

October 22, 2004

Cameron O'Connor
Public Health Specialist III
NYS Department of Health
584 Delaware Avenue
Buffalo NY 14202

**Indoor Air Intrusion Study
CMS Remediation Site - # 915618
Cheektowaga NY**

Dear Cameron:

Attached is the Air Intrusion Report for the CMS Associates Remediation site in Cheektowaga. The air sampling and intrusion study reveals that:

There is evidence that the contaminated groundwater plume extends underneath the northwest corner of the building (nearest the former UST location.) This was expected because the UST was immediately west of the building in the adjacent parking lot.

We analyzed one sample each of the sub-slab, indoor, and ambient air for 22 compounds (which represent the VOCs that are present in the 11 groundwater monitoring wells.)

The analytical results reveal that:

1. The sub-slab sample contained ten of the 22 groundwater VOCs. Three of these ten were absent from both the indoor air and ambient air samples, and therefore are apparently limited to the sub slab and are therefore not an indoor-air-quality concern.
2. The indoor air sample contained eight of the 22 groundwater VOCs
3. One of those eight VOCs (Freon 11) was present in both the indoor and outdoor air, but was absent from the sub-slab sample. Additionally, since 1996, Freon 11 was found in only a single groundwater sample, and is likely an outlier concerning the groundwater VOCs. Therefore this VOC in the indoor air is not a result of the groundwater plume.
4. The remaining seven groundwater VOCs found in the indoor air are present at higher concentration in the sub slab, and at lower concentration in the ambient air sample. This

indicates that, while the groundwater plume may be contributing to the presence of VOCs inside the building, a portion is due to VOCs already present in ambient air.

To determine if the VOCs present in the building are a concern, we compared their concentrations to the NIOSH and OSHA standards for each compound. The rationale for that was, that the use of the building was previously industrial (manufacturing/warehousing) and will continue to such (warehouse). The results were that:

1. For every one of the eight interior VOCs, the indoor air concentration was insignificant compared to the agency standard.
2. The actual levels inside the building are from three to six orders of magnitude below the NIOSH and OSHA exposure standards.

Based on the above results of the air analysis and evaluation of the indoor air VOCs, we conclude that:

1. The groundwater plume likely extends under the northwest corner of the building.
2. Seven VOCs in the indoor air are likely present due partially to the under slab groundwater plume.
3. Four of those seven VOCs in the indoor air are apparently present solely due to their presence in the groundwater plume.
4. The eighth indoor air VOC is present solely due to its presence in ambient air.
5. No further action immediate is warranted at the CMS Site regarding indoor air quality in order to reclassify the site from Class 2 to Class 4 on the NYS Registry.

Cameron, thank you again for your help in refining the goals of the intrusion study and procedures of the sampling plan. Please call me at 864-0012 (cell) if you have any questions about this study.

Sincerely,
KEN W. KLOEBER CONSULTING ENGINEERS

Ken W. Kloeber PE
Principal Engineer

cc: Dave Locey – NYSDEC
Bob Mariacher—CMS / Guy Agostinelli—ZS&A

AIR INTRUSION STUDY

CMS Remediation Site
210 French Road
Town of Cheektowaga, NY
Site # 915618

Prepared for:

CMS Property Associates LLC
210 French Road
Cheektowaga, NY 14227

Prepared by:

Ken W. Kloeber Consulting Engineers
PO Box 140
Boston, NY 14025
716-941-5544
KloeberEng@aol.com

I BACKGROUND and FACILITY DESCRIPTION

The CMS Property Associates site is a groundwater-remediation operation at 210 French Road in Cheektowaga, NY. The site is under review for reclassification (from Class 2 to Class 4) on the NYS Registry of Inactive Hazardous Waste Sites. See the NYSDEC March 2000 *Record of Decision* and Ken W. Kloeber Engineers July 2004 *Remedial Action Summary Report* for further information on the UST spill site and the groundwater remediation that is underway.

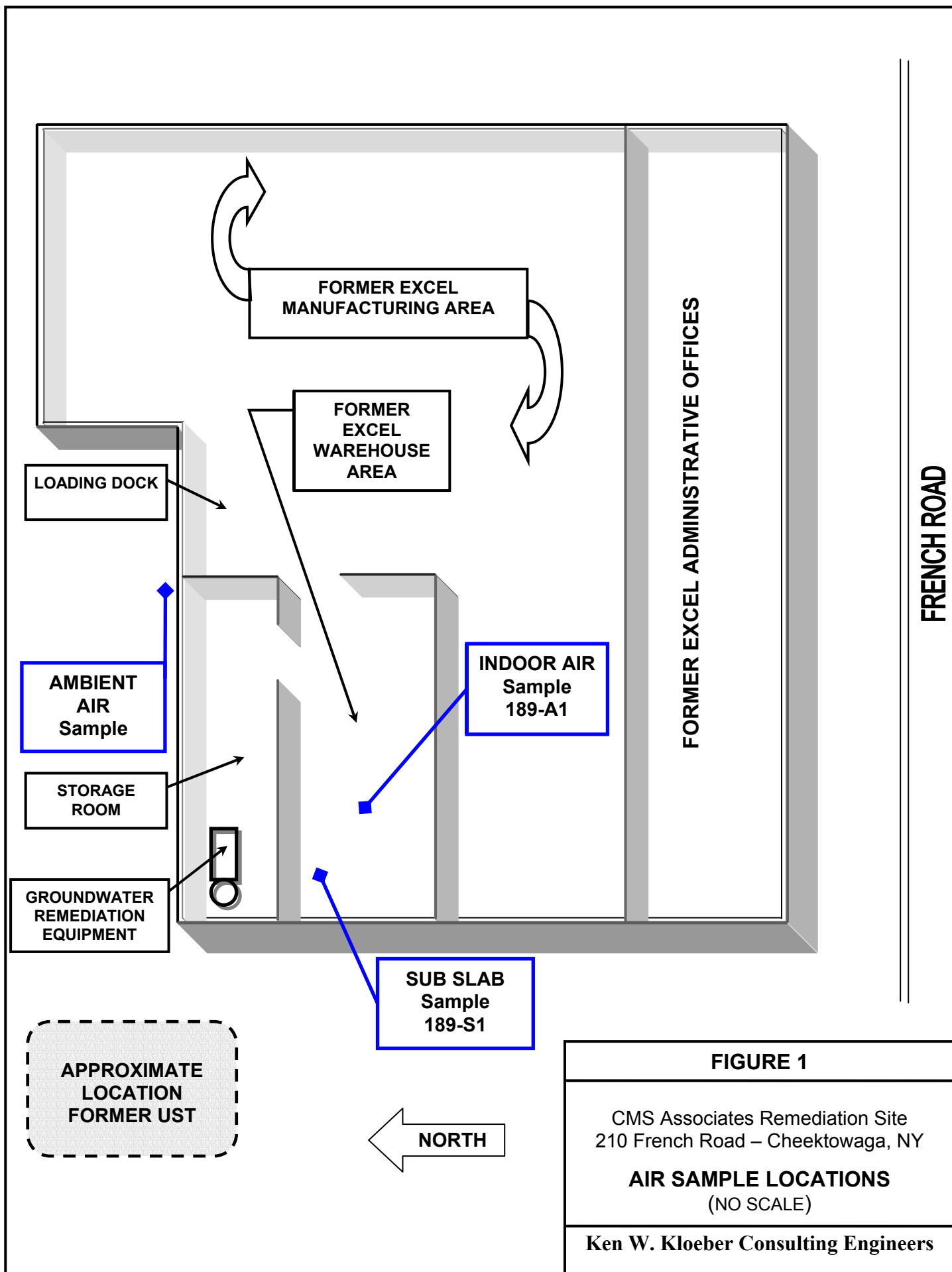
The site owner, CMS Property Associates LLC, additionally has a pending contract to sell the property to Cugini Ventires, LLC, an affiliate of Rosina Food Products, Inc. Rosina's plant at 170 French Road is immediately west of the CMS Site. The intended future use is reportedly warehousing for Rosina's frozen products. The parking lot on the CMS site (which CMS leases to Rosina) separates the two locations. Rosina currently leases a small portion of the building for warehouse space.

During its review of the NYSDEC reclassification package, the NYS Department of Health requested that CMS perform an Air Intrusion Study to determine if volatile organic compounds (VOCs) from the groundwater plume and contaminated bedrock had entered the building. This report presents the findings of the air sampling and the evaluation of the VOCs found inside the building.

The study was coordinated with the NYSDOH, and air sampling and analysis was specifically targeted at only those VOCs that are found in the groundwater during the ongoing sampling of the 11 on-site and off-site wells. See the report Appendix for correspondence outlining the study's intent and procedures.

The building was formerly used by Excel Precision, Inc., who manufactures large-scale and other printed circuit boards for the cellular telecommunications industry and other uses. In late January 2004 Excel moved its operation from the CMS Site to a larger facility because it needed additional space. In its processes, Excel used commercial products containing VOC compounds. Before Excel moved, we inventoried the commercial products stored in the warehouse and manufacturing areas (see Figure 1.)

The building heat is by overhead natural gas space heaters. These have last been operated during winter 2003/2004. The front office area is air conditioned, but not the warehouse/manufacturing area.



II COMPLIANCE REVIEW

Air was sampled at three locations on the CMS site (see Figure 1):

- (1) Under the concrete floor slab in a former warehouse area (air sample ID 189-S1).
- (2) Indoor air in the warehouse area (air sample ID 189-A1).
- (3) Outdoor ambient air next to the rear loading dock area (air sample ID 189-A2).

Volatile organics were observed in all three samples in varying concentrations. Comparing VOCs found in the groundwater to those found in the air sampling/analysis, the following VOCs were non-detectable in all three air samples and are therefore of no concern:

- 1,1,2,2-Tetrachloroethane
- 1,1-Dichloroethane
- 1,1-Dichloroethene
- 1,2-Dichlorobenzene
- 1,2-Dichloroethane
- Bromomethane
- Chloroethane
- cis-1,2-Dichloroethene
- Methyl tert-butyl ether
- Tetrachloroethene (Tetrachloroethylene)
- Vinyl chloride

Of the remaining VOCs, Trichlorofluoromethane (Freon 11) was found at 1.7 ug/m³ in both the indoor air as well as the ambient air sample, and was absent in the under-slab sample. Ambient air is therefore the source of that VOC, instead of the groundwater plume.

Three of the groundwater VOCs were observed in the under-slab sample, but were absent from the indoor air sample, and are therefore of no concern:

- Chloroform
- Methylene chloride
- Trichloroethene

The seven remaining groundwater VOCs were present in the indoor air sample as well as in the under-slab sample. Based on this, we conclude that the source may likely be the groundwater plume. However, it is also possible that Excel Precision contributed to these because it uses VOCs in its manufacturing of printed circuit boards. Although no chemicals were currently stored in the building during this air sampling, there could be remnants of prior use.

We previously inventoried the chemical products that Excel stored in the building. We have not, however, investigated the commercial products to determine their composition or obtained MSD sheets to determine their precise VOC content. We deemed this unnecessary at this point because, as described below, VOCs in the indoor air poses no concern. It is therefore immaterial whether the VOCs are present due to Excel Precision's operations, the groundwater plume, or are in ambient air.

Since it is likely that the groundwater plume has contributed some VOC to the indoor air, we evaluated the impact of these compounds in light of the future use of the structure (which is warehousing.)

III SAMPLING PROCEDURES

We sampled air at three locations using “mini-summa-type” canisters with regulators set for one hour collection times. The sub slab sample (sample 189-S1) was taken through the concrete floor in a room that Excel precision, Inc., previously used for warehousing process chemicals.

We chose that room because it was nearest the former UST and would indicate the presence of a plume under the northwest corner of the building. It also avoided interference from VOCs possibly present in the room that houses the groundwater remediation equipment (see Figure 1.)

The indoor air (sample 189-A1) was collected at a height of 4 feet in the same room, about 20 feet away from the sub slab sample.

Ambient air was collected at a height of 2 feet, adjacent to the rear loading dock door.

We secured all samples after collection and delivered canisters and regulators to the Buffalo representative of Centrex Laboratories (Syracuse NY) for T0-15 analysis. The laboratory results for the groundwater VOC compounds are found in the Appendix.

APPENDIX

NYSDOH Coordination letter
T0-10 Air Analysis Laboratory Results
Air Samples Chain of Custody

September 13, 2004

Cameron O'Connor
Public Health Specialist III
NYS Department of Health
584 Delaware Avenue
Buffalo NY 14202

CMS Remediation Site - # 915618

Dear Cameron:

This purpose of this letter is to confirm our conversations last week regarding an "intrusion investigation" for the CMS remediation site in Cheektowaga. The intent of the intrusion investigation is to provide you the information needed to make a recommendation that the subject property can be re-classified from "Class 2" to "Class 4" on the registry of inactive sites.

This confirms that we discussed that:

1. The purpose of the investigation is:
 - To show that the plume has not extended beneath the building at 210 French Road.
 - To demonstrate (if there is a plume under the slab) that volatile organics have not intruded into the interior atmosphere.
2. The under-slab and indoor air test will be in the northwest corner of the building, nearest the former UST location.
3. The under-slab, indoor, and outdoor tests will run 1 hour and be analyzed at 1 ug/m³ detection limit.
4. The compounds to be reported will the following list found in the groundwater:

Compounds found during groundwater monitoring—CMS remediation site

1,1,1-Trichloroethane
1,1,2,2-Tetrachloroethane
1,1-Dichloroethane
1,1-Dichloroethene
1,2,4-Trimethylbenzene
1,2-Dichlorobenzene
1,2-Dichloroethane
Benzene
Bromomethane
Chloroethane
Chloroform
cis-1,2-Dichloroethene
Ethylbenzene
Methyl tert-butyl ether
Methylene chloride
m-xylene
p-Xylene
Tetrachloroethane
Tetrachloroethene
Toluene
Trichloroethene
Trichlorofluoromethane
Vinyl chloride

Cameron, please call me if you have any questions or need to anything to add to the above.

Sincerely,
KEN W. KLOEBER CONSULTING ENGINEERS

Ken Kloeber

Ken W. Kloeber, PE
Principal Engineer

cc w/encl (fax): Bob Mariacher—CMS Property Associates, LLC
Guy Agostinelli—ZS&A
Dave Locey, PE—NYSDEC Region

CLIENT: Kloeber Engineers
Lab Order: C0410001
Project: 189
Lab ID: C0410001-001A

Client Sample ID: 189- S1
Tag Number: 104, 56
Collection Date: 9/28/2004
Matrix: AIR

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
AIR TOXIC TO15		TO-15		Analyst: RJP		
1,1,1-Trichloroethane	3500	280		ug/m3	10	10/4/2004
1,1,2,2-Tetrachloroethane	ND	35		ug/m3	1	10/4/2004
1,1-Dichloroethane	27	21		ug/m3	1	10/4/2004
1,1-Dichloroethene	ND	20		ug/m3	1	10/4/2004
1,2,4-Trichlorobenzene	ND	38		ug/m3	1	10/4/2004
1,2-Dichlorobenzene	ND	31		ug/m3	1	10/4/2004
1,2-Dichloroethane	ND	21		ug/m3	1	10/4/2004
Benzene	ND	16		ug/m3	1	10/4/2004
Bromomethane	ND	20		ug/m3	1	10/4/2004
Chloroethane	ND	13		ug/m3	1	10/4/2004
Chloroform	98	25		ug/m3	1	10/4/2004
cis-1,2-Dichloroethene	ND	20		ug/m3	1	10/4/2004
Ethylbenzene	ND	22		ug/m3	1	10/4/2004
Freon 11	ND	29		ug/m3	1	10/4/2004
m-Xylene	29	22		ug/m3	1	10/4/2004
Methyl tert-butyl ether	ND	18		ug/m3	1	10/4/2004
Methylene chloride	ND	18		ug/m3	1	10/4/2004
p-Xylene	13	22		ug/m3	1	10/4/2004
Tetrachloroethylene	ND	34		ug/m3	1	10/4/2004
Toluene	140	19		ug/m3	1	10/4/2004
Trichloroethene	ND	27		ug/m3	1	10/4/2004
Vinyl chloride	ND	13		ug/m3	1	10/4/2004
AIR TOXIC TO15_1UG/M3		TO-15		Analyst: RJP		
1,1,1-Trichloroethane	3700	17		ug/m3	20	10/3/2004
1,1,2,2-Tetrachloroethane	ND	1.0		ug/m3	1	10/3/2004
1,1-Dichloroethane	ND	0.62		ug/m3	1	10/3/2004
1,1-Dichloroethene	ND	0.60		ug/m3	1	10/3/2004
1,2,4-Trichlorobenzene	ND	1.1		ug/m3	1	10/3/2004
1,2-Dichlorobenzene	ND	0.92		ug/m3	1	10/3/2004
1,2-Dichloroethane	ND	0.62		ug/m3	1	10/3/2004
Benzene	5.0	0.49		ug/m3	1	10/3/2004
Bromomethane	ND	0.59		ug/m3	1	10/3/2004
Chloroethane	ND	0.40		ug/m3	1	10/3/2004
Chloroform	110	15		ug/m3	20	10/3/2004
cis-1,2-Dichloroethene	ND	0.60		ug/m3	1	10/3/2004
Ethylbenzene	8.8	0.66		ug/m3	1	10/3/2004
Freon 11	ND	0.86		ug/m3	1	10/3/2004
m-Xylene	23	0.66		ug/m3	1	10/3/2004
Methyl tert-butyl ether	ND	0.55		ug/m3	1	10/3/2004

Qualifiers: * Value exceeds Maximum Contaminant Level
 E Value above quantitation range
 J Analyte detected below quantitation limits
 S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
 H Holding times for preparation or analysis exceeded
 ND Not Detected at the Reporting Limit

CLIENT: Kloeber Engineers
Lab Order: C0410001
Project: 189
Lab ID: C0410001-001A

Client Sample ID: 189- S1
Tag Number: 104, 56
Collection Date: 9/28/2004
Matrix: AIR

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
AIR TOXIC TO15_1UG/M3		TO-15		Analyst: RJP		
Methylene chloride	5.2	0.53		ug/m3	1	10/3/2004
p-Xylene	8.5	0.66		ug/m3	1	10/3/2004
Tetrachloroethylene	ND	1.0		ug/m3	1	10/3/2004
Toluene	170	11		ug/m3	20	10/3/2004
Trichloroethene	1.9	0.82		ug/m3	1	10/3/2004
Vinyl chloride	ND	0.39		ug/m3	1	10/3/2004

NOTES:

E - Estimated value. The amount exceeds the linear working range of the instrument. See TO15 for final results.

Qualifiers:	*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: 09-Oct-04

CLIENT: Kloeber Engineers
Lab Order: C0410001
Project: 189
Lab ID: C0410001-003A

Client Sample ID: 189-A1
Tag Number: 93,120
Collection Date: 9/28/2004
Matrix: AIR

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
AIR TOXIC TO15_1UG/M3		TO-15		Analyst: RJP		
1,1,1-Trichloroethane	4.4	0.83		ug/m3	1	10/3/2004
1,1,2,2-Tetrachloroethane	ND	1.0		ug/m3	1	10/3/2004
1,1-Dichloroethane	ND	0.62		ug/m3	1	10/3/2004
1,1-Dichloroethene	ND	0.60		ug/m3	1	10/3/2004
1,2,4-Trichlorobenzene	ND	1.1		ug/m3	1	10/3/2004
1,2-Dichlorobenzene	ND	0.92		ug/m3	1	10/3/2004
1,2-Dichloroethane	ND	0.62		ug/m3	1	10/3/2004
Benzene	1.3	0.49		ug/m3	1	10/3/2004
Bromomethane	ND	0.59		ug/m3	1	10/3/2004
Chloroethane	ND	0.40		ug/m3	1	10/3/2004
Chloroform	ND	0.74		ug/m3	1	10/3/2004
cis-1,2-Dichloroethene	ND	0.60		ug/m3	1	10/3/2004
Ethylbenzene	2.6	0.66		ug/m3	1	10/3/2004
Freon 11	1.7	0.86		ug/m3	1	10/3/2004
m-Xylene	6.8	0.66		ug/m3	1	10/3/2004
Methyl tert-butyl ether	ND	0.55		ug/m3	1	10/3/2004
Methylene chloride	ND	0.53		ug/m3	1	10/3/2004
p-Xylene	3.0	0.66		ug/m3	1	10/3/2004
Tetrachloroethylene	ND	1.0		ug/m3	1	10/3/2004
Toluene	7.7	5.7		ug/m3	10	10/3/2004
Trichloroethene	ND	0.82		ug/m3	1	10/3/2004
Vinyl chloride	ND	0.39		ug/m3	1	10/3/2004

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit

CLIENT: Kloeber Engineers
Lab Order: C0410001
Project: 189
Lab ID: C0410001-004A

Client Sample ID: 189-A2
Tag Number: 101, 119
Collection Date: 9/28/2004
Matrix: AIR

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
AIR TOXIC TO15_1UG/M3		TO-15		Analyst: RJP		
1,1,1-Trichloroethane	ND	0.83		ug/m3	1	10/3/2004
1,1,2,2-Tetrachloroethane	ND	1.0		ug/m3	1	10/3/2004
1,1-Dichloroethane	ND	0.62		ug/m3	1	10/3/2004
1,1-Dichloroethene	ND	0.60		ug/m3	1	10/3/2004
1,2,4-Trichlorobenzene	ND	1.1		ug/m3	1	10/3/2004
1,2-Dichlorobenzene	ND	0.92		ug/m3	1	10/3/2004
1,2-Dichloroethane	ND	0.62		ug/m3	1	10/3/2004
Benzene	0.81	0.49		ug/m3	1	10/3/2004
Bromomethane	ND	0.59		ug/m3	1	10/3/2004
Chloroethane	ND	0.40		ug/m3	1	10/3/2004
Chloroform	ND	0.74		ug/m3	1	10/3/2004
cis-1,2-Dichloroethene	ND	0.60		ug/m3	1	10/3/2004
Ethylbenzene	ND	0.66		ug/m3	1	10/3/2004
Freon 11	1.7	0.86		ug/m3	1	10/3/2004
m-Xylene	1.4	0.66		ug/m3	1	10/3/2004
Methyl tert-butyl ether	ND	0.55		ug/m3	1	10/3/2004
Methylene chloride	ND	0.53		ug/m3	1	10/3/2004
p-Xylene	ND	0.66		ug/m3	1	10/3/2004
Tetrachloroethylene	ND	1.0		ug/m3	1	10/3/2004
Toluene	4.7	0.57		ug/m3	1	10/3/2004
Trichloroethene	ND	0.82		ug/m3	1	10/3/2004
Vinyl chloride	ND	0.39		ug/m3	1	10/3/2004

Qualifiers: * Value exceeds Maximum Contaminant Level
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 ND Not Detected at the Reporting Limit

CEN TEK LABORATORIES, LLC

143 Midler Park Drive * Syracuse, New York 13206
Phone (315) 431-9730 * Fax (315) 431-9731

Chain of Custody

NELAC No. 11830

Company Name: <u>KLOEBER ENGINEERS</u>		Site Name: <u>CMS</u>	
Client Contact: <u>KEN KLOEBER</u>		Phone #: <u>716-864-0012</u>	Project #: <u>189</u>
Send Report To:		Send Invoice To:	
Name: <u>KEN KLOEBER</u>			
Company: <u>KLOEBER ENGINEERS</u>	<u>FAX TO SAME</u>		
Address: <u>PO Box 140</u>			
<u>Boston NY 14025</u>			
Phone: <u>716-864-0012</u>			
Fax: <u>775-860-3804</u>			
e-mail: <u>KLOEBERENG@AOL.COM</u>			

Payment Choice:

Purchase order #	Credit Card (type)
Authorization:	Card #
	Date exp:

Turnaround Time Requested:

Same Day:	Next Day (24hr)	Normal (5 business days)	Other (specify)
Reporting units: Please circle choice/s			
ppbV	<u>ug/m3</u>	mg/m3	

Sample Identification	Date Sampled	Canister Number	Regulator Number	Analysis Requested	Comments
189-S1	9/28	104	56		1209
189-S2 * will send as composite w/ 189-S1.	9/28	105	56		1225 } SCAB
189-A1	9/28	93	120		1210 } indoor
189-A2	9/28	101	119		1212 } outdoor
PLEASE EMAIL RESULTS TO KLOEBERENG@AOL.COM					

Sampled By: <u>KEN KLOEBER</u>		Name of Courier	
Company: <u>KWILL</u>			
Relinquished by: (sign) <u>[Signature]</u>	Date: <u>9/28/04</u>	Time: <u>1515</u>	Received by: (sign) <u>[Signature]</u>
Relinquished by: (sign) <u>[Signature]</u>	Date: <u>9/28/04</u>	Time: <u>1730</u>	Received by: (sign) <u>[Signature]</u>
Relinquished by: (sign) <u>[Signature]</u>	Date: <u>10/1/04</u>	Time: <u>12:20pm</u>	Received for lab by: (sign) <u>[Signature]</u>