	< 0.4	< 0.2	< 0.5	0.2
m- and p-Tolualdehyde	< 0.1	< 0.2	< 0.1	< 0.2	< 0.1	< 0.3	0.1
Hexaldehyde	< 0.1	< 0.2	< 0.1	< 0.2	< 0.1	< 0.3	0.1

\*Denotes breakthrough from front to back of sorbent tube for Acetaldehyde.

Notes: Calculations of concentrations in air are based upon air sampling data reported by client.

Analytical results relate only to the samples as received at the laboratory.

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Michael H. Leftin, Ph.D.  
Laboratory Director

Page 2 of 2

Analyst: D. Mitchell

## Summary of Results

Lawhon and Associates, Inc.  
 975 Eastwind Drive, Suite 190  
 Westerville, OH 43081  
 Attn: Shawn Ansbro

Report Date: 9/6/07  
 Job Number: E07-08749  
 Date Received: 8/22/07  
 Date Analyzed: 9/5/07

Project: Countywide  
 Project #: 07-0082

Analysis: Hydrogen Chloride and Hydrogen Fluoride, NIOSH 7903

<u>Sample ID</u>	<u>IAL ID</u>	<u>Hydrogen Fluoride</u>		<u>Hydrogen Chloride</u>	
		<u>ug</u>	<u>ug/m3</u>	<u>ug</u>	<u>ug/m3</u>
S0820-01H	E07-08749-05	< 0.6	< 2.0	< 0.4	< 1.2
S0820-02H*	E07-08749-06	1.6	3.2	3.9	8.1
S0820-03H*	E07-08749-07	< 0.6	< 1.9	2.6	7.7
G0820-01H	E07-08749-08	< 0.6	< 1.9	< 0.4	< 1.2
G0820-02H	E07-08749-09	< 0.6	< 1.3	0.82	1.7
G0820-03H*	E07-08749-10	< 0.6	< 1.4	0.62	1.3
W0820-01H	E07-08749-11	< 0.6	< 1.4	0.57	1.2
W0820-02H*	E07-08749-12	1.2	2.4	9.8	20
W0820-03H*	E07-08749-13	< 0.6	< 1.4	2.1	4.5
C0820-01H	E07-08749-14	< 0.6	< 1.4	< 0.4	< 0.9
C0820-02H*	E07-08749-15	< 0.6	< 1.3	1.2	2.6
C0820-03H	E07-08749-16	< 0.6	< 1.6	< 0.4	< 1.0
Reporting Limit		0.6		0.4	

\* Denotes breakthrough from the front to the back of the sorbent tube for chloride.

Note: Calculations of concentrations in air are based upon air sampling data reported by client.

Analytical results relate only to the samples as received at the laboratory.

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Michael H. Leftin, Ph.D.  
 Laboratory Director

Analyst: D. Mitchell