Final Engineering Report and O&M Plan - Indoor Air and Soil Vapor Mitigation IRM

Ward Products Site
Amsterdam, New York
Site Code 4-29-004

Prepared by:

The RETEC Group, Inc./RETEC Engineering, P.C.
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RETEC Project Number: NWR01-15852-700

Prepared for:

New Water Realty Corporation
61 Edson Street
Amsterdam, New York 12010

March 1, 2006

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Prepared by:

Mark Hofferbert, P.E., Project Manager

Reviewed by:

John T. Finn, P.E., Senior Engineer

March 1, 2006

Engineer's Certification

I certify that the NYSDEC-approved IRM Work Plan – Indoor Air and Soil Vapor Mitigation, dated August 31, 2005, including all subsequent errata and NYSDEC approved changes, was implemented, and all construction activities were completed in accordance with the Work Plan, and were witnessed by me or by a person under my direct supervision.

Work for this project was performed in accordance with generally accepted professional practices for the nature and condition of work completed in the same or similar localities, at the time the work was performed.

No other warranty, express or implied, is made.

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1 Introduction

This document is the Final Report for an Interim Remedial Measure (IRM) conducted at the Ward Products site in Amsterdam, New York. This Report describes the rationale and procedures performed for the mitigation of trichloroethene (also known as trichloroethylene, or TCE) that was detected at some locations in the indoor air of the existing building at the Ward Products site.

The IRM successfully reduced the indoor air concentration of TCE from a maximum of 13 $\mu g/M^3$ to a maximum of 1.97 $\mu g/M^3$, which is below the New York State Department of Health's (NYSDOH) draft guidance level of 5 $\mu g/M^3$.

The following items are provided in this Final Report:

- A description of all field work performed;
- As-built drawings;
- All pertinent analytical and diagnostic results;
- Status of the site upon completion; and
- An Operation & Maintenance Plan.

This Report has been prepared in accordance with Section V of the New York State Department of Environmental Conservation's (NYSDEC) Order on Consent for this site [NYSDEC, 1997].

1.1 Site Description and Project Background

The Ward Products site lies in an industrial area at 61 Edson Street, as shown in Figure 1. The site is an 8.6-acre property that consists of a large paved parking lot, a 69,556 square-foot single story building, lawn, and wooded areas. There are no nearby residences, and the area is zoned commercial/industrial.

The site is currently an active industrial assembly plant (automobile antennas and wiring harnesses) operated by the tenant, Ward Products, LLC (WP). The property is owned by New Water Realty Corporation (NWR), a company unrelated to WP. WP has typically employed several hundred persons working approximately 8-hour shifts. WP is currently downsizing its Amsterdam operations and the number of employees has decreased to approximately 40.

In November 2002, The RETEC Group, Inc. (RETEC) collected three indoor air samples for analysis of TCE and related compounds. TCE was detected only in the manufacturing office (sample AS-1) at a concentration of 4.8

$\mu g/M^3$. The detection limits in the other two samples, however, were higher (19 $\mu g/M^3$) than the NYSDOH draft air guidance level of 5 $\mu g/M^3$ [NYSDOH, 2005].

Because of the elevated detection limits, RETEC collected additional samples in January 2005, including both indoor air and sub-slab soil vapor samples, at three locations. TCE was detected in the three indoor air samples at concentrations ranging from 6.4 to 13 $\mu g/M^3$. TCE was also detected in the sub-slab soil vapor samples at concentrations ranging from 1,500 to 1,800 $\mu g/M^3$.

The suspected source of TCE in the sub-slab soil vapor is the volatilization of TCE from the groundwater underlying the building. Impacted soil vapor was assumed to then seep into the building, thus impacting the indoor air.

Though the concentrations of TCE in the January 2005 indoor air samples slightly exceeded NYSDOH's draft guidance level of 5 $\mu g/M^3$, they were several orders of magnitude less than the OSHA, NIOSH, and ACGIH recommended exposure levels for workplace environments (ranging from 134,000 $\mu g/M^3$ to 537,000 $\mu g/M^3$). NYSDOH and NYSDEC, however, required that NWR perform mitigation to further minimize existing or potential human health exposure to TCE via soil vapor intrusion. NWR, therefore, performed the mitigation as an IRM under the Order on Consent and effectively addressed the soil vapor exposure pathway.

The design and specifications for the IRM were detailed in the NYSDEC-approved *IRM Work Plan, Indoor Air and Soil Vapor Mitigation*, dated August 31, 2005 [RETEC, 2005b], and subsequent errata [RETEC, 2005c].

See Appendix A of this report for summaries of the pre- and post-IRM analytical data. Appendix C contains the laboratory report for the post-IRM air samples.

1.2 Project Responsibilities

The principal organizations involved in designing and constructing the IRM were WP, NWR, NYSDEC, RETEC, and Enviro Testing, Inc (ETI) of Binghamton, NY.

WP is the current occupant of the property and its facilities. WP provided access to NWR and others so that the IRM could be implemented as provided in the IRM Work Plan. WP had no responsibility for the remedial design, construction, or evaluation of the IRM.

As the site owner, NWR was responsible to NYSDEC for the remedial design, construction, and evaluation of the IRM in accordance with the Order on Consent.

NYSDEC provided review and approval of NWR's remedial designs, plans, and specifications, as presented in the IRM Work Plan, for substantial compliance with the agency's regulations. NYSDOH also reviewed NWR's remedial designs, plans, and specifications, particularly those pertaining to the protection of human health.

RETEC was the engineer and general contractor responsible for the design and implementation of the IRM. RETEC conducted field engineering and subcontractor supervision during the work.

The subcontractor, ETI, was selected by RETEC from among qualified soil vapor mitigation companies. ETI had current certification from The National Environmental Health Association's (NEHA) National Radon Proficiency Program. ETI was responsible for the performance of the work in accordance with the drawings and specifications incorporated in the IRM Work Plan. ETI was provided with a copy of the Order on Consent and was required to comply with it as a condition of their contract.

1.3 Project Approach and Remedial Goals

Based on the results of the 2002 and 2005 indoor air and soil vapor sampling events, NYSDOH determined that TCE, presumably emanating in soil vapor from below the building's floor slab, was present in indoor air at unacceptable concentrations (up to 13 $\mu g/M^3$), and that mitigation was required. NYSDEC had also stated that addressing the indoor air issue would be a required element of any remedial plan for the site, and suggested that the work be performed as an IRM. NWR complied with the regulatory requests and proceeded to address the alleged indoor air issue as an IRM.

The intent of the IRM was to reduce the concentration of TCE in the building's indoor air to a concentration below 5 $\mu g/M^3$, or to the extent practicable.

The most common soil vapor mitigation method is the installation of a sub-slab depressurization system in conjunction with identifying and eliminating preferential soil vapor intrusion pathways. An active sub-slab vapor depressurization system was, therefore, designed and installed as the mitigation (remedial) method.

The design of the IRM was based on information provided in the following:

- The Revised Remedial Investigations Report [Normandeau, 2005];
- Results of Indoor Air Sampling [RETEC, 2002]; and
- Results of January 2005 Indoor Air / Soil Gas Sampling [RETEC, 2005a].

The IRM was also designed and constructed in substantial compliance with the U.S. EPA's *Radon Mitigation Standards*, Document #402-R-93-078 [USEPA, 1994].

The scope of work for the IRM included the following actions:

- Perform a building investigation (completed on June 28, 2005);
- Prepare a Work Plan and conceptual design (completed August 31, 2005 [RETEC, 2005b]);
- Receive written regulatory approval of the Work Plan (received September 28, 2005);
- Mobilize to the site (begun September 25, 2005);
- Construct the piping and electrical components of the vapor system (completed week of September 25, 2005);
- Perform smoke testing, seal leaking floor cracks, and conduct system performance testing (completed week of October 17, 2005);
- Conduct post-IRM air sampling (completed January 20, 2006); and
- Prepare this Final Engineering Report and O&M Plan.

No local, New York State, or federal permits were known or believed to be required for the work. The work was conducted under an Order on Consent with the NYSDEC. All contractors performing the work were given copies of the Order on Consent.

2 Summary of Remedial Activities

This section provides details of the work performed and the materials utilized during construction of the IRM.

2.1 Building Investigation

On June 28, 2005, RETEC and ETI conducted a building investigation and developed a conceptual system design as presented in the IRM Work Plan.

The inspection identified specific building characteristics, configurations, and operational conditions that would affect the design, installation, and effectiveness of the soil vapor system.

The inspection included diagnostic tests for TCE (using colorimetric tubes) to assist in evaluating suspected soil vapor entry points, specifically floor drains and sumps. No significant point sources of TCE-impacted vapor entry were identified at the (qualitative) detection limit of approximately 125 ppb (670 $\mu g/M^3$).

RETEC and ETI also reviewed the available results from previous soil vapor tests to assist in developing the mitigation strategy.

2.2 Site Coordination

RETEC and ETI coordinated their activities with the on-site WP representative. WP provided designated equipment lay down areas. IRM work areas were secured by ETI to ensure the safety of WP workers, visitors, and other personnel.

The work did not significantly disrupt or hinder WP operations.

2.3 Utility Clearance

The locations of overhead and, to the extent practicable, subsurface structures were identified in the area of the work. No utilities or structures were damaged during the work.

2.4 Vent Pipes

The soil vapor system, as-built, consists of fourteen slab penetrations with riser pipes manifolded to six soil vapor vent fans (see Figure 3, and the photos in Appendix E).

All soil vapor vent pipes and fittings, except flow control valves, were made of 4-inch diameter Schedule 40 PVC. Flow control valves were 3-inch diameter PVC.

The cleaning solvents and adhesives used to join plastic pipes and fittings were as recommended by the manufacturers. All joints and connections were permanently sealed, except for fans. The use of compounds containing TCE was not permitted.

The soil vapor vent pipes were fastened to the structure of the building with hangers and supports that adequately and permanently secured the pipes. Existing plumbing, ducts, or mechanical equipment was not used to support vent pipes.

The vent pipes were installed in a configuration that ensures that any rainwater or condensation within the pipes drains downward into the ground beneath the slab.

The vent pipes do not block access to any areas required by WP, or interfere with any light, door, window, or equipment access area.

2.5 Vent Fans

A total of six soil vapor vent fans were installed (see Figure 3 and the photos in Appendix E). The vent fans were RadonAway model GP501 and were sized to provide the pressure difference and airflow characteristics necessary to achieve sub-slab depressurization.

The vent fans were mounted on the exterior of the building in a watertight protective housing and were secured to the vent pipes with flexible couplings.

The manufacturer's product information is provided in Appendix F.

2.6 Suction Pits and Soil Disposal

To provide optimum pressure field extension below the slab, 2- to 3-gallons (average) of soil were excavated from the sub-slab immediately below each of the 14 vent pipe penetration points.

Based on the *Revised Remedial Investigation Report* (RRIR) by Normandeau Associates (NAI), the sub-slab soil was assumed to contain several metals (cadmium, chromium, lead, nickel, and zinc) in excess of the NYSDEC recommended cleanup level [NAI, 2005]. Soil removed from the sub-slab was, therefore, containerized (in a 35-gallon drum), labeled, sampled, analyzed, characterized as non-hazardous waste, and properly disposed of off site by RETEC and NWR. The laboratory analytical report for the sub-slab soils is provided in Appendix D.

Concrete debris and other construction waste was considered non-impacted and was disposed of in the on-site solid waste dumpster.

2.7 Sealing

A urethane sealant was used to seal floor seams and cracks that were found to leak during the performance testing (see Section 3.1).

Non-shrink mortar was used for large openings around vent pipe penetrations in the floor and walls.

Three unused drains west of the Grinding Room entryway, which were noted to be open to the subsurface and to ambient (outside) airflow, were also sealed.

Additional sealing was done in limited areas beyond the work area in the western portion of the Assembly Room where smoke testing indicated a possible source of soil vapor intrusion.

2.8 Electrical

The soil vapor system was provided with dedicated electrical circuits and circuit breakers. The overall system consists of two circuit breakers, three fans per breaker, and six dedicated switches, one at each fan.

The system wiring is located in weather tight conduit around the outside of the building and is not located in, or chased through, the mitigation soil vapor duct pipes or any other heating or cooling ductwork.

The system electrical components were U.L. listed or of equivalent specifications. All electrical work was performed by a licensed electrician.

2.9 Monitors and Labeling

A "Soil Gas Reduction System" label was placed on each vertical vent pipe. The circuit breakers controlling the system were also labeled.

Manometers were installed on each vertical vent pipe, or as necessary, to evaluate the system performance. Each vertical vent pipe was also fitted with a ¼-inch female NPT vapor sampling port.

2.10 Site Restoration

All disturbed surfaces and areas were restored to their previous or better condition.

2.11 Environmental Monitoring

Dust generated during the work was suppressed and contained with a portable vacuum. Noise generation was minimized to the extent practicable.

RETEC periodically recorded the work area volatile organic compound (VOC) concentration using a photoionization detector (PID) with an 11.8 eV bulb. At no time were VOCs detected except in the immediate proximity of fresh PVC pipe solvent.

RETEC also recorded the sub-slab VOC concentrations within the sub-slab sumps and, again, no VOCs were detected above the detection limit of 0.1 ppm.

The action levels outlined in the site-specific Health and Safety Plan were not exceeded.

3 IRM Results

The IRM successfully reduced the indoor air concentration of TCE from a maximum of to 13 $\mu g/M^3$ to a maximum of 1.97 $\mu g/M^3$, which is below the NYSDOH's draft guidance level of 5 $\mu g/M^3$.

Performance and confirmation testing methods and results are discussed below.

3.1 Performance Testing

Vapor system performance testing was conducted after installation was completed.

Performance testing included sub-slab communication testing to measure the area and vacuum of the sub-slab pressure field extension. The integrity of the fan mounting seals and all joints in the interior vent piping was verified. All floor cracks within the mitigation area were smoke tested with the system running to determine where sealing was necessary to prevent vapor leakage.

The vacuum in the system vent pipes, as measured at the manometers, was recorded. The vapors within each vent pipe were also tested for TCE with colorimetric tubes (detection limit approximately 0.125 ppm or 670 $\mu g/M^3$).

The results of all performance testing were good. The data are summarized in Appendix B.

3.2 Confirmation Testing

Post-IRM indoor and ambient air sampling and analysis was conducted on January 20, 2006, after the system had run continuously for 3 months. The indoor sampling locations were the same as the January 2005 locations, i.e. IA-1, IA-2, and IA-3. Outdoor sampling included one upwind ambient sample and one sample downwind from the exhaust stacks. Sampling locations are shown in Figure 2.

3.2.1 Sampling Method

All samples were collected in Summa canisters during normal business hours while the building was occupied. The samples were collected from approximately 3 feet above the floor. The samples were delivered to a certified laboratory for TO-15 analysis with a standard turnaround time.

In addition, vapors within each vent pipe were again tested for TCE with colorimetric tubes during this sampling event.

The Indoor Air Quality Questionnaire and Building Inventory dated January 2005 was reviewed during the 2006 sampling event. No substantial changes were noted.

3.2.2 Analytical Results

Concentrations of TCE in the three indoor air samples ranged from 1.20 to 1.97 ug/M^3. These values are below the NYSDOH draft guidance value for TCE of 5 ug/M^3 in air.

There were no other exceedances of suggested guidance values for the other contaminants of interest.

The analytical results of confirmation testing are summarized in Appendix A. The laboratory report is provided in Appendix C.

3.3 Conclusions

The IRM successfully reduced the indoor air concentration of TCE to below the NYSDOH's draft guidance value of 5 μg/M^3.

The system is mechanically operational and the area of influence appears sufficient.

The average concentration of TCE in the sub-slab soil vapor appears to have reduced over the initial three months of operation, based on qualitative colorimetric tube results.

4 Operations and Maintenance Plan

This section describes the activities associated with the ongoing operation and maintenance (O&M) of the sub-slab soil vapor depressurization system. Project background information was provided in Section 1.0. Details of the system construction were provided in Section 2.0.

4.1 Introduction

Sub-slab depressurization is a simple and reliable method for preventing TCE-contaminated subsurface vapor from entering the building through cracks in the floor slab.

The objectives of the following O&M activities are to:

- Ensure ongoing vapor system operations through scheduled checks;
- Provide repairs to the vapor system when problems arise; and
- Provide a timely response to building occupant concerns related to the system.

4.2 System Inspection and Monitoring

The soil vapor mitigation system was designed and installed as a permanent, integral addition to the building.

The vapor system should be inspected annually (every 12 months), or before the building is re-occupied following a time when the building was vacant and the system was turned off. There are no other routine operating activities that are required.

The annual inspection should include a visual inspection of the complete system, both indoors and outdoors. Any actionable items found during inspections should be addressed immediately, if possible.

Inspection items should include, but not be limited to:

- Recording manometer vacuums;
- Inspecting the fans for mechanical operation, noise, and vibration;
- Inspecting all piping and piping connections (indoors and outdoors);
- Checking for new cracks in walls and floors; and
- Ensuring all piping supports are properly anchored.

Refer to the Vapor System Inspection Form (provided in Appendix G) for a complete listing of items to be checked and documented during system inspections.

NOTE: *The U-tube manometers located on each vent stack provide a quick check that the system is operating correctly. Building occupants should be advised and know that if the fluid in each side of the manometer is at a different height, then the system is functioning normally. If the fluid elevations are exactly even, then the system may be off (at the fan switch or the circuit breaker) or otherwise not functioning properly. In such instance, the facilities manager should be notified.*

Following completion of any inspection or maintenance activities, the inspector should complete a System Inspection Form. Any modifications or repairs performed should be noted on field sketches attached to the Form. The original Inspection Forms should be kept on file at the site, with a copy faxed to RETEC for their files (fax number 607-277-9057).

Inspection records will be compared to previous inspections to determine whether the system is performing within its acceptable range of operation. If it is determined that the system is not performing within its acceptable range, maintenance may be required.

Operational checks can be conducted by the property occupants or, typically, the facilities manager. Because the Indoor Air and Soil Vapor Mitigation system is a component of a larger environmental remediation of the 61 Edson Street property, NYSDEC may require that annual site-wide inspections, including the vapor system, be performed by a NYS licensed engineer.

4.3 System Maintenance

The vapor system should be virtually maintenance free.

The exhaust fans have a 5-year manufacturer's warranty and a 10-year life expectancy. The fans may be easily replaced by a licensed electrician.

If problems are identified that require assistance, maintenance may be requested by contacting RETEC (phone number 607-277-5716). A Maintenance Request Form (included in Appendix G) should also be completed and provided.

4.4 System Termination

The vapor mitigation system need not be operated during any extended period (months) when the building is unoccupied.

Vapor system operation can be permanently terminated upon application to, and approval by, NYSDEC based on data showing that air conditions within the building no longer exceed applicable standards when the system is not operational.

5 References

Normandeau, 2005. Revised Remedial Investigations Report, Ward Products Corporation Site, Normandeau Associates, Inc., May 2005.

NYSDEC, 1997. Order on Consent, Ward Products, Inc. Index #W4-0762-96-06, Site Code #4-29-004, New York State Department of Environmental Conservation, 1997.

NYSDOH, 2005. Guidance for Evaluating Soil Vapor Intrusion in the State of New York, Public Comment Draft, New York State Department of Health, February 2005.

RETEC, 2002. Results of Indoor Air Sampling, New Water Realty Corporation Site, The RETEC Group, Inc., December 2002.

RETEC, 2005a. Results of January 2005 Indoor Air / Soil Gas Sampling, Ward Products LLC Building, The RETEC Group, Inc., February 2005.

RETEC, 2005b. IRM Work Plan - Indoor Air and Soil Vapor Mitigation, Ward Products Site, The RETEC Group, Inc., August 2005.

RETEC, 2005c IRM Work Plan Errata Sheet, Ward Products Site, The RETEC Group, Inc., September 2005.

USEPA, 1994. Radon Mitigation Standards, United States Environmental Protection Agency, Document #402-R-93-078, October 1993 (Revised April 1994).

FIGURES

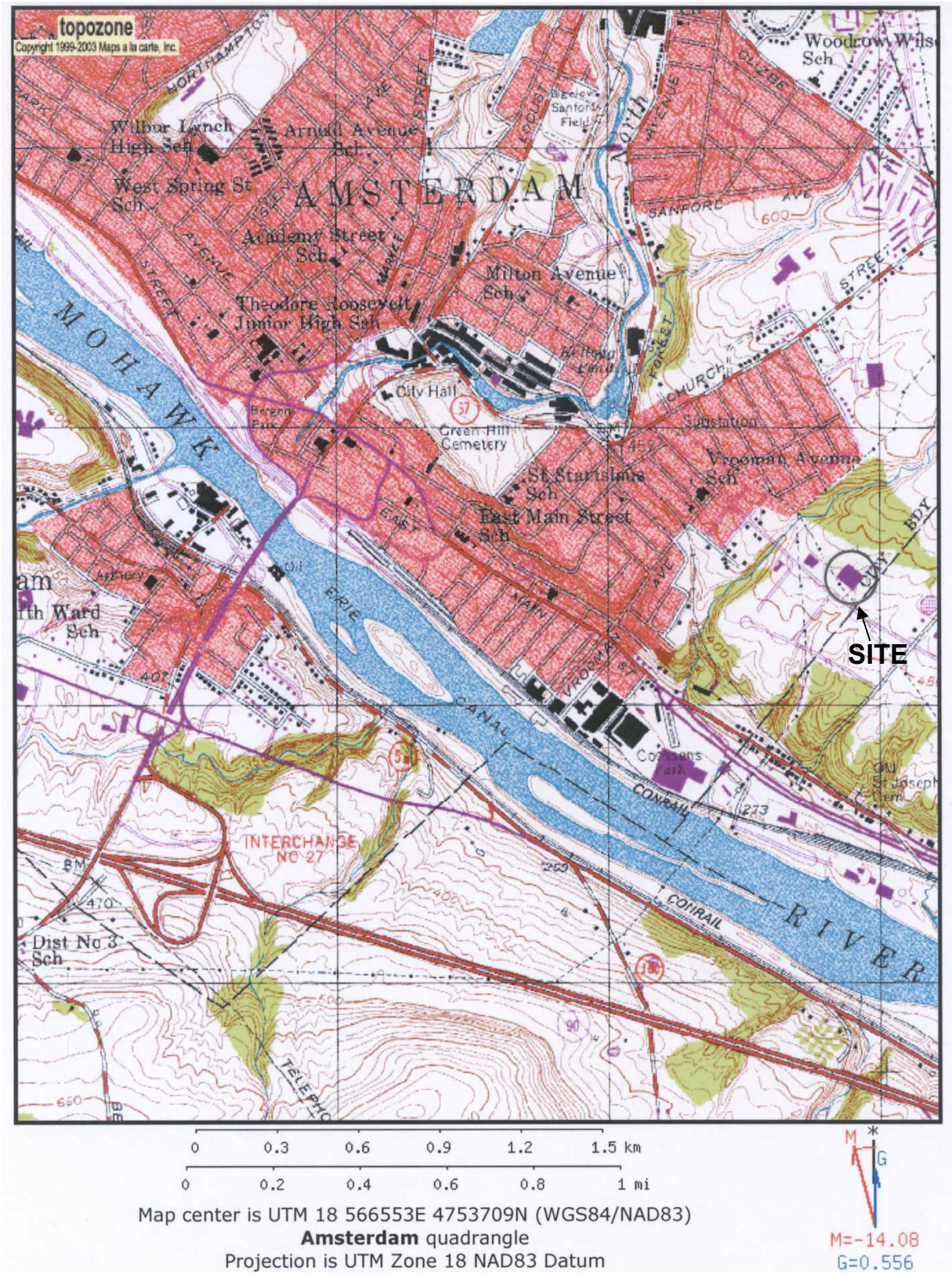
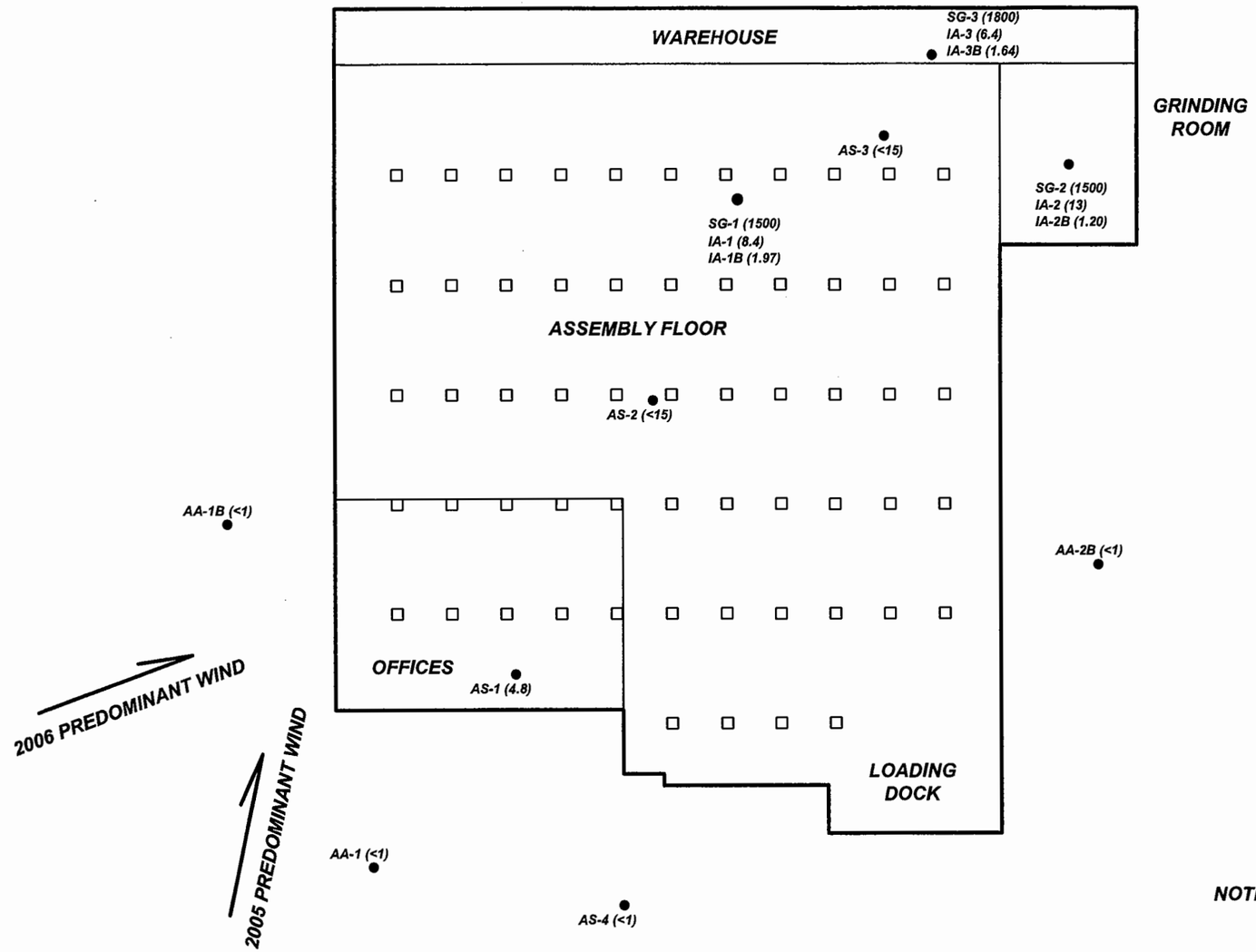


FIGURE 1
Site Location



▲ SUB-SLAB SOIL SAMPLE LOCATION

● AIR / VAPOR SAMPLE LOCATION (ug/M3 TCE)

AS 2002 AIR SAMPLE

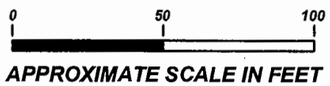
SG- 2005 SOIL GAS SAMPLE

AA- 2005 AMBIENT AIR SAMPLE

IA- 2005 INDOOR AIR SAMPLE

AA-B 2006 AMBIENT AIR SAMPLE

IA-B 2006 INDOOR AIR SAMPLE

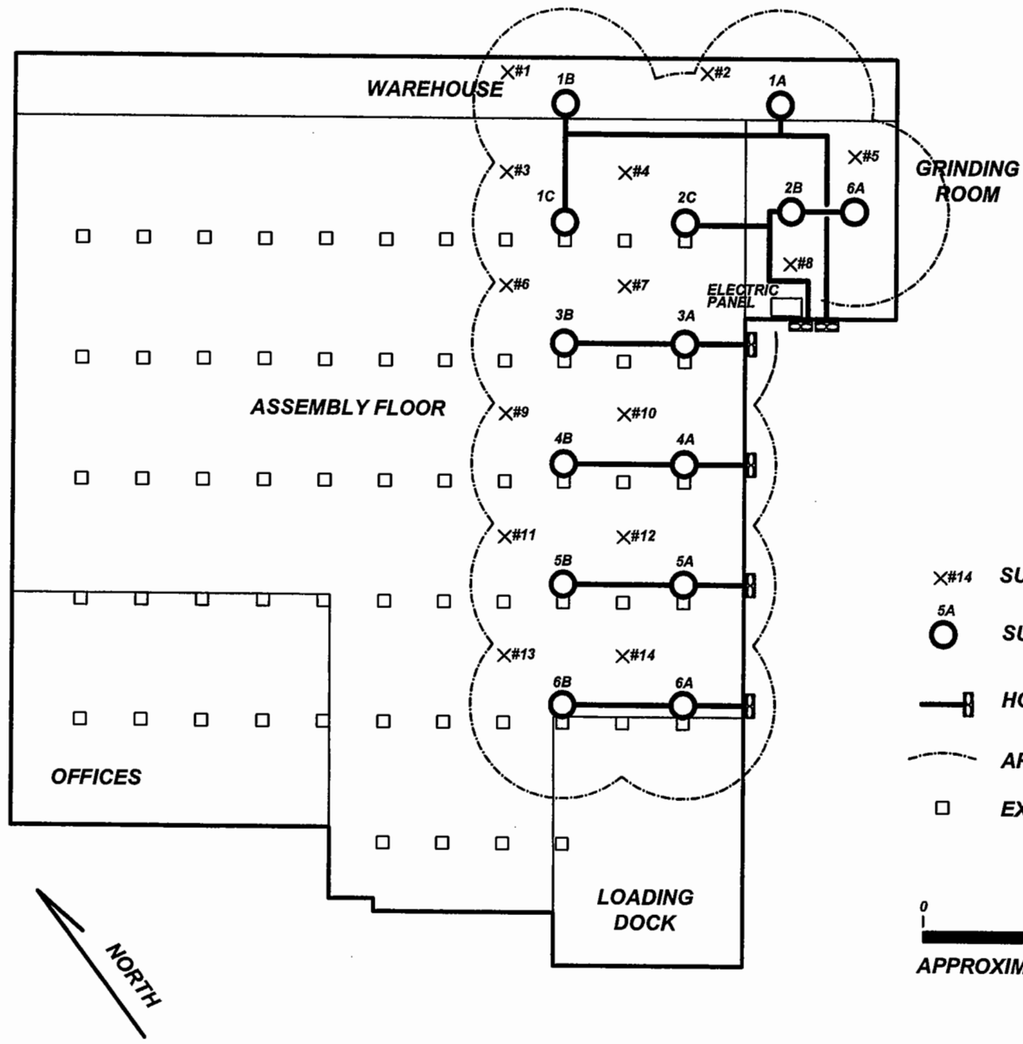


APPROXIMATE SCALE IN FEET

NOTE: SEE DATA SUMMARY TABLES FOR ADDITIONAL ANALYTICAL RESULTS

RETEC

Ward Products Site Amsterdam, NY NWR0-15852-300				INDOOR AIR, SOIL VAPOR, AND SUB-SLAB SOIL SAMPLING LOCATIONS	
DATE: 02/28/06	DRWN: MRH	FILE:		LAYOUT:	FIGURE 2



#14 SUB-SLAB COMMUNICATION TEST POINT

5A SUB-SLAB SUCTION POINT AND VERTICAL VENT PIPE

HORIZONTAL VENT PIPE AND FAN

APPROXIMATE ZONE OF INFLUENCE

EXISTING STRUCTURAL SUPPORT COLUMNS

0 50 100

APPROXIMATE SCALE IN FEET

RETEC

Ward Products Site Amsterdam, NY NWR0-15852-700			AS-BUILT INDOOR AIR AND SOIL VAPOR MITIGATION SYSTEM	
DATE: 02/28/06	DRWN: MRH	FILE:	LAYOUT:	FIGURE 3

APPENDIX A

Pre- and Post IRM Analytical Data Summary Table

Summary and Comparison of Indoor and Ambient Air Sampling Results

Former Ward Products Site
Sample Date - January 21, 2005 (Pre-IRM) and January 20, 2006 (Post-IRM)

Compound	CAS#	Units	Results ppbv									DOH Draft Air Guidance
			Assembly Floor		Grinding Room		Warehouse		Ambient			
			IA-1 2005	IA-1B 2006	IA-2 2005	IA-2B 2006	IA-3 2005	IA-3B 2006	Upwind 2005	Upwind 2006	Downwind 2006	
1-1 Dichloroethene	75-35-4	ppbv	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15	NL
Carbon Tetrachloride	56-23-5	ppbv	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15	0.09	0.09	NL
Chloroform	67-66-3	ppbv	0.19	< 0.15	0.10	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15	NL
cis-1,2-Dichloroethene	156-59-2	ppbv	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15	NL
Tetrachloroethene	127-18-4	ppbv	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15	0.15	< 0.15	14.5
Trichloroethene	79-01-6	ppbv	1.5	0.36	2.4	0.22	1.2	0.30	< 0.15	< 0.04	< 0.04	0.92

Compound	CAS#	Units	Results ug/M^3									DOH Draft Air Guidance
			Assembly Floor		Grinding Room		Warehouse		Ambient			
			IA-1 2005	IA-1B 2006	IA-2 2005	IA-2B 2006	IA-3 2005	IA-3B 2006	Upwind 2005	Upwind 2006	Downwind 2006	
1-1 Dichloroethene	75-35-4	ug/M^3	< 0.60	< 0.60	< 0.60	< 0.60	< 0.60	< 0.60	< 0.60	< 0.60	< 0.60	NL
Carbon Tetrachloride	56-23-5	ug/M^3	< 0.96	< 0.96	< 0.96	< 0.96	< 0.96	< 0.96	< 0.96	0.58	0.58	NL
Chloroform	67-66-3	ug/M^3	0.94	< 0.74	0.65	< 0.74	< 0.74	< 0.74	< 0.74	< 0.74	< 0.74	NL
cis-1,2-Dichloroethene	156-59-2	ug/M^3	< 0.60	< 0.60	< 0.60	< 0.60	< 0.60	< 0.60	< 0.60	< 0.60	< 0.60	NL
Tetrachloroethene	127-18-4	ug/M^3	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	1.03	< 1.0	100
Trichloroethene	79-01-6	ug/M^3	8.4	1.97	13	1.20	6.4	1.64	< 0.82	< 0.22	< 0.22	5

Notes:
NL Not Listed

APPENDIX B

System Performance Testing

Data Summary Table

Performance Testing Results

Ward Products Indoor Air IRM

Suction Point	TCE (ppm) [1] October 2005	TCE (ppm) [1] January 2006	Vacuum (inches H_2O) [2] October 2005	Flow (approx. cfm) [3] October 2005	Vacuum (inches H_2O) [2] January 2006	Flow (approx. cfm) [3] January 2006
1A	< 0.125	< 0.125	3.5	30	3.25	45
1B	< 0.125	< 0.125				
1C	0.13	< 0.125				
2A	< 0.125	< 0.125	2.25	75	2.25	75
2B	0.50	0.25				
2C	0.30	0.13				
3A	2.8	0.50	3.5	30	3.25	45
3B	2.0	0.60				
4A	0.30	< 0.125	3.75	20	3.75	20
4B	1.3	0.50				
5A	< 0.125	< 0.125	3.25	45	2.75	60
5B	0.20	< 0.125				
6A	< 0.125	< 0.125	0.25	> 100	0.25	> 100
6B	< 0.125	< 0.125				

Communication Test Point	Vacuum (inches H_2O) Oct '05, Pre-IRM	Vacuum (inches H_2O) Oct '05, Post-IRM
#1	0.000	0.000
#2	0.000	0.000
#3	0.000	0.004
#4	0.000	0.010
#5	0.000	0.077
#6	0.000	0.068
#7	0.000	0.016
#8	0.000	0.144
#9	0.000	0.168
#10	0.000	0.561
#11	0.000	0.088
#12	0.000	0.100
#13	0.000	0.144
#14	0.000	0.144

Notes:

[1] From colorimetric tubes

[2] From system manometers

[3] From manufacturer's fan curve

1ppm = 5.37 mg/M3 = 5,370 ug/M3

See Figures for Point Locations.

APPENDIX C

Post-IRM Laboratory Report - Air

Centek Laboratories, LLC

Date: *30-Jan-06*

CLIENT:	The RETEC Group, Inc.	**Client Sample ID:**	AA-1B
Lab Order:	C0601009	**Tag Number:**	138
Project:	Ward Products	**Collection Date:**	1/20/2006
Lab ID:	C0601009-001A	**Matrix:**	AIR

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.25UG/M3 TCE BY METHOD TO15		**TO-15**				Analyst: **LL**
1,1,1-Trichloroethane	ND	0.832		ug/m3	1	1/24/2006
1,1,2,2-Tetrachloroethane	ND	1.05		ug/m3	1	1/24/2006
1,1,2-Trichloroethane	ND	0.832		ug/m3	1	1/24/2006
1,1-Dichloroethane	ND	0.617		ug/m3	1	1/24/2006
1,1-Dichloroethene	ND	0.605		ug/m3	1	1/24/2006
1,2,4-Trichlorobenzene	ND	1.13		ug/m3	1	1/24/2006
1,2,4-Trimethylbenzene	0.700	0.749	J	ug/m3	1	1/24/2006
1,2-Dibromoethane	ND	1.17		ug/m3	1	1/24/2006
1,2-Dichlorobenzene	ND	0.917		ug/m3	1	1/24/2006
1,2-Dichloroethane	ND	0.617		ug/m3	1	1/24/2006
1,2-Dichloropropane	ND	0.705		ug/m3	1	1/24/2006
1,3,5-Trimethylbenzene	0.450	0.750	J	ug/m3	1	1/24/2006
1,3-butadiene	ND	0.337		ug/m3	1	1/24/2006
1,3-Dichlorobenzene	ND	0.917		ug/m3	1	1/24/2006
1,4-Dichlorobenzene	ND	0.917		ug/m3	1	1/24/2006
1,4-Dioxane	ND	1.10		ug/m3	1	1/24/2006
2,2,4-trimethylpentane	ND	0.712		ug/m3	1	1/24/2006
4-ethyltoluene	ND	0.750		ug/m3	1	1/24/2006
Acetone	21.0	7.24		ug/m3	10	1/24/2006
Allyl chloride	ND	0.477		ug/m3	1	1/24/2006
Benzene	0.877	0.487		ug/m3	1	1/24/2006
Benzyl chloride	ND	0.877		ug/m3	1	1/24/2006
Bromodichloromethane	ND	1.02		ug/m3	1	1/24/2006
Bromoform	ND	1.58		ug/m3	1	1/24/2006
Bromomethane	ND	0.592		ug/m3	1	1/24/2006
Carbon disulfide	ND	0.475		ug/m3	1	1/24/2006
Carbon tetrachloride	0.576	0.959	J	ug/m3	1	1/24/2006
Chlorobenzene	ND	0.702		ug/m3	1	1/24/2006
Chloroethane	ND	0.402		ug/m3	1	1/24/2006
Chloroform	ND	0.744		ug/m3	1	1/24/2006
Chloromethane	0.945	0.315		ug/m3	1	1/24/2006
cis-1,2-Dichloroethene	ND	0.604		ug/m3	1	1/24/2006
cis-1,3-Dichloropropene	ND	0.692		ug/m3	1	1/24/2006
Cyclohexane	ND	0.525		ug/m3	1	1/24/2006
Dibromochloromethane	ND	1.30		ug/m3	1	1/24/2006
Ethyl acetate	ND	0.916		ug/m3	1	1/24/2006
Ethylbenzene	ND	0.662		ug/m3	1	1/24/2006
Freon 11	1.54	0.857		ug/m3	1	1/24/2006
Freon 113	ND	1.17		ug/m3	1	1/24/2006
Freon 114	ND	1.07		ug/m3	1	1/24/2006

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected at or below quantitation limits
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *30-Jan-06*

CLIENT:	The RETEC Group, Inc.	**Client Sample ID:**	AA-1B
Lab Order:	C0601009	**Tag Number:**	138
Project:	Ward Products	**Collection Date:**	1/20/2006
Lab ID:	C0601009-001A	**Matrix:**	AIR

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.25UG/M3 TCE BY METHOD TO15		**TO-15**				Analyst: **LL**
Freon 12	2.71	0.754		ug/m3	1	1/24/2006
Heptane	0.583	0.625	J	ug/m3	1	1/24/2006
Hexachloro-1,3-butadiene	ND	1.63		ug/m3	1	1/24/2006
Hexane	0.896	0.537		ug/m3	1	1/24/2006
Isopropyl alcohol	3.05	0.375		ug/m3	1	1/24/2006
m&p-Xylene	1.15	1.32	J	ug/m3	1	1/24/2006
Methyl Butyl Ketone	ND	1.25		ug/m3	1	1/24/2006
Methyl Ethyl Ketone	1.83	0.899		ug/m3	1	1/24/2006
Methyl Isobutyl Ketone	ND	1.25		ug/m3	1	1/24/2006
Methyl tert-butyl ether	ND	0.550		ug/m3	1	1/24/2006
Methylene chloride	0.424	0.530	J	ug/m3	1	1/24/2006
o-Xylene	0.485	0.662	J	ug/m3	1	1/24/2006
Propylene	ND	0.262		ug/m3	1	1/24/2006
Styrene	ND	0.649		ug/m3	1	1/24/2006
Tetrachloroethylene	1.03	1.03		ug/m3	1	1/24/2006
Tetrahydrofuran	0.450	0.450		ug/m3	1	1/24/2006
Toluene	2.22	0.575		ug/m3	1	1/24/2006
trans-1,2-Dichloroethene	ND	0.604		ug/m3	1	1/24/2006
trans-1,3-Dichloropropene	ND	0.692		ug/m3	1	1/24/2006
Trichloroethene	ND	0.218		ug/m3	1	1/24/2006
Vinyl acetate	ND	0.537		ug/m3	1	1/24/2006
Vinyl Bromide	ND	0.667		ug/m3	1	1/24/2006
Vinyl chloride	ND	0.390		ug/m3	1	1/24/2006

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected at or below quantitation limits
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *30-Jan-06*

CLIENT:	The RETEC Group, Inc.	**Client Sample ID:**	AA-2B
Lab Order:	C0601009	**Tag Number:**	275
Project:	Ward Products	**Collection Date:**	1/20/2006
Lab ID:	C0601009-002A	**Matrix:**	AIR

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.25UG/M3 TCE BY METHOD TO15		**TO-15**				Analyst: **LL**
1,1,1-Trichloroethane	ND	0.832		ug/m3	1	1/24/2006
1,1,2,2-Tetrachloroethane	ND	1.05		ug/m3	1	1/24/2006
1,1,2-Trichloroethane	ND	0.832		ug/m3	1	1/24/2006
1,1-Dichloroethane	ND	0.617		ug/m3	1	1/24/2006
1,1-Dichloroethene	ND	0.605		ug/m3	1	1/24/2006
1,2,4-Trichlorobenzene	ND	1.13		ug/m3	1	1/24/2006
1,2,4-Trimethylbenzene	ND	0.749		ug/m3	1	1/24/2006
1,2-Dibromoethane	ND	1.17		ug/m3	1	1/24/2006
1,2-Dichlorobenzene	ND	0.917		ug/m3	1	1/24/2006
1,2-Dichloroethane	ND	0.617		ug/m3	1	1/24/2006
1,2-Dichloropropane	ND	0.705		ug/m3	1	1/24/2006
1,3,5-Trimethylbenzene	ND	0.750		ug/m3	1	1/24/2006
1,3-butadiene	ND	0.337		ug/m3	1	1/24/2006
1,3-Dichlorobenzene	ND	0.917		ug/m3	1	1/24/2006
1,4-Dichlorobenzene	ND	0.917		ug/m3	1	1/24/2006
1,4-Dioxane	ND	1.10		ug/m3	1	1/24/2006
2,2,4-trimethylpentane	ND	0.712		ug/m3	1	1/24/2006
4-ethyltoluene	ND	0.750		ug/m3	1	1/24/2006
Acetone	14.5	7.24		ug/m3	10	1/24/2006
Allyl chloride	ND	0.477		ug/m3	1	1/24/2006
Benzene	0.747	0.487		ug/m3	1	1/24/2006
Benzyl chloride	ND	0.877		ug/m3	1	1/24/2006
Bromodichloromethane	ND	1.02		ug/m3	1	1/24/2006
Bromoform	ND	1.58		ug/m3	1	1/24/2006
Bromomethane	ND	0.592		ug/m3	1	1/24/2006
Carbon disulfide	ND	0.475		ug/m3	1	1/24/2006
Carbon tetrachloride	0.576	0.959	J	ug/m3	1	1/24/2006
Chlorobenzene	ND	0.702		ug/m3	1	1/24/2006
Chloroethane	ND	0.402		ug/m3	1	1/24/2006
Chloroform	ND	0.744		ug/m3	1	1/24/2006
Chloromethane	0.798	0.315		ug/m3	1	1/24/2006
cis-1,2-Dichloroethene	ND	0.604		ug/m3	1	1/24/2006
cis-1,3-Dichloropropene	ND	0.692		ug/m3	1	1/24/2006
Cyclohexane	ND	0.525		ug/m3	1	1/24/2006
Dibromochloromethane	ND	1.30		ug/m3	1	1/24/2006
Ethyl acetate	ND	0.916		ug/m3	1	1/24/2006
Ethylbenzene	ND	0.662		ug/m3	1	1/24/2006
Freon 11	1.31	0.857		ug/m3	1	1/24/2006
Freon 113	ND	1.17		ug/m3	1	1/24/2006
Freon 114	ND	1.07		ug/m3	1	1/24/2006

Qualifiers:

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- J Analyte detected at or below quantitation limits
- JN Non-routine analyte. Quantitation estimated.
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Centek Laboratories, LLC

Date: *30-Jan-06*

CLIENT:	The RETEC Group, Inc.	**Client Sample ID:**	AA-2B
Lab Order:	C0601009	**Tag Number:**	275
Project:	Ward Products	**Collection Date:**	1/20/2006
Lab ID:	C0601009-002A	**Matrix:**	AIR

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.25UG/M3 TCE BY METHOD TO15		**TO-15**				Analyst: **LL**
Freon 12	2.71	0.754		ug/m3	1	1/24/2006
Heptane	0.500	0.625	J	ug/m3	1	1/24/2006
Hexachloro-1,3-butadiene	ND	1.63		ug/m3	1	1/24/2006
Hexane	0.537	0.537		ug/m3	1	1/24/2006
Isopropyl alcohol	1.17	0.375		ug/m3	1	1/24/2006
m&p-Xylene	0.971	1.32	J	ug/m3	1	1/24/2006
Methyl Butyl Ketone	ND	1.25		ug/m3	1	1/24/2006
Methyl Ethyl Ketone	1.17	0.899		ug/m3	1	1/24/2006
Methyl Isobutyl Ketone	ND	1.25		ug/m3	1	1/24/2006
Methyl tert-butyl ether	ND	0.550		ug/m3	1	1/24/2006
Methylene chloride	0.353	0.530	J	ug/m3	1	1/24/2006
o-Xylene	0.441	0.662	J	ug/m3	1	1/24/2006
Propylene	ND	0.262		ug/m3	1	1/24/2006
Styrene	ND	0.649		ug/m3	1	1/24/2006
Tetrachloroethylene	ND	1.03		ug/m3	1	1/24/2006
Tetrahydrofuran	ND	0.450		ug/m3	1	1/24/2006
Toluene	1.95	0.575		ug/m3	1	1/24/2006
trans-1,2-Dichloroethene	ND	0.604		ug/m3	1	1/24/2006
trans-1,3-Dichloropropene	ND	0.692		ug/m3	1	1/24/2006
Trichloroethene	ND	0.218		ug/m3	1	1/24/2006
Vinyl acetate	ND	0.537		ug/m3	1	1/24/2006
Vinyl Bromide	ND	0.667		ug/m3	1	1/24/2006
Vinyl chloride	ND	0.390		ug/m3	1	1/24/2006

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected at or below quantitation limits
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *30-Jan-06*

CLIENT:	The RETEC Group, Inc.	**Client Sample ID:**	IA-1B
Lab Order:	C0601009	**Tag Number:**	102
Project:	Ward Products	**Collection Date:**	1/20/2006
Lab ID:	C0601009-003A	**Matrix:**	AIR

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.25UG/M3 TCE BY METHOD TO15		**TO-15**				Analyst: LL
1,1,1-Trichloroethane	ND	0.832		ug/m3	1	1/24/2006
1,1,2,2-Tetrachloroethane	ND	1.05		ug/m3	1	1/24/2006
1,1,2-Trichloroethane	ND	0.832		ug/m3	1	1/24/2006
1,1-Dichloroethane	ND	0.617		ug/m3	1	1/24/2006
1,1-Dichloroethene	ND	0.605		ug/m3	1	1/24/2006
1,2,4-Trichlorobenzene	ND	1.13		ug/m3	1	1/24/2006
1,2,4-Trimethylbenzene	1.60	0.749		ug/m3	1	1/24/2006
1,2-Dibromoethane	ND	1.17		ug/m3	1	1/24/2006
1,2-Dichlorobenzene	ND	0.917		ug/m3	1	1/24/2006
1,2-Dichloroethane	ND	0.617		ug/m3	1	1/24/2006
1,2-Dichloropropane	ND	0.705		ug/m3	1	1/24/2006
1,3,5-Trimethylbenzene	0.849	0.750		ug/m3	1	1/24/2006
1,3-butadiene	ND	0.337		ug/m3	1	1/24/2006
1,3-Dichlorobenzene	ND	0.917		ug/m3	1	1/24/2006
1,4-Dichlorobenzene	36.1	9.17		ug/m3	10	1/24/2006
1,4-Dioxane	ND	1.10		ug/m3	1	1/24/2006
2,2,4-trimethylpentane	ND	0.712		ug/m3	1	1/24/2006
4-ethyltoluene	ND	0.750		ug/m3	1	1/24/2006
Acetone	14.7	7.24		ug/m3	10	1/24/2006
Allyl chloride	ND	0.477		ug/m3	1	1/24/2006
Benzene	0.942	0.487		ug/m3	1	1/24/2006
Benzyl chloride	ND	0.877		ug/m3	1	1/24/2006
Bromodichloromethane	ND	1.02		ug/m3	1	1/24/2006
Bromoform	ND	1.58		ug/m3	1	1/24/2006
Bromomethane	ND	0.592		ug/m3	1	1/24/2006
Carbon disulfide	ND	0.475		ug/m3	1	1/24/2006
Carbon tetrachloride	ND	0.959		ug/m3	1	1/24/2006
Chlorobenzene	ND	0.702		ug/m3	1	1/24/2006
Chloroethane	ND	0.402		ug/m3	1	1/24/2006
Chloroform	ND	0.744		ug/m3	1	1/24/2006
Chloromethane	0.798	0.315		ug/m3	1	1/24/2006
cis-1,2-Dichloroethene	ND	0.604		ug/m3	1	1/24/2006
cis-1,3-Dichloropropene	ND	0.692		ug/m3	1	1/24/2006
Cyclohexane	ND	0.525		ug/m3	1	1/24/2006
Dibromochloromethane	ND	1.30		ug/m3	1	1/24/2006
Ethyl acetate	1.06	0.916		ug/m3	1	1/24/2006
Ethylbenzene	0.618	0.662	J	ug/m3	1	1/24/2006
Freon 11	17.7	8.57		ug/m3	10	1/24/2006
Freon 113	ND	1.17		ug/m3	1	1/24/2006
Freon 114	ND	1.07		ug/m3	1	1/24/2006

Qualifiers:

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- J Analyte detected at or below quantitation limits
- JN Non-routine analyte. Quantitation estimated.
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Centek Laboratories, LLC

Date: *30-Jan-06*

CLIENT:	The RETEC Group, Inc.	**Client Sample ID:**	IA-1B
Lab Order:	C0601009	**Tag Number:**	102
Project:	Ward Products	**Collection Date:**	1/20/2006
Lab ID:	C0601009-003A	**Matrix:**	AIR

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.25UG/M3 TCE BY METHOD TO15		**TO-15**				Analyst: **LL**
Freon 12	2.61	0.754		ug/m3	1	1/24/2006
Heptane	0.958	0.625		ug/m3	1	1/24/2006
Hexachloro-1,3-butadiene	ND	1.63		ug/m3	1	1/24/2006
Hexane	1.07	0.537		ug/m3	1	1/24/2006
Isopropyl alcohol	1550	120		ug/m3	320	1/25/2006
m&p-Xylene	1.94	1.32		ug/m3	1	1/24/2006
Methyl Butyl Ketone	ND	1.25		ug/m3	1	1/24/2006
Methyl Ethyl Ketone	9.89	8.99		ug/m3	10	1/24/2006
Methyl Isobutyl Ketone	0.666	1.25	J	ug/m3	1	1/24/2006
Methyl tert-butyl ether	ND	0.550		ug/m3	1	1/24/2006
Methylene chloride	1.06	0.530		ug/m3	1	1/24/2006
o-Xylene	0.794	0.662		ug/m3	1	1/24/2006
Propylene	ND	0.262		ug/m3	1	1/24/2006
Styrene	ND	0.649		ug/m3	1	1/24/2006
Tetrachloroethylene	ND	1.03		ug/m3	1	1/24/2006
Tetrahydrofuran	0.809	0.450		ug/m3	1	1/24/2006
Toluene	3.22	0.575		ug/m3	1	1/24/2006
trans-1,2-Dichloroethene	ND	0.604		ug/m3	1	1/24/2006
trans-1,3-Dichloropropene	ND	0.692		ug/m3	1	1/24/2006
Trichloroethene	1.97	0.218		ug/m3	1	1/24/2006
Vinyl acetate	ND	0.537		ug/m3	1	1/24/2006
Vinyl Bromide	ND	0.667		ug/m3	1	1/24/2006
Vinyl chloride	ND	0.390		ug/m3	1	1/24/2006

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected at or below quantitation limits
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *30-Jan-06*

CLIENT:	The RETEC Group, Inc.	**Client Sample ID:**	IA-2B
Lab Order:	C0601009	**Tag Number:**	231
Project:	Ward Products	**Collection Date:**	1/20/2006
Lab ID:	C0601009-004A	**Matrix:**	AIR

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.25UG/M3 TCE BY METHOD TO15		**TO-15**				Analyst: **LL**
1,1,1-Trichloroethane	ND	0.832		ug/m3	1	1/24/2006
1,1,2,2-Tetrachloroethane	ND	1.05		ug/m3	1	1/24/2006
1,1,2-Trichloroethane	ND	0.832		ug/m3	1	1/24/2006
1,1-Dichloroethane	ND	0.617		ug/m3	1	1/24/2006
1,1-Dichloroethene	ND	0.605		ug/m3	1	1/24/2006
1,2,4-Trichlorobenzene	ND	1.13		ug/m3	1	1/24/2006
1,2,4-Trimethylbenzene	1.10	0.749		ug/m3	1	1/24/2006
1,2-Dibromoethane	ND	1.17		ug/m3	1	1/24/2006
1,2-Dichlorobenzene	ND	0.917		ug/m3	1	1/24/2006
1,2-Dichloroethane	ND	0.617		ug/m3	1	1/24/2006
1,2-Dichloropropane	ND	0.705		ug/m3	1	1/24/2006
1,3,5-Trimethylbenzene	0.600	0.750	J	ug/m3	1	1/24/2006
1,3-butadiene	ND	0.337		ug/m3	1	1/24/2006
1,3-Dichlorobenzene	ND	0.917		ug/m3	1	1/24/2006
1,4-Dichlorobenzene	12.8	9.17		ug/m3	10	1/24/2006
1,4-Dioxane	ND	1.10		ug/m3	1	1/24/2006
2,2,4-trimethylpentane	ND	0.712		ug/m3	1	1/24/2006
4-ethyltoluene	ND	0.750		ug/m3	1	1/24/2006
Acetone	12.6	7.24		ug/m3	10	1/24/2006
Allyl chloride	ND	0.477		ug/m3	1	1/24/2006
Benzene	0.812	0.487		ug/m3	1	1/24/2006
Benzyl chloride	ND	0.877		ug/m3	1	1/24/2006
Bromodichloromethane	ND	1.02		ug/m3	1	1/24/2006
Bromoform	ND	1.58		ug/m3	1	1/24/2006
Bromomethane	ND	0.592		ug/m3	1	1/24/2006
Carbon disulfide	ND	0.475		ug/m3	1	1/24/2006
Carbon tetrachloride	ND	0.959		ug/m3	1	1/24/2006
Chlorobenzene	ND	0.702		ug/m3	1	1/24/2006
Chloroethane	ND	0.402		ug/m3	1	1/24/2006
Chloroform	ND	0.744		ug/m3	1	1/24/2006
Chloromethane	0.882	0.315		ug/m3	1	1/24/2006
cis-1,2-Dichloroethene	ND	0.604		ug/m3	1	1/24/2006
cis-1,3-Dichloropropene	ND	0.692		ug/m3	1	1/24/2006
Cyclohexane	0.385	0.525	J	ug/m3	1	1/24/2006
Dibromochloromethane	ND	1.30		ug/m3	1	1/24/2006
Ethyl acetate	0.476	0.916	J	ug/m3	1	1/24/2006
Ethylbenzene	0.397	0.662	J	ug/m3	1	1/24/2006
Freon 11	7.94	0.857		ug/m3	1	1/24/2006
Freon 113	ND	1.17		ug/m3	1	1/24/2006
Freon 114	ND	1.07		ug/m3	1	1/24/2006

Qualifiers:

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- J Analyte detected at or below quantitation limits
- JN Non-routine analyte. Quantitation estimated.
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Centek Laboratories, LLC

Date: *30-Jan-06*

CLIENT:	The RETEC Group, Inc.	**Client Sample ID:**	IA-2B
Lab Order:	C0601009	**Tag Number:**	231
Project:	Ward Products	**Collection Date:**	1/20/2006
Lab ID:	C0601009-004A	**Matrix:**	AIR

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.25UG/M3 TCE BY METHOD TO15		**TO-15**				Analyst: **LL**
Freon 12	2.76	0.754		ug/m3	1	1/24/2006
Heptane	0.916	0.625		ug/m3	1	1/24/2006
Hexachloro-1,3-butadiene	ND	1.63		ug/m3	1	1/24/2006
Hexane	0.967	0.537		ug/m3	1	1/24/2006
Isopropyl alcohol	915	60.0		ug/m3	160	1/25/2006
m&p-Xylene	1.24	1.32	J	ug/m3	1	1/24/2006
Methyl Butyl Ketone	ND	1.25		ug/m3	1	1/24/2006
Methyl Ethyl Ketone	2.22	0.899		ug/m3	1	1/24/2006
Methyl Isobutyl Ketone	ND	1.25		ug/m3	1	1/24/2006
Methyl tert-butyl ether	ND	0.550		ug/m3	1	1/24/2006
Methylene chloride	0.600	0.530		ug/m3	1	1/24/2006
o-Xylene	0.530	0.662	J	ug/m3	1	1/24/2006
Propylene	ND	0.262		ug/m3	1	1/24/2006
Styrene	ND	0.649		ug/m3	1	1/24/2006
Tetrachloroethylene	ND	1.03		ug/m3	1	1/24/2006
Tetrahydrofuran	0.390	0.450	J	ug/m3	1	1/24/2006
Toluene	3.22	0.575		ug/m3	1	1/24/2006
trans-1,2-Dichloroethene	ND	0.604		ug/m3	1	1/24/2006
trans-1,3-Dichloropropene	ND	0.692		ug/m3	1	1/24/2006
Trichloroethene	1.20	0.218		ug/m3	1	1/24/2006
Vinyl acetate	ND	0.537		ug/m3	1	1/24/2006
Vinyl Bromide	ND	0.667		ug/m3	1	1/24/2006
Vinyl chloride	ND	0.390		ug/m3	1	1/24/2006

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected at or below quantitation limits
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *30-Jan-06*

CLIENT:	The RETEC Group, Inc.	**Client Sample ID:**	IA-3B
Lab Order:	C0601009	**Tag Number:**	209
Project:	Ward Products	**Collection Date:**	1/20/2006
Lab ID:	C0601009-005A	**Matrix:**	AIR

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.25UG/M3 TCE BY METHOD TO15		**TO-15**				Analyst: **LL**
1,1,1-Trichloroethane	ND	0.832		ug/m3	1	1/24/2006
1,1,2,2-Tetrachloroethane	ND	1.05		ug/m3	1	1/24/2006
1,1,2-Trichloroethane	ND	0.832		ug/m3	1	1/24/2006
1,1-Dichloroethane	ND	0.617		ug/m3	1	1/24/2006
1,1-Dichloroethene	ND	0.605		ug/m3	1	1/24/2006
1,2,4-Trichlorobenzene	ND	1.13		ug/m3	1	1/24/2006
1,2,4-Trimethylbenzene	1.60	0.749		ug/m3	1	1/24/2006
1,2-Dibromoethane	ND	1.17		ug/m3	1	1/24/2006
1,2-Dichlorobenzene	ND	0.917		ug/m3	1	1/24/2006
1,2-Dichloroethane	ND	0.617		ug/m3	1	1/24/2006
1,2-Dichloropropane	ND	0.705		ug/m3	1	1/24/2006
1,3,5-Trimethylbenzene	0.650	0.750	J	ug/m3	1	1/24/2006
1,3-butadiene	ND	0.337		ug/m3	1	1/24/2006
1,3-Dichlorobenzene	ND	0.917		ug/m3	1	1/24/2006
1,4-Dichlorobenzene	34.2	9.17		ug/m3	10	1/24/2006
1,4-Dioxane	ND	1.10		ug/m3	1	1/24/2006
2,2,4-trimethylpentane	ND	0.712		ug/m3	1	1/24/2006
4-ethyltoluene	ND	0.750		ug/m3	1	1/24/2006
Acetone	15.7	7.24		ug/m3	10	1/24/2006
Allyl chloride	ND	0.477		ug/m3	1	1/24/2006
Benzene	0.909	0.487		ug/m3	1	1/24/2006
Benzyl chloride	ND	0.877		ug/m3	1	1/24/2006
Bromodichloromethane	ND	1.02		ug/m3	1	1/24/2006
Bromoform	ND	1.58		ug/m3	1	1/24/2006
Bromomethane	ND	0.592		ug/m3	1	1/24/2006
Carbon disulfide	ND	0.475		ug/m3	1	1/24/2006
Carbon tetrachloride	ND	0.959		ug/m3	1	1/24/2006
Chlorobenzene	ND	0.702		ug/m3	1	1/24/2006
Chloroethane	ND	0.402		ug/m3	1	1/24/2006
Chloroform	ND	0.744		ug/m3	1	1/24/2006
Chloromethane	0.903	0.315		ug/m3	1	1/24/2006
cis-1,2-Dichloroethene	ND	0.604		ug/m3	1	1/24/2006
cis-1,3-Dichloropropene	ND	0.692		ug/m3	1	1/24/2006
Cyclohexane	1.12	0.525		ug/m3	1	1/24/2006
Dibromochloromethane	ND	1.30		ug/m3	1	1/24/2006
Ethyl acetate	0.733	0.916	J	ug/m3	1	1/24/2006
Ethylbenzene	0.574	0.662	J	ug/m3	1	1/24/2006
Freon 11	17.7	8.57		ug/m3	10	1/24/2006
Freon 113	ND	1.17		ug/m3	1	1/24/2006
Freon 114	ND	1.07		ug/m3	1	1/24/2006

Qualifiers:

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- J Analyte detected at or below quantitation limits
- JN Non-routine analyte. Quantitation estimated.
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Centek Laboratories, LLC

Date: *30-Jan-06*

CLIENT:	The RETEC Group, Inc.	**Client Sample ID:**	IA-3B
Lab Order:	C0601009	**Tag Number:**	209
Project:	Ward Products	**Collection Date:**	1/20/2006
Lab ID:	C0601009-005A	**Matrix:**	AIR

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.25UG/M3 TCE BY METHOD TO15		**TO-15**				Analyst: **LL**
Freon 12	2.66	0.754		ug/m3	1	1/24/2006
Heptane	0.875	0.625		ug/m3	1	1/24/2006
Hexachloro-1,3-butadiene	ND	1.63		ug/m3	1	1/24/2006
Hexane	0.860	0.537		ug/m3	1	1/24/2006
Isopropyl alcohol	1790	120		ug/m3	320	1/24/2006
m&p-Xylene	1.90	1.32		ug/m3	1	1/24/2006
Methyl Butyl Ketone	ND	1.25		ug/m3	1	1/24/2006
Methyl Ethyl Ketone	1.89	0.899		ug/m3	1	1/24/2006
Methyl Isobutyl Ketone	0.500	1.25	J	ug/m3	1	1/24/2006
Methyl tert-butyl ether	ND	0.550		ug/m3	1	1/24/2006
Methylene chloride	1.20	0.530		ug/m3	1	1/24/2006
o-Xylene	0.750	0.662		ug/m3	1	1/24/2006
Propylene	ND	0.262		ug/m3	1	1/24/2006
Styrene	ND	0.649		ug/m3	1	1/24/2006
Tetrachloroethylene	ND	1.03		ug/m3	1	1/24/2006
Tetrahydrofuran	0.510	0.450		ug/m3	1	1/24/2006
Toluene	3.03	0.575		ug/m3	1	1/24/2006
trans-1,2-Dichloroethene	ND	0.604		ug/m3	1	1/24/2006
trans-1,3-Dichloropropene	ND	0.692		ug/m3	1	1/24/2006
Trichloroethene	1.64	0.218		ug/m3	1	1/24/2006
Vinyl acetate	0.716	0.537		ug/m3	1	1/24/2006
Vinyl Bromide	ND	0.667		ug/m3	1	1/24/2006
Vinyl chloride	ND	0.390		ug/m3	1	1/24/2006

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected at or below quantitation limits
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits		

APPENDIX D

Post-IRM Laboratory Report – Sub-Slab Soil

Adirondack Environmental Services, Inc

Date: *21-Nov-05*

CLIENT: RETEC
Work Order: 051107002
Project: Soil Analysis
PO#:
Project# : NWR01-15852-700

Client Sample ID: Sub Slab Composite
Collection Date: 10/1/2005
Lab Sample ID: 051107002-001
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
TCLP MERCURY SW1311/7470A(SW7470A)						Analyst: **KH**
Mercury-TCLP	< 0.020	0.020	H	mg/L	1	11/10/2005
TCLP ICP METALS SW6010B/1311(SW1311)						Analyst: **SM**
Arsenic-TCLP	< 0.050	0.050		mg/L	1	11/18/2005 3:14:00 PM
Barium-TCLP	0.21	0.10		mg/L	1	11/18/2005 3:14:00 PM
Cadmium-TCLP	0.071	0.050		mg/L	1	11/18/2005 3:14:00 PM
Chromium-TCLP	< 0.050	0.050		mg/L	1	11/18/2005 3:14:00 PM
Copper-TCLP	< 0.050	0.050		mg/L	1	11/18/2005 3:14:00 PM
Lead-TCLP	< 0.050	0.050		mg/L	1	11/18/2005 3:14:00 PM
Nickel-TCLP	< 0.20	0.20		mg/L	1	11/18/2005 3:14:00 PM
Selenium-TCLP	< 0.050	0.050		mg/L	1	11/18/2005 3:14:00 PM
Silver-TCLP	< 0.10	0.10		mg/L	1	11/18/2005 3:14:00 PM
Zinc-TCLP	0.11	0.10		mg/L	1	11/18/2005 3:14:00 PM
CYANIDE, TOTAL SW9012(E335.3)						Analyst: **RC**
Cyanide	< 0.5	0.5	H	µg/g	1	11/10/2005
HEXAVALENT CHROMIUM SW7196A						Analyst: **NB**
Chromium, Hexavalent	< 0.4	0.4	H	µg/g	1	11/8/2005
PH SW9045B						Analyst: **NB**
pH	10.2	1.0	H	pH Units	1	11/8/2005
CYANIDE, REACTIVE SW7.3.3.2(E335.3)						Analyst: **RC**
Reactive Cyanide	< 1.0	1.0	H	µg/g	1	11/15/2005

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
T - Tentitively Identified Compound-Estimated Conc.
E - Value above quantitation range

APPENDIX E

Project Photographs

Photo 1: Typical Vent Riser with Labels, Flow Valve, Manometer

Photo 2: Another Typical Vent Riser

Photo 3: Overhead Piping in Grinding Room (from warehouse)

Photo 4: Overhead Piping in Grinding Room (to exterior wall and fans)

Photo 5: Typical Floor Penetration (note brass sample port plug)

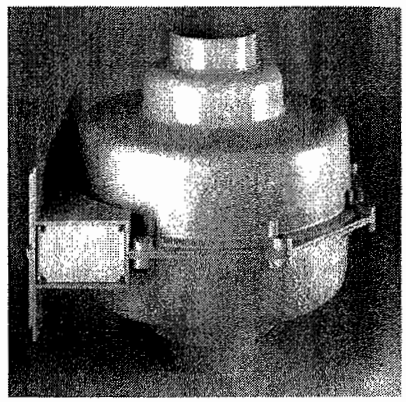
Photo 6: Vent Fans and Exhaust Stacks (total of six units)

APPENDIX F

Equipment Manufacturer’s Literature

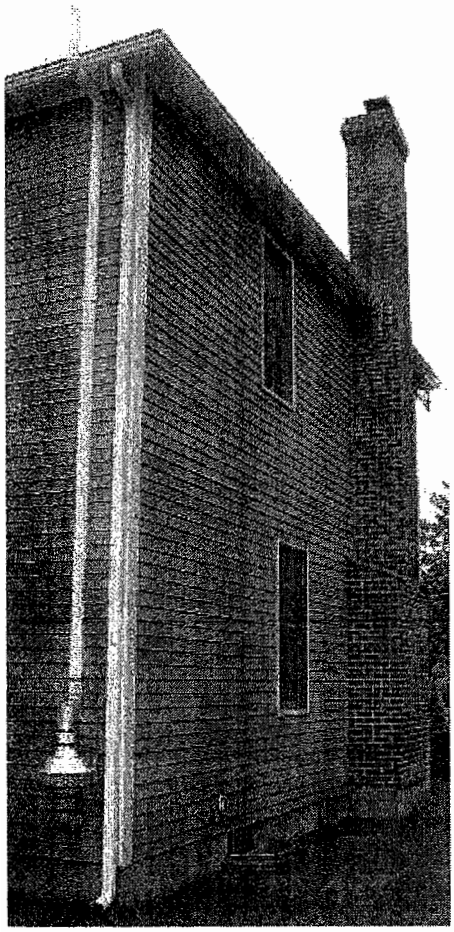
RadonAway™

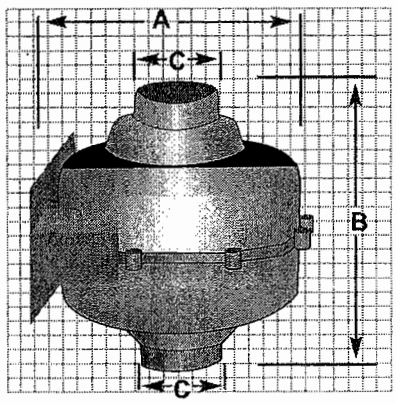
GP Series



Radon Mitigation Fans

Specially designed for radon mitigation, GP Series Fans provide a wide range of performance that makes them ideal for most subslab radon mitigation systems.





Conforms to UL STD. 507
77728
Cert. to CAN/CSA STD. C22.2 No.113

- **5-Year Warranty**
- **Mounts on duct pipe or with integral flange**
- **3" diameter ducts for use with 3" or 4" pipe**
- **Electrical box for hard wire or plug in**
- **ETL Listed - for indoor or outdoor use.**

Model	Dimensions		
	A	B	C Duct Size
GP series	12.5"	13"	3"

The following chart shows performance of GP Series fans:

Model	Watts	Maximum Pressure "WC	Typical CFM vs. Static Pressure WC						
			1.0"	1.5"	2.0"	2.5"	3.0"	3.5"	4.0"
GP201	40-60	2.0	82	58	5	-	-	-	-
GP301	55-90	2.6	92	77	45	10	-	-	-
GP401	60-110	3.4	93	82	60	40	15	-	-
→ GP501	70-140	4.2	95	87	80	70	57	30	10

Choice of model is dependent on certain building characteristics including sub-slab materials and should be made by a radon professional.

For Further Information Contact:

0902
P/N 02002

RadonAway™

INSTALLATION INSTRUCTION IN014 Rev D

DynaVac - XP/XR Series		DynaVac - GP Series	
XP101	p/n 23008-1,-2	GP201	p/n 23007-1
XP151	p/n 23010-1,-2	GP301	p/n 23006-1,-2
XP201	p/n 23011-1,-2	GP401	p/n 23009-1
XR161	p/n 23018-1,-2	GP501	p/n 23005-1,-2
XR261	p/n 23019-1,-2		

1.0 SYSTEM DESIGN CONSIDERATIONS

1.1 INTRODUCTION

The DynaVac GP/XP/XR Series Radon Fans are intended for use by trained, professional Radon mitigators. The purpose of this instruction is to provide additional guidance for the most effective use of a DynaVac Fan. This instruction should be considered as a supplement to EPA standard practices, state and local building codes and state regulations. In the event of a conflict, those codes, practices and regulations take precedence over this instruction.

1.2 ENVIRONMENTALS

The GP/XP/XR Series Fans are designed to perform year-round in all but the harshest climates without additional concern for temperature or weather. For installations in an area of severe cold weather, please contact RadonAway for assistance. When not in operation, the fan should be stored in an area where the temperature is never less than 32 degrees F. or more than 100 degrees F.

1.3 ACOUSTICS

The GP/XP/XR Series Fan, when installed properly, operates with little or no noticeable noise to the building occupants. The velocity of the outgoing air should be considered in the overall system design. In some cases the "rushing" sound of the outlet air may be disturbing. In these instances, the use of a RadonAway Exhaust Muffler is recommended.

1.4 GROUND WATER

In the event that a temporary high water table results in water at or above slab level, water may be drawn into the riser pipes thus blocking air flow to the GP/XP/XR Series Fan. The lack of cooling air may result in the fan cycling on and off as the internal temperature rises above the thermal cutoff and falls upon shutoff. Should this condition arise, it is recommended that the fan be turned off until the water recedes allowing for return to normal operation.

1.5 SLAB COVERAGE

The GP/XP/XR Series Fan can provide coverage up to 2000+ sq. ft. per slab penetration. This will primarily depend on the sub-slab material in any particular installation. In general, the tighter the material, the smaller the area covered per penetration. Appropriate selection of the GP/XP/XR Series Fan best suited for the sub-slab material can improve the slab coverage. The GP & XP series have a wide range of models to choose from to cover a wide range of subslab material. The higher static suction fans are generally used for tighter subslab materials. The XR Series is specifically designed for high flow applications such as stone/gravel and drain tile. Additional suction points can be added as required. It is recommended that a small pit (5 to 10 gallons in size) be created below the slab at each suction hole.

1.6 CONDENSATION & DRAINAGE

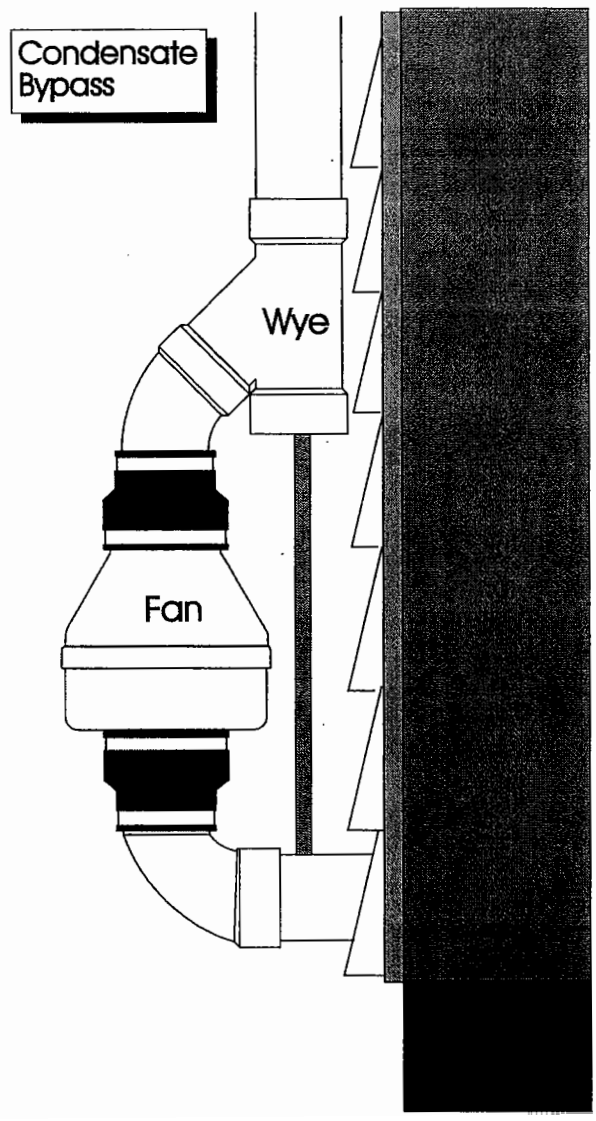
Condensation is formed in the piping of a mitigation system when the air in the piping is chilled below its dew point. This can occur at points where the system piping goes through unheated space such as an attic, garage or outside. The system design must provide a means for water to drain back to a slab hole to remove the condensation. The GP/XP/XR Series Fan **MUST** be mounted vertically plumb and level, with the outlet pointing up for proper drainage through the fan. Avoid mounting the fan in any orientation that will allow water to accumulate inside the fan housing. The GP/XP/XR Series Fans are **NOT** suitable for underground burial.

For GP/XP/XR Series Fan piping, the following table provides the minimum recommended pipe diameter and pitch under several system conditions.

Pipe Dia.	Minimum Rise per Foot of Run* @25 CFM	@50 CFM	@100 CFM
4"	1/8"	1/4"	3/8"
3"	1/4"	3/8"	1 1/2"

*Typical GP/XP/XR Series Fan operational flow rate is 25 - 90 CFM.
(For more precision, determine flow rate by using the chart in the addendum.)

Under some circumstances in an outdoor installation a condensate bypass should be installed in the outlet ducting as shown. This may be particularly true in cold climate installations which require long lengths of outlet ducting or where the outlet ducting is likely to produce large amounts of condensation because of high soil moisture or outlet duct material. Schedule 20 piping and other thin-walled plastic ducting and Aluminum downspout will normally produce much more condensation than Schedule 40 piping.



The bypass is constructed with a 45 degree Wye fitting at the bottom of the outlet stack. The bottom of the Wye is capped and fitted with a tube that connects to the inlet piping or other drain. The condensation produced in the outlet stack is collected in the Wye fitting and drained through the bypass tube. The bypass tubing may be insulated to prevent freezing.

1.7 "SYSTEM ON" INDICATOR

A properly designed system should incorporate a "System On" Indicator for affirmation of system operation. A manometer, such as a U-Tube, or a vacuum alarm is recommended for this purpose.

1.8 ELECTRICAL WIRING

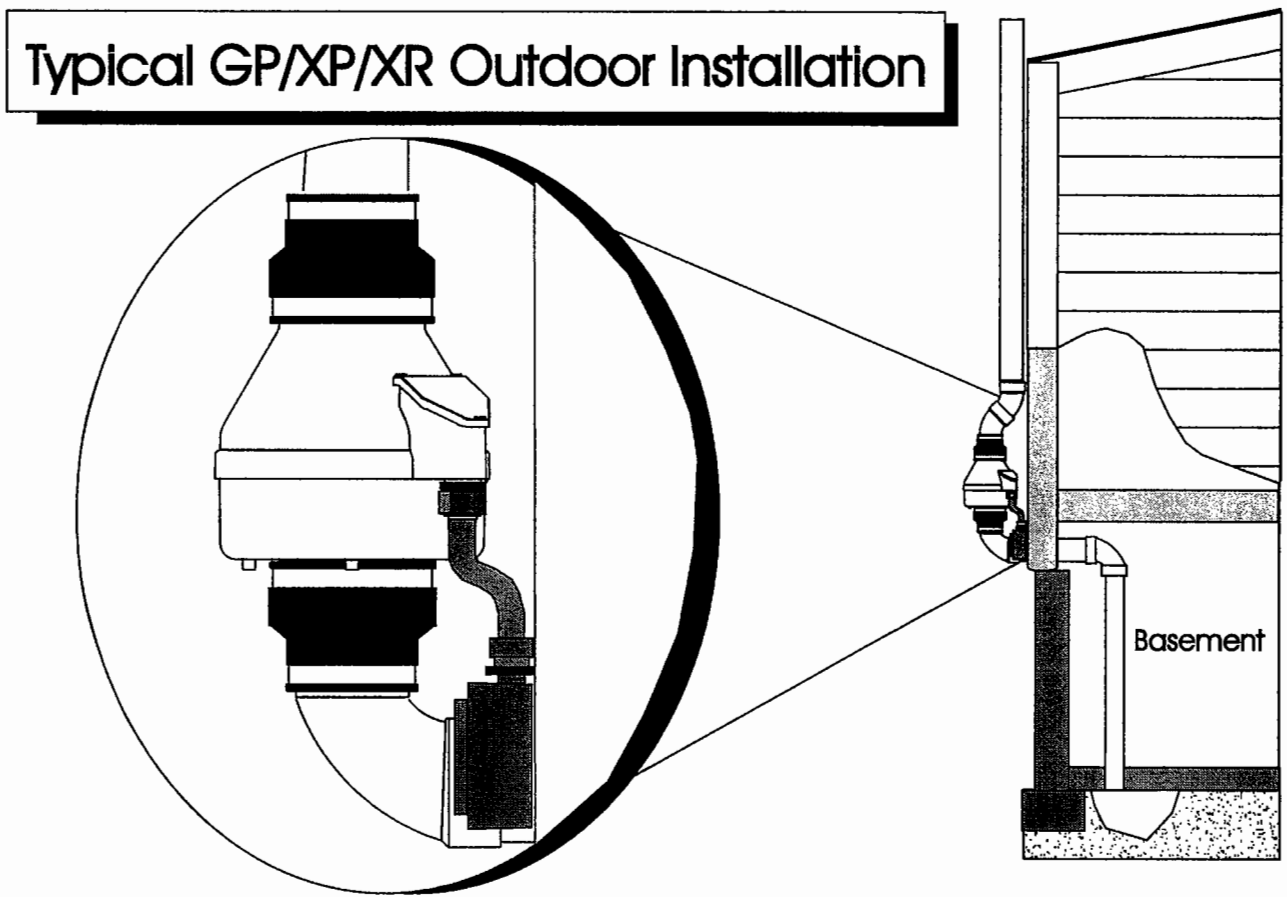
The GP/XP/XR Series Fans operate on standard 120V 60 Hz. AC. All wiring must be performed in accordance with the National Electrical Code and state and local building codes. All electrical work should be performed by a qualified electrician. Outdoor installations require the use of a U.L. listed watertight conduit.

1.9 SPEED CONTROLS

The GP/XP/XR Series Fans are rated for use with electronic speed controls ,however, they are generally not recommended.

2.0 INSTALLATION

The GP/XP/XR Series Fan can be mounted indoors or outdoors. (It is suggested that EPA recommendations be followed in choosing the fan location.) The GP/XP/XR Series Fan may be mounted directly on the system piping or fastened to a supporting structure by means of optional mounting bracket.



2.1 MOUNTING

Mount the GP/XP/XR Series Fan vertically with outlet up. Insure the unit is plumb and level. When mounting directly on the system piping assure that the fan does not contact any building surface to avoid vibration noise.

2.2 MOUNTING BRACKET (optional)

The GP/XP/XR Series fan may be optionally secured with the integral mounting bracket on the GP Series fan or with RadonAway P/N 25007-2 mounting bracket for an XP/XR Series fan. Foam or rubber grommets may also be used between the bracket and mounting surface for vibration isolation.

2.3 SYSTEM PIPING

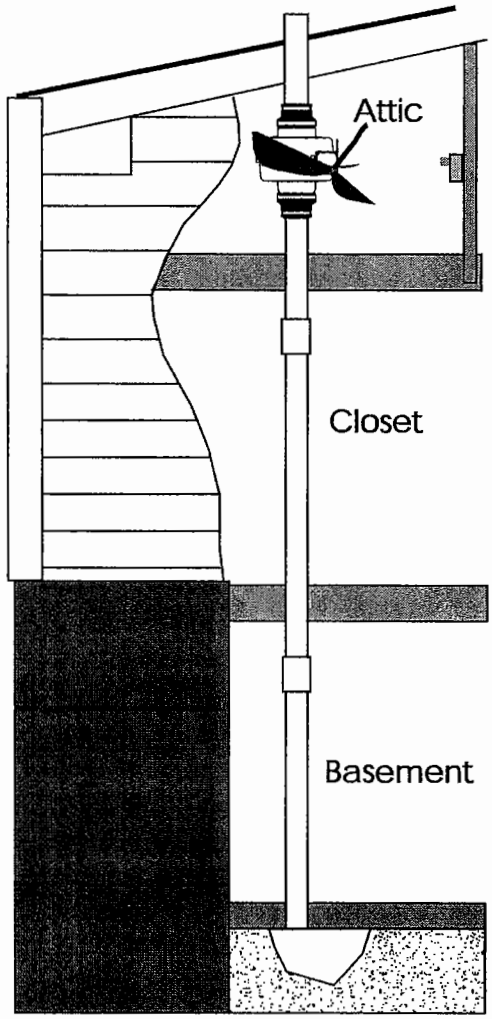
Complete piping run, using flexible couplings as means of disconnect for servicing the unit and vibration isolation.

2.4 ELECTRICAL CONNECTION

Connect wiring with wire nuts provided, observing proper connections:

Fan Wire	Connection
Green	Ground
Black	AC Hot
White	AC Common

Typical GP/XP/XR Indoor Installation



2.5 VENT MUFFLER (optional)

Install the muffler assembly in the selected location in the outlet ducting. Solvent weld all connections. The muffler is normally installed at the end of the vent pipe.

2.6 OPERATION CHECKS

_____ **Verify** all connections are tight and **leak-free.**

_____ **Insure** the GP/XP/XR Series Fan and all ducting is secure and vibration-free.

_____ **Verify** system vacuum pressure with manometer. **Insure** vacuum pressure is **less than** maximum recommended operating pressure

(Based on sea-level operation, at higher altitudes reduce by about 4% per 1000 Feet.)

(Further reduce Maximum Operating Pressure by 10% for High Temperature environments)

See Product Specifications. If this is exceeded, increase the number of suction points.

_____ **Verify Radon levels by testing to EPA protocol.**

GP SERIES PRODUCT SPECIFICATIONS

The following chart shows fan performance for the GPx01 Series Fan:

Typical CFM Vs Static Suction "WC	1.0"	1.5"	2.0"	2.5"	3.0"	3.5"	4.0"
GP501	95	87	80	70	57	30	5
GP401	93	82	60	38	12	-	-
GP301	92	77	45	10	-	-	-
GP201	82	58	5	-	-	-	-

Maximum Recommended Operating Pressure*		
GP501	3.8" W.C.	(Sea Level Operation)**
GP401	3.0" W.C.	(Sea Level Operation)**
GP301	2.4" W.C.	(Sea Level Operation)**
GP201	1.8" W.C.	(Sea Level Operation)**

**Reduce by 10% for High Temperature Operation*

***Reduce by 4% per 1000 feet of altitude*

Power Consumption @ 120 VAC	
GP501	70 - 140 watts
GP401	60 - 110 watts
GP301	55 - 90 watts
GP201	40 - 60 watts

Inlet/Outlet: 3.5" OD (3.0" PVC Sched 40 size compatible)

Mounting: Fan may be mounted on the duct pipe or with integral flanges.

Weight: 12 lbs.

Size: 13H" x 12.5" x 12.5"

Recommended ducting: 3" or 4" Schedule 20/40 PVC Pipe

Storage temperature range: 32 - 100 degrees F.

Normal operating temperature range: -20 - 120 degrees F.

Maximum inlet air temperature: 80 degrees F.

Continuous Duty

Class B Insulation

3000 RPM

Thermally protected

Rated for Indoor or Outdoor Use

GP301C / GP501C Rated for Commercial Use

LISTED Electric Fan ETL® Tested to UL Std. 507

77728

APPENDIX G

O&M Forms

VAPOR SYSTEM INSPECTION FORM

Sub-Slab Soil Vapor Depressurization System
61 Edson Street, Amsterdam, New York

Performed by: _____ Date: _____

Piping Check	**Yes**	**No**
System suction points are sealed?	_____	_____
Piping system is properly supported?	_____	_____
Excessive noise is heard in piping joints?	_____	_____
Valves & manometers installed?	_____	_____
Vaccum > 0.1" observed at all manometers?	_____	_____
Correct labels applied in proper location?	_____	_____
Electrical Check		
All fans in operation?	_____	_____
Each fan is running?	_____	_____
Excessive noise heard when fan is running?	_____	_____
Each fan mounted securely?	_____	_____
Each fan stops when switch is in OFF position?	_____	_____
Electrical junction boxes all closed?	_____	_____
Electrical conduit properly supported?	_____	_____
Correct labels applied in proper location?	_____	_____
Have the following items changed since the last visit?		
Building Foot Print	_____	_____
Heating/Ventilating Systems	_____	_____
Drains, Sumps, Floor Cracks	_____	_____
Wall Penetrations, Cracks	_____	_____

Comments:

_____
_____
_____
_____
_____

MAINTENANCE REQUEST FORM

Sub-Slab Depressurization System
61 Edson Street, Amsterdam, New York

For Maintenance:

Call RETEC at 607-277-5716
and
Fax this form to RETEC at 607-277-9057

Problem Type

Date: _____

Requested By: _____

Address: _____

Requester's Phone Number: _____

_____ 1. Fan Noise/Vibration

_____ 2. Condensate

_____ 3. Manometer

_____ 4. Other

Stated Problem:

_____

_____

_____

_____