FINAL
VAPOR INVESTIGATION REPORT
ACTIVE INDUSTRIAL UNIFORM
SITE NO. 1-52-125

WORK ASSIGNMENT NO. D004434-26

Prepared for:

New York State Department of Environmental Conservation
Albany, New York

Prepared by:

MACTEC Engineering and Consulting, P.C.
Portland, Maine

Project Number: 3612072086

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TABLE OF CONTENTS

LIST OF FIGURES

Figure

LIST OF TABLES

Table

GLOSSARY OF ACRONYMS AND ABBREVIATIONS

bgs	below ground surface
cis-1,2-DCE	cis-1,2-dichloroethene
DUSR	Data Usability Summary Report
GWETS	Groundwater Extraction and Treatment System
HASP	Health and Safety Plan
MACTEC	MACTEC Engineering and Consulting, P.C.
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
PCE	tetrachloroethene
PID	photoionization detector
ppm	parts per million
Report	Active Industrial Vapor Investigation report
Site	Active Industrial Uniform site
SVE	Soil Vapor Extraction System
SVIE	Soil Vapor Intrusion Evaluation
TCE	Trichloroethene
TCL	target compound list
$\mu g/m^3$	micrograms per cubic meter
USEPA	United States Environmental Protection Agency

GLOSSARY OF ACRONYMS AND ABBREVIATIONS (CONTINUED)

VOCs	Volatile Organic Compounds
VI	Vapor Investigation
WP	Work Plan

1.0 INTRODUCTION

MACTEC Engineering and Consulting, P.C. (MACTEC), under contract to the New York State Department of Environmental Conservation (NYSDEC), conducted a Vapor Investigation (VI) at the Active Industrial Uniform site (Site) (Site # 1-52-125) in the Village of Lindenhurst, Suffolk County (see Figure 1.1 for Site Location). This Active Industrial VI report (Report) documents the activities and results of sampling performed at the Site between November 2007 and January 2008.

The Site is the location of a former dry cleaning facility with known releases of organic chlorinated solvent chemicals. The VI investigation was authorized by the NYSDEC as a result of the Site's inclusion in 2005 on the List of Inactive Hazardous Waste Sites with Pre-2003 Remedial Decisions where Disposal of Chlorinated Hydrocarbons Occurred. Additional details on the Site History are provided in Section 2.

This VI was conducted in accordance with the NYSDEC requirements described in Work Assignment No. D004434-26, dated March 28, 2007 (NYSDEC, 2007), and with the April 2006 Superfund Standby Contract No. D004434 between the NYSDEC and MACTEC. The planned Scope of Work was established in the Final VI Work Plan (WP) dated August 2007 (MACTEC, 2007). Vapor and air samples were collected in accordance with New York State Department of Health (NYSDOH) "*Guidance for Evaluating Soil Vapor Intrusion in the State of New York*" (NYSDOH, 2006). The VI also considered guidance established in the NYSDEC "Draft DER-10 Technical Guidance for Site Investigations and Remediation" (NYSDEC, 2002).

2.0 SITE LOCATION AND HISTORY

2.1 SITE LOCATION

The Active Industrial Uniform Site is located at 63 West Montauk Highway (Route 27A or West Merrick Road) in the Village of Lindenhurst, Suffolk County. The Village of Lindenhurst is part of the Town of Babylon and is situated near the south shore of Long Island about 30 miles east from New York City. The Site covers approximately one-half acre.

2.2 PHYSICAL SETTING

The Site is located on the south side of West Montauk Highway and has no obvious relief with a ground elevation from approximately 8.5 to 10 feet above mean sea level. Nearby properties along West Montauk Highway are retail and light industrial businesses and vacant lots. A residential neighborhood immediately borders the Site to the south.

When it was operational, the former dry cleaning facility included two one-story concrete block buildings. These were demolished in 1995 and are marked by the presence of two concrete floor slabs. A building housing groundwater treatment equipment and former soil vapor extraction system (SVE) (presumed) currently occupies the center of the property. The Site is fenced and there is no current industrial or residential use other than the automated operation of the groundwater extraction and treatment system (GWETS).

The southern shore of Long Island in the vicinity of the Site is characterized by north-south trending linear inlets. These inlets extend northward to the vicinity of West Montauk Highway Road. The closest to the Site is Little Neck Creek, located about 700 feet to the southwest of the Site. Depth to groundwater, as measured in Site wells during the late November sampling event, was seven feet below ground surface (bgs). Previous investigations have interpreted groundwater flow as being towards the southwest, with discharge into Little Neck Creek. Based on historical borings logs and observations from shallow hand auger soil vapor points installed during this investigation, the upper ten feet of overburden in the vicinity of the Site is typified by loose

medium to coarse sand. The ground surface and uppermost overburden varies from disturbed native sand to topsoil, silty sand, or asphalt.

2.3 SITE HISTORY

The Site was an active laundry from 1945 to 1993, with dry cleaning operations being performed from 1970 to 1987. The facility was also used as a distribution center for dry-cleaning solvents from 1993 to 1994. The buildings were demolished in February 1995. In 1985, a 275 gallon underground storage tank, used to store tetrachloroethene (PCE), was removed. In 1987, two additional 275 gallon above ground storage tanks, used to store PCE, were removed.

In July 1991, a SVE was installed as an interim measure to remediate on-site soils and to prevent the migration of soil vapors off-site. The SVE was discontinued in December 1997. In December 2000, 590 cubic yards of contaminated soil were removed from 12 drywell locations. As a result of the excavation, the SVE system was removed. Since December 2001, a groundwater pump and treat system has been in continuous operation to reduce chlorinated solvent concentrations. There is a single extraction well located in the southwestern portion of the Site. Groundwater is treated by an air stripper, which is designed to extract dissolved volatile organic contaminants (VOCs) from the liquid phase and pass them into the gas phase. Emissions from the air stripper are treated by utilizing activated carbon to remove the VOCs from the air. The NYSDEC oversees a quarterly monitoring program that includes sampling of on-Site and off-site monitoring wells.

In February 2005, the Site was placed on the List of Inactive Hazardous Waste Site with Pre-2003 Remedial Decisions where Disposal of Chlorinated Hydrocarbons Occurred. A Soil Vapor Intrusion Evaluation (SVIE) was conducted by O'Brien & Gere for the NYSDEC in April 2006. This study is summarized in the following subsection.

2.4 2006 VAPOR INTRUSION INVESTIGATION SUMMARY

NYSDEC completed a SVIE in 2006 that included groundwater sampling and soil gas sampling. Groundwater grab samples and soil gas samples were collected at four locations inside the Site's perimeter and at one off-Site location approximately 200 feet to the southwest of the Site (near the intersection of Holly and Lane). Samples were analyzed for volatile organic compounds (VOCs).

Based on MACTEC's review of the data, elevated chlorinated solvent-type VOCs were reported in one groundwater sample. Compounds such as cis-1,2-dichloroethene (cis-1,2-DCE) and vinyl chloride were detected in the groundwater sample from the southeastern corner of the Site. Elevated VOCs were reported in the corresponding soil gas sample, as well as in the other two soil gas samples located along the south boundary of the Site property. The elevated VOCs included solvents such as PCE and cis-1,2-DCE. Based on the identification of elevated solvents in soil gas, the NYSDEC, in consultation with the NYSDOH, determined to conduct additional soil vapor, groundwater, and indoor air sampling to evaluate potential impacts to surrounding structures from contamination in soil vapor.

3.0 SCOPE OF WORK

MACTEC performed the field portion of this VI in two phases between November 2007 and January 2008. During an initial mobilization from November 26, 2007 to December 19, 2007, MACTEC sampled six existing monitoring wells, conducted indoor air sampling at eight structures, and collected soil gas samples from five on-Site locations. Following the review of preliminary data from this sampling event, NYSDEC directed MACTEC to re-mobilize and collect soil vapor samples at five additional off-Site locations. This re-mobilization occurred during the week of January 14, 2008. The following subsections describe the sampling activities completed during this VI.

The VI was conducted in accordance with the specifications presented in the Quality Assurance Program Plan (ABB-ES, 1994) and the Site specific Quality Assurance Project Plan, included in the WP. Health and Safety procedures followed MACTEC's NYSDEC Program Health and Safety plan (HASP) (MACTEC, 2005) and the Site specific HASP provided in the WP. Air samples were analyzed by Con-Test Laboratory of East Longmeadow, Massachusetts. Soil and groundwater samples were analyzed by Mitkem Laboratory of Warwick, Rhode Island. Both are NYSDOH-approved and Environmental Laboratory Accreditation Program-certified laboratories.

3.1 GENERAL NOTES ON FIELD ACTIVITIES

Health and Safety. All work was conducted under Level D personal protective equipment as specified in the HASP. No health and safety incidents occurred during the two field mobilizations.

Decontamination. Sampling methods and equipment were selected to minimize decontamination requirements and the possibility of cross contamination. Disposable sampling equipment was used as much as practical. Soil vapor points were completed using driven rods and therefore generated no soil waste. The sole boring that was completed using a geoprobe drilling rig (DP-01) was located to the north of the Site. Soils at this location did not exhibit olfactory evidence of contamination and therefore were spread on the ground surface at the Site. Decontamination wash fluids and purged groundwater were containerized temporarily and screened with a photoionization

detector (PID). None of the fluids indicated the presence of VOCs and they were therefore released and allowed to infiltrate in an unpaved area of the Site.

3.2 STRUCTURE SAMPLING

MACTEC collected air samples at eight structures (M01 to M08) near the Active Industrial Uniform Site to evaluate indoor air quality. The structures, shown on Figure 3.1 included a business property located adjacent to the Site (M06), a town fire station (M01) and six single family homes located to the south of the Site.

The targeted sampling approach for each structure included:

- completion of the NYSDOH Indoor Air Quality Questionnaire and Inventory,
- one sub-slab soil vapor sample,
- one basement (or lowest floor) air sample, and
- a sample from the first livable floor in the residences.

The structure samples were collected between November 26, 2007 and November 30, 2007. Two ambient air samples (AA-01 and AA-02) were collected on successive days to document outdoor air conditions during the sampling period.

Based on the shallow depth to groundwater and the physical characteristics of the structures sampled, the sample suite varied between structures.

At structure M01, a slab-on-grade municipal fire station, a sub-slab vapor sample and a first-floor air sample were collected.

At structure M02, basement air and first floor air samples were collected. The homeowner did not grant permission to collect a sub-slab sample due to concerns about shallow groundwater and potential flooding and therefore no sub-slab vapor sample was attempted. At this structure, outdoor soil vapor point samples were located to the north and south of the residence to provide some data to evaluated soil vapor contamination levels. These are described in subsection 3.3.

At structures M03, M04, M05 and M07, the full compliment of sub-slab soil vapor, basement air, and indoor air samples were obtained.

At structure M06, only a basement air sample was collected. No sub-slab sample was collected based on a field judgment that the basement slab was at or near the water table. No first floor sample was collected from this structure since the first floor office suites were unoccupied.

At structure M08, basement air and first floor air samples were collected. No sub-slab sample was attempted, also due to homeowners concerns that the water table was coincident with the bottom elevation of the slab. MACTEC completed a soil vapor sample in the lawn to the north of this residence to help determine the levels of Site contaminants in soil vapor at this location.

MACTEC conducted indoor air surveys and product inventories at each structure sampled using the NYSDOH "Indoor Air Quality Questionnaire and Building Inventory" form. A MiniRae PID that measures parts per billion was used to scan containers that may be off-gassing VOCs. VOCs identified on the containers that are also included on the air sample analytical target compound list (TCL) are noted on the inventory forms, along with any PID readings. One structure (M03) exhibited general indoor air PID readings above background and several structures had elevated readings when measurements were taken adjacent to chemical products, however there were no products identified with listed chlorinated-type solvent organic chemicals. The completed surveys include sketches of the structure layout and the location of air and sub-slab samples.

Sub-slab soil vapor samples were collected from beneath the concrete floor slabs at five structures. MACTEC used a hammer drill to penetrate the floor as specified in the WP. Permanent sub-slab vapor points were installed using a stainless steel sample port and ¼-inch diameter Teflon tubing. Glass beads were used to fill any annular space around the point and a custom manufactured stainless steel sampling port was installed flush to the floor and sealed with quick-drying hydraulic cement. Prior to sampling, three volumes of air were purged from the tubing using a polyethylene syringe at a rate less than 200 milliliters per minute. Samples were collected in 6-liter SUMMA®-type canisters with certified 24-hour flow regulators. Indoor air samples (basement air and/or first floor air) were collected by staging the sampler several feet (generally three to four feet) above the floor. Samples were collected over a 24-hour period coincident with the sub-slab sampling.

For all air samples, pertinent information including the time of sample collection, starting and ending canister vacuum (in inches Mercury), PID measurements, etc., were recorded in the field log book. Table 3.1 presents a tabulated summary of air sample collection information. After approximately 24-hours, the flow valves were closed and the time, remaining vacuum in the canister and barometric pressure was recorded. The samples were delivered to Con-Test Laboratory by the field crew. Con-Test analyzed for VOCs via United States Environmental Protection Agency (USEPA) method TO-15. Laboratory analysis included Category B deliverables. Photographs of the deployed canisters or interior conditions are included in Appendix A. Completed Indoor Air Quality Questionnaires and Inventory Forms are provided in Appendix B.

3.3 SOIL VAPOR SAMPLING

MACTEC collected soil vapor samples from a total of 11 locations during two separate field mobilizations (see Figure 3.1). During the initial mobilization in November and December 2007, samples were obtained from six on-Site locations. These included two vapor points that had been installed during the 2006 VIE (SV-V1S and SV-V2S) and four new soil vapor points that were installed by MACTEC near existing Site wells (DP-01 to DP-04).

After review of preliminary soil vapor data, the NYSDEC directed MACTEC to collect soil vapor samples from five off-Site locations (DP-05 to DP-09). Eight of the eleven points were constructed as permanent installations with flush-to-grade metal covers. The exceptions; DP-06, DP-07 and DP-09, were temporary points, as directed by the NYSDEC. Vapor point sampling diagrams are provided in Appendix C.

The off-Site soil vapor samples had the following location rationale:

- DP-05 is South of residence M02 to provide soil vapor near this residence where no sub-slab basement sample could be obtained;
- DP-06 is located near MW-2S, which contained elevated solvents in groundwater;
- DP-07 is located near residence M08, where no sub-slab vapor sample could be obtained;
- DP-08 is located north of the Site to provide data on soil vapor (and groundwater conditions) upgradient from the Site; and
- DP-09 was located southwest of the Site on Holly Street to characterize soil vapor near residences where access could not be obtained by the NYSDEC for indoor air sampling.

The soil vapor points were installed, tested, and sampled in accordance with the procedures described in the WP. Drilled vapor point borings (DP-01, DP-02, DP-03, and DP-08) were completed using direct-push drilling methods. The remaining points were completed using direct-push hand tools to advance a 1.5-inch diameter borehole without soil sampling. Soil Vapor Sampling Implant Records are provided in Appendix C. Points that were completed as permanent installations included installation of a flush-to-the-ground metal road box with sealable cap that was set into a concrete pad. Points that were temporary were abandoned by pulling the tubing out after sampling and restoring each location to the original surface condition (e.g. grass or soil cover).

Soil gas samples were collected into clean-certified, three-liter SUMMA-type canisters with flow regulators set to 20-minutes per sample. Flow rate was les than 0.2 liters per minute, as requested by NYSDOH. Samples were delivered to Con-Test laboratory by the field crew and were analyzed there for VOCs by USEPA Method TO-15 with minimum reporting limits of 1.0 ug/m^3.

3.4 GROUNDWATER SAMPLING

MACTEC collected groundwater samples at seven locations. These included five on-Site monitoring wells (MW-101, MW-104, MW-106, MW-107 and MW-108) and one monitoring well located on Lane Street, directly south (downgradient) from the Site (MW-2S). These samples were collected by accessing existing monitoring wells. Additionally, a groundwater sample was collected at soil vapor point location DP-08. This location is north (upgradient) of the Site and provided data on groundwater quality flowing toward the Site as well as an upgradient soil vapor location. All of the groundwater samples were collected at or near contemporaneous soil vapor sampling locations and therefore provided information to aid in the interpretations of vapor and structure sample results.

Samples were obtained using low-flow sampling procedures as described in the WP. Field data records that include details on purge data, water depth, flow rate, etc are provided in Appendix C. All samples were submitted to Mitkem for analysis for TCL VOCs. The sample set included one field duplicate from well MW-104.

3.5 SOIL SAMPLING

Soil grab samples were collected from the three on-Site soil vapor point borings that were completed using a geoprobe drill rig (DP-01, DP-02 and DP-03). At these locations, soils were collected into an acetate tube using a 5-foot long core sampler. Upon retrieval, the tubes were removed from the core barrel and opened lengthwise to proved access to the soils. Soils were logged and samples were obtained from specific depths. At DP-01 samples were collected from 3 feet and 6 feet bgs. A field duplicate was also collected at the six foot depth. The sample from three feet bgs exhibited a positive PID reading of 59 parts per million (ppm). The sample from 6 feet bgs exhibited a PID reading of 7 ppm.

At DP-02 and DP-03, there were no indications of contamination and samples were collected from 6 feet bgs to provide data from the horizon one foot above the water table. The samples from DP-01 and DP-02 were analyzed for TCL VOCs by Mitkem. The sample from DP-03 was inadvertently held in field custody beyond the required method holding time and was therefore not analyzed. Boring logs with stratigraphic descriptions and drilling information are provided in Appendix C.

4.0 DATA ASSESSMENT

4.1 DATA USABILITY ASSESSMENT

MACTEC reviewed the laboratory data results from the two field events to establish that the results met data quality objectives. Project chemist review was completed based on NYSDEC Division of Environmental Remediation guidance for Data Usability Summary Reports (DUSR) (NYSDEC, 2002b). The review included evaluations of sample collection, data package completeness, holding times, quality control data (blanks, instrument calibrations, duplicates, surrogate recovery, and spike recovery), data transcription, electronic data reporting, calculations, and data qualification.

All air samples and soil vapor samples were analyzed by Con-Test Analytical Laboratory of East Longmeadow, Massachusetts for VOCs by USEPA Method TO-15. All groundwater samples and soil samples were analyzed by Mitkem Laboratory of Warwick, Rhode Island. Both laboratories provided Category B deliverables as defined in the NYSDEC Analytical Services Protocols (NYSDEC, 2000).

The data from each field mobilization was reviewed separately. The December 2007 field event generated a total of seventeen air, eleven soil vapor, seven groundwater, and four soil samples. The January 2008 field event generated five soil vapor samples and one groundwater sample. The DUSRs for these two data sets are provided in Appendix D along with tabulated full data results. With the exception of the items discussed in the DUSR, the results are interpreted to be usable as reported by the laboratory. The chemist review added various data validation qualifiers, as dictated by the guidelines. These include:

- U indicates that the analyte was not detected above the reported detection limit
- UJ indicates that the analyte was not detected a the reported detection limit and the detection limit is estimated
- J indicates that the concentration is estimated
- R indicates that the results was rejected during validation
- D indicates that the results was reported from a diluted analytical run

The chemist review noted that four air samples from the December 2007 event (AIFAM03, AIFAM04, AIFAM08 and AIBAM08) had slight positive final pressure readings when canister pressure was recorded upon receipt at the laboratory. The laboratory explanation was that temperature differences between the field and laboratory setting and potential differences in the accuracy of pressure gauges caused these positive readings. Detected compounds from these samples were qualified as estimated. MACTEC notes that a duplicate sample that was collected at one of these locations (AIFAM08DUP) has similar reported concentrations to the field prime sample and did not have a positive laboratory pressure reading. This supports a finding that the results are accurate and usable.

4.2 INDOOR AIR AND SUB-SLAB SOIL VAPOR RESULTS

Table 4.1 presents a summary of VOCs that were detected in sub-slab soil vapor samples and indoor air samples. MACTEC has grouped the results by structure and included results for two outdoor ambient air samples that were collected during the week that the sampling was performed. The NYSDOH has developed two matrices to use as tools in making remedial action decisions when soil vapor may be entering structures. The decision matrices are included in the NYSDOH *Guidance for Evaluating Soil Vapor Intrusion in the State of New York* (NYSDOH, 2006). The list of volatile chemicals that the matrices provide guidance for have been amended to seven, as documented to the NYSDEC in a letter dated June 25, 2007 (NYSDOH, 2007). The seven VOCs are: trichloroethene (TCE), PCE, 1,1,1-trichloroethane, 1,1-dichloroethene, cis-1,2-DCE, vinyl chloride, and carbon tetrachloride. The guidance values are applicable when evaluating sub-slab vapor samples in relation to indoor air concentration.

Of the eight structures sampled, five included sub-slab soil vapor and indoor air sample sets that can be used to compare to the NYSDOH guidance matrices (M01, M03, M04, M05 and M07). The other three structures (M02, M06 and M08) had deeper basements and sub-slab samples were not collected based either on owner reluctance or a field supposition that groundwater was close to the bottom of the floor slab. Where a comparison to the matrices can be made, two compounds, PCE and carbon tetrachloride are reported in indoor air at levels above NYSDOH indoor air guidance values.

PCE and carbon tetrachloride levels in homes have been examined as part of several studies by the USEPA and NYSDOH. A NYSDOH fact sheet on levels of PCE in indoor and outdoor air discusses

the findings of several studies and concludes that, "Collectively, these data show that background levels of (PCE) in air are seldom above 10 micrograms per cubic meter (µg/m^3)" (NYSDOH, 2003). One of the studies cited, The NYSDOH 2003 *"Study of Volatile Organic Chemicals in Air of Fuel Oil in Heated Homes"*, as cited in the current NYSDOH soil vapor guidance, Appendix C (NYSDOH 2006) determines that the 95th percentile of the mean for PCE in indoor air is 4.1 µg/m^3 and the 95th percentile for carbon tetrachloride is 1.1 µg/m^3.

The results for PCE in indoor air and sub-slab soil vapor are shown on Figure 4.1. PCE was reported above background levels in indoor air (e.g. >10 µg/m^3) in samples from one structure (M03). When indoor air concentrations are compared to the corresponding sub-slab soil vapor results, PCE was reported above NYSDOH guidance at structures M03 and M04. The highest sub-slab vapor concentration, PCE at 1100 µg/m^3 was reported at M04. Corresponding indoor air levels for PCE were 2 µg/m^3 in basement and first floor air. This elevated sub-slab concentration yields a category of "MITIGATE" when the appropriate NYSDOH matrix is applied. PCE sub-slab and indoor air results from Structure M03 yields a category of "MONITOR" when applied to NYSDOH Matrix 2. PCE detections at M03 indicate increased levels in the first-floor sample (70 µg/m^3) when compared to basement air (22 µg/m^3) and sub-slab (59 µg/m^3). The levels of PCE in indoor air may be the result of household influences (i.e. weekly dry cleaning as indicated in the questionnaire), but soil vapor intrusion may also be a contributing factor. Based on the low soil gas result at Structure M03, minimal soil vapors are anticipated to enter the structure and reasonable and practicable actions should be taken to reduce exposure to chemicals in indoor air from daily use and soil vapor intrusion.

PCE was also reported in indoor air samples from the three structures where no sub-slab sample was obtained (M02, M06 and M08) but was reported at concentrations below 2.5 µg/m^3. At these structures, results from nearby exterior soil vapor implants provide supplemental data to evaluate the indoor air findings. See the following subsection for a discussion of soil vapor results.

Carbon tetrachloride was reported in indoor air at all eight structures, however, the levels in indoor air from the lowest floor of each structure were similar to those reported in the two ambient air samples and all detection of carbon tetrachloride are below the approximate background concentration (1.1 µg/m^3) cited above from the NYSDOH vapor intrusion guidance document. Additionally, none of the five sub-slab soil vapor samples contained carbon tetrachloride above the

reporting limits of 0.62 µg/m^3 and carbon tetrachloride was not identified in any of the groundwater samples. This suggests that carbon tetrachloride may be present in these structures from household influences and not as a Site-related contaminant.

4.3 SOIL VAPOR RESULTS

The results from soil vapor implants that are located on the Site or at off-site locations outside of structures are provided on Table 4.2. Samples were collected from six locations on the Site (DP-01 to DP-04 and SV-V1S and SV-V2S). Chlorinated VOCs were detected at elevated concentrations at all these locations. The levels of PCE are shown on Figure 4.2. Of note are the elevated levels reported at DP-01 (740,000 µg/m^3) and at several points along the south border of the Site property. TCE and cis-1,2-DCE also stand out as VOCs that are distinctly elevated in Site soil gas and that can be linked to residual source contamination.

Lower concentrations of VOCs are present in the five off-Site vapor samples (DP-05 to DP-09). PCE was reported at the upgradient location (DP-08) at 11 µg/m^3. South of the Site, levels generally drop rapidly with distance from the Site. The highest PCE result from an off-Site location (340 µg/m^3 at DP-06) is potentially linked to elevated PCE in shallow groundwater at that location (see sub-section 4.4 below). However, note that structure sampling near this location (M05) did not find PCE in indoor air that indicated that mitigation or monitoring is appropriate.

4.4 GROUNDWATER RESULTS

VOCs detected in groundwater samples from the six monitoring wells and one geoprobe location that were sampled for this VI, are presented in Table 4.3. There were no chlorinated solvent VOCs reported in the grab groundwater sample collected upgradient from the Site at DP-08 nor were there any in three of the five on-Site sampling locations (MW-101, MW-107 and MW-108). PCE was reported in MW-104 (77 µg/L) and PCE and various related compounds (notably cis-1,2-DCE) were reported in MW-106 and in the sample from MW-2S. The concentrations of PCE in sampled wells are shown on Figure 4.3.

Groundwater in Site and downgradient wells is sampled on a regular basis as part of the operation and maintenance of the GWETS at the Site. MACTEC understands that the NYSDEC will

incorporate the results from this VI into considerations for optimizing the groundwater capture system. Therefore, MACTEC has not provided additional discussion of groundwater results within this Report.

4.5 SOIL RESULTS

VOCs detected in soil samples from the six monitoring wells and one geoprobe location that were sampled for this VI, are presented in Table 4.4. As described in Section 3.5, soil samples from above the water table from two on-Site vapor point locations (DP-01 and DP-02) were analyzed. The grab soil samples from these borings contained PCE, TCE and cis-1,2-DCE. Of note, PCE was reported in the sample from 3 feet bgs at DP-01 at 120 mg/kg. This indicates residual solvent contamination in shallow soils and also provides confirmation of the elevated PCE soil gas result at this location (740,000 µg/m^3).

5.0 INVESTIGATION FINDINGS

The primary goals of this VI were to; further evaluate the source of elevated 2006 on-Site soil vapor results, perform structure evaluations to assess indoor air quality, provide data on soil vapor impact in the area of migrating impacted groundwater, and to obtain data to design sub-slab depressurization systems or soil vapor extraction, if appropriate.

Based on the review of results from this investigation, MACTEC has identified the following findings:

- The 2007 VI confirmed chlorinated solvents in on-Site soil gas. Solvents reported in the on-Site samples include PCE, TCE, cis-1,2-DCE, and 111TCA.
- Shallow soil samples from DP-01, the on-Site location with the highest levels of reported soil gas impact, contain elevated PCE and TCE and therefore confirmed that there is residual contamination in shallow soil.
- Levels of chlorinated solvents in off-Site soil gas were significantly lower (e.g., PCE <340 $\mu g/m^3$) than the samples collected along the southern Site boundary (PCE >4,000 $\mu g/m^3$) and generally decline with increasing distance from the Site.
- The on-Site extraction well appears to be controlling groundwater beneath much of the Site based on the low levels of contamination reported in groundwater from monitoring wells MW-104, MW-107 and MW-108. The presence of elevated VOCs in MW-106 and off-Site well MW-2S suggest to MACTEC that groundwater capture is incomplete at the southeastern corner of the Site.
- Structure sampling generally detected chlorinated solvents at concentrations below NYSDOH guidance criteria in indoor air. Only one structure (M04) exhibited PCE levels in sub-slab vapor that would indicate a "MITIGATE" condition based on current NYSDOH guidance. This structure is adjacent to impacted soil gas and impacted groundwater (which could contribute to soil gas impact) and is also near former (removed) dry wells that were probable release points for solvent contamination.

Shallow impacted groundwater that is migrating beneath structures would be expected to off-gas to soil vapor. Because of limited knowledge of the GWETS, MACTEC cannot conclude to what extent the operating groundwater extraction system may be preventing higher levels of impact in off-Site soil vapor and structures. Structure M02 is near impacted soil vapor along the southern Site border and it is reasonable to infer that contaminated groundwater could contribute to soil gas contamination in the vicinity of the residence if upgradient groundwater was not being controlled through pumping (as evidenced by the absence of impact in nearby monitoring wells MW-108 and

MW-107). Because of the absence of sub-slab data at this location, MACTEC could not compare the indoor air results at this location with the NYSDOH remediation guidance matrices.

The NYSDEC, in consultation with NYSDOH, will evaluate the results presented in this Report to determine the appropriate follow-up actions. MACTEC offers the following recommendations:

1. Review the current on-Site remedy and consider optimizing groundwater capture. Include groundwater monitoring from MW-2S as part of the current monitoring program. Include installation of a permanent soil vapor point to the south of MW-2S (in the Lane Street right-of-way along the south side of the street). Based on the results, further soil vapor intrusion evaluations may be warranted.
2. Consider vapor remediation at M02 and M04 based on NYSDOH decision guidance at M04 and proximity to the Site of both structures
3. During the next heating season, attempt to sample the structure abutting the Site to the west along West Montauk Highway due to the elevated results in soil vapor at nearby DP-01.

Based on conversations with NYSDOH, MACTEC has provided the addresses of the structures that were sampled under separate cover to the NYSDEC.

6.0 REFERENCES

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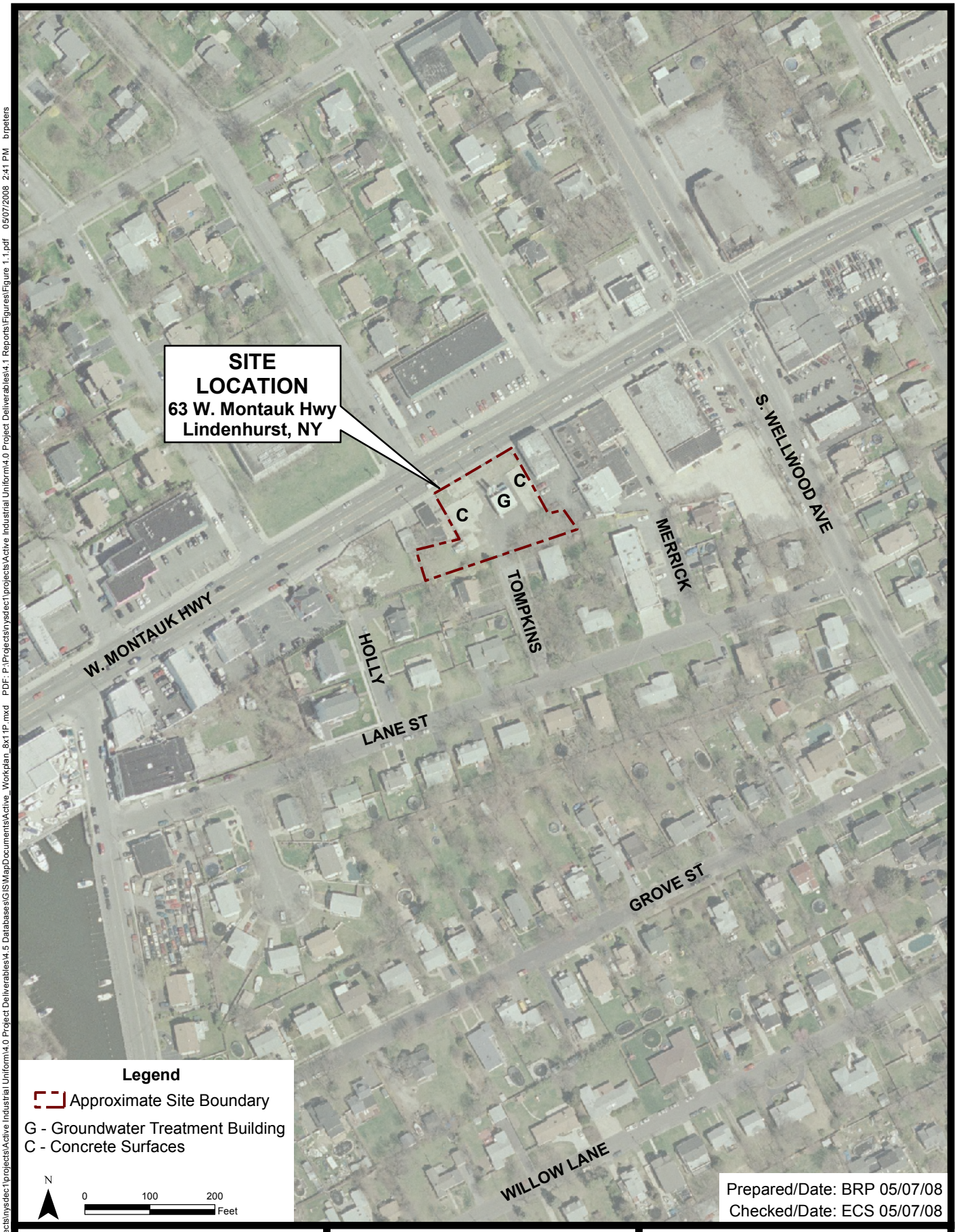
FIGURES

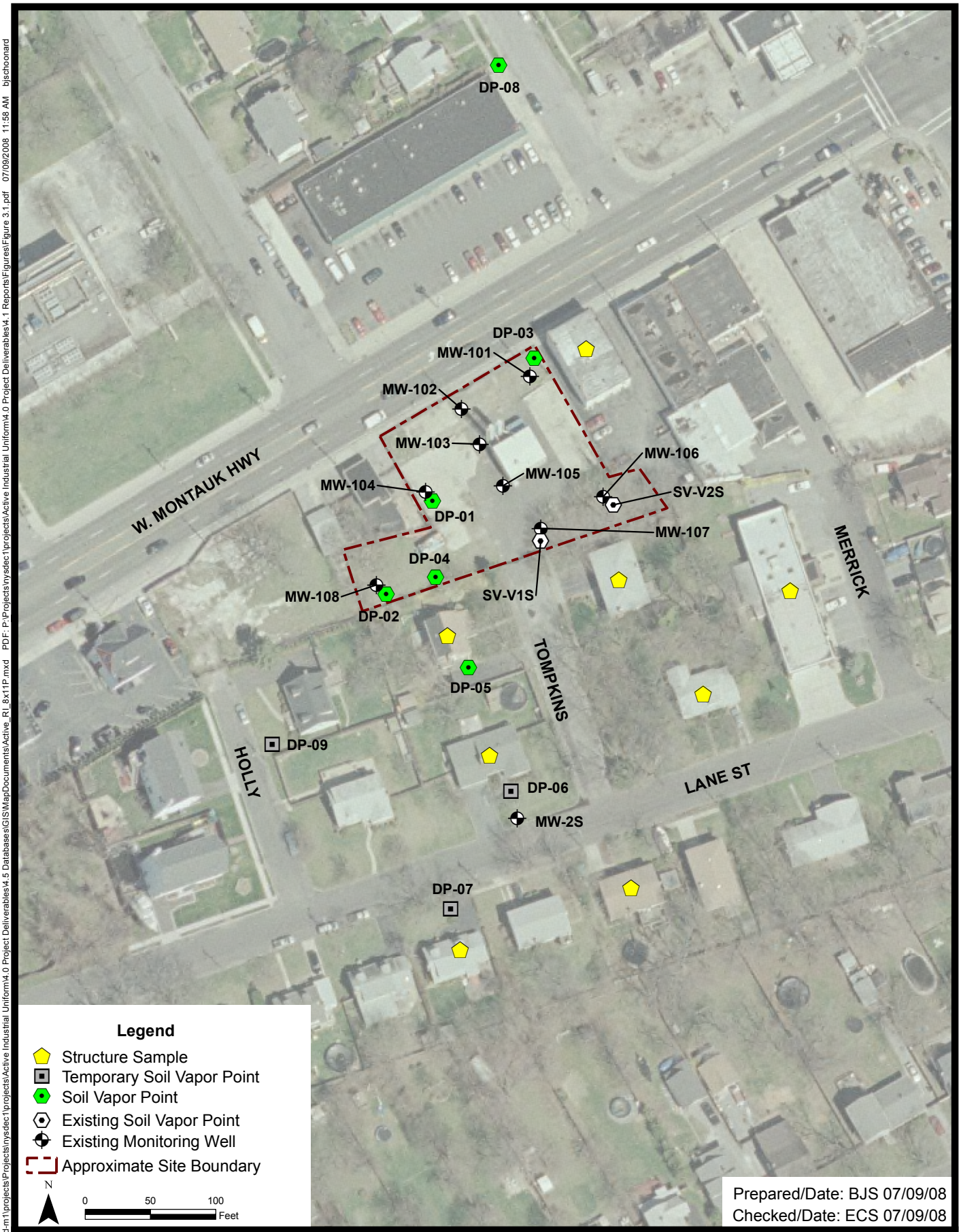


VI REPORT
ACTIVE INDUSTRIAL UNIFORM
LINDENHURST, NY

MACTEC

SITE LOCATION

Project 3612-07-2086
Figure 1.1



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VI REPORT
ACTIVE INDUSTRIAL UNIFORM
LINDENHURST, NY

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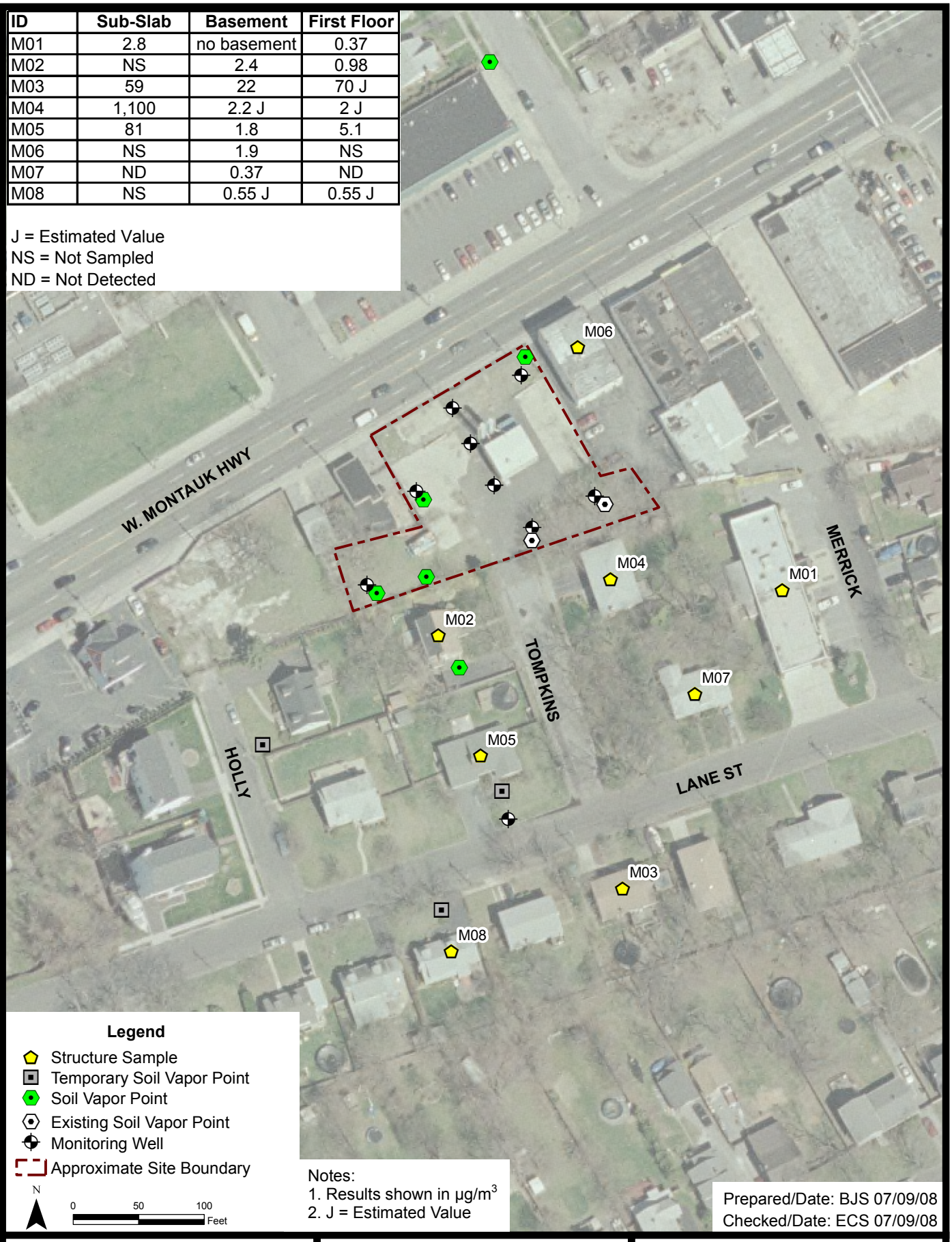
SAMPLING LOCATIONS

Project 3612-07-2086
Figure 3.1

ID	Sub-Slab	Basement	First Floor
M01	2.8	no basement	0.37
M02	NS	2.4	0.98
M03	59	22	70 J
M04	1,100	2.2 J	2 J
M05	81	1.8	5.1
M06	NS	1.9	NS
M07	ND	0.37	ND
M08	NS	0.55 J	0.55 J

J = Estimated Value
NS = Not Sampled
ND = Not Detected



Legend

- Structure Sample
- Temporary Soil Vapor Point
- Soil Vapor Point
- Existing Soil Vapor Point
- Monitoring Well
- Approximate Site Boundary

N
0 50 100 Feet

Notes:
1. Results shown in µg/m^3
2. J = Estimated Value

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VI REPORT
ACTIVE INDUSTRIAL UNIFORM
LINDENHURST, NY

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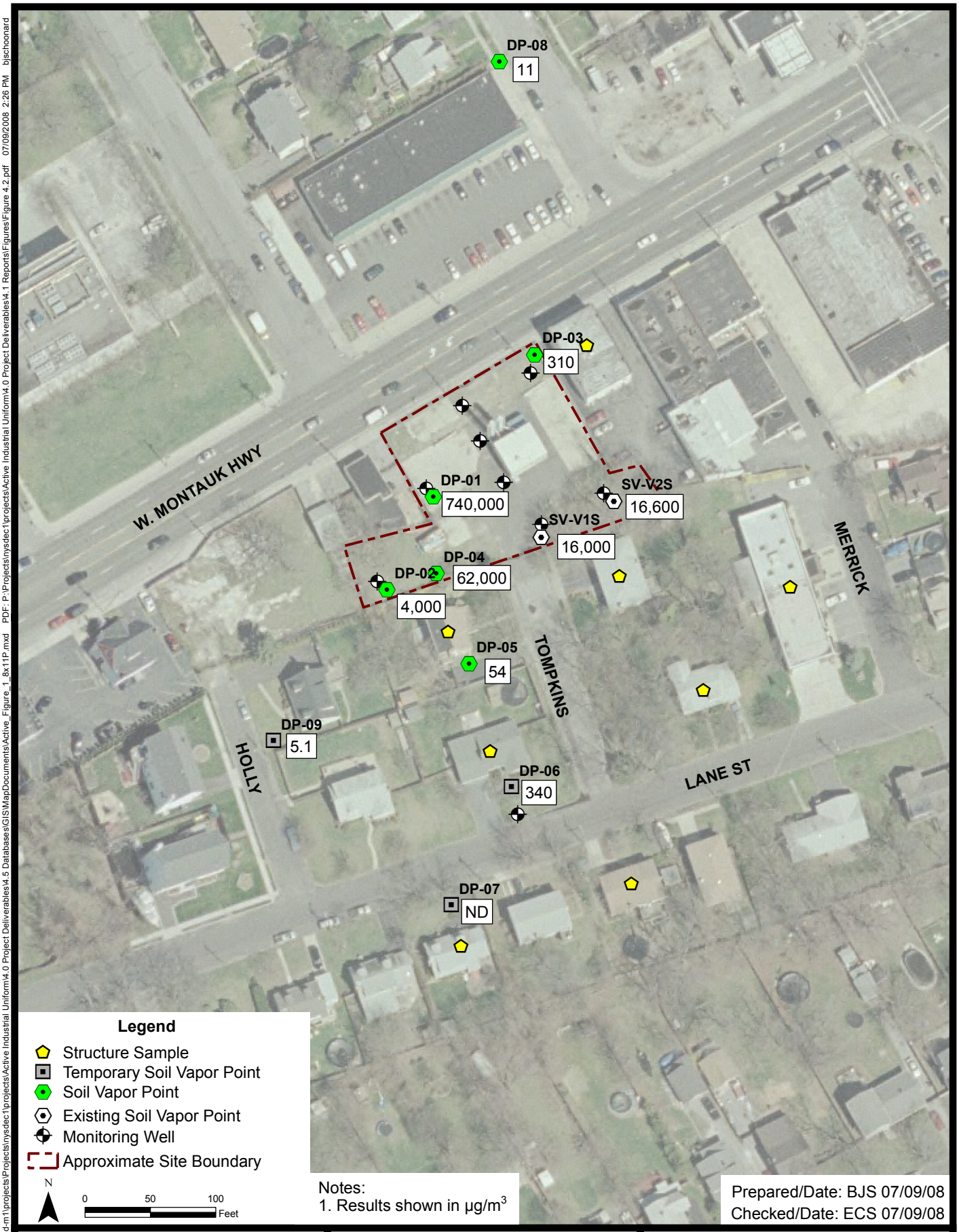
PCE IN 2007 SUB-SLAB VAPOR
AND INDOOR AIR
Project 3612072086
Figure 4.1

Document: \\portland-m1\projects\Projects\nysdec1\projects\Active Industrial Uniform\4.0 Project Deliverables\4.5 Databases\GIS\MapDocuments\Active_Figure_1_8x11P.mxd PDF: P:\Projects\nysdec1\projects\Active Industrial Uniform\4.0 Project Deliverables\4.1 Reports\Figures\Figure 4.1.pdf 07/09/2008 2:21 PM bjschoonard



Notes:
1. Results shown in µg/m^3

Prepared/Date: BJS 07/09/08
Checked/Date: ECS 07/09/08

VI REPORT
ACTIVE INDUSTRIAL UNIFORM
LINDENHURST, NY

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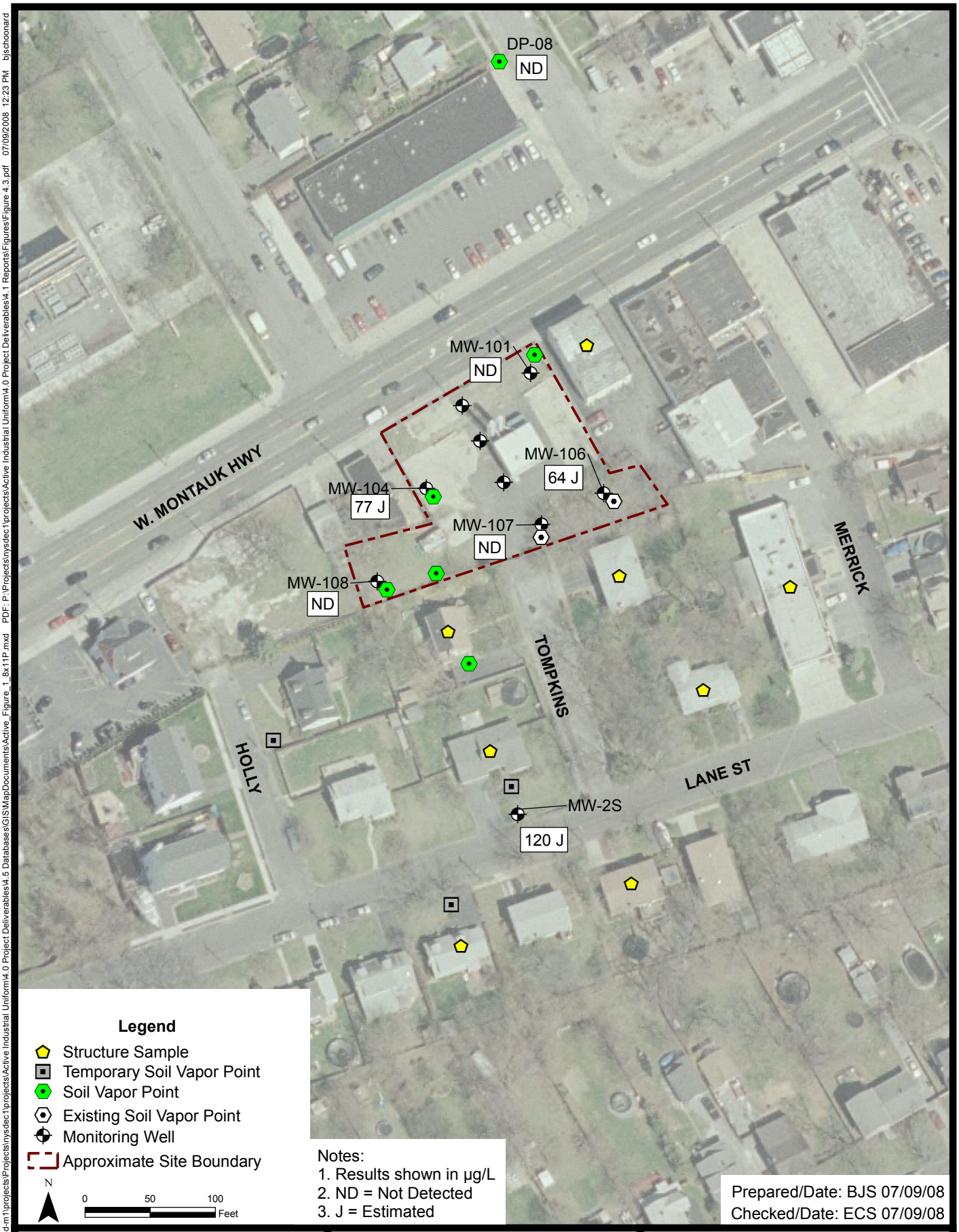
PCE IN 2007 SOIL VAPOR
(OUTSIDE LOCATIONS)
Project 3612072086
Figure 4.2



VI REPORT
ACTIVE INDUSTRIAL UNIFORM
LINDENHURST, NY

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PCE IN 2007 GROUNDWATER

Project 3612-07-2086
Figure 4.3

TABLES

Table: 3.1: Air Sample Data Collection Summary

Location	Field Sample ID	Sample Type	Vapor Point	Can ID	Regulator ID	Start Date	Start Time	Sample End Date	End Time	Start Pressure (inches of Hg)	End Pressure (inches of Hg)	Canister Size	Depth (feet)	Slab Thickness (inches)	Purge (ml)	He Tracer Detected	PID Reading: Purged Vapor (ppb)
Ambient (Outdoor) Air Samples																	
AA-01	AIAA001	Indoor Air	NA	1257	3088	11/28/2008	5:40 PM	11/29/2007	4:05 PM	-30	-3	6 Liter	NA	NA	NA	NA	NA
AA-02	AIAA002	Indoor Air	NA	1465	3075	11/29/2008	11:35 AM	11/30/2007	9:20 AM	-30 +	-9	6 Liter	NA	NA	NA	NA	NA
Indoor Air Samples																	
BA-M02	AIBAM02	Indoor Air	NA	1066	3014	11/26/2008	4:43 PM	11/27/2007	3:52 PM	-30	-10	6 Liter	NA	NA	NA	NA	NA
BA-M03	AIBAM03	Indoor Air	NA	1732	3257	11/27/2008	8:05 AM	11/28/2007	7:34 AM	-30 +	-5	6 Liter	NA	NA	NA	NA	NA
BA-M04	AIBAM04	Indoor Air	NA	1471	3288	11/27/2008	3:06 PM	11/28/2007	2:18 PM	-30 +	-8	6 Liter	NA	NA	NA	NA	NA
BA-M05	AIBAM05	Indoor Air	NA	1175	3306-2	11/28/2008	8:25 AM	11/29/2007	8:24 AM	-29	-5	6 Liter	NA	NA	NA	NA	NA
BA-M06	AIBAM06	Indoor Air	NA	1783	3121	11/28/2008	12:50 PM	11/29/2007	10:55 AM	-30 +	-11	6 Liter	NA	NA	NA	NA	NA
BA-M07	AIBAM07	Indoor Air	NA	1189	3061	11/28/2008	4:45 PM	11/29/2007	4:07 PM	-29	9	6 Liter	NA	NA	NA	NA	NA
BA-M08	AIBAM08	Indoor Air	NA	1095	3196	11/29/2008	11:25 AM	11/30/2007	9:10 AM	-30 +	-1	6 Liter	NA	NA	NA	NA	NA
FA-M01	AIFAM01	Indoor Air	NA	1120	3092	11/26/2007	3:36 PM	11/27/2007	1:54 PM	-30	-9	6 Liter	NA	NA	NA	NA	NA
FA-M02	AIFAM02	Indoor Air	NA	1701	3256	11/26/2007	4:54 PM	11/27/2007	3:48 PM	-30	-8	6 Liter	NA	NA	NA	NA	NA
FA-M03	AIFAM03	Indoor Air	NA	1644	3267	11/27/2007	8:17 AM	11/28/2007	7:48 AM	-29	0	6 Liter	NA	NA	NA	NA	NA
FA-M04	AIFAM04	Indoor Air	NA	1720	3055	11/27/2007	3:08 PM	11/28/2007	2:14 PM	-30	0	6 Liter	NA	NA	NA	NA	NA
FA-M05	AIFAM05	Indoor Air	NA	1023	3060	11/28/2007	8:43 AM	11/29/2007	8:20 AM	-30	-7	6 Liter	NA	NA	NA	NA	NA
FA-M07	AIFAM07	Indoor Air	NA	1481	3093	11/28/2007	4:55 PM	11/29/2007	4:05 PM	-29	7	6 Liter	NA	NA	NA	NA	NA
FA-M08	AIFAM08	Indoor Air	NA	1664	3160	11/29/2007	11:17 AM	11/30/2007	9:15 AM	-30 +	-3	6 Liter	NA	NA	NA	NA	NA
FA-M08	AIFAM08DUP	Indoor Air	NA	1458	3287	11/29/2007	11:17 AM	11/30/2007	9:15 AM	-30 +	-16	6 Liter	NA	NA	NA	NA	NA
Soil Vapor Samples - Sub-Slab																	
SS-M01	AISSM01	Sub Slab	Permanent	1450	3037	11/26/2007	3:45 PM	11/27/2007	11:14 AM	-30	-2	6 Liter	0.6	4	125	NA	11
SS-M03	AISSM03	Sub Slab	Permanent	1147	3065	11/27/2007	8:30 AM	11/28/2007	7:35 AM	-27	-5	6 Liter	0.5	3	240	NA	450
SS-M04	AISSM04	Sub Slab	Permanent	1073	3074	11/27/2007	2:54 PM	11/28/2007	2:02 PM	-30	-7	6 Liter	0.5	3	240	NA	665
SS-M05	AISSM05	Sub Slab	Permanent	1033	3044	11/28/2007	9:46 AM	11/29/2007	8:28 AM	-30	-10	6 Liter	0.5	3	240	NA	6
SS-M07	AISSM07	Sub Slab	Permanent	1614	3096	11/28/2007	4:50 PM	11/29/2007	4:09 PM	-30	-16	6 Liter	0.5	3	200	NA	0
Soil Vapor Samples - Direct Push Borings																	
DP-01	AISVM01DUP	Soil Vapor	Permanent	1764	NP	12/18/2007	8:20 AM	12/18/2007	8:24 AM	-30	-4	3 liter	5	NA	600	0%	143
DP-02	AISVM02	Soil Vapor	Permanent	1524	NP	12/18/2007	9:11 AM	12/18/2007	9:24 AM	-30	-5	3 liter	5	NA	600	0%	0
DP-03	AISVM03	Soil Vapor	Permanent	1774	NP	12/18/2007	8:45 AM	12/18/2007	9:09 AM	-30	-5	3 liter	5	NA	600	0%	0
DP-04	AISVM04	Soil Vapor	Permanent	1396	NP	12/19/2007	10:08 AM	12/19/2007	10:28 AM	-30	-4	3 liter	5	NA	600	0%	12
DP-05	AISVM05	Soil Vapor	Permanent	1349	NP	1/15/2008	2:54 PM	1/15/2008	3:14 PM	-28	-5	3 liter	5	NA	240	<0.1%	674
DP-06	AISVM06	Soil Vapor	Temporary	1358	NP	1/16/2008	7:45 AM	1/16/2008	8:05 AM	-30	-9	3 liter	5	NA	240	1%	1951
DP-07	AISVM07	Soil Vapor	Temporary	1371	NP	1/16/2008	8:29 AM	1/16/2008	8:49 AM	-30	-5	3 liter	5	NA	240	NR	1398
DP-08	AISVM08	Soil Vapor	Permanent	1680	NP	1/17/2008	9:20 AM	1/17/2008	9:40 AM	-30 +	-10	3 liter	5.5	NA	240	NR	188
DP-09	AISVM09	Soil Vapor	Temporary	1362	NP	1/17/2008	10:00 AM	1/17/2008	10:20 AM	-30 +	-10	3 liter	5.5	NA	240	NR	511
SV-V1S	AISVVIS	Soil Vapor	Permanent	1359	NP	11/30/2007	9:03 AM	11/30/2007	9:23 AM	-30	-6	3 liter	4.5	NA	240	<0.1%	3800
SV-V2S	AISVV2S	Soil Vapor	Permanent	1645	NP	11/30/2007	9:07 AM	11/30/2007	9:27 AM	-30	-6	3 liter	4.5	NA	240	<0.1%	NR

NP = Not Provided for 20 Minute Regulators
NR = Not Recorded
NA = Not Applicable

Table 4.1: Indoor Air VOC Results

Structure	Ambient Air				Structure 1				Structure 2				Structure 3			
Location	AA-01		AA-02		SS-M01		FA-M01		BA-M02		FA-M02		SS-M03		BA-M03	
Sample Date	11/29/2007		11/30/2007		11/27/2007		11/27/2007		11/27/2007		11/27/2007		11/28/2007		11/28/2007	
Sample ID	AIAA001		AIAA002		AISSM01		AIFAM01		AIBAM02		AIFAM02		AISSM03		AIBAM03	
Qc Code	FS		FS		FS		FS		FS		FS		FS		FS	
Parameter	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
1,1,1-Trichloroethane	0.25	U	0.25	U	**0.98**		0.25	U	**2.3**		**2.8**		**0.65**		0.25	U
1,1,2-Trichloro-1,2,2-Trifluoroethane	**0.69**		**0.69**		0.76	U	**0.69**		**0.55**		**0.76**		0.76	U	**0.69**	
1,1-Dichloroethane	0.18	U	0.18	U	0.4	U	0.18	U	0.18	U	0.18	U	0.4	U	0.18	U
1,2,4-Trimethylbenzene	0.23	U	0.23	U	**41**		**7.9**		**2.5**		**2.9**		**3.6**		**5.5**	
1,2-Dichlorobenzene	0.27	U	0.27	U	0.6	UJ	0.27	U	0.27	U	0.27	U	0.6	UJ	**0.7**	
1,2-Dichloroethane	0.18	U	0.18	U	0.4	U	0.18	U	**3.2**		**2.5**		0.4	U	0.18	U
1,3,5-Trimethylbenzene	0.23	U	0.23	U	**10**		**2.1**		**0.49**		**0.44**		**0.88**		**1.3**	
1,3-Dichlorobenzene	0.27	UJ	0.27	UJ	0.6	UJ	0.27	UJ	0.27	UJ	0.27	UJ	0.6	UJ	0.27	UJ
1,4-Dichlorobenzene	0.27	UJ	0.27	UJ	**66**	J	**180**	J	**0.6**	J	**1.3**	J	**180**	J	**340**	J
2-Butanone	**2.2**	J	**1.5**	J	**6.4**		**6.5**	J	**4.4**	J	**7.9**	J	**5.7**		**2.7**	J
2-Hexanone	**0.59**		**0.26**		0.4	U	**1.3**		**0.48**		**1.4**		**1.6**		0.18	U
2-Propanol	1.2	U	1.2	U	**6.3**		**5.7**		**23**		**27**		**24**		**57**	
4-Ethyltoluene	0.23	U	0.23	U	**9.7**		**2**		**0.44**		**0.4**		**0.88**		**1.2**	
4-Methyl-2-pentanone	0.18	UJ	0.18	UJ	**3.2**		**1**	J	**0.18**		**0.66**	J	**0.66**		0.18	UJ
Acetone	**11**		**7.7**		2.4	U	**54**		**44**		**80**		**50**		**48**	
Benzene	**0.55**		**0.63**		**22**		**3.5**		**1.2**		**1.5**		**1.7**		**2.2**	
Carbon tetrachloride	**0.45**		**0.51**		0.62	U	**0.57**		**0.51**		**0.62**		0.62	U	**0.51**	
Chloroethane	0.12	U	0.12	U	0.26	U	0.12	U	0.12	U	0.12	U	0.26	U	0.12	U
Chloroform	0.22	U	0.22	U	0.48	U	0.22	U	**0.31**		**0.61**		**1.7**		0.22	U
Chloromethane	**1.2**		**1.2**		**0.95**		**1.3**		**1.2**		**2.3**		**1.1**		**1.7**	
Cis-1,2-Dichloroethene	0.18	U	0.18	U	0.4	U	0.18	U	0.18	U	0.18	U	0.4	U	0.18	U
Cyclohexane	0.16	U	0.16	U	**13**		**1.6**		**0.56**		**1.1**		**0.62**		**0.93**	
Dichlorodifluoromethane	**2.8**		**3**		**3.2**		**3.2**		**5.4**		**8.4**		**2.8**		**2.9**	
Ethanol	**5.6**	J	**8.4**	J	**330**	J	**180**	J	**620**	J	**2400**	J	**330**	J	**860**	J
Ethyl acetate	0.17	U	0.17	U	0.36	U	0.17	U	**1.8**		**8**		**3.5**		**9.1**	
Ethyl benzene	**0.51**		**0.23**		**40**		**5.3**		**1.1**		**1.4**		**2.2**		**3.4**	
Heptane	0.18	U	0.18	U	**28**		**3.5**		**1.7**		**3.9**		**1.6**		**3**	
Hexane	**0.41**		**0.6**		**61**		**11**		**0.98**		**1.3**		**3.6**		**6.9**	
Methyl Tertbutyl Ether	0.17	U	0.17	U	**2**		0.17	U	0.17	U	0.17	U	0.36	U	0.17	U
Methylene chloride	**1.7**	J	**1.9**	J	7.4	U	**18**	J	**4.7**	J	**9**	J	1.8	U	**2.2**	J
Naphthalene	0.58	U	0.58	U	**5.9**		**0.94**		**0.9**		**1.2**		**4.4**		**8**	
o-Xylene	**0.31**		**0.23**		**39**		**6.1**		**1.1**		**1.4**		**2.8**		**4.5**	
Propylene	**0.64**		0.31	U	0.69	U	**1.5**		0.31	U	0.31	U	**13**		0.31	U
Styrene	0.19	U	0.19	U	**1**		**0.38**		**1.1**		**1.4**		**0.51**		**0.84**	
Tetrachloroethene	0.31	U	**0.49**		**2.8**		**0.37**		**2.4**		**0.98**		**59**		**22**	
Tetrahydrofuran	0.27	UJ	0.27	UJ	0.59	U	0.27	UJ	0.27	UJ	0.27	UJ	0.59	U	**1**	J
Toluene	**1.7**		**1.6**		**220**		**35**		**21**		**54**		**19**		**33**	
trans-1,2-Dichloroethene	0.18	U	0.18	U	0.4	U	0.18	U	0.18	U	0.18	U	0.4	U	0.18	U
Trichloroethene	0.25	U	0.25	U	0.54	U	0.25	U	0.25	U	0.25	U	0.54	U	0.25	U
Trichlorofluoromethane	**1.3**		**1.2**		**3.1**		**7.3**		**2.8**		**51**		**1.8**		**2.8**	
Vinyl acetate	**0.44**		**0.38**		**16**		**4**		**2.8**		**9.9**		**2.1**		**2**	
Xylene, m/p	**1.1**		**0.63**		**110**		**17**		**3.2**		**4.1**		**7.7**		**13**	

Table 4.1: Indoor Air VOC Results

Structure	Ambient Air						Structure 4						Structure 5			
Location	AA-01		AA-02		FA-M03		SS-M04		BA-M04		FA-M04		SS-M05		BA-M05	
Sample Date	11/29/2007		11/30/2007		11/28/2007		11/28/2007		11/28/2007		11/28/2007		11/29/2007		11/29/2007	
Sample ID	AIAA001		AIAA002		AIFAM03		AISSM04		AIBAM04		AIFAM04		AISSM05		AIBAM05	
Qc Code	FS		FS		FS		FS		FS		FS		FS		FS	
Parameter	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
1,1,1-Trichloroethane	0.25	U	0.25	U	0.25	UJ	**15**		**0.83**		**0.74**	J	0.54	U	0.25	U
1,1,2-Trichloro-1,2,2-Trifluoroethane	**0.69**		**0.69**		**0.76**	J	0.76	U	**0.69**		**0.76**	J	0.76	U	**0.69**	
1,1-Dichloroethane	0.18	U	0.18	U	0.18	UJ	**2.5**		0.18	U	0.18	UJ	0.4	U	0.18	U
1,2,4-Trimethylbenzene	0.23	U	0.23	U	**7.1**	J	**3.2**		**5.6**		**4.4**	J	0.5	U	**0.4**	
1,2-Dichlorobenzene	0.27	U	0.27	U	**1.7**	J	0.6	UJ	0.27	U	0.27	UJ	0.6	UJ	0.27	U
1,2-Dichloroethane	0.18	U	0.18	U	**0.36**	J	0.4	U	**0.44**		**0.4**	J	0.4	U	0.18	U
1,3,5-Trimethylbenzene	0.23	U	0.23	U	**1.6**	J	**0.79**		**1.5**		**1.1**	J	0.5	U	0.23	U
1,3-Dichlorobenzene	0.27	UJ	0.27	UJ	**1**	J	0.6	UJ	0.27	UJ	0.27	UJ	0.6	UJ	0.27	UJ
1,4-Dichlorobenzene	0.27	UJ	0.27	UJ	**570**	J	**1.1**	J	0.27	UJ	**0.27**	J	0.6	UJ	0.27	UJ
2-Butanone	**2.2**	J	**1.5**	J	**7.1**	J	**3.4**		**2.2**	J	**5**	J	**3.9**		**7.4**	J
2-Hexanone	**0.59**		**0.26**		**0.96**	J	0.4	U	0.18	U	0.18	UJ	**0.49**		0.18	U
2-Propanol	1.2	U	1.2	U	**86**	J	**3.3**		**7.4**		**9.4**	J	2.5	U	**8.1**	
4-Ethyltoluene	0.23	U	0.23	U	**1.6**	J	**0.69**		**1.5**		**1.2**	J	0.5	U	0.23	U
4-Methyl-2-pentanone	0.18	UJ	0.18	UJ	**0.96**	J	0.4	U	0.18	UJ	**0.66**	J	0.4	U	0.18	UJ
Acetone	**11**		**7.7**		**80**	J	2.4	U	1.1	U	1.1	UJ	**41**		**24**	
Benzene	**0.55**		**0.63**		**2.5**	J	**4.1**		**7.8**		**6.9**	J	0.32	U	**0.66**	
Carbon tetrachloride	**0.45**		**0.51**		**0.62**	J	0.62	U	**0.57**		**0.62**	J	0.62	U	**0.51**	
Chloroethane	0.12	U	0.12	U	**0.26**	J	0.26	U	0.12	U	0.12	UJ	0.26	U	0.12	U
Chloroform	0.22	U	0.22	U	**0.31**	J	**2.9**		0.22	U	0.22	UJ	**0.58**		**0.39**	
Chloromethane	**1.2**		**1.2**		**2.6**	J	0.2	U	**1.6**		**2.2**	J	0.2	U	**1.4**	
Cis-1,2-Dichloroethene	0.18	U	0.18	U	0.18	UJ	**3.3**		**2.3**		**1.7**	J	0.4	U	0.18	U
Cyclohexane	0.16	U	0.16	U	**1**	J	**1.4**		**2.3**		**2.1**	J	0.34	U	**0.37**	
Dichlorodifluoromethane	**2.8**		**3**		**3.4**	J	**3**		**3.2**		**3.8**	J	**2.4**		**3.1**	
Ethanol	**5.6**	J	**8.4**	J	**3100**	J	**93**		500	J	**700**	J	5.9	U	**1200**	J
Ethyl acetate	0.17	U	0.17	U	**36**	J	0.36	U	**1**		**2.7**	J	0.36	U	**0.52**	
Ethyl benzene	**0.51**		**0.23**		**6.3**	J	**3.1**		**6.2**		**5**	J	0.44	U	**0.51**	
Heptane	0.18	U	0.18	U	**2.9**	J	**2.6**		**6.5**		**6.2**	J	0.4	U	**0.44**	
Hexane	**0.41**		**0.6**		**5.9**	J	**6.4**		**13**		**14**	J	0.36	U	**1**	
Methyl Tertbutyl Ether	0.17	U	0.17	U	0.17	UJ	0.36	U	0.17	U	0.17	UJ	0.36	U	0.17	U
Methylene chloride	**1.7**	J	**1.9**	J	**1.8**	J	6.1	U	**5.1**	J	**5.5**	J	0.97	U	**2.4**	J
Naphthalene	0.58	U	0.58	U	**27**	J	1.3	U	0.58	U	0.58	UJ	1.3	U	0.58	U
o-Xylene	**0.31**		**0.23**		**7.2**	J	**4.1**		**7.7**		**5.6**	J	0.44	U	**0.43**	
Propylene	**0.64**		0.31	U	0.31	UJ	0.69	U	0.31	U	**3.3**	J	0.69	U	**1.1**	
Styrene	0.19	U	0.19	U	**1.8**	J	0.42	U	**0.38**		**0.65**	J	0.42	U	**0.23**	
Tetrachloroethene	0.31	U	**0.49**		**70**	J	**1100**		**2.2**	J	**2**	J	**81**		**1.8**	
Tetrahydrofuran	0.27	UJ	0.27	UJ	**2**	J	0.59	U	0.27	UJ	0.27	UJ	**0.71**		**5.7**	J
Toluene	**1.7**		**1.6**		**78**	J	**37**		**63**		**60**	J	**1.3**		**3.7**	
trans-1,2-Dichloroethene	0.18	U	0.18	U	0.18	UJ	**4.9**		0.18	U	0.18	UJ	0.4	U	0.18	U
Trichloroethene	0.25	U	0.25	U	0.25	UJ	**6**		0.25	UJ	0.25	UJ	**1.5**		0.25	U
Trichlorofluoromethane	**1.3**		**1.2**		**3.3**	J	**1.5**		**2.3**		**2.2**	J	**0.9**		**2**	
Vinyl acetate	**0.44**		**0.38**		**4.1**	J	**6.8**		**10**		**13**	J	**1.6**		**0.54**	
Xylene, m/p	**1.1**		**0.63**		**21**	J	**12**		**22**		**16**	J	0.86	U	**1.2**	

Table 4.1: Indoor Air VOC Results

Structure	Ambient Air						Structure 6		Structure 7					
Location	AA-01		AA-02		FA-M05		BA-M06		SS-M07		BA-M07		FA-M07	
Sample Date	11/29/2007		11/30/2007		11/29/2007		11/29/2007		11/29/2007		11/29/2007		11/29/2007	
Sample ID	AIAA001		AIAA002		AIFAM05		AIBAM06		AISSM07		AIBAM07		AIFAM07	
Qc Code	FS		FS		FS		FS		FS		FS		FS	
Parameter	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
1,1,1-Trichloroethane	0.25	U	0.25	U	0.25	U	0.25	U	0.54	U	0.25	U	0.25	U
1,1,2-Trichloro-1,2,2-Trifluoroethane	**0.69**		**0.69**		**0.69**		**0.62**		0.76	U	**0.69**		**0.69**	
1,1-Dichloroethane	0.18	U	0.18	U	0.18	U	0.18	U	0.4	U	0.18	U	0.18	U
1,2,4-Trimethylbenzene	0.23	U	0.23	U	**0.66**		0.23	U	**3**		**15**		**8.4**	
1,2-Dichlorobenzene	0.27	U	0.27	U	0.27	U	0.27	U	0.6	UJ	0.27	U	0.27	U
1,2-Dichloroethane	0.18	U	0.18	U	0.18	U	0.18	U	0.4	U	0.18	U	0.18	U
1,3,5-Trimethylbenzene	0.23	U	0.23	U	0.23	U	0.23	U	**0.69**		**4**		**2**	
1,3-Dichlorobenzene	0.27	UJ	0.27	UJ	0.27	UJ	0.27	UJ	0.6	UJ	0.27	UJ	0.27	UJ
1,4-Dichlorobenzene	0.27	UJ	0.27	UJ	**0.27**	J	0.27	UJ	0.6	UJ	0.27	UJ	0.27	UJ
2-Butanone	**2.2**	J	**1.5**	J	**15**	J	1.4	UJ	**4.7**		**9.9**	J	**5.3**	J
2-Hexanone	**0.59**		**0.26**		**0.48**		0.18	U	**0.57**		0.18	U	0.18	U
2-Propanol	1.2	U	1.2	U	**33**		1.2	U	**5.5**		**3.8**		**11**	
4-Ethyltoluene	0.23	U	0.23	U	0.23	U	0.23	U	**0.69**		**4.4**		**2.3**	
4-Methyl-2-pentanone	0.18	UJ	0.18	UJ	**0.37**	J	0.18	UJ	0.4	U	0.18	UJ	0.18	UJ
Acetone	**11**		**7.7**		**68**		**4**		**130**		**37**		**30**	
Benzene	**0.55**		**0.63**		**0.95**		**0.63**		**1.3**		**8.6**		**4.7**	
Carbon tetrachloride	**0.45**		**0.51**		**0.74**		**0.45**		0.62	U	**0.51**		**0.96**	
Chloroethane	0.12	U	0.12	U	0.12	U	0.12	U	0.26	U	0.12	U	0.12	U
Chloroform	0.22	U	0.22	U	**2.1**		0.22	U	0.48	U	0.22	U	**6.1**	
Chloromethane	**1.2**		**1.2**		**1.6**		**1.1**		0.2	U	**1.1**		**1.3**	
Cis-1,2-Dichloroethene	0.18	U	0.18	U	0.18	U	0.18	U	0.4	U	0.18	U	0.18	U
Cyclohexane	0.16	U	0.16	U	**0.4**		0.16	U	0.34	U	**4**		**2**	
Dichlorodifluoromethane	**2.8**		**3**		**3.1**		**2.8**		**3.2**		**3.1**		**3**	
Ethanol	**5.6**	J	**8.4**	J	**3200**	J	**9**	J	**320**	J	**170**	J	170	J
Ethyl acetate	0.17	U	0.17	U	**2.3**		0.17	U	0.36	U	0.17	U	**3**	
Ethyl benzene	**0.51**		**0.23**		**1.4**		0.2	U	**1.9**		**16**		**7.8**	
Heptane	0.18	U	0.18	U	**0.92**		0.18	U	0.4	U	**11**		**2.3**	
Hexane	**0.41**		**0.6**		**0.98**		**0.63**		**1.3**		**32**		**15**	
Methyl Tertbutyl Ether	0.17	U	0.17	U	0.17	U	0.17	U	**5.9**		0.17	U	0.17	U
Methylene chloride	**1.7**	J	**1.9**	J	**2.3**	J	**1.7**	J	4	U	**13**	J	**7.3**	J
Naphthalene	0.58	U	0.58	U	0.58	U	0.58	U	1.3	U	**1.5**		**1.7**	
o-Xylene	**0.31**		**0.23**		**1.4**		0.2	U	**3**		**14**		**7**	
Propylene	**0.64**		0.31	U	0.31	U	0.31	U	0.69	U	0.31	U	0.31	U
Styrene	0.19	U	0.19	U	**1**		0.19	U	0.42	U	**0.46**		**0.54**	
Tetrachloroethene	0.31	U	**0.49**		**5.1**		**1.9**		0.68	U	**0.37**		0.31	U
Tetrahydrofuran	0.27	UJ	0.27	UJ	**13**	J	0.27	UJ	0.59	U	**3.7**	J	**1.5**	J
Toluene	**1.7**		**1.6**		**19**		**1.1**		**9.4**		**71**		**49**	
trans-1,2-Dichloroethene	0.18	U	0.18	U	0.18	U	0.18	U	0.4	U	0.18	U	0.18	U
Trichloroethene	0.25	U	0.25	U	0.25	U	**0.34**		0.54	U	0.25	U	0.25	U
Trichlorofluoromethane	**1.3**		**1.2**		**1.3**		**1.2**		**1.2**		**1.2**		**1.1**	
Vinyl acetate	**0.44**		**0.38**		**2.4**		0.32	U	**2.5**		**8.5**		**4.3**	
Xylene, m/p	**1.1**		**0.63**		*3.9*		**0.51**		**7.7**		**42**		**21**	

Table 4.1: Indoor Air VOC Results

Structure	Ambient Air				Structure 8					
Location	AA-01		AA-02		BA-M08		FA-M08		FA-M08	
Sample Date	11/29/2007		11/30/2007		11/30/2007		11/30/2007		11/30/2007	
Sample ID	AIAA001		AIAA002		AIBAM08		AIFAM08		AIFAM08 DUP	
Qc Code	FS		FS		FS		FS		FD	
Parameter	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
1,1,1-Trichloroethane	0.25	U	0.25	U	0.25	UJ	0.25	UJ	0.25	U
1,1,2-Trichloro-1,2,2-Trifluoroethane	**0.69**		**0.69**		**0.55**	J	**0.76**	J	**0.69**	
1,1-Dichloroethane	0.18	U	0.18	U	0.18	UJ	0.18	UJ	0.18	U
1,2,4-Trimethylbenzene	0.23	U	0.23	U	0.23	UJ	**0.62**	J	**0.49**	
1,2-Dichlorobenzene	0.27	U	0.27	U	0.27	UJ	0.27	UJ	0.27	U
1,2-Dichloroethane	0.18	U	0.18	U	0.18	UJ	0.18	UJ	0.18	U
1,3,5-Trimethylbenzene	0.23	U	0.23	U	0.23	UJ	0.23	UJ	0.23	U
1,3-Dichlorobenzene	0.27	UJ	0.27	UJ	0.27	UJ	0.27	UJ	0.27	UJ
1,4-Dichlorobenzene	0.27	UJ	0.27	UJ	**3.2**	J	**2.6**	J	**1.9**	J
2-Butanone	**2.2**	J	**1.5**	J	1.4	UJ	**3.3**	J	**1.4**	J
2-Hexanone	**0.59**		**0.26**		0.18	UJ	0.18	UJ	0.18	U
2-Propanol	1.2	U	1.2	U	**1.3**	J	**44**	J	**27**	J
4-Ethyltoluene	0.23	U	0.23	U	0.23	UJ	0.23	UJ	0.23	U
4-Methyl-2-pentanone	0.18	UJ	0.18	UJ	0.18	UJ	0.18	UJ	0.18	UJ
Acetone	**11**		**7.7**		**11**	J	**50**	J	**36**	J
Benzene	**0.55**		**0.63**		**0.63**	J	**0.92**	J	**0.83**	
Carbon tetrachloride	**0.45**		**0.51**		**0.45**	J	**0.51**	J	**0.51**	
Chloroethane	0.12	U	0.12	U	0.12	UJ	**0.45**	J	**0.28**	J
Chloroform	0.22	U	0.22	U	**0.26**	J	0.22	UJ	0.22	U
Chloromethane	**1.2**		**1.2**		**0.99**	J	**1.5**	J	**1.3**	
Cis-1,2-Dichloroethene	0.18	U	0.18	U	0.18	UJ	0.18	UJ	0.18	U
Cyclohexane	0.16	U	0.16	U	**0.22**	J	**0.34**	J	**0.31**	
Dichlorodifluoromethane	**2.8**		**3**		**2.6**	J	**3.2**	J	**3.1**	
Ethanol	**5.6**	J	**8.4**	J	**61**	J	**420**	J	**330**	J
Ethyl acetate	0.17	U	0.17	U	0.17	UJ	**4**	J	**3.5**	
Ethyl benzene	**0.51**		**0.23**		**0.23**	J	**0.62**	J	**0.51**	
Heptane	0.18	U	0.18	U	**0.66**	J	**0.92**	J	**0.74**	
Hexane	**0.41**		**0.6**		**0.79**	J	**1.2**	J	**1.1**	
Methyl Tertbutyl Ether	0.17	U	0.17	U	0.17	UJ	0.17	UJ	0.17	U
Methylene chloride	**1.7**	J	**1.9**	J	**0.53**	J	**0.53**	J	**0.78**	J
Naphthalene	0.58	U	0.58	U	0.58	UJ	0.58	UJ	0.58	U
o-Xylene	**0.31**		**0.23**		**0.23**	J	**0.55**	J	**0.43**	
Propylene	**0.64**		0.31	U	**0.76**	J	0.31	UJ	0.31	U
Styrene	0.19	U	0.19	U	0.19	UJ	**0.5**	J	**0.34**	
Tetrachloroethene	0.31	U	**0.49**		**0.55**	J	**0.55**	J	**0.43**	
Tetrahydrofuran	0.27	UJ	0.27	UJ	0.27	UJ	0.27	UJ	0.27	UJ
Toluene	**1.7**		**1.6**		**2.6**	J	**8.6**	J	**7.7**	
trans-1,2-Dichloroethene	0.18	U	0.18	U	0.18	UJ	0.18	UJ	0.18	U
Trichloroethene	0.25	U	0.25	U	0.25	UJ	0.25	UJ	0.25	U
Trichlorofluoromethane	**1.3**		**1.2**		**1.1**	J	**1.3**	J	**1.3**	
Vinyl acetate	**0.44**		**0.38**		**0.44**	J	**2**	J	**0.48**	J
Xylene, m/p	**1.1**		**0.63**		**0.7**	J	**1.4**	J	**1.2**	

Notes:

Only Detected Compounds shown.
Samples analyzed for VOCs by USEPA Method TO-15.
Location Name: AA = Ambient Air; SS = Sub-Slab;
BA = Basement Air; FA = First Floor Air
Results in microgram per cubic meter ($\mu g/m^3$)
QC Code:
FS = Field Sample
FD = Field Duplicate Sample
Qualifiers:
U = Not detected at a concentration greater than the RL
J = Estimated value
Detections are indicated in **BOLD**

Highlighted results fall within the guidance criteria for **Mitigate,** as established in "Guidance for Evaluating Soil Vapor Intrusion in the State of New York (New York State Department of Health, 2006).

Highlighted results fall within the criteria for **Monitor,** as established in "Guidance for Evaluating Soil Vapor Intrusion in the State of New York (New York State Department of Health, 2006)..

Highlighted results exceed ambient conditions and fall within criteria for recommend that reasonable and practical actions are taken to identify the source(s) and reduce exposure, as established in "Guidance for Evaluating Soil Vapor Intrusion.." (New York State Department of Health, 2006).

Table 4.2: Soil Vapor Results

Location	SV-V1S		SV-V2S		DP-01		DP-02		DP-03		DP-04	
Field Sample Date	11/30/2007		11/30/2007		12/18/2007		12/18/2007		12/18/2007		12/19/2007	
Field Sample ID	AISVVIS		AISVV2S		AISVM01 DUP		AISVM02		AISVM03		AISVM04	
Sample Interval (feet bgs)	3.5 - 4.5		3.5 - 4.5		3.5 - 5.0		3.5 - 5.0		3.5 - 5.0		3.5 - 5.0	
QC Code	FS		FS		FD		FS		FS		FS	
Parameter	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
1,1,1-Trichloroethane	**200**		**51**		**700**		**2.1**		**50**		**36**	
1,1-Dichloroethane	4	U	**15**		**15**		0.4	U	0.4	U	**9.7**	
1,1-Dichloroethene	4	U	4	U	**13**		0.4	U	0.4	U	4	U
1,2,4-Trimethylbenzene	5	U	5	U	5	U	**1.7**		**3**		5	U
1,2-Dichloroethane	4	U	4	U	4	U	0.4	U	0.4	U	4	U
1,3,5-Trimethylbenzene	5	U	5	U	5	U	0.5	U	**0.98**		5	U
1,3-Dichlorobenzene	6	UJ	6	UJ	6	U	0.6	U	0.6	U	6	U
2-Butanone	30	U	30	U	30	U	3	U	3	U	30	U
2-Propanol	25	U	25	U	25	U	**6.2**		**2.9**		25	U
4-Ethyltoluene	5	U	5	U	5	U	0.5	U	**0.59**		5	U
4-Methyl-2-pentanone	4	U	4	U	4	U	0.4	U	0.4	U	4	U
Acetone	24	U	24	U	24	U	**85**		**39**		24	U
Benzene	3.2	U	3.2	U	**27**		**11**		**6.6**		**3.8**	
Carbon disulfide	32	U	32	U	32	U	3.2	U	**20**		32	U
Chlorobenzene	4.6	U	4.6	U	**6.4**		0.46	U	0.46	U	**4.6**	
Chloroform	**6.8**		**15**		**190**		**2.7**		**1.3**		**13**	
Cis-1,2-Dichloroethene	**77**		**3400**		**1600**		**320**		**2**		**21000**	
Cyclohexane	3.4	U	3.4	U	3.4	U	**1.2**		**1.4**		3.4	U
Dichlorodifluoromethane	5	U	5	U	5	U	**2.8**		**3**		5	U
Ethanol	19	U	19	U	19	UJ	**19**	J	**7.3**	J	19	UJ
Ethyl benzene	4.4	U	4.4	U	4.4	U	**0.87**		**1.4**		4.4	U
Heptane	4	U	4	U	4	U	**0.98**		**4.5**		4	U
Hexane	3.6	U	3.6	U	**4.9**		**5.9**		**11**		3.6	U
Methyl Tertbutyl Ether	3.6	U	3.6	U	3.6	U	**0.43**		0.36	U	3.6	U
Methylene chloride	**13**		7	U	43	U	6.5	U	1.7	U	7	U
Naphthalene	13	U	13	U	13	U	1.3	U	1.3	U	13	U
o-Xylene	4.4	U	4.4	U	4.4	U	**0.96**		**1.7**		4.4	U
Styrene	4.2	U	4.2	U	4.2	U	0.42	U	0.42	U	4.2	U
Tetrachloroethene	**16000**		**6600**		**740000**		**4000**		**310**		**62000**	
Toluene	3.8	U	3.8	U	3.8	U	**2.6**		**15**		3.8	U
trans-1,2-Dichloroethene	**9.5**		**52**		**89**		**14**		0.4	U	**410**	
Trichloroethene	**1200**		**4000**		**20000**		**310**		**64**		**8200**	
Trichlorofluoromethane	**5.6**		**18**		5.6	U	**1.3**		**1.6**		5.6	U
Vinyl acetate	7.1	U	7.1	U	7.1	U	0.71	U	0.71	U	7.1	U
Vinyl chloride	2.6	U	2.6	U	2.6	U	0.26	U	0.26	U	**14**	
Xylene, m/p	8.6	U	8.6	U	8.6	U	**2.3**		**4.3**		8.6	U

Notes:
Only Detected Compounds shown.
Samples analyzed for VOCs by USEPA Method TO-15.
Results in microgram per cubic meter (µg/m3)
QC Code:
FS = Field Sample
FD = Field Duplicate
Detections are indicated in **BOLD**
Qualifiers:
U = Not detected at a concentration greater than the RL
J = Estimated value

Table 4.2: Soil Vapor Results

Location	DP-05		DP-06		DP-07		DP-08		DP-09	
Field Sample Date	1/15/2008		1/16/2008		1/16/2008		1/17/2008		1/17/2008	
Field Sample ID	AISVM05		AISVM06		AISVM07		AISVM08		AISVM09	
Sample Interval (feet bgs)	4.0 - 5.0		4.0 - 5.0		4.0 - 5.0		4.0 - 5.5		4.0 - 5.5	
QC Code	FS		FS		FS		FS		FS	
Parameter	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
1,1,1-Trichloroethane	0.25	U	54	UJ	1.4	UJ	**1.9**		0.25	UJ
1,1-Dichloroethane	0.18	U	40	U	1	U	0.18	U	0.18	U
1,1-Dichloroethene	0.36	U	80	U	2	U	0.36	U	0.36	U
1,2,4-Trimethylbenzene	**1.6**		50	U	1.3	U	**4.1**		**1.2**	
1,2-Dichloroethane	0.18	U	40	U	**7.1**		0.18	U	0.18	U
1,3,5-Trimethylbenzene	0.23	U	50	U	1.3	U	**1.4**		**0.93**	
1,3-Dichlorobenzene	0.27	U	60	U	1.5	U	**0.38**		0.27	U
2-Butanone	1.1	U	**170**		**22**		**4.6**	J	**1.3**	
2-Propanol	**0.8**		50	U	1.3	U	**1.4**		0.23	U
4-Ethyltoluene	0.23	U	50	U	1.3	U	**1.1**		**0.49**	
4-Methyl-2-pentanone	0.18	U	40	UJ	1	UJ	**0.81**		0.18	UJ
Acetone	**8.9**	J	**1300**	J	0.6	UJ	**10**	J	**7.7**	J
Benzene	0.15	U	**1500**		**380**		**21**		**3.4**	
Carbon disulfide	0.29	U	**1500**	J	1.6	UJ	**3.9**		**8.7**	J
Chlorobenzene	0.21	U	46	U	1.2	U	0.21	U	0.21	U
Chloroform	**0.79**		48	U	1.2	U	0.22	U	**0.66**	
Cis-1,2-Dichloroethene	0.18	U	40	U	**8.3**		0.18	U	0.18	U
Cyclohexane	0.16	U	**5100**	J	**530**	J	**3.5**		**5.3**	J
Dichlorodifluoromethane	**2**		99	U	2.5	U	**2.2**		**1.1**	
Ethanol	**11**	J	**260**	J	0.95	UJ	**38**	J	**15**	J
Ethyl benzene	**0.31**		44	U	**1.3**		**6.6**		**1.4**	
Heptane	0.18	U	**4300**	J	**330**	J	**15**		**3.4**	J
Hexane	**0.51**		**21000**	J	**2300**	J	**23**		**22**	J
Methyl Tertbutyl Ether	0.17	U	36	U	0.9	U	0.17	U	0.17	U
Methylene chloride	**3.2**		**1000**		2.1	U	**4**		2.2	U
Naphthalene	0.58	UJ	**250**	J	3.2	UJ	0.58	UJ	0.58	UJ
o-Xylene	**0.39**		44	U	1.1	U	**6**		**2**	
Styrene	0.19	U	42	U	1.1	U	**0.27**		0.19	U
Tetrachloroethene	**54**		**340**		1.7	U	**11**		**5.1**	
Toluene	**1.1**		**230**		**30**		**68**		**6.3**	
trans-1,2-Dichloroethene	0.36	U	80	U	2	U	0.36	U	0.36	U
Trichloroethene	0.25	U	54	U	1.4	U	0.25	U	0.25	U
Trichlorofluoromethane	**1.1**		120	U	2.9	U	**1.2**		**0.71**	
Vinyl acetate	**0.63**		71	U	1.8	U	0.32	U	0.32	U
Vinyl chloride	0.12	U	**56**		**2.4**		0.12	U	0.12	U
Xylene, m/p	**0.9**		86	U	2.2	U	**17**		**3.8**	

Notes:
Only Detected Compounds shown.
Samples analyzed for VOCs by USEPA Meth
Results in microgram per cubic meter (µg/m3
QC Code:
FS = Field Sample
FD = Field Duplicate
Detections are indicated in **BOLD**
Qualifiers:
U = Not detected at a concentration greate
J = Estimated value

Table 4.3: Groundwater VOC Results

Location	MW-101		MW-104		MW-104		MW-106		MW-107		MW-108		MW-2S		DP-08	
Sample Date	11/28/2007		11/28/2007		11/28/2007		11/27/2007		11/27/2007		11/28/2007		11/28/2007		1/23/2008	
Sample ID	AIMW101		AIMW104		AIMW104DUP		AIMW106		AIMW107		AIMW108		AIMW2S		AIGW08	
QC Code	FS		FS		FD		FS		FS		FS		FS		FS	
Parameter	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
Cis-1,2-Dichloroethene	5	U	5	U	5	U	**260**		5	U	5	U	**530**	J	5	U
Tetrachloroethene	5	UJ	**77**	J	**74**	J	**64**	J	5	UJ	5	UJ	**120**	J	5	U
trans-1,2-Dichloroethene	5	U	5	U	5	U	**2**	J	5	U	5	U	**5**	J	5	U
Trichloroethene	5	U	**3**	J	**4**	J	**23**		5	U	5	U	**110**	J	5	U
Vinyl chloride	5	U	5	U	5	U	**4**	J	5	U	5	U	25	U	5	U

Notes:
Results in microgram per liter (µg/L)
Only detected compounds shown.
Samples analyzed for VOCs by EPA Method 8260B
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).
Detections are indicated in **BOLD**
Highlighted results exceed criteria

Table 4.4: Soil VOC Results

	Location	DP-01		DP-01		DP-01		DP-02	
	Sample Date	12/12/2007		12/12/2007		12/12/2007		12/12/2007	
	Sample ID	AIGS0103		AIGS0106		AIGS0106DUP		AIGS0206	
	Sample Depth (feet bgs)	3.0		6.0		6.0		6.0	
	QC Code	FS		FS		FD		FS	
Parameter	**Criteria**	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
1,1,1,2-Tetrachloroethane	NA	**0.02**	J	0.003	UJ	0.003	UJ	0.003	UJ
1,1,1-Trichloroethane	0.68	**0.013**	J	0.003	UJ	0.003	UJ	0.003	UJ
1,2,4-Trimethylbenzene	3.6	**0.001**	J	0.003	UJ	0.003	UJ	0.003	UJ
1,2-Dichlorobenzene	1.1	**0.003**	J	0.003	UJ	0.003	UJ	0.003	UJ
1,3-Dichlorobenzene	2.4	**0.002**	J	0.003	UJ	0.003	UJ	0.003	UJ
1,4-Dichlorobenzene	1.8	**0.002**	J	0.003	UJ	0.003	UJ	0.003	UJ
2-Butanone	0.12		R		R		R	**0.005**	J
Benzene	0.006	**0.001**	J	0.003	UJ	0.003	UJ	0.003	UJ
Chlorobenzene	1.1	**0.003**	J	0.003	UJ	0.003	UJ	0.003	UJ
Chloroform	0.37	**0.006**	J	0.003	UJ	0.003	UJ	0.003	UJ
Cis-1,2-Dichloroethene	0.25	**0.054**	J	**0.002**	J	**0.002**	J	0.003	UJ
Tetrachloroethene	1.3	**120**	D	**2**	DJ	**3.3**	DJ	**0.1**	J
trans-1,2-Dichloroethene	NA	**0.001**	J	0.003	UJ	0.003	UJ	0.003	UJ
Trichloroethene	0.47	**3.8**	DJ	**0.047**	J	**0.051**	J	**0.002**	J

Notes:
Results reported in micrograms per kilogram (mg/kg)
Only detected compounds shown.
Samples analyzed for VOC EPA Method 8260B
QC Code:
FS = Field Sample
FD = Field Duplicate
Qualifiers:
U = Not detected at a concentration greater than the RL
J = Estimated value
R = Result was rejected during validation
D = Result was reported from a diluted analytical run.
NA = No criteria available

Criteria = Values from Subpart 375-6.8(a) Unrestricted Use Soil Cleanup, "Remedial Program Soil Clean-up Objectives" (NYS, 2006).
Detections are indicated in **BOLD**
Highlighted results exceed criteria

APPENDIX A

PHOTOGRAPHS

APPENDIX A : SITE PHOTOS

Site View 1 Looking NW from center

Site View 2 Looking N

Site View 3 South Gate towards Tompkins Lane

Site View 4 Looking NE from center

Site View 5 GWETS Building

AI Structure 01 Closet Chemicals

AI Structure 01 Closet Chemicals 2

AI Structure 01 SubSlab

AI Structure 02 Basement Air

AI Structure 02 Basement Chemicals

AI Structure 02 Basement Chemicals 2

AI Structure 02 First Floor Air

AI Structure 03 Basement Air

AI Structure 03 Laundry Chemical

AI Structure 03 SubSlab

AI Structure 04 Basement Air

AI Structure 04 First Floor Air

AI Structure 04 Garage Chemicals

AI Structure 04 Garage Chemicals 2

AI Structure 04 SubSlab

AI Structure 05 Basement Air

AI Structure 05 Basement Sump

AI Structure 05 First Floor Air

AI Structure 05 Garage Sub Slab

AI Structure 06 Basement Air

AI Structure 06 Basement Sump

AI Structure 06 Basement View

AI Structure 06 First Floor View

AI Structure 07 Basement Air

AI Structure 07 Basement Chemicals

AI Structure 07 Basement View

AI Structure 07 First Floor Air

AI Structure 07 SubSlab

AI Structure 08 Ambient Backyard Air

AI Structure 08 Basement Air

AI Structure 08 Basement Sump

AI Structure 08 First Floor Air

AI DP05 Location

AI DP07 Location

AI DP08 Installing Flushmount

AI DP08 Post-Installation

AI DP09 Location

AI Helium Test at SV1

AI MW2S and DP06 Location

APPENDIX B

INDOOR AIR QUALITY QUESTIONNAIRES and INVENTORY FORMS

ESR-3

Location AIM 01

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 Phil Muller Date/Time Prepared 11-26-07 / 1345

Preparer's Affiliation MACTEC Phone No. 603 315 4402

Purpose of Investigation Vapor Investigation

[redacted]

1. OCCUPANT:

Contact Information Provided To NYSDEC And NYSDOH Under Separate Cover

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

Interviewed: Y / N

Contact Information Provided To NYSDEC And NYSDOH Under Separate Cover

3. BUILDING CHARACTERISTICS

Type of Building: (Circle appropriate response)

Residential	School	Commercial/Multi-use
Industrial	Church	Other: Fire Station

Location Almost

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) Fire House

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

Other characteristics:

Number of floors 1 Building age 1989

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 —

Infiltration into air ducts —

Location AIM01

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 None
c. ~~Basement~~ 1st floor:	(concrete)	dirt	stone	other _____
d. ~~Basement~~ 1st floor:	uncovered	covered	covered with tile, sealed	
e. Concrete floor:	unsealed	sealed	sealed with sealant	
f. Foundation walls:	poured	(block)	stone	other _____
g. Foundation walls:	(unsealed)	sealed	sealed with _____	
h. The ~~basement~~ 1st Floor is:	wet	damp	(dry)	moldy
i. The ~~basement~~ 1st Floor is:	(finished)	unfinished	partially finished	
j. Sump present?	Y / (N)			
k. Water in sump?	Y / N / (not applicable)			

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

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

None

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: gas

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 Location AIM01

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.

ducts in ceiling

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~~	—
1st Floor	kitchen, rec room, fire engines in garage
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 Same as entire structure

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?_____

Y/(N) When & Type?_____

Location A1M01

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? outside

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: _____

Do any of the building occupants use solvents at work? Y / N Maybe, most likely
(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? —

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

10. RELOCATION INFORMATION (for oil spill residential emergency) N/A

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

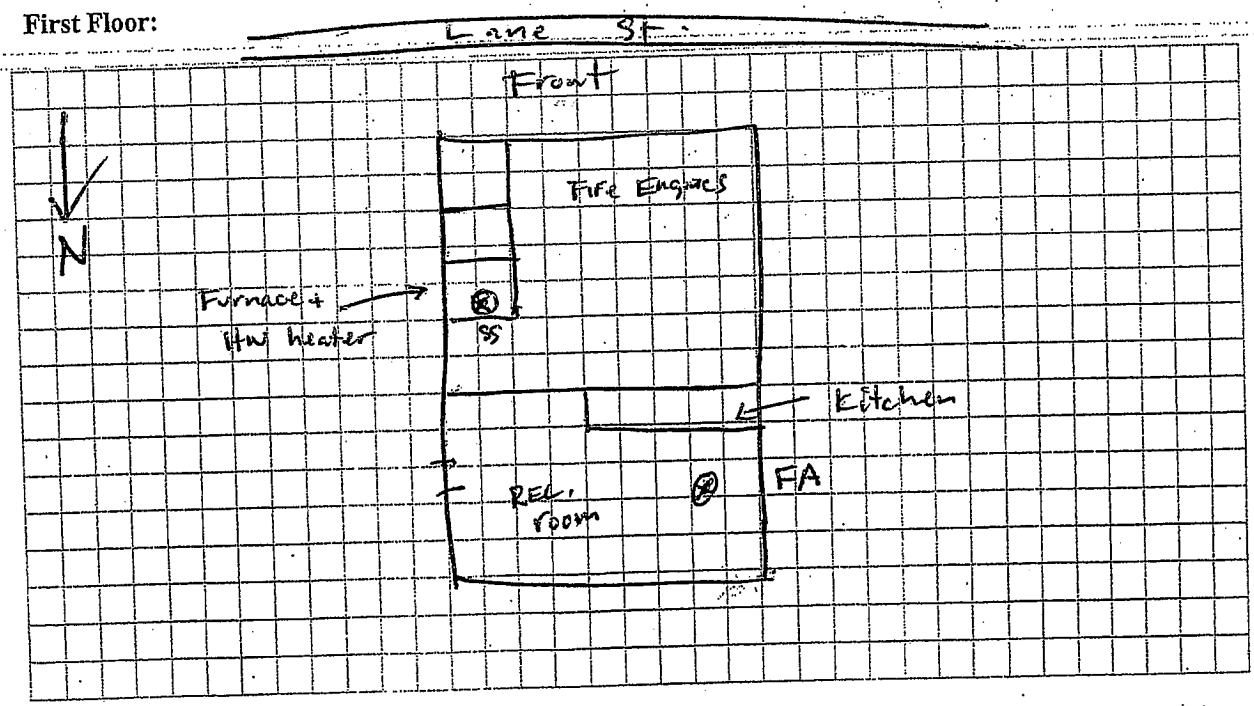
Location AIM01

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:

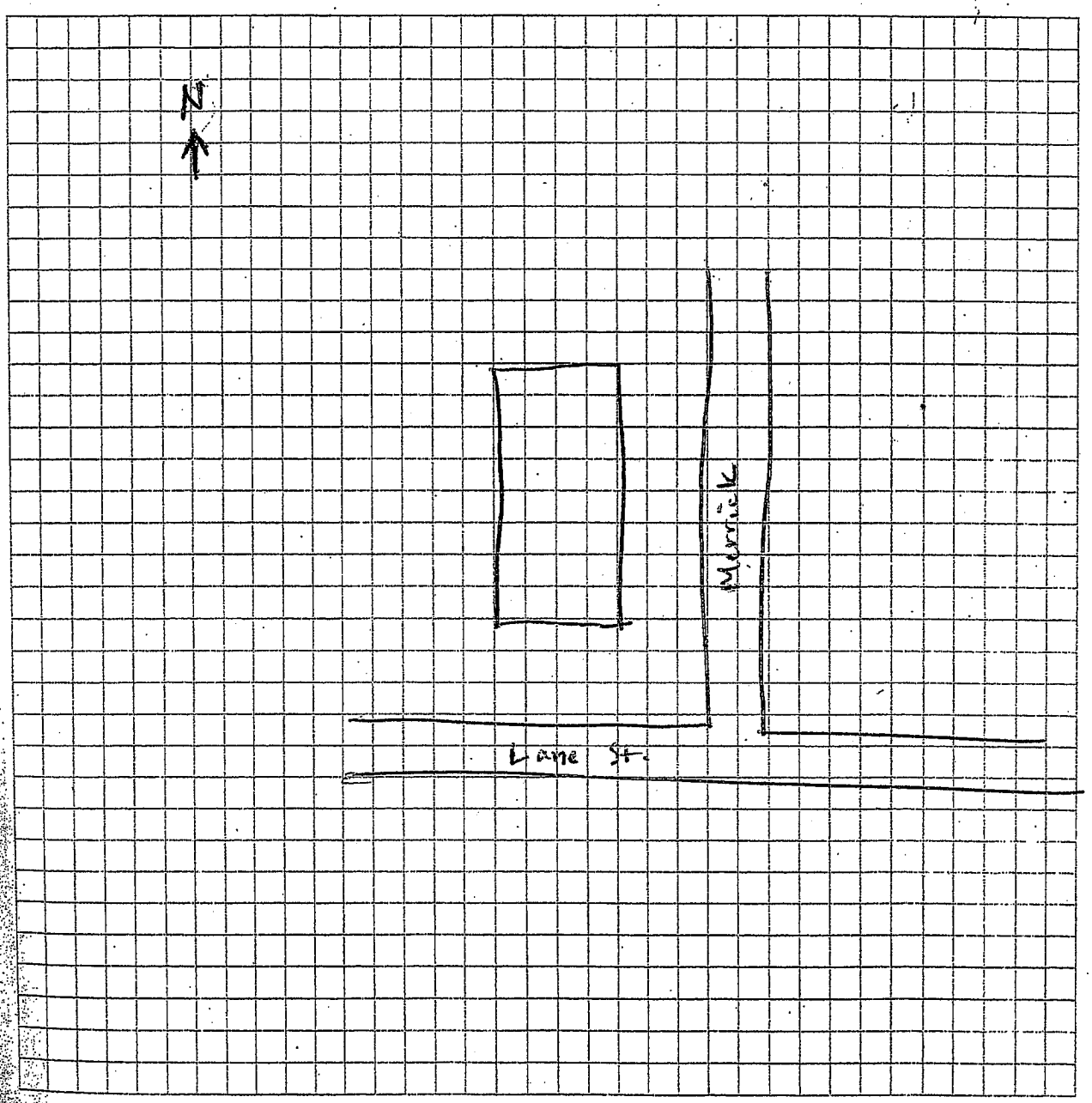


12. OUTDOOR PLOT

Location AIM01

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.



13. PRODUCT INVENTORY FORM

Location A1M01

Make & Model of field instrument used: ppb RAE

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) ppb	Photo ** Y/N
Utility Rm	Mop Stripper	1 gal.	U	Monoethanolimine 2-butoxy ethanol	3	N
				surfactant glycol ether, potassium hydroxide		
"	Propane	2x 16 oz	UO	propane	3	N
	cleaner + disinfectant (Scott, multi-wash mini)	1x 16 oz	U	iodine, phosphoric acid, inert ingredients	3	
"	Mr. Clean Starter Soap	1x 20oz	U	surfactants	3	N
"	Rug Doctor steam cleaner	1 gal.	U		4	N
"	fire extinguisher	3x	UO		3	N
"	Floor Stripper (chemspec)	1 gal	U	not listed	3	N
"	glass cleaner	19oz	U	2-Butoxyethanol, ethyl alcohol methyl alcohol, liq. petroleum gas	3	N
"	Floor finish-hi shine (chemspec)	1gal	U	not listed	3	N
"	Anti-Slip Solvent (Amity Vacuum, Inc.)	14 lbs	U	paraffin, mineral spirits polyethylene wax petroleum wax	3	N
"	Paint (pint)	¼ gal	U	titanium dioxide, mineral spirits, calcium carbonate	6	N
"	Paint. (Ben. Moore) Hi gloss enamal	1gal	U	Latex resin, titanium dioxide, propylene glycol		N
"	Kitty Litter	5 gal	U			
"	Paint	5 gal	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.

Storage Room — motor oil, lithium grease, valve cleaner (xylene, toluene, acetone, methanol), soap (See photo)

termite + carpenter Ant killer

OSR – 3

Location AIM02

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 Phil Muller Date/Time Prepared 11.26.07 / 1600

Preparer's Affiliation MACTEC Phone No. 603 315 4402

Purpose of Investigation Vapor Intrusion Study

1. OCCUPANT:

Interviewed: (Y) N

Contact Information Provided To NYSDEC And NYSDOH Under Separate Cover

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: _____

Location AIM02

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) —

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

Other characteristics:

Number of floors 2 Building age ~1955

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 —

Infiltration into air ducts —

Location AIM02

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 Some carpet	
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)			
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)

Small crack from water damage

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: Fuel Oil

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

Location AIM02

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	shop, laundry, TV room
1st Floor	kitchen, living room, dining room, TV, bath
2nd Floor	3 bedrooms, bath
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? basement
g. Is there smoking in the building?	Y / (N)	How frequently?
h. Have cleaning products been used recently?	(Y) / N	When & Type? weekly
	(Y) / N	When & Type?

Location AIM02

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? inside

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

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: _____

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? —

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

10. RELOCATION INFORMATION (for oil spill residential emergency) N/A

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

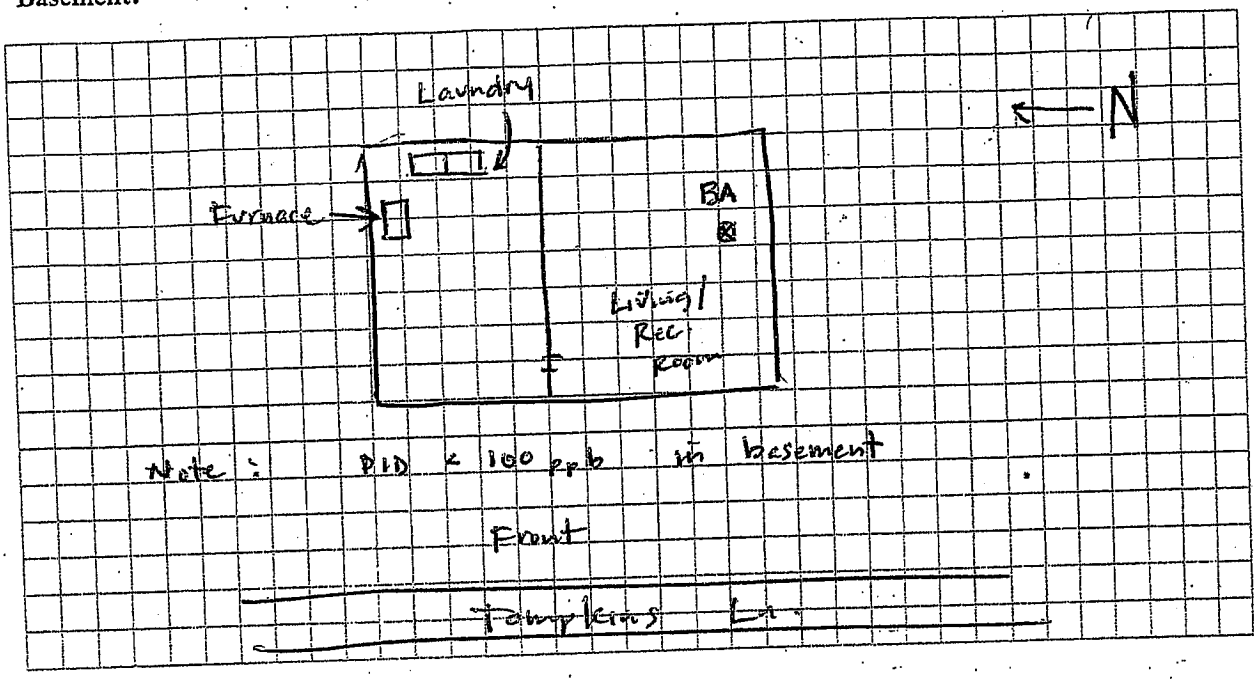
d. Relocation package provided and explained to residents? Y / N

Location A1M02

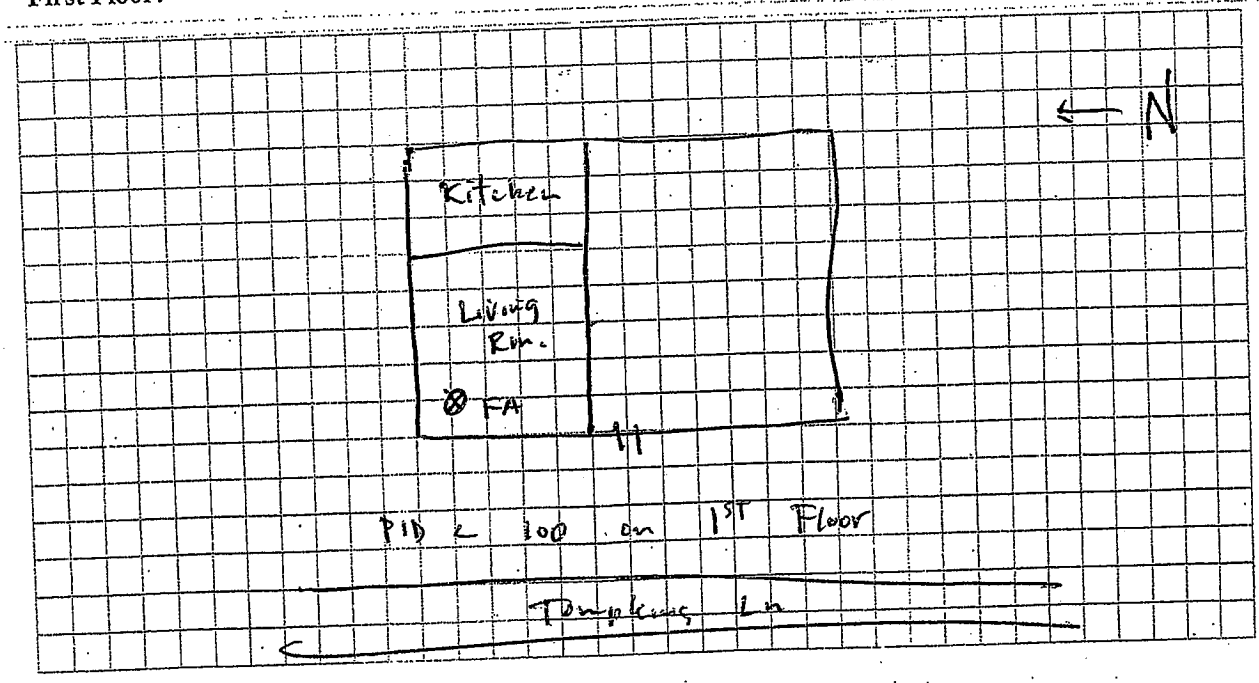
11. FLOOR PLANS

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:

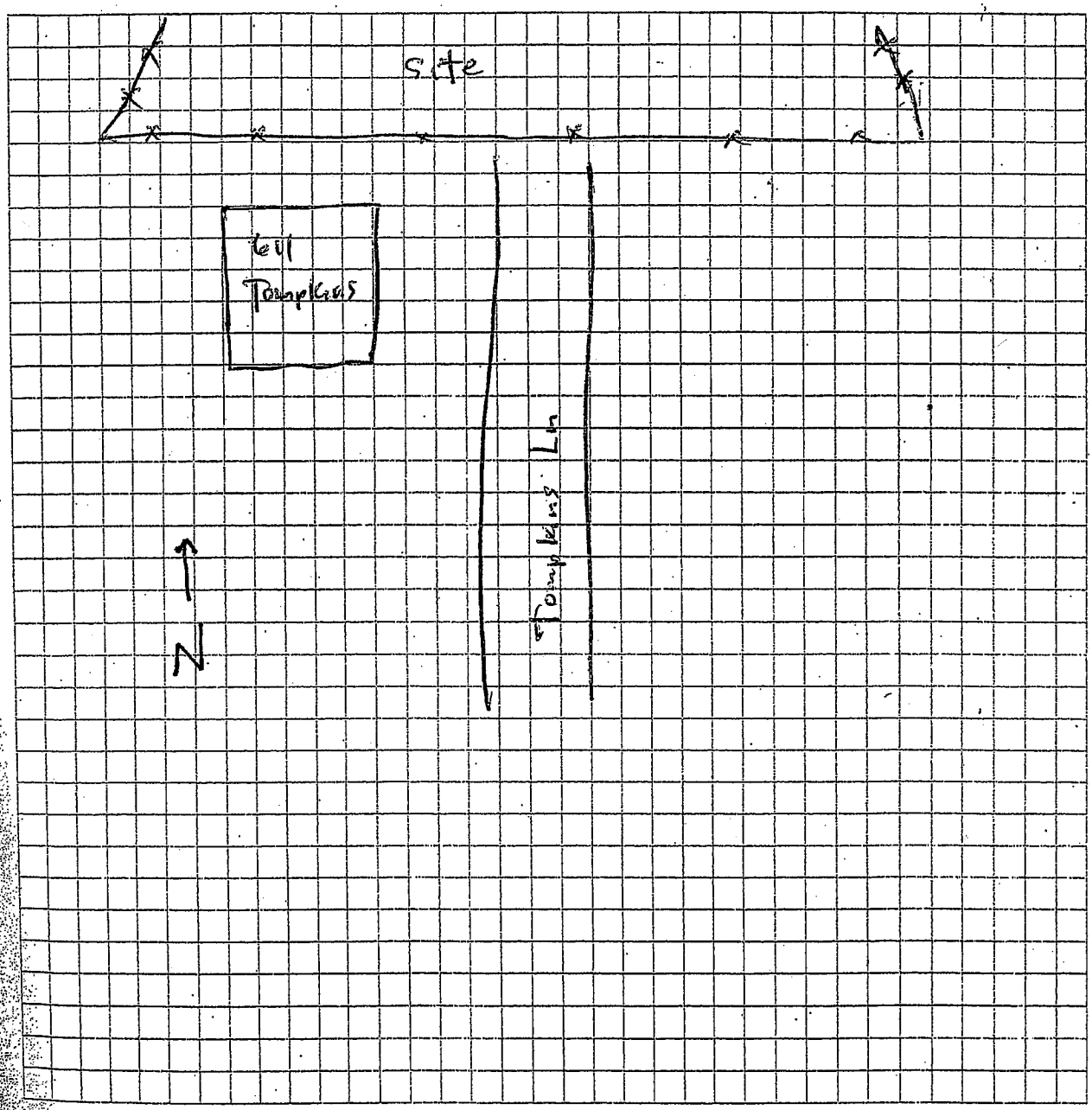


12. OUTDOOR PLOT

Location AIM02

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.



13. PRODUCT INVENTORY FORM

Location AFM02

Make & Model of field instrument used: ppb RAE

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) (ppb)	Photo** Y/N
Basement	WD-40	12oz	U		2100	N
"	Rust-oleum	12oz	U		"	N
"	Paint	15 x 1 gal.	U		"	N
"	Aluminum Polish	12oz	U		"	N
"	STP Protectant	32oz	U		"	N
"	disinfectant Spray	12 oz	U		"	N
"	Motor oil	1 qt.	U		"	N
"	wheel cleaner	4oz	U		"	N
"	Wash n' Wax	32oz	U		"	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.

OSR-3

Location AIM03

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 Phil Muller Date/Time Prepared 11.27.07 / 0700

Preparer's Affiliation MACTEC Phone No. 603 315 4402

Purpose of Investigation Vapor Intrusion

1. OCCUPANT:

Interviewed: (Y) / N

Contact Information Provided To NYSDEC And NYSDOH Under Separate Cover

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: _____

Location AIM03

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

Ranch	2-Family	3-Family
(Raised Ranch)	(Split Level) (PM)	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? _____

Other characteristics:

Number of floors 2 Building age 35-45 years

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 —

Infiltration into air ducts —

Location AIM03

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

a. Above grade construction:	(wood frame)	concrete	stone	brick
b. Basement type: 1ST floor	full	crawlspace	slab	other N/A
c. ~~Basement~~ 1ST floor:	(concrete)	dirt	stone	other _____
d. Basement floor:	uncovered	covered	covered with carpet	
e. Concrete floor:	(unsealed)	sealed	sealed with _____	
f. Foundation walls:	(poured)	block	stone	other _____
g. Foundation walls:	(unsealed)	sealed	sealed with _____	
h. The ~~basement~~ 1ST floor is:	wet	(damp)	(dry) (rm)	moldy
i. The ~~basement~~ 1ST floor is:	(finished)	unfinished	partially finished	
j. Sump present?	Y / (N)			
k. Water in sump?	Y / N / (not applicable)			

Basement/Lowest level depth below grade: 2 (feet)

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

None

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: Fuel Oil

Boiler/furnace located in: Basement Outdoors Main Floor Other 1ST floor

Air conditioning: Central Air Window units (Open Windows) None

Location AIM03

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 (1st floor)

Level	General Use of Each Floor (e.g., familyroom, bedroom, laundry, workshop, storage)
~~Basement~~	—
1st Floor	Laundry, BR, Den, 1/2 bath
2nd Floor	Kitchen, LR, DR, 3 BR, Bath
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? garage

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

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

(Y) / N When & Type?

Location A1 M03

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? attic?

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: _____

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: _____
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: N/A

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

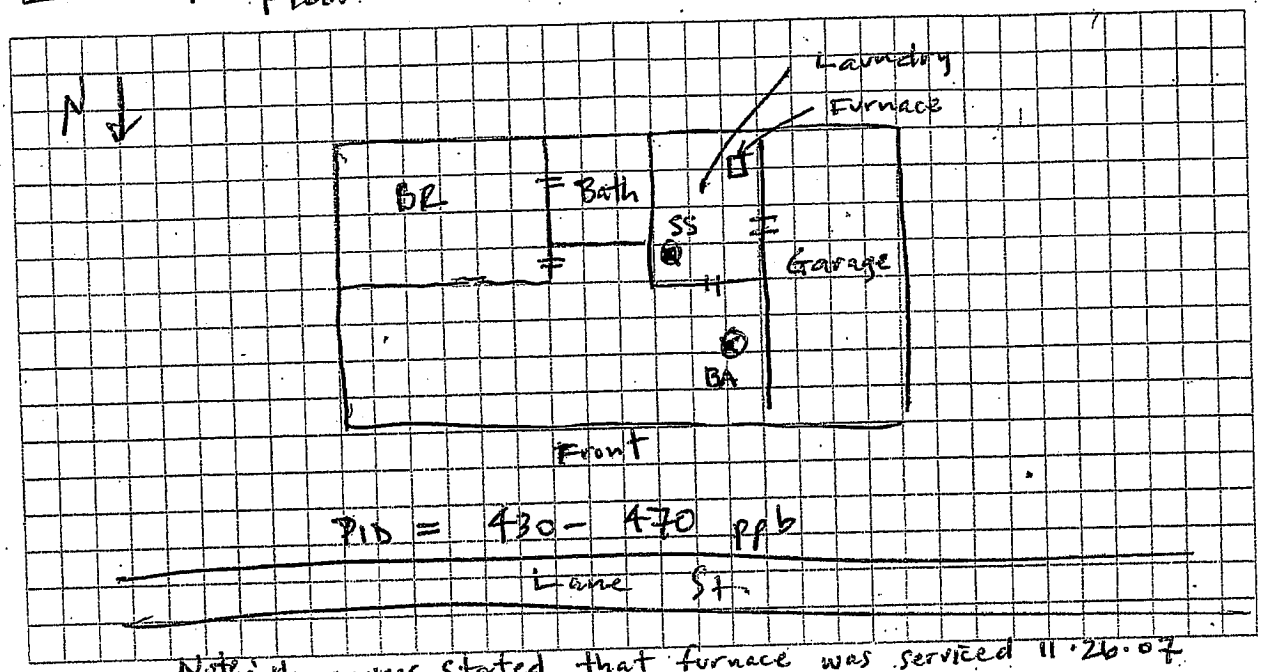
d. Relocation package provided and explained to residents? Y / N

Location AIM03

11. FLOOR PLANS

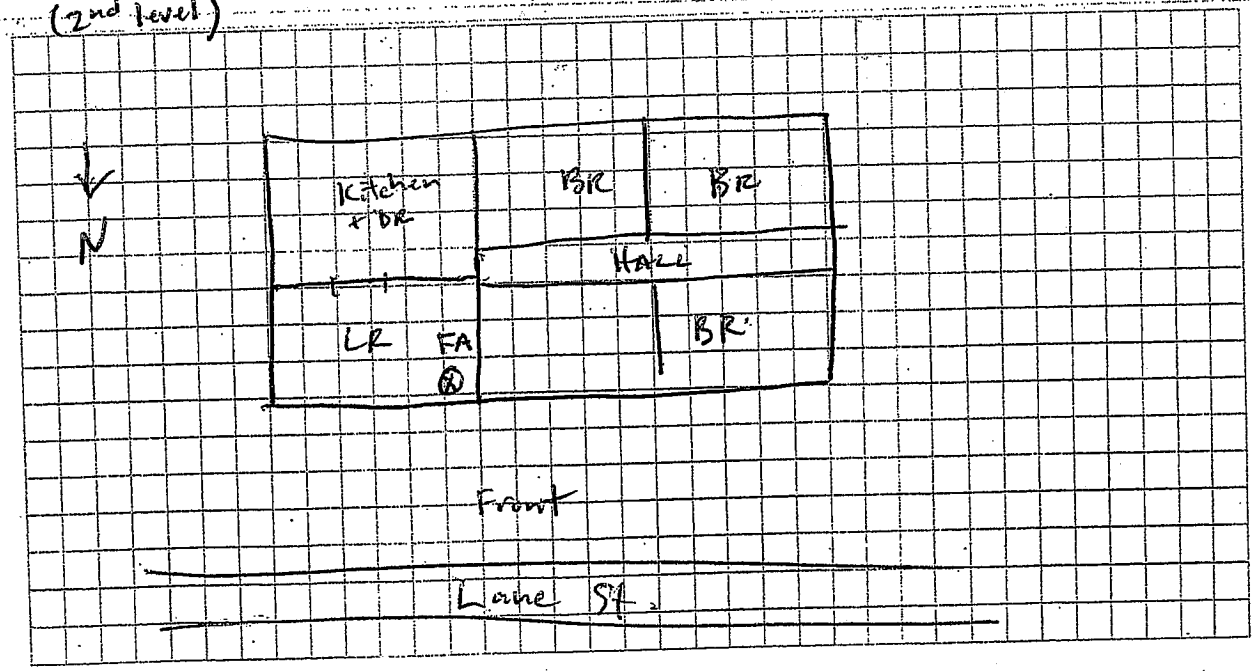
Draw a plan view sketch of the basement and first floor of the building. Indicate air sampling locations, possible indoor air pollution sources and PID meter readings. If the building does not have a basement, please note.

~~Basement:~~ 1st Floor



Note: Homeowner stated that furnace was serviced 11.26.07

First Floor:
(2nd level)

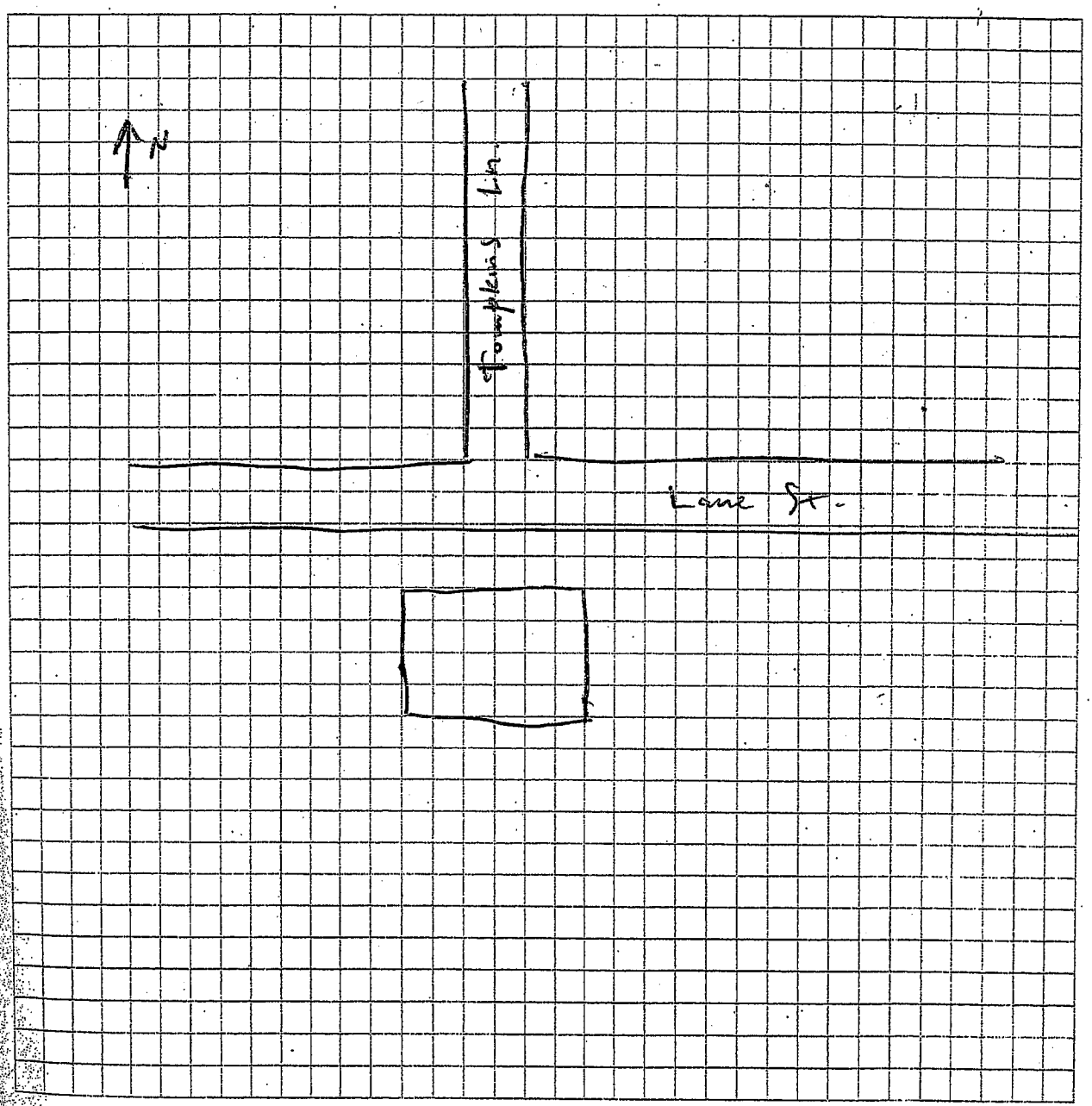


12. OUTDOOR PLOT

Location AIM03

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.



13. PRODUCT INVENTORY FORM

Location AIM03

Make & Model of field instrument used: ppb RAE

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) (ppb)	Photo ** Y/N
1ST Floor Laundry	Krud Kutter	8oz	U	surfactants, detergents	424	N
"	Ammonia	1/2 gal.	U		"	N
"	rust remover	4 oz	U	Phosphoric acid	"	N
"	detergent	3gal	U		"	N
"	Quikrete Bonding Adhesive		U		"	N
"	Liquid Plummer	32 oz	U		"	N
"	Wood Floor Finish	1/2 gal	U	Dipropylene Glycol, Monomethylether	454	N
"	Zep Drain Care	1/2 gal	U		"	N
"	Rust Oleum Protective Enamel	32 oz	U		"	N
1st Floor BR	WD-40	12 oz	U		450	N
"	Woolite Pet Oxygen	22 oz	U		"	"
"	Stain Remover	12 oz	U		"	N
"	Magic Sizing	12 oz	U		"	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.

Note: Attached garage has many products in shop area. Garage door closed.

OSR – 3

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. Location AIM04

Preparer's Name Phil Muller Date/Time Prepared 11.27.07 / 1410

Preparer's Affiliation MACTEC Phone No. 603 315 4402

Purpose of Investigation Vapor Intrusion

1. OCCUPANT:

Interviewed: (Y) N

Contact Information Provided To NYSDEC And NYSDOH Under Separate Cover

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: _____

Location AIM04

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) —

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

Other characteristics:

Number of floors 2 Building age 1965

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 —

Infiltration into air ducts —

Location AIM04

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

a. Above grade construction:	(wood frame)	concrete	stone	brick
b. ~~Basement~~ type: (1st Floor)	(full)	crawlspace	slab	other _____
c. Basement floor:	(concrete)	dirt	stone	other _____
d. Basement floor:	uncovered	(covered)	covered with carpet + linoleum	
e. Concrete floor:	(unsealed)	sealed	sealed with _____	
f. Foundation walls: N/A	poured	block	stone	other slab on grade
g. Foundation walls: N/A	unsealed	sealed	sealed with _____	
h. The ~~basement~~ (1st) is:	wet	damp	(dry)	moldy
i. The basement is:	(finished)	unfinished	partially finished	
j. Sump present?	Y / (N) drain to drywell in garage			
k. Water in sump?	Y / N / (not applicable)			

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

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

drain in garage

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: Natural gas

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

Air conditioning: Central Air (Window units) Open Windows None

Location AIM04

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.

N/A

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)
1st Floor	office, garage, laundry, bath, kitchen, living rm.
~~Basement~~ 2nd floor	
~~1st Floor~~	Kitchen, dining, 3 BR, living
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? garage

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

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

(Y) N When & Type?_____

Location A1M04

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? _____

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? _____

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: N/A

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

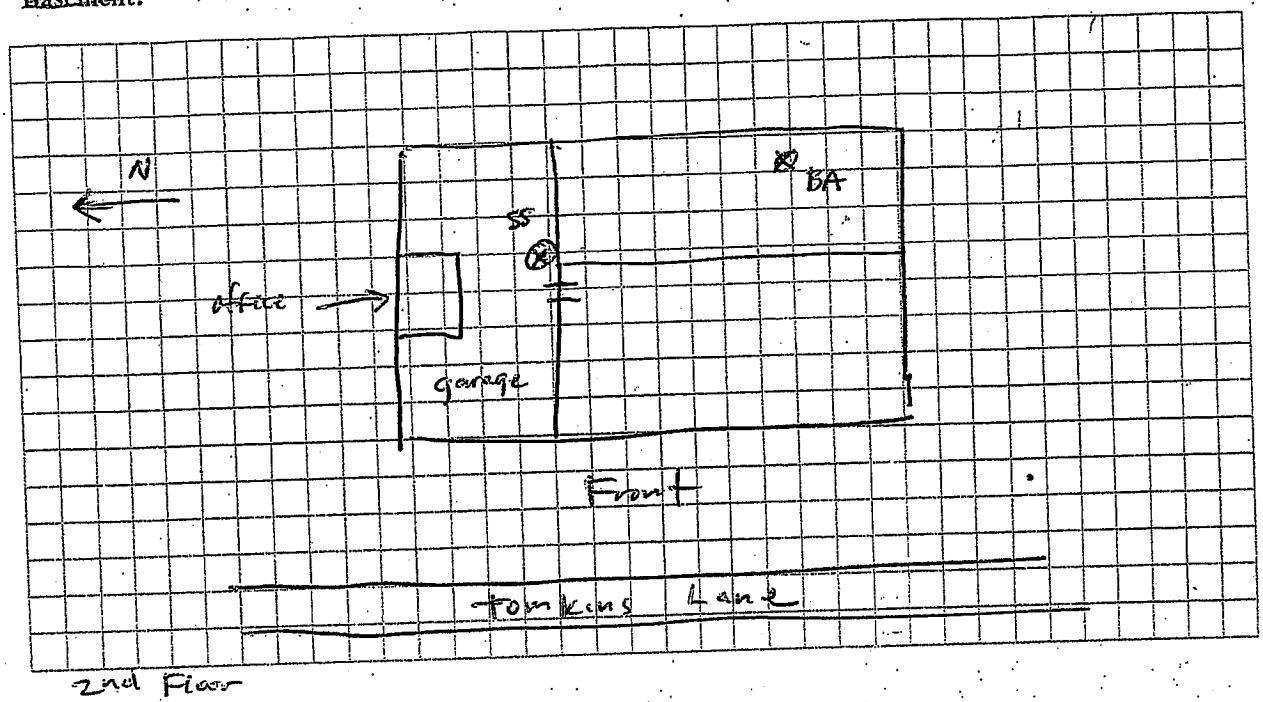
Location AIM04

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.

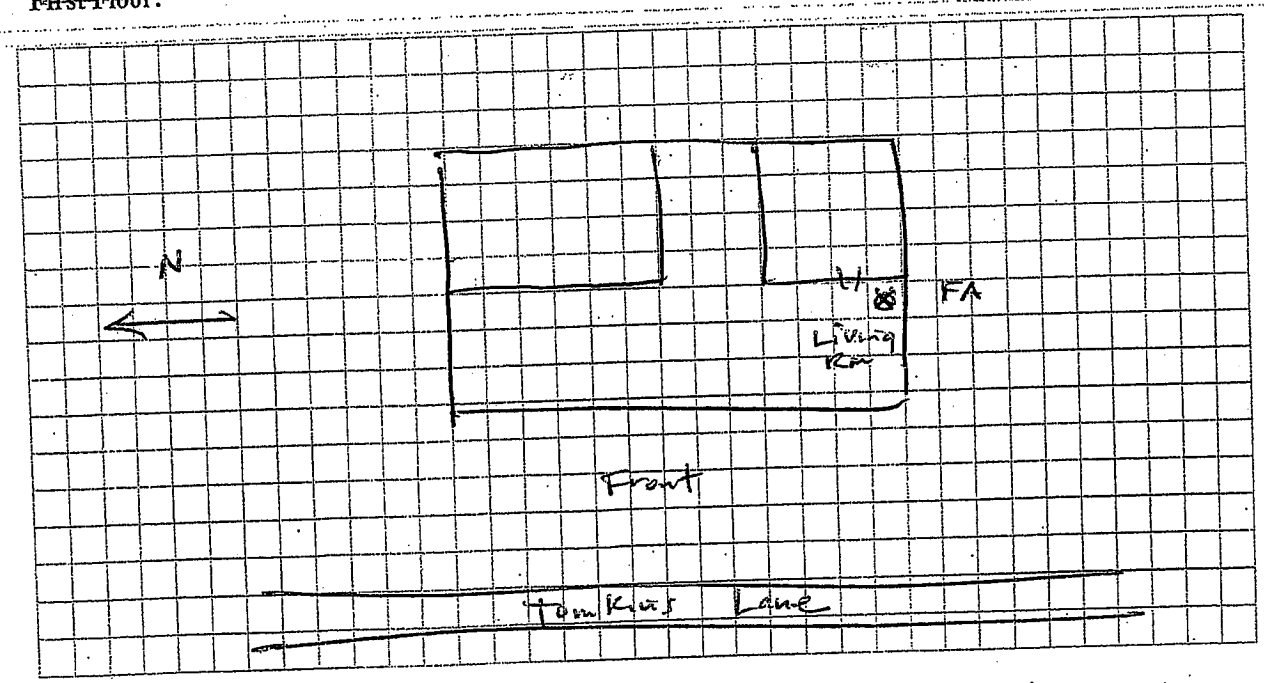
1ST Floor

~~Basement~~:



2nd Floor

~~First Floor~~:

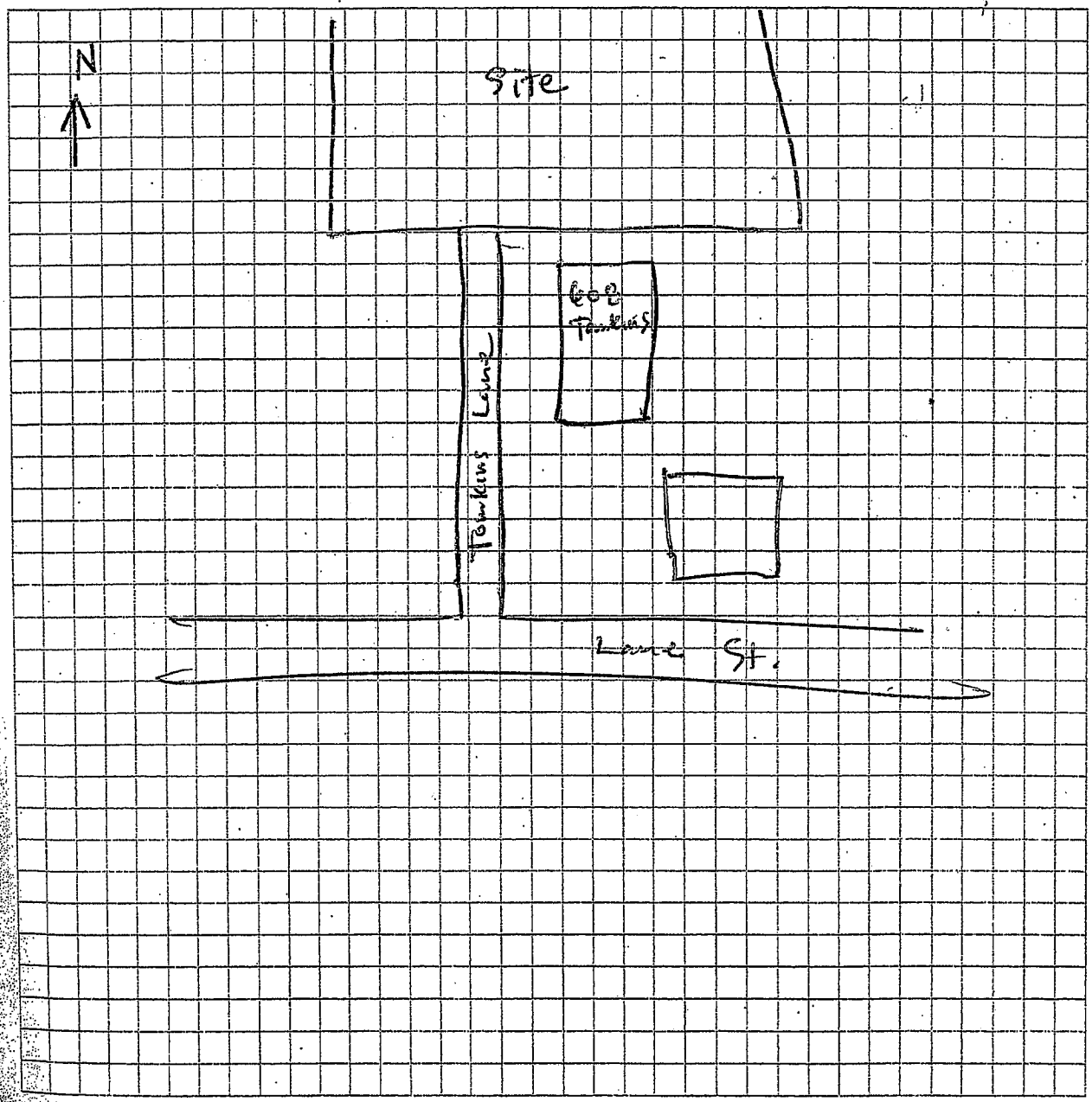


12. OUTDOOR PLOT

Location AIM04

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.



13. PRODUCT INVENTORY FORM

Location AIM04.

Make & Model of field instrument used: ppb RAE

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) ppb	Photo ** Y/N
Garage	Lestoil Cleaner	40oz	used	petroleum distillates	<0.1	Y
"	All-wheel cleaner	32oz	used	2-butoxyethanol oxalic acid	<0.1	
"	Multi-purpose cleaner	32oz	used	Not provided	<0.1	
"	Grease Lightning					
"	Sonic Screen + gal red car wash		used	Not provided	<0.1	
"	Windex glass cleaner	32oz	used	Not provided	<0.1	
"	Cutter insect repellent	6oz	used	N-N Diethyl toluamide inert ingredients	<0.1	
"	Liquid wrench Silicone Spray	11oz	used	petroleum distillates	<0.1	
"	Sta-Bil Fuel Stabilizer	10oz	used	petroleum distillates	<0.1	
"	Prestone De-Icer	11oz	used	Not provided	<0.1	
"	Thrust quick starting fluid	11oz	used	Not provided	<0.1	
"	Tide laundry detergent	3 1/2 gal	used	Not provided	<0.1	
"	Clorox bleach	22oz	used	Not provided	<0.1	
"	Krylon spray-paint	15oz	used	Not provided	1317	

* 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.

OSR – 3

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

Location AIM05

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

Preparer's Name Phil Moller Date/Time Prepared 11.28.07/0810

Preparer's Affiliation MACTEC Phone No. 603 315 4402

Purpose of Investigation Vapor Intrusion

1. OCCUPANT:

Interviewed: (Y)/ N

Contact Information Provided To NYSDEC And NYSDOH Under Separate Cover

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: _____

Location AIM05

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? _____

Other characteristics:

Number of floors Basement + 1ST Floor Building age 55 yrs.

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 —

Infiltration into air ducts —

5. BASEMENT AND CONSTRUCTION CHARACTERISTICS (Circle all that apply) Location AIM05

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	Partially covered with carpet ?	
e. Concrete floor:	unsealed	sealed	one area ^ sealed with Sealant 18 yrs ago	
f. Foundation walls:	poured	(block)	stone	other _____
g. Foundation walls:	(unsealed)	sealed	sealed with _____	
h. The basement is:	wet	damp	(dry)	moldy floods periodically
i. The basement is:	(finished)	unfinished	partially finished	
j. Sump present?	(Y) N			
k. Water in sump?	(Y) N / not applicable	1" water		

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

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

Sump (soil visible) see photo

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: gas

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) Location Almost

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	Living / Rec Room
1st Floor	Bedroom, bath, kitchen, Dining
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 electric
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? _____
[illegible]	(Y) / N When & Type? _____

Location AIM05

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? inside

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: _____

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

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: N/A

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

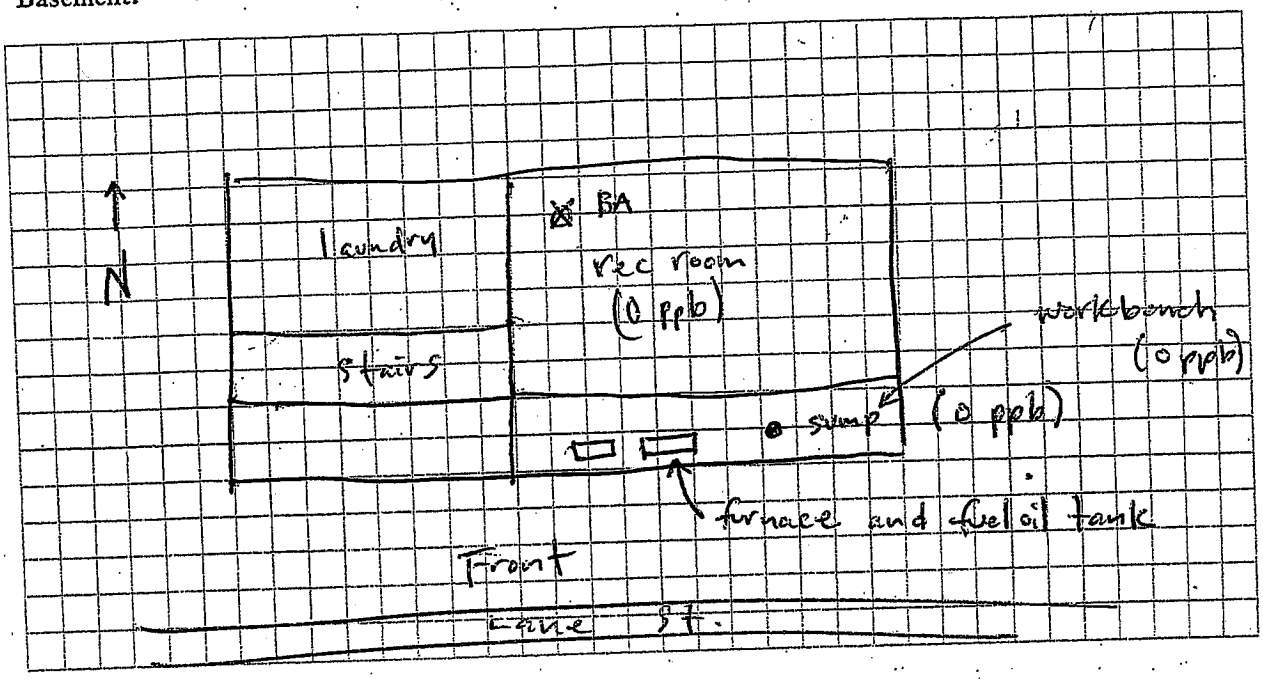
d. Relocation package provided and explained to residents? Y / N

Location AIM05

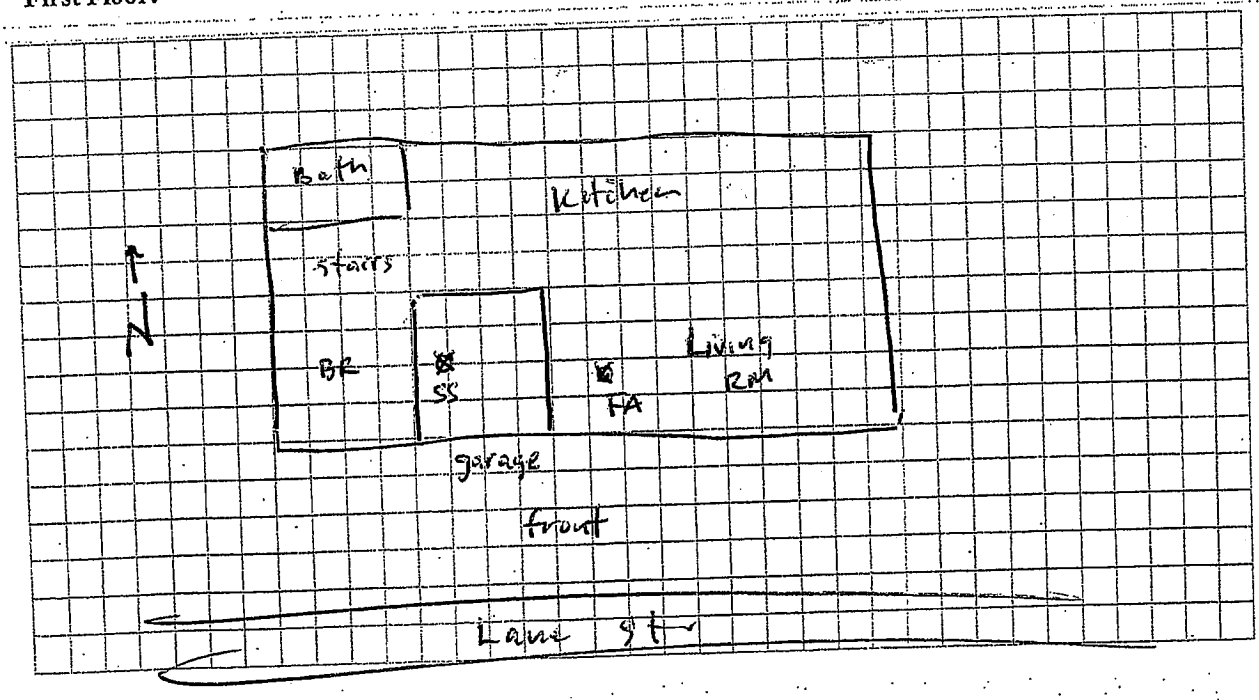
11. FLOOR PLANS

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:

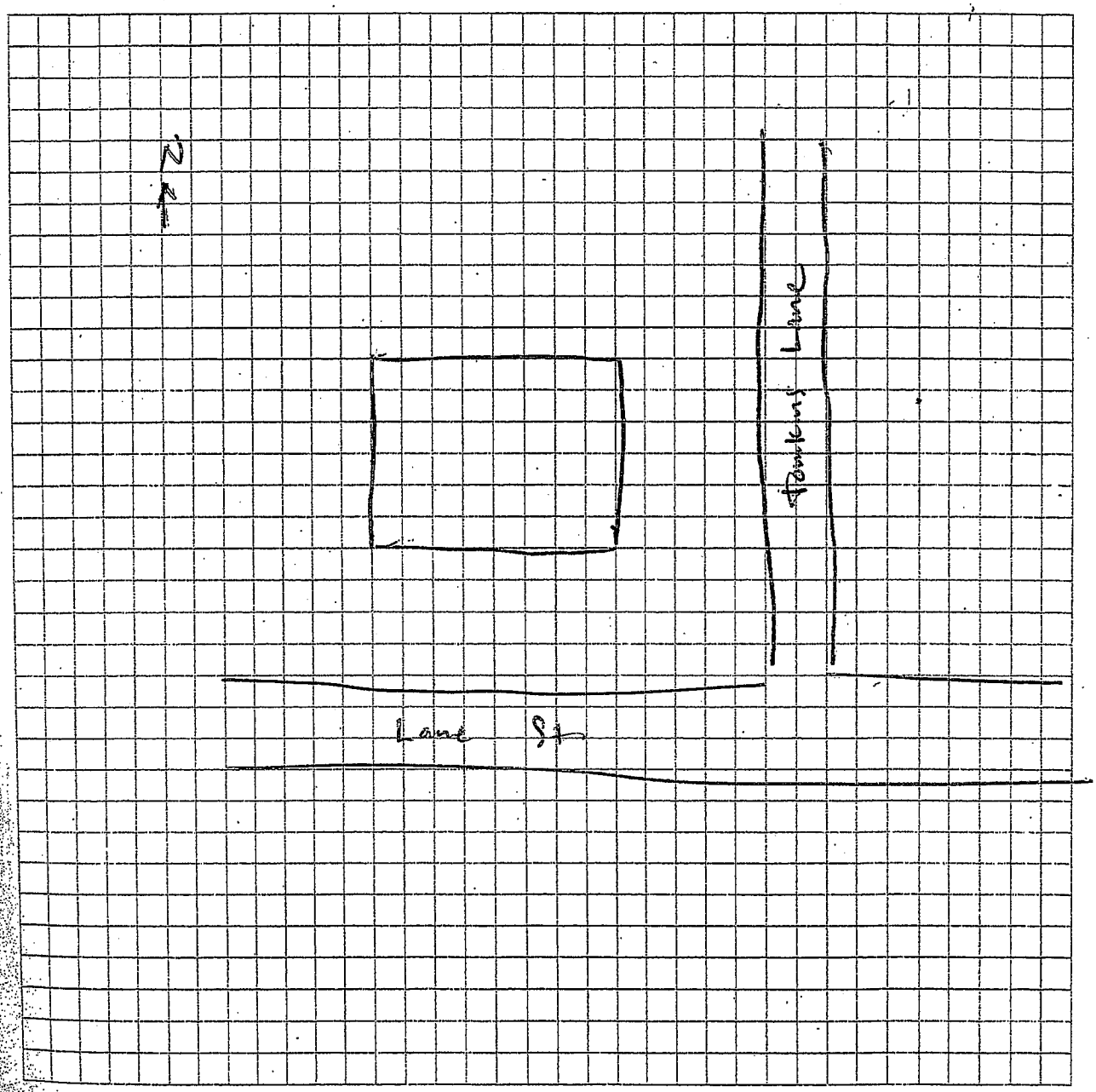


12. OUTDOOR PLOT

Location AIM05

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.



13. PRODUCT INVENTORY FORM

Location A1M05

Make & Model of field instrument used: ppb RAE

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	Armor All Wipes	12 oz	U	not listed	0	N
Laundry	Scotch Gard cleaner (3M)	14 oz	U	isobutane	0	N
"	Spray + Wash	12 oz	U	bleach + surfactants	0	N
"	Stain remover (Gonzo)	8 oz.	U	not listed	0	N
"	fantastik cleaner	3 x 10 oz.	U			Y
"	misc soaps, detergents + cleaners	10 x 20 oz	U		0	Y

* 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.

OSR – 3

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

Location AIM06

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

Preparer's Name Phil Muller Date/Time Prepared 11.28.07 / 1200

Preparer's Affiliation MACTEC Phone No. 603 315 4402

Purpose of Investigation Vapor Intrusion

1. OCCUPANT: Vacant (former Nail Salon)

Interviewed: Y / (N)

Last Name: _____ First Name: _____

Address: _____

County: _____

Home Phone: _____ Office Phone: _____

Number of Occupants/persons at this location _____ Age of Occupants _____

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

Interviewed: (Y) / N

Contact Information Provided To NYSDEC And NYSDOH Under Separate Cover

3. BUILDING CHARACTERISTICS

Type of Building: (Circle appropriate response)

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

Location A1M06

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) Former Nail Salon / Real Estate office (occupied)

Does it include residences (i.e., multi-use)? (Y) / N If yes, how many? 5

Other characteristics:

Number of floors 2 Building age 50 years +

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 —

Infiltration into air ducts —

Location AIM06

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 3/4
c. Basement floor:	(concrete)	dirt	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 Sometimes, flooding
i. The basement is:	finished	(unfinished)	partially finished	
j. Sump present?	(Y) N			
k. Water in sump?	(Y) (N) (pm) not applicable	~1"		

Basement/Lowest level depth below grade: 6.5 (feet)

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

Sump

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: electric

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 Location AFM06

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	Nothing
1st Floor	Vacant Shop / Real Estate in half of bldg
2nd Floor	residences
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?_____

Y / (N) When & Type?_____

Location AIM06

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? 6 mos. ago

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

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:** N/A

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

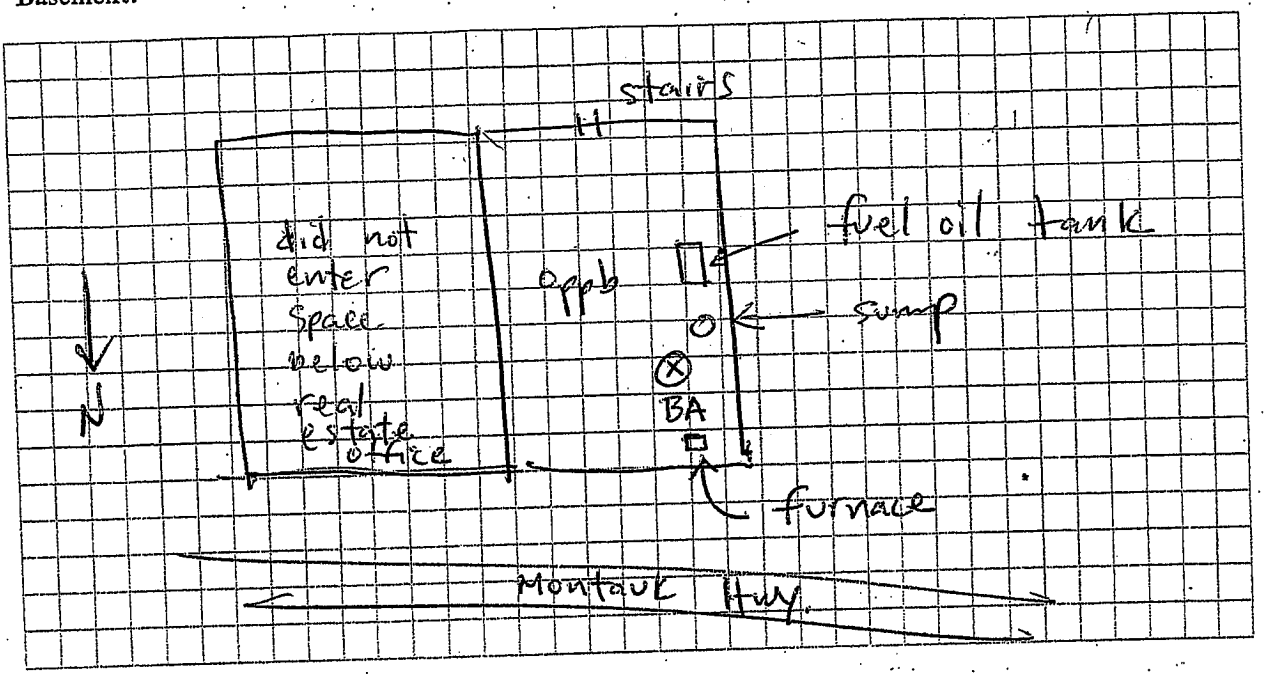
d. **Relocation package provided and explained to residents?** Y / N

Location AIM06

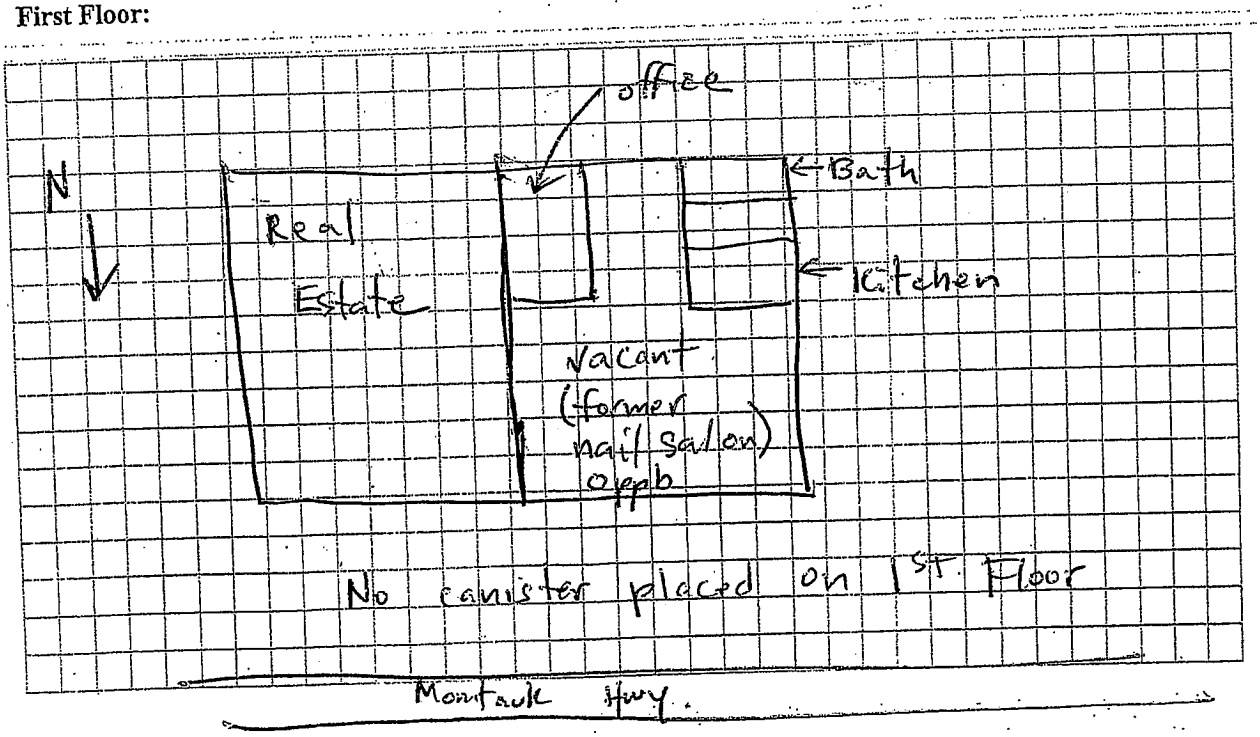
11. FLOOR PLANS

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:

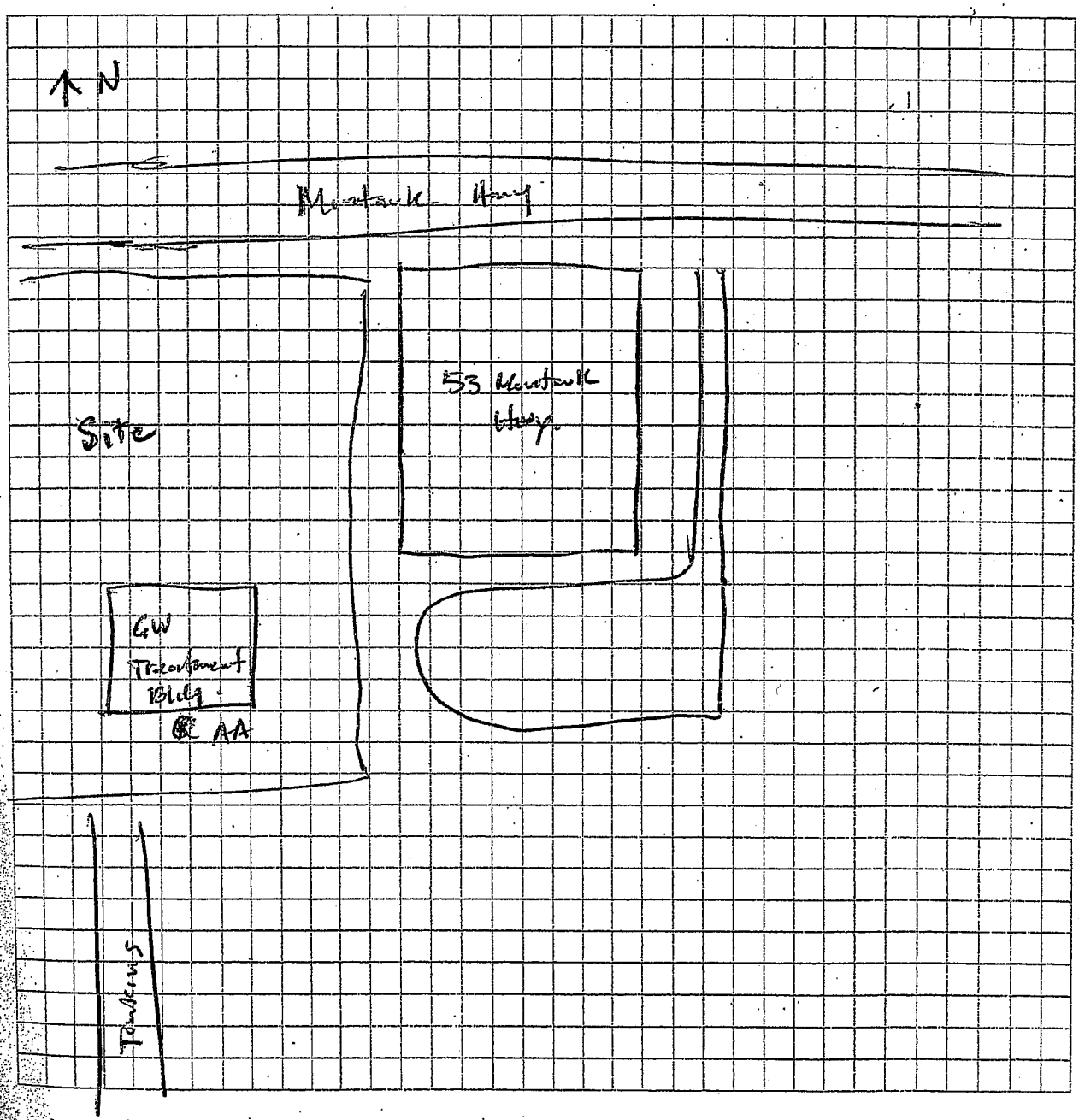


12. OUTDOOR PLOT

Location AIM06

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.



13. PRODUCT INVENTORY FORM

Make & Model of field instrument used: ppb RAE Location AIM#6

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
No Products in Basement + First Floor						

* 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.

OSR – 3

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. Location AIM07

Preparer's Name Phil Muller Date/Time Prepared 11.28.07

Preparer's Affiliation MACTEC Phone No. 603 315 4402

Purpose of Investigation Vapor Intrusion

1. OCCUPANT:

Interviewed: (Y)/ N

Contact Information Provided To NYSDEC And NYSDOH Under Separate Cover

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: _____

Location AIM07

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) _____

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

Other characteristics:

Number of floors 2 + basement Building age 56 yrs old

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 —

Infiltration into air ducts —

5. BASEMENT AND CONSTRUCTION CHARACTERISTICS (Circle all that apply) Location AIM07

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 _____	
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)			
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)

abandoned well inside basement

small 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: Fuel oil

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

Location AIM07

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.

N/A

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	Workshop, Laundry
1st Floor	Kitchen, Living Rm, Bedroom, Den
2nd Floor	Attic, Bedroom
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? basement

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

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

Y / N When & Type?

Location AIM 07

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

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? outside

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? last month

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

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: N/A

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

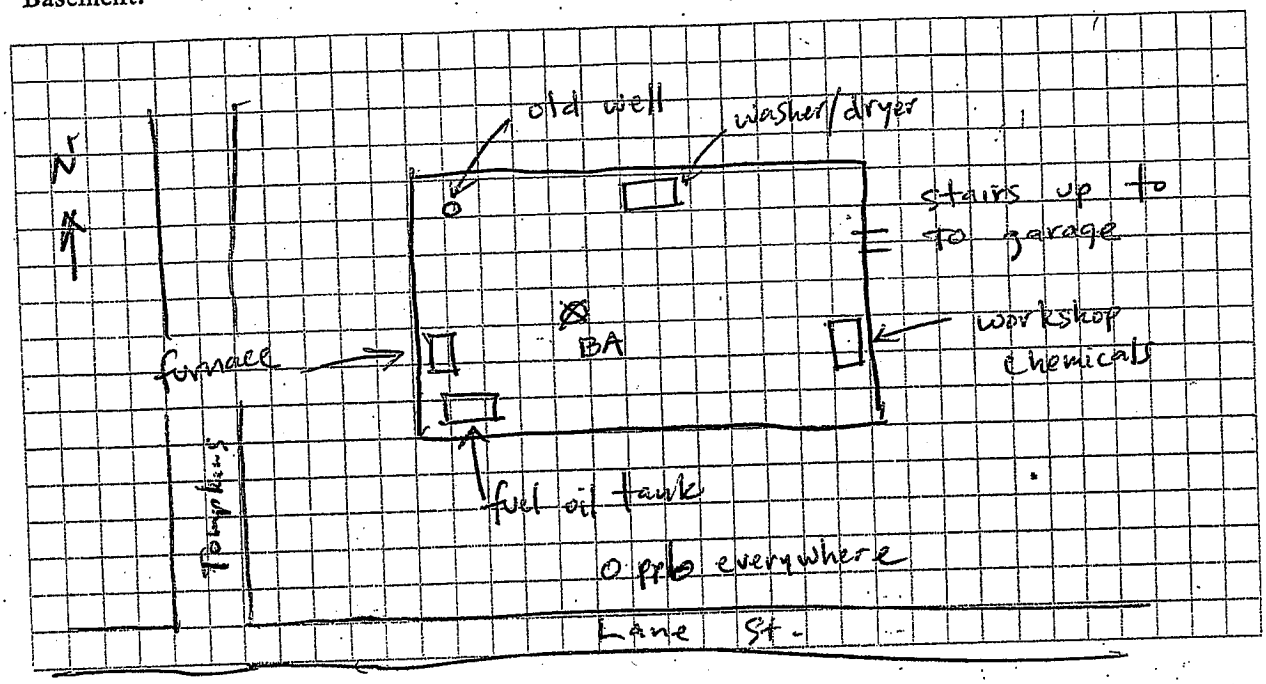
d. Relocation package provided and explained to residents? Y / N

Location AIM07

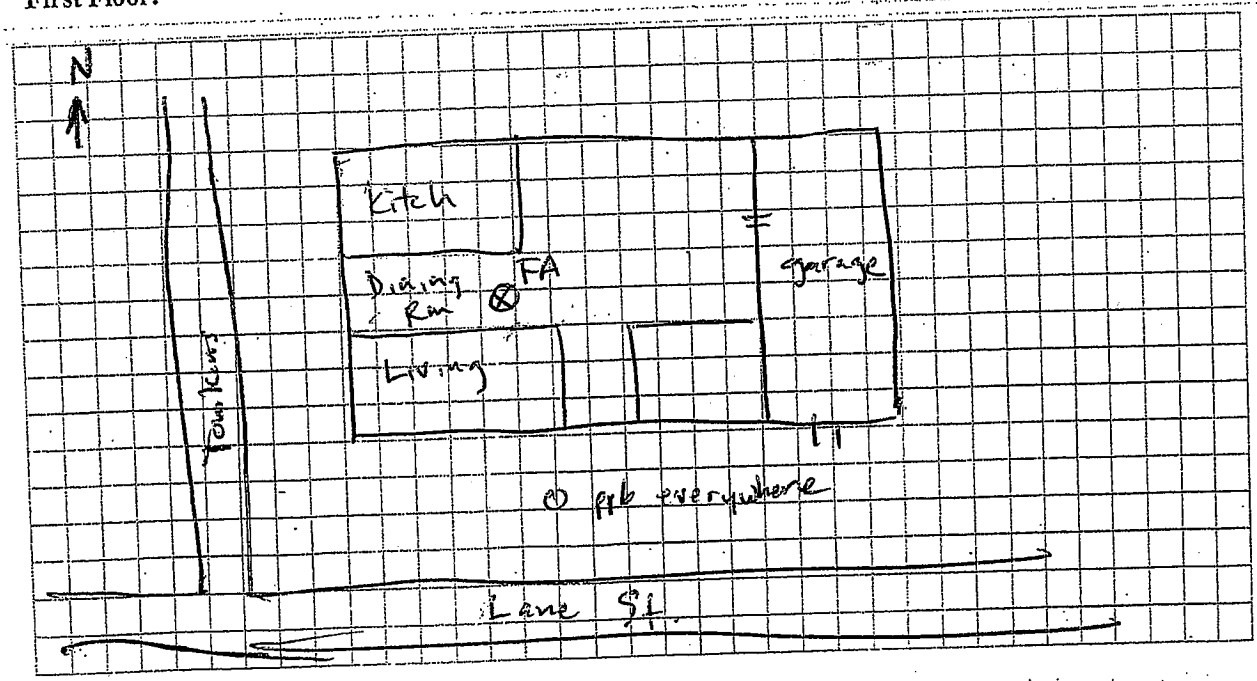
11. FLOOR PLANS

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:

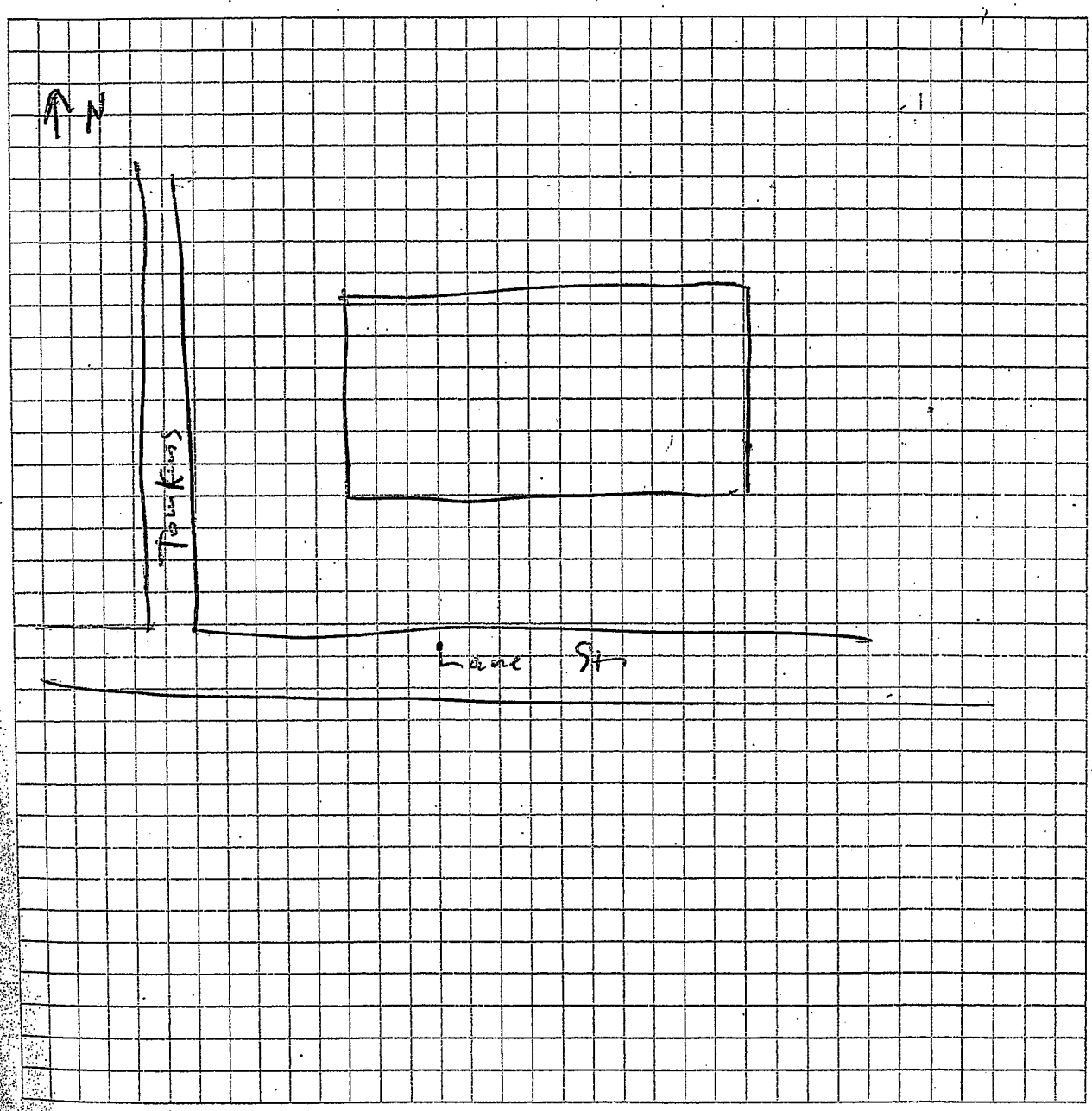


12. OUTDOOR PLOT

Location AIM07

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.



13. PRODUCT INVENTORY FORM

Make & Model of field instrument used: ppb RAE Location AIM07

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	Caulk		U		0	Y
"	rust-oleum		U		0	Y
"	WD-40		U		0	Y
"	Paint		U		0	Y
"	Sticky stuff remover		U		0	Y
"	Insect Killer		U		0	Y
"	Mineral Spirits		U		0	Y
"	Polyurethane		U		0	Y
garage	Gasoline	5 gal	U		0	N
"	lawn mowers	3	U		0	N
"	Propane	17 lbs	U		0	N
"	Zep hose wash	1 gal	U		0	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.

OSR – 3

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. Location AIM08

Preparer's Name Phil Muller Date/Time Prepared 11-29-07 / 1110

Preparer's Affiliation MACTEC Phone No. 603 315 4402

Purpose of Investigation Vapor Intrusion

1. OCCUPANT:

Interviewed: (Y) N

Contact Information Provided To NYSDEC And NYSDOH Under Separate Cover

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: _____

Location AFM08

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) N/A

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

Other characteristics:

Number of floors 2 + basement Building age 60

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 —

Infiltration into air ducts —

Location AIM08.

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 _____	
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			
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)

Sump

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: Gas

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

Location AIM08

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.

N/A

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	Laundry, storage,
1st Floor	Kitchen, living, dining, 2BR, bath
2nd Floor	2BR, bath
3rd Floor	—
4th Floor	—

8. FACTORS THAT MAY INFLUENCE INDOOR AIR QUALITY

a. Is there an attached garage? (Y)/N converted to family room

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? basement

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

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

(Y) / N When & Type?_____

Location AIM08

j. Has painting/staining been done in the last 6 months? (Y)/N Where & When? 7 mos

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

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? inside

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: _____

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

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: N/A

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

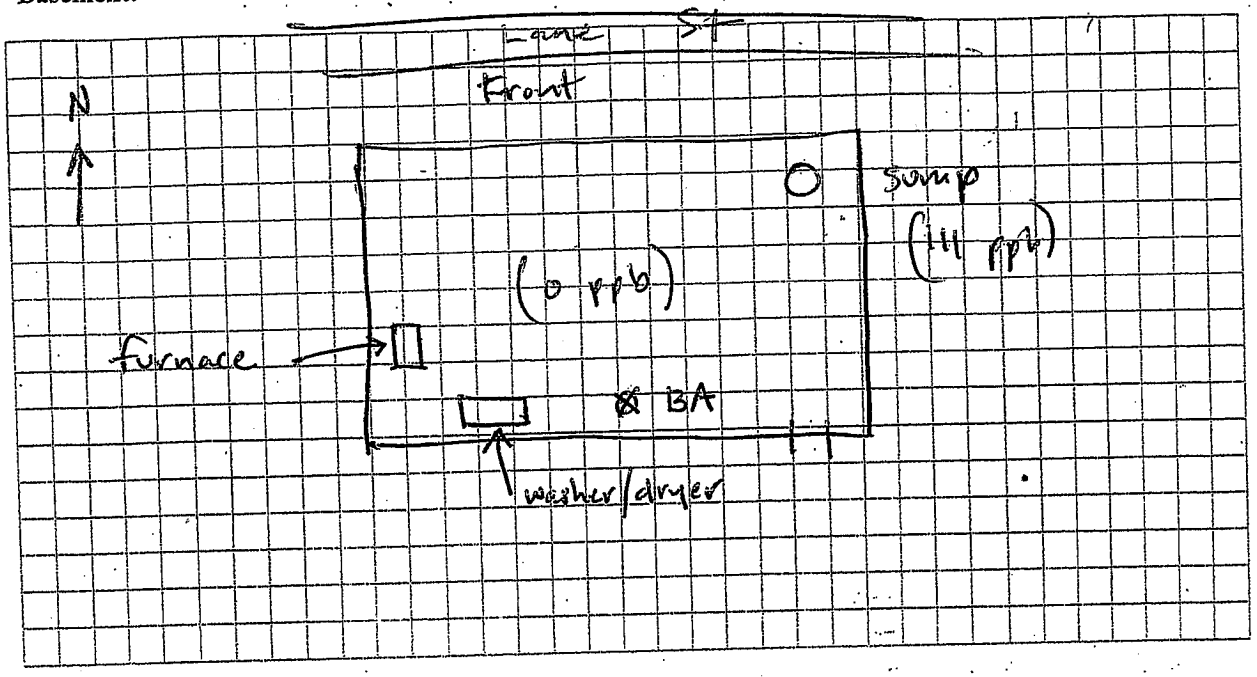
d. Relocation package provided and explained to residents? Y/N

Location A1M08.

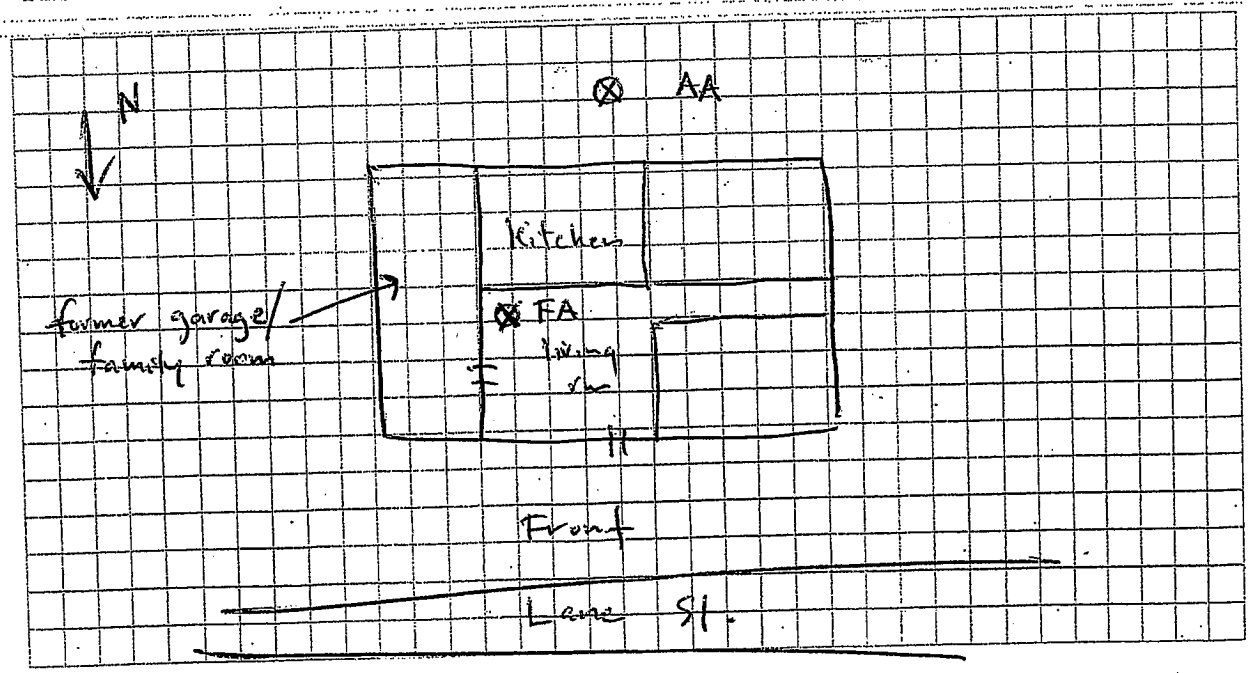
11. FLOOR PLANS

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:

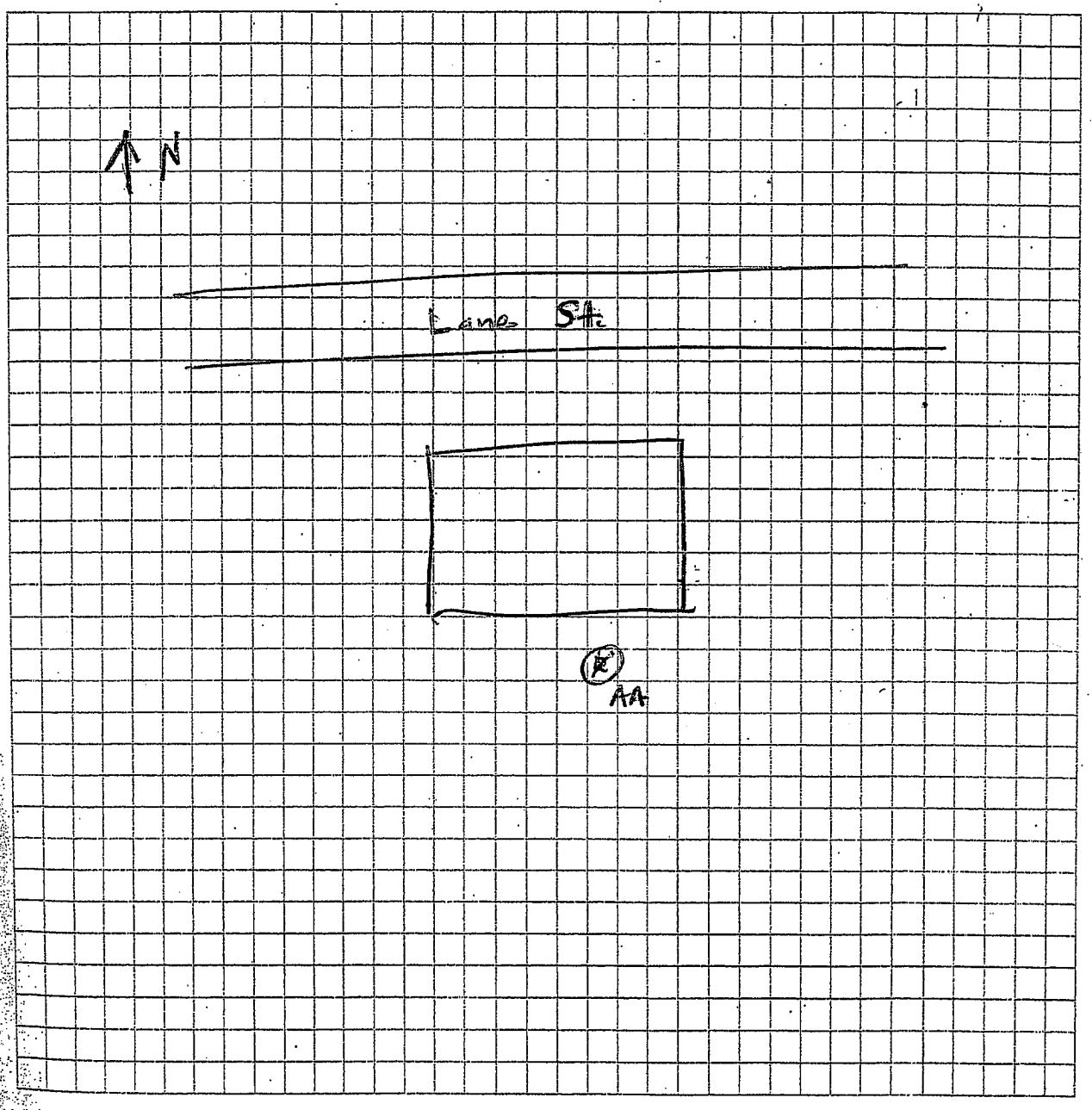


12. OUTDOOR PLOT

Location AFM08.

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.



13. PRODUCT INVENTORY FORM

Location ATM08

Make & Model of field instrument used: ppb RAE

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	Lysol	U	10 oz		0	
"	Paint	U	10 gal.		0	
"	disinfecting wipes	U	1 box		0	
"	bleach	U	1 gal		0	
"	detergent	U	3 gal		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.

APPENDIX C

FIELD DATA RECORDS

Soil Vapor Implant Sampling Records

Soil Boring Logs

Groundwater Sampling Records

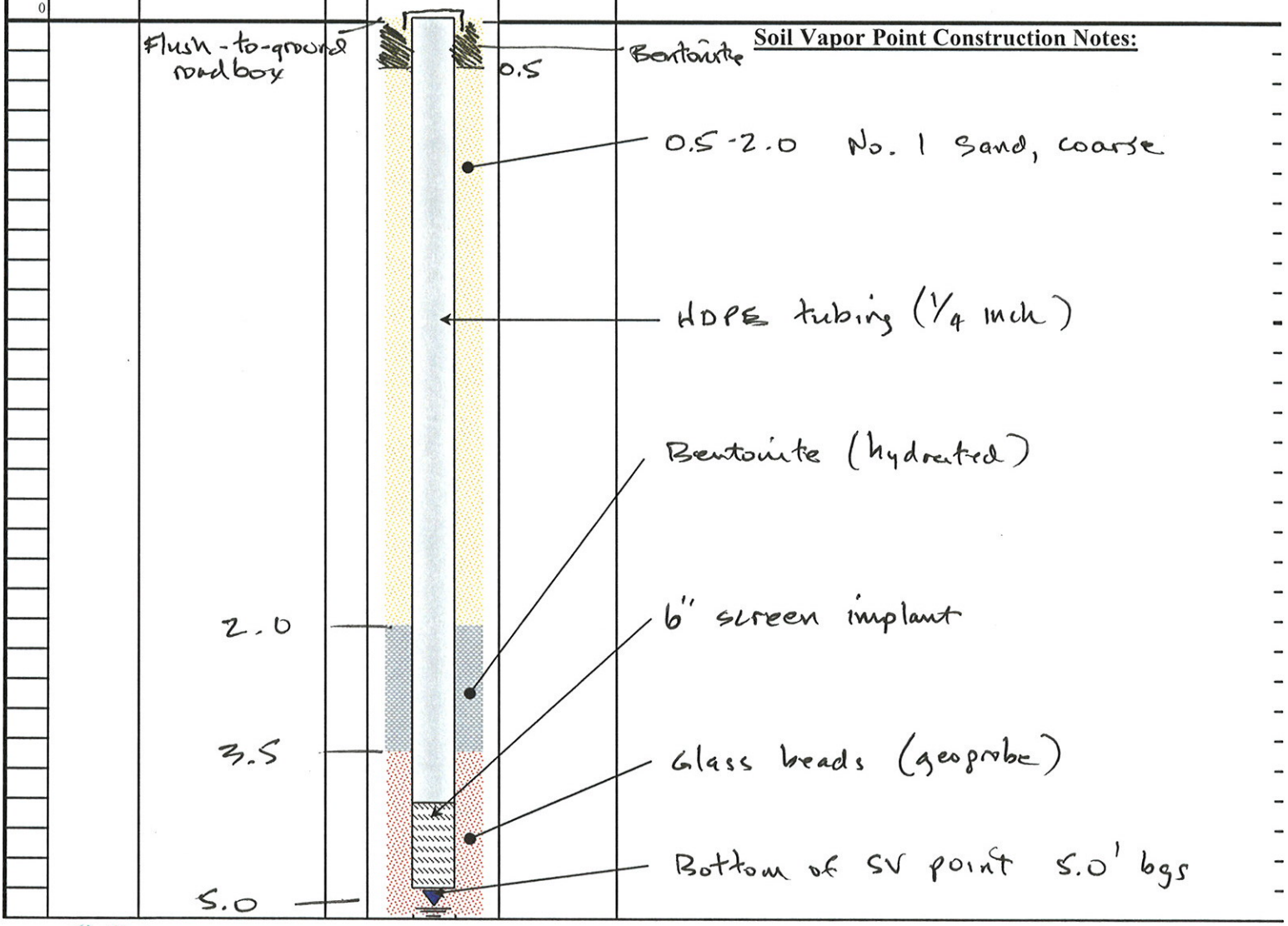
SOIL VAPOR IMPLANT SAMPLING RECORD

Boring ID: DP-01

Project No.: 36120720860021	**Project:** Active Industrial	**Checked By:** ELS	
Client Name: NYSDEC	**Logged By:** DLC	**Protection Level:** D	**Ground Elevation:** —
Drilling Contractor: ADT	**Drilling Method:** Geoprobe	**Driller's Name:** A. Rabel	
Installation Date/Time: 12/12/2007	**Sample Date/Time:** 12/18/2007 0836	**Start Time:**	**End Time:**
Rig Type: —			
He Breakthrough %: None	**Initial He %:** 100%	**Final He %:** >95%	**Auger Size:** —

Overburden Drilling Notes:

SEE SOIL BORING LOG FOR DETAILS



Soil Vapor Point Construction Notes:

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FIGURE 4-11
SOIL VAPOR SAMPLING RECORD
NYSDEC QUALITY ASSURANCE PROJECT PLAN

SOIL VAPOR IMPLANT SAMPLING RECORD

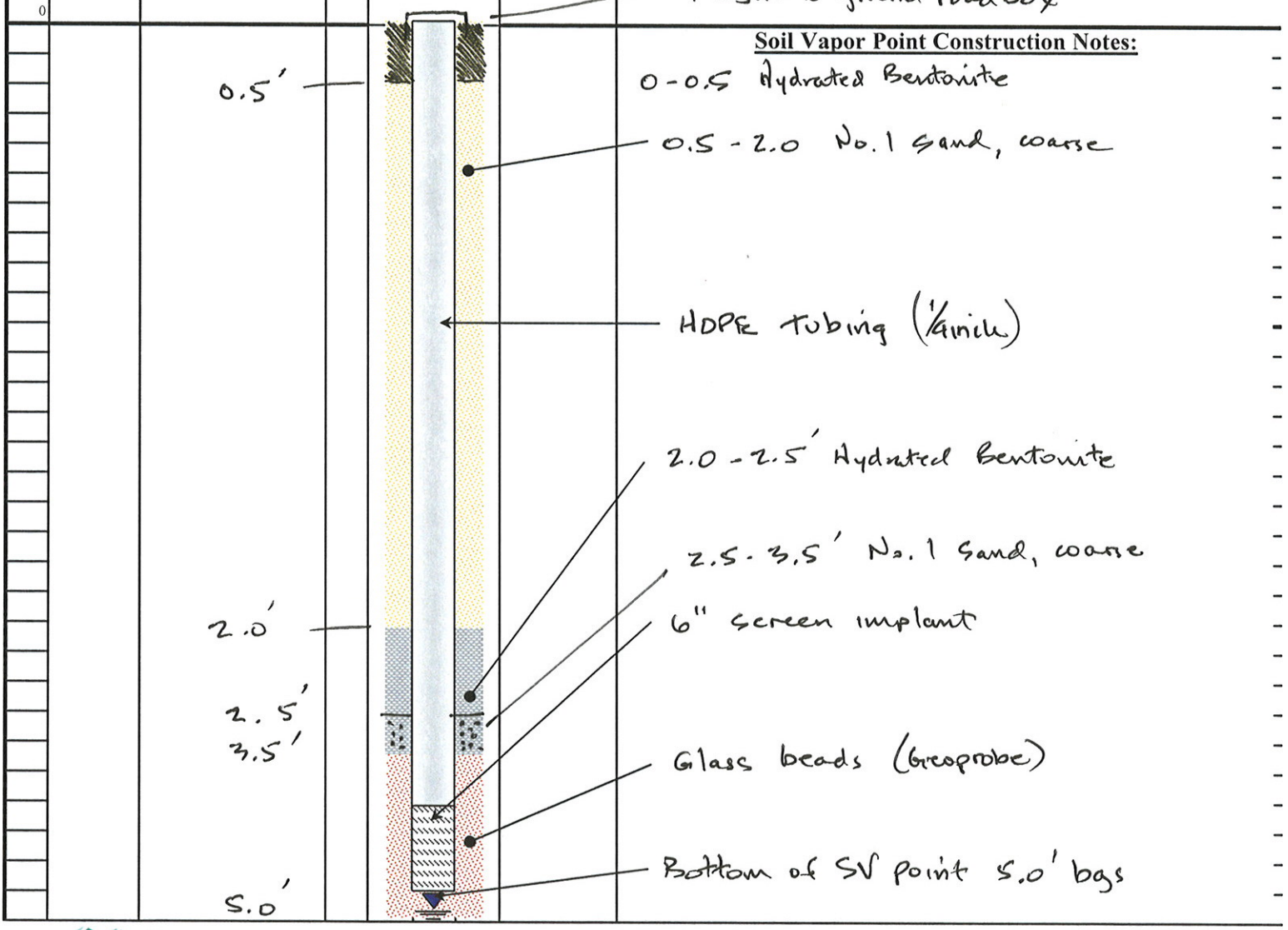
Boring ID: DP-02

Project No.: 3612072086 / 03.1	**Project:** ACTIVE INDUSTRIAL	**Checked By:** ECS	
Client Name: NYSDEC	**Logged By:**	**Protection Level:**	**Ground Elevation:**
Drilling Contractor: ADT	**Drilling Method:** Geoprobe	**Driller's Name:** A. Babel	
Installation Date/Time: 12/12/2007 1500	**Sample Date/Time:** 12/18/07 0924	**Start Time:**	**End Time:** / **Rig Type:** —
He Breakthrough %: none	**Initial He %:** 100	**Final He %:** >90%	**Auger Size:**

Depth (feet) | Recovery | Blow Counts | Graphic Log | Soil Vapor Diagram | Vapor Point Construction Notes

Overburden Drilling Notes:

SEE SOIL BORING LOG FOR DETAILS



Soil Vapor Point Construction Notes:

0-0.5 Hydrated Bentonite

0.5 - 2.0 No. 1 Sand, coarse

2.0 - 2.5' Hydrated Bentonite

2.5 - 3.5' No. 1 Sand, coarse

Bottom of SV point 5.0' bgs

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FIGURE 4-11
SOIL VAPOR SAMPLING RECORD
NYSDEC QUALITY ASSURANCE PROJECT PLAN

SOIL VAPOR IMPLANT SAMPLING RECORD

Boring ID: DP-03

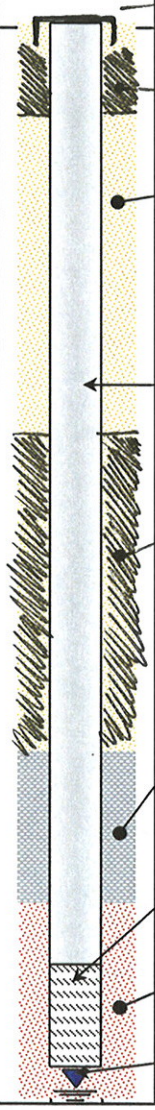
Project No.: 361207208 6/02.1	**Project:** ACTIVE INDUSTRIAL	**Checked By:** ECS	
Client Name: NYSDEC	**Logged By:** DLC	**Protection Level:** D	**Ground Elevation:** —
Drilling Contractor: ADT	**Drilling Method:** Geoprobe		**Driller's Name:** Andrea Babel
Installation Date/Time: 12/13/2007 0920	**Sample Date/Time:** 12/18/07 0909	**Start Time:**	**End Time:** / **Rig Type:** —
He Breakthrough %: none	**Initial He %:** 100	**Final He %:** >90	**Auger Size:** 1.5"

Depth (feet)	Recovery	Blow Counts	Graphic Log	Soil Vapor Diagram	Vapor Point Construction Notes
0					

Overburden Drilling Notes:

Flush-to-ground road box

Soil Vapor Point Construction Notes:



- Hydrated Bentonite 0.0' to 0.5' bgs
- Coarse Sand (No.1) 0.5' to 1.5' bgs
- HDPE tubing (1/4" OD)
- Hydrated Bentonite 1.5' to 2.5' bgs
- Coarse Sand (No.1) 2.5' to 3.5' bgs
- 6" screen implant
- Glass Beads (Geoprobe) 3.5' to 5.0' bgs
- Bottom of SV point = 5.0' bgs

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FIGURE 4-11
SOIL VAPOR SAMPLING RECORD
NYSDEC QUALITY ASSURANCE PROJECT PLAN

SOIL VAPOR IMPLANT SAMPLING RECORD

Boring ID: DP-04

Project No.: 361207206 / 02.1	**Project:** Active Industrial	**Checked By:** ECS	
Client Name: NYSDEC	**Logged By:** DLC	**Protection Level:** D	**Ground Elevation:** —
Drilling Contractor: MACTEC	**Drilling Method:** Hand Auger	**Driller's Name:** P. Mullen	
Installation Date/Time: 12/18/07 10:00	**Sample Date/Time:** 12/19/07 1008	**Start Time:**	**End Time:**
Rig Type: hand tools			
He Breakthrough %: none	**Initial He %:** 100%	**Final He %:** >90%	**Auger Size:** 1.5"

Depth (feet)	Recovery	Blow Counts	Graphic Log	Soil Vapor Diagram	Vapor Point Construction Notes
0					

Overburden Drilling Notes:

Drive point using hand auger tools
No soil samples retrieved

Flush-to-ground road box installed 12/19/07

Soil Vapor Point Construction Notes:

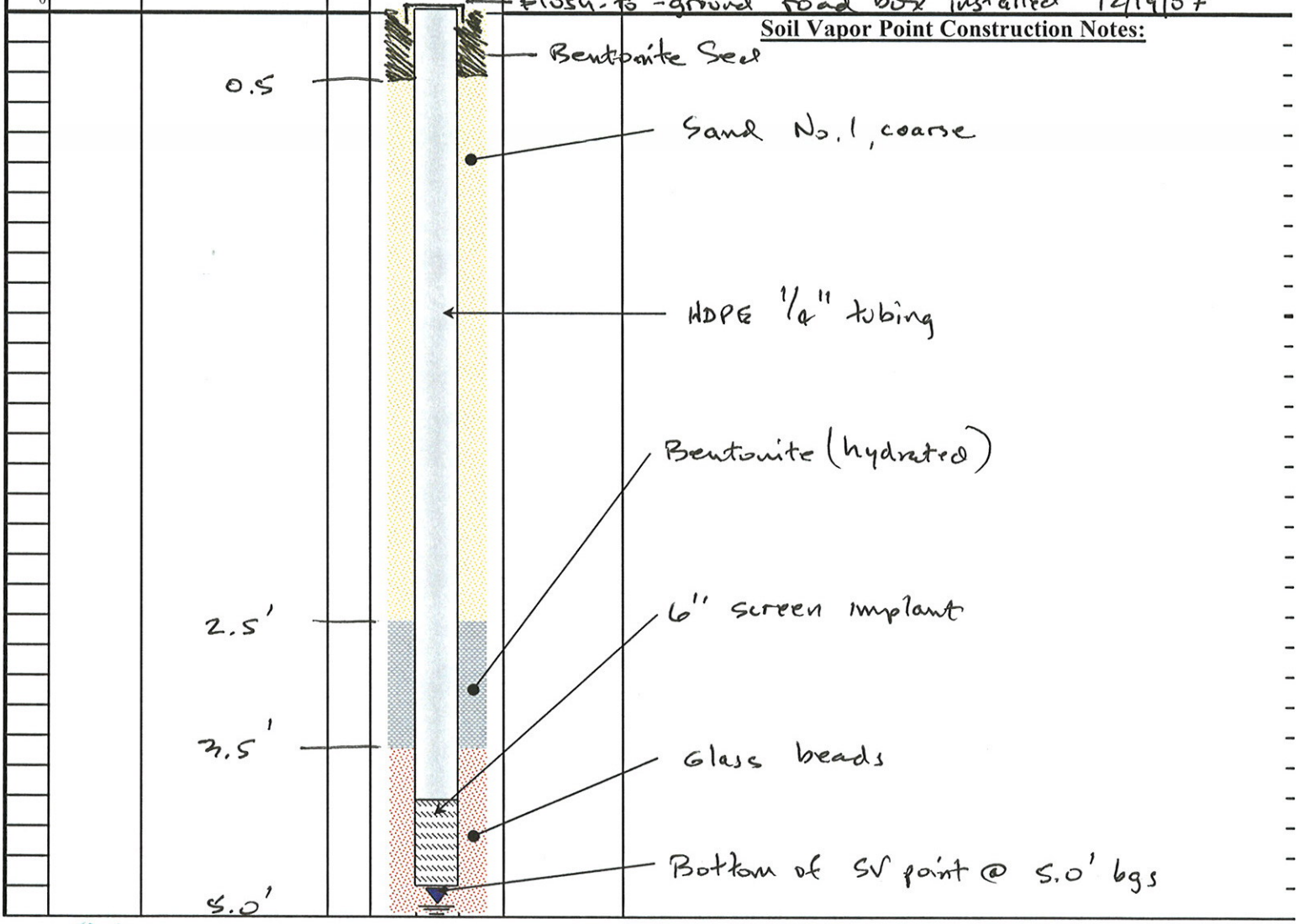

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FIGURE 4-11
SOIL VAPOR SAMPLING RECORD
NYSDEC QUALITY ASSURANCE PROJECT PLAN

SOIL VAPOR IMPLANT SAMPLING RECORD

Boring ID: DP-05

Project No.: 361207.2086/03.1	**Project:** Active Industrial	**Checked By:** ELS	
Client Name: NYSDEC	**Logged By:** PJM	**Protection Level:** D	**Ground Elevation:** —
Drilling Contractor: MACTEC	**Drilling Method:** Geoprobe Hand Tools	**Driller's Name:** Phil Muller	
Installation Date/Time: 1.14.08/ 1615	**Sample Date/Time:** 1.15.08/ 1454	**Start Time:** 1454	**End Time:** 1514	**Rig Type:** —
He Breakthrough %: <1000 ppm		**Initial He %:** 100	**Final He %:** 79o	**Auger Size:** 1.5"

Depth (feet)	Recovery	Blow Counts	Graphic Log	Soil Vapor Diagram	Vapor Point Construction Notes
0					
	0.5'				
	3.0'				
	4.0'				
	4.5'				
5.0					

Overburden Drilling Notes

Roadbox (flushmount)

Soil Vapor Point Construction Notes:

- hydrated bentonite (6" thick)
- Coarse Sand
- 1.5" dia
- HDPE tubing (1/4" O.D.)
- Hydrated Bentonite (1' thick)
- 6" Screen implant
- glass beads (1' thick)
- Bottom of SV point = 5.0' bgs

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FIGURE 4-11
SOIL VAPOR SAMPLING RECORD
NYSDEC QUALITY ASSURANCE PROJECT PLAN

SOIL VAPOR IMPLANT SAMPLING RECORD

Boring ID: DP-06

Project No.: 3612072086	**Project:** ACTIVE INDUSTRIAL	**Checked By:** ECS	
Client Name: NYSDEC	**Logged By:** PM	**Protection Level:** D	**Ground Elevation:** —
Drilling Contractor: MACTEC	**Drilling Method:** Hand auger (slide hammer)		**Driller's Name:** Moller
Installation Date/Time: 1/15/2008 0800	**Sample Date/Time:** 1/16/08 0805	**Start Time:**	**End Time:**	**Rig Type:** —
He Breakthrough %: 1%		**Initial He %:** 100	**Final He %:** 75	**Auger Size:** 1.5"

Depth (feet)	Recovery	Blow Counts	Graphic Log	Soil Vapor Diagram	Vapor Point Construction Notes
0		0.0			

Overburden Drilling Notes:

Advanced using geoprobe slide hammer – no soil samples/cuttings retrieved

Temporary Point – tubing removed after sampling

Soil Vapor Point Construction Notes:

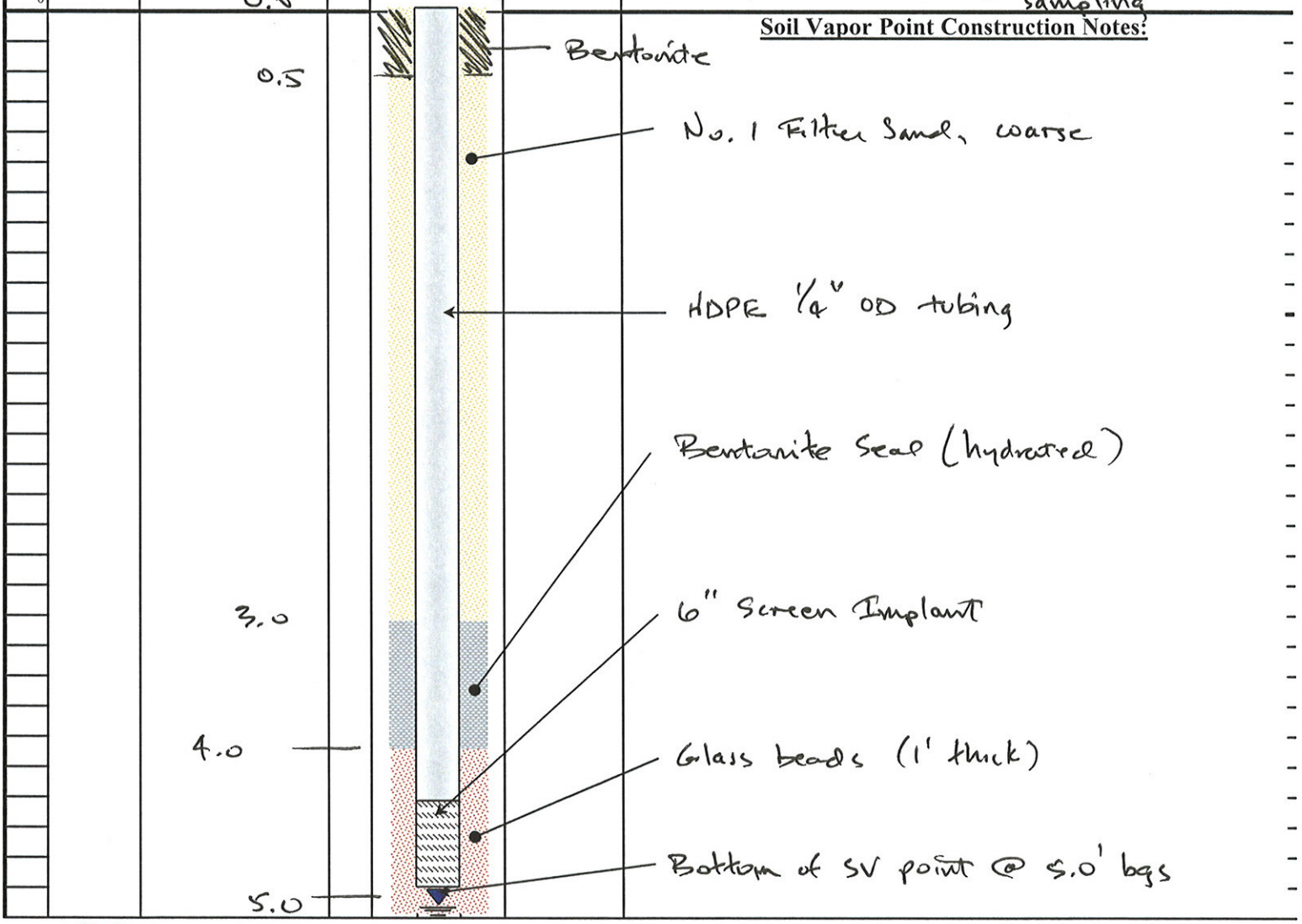

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FIGURE 4-11
SOIL VAPOR SAMPLING RECORD
NYSDEC QUALITY ASSURANCE PROJECT PLAN

SOIL VAPOR IMPLANT SAMPLING RECORD

Boring ID: DP-07

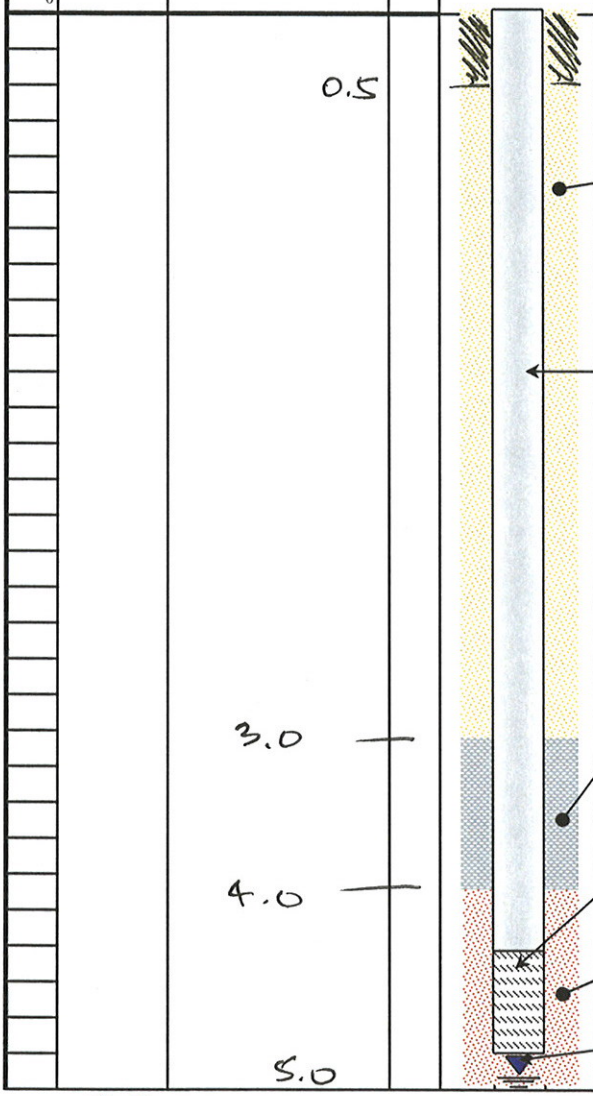
Project No.: 3612072086	**Project:** Active Industrial	**Checked By:** ECS	
Client Name: NYSDEC	**Logged By:** PM	**Protection Level:** D	**Ground Elevation:** —
Drilling Contractor: MACTEC	**Drilling Method:** Hand Auger		**Driller's Name:** Muller
Installation Date/Time: 1/15/2008 0845	**Sample Date/Time:**	**Start Time:**	**End Time:** / **Rig Type:**
He Breakthrough %: No test *		**Initial He %:**	**Final He %:** / **Auger Size:**

Depth (feet)	Recovery	Blow Counts	Graphic Log	Soil Vapor Diagram	Vapor Point Construction Notes
0					

Overburden Drilling Notes:

Advanced hand auger point using slide-hammer
No soil samples/cuttings retrieved
Temporary Point - Tubing removed after sampling

Soil Vapor Point Construction Notes:



* No Helium test completed because detector battery wouldn't hard charge. Notes in field book ES

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FIGURE 4-11
SOIL VAPOR SAMPLING RECORD
NYSDEC QUALITY ASSURANCE PROJECT PLAN

SOIL VAPOR IMPLANT SAMPLING RECORD

Boring ID: DP-08

Project No.: 361207208 6/03.1	**Project:** Active Industrial	**Checked By:** ECS	
Client Name: NYSDEC	**Logged By:** DLC	**Protection Level:** D	**Ground Elevation:** —
Drilling Contractor: ADT	**Drilling Method:** Geoprobe		**Driller's Name:** Yuri
Installation Date/Time: 1·16·08 / 1015	**Sample Date/Time:** 1·17·08 / 0920	**Start Time:** 0920	**End Time:** 0940	**Rig Type:** Geoprobe
He Breakthrough %: —		**Initial He %:** —	**Final He %:** —	**Auger Size:** 1.5"

Depth (feet)	Recovery	Blow Counts	Graphic Log	Soil Vapor Diagram	Vapor Point Construction Notes
0					
	0.5'				
2.5'					
	3.5				
	4.0				
	5.0				
5.5					

Overburden Drilling Notes

Road box (flushmount)

Soil Vapor Point Construction Notes:

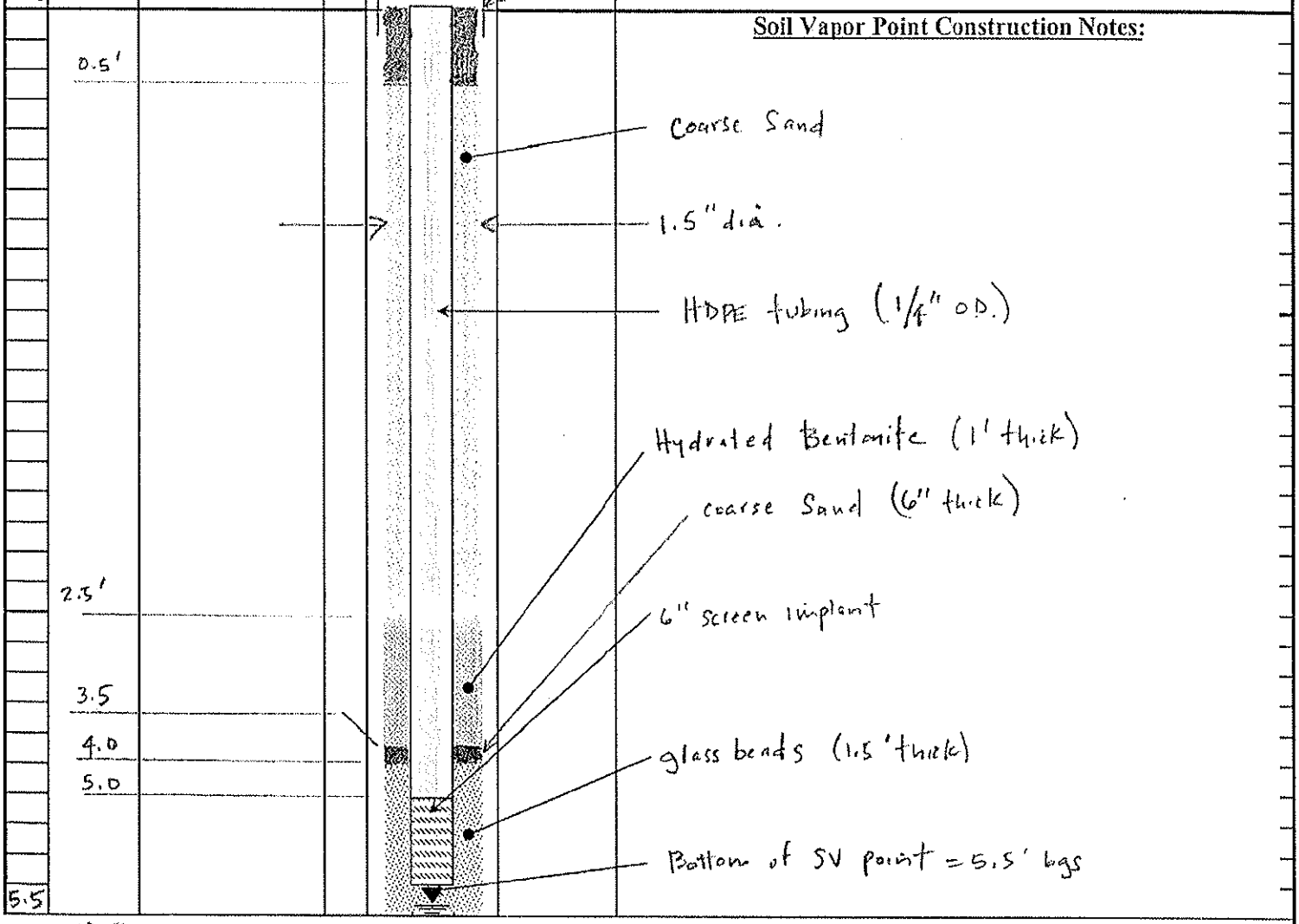

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FIGURE 4-11
SOIL VAPOR SAMPLING RECORD
NYSDEC QUALITY ASSURANCE PROJECT PLAN

SOIL VAPOR IMPLANT SAMPLING RECORD

Boring ID: DP-09

Project No.: 36120720846/03.1	**Project:** Active Industrial	**Checked By:** ECS	
Client Name: NYSDEC	**Logged By:** DLC	**Protection Level:** D	**Ground Elevation:** —
Drilling Contractor: ADT	**Drilling Method:** Geoprobe		**Driller's Name:** YURI
Installation Date/Time: 01/16/2008 1230	**Sample Date/Time:** 01/17/2008 1000	**Start Time:** 1000	**End Time:** 1020
He Breakthrough %: —		**Initial He %:** —	**Final He %:** —
Rig Type: —	**Auger Size:** 1.5"		

Depth (feet)	Recovery	Blow Counts	Graphic Log	Soil Vapor Diagram	Vapor Point Construction Notes
0					

Overburden Drilling Notes:

NOTE: POINT WAS TEMPORARY. TUBING WAS REMOVED AFTER SAMPLING ON 1/17/08

NO SOIL SAMPLING DURING ADVANCEMENT

Soil Vapor Point Construction Notes:

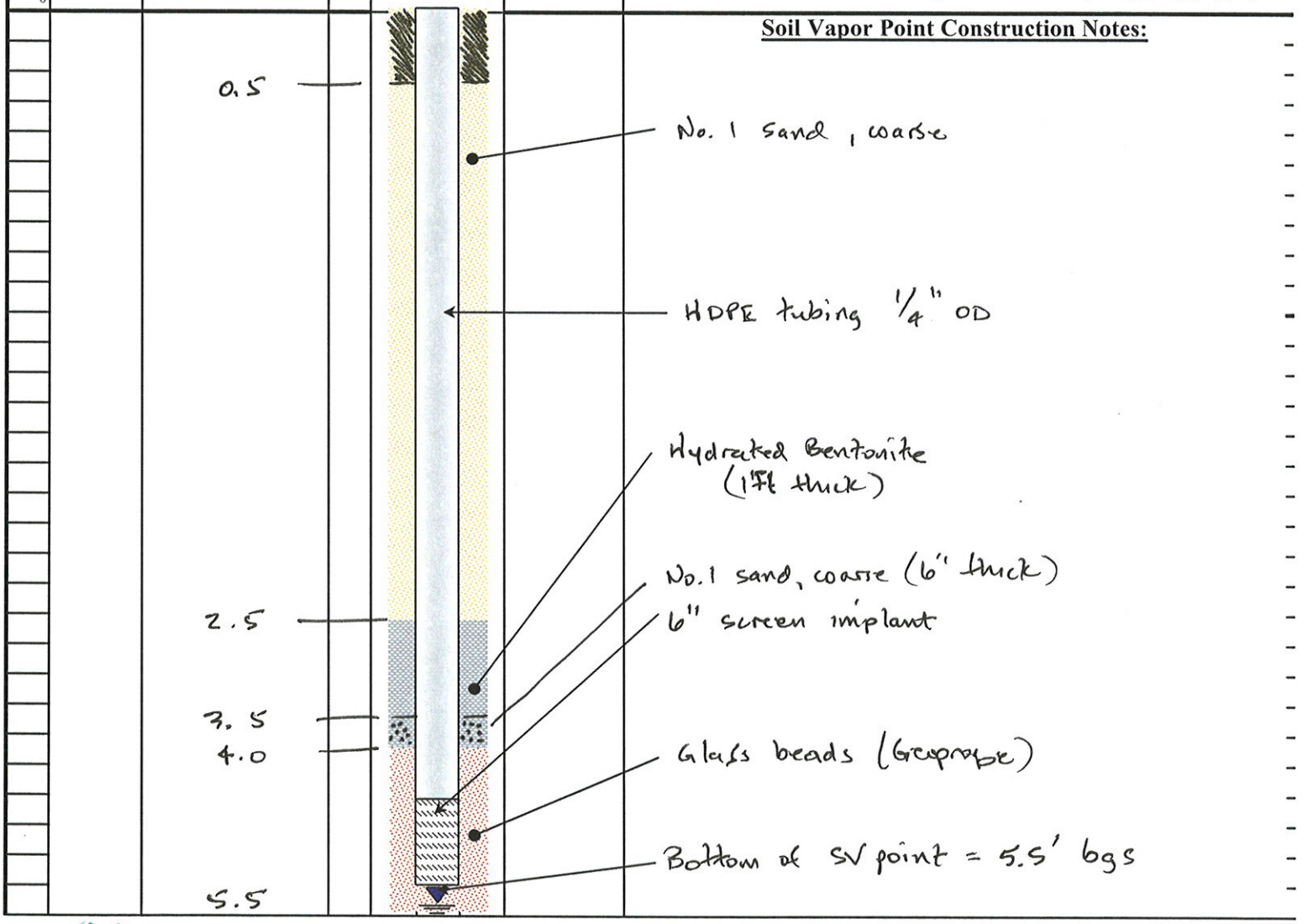

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FIGURE 4-11
SOIL VAPOR SAMPLING RECORD
NYSDEC QUALITY ASSURANCE PROJECT PLAN

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Soil Boring Log

MACTEC
107 Audubon Road
Wakefield, MA

Boring Location: DP-01			Page 1 of 1
Project Name: Active ~~Industrial~~		**Geologist:** DLC	
Date Started: 12/12/07		**Drilling Company:** ADT	
Date Completed: 12/12/07		**Drilling Method:** Direct Push	
Total Depth: 10'		**Depth to Water:** 6' (est)	
Comments: SEE SOIL VAPOR DIAGRAM FOR CONSTRUCTION DETAILS			

Depth (feet)	Stratigraphy Description	Penetration/ Recovery (feet)	Headspace (ppm)	Blows/ 6 inches	Sample ID
0 to 5	0-0.3: Mostly brown-dark brown silty sand, some concrete frags, some gravel 0.3-0.6: Mostly dark, ash-like material	5.0/2.7	59.0	/	AIG50103 @ 3' BGS 16:00
	0.6-0.8: Mostly brown-dark brown gravelly sand 0.8-1.3: Mostly dark, black ash/tar material shiny, damp, odorless				
	1.3-2.7: Mostly silty fine sand, brown, damp slightly plastic, some gravel, dense				
5 to 10	0-0.3: Mostly brown to dark brown silty fine sand, mod dense, moist, some gravel 0.3-0.9: Mostly same as above but lighter	5/3.9	6.7	/	AIG50106 @ 6' BGS 16:10
	0.9-3.9: Mostly brown-light brown sand, some gravel. Reddish brown from 1.9-2.2. Uniform wet, odorless				

Prepared by: DLC
Checked by: ELS

MACTEC

Soil Boring Log

MACTEC
107 Audubon Road
Wakefield, MA

Boring Location: DP-02			Page 1 of 1
Project Name: Active Indus. Trial		**Geologist:** DLC	
Date Started: 12/12/07		**Drilling Company:** ADT	
Date Completed:		**Drilling Method:** Direct Push	
Total Depth: 10'		**Depth to Water:** 8' BGS	
Comments: SEE Soil Vapor Diagram for Construction Details			

Depth (feet)	Stratigraphy Description	Penetration/ Recovery (feet)	Headspace (ppm)	Blows/ 6 inches	Sample ID
0 to 5	0-1.1: Mostly brown. light brown silty sand med. Fine grained. moist, med dense. odorless	5.0/3.2		/	
	1.1-2.1: Same as above but lighter in color and less moist.				
	2.1-3.3: Mostly brown. light brown sand. Some gravel, loose, dry. odorless				
5 to 10	0-1.4: Mostly brown. light brown med sand some gravel. well graded, loose, dry. Some silty sand at 0.2'	5.0/3.5		/	
	1.4-3.3: Mostly gravelly med sand. well graded wet. Unit of reddish brown- red brown sand at 1.4-2.2' odorless				

Prepared by: DLC
Checked by: ECS

MACTEC

Soil Boring Log

MACTEC
107 Audubon Road
Wakefield, MA

Boring Location: DP-03	Page 1 of 1
Project Name: Active Industrial	**Geologist:** DLC
Date Started: 12/13/07	**Drilling Company:** ADT
Date Completed: 12/13/07	**Drilling Method:** Direct Push
Total Depth: 10' BGS	**Depth to Water:**
Comments: SEE Soil Vapor Diagram for Construction Details	

Depth (feet)	Stratigraphy Description	Penetration/ Recovery (feet)	Headspace (ppm)	Blows/ 6 inches	Sample ID
0	0-0.3: Mostly dark brown. brown, loose. topsoil.	5.0/1.6		/	~~AIGS0306~~
5	0.3-0.6: Mostly brown silty sand, moist, odorless cobble at 0.4', large asphalt frag at 0.7'				
	0.6-1.6: Mostly same as above, some gravel, damp. large asphalt frags				
5	0-0.2: Mostly brown. light brown silty sand mixed w/ asphalt frags, moist	5.0/3.0		/	AIGS0306 @ 6' BGS @ 9:00
10	0.2-0.9: Mostly reddish brown med sand, some gravel				
	0.9-1.3: Mostly brown light brown gravelly sand well graded				
	1.3-3.0: Mostly brown light brown sand, uniform, wet.				

Prepared by: DLC
Checked by: ECS

MACTEC

Soil Boring Log

MACTEC
107 Audubon Road
Wakefield, MA

Boring Location: DP - 08			Page 1 of 1
Project Name: Active Industrial		Geologist: DLC	
Date Started: 1/16/08		Drilling Company: ADT	
Date Completed: 1/16/08		Drilling Method: Direct Push	
Total Depth: 12' BGS		Depth to Water: approx 8' BGS	
Comments: SEE SOIL VAPOR DIAGRAM FOR CONSTRUCTION DETAILS			

Depth (feet)	Stratigraphy Description	Penetration/ Recovery (feet)	Headspace (ppm)	Blows/ 6 inches	Sample ID
0 - 4	0-0.9: Mostly loamy topsoil, brown, some organics, some silt, moist, odorless 0.9-1.4: Mostly brown-light brown silty sand	4.0/2.5	3.3	N/A	
	uniform, odorless, damp. 1.4-2.5: Mostly brown, poorly graded, fine sand, some Med sand, some silt				
4 - 8	0-0.2: Mostly same as 1.4-2.5 section above 0.2-1.9: Mostly light brown-tan 1.9-3.0: Mostly well	4.0/3.0	3.9	N/A	
8 - 12	~~same~~ graded brown-tan sand, some fines, dry, odorless	4.0/3.3			
8 - 12	Mostly brown - light brown med sand, some fine, some gravel, well graded, wet, odorless	4.0/3.3	5.8	N/A	

Prepared by: DLC
Checked by:

MACTEC ENGINEERING & CONSULTING, INC. PAGE 1 OF 1

FIELD DATA RECORD - GROUNDWATER SAMPLING

PROJECT: Active Industrial Uniform | DATE: 11/20/09

WELL ID: MW-25 | BOTTLE TIME: 1500

START 14:25 END 15:05

SAMPLE ISIS ID: AI MW25

☐ QC SAMPLES COLLECTED | DUPLICATE ID: | MS ID: | MSD ID:

WATER LEVEL / WELL DATA

MEASURED WELL DEPTH	21.67 FT (TOR)	HISTORICAL WELL DEPTH	21.67 FT (TOR)	PROTECTIVE CASING STICKUP (FROM GROUND)	FT	PROTECTIVE CASING / WELL DIFFERENCE	0.37 FT
DEPTH TO WATER	5.85 FT (TOR)	SCREEN LENGTH	10 FT	WELL DIAMETER	2 IN	WELL MATERIAL	PVC

Difference between PVC and Ground

HEIGHT OF WATER COLUMN: 15.82 FT x ☒ 0.16 GAL/FT (2 IN) ☐ 0.65 GAL/FT (4 IN) ☐ 1.5 GAL/FT (6 IN) = 2.58 GAL/VOL

TOTAL VOLUME PURGED: 1.45 GAL

Total purge volume = (ml per min.) x time (min.) x 0.00026 gal/ml

AMBIENT AIR: 0 PPM | WELL MOUTH: 6950 PPM

PURGE DATA

µS/cm

TIME	DEPTH TO WATER (ft)	PURGE RATE (mL/min)	TEMP. (degrees C)	pH (units)	TURBIDITY (NTU)	SPEC. COND. (uhmos/cm)	D.O. (mg/L)	ORP (mV)	Comments
14:38	5.87	250	14.97	6.49	21.0	291	3.25	119.8	
14:41	5.87	250	15.10	6.42	21.2	289	3.12	123.1	
14:44	5.87	250	15.26	6.32	21.3	287	2.10	125.6	
14:47	5.87	250	15.35	6.30	20.6	285	2.06	127.2	
14:50	5.87	250	15.38	6.25	19.3	283	1.98	129.5	
15:00	Sample collected								

EQUIPMENT DOCUMENTATION

PURGING: ☒

SAMPLING: ☒ PERISTALTIC PUMP; ☐ SUBMERSIBLE PUMP; ☐ BLADDER PUMP; ☐ PVC/SILICON TUBING; ☐ TEFLON/SILICON TUBING; ☐ WATTERA; ☐ IN LINE FILTER; ☐ PRESS/VAC FILTER; _____

DECON FLUIDS USED: ☐ METHANOL; ☐ LIQUINOX; ☐ POTABLE WATER; ☐ DEIONIZED WATER; ☐ HEXANE; ☐ NITRIC ACID; ☒ NONE- Dedicated Tubing

WATER LEVEL EQUIPMENT USED: ☒ ELECTRIC COND. PROBE; ☐ FLOAT ACTIVATED; ☐ KECK INTERFACE PROBE; _____

NUMBER OF FILTERS USED _____

ANALYTICAL PARAMETERS

		METHOD NUMBER	FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	SAMPLE BOTTLE ID NUMBERS
☒	TCL VOCs	8260B	N	HCl/4degC	2 x 40mL	☒	AIMW25

NOTES AND SAMPLE OBSERVATIONS

Stabilization is considered achieved when three consecutive readings are taken at 3 to 5 min. intervals within the following limits:

Temp. - 3 %; Turbidity 10% > than 1 NTU; DO - 10%; Sp. Cond. - 3%; pH - 0.1 unit; ORP - 10 mV.

SIGNATURE: Ralph J. Wall

RECEIVED BY: _____

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FIELD DATA RECORD - GROUNDWATER SAMPLING

PROJECT: Active Industrial Uniform
DATE: 11.28.07
WELL ID: MW - 101
START: 1030 END: 1140
BOTTLE TIME: 11:20
SAMPLE ISIS ID: AI MW101
QC SAMPLES COLLECTED: DUPLICATE ID: / MS ID: / MSD ID: /

WATER LEVEL / WELL DATA

MEASURED WELL DEPTH: 14.22 FT (TOR)
HISTORICAL WELL DEPTH: 14.22 FT (TOR)
PROTECTIVE CASING STICKUP (FROM GROUND): / FT
PROTECTIVE CASING / WELL DIFFERENCE: FT (Difference From PVC to Ground)
DEPTH TO WATER: 7.15 FT (TOR)
SCREEN LENGTH: 10 FT
WELL DIAMETER: 2 IN
WELL MATERIAL: PVC
HEIGHT OF WATER COLUMN: 7.07 FT x [✓] 0.16 GAL/FT (2 IN) [ ] 0.65 GAL/FT (4 IN) [ ] 1.5 GAL/FT (6 IN) = 1.15 GAL/VOL
TOTAL VOLUME PURGED: 1.65 GAL
Total purge volume = (ml per min.) x time (min.) x 0.00026 gal/ml
AMBIENT AIR: 0 ~~PPM~~ ppb
WELL MOUTH: 440 ~~PPM~~ ppb

PURGE DATA

µS/cm

TIME	DEPTH TO WATER (ft)	PURGE RATE (mL/min)	TEMP. (degrees C)	pH (units)	TURBIDITY (NTU)	SPEC. COND. (uhmos/cm)	D.O. (mg/L)	ORP (mV)	Comments
1055	Begin	Purging	@	250	mL/min				
11:00	7.17	250	15.45	260 7.20	29.7	596	3.02	170.2	
11:03	7.17	250	15.60	250 7.21	24.2	603	2.84	166.9	
11:06	7.17	250	15.68	250 7.14	17.5	608	2.44	45.9	
11:09	7.17	250	15.71	7.15	11.4	618	2.19	-43.8	
11:12	7.17	250	15.74	7.15	11.9	625	2.02	-50.6	
11:15	7.17	250	15.76	7.15	10.9	628	1.99	-53.6	
11:20	Sample collected								

EQUIPMENT DOCUMENTATION

PURGING: [✓]
SAMPLING: [✓] PERISTALTIC PUMP; [ ] SUBMERSIBLE PUMP; [ ] BLADDER PUMP; [ ] PVC/SILICON TUBING; [ ] TEFLON/SILICON TUBING; [ ] WATTERA; [ ] IN LINE FILTER; [ ] PRESS/VAC FILTER; _____

DECON FLUIDS USED: [ ] METHANOL; [ ] LIQUINOX; [ ] POTABLE WATER; [ ] DEIONIZED WATER; [ ] HEXANE; [ ] NITRIC ACID; [✓] NONE- Dedicated Tubing

WATER LEVEL EQUIPMENT USED: [X] ELECTRIC COND. PROBE; [ ] FLOAT ACTIVATED; [ ] KECK INTERFACE PROBE; [ ] _____

NUMBER OF FILTERS USED _____

ANALYTICAL PARAMETERS

	METHOD NUMBER	FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	SAMPLE BOTTLE ID NUMBERS
[✓] TCL VOCs	8260B	N	HCl/4degC	3 x 40mL 2	[✓]	AI MW 101

NOTES AND SAMPLE OBSERVATIONS

Stabilization is considered achieved when three consecutive readings are taken at 3 to 5 min. intervals within the following limits:
Temp. - 3 %; Turbidity 10% > than 1 NTU; DO - 10%; Sp. Cond. - 3%; pH - 0.1 unit; ORP - 10 mV.

SIGNATURE: _____

RECEIVED BY: _____

MACTEC ENGINEERING & CONSULTING, INC. PAGE 1 OF 1

FIELD DATA RECORD - GROUNDWATER SAMPLING

PROJECT: Active Industrial Uniform | DATE: 11/28/07

WELL ID: MW-104 | BOTTLE

START 11:30 END 12:15 | TIME: 12:10

SAMPLE ISIS ID: AIMW104

[X] QC SAMPLES COLLECTED — DUPLICATE ID: AIMW104DUP; MS ID: AIMW104MS; MSD ID: AIMW104MSD

WATER LEVEL / WELL DATA

PVC / ground surface diff.

MEASURED WELL DEPTH	14.21 FT (TOR)	HISTORICAL WELL DEPTH	— FT (TOR)	PROTECTIVE CASING STICKUP (FROM GROUND)	/ FT	PROTECTIVE CASING / WELL DIFFERENCE	0.29 FT
DEPTH TO WATER	7.11 FT (TOR)	SCREEN LENGTH	— FT	WELL DIAMETER	2 IN	WELL MATERIAL	PVC

HEIGHT OF WATER COLUMN: 7.10 FT x [X] 0.16 GAL/FT (2 IN) [ ] 0.65 GAL/FT (4 IN) [ ] 1.5 GAL/FT (6 IN) = 1.15 GAL/VOL

TOTAL VOLUME PURGED: 1.82 GAL

Total purge volume = (ml per min.) x time (min.) x 0.00026 gal/ml

AMBIENT AIR: 0 PPM | WELL MOUTH: 7280 PPM

PURGE DATA

TIME	DEPTH TO WATER (ft)	PURGE RATE (mL/min)	TEMP. (degrees C)	pH (units)	TURBIDITY (NTU)	SPEC. COND. (uhmos/cm)	D.O. (mg/L)	ORP (mV)	Comments
11:40	Begin purging								
11:45	7.16	230	17.08	7.31	73.8	327	6.35	51.6	
11:48	7.16	230	16.87	6.89	61.6	324	2.43	70.3	
11:51	7.16	230	16.80	6.74	56.8	323	1.46	73.7	
11:54	7.16	250	16.74	6.69	34.6	327	0.94	84.1	
11:57	7.16	230	16.82	6.68	30.6	331	0.79	86.2	
12:00	7.16	230	16.99	6.68	30.2	332	0.78	87.2	
12:03	7.16	230	17.27	6.68	29.7	333	0.79	88.5	
12:10	Sample collected								

EQUIPMENT DOCUMENTATION

PURGING: [X]

SAMPLING: [X] PERISTALTIC PUMP; [ ] SUBMERSIBLE PUMP; [ ] BLADDER PUMP; [ ] PVC/SILICON TUBING; [ ] TEFLON/SILICON TUBING; [ ] WATTERA; [ ] IN LINE FILTER; [ ] PRESS/VAC FILTER; _____

DECON FLUIDS USED: [ ] METHANOL; [ ] LIQUINOX; [ ] POTABLE WATER; [ ] DEIONIZED WATER; [ ] HEXANE; [ ] NITRIC ACID; [X] NONE- Dedicated Tubing

WATER LEVEL EQUIPMENT USED: [X] ELECTRIC COND. PROBE; [ ] FLOAT ACTIVATED; [ ] KECK INTERFACE PROBE; _____

NUMBER OF FILTERS USED _____

ANALYTICAL PARAMETERS

		METHOD NUMBER	FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	SAMPLE BOTTLE ID NUMBERS
[X]	TCL VOCs	8260B	N	HCl/4degC	2 x 40mL	[X]	AIMW104

NOTES AND SAMPLE OBSERVATIONS

Stabilization is considered achieved when three consecutive readings are taken at 3 to 5 min. intervals within the following limits:

Temp. - 3 %; Turbidity 10% > than 1 NTU; DO - 10%; Sp. Cond. - 3%; pH - 0.1 unit; ORP - 10 mV.

SIGNATURE: _____

RECEIVED BY: _____

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FIELD DATA RECORD - GROUNDWATER SAMPLING

PROJECT: Active Industrial Uniform | DATE: 11/27/07

WELL ID: MW-106 | BOTTLE TIME: 13:55

START: 13:22 END: 14:00

SAMPLE ISIS ID: AIMW106

☐ QC SAMPLES COLLECTED — DUPLICATE ID: / MS ID: / MSD ID: /

WATER LEVEL / WELL DATA

(Between PVC + ground)

MEASURED WELL DEPTH	14.13 FT (TOR)	HISTORICAL WELL DEPTH	14.13 FT (TOR)	PROTECTIVE CASING STICKUP (FROM GROUND)	N/A FT	PROTECTIVE CASING / WELL DIFFERENCE	0.78 FT
DEPTH TO WATER	6.92 FT (TOR)	SCREEN LENGTH	10 FT	WELL DIAMETER	2 IN	WELL MATERIAL	PVC

HEIGHT OF WATER COLUMN: 7.21 FT x ☒ 0.16 GAL/FT (2 IN) ☐ 0.65 GAL/FT (4 IN) ☐ 1.5 GAL/FT (6 IN) = 1.18 GAL/VOL

TOTAL VOLUME PURGED: 2.53 GAL

Total purge volume = (ml per min.) x time (min.) x 0.00026 gal/ml

AMBIENT AIR: 0 PPM | WELL MOUTH: 1 PPM (after cover was open for 3 minutes.)

PURGE DATA

TIME	DEPTH TO WATER (ft)	PURGE RATE (mL/min)	TEMP. (degrees C)	pH (units)	TURBIDITY (NTU)	SPEC. COND. ~~(uhmos/cm)~~ mS/cm	D.O. (mg/L)	ORP (mV)	Comments
1331	Begin Purging @				330 ml/min				clear
1335	6.95	330	16.68	6.79	33.9	294	1.29	2.9	"
1341	6.95	330	16.91	6.68	17.4	295	0.65	-9.4	"
13:44	6.95	330	17.08	6.66	10.7	296	0.42	-22.9	
13:47	6.95	330	17.07	6.66	9.2	296	0.39	-35.9	
13:50	6.95	330	17.07	6.67	8.8	297	0.33	-41.7	
13:53	6.95	330	17.01	6.68	8.6	298	0.34	-44.0	
13:55	Sample collected								

EQUIPMENT DOCUMENTATION

PURGING: ☒

SAMPLING: ☒ PERISTALTIC PUMP; ☐ SUBMERSIBLE PUMP; ☐ BLADDER PUMP; ☐ PVC/SILICON TUBING; ☐ TEFLON/SILICON TUBING; ☐ WATTERA; ☐ IN LINE FILTER; ☐ PRESS/VAC FILTER; _____

DECON FLUIDS USED: ☐ METHANOL; ☐ LIQUINOX; ☐ POTABLE WATER; ☐ DEIONIZED WATER; ☐ HEXANE; ☐ NITRIC ACID; ☒ NONE- Dedicated Tubing

WATER LEVEL EQUIPMENT USED: ☒ ELECTRIC COND. PROBE; ☐ FLOAT ACTIVATED; ☐ KECK INTERFACE PROBE; _____

NUMBER OF FILTERS USED _____

ANALYTICAL PARAMETERS

		METHOD NUMBER	FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	SAMPLE BOTTLE ID NUMBERS
☒	TCL VOCs	8260B	N	HCl/4degC	3 x 40mL 2	☑	AIMW106

NOTES AND SAMPLE OBSERVATIONS

Stabilization is considered achieved when three consecutive readings are taken at 3 to 5 min. intervals within the following limits:

Temp. - 3 %; Turbidity 10% > than 1 NTU; DO - 10%; Sp. Cond. - 3%; pH - 0.1 unit; ORP - 10 mV.

SIGNATURE: _____

RECEIVED BY: _____

MACTEC ENGINEERING & CONSULTING, INC. PAGE 1 OF 1

FIELD DATA RECORD - GROUNDWATER SAMPLING

PROJECT: Active Industrial Uniform | DATE: 11.27.07

WELL ID: MW-107 | START: 1215 END: 13:10 | BOTTLE TIME: 13:05

SAMPLE ISIS ID: AI MW 107

☐ QC SAMPLES COLLECTED — DUPLICATE ID: / MS ID: / MSD ID: /

WATER LEVEL / WELL DATA

(Flushmount to PVC top)

MEASURED WELL DEPTH	14.29 FT (TOR)	HISTORICAL WELL DEPTH	14.29 FT (TOR)	PROTECTIVE CASING STICKUP (FROM GROUND)	N/A FT	PROTECTIVE CASING / WELL DIFFERENCE	0.67 FT
DEPTH TO WATER	6.94 FT (TOR)	SCREEN LENGTH	10 FT	WELL DIAMETER	2 IN	WELL MATERIAL	PVC

HEIGHT OF WATER COLUMN: 7.35 FT x ☒ 0.16 GAL/FT (2 IN) ☐ 0.65 GAL/FT (4 IN) ☐ 1.5 GAL/FT (6 IN) = 1.19 GAL/VOL

TOTAL VOLUME PURGED: ~~5.09~~ 2.96 GAL (DLC)

Total purge volume = (ml per min.) x time (min.) x 0.00026 gal/ml

AMBIENT AIR: 0 PPM | WELL MOUTH: 6.8 PPM

PURGE DATA

TIME	DEPTH TO WATER (ft)	PURGE RATE (mL/min)	TEMP. (degrees C)	pH (units)	TURBIDITY (NTU)	SPEC. COND. ~~(uhmos/cm)~~ mS/cm	D.O. (mg/L)	ORP (mV)	Comments
1233	Begin Purging			@	350 ml/min				cloudy
1238	6.95	350	16.54	6.79	40.7	334	2.71	-116.2	"
1243	6.95	350	17.20	6.86	19.9	330	0.63	-142.6	clearing
1248	6.95	350	17.17	6.89	16.7	324	0.45	-153.9	clear
1253	6.95	350	17.12	6.93	13.0	324	0.31	-161.7	"
1258	6.95	350	17.06	6.94	12.5	325	0.30	-160.9	"
1303	6.95	350	17.07	6.94	12.4	327	0.32	-161.0	"
1305	Collect Sample			AI MW 107					

EQUIPMENT DOCUMENTATION

PURGING: ☒

SAMPLING: ☒ PERISTALTIC PUMP; ☐ SUBMERSIBLE PUMP; ☐ BLADDER PUMP; ☐ PVC/SILICON TUBING; ☐ TEFLON/SILICON TUBING; ☐ WATTERA; ☐ IN LINE FILTER; ☐ PRESS/VAC FILTER; _____

DECON FLUIDS USED: ☐ METHANOL; ☐ LIQUINOX; ☐ POTABLE WATER; ☐ DEIONIZED WATER; ☐ HEXANE; ☐ NITRIC ACID; ☒ NONE- Dedicated Tubing

WATER LEVEL EQUIPMENT USED: ☒ ELECTRIC COND. PROBE; ☐ FLOAT ACTIVATED; ☐ KECK INTERFACE PROBE; _____

NUMBER OF FILTERS USED _____

ANALYTICAL PARAMETERS

		METHOD NUMBER	FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	SAMPLE BOTTLE ID NUMBERS
☒	TCL VOCs	8260B	N	HCl/4degC	1 x 40mL 2.	☑	AI MW107

NOTES AND SAMPLE OBSERVATIONS

Stabilization is considered achieved when three consecutive readings are taken at 3 to 5 min. intervals within the following limits:

Temp. - 3 %; Turbidity 10% > than 1 NTU; DO - 10%; Sp. Cond. - 3%; pH - 0.1 unit; ORP - 10 mV.

SIGNATURE: _____

RECEIVED BY: _____

MACTEC ENGINEERING & CONSULTING, INC. PAGE 1 OF 1

FIELD DATA RECORD - GROUNDWATER SAMPLING

PROJECT: Active Industrial Uniform | DATE: 11.28.07

WELL ID: MW-108 | START: 1340 END: 14:15 | BOTTLE TIME: 14:10

SAMPLE ISIS ID: AI MW108

☐ QC SAMPLES COLLECTED | DUPLICATE ID: | MS ID: | MSD ID:

WATER LEVEL / WELD DATA

MEASURED WELL DEPTH	14.11 FT (TOR)	HISTORICAL WELL DEPTH	~~14.11~~ FT (TOR) (pm)	PROTECTIVE CASING STICKUP (FROM GROUND)	/ FT
PROTECTIVE CASING / WELL DIFFERENCE	0.42 FT (Diff between PVC and ground)	DEPTH TO WATER	7.31 FT (TOR)	SCREEN LENGTH	~~10~~ FT (pm)
WELL DIAMETER	2 IN	WELL MATERIAL	PVC	HEIGHT OF WATER COLUMN	6.80 FT

☑ 0.16 GAL/FT (2 IN) ☐ 0.65 GAL/FT (4 IN) ☐ 1.5 GAL/FT (6 IN) x = 1.12 GAL/VOL

TOTAL VOLUME PURGED: 1.69 GAL

Total purge volume = (ml per min.) x time (min.) x 0.00026 gal/ml

AMBIENT AIR: 0 PPM | WELL MOUTH: 113 ~~PPM~~ ppb

PURGE DATA

uS/cm

TIME	DEPTH TO WATER (ft)	PURGE RATE (mL/min)	TEMP. (degrees C)	pH (units)	TURBIDITY (NTU)	SPEC. COND. (uhmos/cm)	D.O. (mg/L)	ORP (mV)	Comments
1344	Begin	Purging @ 250 mL/min							
13:50	7.32	250	15.27	6.87	17.0	599	2.11	95.4	
13:53	7.32	250	15.33	6.79	14.6	601	1.74	94.5	
13:56	7.32	250	15.44	6.76	10.8	600	1.77	94.9	
13:59	7.32	250	15.48	6.74	10.2	603	1.83	96.2	
14:02	7.32	250	15.50	6.73	9.15	606	1.90	98.9	
14:10	Sample collected								

EQUIPMENT DOCUMENTATION

PURGING: ☒

SAMPLING: ☒ PERISTALTIC PUMP; ☐ SUBMERSIBLE PUMP; ☐ BLADDER PUMP; ☐ PVC/SILICON TUBING; ☐ TEFLON/SILICON TUBING; ☐ WATTERA; ☐ IN LINE FILTER; ☐ PRESS/VAC FILTER; _____

DECON FLUIDS USED: ☐ METHANOL; ☐ LIQUINOX; ☐ POTABLE WATER; ☐ DEIONIZED WATER; ☐ HEXANE; ☐ NITRIC ACID; ☒ NONE- Dedicated Tubing

WATER LEVEL EQUIPMENT USED: ☒ ELECTRIC COND. PROBE; ☐ FLOAT ACTIVATED; ☐ KECK INTERFACE PROBE; ☐ _____

NUMBER OF FILTERS USED _____

ANALYTICAL PARAMETERS

		METHOD NUMBER	FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	SAMPLE BOTTLE ID NUMBERS
☒	TCL VOCs	8260B	N	HCl/4degC	3 x 40mL (2)	☒	AI MW108

NOTES AND SAMPLE OBSERVATIONS

Stabilization is considered achieved when three consecutive readings are taken at 3 to 5 min. intervals within the following limits:

Temp. - 3 %; Turbidity 10% > than 1 NTU; DO - 10%; Sp. Cond. - 3%; pH - 0.1 unit; ORP - 10 mV.

SIGNATURE: _____

RECEIVED BY: _____

APPENDIX D

DATA USABILITY SUMMARY REPORTS
DATA TABLES

DATA USABILITY SUMMARY REPORT
DECEMBER 2007
ACTIVE INDUSTRIAL UNIFORM
LINDENHURST, NEW YORK

Introduction:

Seven groundwater, four soil, eleven soil vapor, and seventeen air samples were collected by MACTEC at the Active Industrial Uniform site in November and December 2007 and submitted for off-site laboratory analyses. Air and soil vapor samples were analyzed by Contest Analytical Laboratory located in East Longmeadow, Massachusetts and groundwater and soil samples were analyzed by Mitkem Laboratories located in Warwick, RI. A listing of samples included in this investigation is presented in Table 1. Samples were analyzed for the following parameters:

- Volatile organic compounds (VOCs) in air and soil vapor by EPA Method TO-15.
- Volatile organic compounds (VOCs) in groundwater by EPA Method 8260B.
- Volatile organic compounds (VOCs) in soil by EPA Method 8260B.

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 above the reported detection limit

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

J = concentration is estimated

R = result was rejected during validation

D = result was reported from a diluted analytical run

A summary of the final field sample data is presented in Table 2. Results are interpreted to be usable as reported by the laboratory unless discussed in the following sections.

Volatile Organic Compounds - Groundwater

Surrogates

Sample AIMW2S reported a percent recovery for the surrogate toluene-d8 (119) that was greater than laboratory control limits indicating a potential high bias. All positive results associated with sample AIMW2S were qualified as estimated (J).

Initial Calibration

The initial calibration had relative response factors that were below the control limit of 0.05 for acetone (0.011) and 2-butanone (0.015). All results for acetone and 2-butanone were non-detect and were rejected (R) in samples AIMW107, AIMW106, AIMW101, AIMW104, AIMW108, AIMW2S, and AIMW104DUP due to the low response factors.

Continuing Calibration

The continuing calibration had relative response factors that were below the control limit of 0.05 for acetone (0.008) and 2-butanone (0.011). All results for acetone and 2-butanone were non-detect and were rejected (R) in samples AIMW107, AIMW106, AIMW101, AIMW104, AIMW108, and AIMW104DUP due to the low response factors. In addition, the percent differences between the initial and continuing calibration response factors were greater than the control limit of 20 for dichlorodifluoromethane (40), 4-methyl-2-pentanone (33), trans-1,3-dichloropropene (32), tetrachloroethene (22), 2-hexanone (29), dibromochloromethane (30), 1,3,5-

trimethylbenzene (22), sec-butylbenzene (23), 1,2-dibromo-3-chloropropane (23), naphthalene (28), 1,1,2-trichloro-1,2,2-trifluoromethane (50), and methyl acetate (26). The results for tetrachloroethene were positive in samples AIMW106, AIMW104, and AIMW104DUP and were qualified as estimated (J). The remaining compounds were non-detect in the samples listed above and were qualified as estimated (UJ).

The continuing calibration had relative response factors that were below the control limit of 0.05 for acetone (0.009) and 2-butanone (0.013). The results for acetone and 2-butanone were non-detect and were rejected (R) in sample AIMW2S due to the low response factors. In addition, the percent differences between the initial and continuing calibration response factors were greater than the control limit of 20 for dichlorodifluoromethane (23), 2,2-dichloropropane (28), 4-methyl-2-pentanone (21), trans-1,3-dichloropropene (39), 2-hexanone (20.2), and 1,1,2-trichloro-1,2,2-trifluoromethane (39). All of the compounds listed above were non-detect in sample AIMW2S and were qualified as estimated (UJ).

Laboratory Control Sample

The two LCS samples associated with samples AIMW107, AIMW106, AIMW101, AIMW104, AIMW108, AIMW2S, and AIMW104DUP reported percent recoveries for 1,2,3-trichloropropane (66, 62) that were below laboratory control limits indicating a potential low bias. The results for 1,2-trichloropropane were non-detect in the samples listed above and were qualified as estimated (UJ).

Matrix Spike/Matrix Spike Duplicate

The MS/MSD associated with sample AIMW104 had percent recoveries for 1,2,3-trichloropropane (64, 64) and methyl acetate (58, 58) that were below laboratory control limits indicating a potential low bias. The results for these compounds were non-detect in samples AIMW104 and AIMW104DUP and were qualified as estimated (UJ).

Tentatively Identified Compounds

Tentatively Identified Compounds (TICS) were reported in accordance with method 8260B guidelines. No TICs were identified in the groundwater samples associated with this data set.

Volatile Organic Compounds - Soil

Blank Contamination

The method blank (VBLK1E) reported detections of acetone (2 µg/kg) and naphthalene (1.0 µg/kg). Action levels were calculated at five times the detection reported in the blank for naphthalene and ten times the blank contamination for acetone. The results for acetone were less than the action level in samples AIGS0206 and AIGS0106 and were qualified as non-detect (U). The results for naphthalene were less than the action level in samples AIGS0206 and AIGS0103 and were also qualified as non-detect (U).

Surrogates

Samples AIGS0206, AIGS0103, AIGS0106, and AIGS0106DUP reported percent recoveries for the surrogate toluene-d8 that were greater than laboratory control limits. In addition, the same samples reported percent recoveries for the surrogate bromofluorobenzene that were below laboratory control limits. Sample AIGS0206 was re-analyzed with similar results. The remaining samples were re-analyzed at dilutions, and surrogate recoveries were within laboratory control limits indicating potential matrix interferences. All results associated with the samples listed above were qualified as estimated (J/UJ).

Internal Standards

Sample AIGS0103 reported low recoveries for all three internal standards. The sample was re-analyzed at a dilution, and all internal standard responses were within control limits indicating a potential matrix interference. All results associated with this sample were qualified as estimated (J/UJ).

Samples AIGS0206, AIGS0106, and AIGS0106DUP reported low recoveries for the internal standard 1,4-dichlorobenzene-d4. Sample AIGS0206 was re-analyzed with similar results. Samples AIGS0106 and AIGS0106DUP were re-analyzed at dilutions, and all internal standard responses were within control limits indicating a potential matrix interference. The results associated with this internal standard were qualified as estimated (J/UJ) in the samples listed above.

Initial Calibration

The initial calibration had relative response factors that were below the control limit of 0.05 for acetone (0.025) and 2-butanone (0.020). The result for 2-butanone was positive in sample AIGS0206 and was qualified as estimated (J). The remaining results for acetone and 2-butanone were non-detect and were rejected (R) in samples AIGS0206, AIGS0103, AIGS0106, and AIGS0106DUP due to the low response factors.

Continuing Calibration

The continuing calibration had relative response factors that were below the control limit of 0.05 for acetone (0.027) and 2-butanone (0.021). The result for 2-butanone was positive in sample AIGS0206 and was qualified as estimated (J). The remaining results for acetone and 2-butanone were non-detect and were rejected (R) in samples AIGS0206, AIGS0103, AIGS0106, and AIGS0106DUP due to the low response factors. In addition, the percent differences between the initial and continuing calibration response factors were greater than the control limit of 20 for iodomethane (21) and vinyl acetate (21). The results for these compounds were non-detect in the samples listed above and were qualified as estimated (UJ).

Matrix Spike/Matrix Spike Duplicate

The MS/MSD associated with sample AIGS0106 had percent recoveries for trichloroethene (59, 59), 1,3-dichloropropane (69), 1,2,4-trichlorobenzene (41, 50), and 1,2,3-trichlorobenzene (38, 47) that were below laboratory control limits indicating a potential low bias. The results for trichloroethene were positive in samples AIGS0106 and AIGS0106DUP and were qualified as estimated (J). The remaining compounds were non-detect in samples AIGS0106 and AIGS0106DUP and were qualified as estimated (UJ).

The MS/MSD associated with sample AIGS0106 was analyzed at a dilution. The results for tetrachloroethene (41, 47) were below laboratory control limits indicating a potential low bias. The results for tetrachloroethene were positive in samples AIGS0106 and AIGS0106DUP and were qualified as estimated (J).

Tentatively Identified Compounds

Tentatively Identified Compounds (TICS) were reported in accordance with method 8260B guidelines. Several "unknown" compounds were identified as (TICs) in the soil samples AIGS0103 and AIGS0106. All reported TICs are identified in Table 2.5.

Volatile Organic Compounds – Air/Soil Vapor

Blank Contamination

The method blank associated with a subset of samples reported a detection of methylene chloride (0.2 µg/m^3) and ethanol (0.99 µg/m^3). Action levels were calculated at ten times the detection reported in the blank for methylene chloride and five times the blank contamination for ethanol. The action levels were then multiplied by any applicable dilution factors. The result for ethanol was less than the action level in sample AISSM05 and was qualified as non-detect (U). The results for methylene chloride were less than the action level in samples AISSM01, AISSM03, AISSM04, AISSM05, and AISSM07 and were qualified as non-detect (U).

The method blank associated with a subset of soil vapor samples reported a detection of methylene chloride (0.98 µg/m^3). An action level was calculated at ten times the detection reported in the blank and then multiplied by any applicable dilution factors. The results for methylene chloride were less than the action level in samples AISVM01DUP, AISVM03, and AISVM02 and were qualified as non-detect (U).

Continuing Calibration

The continuing calibration had percent differences between the initial and continuing calibration response factors that were greater than the control limit of 25 for ethanol (-49), methylene chloride (-25), tetrahydrofuran (27), bromoform (-40), 1,3-dichlorobenzene (-32), 1,4-dichlorobenzene (-29), and 1,2,4-trichlorobenzene (-32). The results for these compounds were qualified as estimated (J/UJ) in samples AIFAM01, AIBAM02, AIFAM02, AIBAM03, AIFAM03, AIBAM04, AIFAM04, AIFAM05, AIBAM05, AIBAM06, AIBAM07, AIFAM07, AIAA001, AIFAM08, AIFAM08DUP, AIBAM08, and AIAA002.

The continuing calibration had percent differences between the initial and continuing calibration response factors that were greater than the control limit of 25 for bromoform (-34), 1,3-dichlorobenzene (-30), 1,4-dichlorobenzene (-30), 1,2-dichlorobenzene (-28), 1,2,4-trichlorobenzene (-42), and hexachlorobutadiene (-29). The results for bromoform, 1,3-dichlorobenzene, 1,2-dichlorobenzene, 1,2,4-trichlorobenzene, and hexachlorobutadiene were non-detect in samples AISSM01, AISSM03, AISSM04, AISSM05, AISSM07, AISVV1S, and AISVV2S and were qualified as estimated (UJ). The results for 1,4-dichlorobenzene were qualified as estimated (J/UJ) in the samples listed above.

The continuing calibration had a percent difference between the initial and continuing calibration calculated values that were greater than the control limit of 25 for ethanol (-47). The results for ethanol in samples AISVM01DUP, AISVM03, AISVM02, and AISVM04 and were qualified as estimated (J/UJ).

Laboratory Control Sample

The LCS had percent recoveries for 2-butanone (68) and 4-methyl-2-pentanone (69) that were less than the control limit of 70-130 indicating a potential low bias. The results for 2-butanone and 4-methyl-2-pentanone were qualified as estimated (J/UJ) in samples AIFAM01, AIBAM02, AIFAM02, AIBAM03, AIFAM03, AIBAM04, AIFAM04, AIFAM05, AIBAM05, AIBAM06, AIBAM07, AIFAM07, AIAA001, AIFAM08, AIFAM08DUP, AIBAM08, and AIAA002.

The LCS had a percent recovery for ethanol (165) that was greater than the control limit of 70-130 indicating a potential high bias. The results for ethanol were positive in samples AISVM03 and AISVM02 and were qualified as estimated (J).

Duplicates

The relative percent differences between sample AIFAM08 and its field duplicate were greater than the control limit of 30 for acetone (33), 2-butanone (81), chloroethane (47), 1,4-dichlorobenzene (31), isopropanol (48), and vinyl acetate (123). The results for these compounds were qualified as estimated (J) in samples AIFAM08 and AIFAM08DUP.

The laboratory duplicate associated with sample AIBAM04 had a relative percent difference that was greater than the control limit of 30 for tetrachloroethene (165). The result for tetrachloroethene was qualified as estimated (J) in sample AIBAM04. In addition, the results for trichloroethene were inconsistent. The original sample result was non-detect while the duplicate result was greater than two times the reporting limit. The result for trichloroethene was qualified as estimated (UJ) in sample AIBAM04.

Miscellaneous

Samples AIFAM03, AIFAM04, AIFAM08, and AIBAM08 had final pressure readings of +1”Hg upon receipt at the laboratory. Based on the positive pressure readings at the time of receipt, the sampling intervals and flow rates for the canisters are in question. All results associated with the samples above were qualified as estimated (J/UJ).

The results for ethanol in samples AIFAM01, AISSM01, AIBAM02, AIFAM02, AIBAM03, AIFAM03, AISSM03, AIBAM04, AIFAM04, AIFAM05, AIBAM05, AIBAM07, AIFAM07, AISSM07, AIFAM08, and AIFAM08DUP were found to be greater than the calibration range of the instrument and were qualified as estimated (J).

The collection of sample AISVM01 was stopped after four minutes due to excessive vacuum loss and was therefore not analyzed. However, a duplicate was collected and analyzed at this location.

TABLE 1
Sample Summary

SDG	Sample Name	Date Collected	Method	Parameter	Type
F1856	AIGS0206	12/12/2007	SW8260B	VOC	FS
F1856	AIGS0206	12/12/2007	SW8260B	VOC	FS
F1856	AIGS0103	12/12/2007	SW8260B	VOC	FS
F1856	AIGS0103	12/12/2007	SW8260B	VOC	FS
F1856	AIGS0106	12/12/2007	SW8260B	VOC	FS
F1856	AIGS0106	12/12/2007	SW8260B	VOC	FS
F1743	AIMW107	11/27/2007	SW8260B	VOC	FS
F1856	AIGS0106DUP	12/12/2007	SW8260B	VOC	FD
F1743	AIMW106	11/27/2007	SW8260B	VOC	FS
F1856	AIGS0106DUP	12/12/2007	SW8260B	VOC	FD
F1743	AIMW101	11/28/2007	SW8260B	VOC	FS
F1743	AIMW104	11/28/2007	SW8260B	VOC	FS
F1743	AIMW108	11/28/2007	SW8260B	VOC	FS
F1743	AIMW2S	11/28/2007	SW8260B	VOC	FS
F1743	AIMW104DUP	11/28/2007	SW8260B	VOC	FD
F1743	TRIP BLANK	11/28/2007	SW8260B	VOC	TB
LIMT-11841	AIFAM01	11/27/2007	TO-15	VOC	FS
LIMT-11841	AISSM01	11/27/2007	TO-15	VOC	FS
LIMT-11841	AIBAM02	11/27/2007	TO-15	VOC	FS
LIMT-11841	AIFAM02	11/27/2007	TO-15	VOC	FS
LIMT-11841	AIBAM03	11/28/2007	TO-15	VOC	FS
LIMT-11841	AIFAM03	11/28/2007	TO-15	VOC	FS
LIMT-11841	AISSM03	11/28/2007	TO-15	VOC	FS
LIMT-11841	AISSM04	11/28/2007	TO-15	VOC	FS
LIMT-11841	AIBAM04	11/28/2007	TO-15	VOC	FS
LIMT-11841	AIFAM04	11/28/2007	TO-15	VOC	FS
LIMT-11841	AIFAM05	11/29/2007	TO-15	VOC	FS
LIMT-12406	AISVM01 DUP	12/18/2007	TO-15	VOC	FD
LIMT-12406	AISVM02	12/18/2007	TO-15	VOC	FS
LIMT-12406	AISVM03	12/18/2007	TO-15	VOC	FS
LIMT-12406	AISVM04	12/19/2007	TO-15	VOC	FS
LIMT-11841	AIBAM05	11/29/2007	TO-15	VOC	FS
LIMT-11841	AISSM05	11/29/2007	TO-15	VOC	FS
LIMT-11841	AIBAM06	11/29/2007	TO-15	VOC	FS
LIMT-11841	AIBAM07	11/29/2007	TO-15	VOC	FS
LIMT-11841	AIFAM07	11/29/2007	TO-15	VOC	FS
LIMT-11841	AISSM07	11/29/2007	TO-15	VOC	FS
LIMT-11841	AIAA001	11/29/2007	TO-15	VOC	FS
LIMT-11841	AIFAM08	11/30/2007	TO-15	VOC	FS
LIMT-11841	AIFAM08 DUP	11/30/2007	TO-15	VOC	FD
LIMT-11841	AIBAM08	11/30/2007	TO-15	VOC	FS
LIMT-11841	AIAA002	11/30/2007	TO-15	VOC	FS

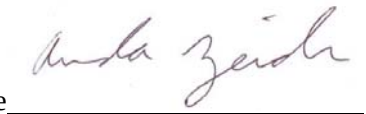
LIMT-11841	AISVVIS	11/30/2007	TO-15	VOC	FS
LIMT-11841	AISVV2S	11/30/2007	TO-15	VOC	FS

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 February 4, 2008

Reviewed by Julie Ricardi for:

Quality Assurance Officer: Chris Ricardi, NRCC-EAC

Date: 2/15/08

DATA USABILITY SUMMARY REPORT
JANUARY 2008
ACTIVE INDUSTRIAL UNIFORM
LINDENHURST, NEW YORK

Introduction:

One groundwater and five soil vapor samples were collected by MACTEC at the Active Industrial Uniform site in January 2008 and submitted for off-site laboratory analyses. Soil vapor samples were analyzed by Con-Test Analytical Laboratory located in East Longmeadow, Massachusetts and groundwater samples were analyzed by Mitkem Laboratories located in Warwick, RI. A listing of samples included in this investigation is presented in Table 1. Samples were analyzed for the following parameters:

- Volatile organic compounds (VOCs) soil vapor by EPA Method TO-15.
- Volatile organic compounds (VOCs) in water by EPA Method 8260B.

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 above the reported detection limit
UJ = target analyte is not detected at the reported detection limit and is estimated

J = concentration is estimated

R = result was rejected during validation

Volatile Organic Compounds – Groundwater

Initial Calibration

The initial and the continuing calibration had a relative response factors that were less than the control limit of 0.05 for acetone (0.019 and 0.022, respectively) and 2-butanone (0.026 and 0.028, respectively). The results for acetone and 2-butanone were non-detect in sample AIGW08 and were qualified as unusable (R).

Continuing Calibration

The continuing calibration had percent differences between the initial and continuing calibration factors that were greater than the control limit of 25 for trichlorofluoromethane (-29). The results for trichlorofluoromethane were non-detect in sample AIGW08 and were qualified as estimated (UJ).

Volatile Organic Compounds – Soil Vapor

Case Narrative

The surrogate standard BFB had a percent recovery that was greater than the maximum allowable range of 130 percent (144). Three samples AISVM06, AISVM07 and AISVM09 were re-analyzed

Blank Contamination

Method blank 112667 associated with samples AISVM05 and AISVM08 reported a detection of 2-butanone (0.34 µg/m^3) and 2-hexanone (0.09 µg/m^3). An action level was calculated at ten times the detection reported in the blank and then multiplied by any applicable dilution factors. The results for of 2-butanone greater than the action level required no qualifications. The results for of 2-hexanone in AISVM05 were less than the action level and were qualified as non-detect (U).

Method blank 112666 associated with samples AISVM06, AISVM07 and AISVM09 reported a detection of methylene chloride (0.21 µg/m^3). An action level was calculated at ten times the detection reported in the blank and then multiplied by any applicable dilution factors. The results for methylene chloride were less than the action level in samples AISVM06 and AISVM09 and were qualified as non-detect (U). The results for of methylene chloride greater than the action level required no qualifications.

Initial Calibration

The initial calibration associated with samples AISVM05, AISVM06, AISVM07, AISVM08 and AISVM09 had a relative standard deviation that was greater than the control limit of 30 for acetone (46), and ethanol (52); however, a linear regression was run and the R-squared value was greater than 0.99 for all compounds. No further action was taken.

Continuing Calibration

The continuing calibration associated with samples AISVM05 and AISVM08 was within criteria.

The continuing calibration (F012606.D) associated with samples AISVM06, AISVM07 and AISVM09 had percent differences between the initial and continuing calibration response factors that were greater than the control limit of 25 for 1,3 butadiene (39.2), bromomethane (-43.3), acetone (31.7), carbon disulfide (-25.2), hexane (30.7), 1,1,1 TCA (32.7), carbon tetrachloride (33.9), cyclohexane (55.5), bromodichloromethane (27.6), heptane (30.5), 4-methyl-2-pentanone (MIBK) (52.3) and 2-hexanone (52.9). The results for these compounds in samples AISVM06, AISVM07 and AISVM09 were qualified as estimated (J/UJ).

Laboratory Control Sample

The LCS number 74114 associated with samples AISVM05 and AISVM08, had a percent recovery for napthalene (136) that was greater than the control limit of 70-130 indicating a potential high bias. The results for naphthalene in samples AISVM05 and AISVM08 were non-detect. No further action was taken

The LCS number 74115 associated with samples AISVM06, AISVM07 and AISVM09, had a percent recovery for napthalene (177), bromomethane (149), bromoform (135), hexachlorobutadiene (138), and 1,2,4 trichlorobenzene (139.6) that was greater than the control limits of 70-130 indicating a potential high bias. The results for naphthalene were positive in sample AISVM06 and were qualified as estimated (J). LCS number 74115 also had a percent recovery for 4-methyl-2-pentanone (56) and 1,3 butadiene (66) that was less than the control limits of 70-130 indicating a potential low bias. Results for these compounds were non-detect in these samples AISVM06, AISVM07 and AISVM09 and were qualified as estimated (UJ).

Duplicates

No field duplicate was associated with this SDG. A laboratory duplicate was analyzed and associated with AISVM06 and had a RPD that was greater than the control limit of 30 percent for acetone (>170%), ethanol (>100%), and naphthalene (47%). The results for these compounds were qualified as estimated (J/UJ).

TABLE 1
Sample Summary

SDG	Sample Name	Date Collected	Method	Parameter	Type
G0077	AIGW08	01/16/2008	SW8260B	VOC	FS
LIMT-12935	AISVM05	01/15/2008	TO-15	VOC	FS
LIMT-12935	AISVM06	01/16/2008	TO-15	VOC	FS
LIMT-12935	AISVM07	01/16/2008	TO-15	VOC	FS
LIMT-12935	AISVM08	01/17/2008	TO-15	VOC	FS
LIMT-12935	AISVM09	01/17/2008	TO-15	VOC	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: Brandon Shaw

Signature_____ Date February 21, 2008

Senior Review (Water): Chris Ricardi

Signature_____ Date February 8, 2008

Senior Review (Soil Vapor): Jayme Connolly

Signature_____ Date March 18, 2008

Table 2.1: Groundwater VOC Results

Lab Sample Id	F1743-01A		F1743-02A		F1743-03A		F1743-04A		F1743-05A		F1743-06A		F1743-07A		F1743-08A	
Lab Sample Delivery Group	F1743		F1743		F1743		F1743		F1743		F1743		F1743		F1743	
Loc Name	MW-107		MW-106		MW-101		MW-104		MW-108		MW-2S		MW-104		QC	
Field Sample Id	AIMW107		AIMW106		AIMW101		AIMW104		AIMW108		AIMW2S		AIMW104DUP		TRIP BLANK	
Field Sample Date	11/27/2007		11/27/2007		11/28/2007		11/28/2007		11/28/2007		11/28/2007		11/28/2007		11/28/2007	
Qc Code	FS		FS		FS		FS		FS		FS		FD		TB	
Parameter	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**
1,1,1,2-Tetrachloroethane	5	U	10	U	5	U	5	U	5	U	25	U	5	U	5	U
1,1,1-Trichloroethane	5	U	10	U	5	U	5	U	5	U	25	U	5	U	5	U
1,1,2,2-Tetrachloroethane	5	U	10	U	5	U	5	U	5	U	25	U	5	U	5	U
1,1,2-Trichloro-1,2,2-Trifluoroethane	5	UJ	10	UJ	5	UJ	5	UJ	5	UJ	25	UJ	5	UJ	5	U
1,1,2-Trichloroethane	5	U	10	U	5	U	5	U	5	U	25	U	5	U	5	U
1,1-Dichloroethane	5	U	10	U	5	U	5	U	5	U	25	U	5	U	5	U
1,1-Dichloroethene	5	U	10	U	5	U	5	U	5	U	25	U	5	U	5	U
1,1-Dichloropropene	5	U	10	U	5	U	5	U	5	U	25	U	5	U	5	U
1,2,3-Trichlorobenzene	5	U	10	U	5	U	5	U	5	U	25	U	5	U	5	U
1,2,3-Trichloropropane	5	UJ	10	UJ	5	UJ	5	UJ	5	UJ	25	UJ	5	UJ	5	U
1,2,4-Trichlorobenzene	5	U	10	U	5	U	5	U	5	U	25	U	5	U	5	U
1,2,4-Trimethylbenzene	5	U	10	U	5	U	5	U	5	U	25	U	5	U	5	U
1,2-Dibromo-3-chloropropane	5	UJ	10	UJ	5	UJ	5	UJ	5	UJ	25	U	5	UJ	5	U
1,2-Dibromoethane	5	U	10	U	5	U	5	U	5	U	25	U	5	U	5	U
1,2-Dichlorobenzene	5	U	10	U	5	U	5	U	5	U	25	U	5	U	5	U
1,2-Dichloroethane	5	U	10	U	5	U	5	U	5	U	25	U	5	U	5	U
1,2-Dichloropropane	5	U	10	U	5	U	5	U	5	U	25	U	5	U	5	U
1,3,5-Trimethylbenzene	5	UJ	10	UJ	5	UJ	5	UJ	5	UJ	25	U	5	UJ	5	U
1,3-Dichlorobenzene	5	U	10	U	5	U	5	U	5	U	25	U	5	U	5	U
1,3-Dichloropropane	5	U	10	U	5	U	5	U	5	U	25	U	5	U	5	U
1,4-Dichlorobenzene	5	U	10	U	5	U	5	U	5	U	25	U	5	U	5	U
2,2-Dichloropropane	5	U	10	U	5	U	5	U	5	U	25	UJ	5	U	5	U
2-Butanone		R		R		R		R		R		R		R	5	U
2-Chlorotoluene	5	U	10	U	5	U	5	U	5	U	25	U	5	U	5	U
2-Hexanone	5	UJ	10	UJ	5	UJ	5	UJ	5	UJ	25	UJ	5	UJ	5	U
4-Chlorotoluene	5	U	10	U	5	U	5	U	5	U	25	U	5	U	5	U
4-iso-Propyltoluene	5	U	10	U	5	U	5	U	5	U	25	U	5	U	5	U
4-Methyl-2-pentanone	5	UJ	10	UJ	5	UJ	5	UJ	5	UJ	25	UJ	5	UJ	5	U
Acetic acid, methyl ester	5	UJ	10	UJ	5	UJ	5	UJ	5	UJ	25	U	5	UJ	5	U
Acetone		R		R		R		R		R		R		R	5	U
Benzene	5	U	10	U	5	U	5	U	5	U	25	U	5	U	5	U
Bromobenzene	5	U	10	U	5	U	5	U	5	U	25	U	5	U	5	U
Bromochloromethane	5	U	10	U	5	U	5	U	5	U	25	U	5	U	5	U
Bromodichloromethane	5	U	10	U	5	U	5	U	5	U	25	U	5	U	5	U
Bromoform	5	U	10	U	5	U	5	U	5	U	25	U	5	U	5	U
Bromomethane	5	U	10	U	5	U	5	U	5	U	25	U	5	U	5	U
Carbon disulfide	5	U	10	U	5	U	5	U	5	U	25	U	5	U	5	U
Carbon tetrachloride	5	U	10	U	5	U	5	U	5	U	25	U	5	U	5	U
Chlorobenzene	5	U	10	U	5	U	5	U	5	U	25	U	5	U	5	U
Chlorodibromomethane	5	UJ	10	UJ	5	UJ	5	UJ	5	UJ	25	U	5	UJ	5	U
Chloroethane	5	U	10	U	5	U	5	U	5	U	25	U	5	U	5	U
Chloroform	5	U	10	U	5	U	5	U	5	U	25	U	5	U	5	U
Chloromethane	5	U	10	U	5	U	5	U	5	U	25	U	5	U	5	U
Cis-1,2-Dichloroethene	5	U	260		5	U	5	U	5	U	530	J	5	U	5	U
cis-1,3-Dichloropropene	5	U	10	U	5	U	5	U	5	U	25	U	5	U	5	U
Cyclohexane	5	U	10	U	5	U	5	U	5	U	25	U	5	U	5	U
Dibromomethane	5	U	10	U	5	U	5	U	5	U	25	U	5	U	5	U
Dichlorodifluoromethane	5	UJ	10	UJ	5	UJ	5	UJ	5	UJ	25	UJ	5	UJ	5	U

Table 2.1: Groundwater VOC Results

Lab Sample Id	F1743-01A		F1743-02A		F1743-03A		F1743-04A		F1743-05A		F1743-06A		F1743-07A		F1743-08A	
Lab Sample Delivery Group	F1743		F1743		F1743		F1743		F1743		F1743		F1743		F1743	
Loc Name	MW-107		MW-106		MW-101		MW-104		MW-108		MW-2S		MW-104		QC	
Field Sample Id	AIMW107		AIMW106		AIMW101		AIMW104		AIMW108		AIMW2S		AIMW104DUP		TRIP BLANK	
Field Sample Date	11/27/2007		11/27/2007		11/28/2007		11/28/2007		11/28/2007		11/28/2007		11/28/2007		11/28/2007	
Qc Code	FS		FS		FS		FS		FS		FS		FD		TB	
Parameter	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**
Ethyl benzene	5	U	10	U	5	U	5	U	5	U	25	U	5	U	5	U
Hexachlorobutadiene	5	U	10	U	5	U	5	U	5	U	25	U	5	U	5	U
Iodomethane	5	U	10	U	5	U	5	U	5	U	25	U	5	U	5	U
Isopropylbenzene	5	U	10	U	5	U	5	U	5	U	25	U	5	U	5	U
Methyl cyclohexane	5	U	10	U	5	U	5	U	5	U	25	U	5	U	5	U
Methyl Tertbutyl Ether	5	U	10	U	5	U	5	U	5	U	25	U	5	U	5	U
Methylene chloride	5	U	10	U	5	U	5	U	5	U	25	U	5	U	5	U
n-Butylbenzene	5	U	10	U	5	U	5	U	5	U	25	U	5	U	5	U
Naphthalene	5	UJ	10	UJ	5	UJ	5	UJ	5	UJ	25	U	5	UJ	5	U
o-Xylene	5	U	10	U	5	U	5	U	5	U	25	U	5	U	5	U
Propylbenzene	5	U	10	U	5	U	5	U	5	U	25	U	5	U	5	U
sec-Butylbenzene	5	UJ	10	UJ	5	UJ	5	UJ	5	UJ	25	U	5	UJ	5	U
Styrene	5	U	10	U	5	U	5	U	5	U	25	U	5	U	5	U
tert-Butylbenzene	5	U	10	U	5	U	5	U	5	U	25	U	5	U	5	U
Tetrachloroethene	5	UJ	64	J	5	UJ	77	J	5	UJ	120	J	74	J	5	U
Toluene	5	U	10	U	5	U	5	U	5	U	25	U	5	U	5	U
trans-1,2-Dichloroethene	5	U	2	J	5	U	5	U	5	U	5	J	5	U	5	U
trans-1,3-Dichloropropene	5	UJ	10	UJ	5	UJ	5	UJ	5	UJ	25	UJ	5	UJ	5	U
Trichloroethene	5	U	23		5	U	3	J	5	U	110	J	4	J	5	U
Trichlorofluoromethane	5	U	10	U	5	U	5	U	5	U	25	U	5	U	5	U
Vinyl acetate	5	U	10	U	5	U	5	U	5	U	25	U	5	U	5	U
Vinyl chloride	5	U	4	J	5	U	5	U	5	U	25	U	5	U	5	U
Xylene, m/p	5	U	10	U	5	U	5	U	5	U	25	U	5	U	5	U
Xylenes, Total	5	U	10	U	5	U	5	U	5	U	25	U	5	U	5	U

Notes:
Results in micrograms per liter (µg/L)
Samples analyzed for VOCs by EPA Method 8260B
QC Code:
FS = Field Sample
FD = Field Duplicate
TB = Trip Blank
Qualifiers:
U = Not detected at a concentration greater than the reporting limit
J = Estimated value
R = Result was rejected during validation

Table 2.2: Soil VOC Results

Lab Sample Id	F1856-01B		F1856-02B		F1856-03B		F1856-04B	
Lab Sample Delivery Group	F1856		F1856		F1856		F1856	
Loc Name	DP-02		DP-01		DP-01		DP-01	
Field Sample Id	AIGS0206		AIGS0103		AIGS0106		AIGS0106DUP	
Field Sample Date	12/12/2007		12/12/2007		12/12/2007		12/12/2007	
Qc Code	FS		FS		FS		FD	
Parameter	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**
1,1,1,2-Tetrachloroethane	3	UJ	20	J	3	UJ	3	UJ
1,1,1-Trichloroethane	3	UJ	13	J	3	UJ	3	UJ
1,1,2,2-Tetrachloroethane	3	UJ	4	UJ	3	UJ	3	UJ
1,1,2-Trichloro-1,2,2-Trifluoroethane	3	UJ	4	UJ	3	UJ	3	UJ
1,1,2-Trichloroethane	3	UJ	4	UJ	3	UJ	3	UJ
1,1-Dichloroethane	3	UJ	4	UJ	3	UJ	3	UJ
1,1-Dichloroethene	3	UJ	4	UJ	3	UJ	3	UJ
1,1-Dichloropropene	3	UJ	4	UJ	3	UJ	3	UJ
1,2,3-Trichlorobenzene	3	UJ	4	UJ	3	UJ	3	UJ
1,2,3-Trichloropropane	3	UJ	4	UJ	3	UJ	3	UJ
1,2,4-Trichlorobenzene	3	UJ	4	UJ	3	UJ	3	UJ
1,2,4-Trimethylbenzene	3	UJ	1	J	3	UJ	3	UJ
1,2-Dibromo-3-chloropropane	3	UJ	4	UJ	3	UJ	3	UJ
1,2-Dibromoethane	3	UJ	4	UJ	3	UJ	3	UJ
1,2-Dichlorobenzene	3	UJ	3	J	3	UJ	3	UJ
1,2-Dichloroethane	3	UJ	4	UJ	3	UJ	3	UJ
1,2-Dichloropropane	3	UJ	4	UJ	3	UJ	3	UJ
1,3,5-Trimethylbenzene	3	UJ	4	UJ	3	UJ	3	UJ
1,3-Dichlorobenzene	3	UJ	2	J	3	UJ	3	UJ
1,3-Dichloropropane	3	UJ	4	UJ	3	UJ	3	UJ
1,4-Dichlorobenzene	3	UJ	2	J	3	UJ	3	UJ
2,2-Dichloropropane	3	UJ	4	UJ	3	UJ	3	UJ
2-Butanone	5	J		R		R		R
2-Chlorotoluene	3	UJ	4	UJ	3	UJ	3	UJ
2-Hexanone	3	UJ	4	UJ	3	UJ	3	UJ
4-Chlorotoluene	3	UJ	4	UJ	3	UJ	3	UJ
4-iso-Propyltoluene	3	UJ	4	UJ	3	UJ	3	UJ
4-Methyl-2-pentanone	3	UJ	4	UJ	3	UJ	3	UJ
Acetic acid, methyl ester	3	UJ	4	UJ	3	UJ	3	UJ
Acetone		R		R		R		R
Benzene	3	UJ	1	J	3	UJ	3	UJ
Bromobenzene	3	UJ	4	UJ	3	UJ	3	UJ
Bromochloromethane	3	UJ	4	UJ	3	UJ	3	UJ
Bromodichloromethane	3	UJ	4	UJ	3	UJ	3	UJ

Table 2.2: Soil VOC Results

Lab Sample Id	F1856-01B		F1856-02B		F1856-03B		F1856-04B	
Lab Sample Delivery Group	F1856		F1856		F1856		F1856	
Loc Name	DP-02		DP-01		DP-01		DP-01	
Field Sample Id	AIGS0206		AIGS0103		AIGS0106		AIGS0106DUP	
Field Sample Date	12/12/2007		12/12/2007		12/12/2007		12/12/2007	
Qc Code	FS		FS		FS		FD	
Parameter	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**
Bromoform	3	UJ	4	UJ	3	UJ	3	UJ
Bromomethane	3	UJ	4	UJ	3	UJ	3	UJ
Carbon disulfide	3	UJ	4	UJ	3	UJ	3	UJ
Carbon tetrachloride	3	UJ	4	UJ	3	UJ	3	UJ
Chlorobenzene	3	UJ	3	J	3	UJ	3	UJ
Chlorodibromomethane	3	UJ	4	UJ	3	UJ	3	UJ
Chloroethane	3	UJ	4	UJ	3	UJ	3	UJ
Chloroform	3	UJ	6	J	3	UJ	3	UJ
Chloromethane	3	UJ	4	UJ	3	UJ	3	UJ
Cis-1,2-Dichloroethene	3	UJ	54	J	2	J	2	J
cis-1,3-Dichloropropene	3	UJ	4	UJ	3	UJ	3	UJ
Cyclohexane	3	UJ	4	UJ	3	UJ	3	UJ
Dibromomethane	3	UJ	4	UJ	3	UJ	3	UJ
Dichlorodifluoromethane	3	UJ	4	UJ	3	UJ	3	UJ
Ethyl benzene	3	UJ	4	UJ	3	UJ	3	UJ
Hexachlorobutadiene	3	UJ	4	UJ	3	UJ	3	UJ
Iodomethane	3	UJ	4	UJ	3	UJ	3	UJ
Isopropylbenzene	3	UJ	4	UJ	3	UJ	3	UJ
Methyl cyclohexane	3	UJ	4	UJ	3	UJ	3	UJ
Methyl Tertbutyl Ether	3	UJ	4	UJ	3	UJ	3	UJ
Methylene chloride	3	UJ	4	UJ	3	UJ	3	UJ
n-Butylbenzene	3	UJ	4	UJ	3	UJ	3	UJ
Naphthalene	3	UJ	4	UJ	3	UJ	3	UJ
o-Xylene	3	UJ	4	UJ	3	UJ	3	UJ
Propylbenzene	3	UJ	4	UJ	3	UJ	3	UJ
sec-Butylbenzene	3	UJ	4	UJ	3	UJ	3	UJ
Styrene	3	UJ	4	UJ	3	UJ	3	UJ
tert-Butylbenzene	3	UJ	4	UJ	3	UJ	3	UJ
Tetrachloroethene	100	J	120000	D	2000	DJ	3300	DJ
Toluene	3	UJ	4	UJ	3	UJ	3	UJ
trans-1,2-Dichloroethene	3	UJ	1	J	3	UJ	3	UJ
trans-1,3-Dichloropropene	3	UJ	4	UJ	3	UJ	3	UJ
Trichloroethene	2	J	3800	DJ	47	J	51	J
Trichlorofluoromethane	3	UJ	4	UJ	3	UJ	3	UJ

Table 2.2: Soil VOC Results

Lab Sample Id	F1856-01B		F1856-02B		F1856-03B		F1856-04B	
Lab Sample Delivery Group	F1856		F1856		F1856		F1856	
Loc Name	DP-02		DP-01		DP-01		DP-01	
Field Sample Id	AIGS0206		AIGS0103		AIGS0106		AIGS0106DUP	
Field Sample Date	12/12/2007		12/12/2007		12/12/2007		12/12/2007	
Qc Code	FS		FS		FS		FD	
Parameter	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**
Vinyl acetate	3	UJ	4	UJ	3	UJ	3	UJ
Vinyl chloride	3	UJ	4	UJ	3	UJ	3	UJ
Xylene, m/p	3	UJ	4	UJ	3	UJ	3	UJ
Xylenes, Total	3	UJ	4	UJ	3	UJ	3	UJ

Notes:
Results in micrograms per kilogram (µg/kg)
Samples analyzed for VOCs by EPA Method 8260B
QC Code:
FS = Field Sample
FD = Field Duplicate
Qualifiers:
U = Not detected at a concentration greater than the reporting limit
J = Estimated value
R = Result was rejected during validation
D = Result was reported from a diluted analytical run.

Table 2.3: Air VOC Results

Lab Sample Id	07B46831		07B46833		07B46834		07B46835		07B46836		07B46839		07B46840	
Lab Sample Delivery Group	LIMT-11841		LIMT-11841		LIMT-11841		LIMT-11841		LIMT-11841		LIMT-11841		LIMT-11841	
Loc Name	FA-M01		BA-M02		FA-M02		BA-M03		FA-M03		BA-M04		FA-M04	
Field Sample Id	AIFAM01		AIBAM02		AIFAM02		AIBAM03		AIFAM03		AIBAM04		AIFAM04	
Field Sample Date	11/27/2007		11/27/2007		11/27/2007		11/28/2007		11/28/2007		11/28/2007		11/28/2007	
Qc Code	FS		FS		FS		FS		FS		FS		FS	
Parameter	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**
1,1,1-Trichloroethane	0.25	U	2.3		2.8		0.25	U	0.25	UJ	0.83		0.74	J
1,1,2,2-Tetrachloroethane	0.31	U	0.31	U	0.31	U	0.31	U	0.31	UJ	0.31	U	0.31	UJ
1,1,2-Trichloro-1,2,2-Trifluoroethane	0.69		0.55		0.76		0.69		0.76	J	0.69		0.76	J
1,1,2-Trichloroethane	0.25	U	0.25	U	0.25	U	0.25	U	0.25	UJ	0.25	U	0.25	UJ
1,1-Dichloroethane	0.18	U	0.18	U	0.18	U	0.18	U	0.18	UJ	0.18	U	0.18	UJ
1,1-Dichloroethene	0.18	U	0.18	U	0.18	U	0.18	U	0.18	UJ	0.18	U	0.18	UJ
1,2,4-Trichlorobenzene	0.34	UJ	0.34	UJ	0.34	UJ	0.34	UJ	0.34	UJ	0.34	UJ	0.34	UJ
1,2,4-Trimethylbenzene	7.9		2.5		2.9		5.5		7.1	J	5.6		4.4	J
1,2-Dibromoethane	0.35	U	0.35	U	0.35	U	0.35	U	0.35	UJ	0.35	U	0.35	UJ
1,2-Dichloro-1,1,2,2-tetrafluoroethane	0.32	U	0.32	U	0.32	U	0.32	U	0.32	UJ	0.32	U	0.32	UJ
1,2-Dichlorobenzene	0.27	U	0.27	U	0.27	U	0.7		1.7	J	0.27	U	0.27	UJ
1,2-Dichloroethane	0.18	U	3.2		2.5		0.18	U	0.36	J	0.44		0.4	J
1,2-Dichloropropane	0.21	U	0.21	U	0.21	U	0.21	U	0.21	UJ	0.21	U	0.21	UJ
1,3,5-Trimethylbenzene	2.1		0.49		0.44		1.3		1.6	J	1.5		1.1	J
1,3-Dichlorobenzene	0.27	UJ	0.27	UJ	0.27	UJ	0.27	UJ	1	J	0.27	UJ	0.27	UJ
1,4-Dichlorobenzene	180	J	0.6	J	1.3	J	340	J	570	J	0.27	UJ	0.27	J
2-Butanone	6.5	J	4.4	J	7.9	J	2.7	J	7.1	J	2.2	J	5	J
2-Hexanone	1.3		0.48		1.4		0.18	U	0.96	J	0.18	U	0.18	UJ
2-Propanol	5.7		23		27		57		86	J	7.4		9.4	J
4-Ethyltoluene	2		0.44		0.4		1.2		1.6	J	1.5		1.2	J
4-Methyl-2-pentanone	1	J	0.18		0.66	J	0.18	UJ	0.96	J	0.18	UJ	0.66	J
Acetone	54		44		80		48		80	J	1.1	U	1.1	UJ
Benzene	3.5		1.2		1.5		2.2		2.5	J	7.8		6.9	J
Benzyl chloride	0.24	U	0.24	U	0.24	U	0.24	U	0.24	UJ	0.24	U	0.24	UJ
Bromodichloromethane	0.3	U	0.3	U	0.3	U	0.3	U	0.3	UJ	0.3	U	0.3	UJ
Bromoform	0.46	UJ	0.46	UJ	0.46	UJ	0.46	UJ	0.46	UJ	0.46	UJ	0.46	UJ
Bromomethane	0.18	U	0.18	U	0.18	U	0.18	U	0.18	UJ	0.18	U	0.18	UJ
Butadiene, 1,3-	0.1	U	0.1	U	0.1	U	0.1	U	0.1	UJ	0.1	U	0.1	UJ
Carbon disulfide	1.5	U	1.5	U	1.5	U	1.5	U	1.5	UJ	1.5	U	1.5	UJ
Carbon tetrachloride	0.57		0.51		0.62		0.51		0.62	J	0.57		0.62	J
Chlorobenzene	0.21	U	0.21	U	0.21	U	0.21	U	0.21	UJ	0.21	U	0.21	UJ
Chlorodibromomethane	0.39	U	0.39	U	0.39	U	0.39	U	0.39	UJ	0.39	U	0.39	UJ
Chloroethane	0.12	U	0.12	U	0.12	U	0.12	U	0.26	J	0.12	U	0.12	UJ
Chloroform	0.22	U	0.31		0.61		0.22	U	0.31	J	0.22	U	0.22	UJ
Chloromethane	1.3		1.2		2.3		1.7		2.6	J	1.6		2.2	J
Cis-1,2-Dichloroethene	0.18	U	0.18	U	0.18	U	0.18	U	0.18	UJ	2.3		1.7	J

Table 2.3: Air VOC Results

Lab Sample Id	07B46831		07B46833		07B46834		07B46835		07B46836		07B46839		07B46840	
Lab Sample Delivery Group	LIMT-11841		LIMT-11841		LIMT-11841		LIMT-11841		LIMT-11841		LIMT-11841		LIMT-11841	
Loc Name	FA-M01		BA-M02		FA-M02		BA-M03		FA-M03		BA-M04		FA-M04	
Field Sample Id	AIFAM01		AIBAM02		AIFAM02		AIBAM03		AIFAM03		AIBAM04		AIFAM04	
Field Sample Date	11/27/2007		11/27/2007		11/27/2007		11/28/2007		11/28/2007		11/28/2007		11/28/2007	
Qc Code	FS		FS		FS		FS		FS		FS		FS	
Parameter	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**
cis-1,3-Dichloropropene	0.2	U	0.2	U	0.2	U	0.2	U	0.2	UJ	0.2	U	0.2	UJ
Cyclohexane	1.6		0.56		1.1		0.93		1	J	2.3		2.1	J
Dichlorodifluoromethane	3.2		5.4		8.4		2.9		3.4	J	3.2		3.8	J
Ethanol	180	J	620	J	2400	J	860	J	3100	J	500	J	700	J
Ethyl acetate	0.17	U	1.8		8		9.1		36	J	1		2.7	J
Ethyl benzene	5.3		1.1		1.4		3.4		6.3	J	6.2		5	J
Heptane	3.5		1.7		3.9		3		2.9	J	6.5		6.2	J
Hexachlorobutadiene	2	U	2	U	2	U	2	U	2	UJ	2	U	2	UJ
Hexane	11		0.98		1.3		6.9		5.9	J	13		14	J
Methyl Tertbutyl Ether	0.17	U	0.17	U	0.17	U	0.17	U	0.17	UJ	0.17	U	0.17	UJ
Methylene chloride	18	J	4.7	J	9	J	2.2	J	1.8	J	5.1	J	5.5	J
Naphthalene	0.94		0.9		1.2		8		27	J	0.58	U	0.58	UJ
o-Xylene	6.1		1.1		1.4		4.5		7.2	J	7.7		5.6	J
Propylene	1.5		0.31	U	0.31	U	0.31	U	0.31	UJ	0.31	U	3.3	J
Styrene	0.38		1.1		1.4		0.84		1.8	J	0.38		0.65	J
Tetrachloroethene	0.37		2.4		0.98		22		70	J	2.2	J	2	J
Tetrahydrofuran	0.27	UJ	0.27	UJ	0.27	UJ	1	J	2	J	0.27	UJ	0.27	UJ
Toluene	35		21		54		33		78	J	63		60	J
trans-1,2-Dichloroethene	0.18	U	0.18	U	0.18	U	0.18	U	0.18	UJ	0.18	U	0.18	UJ
trans-1,3-Dichloropropene	0.2	U	0.2	U	0.2	U	0.2	U	0.2	UJ	0.2	U	0.2	UJ
Trichloroethene	0.25	U	0.25	U	0.25	U	0.25	U	0.25	UJ	0.25	UJ	0.25	UJ
Trichlorofluoromethane	7.3		2.8		51		2.8		3.3	J	2.3		2.2	J
Vinyl acetate	4		2.8		9.9		2		4.1	J	10		13	J
Vinyl chloride	0.12	U	0.12	U	0.12	U	0.12	U	0.12	UJ	0.12	U	0.12	UJ
Xylene, m/p	17		3.2		4.1		13		21	J	22		16	J

Notes:

Results in micrograms per cubic meter ($\mu g/m^3$)
Air 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 reporting limit
J = Estimated value

Table 2.3: Air VOC Results

Lab Sample Id	07B46841		07B46842		07B46844		07B46845		07B46846		07B46848		07B46849	
Lab Sample Delivery Group	LIMT-11841		LIMT-11841		LIMT-11841		LIMT-11841		LIMT-11841		LIMT-11841		LIMT-11841	
Loc Name	FA-M05		BA-M05		BA-M06		BA-M07		FA-M07		AA-01		FA-M08	
Field Sample Id	AIFAM05		AIBAM05		AIBAM06		AIBAM07		AIFAM07		AIAA001		AIFAM08	
Field Sample Date	11/29/2007		11/29/2007		11/29/2007		11/29/2007		11/29/2007		11/29/2007		11/30/2007	
Qc Code	FS		FS		FS		FS		FS		FS		FS	
Parameter	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**
1,1,1-Trichloroethane	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	UJ
1,1,2,2-Tetrachloroethane	0.31	U	0.31	U	0.31	U	0.31	U	0.31	U	0.31	U	0.31	UJ
1,1,2-Trichloro-1,2,2-Trifluoroethane	0.69		0.69		0.62		0.69		0.69		0.69		0.76	J
1,1,2-Trichloroethane	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	UJ
1,1-Dichloroethane	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	UJ
1,1-Dichloroethene	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	UJ
1,2,4-Trichlorobenzene	0.34	UJ	0.34	UJ	0.34	UJ	0.34	UJ	0.34	UJ	0.34	UJ	0.34	UJ
1,2,4-Trimethylbenzene	0.66		0.4		0.23	U	15		8.4		0.23	U	0.62	J
1,2-Dibromoethane	0.35	U	0.35	U	0.35	U	0.35	U	0.35	U	0.35	U	0.35	UJ
1,2-Dichloro-1,1,2,2-tetrafluoroethane	0.32	U	0.32	U	0.32	U	0.32	U	0.32	U	0.32	U	0.32	UJ
1,2-Dichlorobenzene	0.27	U	0.27	U	0.27	U	0.27	U	0.27	U	0.27	U	0.27	UJ
1,2-Dichloroethane	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	UJ
1,2-Dichloropropane	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	UJ
1,3,5-Trimethylbenzene	0.23	U	0.23	U	0.23	U	4		2		0.23	U	0.23	UJ
1,3-Dichlorobenzene	0.27	UJ	0.27	UJ	0.27	UJ	0.27	UJ	0.27	UJ	0.27	UJ	0.27	UJ
1,4-Dichlorobenzene	0.27	J	0.27	UJ	0.27	UJ	0.27	UJ	0.27	UJ	0.27	UJ	2.6	J
2-Butanone	15	J	7.4	J	1.4	UJ	9.9	J	5.3	J	2.2	J	3.3	J
2-Hexanone	0.48		0.18	U	0.18	U	0.18	U	0.18	U	0.59		0.18	UJ
2-Propanol	33		8.1		1.2	U	3.8		11		1.2	U	44	J
4-Ethyltoluene	0.23	U	0.23	U	0.23	U	4.4		2.3		0.23	U	0.23	UJ
4-Methyl-2-pentanone	0.37	J	0.18	UJ	0.18	UJ	0.18	UJ	0.18	UJ	0.18	UJ	0.18	UJ
Acetone	68		24		4		37		30		11		50	J
Benzene	0.95		0.66		0.63		8.6		4.7		0.55		0.92	J
Benzyl chloride	0.24	U	0.24	U	0.24	U	0.24	U	0.24	U	0.24	U	0.24	UJ
Bromodichloromethane	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	UJ
Bromoform	0.46	UJ	0.46	UJ	0.46	UJ	0.46	UJ	0.46	UJ	0.46	UJ	0.46	UJ
Bromomethane	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	UJ
Butadiene, 1,3-	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	UJ
Carbon disulfide	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U	1.5	UJ
Carbon tetrachloride	0.74		0.51		0.45		0.51		0.96		0.45		0.51	J
Chlorobenzene	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	UJ
Chlorodibromomethane	0.39	U	0.39	U	0.39	U	0.39	U	0.39	U	0.39	U	0.39	UJ
Chloroethane	0.12	U	0.12	U	0.12	U	0.12	U	0.12	U	0.12	U	0.45	J
Chloroform	2.1		0.39		0.22	U	0.22	U	6.1		0.22	U	0.22	UJ
Chloromethane	1.6		1.4		1.1		1.1		1.3		1.2		1.5	J
Cis-1,2-Dichloroethene	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	UJ

Table 2.3: Air VOC Results

Lab Sample Id	07B46841		07B46842		07B46844		07B46845		07B46846		07B46848		07B46849	
Lab Sample Delivery Group	LIMT-11841		LIMT-11841		LIMT-11841		LIMT-11841		LIMT-11841		LIMT-11841		LIMT-11841	
Loc Name	FA-M05		BA-M05		BA-M06		BA-M07		FA-M07		AA-01		FA-M08	
Field Sample Id	AIFAM05		AIBAM05		AIBAM06		AIBAM07		AIFAM07		AIAA001		AIFAM08	
Field Sample Date	11/29/2007		11/29/2007		11/29/2007		11/29/2007		11/29/2007		11/29/2007		11/30/2007	
Qc Code	FS		FS		FS		FS		FS		FS		FS	
Parameter	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**
cis-1,3-Dichloropropene	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	UJ
Cyclohexane	0.4		0.37		0.16	U	4		2		0.16	U	0.34	J
Dichlorodifluoromethane	3.1		3.1		2.8		3.1		3		2.8		3.2	J
Ethanol	3200	J	1200	J	9	J	170	J	170	J	5.6	J	420	J
Ethyl acetate	2.3		0.52		0.17	U	0.17	U	3		0.17	U	4	J
Ethyl benzene	1.4		0.51		0.2	U	16		7.8		0.51		0.62	J
Heptane	0.92		0.44		0.18	U	11		2.3		0.18	U	0.92	J
Hexachlorobutadiene	2	U	2	U	2	U	2	U	2	U	2	U	2	UJ
Hexane	0.98		1		0.63		32		15		0.41		1.2	J
Methyl Tertbutyl Ether	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	UJ
Methylene chloride	2.3	J	2.4	J	1.7	J	13	J	7.3	J	1.7	J	0.53	J
Naphthalene	0.58	U	0.58	U	0.58	U	1.5		1.7		0.58	U	0.58	UJ
o-Xylene	1.4		0.43		0.2	U	14		7		0.31		0.55	J
Propylene	0.31	U	1.1		0.31	U	0.31	U	0.31	U	0.64		0.31	UJ
Styrene	1		0.23		0.19	U	0.46		0.54		0.19	U	0.5	J
Tetrachloroethene	5.1		1.8		1.9		0.37		0.31	U	0.31	U	0.55	J
Tetrahydrofuran	13	J	5.7	J	0.27	UJ	3.7	J	1.5	J	0.27	UJ	0.27	UJ
Toluene	19		3.7		1.1		71		49		1.7		8.6	J
trans-1,2-Dichloroethene	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	UJ
trans-1,3-Dichloropropene	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	UJ
Trichloroethene	0.25	U	0.25	U	0.34		0.25	U	0.25	U	0.25	U	0.25	UJ
Trichlorofluoromethane	1.3		2		1.2		1.2		1.1		1.3		1.3	J
Vinyl acetate	2.4		0.54		0.32	U	8.5		4.3		0.44		2	J
Vinyl chloride	0.12	U	0.12	U	0.12	U	0.12	U	0.12	U	0.12	U	0.12	UJ
Xylene, m/p	3.9		1.2		0.51		42		21		1.1		1.4	J

Notes:

Results in micrograms per cubic meter ($\mu g/m^3$)
Air samples analyzed for VOCs by EPA Method TC
QC Code:
FS = Field Sample
FD = Field Duplicate
Qualifiers:
U = Not detected at a concentration greater than the reporting limit
J = Estimated value

Table 2.3: Air VOC Results

Lab Sample Id	07B46850		07B46851		07B46852	
Lab Sample Delivery Group	LIMT-11841		LIMT-11841		LIMT-11841	
Loc Name	FA-M08		BA-M08		AA-02	
Field Sample Id	AIFAM08 DUP		AIBAM08		AIAA002	
Field Sample Date	11/30/2007		11/30/2007		11/30/2007	
Qc Code	FD		FS		FS	
Parameter	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**
1,1,1-Trichloroethane	0.25	U	0.25	UJ	0.25	U
1,1,2,2-Tetrachloroethane	0.31	U	0.31	UJ	0.31	U
1,1,2-Trichloro-1,2,2-Trifluoroethane	0.69		0.55	J	0.69	
1,1,2-Trichloroethane	0.25	U	0.25	UJ	0.25	U
1,1-Dichloroethane	0.18	U	0.18	UJ	0.18	U
1,1-Dichloroethene	0.18	U	0.18	UJ	0.18	U
1,2,4-Trichlorobenzene	0.34	UJ	0.34	UJ	0.34	UJ
1,2,4-Trimethylbenzene	0.49		0.23	UJ	0.23	U
1,2-Dibromoethane	0.35	U	0.35	UJ	0.35	U
1,2-Dichloro-1,1,2,2-tetrafluoroethane	0.32	U	0.32	UJ	0.32	U
1,2-Dichlorobenzene	0.27	U	0.27	UJ	0.27	U
1,2-Dichloroethane	0.18	U	0.18	UJ	0.18	U
1,2-Dichloropropane	0.21	U	0.21	UJ	0.21	U
1,3,5-Trimethylbenzene	0.23	U	0.23	UJ	0.23	U
1,3-Dichlorobenzene	0.27	UJ	0.27	UJ	0.27	UJ
1,4-Dichlorobenzene	1.9	J	3.2	J	0.27	UJ
2-Butanone	1.4	J	1.4	UJ	1.5	J
2-Hexanone	0.18	U	0.18	UJ	0.26	
2-Propanol	27	J	1.3	J	1.2	U
4-Ethyltoluene	0.23	U	0.23	UJ	0.23	U
4-Methyl-2-pentanone	0.18	UJ	0.18	UJ	0.18	UJ
Acetone	36	J	11	J	7.7	
Benzene	0.83		0.63	J	0.63	
Benzyl chloride	0.24	U	0.24	UJ	0.24	U
Bromodichloromethane	0.3	U	0.3	UJ	0.3	U
Bromoform	0.46	UJ	0.46	UJ	0.46	UJ
Bromomethane	0.18	U	0.18	UJ	0.18	U
Butadiene, 1,3-	0.1	U	0.1	UJ	0.1	U
Carbon disulfide	1.5	U	1.5	UJ	1.5	U
Carbon tetrachloride	0.51		0.45	J	0.51	
Chlorobenzene	0.21	U	0.21	UJ	0.21	U
Chlorodibromomethane	0.39	U	0.39	UJ	0.39	U
Chloroethane	0.28	J	0.12	UJ	0.12	U
Chloroform	0.22	U	0.26	J	0.22	U
Chloromethane	1.3		0.99	J	1.2	
Cis-1,2-Dichloroethene	0.18	U	0.18	UJ	0.18	U

Table 2.3: Air VOC Results

Lab Sample Id	07B46850		07B46851		07B46852	
Lab Sample Delivery Group	LIMT-11841		LIMT-11841		LIMT-11841	
Loc Name	FA-M08		BA-M08		AA-02	
Field Sample Id	AIFAM08 DUP		AIBAM08		AIAA002	
Field Sample Date	11/30/2007		11/30/2007		11/30/2007	
Qc Code	FD		FS		FS	
Parameter	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**
cis-1,3-Dichloropropene	0.2	U	0.2	UJ	0.2	U
Cyclohexane	0.31		0.22	J	0.16	U
Dichlorodifluoromethane	3.1		2.6	J	3	
Ethanol	330	J	61	J	8.4	J
Ethyl acetate	3.5		0.17	UJ	0.17	U
Ethyl benzene	0.51		0.23	J	0.23	
Heptane	0.74		0.66	J	0.18	U
Hexachlorobutadiene	2	U	2	UJ	2	U
Hexane	1.1		0.79	J	0.6	
Methyl Tertbutyl Ether	0.17	U	0.17	UJ	0.17	U
Methylene chloride	0.78	J	0.53	J	1.9	J
Naphthalene	0.58	U	0.58	UJ	0.58	U
o-Xylene	0.43		0.23	J	0.23	
Propylene	0.31	U	0.76	J	0.31	U
Styrene	0.34		0.19	UJ	0.19	U
Tetrachloroethene	0.43		0.55	J	0.49	
Tetrahydrofuran	0.27	UJ	0.27	UJ	0.27	UJ
Toluene	7.7		2.6	J	1.6	
trans-1,2-Dichloroethene	0.18	U	0.18	UJ	0.18	U
trans-1,3-Dichloropropene	0.2	U	0.2	UJ	0.2	U
Trichloroethene	0.25	U	0.25	UJ	0.25	U
Trichlorofluoromethane	1.3		1.1	J	1.2	
Vinyl acetate	0.48	J	0.44	J	0.38	
Vinyl chloride	0.12	U	0.12	UJ	0.12	U
Xylene, m/p	1.2		0.7	J	0.63	

Notes:

Results in micrograms per cubic meter ($\mu g/m^3$)
Air samples analyzed for VOCs by EPA Method TC
QC Code:
FS = Field Sample
FD = Field Duplicate
Qualifiers:
U = Not detected at a concentration greater than the reporting limit
J = Estimated value

Table 2.4: Soil Vapor VOC Results

Lab Sample Id	07B46832		07B46837		07B46838		07B46843		07B46847		07B46853	
Lab Sample Delivery Group	LIMT-11841		LIMT-11841		LIMT-11841		LIMT-11841		LIMT-11841		LIMT-11841	
Loc Name	SS-M01		SS-M03		SS-M04		SS-M05		SS-M07		SV-V1S	
Field Sample Id	AISSM01		AISSM03		AISSM04		AISSM05		AISSM07		AISVVIS	
Field Sample Date	11/27/2007		11/28/2007		11/28/2007		11/29/2007		11/29/2007		11/30/2007	
Qc Code	FS		FS		FS		FS		FS		FS	
Parameter	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**
1,1,1-Trichloroethane	0.98		0.65		15		0.54	U	0.54	U	200	
1,1,2,2-Tetrachloroethane	0.68	U	0.68	U	0.68	U	0.68	U	0.68	U	6.8	U
1,1,2-Trichloro-1,2,2-Trifluoroethane	0.76	U	0.76	U	0.76	U	0.76	U	0.76	U	7.6	U
1,1,2-Trichloroethane	0.54	U	0.54	U	0.54	U	0.54	U	0.54	U	5.4	U
1,1-Dichloroethane	0.4	U	0.4	U	2.5		0.4	U	0.4	U	4	U
1,1-Dichloroethene	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U	4	U
1,2,4-Trichlorobenzene	0.74	UJ	0.74	UJ	0.74	UJ	0.74	UJ	0.74	UJ	7.4	UJ
1,2,4-Trimethylbenzene	41		3.6		3.2		0.5	U	3		5	U
1,2-Dibromoethane	0.76	U	0.76	U	0.76	U	0.76	U	0.76	U	7.6	U
1,2-Dichloro-1,1,2,2-tetrafluoroethane	0.7	U	0.7	U	0.7	U	0.7	U	0.7	U	7	U
1,2-Dichlorobenzene	0.6	UJ	0.6	UJ	0.6	UJ	0.6	UJ	0.6	UJ	6	UJ
1,2-Dichloroethane	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U	4	U
1,2-Dichloropropane	0.46	U	0.46	U	0.46	U	0.46	U	0.46	U	4.6	U
1,3,5-Trimethylbenzene	10		0.88		0.79		0.5	U	0.69		5	U
1,3-Dichlorobenzene	0.6	UJ	0.6	UJ	0.6	UJ	0.6	UJ	0.6	UJ	6	UJ
1,4-Dichlorobenzene	66	J	180	J	1.1	J	0.6	UJ	0.6	UJ	6	UJ
2-Butanone	6.4		5.7		3.4		3.9		4.7		30	U
2-Hexanone	0.4	U	1.6		0.4	U	0.49		0.57		4	U
2-Propanol	6.3		24		3.3		2.5	U	5.5		25	U
4-Ethyltoluene	9.7		0.88		0.69		0.5	U	0.69		5	U
4-Methyl-2-pentanone	3.2		0.66		0.4	U	0.4	U	0.4	U	4	U
Acetone	2.4	U	50		2.4	U	41		130		24	U
Benzene	22		1.7		4.1		0.32	U	1.3		3.2	U
Benzyl chloride	0.52	U	0.52	U	0.52	U	0.52	U	0.52	U	5.2	U
Bromodichloromethane	0.66	U	0.66	U	0.66	U	0.66	U	0.66	U	6.6	U
Bromoform	1.1	UJ	1.1	UJ	1.1	UJ	1.1	UJ	1.1	UJ	11	UJ
Bromomethane	0.38	U	0.38	U	0.38	U	0.38	U	0.38	U	3.8	U
Butadiene, 1,3-	0.22	U	0.22	U	0.22	U	0.22	U	0.22	U	2.2	U
Carbon disulfide	3.2	U	3.2	U	3.2	U	3.2	U	3.2	U	32	U
Carbon tetrachloride	0.62	U	0.62	U	0.62	U	0.62	U	0.62	U	6.2	U
Chlorobenzene	0.46	U	0.46	U	0.46	U	0.46	U	0.46	U	4.6	U
Chlorodibromomethane	0.86	U	0.86	U	0.86	U	0.86	U	0.86	U	8.6	U
Chloroethane	0.26	U	0.26	U	0.26	U	0.26	U	0.26	U	2.6	U
Chloroform	0.48	U	1.7		2.9		0.58		0.48	U	6.8	
Chloromethane	0.95		1.1		0.2	U	0.2	U	0.2	U	2	U
Cis-1,2-Dichloroethene	0.4	U	0.4	U	3.3		0.4	U	0.4	U	77	

Table 2.4: Soil Vapor VOC Results

	Lab Sample Id	07B46832		07B46837		07B46838		07B46843		07B46847		07B46853	
	Lab Sample Delivery Group	LIMT-11841		LIMT-11841		LIMT-11841		LIMT-11841		LIMT-11841		LIMT-11841	
	Loc Name	SS-M01		SS-M03		SS-M04		SS-M05		SS-M07		SV-V1S	
	Field Sample Id	AISSM01		AISSM03		AISSM04		AISSM05		AISSM07		AISVVIS	
	Field Sample Date	11/27/2007		11/28/2007		11/28/2007		11/29/2007		11/29/2007		11/30/2007	
	Qc Code	FS		FS		FS		FS		FS		FS	
Parameter		**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**
cis-1,3-Dichloropropene		0.44	U	0.44	U	0.44	U	0.44	U	0.44	U	4.4	U
Cyclohexane		13		0.62		1.4		0.34	U	0.34	U	3.4	U
Dichlorodifluoromethane		3.2		2.8		3		2.4		3.2		5	U
Ethanol		330	J	330	J	93		5.9	U	320	J	19	U
Ethyl acetate		0.36	U	3.5		0.36	U	0.36	U	0.36	U	3.6	U
Ethyl benzene		40		2.2		3.1		0.44	U	1.9		4.4	U
Heptane		28		1.6		2.6		0.4	U	0.4	U	4	U
Hexachlorobutadiene		4.3	UJ	4.3	UJ	4.3	UJ	4.3	UJ	4.3	U	43	UJ
Hexane		61		3.6		6.4		0.36	U	1.3		3.6	U
Methyl Tertbutyl Ether		2		0.36	U	0.36	U	0.36	U	5.9		3.6	U
Methylene chloride		7.4	U	1.8	U	6.1	U	0.97	U	4	U	13	
Naphthalene		5.9		4.4		1.3	U	1.3	U	1.3	U	13	U
o-Xylene		39		2.8		4.1		0.44	U	3		4.4	U
Propylene		0.69	U	13		0.69	U	0.69	U	0.69	U	6.9	U
Styrene		1		0.51		0.42	U	0.42	U	0.42	U	4.2	U
Tetrachloroethene		2.8		59		1100		81		0.68	U	16000	
Tetrahydrofuran		0.59	U	0.59	U	0.59	U	0.71		0.59	U	5.9	U
Toluene		220		19		37		1.3		9.4		3.8	U
trans-1,2-Dichloroethene		0.4	U	0.4	U	4.9		0.4	U	0.4	U	9.5	
trans-1,3-Dichloropropene		0.44	U	0.44	U	0.44	U	0.44	U	0.44	U	4.4	U
Trichloroethene		0.54	U	0.54	U	6		1.5		0.54	U	1200	
Trichlorofluoromethane		3.1		1.8		1.5		0.9		1.2		5.6	
Vinyl acetate		16		2.1		6.8		1.6		2.5		7.1	U
Vinyl chloride		0.26	U	0.26	U	0.26	U	0.26	U	0.26	U	2.6	U
Xylene, m/p		110		7.7		12		0.86	U	7.7		8.6	U

Notes:

Results in micrograms per cubic meter ($\mu g/m^3$)
Soil Vapor 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 reporting limit
J = Estimated value

Table 2.4: Soil Vapor VOC Results

Lab Sample Id	07B46854		07B50049		07B50050		07B50051		07B50052	
Lab Sample Delivery Group	LIMT-11841		LIMT-12406		LIMT-12406		LIMT-12406		LIMT-12406	
Loc Name	SV-V2S		DP-01		DP-03		DP-02		DP-04	
Field Sample Id	AISVV2S		AISVM01 DUP		AISVM03		AISVM02		AISVM04	
Field Sample Date	11/30/2007		12/18/2007		12/18/2007		12/18/2007		12/19/2007	
Qc Code	FS		FD		FS		FS		FS	
Parameter	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**
1,1,1-Trichloroethane	51		700		50		2.1		36	
1,1,2,2-Tetrachloroethane	6.8	U	6.8	U	0.68	U	0.68	U	6.8	U
1,1,2-Trichloro-1,2,2-Trifluoroethane	7.6	U	7.6	U	0.76	U	0.76	U	7.6	U
1,1,2-Trichloroethane	5.4	U	5.4	U	0.54	U	0.54	U	5.4	U
1,1-Dichloroethane	15		15		0.4	U	0.4	U	9.7	
1,1-Dichloroethene	4	U	13		0.4	U	0.4	U	4	U
1,2,4-Trichlorobenzene	7.4	UJ	7.4	U	0.74	U	0.74	U	7.4	U
1,2,4-Trimethylbenzene	5	U	5	U	3		1.7		5	U
1,2-Dibromoethane	7.6	U	7.6	U	0.76	U	0.76	U	7.6	U
1,2-Dichloro-1,1,2,2-tetrafluoroethane	7	U	7	U	0.7	U	0.7	U	7	U
1,2-Dichlorobenzene	6	UJ	6	U	0.6	U	0.6	U	6	U
1,2-Dichloroethane	4	U	4	U	0.4	U	0.4	U	4	U
1,2-Dichloropropane	4.6	U	4.6	U	0.46	U	0.46	U	4.6	U
1,3,5-Trimethylbenzene	5	U	5	U	0.98		0.5	U	5	U
1,3-Dichlorobenzene	6	UJ	6	U	0.6	U	0.6	U	6	U
1,4-Dichlorobenzene	6	UJ	6	U	0.6	U	0.6	U	6	U
2-Butanone	30	U	30	U	3	U	3	U	30	U
2-Hexanone	4	U	4	U	0.4	U	0.4	U	4	U
2-Propanol	25	U	25	U	2.9		6.2		25	U
4-Ethyltoluene	5	U	5	U	0.59		0.5	U	5	U
4-Methyl-2-pentanone	4	U	4	U	0.4	U	0.4	U	4	U
Acetone	24	U	24	U	39		85		24	U
Benzene	3.2	U	27		6.6		11		3.8	
Benzyl chloride	5.2	U	5.2	U	0.52	U	0.52	U	5.2	U
Bromodichloromethane	6.6	U	6.6	U	0.66	U	0.66	U	6.6	U
Bromoform	11	UJ	11	U	1.1	U	1.1	U	11	U
Bromomethane	3.8	U	3.8	U	0.38	U	0.38	U	3.8	U
Butadiene, 1,3-	2.2	U	2.2	U	0.22	U	0.22	U	2.2	U
Carbon disulfide	32	U	32	U	20		3.2	U	32	U
Carbon tetrachloride	6.2	U	6.2	U	0.62	U	0.62	U	6.2	U
Chlorobenzene	4.6	U	6.4		0.46	U	0.46	U	4.6	
Chlorodibromomethane	8.6	U	8.6	U	0.86	U	0.86	U	8.6	U
Chloroethane	2.6	U	2.6	U	0.26	U	0.26	U	2.6	U
Chloroform	15		190		1.3		2.7		13	
Chloromethane	2	U	2	U	0.2	U	0.2	U	2	U
Cis-1,2-Dichloroethene	3400		1600		2		320		21000	

Table 2.4: Soil Vapor VOC Results

	Lab Sample Id	07B46854		07B50049		07B50050		07B50051		07B50052	
	Lab Sample Delivery Group	LIMT-11841		LIMT-12406		LIMT-12406		LIMT-12406		LIMT-12406	
	Loc Name	SV-V2S		DP-01		DP-03		DP-02		DP-04	
	Field Sample Id	AISVV2S		AISVM01 DUP		AISVM03		AISVM02		AISVM04	
	Field Sample Date	11/30/2007		12/18/2007		12/18/2007		12/18/2007		12/19/2007	
	Qc Code	FS		FD		FS		FS		FS	
Parameter		**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**
cis-1,3-Dichloropropene		4.4	U	4.4	U	0.44	U	0.44	U	4.4	U
Cyclohexane		3.4	U	3.4	U	1.4		1.2		3.4	U
Dichlorodifluoromethane		5	U	5	U	3		2.8		5	U
Ethanol		19	U	19	UJ	7.3	J	19	J	19	UJ
Ethyl acetate		3.6	U	3.6	U	0.36	U	0.36	U	3.6	U
Ethyl benzene		4.4	U	4.4	U	1.4		0.87		4.4	U
Heptane		4	U	4	U	4.5		0.98		4	U
Hexachlorobutadiene		43	UJ	43	U	4.3	U	4.3	U	43	U
Hexane		3.6	U	4.9		11		5.9		3.6	U
Methyl Tertbutyl Ether		3.6	U	3.6	U	0.36	U	0.43		3.6	U
Methylene chloride		7	U	43	U	1.7	U	6.5	U	7	U
Naphthalene		13	U	13	U	1.3	U	1.3	U	13	U
o-Xylene		4.4	U	4.4	U	1.7		0.96		4.4	U
Propylene		6.9	U	6.9	U	0.69	U	0.69	U	6.9	U
Styrene		4.2	U	4.2	U	0.42	U	0.42	U	4.2	U
Tetrachloroethene		6600		740000		310		4000		62000	
Tetrahydrofuran		5.9	U	5.9	U	0.59	U	0.59	U	5.9	U
Toluene		3.8	U	3.8	U	15		2.6		3.8	U
trans-1,2-Dichloroethene		52		89		0.4	U	14		410	
trans-1,3-Dichloropropene		4.4	U	4.4	U	0.44	U	0.44	U	4.4	U
Trichloroethene		4000		20000		64		310		8200	
Trichlorofluoromethane		18		5.6	U	1.6		1.3		5.6	U
Vinyl acetate		7.1	U	7.1	U	0.71	U	0.71	U	7.1	U
Vinyl chloride		2.6	U	2.6	U	0.26	U	0.26	U	14	
Xylene, m/p		8.6	U	8.6	U	4.3		2.3		8.6	U

Notes:

Results in micrograms per cubic meter ($\mu g/m^3$)
Soil Vapor 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 reporting limit
J = Estimated value

Table 2.5: TIC Results

SDG	Sample ID	Lab ID	Sample Date	Compound	Result	Qualifier	Type	Matrix
MF1856	AIGS0103	F1856-02B	12/12/2007	Unknown	48	J	FS	Soil
MF1856	AIGS0103	F1856-02B	12/12/2007	Unknown	15	J	FS	Soil
MF1856	AIGS0103	F1856-02B	12/12/2007	Unknown	10	J	FS	Soil
MF1856	AIGS0103	F1856-02B	12/12/2007	Unknown	4	J	FS	Soil
MF1856	AIGS0103	F1856-02B	12/12/2007	Unknown	12	J	FS	Soil
MF1856	AIGS0106	F1856-03B	12/12/2007	Unknown	13	J	FS	Soil

Notes:
Qualifiers:
J = Estimated Value
Type:
FS = Field Sample