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July 30, 2007

Division of Environmental Remediation
Remedial Bureau E, 12th Floor
New York State Department of
Environmental Conservation
625 Broadway
Albany, New York 12233-7017

Attention: Mr. Benjamin Rung, Project Manager

Subject: **Vapor Intrusion Evaluation Letter Report**
Becker Electronics Manufacturing Site - Site No. 4-20-007
MACTEC Engineering and Consulting, P.C. Project No. 3612072072

Dear Mr. Rung,

MACTEC Engineering and Consulting, P.C., (MACTEC), under contract to the New York State Department of Environmental Conservation (NYSDEC) is pleased to present this Vapor Intrusion Evaluation (VIE) letter report for the Immediate Investigation Work Assignment (IIWA) #D004434-02 for soil vapor, groundwater and indoor air sampling at the Becker Electronics Manufacturing Site # 4-20-007 (Site), dated January 5, 2007. Discussed in this letter report are field activities and analytical results for the Site. Field activities were conducted as outlined in the Field Investigation Work Plan during an initial sampling event in February, 2007 (MACTEC, 2005). After a review of the preliminary data, the NYSDEC directed MACTEC to conduct sub-slab and indoor air sampling. This additional field event was completed in April, 2007.

Introduction

The Site is located on approximately 8 acres along the south side of Route 145 in East Durham, Greene County, New York (Figures 1 and 2). Since 1980, solvent contamination has been detected in groundwater surrounding the Site. In 1982, Becker Electronics closed the facility and filed for bankruptcy. The NYSDEC completed a Remedial Investigation/Feasibility Study (RI/FS) for this Site in 1996 and a Record of Decision was subsequently signed. As part of a Remedial Action plan, impacted off-site private drinking water wells were fitted with carbon filtration systems. The final remedy for the Site was completed in 1999. Remedial activities included debris pile capping, building demolition, soil removal, and groundwater pumping with on-site treatment. The groundwater treatment system is currently operating.

This letter report provides a brief summary of the activities completed and the sampling and analysis findings for the VIE conducted by MACTEC. Enclosed are figures that show the sampling points and area of study and tables presenting the final analytical results. Also attached are soil vapor implant diagrams, field data records, indoor air questionnaire and inventory records, photographs, weather data and Data Usability Summary Reports (DUSR).

Field Activities

Based on previous investigations and current conditions, the NYSDEC directed MACTEC to conduct soil vapor and groundwater sampling at eight locations on or down gradient of the Site. At each location soil vapor was attempted to be sampled from within the vadose zone. MACTEC also attempted to collect groundwater samples from each boring location. Due to the dense soil formation, the actual number of samples per location and sample collection depths varied. Sampling was conducted during the week of February 5, 2007.

After a review of the data, the NYSDEC directed MACTEC to conduct sub-slab and indoor air sampling at six properties along Route 145. This sampling was completed during the week of April 2, 2007.

Soil Vapor Sampling (February, 2007)

Temporary soil vapor points were installed at five locations to evaluate the potential vapor migration contaminants from the vadose zone (SV-1, SV-3, SV-5, SV-6, and SV-8 on Figure 1). Previous soil remediation and groundwater treatment actions have focused on impacts near PW-1. Groundwater flows northeasterly and discharges into a stream located approximately 350 feet northeast of Route 145. The temporary soil vapor implant logs are provided as Attachment A. Soil vapor probe construction and sampling procedures were in accordance with the NYSDOH guidance (NYSDOH, 2006).

At each location, a 2-inch diameter borehole was created using direct-push drilling methods to evacuate a soil profile with a macrocore sampler. Subsurface soil samples were collected using a 4-foot long 2-inch diameter core sampler with an acrylic liner of discrete subsurface soil samples. Soil samples were collected continuously from the ground surface to refusal. Photoionization detector (PID) headspace readings were used to screen soil samples for the presence of volatile organic compounds (VOCs) as each soil sample was removed from the sample collection tube. Upon removal of the soil, the hole remained open allowing for the installation of the soil vapor implant.

After review of the subsurface conditions, MACTEC installed a temporary Geoprobe soil vapor implant at each location. Glass beads were used to create a sampling zone around the screen. The implants included a 6-inch length, double woven stainless steel wire screen which threaded into a disposable stainless steel point. Approximately 250 milliliters (ml) of glass beads were placed in the hole and brought to a depth approximately one foot above the implant screen. Hydrated powdered bentonite was placed above the glass beads. Any remaining void space was filled with sand to within six inches of the ground surface. The remaining open space was sealed with bentonite. Polyethylene tubing was extended from the implant to the ground surface to permit sampling.

Soil vapor points were sampled approximately 24 hours after installation. Before sampling, one liter of soil vapor was purged using a 580B OVM PID pump. This equates to slightly greater than

three times the volume of the annular space of the screen pack plus the volume of the sample tubing. During the soil vapor purge, the vapors were screened with a PID. In addition, helium leak tests were conducted at all locations to ensure samples are representative of sub-surface conditions and not outdoor ambient air. These tests were conducted by encapsulating the sample point with a bucket sealed to the ground surface with hydrated bentonite and filling the encapsulated area with helium. The soil vapor sample port was tested for helium breakthrough with a portable monitoring device before the collection of the soil vapor sample. If greater than 10 percent of the tracer gas was detected in the screening sample, the sample point seal was enhanced and the procedure repeated. At one location (SV-3), the surface was re-sealed prior to sampling due to sub-freezing conditions that were causing breakthrough. The soil vapor samples were collected using a six-liter SUMMA®-type canister with flow valves set to approximately 20 minutes per sample. Flow into the canisters was set to 167 ml/minute, or less than 200 ml/minute as requested by the NYSDOH. Soil vapor samples were sent to Air Toxics for analyses of VOCs by USEPA Method TO-15.

Groundwater Sampling (February, 2007)

Groundwater grab samples were collected from three of the co-located soil vapor locations (GW-5, GW-6 and GW-8), as well as one existing monitoring well from the Site property (MW-4). The objective of the groundwater sampling was to assess potential concentrations of solvent contamination in shallow groundwater at the soil gas sampling locations to aid in the evaluation of the soil gas results. Each boring was advanced into the groundwater table until refusal. The groundwater table was encountered from 14 to 15 feet below ground surface (bgs).

Groundwater grab samples were collected using direct-push drilling methods, using a ½-inch diameter stainless steel wire wound screen that was exposed to the aquifer, after being pushed to refusal. A peristaltic pump was used for the collection of discrete groundwater samples. A minimum of one tubing volume of water was purged and one set of parameters including temperature, conductivity, pH, and turbidity was collected before sampling. VOC samples were collected at a low purge rate (approximately 100 milliliters per minute) to minimize potential volatilization. Groundwater sampling field data records are included as Attachment B. After

sampling, each open borehole back filled with the native soil and sealed at the ground surface using hydrated bentonite.

Groundwater samples were delivered to Katahdin Analytical Services for analyses for TCL VOCs using USEPA 8260 methods as described in the NYSDEC ASP of June 2000. Off-site laboratory analysis included Category B deliverables.

Sub-Slab and Indoor Air Sampling (April, 2007)

After a preliminary review of the data, the NYSDEC directed MACTEC to conduct sub-slab and indoor air sampling along Route 145 to investigate the potential for vapor migration of contaminants from the groundwater into occupied indoor spaces. Six properties were sampled during this investigation; four sub-slab (SS-001, SS-002, SS-009, SS-011), four basement air (BA-002, BA-008, BA-009, BA-010), two first floor air (FA-002 and FA-009) and three ambient air samples (AA-002, AA-009 and AA-010) were collected from the six properties. The sampling task was conducted, from April 2, 2007 through April 4, 2007. At each structure sampled, MACTEC completed an indoor air survey, and obtained sub-slab soil vapor and indoor air samples, as agreed upon with the homeowner and as deemed appropriate by the NYSDEC and the New York State Department of Health (NYSDOH). For the purposes of this report, structures have been identified herein as V-1, V-2 and V-8 through V-11.

Indoor Air Survey. Indoor air surveys and product inventories were conducted at each business or residence sampled using the modified NYSDOH "Indoor Air Quality Questionnaire and Building Inventory" (inventory form) form. A parts per billion (ppb) MiniRae PID was used to scan inventoried items that may have been off-gassing VOCs. VOCs that were listed on the household container and were also included on the air sample analytical target compound list were noted on the inventory form, along with any PID readings. Completed inventory forms are included as Attachment C.

Sub-Slab Soil Vapor and Indoor Air Sampling. The sub-slab soil vapor samples were collected using the following procedure. A one-inch diameter hole was drilled two inches into the building's

concrete floor using an electric hammer drill. The hole was continued with a 3/8-inch drill bit, through the building slab to a depth of approximately three-inches below the slab. Drill cuttings and dust from the area were removed. A ¼-inch piece of Teflon tubing was inserted through a one-inch diameter rubber stopper, and placed into the hole, so that the bottom of the tubing was below the slab floor and the stopper rested inside the one-inch hole, forming a seal. The stopper was then covered flush to the slab surface with bees wax to provide an impenetrable seal for the migration of indoor air into the sub-slab. One 60 cubic centimeter (cc) volume of air was purged from the tubing with a polyethylene syringe. The syringe was capped and the air released outside the building as to not interfere with the indoor air sample collection. A 6-liter SUMMA®-type canister with a 24-hour flow valve was then connected to the tubing with Swagelok® fittings.

Indoor air samples were collected in 6-liter SUMMA®-type canisters from the basement level, in the vicinity of the sub-slab vapor sample collection points. Samples were collected from approximately three to five feet above the floor level and set up with 24-hour flow valves.

If the basement was not finished as a living space, then a second indoor air sample was collected from the first floor level (i.e. one sample was collected from the first floor of occupied living space in the home, when applicable). The second sample was also collected from approximately three to five feet above the floor level, and set up with 24-hour flow valves.

Ambient air samples were collected in 6-liter SUMMA®-type canisters from the vicinity of the homes being sampled for indoor air and sub-slab vapor VOC contamination. Samples were collected from approximately three to five feet above ground surface. Ambient air samples were set up with 24-hour flow valves.

Once the sub-slab vapor sample canisters, indoor air sample canisters, and exterior ambient air canister had been set up with 24-hr flow valves for an individual location, the valves from all containers were opened. The time of sample collection and canister vacuum (in inches Hg) were recorded in the field log book. Representative photos are included as Attachment D. Weather data from the area, as provided by an internet site, is included as Attachment E.

Approximately 23 hours after sample collection, the flow valves were shut off. The time and remaining vacuum in the canister were noted in the field log book. The samples were shipped to Air Toxics laboratories for analyses of VOCs via USEPA Method TO-15. Laboratory analysis included Category B deliverables.

Upon completion of sub-slab sampling, the tubing and stopper were removed from the building floor and the holes were filled completely with a fast drying hydraulic concrete (i.e. Quickcrete).

Results

Upon receipt of the analytical laboratory data, a Data Usability Summary Report (DUSR) was completed. Based on chemist review, MACTEC determined that the laboratory data met the project specific criteria for data quality and data use. The DUSR and validated Form 1's are presented as Attachment F. Summaries of detected compounds are included in Tables 1 through 3.

Soil Vapor Sample Results. Table 1 shows a summary of compounds detected in the soil vapor samples. VOCs detected in soil vapor samples include chlorinated VOCs, ketones, and aromatics. There are no standards or guidance values for exterior soil gas samples, only sub-slab soil gas samples. The only compounds for which sub-slab draft guidance numbers have been calculated are PCE, TCE, and 1,1,1-TCA. The highest concentrations of 1,1,1-TCA (160 EJ µg/m^3), PCE (54 µg/m^3) and TCE (1.4 µg/m^3) detected were below the guidance concentration requiring mitigation (1000 µg/m^3 for 1,1,1-TCA and PCE; 250 µg/m^3 for TCE), or even monitoring (>100 µg/m^3 and >50 µg/m^3, respectively).

Groundwater Sample Results. A summary of VOCs detected in groundwater samples collected is presented in Table 2. 1,1,1-TCA was detected in all four groundwater samples collected from the Site at concentrations ranging from 5 µg/L (GW-5) to 10 µg/L (GW-6 and MW-4). 1,1,1-TCA concentrations in groundwater exceeded the NYS Class GA groundwater standard for 1,1,1-TCA of 5 µg/L at three of the four locations (see Table 2).

1,1,1 DCA was also detected at concentrations (6 µg/L) in exceedance of standards, criteria or guidelines (SCGs) from a groundwater sample collected at GW-006.

Other VOCs detected in groundwater samples, but at concentrations below applicable SCGs, include: 1,1-dichloroethane, 1,1-dichloroethene, cis-1,2-dichloroethene, acetone, PCE and TCE.

As mentioned earlier, there is an active groundwater extraction and treatment system at the Site.

Sub-Slab Soil Vapor and Indoor Air Sample Results. A summary of VOCs detected in sub-slab soil vapor and indoor air samples collected is presented in Table 3. The only VOCs for which the NYSDOH has promulgated guidance values for soil vapor are TCE, PCE, and 1,1,1-TCA. These guidance values are only applicable when evaluating sub-slab soil vapor samples in relation to indoor air concentrations, and not exterior soil vapor samples.

The primary contaminant in area groundwater, 1,1,1-TCA, was detected during this investigation at the highest concentration (220 micrograms per meter cubed [µg/m^3]) in sub-slab sample SS-009. The highest concentration of 1,1,1-TCA detected in indoor air was collected from the same structure (Home V-9) at 3.3 µg/m^3 (BA-009 collected from the basement), compared to an average New York State background indoor air concentration range of less than <0.25 to 1.4 µg/m^3 (NYSDOH, 2005). The first floor air sample for Home V-9 also had a detection for 1,1,1-TCA of 1.1 µg/m^3.

The second highest concentration of 1,1,1-TCA (1.7 µg/m^3) in sub-slab samples was detected in sample SS-001. 1,1,1-TCA was also detected in trace concentrations from sub-slab soil vapor samples SS-002 and SS-011 (1.2 µg/m^3 and 0.64 µg/m^3, respectively).

PCE and TCE were also detected in soil vapor sample SS-009 at concentrations (PCE of 1.6 J µg/m^3 and TCE of 25 µg/m^3) which were below the guidance concentration requiring mitigation (1000 µg/m^3 and 250 µg/m^3, respectively), or even monitoring (>100 µg/m^3 and >50 µg/m^3, respectively). Very low levels of TCE were also detected at SS-011 (0.18 µg/m^3).

Conclusions

In summary, all concentrations detected are below concentrations that require monitoring or mitigation, with the exception of the sub-slab and indoor air samples collected at Home V-9. This is based on comparison to the Soil Vapor/Indoor Air Matrices in the Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York (NYSDOH, 2006). Results for those VOCs for which NYSDOH has promulgated guidance (1,1,1-TCA, PCE, and TCE) and actions recommended based on the analytical results are shown in Table 4. Based on conversations with NYSDOH, MACTEC has provided the addresses of the structures that were sampled under separate cover to NYSDEC.

If you have any questions or concerns, please contact either John Peterson or Eric Sandin at 207-775-5401.

Sincerely,

MACTEC Engineering and Consulting, P.C.

John W. Peterson
Project Manager

Eric C. Sandin
Site Manager

Enclosures:
Soil Vapor Implant Diagrams
Groundwater Grab Sample FDRs
Indoor Air Quality Questionnaire Building Inventory Forms
Site Photographs
Site Weather
Data Usability Summary Report and Laboratory Data

REFERENCES

ABB Environmental Services, 1995. *Quality Assurance Program Plan*. Prepared for the New York State Department of Environmental Conservation, Albany, New York. June 1995.

MACTEC Engineering and Consulting, Inc. P.C., 2005. *Program Health and Safety Plan.* Prepared for New York State Department of Environmental Conservation, Albany, New York. 2005.

New York State Department of Health (NYSDOH), 2005. "*Guidance for Evaluating Soil Vapor Intrusion in the State of New York"*, Final, October 2006

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Legend

- Soil Vapor Sample
- Groundwater Grab Sample
- Existing Well
- Property Lines (Approximate)
- (from Greene County)

N

0 40 80 Feet

Greene County digital orthoimagery (2004) obtained from New York State GIS Clearinghouse at: http://www.nysgis.state.ny.us

Prepared/Date: BRP 05/31/07
Checked/Date: BAS 05/31/07

NYSDEC
Becker Electronics Mfg.
Durham, New York

MACTEC

February 2007 - Soil Vapor and Groundwater Grab Sample Locations
Project 3612-07-2072 Figure 1

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Legend

Property Lines (Approximate)
(from Greene County)

N

0 100 200 Feet

Greene County digital orthoimagery (2004) obtained from New York State GIS Clearinghouse at: http://www.nysgis.state.ny.us

Prepared/Date: BRP 05/31/07
Checked/Date: BAS 05/31/07

NYSDEC
Becker Electronics Mfg.
Durham, New York

MACTEC

April 2007 - Vapor Intrusion
Area of Study
Project 3612-07-2072 Figure 2

Table 1: Soil Vapor VOC Results

Location	GV-001		GV-003		GV-005		GV-006		GV-008	
Sample Date	2/7/2007		2/7/2007		2/7/2007		2/7/2007		2/7/2007	
Sample ID	BEGV00110		BEGV00305		BEGV00509		BEGV00605		BEGV00807	
Qc Code	FS		FS		FS		FS		FS	
Parameter	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**
1,1,1-Trichloroethane	**120**		0.36	UJ	**16**	**J**	**3.5**		**160**	**EJ**
1,1-Dichloroethane	**0.94**		0.54	UJ	**3.2**	**J**	0.55	U	**14**	
1,1-Dichloroethene	**3.8**		0.53	UJ	**1.1**	**J**	0.54	U	**11**	
2-Butanone	**20**	**J**	**9.8**	**J**	**6.2**	**J**	**5.6**		**5.4**	
4-Methyl-2-pentanone	**3.8**		0.55	UJ	0.55	UJ	0.56	U	0.59	U
Benzene	**17**		**10**	**J**	**2.2**	**J**	**17**		**5.5**	
Butadiene, 1,3-	**2.7**		0.3	UJ	**0.88**	**J**	**2.7**		0.32	U
Chloroform	**1.5**		**0.65**	**J**	**0.83**	**J**	0.66	U	**1.2**	
Cis-1,2-Dichloroethene	0.59	U	0.53	UJ	**0.62**	**J**	0.54	U	0.57	U
Cyclohexane	**2.5**		**0.6**	**J**	0.46	UJ	**1.6**		**2.3**	
Ethyl benzene	**4.8**		0.58	UJ	0.58	UJ	**1**		0.62	U
Heptane	**2.6**		**0.94**	**J**	**1.4**	**J**	**3.3**		**1.3**	
Hexane	**4.5**		**2.3**	**J**	**3.7**	**J**	**6**		**1.8**	
Methyl Tertbutyl Ether	**4**	**J**	**3.2**	**J**	0.48	UJ	**0.79**	**J**	**1.4**	**J**
o-Xylene	**2.8**		0.58	UJ	0.58	UJ	**0.73**		0.62	U
Tetrachloroethene	**54**		**1.8**	**J**	**2.5**	**J**	**12**		**5.6**	
Toluene	**96**		**7**	**J**	**5.1**	**J**	**33**		**19**	
Trichloroethene	**0.76**		**0.19**	**J**	**0.99**	**J**	**0.17**		**1.4**	
Xylene, m/p	**11**		**0.69**	**J**	**1.4**	**J**	**2.5**		**1.3**	

Notes:
Only Detected Compounds shown. Samples analyzed for VOCs by USEPA Method TO-15.
Results in microgram per cubic meter ($\mu g/m^3$)
QC Code:
FS = Field Sample
Qualifiers:
U = Not detected at a concentration greater than the reporting limit
J = Estimated value
E = Result exceeded the calibration curve of the instrument

Table 2: Groundwater VOC Results

	Location	MW-004		GW-005		GW-006		GW-008		GW-008	
	Sample Date	2/6/2007		2/6/2007		2/6/2007		2/5/2007		2/5/2007	
	Sample ID	BEMW004		BEGW005		BEGW006		BEGW008		BEGW008DUP	
	Sample Depth (ft bgs)	27.0 - 28.0**		8.0 - 12.0		10.0 - 14.0		8.0 - 12.0		8.0 - 12.0	
	Qc Code	FS		FS		FS		FS		FD	
Parameter	Criteria	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
1,1,1-Trichloroethane	5*	**10**		**5**		**10**		**7**		**7**	
1,1-Dichloroethane	5*	**2**		**5**		**6**		**4**		**4**	
1,1-Dichloroethene	5*	**2**		**1**	**J**	1	U	1	U	**0.7**	**J**
1,2-Dichloroethene (total)	NA	**0.8**	**J**	**3**		2	U	2	U	2	U
Acetone	50	**8**		5	U	**10**		5	U	**9**	
Cis-1,2-Dichloroethene	5*	**0.8**	**J**	**3**		1	U	1	U	1	U
Tetrachloroethene	5*	1	U	**0.7**	**J**	1	U	1	U	1	U
Trichloroethene	5*	**2**		**4**		1	U	**0.9**	**J**	**0.8**	**J**

Notes:
Only Detected Compounds shown. Samples analyzed for VOCs by USEPA Method SW846 8260B.
Results in microgram per liter (µg/L)
ft bgs = feet below ground surface
QC Code:
FS = Field Sample
FD = Field Duplicate
Qualifiers:
U = Not detected at a concentration greater than the reporting limit
J = Estimated value
Criteria = Values from Technical and Operational Guidance Series (TOGS) 1.1.1,
Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations (NYSDEC, 1998).
*Criteria listed are New York State Groundwater Standards.
Highlighted results exceed associated criteria
** Well specifics not known. Water level at 15 ft; sample collected within casing from 27 ft bgs.

Table 3: Indoor Air VOC Results

Location	SS-001		AA-002		SS-002		BA-002		BA-002		FA-002	
Sample Date	4/3/2007		4/2/2007		4/2/2007		4/2/2007		4/2/2007		4/2/2007	
Sample ID	420007SS001		420007AA002		420007SS002		420007BA002		420007BA002-DUP		420007FA002	
Task Name	Task 2		Task 2		Task 2		Task 2		Task 2		Task 2	
Qc Code	FS		FS		FS		FS		FD		FS	
Parameter	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**
1,1,1-Trichloroethane	**1.7**		**0.6**		**1.2**		0.41	U	0.47	U	0.41	U
1,1-Dichloroethane	0.55	U	0.58	U	0.79	U	0.62	U	0.69	U	0.62	U
1,1-Dichloroethene	0.54	U	0.57	U	0.78	U	0.6	U	0.68	U	0.6	U
1,2,4-Trimethylbenzene	0.67	U	**0.82**		0.96	U	**1.7**		**1.4**		**0.84**	
2-Butanone	0.4	U	**5.5**		**23**		**2.4**	**J**	**1.4**	**J**	**0.94**	
4-Ethyltoluene	0.67	U	0.71	U	0.96	U	**1.6**		**1.6**		**0.99**	
Benzene	**0.67**		**1.2**		**2.9**		**2**		**1.8**		**1.9**	
Chloroform	**4.8**		0.7	U	**39**		0.74	U	0.83	U	**3.2**	
Chloromethane	0.28	U	**0.76**		0.4	U	**0.73**		**0.61**		**0.92**	
Cyclohexane	0.47	U	**1.3**		0.67	U	0.52	U	0.59	U	0.52	U
Ethyl benzene	0.59	U	**0.72**		0.85	U	**1.8**		**1.5**		**0.84**	
Heptane	0.56	U	**0.59**		**0.88**		**0.96**		**0.73**		**0.69**	
Hexane	0.48	U	**0.65**		0.69	U	**1.2**		**0.91**		**0.78**	
o-Xylene	0.59	U	0.62	U	0.85	U	**1.7**		**1.6**		**0.91**	
Tetrachloroethene	0.46	U	**1.2**		0.66	U	0.52	U	0.58	U	0.52	U
Toluene	**1.6**		**6.1**		**2.4**		**12**		**10**		**7.2**	
Trichloroethene	0.15	U	0.15	U	0.21	U	0.16	U	0.18	U	0.16	U
Xylene, m/p	**0.88**		**1.6**		**0.99**		**5.6**		**4.8**		**2.8**	

Notes:
Only Detected Compounds shown.
Samples analyzed for VOCs by USEPA Method TO-15.
Results in microgram per cubic meter ($\mu g/m^3$)
QC Code:
FS = Field Sample
FD = Field Duplicate
Qualifiers:
U = Not detected at a concentration greater than the RL
J = Estimated value

Table 3: Indoor Air VOC Results

Location	FA-002		BA-008		AA-009		SS-009		BA-009		FA-009	
Sample Date	4/2/2007		4/3/2007		4/3/2007		4/3/2007		4/3/2007		4/3/2007	
Sample ID	420007FA002-DUP		420007BA008		420007AA009		420007SS009		420007BA009		420007FA009	
Task Name	Task 2		Task 2		Task 2		Task 2		Task 2		Task 2	
Qc Code	FD		FS		FS		FS		FS		FS	
Parameter	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**
1,1,1-Trichloroethane	0.42	U	0.46	U	0.44	U	**220**		**3.3**		**1.1**	
1,1-Dichloroethane	0.63	U	0.68	U	0.65	U	**31**		0.64	U	0.81	U
1,1-Dichloroethene	0.61	U	0.67	U	0.64	U	**4.3**		0.63	U	0.8	U
1,2,4-Trimethylbenzene	**1**		0.82	U	0.79	U	0.81	U	0.78	U	0.99	U
2-Butanone	**1.3**		0.5	U	**8.4**		**1.7**		**0.72**		**2.2**	
4-Ethyltoluene	**1**		0.82	U	0.79	U	0.81	U	0.78	U	0.99	U
Benzene	**2**		0.54	U	0.51	U	**1.4**		**0.7**		**1.2**	
Chloroform	**2.6**		0.82	U	0.79	U	**5.6**		0.77	U	0.98	U
Chloromethane	**0.85**		**0.85**		**0.96**		0.34	U	**0.63**		**1.2**	
Cyclohexane	0.53	U	0.58	U	0.55	U	0.56	U	0.54	U	0.69	U
Ethyl benzene	**0.96**		0.73	U	0.7	U	0.71	U	0.69	U	0.87	U
Heptane	**0.79**		0.69	U	0.66	U	**0.83**		0.65	U	0.82	U
Hexane	**0.96**		0.59	U	0.57	U	**0.71**		0.56	U	0.71	U
o-Xylene	**0.9**		0.73	U	0.7	U	0.71	U	0.69	U	0.87	U
Tetrachloroethene	0.52	U	0.57	U	0.55	U	**1.6**		0.54	U	0.68	U
Toluene	**7.6**		0.63	U	**1.1**		**3.6**		**1.7**		**5.4**	
Trichloroethene	0.17	U	0.18	U	0.17	U	**25**		**0.27**		0.22	U
Xylene, m/p	**2.9**		0.73	U	0.7	U	**1.4**		**0.75**		**0.84**	**J**

Notes:
Only Detected Compounds shown.
Samples analyzed for VOCs by USEPA Method TO-15.
Results in microgram per cubic meter ($\mu g/m^3$)
QC Code:
FS = Field Sample
FD = Field Duplicate
Qualifiers:
U = Not detected at a concentration greater than the RL
J = Estimated value

Table 3: Indoor Air VOC Results

Location	AA-010		BA-010		SS-011	
Sample Date	4/3/2007		4/3/2007		4/2/2007	
Sample ID	420007AA010		420007BA010		420007SS011	
Task Name	Task 2		Task 2		Task 2	
Qc Code	FS		FS		FS	
Parameter	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**
1,1,1-Trichloroethane	0.39	U	0.39	U	**0.64**	
1,1-Dichloroethane	0.58	U	0.58	U	0.62	U
1,1-Dichloroethene	0.57	U	0.57	U	0.6	U
1,2,4-Trimethylbenzene	0.71	U	0.71	U	0.75	U
2-Butanone	**12**		**1.3**		**35**	
4-Ethyltoluene	0.71	U	0.71	U	0.75	U
Benzene	**0.75**		**0.8**		**41**	
Chloroform	0.7	U	0.7	U	0.74	U
Chloromethane	**1.6**		**1**		**0.62**	
Cyclohexane	0.5	U	0.5	U	**37**	
Ethyl benzene	0.62	U	0.62	U	**1.3**	
Heptane	0.59	U	0.59	U	**58**	
Hexane	0.51	U	0.51	U	**120**	
o-Xylene	0.62	U	0.62	U	0.66	U
Tetrachloroethene	0.49	U	0.49	U	0.52	U
Toluene	**1.6**		**2**		**19**	
Trichloroethene	**0.86**		0.15	U	**0.18**	
Xylene, m/p	**0.77**		0.62	U	**1.3**	

Notes:
Only Detected Compounds shown.
Samples analyzed for VOCs by USEPA Method TO-15.
Results in microgram per cubic meter ($\mu g/m^3$)
QC Code:
FS = Field Sample
FD = Field Duplicate
Qualifiers:
U = Not detected at a concentration greater than the RL
J = Estimated value

Table 4 - Detected VOCs in Sub-Slab Soil Vapor

Location ID	Sample Type	1,1,1-TCA	PCE	TCE	NYSDOH Guidance
V-1	SS	1.7	0.46 U	0.15 U	NFA
V-2	AA	0.6	1.2	0.15 U	N/A
	SS	1.2	0.66 U	0.21U	NFA
	BA	0.41 U	0.52 U	0.16 U	NFA
	FA	0.41 U	0.52 U	0.16 U	NFA
V-8	BA	0.46 U	0.57 U	0.18 U	NFA
V-9	AA	0.44 U	0.55 U	0.17 U	N/A
	SS	**220**	1.6	25	Monitor/Mitigate
	BA	**3.3**	0.54 U	0.27	Monitor/Mitigate
	FA	**1.1**	0.68 U	0.22 U	Monitor/Mitigate
V-10	AA	0.39 U	0.49 U	0.86	NFA
	BA	0.39 U	0.49 U	0.15 U	NFA
V-11	SS	0.64	0.52 U	0.18	NFA

Notes:

Results in microgram per cubic meter (µg/m^3)
Samples analyzed for VOCs by USEPA Method TO-15.

1,1,1-TCA - 1,1,1-Trichloroethane
PCE - Tetrachloroethene
TCE - Trichloroethene
NFA - No Further Action
Sample Type = Sample location name (First two Digits)
- AA = Ambient Air
- SV = Soil Vapor
- BA = Basement Air
- FA = First Floor Air

Only VOCs for which the NYSDOH has promulgated guidance values for soil vapor are shown.
Results in **BOLD** exceed the sub-slab guidance criteria for remediation (250 µg/m3 for trichloroethene and 1000 µg/m3 for tetrachloroethene and 1,1,1-tetrachloroethane) or the guidance

ATTACHMENT A:

SOIL VAPOR IMPLANT DIAGRAMS

Soil Vapor Implant Completion Log

Boring ID: SV-1

Project No.: 3612072072-02	**Project:** BECKER ELECTRONICS		**Checked By:** ECS		
Client Name: NYSDEC	**Logged By:** BAS	**Protection Level:** D		**Ground Elevation:**	
Drilling Contractor: AQUIFER DRILLING AND TESTING - ADT	**Drilling Method:** DIRECT PUSH			**Driller's Name:** MARTY BACHNOR	
Installation Date/Time: FEB 2, 2007 @ 10:30	**Sample Date/Time:** 2/07/07 @ 1219	**Start Time:** 12:19	**End Time:** 13:05	**Rig Type:** TRUCK MOUNT 5400	
He Breakthrough %: none		**Initial He %** 100	**Final He %:** 96	**Auger Size:** 2 1/4"	

Depth (feet)	Recovery	Blow Counts	PID	Graphic Log	Soil Vapor Diagram	Vapor Point Construction Notes
0						
1			<1			0N Industrial Sand Pack; 0 - 7.0 bgs
2						
3			<1			
	3.6 / 4					3/8" OD LDPE Tubing
4						
			<1			Bentonite Seal; 7.0 to 9.0 ft bgd
5						
6	3.4 / 4					
			<1			
7						Glass Beads; 9.0 to 10.0
8						Stainless Steel Screen; 9.4 to 9.9
			<1			
9						
	1.2/2					Threaded SS Point; 9.9 to 10 10.0
10						

Overburden Drilling Notes:

Located between Supersonic Speedway Building and Route 145

0 - 0.5 Top soil with grass roots
0.5 - 0.8 Crushed gravel
0.8 - 1.1 Cobbles - reddish sandstone fill?
1.1 - 2.5 Brown silty sand, well graded, some fine gravel, dry v dense, SW
2.5 - 4.0 Brown sand, med to coarse, well graded, damp SW
4.0 - 8.0 Brown silty sandy gravel, damp, coarse sand GW
PID <1.0 (background)
8.0 - 10.0 Gravel, rock fragments, bedrock refusal at 10 feet

Soil vapor sample collected:
BEGV00110 2/7/2007 at 1230 hours

No groundwater grab sample collected (refusal before water table)

BOB: 10.0 bgs

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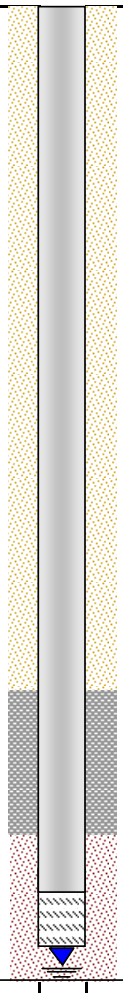
Soil Vapor Implant Completion Log

Boring ID: SV-2

Project No.: 3612072072-02	**Project:** BECKER ELECTRONICS		**Checked By:** ECS		
Client Name: NYSDEC	**Logged By:** BAS	**Protection Level:** D		**Ground Elevation:**	
Drilling Contractor: AQUIFER DRILLING AND TESTING - ADT	**Drilling Method:** DIRECT PUSH			**Driller's Name:** MARTY BACHNOR	
Installation Date/Time: FEB 2, 2007 @ 1100	**Sample Date/Time:** None	**Start Time:** NA	**End Time:** NA	**Rig Type:** TRUCK MOUNT 5400	
He Breakthrough %: not applicable		**Initial He %** NA	**Final He** NA	**Auger Size:** 2 1/4"	

Depth (feet)	Recovery	Blow Counts	PID	Graphic Log	Soil Vapor Diagram	Vapor Point Construction Notes	**Overburden Drilling Notes:**
0							
1							**No Soil Vapor Sample Point Installed at this Location** Attempted three separate borings near southeast corner of Darby's Irish Pub. Encountered refusal at 2.1 feet below grade. Gravel, cobbles, and weathered rock. Building appears to be founded on bedrock.
2							
3							
4							No Samples collected.
5							



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Soil Vapor Implant Completion Log

Boring ID: SV-3

Project No.: 3612072072-02	**Project:** BECKER ELECTRONICS		**Checked By:** ECS		
Client Name: NYSDEC	**Logged By:** BAS	**Protection Level:** D		**Ground Elevation:**	
Drilling Contractor: AQUIFER DRILLING AND TESTING - ADT	**Drilling Method:** DIRECT PUSH			**Driller's Name:** MARTY BACHNOR	
Installation Date/Time: FEB 2, 2007 @ 10:30	**Sample Date/Time:** FEB 7, 2007 @ 15:50	**Start Time:** 15:35	**End Time:** 16:20	**Rig Type:** TRUCK MOUNT 5400	
He Breakthrough %: 83%, 50.7% then 10.9%		**Initial He %:**	**Final He %:**	**Auger Size:** 2 1/4"	

Depth (feet)	Recovery	Blow Counts		Graphic Log	Soil Vapor Diagram	Vapor Point Construction Notes
0						
1						0N Industrial Sand Pack; 0 - 2.0
2	2.2/4.0					3/8" OD LDPE Tubing
3						Bentonite Seal; 2.0 to 4.1
4						Glass Beads; 5.2 to 4.1
5						Stainless Steel Screen; 4.6 to 5.1
						Threaded SS Point; 5.1 to 5.2

Overburden Drilling Notes:

0 - 0.5: Top soil with roots

0.5 - 5.2: Brown to stratified well drained silty clay with fine gravel, dry to damp, very dense, fryable,

Made 4 attempts top penetrate to water table. Encountered refusal with geoprbe at depths between 1.2 and 5.3 feet below grade.

Temporary soil vapor point installed at deepest locations.

No groundwater grab sample could be collected.

Sample Collected:

BEGV00305 2/7/2007 at 1550 hours

BOB: 5.2' bgs

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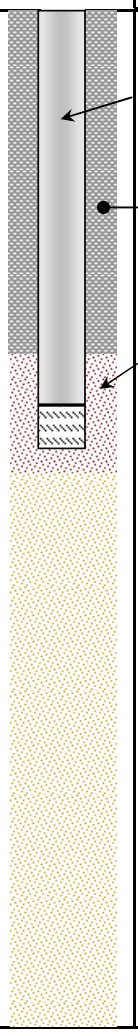
Soil Vapor Implant Completion Log

Boring ID: SV-4

Project No.: 3612072072-02	**Project:** BECKER ELECTRONICS		**Checked By:** ECS		
Client Name: NYSDEC	**Logged By:** BAS	**Protection Level:** D		**Ground Elevation:**	
Drilling Contractor: AQUIFER DRILLING AND TESTING - ADT	**Drilling Method:** DIRECT PUSH			**Driller's Name:** MARTY BACHNOR	
Installation Date/Time: FEB 2, 2007 @ 14:30	**Sample Date/Time:** none	**Start Time:** NA	**End Time:** NA	**Rig Type:** TRUCK MOUNT 5400	
He Breakthrough %: no vapor sample		**Initial He %:** NA	**Final He %:** NA	**Auger Size:** 2 1/4"	

Depth (feet)	Recovery	Blow Counts		Graphic Log	Soil Vapor Diagram	Vapor Point Construction Notes	Overburden Drilling Notes:
0							
1						3/8" OD LDPE Tubing Bentonite Seal; 0 to 3.6 ft bgs Glass Beads; 3.6 to 4.6 Stainless Steel Screen; 4 to 4.5 Threaded SS Point; 4.5 to 4.6	Located near northwestern corner of Becker facility **0 - 4.0** Brown, silty clay, little fine gravel, moist/wet, soft, ML Made three attmepts to penetrate deeper. Deepest refusal at 4.6 feet. Groundwater grab sample collected: BEGW004 2/07/2007 Set soil vapor implant as shown but soil did not yield vapor sample (due to clay content) **BOB**: 4.6 bgs
2							
3							
4							
5							
6							
7							
8							
9							
10							

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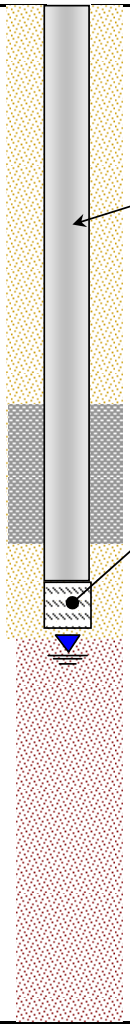
Soil Vapor Implant Completion Log

Boring ID: SV-5

Project No.: 3612072072-02	**Project:** BECKER ELECTRONICS		**Checked By:** ECS		
Client Name: NYSDEC	**Logged By:** BAS	**Protection Level:** D		**Ground Elevation:**	
Drilling Contractor: AQUIFER DRILLING AND TESTING - ADT	**Drilling Method:** DIRECT PUSH			**Driller's Name:** MARTY BACHNOR	
Installation Date/Time: FEB 6, 2007 @	**Sample Date/Time:** GV 2/7/07 1345 hrs	**Start Time:** 13:32	**End Time:** 14:24	**Rig Type:** TRUCK MOUNT 5400	
He Breakthrough %: none		**Initial He %** 100	**Final He %:** 85.1	**Auger Size:** 2 1/4"	

Depth (feet)	Recovery	Blow Counts		Graphic Log	Soil Vapor Diagram	Vapor Point Construction Notes
0						**Overburden Drilling Notes:**
1					0N Industrial Sand Pack; 0 - 6 .0 bgs	
2						
	3.4 / 4					
3					3/8" OD LDPE Tubing	
4					Bentonite Seal; 6 to 8 ft bgs	
5						
6	2.7 / 4				Glass Beads; 8.1 to 9.5 ft	
7						
8					Stainless Steel Screen; 8.9 to 9.4 ft bgs	
9						
10	3.1 / 4				Threaded SS Point; 9.5 to 9.6	
11						
12						
	1.0 / 1.0					
13						
14						
15						



Located 9 feet north of well marked OM-4 and across Route 145 from Speedway entrance driveway.

0 - 0.5 Brown sand and gravel with roots. Frozen ground
0.5 - 2.0 Lt brown to light reddish brown silty gravel GM
2.0 - 3.5 Olive brown gravelly silt, non-plastic GM
3.5 - 4.0 Lt brown sandy silt, pporly graded SM
4.0 - 5.0 Lt brown gravelly silt, moist, well graded, dense GM
5.0 - 5.5 Lt brown silty gravel with some sand, well graded GM
5.5 - 7.8 Lt brown gravelly silt, wet GM
7.8 - 8.0 Dark gray silt, peaty texture, well drained, friable OL
8.0 - 9.0 sandy silt, fine sand, stratified, poorly graded ML
9.0 - 11.5 silty sandy gravel, well graded, dense GW
11.5 - 12.7 gray sand, medium to coarse with some silt SM, wet
12.7 - 13 silty clay, stratified, wet, v stiff, OL

Groundwater grab sample collected:
BEGW005 2/6/2007 @ 0945 hrs
Soil vapor sample collected:
BEGV00509 2/7/2007 at 1345 hours

BOB: 13.0 bgs

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Soil Vapor Implant Completion Log

Boring ID: SV-6

Project No.: 3612072072-02	**Project:** BECKER ELECTRONICS		**Checked By:** ECS		
Client Name: NYSDEC	**Logged By:** BAS	**Protection Level:** D		**Ground Elevation:**	
Drilling Contractor: AQUIFER DRILLING AND TESTING - ADT	**Drilling Method:** DIRECT PUSH			**Driller's Name:** MARTY BACHNOR	
Installation Date/Time: FEB 6, 2007 @ 1217	**Sample Date/Time:** 2/7/2007 1430 hrs	**Start Time:** 14:29	**End Time:** 15:15	**Rig Type:** TRUCK MOUNT 5400	
He Breakthrough %: none		**Initial He %** 100	**Final He %:** 94	**Auger Size:** 2 1/4"	

Depth (feet)	Recovery	Blow Counts		Graphic Log	Soil Vapor Diagram	Vapor Point Construction Notes
0						
1						0N Industrial Sand Pack; 0 - 2.0 bgs
2	3.0 / 4.0					
3						3/8" OD LDPE Tubing
4						
5						Bentonite Seal; 2.0 to 4.5 ft bgs
6	3.2 / 4.0					Glass Beads; 4.5 to 5.5
7						
8						Stainless Steel Screen; 4.9 to 5.4
9						
10	4.0 / 4.0					Threaded SS Point; 5.4 to 5.5
11						
12						
13	4.0 / 3.4					
14						
15						

Overburden Drilling Notes:

Located near treatment system discharge at edge of grass to east of treatment building. Note that due to the depth to water (12.4 ft bgs), two vapor points wwere installed. Only the shallow installation is depicted on this log since the deeper point (screened from 10.5 to 11 ft bgs) did not yield a vapor sample.

0 - 0.8 Lt gray sandy fine gravel, dry
0.8 - 1.4 Lt brown silty gravel, dry, dense
1.4 - 3.2 redbrown silty fine sand, porrly graded, dry, GM
3.2 - 3.8 gravel
3.8 - 4.0 gray to orangegray clay, stratified, dry, m stiff, friable CL
4.0 - 7 Orangebrown silty sand with little fine gravel, damp GM
7.0 - 8.5 Orange brown sand, fine with silt, trace gravel SM
8.5 - 9.2 silt-sand-gravel, damp, well graded GM
9.2 - 12.4 Brown clay-silt-sand, v. dense, ML
12.4 - 13.8 silty coarse sand, poorly graded SP
13.8 - 15.4 brown clay and silty sand ML

Groundwater grab sample not colelcted (no water at refusal)

Soil vapor sample collected:
BEGV00605 2/7/07 @ 1430

BOB: 15.4 bgs

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Soil Vapor Implant Completion Log

Boring ID: SV-7

Project No.: 3612072072-02	**Project:** BECKER ELECTRONICS	**Checked By:** ECS			
Client Name: NYSDEC	**Logged By:** BAS	**Protection Level:** D	**Ground Elevation:**		
Drilling Contractor: AQUIFER DRILLING AND TESTING - ADT	**Drilling Method:** DIRECT PUSH	**Driller's Name:** MARTY BACHNOR			
Installation Date/Time: 2/6/07 1413 hrs	**Sample Date/Time:** none	**Start Time:** NA	**End Time:** NA	**Rig Type:** TRUCK MOUNT 5400	
He Breakthrough %: no test		**Initial He %** NA	**Final He %** NA	**Auger Size:** 2 1/4"	

Depth (feet)	Recovery	Blow Counts	PID	Graphic Log	Soil Vapor Diagram	Vapor Point Construction Notes
0						
1			<1			0N Industrial Sand Pack; 0 - 6.5 bgs
2	4.0 / 4.0					
3						3/8" OD LDPE Tubing
			8			
4						
5						Bentonite Seal; 6.5 to 8.5 ft bgs
6	3.7 / 4.0		13			Glass Beads; 8.5 to 9.5
7						
8						Stainless Steel Screen; 8.9 to 9.4
	4 / 2.8		25			
9			33			
			22			Threaded SS Point; 9.4 to 9.5
10			16			
			10			
11						
12						
13						
14						
15						

Overburden Drilling Notes:

At source area (removed building) and current GWTS.

0 - 02 grass and sod layer
0.7- 4.2 reddish brown fine sandy silt, damp SM FILL
4.2 - 4.6 gray to dark gray sandy gravel, chemical odor, wet GP
4.6 - 6.0 gray to olive brown fine sandy silt, stratified p graded SM
6.0 - 8.0 - brown fine sandy silt, damp, v stiff SM
8.0 - 8.5 olivebrown sandy silt
8.5 - 10.8 sandy silt, v dense, trace fine gravel, firable SM
Refusal at 10.8

No groundwater sample or soil vapor sample collected

Silt was too tight to yield water or vapor

BOB: 10.8 bgs

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Soil Vapor Implant Completion Log

Boring ID: SV-8

Project No.: 3612072072-02	**Project:** BECKER ELECTRONICS		**Checked By:** ECS		
Client Name: NYSDEC	**Logged By:** BAS	**Protection Level:** D		**Ground Elevation:**	
Drilling Contractor: AQUIFER DRILLING AND TESTING - ADT	**Drilling Method:** DIRECT PUSH			**Driller's Name:** MARTY BACHNOR	
Installation Date/Time: FEB 5, 2007 @ 14:25	**Sample Date/Time:** 2/7/2007 1315	**Start Time:** 13:11	**End Time:** 13:57	**Rig Type:** TRUCK MOUNT 5400	
He Breakthrough %: none		**Initial He %** 100	**Final He %:** 0.00	**Auger Size:** 2 1/4"	

Depth (feet)	Recovery	Blow Counts		Graphic Log	Soil Vapor Diagram	Vapor Point Construction Notes
0						
1						0N Industrial Sand Pack; 0 - 4.0 bgs
2	3.5 / 4					
3						3/8" OD LDPE Tubing
4						
5						Bentonite Seal; 4.0 to 6.0 ft bgs
6	3.1 / 4					Glass Beads; 6.0 to 7.1
7						
8						Stainless Steel Screen; 6.5 to 7.0
9	3.0 / 4					Threaded SS Point; 7 to 7.1
10						
11						
12	0.7 / 0.7					

Overburden Drilling Notes:

Located edge of gravel driveway at 2146 Main St (Route 145)

0 - 0.2 Top soil with grass roots
0.2 - 1.0 Light gray sand and gravel
1.0 - 3.1 olive brown to pink silty sand and fine gravel, well graded, dry, GW
3.1 - 6.2 Lt orange brown sand, med to coarse, loose, SP
6.2 - 6.4 cobbles
6.4 - 7.7 Brown silty sand with some gravel, damp, dense
7.7 - 8.5 Brown silty sand and gravel, wet,
8.5 - 10.6 Light orange brown sand, coarse, poorly graded, m dense
10.6 - 12.0 Light brown sandy clay, fine sand, trace coarse, wet, poorly graded
12.0 - 12.7 Light brown silty gravelly till, damp, dense

Groundwater grab sample collected:
BEGW008 / BEGW008-DUP @ 1515 hrs
Soil vapor sample collected:
BEGV00807 2/7/2007 at 1315 hours

BOB: 12.7 bgs

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ATTACHMENT B:

GROUNDWATER GRAB FDRS

GROUNDWATER SAMPLE FIELD DATA RECORD

Project: Becker Electronics
Project Number: 36120720721/02
Site: Becker
Date: 02/06/07
Time: Start: 1450 End: 1545
Sample Location ID: BEMW04
Signature of Sampler:

Water Level/Well Data

Well Depth _____ Ft. ___ Measured ___ Historical
___ Top of Well ___ Top of Protective Casing ___ _____
Well Riser Stick-up _____ Ft. (from ground)
Protective _____ Ft. Casing/Well Difference
Protective _____ Ft. Casing

Depth to Water _____ Ft.
Well Material: ___ PVC ___ SS _____
Well Locked?: ___ Yes ___ No
Well Dia. ___ 2 inch ___ 4 inch ___ 6 inch ___ _____
Water Level Equip. Used: ___ Elect. Cond. Probe ___ Float Activated ___ Press. Transducer ___ _____

Geoprobe direct push

Height of Water Column _____ Ft. X ___ .16 Gal/Ft. (2 in.) ___ .65 Gal/Ft. (4 in.) ___ 1.5 Gal/Ft. (6 in.) ___ __ Gal/Ft. (__in.) = _____ Gal/Vol. _____ Total Gal Purged

Well Integrity: Yes No
Prot. Casing Secure ___ ___
Concrete Collar Intact ___ ___
Other _____ ___ ___

Equipment Documentation

Purging/Sampling Equipment Used:

(✓ If Used For) Purging	Sampling		Equipment ID
	✓	Peristaltic Pump	
		Submersible Pump	
✓		Bailer	
		PVC/Silicon Tubing	
		Teflon/Silicon Tubing	
		Airlift	
		Hand Pump	
		In-line Filter	
✓	✓	Press/Vac Filter Existing well.	

Decontamination Fluids Used:

(✓ All That Apply at Location)
___ Methanol (100%)
___ 25% Methanol/75% ASTM Type II water
___ Deionized Water
___ Liquinox Solution
___ Hexane
___ HNO_3/D.I. Water Solution
___ Potable Water
___ None
___ _____
___ _____

Field Analysis Data

PID: Ambient Air 0.1 ppm Well Mouth 0.1 ppm
Purge Data Collected ___ In-line ✓ In Container
Sample Observations: ___ Turbid ___ Colored ✓ Clear ___ Cloudy ✓ Odor

Purge Data	@ ~0.2 Gal. (Time)	@ ~0.4 Gal. (1456)	@ 0.8 Gal. (1501)	@ 1.2 Gal. (1504)	@ 1.6 Gal. (1516)
Temperature, Deg. C	7.7	8.5	8.3	8.8	8.8
pH, units	4.9	6.0	7.8	7.9	7.4
Specific Conductivity (µmhos/cm)	311	310	317	321	320
Turbidity (NTUS)	321	183	96	188	181
Oxidation - Reduction, +/- mv					
Dissolved Oxygen, ppm	0.1	0.7	20.1	2.4	1.4

1521	1526
2.0	2.4
7.0	8.2
8.8	9.1
319	319
172	154
0.2	0.2

Sample Collection Requirements

(✓ If Required at this Location)

Analytical Parameter	✓ If Sample Collected	Preservation Method	Volume Required	Sample Bottle ILot Nos.
✓ VOCs	✓	4°C/HCl	3 2x40 ml	
___ SVOCs		4°C	2x1 liter AG	
___ Metals		HNO_3,4°C	1x1 liter P	
___ Cyanide		NaOH,4°C	1x500mLP	
___ Nitrate/Sulfate		H_2SO_4,4°C	1x1 liter P	
___ Nitrate/Phosphate		H_2SO_4,4°C	1x1 liter P	
___ Pest/PCB		4°C	3x1 liter AG	
___ TPH		H_2SO_4,4°C	2x1 liter AG	
___ TOC		H_2SO_4,4°C	1x1 liter P	

1530

Notes: Existing MW.
purge rate: 200ml/min
* turbidity estimated

FIGURE 4-1
GROUNDWATER SAMPLE DATA RECORD
NYSDEC QUALITY ASSURANCE PROGRAM PLAN

GROUNDWATER SAMPLE FIELD DATA RECORD

Project: Beeker Electronics
Project Number: 3612072072/02 /MS (MSD)
Sample Location ID: BEGW005

Site: Becker
Date: 02/16/07
Time: Start: 0915 End: 0955
Signature of Sampler:

Water Level/Well Data

Well Depth _____ Ft. ___ Measured ___ Historical
___ Top of Well ___ Top of Protective Casing ___ _____
Well Riser Stick-up _____ Ft. (from ground)
Protective _____ Ft. Casing/Well Difference
Protective _____ Ft. Casing

Depth to Water _____ Ft.
Well Material: ___ PVC ___ SS _____
Well Locked?: ___ Yes ___ No
Geoprobe - Direct Push
Well Dia. ___ 2 inch ___ 4 inch ___ 6 inch ___ _____
Water Level Equip. Used: ___ Elect. Cond. Probe ___ Float Activated ___ Press. Transducer ___ _____

Height of Water Column _____ Ft. X ___ .16 Gal/Ft. (2 in.) ___ .65 Gal/Ft. (4 in.) ___ 1.5 Gal/Ft. (6 in.) ___ ___ Gal/Ft. (___ in.) = _____ Gal/Vol. _____ Total Gal Purged

Well Integrity:

	Yes	No
Prot. Casing Secure	___	___
Concrete Collar Intact	___	___
Other _____	___	___

Equipment Documentation

Purging/Sampling Equipment Used:

(✓ If Used For) Purging	Sampling		Equipment ID
___	✓	Peristaltic Pump	
___	___	Submersible Pump	
___	___	Bailer	
✓	✓	PVC/Silicon Tubing	
___	___	Teflon/Silicon Tubing	
___	___	Airlift	
___	___	Hand Pump	
___	___	In-line Filter	
✓	___	Press/Vac Filter	
✓	✓	SP-15	

Decontamination Fluids Used:

(✓ All That Apply at Location)
___ Methanol (100%)
___ 25% Methanol/75% ASTM Type II water
___ Deionized Water
✓ Liquinox Solution
___ Hexane
___ HNO_3/D.I. Water Solution
✓ Potable Water
___ None
___ _____
___ _____

Field Analysis Data

PID: Ambient Air ___ ppm Well Mouth ___ ppm
Purge Data Collected ✓ In-line ___ In Container
Sample Observations: ✓ Turbid ___ Clear ___ Cloudy ___ Colored ___ Odor

Purge Data	@ ~2.0 Gal.	@ _____ Gal.	@ _____ Gal.	@ _____ Gal.	@ _____ Gal.
Temperature, Deg. C	6.2				
pH, units	6.6				
Specific Conductivity (µmhos/cm)	253				
Turbidity (NTUS)	2100s				
Oxidation - Reduction, +/- mv	—				
Dissolved Oxygen, ppm	5.5				

Sample Collection Requirements (✓ If Required at this Location)

Analytical Parameter	✓ If Sample Collected	Preservation Method	Volume Required	Sample Bottle ILot Nos.
✓ VOCs	✓	4°C	3 2x40 ml	
___ SVOCs	___	4°C	2x1 liter AG	
___ Metals	___	HNO_3,4°C	1x1 liter P	
___ Cyanide	___	NaOH,4°C	1x500mLP	
___ Nitrate/Sulfate	___	H_2SO_4,4°C	1x1 liter P	
___ Nitrate/Phosphate	___	H_2SO_4,4°C	1x1 liter P	
___ Pest/PCB	___	4°C	3x1 liter AG	
___ TPH	___	H_2SO_4,4°C	2x1 liter AG	
___ TOC	___	H_2SO_4,4°C	1x1 liter P	
	___			

0945

Notes: Screen: 8' to 12'
Sheen on purge waters from
* MS (MSD) Here as well.

FIGURE 4-1
GROUNDWATER SAMPLE DATA RECORD
NYSDEC QUALITY ASSURANCE PROGRAM PLAN

GROUNDWATER SAMPLE FIELD DATA RECORD

Project: Becker Electronics
Project Number: 36128720721 02
Site: Becker
Date: 02/06/07
Time: Start: 1135 End: 1200
Sample Location ID: BEGW006
Signature of Sampler:

Water Level/Well Data

Well Depth _____ Ft. ___ Measured ___ Historical
___ Top of Well ___ Top of Protective Casing ___ _____
Well Riser Stick-up _____ Ft. (from ground)
Protective _____ Ft. Casing/Well Difference
Protective _____ Ft. Casing

Depth to Water _____ Ft.
Well Material: ___ PVC ___ SS _____
Well Locked?: ___ Yes ___ No
Well Dia. ___ 2 inch ___ 4 inch ___ 6 inch ___ _____
Water Level Equip. Used: ___ Elect. Cond. Probe ___ Float Activated ___ Press. Transducer ___ _____

Geoprobe - Direct Push

Height of Water Column _____ Ft. X ___ .16 Gal/Ft. (2 in.) ___ .65 Gal/Ft. (4 in.) ___ 1.5 Gal/Ft. (6 in.) ___ ___ Gal/Ft. (__in.) = _____ Gal/Vol. _____ Total Gal Purged

Well Integrity: Yes / No
Prot. Casing Secure ___ ___
Concrete Collar Intact ___ ___
Other _____ ___ ___

Equipment Documentation

Purging/Sampling Equipment Used:

(✓ If Used For) Purging	Sampling		Equipment ID
		Peristaltic Pump	
		Submersible Pump	
		Bailer	
✓	✓	PVC/Silicon Tubing	
		Teflon/Silicon Tubing	
		Airlift	
		Hand Pump	
		In-line Filter	
✓	✓	Press/Vac Filter	SP-15

Decontamination Fluids Used:

(✓ All That Apply at Location)
___ Methanol (100%)
___ 25% Methanol/75% ASTM Type II water
___ Deionized Water
✓ Liquinox Solution
___ Hexane
___ HNO_3/D.I. Water Solution
✓ Potable Water
___ None
___ _____
___ _____

Field Analysis Data

PID: Ambient Air ___ ppm Well Mouth ___ ppm

Purge Data Collected: ✓ In-line ___ In Container

Sample Observations: ✓ Turbid ___ Clear ___ Cloudy ___ Colored ___ Odor

Purge Data @ ~6.2 Gal.	@ _____ Gal.	@ _____ Gal.	@ _____ Gal.	@ _____ Gal.	@ _____ Gal.
Temperature, Deg. C 7.9					
pH, units 5.1					
Specific Conductivity (µmhos/cm) 188					
Turbidity (NTUS) >1000					
Oxidation - Reduction, +/- mv					
Dissolved Oxygen, ppm 5.1					

Sample Collection Requirements

(✓ If Required at this Location)

Analytical Parameter	✓ If Sample Collected	Preservation Method	Volume Required
✓ VOCs	✓	4°C/HCl	3 2x40 ml
___ SVOCs		4°C	2x1 liter AG
___ Metals		HNO_3, 4°C	1x1 liter P
___ Cyanide		NaOH, 4°C	1x500mLP
___ Nitrate/Sulfate		H_2SO_4, 4°C	1x1 liter P
___ Nitrate/Phosphate		H_2SO_4, 4°C	1x1 liter P
___ Pest/PCB		4°C	3x1 liter AG
___ TPH		H_2SO_4, 4°C	2x1 liter AG
___ TOC		H_2SO_4, 4°C	1x1 liter P

Sample Bottle ILot Nos. _____ 1510

Notes: Screen: 10' to 14'

FIGURE 4-1
GROUNDWATER SAMPLE DATA RECORD
NYSDEC QUALITY ASSURANCE PROGRAM PLAN
ABB Environmental Services

GROUNDWATER SAMPLE FIELD DATA RECORD

Project: Becker Electronics
Project Number: 3612072072/02
BEGW08SDUP
Sample Location ID: BEGW008

Site: Becker
Date: 02/05/07
Time: Start: 1430 End: 1520
Signature of Sampler:

Water Level/Well Data

Well Depth _____ Ft. ___ Measured ___ Historical

___ Top of Well ___ Top of Protective Casing ___ _____

Well Riser Stick-up _____ Ft. (from ground)

Protective _____ Ft. Casing/Well Difference

Protective _____ Ft. Casing

Depth to Water _____ Ft.

Well Material: ___ PVC ___ SS _____

Well Locked?: ___ Yes ___ No

Geoprobe - direct Push

Well Dia. ___ 2 inch ___ 4 inch ___ 6 inch ___ _____

Water Level Equip. Used: ___ Elect. Cond. Probe ___ Float Activated ___ Press. Transducer ___ _____

Height of Water Column _____ Ft. X ___ .16 Gal/Ft. (2 in.) ___ .65 Gal/Ft. (4 in.) ___ 1.5 Gal/Ft. (6 in.) ___ ___ Gal/Ft. (___ in.) = _____ Gal/Vol. _____ Total Gal Purged

Well Integrity:

	Yes	No
Prot. Casing Secure	___	___
Concrete Collar Intact	___	___
Other _____	___	___

Equipment Documentation

Purging/Sampling Equipment Used:

(✓ If Used For) Purging	Sampling		Equipment ID
✓	✓	Peristaltic Pump	
—	—	Submersible Pump	
—	—	Bailer	
✓	✓	PVC/Silicon Tubing	
—	—	Teflon/Silicon Tubing	
—	—	Airlift	
—	—	Hand Pump	
—	—	In-line Filter	
—	—	Press/Vac Filter	
✓	✓	SP-15	

Decontamination Fluids Used:

(✓ All That Apply at Location)

___ Methanol (100%)
___ 25% Methanol/75% ASTM Type II water
___ Deionized Water
✓ Liquinox Solution
___ Hexane
___ HNO_3/D.I. Water Solution
✓ Potable Water
___ None
___ _____
___ _____

Field Analysis Data

PID: Ambient Air 0 ppm Well Mouth 0 ppm

Purge Data Collected ___ In-line ✓ In Container

Sample Observations: ___ Turbid ___ Clear ✓ Cloudy ___ Colored ___ Odor

Purge Data	@ ~1.5 Gal.	@ _____ Gal.	@ _____ Gal.	@ _____ Gal.	@ _____ Gal.
Temperature, Deg. C	2.5				
pH, units	8.4				
Specific Conductivity (µmhos/cm)	610				
Turbidity (NTUS)	~270				
Oxidation - Reduction, +/- mv					
Dissolved Oxygen, ppm	11.4				

Sample Collection Requirements

(✓ If Required at this Location)

Analytical Parameter	✓ If Sample Collected	Preservation Method	Volume Required	Sample Bottle ILot Nos.
✓ VOCs		4°C	3x40 ml	
___ SVOCs		4°C	2x1 liter AG	
___ Metals		HNO_3,4°C	1x1 liter P	
___ Cyanide		NaOH,4°C	1x500mLP	
___ Nitrate/Sulfate		H_2SO_4,4°C	1x1 liter P	
___ Nitrate/Phosphate		H_2SO_4,4°C	1x1 liter P	
___ Pest/PCB		4°C	3x1 liter AG	
___ TPH		H_2SO_4,4°C	2x1 liter AG	
___ TOC		H_2SO_4,4°C	1x1 liter P	

W1515

Notes: Screen: 8' to 12'

Duplicate collected here Also.

* Turbidity estimated from 4-10

FIGURE 4-1
GROUNDWATER SAMPLE DATA RECORD
NYSDEC QUALITY ASSURANCE PROGRAM PLAN
ABB Environmental Services

ATTACHMENT C:

INDOOR AIR QUALITY QUESTIONNAIRE AND BUILDING INVENTORY FORMS

NEW YORK STATE DEPARTMENT OF HEALTH
INDOOR AIR QUALITY QUESTIONNAIRE AND BUILDING INVENTORY
CENTER FOR ENVIRONMENTAL HEALTH

This form must be completed for each residence involved in indoor air testing.

Preparer's Name Brandon AL Shaw Date/Time Prepared 04/03/07 @ 0845

Preparer's Affiliation MACTEC - Portland Phone No. 207 775 5401

Purpose of Investigation Soil Vapor Intrusion @ BECKER ELECTRONICS
Site # 420007

1. OCCUPANT: There was no one home, so conducted interview/questionnaire to the best of our ability

Interviewed: Y / N

Last Name: _____ First Name: _____

Address: _____

County: _____ 5

Home Phone: _____ Office Phone: _____

Number of Occupants/persons at this location 0 Age of Occupants Vacant

2. OWNER OR LANDLORD: (Check if same as occupant ___)

Interviewed: Y / N

Last Name: _____ First Name: _____

Address: _____

County: _____ 5

Home Phone: _____ Office Phone: _____

3. BUILDING CHARACTERISTICS

Type of Building: (Circle appropriate response)

Residential	School	Commercial/Multi-use
Industrial	Church	Other: _____

Sample ID: V-10

If the property is residential, type? (Circle appropriate response)

Ranch	2-Family	3-Family
Raised Ranch	Split Level	Colonial
Cape Cod	Contemporary	Mobile Home w/ Addition in front &
Duplex	Apartment House	Townhouses/Condos
Modular	Log Home	Other:_____ Back of home.

If multiple units, how many? 0

If the property is commercial, type?

Business Type(s) N/A

Does it include residences (i.e., multi-use)? Y / N If yes, how many? N/A

Other characteristics:

Number of floors 1 Building age unknown

Is the building insulated? Y / N How air tight? Tight / Average / Not Tight unknown

4. AIRFLOW

Use air current tubes or tracer smoke to evaluate airflow patterns and qualitatively describe:

Airflow between floors

Airflow near source

Outdoor air infiltration

Infiltration into air ducts

Sample ID: V-10

5. BASEMENT AND CONSTRUCTION CHARACTERISTICS (Circle all that apply)

a. Above grade construction:	wood frame	concrete	stone	brick mobile home
b. Basement type:	full	crawlspace ↔ slab		other none
c. Basement floor:	concrete	dirt ← beneath (2) additions	stone	other _____
d. Basement floor:	uncovered	covered	covered with n/a	
e. Concrete floor:	unsealed	sealed	sealed with N/A	
f. Foundation walls:	poured	block	stone	other slat → plastic
g. Foundation walls:	unsealed	sealed	sealed with _____	
h. The basement is:	wet	damp	dry	moldy
i. The basement is:	finished	unfinished	partially finished	
j. Sump present?	Y / N			
k. Water in sump?	Y / N / not applicable			

under original trailer

Basement/Lowest level depth below grade: ∅ (feet)

Identify potential soil vapor entry points and approximate size (e.g., cracks, utility ports, drains)

broken slats in crawlspace of trailer, and crawlspace beneath additions.

6. HEATING, VENTING and AIR CONDITIONING (Circle all that apply)

Type of heating system(s) used in this building: (circle all that apply – note primary)

Hot air circulation	Heat pump	Hot water baseboard → assumed	
Space Heaters	Stream radiation	Radiant floor	
Electric baseboard	Wood stove	Outdoor wood boiler	Other _____

The primary type of fuel used is:

Natural Gas	Fuel Oil	Kerosene
Electric	Propane	Solar
Wood	Coal	

Domestic hot water tank fueled by: propane → assumed

Boiler/furnace located in: Basement Outdoors Main Floor Other _____

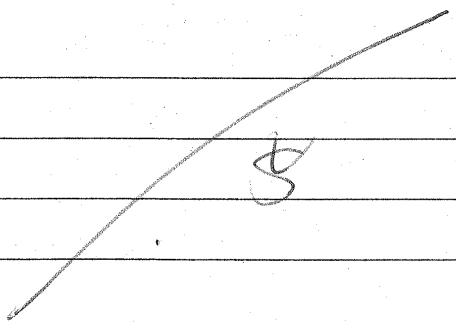
Air conditioning: Central Air Window units Open Windows None

unknown

Sample ID: V-10

Are there air distribution ducts present? Y / N / (n/a)

Describe the supply and cold air return ductwork, and its condition where visible, including whether there is a cold air return and the tightness of duct joints. Indicate the locations on the floor plan diagram.



7. OCCUPANCY

Is basement/lowest level occupied? Full-time Occasionally Seldom Almost Never

Level	**General Use of Each Floor (e.g., familyroom, bedroom, laundry, workshop, storage)**
Basement	Crawl space - n/a
1st Floor	living area
2nd Floor	
3rd Floor	
4th Floor	

8. FACTORS THAT MAY influence INDOOR AIR QUALITY

a. Is there an attached garage?	Y / (N)	
b. Does the garage have a separate heating unit?	(Y) / N / NA	
c. Are petroleum-powered machines or vehicles stored in the garage (e.g., lawnmower, atv, car)	Y / N / NA	Please specify unknown
d. Has the building ever had a fire?	Y / N	When? unknown
e. Is a kerosene or unvented gas space heater present?	Y / N	Where? unknown
f. Is there a workshop or hobby/craft area?	Y / N	Where & Type? unknown
g. Is there smoking in the building?	Y / N	How frequently? unknown
h. Have cleaning products been used recently?	Y / N	When & Type? unknown
i. Have cosmetic products been used recently?	Y / N	When & Type? unknown

Sample ID: V-10

j. Has painting/staining been done in the last 6 months? Y / N Where & When? unknown

k. Is there new carpet, drapes or other textiles? Y / N Where & When? unknown

l. Have air fresheners been used recently? Y / N When & Type? unknown

m. Is there a kitchen exhaust fan? Y / N If yes, where vented? unknown

n. Is there a bathroom exhaust fan? Y / N If yes, where vented? unknown

o. Is there a clothes dryer? Y / N If yes, is it vented outside? Y / N unknown

p. Has there been a pesticide application? Y / N When & Type? unknown

Are there odors in the building? Y / N
If yes, please describe: unknown

Do any of the building occupants use solvents at work? Y / N / unknown
(e.g., chemical manufacturing or laboratory, auto mechanic or auto body shop, painting, fuel oil delivery, boiler mechanic, pesticide application, cosmetologist

If yes, what types of solvents are used? N/A

If yes, are their clothes washed at work? Y / N (N/A)

Do any of the building occupants regularly use or work at a dry-cleaning service? (Circle appropriate response)

Yes, use dry-cleaning regularly (weekly) — No
Yes, use dry-cleaning infrequently (monthly or less) — Unknown
Yes, work at a dry-cleaning service

Is there a radon mitigation system for the building/structure? Y / N Date of Installation: unknown
Is the system active or passive? Active/Passive

9. WATER AND SEWAGE one of these → unknown

Water Supply: Public Water (Drilled Well) (Driven Well) (Dug Well) Other: _____

Sewage Disposal: Public Sewer (Septic Tank) Leach Field Dry Well Other: _____
→ assumed

10. RELOCATION INFORMATION (for oil spill residential emergency)

a. Provide reasons why relocation is recommended: _____

b. Residents choose to: remain in home relocate to friends/family relocate to hotel/motel

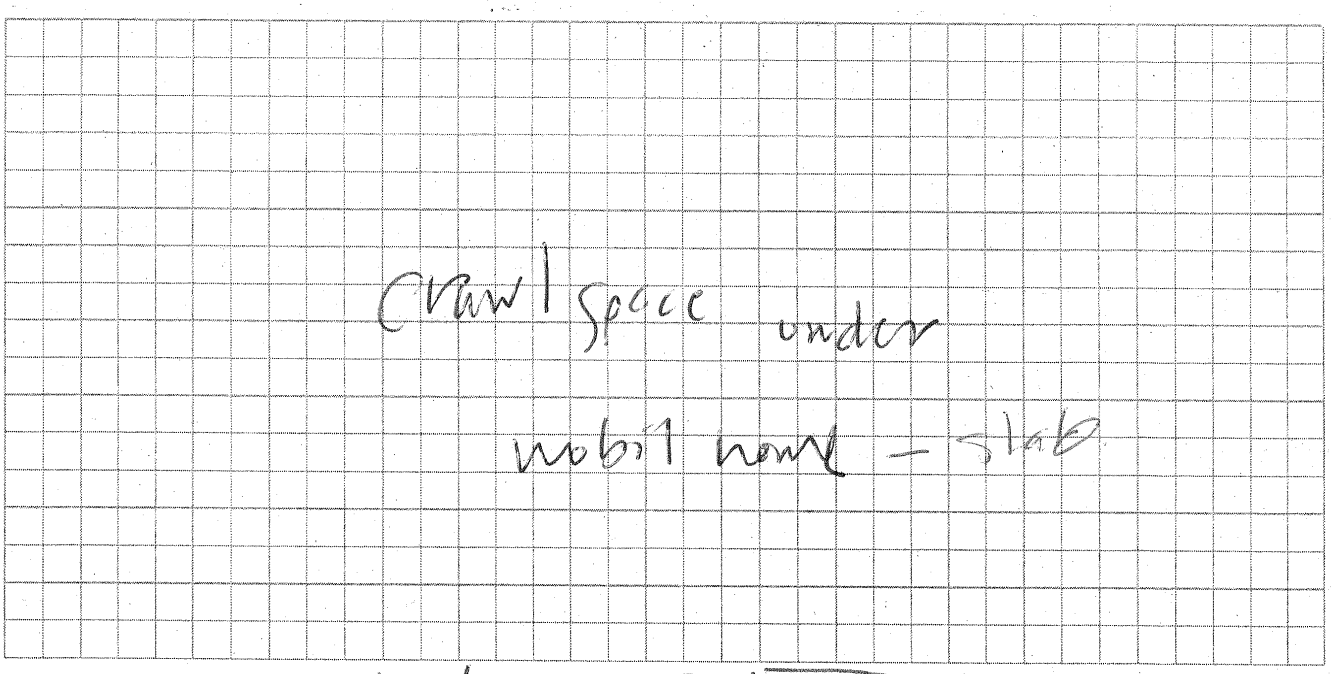
c. Responsibility for costs associated with reimbursement explained? Y / N

d. Relocation package provided and explained to residents? Y / N

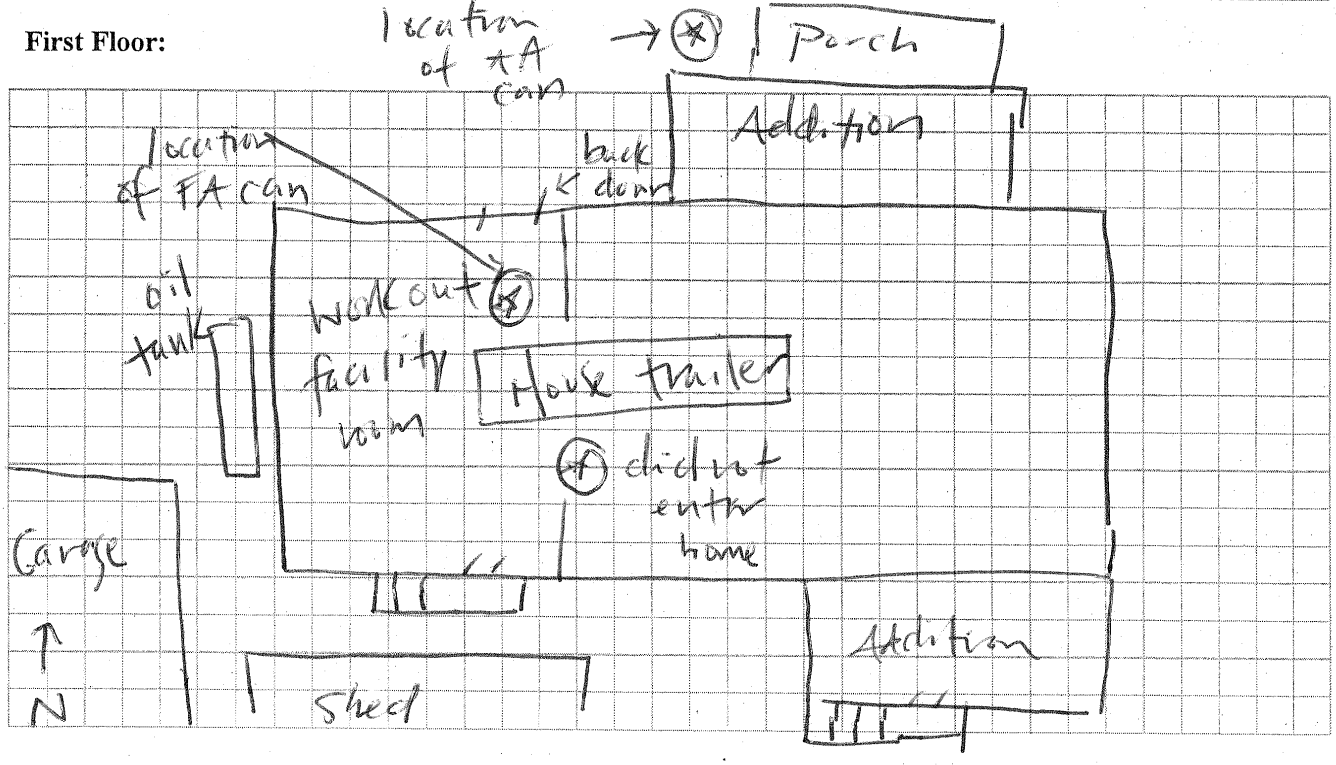
11. FLOOR PLANS

Draw a plan view sketch of the basement and first floor of the building. Indicate air sampling locations, possible indoor air pollution sources and PID meter readings. If the building does not have a basement, please note.

Basement:



First Floor:

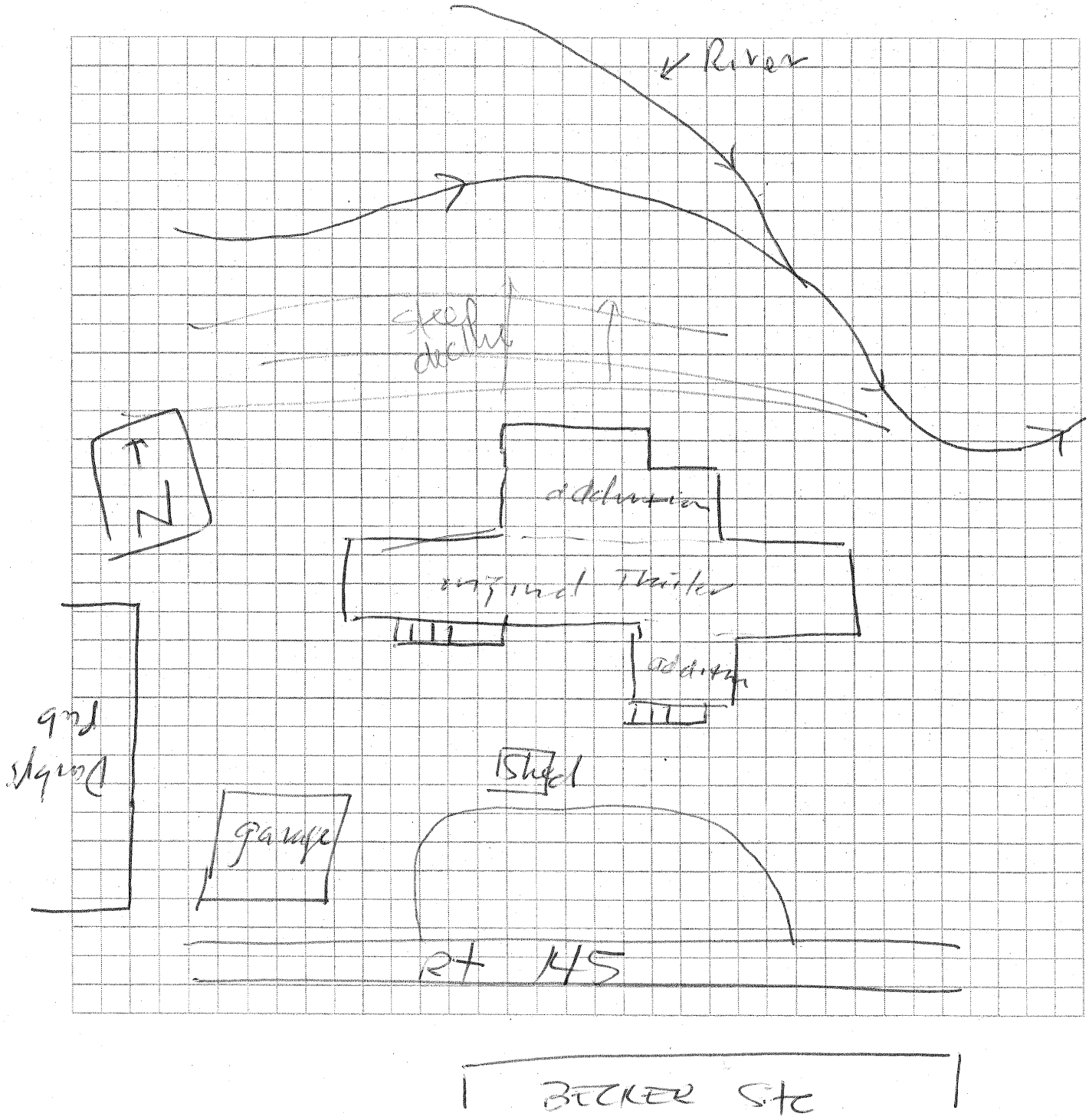


Sample ID: V-10

12. OUTDOOR PLOT

Draw a sketch of the area surrounding the building being sampled. If applicable, provide information on spill locations, potential air contamination sources (industries, gas stations, repair shops, landfills, etc.), outdoor air sampling location(s) and PID meter readings.

Also indicate compass direction, wind direction and speed during sampling, the locations of the well and septic system, if applicable, and a qualifying statement to help locate the site on a topographic map.



Sample ID: V-10

13. PRODUCT INVENTORY FORM

Make & Model of field instrument used: N/A

List specific products found in the residence that have the potential to affect indoor air quality.

Location	Product Description	Size (units)	Condition*	Chemical Ingredients	Field Instrument Reading (units)	Photo ** Y / N

* Describe the condition of the product containers as **Unopened (UO), Used (U),** or **Deteriorated (D)**
** Photographs of the **front and back** of product containers can replace the handwritten list of chemical ingredients. However, the photographs must be of good quality and ingredient labels must be legible.

Sample ID: V-10

NEW YORK STATE DEPARTMENT OF HEALTH
INDOOR AIR QUALITY QUESTIONNAIRE AND BUILDING INVENTORY
CENTER FOR ENVIRONMENTAL HEALTH

This form must be completed for each residence involved in indoor air testing.

Preparer's Name Brandon A.L. Shaw Date/Time Prepared 04/02/2007 @515

Preparer's Affiliation MTTC ESC Phone No. 2077755401

Purpose of Investigation Soil Vapor Intrusion Site #42007 - BECKER

1. OCCUPANT: vacant → unheated

Interviewed: Y / N

Last Name: _____ First Name: _____

Address: _____

County: _____

Home Phone: _____ Office Phone: _____

Number of Occupants/persons at this location Ø Age of Occupants vacant

2. OWNER OR LANDLORD: (Check if same as occupant N/A)

Interviewed: Y / N

Last Name: _____ First Name: _____

Address: _____

County: _____

Home Phone: _____ Office Phone: _____

& no interview actually conducted here; house is vacant.

3. BUILDING CHARACTERISTICS

Type of Building: (Circle appropriate response)

(Residential)	School	Commercial/Multi-use
Industrial	Church	Other: _____

Sample ID: V-11

If the property is residential, type? (Circle appropriate response)

Ranch	2-Family	3-Family
Raised Ranch	Split Level	Colonial
Cape Cod	Contemporary	Mobile Home
Duplex	Apartment House	Townhouses/Condos
Modular	Log Home	Other:_____

If multiple units, how many? 1

If the property is commercial, type?

Business Type(s) N/A

Does it include residences (i.e., multi-use)? Y / N If yes, how many? N/A

Other characteristics:

Number of floors 3 Building age unknown

Is the building insulated? Y / N How air tight? Tight / Average / Not Tight

* cracks in foundation

4. AIRFLOW

Use air current tubes or tracer smoke to evaluate airflow patterns and qualitatively describe:

Airflow between floors

not much air flow in resistance

Airflow near source

Outdoor air infiltration

through windows / doors / AC unit

Infiltration into air ducts

5. **BASEMENT AND CONSTRUCTION CHARACTERISTICS** (Circle all that apply)

a. Above grade construction:	wood frame	concrete	stone	brick
b. Basement type:	full	crawlspace	slab	other partial
c. Basement floor:	concrete	dirt small	stone	other _____
d. Basement floor:	uncovered	covered	covered with _____	
e. Concrete floor:	unsealed	sealed	sealed with unknown → paint maybe	
f. Foundation walls:	poured	block	stone	other _____
g. Foundation walls:	unsealed	sealed	sealed with unknown	
h. The basement is:	wet	damp	dry	moldy
i. The basement is:	finished	unfinished	partially finished	
j. Sump present?	Y / N → drain pipe to outside			
k. Water in sump?	Y / N / not applicable			

Basement/Lowest level depth below grade: ~5 (feet)

Identify potential soil vapor entry points and approximate size (e.g., cracks, utility ports, drains)

cracks in foundation walls, utility port - drain

6. **HEATING, VENTING and AIR CONDITIONING** (Circle all that apply)

Type of heating system(s) used in this building: (circle all that apply – note primary)

Hot air circulation	Heat pump	Hot water baseboard	
Space Heaters	Stream radiation	Radiant floor	
Electric baseboard	Wood stove	Outdoor wood boiler	Other _____

The primary type of fuel used is:

Natural Gas	Fuel Oil	Kerosene	
Electric	Propane	Solar	
Wood	Coal		

unknown which

Domestic hot water tank fueled by: _____

Boiler/furnace located in:	Basement	Outdoors	Main Floor	Other_____
Air conditioning:	Central Air	Window units	Open Windows	None

Are there air distribution ducts present? Y / N unknown

Describe the supply and cold air return ductwork, and its condition where visible, including whether there is a cold air return and the tightness of duct joints. Indicate the locations on the floor plan diagram.

N/A

NO

7. OCCUPANCY

Is basement/lowest level occupied? Full-time Occasionally Seldom Almost Never

Level	**General Use of Each Floor (e.g., familyroom, bedroom, laundry, workshop, storage)**
Basement	storage
1st Floor	living space - vacant
2nd Floor	living space - vacant
3rd Floor	
4th Floor	

8. FACTORS THAT MAY influence INDOOR AIR QUALITY

a. Is there an attached garage? Y / N → through a covered pathway

b. Does the garage have a separate heating unit? Y / N / NA

c. Are petroleum-powered machines or vehicles stored in the garage (e.g., lawnmower, atv, car) Y / N / NA Please specify

d. Has the building ever had a fire? Y / N When? unknown

e. Is a kerosene or unvented gas space heater present? Y / N Where? Did not see one.

f. Is there a workshop or hobby/craft area? Y / N Where & Type?

g. Is there smoking in the building? Y / N How frequently? unknown

h. Have cleaning products been used recently? Y / N When & Type?

i. Have cosmetic products been used recently? Y / N When & Type?

Sample ID: V-11

j. Has painting/staining been done in the last 6 months? Y / (N) Where & When? _____

k. Is there new carpet, drapes or other textiles? Y / (N) Where & When? _____

l. Have air fresheners been used recently? Y / (N) When & Type? _____

m. Is there a kitchen exhaust fan? (Y) / N If yes, where vented? Outside

n. Is there a bathroom exhaust fan? Y / (N) If yes, where vented? _____

o. Is there a clothes dryer? Y / (N) If yes, is it vented outside? Y / N

p. Has there been a pesticide application? Y / N When & Type? Unknown - mice throughout house. Thigh

Are there odors in the building? (Y) / N
If yes, please describe: _____

Do any of the building occupants use solvents at work? Y / (N)
(e.g., chemical manufacturing or laboratory, auto mechanic or auto body shop, painting, fuel oil delivery, boiler mechanic, pesticide application, cosmetologist

If yes, what types of solvents are used? N/A

If yes, are their clothes washed at work? Y / (N)

Do any of the building occupants regularly use or work at a dry-cleaning service? (Circle appropriate response)

Yes, use dry-cleaning regularly (weekly) (No)
Yes, use dry-cleaning infrequently (monthly or less) Unknown
Yes, work at a dry-cleaning service

Is there a radon mitigation system for the building/structure? Y / (N) Date of Installation: _____
Is the system active or passive? Active/Passive (N/A)

9. WATER AND SEWAGE

Water Supply: Public Water (Drilled Well) (Driven Well) Dug Well Other: Unknown → Assumed.

Sewage Disposal: Public Sewer (Septic Tank) (Leach Field) Dry Well Other: Unknown → Assumed

10. RELOCATION INFORMATION (for oil spill residential emergency)

a. Provide reasons why relocation is recommended: _____

b. Residents choose to: remain in home relocate to friends/family relocate to hotel/motel

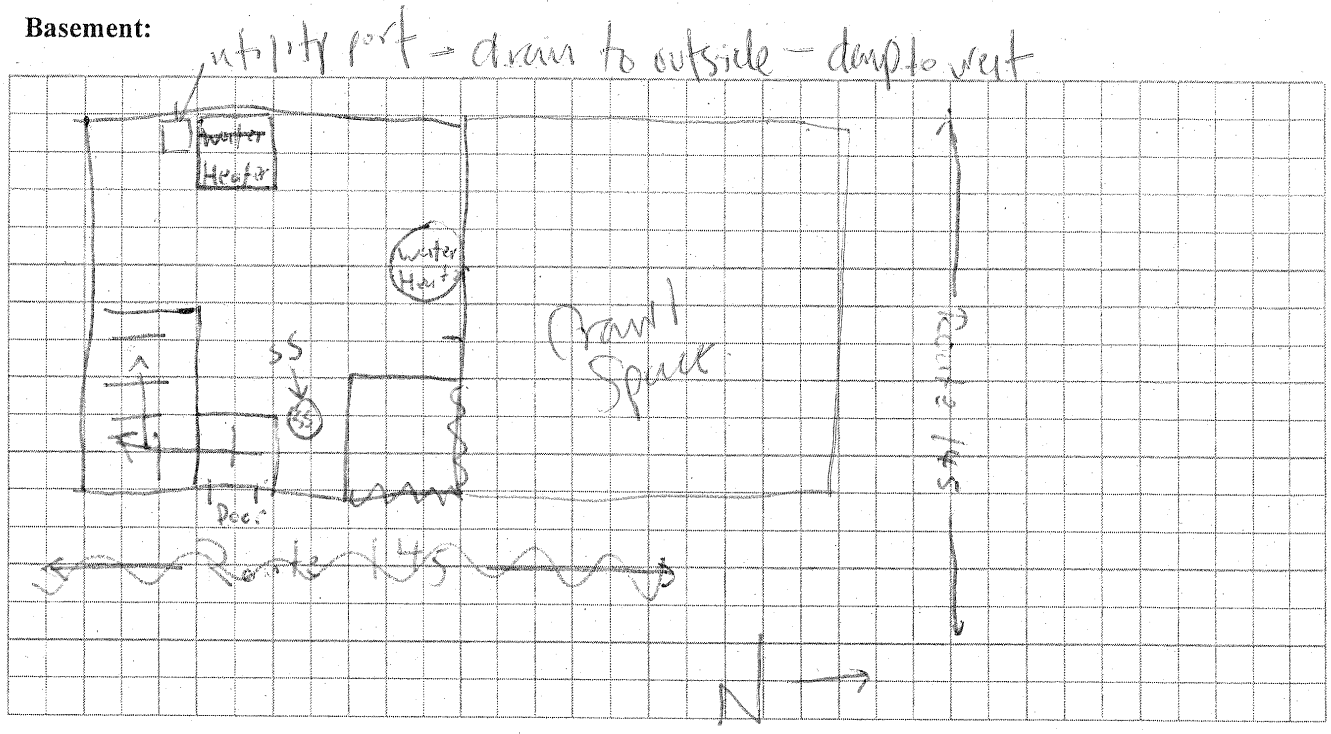
c. Responsibility for costs associated with reimbursement explained? Y / N

d. Relocation package provided and explained to residents? Y / N

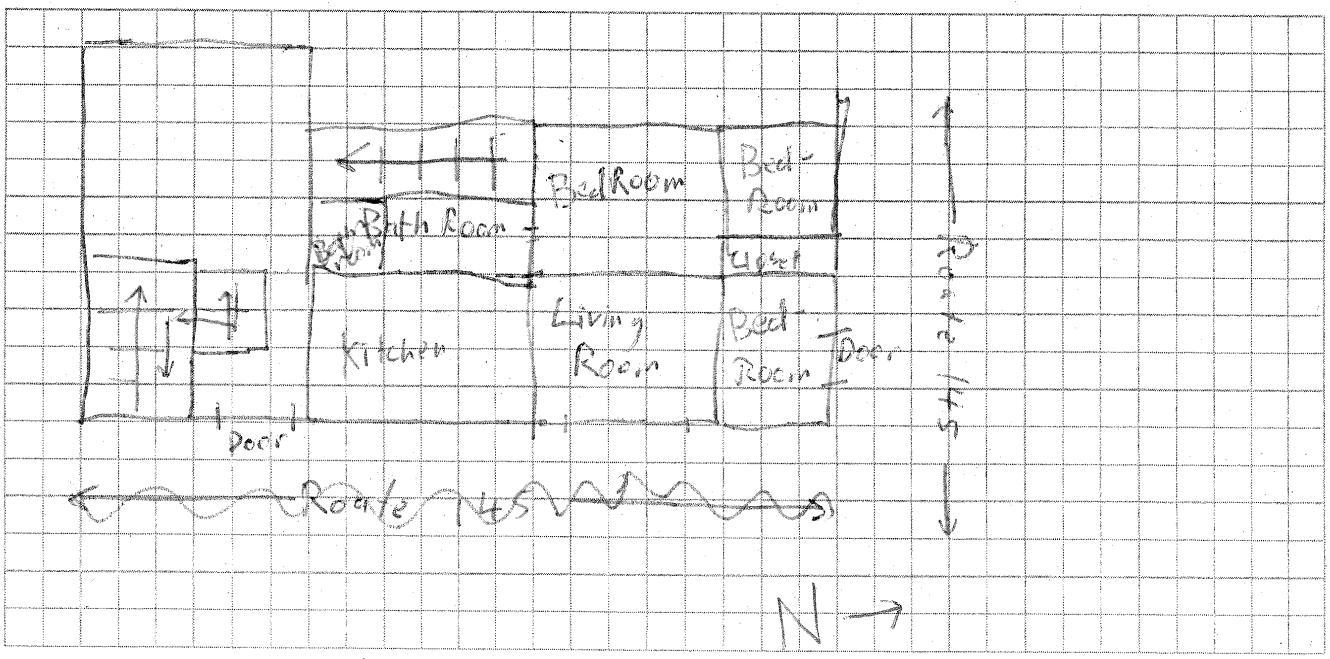
11. FLOOR PLANS

Draw a plan view sketch of the basement and first floor of the building. Indicate air sampling locations, possible indoor air pollution sources and PID meter readings. If the building does not have a basement, please note.

Basement:



First Floor:

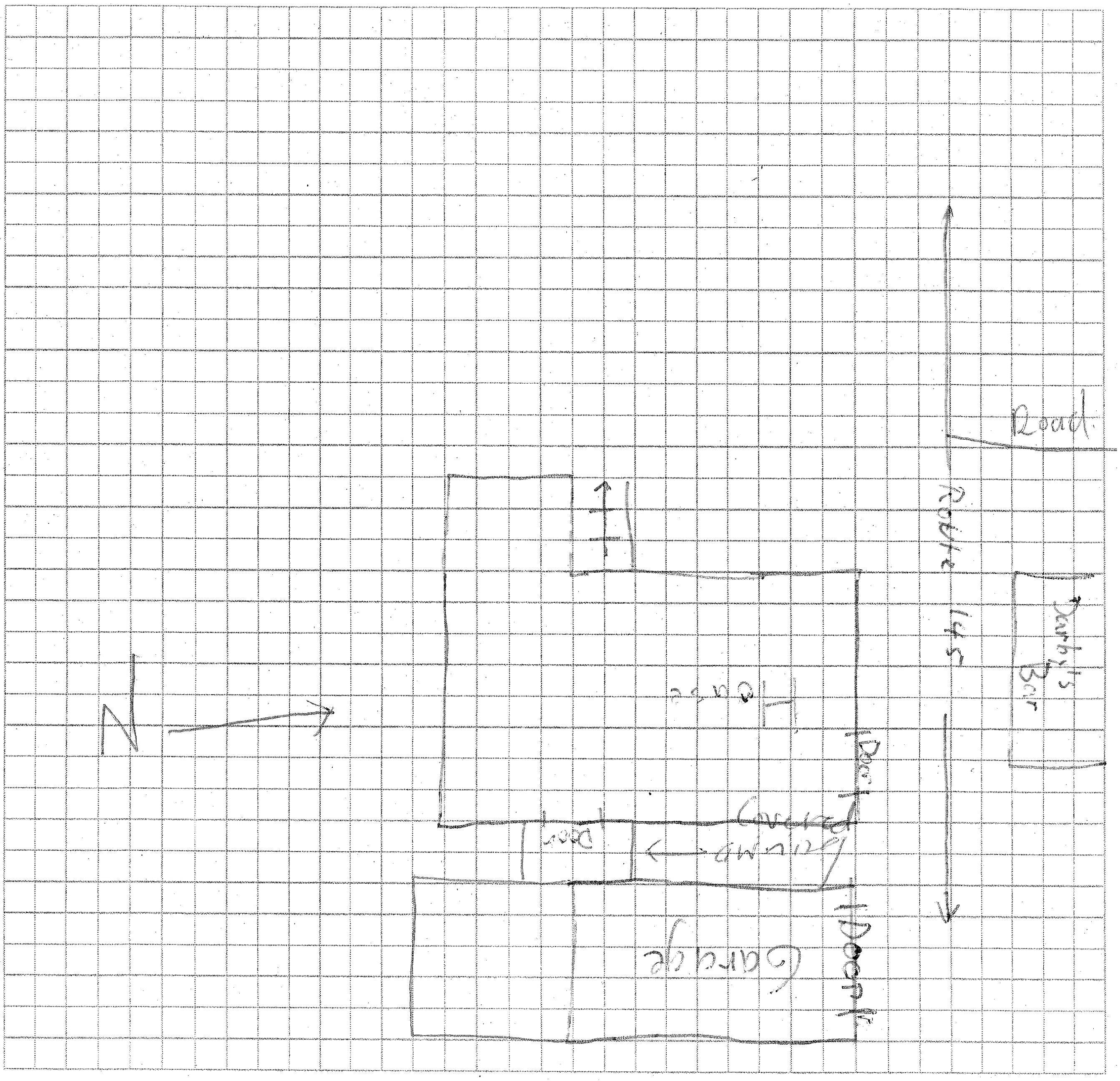


Sample ID: V-11

12. OUTDOOR PLOT

Draw a sketch of the area surrounding the building being sampled. If applicable, provide information on spill locations, potential air contamination sources (industries, gas stations, repair shops, landfills, etc.), outdoor air sampling location(s) and PID meter readings.

Also indicate compass direction, wind direction and speed during sampling, the locations of the well and septic system, if applicable, and a qualifying statement to help locate the site on a topographic map.



Sample ID: V-11

13. PRODUCT INVENTORY FORM

Make & Model of field instrument used: ppb RAE plus - PID #6569

List specific products found in the residence that have the potential to affect indoor air quality.

Location	Product Description	Size (units)	Condition*	Chemical Ingredients	Field Instrument Reading (units)	Photo** Y / N
Basement Bkgd=0	Oatey All Purpose Cement	4oz	U	Tetrahydrofuran, Acetone, cyclohexane, MEK.	0	N
" "	Easy Going RV and Marine Antifreeze	1gal	U	N/A	0	" "
" "	Moore Alkyd Primer and Sealer	1gal	U	Mineral Spirits	0	" "
" "	Janesway Acrylic Latex	1gal	U	Acrylic Resin, Nepheline Syenite	0	" "
" "	Impervo Alkyd Enamel	8oz	U	Petroleum Solvents	0	" "
" "	Cook and Dunn Latex Primer/Sealer	1gal	U	Calcium Carbonate	0	" "
" "	Cook and Dunn Stain Oil Based	1gal	U	Alkyd Resin, Calcium Carbonate, Petroleum Solvents	0	" "
" "	Cook and Dunn Alkyd-Gloss	1gal	U	Calcium Carbonate, Alkyd Resin, Stoddard Solvent	0	" "
" "	Zinsser Primer-Sealer	1qt	U	Ethanol, Shellac, Isopropanol, Methanol	3ppb	" "
First Floor Bkgd=0	OFF! Insect Repellent	6oz	U	N,N-Diethyl-meta-toluamide	0	" "
" "	Sherwin Williams Latex Paint	(2) 1gal	U	Calcium Carbonate, Ethylene Glycol, 2-(2-Butoxyethoxy)-ethanol	0	" "
"	Red and White Lighter Fluid	32oz	U	Petroleum Distillates	0	" "

* Describe the condition of the product containers as **Unopened (UO), Used (U),** or **Deteriorated (D)**
** Photographs of the **front and back** of product containers can replace the handwritten list of chemical ingredients. However, the photographs must be of good quality and ingredient labels must be legible.

MEK - Methyl Ethyl Ketone

N/A - Not Applicable

Sample ID: V-11

NEW YORK STATE DEPARTMENT OF HEALTH
INDOOR AIR QUALITY QUESTIONNAIRE AND BUILDING INVENTORY
CENTER FOR ENVIRONMENTAL HEALTH

This form must be completed for each residence involved in indoor air testing.

Preparer's Name Brandon A.L. Shaw Date/Time Prepared April 2, 2007 @ 1300

Preparer's Affiliation Mactec - Portland, ME Phone No. 207-775-5401

Purpose of Investigation Subslab/Indoor Air Survey @ Becker Electronics Site # 4-20-007; Vapor Intrusion Evaluation

1. OCCUPANT: owner

Interviewed: Y / N

Last Name: Frey First Name: Susan

Address: 2205 Route 145, East Durham, NY

County: Greene

Home Phone: 918 621 1592 (Cell) Office Phone: 518 634 3040 (Pub)

Number of Occupants/persons at this location 9 (8) Age of Occupants ⊗ → customers however are usually inside building from 11 AM to close

2. OWNER OR LANDLORD: (Check if same as occupant √)

Interviewed: Y / N

Last Name: First Name:

Address:

County:

Home Phone: Office Phone:

3. BUILDING CHARACTERISTICS

Type of Building: (Circle appropriate response)

Residential	School	Commercial/Multi-use – Pub
Industrial	Church	Other:

Sample ID: V-2

If the property is residential, type? (Circle appropriate response)

Ranch	2-Family	3-Family
Raised Ranch	Split Level	Colonial
Cape Cod	Contemporary	Mobile Home
Duplex	Apartment House	Townhouses/Condos
Modular	Log Home	Other: Commercial

If multiple units, how many? _____

If the property is commercial, type?

Business Type(s) Pub

Does it include residences (i.e., multi-use)? Y / N If yes, how many? N/A

Other characteristics:

Number of floors 1 + basement Building age 1900

Is the building insulated? Y / N How air tight? Tight / Average / Not Tight

4. AIRFLOW

Use air current tubes or tracer smoke to evaluate airflow patterns and qualitatively describe:

Airflow between floors

Airflow near source

Outdoor air infiltration

basement walls have cracks; where wall of foundation connect to the building frame there are cracks; leaky doors

Infiltration into air ducts

Sample ID: V-2

5. **BASEMENT AND CONSTRUCTION CHARACTERISTICS** (Circle all that apply)

a. Above grade construction:	wood frame	concrete	stone	brick
b. Basement type:	full both	crawlspace	slab	other _____
c. Basement floor:	concrete	dirt	stone	other _____
d. Basement floor:	uncovered	covered	covered with _____	
e. Concrete floor:	unsealed	sealed	sealed with Sealed 8 years ago	
f. Foundation walls:	poured	block	stone	other _____
g. Foundation walls:	unsealed	sealed	sealed with _____	
h. The basement is:	wet	damp	dry	moldy – no
i. The basement is:	finished	unfinished	partially finished	
j. Sump present?	Y / N			
k. Water in sump?	Y / N / not applicable			

Basement/Lowest level depth below grade: daylight basement; 0' bgs to ~4' bgs (feet)

Identify potential soil vapor entry points and approximate size (e.g., cracks, utility ports, drains)

Some cracks observed. Concrete on floor was old & broken in places

6. **HEATING, VENTING and AIR CONDITIONING** (Circle all that apply)

Type of heating system(s) used in this building: (circle all that apply – note primary)

Hot air circulation	Heat pump	~~Hot water baseboard~~	
Space Heaters	Stream radiation	Radiant floor ← in dining room – not working	
Electric baseboard	Wood stove	Outdoor wood boiler	Other _____

The primary type of fuel used is:

Natural Gas	Fuel Oil	Kerosene
Electric	Propane	Solar
Wood	Coal	

Domestic hot water tank fueled by: 0.1

Boiler/furnace located in:	Basement	Outdoors	Main Floor	Other_____
Air conditioning:	Central Air	Window units	Open Windows	None

+3 phase

Sample ID: V-2

Are there air distribution ducts present? (Y) N

Describe the supply and cold air return ductwork, and its condition where visible, including whether there is a cold air return and the tightness of duct joints. Indicate the locations on the floor plan diagram.

duct work below attic; straight out to the north

7. OCCUPANCY

Is basement/lowest level occupied? Full-time Occasionally Seldom Almost Never

Level	**General Use of Each Floor (e.g., familyroom, bedroom, laundry, workshop, storage)**
Basement	storage - crawl space
1st Floor	Pub
2nd Floor	
3rd Floor	
4th Floor	

8. FACTORS THAT MAY INFLUENCE INDOOR AIR QUALITY

a. Is there an attached garage? Y (N)

b. Does the garage have a separate heating unit? Y / N (NA)

c. Are petroleum-powered machines or vehicles stored in the garage (e.g., lawnmower, atv, car) Y (N) NA Please specify_____

d. Has the building ever had a fire? Y (N) When?_____

e. Is a kerosene or unvented gas space heater present? Y (N) Where?_____

f. Is there a workshop or hobby/craft area? Y (N) Where & Type?_____

g. Is there smoking in the building? Y (N) How frequently?_____

h. Have cleaning products been used recently? (Y) N When & Type? normal business

i. Have cosmetic products been used recently? Y (N) When & Type?_____

j. Has painting/staining been done in the last 6 months? Y / (N) Where & When? _____

k. Is there new carpet, drapes or other textiles? Y / (N) Where & When? _____

l. Have air fresheners been used recently? Y / (N) When & Type? bleach in morning

m. Is there a kitchen exhaust fan? (Y) / N If yes, where vented? gas / system, yes

n. Is there a bathroom exhaust fan? (Y) / N If yes, where vented? _____

o. Is there a clothes dryer? Y / (N) If yes, is it vented outside? Y / N

p. Has there been a pesticide application? Y / (N) When & Type? _____

Are there odors in the building? Y / (N)
If yes, please describe: food.

Do any of the building occupants use solvents at work? Y / (N)
(e.g., chemical manufacturing or laboratory, auto mechanic or auto body shop, painting, fuel oil delivery, boiler mechanic, pesticide application, cosmetologist

If yes, what types of solvents are used? yes — sanitizer

If yes, are their clothes washed at work? Y / (N)

Do any of the building occupants regularly use or work at a dry-cleaning service? (Circle appropriate response)

Yes, use dry-cleaning regularly (weekly) (No)
Yes, use dry-cleaning infrequently (monthly or less) Unknown
Yes, work at a dry-cleaning service

Is there a radon mitigation system for the building/structure? Y / (N) Date of Installation: _____
Is the system active or passive? Active/Passive (NA)

9. WATER AND SEWAGE

Water Supply: Public Water (Drilled Well) ↔ (Driven Well) → 75' bgs Dug Well Other: _____

Sewage Disposal: Public Sewer (Septic Tank) Leach Field Dry Well Other: _____

10. RELOCATION INFORMATION (for oil spill residential emergency)

a. Provide reasons why relocation is recommended: N/A

b. Residents choose to: remain in home relocate to friends/family relocate to hotel/motel (N/A)

c. Responsibility for costs associated with reimbursement explained? Y / N (NA)

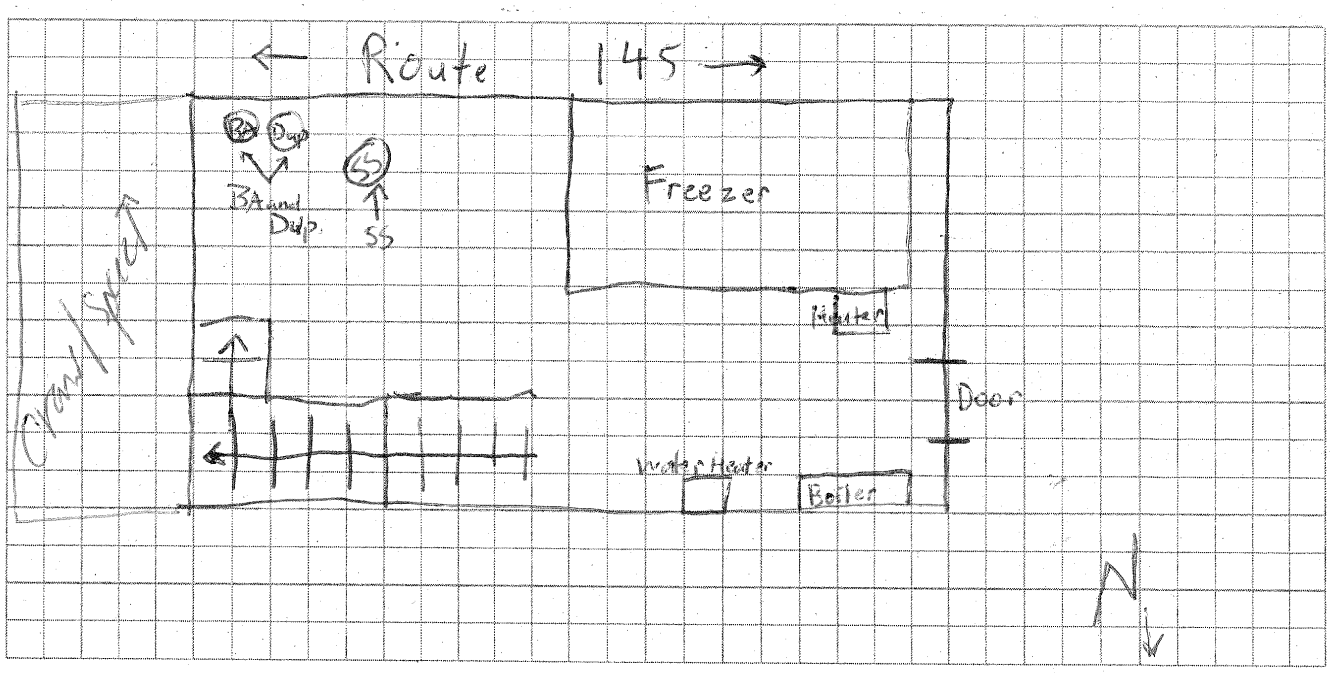
d. Relocation package provided and explained to residents? Y / N (NA)

Sample ID: V-2

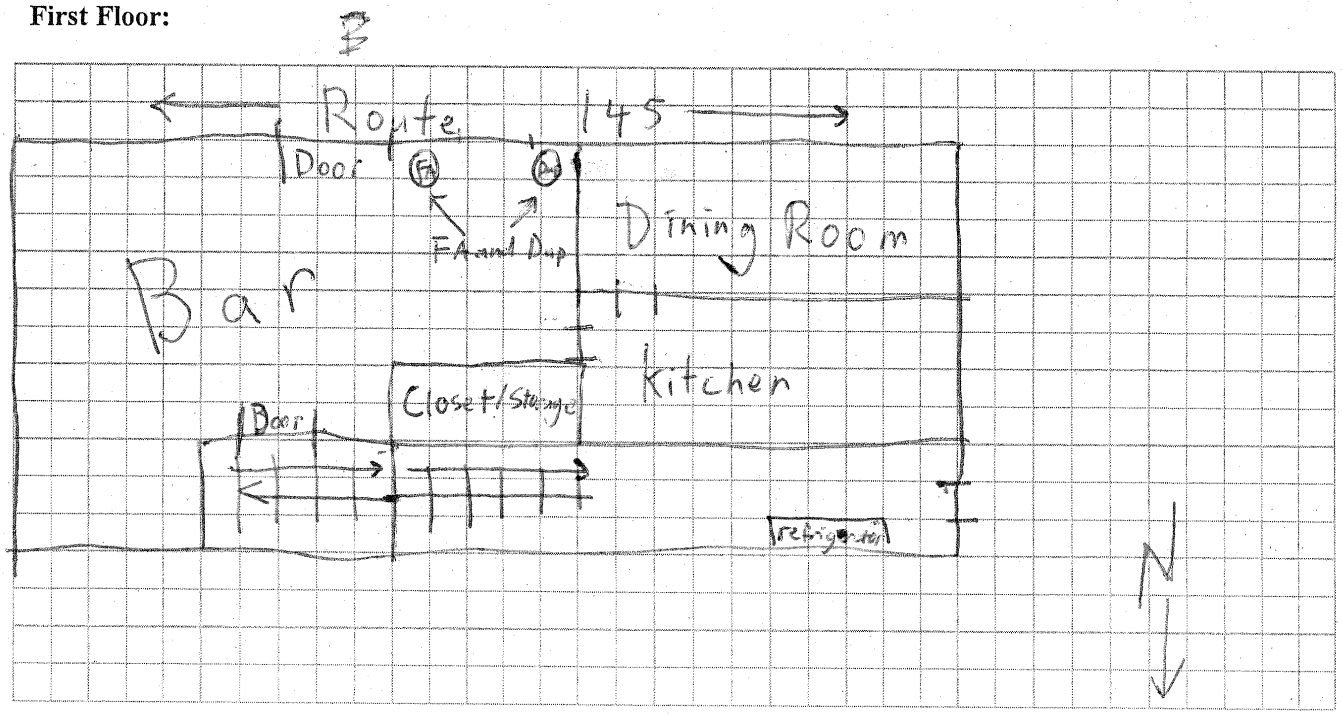
11. FLOOR PLANS

Draw a plan view sketch of the basement and first floor of the building. Indicate air sampling locations, possible indoor air pollution sources and PID meter readings. If the building does not have a basement, please note.

Basement:



First Floor:

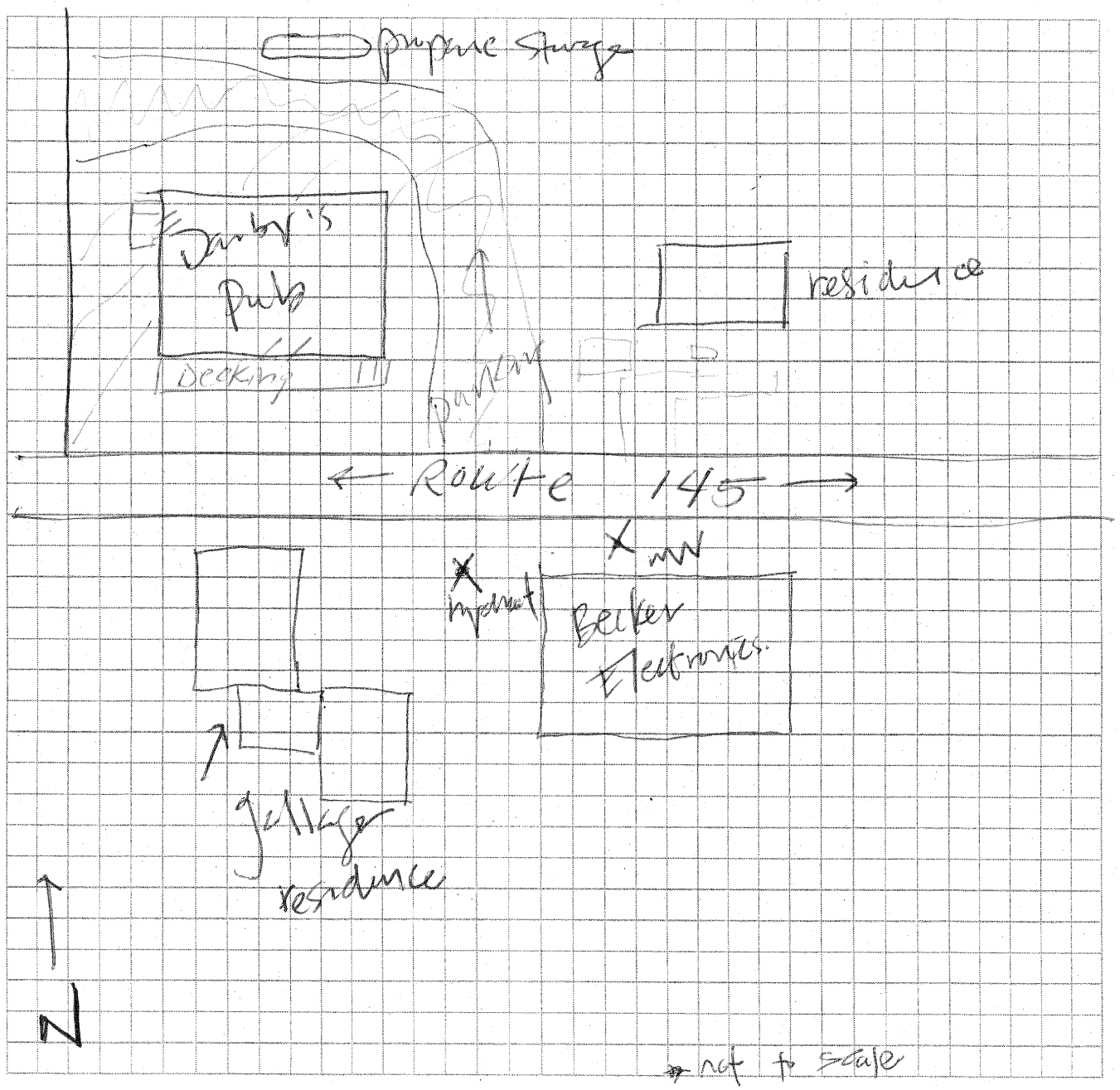


Sample ID: V-2

12. OUTDOOR PLOT

Draw a sketch of the area surrounding the building being sampled. If applicable, provide information on spill locations, potential air contamination sources (industries, gas stations, repair shops, landfills, etc.), outdoor air sampling location(s) and PID meter readings.

Also indicate compass direction, wind direction and speed during sampling, the locations of the well and septic system, if applicable, and a qualifying statement to help locate the site on a topographic map.



Sample ID: V-2

13. PRODUCT INVENTORY FORM

Make & Model of field instrument used: ppb RAE plus - PID #165569

List specific products found in the residence that have the potential to affect indoor air quality.

Location	Product Description	Size (units)	Condition*	Chemical Ingredients	Field Instrument Reading (units)	Photo** Y / N
Basement Bkgd = 0	Compressed Gas NOS (75% Nitrogen, 25% CO_2)	(3) N/A	U	Nitrogen, Carbon Dioxide	0	N
" "	Ep. Soap Leak-Seek Leak Detection Fluid	1 gal	U	N/A	0	" "
" "	GE Silicone II Silicone Sealant	10.1 oz	U	Methoxypolydimethylsiloxane, Dimethylpolysiloxane,	2127 ppb	" "
" "	" "	" "	" "	Hexamethyldisilazane, Methyltrimethoxysilane	" "	" "
" "	5 gal containers of gasoline	(2) 5 gal	U	gasoline	719 ppb	" "
" "	Open buckets filled with gas substance	(2) N/A	U	Unknown N/A	4420 ppb	" "
First Floor Closet	IND/COM Flying Insect Killer	15 oz	U	Pyrethrins, Piperonyl butoxide	0	" "
Bkgd = 0	Tarn-X Tarnish remover	12 oz	U	thiourea, sulfamic acid	0	" "
" "	Kilz Casual Colors Spray Paint	12 oz	U	Toluene, Acetone, Xylene	384 ppb	" "
" "	Behr Enamel Paint	(2) 1 gal	U	Ethylene Glycol	0	" "
" "	Zinsser Bulls-eye 1-2-3 Primer	1 gal	U	Ethylene Glycol, Acrylic polymer	0	" "
" "	Benjamin Moore Latex Paint	1 gal	U	Eligible	0	" "
Bar Bkgd = 0	Hot Shot Flying Insect Killer	15 oz	U	Permethrin, d-trans Allethrin	8 ppb	" "
" "	Pledge Furniture Polish	17.7 oz	U	Isoparaffinic Hydrocarbon, Isobutane, Propane, Butane	888 ppb	" "
" "	Behold Furniture Polish	16.6 oz	U	N/A	6057 ppb	" "
Bkgd = 40%	Shoo-fly hornet Jet-burst	12 oz	U	Dianzion, Pyrethrins, Piperonyl butoxide	574 ppb	" "
" "	Brasso Metal Polish	8 oz	U	Petroleum Distillates	677 ppb	" "
Basement Bkgd = 0	Behr Porch and Floor Enamel	1 gal	U	Ethylene Glycol	0	" "
						U

* Describe the condition of the product containers as **Unopened (UO), Used (U),** or **Deteriorated (D)**
** Photographs of the **front and back** of product containers can replace the handwritten list of chemical ingredients. However, the photographs must be of good quality and ingredient labels must be legible.

N/A = Not Applicable

Sample ID: V-2

NEW YORK STATE DEPARTMENT OF HEALTH
INDOOR AIR QUALITY QUESTIONNAIRE AND BUILDING INVENTORY
CENTER FOR ENVIRONMENTAL HEALTH

This form must be completed for each residence involved in indoor air testing.

Preparer's Name Brandon AL Shaw Date/Time Prepared 04/03/2007 @ 1015

Preparer's Affiliation MACTEC - Portland, ME Phone No. 207 828 3367

Purpose of Investigation Soil Vapor Intrusion Investigation, Site: 420007 + Becker Electronics

1. OCCUPANT:

Interviewed: Y / N

Last Name: _____ First Name: _____

Address: _____

County: _____

Home Phone: _____ Office Phone: _____

Number of Occupants/persons at this location Varies Age of Occupants Various; closed October through May; several customers & workers

2. OWNER OR LANDLORD: (Check if same as occupant ✓) ← see note

Interviewed: (Y) / N

Last Name: Handle First Name: Roy

Address: Route 145, East Durham, NY

County: Greene

Home Phone: 518 622 2934 Office Phone: 518 634 7200

3. BUILDING CHARACTERISTICS

Type of Building: (Circle appropriate response)

Residential School (Commercial/Multi-use) → Speedway race track
Industrial Church Other: _____

Sample ID: V-1

If the property is residential, type? (Circle appropriate response)

Ranch	2-Family	3-Family
Raised Ranch	Split Level	Colonial
Cape Cod	Contemporary	Mobile Home
Duplex	Apartment House	Townhouses/Condos
Modular	Log Home	Other:_____

If multiple units, how many? 8

If the property is commercial, type?

Business Type(s) Race track - Snack bar

Does it include residences (i.e., multi-use)? Y (N) If yes, how many? N/A

Other characteristics:

Number of floors 1 Building age 1986

Is the building insulated? Y / N How air tight? Tight / Average / Not Tight

4. AIRFLOW

Use air current tubes or tracer smoke to evaluate airflow patterns and qualitatively describe:

Airflow between floors

/

Airflow near source

/

Outdoor air infiltration

back of building is open, leaky windows

Infiltration into air ducts

/

Sample ID: V-1

5. BASEMENT AND CONSTRUCTION CHARACTERISTICS (Circle all that apply)

a. Above grade construction:	wood frame	concrete	stone	brick
b. Basement type:	full	crawlspace	slab	other non
c. Basement floor:	concrete	dirt	stone	other blacktop in back where garage are street
d. Basement floor:	uncovered	covered	covered with Lenolium tiles.	
e. Concrete floor:	unsealed	sealed	sealed with _____	
f. Foundation walls:	poured	block	stone	other N/A
g. Foundation walls:	unsealed	sealed	sealed with N/A	
h. The basement is:	wet	damp	dry	moldy N/A
i. The basement is:	finished	unfinished	partially finished	N/A
j. Sump present?	Y / N / N/A			
k. Water in sump?	Y / N / not applicable			

Basement/Lowest level depth below grade: 0 (feet)

Identify potential soil vapor entry points and approximate size (e.g., cracks, utility ports, drains)

floor is covered, back of building is asphalt

6. HEATING, VENTING and AIR CONDITIONING (Circle all that apply)

Type of heating system(s) used in this building: (circle all that apply – note primary)

Hot air circulation	Heat pump	Hot water baseboard	
Space Heaters	Stream radiation	Radiant floor	
Electric baseboard	Wood stove	Outdoor wood boiler	Other none

The primary type of fuel used is:

& unheated all season

Natural Gas	Fuel Oil	Kerosene	
Electric	Propane	Solar	
Wood	Coal		none

Domestic hot water tank fueled by: electric

Boiler/furnace located in:	Basement	Outdoors	Main Floor	Other none
Air conditioning:	Central Air	Window units	Open Windows	None

Sample ID: V-1

Are there air distribution ducts present? Y / (N)

Describe the supply and cold air return ductwork, and its condition where visible, including whether there is a cold air return and the tightness of duct joints. Indicate the locations on the floor plan diagram.

7. OCCUPANCY

Is basement/lowest level occupied? Full-time Occasionally Seldom Almost Never (n/a)

Level	**General Use of Each Floor (e.g., familyroom, bedroom, laundry, workshop, storage)**
Basement	N/A - on grade
1st Floor	Store front & go-cart storage
2nd Floor	
3rd Floor	
4th Floor	

8. FACTORS THAT MAY INFLUENCE INDOOR AIR QUALITY

a. Is there an attached garage? (Y) / N

b. Does the garage have a separate heating unit? Y / (N) / NA

c. Are petroleum-powered machines or vehicles stored in the garage (e.g., lawnmower, atv, car) (Y) / N / NA
Please specify go carts

d. Has the building ever had a fire? Y / (N) When? go cart did bump in back

e. Is a kerosene or unvented gas space heater present? Y / (N) Where? _____

f. Is there a workshop or hobby/craft area? (Y) N Where & Type? North side of building - go cart area

g. Is there smoking in the building? Y / (N) How frequently? _____

h. Have cleaning products been used recently? Y / (N) When & Type? _____

i. Have cosmetic products been used recently? Y / (N) When & Type? _____

Sample ID: V-1

j. Has painting/staining been done in the last 6 months? Y / (N) Where & When? _____

k. Is there new carpet, drapes or other textiles? Y / (N) Where & When? _____

l. Have air fresheners been used recently? Y / (N) When & Type? _____

m. Is there a kitchen exhaust fan? (Y) / N If yes, where vented? outside

n. Is there a bathroom exhaust fan? (Y) / N If yes, where vented? to the shop

o. Is there a clothes dryer? Y / (N) If yes, is it vented outside? Y / N

p. Has there been a pesticide application? Y / (N) When & Type? _____

Are there odors in the building? (Y) / N
If yes, please describe: stale air → vacant since october

Do any of the building occupants use solvents at work? (Y) / N
(e.g., chemical manufacturing or laboratory, auto mechanic or auto body shop, painting, fuel oil delivery, boiler mechanic, pesticide application, cosmetologist

If yes, what types of solvents are used? Gasoline, break cleaners

If yes, are their clothes washed at work? Y / (N)

Do any of the building occupants regularly use or work at a dry-cleaning service? (Circle appropriate response)

Yes, use dry-cleaning regularly (weekly) (No)
Yes, use dry-cleaning infrequently (monthly or less) Unknown
Yes, work at a dry-cleaning service

Is there a radon mitigation system for the building/structure? Y / (N) Date of Installation: _____
Is the system active or passive? Active/Passive

9. WATER AND SEWAGE

Water Supply:	Public Water	Drilled Well	(Driven Well)	Dug Well	Other: _____
Sewage Disposal:	Public Sewer	(Septic Tank)	(Leach Field)	Dry Well	Other: _____

10. RELOCATION INFORMATION (for oil spill residential emergency)

a. Provide reasons why relocation is recommended: _____

b. Residents choose to: remain in home relocate to friends/family relocate to hotel/motel

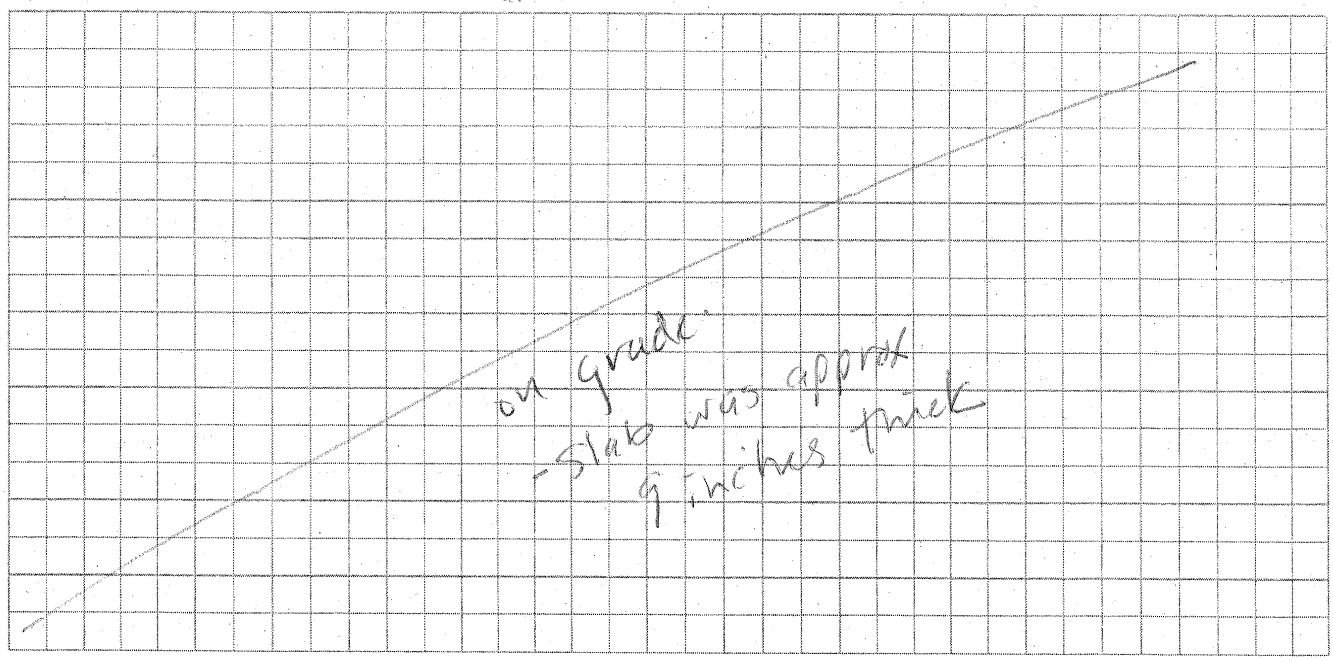
c. Responsibility for costs associated with reimbursement explained? Y / N

d. Relocation package provided and explained to residents? Y / N

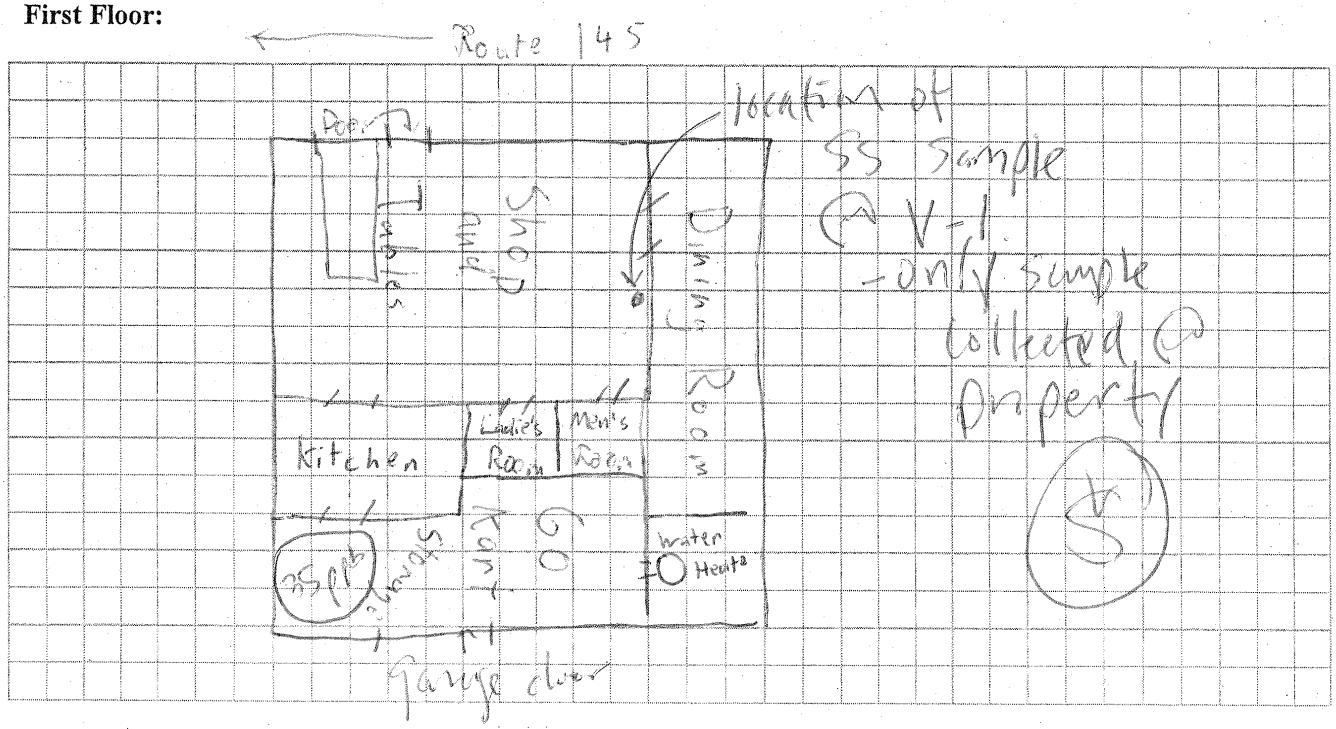
11. FLOOR PLANS

Draw a plan view sketch of the basement and first floor of the building. Indicate air sampling locations, possible indoor air pollution sources and PID meter readings. If the building does not have a basement, please note.

Basement:



First Floor:

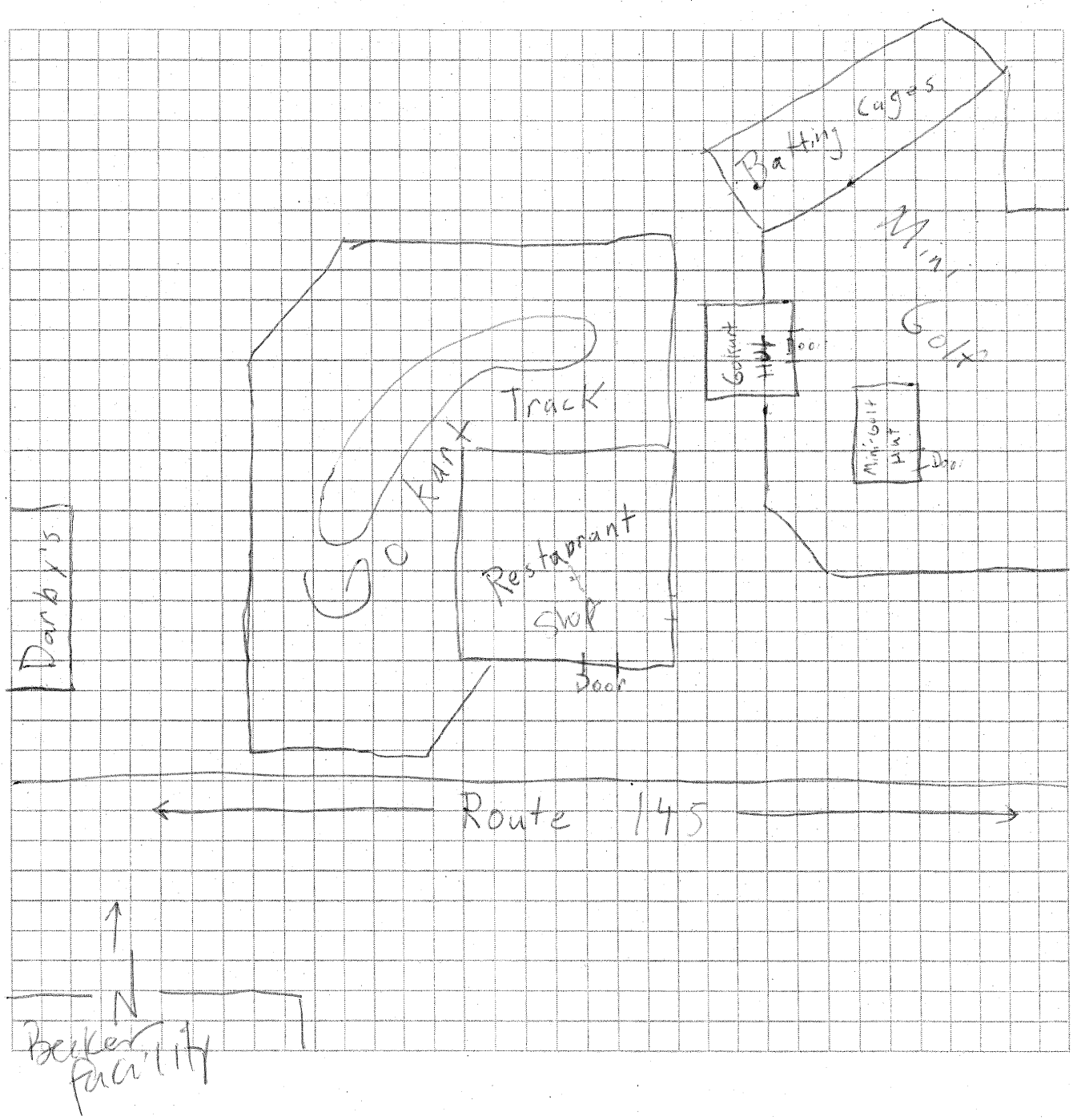


Sample ID: V-1

12. OUTDOOR PLOT

Draw a sketch of the area surrounding the building being sampled. If applicable, provide information on spill locations, potential air contamination sources (industries, gas stations, repair shops, landfills, etc.), outdoor air sampling location(s) and PID meter readings.

Also indicate compass direction, wind direction and speed during sampling, the locations of the well and septic system, if applicable, and a qualifying statement to help locate the site on a topographic map.



Sample ID: V-1

13. PRODUCT INVENTORY FORM

Make & Model of field instrument used: ppb RAE plus - pine #6569

List specific products found in the residence that have the potential to affect indoor air quality.

Location	Product Description	Size (units)	Condition*	Chemical Ingredients	Field Instrument Reading (units)	Photo ** Y / N
Shop Bldg #835	Claire Stainless Steel Polish and Cleaner	15oz	U	White Mineral Oil, Isoparaffinic Hydrocarbon, Mineral Spirits,	165 ppb	N
" "	" "	" "	" "	Acetone, Methyl Acetate, Propane	" "	" "
" "	Behold Furniture Polish	16.6oz	U	N/A	127 ppb	" "
" "	NETCARE Oil Base Stainless Steel Cleaner	15oz	U	White Mineral Oil, Isoparaffinic Hydrocarbon, Mineral Spirits,	440 ppb	" "
" "	" "	" "	" "	Acetone, Methyl Acetate, Propane	" "	" "
" " Bldg #4	OFF! Skintastic Clean Feel	6oz	U	Picaridin	5 ppb	" "
Garage Backroom	Klean-Strip Paint Thinner	32oz	U	N/A	123 ppb	" "
Bldg #0	3M Super 77 Adhesive	16.75oz	U	acetone, propane, heptanes, Cyclohexane, 2-methyl pentane,	299 ppb	" "
" "	" "	" "	" "	2,3-dimethyl butane, 2,2-dimethyl butane, hexane	" "	" "
" "	WD-40 Spray Lubricant	(2) 11oz	U	Petroleum Distillates	0	" "
" "	X-O Rust Spray Enamel	12oz	U	N/A	321 ppb	" "
" "	Zinsolute Speed-E-Namel	12oz	U	Benzene, Acetone, Methylbenzene	266 ppb	
" "	Service Pro Emergency Tire Inflator	12oz	U	Propane - Isobutane - n-Butane Ethylene Glycol	0	" "
" "	Benzomatic Propane	14.1oz	U	N/A	0	" "
" "	Havoc Rodenticide Bait Pack	(12) 50g	U	3[3-(4-bromo-[1,1-biphenyl]-4-yl)-1,2,3,4-tetrahydro-1-naphthenyl]-4-hydroxy-2H-1-benzopyran-2-one	0	" "
" "	" "	" "	" "		" "	" "
" "	Raid Earth Options Wasp and Hornet	15oz	U	Eugenol, 2-Phenethyl Propionate	0	" "
" "	Gas Filled Go-karts	11 cans	U	Gasoline	39.4 ppm	" "
" "	Rust-oleum Latex Enamel Paint	9(32oz)	U	Petroleum Distillates	5763 ppb High	" "

* Describe the condition of the product containers as **Unopened (UO), Used (U),** or **Deteriorated (D)**
** Photographs of the **front and back** of product containers can replace the handwritten list of chemical ingredients. However, the photographs must be of good quality and ingredient labels must be legible.

N/A - Not Applicable

13. PRODUCT INVENTORY FORM

Make & Model of field instrument used: ppb RAEplus - Pine #16574

List specific products found in the residence that have the potential to affect indoor air quality.

Location	Product Description	Size (units)	Condition*	Chemical Ingredients	Field Instrument Reading (units)	Photo ** Y / N
Guest Bedroom	Minwax wood Finish	(2) 1qt	U	mineral Spirits	0	N
BRgd=0	Red Devil Enamel controls Rust	1qt	U	N/A	0	"
"	Benjamin Moor Regal Latex	1qt	U	water/ Glycols, Ethylene Glycol	71ppb	"
"	X-O Rust Enamel (4) (2)	1qt (2)-1gal	U	Petroleum Distillates	44ppb	"
"	Glidden Evermore Acrylic Latex	1gal-(2)1qt	U	1-2, Ethanediol, 2propenoic Acid, 2-Methyl-Methyl Ester, Polymer	0	"
"	"	"	"	with Butyl-2-Propenoate, Nepheline Synetite, 2-Methyl-Monoester	"	"
"	Value Exterior Latex Wood Stain	1gal	U	N/A	0	"
"	acme auto Finish Acrlic Enamel	32oz	U	Eligible	0	"
"	Emperor Alkyd Enamel	(2)8oz	U	Petroleum solvents	0	"
"	~~Benjamin Moor~~ Metal & Wood Enamel	(2)8oz	U	Stoddard Spirvent, Soya Alkyd Resin	0	"
"	3 C Flooring Adhesive	32oz	U	Polypropylene	0	"
"	Olympian Maximum Wood Stain	1gal	U	Ethylene Glycol, Octylisothiazalone	0	"
"	Behr Deckfence, Sealing wood Stain	2.5gal	U	Ethylene Glycol	0	"

* Describe the condition of the product containers as **Unopened (UO), Used (U),** or **Deteriorated (D)**
** Photographs of the **front and back** of product containers can replace the handwritten list of chemical ingredients. However, the photographs must be of good quality and ingredient labels must be legible.

Sample ID: V-1

NEW YORK STATE DEPARTMENT OF HEALTH
INDOOR AIR QUALITY QUESTIONNAIRE AND BUILDING INVENTORY
CENTER FOR ENVIRONMENTAL HEALTH

This form must be completed for each residence involved in indoor air testing.

Preparer's Name Brandon M. Shaw Date/Time Prepared 04/03/2007 @ 1200

Preparer's Affiliation MACTEC - Portland, ME Phone No. 207 828 3367

Purpose of Investigation Soil Vapor Intrusion Investigation; SIR# 420007
*Becker Electronics

1. OCCUPANT:

Interviewed: Y / N

Last Name: Norbury First Name: Guy

Address: 2146 Route 145 → Behind Home; East Durham, NY

County: Greene

Home Phone: 518 634 7724 Office Phone: ~~518~~ 212-412-5000 (8 am + 430 pm)

Number of Occupants/persons at this location (3) Age of Occupants 11, 52, 49

2. OWNER OR LANDLORD: (Check if same as occupant ✓)

Interviewed: Y / N

Last Name: _____ First Name: _____

Address: _____

County: _____

Home Phone: _____ Office Phone: _____

3. BUILDING CHARACTERISTICS

Type of Building: (Circle appropriate response)

(Residential)	School	Commercial/Multi-use
Industrial	Church	Other: _____

Sample ID: V-9

If the property is residential, type? (Circle appropriate response)

(Ranch)	2-Family	3-Family
Raised Ranch	Split Level	Colonial
Cape Cod	Contemporary	Mobile Home
Duplex	Apartment House	Townhouses/Condos
Modular	(Log Home)	Other:_____

If multiple units, how many? _____

If the property is commercial, type?

Business Type(s) _____

Does it include residences (i.e., multi-use)? Y / (N/A) If yes, how many? _____

Other characteristics:

Number of floors (1) Building age pre 1960?

Is the building insulated? (Y) / N How air tight? (Tight) / Average / Not Tight

4. AIRFLOW

Use air current tubes or tracer smoke to evaluate airflow patterns and qualitatively describe:

Airflow between floors

Airflow near source

Outdoor air infiltration

Basement has a large hole in wall near where Sum mass (SS) were collected; rain came through & covered floor between sampling days

Infiltration into air ducts

(8)

Sample ID: V-9

5. BASEMENT AND CONSTRUCTION CHARACTERISTICS (Circle all that apply)

a. Above grade construction:	wood frame	concrete	stone	brick
b. Basement type:	full → to kitchen	crawlspace	slab	other _____
c. Basement floor:	concrete	dirt under some	stone	other _____
d. Basement floor:	uncovered	covered	covered with _____	
e. Concrete floor:	unsealed	sealed	sealed with _____	
f. Foundation walls:	poured	block	stone	other _____
g. Foundation walls:	unsealed	sealed	sealed with _____	
h. The basement is:	wet	damp	dry	moldy
i. The basement is:	finished	unfinished	partially finished	
j. Sump present?	Y / N ← by bulkhead			
k. Water in sump?	Y / N / not applicable			

Basement/Lowest level depth below grade: daylight (feet)

Identify potential soil vapor entry points and approximate size (e.g., cracks, utility ports, drains)

cracks

6. HEATING, VENTING and AIR CONDITIONING (Circle all that apply)

Type of heating system(s) used in this building: (circle all that apply – note primary)

Hot air circulation	Heat pump	Hot water baseboard	
Space Heaters	Stream radiation	Radiant floor	
Electric baseboard	Wood stove	Outdoor wood boiler	Other _____

The primary type of fuel used is:

Natural Gas	Fuel Oil	Kerosene
Electric	Propane	Solar
Wood	Coal	

Domestic hot water tank fueled by: oil w/ furnace

Boiler/furnace located in:	Basement	Outdoors	Main Floor	Other_____
Air conditioning:	Central Air	Window units	Open Windows	None

5

Sample ID: V-9

Are there air distribution ducts present? Y / (N)

Describe the supply and cold air return ductwork, and its condition where visible, including whether there is a cold air return and the tightness of duct joints. Indicate the locations on the floor plan diagram.

7. OCCUPANCY

Is basement/lowest level occupied? Full-time Occasionally (Seldom) Almost Never

Level	**General Use of Each Floor (e.g., familyroom, bedroom, laundry, workshop, storage)**
Basement	storage / laundry.
1st Floor	living space - family room, dining room
2nd Floor	~~living space - bedrooms~~
3rd Floor	
4th Floor	

8. FACTORS THAT MAY INFLUENCE INDOOR AIR QUALITY

a. Is there an attached garage? Y / (N)

b. Does the garage have a separate heating unit? Y / N / (NA)

c. Are petroleum-powered machines or vehicles stored in the garage (e.g., lawnmower, atv, car) Y / N / (NA) Please specify_____

d. Has the building ever had a fire? Y / (N) When?_____

e. Is a kerosene or unvented gas space heater present? Y / (N) Where?_____

f. Is there a workshop or hobby/craft area? (Y) / N Where & Type?_____

g. Is there smoking in the building? Y / (N) How frequently?_____

h. Have cleaning products been used recently? Y / (N) When & Type? not other than cleaning

i. Have cosmetic products been used recently? Y / (N) When & Type?_____

Sample ID: V-9

j. Has painting/staining been done in the last 6 months? Y / N Where & When? shelves in childs room.

k. Is there new carpet, drapes or other textiles? Y / N Where & When? _____

l. Have air fresheners been used recently? Y / N When & Type? Candles

m. Is there a kitchen exhaust fan? Y / N If yes, where vented? outside

n. Is there a bathroom exhaust fan? Y / N If yes, where vented? _____

o. Is there a clothes dryer? Y / N If yes, is it vented outside? Y / N

p. Has there been a pesticide application? Y / N When & Type? Captners

Are there odors in the building? Y / N
If yes, please describe: N/A

Do any of the building occupants use solvents at work? Y / N
(e.g., chemical manufacturing or laboratory, auto mechanic or auto body shop, painting, fuel oil delivery, boiler mechanic, pesticide application, cosmetologist

If yes, what types of solvents are used? N/A

If yes, are their clothes washed at work? Y / N N/A

Do any of the building occupants regularly use or work at a dry-cleaning service? (Circle appropriate response)

Yes, use dry-cleaning regularly (weekly) No
Yes, use dry-cleaning infrequently (monthly or less) Unknown
Yes, work at a dry-cleaning service

Is there a radon mitigation system for the building/structure? Y / N Date of Installation: N/A
Is the system active or passive? Active/Passive

9. WATER AND SEWAGE

~100' bgs.

Water Supply: Public Water Drilled Well Driven Well Dug Well Other: _____

Sewage Disposal: Public Sewer Septic Tank Leach Field Dry Well Other: _____

10. RELOCATION INFORMATION (for oil spill residential emergency)

a. Provide reasons why relocation is recommended: _____

b. Residents choose to: remain in home relocate to friends/family relocate to hotel/motel

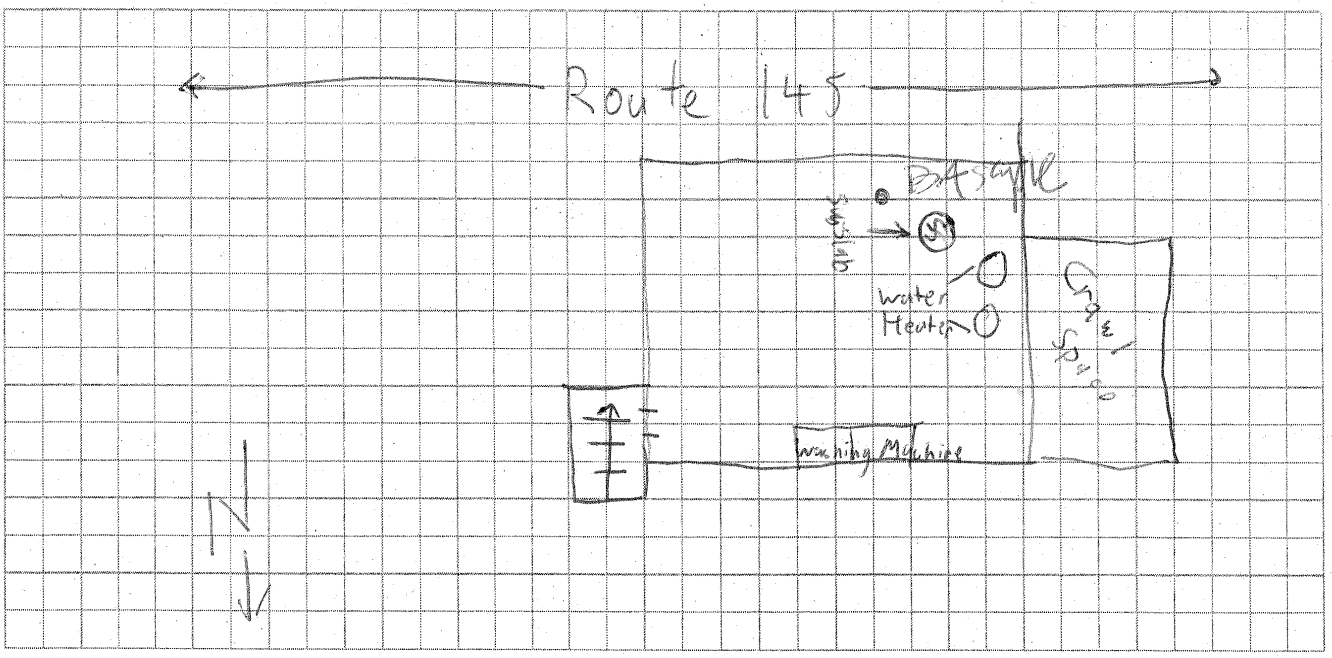
c. Responsibility for costs associated with reimbursement explained? Y / N

d. Relocation package provided and explained to residents? Y / N

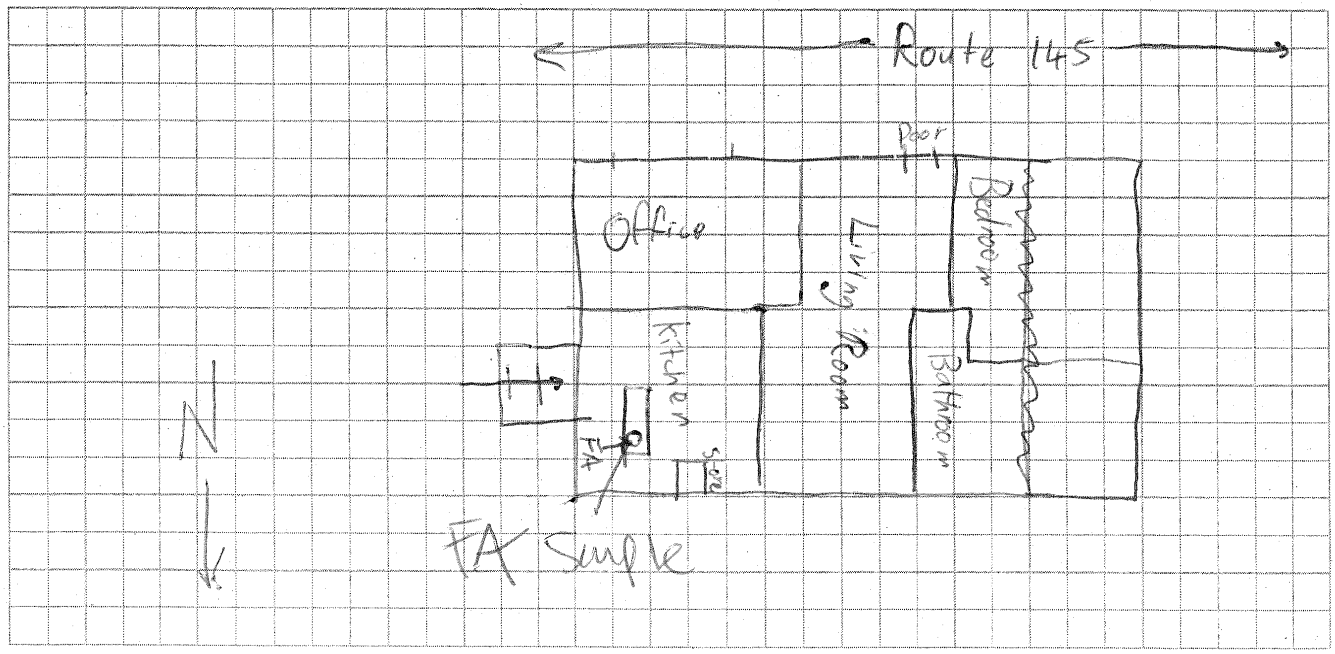
11. FLOOR PLANS

Draw a plan view sketch of the basement and first floor of the building. Indicate air sampling locations, possible indoor air pollution sources and PID meter readings. If the building does not have a basement, please note.

Basement:



First Floor:

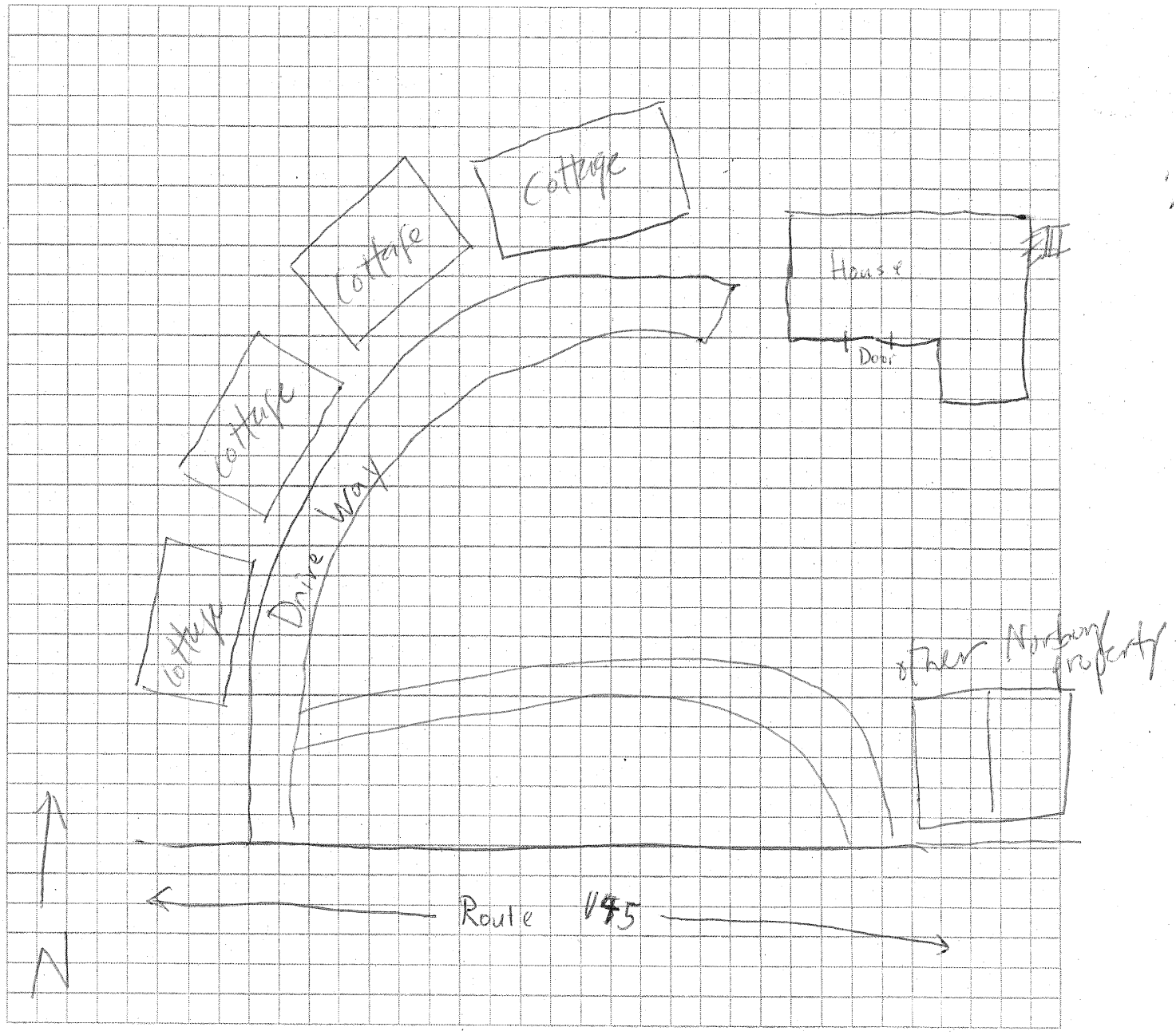


Sample ID: V-9

12. OUTDOOR PLOT

Draw a sketch of the area surrounding the building being sampled. If applicable, provide information on spill locations, potential air contamination sources (industries, gas stations, repair shops, landfills, etc.), outdoor air sampling location(s) and PID meter readings.

Also indicate compass direction, wind direction and speed during sampling, the locations of the well and septic system, if applicable, and a qualifying statement to help locate the site on a topographic map.



Sample ID: V-9

13. PRODUCT INVENTORY FORM

Make & Model of field instrument used: ppb Mini Rae – Pine #6569

List specific products found in the residence that have the potential to affect indoor air quality.

Location	Product Description	Size (units)	Condition*	Chemical Ingredients	Field Instrument Reading (units)	Photo** Y / N
Basement Bkgd = 0	Cabot Polyurethane	1 qt	U	Glycol Ether, n-Methyl Pyrrolidone	0	N
" "	Minwax Wood Finish	1 qt	U	Aliphatic Hydrocarbons	0	" "
" "	d-con Bait Pellets kills Rats/Mice II	(20) 1oz	UO	Brodifacoum	0	" "
" "	OSI RF-140 Roof and Flashing	(6) 10.2oz	UO	Stoddard Solven, Naphthenic Distillate, Petroleum Distillate, Toluene	409 ppb High	" "
" "	PL Polyurethane/ Roof/Flashing Sealant	(2) 10.2oz	UO	N/A	0	" "
" "	DAP Alex Plus Acrylic Silicone Caulk	(3) 10.1oz	UO	Ethylene Glycol	0	" "
" "	GE window and Door Silicone	10.1oz	UO	Methoxypolydimethylsiloxane Dimethylpolysiloxane	0	" "
" "	DAP Concrete and Mortar Filler	10.1oz	UO	Ethylene Glycol	0	" "
" "	OSI 100% Silicone	10.3oz	U	N/A	0	" "
" "	GE Silicone II Sealant	10.1oz	UO	Methoxypolydimethylsiloxane, Dimethyl Polysiloxane,	0	" "
" "	~~UGI Dry Lok Masonry Crack Filler~~	" "	" "	Hexamethyldisiloxane, Methyl-trimethoxy silane	" "	" "
" "	UGI Dry Lok Masonry Crack Filler	10.5oz	U	N/A	39 ppb	" "
" "	Minwax Tung Oil Finish (2)	32oz	U	Aliphatic Hydrocarbons	1003 ppb	" "
" "	Benjamin Moore Floor Patio Enamel	1 gal	U	Ethylene Glycol, Stoddard Solvent	0	" "
" "	Painters Touch Multi-purpose paint	32oz	U	N/A	0	" "
" "	Behr Premium plus Enamel	(2) 1gal (1) 1qt	U	Ethylen Glycol	0	" "
" "	Rust-oleum Protective Enamel	8oz	U	N/A	0	" "
" "	Zinsser DIF Wallpaper Stripper	1 gal	U	Diethylene Glycol, Surfactant	0	" "
" "	Minwax Polyshades Polyurethane	(3) (4) 1qt	U	Aliphatic Hydrocarbons	0	" "

* Describe the condition of the product containers as **Unopened (UO), Used (U),** or **Deteriorated (D)**
** Photographs of the **front and back** of product containers can replace the handwritten list of chemical ingredients. However, the photographs must be of good quality and ingredient labels must be legible.

N/A - Not Applicable

Sample ID: V-9

13. PRODUCT INVENTORY FORM

Make & Model of field instrument used: 6569 - Pine ppb MiniRae

List specific products found in the residence that have the potential to affect indoor air quality.

*done with permisson by BShaw

Location	Product Description	Size (units)	Condition*	Chemical Ingredients	Field Instrument Reading (units) ppb	Photo** Y / N
Basement	Liquid Wrench #1	4oz	U	Petr. Distillates	0	N
↓	ortho Home Defense	(2) 1gal	U	Bi fenthrin	173	
↓	Niggra Spray Starch	22oz	U	N/A	0	
First flor	old English furn. Polish	8oz	40	Petr. Distillates	45	
↓	Decon Rat & mice Killer	2 Bars	40	—	0	
First flor Bathrm	Bissell Air freshner	9oz	U	N/A	181	
↓	Hot Shot-Roach & Ant Killer	12oz	U	Tralomethrin, Dursey Allethrin	140	
↓	Top Crest furn. Polish	14oz	U	Petro. Distilates, Propoxur, Bufen	121	
↓	Wasp & hornet Killer	17.5oz	U	Tetramethrin, Permethrin Piperonyl, butoxide	125	

* Describe the condition of the product containers as **Unopened (UO), Used (U),** or **Deteriorated (D)**
** Photographs of the **front and back** of product containers can replace the handwritten list of chemical ingredients. However, the photographs must be of good quality and ingredient labels must be legible.

Sample ID: V-9

NEW YORK STATE DEPARTMENT OF HEALTH
INDOOR AIR QUALITY QUESTIONNAIRE AND BUILDING INVENTORY
CENTER FOR ENVIRONMENTAL HEALTH

This form must be completed for each residence involved in indoor air testing.

Preparer's Name Brandon AL Shaw Date/Time Prepared 04/03/2007 @ 1335

Preparer's Affiliation MACTEC - Portland, ME Phone No. 207 7755401

Purpose of Investigation Soil Vapor Intrusion Investigation, Site # 42007 * Becker Electronics

1. OCCUPANT:

Interviewed: Y / (N)

Last Name: _____ First Name: _____

Address: _____ House is Vacant

County: _____

Home Phone: _____ Office Phone: _____

Number of Occupants/persons at this location 0 Age of Occupants N/A

2. OWNER OR LANDLORD: (Check if same as occupant ___)

Interviewed: Y (N)

Last Name: Norbury First Name: Guy

Address: 2146 Route 145, East Durham, NY

County: Greene

Home Phone: 518 634 7726 Office Phone: _____

3. BUILDING CHARACTERISTICS

Type of Building: (Circle appropriate response)

(Residential)	School	Commercial/Multi-use
~~Industrial~~	Church	Other: _____

Sample ID: V-8

If the property is residential, type? (Circle appropriate response)

Ranch	2-Family	3-Family
Raised Ranch	Split Level	Colonial
Cape Cod	Contemporary	Mobile Home
Duplex	Apartment House	Townhouses/Condos
Modular	Log Home	Other:_____

unable to view other unit or upstairs in property.

If multiple units, how many? 2

If the property is commercial, type?

Business Type(s) _____

Does it include residences (i.e., multi-use)? Y / N If yes, how many? _____

Other characteristics:

Number of floors 2 Building age unknown

Is the building insulated? (Y) / N How air tight? Tight / Average / (Not Tight)

- basement is slightly open to outside → in respect to the crawl space

4. AIRFLOW

Use air current tubes or tracer smoke to evaluate airflow patterns and qualitatively describe:

Airflow between floors

Airflow near source

Outdoor air infiltration

Infiltration into air ducts

Sample ID: V-8

5. **BASEMENT AND CONSTRUCTION CHARACTERISTICS** (Circle all that apply)

a. Above grade construction:	wood frame	concrete	stone	brick
b. Basement type:	full	crawlspace	slab	other _____
c. Basement floor:	concrete	dirt	stone	other ↓
d. Basement floor:	uncovered	covered	covered with wood chips & stones	
e. Concrete floor:	unsealed	sealed	sealed with _____	
f. Foundation walls:	poured	block	stone	other _____
g. Foundation walls:	unsealed	sealed	sealed with whitepaint-like material	
h. The basement is:	wet	damp	dry	moldy
i. The basement is:	finished	unfinished	partially finished	
j. Sump present?	Y / N			
k. Water in sump?	Y / N / not applicable			

Basement/Lowest level depth below grade: 4 (feet)

Identify potential soil vapor entry points and approximate size (e.g., cracks, utility ports, drains)

basement floor is open to earth; foundation walls are open to outside w/ 1"-3" cracks

6. **HEATING, VENTING and AIR CONDITIONING** (Circle all that apply)

Type of heating system(s) used in this building: (circle all that apply – note primary)

Hot air circulation	Heat pump	Hot water baseboard	
Space Heaters	Stream radiation	Radiant floor	
Electric baseboard	Wood stove	Outdoor wood boiler	Other _____

The primary type of fuel used is:

Natural Gas	Fuel Oil	Kerosene
Electric	Propane	Solar
Wood	Coal	

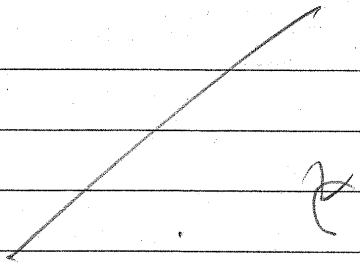
Domestic hot water tank fueled by: propane / Gas

Boiler/furnace located in:	Basement	Outdoors	Main Floor	Other _____
Air conditioning:	Central Air	Window units	Open Windows	None

Sample ID: V-8

Are there air distribution ducts present? Y / (N)

Describe the supply and cold air return ductwork, and its condition where visible, including whether there is a cold air return and the tightness of duct joints. Indicate the locations on the floor plan diagram.



7. OCCUPANCY

Is basement/lowest level occupied? Full-time Occasionally Seldom (Almost Never)

Level	**General Use of Each Floor (e.g., familyroom, bedroom, laundry, workshop, storage)**
Basement	storage - crawl space
1st Floor	living area - vacant; kitchen, bathroom
2nd Floor	living area - vacant → in other property so we could not see it
3rd Floor	
4th Floor	

8. FACTORS THAT MAY INFLUENCE INDOOR AIR QUALITY

a. Is there an attached garage? Y (N)

b. Does the garage have a separate heating unit? Y / N / (NA)

c. Are petroleum-powered machines or vehicles stored in the garage (e.g., lawnmower, atv, car) Y / N / (NA) Please specify_____

d. Has the building ever had a fire? Y / N When? unknown

e. Is a kerosene or unvented gas space heater present? Y / (N) Where?_____

f. Is there a workshop or hobby/craft area? Y / (N) Where & Type?_____

g. Is there smoking in the building? Y / (N) How frequently?_____

h. Have cleaning products been used recently? Y / (N) When & Type?_____

i. Have cosmetic products been used recently? Y / (N) When & Type?_____

j. Has painting/staining been done in the last 6 months? Y (N) Where & When? _____

k. Is there new carpet, drapes or other textiles? Y / (N) Where & When? _____

l. Have air fresheners been used recently? Y / (N) When & Type? _____

m. Is there a kitchen exhaust fan? Y / (N) If yes, where vented? _____

n. Is there a bathroom exhaust fan? (Y) / N If yes, where vented? _____

o. Is there a clothes dryer? Y / (N) If yes, is it vented outside? Y / N

p. Has there been a pesticide application? Y / N When & Type? Unknown

Are there odors in the building? Y (N)
If yes, please describe: _____

Do any of the building occupants use solvents at work? Y / (N)
(e.g., chemical manufacturing or laboratory, auto mechanic or auto body shop, painting, fuel oil delivery, boiler mechanic, pesticide application, cosmetologist

If yes, what types of solvents are used? N/A

If yes, are their clothes washed at work? Y / (N)

Do any of the building occupants regularly use or work at a dry-cleaning service? (Circle appropriate response)

Yes, use dry-cleaning regularly (weekly) (No)
Yes, use dry-cleaning infrequently (monthly or less) Unknown
Yes, work at a dry-cleaning service

Is there a radon mitigation system for the building/structure? Y / (N) Date of Installation: _____
Is the system active or passive? Active/Passive

9. WATER AND SEWAGE Assumed (5)

Water Supply:	Public Water	(Drilled Well)	Driven Well	Dug Well	Other: _____
Sewage Disposal:	Public Sewer	(Septic Tank)	Leach Field	Dry Well	Other: _____

10. RELOCATION INFORMATION (for oil spill residential emergency)

a. Provide reasons why relocation is recommended: _____

b. Residents choose to: remain in home relocate to friends/family relocate to hotel/motel

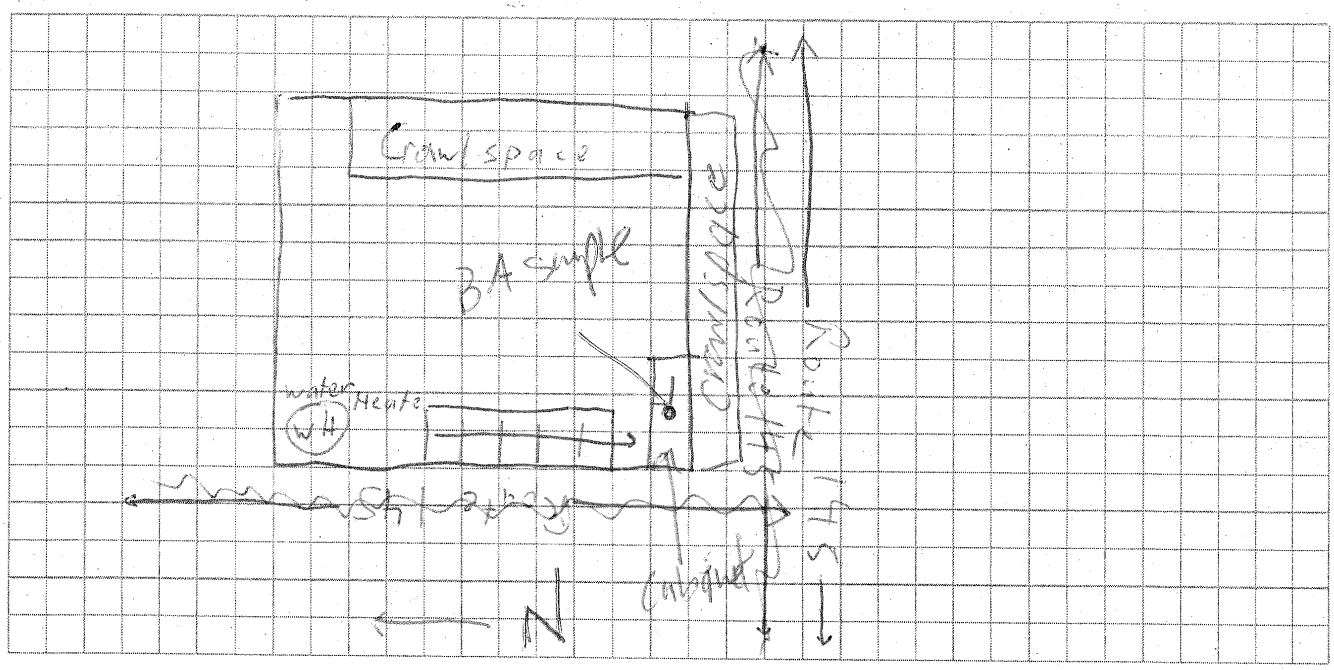
c. Responsibility for costs associated with reimbursement explained? Y / N

d. Relocation package provided and explained to residents? Y / N

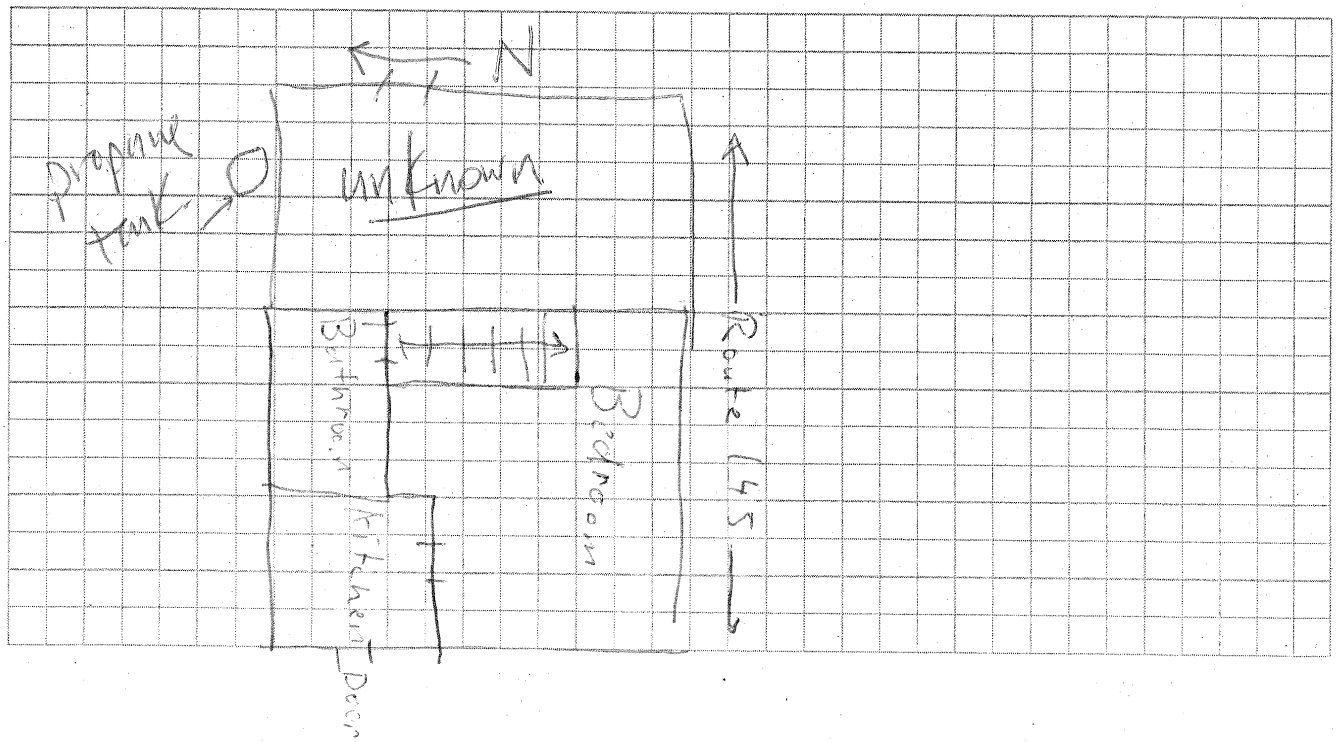
11. FLOOR PLANS

Draw a plan view sketch of the basement and first floor of the building. Indicate air sampling locations, possible indoor air pollution sources and PID meter readings. If the building does not have a basement, please note.

Basement:



First Floor:

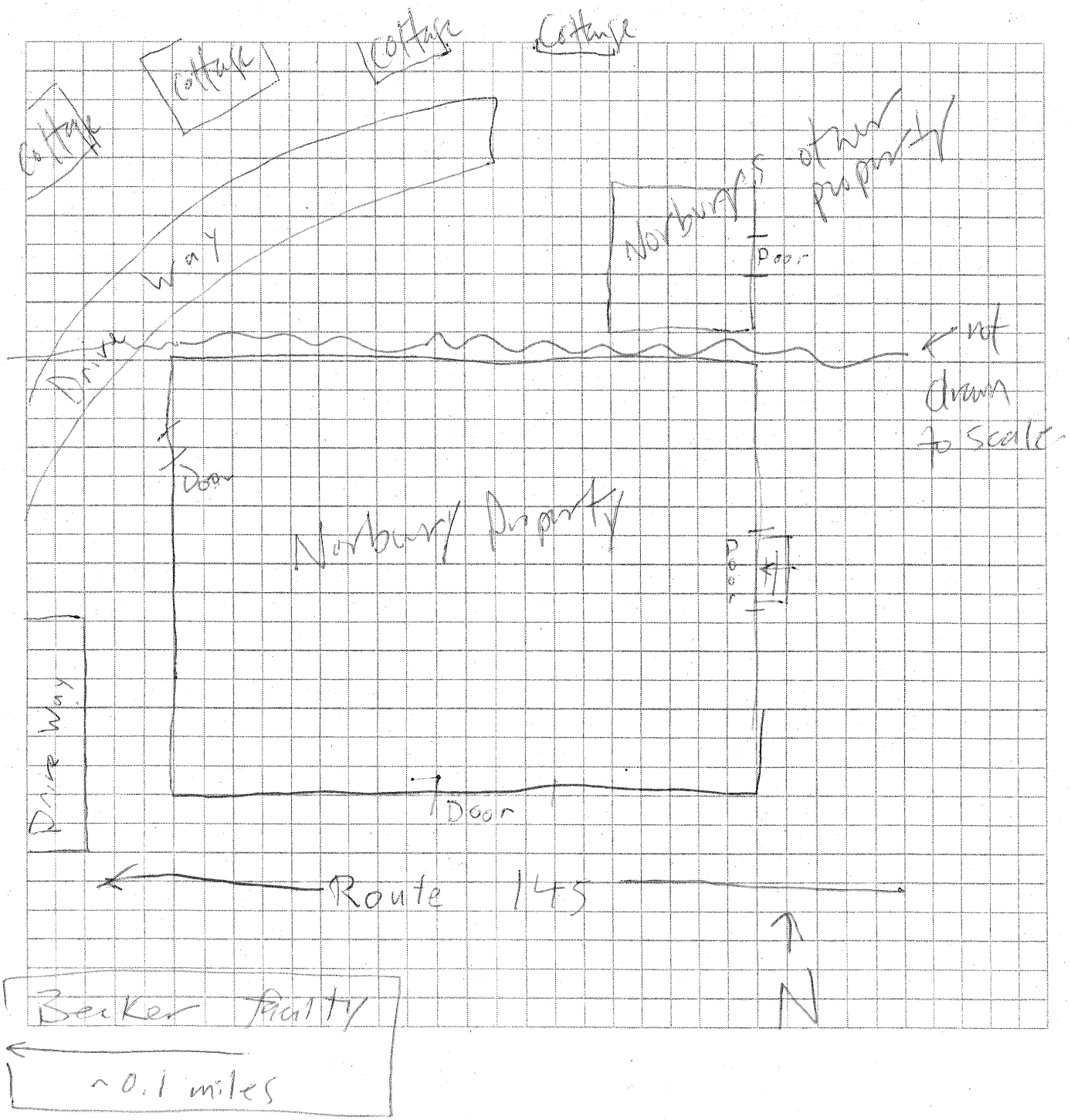


Sample ID: V-8

12. OUTDOOR PLOT

Draw a sketch of the area surrounding the building being sampled. If applicable, provide information on spill locations, potential air contamination sources (industries, gas stations, repair shops, landfills, etc.), outdoor air sampling location(s) and PID meter readings.

Also indicate compass direction, wind direction and speed during sampling, the locations of the well and septic system, if applicable, and a qualifying statement to help locate the site on a topographic map.



Sample ID: V-8

13. PRODUCT INVENTORY FORM

Make & Model of field instrument used: ppb RAE plus – Pine #6569

List specific products found in the residence that have the potential to affect indoor air quality.

Location	Product Description	Size (units)	Condition*	Chemical Ingredients	Field Instrument Reading (units)	Photo ** Y / N
Basement BKgd=0	eligable gallon of paint	1gal	D	eligable	0	N
First Floor BKgd=0	N/A			N/A		" "

* Describe the condition of the product containers as **Unopened (UO), Used (U),** or **Deteriorated (D)**
** Photographs of the **front and back** of product containers can replace the handwritten list of chemical ingredients. However, the photographs must be of good quality and ingredient labels must be legible.

Sample ID: V-8

ATTACHMENT D:

SITE PHOTOGRAPHS

BECKER ELECTRONICS SITE PHOTOGRAPHS

Site Property – View Looking Southwest

Extraction Well Pair – Old Chemical Storage Footprint.

BECKER ELECTRONICS SITE PHOTOGRAPHS

Treatment Building – View Looking Southwest.

Sub-Slab Summa Can Setup – Sample V-1.

BECKER ELECTRONICS SITE PHOTOGRAPHS

Indoor Air Sampling at V-9.

Basement Air Duplicate Sampling Setup at V-2.

ATTACHMENT E:

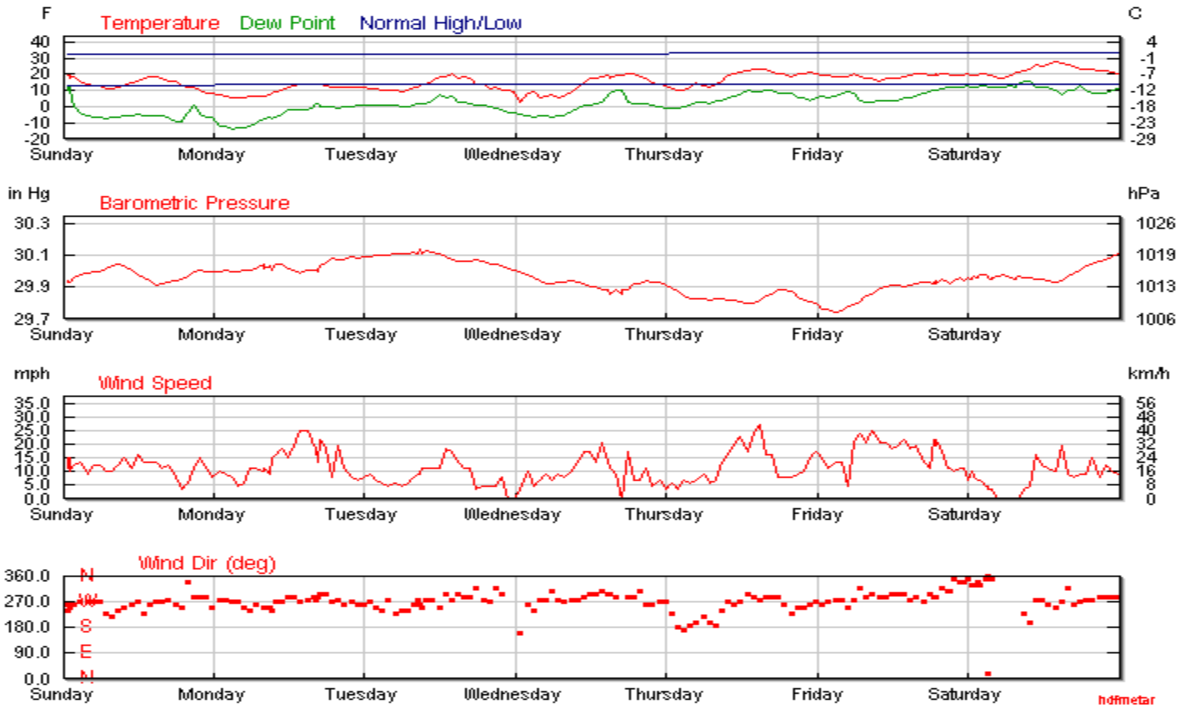
WEATHER

wunderground.com

History for Albany, NY
on Monday, February 5, 2007

February 5, 2007
Weekly Summary

Temperature	**Max**	**Avg**	**Min**	
Max Temperature	**29** °F / **-1** °C	**21** °F / **-6** °C	**14** °F / **-10** °C	
Mean Temperature	**23** °F / **-5** °C	**15** °F / **-9** °C	**9** °F / **-12** °C	
Min Temperature	**16** °F / **-8** °C	**9** °F / **-12** °C	**3** °F / **-16** °C	
Degree Days	**Max**	**Avg**	**Min**	**Sum**
Heating Degree Days (base 65)	**56**	**50**	**42**	**348**
Cooling Degree Days (base 65)	**0**	**0**	**0**	**0**
Growing Degree Days (base 50)	**0**	**0**	**0**	**0**
Dew Point	**Max**	**Avg**	**Min**	
Dew Point	**16** °F / **-8** °C	**2** °F / **-16** °C	**-14** °F / **-25** °C	
Precipitation	**Max**	**Avg**	**Min**	**Sum**
Precipitation	**0.00** in / **0.0** cm	**0.00** in / **0.0** cm	**0.00** in / **0.0** cm	**0.00** in / **0.00** cm
Snowdepth	**2.0** in / **5** cm	**1.2** in / **3** cm	**1.0** in / **3** cm	-
Wind	**Max**	**Avg**	**Min**	
Wind	**33** mph / **53** km/h	**11** mph / **18** km/h	**0** mph / **0** km/h	
Gust Wind	**45** mph / **72** km/h	**25** mph / **41** km/h	**16** mph / **26** km/h	
Pressure	**Max**	**Avg**	**Min**	
Pressure	**30.14** in / **1021** hPa	**29.96** in / **1014** hPa	**29.74** in / **1007** hPa	



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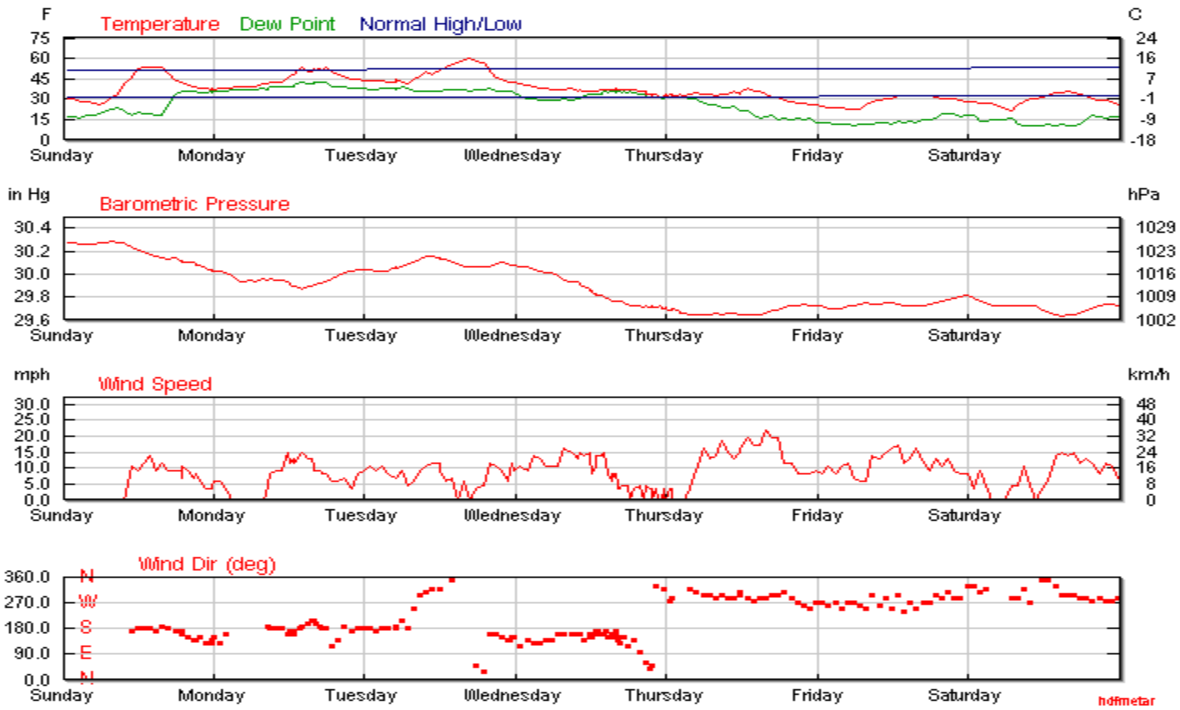
Date	Temperature (°F)			Dew Point (°F)			Humidity (%)			Pressure (in)			Visibility (mi)			Wind (mph)		Gust Speed (mph)	Precipitation (in)	Events
	high	avg	low	high	avg	low	high	avg	low	high	avg	low	high	avg	low	high	avg	high	sum	
February																				
4	20	14	7	13	0	-9	61	47	33	30.04	29.98	29.91	10	9	2	25	12	33	T	Snow
5	14	9	4	1	-8	-14	61	52	42	30.09	30.01	29.99	10	10	10	32	13	43	0.00	
6	20	14	8	7	1	-4	69	59	49	30.14	30.09	30.01	10	10	10	23	8	28	T	
7	20	12	3	10	1	-7	69	57	45	30.00	29.94	29.86	10	9	5	24	10	33	T	Snow
8	24	16	8	10	3	-1	67	56	45	29.89	29.85	29.80	10	10	10	32	13	41	T	
9	21	19	16	13	6	3	74	63	51	29.96	29.85	29.74	10	10	9	33	16	45	T	Snow
10	29	23	16	16	12	7	80	61	42	30.11	29.96	29.93	10	9	5	22	8	29	T	Snow

wunderground.com

History for Albany, NY
on Monday, April 2, 2007

April 2, 2007
Weekly Summary

Temperature	**Max**	**Avg**	**Min**	
Max Temperature	**60** °F / **15** °C	**45** °F / **7** °C	**34** °F / **1** °C	
Mean Temperature	**50** °F / **10** °C	**38** °F / **3** °C	**29** °F / **-1** °C	
Min Temperature	**40** °F / **4** °C	**29** °F / **-1** °C	**22** °F / **-5** °C	
Degree Days	**Max**	**Avg**	**Min**	**Sum**
Heating Degree Days (base 65)	**36**	**27**	**15**	**191**
Cooling Degree Days (base 65)	**0**	**0**	**0**	**0**
Growing Degree Days (base 50)	**0**	**0**	**0**	**0**
Dew Point	**Max**	**Avg**	**Min**	
Dew Point	**43** °F / **6** °C	**26** °F / **-3** °C	**10** °F / **-12** °C	
Precipitation	**Max**	**Avg**	**Min**	**Sum**
Precipitation	**1.02** in / **2.6** cm	**0.26** in / **0.6** cm	**0.00** in / **0.0** cm	**1.27** in / **3.23** cm
Snowdepth	**0.0** in / **0** cm	**0.0** in / **0** cm	**0.0** in / **0** cm	-
Wind	**Max**	**Avg**	**Min**	
Wind	**28** mph / **45** km/h	**8** mph / **13** km/h	**0** mph / **0** km/h	
Gust Wind	**37** mph / **60** km/h	**20** mph / **33** km/h	**16** mph / **26** km/h	
Pressure	**Max**	**Avg**	**Min**	
Pressure	**30.29** in / **1026** hPa	**29.89** in / **1012** hPa	**29.63** in / **1003** hPa	



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Date	Temperature (°F)			Dew Point (°F)			Humidity (%)			Pressure (in)			Visibility (mi)			Wind (mph)		Gust Speed (mph)	Precipitation (in)	Events
	high	avg	low	high	avg	low	high	avg	low	high	avg	low	high	avg	low	high	avg	high	sum	
April																				
1	54	40	26	36	25	16	92	58	24	30.29	30.18	30.03	10	9	6	18	5	23	0.24	Rain
2	53	46	38	43	36	36	100	83	66	30.04	29.98	29.87	10	9	3	17	7	23	T	Rain
3	60	50	40	39	37	35	89	64	39	30.16	30.09	30.03	10	10	9	16	8	22	0.00	
4	41	37	32	36	30	29	100	85	70	30.07	29.88	29.70	10	4	1	20	8	29	1.02	Rain , Snow
5	39	32	25	32	26	13	96	70	43	29.74	29.67	29.64	10	8	2	28	12	37	0.01	Snow
6	34	29	23	19	13	11	65	53	41	29.81	29.71	29.70	10	10	9	21	11	26	T	
7	37	30	22	18	14	10	77	56	35	29.79	29.71	29.63	10	10	10	18	8	25	0.00	

ATTACHMENT F:

DUSR

DATA USABILITY SUMMARY REPORT
2007 SAMPLING EVENT
BECKER ELECTRONICS
EAST DURHAM, NEW YORK

1.0 INTRODUCTION:

Groundwater and soil vapor samples were collected at the Becker Electronics site in February of 2007 and submitted for off-site laboratory analyses. Groundwater samples were analyzed by Katahdin Analytical Services located in Scarborough, ME. Soil vapor samples were analyzed by Air Toxics located in Folsom, CA. A listing of samples included in this investigation is presented in Table 1. A summary of the analytical results is presented in Attachment F, Tables 1.2-1.3. Samples were analyzed for the following parameters:

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- Water: VOCs by EPA Method SW846 8260B
- Air: VOCs by EPA Method TO-15

Deliverables for the off-site laboratory analyses included a Category B deliverable as defined in the New York State Department of Environmental Conservation (NYSDEC) Analytical Services Protocols (NYSDEC, 2000).

A project chemist review was completed based on NYSDEC Division of Environmental Remediation guidance for Data Usability Summary Reports (NYSDEC, 2002). Laboratory QC limits were used during the data evaluation unless noted otherwise. The project chemist review included evaluations of sample collection, data package completeness, holding times, QC data (blanks, instrument calibrations, duplicates, surrogate recovery, and spike recovery), data transcription, electronic data reporting, calculations, and data qualification. With the exception of the items discussed below, results are interpreted to be usable as reported by the laboratory. The following laboratory or data validation qualifiers are used in the final data presentation.

U = target analyte is not detected at the reported detection limit
J = concentration is estimated
UJ = target analyte is not detected at the reported detection limit and is estimated
E = Detection exceeded the upper calibration range of the instrument

Results are interpreted to be usable as reported by the laboratory unless discussed in the following sections.

2.0 AIR - VOLATILE ORGANIC COMPOUNDS

Initial Calibration

The initial calibration had a relative standard deviation that was greater than the control limit of 30 for methyl-tert-butyl ether (32). The results for MTBE in samples BEGV00110, BEGV00305, BEGV00509, BEGV00605, and BEGV00807 were qualified as estimated (J/UJ).

Laboratory Duplicates

The laboratory duplicate associated with sample BEGV00110 had a relative percent difference between the parent sample and duplicate that was greater than the control limit of 30 for 2-butanone (38). The result for 2-butanone in sample BEGV00110 was positive and was qualified as estimated (J).

Miscellaneous

Sample BEGV00807 had a detection for 1,1,1-trichloroethane that was greater than the calibration curve and the result was lab qualified with an "E." The sample was not reanalyzed due to the limited volume of sample and was qualified as estimated (J) during validation.

Samples BEGV00305 and BEGV00509 had final pressure readings of 0.0 inches of mercury when received by the laboratory. When the final pressure of the summa canister is zero, the sample canister finished filling before the end of the proposed sampling interval. Based on professional judgment the results for these samples were qualified as estimated (J/UJ).

3.0 WATER SAMPLES - VOLATILE ORGANIC COMPOUNDS

No data quality issues were identified and groundwater results are interpreted to be usable as reported by the laboratory.

TABLE 1
Sample Summary

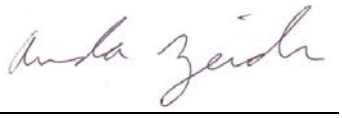
SDG	Field Sample ID	Lab Sample ID	Method	Sample Date	Matrix	QC Code
SA0587	BEGW005	SA0587-3	SW8260	2/6/2007	GW	FS
SA0587	BEGW006	SA0587-4	SW8260	2/6/2007	GW	FS
SA0587	BEGW008	SA0587-1	SW8260	2/5/2007	GW	FS
SA0587	BEGW008DUP	SA0587-2	SW8260	2/5/2007	GW	FD
SA0587	BEMW004	SA0587-5	SW8260	2/6/2007	GW	FS
SA0587	BETB001	SA0587-6	SW8260	2/8/2007	BW	TB
0702222	BEGV00110	0702222-01B	TO15	2/7/2007	AIR	FS
0702222	BEGV00305	0702222-02B	TO15	2/7/2007	AIR	FS
0702222	BEGV00509	0702222-03B	TO15	2/7/2007	AIR	FS
0702222	BEGV00605	0702222-04B	TO15	2/7/2007	AIR	FS
0702222	BEGV00807	0702222-05B	TO15	2/7/2007	AIR	FS

Reference:

New York State Department of Environmental Conservation (NYSDEC), 2000. "Analytical Services Protocols"; June 2000.

New York State Department of Environmental Conservation (NYSDEC), 2002. "Technical Guidance for Site Investigation and Remediation-Appendix 2B"; Draft DER-10; Division of Environmental Remediation; December 2002.

Data Validator: Amanda Zeidler

Signature  Date April 17, 2007

Quality Assurance Officer: Chris Ricardi, NRCC-EAC

Date: 5/10/07

Attachment F
Table 1.1: Groundwater VOC Results

Lab Sample Id	SA0587-1		SA0587-2		SA0587-3		SA0587-4		SA0587-5		SA0587-6	
Lab Sample Delivery Group	SA0587		SA0587		SA0587		SA0587		SA0587		SA0587	
Loc Name	GW-008		GW-008		GW-005		GW-006		MW-004		QC	
Field Sample Id	BEGW008		BEGW008DUP		BEGW005		BEGW006		BEMW004		BETB001	
Field Sample Date	2/5/2007		2/5/2007		2/6/2007		2/6/2007		2/6/2007		2/8/2007	
Qc Code	FS		FD		FS		FS		FS		TB	
Param Name	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**
1,1,1,2-Tetrachloroethane	1	U	1	U	1	U	1	U	1	U	1	U
1,1,1-Trichloroethane	7		7		5		10		10		1	U
1,1,2,2-Tetrachloroethane	1	U	1	U	1	U	1	U	1	U	1	U
1,1,2-Trichloroethane	1	U	1	U	1	U	1	U	1	U	1	U
1,1-Dichloroethane	4		4		5		6		2		1	U
1,1-Dichloroethene	1	U	0.7	J	1	J	1	U	2		1	U
1,1-Dichloropropene	1	U	1	U	1	U	1	U	1	U	1	U
1,2,3-Trichlorobenzene	1	U	1	U	1	U	1	U	1	U	1	U
1,2,3-Trichloropropane	1	U	1	U	1	U	1	U	1	U	1	U
1,2,4-Trichlorobenzene	1	U	1	U	1	U	1	U	1	U	1	U
1,2,4-Trimethylbenzene	1	U	1	U	1	U	1	U	1	U	1	U
1,2-Dibromo-3-chloropropane	1	U	1	U	1	U	1	U	1	U	1	U
1,2-Dibromoethane	1	U	1	U	1	U	1	U	1	U	1	U
1,2-Dichlorobenzene	1	U	1	U	1	U	1	U	1	U	1	U
1,2-Dichloroethane	1	U	1	U	1	U	1	U	1	U	1	U
1,2-Dichloroethene (total)	2	U	2	U	3		2	U	0.8	J	2	U
1,2-Dichloropropane	1	U	1	U	1	U	1	U	1	U	1	U
1,3,5-Trichlorobenzene	1	U	1	U	1	U	1	U	1	U	1	U
1,3,5-Trimethylbenzene	1	U	1	U	1	U	1	U	1	U	1	U
1,3-Dichlorobenzene	1	U	1	U	1	U	1	U	1	U	1	U
1,3-Dichloropropane	1	U	1	U	1	U	1	U	1	U	1	U
1,4-Dichlorobenzene	1	U	1	U	1	U	1	U	1	U	1	U
2,2-Dichloropropane	1	U	1	U	1	U	1	U	1	U	1	U
2-Butanone	5	U	5	U	5	U	5	U	5	U	5	U
2-Chlorotoluene	1	U	1	U	1	U	1	U	1	U	1	U
2-Hexanone	5	U	5	U	5	U	5	U	5	U	5	U
4-Chlorotoluene	1	U	1	U	1	U	1	U	1	U	1	U
4-iso-Propyltoluene	1	U	1	U	1	U	1	U	1	U	1	U
4-Methyl-2-pentanone	5	U	5	U	5	U	5	U	5	U	5	U
Acetone	5	U	9		5	U	10		8		4	J
Benzene	1	U	1	U	1	U	1	U	1	U	1	U
Bromobenzene	1	U	1	U	1	U	1	U	1	U	1	U
Bromochloromethane	1	U	1	U	1	U	1	U	1	U	1	U
Bromodichloromethane	1	U	1	U	1	U	1	U	1	U	1	U

Attachment F
Table 1.1: Groundwater VOC Results

Lab Sample Id	SA0587-1		SA0587-2		SA0587-3		SA0587-4		SA0587-5		SA0587-6	
Lab Sample Delivery Group	SA0587		SA0587		SA0587		SA0587		SA0587		SA0587	
Loc Name	GW-008		GW-008		GW-005		GW-006		MW-004		QC	
Field Sample Id	BEGW008		BEGW008DUP		BEGW005		BEGW006		BEMW004		BETB001	
Field Sample Date	2/5/2007		2/5/2007		2/6/2007		2/6/2007		2/6/2007		2/8/2007	
Qc Code	FS		FD		FS		FS		FS		TB	
Param Name	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**
Bromoform	1	U	1	U	1	U	1	U	1	U	1	U
Bromomethane	2	U	2	U	2	U	2	U	2	U	2	U
Carbon disulfide	1	U	1	U	1	U	1	U	1	U	1	U
Carbon tetrachloride	1	U	1	U	1	U	1	U	1	U	1	U
Chlorobenzene	1	U	1	U	1	U	1	U	1	U	1	U
Chlorodibromomethane	1	U	1	U	1	U	1	U	1	U	1	U
Chloroethane	2	U	2	U	2	U	2	U	2	U	2	U
Chloroform	1	U	1	U	1	U	1	U	1	U	1	U
Chloromethane	2	U	2	U	2	U	2	U	2	U	2	U
Cis-1,2-Dichloroethene	1	U	1	U	3		1	U	0.8	J	1	U
cis-1,3-Dichloropropene	1	U	1	U	1	U	1	U	1	U	1	U
Dibromomethane	1	U	1	U	1	U	1	U	1	U	1	U
Dichlorodifluoromethane	2	U	2	U	2	U	2	U	2	U	2	U
Diethyl ether	1	U	1	U	1	U	1	U	1	U	1	U
Ethyl benzene	1	U	1	U	1	U	1	U	1	U	1	U
Hexachlorobutadiene	1	U	1	U	1	U	1	U	1	U	1	U
Isopropylbenzene	1	U	1	U	1	U	1	U	1	U	1	U
Methyl Tertbutyl Ether	1	U	1	U	1	U	1	U	1	U	1	U
Methylene chloride	5	U	5	U	5	U	5	U	5	U	5	U
n-Butylbenzene	1	U	1	U	1	U	1	U	1	U	1	U
Naphthalene	1	U	1	U	1	U	1	U	1	U	1	U
o-Xylene	1	U	1	U	1	U	1	U	1	U	1	U
Propylbenzene	1	U	1	U	1	U	1	U	1	U	1	U
sec-Butylbenzene	1	U	1	U	1	U	1	U	1	U	1	U
Styrene	1	U	1	U	1	U	1	U	1	U	1	U
tert-Butylbenzene	1	U	1	U	1	U	1	U	1	U	1	U
Tetrachloroethene	1	U	1	U	0.7	J	1	U	1	U	1	U
Tetrahydrofuran	5	U	5	U	5	U	5	U	5	U	5	U
Toluene	1	U	1	U	1	U	1	U	1	U	1	U
trans-1,2-Dichloroethene	1	U	1	U	1	U	1	U	1	U	1	U
trans-1,3-Dichloropropene	1	U	1	U	1	U	1	U	1	U	1	U
Trichloroethene	0.9	J	0.8	J	4		1	U	2		1	U
Trichlorofluoromethane	2	U	2	U	2	U	2	U	2	U	2	U
Vinyl acetate	1	U	1	U	1	U	1	U	1	U	1	U

Attachment F
Table 1.1: Groundwater VOC Results

Lab Sample Id	**SA0587-1**		**SA0587-2**		**SA0587-3**		**SA0587-4**		**SA0587-5**		**SA0587-6**	
Lab Sample Delivery Group	**SA0587**		**SA0587**		**SA0587**		**SA0587**		**SA0587**		**SA0587**	
Loc Name	**GW-008**		**GW-008**		**GW-005**		**GW-006**		**MW-004**		**QC**	
Field Sample Id	**BEGW008**		**BEGW008DUP**		**BEGW005**		**BEGW006**		**BEMW004**		**BETB001**	
Field Sample Date	**2/5/2007**		**2/5/2007**		**2/6/2007**		**2/6/2007**		**2/6/2007**		**2/8/2007**	
Qc Code	**FS**		**FD**		**FS**		**FS**		**FS**		**TB**	
Param Name	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**
Vinyl chloride	2	U	2	U	2	U	2	U	2	U	2	U
Xylene, m/p	2	U	2	U	2	U	2	U	2	U	2	U
Xylenes, Total	3	U	3	U	3	U	3	U	3	U	3	U

Notes:
Results in microgram per liter (µg/L)
Samples analyzed for VOCs by EPA Method SW846 8260B
QC Code:
FS = Field Sample
FD = Field Duplicate
TB = Trip Blank
Qualifiers:
U = Not detected at a concentration greater than the RL
J = Estimated value

Attachment F
Table 1.2: Soil Vapor VOC Results

Lab Sample Id	0702222-01A		0702222-02A		0702222-03A		0702222-04A		0702222-05A	
Lab Sample Delivery Group	702222		702222		702222		702222		702222	
Loc Name	GV-001		GV-003		GV-005		GV-006		GV-008	
Field Sample Id	BEGV00110		BEGV00305		BEGV00509		BEGV00605		BEGV00807	
Field Sample Date	2/7/2007		2/7/2007		2/7/2007		2/7/2007		2/7/2007	
Qc Code	FS		FS		FS		FS		FS	
Param Name	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**
1,1,1-Trichloroethane	120		0.36	UJ	16	J	3.5		160	EJ
1,1,2,2-Tetrachloroethane	0.51	U	0.46	UJ	0.46	UJ	0.47	U	0.49	U
1,1,2-Trichloroethane	0.41	U	0.36	UJ	0.36	UJ	0.37	U	0.39	U
1,1-Dichloroethane	0.94		0.54	UJ	3.2	J	0.55	U	14	
1,1-Dichloroethene	3.8		0.53	UJ	1.1	J	0.54	U	11	
1,2,4-Trimethylbenzene	0.73	U	0.66	UJ	0.66	UJ	0.67	U	0.71	U
1,2-Dichloroethane	0.6	U	0.54	UJ	0.54	UJ	0.55	U	0.58	U
1,2-Dichloropropane	0.69	U	0.62	UJ	0.62	UJ	0.63	U	0.66	U
1,3,5-Trimethylbenzene	0.73	U	0.66	UJ	0.66	UJ	0.67	U	0.71	U
1,4-Dioxane	0.54	U	0.48	UJ	0.48	UJ	0.49	U	0.52	U
2-Butanone	20	J	9.8	J	6.2	J	5.6		5.4	
4-Ethyltoluene	0.73	U	0.66	UJ	0.66	UJ	0.67	U	0.71	U
4-Methyl-2-pentanone	3.8		0.55	UJ	0.55	UJ	0.56	U	0.59	U
Benzene	17		10	J	2.2	J	17		5.5	
Bromomethane	0.58	U	0.52	UJ	0.52	UJ	0.53	U	0.56	U
Butadiene, 1,3-	2.7		0.3	UJ	0.88	J	2.7		0.32	U
Chlorobenzene	0.68	U	0.62	UJ	0.62	UJ	0.63	U	0.66	U
Chloroethane	0.39	U	0.35	UJ	0.35	UJ	0.36	U	0.38	U
Chloroform	1.5		0.65	J	0.83	J	0.66	U	1.2	
Chloromethane	0.31	U	0.28	UJ	0.28	UJ	0.28	U	0.3	U
Cis-1,2-Dichloroethene	0.59	U	0.53	UJ	0.62	J	0.54	U	0.57	U
cis-1,3-Dichloropropene	0.68	U	0.61	UJ	0.61	UJ	0.62	U	0.65	U
Cyclohexane	2.5		0.6	J	0.46	UJ	1.6		2.3	
Ethyl benzene	4.8		0.58	UJ	0.58	UJ	1		0.62	U
Heptane	2.6		0.94	J	1.4	J	3.3		1.3	
Hexane	4.5		2.3	J	3.7	J	6		1.8	
Isopropylbenzene	0.73	U	0.66	UJ	0.66	UJ	0.67	U	0.71	U
Methyl Tertbutyl Ether	4	J	3.2	J	0.48	UJ	0.79	J	1.4	J
o-Xylene	2.8		0.58	UJ	0.58	UJ	0.73		0.62	U
Propylbenzene	0.73	U	0.66	UJ	0.66	UJ	0.67	U	0.71	U
Styrene	0.63	U	0.57	UJ	0.57	UJ	0.58	U	0.61	U
Tetrachloroethene	54		1.8	J	2.5	J	12		5.6	
Toluene	96		7	J	5.1	J	33		19	
trans-1,2-Dichloroethene	0.59	U	0.53	UJ	0.53	UJ	0.54	U	0.57	U

Attachment F
Table 1.2: Soil Vapor VOC Results

Lab Sample Id	0702222-01A		0702222-02A		0702222-03A		0702222-04A		0702222-05A	
Lab Sample Delivery Group	702222		702222		702222		702222		702222	
Loc Name	GV-001		GV-003		GV-005		GV-006		GV-008	
Field Sample Id	BEGV00110		BEGV00305		BEGV00509		BEGV00605		BEGV00807	
Field Sample Date	2/7/2007		2/7/2007		2/7/2007		2/7/2007		2/7/2007	
Qc Code	FS		FS		FS		FS		FS	
Param Name	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**
trans-1,3-Dichloropropene	0.68	U	0.61	UJ	0.61	UJ	0.62	U	0.65	U
Trichloroethene	0.76		0.19	J	0.99	J	0.17		1.4	
Vinyl chloride	0.38	U	0.34	UJ	0.34	UJ	0.35	U	0.37	U
Xylene, m/p	11		0.69	J	1.4	J	2.5		1.3	

Notes:
Results in microgram per cubic meter (µg/m3)
Samples analyzed for VOCs by EPA Method TO-15
QC Code:
FS = Field Sample
Qualifiers:
U = Not detected at a concentration greater than the reporting limit
J = Estimated value
E = Result exceeds the upper calibration range of the analytical instrument

DATA USABILITY SUMMARY REPORT
2007 SAMPLING EVENT
BECKER ELECTRONICS
EAST DURHAM, NEW YORK

Introduction:

Fifteen air samples were collected at the Becker Electronics site in April of 2007 and submitted for off-site laboratory analyses. Samples were analyzed by Air Toxics located in Folsom, CA. A listing of samples included in this investigation is presented in Table 1. A summary of the analytical results is presented in Attachment F, Table 1.1. Samples were analyzed for the following parameters:

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- Air: VOCs by EPA Method TO-15

Deliverables for the off-site laboratory analyses included a Category B deliverable as defined in the New York State Department of Environmental Conservation (NYSDEC) Analytical Services Protocols (NYSDEC, 2000).

A project chemist review was completed based on NYSDEC Division of Environmental Remediation guidance for Data Usability Summary Reports (NYSDEC, 2002). Laboratory QC limits were used during the data evaluation unless noted otherwise. The project chemist review included evaluations of sample collection, data package completeness, holding times, QC data (blanks, instrument calibrations, duplicates, surrogate recovery, and spike recovery), data transcription, electronic data reporting, calculations, and data qualification. With the exception of the items discussed below, results are interpreted to be usable as reported by the laboratory. The following laboratory or data validation qualifiers are used in the final data presentation.

U = target analyte is not detected at the reported detection limit
J = concentration is estimated
UJ = target analyte is not detected at the reported detection limit and is estimated

Results are interpreted to be usable as reported by the laboratory unless discussed in the following sections.

Air - Volatile Organic Compounds

Field Duplicates

Sample 420007BA002 and its field duplicate had a relative percent difference that was greater than the control limit of 30 for 2-butanone (53). The results for 2-butanone in samples 420007BA002 and 420007BA002-DUP were qualified as estimated (J).

Continuing Calibration

The continuing calibration verification had percent differences between the initial and continuing calibration response factors that were greater than the control limit of 25 for 1,2-dichloroethane (-29) and 1,1,2,2-tetrachloroethane (-30). The results for these compounds were non-detect in the samples listed below and were qualified as estimated (UJ).

Sample ID	1,2-dichloroethane Final Result/Qualifier	1,1,2,2-tetrachloroethane Final Result/Qualifier
420007SS002	0.79 UJ	0.67 UJ
420007BA002	0.62 UJ	0.52 UJ
420007BA002-DUP	0.69 UJ	0.59 UJ
420007FA002	0.62 UJ	0.52 UJ
420007FA002-DUP	0.63 UJ	0.53 UJ
420007AA002	0.58 UJ	0.49 UJ
420007SS011	0.62 UJ	0.52 UJ
420007BA010	0.58 UJ	0.49 UJ
420007AA010	0.58 UJ	0.49 UJ
420007SS001	0.55 UJ	0.47 UJ

TABLE 1
Sample Summary

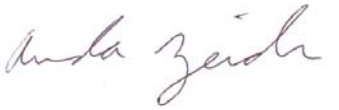
SDG	Field Sample ID	Lab Sample ID	Method	Sample Date	Matrix	QC Code
0704135A	420007SS002	0704135A-01	TO-15	4/2/07	Air	FS
0704135A	420007BA002	0704135A-02	TO-15	4/2/07	Air	FS
0704135A	420007BA002-DUP	0704135A-03	TO-15	4/2/07	Air	FD
0704135A	420007FA002	0704135A-04	TO-15	4/2/07	Air	FS
0704135A	420007FA002-DUP	0704135A-05	TO-15	4/2/07	Air	FD
0704135A	420007AA002	0704135A-06	TO-15	4/2/07	Air	FS
0704135A	420007SS011	0704135A-07	TO-15	4/2/07	Air	FS
0704135A	420007BA010	0704135A-08	TO-15	4/3/07	Air	FS
0704135A	420007AA010	0704135A-09	TO-15	4/3/07	Air	FS
0704135A	420007SS001	0704135A-10	TO-15	4/3/07	Air	FS
0704135B	420007SS009	0704135B-11	TO-15	4/3/07	Air	FS
0704135B	420007BA009	0704135B-12	TO-15	4/3/07	Air	FS
0704135B	420007FA009	0704135B-13	TO-15	4/3/07	Air	FS
0704135B	420007AA009	0704135B-14	TO-15	4/3/07	Air	FS
0704135B	420007BA008	0704135B-15	TO-15	4/3/07	Air	FS

Reference:

New York State Department of Environmental Conservation (NYSDEC), 2000. "Analytical Services Protocols"; June 2000.

New York State Department of Environmental Conservation (NYSDEC), 2002. "Technical Guidance for Site Investigation and Remediation-Appendix 2B"; Draft DER-10; Division of Environmental Remediation; December 2002.

Data Validator: Amanda Zeidler

Signature  Date May 1, 2007

Quality Assurance Officer: Chris Ricardi, NRCC-EAC

Date: 5/10/07

Attachment F
Table 1.3: Air VOC Results

Lab Sample Id	0704135A-01A		0704135A-02A		0704135A-03A		0704135A-04A		0704135A-05A	
Lab Sample Delivery Group	0704135A		0704135A		0704135A		0704135A		0704135A	
Loc Name	SS-002		BA-002		BA-002		FA-002		FA-002	
Field Sample Id	420007SS002		420007BA002		420007BA002-DUP		420007FA002		420007FA002-DUP	
Field Sample Date	4/2/2007		4/2/2007		4/2/2007		4/2/2007		4/2/2007	
Qc Code	FS		FS		FD		FS		FD	
Param Name	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**
1,1,1-Trichloroethane	1.2		0.41	U	0.47	U	0.41	U	0.42	U
1,1,2,2-Tetrachloroethane	0.67	UJ	0.52	UJ	0.59	UJ	0.52	UJ	0.53	UJ
1,1,2-Trichloroethane	0.53	U	0.41	U	0.47	U	0.41	U	0.42	U
1,1-Dichloroethane	0.79	U	0.62	U	0.69	U	0.62	U	0.63	U
1,1-Dichloroethene	0.78	U	0.6	U	0.68	U	0.6	U	0.61	U
1,2,4-Trimethylbenzene	0.96	U	1.7		1.4		0.84		1	
1,2-Dichloroethane	0.79	UJ	0.62	UJ	0.69	UJ	0.62	UJ	0.63	UJ
1,2-Dichloropropane	0.9	U	0.7	U	0.79	U	0.7	U	0.72	U
1,3,5-Trimethylbenzene	0.96	U	0.75	U	0.84	U	0.75	U	0.76	U
1,4-Dioxane	0.71	U	0.55	U	0.62	U	0.55	U	0.56	U
2-Butanone	23		2.4	J	1.4	J	0.94		1.3	
4-Ethyltoluene	0.96	U	1.6		1.6		0.99		1	
4-Methyl-2-pentanone	0.8	U	0.62	U	0.7	U	0.62	U	0.63	U
Benzene	2.9		2		1.8		1.9		2	
Bromomethane	0.76	U	0.59	U	0.66	U	0.59	U	0.6	U
Butadiene, 1,3-	0.43	U	0.34	U	0.38	U	0.34	U	0.34	U
Chlorobenzene	0.9	U	0.7	U	0.79	U	0.7	U	0.71	U
Chloroethane	0.52	U	0.4	U	0.45	U	0.4	U	0.41	U
Chloroform	39		0.74	U	0.83	U	3.2		2.6	
Chloromethane	0.4	U	0.73		0.61		0.92		0.85	
Cis-1,2-Dichloroethene	0.78	U	0.6	U	0.68	U	0.6	U	0.61	U
cis-1,3-Dichloropropene	0.89	U	0.69	U	0.78	U	0.69	U	0.7	U
Cyclohexane	0.67	U	0.52	U	0.59	U	0.52	U	0.53	U
Ethyl benzene	0.85	U	1.8		1.5		0.84		0.96	
Heptane	0.88		0.96		0.73		0.69		0.79	
Hexane	0.69	U	1.2		0.91		0.78		0.96	
Isopropylbenzene	0.96	U	0.75	U	0.84	U	0.75	U	0.76	U
Methyl Tertbutyl Ether	0.71	U	0.55	U	0.62	U	0.55	U	0.56	U
o-Xylene	0.85	U	1.7		1.6		0.91		0.9	
Propylbenzene	0.96	U	0.75	U	0.84	U	0.75	U	0.76	U
Styrene	0.83	U	0.65	U	0.73	U	0.65	U	0.66	U
Tetrachloroethene	0.66	U	0.52	U	0.58	U	0.52	U	0.52	U
Toluene	2.4		12		10		7.2		7.6	
trans-1,2-Dichloroethene	0.78	U	0.6	U	0.68	U	0.6	U	0.61	U

Attachment F
Table 1.3: Air VOC Results

Lab Sample Id	0704135A-01A		0704135A-02A		0704135A-03A		0704135A-04A		0704135A-05A	
Lab Sample Delivery Group	0704135A		0704135A		0704135A		0704135A		0704135A	
Loc Name	SS-002		BA-002		BA-002		FA-002		FA-002	
Field Sample Id	420007SS002		420007BA002		420007BA002-DUP		420007FA002		420007FA002-DUP	
Field Sample Date	4/2/2007		4/2/2007		4/2/2007		4/2/2007		4/2/2007	
Qc Code	FS		FS		FD		FS		FD	
Param Name	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**
trans-1,3-Dichloropropene	0.89	U	0.69	U	0.78	U	0.69	U	0.7	U
Trichloroethene	0.21	U	0.16	U	0.18	U	0.16	U	0.17	U
Vinyl chloride	0.5	U	0.39	U	0.44	U	0.39	U	0.4	U
Xylene, m/p	0.99		5.6		4.8		2.8		2.9	

Notes:
Results in microgram per cubic meter (µg/m3)
Samples analyzed for VOCs by EPA Method TO-15
QC Code:
FS = Field Sample
FD = Field Duplicate
Qualifiers:
U = Not detected at a concentration greater than the RL
J = Estimated value

Attachment F
Table 1.3: Air VOC Results

Lab Sample Id	0704135A-06B		0704135A-07B		0704135A-08B		0704135A-09A		0704135A-10A	
Lab Sample Delivery Group	0704135A		0704135A		0704135A		0704135A		0704135A	
Loc Name	AA-002		SS-011		BA-010		AA-010		SS-001	
Field Sample Id	420007AA002		420007SS011		420007BA010		420007AA010		420007SS001	
Field Sample Date	4/2/2007		4/2/2007		4/3/2007		4/3/2007		4/3/2007	
Qc Code	FS		FS		FS		FS		FS	
Param Name	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**
1,1,1-Trichloroethane	0.6		0.64		0.39	U	0.39	U	1.7	
1,1,2,2-Tetrachloroethane	0.49	UJ	0.52	UJ	0.49	UJ	0.49	UJ	0.47	UJ
1,1,2-Trichloroethane	0.39	U	0.41	U	0.39	U	0.39	U	0.37	U
1,1-Dichloroethane	0.58	U	0.62	U	0.58	U	0.58	U	0.55	U
1,1-Dichloroethene	0.57	U	0.6	U	0.57	U	0.57	U	0.54	U
1,2,4-Trimethylbenzene	0.82		0.75	U	0.71	U	0.71	U	0.67	U
1,2-Dichloroethane	0.58	UJ	0.62	UJ	0.58	UJ	0.58	UJ	0.55	UJ
1,2-Dichloropropane	0.66	U	0.7	U	0.66	U	0.66	U	0.63	U
1,3,5-Trimethylbenzene	0.71	U	0.75	U	0.71	U	0.71	U	0.67	U
1,4-Dioxane	0.52	U	0.55	U	0.52	U	0.52	U	0.49	U
2-Butanone	5.5		35		1.3		12		0.4	U
4-Ethyltoluene	0.71	U	0.75	U	0.71	U	0.71	U	0.67	U
4-Methyl-2-pentanone	0.59	U	0.62	U	0.59	U	0.59	U	0.56	U
Benzene	1.2		41		0.8		0.75		0.67	
Bromomethane	0.56	U	0.59	U	0.56	U	0.56	U	0.53	U
Butadiene, 1,3-	0.32	U	0.34	U	0.32	U	0.32	U	0.3	U
Chlorobenzene	0.66	U	0.7	U	0.66	U	0.66	U	0.63	U
Chloroethane	0.38	U	0.4	U	0.38	U	0.38	U	0.36	U
Chloroform	0.7	U	0.74	U	0.7	U	0.7	U	4.8	
Chloromethane	0.76		0.62		1		1.6		0.28	U
Cis-1,2-Dichloroethene	0.57	U	0.6	U	0.57	U	0.57	U	0.54	U
cis-1,3-Dichloropropene	0.65	U	0.69	U	0.65	U	0.65	U	0.62	U
Cyclohexane	1.3		37		0.5	U	0.5	U	0.47	U
Ethyl benzene	0.72		1.3		0.62	U	0.62	U	0.59	U
Heptane	0.59		58		0.59	U	0.59	U	0.56	U
Hexane	0.65		120		0.51	U	0.51	U	0.48	U
Isopropylbenzene	0.71	U	0.75	U	0.71	U	0.71	U	0.67	U
Methyl Tertbutyl Ether	0.52	U	0.55	U	0.52	U	0.52	U	0.49	U
o-Xylene	0.62	U	0.66	U	0.62	U	0.62	U	0.59	U
Propylbenzene	0.71	U	0.75	U	0.71	U	0.71	U	0.67	U
Styrene	0.61	U	0.65	U	0.61	U	0.61	U	0.58	U
Tetrachloroethene	1.2		0.52	U	0.49	U	0.49	U	0.46	U
Toluene	6.1		19		2		1.6		1.6	
trans-1,2-Dichloroethene	0.57	U	0.6	U	0.57	U	0.57	U	0.54	U

Attachment F
Table 1.3: Air VOC Results

Lab Sample Id	0704135A-06B		0704135A-07B		0704135A-08B		0704135A-09A		0704135A-10A	
Lab Sample Delivery Group	0704135A		0704135A		0704135A		0704135A		0704135A	
Loc Name	AA-002		SS-011		BA-010		AA-010		SS-001	
Field Sample Id	420007AA002		420007SS011		420007BA010		420007AA010		420007SS001	
Field Sample Date	4/2/2007		4/2/2007		4/3/2007		4/3/2007		4/3/2007	
Qc Code	FS		FS		FS		FS		FS	
Param Name	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**
trans-1,3-Dichloropropene	0.65	U	0.69	U	0.65	U	0.65	U	0.62	U
Trichloroethene	0.15	U	0.18		0.15	U	0.86		0.15	U
Vinyl chloride	0.37	U	0.39	U	0.37	U	0.37	U	0.35	U
Xylene, m/p	1.6		1.3		0.62	U	0.77		0.88	

Notes:
Results in microgram per cubic meter (µg/m3)
Samples analyzed for VOCs by EPA Method TO-15
QC Code:
FS = Field Sample
FD = Field Duplicate
Qualifiers:
U = Not detected at a concentration greater than the RL
J = Estimated value

Attachment F
Table 1.3: Air VOC Results

Lab Sample Id	0704135B-11A		0704135B-12B		0704135B-13A		0704135B-14A		0704135B-15A	
Lab Sample Delivery Group	0704135B		0704135B		0704135B		0704135B		0704135B	
Loc Name	SS-009		BA-009		FA-009		AA-009		BA-008	
Field Sample Id	420007SS009		420007BA009		420007FA009		420007AA009		420007BA008	
Field Sample Date	4/3/2007		4/3/2007		4/3/2007		4/3/2007		4/3/2007	
Qc Code	FS		FS		FS		FS		FS	
Param Name	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**
1,1,1-Trichloroethane	220		3.3		1.1		0.44	U	0.46	U
1,1,2,2-Tetrachloroethane	0.56	U	0.54	U	0.69	U	0.55	U	0.58	U
1,1,2-Trichloroethane	0.45	U	0.43	U	0.55	U	0.44	U	0.46	U
1,1-Dichloroethane	31		0.64	U	0.81	U	0.65	U	0.68	U
1,1-Dichloroethene	4.3		0.63	U	0.8	U	0.64	U	0.67	U
1,2,4-Trimethylbenzene	0.81	U	0.78	U	0.99	U	0.79	U	0.82	U
1,2-Dichloroethane	0.66	U	0.64	U	0.81	U	0.65	U	0.68	U
1,2-Dichloropropane	0.76	U	0.73	U	0.93	U	0.74	U	0.78	U
1,3,5-Trimethylbenzene	0.81	U	0.78	U	0.99	U	0.79	U	0.82	U
1,4-Dioxane	0.59	U	0.57	U	0.72	U	0.58	U	0.6	U
2-Butanone	1.7		0.72		2.2		8.4		0.5	U
4-Ethyltoluene	0.81	U	0.78	U	0.99	U	0.79	U	0.82	U
4-Methyl-2-pentanone	0.67	U	0.65	U	0.82	U	0.66	U	0.69	U
Benzene	1.4		0.7		1.2		0.51	U	0.54	U
Bromomethane	0.64	U	0.61	U	0.78	U	0.62	U	0.65	U
Butadiene, 1,3-	0.36	U	0.35	U	0.44	U	0.36	U	0.37	U
Chlorobenzene	0.76	U	0.73	U	0.92	U	0.74	U	0.77	U
Chloroethane	0.43	U	0.42	U	0.53	U	0.42	U	0.44	U
Chloroform	5.6		0.77	U	0.98	U	0.79	U	0.82	U
Chloromethane	0.34	U	0.63		1.2		0.96		0.85	
Cis-1,2-Dichloroethene	0.65	U	0.63	U	0.8	U	0.64	U	0.67	U
cis-1,3-Dichloropropene	0.74	U	0.72	U	0.91	U	0.73	U	0.76	U
Cyclohexane	0.56	U	0.54	U	0.69	U	0.55	U	0.58	U
Ethyl benzene	0.71	U	0.69	U	0.87	U	0.7	U	0.73	U
Heptane	0.83		0.65	U	0.82	U	0.66	U	0.69	U
Hexane	0.71		0.56	U	0.71	U	0.57	U	0.59	U
Isopropylbenzene	0.81	U	0.78	U	0.99	U	0.79	U	0.82	U
Methyl Tertbutyl Ether	0.59	U	0.57	U	0.72	U	0.58	U	0.6	U
o-Xylene	0.71	U	0.69	U	0.87	U	0.7	U	0.73	U
Propylbenzene	0.81	U	0.78	U	0.99	U	0.79	U	0.82	U
Styrene	0.7	U	0.67	U	0.86	U	0.68	U	0.72	U
Tetrachloroethene	1.6		0.54	U	0.68	U	0.55	U	0.57	U
Toluene	3.6		1.7		5.4		1.1		0.63	U
trans-1,2-Dichloroethene	0.65	U	0.63	U	0.8	U	0.64	U	0.67	U

Attachment F
Table 1.3: Air VOC Results

Lab Sample Id	0704135B-11A		0704135B-12B		0704135B-13A		0704135B-14A		0704135B-15A	
Lab Sample Delivery Group	0704135B		0704135B		0704135B		0704135B		0704135B	
Loc Name	SS-009		BA-009		FA-009		AA-009		BA-008	
Field Sample Id	420007SS009		420007BA009		420007FA009		420007AA009		420007BA008	
Field Sample Date	4/3/2007		4/3/2007		4/3/2007		4/3/2007		4/3/2007	
Qc Code	FS		FS		FS		FS		FS	
Param Name	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**
trans-1,3-Dichloropropene	0.74	U	0.72	U	0.91	U	0.73	U	0.76	U
Trichloroethene	25		0.27		0.22	U	0.17	U	0.18	U
Vinyl chloride	0.42	U	0.4	U	0.51	U	0.41	U	0.43	U
Xylene, m/p	1.4		0.75		0.84	J	0.7	U	0.73	U

Notes:
Results in microgram per cubic meter (µg/m3)
Samples analyzed for VOCs by EPA Method TO-15
QC Code:
FS = Field Sample
FD = Field Duplicate
Qualifiers:
U = Not detected at a concentration greater than the RL
J = Estimated value