

## 2021 Hazardous Waste Scanning Project

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C932142

REMEDIAL INVESTIGATION/  
ALTERNATIVES ANALYSIS/  
INTERIM REMEDIAL MEASURES REPORT

FOR

FORMER REMINGTON-RAND FACILITY  
184 SWEENEY STREET  
CITY OF NORTH TONAWANDA  
NIAGARA COUNTY, NEW YORK

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## TABLE OF CONTENTS

Section	Page
Executive Summary .....	iv
1.0 INTRODUCTION .....	1
1.1 Site Background .....	1
1.2 Contaminates of Concern (COCs) .....	5
2.0 REMEDIAL INVESTIGATION .....	6
2.1 Sub Slab Vapor Intrusion Investigation .....	6
2.2 Sub-Slab Soil Investigation .....	7
2.3 Exterior Surface and Subsurface Soil Investigation .....	8
2.4 Building Pit/Floor Drain sampling .....	10
2.5 Groundwater Investigation .....	10
2.6 Transformer Sampling .....	11
3.0 PHYSICAL CHARACTERISTICS OF THE STUDY AREA .....	13
3.1 Surface Features .....	13
3.2 Geology/Hydrogeology .....	13
3.3 Demography and Land Use .....	13
4.0 NATURE AND EXTENT OF CONTAMINATION BY MEDIA .....	15
4.1 Introduction .....	15
4.2 Potential Sources .....	15
4.3 Vapor/Air Sampling Analytical Results .....	16
4.4 Soil Sampling Analytical Results .....	19
4.4.1 Exterior Soil Samples .....	20
4.4.2 Interior Sub-Slab Soil Samples .....	22
4.5 Building Pit/Floor Drain Sampling Analytical Results .....	23
4.6 Groundwater Sampling Analytical Results .....	24
4.7 Transformer Sampling Analytical Results .....	25
5.0 INTERIM REMEDIAL MEASURES .....	26
6.0 FATE AND TRANSPORT OF COCS .....	28
6.1 Fugitive Dust .....	28
6.2 Surface Water Runoff .....	28
6.3 Volatilization .....	28
6.4 Leaching .....	29
6.5 Groundwater Transport .....	29
6.6 Exposure Pathway Summary .....	29
7.0 QUALITATIVE RISK ASSESSMENT .....	30



7.1	Human Exposure Risks .....	30
7.2	Ecological Exposure Risks .....	30
8.0	REMEDIAL ALTERNATIVES EVALUATION .....	31
8.1	Remedial Action Objectives .....	31
8.2	Land Use Evaluation .....	32
8.3	Evaluation of Alternatives .....	33
8.3.1	IRMs with No Further Action .....	33
8.3.2	IRMs with Institutional and Engineering Controls .....	33
8.3.3	Unrestricted Use .....	35
8.4	Recommended Remedial Measures .....	36
9.0	SUMMARY AND CONCLUSION .....	37
9.1	Summary .....	37
9.2	Conclusions .....	41

## LIST OF TABLES

1	Analytical Results Summary Table – Soil Boring Samples
2	Analytical Results Summary Table – Test Trench Soil Samples
3	Analytical Results Summary Table – Surface Soil Samples
4	Analytical Results Summary Table – Groundwater Samples
5	Analytical Results Summary Table – Sub-Slab Soil Boring and Drain Samples
6	Analytical Results Summary Table – Sub-Slab Vapor and Ambient Air Samples

## LIST OF FIGURES

1	Project Location Map
2	Vapor Intrusion/Sub-Slab Soil/ Drain Sediment Sampling Locations
3	Boring, Test Trenching and Monitoring Well Locations
4	Surface Soil Sample results
5	Exterior Subsurface Soil Sample Results
6	Sub-Floor Subsurface Soil sample Results
7	Round 2 Groundwater Filtered Sample Results
8	Drain/Pit Sediment Sample Results

## APPENDICES

Appendix A	Boring, Test Pit and Monitoring Well Logs
Appendix B	Data Usability Summary Report (DUSR Text Only)
Appendix C	Photographs
Appendix D	Stohl Transformer Sampling Report
Appendix E	NYSDOH Soil Vapor/Indoor Air Matrices

## EXECUTIVE SUMMARY

This document presents a report on the Remedial Investigation (RI), Alternatives Analysis (AA) and Interim remedial Measures (IRMs) at the Former Remington Rand facility located at 184 Sweeney Street in the City of North Tonawanda, New York (refer to Figure 1). Remington Lofts on the Canal, LLC owner of the Former Remington Rand has entered into a Brownfield Cleanup Program (BCP) Agreement with the NYSDEC under the Voluntary section of the "Brownfield Cleanup Program Act". Remington Lofts on the Canal, LLC (Owner) has contracted Panamerican Environmental, Inc. (PEI) to complete the RI/AAR/IRM in accordance with BCP requirements as defined in section 375-3.8 of the NYSDEC 6NYCRR Part 375 Environmental Remediation Program Regulations.

To date, Phase I and Phase 2 Environmental Site Assessments (ESAs) have been completed at the site. The results of the ESAs concluded that site soil and possibly groundwater have been impacted from past industrial use of the property. The goal of the RI/AAR program is to complete a focused environmental remedial investigation (RI) to accurately assess the source, nature and extent of contaminated media on site and to gather sufficient data to develop remedial alternatives (AA). The planned re-use of the property is to renovate and rehab the approximately 164,367 square foot, four-story building into a high-tech business incubator with work/live loft spaces. Based on the planned re-use of this property, the information generated from the RI identified IRMs required to mitigate immediate, if not all, of the environmental concerns at the site to meet Restricted Residential status as defined in Part 375-1.8(g)(2); achieve Soil Cleanup Objectives as defined in Part 375-6.8(b); and mitigate any other environmental impacted media at the site.

The Former Remington Rand Property (property) has been associated with commercial/industrial use since at least 1886. The property is bound to the north by Tremont Street, to the west by Marion Street, to the south by Sweeney Street, and to the east by an active CSX railroad line. The property consists of a 1.8-acre parcel and includes the slab-on-grade four-story concrete block and brick building. Also, a one-story slab-on-grade brick building that occupies approximately 14,100 square feet adjoins the four-story building on the south. The remainder of the property is occupied by asphalt/concrete and gravel parking areas with some green space.

Previously conducted preliminary site investigations involved a soil boring investigation and collecting of surface and sub-surface soil/fill samples at the subject site. Contaminants of concern identified in surface/near-surface soils exterior to the building included polynuclear aromatic hydrocarbons (PAHs), polychlorinated biphenyl's (PCBs) and heavy metals. The potential for impacted groundwater was also identified. Data gaps included the need to examine sub-slab vapors and potential impacted soil beneath the building, groundwater assessment and an expansion of the exterior soil data.

To assess the above media and site conditions the following remedial investigation activities were undertaken:

- Assessment of sub-slab vapors beneath the building floor slab - A total of seven

borings were installed through the concrete floor slab at locations of historic industrial operations and one air/vapor sample was collected from each location. Analytical results were compared to four ambient air samples collected within the building and one outdoor air sample collected for background. All the results were compared to New York State Department of health (NYSDOH) guideline values.

- Additional assessment of surface and subsurface soil/fill materials across the site exterior of the building - A total of ten test trenches were excavated in portions of the property not covered by the existing building including the courtyard and east parking area. A total of six surface soil and eight subsurface soil samples were collected for analysis. Seven geoprobe borings were installed adjacent two transformer areas and in the south loading ramp area. A total of six surface soil and five subsurface soil samples were collected for analysis. A total of six additional surface soil samples were collected in the two transformer areas.
- Assessment of sub-slab soils - Geoprobe borings were installed at each of the seven sub-slab vapor sampling locations and a total of four soil samples were collected from selected cores. One additional soil sample was collected from a boring installed through a filled in area within the building.
- Assessment of building pit and drain sediments - A total of two sediment samples were collected from floor drains/trenches and a total of two sediment samples were collected from two elevator pits.
- Assessment of groundwater conditions - A total of five Geoprobe borings were converted into groundwater monitoring wells. These were installed at perimeter locations north, east, west and south of the site and one in the center courtyard. One groundwater sample was collected from each monitoring well during two rounds of groundwater sampling.
- Assessment of PCBs in transformer oils - A total of 10 transformers and two fluid reservoirs were sampled for PCBs.

The samples were submitted to a New York State approved laboratory for analysis. Analysis was sample specific and included all or some of the following parameters as further described in the body of the report: TAL metals, TCL VOCs, TCL SVOCS, PCBs and pesticides.

### **RI Findings Summary**

The sub-slab vapor assessment program resulted in a number of VOC compounds detected in both the indoor/outdoor air samples and in the sub-slab vapor samples. Based on the NYSDOH Guidance for Evaluating Soil Vapor Intrusion in NY State, only one sample, sub-slab vapor concentration from sample RR-SA-03, had concentrations indicating follow-up remediation. To mitigate the sub slab vapors in this area a passive vapor mitigation system was installed as an IRM. This system is deemed as sufficient since

the first floor area of the building is to be used only as a parking garage.

Exterior surface and sub-surface soils analytical results confirmed the results of prior assessments completed on the property which indicated elevated concentrations of PAHs and metals (COCs) that exceeded Part 375 restricted residential soil cleanup objectives. In order for the site to meet Part 375 restricted residential cleanup objectives an IRM was performed which included removing the top two feet of existing soil and replacing with clean fill material and/or pavement sections.

The results of the Sub-slab soils assessment indicated only a few PAH and metal compounds that slightly exceeded Part 375 restricted residential soil cleanup objectives. Because of the very low level of contamination detected and the fact that the floor slab is to remain in place for the planned future development no further remediation is recommended for this area. The area of the building corresponding with the sub-slab vapor (RR-SA-03) also indicated some potential impacts to sub-slab soil. The passive vapor mitigation IRM is deemed sufficient as an IRM based on the sub-floor soil sample results.

Analytical results of several samples collected from the first floor drain/trench and elevator pit sediments indicated elevated concentrations of a number of metal compounds (COCs) that exceeded 375 restricted residential soil cleanup objectives. An IRM was performed to address the COCs which include removal/disposal of sediments from the drains/trenches and pits followed by water /steam cleaning.

The results of the groundwater assessment indicated that only two metal compounds were detected in two of the unfiltered samples which exceeded the TOGs groundwater standards. No metal compounds exceeded groundwater standards in the filtered samples. Since the site is served by municipal water supply, and groundwater is not planned to be used for the new development, no further action related to groundwater is recommended.

Results of the transformer sampling indicated that three of the ten transformers and both fluid reservoirs do not have PCB containing oil. Results from the remaining seven transformers indicated various concentrations of PCBs (COC) with the highest being 250 ppm. Removal and proper disposal of transformer oils was performed as an IRM, specifically the PCB oils in the seven transformers was removed and the transformers cleaned in accordance with all appropriate regulations. Some minor staining of soil around specific transformers indicated elevated levels of PCBs in the surface stained areas. This soil was excavated and properly disposed as part of the IRM. Off site disposal at approved facilities was performed for all transformers after draining/cleaning. The transformer enclosure building and foundation slab were also removed and properly disposed of at an off-site facility.

### **Remedial Action Summary**

The RI/AAR/IRM is being carried out in accordance with BCP requirements as defined in section 375-3.8 of the NYSDEC 6NYCRR Part 375 Environmental Remediation Program Regulations. The final remedial measures for the Remington Site must satisfy

Remedial Action Objectives (RAOs). Remedial Action Objectives are site-specific statements that convey the goals for minimizing or eliminating substantial risks to public health and the environment. Appropriate RAOs for the site are:

- Prevent potential sub-slab VOC vapors from entering the building;
- Remove impacted sediments from first floor building floor drains and elevator pits to levels protective of human health (Part 375 Restricted Residential SCOs);
- Remove PCB containing oil transformers from the site; and
- Prevent ingestion or direct contact with exterior soil/fill that contains COCs above Part 375 Restricted Residential SCOs

The following IRMs were completed to meet the RAOs:

- 1) Installed a sub-slab vapor venting system beneath a portion of the ground floor slab of the structure.
- 2) Removed impacted soil exterior to the building to a depth of two feet for off-site disposal and replaced with clean fill and or cement/asphalt paving sections separated from existing soil by a geotextile demarcation layer.
- 3) Removed sediments and cleaned building floor drains and elevator shaft pits.
- 4) Removed and properly disposed of PCB transformer oils, transformers and transformer enclosure.

Upon completion of the IRMs, no additional environmental concerns were uncovered during IRM activities with the exception of the removal of a 500+/- gallon underground storage tank (UST) uncovered during exterior soil excavation near the Sweeney street loading ramp. The UST was empty of liquid; however, some contaminated soil was also removed with the UST and disposed of at an approved off-site landfill.

A remedial alternatives evaluation was completed for the post-IRM site. The following alternatives were evaluated.

- IRMs with No Further Action;
- IRMs with Institutional and Engineering Controls; and,
- Unrestricted Use Cleanup

Based on the Alternatives Analysis evaluation, the completed IRMs and implementation of ICs and ECs fully satisfies the remedial action objectives and is fully protective of human health and the environment. Therefore, the IRMs and implementation of ICs and ECs is the recommended final remedy for site.

A Final Engineering Report will be prepared that will document all IRM construction activities. And the final remedy requirements.



## 1.0 INTRODUCTION

Remington Lofts on the Canal, LLC owner of the Former Remington Rand facility located at 184 Sweeney Street in the City of North Tonawanda, New York (refer to Figure 1) has entered into a Brownfield Cleanup Program (BCP) Agreement with the NYSDEC under the Voluntary section of the "Brownfield Cleanup Program Act". Remington Lofts on the Canal, LLC has contracted Panamerican Environmental, Inc. (PEI) to conduct a Remedial Investigation (RI) and prepare an Alternatives Analysis Report (AAR) as required by the BCP Agreement and complete Interim Remedial Measures (IRMs) as necessary. This document presents a report on the RI/AAR/IRM activities completed at the Former Remington Rand facility as part of the BCP program.

Phase I and Phase 2 environmental site assessments (ESAs) were previously completed at the property. The results of the ESAs concluded that site soil and possibly groundwater have been impacted from past industrial use of the property. The goal of the RI/AAR/IRM program was to complete a focused environmental remedial investigation (RI) to accurately assess the source, nature and extent of contaminated media on site and to gather sufficient data to develop remedial alternatives (AA). The information generated from the RI also identified IRMs required to mitigate immediate, if not all, of the environmental concerns at the site. Upon completion of the IRMs, no other environmental concerns were identified which require additional remedial alternatives analysis to meet specific cleanup and redevelopment concept plan objectives. The objective was to minimize or eliminate impacts from the property that effect the potential re-use of the property. As such, the scope of the investigations and remediation was tailored to the future use of the site under restricted residential status as stipulated in the Part 375 regulations.

The RI/AAR/IRM program was completed in accordance with BCP requirements as defined in section 375-3.8 of the NYSDEC 6NYCRR Part 375 Environmental Remediation Program Regulations. As anticipated, the IRMs performed have achieved the site soil cleanup objectives (SCOs) of meeting Restricted Residential status as defined in Part 375-1.8(g)(2) and achieved Soil Cleanup Objectives as defined in Part 375-6.8(b). The IRMs also mitigated other identified environmental impacted media issues at the site including removal of PCB containing transformers, installing a sub-slab vapor venting system and removal of contaminated building drain sediment.

All RI/AA/IRM activities were carried out in accordance with the requirements of the approved RI/AAR/IRM work plan (*Work Plan for Remedial Investigation/Alternatives Analysis Report and Interim Remedial Measure, Former Remington Rand Facility, 184 Sweeney Street City of North Tonawanda, Niagara County, New York prepared for: Remington Lofts on the Canal, LLC, prepared by: PEI, March 2009*). The work plan was approved by NYSDEC Region 9 as part of the BCP process.

### 1.1 Site Background

The Former Remington Rand Property (property) has been associated with commercial/industrial use since at least 1886. The property is bound to the north by

Tremont Street, to the west by Marion Street, to the south by Sweeney Street, and to the east by an active CSX railroad line. Tonawanda Creek/Erie Canal is located just over 150 feet south across Sweeney Street. This is an active recreation area and part of the Erie Canal system. Tonawanda Creek is listed as a permanent Riverine Open Water federally designated wetland area and is listed as a Class C surface water body according to 6 NYCRR Part 837.4.

The property consists of a 1.8-acre parcel and includes a slab-on-grade four-story concrete block and brick building. Also, a one-story slab-on-grade brick building that occupies approximately 14,100 square feet adjoins the four-story building on the south. The remainder of the property is occupied by asphalt/concrete and gravel parking areas with some green space. The use and configuration of buildings on this property has varied over time.

From sometime prior to 1886 to about 1900 the property was associated with the lumber industry and contained lumber storage and shingle manufacturing. During that time, a portion of the property contained a railroad trolley power house (located in the one-story portion of the building complex identified above). The lumber and wood industry in North Tonawanda, particularly in the mid to late 1800's, typically included cutting timber and pulpwood, sawmills, lath mills, shingle mills, cooperage stock mills (wooden casks or tubs), planning mills, plywood mills, etc. The J. Jackson Shingle Saw Mill was located on a portion of the property with the main mill across Sweeney Street along the Creek. Most lumber at that time was dried to specific moisture content through air or kiln drying powered by coal. Wood that was not kiln-dried was surface protected using chemicals in a dip process, spray process, or green chain process.

From 1900 to the early 1920's the property was occupied by the Herschell-Spillman Co., which manufactured carousels and other amusement park rides. During this time, two carousels were shown located in the northeastern portion of the complex. A painting shop was located along the western half of the property and a machine shop was located in the southeastern portion (in the location of the former trolley power house). Also, a tool house was located off the northeast corner of the southern portion of the building near the rail embankment.

From 1925 to the early/mid 1970's, the property was occupied by the Remington-Rand Corporation. Remington Rand was formed by the merger of the Remington Typewriter Company, Rand Kardex Company, and Powers Accounting Machine Company. Remington Rand was an early American computer manufacturer, best known as the original maker of the UNIVAC I. Remington Rand also manufactured office equipment and other equipment/supplies. The Sweeney Street location was Remington's major printing facility.

From the mid 1970's to present, the building complex was occupied by various commercial tenants including a chemical company, building contractors, warehousing, and furniture and cabinetry makers. At least one of these former tenants has a history as a large quantity generator of hazardous waste.



An active rail line has been located along the eastern border of the property since the mid 1800's. Automotive sales and service and commercial buildings have historically been located on adjacent property to the west of the facility. An automotive service facility with gasoline tanks was historically located on adjacent property northwest of the intersection of Sweeney and Marion Streets and east of the property on the east side of the railroad embankment.

A Phase I Environmental Site Assessment (ESA) was completed on the property in August 2006 (*"Phase I Environmental Assessment Report for 184 Sweeney Street, City of North Tonawanda, Niagara County, New York,"* prepared for, Niagara County Center for Economic Development, prepared by, TVGA Consultants, August 2006). The Phase I ESA was completed in accordance with ASTM Practice E 1527-05. Based on the findings and recommendations of the Phase I ESA, a limited and focused near-surface/subsurface Phase II assessment was completed by Panamerican Environmental, Inc. in December 2007 (*"Phase II Environmental Assessment Report for The Former Remington Rand Facility, 184 Sweeney Street, City of North Tonawanda, Niagara County, New York,"* prepared for, The Kissling Interests, LLC, prepared by, Panamerican Environmental, Inc., December 2007). The findings and recommendations of these assessments are summarized below:

### **Phase I Summary**

Several potential recognized environmental conditions (RECs) were identified in the Phase I ESA including:

- The historical use of the property for industrial and commercial purposes for more than 100 years included the operation of a machine shop and paint shop; trolley powerhouse; potentially PCB-containing transformers, production of automotive chemicals; and the storage of various hazardous materials. This indicates the potential for past discharges of materials to the ground surface and/or interior of the building.
- The presence of a series of electrical transformers with observable staining located in a fenced area along the northeast corner of the structure and one located in the central rear area of the property.
- Potential contamination from two up-gradient sites that historically operated gasoline USTs northeast of the property at 147 Tremont Street and 59 Oliver Street.
- The presence of an automotive repair facility that operated gasoline tanks west of the subject property.

The Phase I ESA also identified some stained areas inside the building and the presence of drums containing solvent materials, as well as the potential for asbestos and lead-based paint.

## Phase II Summary

The Phase II investigation included a focused program of surface/near-surface and subsurface soil sampling. Additionally, a building walk-through was completed. Twelve borings and two surface soil sample locations were selected and were focused in areas of concern as identified in the Phase I assessment. Borings were advanced to an average of 12-16 feet below ground surface (bgs) with some advanced to 20 feet bgs using Geoprobe® direct push technology. Continuous soil sampling was conducted in areas outside the structure using the Geoprobe® with a two-inch diameter sampler with four-foot lengths. Areas of concern include:

- Southeast property area along the perimeter with rail line and the area of the former trolley powerhouse/maintenance and lumber storage (southeast corner of the property).
- The rear perimeter of current building in the courtyard area.
- Western courtyard area near former paint shop.
- Stained areas around on-site transformers at northeast and central courtyard portion of the site.

At each location, visual observations were recorded and field screening of soil for volatile organic compound (VOC) concentrations using a photoionization detector (PID) was completed. A total of five soil samples, three subsurface and two surface were collected for laboratory analysis for target compound list (TCL) and target analyte list compounds plus STARS method 8260 and 8270 and tentatively identified compounds (TICs). The purpose of this focused investigation was to perform a field assessment concerning conditions relative to past use of the property and findings in the Phase I. The purpose was not to complete a detailed nature and extent of contamination investigation designed to determine detailed and specific remedial actions and remedial costs.

The result of the assessment indicated that site soil and possibly groundwater have been impacted from past industrial use of the property. The analytical results were compared to the New York State Department of Environmental Conservation (NYSDEC) Final Restricted Use Soil Cleanup Objectives (SCOs) as presented in 6 NYCRR Part 375-6.8 (b). This comparison found elevated polynuclear aromatic hydrocarbons (PAH) and metal compounds at concentrations in both surface and subsurface soils in excess of the SCOs for residential, and in some cases, commercial limits. Additionally, PCBs were found in the stained soils adjacent to both transformer areas. Also, a number of volatile and semi-volatile compounds as well as tentatively identified compounds (TICs) were detected at low concentrations in both samples from Boreholes 6 and 12 (refer to Figure 3). It should be noted that elevated total organic vapor readings as measured on the field PID, ranged from 10-50 ppm above background in locations 6 and 12 respectively. Chemical-type odors were observed in soils from each of these boreholes above and in the saturated zones.

A sample of fill material collected from the near surface soils in the southeast area of the property (former powerhouse/maintenance and boiler area) had elevated levels of

carcinogenic PAH compounds ranging from 3-9 ppm (SCOs range from 0.5-1 ppm for residential use). This fill also had elevated metal concentrations including 1,020 ppm for lead (SCG - 400 ppm) and 21.8 ppm for arsenic (SCG - 16 ppm). Based on field observations and former use, it is possible that additional surface and subsurface samples in this area may show a range of elevated PAHs and metals both higher and lower than these numbers.

Two surface soil samples were collected from stained soils adjacent to two separate transformer areas. Both sample results indicated concentrations of PCBs as well as significantly elevated levels of PAHs (range 16-180 ppm) and metals (3,170 ppm lead; 68.8 ppm chromium; 24.9 ppm arsenic; and 32.4 ppm cadmium).

During the limited Phase II assessment, a brief building reconnaissance was performed. Not all building areas were accessible and most occupied areas were not viewed. Various areas of floor staining, large pieces of equipment and a drum of solvent (labeled acetone) were observed on the first floor. Small woodworking/cabinet and furniture making businesses and vacant space were observed on the second and third floors. Some drums of solvents, glues and paints and strong solvent odors were also observed on these floors. The fourth floor was observed to contain a large open vacant space. The floor was stained and a very strong chemical-urethane-type odor was observed.

In summary, the Phase I and limited Phase II assessment indicated environmental impact to the property from past and recent commercial use effecting both soil and possibly groundwater.

## **1.2 Contaminates of Concern (COCs)**

Based on the findings related to historic use of the Site and previous investigations, the contaminants of concern (COCs) are VOCs, PAHs, PCBs and heavy metals in the following media:

- **Exterior soils**-PAHs, PCBs and heavy metals.
- **Drain sediments**-heavy metals
- **Transformers**-PCBs
- **Sub-Slab soils**-VOCs

## **2.0 REMEDIAL INVESTIGATION**

The main purpose of this RI was to expand on the information generated during the Phase I/II data and to determine the extent of contamination to allow for the design of remedial actions including IRMs.

The previous investigations identified elevated metals, PAHs and PCBs in surface/near-surface soils exterior to the building and the potential for impacted groundwater. Data gaps included the need to examine sub-slab vapors and soil beneath the building, potential for contamination in pits and trenches in the building and to confirm the nature and extent of contamination outside the building. The following sections discuss the remedial investigation tasks conducted to gather the required data including filling these data gaps.

Photographs of the remedial investigation activities are provided in Appendix C. All work was completed in accordance with the approved work plan and with NYSDEC oversight.

### **2.1 Sub Slab Vapor Intrusion Investigation**

The Remington Rand building complex was constructed over a number of years and additions to the original building were constructed over areas where previous industrial operations and/or structures potentially occurred. To assess if contamination from these old operations exists beneath the current buildings and to determine if more recent uses of the property have affected the sub-slab area, a soil and sub-slab vapor intrusion investigation was completed.

This investigation consisted of sampling the air beneath the building slabs along with sampling building indoor ambient air.

Seven sub-slab samples, four indoor air samples and one outdoor air sample were collected at the facility. Sample locations are shown on Figure 2. All of the samples were collected over a targeted 8-hour time period using 6-liter Summa® canisters equipped with flow controller valves pre-calibrated at the laboratory. Sample collection was initiated by turning on a valve built into the Summa canister. Sample collection was terminated by shutting off the valve after the vacuum in the canisters had reached approximately minus 3 inches of mercury.

The sub-slab samples were collected through Teflon tubing inserted through a hole in the slab that was drilled with an electric hammer drill. The tubing was sealed to the slab floor with modeling clay. The integrity of the clay seal was tested using helium tracer gas inserted into an enclosure placed above the clay seal. Prior to sample collection, approximately ½ liter of sub slab soil vapor was collected from the sub slab and checked for the presence of helium. At all seven sub slab sample locations, the helium testing showed no leakage of indoor air through the floor seals. Sub slab sample construction and helium testing procedures followed those described in the procedures in section C9.0 of Part C-Field Sampling Plan of the approved Work Plan and were in accordance with the

October 2006, New York State Department of Health *Guidance for Evaluating Soil Vapor Intrusion in the State of New York*.

Four indoor air samples were collected by placing a 6-liter Summa canister at breathing height at three locations within the facility. As with the sub slab samples, the indoor air samples were pre-targeted for 8-hours and the canisters turned off when the residual vacuum in the canisters had reached approximately minus 3 inches of mercury.

One outdoor (ambient) air sample was collected by Summa canister located in the courtyard area (refer to Figure 2). This sample collection was turned off after the residual vacuum in the canister reached -3 inches of mercury.

Summa Canister Data Sheets were used to record the sampling time, Summa canister and flow controller serial numbers and purging times and helium tracer gas test results for the sub slab samples. All air samples were submitted to Test America, a NYSDEC certified contract laboratory and analyzed for TCL VOCs. A discussion of the analytical results is provided in Section 4.

## **2.2 Sub-Slab Soil Investigation**

During the vapor intrusion study several of the vapor intrusion holes were placed in areas where historic operations of concern (old machine shop, painting operations, etc.) were indicated on historic maps. Upon completion of the soil vapor intrusion investigation, soil borings were used to investigate the sub-slab soil at the seven vapor intrusion hole locations to assess if contaminated soils exist in these areas below the building slab. The sub-slab soil investigation was completed in accordance with the approved work plan.

The borings were installed on May 20, 2009 using a track Geoprobe unit operated by EPS of Vermont. However, because of the inaccessibility of the Geoprobe unit, boring location RR-SS-SF-01 was drilled using a hand augur after coring the floor slab with a coring machine. The hand augured hole reached a depth of three feet below the top of floor slab (bgs). The Geoprobe borings ranged in depth from 5 feet to 8 feet bgs with one boring RR-SS-SF-04 extended to 12 feet bgs. Each boring was continuously sampled and a PEI geologist visually examined and logged all borings and performed field screening for VOCs using a photoionization detector (PID) – refer to boring logs in Appendix A. The only PID reading above background was recorded in boring RR-SS-SF-04 (175 ppm) between 6 feet and 8 feet bgs. A soil sample was collected at this location.

A total of four (4) soil samples were selected from the cores for analysis based on visual, olfactory and/or PID readings. One additional sample was collected from a core of a soil filled area located along the northwest side of the building (RR-SS-SF-08 on Figure 2). All samples were submitted to Test America and analyzed for TCL VOCs and SVOCs (plus STARS & TICs), TAL metals, PCBs and Pesticides.

In general, fill material consisting of black, granular cinder material, including coarse to fine gravel and medium to fine sand was observed at 1-3 feet bgs. The soils below this layer

consisted of reddish brown, very tight, silty clay with medium to fine sand and coarse to fine gravel.

Analytical results are discussed in Section 4.0. Sub slab boring logs are provided in Appendix A.

## **2.3 Exterior Surface and Subsurface Soil Investigation**

A surface and subsurface soil assessment program was completed using a combination approach which included test trenches and borings.

### **(a) Soil Borings**

Soil borings were used to assess surface and subsurface soils in the courtyard transformer and northeast transformer areas and the concrete ramp at Sweeney Street as shown on Figure 3. A total of seven soil borings were installed on April 27, 2009 using a track-mounted Geoprobe operated by EPS of Vermont under subcontract to PEI. Work was completed in accordance with the approved work plan and with NYSDEC oversight.

A total of three Geoprobe borings were installed around each transformer area and one boring installed through the concrete ramp at Sweeney Street (refer to Figure 3). Borings ranged in depth from 12 feet to 20 feet bgs. Each boring was continuously sampled and a PEI geologist visually examined and logged all borings and performed field screening for VOCs using a photoionization detector (PID) – refer to boring logs in Appendix A.

A total of six (6) surface soil and five (5) subsurface soil samples were collected from boring locations. Surface soil samples were collected from the upper two inches or immediately below the turf layer. Both surface and subsurface samples were selected from borings which indicate the highest potential for contamination based on visual, olfactory, and screening information or to obtain information from across the property. Sampling locations are indicated on Figure 3 and on the boring Logs provided in Appendix A. This information was collected as a supplement to data collected during the previous Phase II ESA assessment note above. All samples were submitted to Test America and analyzed as follows:

- Two (2) surface soil samples were analyzed for TCL SVOCs, PCBs, Pesticides and TAL metals and
- Four (4) surface soil samples were analyzed for PCBs only.
- Five (5) subsurface soil samples were analyzed for TCL VOCs and SVOCs (plus STARS & TICs), PCBs and TAL metals.

Analytical results are discussed in Section 4.0.

## **(b) Test Trenching**

Test trenching was used to assess surface and subsurface soils in the area of the courtyard and east of the building as shown on Figure 3. Test trenching was completed in accordance with the approved work plan. A total of 10 test trenches were excavated on April 30, 2009 using a trackhoe operated by Ridgeway Environmental Services under subcontract to PEI. Test trenches ranged in length from 10 feet to 12 feet and in depth from 4 feet below ground surface (bgs) to 12 feet bgs. Trench locations, depths and lengths were selected by PEI based on historical information, the results of the Phase II ESA and field observances at the time of trenching.

A PEI geologist visually examined and logged all test trenches (refer to Appendix A Test Pit logs) and perform field screening for VOCs using a photoionization detector (PID). The exact locations of trenches were subject to accessibility and the location of underground utility lines. All trenches were advanced at a minimum distance of 2.5 feet away from marked utilities, where present, to reduce the possibility of accidentally damaging an underground line. All trenches were filled with indigenous soil upon completion in the order in which it was removed.

A total of six (6) surface soil and eight (8) subsurface soil samples were collected from test trench locations. Surface soil samples were collected from the upper two inches or immediately below the turf layer. Both surface and subsurface samples were chosen from the test trenches which indicated the highest potential for contamination based on visual, olfactory, and screening information (PID readings) and from areas across the property. Alternatively, where no evidence of contamination was observed, some samples were collected from varied depths to profile the soil/fill materials vertically. Sampling locations are indicated on Figure 3 and on the Test Pit Logs provided in Appendix A.

- Surface soil samples – TCL SVOCs, PCBs, Pesticides and TAL metals
- Subsurface soil samples – TCL VOCs and SVOCs (plus STARS & TICs) and TAL metals. Two samples (near transformers) were also analyzed for PCBs.

Analytical results are discussed in Section 4.0.

## **(c) Additional Surface Soil Samples**

An additional six (6) surface soil samples were collected from the courtyard transformer and northeast transformer areas (three each area) on May 1, 2009. The locations are indicated on Figure 3. The surface soil samples were collected from the upper two inches or immediately below the turf layer by use of a hand shovel. All samples were submitted to Test America and analyzed as follows:

- Surface soil samples – Two samples -TCL SVOCs, PCBs, Pesticides and

TAL metals and four samples PCBs only.

Analytical results are discussed in Section 4.0.

## **2.4 Building Pit/Floor Drain sampling**

A field assessment of soil/sediment within the building elevator shaft pits and several floor drains/trenches was undertaken on May 20, 2009. A total of four (4) grab samples of soil/sediment were collected; two from the elevator shaft pits and two from floor drains (refer to Figure 2 for locations). All samples were submitted to Test America and analyzed for TCL VOCs and SVOCs, TAL metals, PCBs and Pesticides. Analytical results are discussed in Section 4.0. The purpose was to ascertain whether these areas could have been impacted by past building use.

## **2.5 Groundwater Investigation**

A total of five (5) groundwater mini-wells were installed on April 28, 2009 by EPS of Vermont in converted Geoprobe borings as follows:

- Monitoring well RR-MW-01 was installed in the center of the courtyard,
- RR-MW-02 along the east property line,
- RR-MW-03 along the south property line,
- RR-MW-04 along the west property line; and
- RR-MW-05 along the north property line.

Monitoring well locations are shown on Figure 3.

The groundwater investigation was completed in accordance with the approved work plan. Each mini-well consisted of a 1-inch diameter PVC pipe equipped with a 10-foot slotted screen and solid riser pipe extending to the surface. Screens were positioned to straddle the groundwater surface in each well. The annulus around the screen was filled with filter sand to one foot above the top of the screen. A three-foot thick bentonite seal was then installed and the borehole filled to the ground surface with a cement/bentonite mix. A road box was installed to complete each installation.

Monitoring wells were installed at the following depths from the top of the flush mounted PVC casing. Water levels are also provided:

- RR-MW-01 – 15.75 feet to bottom of well – 7.34 feet to standing water
- RR-MW-02 – 14.30 feet to bottom of well – 5.51 feet to standing water
- RR-MW-03 – 14.79 feet to bottom of well – 3.76 feet to standing water
- RR-MW-04 – 15.91 feet to bottom of well – 5.94 feet to standing water
- RR-MW-05 – 18.22 feet to bottom of well – 8.50 feet to standing water

The wells were developed and water level measurements recorded on April 29, 2009. The



wells were sampled on May 1, 2009. Other than MW-03, groundwater turbidity remained elevated after development in the other four well samples (greater than 50 NTU). As a result of the elevated turbidity samples MW-01, 02, 04 and 05 had elevated concentrations of several metal compounds that exceeded groundwater regulations (refer to Section 4). After discussions with the Client and NYSDEC it was decided to re-sample the wells just for RCRA metals and analyze both filtered and unfiltered samples. The wells were re-sampled on July 2, 2009. The wells were not developed before sampling so as to minimally disturb sediments at the bottom of each well.

Samples from both rounds were submitted to Test American and analyzed for TCL VOCs and SVOCs and TAL metals in Round 1 and RCRA metals only (filtered and unfiltered) in Round 2. Sample analytical results are discussed in section 4.

On July 14, 2009 James L. Shisler, L.S. land surveyors surveyed the top elevation of each well casing. Monitoring well elevations are recorded on Figure 3.

Water level readings were taken at the time of well development and each sampling round. Water level elevations are provided in the following table.

REMINGTON RAND GROUNDWATER ELEVATION DATA								
Monitoring Well	Elevation T of C (ft)	Water Level 4/29/2009	WL Elev.	Water Level 5/1/2009	WL Elev.	Water Level 7/2/2009	WL Elev.	WL Elev. Average
MW-01	575.43	7.34	568.09	7.50	567.93	8.00	567.43	567.82
MW-02	576.45	5.51	570.94	5.36	571.09	5.25	571.20	571.08
MW-03	573.75	3.76	569.99	3.80	569.95	3.55	570.20	570.05
MW-04	574.67	5.94	568.73	5.90	568.77	6.40	568.27	568.59
MW-05	576.08	8.50	567.58	8.50	567.58	8.66	567.42	567.53

Based on the average water level data from the table it appears that groundwater flows from the southeast to the northwest across the site. This is somewhat adverse to what would be expected with the Erie Canal located to the south of the property. However, with the overburden water table being fairly close to the surface, flow may be influenced by the site fill conditions and also by buried utility runs within the Tremont Street and Marion Street right of ways to the north and west respectively.

Well construction diagrams and logs for each well are provided in Appendix A. All wells were installed in general accordance with the SI/RAR approved work plan.

## 2.6 Transformer Sampling

Fluid samples were collected from the nine pad mounted transformers and two circuit breaker fluid reservoirs (inside transformer building) located at the north end of the site. Additionally, fluid in the single pad mounted transformer located at the south end of the courtyard was also sampled. One stained concrete chip sample from the courtyard transformer pad and one stained soil sample immediately adjacent the courtyard transformer pad were collected.

Samples were collected on August 14, 2009 by Stohl Environmental under subcontract to the project architect, Carmina Wood Morris PC. All samples were submitted to Test America and analyzed for PCBs. At the northern location, oil samples were collected from all nine transformers (T-1 to T-9) and fluid reservoirs (C-1 and C-2) using dedicated tubing. The oil sample from the courtyard transformer was collected via a stopcock near the base of the transformer.

Transformer sampling details are provided in the Stohl report in Appendix D. Sample analytical results are discussed in Section 4.

### **3.0 PHYSICAL CHARACTERISTICS OF THE STUDY AREA**

#### **3.1 Surface Features**

The property consists of a 1.8-acre parcel and includes an approximately 37,570 square foot slab-on-grade four-story concrete block and brick building. Also, a one-story slab-on-grade brick building that occupies approximately 14,100 square feet adjoins the four-story building on the south. The remainder of the property is occupied by asphalt/concrete and gravel parking areas with some green space. The use and configuration of buildings on this property has varied over time resulting in portions of the current buildings being located over former manufacturing areas.

The property is relatively flat and bound to the north by Tremont Street, to the west by Marion Street, to the south by Sweeney Street, and to the east by an active CSX railroad line. Tonawanda Creek/Erie Canal is located just over 150 feet south across Sweeney Street. This is an active recreation area and part of the Erie Canal system. Tonawanda Creek is listed as a permanent Riverine Open Water federally designated wetland area and is listed as a Class C surface water body according to 6 NYCRR Part 837.4. (Refer to Figure 3)

#### **3.2 Geology/Hydrogeology**

In general, fill material consisting of black to grey granular fill, including (C-F) coarse to fine gravel, (M-F) medium to fine sand and traces of concrete, wood, construction and demolition (C&D) debris and organic material was observed at 1-3 feet bgs at the north end and courtyard area of the site and up to 4 and 6 feet bgs in the south east parking area of the site. The soils below this layer consists of grey to brown, granular, loose, M-F sand and silt from 3 to 10 feet bgs. Soil borings and test trenches were terminated in a redish brown, tight, clay with M-F sand and C-F gravel lenses with traces of silt at between 8 and 17 feet bgs. Soils in some boreholes/trenches were wet to saturated at between 11-16 feet

As noted in section 2.5, groundwater was encountered in all 5 of the monitoring wells installed across the site. Based on the groundwater elevations recorded in the table provided in section 2.5 the groundwater appears to flow from the southeast to the northwest across the site. This is somewhat adverse to what would be expected with the Erie Canal located to the south of the property. However, with the overburden water table being fairly close to the surface, flow may be influenced by the site fill conditions and also by buried utility runs within the Tremont Street and Marion Street right of ways to the north and west respectively.

#### **3.3 Demography and Land use**

The City of North Tonawanda, located midway between Buffalo and Niagara Falls, is the second largest community in the County of Niagara, and the 15th largest city out of 62 in the state of New York, with a population of 33,262. Historically, North Tonawanda has been

an important regional manufacturing center. Today, North Tonawanda is focused on waterfront development, entertainment and tourism. As of the census of 2000, there were 33,262 people, 13,671 households, and 8,981 families residing in the city. North Tonawanda and the site are known for being the birthplace of the Herschell-Spillman Company, one of the leading manufacturers of carousels in America. The city is also known as the place that Rudolph Wurlitzer first developed and manufactured the Wurlitzer Organ and later the Wurlitzer Jukebox.

The Former Remington Rand Property (property) has been associated with commercial/industrial use since at least 1886. From sometime prior to 1886 to about 1900 the property was associated with the lumber industry and contained lumber storage and shingle manufacturing. During that time, a portion of the property contained a railroad trolley power house. From 1900 to the early 1920's the property was occupied by the Herschell-Spillman Co., which, as noted above, manufactured carousels and other amusement park rides. From 1925 to the early/mid 1970's, the property was occupied by the Remington-Rand Corporation. Remington Rand was formed by the merger of the Remington Typewriter Company, Rand Kardex Company, and Powers Accounting Machine Company. From the mid 1970's to present, the building complex was occupied by various commercial tenants including a chemical company, building contractors, warehousing, and furniture and cabinetry makers. An active rail line has been located along the eastern border of the property since the mid 1800's. Automotive sales and service and commercial buildings have historically been located on adjacent property to the west of the facility. An automotive service facility with gasoline tanks was historically located on adjacent property northwest of the intersection of Sweeney and Marion Streets and east of the property on the east side of the railroad embankment.

## **4.0 NATURE AND EXTENT OF CONTAMINATION BY MEDIA**

### **4.1 Introduction**

This section discusses the results of the RI activities, and in particular the nature and extent of contaminants detected in the media investigated.

All air, soil and water samples were submitted for analysis to Test America Buffalo a New York State certified laboratory. All analytical data from the laboratory was validated by Chemworld Environmental, Inc. of Rockville, Maryland. Chemworld's Data Usability Summary Report (DUSR Text Only) for all data is provided in Appendix B.

### **4.2 Potential Sources**

Other than some surface staining near isolated transformer units resulting in minor PCB impacted surface/near surface soil, no specific source of contamination was uncovered during the investigation or historical review. The minor areas of impacted environmental media found during the remedial investigation are further described below.

#### **Air**

The RI sub-slab vapor/ambient air sampling program resulted in the detection of some VOC compounds in both the indoor/outdoor air samples and in the sub-slab vapor samples. The VOCs detected in the indoor air samples were, in general, consistent with those detected in the outdoor ambient air control sample and detected at similar concentrations. DOH guidance suggests that, based on studies on other buildings and given the relatively low concentrations observed in the sub-slab samples, the ambient indoor air concentrations found in the Remington Rand building are most likely due to typical ambient sources indoor or outside the building. During renovation, the building surfaces will be cleaned, refurbished and painted and any potential indoor ambient source will be removed. The subsurface soil assessment indicated that some impacted soil exists in a portion of the courtyard along the wall of the building and under the slab in that area. Relatively low elevated concentrations of VOCs were detected.

#### **Soil**

The soil assessment indicated that some impacted soil exists in areas inside the building beneath the floor slab primarily near the westerly end of the courtyard (refer to Figure 2) and in surface and subsurface soils outside the building (courtyard and along the southeastern portion of the property - refer to Figure 3). Relatively low elevated concentrations of metals and SVOCs, primarily polynuclear aromatic hydrocarbons (PAHs) compounds were found in these soils. Minor concentrations of VOCs, PCBs and pesticides were indicated in some areas. With some exceptions, the elevated compound concentrations in the exterior soils were primarily in the surface or near-surface soils.

Other than some surface staining near isolated transformer units resulting in minor PCB impacted surface/near surface soil, a specific source of the elevated concentrations of the other compounds is unknown and no specific source was uncovered during the investigation or historical review. The potential source of the low levels of contamination in the soils most likely relates to the over 100 years of historic commercial/industrial operations at the site and in the general area. Additionally, an operating railroad line abuts the eastern side of the property and for a period of time a railroad spur was on the property. The historical use of the property for industrial and commercial purposes included the operation of a machine shop and paint shop; trolley powerhouse; production of automotive chemicals; and the storage of various hazardous materials. This indicates the potential for past discharges of materials to the ground surface and/or interior of the building.

PAHs are a group of chemicals that are formed during incomplete burning of wood, coal, gas, garbage or other organic substances and are widely distributed in the environment and particularly in older urban environments where coal, gas, and petroleum were burned for heat and other energy uses. PAH compounds are common constituents of fill material found in urban environments, and are typically associated with both fill material, coal tar and asphalt based materials or ash and along rail lines.

Most metals occur in nature and their concentrations in fill and natural soil will exhibit considerable variability both stratigraphically and spatially. This variability is related to the variable composition of the fill, natural soils' protolith, weathering processes that chemically and physically modify soil, and groundwater interactions that modify the geochemistry. Metals are also associated with machining operations as noted above.

As stated, PCBs were detected in the exterior soils, primarily surface soils, isolated near the two exterior transformer areas.

As stated, low levels of volatile and semi-volatile compounds were associated with some impacted soil in a portion of the courtyard along the west and south west courtyard walls of the building and under the slab in that area. Relatively low elevated concentrations of VOCs were detected in this area. No specific source was identified and these may have been associated with spills or small releases during the operation lifetime of the building.

### **Groundwater**

An examination of the filtered and unfiltered sample analytical results, suggests that the property is not a source of impacted groundwater.

The findings of the sampling analytical program are further described below.

### **4.3 Vapor/Air Sampling Analytical Results**

A total of seven sub-slab vapor samples and five ambient air samples (four indoor and one outdoor ambient location) were analyzed in accordance with the approved work plan and

the NYSDEC Analytical Services Protocol (ASP), 10/95 edition. Samples were submitted to Test America, a NYSDEC certified contract laboratory, and analyzed for TCL VOCs by EPA method TO-15.

A number of VOC compounds were detected in both the indoor/outdoor ambient air samples and in the sub-slab vapor samples. The VOC compounds detected during the sampling program are summarized in Table 6 and discussed in detail below.

The New York State Department of Health (NYSDOH) has developed a guidance document ("NYSDOH Guidance for Evaluating Soil Vapor Intrusion in NY State, 10/06"). This guidance (NYSDOH Guidance) has been prepared by NYSDOH in consultation with the NYSDEC. It is intended as general guidance to evaluate soil vapor intrusion in New York State.

Chemicals are part of our everyday life. As such, they are found in the indoor air of buildings not affected by intrusion of contaminated soil vapor. They are also found in the outdoor air that enters a home or place of business. Commonly found concentrations of these chemicals in indoor and outdoor air are referred to as "background levels." Background levels of volatile chemicals are one of the factors considered when evaluating sampling results at a site. The VOCs detected in the indoor air samples collected within the Remington building were, in general, consistent with those detected in the outdoor ambient air control sample and detected at similar concentrations (refer to Table 6). The NYSDOH has developed guideline values for acceptable background levels for five specific VOCs in ambient air. Two of the five VOCs, methylene chloride and trichloroethene (TCE), were detected in indoor and/or outdoor ambient air samples at the site at values significantly below guideline values. The highest concentration of methylene chloride detected in the ambient air was 12 mcg/m<sup>3</sup> in sample RR-AA-04 versus the guideline value of 60 mcg/m<sup>3</sup>. The highest concentration of TCE detected in the ambient air was 0.70 mcg/m<sup>3</sup> also in sample RR-AA-04 versus the guideline value of 5.0 mcg/m<sup>3</sup>.

The goals of collecting sub-slab vapor samples were to identify potential and current (when collected concurrently with indoor and outdoor air samples) exposures associated with soil vapor intrusion and to characterize the nature and extent of subsurface vapor contamination, if any. New York State currently does not have any standards, criteria or guidance values for concentrations of compounds in sub-slab vapor. Additionally, there are no databases available of background levels of volatile chemicals in subsurface vapors. However, the NYSDOH has developed in their guidance document decision matrices as a risk management tool to provide guidance on a case-by-case basis about actions that should be taken to address current and potential exposures related to soil vapor intrusion. The matrices are intended to be used when evaluating the results from buildings with full slab foundations such as the Remington building. The matrices encapsulate the data evaluation processes and actions recommended to address potential exposures.

The NYSDOH has developed two matrices, which are included in Appendix E for reference, to use as tools in making decisions when soil vapor may be entering buildings. The first decision matrix was originally developed for TCE and the second for PCE and

later two additional chemicals were added. As summarized in the following table from the NYSDOH Guidance, four chemicals have been assigned to the two matrices to date.

Chemical	Soil Vapor/Indoor Air Matrix
Carbon tetrachloride	Matrix 1
Tetrachloroethene (PCE)	Matrix 2
1,1,1-Trichloroethane (1,1,1-TCA)	Matrix 2
Trichloroethene (TCE)	Matrix 1

Using the Matrix 1 and 2 models from the Guidance (refer to Appendix E), the concentrations of these VOCs detected at the site were evaluated as follows:

- Matrix 1 - Concentrations of both trichloroethene and carbon tetrachloride are between 0.25 to less than 1 in all indoor air samples (refer to table 6) and sub-slab concentrations for these compounds are less than 5 for all samples resulting in Action 2 "Take reasonable and practical actions to identify source(s) and reduce exposure".
- Matrix 2 – Concentrations of both tetrachloroethene and 1,1,1-trichloroethane are less than 3 for all indoor air samples (refer to Table 6). Sub-slab vapor concentrations for tetrachloroethene in all samples are less than 100 resulting in Action 1 "No further action" related to this compound". The sub-slab vapor concentration from sample RR-SA-03 for 1,1,1 trichloroethane falls between 100 and 1,000 resulting in Action 5 "Monitor".

#### Assessment of Matrix Results:

The sub-slab air analytical results (refer to Table 6) reveal that the highest concentrations of trichloroethene and carbon tetrachloride were detected in Sub-slab samples RR-SA-03 and RR-SA-04 (refer to Figure 2) both located in the central section of the building south of the south end of the courtyard. These concentration levels resulted in a Matrix 1 Action 2 "Take reasonable and practical actions to identify source(s) and reduce exposure". The highest concentration of 1,1,1- trichloroethane was detected in sample RR-SA-03 and the next highest concentration level was detected in RR-SA-04 and resulted in a Matrix 2 Action 5 "Monitor". It should be noted that during the sub-slab soil boring program in the area adjacent to RR-SA-04 elevated VOC PID readings were recorded (175 ppm). This was the only sub-slab soil boring where elevated PID readings were recorded.

After consultation with the NYSDEC and NYSDOH it was agreed that the area of the sub-slab where samples RR-SA 03 and RR-SA-04 were collected would require some form of vapor mitigation to satisfy the action guidelines resulting from the Matrix assessments. It was agreed that, since the first floor area of the building will be used as a parking garage, a



passive sub-slab vapor venting system should be installed under the area of the slab surrounding the two sample locations. The system would be installed as an IRM and is discussed in greater detail in Section 6 IRM Recommendations. It was also agreed that the installation of a passive vapor mitigation system would also eliminate the need to perform periodic monitoring of the ambient air unless the space use changed in the future whereby the air maybe re-sampled and the passive system modified to an active system depending on the change in space re-use. However, to assess the effectiveness of the passive vapor system an air sample will be collected and analyzed from a sample port installed in the vent piping on six month intervals for the foreseeable future as determined by the NYSDEC/NYSDOH. The IRM will also include the installation of an in-line fan above the sample port which will be turned on before each sampling event to place a vacuum on the system to assure the sample reflects the sub-slab air flowing to the vent stack. In the future, if it is determined that an active system is required, the fan can be fully activated to form an active system.

#### OSHA Permissible Exposure Limits (Pel):

The concentrations of the various compounds detected in the indoor ambient air (refer to Table 6) were compared to the OSHA (Occupational Safety and Health Administration) PEL for 8-hour time-weighted average worker inhalation exposure for each detected compound concentration. In all cases the maximum concentration detected in the ambient air for each compound was orders of magnitude lower than the OSHA (Occupational Safety and Health Administration) PEL for 8-hour time-weighted average worker inhalation exposure to each compound.

#### **4.4 Soil sampling Analytical Results**

All soil samples were submitted to Test America a NYSDEC certified contract laboratory and analyzed in accordance with NYSDEC Analytical Services Protocol (ASP), 10/95 edition.

Compounds detected during the soil sampling program are summarized in the following tables and discussed in detail below:

Table 1 – Soil Boring Sample Analytical Results

Table 2 – Test Trench Soil Sample Analytical results

Table 3 – Surface Soil Sample Analytical results

Table 5 – Sub-Slab Boring and Drain Samples Analytical results

Each table also provides a comparison of the analytical results with 6 NYCRR Part 375-6.8 Residential and Restricted Residential Soil Cleanup Objectives. A Data Usability Summary Report (DUSR) is provided in Appendix B.

Concentrations of selected key compounds detected in soil samples at each sample location are presented on the following figures:

Figure 4 – Exterior Surface Soil Sample Results  
Figure 5 – Exterior Subsurface soil sample Results  
Figure 6 – Sub-Slab Soil Sample Results  
**4.4.1 Exterior Soil samples**

**(a) Surface Soil Samples**

Surface soil samples were collected from the following areas (refer to Figure 4):

- North Transformer Area:
  - Boring samples-BH-01A, 02A and 03A
  - Shovel samples-SS-08A, 09A and 10A
- Courtyard Transformer Area:
  - Boring samples-BH-04A, 05A and 06A
  - Shovel samples-SS-11A, 12A and 13A
- General Courtyard Area:
  - Test Trench samples-TP-07A, 08A, 09A and 10A
- East Parking Area:
  - Test Trench samples-TP-03A and 05A

All six test trench surface soil samples, borehole samples BH-02A and 05A and shovel samples SS-08A and 11A were analyzed for TCL SVOCs, PCBs, pesticides and TAL metals. Borehole samples BH-01A, 03A, 04A and 06A and surface samples SS-09A, 10A, 12A and 13A were analyzed for PCBs only. Surface soil samples were not analyzed for VOCs.

Specific surface soil sample compound concentrations detected are provided in Analytical Tables 1 through 3, noted on Figure 4 and discussed in detail below.

**SVOCs**

Numerous SVOCs consisting primarily of PAHs were detected in all surface soil samples analyzed for SVOCs. All surface soil samples analyzed for SVOCs had several PAH compounds that exceeded Part 375 residential and restricted residential soil cleanup objectives. In most of the samples PAH concentrations only slightly exceed cleanup objectives; however, in five samples the exceedences were in the order of magnitude range. These samples included: TP-03A and 05A in the east parking area; SS-08A near the north transformer area and TP-08A and SS-11A near the courtyard transformer area.

**PCBs**

No PCB compounds were detected in five of the 18 surface soil samples analyzed for PCBs. In the other 13 samples, one or more of the following PCB compounds were detected: Aroclor 1248, 1254 and 1260. The detected concentrations of each of these compounds were, in all cases, below Part 375 residential and restricted

residential soil cleanup objectives.

### **Pesticides**

No pesticide compounds were detected in three of the 10 surface soil samples analyzed for pesticides. Between one and three pesticide compounds were detected in the other seven surface soil samples at concentrations significantly below Part 375 residential and restricted residential soil cleanup objectives.

### **Metals**

Metal compounds were detected in all of the 10 surface soil samples analyzed for metals. Four surface soil samples (BH-05A, TP-03A, TP-07A and TP-09A) had no detected metal concentrations that exceeded Part 375 residential and restricted residential soil cleanup objectives. Six surface soil samples had between one and seven detected metal compound concentrations that exceeded Part 375 residential and/or restricted residential soil cleanup objectives including: BH-02A (7); SS-08A (6); SS-11A (1); TP-05A (5); TP-08A (1) and TP-10A (4). Refer to Analytical Tables 1 through 3 for specific compound concentrations.

Most metals are naturally present in soil and fill materials. Concentrations of metals in soil and fill exhibit considerable variability, both stratigraphically and spatially. This variability is related to the composition of the fill, natural soils' origin, weathering processes that chemically and physically modify soil and, groundwater interactions that modify the geochemistry.

### **(b) Exterior Sub-Surface Soil Samples**

Sub-surface soil samples were collected from the following areas (refer to Figure 5):

- North Transformer Area:  
Boring samples-BH-01B and 02B
- Courtyard Transformer Area:  
Boring samples-BH-04B and 06B
- General Courtyard Area:  
Test Trench samples-TP-07B, 08B, 09B and 10B
- East Parking Area:  
Test Trench samples-TP-01B, 02B, 04B and 06B
- Sweeney St. Loading Dock Ramp:  
Borehole sample – BH-07B

Borehole samples BH-01B, 02B, 04B, 06B and 07B and Test trench samples TP-7B and 09B were analyzed for TCL VOCs/ SVOCs (STARS + TICs), PCBs and TAL metals.

Test trench samples TP-01B, 02B, 04B, 06B, 08B and 10B were analyzed for TCL VOCs/ SVOCs (STARS + TICs), and TAL metals.

Specific exterior subsurface soil sample compound concentrations detected are provided in Analytical Tables 1 and 2, noted on Figure 5 and discussed in detail below.

#### VOCs

No VOCs were detected in five of the 13 subsurface soil samples analyzed for VOCs. Several VOCs were detected in the other eight subsurface soil samples at concentrations significantly below Part 375 residential and restricted residential soil cleanup objectives.

#### SVOCs

No SVOCs were detected in two of the subsurface soil samples. Numerous SVOCs consisting primarily of PAHs were detected in the other 11 subsurface soil samples analyzed for SVOCs. Only two samples (TP-01B and TP-09B) detected concentrations of several PAH compounds that slightly exceeded Part 375 residential and restricted residential soil cleanup objectives.

#### PCBs

No PCBs were detected in six of the seven subsurface soil samples analyzed for PCBs. Two PCB compounds were detected in one subsurface soil sample (TP-9B) at concentrations significantly below Part 375 residential and restricted residential soil cleanup objectives.

#### Metals

Metal compounds were detected in all of the 13 subsurface soil samples analyzed for metals. No metal compounds exceeded Part 375 residential and restricted residential soil cleanup objectives in 10 of the 13 samples. Three samples (BH-6B, TP-2B and TP-9B) had one metal compound each that slightly exceeded Part 375 residential and restricted residential soil cleanup objectives.

### **4.4.2 Interior Sub-Slab Soil Samples**

A total of five soil samples (RR-SS-SF-01, 04, 05, 07 and 08) were collected for analysis from the eight sub-slab boring locations (refer to Figure 6).

Each sample was analyzed for VOCs/SVOCs (STARS +TICs), PCBs, Pesticides and TAL Metals.

Specific interior sub-slab soil sample compound concentrations detected are provided in

Analytical Table 5, noted on Figure 6 and discussed in detail below.

### VOCs

No VOCs were detected in two of the five sub-slab soil samples (RR-SS-SF-05 and 07). Only one VOC was detected in each of the other three sub-slab soil samples at concentrations significantly below Part 375 residential and restricted residential soil cleanup objectives.

### SVOCs

Several SVOCs consisting primarily of PAHs were detected in all five sub slab soil samples. Only one sub slab soil sample (RR-SS-SF-05) had concentrations of two PAH compounds that slightly exceeded Part 375 residential and restricted residential soil cleanup objectives.

### PCBs

No PCBs were detected in four of the five sub-slab soil samples analyzed for PCBs. One PCB compound was detected in one sub-slab soil sample (RR-SS-SF-08) at a concentration significantly below Part 375 residential and restricted residential soil cleanup objectives.

### Pesticides

No pesticide compounds were detected in any of the five sub-slab soil samples analyzed for pesticides.

### Metals

Metal compounds were detected in all of the five sub-slab soil samples. No metal compound concentrations exceeded Part 375 residential and restricted residential soil cleanup objectives in four of the five samples. One sample (RR-SS-SF-01) had one metal compound that slightly exceeded Part 375 residential and restricted residential soil cleanup objectives.

## **4.5 Building Pit/Floor Drain Sediment Sampling Analytical Results**

A total of two drain sediment samples (RR-SS-DNE and RR-SS-DC) and two elevator shaft/pit sediment samples (RR-SS-ES and RR-SS-EN) were collected for analysis from drain/pit locations (refer to Figure 8).

Each sample was analyzed for VOCs/SVOCs (STARS + TICs), PCBs, Pesticides and TAL Metals.

Specific building pit/floor drain sediment compound concentrations detected are provided

in Analytical Table 5, noted on Figure 8 and discussed in detail below.

### VOCs

Between one and two VOCs were detected in each of the drain/pit sediment samples at concentrations significantly below Part 375 residential and restricted residential soil cleanup objectives.

### SVOCs

Several SVOCs consisting primarily of PAHs were detected in all four drain/pit sediment samples. Three of the four samples (RR-SS-EN, RR-SS-DNE and RR-SS-DC) had concentrations of two PAH compounds each that slightly exceeded Part 375 residential and restricted residential soil cleanup objectives.

### PCBs

No PCBs were detected in three of the four drain/pit sediment samples. Two PCB compounds were detected in one drain sediment sample (RR-SS-DNE) at concentrations significantly below Part 375 residential and restricted residential soil cleanup objectives.

### Pesticides

Several pesticide compounds were detected in all four drain/pit sediment samples at concentrations significantly below Part 375 residential and restricted residential soil cleanup objectives.

### Metals

Metal compounds were detected in all of the four drain/pit sediment samples. Several metal compounds exceeded Part 375 residential and restricted residential soil cleanup objectives in all four samples. One sample (RR-SS-DC) had several metal compound that significantly exceeded Part 375 residential and restricted residential soil cleanup objectives.

## **4.6 Groundwater Sampling Analytical Results**

A total of 5 micro-wells were installed and two rounds of groundwater sampling conducted. As discussed in section 2.5 the first round of well sampling experienced, other than MW-03, high turbidity (greater than 50 NTU) levels in the wells during sampling. Samples from Round-1 were analyzed for TCL VOCs and SVOCs and TAL metals. As a result of the high turbidity samples MW-01, 02, 04 and 05 detected elevated concentrations of several metal compounds that exceeded NYSDEC TOGs 1.1.1 GA Groundwater Regulations (refer to Table 4).

As a result of the elevated concentrations of metal compounds a second round of sampling was conducted for both filtered and unfiltered samples from each well and analyzed for RCRA metals only (refer to Table 4 and Figure 7 – filtered results). A few metal compounds were detected in each of the filtered samples at concentrations significantly below the TOGs 1.1.1 groundwater regulations. Several metal compounds were also detected in the unfiltered samples with most concentrations significantly below TOGs 1.1.1 groundwater regulations with the exception of arsenic and lead in RR-MW-01 and RR-MW -02 that exceeded TOGs 1.1.1 groundwater regulations.

#### **4.7 Transformer Sampling Analytical Results**

Fluid samples were collected from the nine pad mounted transformers (T-1 to T-9) and two circuit breaker fluid reservoirs (C-1 and C-2 inside transformer building) located at the north end of the site along with the single pad mounted transformer (T-10) located at the south end of the courtyard. Also, one stained concrete chip sample from the courtyard transformer pad and one stained soil sample immediately next to the courtyard transformer pad were collected. All samples were analyzed for PCBs. A table of the analytical results can be found on page 2 of Stohl's report provided in Appendix D and further discussed below.

##### **PCBs**

Low concentrations of PCBs were detected in the nine northern transformer samples (T-1 through T-9). PCB concentrations ranged from 3.4 ppm to 8.1 ppm in transformer samples T-1 to T-6. No PCBs were detected in Transformer samples T-7 to T-9. Also, no PCBs were detected in the two fluid reservoir samples C-1 and C-2. The T-10 transformer sample detected a higher PCB concentration of 240 ppm. The stain soil sample collected adjacent T-10 detected a PCB concentration of 120 ppm. This sample appears to be primarily composed of the stain material and is from a small isolated area directly next to the pad. Other surface soil samples collected in this area during the site investigation (refer to Section 4.4.1) including a stained soil sample near the pad detected PCB concentrations of less than 1 ppm.

## 5.0 INTERIM REMEDIAL MEASURES (IRMs)

The RI/AAR/IRM is being carried out in accordance with BCP requirements as defined in section 375-3.8 of the NYSDEC 6NYCRR Part 375 Environmental Remediation Program Regulations. The planned new development of the site under the BCP required that: the site soils and drain sediments be remediated to meet Restricted Residential status as defined in Part 375-1.8(g)(2) and achieve Soil Cleanup Objectives as defined in Part 375-6.8(b); PCP containing transformers be removed and disposed of in accordance with appropriate regulations; and install a sub-slab vapor removal system in a portion of the building. Based upon the results of the RI presented herein the above restricted residential status was obtained by completing the previously mentioned IRMs as follows.

- 1) Installed a sub-slab vapor venting system beneath a portion of the ground floor slab of the structure.
- 2) Removed impacted soil exterior to the building to a depth of two feet for off-site disposal and replaced with clean fill and or cement/asphalt paving sections separated from existing soil by a geotextile demarcation layer.
- 3) Removed sediments and cleaned building floor drains and elevator shaft pits.
- 4) Removed and properly disposed of PCB transformer oils, transformers and transformer enclosures.

The following is a brief description of each IRM:

**Sub-Slab vapor venting** was accomplished by installing a passive soil vapor extraction system in the rear northeast end of the center section of the structure, south of the courtyard area the system is designed for conversion to an active sub-slab depressurization system by installing an in-line fan.

**Removal and replacement of the top two feet of impacted soil** was accomplished by removing the top two feet of soil in property green space areas exterior to the building and replacing with soil meeting Brownfield requirements for replacement fill (6NYYCCR375 – Appendix 5A – Allowable Constituent Levels for Imported Fill or Soil Subdivision 5.4(e)) and or with concrete/asphalt paving sections. The removed soil was disposed of at an offsite approved permitted landfill. The site development incorporates on-site paved roadways, sidewalks and other paved areas. The soil in these areas was removed to the depth of the pavement section but not less than 12 inches in depth.

During soil excavation an empty 500+/- gallon underground storage tank (UST) was



uncovered near the Sweeney Street loading ramp just north of Sweeney Street at the site's southern property boundary. Some contaminated soil was also removed (220 +/- tons) from around and beneath the UST and disposed of with the UST at an approved off-site landfill. Confirmation samples were collected from the sidewalls and bottom of the excavation and the analytical results indicated that no compound concentrations exceeded Part 375 SCOs. A test pit was also excavated just south of Sweeney Street off site and no soil contamination was observed and no elevated PID readings were recorded above background.

**Removal of sediments and cleaning floor drains and elevator shaft pits** were accomplished by removing sediments from open drains and sumps including elevator shaft pits and transport to approved landfill based on material profiling and disposal facility requirements. After sediment removal, trenches and pits were washed/steam cleaned and the wash water containerized. All materials were tested for disposal purposes and properly disposed of off-site at an approved regulated facility.

**Removal of PCB transformer oils, transformers and enclosures** were accomplished by removing and disposing of the PCB containing oils from the transformers identified in the transformer sampling report (refer to Appendix D) in accordance with all applicable rules and regulations. Non PCB containing transformer and reservoir fluids were removed and properly disposed of at an approved off-site facility. All transformer units were then cleaned and properly disposed of at an approved off-site facility. The north transformer enclosure building was also removed including the building foundation. All enclosure materials were disposed of off-site at an approved disposal facility.

A Final Engineering Report (FER) will be prepared that will document all IRM construction activities. And the final remedy requirements.

## **6.0 FATE AND TRANSPORT OF COCS**

The surface/subsurface soil/fill and groundwater sample analytical results were incorporated with the physical site conditions to evaluate the fate and transport of COCs in Site media. The mechanisms by which the COCs can migrate to other areas or media are briefly outlined below. In all instances, the potential pathways are evaluated in the context of post-IRM conditions.

### **6.1 Fugitive Dust**

Chemicals present in soil can be released to ambient air as a result of fugitive dust generation. Impacted soil/fill was excavated/removed and disposed of off-Site as part of the IRM work. Furthermore, the majority of the Site is covered by the Remington Lofts building, asphalt and concrete pavement/sidewalks, and landscaped/vegetated areas which are a very small portion of the site. Based on this site cover there is little possibility of dust generation.

Based on the IRMs completed, the current and future restricted residential land use, and the majority of the Site being covered by a building, asphalt/concrete paved areas, and vegetation, this migration pathway is not relevant as long as paved (i.e. asphalt and concrete), and vegetated areas across the Site are maintained in accordance with the Site Management Plan (SMP) for the Site.

### **6.2 Surface Water Runoff**

The potential for soil particle transport with surface water runoff is low, as the majority of the Site is covered by a building, paved areas and vegetation. Storm water is collected on-site by receivers and transported offsite to the Municipal storm water collection system. Therefore, surface water runoff is not considered a relevant migration pathway.

### **6.3 Volatilization**

Volatile chemicals were present in very low concentrations in both the site exterior soils and groundwater wells. No VOC concentrations were detected in exterior soil/fill and groundwater samples above 6NYCRR Part 375 Restricted Residential SCOs or NYSDEC TOGS respectively. In fact, no VOCs were detected above Part 375 Residential SCOs. Therefore, volatilization through the release of VOCs from the exterior soils or groundwater are not considered relevant migration pathway.

However, the sub-slab vapor intrusion investigation within the building revealed several VOC compounds detected in both the indoor/outdoor ambient air samples and in the sub-slab vapor samples. The VOC compounds detected during the sampling program are summarized in Table 6. The NYSDOH has developed two matrices, which are included in Appendix E for reference, to use as tools in making decisions when soil vapor may be entering buildings. This is discussed in detail in section 4.3 of this report. The results of this evaluation indicated that Sub-slab vapor samples RR-SA-03 and RR-SA-04 (refer to Figure 2) both located in the central section of the building south of the south end of the courtyard had elevated concentrations of targeted NYSDOH VOCs that indicated action should be taken to reduce possible indoor air exposure in this area. The result of this investigation indicated that a volatilization migration pathway existed in this portion of the building but was mitigated through the IRM of installing a sub-slab vapor ventilation system in the targeted area of the building.

#### **6.4 Leaching**

Leaching refers to chemicals present in soil/fill migrating downward to groundwater as a result of infiltration of precipitation. Excavation/removal and off-Site disposal of the top two feet of impacted soil/fill from the site greatly reduced the potential for leaching of chemicals to groundwater. Furthermore, the majority of the site is covered by the building, paved areas and vegetation which limit infiltration of precipitation to the groundwater. Also, groundwater sample analytical results indicated very low concentrations of COCs.

#### **6.5 Groundwater Transport**

As noted in section 2.5, groundwater was encountered in all 5 of the monitoring wells installed across the site. Based on the groundwater elevations recorded in the table provided in section 2.5, the groundwater appears to flow from the southeast to the northwest across the site. This is somewhat adverse to what would be expected with the Erie Canal located to the south of the property. However, with the overburden water table being fairly close to the surface (4-8 feet), flow may be influenced by the site fill conditions (3 -6 feet of fill) and also by buried utility runs within the Tremont Street and Marion Street right of ways to the north and west respectively.

Filtered groundwater samples indicated only a few metal and VOCs in the groundwater at very low concentrations and below TOGS groundwater regulations

The Site and surrounding area are serviced by a municipal water service, with no evidence of potable wells in the area of the site. Therefore, transport off-site via groundwater migration is not a relevant migration pathway.

#### **6.6 Exposure Pathway Summary**

Based on the above analysis, the pathway through which Site COCs could reach receptors at significant exposure concentrations has been greatly reduced by the IRMs and is primarily limited to incidental contact with residual contaminants in soil/fill during

future potential development at the site that would call for exterior excavation or removal of sections of the building floor slab for future building changes/development.

## **7.0 QUALITATIVE RISK ASSESSMENT**

### **7.1 Human Exposure Risks**

Extensive remedial activities were conducted as IRMs related to COCs in the surface and subsurface soil/fill. Only a few COCs (PAHs) were detected above their respective restricted residential SCO in subsurface soil/fill samples collected below the two foot soil removed under the IRM. Future human contact with these subsurface soils may result in a potential human health risk for incidental ingestion, dermal contact and/or inhalation of re-suspended particulates. However, the majority of site is covered with the building, paved areas eliminating the potential exposure pathway and associated health risk. Areas not covered by impermeable surfaces are covered by two feet of clean fill material and a vegetative layer which reduces the potential for passive exposure (fugitive dust). Institutional controls in association with the Site Management Plan (SMP) will be utilized to reduce the potential for human exposure during non-routine intrusive activities or future development.

### **7.2 Ecological Exposure Risks**

The site is developed as a restricted residential facility located within a developed, urban area in the City of North Tonawanda. The site building houses condo lofts on the upper floors and commercial enterprises on the ground floor. As noted previously, the remainder of the site is covered primarily with paved areas (access roads, parking area and sidewalks) with minimal green space of grassed and landscaped areas. The site provides little or no wildlife habitat or pond/water features. Tonawanda Creek/Erie Canal is located just over 150 feet south across Sweeney Street. This is an active recreation area and part of the Erie Canal system. Tonawanda Creek is listed as a permanent Riverine Open Water federally designated wetland area and is listed as a Class C surface water body according to 6 NYCRR Part 837.4. As noted earlier, surface water runoff does not come in contact with the existing site impacted soils because the top two feet was removed under the IRM and the site is covered with the building, paved areas and clean fill in the minimal green areas that are vegetated. Surface water runoff from the site is collected by the City storm water system and does not flow to Tonawanda Creek. Over burden groundwater also appears to flow away from the creek based on the water level measures from the RI monitoring wells. Also, groundwater sampling indicated very low concentrations of COCs and well below TOGs regulatory levels.

Therefore,, no unacceptable ecological risks are anticipated under the current or any anticipated future use scenario.

## 8.0 REMEDIAL ALTERNATIVES EVALUATION

### 8.1 Remedial Action Objectives

The final remedial measures for the Remington Site must satisfy Remedial Action Objectives (RAOs). Remedial Action Objectives are site-specific statements that convey the goals for minimizing or eliminating substantial risks to public health and the environment. Appropriate RAOs for the site are:

- Prevent potential sub-slab VOC vapors from entering the building;
- Remove impacted sediments from first floor building floor drains and elevator pits to levels protective of human health (Part 375 Restricted Residential SCOs);
- Remove PCB containing oil transformers from the site; and
- Prevent ingestion or direct contact with exterior soil/fill that contains COCs above Part 375 Restricted Residential SCOs.

In addition to achieving RAOs, NYSDEC's Brownfield Cleanup Program calls for remedy evaluation in accordance with DER-10 Technical Guidance for Site Investigation and Remediation. The guidance states that an appropriate remedy should identify and develop a remedial action that is based on the following criteria:

- **Overall Protection of Public Health and the Environment.** This criterion is an evaluation of the remedy's ability to protect public health and the environment, assessing how risks posed through each existing or potential pathway of exposure are eliminated, reduced, or controlled through removal, treatment, engineering controls, or institutional controls.
- **Compliance with Standards, Criteria, and Guidance (SCGs).** Compliance with SCGs addresses whether a remedy will meet applicable environmental laws, regulations, standards, and guidance.
- **Long-Term Effectiveness and Permanence.** This criterion evaluates the long-term effectiveness of the remedy after implementation. If wastes or treated residuals remain on-site after the selected remedy has been implemented, the following items are evaluated: (i) the magnitude of the remaining risks (i.e., will there be any significant threats, exposure pathways, or risks to the community and environment from the remaining wastes or treated residuals), (ii) the adequacy of the

engineering and institutional controls intended to limit the risk, (iii) the reliability of these controls, and (iv) the ability of the remedy to continue to meet RAOs in the future.

- **Reduction of Toxicity, Mobility or Volume with Treatment.** This criterion evaluates the remedy's ability to reduce the toxicity, mobility, or volume of Site contamination. Preference is given to remedies that permanently and significantly reduce the toxicity, mobility, or volume of the wastes at the Site.
- **Short-Term Effectiveness.** Short-term effectiveness is an evaluation of the potential short-term adverse impacts and risks of the remedy upon the community, the workers, and the environment during construction and/or implementation. This includes a discussion of how the identified adverse impacts and health risks to the community or workers at the Site will be controlled, and the effectiveness of the controls. This criterion also includes a discussion of engineering controls that will be used to mitigate short term impacts (i.e., dust control measures), and an estimate of the length of time needed to achieve the remedial objectives.
- **Implementability.** The implementability criterion evaluates the technical and administrative feasibility of implementing the remedy. Technical feasibility includes the difficulties associated with the construction and the ability to monitor the effectiveness of the remedy. For administrative feasibility, the availability of the necessary personnel and material is evaluated along with potential difficulties in obtaining specific operating approvals, access for construction, etc.
- **Cost.** Costs will be applied where applicable
- **Community Acceptance.** This criterion evaluates the public's comments, concerns, and overall perception of the remedy.

## 8.2 Land Use Evaluation

In developing and screening remedial alternatives, NYSDEC's Part 375 regulations require that the reasonableness of the anticipated future land use be factored into the evaluation. The future land use for the site is restricted residential development. Presently, the building is being renovated to house mixed use residential and commercial. The first floor of the building will house commercial enterprises and subsequent floors above the first will be condo/loft units. As previously noted the remainder of the site surrounding the building will be composed of primarily paved areas (roads, parking and sidewalks) with some mixed in landscaped/grassed areas. The redevelopment of the site is anticipated to be complete by the end of 2010. This remediation and development of the site is consistent with Part 375 Restricted Residential development requirements. Accordingly, remedial alternatives to clean up the Site to restricted residential end use are identified and evaluated herein.

Although the Site is to be used for restricted residential purposes, evaluating a more

restricted-use scenario is a requirement of the BCP. Therefore, a comparison of the soil/fill analytical data to Part 375 Residential as well as Restricted Residential SCOs is presented in the analytical tables. A review of the SCOs for Unrestricted SCOs was also performed and there were only a few compounds detected that were more restrictive than the Residential SCOs. DER-10 guidance also requires the evaluation of a "no-action" alternative to provide a baseline for comparison against other alternatives. Since IRMs have been completed for the Site, the following alternatives were evaluated:

- IRMs with No Further Action;
- IRMs with Institutional and Engineering Controls; and,
- Unrestricted Use Cleanup

The following section discusses the evaluation of these alternatives.

### **8.3 Evaluation of Alternatives**

#### **8.3.1 IRMs with No Further Action**

Under this alternative, with completion of the IRMs, the Site would remain in its current state, with no additional controls in-place.

**Overall Protection of Public Health and the Environment** – The site is not protective of human health and the environment, due to the absence of institutional and engineering controls to prevent more restrictive forms of future site use (e.g., unrestricted and residential) or removal restrictions of impacted site soils to uncontrolled off-site locations. Therefore, no further action is not protective of public health and does not satisfy the RAOs.

**Compliance with SCGs** – With completion of the IRMs and under the present site development conditions the site meets the restricted residential SCGs.

**Long-Term Effectiveness and Permanence** – The no further action alternative involves no institutional or engineering controls for monitoring and maintaining the sub-slab vapor extraction system or that the cover system in place across the site (paved areas, topsoil/landscaped) will be maintained, and therefore provides no long-term effectiveness toward achieving the RAOs.

**Reduction of Toxicity, Mobility, or Volume with Treatment** – The IRMs completed at the Site have reduced the toxicity, mobility and volume of COCs. However, certain COCs above restricted residential SCOs do remain on-Site, and without ICs and ECs the integrity of the sub-slab venting system and soil cover system cannot be assured. Therefore, no further action is not protective of public health and does not satisfy the RAOs.

**Short-Term Effectiveness** – The no further action alternative would in most cases meet short term effectiveness.

**Implementability** – No further action alternative meets this criterion.

### **8.3.2 IRMs with Institutional and Engineering Controls (IC/EC)**

The IRMs achieved removal of the contaminated drain sediments, PCB transformers, sub-slab vapors and the top two feet of impacted soil/fill across the site. This alternative is defined as performing no additional cleanup activities at the Site beyond that which was already performed as IRMs with implementation of ICs and ECs as follows:

- Execution and recording of an Environmental Easement to restrict land use to restricted residential use per NYSDEC Part 375 regulations and prevent future exposure to any contamination remaining at the site.
- Development and implementation of a Site Management Plan (SMP) for long term management of remaining contamination including operation, monitoring and maintenance of the sub-slab vapor venting system as required by the Environmental Easement, which includes plans for Institutional and Engineering Controls.

This SMP specifies the methods necessary to ensure compliance with all ECs and ICs required by the Environmental Easement for contamination that remains at the site. The SMP also includes an Excavation Work Plan that details procedures to be implemented to minimize human and ecological exposure if future work on site requires the disturbance of the remaining impacted soil on site.

**Overall Protection of Public Health and the Environment** – The site is protective of human health and the environment, due to the implementation of institutional and engineering controls to prevent more restrictive forms of future site use (e.g., unrestricted and residential). Under ICs/ECs the sub-slab vapor extraction system will be monitored and maintained and the excavation work plan will apply to any future disturbance of the remaining impacted soils including the requirement to prepare an approved health and safety plan for all work.

**Compliance with SCGs** – With completion of the IRMs and under the present site development conditions the site meets the restricted residential SCGs

**Long-Term Effectiveness and Permanence** – The IRMs achieved removal of PCB transformers, the potential for sub-slab vapor intrusion and removed contaminated sediments and soil/fill to restricted residential SCOs. The Site Management Plan (SMP) will include an Excavation Work Plan to address any impacted soil/fill encountered during any future development and/or maintenance activities. Implementation of the SMP for long term management also includes operation, monitoring and maintenance of the sub-slab vapor venting system and a Site-wide Inspection program to assure that the ICs/ECs placed on the Site have not been altered and remain effective. As such, this alternative is expected to provide long-term effectiveness and permanence.



**Reduction of Toxicity, Mobility, or Volume with Treatment** – Through removal of the PCB transformers, contaminated sediments and soil/fill exceeding restricted residential SCOs, along with the mitigation of sub-slab vapors by the venting system the IRMs either permanently or significantly reduced the toxicity, mobility, and volume of Site contamination. The Site Management Plan will include: an excavation work plan to address any impacted soil/fill encountered during future development and/or maintenance activities; operation, monitoring and maintenance requirements for the sub-slab vapor venting system and a Site-wide Inspection program to assure that the ICs/ECs placed on the Site have not been altered and remain effective. Therefore, this alternative satisfies this criterion.

**Short-Term Effectiveness** –As noted above the IRMs achieved the RAOs for the Site. Short-term adverse impacts and risks to the community, the workers, and the environment during the implementation of the IRMs were effectively controlled through approved contractor health and safety plans implemented by the contractors for all work.

**Implementability** – There are no implementation issues related to the Institutional and Engineering Controls placed on the site.

**Community Acceptance** – Community acceptance will be evaluated based on comments to be received from the public in response to Fact Sheets, public comment periods on documents and other planned Citizen Participation activities.

### **8.3.3 Unrestricted Use**

An Unrestricted Use alternative would necessitate remediation of all soil/fill where concentrations exceed the Unrestricted SCOs per 6NYCRR Part 375 which are very similar to Residential SCOs (Tables 1, 2, 3 and 5). For Unrestricted Use scenarios, excavation and off-site disposal of impacted soil/fill is generally regarded as the most applicable remedial measure. The Unrestricted Use alternative assumes that those areas which exceed Unrestricted SCOs would be excavated and disposed at an approved off-Site landfill. The completed IRMs removed the top two feet of soil across the non building areas of the site. Based on the RI analytical results to meet Unrestricted SCOs another 3 to 4 feet of impacted soil below the two feet already removed would be required to be removed for off-site disposal from a large area of the site. An estimated additional 3,500 tons of impacted soil would have to be removed from open areas and replaced with an equal quantity of clean fill. Also, the replacement two feet of fill and paved sections would have to be removed and replaced to reach the additional impacted soils.

There are also areas beneath the building floor slab where SVOC concentrations in the soil exceed Unrestricted SCOs and would have to be excavated and replaced. This would require the removal of the floor slab in several areas and excavating the soils up to 2-3 feet in depth. There will also be areas where it will be structurally prohibitive to remove floor slab areas and soils without endangering the stability of the building structure.

Based on the minor exceedences of groundwater concentrations, as described above, and the removal of an additional 3-4 feet of soil/fill across the Site; thereby removing any potential source area, this alternative assumes that no groundwater remediation or long-term monitoring would be required.

**Overall Protection of Public Health and the Environment** – The Unrestricted Use alternative would achieve the corresponding Part 375 SCOs, which are designed to be protective of human health under any reuse scenario.

**Compliance with SCGs** –Unrestricted Use alternative would comply with SCOs

**Long-Term Effectiveness and Permanence** – The Unrestricted Use alternative would achieve removal of all residual impacted soil/fill; therefore, no soil/fill exceeding the Unrestricted SCOs would remain on the Site. As such, the Unrestricted Use alternative would provide long-term effectiveness and permanence. Post-remedial monitoring and certifications would not be required.

**Reduction of Toxicity, Mobility, or Volume with Treatment** – Through removal of all impacted soil/fill, the Unrestricted Use alternative would permanently and/or significantly reduce the toxicity, mobility, and volume of Site contamination.

**Short-Term Effectiveness** – The short-term adverse impacts and risks to the community, workers, and environment during implementation of the Unrestricted Use alternative would increase. The duration of time community, workers, and the environment is exposed to fugitive dust and potential off-site exposures during remediation would increase. There would also be worker safety issues related to the removal of inside floor slabs and soils near foundations.

**Implementability** – Technical implementability of the Unrestricted Use alternative would be very difficult and not practical. The Site is currently being developed as a commercial condo facility with new underground utilities having been installed throughout the site along with site roads, sidewalks and landscaped areas. The excavation of impacted soils below the building slab also presents a major challenge related to possible building structural concerns. To remove the addition 3-4 feet of soil below the already removed 2 feet of soil would require the removal of the recently constructed surface roads, sidewalks, landscaping and buried utility runs in some areas and rebuilding it all once the lower 3-4 feet of soil is removed and replaced. Re-excavating large portions of the site is not considered a reasonable alternative given the current and anticipated future use of the site.

**Community Acceptance** – Community acceptance will be evaluated based on comments to be received from the public in response to Fact Sheets, public comment periods on documents and other planned Citizen Participation activities.

## **8.4 Recommended Remedial Measure**

Based on the Alternatives Analysis evaluation, the completed IRMs and implementation of ICs and ECs fully satisfies the remedial action objectives and is fully protective of human health and the environment. Therefore, the IRMs and implementation of ICs and ECs is the recommended final remedy for site.

## **9.0 SUMMARY AND CONCLUSIONS**

### **9.1 Summary**

The RI tasks were completed in accordance with a defined scope of work and approved workplan. The following provides a summary of the site investigation activities at the Remington Rand site. Assessment activities consisted of the following specific tasks:

- Assessment of sub-slab vapors beneath the building floor slab. A total of seven borings were installed through the concrete floor slab at locations of historic industrial operations and one air/vapor sample was collected from each location and analytical results compared to four ambient air samples collected within the building and one outdoor air sample collected for background.
- Assessment of surface and subsurface soil/fill materials across the site exterior to the building. A total of ten test trenches were excavated in the courtyard and east parking area and a total of six surface soil and eight subsurface soil samples were collected for analysis. Seven geoprobe borings were installed adjacent the two transformer areas and in the south loading ramp and a total of six surface soil and five subsurface soil samples were collected for analysis. A total of six additional surface soil samples were collected in the two transformer areas.
- Assessment of sub-slab soils. Geoprobe borings were installed at each of the seven sub-slab vapor sampling locations and a total of four soil samples were collected from selected cores. One additional soil sample was collected from a boring installed through a soil/debris pile within the building.
- Assessment of building pit and drain sediments. A total of three sediment samples were collected from floor drains and one sediment sample from an elevator pit.
- Assessment of groundwater conditions. A total of five Geoprobe boring converted groundwater monitoring wells were installed at perimeter locations north, east, west and south of the site and one in the center courtyard. One groundwater sample was collected from each monitoring well during two rounds of groundwater sampling.

- Assessment of PCBs in transformer oils. A total of 10 transformers and two fluid reservoirs were sampled for PCBs.
- Performed laboratory analysis on all samples. Analysis included TAL metals, TCL VOCs (no surface soil samples), TCL SVOCS, PCBs and pesticides. Not all analyses were performed on all samples.

## **Summary of Results by Medium**

### **Sub-Slab Vapor/Ambient Air**

A number of VOC compounds were detected in both the indoor/outdoor air samples and in the sub-slab vapor samples (refer to Analytical Table 6). The VOCs detected in the indoor air samples were, in general, consistent with those detected in the outdoor ambient air control sample and detected at similar concentrations. Using the Matrix 1 and 2 models from the NYSDOH Guidance for Evaluating Soil Vapor Intrusion in NY State, 10/06 the concentration of the guidance selected VOCs detected at the site was evaluated as follows:

Matrix 1 - Indoor air concentrations for both trichloroethene and carbon tetrachloride are between 0.25 to <1 (refer to table 6) and sub-slab concentrations for these compounds are <5 for all samples resulting in Action 2 "Take reasonable and practical actions to identify source(s) and reduce exposure".

Matrix 2 - Indoor air concentrations for both tetrachloroethene and 1,1,1-trichloroethane are <3. Sub-slab vapor concentrations for tetrachloroethene in all samples are <100 resulting in Action 1 "No further action". Sub-slab vapor concentration from sample RR-SA-03 for 1,1,1 trichloroethane falls between 100 to <1,000 resulting in Action 5 "Monitor".

The Action 2 result from Matrix 1 is further described in the Guidance by stating that the concentrations detected in the indoor air samples are likely due to indoor and/or outdoor sources rather than soil vapor intrusion given the concentration detected in the sub-slab vapor samples. Steps should be taken to identify possible sources and reduce exposure.

### **Exterior Soil Sampling Results**

Soil samples were analyzed for TAL metals, TCL VOCs, TCL SVOCS, PCBs and pesticides. As noted above not all analyses were performed on all samples. Concentrations of detected compounds in the exterior soil samples are provided in Analytical Tables 1, 2 and 3. Each table also provides a comparison of the analytical results with 6 NYCRR Part 375-6.8 Residential and Restricted Residential Soil Cleanup Objectives.

### **Surface soils**

Numerous SVOCs consisting primarily of PAHs were detected in all surface soil samples analyzed for SVOCs. All surface soil samples analyzed for SVOCs had several PAH compounds that exceeded Part 375 residential and restricted residential soil cleanup objectives. In most of the samples PAH concentrations only slightly exceed cleanup objectives; however, in five samples the exceedences were in the order of magnitude range. These samples included: TP-03A and 05A in the east parking area; SS-08A near the north transformer area and TP-08A and SS-11A near the courtyard transformer area

PAHs, as well as metals, are not, in general, very mobile in soils. PAHs have low solubility's with water and tend to adsorb to the soil grains. These compounds do not readily breakdown in the environment. PAHs deposited from the historical combustion of coal or other fuels will most likely still be present in soils today. Based on their low volatility and their association with soil, the primary concern for potential human exposure to PAHs includes inhalation, ingestion and dermal contact.

Several PCB and Pesticide compounds were detected in the surface soil samples. However, in all cases, compound concentrations were below Part 375 Residential and Restricted Residential Soil Cleanup Objectives.

Metal compounds were detected in all of the surface soil samples analyzed for metals. Six surface soil samples had between one and seven metal compound concentrations that exceeded Part 375 residential and/or restricted residential soil cleanup objectives including: BH-02A (7); SS-08A (6); SS-11A (1); TP-05A (5); TP-08A (1) and TP-10A (4).

Most metals are naturally present in soil and fill materials. Concentrations of metals in soil and fill exhibit considerable variability, both stratigraphically and spatially. This variability is related to the composition of the fill, natural soils' origin, weathering processes that chemically and physically modify soil and, groundwater interactions that modify the geochemistry.

### **Sub-Surface Soils**

Several VOC and PCB compounds were detected in the sub- surface soil samples. However, in all cases, compound concentrations were below Part 375 Residential and Restricted Residential Soil Cleanup Objectives.

Numerous SVOCs consisting primarily of PAHs were detected in most sub-surface soil samples analyzed for SVOCs. Only two samples (TP-01B and TP-09B) detected concentrations of several PAH compounds that slightly exceeded Part 375 residential and restricted residential soil cleanup objectives.

Metal compounds were detected in all sub-surface soil samples analyzed for metals. No metal compounds exceeded Part 375 residential and restricted residential soil cleanup objectives in 10 of the 13 samples. Three samples (BH-6B, TP-2B and TP-9B) had one metal compound each that slightly exceeded Part 375 residential and restricted residential

soil cleanup objectives.

### **Interior Sub-Slab Soils**

A few VOCs were detected in the sub-slab soil samples at concentrations significantly below Part 375 residential and restricted residential soil cleanup objectives. One PCB compound was detected in one of the sub-slab soil samples at a concentration significantly below Part 375 residential and restricted residential soil cleanup objectives. No pesticides were detected in any of the sub-slab soil samples.

Several SVOCs consisting primarily of PAHs were detected in all five sub slab soil samples. Only one sub slab soil sample (RR-SS-SF-05) had concentrations of two PAH compounds that slightly exceeded Part 375 residential and restricted residential soil cleanup objectives.

Metal compounds were detected in all of the five sub-slab soil samples. No metal compounds exceeded Part 375 residential and restricted residential soil cleanup objectives in four of the five samples. One sample (RR-SS-SF-01) had one metal compound that slightly exceeded Part 375 residential and restricted residential soil cleanup objectives.

### **Interior Floor Drain/Pit Sediments**

Between one and two VOCs were detected in each of the drain/pit sediment samples at concentrations significantly below Part 375 residential and restricted residential soil cleanup objectives. Two PCB compounds were detected in one drain sediment sample at concentrations significantly below Part 375 residential and restricted residential soil cleanup objectives. Several pesticide compounds were detected in all four drain/pit sediment samples at concentrations significantly below Part 375 residential and restricted residential soil cleanup objectives.

Several SVOCs consisting primarily of PAHs were detected in all four drain/pit sediment samples. Three of the four samples (RR-SS-EN, RR-SS-DNE and RR-SS-DC) had concentrations of two PAH compounds each that slightly exceeded Part 375 residential and restricted residential soil cleanup objectives.

Metal compounds were detected in all of the four drain/pit sediment samples. Several metal compounds exceeded Part 375 residential and restricted residential soil cleanup objectives in all four samples. One sample (RR-SS-DC) had several metal compound that significantly exceeded Part 375 residential and restricted residential soil cleanup objectives.

### **Groundwater**

Groundwater Samples from Round-1 were analyzed for TCL VOCs and SVOCs and TAL metals. As a result of high turbidity in the samples from the first round, with the exception of sample MW-03, samples MW-01, 02, 04 and 05 detected elevated concentrations of

several metal compounds that exceeded groundwater regulations (NYSDEC TOGs 1.1.1 GA Groundwater).

As a result of the elevated concentrations of metal compounds a second round of sampling was conducted of both filtered and unfiltered samples from each well and analyzed for RCRA metals only. A few metal compounds were detected in each of the filtered samples at concentrations significantly below the TOGs 1.1.1 groundwater regulations. Several metal compounds were also detected in the unfiltered samples with most concentrations significantly below TOGs 1.1.1 groundwater regulations with two exceptions. Arsenic concentrations in samples RR-MW-01A (582 ppm) and RR-MW-02A (78.6 ppm) exceeded TOGs 1.1.1. Standard for arsenic of 25 ppm and lead concentrations in RR-MW-01A (30.1 ppm) and RR-MW-02A (30.2 ppm) exceeded TOGs 1.1.1. Standard for lead of 25 ppm.

### **Transformer Fluids**

Low concentrations of PCBs were detected in the nine northern transformer samples (T-1 through T-9). PCB concentrations ranged from 3.4 ppm to 8.1 ppm in transformer samples T-1 to T-6. No PCBs were detected in Transformer samples T-7 to T-9. Also, no PCBs were detected in the two fluid reservoir samples C-1 and C-2. The single courtyard T-10 transformer had a higher PCB concentration of 240 ppm. A stained soil sample collected adjacent to the T-10 transformer detected a PCB concentration of 120 ppm. This sample appears to be from a small isolated area directly next to the pad. Other surface soil samples collected in this area (refer to Section 4.4.1), including a stained soil sample near the pad, detected PCB concentrations of less than 1 ppm. A table of the analytical results can be found on page 2 of Stohl's report provided in Appendix D.

## **9.2 Conclusions**

The sub-slab vapor assessment program resulted in a number of VOC compounds detected in both the indoor/outdoor air samples and in the sub-slab vapor samples. Utilizing the NYSDOH Guidance for Evaluating Soil Vapor Intrusion in NY State, the sub-slab vapor concentration from sample RR-SA-03 indicated that this area of the sub-slab should be monitored and steps should be taken to identify possible sources and reduce exposure. To mitigate the sub slab vapors in this area a passive vapor mitigation system is recommended since the first floor area of the building is to be used only as a parking garage. Vapor mitigation is further discussed in Section 6.0 – Remedial Recommendations.

Exterior surface and sub-surface soils exhibited elevated concentrations of PAHs and metals that exceeded Part 375 restricted residential soil cleanup objectives. According to Part 375 in order for the site to meet restricted residential cleanup objectives the top two feet of existing soil will need to be removed and replace with clean fill material. This mitigation process is further discussed in Section 6.0.

Sub-slab soils exhibited only a few PAH and metal compounds that slightly exceeded Part 375 restricted residential soil cleanup objectives. Because of the very low level of contamination detected and the fact that the floor slab is to remain in place for the planned

future development no further remediation is recommended for this area.

The first floor drain/trench and elevator pit sediment samples exhibited in several samples significant elevated concentrations of a number of metal compounds that exceeded 375 restricted residential soil cleanup objectives. It is recommended that the sediments be removed from the drains/trenches and pits and disposed off site at an approved disposal facility. This remediation process is further discussed in Section 6.0.

Due to high sample turbidity levels in the first round of groundwater sampling the samples exhibited elevated concentrations of a number of metal compounds above TOGs ground water standards. A second round of sampling was conducted after the wells had settled and both filtered and unfiltered samples were collected. Only two metal compounds were detected in two of the unfiltered samples that exceeded the TOGs groundwater standard and no metal compounds exceeded groundwater standards in the filtered samples. Since the site is served by municipal water supply, and groundwater is not planned to be used for the new development, no further action related to groundwater is recommended.

Three of the ten transformers and both fluid reservoirs do not have PCB containing oil. The remaining seven transformers have various concentrations of PCBs with the highest being 250 ppm. The PCB oils in the seven transformers will have to be removed and the transformers cleaned in accordance with all appropriate regulations. The remediation of the transformers is further discussed in Section 6.0.

The intent of the approved RI/AAR/IRM Work Plan was for the IRMs to substantially or completely constitute the final NYSDEC approved BCP remedy for the Site. Based on the alternatives analysis evaluation, the IRMs, together with implementation of ICs and ECs fully satisfies the remedial action objectives and is protective of human health and the environment. Therefore, the IRMs and Implementation of the ICs and ECs is the recommended final remedy for the site.



TABLE 1 - Remington Rand Soil Boring Analytical Results

Sample Number	RR-BH-01A	RR-BH-01B	RR-BH-02A	RR-BH-02B	RR-BH-03A	RR-BH-04A	RR-BH-04B	RR-BH-05A	RR-BH-06A	RR-BH-06B	RR-BH-07B	NYSDEC	NYSDEC
Sample Date	4/27/2009	4/27/2009	4/27/2009	4/27/2009	4/27/2009	4/27/2009	4/27/2009	4/27/2009	4/27/2009	4/27/2009	4/27/2009	PART 375	PART 375
Sample depth	Surface	1'-2'	Surface	4'-5'	Surface	Surface	4'-5'	Surface	Surface	2'-3'	2'-3'	Residential	Restrict-Res
Compounds	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	(a) ppm	(b) ppm
Metals													
Aluminum	N/A	8170	21500	11900	N/A	N/A	6590	6340	N/A	19200	7870	N/A	N/A
Antimony	N/A	ND	9.4 J	ND	N/A	N/A	1.0 J	1.4 J	N/A	1.2 J	ND	N/A	N/A
Arsenic	N/A	5.7	52.5 (a)(b)	6.0	N/A	N/A	5.2	6.2	N/A	20.2 (a)(b)	11.8	16	16
Barium	N/A	55	2160 D08 (a)(b)	47.1	N/A	N/A	75.5	105	N/A	164	61.4	350	400
Beryllium	N/A	0.505	2.41	0.436	N/A	N/A	0.28	0.271	N/A	1.25	0.289	14	72
Cadmium	N/A	0.98 J	4.12 J (a)	ND	N/A	N/A	ND	0.604 J	N/A	ND	ND	2.5	4.3
Calcium	N/A	7420	108000	2410	N/A	N/A	17100	17700	N/A	3620	2760	N/A	N/A
Chromium	N/A	12.6 BJ	119 BJ (a)(b)	18.7 BJ	N/A	N/A	12.8 BJ	17.6 BJ	N/A	17.1 BJ	13.2 BJ	22	110
Cobalt	N/A	17	4.79	7.94	N/A	N/A	7.04	6.71	N/A	10.4	8.27	N/A	N/A
Copper	N/A	158	482 (a)(b)	22.6	N/A	N/A	57.5	70	N/A	73.2	21.9	270	270
Iron	N/A	15800	15800	21300	N/A	N/A	20100	24200	N/A	6530	19300	N/A	N/A
Lead	N/A	120	3030 MPS (a)(b)	12.5	N/A	N/A	78.1	150	N/A	130	12.3	400	400
Magnesium	N/A	3140	12500	2700	N/A	N/A	4950	7290	N/A	650	2890	N/A	N/A
Manganese	N/A	433	4450 D08 (a)(b)	136	N/A	N/A	212	471	N/A	335	517	2000	2000
Mercury	N/A	0.216 J	0.421 J	0.0288 J	N/A	N/A	0.0844 J	0.0805 J	N/A	0.178 J	0.0232 J	J	0.81
Nickel	N/A	34.2 J	24.4 J MPS	17.3 J	N/A	N/A	18.9 J	19.3 J	N/A	27.4 J	29.2 J	140	310
Selenium	N/A	ND	0.8 J	ND	N/A	N/A	ND	ND	N/A	ND	0.7 J	36	180
Potassium	N/A	731	1210	845	N/A	N/A	1040	807	N/A	1490	1110	N/A	N/A
Silver	N/A	ND	0.813	ND	N/A	N/A	ND	ND	N/A	ND	ND	36	180
Sodium	N/A	83.8 J	556	47.2 J	N/A	N/A	77.2 J	57 J	N/A	231	172	N/A	N/A
Vanadium	N/A	17.8	14	25.9	N/A	N/A	17.6	16	N/A	25.8	16.5	N/A	N/A
Zinc	N/A	308	1610 D08	55.1	N/A	N/A	94.1	146	N/A	144	70.9	2200	10000
SVOCs													
2-Methylnaphthalene	N/A	ND	ND	ND	N/A	N/A	ND	0.14 D02,J	N/A	ND	ND	N/A	N/A
Acenaphthene	N/A	0.04 J	ND	ND	N/A	N/A	0.24 D02,J	1.2 D02,J	N/A	ND	ND	100	100
Anthracene	N/A	0.085 J	0.23 D02,J	ND	N/A	N/A	0.69 D02,J	0.22 D02	N/A	ND	ND	100	100
Benzo(a)anthracene	N/A	0.43	1.2 D02,J (a)(b)	0.014 J	N/A	N/A	1.5 D02,J(a)(b)	4.8 D02 (a)(b)	N/A	0.048 J	ND	1	1
Benzo(a)pyrene	N/A	0.36	1.3 D02,J (a)(b)	0.029 J	N/A	N/A	1.3 D02,J(a)(b)	4.2 D02 (a)(b)	N/A	0.035 J	ND	1	1
Benzo(b)fluoranthene	N/A	0.4	2.3 D02,J (a)(b)	0.028 J	N/A	N/A	1.7 D02,J(a)(b)	4.5 D02 (a)(b)	N/A	0.11 J	ND	1	1
Benzo(g,h,i)perylene	N/A	0.19 J	1.4 D02,J	0.036 J	N/A	N/A	0.98 D02,J	3.0 D02	N/A	0.044 J	ND	100	100
Benzo(k)fluoranthene	N/A	0.18 J	ND	0.010 J	N/A	N/A	0.58 D02,J	2.8 D02 (a)	N/A	ND	ND	1	3.9
Carbazole	N/A	0.019 J	ND	ND	N/A	N/A	0.33 D02,J	1.6 D02,J	N/A	ND	ND	N/A	N/A
Chrysene	N/A	0.41	1.1 D02,J (a)	0.019 J	N/A	N/A	1.5 D02,J (a)	4.9 D02 (a)(b)	N/A	0.064 J	ND	1	3.9
Dibenz(a,h)anthracene	N/A	0.058 J	0.57 D02,J (a)(b)	0.018 J	N/A	N/A	0.27 D02,J	0.73 D02,J (a)(b)	N/A	0.010 J	ND	0.33	0.33
Dibenzofuran	N/A	0.0087 J	ND	ND	N/A	N/A	0.16 D02,J	0.79 D02,J	N/A	ND	ND	14	59
Fluoranthene	N/A	0.77	2.3 D02,J	0.015 J	N/A	N/A	3.5 D02	12.0 D02	N/A	0.062 J	ND	100	100
Fluorene	N/A	0.017 J	ND	ND	N/A	N/A	0.25 D02,J	1.2 D02,J	N/A	ND	ND	100	100
Indeno(1,2,3-cd)pyrene	N/A	0.19 J	0.98 D02,J (a)(b)	0.022 J	N/A	N/A	0.87 D02,J (a)(b)	2.5 D02 (a)(b)	N/A	0.032 J	ND	0.5	0.5
Naphthalene	N/A	0.012 J	ND	ND	N/A	N/A	ND	0.34 D02,J	N/A	ND	ND	100	100
Phenanthrene	N/A	0.35	1.4 D02,J	0.0085 J	N/A	N/A	2.7 D02	11.0 D02	N/A	0.019 J	ND	100	100
Pyrene	N/A	0.67	1.6 D02,J	0.013 J	N/A	N/A	2.9 D02	9.7 D02	N/A	0.049 J	ND	100	100
TICs Total	N/A	0.38	0.56	0.19	N/A	N/A	ND	ND	N/A	ND	ND		
PCBs													
Aroclor 1254	ND	ND	ND	ND	0.07 J	ND	ND	ND	ND	ND	ND	1	1
Aroclor 1260	ND	ND	ND	ND	ND	ND	ND	0.045 J	0.1 J	ND	ND	1	1
Pesticides													
4,4'-DDT	N/A	N/A	0.049 J	N/A	N/A	N/A	N/A	ND	N/A	N/A	N/A	1.7	7.9
Volatile Organics													
Methylene Chloride	N/A	ND	N/A	ND	N/A	N/A	ND	N/A	N/A	ND	ND	51	100
Naphthalene	N/A	ND	N/A	ND	N/A	N/A	ND	N/A	N/A	ND	ND	100	100
Tetrachloroethene	N/A	ND	N/A	ND	N/A	N/A	ND	N/A	N/A	0.0014 J	ND	5.5	19
Acetone	N/A	ND	N/A	ND	N/A	N/A	0.012 J	N/A	N/A	ND	0.015 J	100	100
TICs Total	N/A	ND	ND	ND	N/A	N/A	ND	N/A	N/A	ND	0.015 J		

N/A - Not Applicable ND - Non-detected

bgs - below ground surface

TICs - Tentatively Identified Compounds

Shading - Results above NYSEDEC Restricted Residential Cleanup Objectives

B - Analyte was detected in the associated Method Blank.

D02 - Dilution required due to sample matrix effects

D08 - Dilution required due to high concentration of target analyte(s)

ID4 - Benzo(b)fluoranthene coelutes with Benzo(k)fluoranthene. The reported result is a summation of the isomers and

the concentration is based on the response factor of Benzo(b)fluoranthene

J - Analyte detected at a level less than the Reporting Limit (RL) and greater than or equal to the Method Detection

Limit (MDL). Concentrations within this range are estimated.

MPS - The post spike and/or serial dilution were outside the acceptance limits due to sample matrix interference. See Blank spike (LCS).

TABLE 2 - Remington Rand Test Trench Soil Analytical Results

1 of 2

Sample Number	RR-TP-01B	RR-TP-02B	RR-TP-03A	RR-TP-04B	RR-TP-05A	RR-TP-06B	RR-TP-07A	RR-TP-07B	RR-TP-08A	RR-TP-08B	RR-TP-09A	RR-TP-09B	RR-TP-10A	RR-TP-10B	NYSDEC	NYSDEC
Sample Date	4/30/2009	4/30/2009	4/30/2009	4/30/2009	4/30/2009	4/30/2009	4/30/2009	4/30/2009	4/30/2009	4/30/2009	4/30/2009	4/30/2009	4/30/2009	4/30/2009	PART 375	PART 375
Sample depth	4'-5'	3'-4'	Surface	3.5'	Surface	5.5' - 6'	Surface	6'	Surface	8'-10'	Surface	3'	Surface	2.5'-3'	Residential	Restrict-Res
Compounds	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	(a) ppm	(b) ppm
Metals																
Aluminum	8040 J	8350 J	11200 J	11600 J	5870 J	11200 J	4730 J	6990 J	6190 J	8290 J	8790 J	10200 J	5730 J	8350 J	N/A	N/A
Antimony	2.4 J	4.6 J	ND	ND	11.3 J	ND	ND	ND	2.8 J	ND	ND	2.1 J	14.4 J	0.7 J	N/A	N/A
Arsenic	4.7	6.8	4.9	3.3	27.5 (a)(b)	3.9	4.2	4.1	11.1	3.5	3.7	9.1	12.5	5.1	16	16
Barium	100	177	145	49.5	1020 (a)(b)	90.4	92.4	49.3	144	34	123	283	598 (a)(b)	75.5	350	400
Beryllium	0.383 J	0.684 J	1.79 J	0.38 J	0.855 J	0.802 J	0.386 J	0.394 J	0.52 J	0.368 J	1.01 J	0.636 J	0.708 J	0.48 J	14	72
Cadmium	0.271	0.56	1.41	ND	1.79	0.785	0.416	0.216 J	0.975	0.068 J	0.757	0.384	1.69	0.138 J	2.5	4.3
Calcium	16300 J	50800 J	386000 J D08	1600 J	19200 J	3560 J	50500 J	9970 J	55400 J	2140 J	112000 J D08	33100 J	133000 J D08	7780 J	N/A	N/A
Chromium	9.94 J	35.1 J(a)	20.8 J	12.2 J	28.4 J (a)	19.9 J	11.9 J	10.8 J	22.1 J (a)	12.2 J	18.2 J	20.4 J	49.9 J (a)	12.4 J	22	110
Cobalt	5.44	4.21	2.33	4.24	8.74	8.85	3.56	6.61	5.3	6.83	3.12	0.27	5.81	6.69	N/A	N/A
Copper	90.2	255	44.2	10.6	662 (a)(b)	57.2	62.1	20.5	82.8	14.3	178	257	695 (a)(b)	22	270	270
Iron	12500 J	18800 J	9470 J	12800 J	30600 J	23600 J	10700 J	16200 J	23500 J	15900 J	8790 J	32300 J	40800 J	15600 J	N/A	N/A
Lead	299 J	270 J	150 J	14.8 J	812 (a)(b)	50.1 J	91.1 J	33 J	215 J	7.8 J	115 J	482 J (a)(b)	872 J (a)(b)	74.9 J	400	400
Magnesium	4350 J	15000 J	18000 J	2320 J	6260 J	3090 J	8660 J	3380 J	30500 J	2640 J	24000 J	3330 J	3900 J	2680 J	N/A	N/A
Manganese	294 J	517 J	887 J	81.5 J	427 J	302 J	309 J	191 J	410 J	173 J	728 J	726 J	993 J	205 J	2000	2000
Mercury	0.168	0.188	0.116	0.0363	0.666	0.0559	0.247	0.0413	0.181	ND	0.246	0.573	0.353	0.0929	0.81	0.81
Nickel	12.1	14.6	10.4	12.2	914	19.6	10.2	17.3	29.6	18.3	8.56	20	33.8	13.2	140	310
Selenium	2.1 J	0.6 J	ND	ND	1.4 J	ND	ND	ND	ND	ND	ND	1.1 J	ND	1.0 J	36	180
Potassium	1450	1080	750	1120	446	1180	638	1300	1040	16.4	773	1480	655	1310	N/A	N/A
Silver	ND	0.216 J,B	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	36	180
Sodium	474	224	265	95.5 J	271	121 J	102	102	153 J	74.7 J	172	102 J	215	131	N/A	N/A
Vanadium	13.5 J	15.6 J	0.55 J	18.9 J	28.2 J	22.3 J	13 J	16 J	23.7 J	15.8 J	10.7 J	28.9 J	66.8 J	22 J	N/A	N/A
Zinc	141 BJ	327 BJ	494 BJ	43.7 BJ	900 BJ	188 BJ	111 BJ	78.2 BJ	287 BJ	55.2 BJ	165 BJ	300 BJ	645 BJ	99.5 BJ	2200	10000
SVOCs																
2-Methylnaphthalene	0.17 J	0.034 J	ND	ND	0.71 D02,J	0.013 J	ND	0.017 J	9.0 T10,D02,J	ND	ND	ND	ND	ND	N/A	N/A
Acenaphthene	0.7	0.042 J	4.6 T10,D02,J	ND	5.6 D02	ND	0.72 D02,J	0.14 J	91.0 T10,D02	ND	1.9 T10,D02,J	0.43 D02,J	0.43 D02,J	ND	100	100
Acenaphthylene	0.11 J	0.080 J	0.83 T10,D02,J	ND	0.44 D02,J	ND	ND	ND	ND	ND	ND	ND	ND	ND	100	100
Anthracene	1.4	0.11 J	9.7 T10,D02,J	ND	10.0 D02	0.029 J	1.5 D02,J	0.27	160.0 T10,D02(a)(b)	ND	5.2 T10,D02,J	1.3 D02,J	1.4 D02,J	ND	100	100
Benzaldehyde	0.10 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	N/A
Benzo(a)anthracene	3 (a)(b)	0.44	41.0 T10,D02(a)(b)	ND	26.0 D02(a)(b)	0.087 J	4.2 D02(a)(b)	0.7	350.0 T10,D02(a)(b)	ND	10 T10,D02,J(a)(b)	2.2 D02,J(a)(b)	4.4 D02 (a)(b)	0.033 J	1	1
Benzo(a)pyrene	2.8 (a)(b)	0.45	42.0 T10,D02(a)(b)	ND	24.0 D02(a)(b)	0.079 J	4.0 D02(a)(b)	0.68	290.0 T10,D02(a)(b)	ND	8.8 T10,D02,J(a)(b)	1.8 D02,J(a)(b)	3.9 D02,J(a)(b)	0.033 J	1	1
Benzo(b)fluoranthene	3.3 (a)(b)	0.51	50.0 T10,D02(a)(b)	ND	27.0 D02 (a)(b)	0.10 J	4.2 D02 (a)(b)	0.77	320.0 T10,D02(a)(b)	ND	11.0 T10,D02,J(a)(b)	2.1 D02,J(a)(b)	4.8 D02 (a)(b)	0.038 J	1	1
Benzo(g,h,i)perylene	1.5	0.33	26.0 T10,D02	ND	12.0 D02	0.056 J	2.6 D02,J	0.44	170.0 T10,D02(a)(b)	ND	5.5 T10,D02,J	0.97 D02,J	2.1 D02,J	0.020 J	100	100
Benzo(k)fluoranthene	1.1 (a)	0.28	19.0 T10,D02(a)(b)	ND	11.0 D02 (a)(b)	0.031 J	2.2 D02,J (a)	0.27	150.0 T10,D02(a)(b)	ND	3.0 T10,D02,J (a)	0.62 D02,J	1.4 D02,J (a)	0.020 J	1	3.9
Biphenyl	0.053 J	ND	ND	ND	ND	ND	ND	ND	3.2 T10,D02,J	ND	ND	ND	ND	ND	N/A	N/A
Bis(2-ethylhexyl)phthalate	ND	ND	5.6 T10,D02,J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	N/A
Carbazole	0.88	0.074 J	6.4 T10,D02,J	ND	8.5 D02	0.028 J	0.99 D02,J	0.20 J	110.0 T10,D02	ND	2.7 T10,D02,J	0.68 D02,J	0.58 D02,J	ND	N/A	N/A
Chrysene	2.9 (a)	0.47	41.0 T10,D02(a)(b)	ND	26.0 D02(a)(b)	0.089 J	4.1 D02 (a)(b)	0.66	310.0 T10,D02(a)(b)	ND	9.8 T10,D02,J(a)(b)	2.1 D02,J (a)	4.1 D02,J (a)(b)	0.036 J	1	3.9
Dibenz(a,h)anthracene	0.4 (a)(b)	0.081 J	6.5 T10,D02,J(a)(b)	ND	3.6 D02 J(a)(b)	0.014 J	0.75 D02,J(a)(b)	0.11 J	48.0 T10,D02(a)(b)	ND	1.6 T10,D02,J(a)(b)	0.32 D02,J	0.61 D02,J(a)(b)	ND	0.33	0.33
Dibenzofuran	0.43	0.032 J	1.9 T10,D02,J	ND	3.8 D02,J	ND	0.41 D02,J	0.085 J	56.0 T10,D02 (a)	ND	1.4 T10,D02,J	0.4 D02,J	ND	ND	14	59
Diethyl phthalate	0.036 J	0.019 J	ND	ND	0.27 D02,J	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	N/A
Fluoranthene	7.7	0.95	110.0 T10,D02(a)(b)	ND	74.0 D02	0.22 J	9.9 D02	1.6	920.0 T10,D02(a)(b)	ND	24.0 T10,D02	4.9 D02	9.3 D02	0.074 J	100	100
Fluorene	0.73	0.041 J	4.1 T10,D02,J	ND	6.2 D02	ND	0.68 D02,J	0.14 J	81.0 T10,D02	ND	2.2 T10,D02,J	0.68 D02,J	0.4 D02,J	ND	100	100
Indeno(1,2,3-cd)pyrene	1.5 (a)(b)	0.3	24.0 T10,D02(a)(b)	ND	12.0 D02 (a)(b)	0.043 J	2.4 D02,J (a)(b)	0.38	160.0 T10,D02(a)(b)	ND	4.8 T10,D02,J(a)(b)	0.94 D02,J(a)(b)	2.0 D02,J (a)(b)	0.018 J	0.5	0.5
Naphthalene	0.27 J	0.033 J	ND	ND	1.5 D02,J	ND	ND	0.037 J	20.0 T10,D02,J	ND	ND	ND	ND	ND	100	100
Phenanthrene	6.1	0.58	60.0 T10,D02	ND	60.0 D02	0.19 J	8.2 D02	1.3	830.0 T10,D02(a)(b)	ND	22.0 T10,D02	5.3 D02	6.2 D02	0.054 J	100	100
Pyrene	5.5	0.73	78.0 T10,D02	ND	40.0 D02	0.15 J	8.1 D02	1.3	640.0 T10,D02(a)(b)	ND	18.0 T10,D02,J	3.7 D02	6.9 D02	0.054 J	100	100
TICs Total	11.75	2.27	N/A	1.04	N/A	1.43	N/A	67.36	N/A	133.4	N/A	ND	N/A	0.63		

N/A - Not Applicable ND - Non-detect

bgs - below ground surface

TICs - Tentitively Identified Compounds

Shading - Results above NYSDEC Restricted Residential Cleanup Objectives

B - Analyte was detected in the associated Method Blank.

D02 - Dilution required due to sample matrix effects

D04 - Dilution required due to high levels of non-target compounds

D08 - Dilution required due to high concentration of target analyte(s)

D10 - Dilution Required due to sample color

J - Analyte detected at a level less than the Reporting Limit (RL) and greater than or equal to the Method Detection

Limit (MDL). Concentrations within this range are estimated.

T10 - Sample had an adjusted final volume during extraction due to extract mix/or viscosity

QFL - Florisil cleanup (EPA 3620) performed on extract

H - Sample analysis performed past method specified holding time

TABLE 2 (con't) - Remington Rand Test Trench Soil Analytical Results														2 of 2		
Sample Number	RR-TP-01B	RR-TP-02B	RR-TP-03A	RR-TP-04B	RR-TP-05A	RR-TP-06B	RR-TP-07A	RR-TP-07B	RR-TP-08A	RR-TP-08B	RR-TP-09A	RR-TP-09B	RR-TP-10A	RR-TP-10B	NYSDEC	NYSDEC
Sample Date	4/30/2009	4/30/2009	4/30/2009	4/30/2009	4/30/2009	4/30/2009	4/30/2009	4/30/2009	4/30/2009	4/30/2009	4/30/2009	4/30/2009	4/30/2009	4/30/2009	PART 375	PART 375
Sample depth	4'-5'	3'-4'	Surface	3.5'	Surface	6'-6.5'	Surface	6'	Surface	8'-10'	Surface	3'	Surface	3'-4'	Residential	Restrict-Res
Compounds	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	(a) ppm	(b) ppm
PCBs																
Aroclor 1254	N/A	N/A	ND	N/A	ND	N/A	0.56 D08	ND	0.086	N/A	0.39 D08	0.41	ND	N/A	1	1
Aroclor 1248	N/A	N/A	0.026	N/A	ND	N/A	ND	ND	ND	N/A	ND	ND	0.31 J D08	N/A	1	1
Aroclor 1260	N/A	N/A	0.063 J	N/A	ND	N/A	0.44 J D08	ND	0.07 J	N/A	0.30 J D08	0.46 J	0.69 J D08	N/A	1	1
Pesticides																
Endosulfan Sulfate	N/A	N/A	0.11 J QFL,D10	N/A	ND	N/A	0.019 D10,QFL,J	N/A	0.35 J D10,QFL	N/A	ND	N/A	ND	N/A	4.8	24
Endrin	N/A	N/A	ND	N/A	ND	N/A	0.052 J D10,QFL	N/A	ND	N/A	0.063 QFL D10,J	N/A	0.043 QFL D10,J	N/A	2.2	11
4,4-DDE	N/A	N/A	ND	N/A	ND	N/A	0.014 D10,QFL,J	N/A	ND	N/A	ND	N/A	ND	N/A	1.8	8.9
gamma-Chlordane	N/A	N/A	ND	N/A	ND	N/A	ND	N/A	ND	N/A	0.058 QFL,D10,J	N/A	ND	N/A	N/A	N/A
4,4'-DDT	N/A	N/A	ND	N/A	ND	N/A	ND	N/A	0.11 J D10,QFL	N/A	ND	N/A	ND	N/A	1.7	7.9
Volatile Organics																
Methylene Chloride	ND	0.0081	N/A	ND	N/A	ND	N/A	ND	N/A	ND	N/A	0.035 H	N/A	0.0086 H	51	100
1,1Dichloroethane	ND	ND	N/A	ND	N/A	ND	N/A	0.0016 J	N/A	ND	N/A	ND	N/A	ND	19	26
Tetrachloroethene	ND	ND	N/A	ND	N/A	ND	N/A	ND	N/A	ND	N/A	ND	N/A	ND	5.5	19
Trichloroethene	ND	ND	N/A	ND	N/A	ND	N/A	ND	N/A	ND	N/A	ND	N/A	0.0013 H,J	10	21
cis-1,2-Dichloroethene	ND	ND	N/A	ND	N/A	ND	N/A	0.0023 J	N/A	ND	N/A	ND	N/A	0.0084 H	59	100
Isopropylbenzene	ND	ND	N/A	ND	N/A	ND	N/A	0.01	N/A	0.1 J	N/A	ND	N/A	ND	N/A	N/A
sec-Butylbenzene	ND	ND	N/A	ND	N/A	ND	N/A	0.042	N/A	0.17 J	N/A	ND	N/A	ND	100	100
Carbon Disulfide	ND	ND	N/A	ND	N/A	ND	N/A	ND	N/A	0.003 J	N/A	0.0019 H,J	N/A	ND	N/A	N/A
n-Butylbenzene	ND	ND	N/A	ND	N/A	ND	N/A	ND	N/A	0.13 J	N/A	ND	N/A	ND	100	100
n-Propylbenzene	ND	ND	N/A	ND	N/A	ND	N/A	ND	N/A	0.16 J	N/A	ND	N/A	ND	100	100
1,2,4-Trimethylbenzene	ND	ND	N/A	ND	N/A	ND	N/A	ND	N/A	0.13 J	N/A	ND	N/A	ND	47	52
Acetone	ND	ND	N/A	ND	N/A	0.16 D04	N/A	0.081	N/A	0.023 J	N/A	ND	N/A	0.061 H,J	100	100
TICs Total	ND	ND	N/A	ND	N/A	ND	N/A	5.03	N/A	2.75	N/A	0.28	N/A	0.014		

N/A - Not Applicable ND - Non-detected

bgs - below ground surface

TICs - Tentatively Identified Compounds

Shading - Results above NYSDEC Restricted Residential Cleanup Objectives

B - Analyte was detected in the associated Method Blank.

D02 - Dilution required due to sample matrix effects

D04 - Dilution required due to high levels of non-target compounds

D08 - Dilution required due to high concentration of target analyte(s)

D10 - Dilution Required due to sample color

J - Analyte detected at a level less than the Reporting Limit (RL) and greater than or equal to the Method Detection Limit (MDL). Concentrations within this range are estimated.

T10 - Sample had an adjusted final volume during extraction due to extract mix/or viscosity

QFL - Florisil cleanup (EPA 3620) performed on extract

H - Sample analysis performed past method specified holding time

**TABLE 3 - Remington Rand Surface Soil Sample Analytical Results**

Sample Number	RR-SS-08A	RR-SS-09A	RR-SS-10A	RR-SS-11A	RR-SS-12A	RR-SS-13A	NYSDEC	NYSDEC
Sample Date	5/1/2009	5/1/2009	5/1/2009	5/1/2009	5/1/2009	5/1/2009	PART 375	PART 375
Sample depth	Surface	Surface	Surface	Surface	Surface	Surface	Residential	Restrict-Residential
Compounds	ppm	ppm	ppm	ppm	ppm	ppm	(a) ppm	(b) ppm
<b>Metals</b>								
Aluminum	7060	N/A	N/A	2710	N/A	N/A	N/A	N/A
Antimony	4.4 J	N/A	N/A	ND	N/A	N/A	N/A	N/A
Arsenic	16.6 (a)(b)	N/A	N/A	4	N/A	N/A	16	16
Barium	558 (a)(b)	N/A	N/A	82.2	N/A	N/A	350	400
Beryllium	0.543	N/A	N/A	0.165 J	N/A	N/A	14	72
Cadmium	11.4 (a)(b)	N/A	N/A	1.56	N/A	N/A	2.5	4.3
Calcium	27000	N/A	N/A	118000 D08	N/A	N/A	N/A	N/A
Chromium	62.1 B (a)	N/A	N/A	14.6 B	N/A	N/A	22	110
Cobalt	8.64	N/A	N/A	2.51	N/A	N/A	N/A	N/A
Copper	524 (a)(b)	N/A	N/A	30.6	N/A	N/A	270	270
Iron	37700	N/A	N/A	11000	N/A	N/A	N/A	N/A
Lead	1330 (a)(b)	N/A	N/A	413 (a)(b)	N/A	N/A	400	400
Magnesium	10700	N/A	N/A	9680	N/A	N/A	N/A	N/A
Manganese	487	N/A	N/A	256	N/A	N/A	2000	2000
Mercury	0.964 (a)(b)	N/A	N/A	0.066	N/A	N/A	0.81	0.81
Nickel	58.5	N/A	N/A	11.9	N/A	N/A	140	310
Selenium	ND	N/A	N/A	ND	N/A	N/A	36	180
Potassium	726	N/A	N/A	488	N/A	N/A	N/A	N/A
Silver	1.34	N/A	N/A	ND	N/A	N/A	36	180
Sodium	228	N/A	N/A	133 J	N/A	N/A	N/A	N/A
Vanadium	23.9	N/A	N/A	12.3	N/A	N/A	N/A	N/A
Zinc	1970 D08	N/A	N/A	634	N/A	N/A	2200	10000
<b>Semi-Volatile Organics</b>								
2-Methynaphthalene	ND	N/A	N/A	ND	N/A	N/A	N/A	N/A
Acenaphthene	ND	N/A	N/A	38.0 D02,T10,J	N/A	N/A	100	100
Anthracene	15.0 T10,D02,J	N/A	N/A	88.0 D02,T10	N/A	N/A	100	100
Benzo(a)anthracene	36.0 T10,D02,J(a)(b)	N/A	N/A	160.0 D02,T10(a)(b)	N/A	N/A	1	1
Benzo(a)pyrene	38.0 T10,D02,J(a)(b)	N/A	N/A	140.0 D02,T10(a)(b)	N/A	N/A	1	1
Benzo(b)fluoranthene	58.0 T10,D02,J(a)(b)	N/A	N/A	150.0 D02,T10(a)(b)	N/A	N/A	1	1
Benzo(g,h,i)perylene	27.0 T10,D02,J	N/A	N/A	85.0 D02,T10	N/A	N/A	100	100
Benzo(k)fluoranthene	14.0 T10,D02,J(a)(b)	N/A	N/A	80.0 D02,T10(a)(b)	N/A	N/A	1	3.9
Carbazole	10.0 T10,D02,J	N/A	N/A	55.0 D02,T10,J	N/A	N/A	N/A	N/A
Chrysene	38.0 T10,D02,J(a)(b)	N/A	N/A	150.0 D02,T10(a)(b)	N/A	N/A	1	3.9
Dibenz(a,h)anthracene	7.1 T10,D02,J(a)(b)	N/A	N/A	22.0 D02,T10,J(a)(b)	N/A	N/A	0.33	0.33
Dibenzofuran	ND	N/A	N/A	24.0 D02,T10,J	N/A	N/A	14	59
Fluoranthene	82.0 T10,D02,J	N/A	N/A	410.0 D02,T10(a)(b)	N/A	N/A	100	100
Flourene	ND	N/A	N/A	39.0 D02,T10,J	N/A	N/A	100	100
Indeno(1,2,3-cd)pyrene	22.0 T10,D02,J(a)(b)	N/A	N/A	77.0 D02,T10,J(a)(b)	N/A	N/A	0.5	0.5
Naphthalene	ND	N/A	N/A	7.0 D02,T10,J	N/A	N/A	100	100
Phenanthrene	63.0 T10,D02,J	N/A	N/A	330.0 D02,T10(a)(b)	N/A	N/A	100	100
Pyrene	52.0 T10,D02,J	N/A	N/A	280.0 D02,T10(a)(b)	N/A	N/A	100	100
<b>PCBs</b>								
Aroclor 1254	ND	0.32 D08,QSU	ND	0.14 D08,J	0.11	0.099 J	1	1
Aroclor 1248	ND	ND	7.0 D08	ND	ND	ND	1	1
<b>Pesticides</b>								
Heptachlor	ND	N/A	N/A	0.17 QFL,D10,J	N/A	N/A	0.42	2.1
Methoxychlor	ND	N/A	N/A	0.16 QFL,D10,J	N/A	N/A	N/A	N/A
4,4'-DDT	0.21 D10,QFL,J	N/A	N/A	ND	N/A	N/A	1.7	7.9
<b>Volatile Organics</b>								
Methylene Chloride	N/A	N/A	N/A	N/A	N/A	N/A	51	100
Naphthalene	N/A	N/A	N/A	N/A	N/A	N/A	100	100
Tetrachloroethene	N/A	N/A	N/A	N/A	N/A	N/A	5.5	19
Acetone	N/A	N/A	N/A	N/A	N/A	N/A	100	100

N/A - Not Applicable ND - Non-detect

bgs - below ground surface

Shading - Results above NYSDEC Restricted Residential Cleanup Objectives

B - Analyte was detected in the associated Method Blank.

D02 - Dilution required due to sample matrix effects

D08 - Dilution required due to high concentration of target analyte(s)

D10 - Dilution required due to sample color

QFL - Florisil cleanup (EPA 3620) performed on extract

J - Analyte detected at a level less than the Reporting Limit (RL) and greater than or equal to the Method Detection

Limit (MDL). Concentrations within this range are estimated.

QSU - Sulfur (EPA 3660) cleanup performed on extract

T10 - Sample had an adjusted final volume during extraction due to extract mix/or viscosity

**TABLE 4 - Remington Rand Groundwater Sample Analytical Results - RD 1 & 2**

Sample Number	RR-MW-01	RR-MW-02	RR-MW-03	RR-MW-04	RR-MW-05	RR-MW-01A	RR-MW-02A	RR-MW-03A	RR-MW-04A	RR-MW-05A	RR-MW-01A	RR-MW-02A	RR-MW-03A	RR-MW-04A	RR-MW-05A	NYSDEC
Sample Date/Round	5/1/2009 RD 1	5/1/2009 RD 1	5/1/2009 RD 1	5/1/2009 RD 1	5/1/2009 RD 1	7/2/2009 RD 2	7/2/2009 RD 2	7/2/2009 RD 2	7/2/2009 RD 2	7/2/2009 RD 2	7/2/2009 RD 2	7/2/2009 RD 2	7/2/2009 RD 2	7/2/2009 RD 2	7/2/2009 RD 2	
Status	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Lab Filtered	Lab Filtered	Lab Filtered	Lab Filtered	Lab Filtered	TOGs 1.1.1. GA
Compounds	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
<b>Metals</b>																
Aluminum	353000 J	47900 J	1060	208000 J	221000 J	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Antimony	ND	6.3 J	ND	ND	ND	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	3
Arsenic	150	27.5	ND	171	116	582	79.6	ND	ND	12.8	ND	ND	ND	ND	ND	25
Barium	2460 J	485 J	54.3 J	1450 J	1560 J	570	78.1	218	73.5	156	57	51.2	6.1	65.8	53.3	1000
Beryllium	15.6	2.1	ND	10	9.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	3
Cadmium	7.2	1 J	ND	4.5	2.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5
Calcium	1660000 D08	181000	99900	1010000 D08	1140000 D08	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Chromium	571	73.9 J	2.3 J	360 J	364 J	26.3	4	28.1	4.9	36	ND	ND	10.6	ND	2.2 J	50
Cobalt	255	32.4	ND	189	167	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Copper	.911	161	3.7 J	653	599	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	200
Iron	1260000 D08	81900	1520	450000	385000	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	300
Lead	597	396	5.6	366	446	30.1	30.2	3.2 J	3.7 J	26.8	2.9 J	ND	ND	2.2 J	2.2 J	25
Magnesium	398000	42800	12800	216000	275000	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Manganese	11000	3230	266	7550	7870	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	300
Mercury	0.5 S6	1 S6	ND	0.6 S6	0.4 S6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7
Nickel	678	97.4	4.2 J	485	426	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	100
Potassium	68800	20600 J	3100 J	4080 J	5170 J	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Selenium	ND	ND	ND	ND	ND	ND	ND	ND	6.6 J	ND	ND	ND	ND	ND	ND	10
Sodium	16200	13000	14800	77100	99300	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	20000
Thallium	ND	ND	ND	ND	8.1 J	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.5
Vanadium	793	104 J	2.2 J	455 J	426 J	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Zinc	2050	442	ND	1550	1510	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<b>Semi-Volatile Organics</b>																
Bis(2-ethylhexyl) phthalate	ND	ND	ND	ND	4.8 J	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	5
<b>Volatile Organics</b>																
Chloroethane	3.6 P11	ND	ND	ND	ND	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Carbon Disulfide	ND	ND	1.2	0.54 P11,J	ND	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Methyl tert-Butyl Ether	2.5 P11	ND	ND	ND	0.64 P11,J	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Methylcyclohexane	ND	ND	ND	ND	0.62 P11,J	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
cis-1,2-Dichloroethene	ND	0.78 J	ND	ND	ND	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	5
Acetone	6.6 P11 J	ND	ND	ND	3.2 P11,J	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	50

N/A - Not Applicable ND - Non-detect

TOGs 1.1.1 GA - Technical and Operational Guidance Series (1.1.1) Source of Drinking Water (Groundwater)

Shading - Results above NYSDEC Restricted Residential Cleanup Objectives

B - Analyte was detected in the associated Method Blank.

P11 - Sample was not sufficiently preserved at time of collection. Sample pH is >2

D08 - Dilution required due to high concentration of target analyte(s)

S6 - Sediment present

J - Analyte detected at a level less than the Reporting Limit (RL) and greater than or equal to the Method Detection Limit (MDL). Concentrations within this range are estimated.

RD 2 - Analyzed for RCRA 8 metals only (Arsenic, Barium, Cadmium, Chromium, Lead, Mercury, Selenium and Silver)

TABLE 5 - Remington Rand Sub-Slab Soil Boring and Drain Samples Analytical Results										1 of 2	
Sample Number	RR-SS-SF-01	RR-SS-SF-04	RR-SS-SF-05	RR-SS-SF-07	RR-SS-SF-08	RR-SS-EN	RR-SS-DNE	RR-SS-ES	RR-SS-DC	NYSDEC	NYSDEC
Sample Date	5/20/2009	5/20/2009	5/20/2009	5/20/2009	5/20/2009	5/20/2009	5/20/2009	5/20/2009	5/20/2009	5/20/2009	5/20/2009
Sample depth	3'	6.5'-7'	2.5'-3.5'	0.5' - 2'	1' - 2.5'	Elev Pit	Floor Drain	Elev Pit	Floor Drain	Residential	Restrict-Res
Compounds	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	(a) ppm	(b) ppm
Metals											
Aluminum	4810	4138	7780	9370	2440	3620	4520	9690	9560	N/A	N/A
Antimony	4.4 J	ND	ND	ND	ND	19.4 J	2.4 J	153 J	143 J	N/A	N/A
Arsenic	9.1	1.5 J	5.1	11.5	1.4 J	5.7	5.2	13.4	54.3 (a)(b)	16	16
Barium	521 B (a)(b)	18.9 B	64 B	24.1 B	10.3 B	424 B (a)(b)	577 B (a)(b)	739 B (a)(b)	2540 B (a)(b)	350	400
Beryllium	0.635 J	0.22 J	0.402 J	0.533 J	0.138 J	0.812 J	0.295 J	0.417 J	0.528 J	14	72
Cadmium	1.96	0.173 J	0.362	0.367	0.173 J	3.7 (a)	6.67 (a)(b)	30.8 (a)(b)	16.7 (a)(b)	2.5	4.3
Calcium	20500 B	27000 B	6300 B	1180 B	77200 D08,B	17700 B	67200 D08,B	26600 B	60600 B	N/A	N/A
Chromium	9.74	7.06	13.3	14	3.55	54.7 (a)	48.8 (a)	73.5 (a)	153 (a)(b)	22	110
Cobalt	12.3	4.32	5.72	8.02	1.9	5.32	5.82	9.85	22.1	N/A	N/A
Copper	152	8.2	22.2	22.4	6.2	135	198	285 (a)(b)	147000 D08(a)(b)	270	270
Iron	23500 BJ	8650 BJ	14600 BJ	25400 BJ	5460 BJ	28500 BJ	16700 BJ	31000 BJ	257000 J D08,B	N/A	N/A
Lead	97.3 B	6.2 B	111 B	15.3 B	5.2 B	414 B (a)(b)	280 B	2110 B (a)(b)	10400 B (a)(b)	400	400
Magnesium	5240 J	7850 J	2350 J	2760 J	33300 J	4300 J	16200 J	4830 J	6390 J	N/A	N/A
Manganese	323	194	347	207	232	423	359	397	1800	2000	2000
Mercury	0.296	ND	0.358	0.0225	ND	0.509	1.97 D08 (a)(b)	0.912 (a)(b)	3.31 D08 (a)(b)	0.81	0.81
Nickel	39.8	11.1	12.7	16.4	4.06	15.7	28.1	33.5	223	140	310
Selenium	1.4 J	ND	ND	0.9 J	ND	ND	ND	1.2 J	1.2 J	36	180
Potassium	699	832	1030	759	1050	309	709	1120	1770	N/A	N/A
Silver	ND	ND	ND	ND	ND	0.698	0.999	2.39	54.8 (a)	36	180
Sodium	504	58.3 J	103 J	100 J	216	141 J	236	456	1950	N/A	N/A
Thallium	2.0 J	1.0 J	1.3 J	2.2 J	0.4 J	2.1 J	1.0 J	2.3 J	19.8	N/A	N/A
Vanadium	10.8	9.9	17.6	22.2	5.66	27.4	14.6	23.7	77.2	N/A	N/A
Zinc	459 B	38.0 B	112 B	56.4 B	44.2 B	500 B	866 B	985 B	8940 D08,B(a)	2200	10000
SVOCs											
2-Methynaphthalene	0.092 D02,J	ND	0.31 D02,J	ND	ND	ND	ND	ND	ND	N/A	N/A
Acenaphthene	ND	ND	0.99 D02,J	ND	ND	ND	0.47 D02,J	ND	ND	100	100
Anthracene	ND	ND	2.9 D02	0.0084 J	ND	0.17 D02,J	0.95 D02,J	ND	0.44 D02,J	100	100
Benzaldehyde	ND	ND	ND	ND	ND	ND	ND	0.29 D02,J	1.1 D02,J	N/A	N/A
Benzo(a)anthracene	0.084 D02,J	ND	4.5 D02 (a)(b)	0.094 J	0.014 J	1.1 D02,J(a)(b)	3.6 D02,J (a)(b)	0.17 D02,J	1.4 D02,J (a)(b)	1	1
Benzo(a)pyrene	0.074 D02,J	0.017 J	3.1 D02(a)(b)	0.058 J	0.013 J	1.0 D02,J(a)(b)	3.1 D02,J (a)(b)	0.12 D02,J	1.5 D02,J (a)(b)	1	1
Benzo(b)fluoranthene	0.12 D02,J	0.013 J	3.7 D02(a)(b)	0.095 J	0.016 J	1.5 D02,J(a)(b)	4.0 D02,J (a)(b)	ND	1.9 D02,J (a)(b)	1	1
Benzo(g,h,i)perylene	0.12 D02,J	0.016 J	1.8 D02,J	0.037 J	0.017 J	1.2 D02,J	3.0 D02,J	0.23 D02,J	1.9 D02,J	100	100
Benzo(k)fluoranthene	0.065 D02,J	0.016 J	1.8 D02,J (a)	0.029 J	0.012 J	0.44 D02,J	2.0 D02,J (a)	ND	1.1 D02,J (a)	1	3.9
Bis(2-ethylhexyl)	ND	ND	ND	ND	ND	1.8 D02,J	5.2 D02,J	2.1 D02,J	5.3 D02,J	N/A	N/A
Butyl benzyl phthalate	ND	ND	ND	ND	ND	3.7 D02,J	ND	2.0 D02,J	2.5 D02,J	N/A	N/A
Diethyl phthalate	ND	ND	ND	ND	ND	ND	ND	0.11 D02,J	ND	N/A	N/A
Di-n-butyl phthalate	ND	ND	ND	ND	ND	ND	ND	1.8 D02,J	ND	N/A	N/A
Carbazole	ND	ND	1.4 D02,J	0.015 J	ND	ND	0.68 D02,J	ND	0.41 D02,J	N/A	N/A
Chrysene	0.084 D02,J	ND	4.3 D02 (a)(b)	0.098 J	0.013 J	1.0 D02,J (a)	3.6 D02,J (a)	ND	1.7 D02,J (a)	1	3.9

N/A - Not Applicable ND - Non-detect

bgs - below ground surface TICs - Tentatively Identified Compounds

Shading - Results above NYSDEC Restricted Residential Cleanup Objectives

B - Analyte was detected in the associated Method Blank.

D02 - Dilution required due to sample matrix effects

D08 - Dilution required due to high concentration of target analyte(s)

D10 - Dilution required due to sample color

QFL - Florisil clean-up (EPA 3620) performed on extract

QSU - Sulfur (EPA 3660) clean-up performed on extract

J - Analyte detected at a level less than the Reporting Limit (RL) and greater than or equal to the Method Detection

Limit (MDL). Concentrations within this range are estimated.

TABLE 5 (con't) - Remington Rand Sub-Slab Soil Boring and Drain Samples Analytical Results											2 of 2
Sample Number	RR-SS-SF-01	RR-SS-SF-04	RR-SS-SF-05	RR-SS-SF-07	RR-SS-SF-08	RR-SS-EN	RR-SS-DNE	RR-SS-ES	RR-SS-DC	NYSDEC	NYSDEC
Sample Date	5/20/2009	5/20/2009	5/20/2009	5/20/2009	5/20/2009	5/20/2009	5/20/2009	5/20/2009	5/20/2009	PART 375	PART 375
Sample depth	3'	6.5' - 7'	2.5' - 3.5'	0.5' - 2'	1' - 2.5'	Elev Pit	Floor Drain	Elev Pit	Floor Drain	Residential	Restrict-Res
Compounds	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	(a) ppm	(b) ppm
<b>SVOCs</b>											
Dibenz(a,h)anthracene	0.049 D02,J	0.012 J	0.57 D02,J(a)(b)	0.017 J	0.010 J	0.37 D02,J(a)(b)	0.92 D02,J(a)(b)	ND	0.41 D02,J(a)(b)	0.33	0.33
Dimethyl phthalate	ND	ND	ND	ND	2.0	ND	ND	0.78 D02,J	1.1 D02,J	N/A	N/A
Dibenzofuran	ND	ND	1.2 D02,J	ND	ND	ND	0.47 D02,J	ND	ND	14	59
Fluoranthene	0.084 D02,J	ND	11.0 D02,J	0.16 J	0.021 J	2.1 D02,J	8.1 D02,J	0.15 D02,J	3.1 D02,J	100	100
Flourene	ND	ND	1.2 D02,J	ND	ND	ND	0.44 D02,J	ND	ND	100	100
Indeno(1,2,3-cd)pyrene	0.11 D02,J	0.015 J	1.5 D02,J (a)(b)	0.035 J	0.014 J	0.91 D02,J(a)(b)	2.5 D02,J(a)(b)	0.18 D02,J	1.5 D02,J (a)(b)	0.5	0.5
Naphthalene	0.087 D02,J	ND	0.45 D02,J	ND	ND	ND	0.46 D02,J	ND	ND	100	100
Phenanthrene	0.11 D02,J	ND	13.0 D02	0.052 J	0.012 J	1.1 D02,J	6.0 D02,J	0.099 D02,J	2.2 D02,J	100	100
Pyrene	0.082 D02,J	ND	8.0 D02	0.13 J	0.015 J	1.7 D02,J	6.1 D02,J	0.099 D02,J	2.3 D02,J	100	100
TICs Total	ND	36.7	3.6	ND	ND	N/A	N/A	N/A	N/A		
<b>PCBs</b>											
Aroclor 1254	ND	ND	ND	ND	ND	ND	0.46 J QSU,D02	ND	ND	1	1
Aroclor 1260	ND	ND	ND	ND	0.0057 QSU,J	ND	0.54 J QSU,D02	ND	ND	1	1
<b>Pesticides</b>											
alpha-Chlordane	ND	ND	ND	ND	ND	0.052 J D10,QFL	0.027 D10,QFL,J	0.10 J D10,QFL	0.6 J D10,QFL	0.91	4.2
Endrin	ND	ND	ND	ND	ND	0.0077 D10,QFL,J	ND	ND	ND	2.2	11
Endosulfan II	ND	ND	ND	ND	ND	ND	0.015 D10,QFL,J	0.051 J D10,QFL	0.046 D10,QFL,J	4.8	24
gamma-Chlordane	ND	ND	ND	ND	ND	ND	ND	ND	0.4 J D10,QFL,B	N/A	N/A
4,4-DDE	ND	ND	ND	ND	ND	ND	0.032 D10,QFL,J	ND	0.06 D10,QFL,J	1.8	8.9
4,4'-DDT	ND	ND	ND	ND	ND	0.033 J D10,QFL	0.12 D10,QFL	ND	0.049 D10,QFL,J	1.7	7.9
<b>Volatiles Organics</b>											
Methylene Chloride	0.011 J	ND	ND	ND	ND	ND	0.0040 J	0.0094 J	0.012 J	51	100
Chloroform	ND	ND	ND	ND	ND	0.0065	ND	ND	ND	10	49
sec-Butylbenzene	ND	0.0088	ND	ND	ND	ND	ND	ND	ND	100	100
Trichloroethene	ND	ND	ND	ND	ND	ND	0.0040 J	ND	ND	10	21
Acetone	ND	ND	ND	ND	0.017 J	ND	ND	ND	0.055	100	100
TICs Total	1.1	5.21	ND	ND	1.1	N/A	N/A	N/A	N/A		

N/A - Not Applicable ND - Non-detect

bgs - below ground surface TICs - Tentatively Identified Compounds

Shading - Results above NYSDEC Restricted Residential Cleanup Objectives

B - Analyte was detected in the associated Method Blank.

D02 - Dilution required due to sample matrix effects

D08 - Dilution required due to high concentration of target analyte(s)

D10 - Dilution required due to sample color

QFL - Florisil clean-up (EPA 3620) performed on extract

QSU - Sulfur (EPA 3660) clean-up performed on extract

J - Analyte detected at a level less than the Reporting Limit (RL) and greater than or equal to the Method Detection Limit (MDL). Concentrations within this range are estimated.

TABLE 6 - Remington Rand Sub Slab Vapor & Ambient Air Analytical Results														
Sample Number	RR-AA-01	RR-AA-02	RR-AA-03	RR-AA-04	RR-AA-05	RR-SA-01	RR-SA-02	RR-SA-03	RR-SA-04	RR-SA-05	RR-SA-06	RR-SA-07	NYSDOH	NYSDOH
Sample Date	5/12/2009	5/12/2009	5/12/2009	5/12/2009	5/12/2009	5/12/2009	5/12/2009	5/12/2009	5/12/2009	5/12/2009	5/12/2009	5/12/2009	Soil Vapor/Indoor Air	Soil Vapor/Indoor Air
Sample Location	Outdoor	Indoor	Indoor	Indoor	Indoor	SubSlab	SubSlab	SubSlab	SubSlab	SubSlab	SubSlab	SubSlab	Matrix 1 (Sub-Vapor)	Matrix 2 (Sub-Vapor)
Compounds	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3
VOCs EPA T0-15														
Ethylbenzene	ND	ND	0.38	0.44	ND	1.50	11.0	4.4	3.7	4.7	7.2	6.0		
Trichlorofluoromethane	1.4	1.4	2.2	1.9	2.1	83.0	2.2	2.0	2.0	8.9	5.8	2.7		
n-Hexane	ND	0.82	ND	1.1	ND	1.3	14.0	7.9	2.3	5.7	26.0	4.6		
tert-Butyl alcohol	ND	ND	ND	ND	ND	L2	4.1	3.8	5.0	5.6	62.0	9.7		
Methylene chloride	9.3	1.2	2.2	12.0	2.1	13.0	3.4	6.3	2.1	11.0	3.4	1.5		
Benzene	0.6	1.4	1.2	1.1	0.7	33.0	84 E	2.9	1.4	3.7	5.8	1.5		
Styrene	ND	ND	9.3	ND	ND	ND	1.7	0.6	1.6	470 E	5.0	1.0		
Tetrachloroethene	ND	ND	ND	ND	ND	8.0	6.3	9.0	5.7	5.7	13.0	ND		100 (2)
Toluene	1.6	2.6	2.6	2.5	1.4	1.0	55.0	62.0	6.0	5.5	23.0	7.9		
1,1,1-Trichloroethane	ND	ND	ND	0.5	ND	1.5	8.2	670 E	92.0	2.8	1.5	5.8		100 to < 1000 (2)
Trichloroethene	ND	0.3	ND	0.7	ND	2.1	ND	4.0	3.8	0.6	0.37	ND	< 5 (1)	
1,2,4-Trimethylbenzene	ND	ND	0.6	0.5	ND	1.4	15.0	3	2.1	3.1	4.9	2.5		
1,3,5-Trimethylbenzene	ND	ND	ND	ND	ND	0.6	9.2	0.97	1.0	1.4	3.0	0.9		
o-Xylenc	ND	ND	0.6	0.6	ND	1.9	2.4	9	5.7	5.0	8.7	9.6		
1,1,2-Trichlorotrifluoroethane	ND	ND	0.7	ND	ND	0.7	0.63	ND	0.6	0.8	0.6	0.7		
m-Xylenc & p-Xylene	0.9	0.6	1.5	1.4	0.7	8.2	48.0	18	17.0	18.0	35.0	27.0		
Bromodichloromethane	ND	ND	ND	ND	ND	0.6	ND	ND	ND	15.0	1.8	ND		
2-Butanone (MEK)	1.6	1.0	1.2	2.0	3.7	4.3	16.0	8	8.7	7.4	12.0	13.0		
4-Methyl-2-pentanone (MIBK)	ND	ND	ND	ND	MD	ND	2.2	ND	ND	ND	2.9	L2		
Carbon tetrachloride	0.66 J	0.67 J	0.85 J	0.82 J	0.84 J	0.75 J	0.62 J	0.84 J	0.7 J	1.5 J	0.73 J	1.4 J	< 5 (1)	
Dibromochloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
Chloroform	ND	ND	ND	ND	ND	3.2	0.5	2	2.8	120.0	9.5	0.4		
Chloromethane	0.8	0.9	1.3	13.0	1.5	ND	0.8	4	ND	ND	0.5	ND		
Cyclohe Mine	ND	ND	ND	ND	ND	1.0	ND	ND	ND	ND	ND	ND		
Cyclohexane	ND	ND	ND	ND	ND	ND	17.0	19	12.0	5.0	15.0	34.0		
Dichlorodifluoromethane	2.2	23.0	2.6	2.6	2.8	4.0	2.9	3	1.3	3.1	2.8	2.3		
1,1-Dichloroethane	ND	ND	ND	ND	ND	ND	NO	2	57.0	ND	ND	ND		

N/A - Not Applicable ND - Non-detect

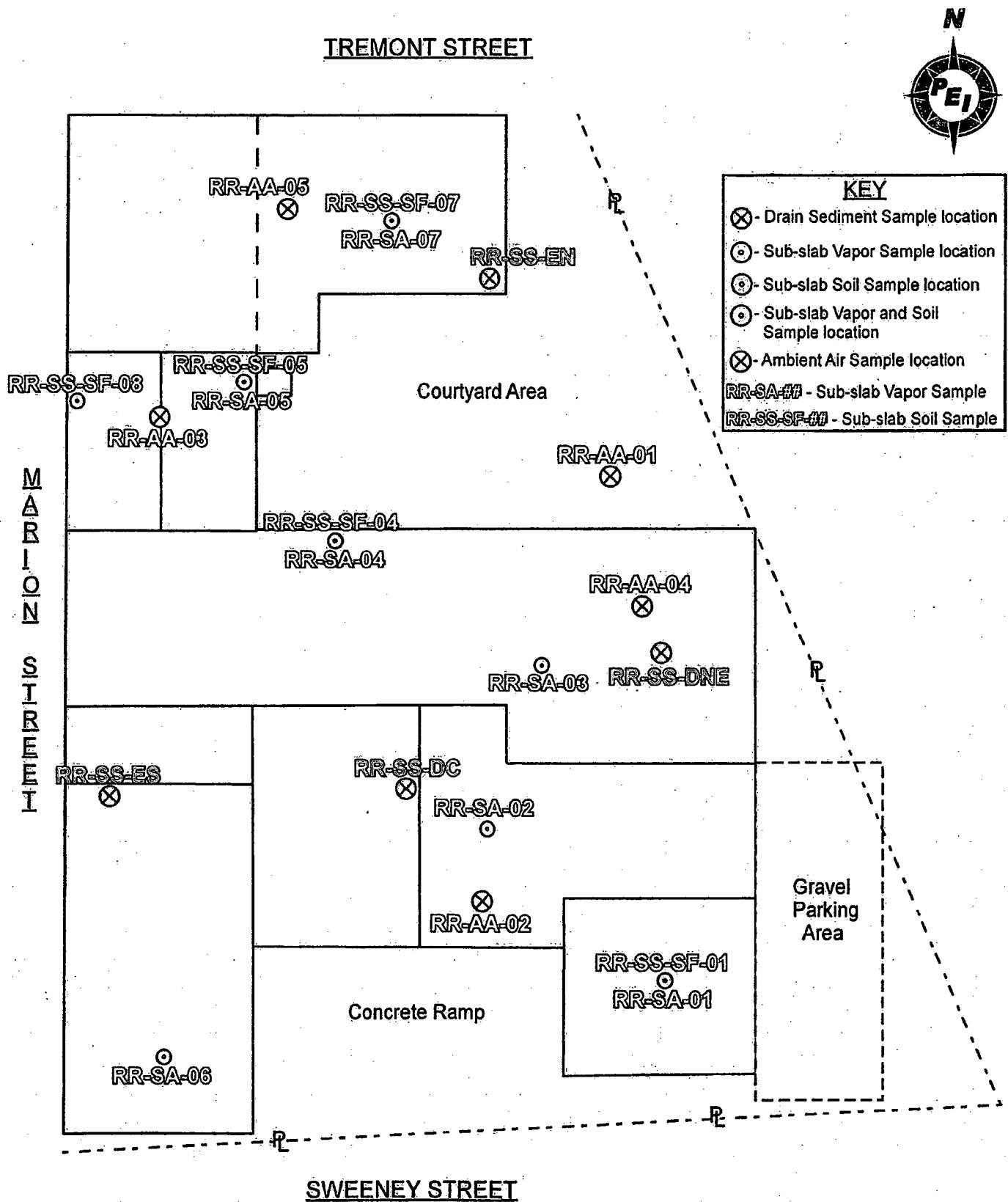
E - Estimated result due to exceeding calibration range

- (1) - Matrix 1 (Guidance for Evaluating Soil vapor Intrusion in NY State 10/06) indoor air concentration for both Trichloroethene and Carbon Tetrachloride falls between 0.25 to <1 and sub-slab vapor concentrations are less < 5 for all samples results in Action 2 "Take reasonable and practical actions to identify source(s) and reduce exposure".
- (2) - Matrix 2 (see reference above) indoor air concentrations for both Tetrachloroethene and 1,1,1-Trichloroethane are < 3. Sub-slab vapor concentrations for Tetrachloroethene in all samples are < 100 resulting in Action 1 "No further action". Sub-slab vapor concentration from sample RR-SA-03 for 1,1,1-Trichloroethane falls between 100 to <1,000 results in Action 5 "Monitor"

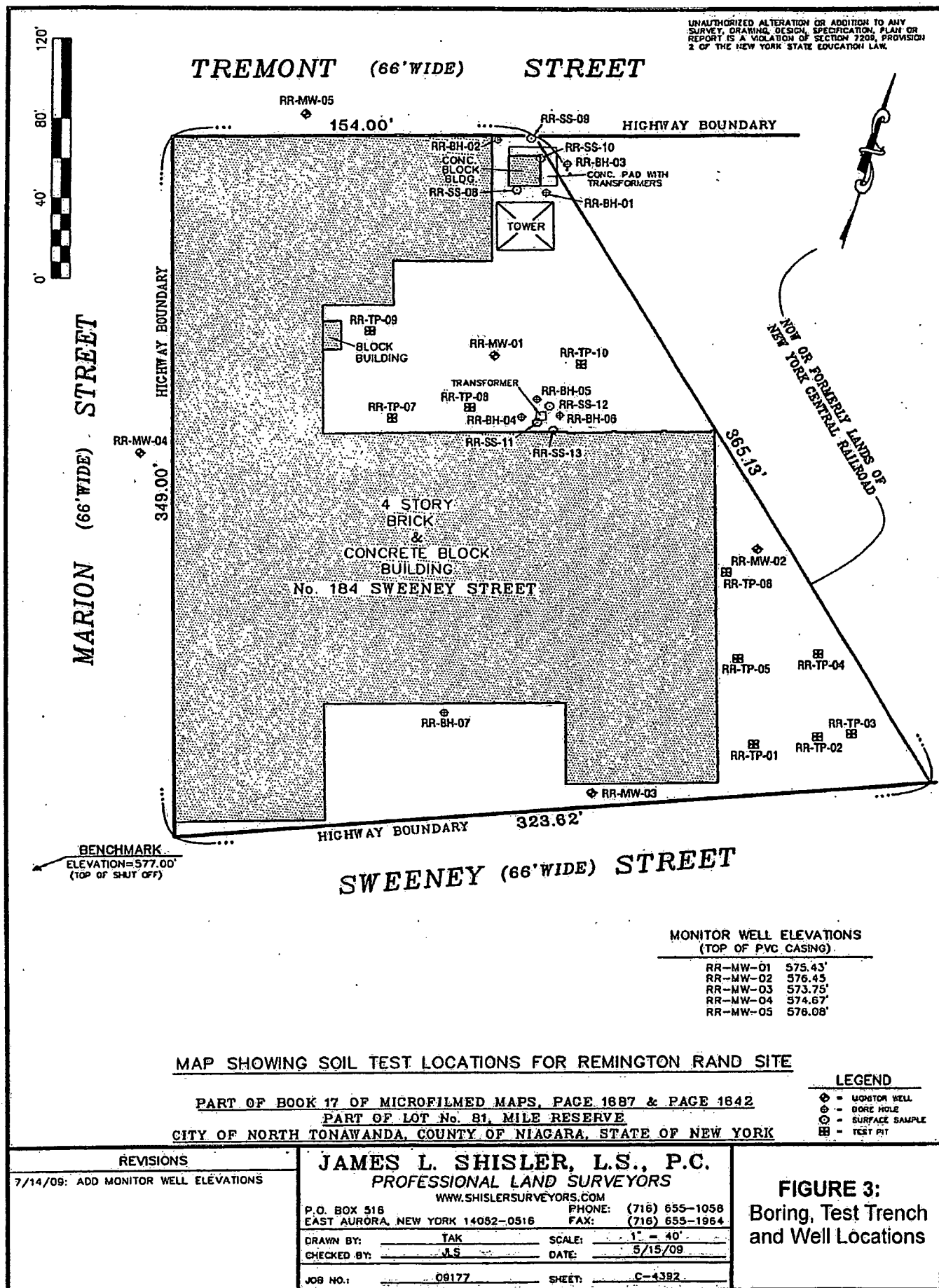


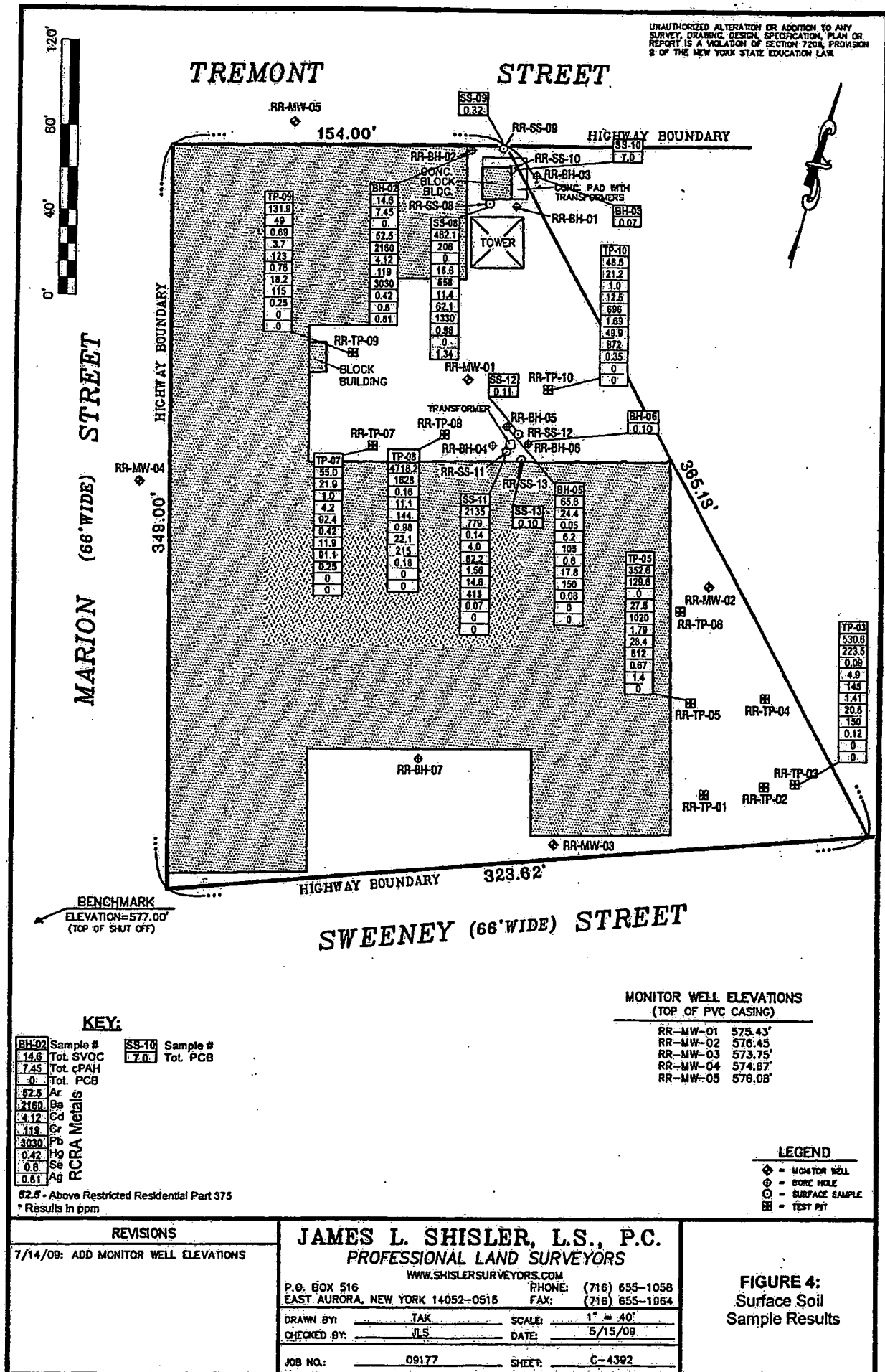




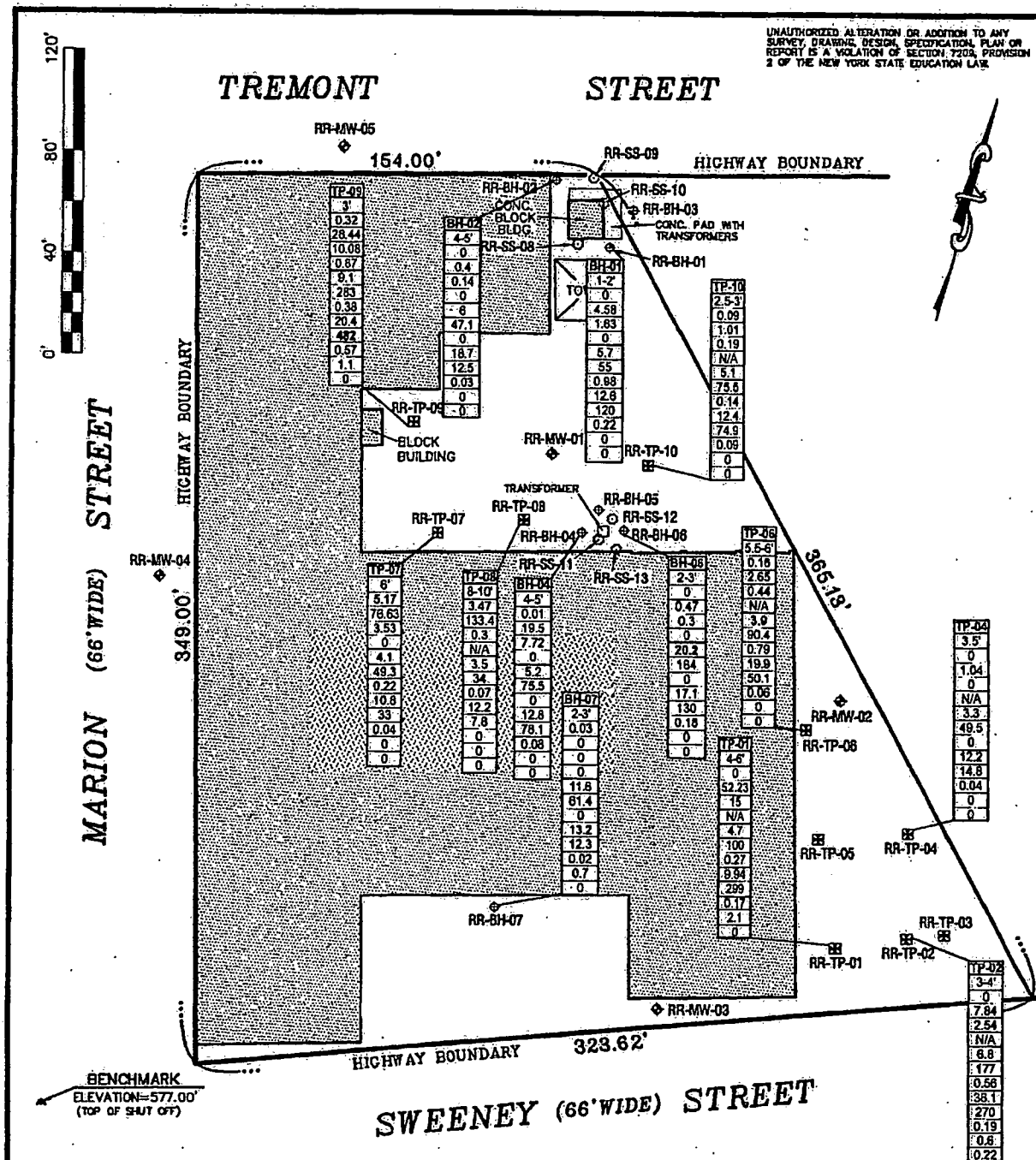


**Figure 2. Vapor Intrusion/Sub-Slab Soil/Drain Sediment Sample Locations**





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**KEY:**

TP-01	Sample #
3'	Depth
0.32	Tot. VOC
28.44	Tot. SVOC
10.08	Tot. cPAH
0.87	Tot. PCB
9.1	Ar
283	Ba
0.38	Cd
20.4	Cr
482	Pb
0.57	Hg
1.1	Se
0	Ag

482 - Above Restricted Residential Part 375  
\* Results in ppm

**MONITOR WELL ELEVATIONS  
(TOP OF PVC CASING)**

RR-MW-01	573.43'
RR-MW-02	576.43'
RR-MW-03	573.75'
RR-MW-04	574.67'
RR-MW-05	576.08'

**LEGEND**

- ◆ = MONITOR WELL
- = BORE HOLE
- = SURFACE SAMPLE
- = TEST PIT

**REVISIONS**

7/14/09: ADD MONITOR WELL ELEVATIONS

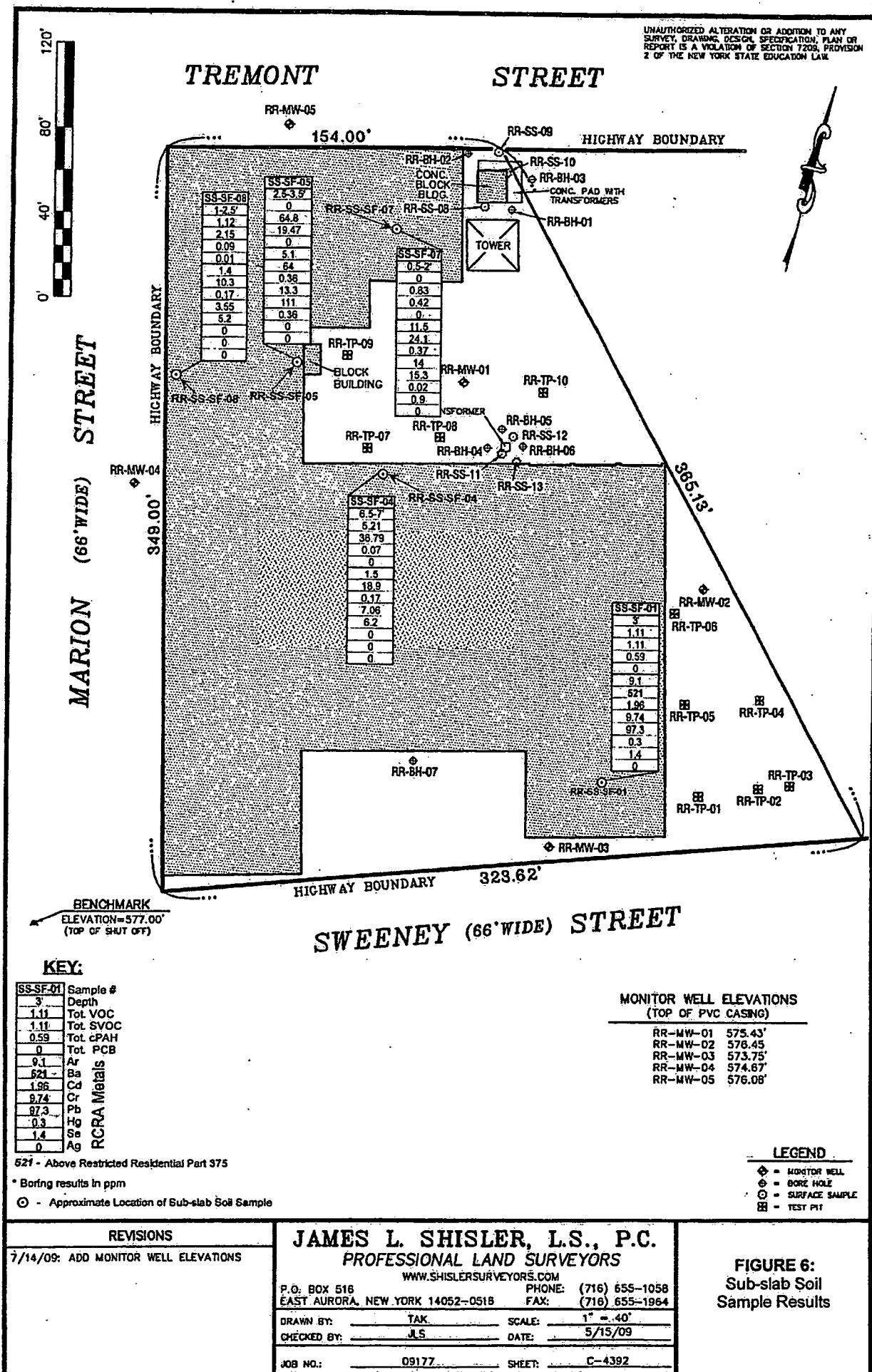
**JAMES L. SHISLER, L.S., P.C.  
PROFESSIONAL LAND SURVEYORS**

P.O. BOX 518 EAST AURORA, NEW YORK 14052-0518  
PHONE: (716) 655-1058 FAX: (716) 655-1964

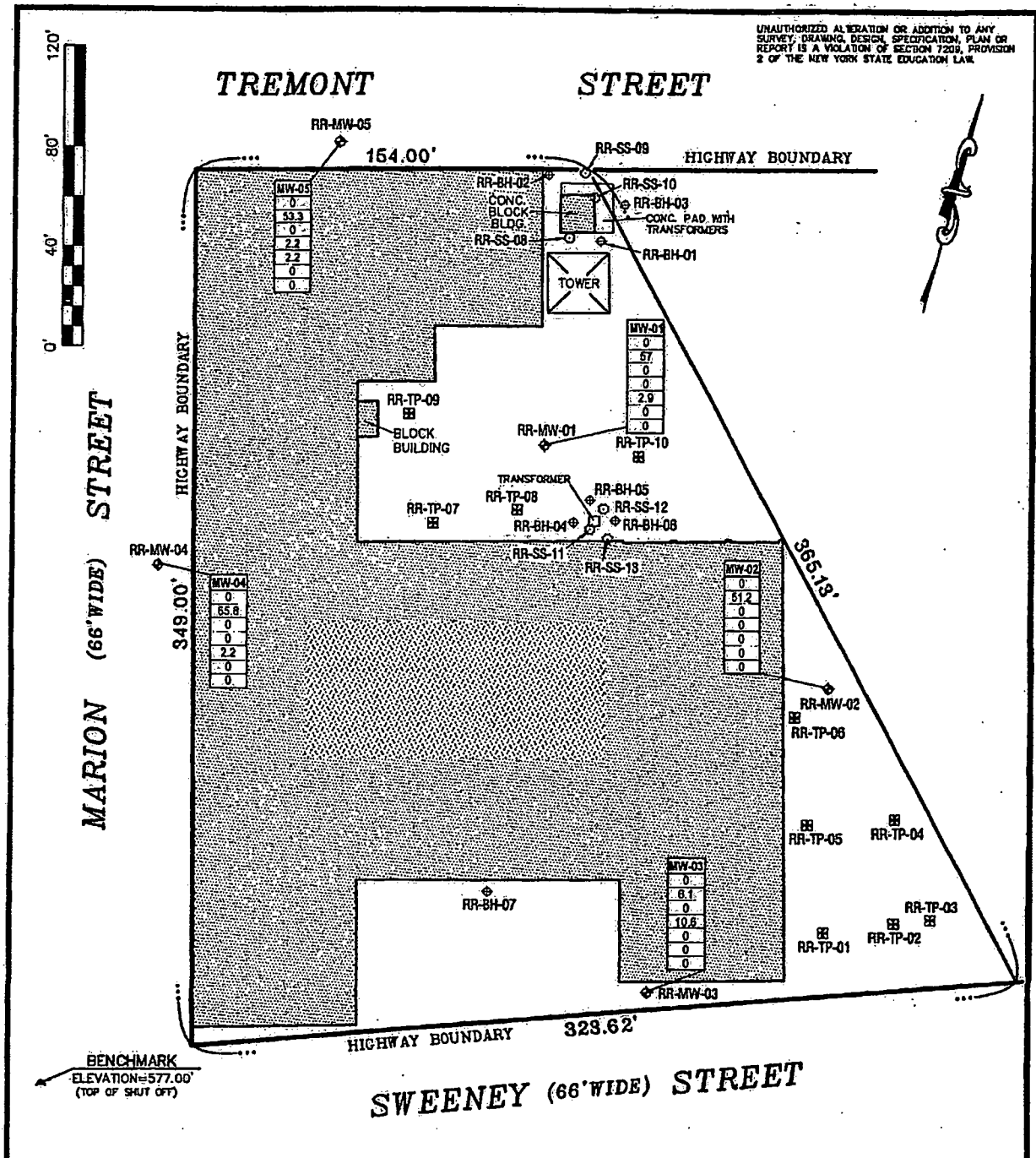
DRAWN BY: TAK SCALE: 1" = 40'  
CHECKED BY: JLS DATE: 5/15/08

JOB NO.: 09177 SHEET: C-4392

**FIGURE 5:  
Exterior Subsurface  
Soil Sample Results**



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**KEY:**

MW-01	Sample #
0	Ar
57	Ba
0	Cd
0	Cr
2.9	Pb
0	Hg
0	Se

RCRA Metals

\* Well results in ppb

**LEGEND**

- ◆ - MONITOR WELL
- ⊕ - CORE HOLE
- - SURFACE SAMPLE
- ⊞ - TEST PIT

**REVISIONS**

7/14/09: ADD MONITOR WELL ELEVATIONS

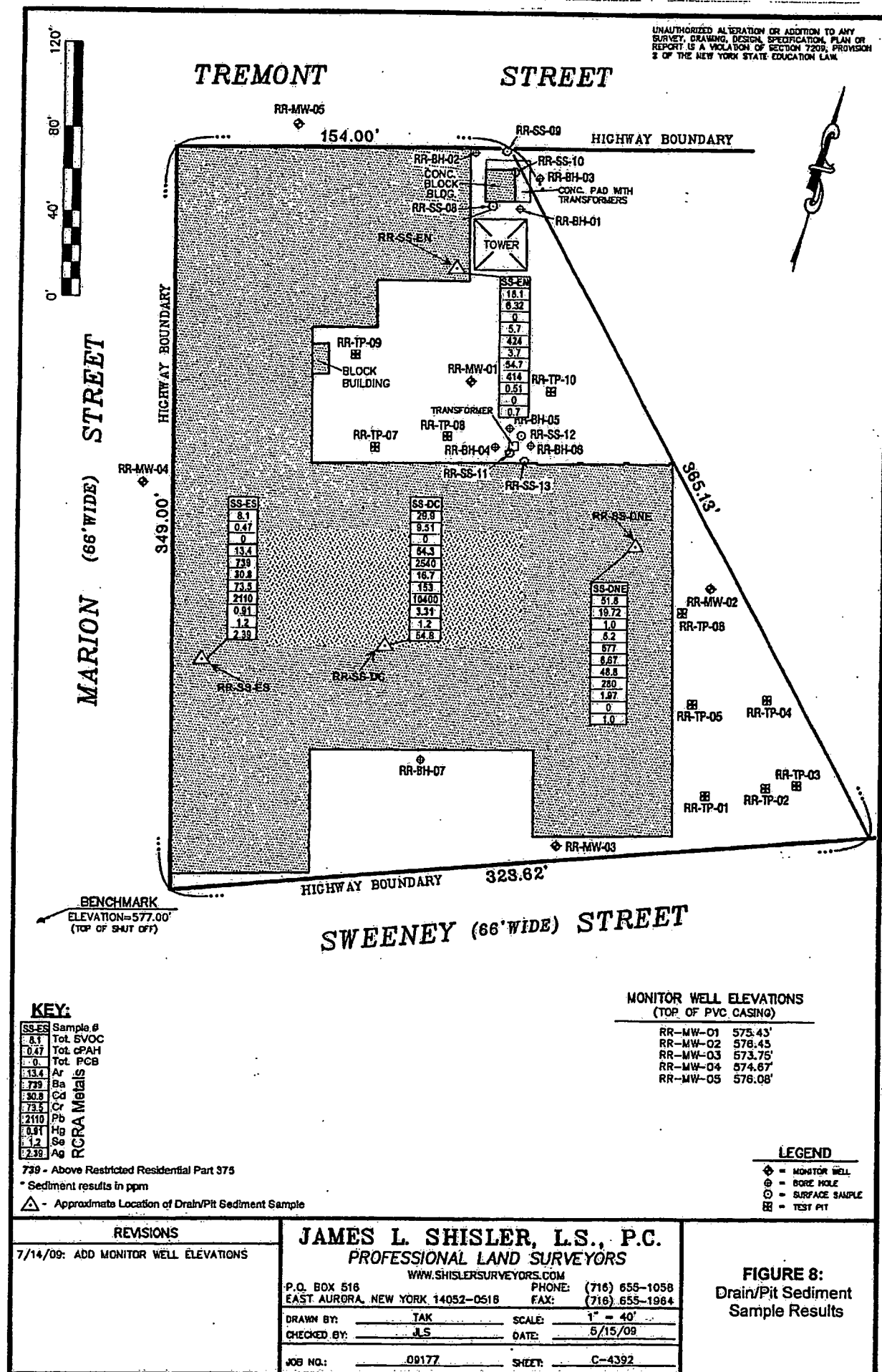
**JAMES L. SHISLER, L.S., P.C.**  
PROFESSIONAL LAND SURVEYORS

P.O. BOX 516  
EAST AURORA, NEW YORK 14052-0516  
PHONE: (716) 655-1058  
FAX: (716) 655-1964

DRAWN BY: TAK  
CHECKED BY: JLS  
SCALE: 1" = 40'  
DATE: 5/15/09

JOB NO.: 09177  
SHEET: C-4392

**FIGURE 7:**  
Round 2  
Groundwater Filtered  
Sample Results





## APPENDIX A

### Boring, Test Pit & Monitoring well Logs

**Panamerican Environmental, Inc.**  
 2390 Clinton Street  
 Buffalo, New York 14227

<b>GEOPROBE LOG</b>										
BORING NO.: RR-BH-01										
PROJECT: Remington Rand - City of North Tonawanda					SHEET: 1 of 3					
CLIENT: The Kissling Intrests, LLC					JOB NO.: N/A					
BORING CONTRACTOR: Environmental Services of Vermont					BORING LOCATION: Near Transformer Bldg					
GROUNDWATER: Not Observed					CAS.	SAMPLER	CORE	TUBE	GROUND ELEVATION: NA	
DATE	TIME	LEVEL	TYPE	TYPE	DATE STARTED: April 27, 2009					
				DIA.	DATE FINISHED: April 27, 2009					
				WT.	DRILLER: A. Morse					
				FALL	GEOLOGIST: J. Ryszkiewicz					
* POCKET PENETROMETER READING					REVIEWED BY: N/A					
DEPTH FEET	STRATA	SAMPLE				DESCRIPTION				REMARKS
		"S" NO.	CORE NO.	BLOWS PER 6"	RECOVERY ROD%	COLOR	CONSISTENCY HARDNESS	MATERIAL DESCRIPTION	CLASS USCS	
1				34 48		Black and Grey	Gravelly	Black and grey, soil with silty clay, C-F (coarse to fine) gravel and M-F (medium to fine) sand with traces of coal. Layer was moist.		0.0 ppm Readings on Photoionization Detector
2										
3				16 48		Brown	Tight	Brown, tight, silty clay with M-F sand and traces of C-F gravel. Layer was damp.		0.0 ppm Readings on Photoionization Detector
4						Grey	Granular	Grey, granular, C-F gravel (sandstone) with traces of M-F sand and silty clay. Layer was wet.		0.0 ppm Readings on Photoionization Detector
5				14 48		Brown	Granular	Brown, granular, M-F sand with traces of silt. Layer was wet.		0.0 ppm Readings on Photoionization Detector
6										
7				31 48		Black and Grey	Granular	Black and grey, granular, M-F sand with traces of silt and C-F gravel. Layer was moist.		0.0 ppm Readings on Photoionization Detector
8										

**COMMENTS:** Photoionization readings were taken with a Mini-Rae 2000. A subsurface soil sample was taken from 12-24 inches below surface for TAL Metals, TCL Semi-Volatiles, PCB/Pest and TCL Volatiles. Surface sample for PCB's only.

PROJECT NO.: \_\_\_\_\_

BORING NO.: **RR-BH-01**

**Panamerican Environmental, Inc.**  
2390 Clinton Street  
Buffalo, New York 14227

										<b>GEOPROBE LOG</b>	
										BORING NO.: RR-BH-01	
PROJECT: Remington Rand - City of North Tonawanda										SHEET: 2 OF 3	
CLIENT: The Kissling Intrests, LLC										JOB NO.: N/A	
BORING CONTRACTOR: Environmental Services of Vermont										BORING LOCATION: Near Transformer building	
GROUNDWATER: Not Observed					CAS.	SAMPLER	CORE	TUBE	GROUND ELEVATION: NA		
DATE	TIME	LEVEL	TYPE		TYPE				DATE STARTED: April 27, 2009		
					DIA.				DATE FINISHED: April 27, 2009		
					WT.				DRILLER: A. Morse		
					FALL				GEOLOGIST: J. Ryszkiewicz		
* POCKET PENETROMETER READING										REVIEWED BY: N/A	
DEPTH FEET	STRATA	SAMPLE				DESCRIPTION				REMARKS	
		'S' NO.	CORE NO.	BLOWS PER 6"	RECOVERY ROD%	COLOR	CONSISTENCY HARDNESS	MATERIAL DESCRIPTION	CLASS USCS		
9						Grey and Black	Gravelly	Grey and black, loose and gravelly, M-F sand and C-F gravel and traces of silt. Layer was wet.		0.0 ppm Readings on Photoionization Detector	
10											
11										0.0 ppm Readings on Photoionization Detector	
12											
13						Reddish Brown	Tight	Reddish brown, tight, clay till with M-F sand and C-F gravel and traces of silt. Layer was moist.		0.0 ppm Readings on Photoionization Detector	
14											
15										0.0 ppm Readings on Photoionization Detector	
16											

COMMENTS: Photoionization readings were taken with a Mini-Rae 2000. A subsurface soil sample was taken from 12-24 inches below surface for TAI Metals, TCL Semi-Volatiles, PCB/Pest and TCL Volatiles. Surface sample for PCB's only.

PROJECT NO.: \_\_\_\_\_  
BORING NO.: RR-BH-01

**Panamerican Environmental, Inc.**  
2390 Clinton Street  
Buffalo, New York 14227

										<b>GEOPROBE LOG</b>	
										BORING NO.: <b>RR-BH-01</b>	
PROJECT: <b>Remington Rand - City of North Tonawanda</b>										SHEET: <b>3</b> OF 3	
CLIENT: <b>The Kissling Intrests, LLC</b>										JOB NO.: <b>N/A</b>	
BORING CONTRACTOR: <b>Environmental Services of Vermont</b>										BORING LOCATION: <b>Near Transformer building</b>	
GROUNDWATER: <b>Not Observed</b>										CAS.	SAMPLER
										CORE	TUBE
DATE	TIME	LEVEL	TYPE		TYPE				GROUND ELEVATION: <b>NA</b>		
					DIA.				DATE STARTED: <b>April 27, 2009</b>		
					WT.				DATE FINISHED: <b>April 27, 2009</b>		
					FALL				DRILLER: <b>A. Morse</b>		
										GEOLOGIST: <b>J. Ryszkiewicz</b>	
										REVIEWED BY: <b>N/A</b>	
										* POCKET PENETROMETER READING	
DEPTH FEET	STRATA	SAMPLE				DESCRIPTION				REMARKS	
		*S* NO.	CORE NO.	BLOWS PER 6"	RECOVERY RQX	COLOR	CONSISTENCY HARDNESS	MATERIAL DESCRIPTION	CLASS USCS		
17					42 48					0.0 ppm Readings on Photoionization Detector	
18						Reddish Brown	Tight	Reddish brown, tight, clay till with M-F sand and C-F gravel and traces of silt. Layer was moist.			
19					28 48					0.0 ppm Readings on Photoionization Detector	
20								End of boring at 20 feet bgs			
21											
22											
23											
24											

COMMENTS: Photoionization readings were taken with a Mini-Rae 2000. A subsurface soil sample was taken from 12-24 inches below surface for TAL Metals, TCL Semi-Volatiles, PCB/Pest and TCL Volatiles. Surface sample for PCB's only.

PROJECT NO.: \_\_\_\_\_

BORING NO.: **RR-BH-01**

**Panamerican Environmental, Inc.**  
2390 Clinton Street  
Buffalo, New York 14227

										<b>GEOPROBE LOG</b>	
										BORING NO.: RR-BH-02	
PROJECT: Remington Rand - City of North Tonawanda										SHEET: 1 of 3	
CLIENT: The Kissling Intrests, LLC										JOB NO.: N/A	
BORING CONTRACTOR: Environmental Services of Vermont										BORING LOCATION: Near Transformer Bldg	
GROUNDWATER: Not Observed										GROUND ELEVATION: NA	
DATE	TIME	LEVEL	TYPE		TYPE	CAS.	SAMPLER	CORE	TUBE	DATE STARTED: April 27, 2009	
					DIA.					DATE FINISHED: April 27, 2009	
					WT.					DRILLER: A. Morse	
					FALL					GEOLOGIST: J. Ryszkiewicz	
										REVIEWED BY: N/A	
										* POCKET PENETROMETER READING	
DEPTH FEET	STRATA	*S* NO.	CORE NO.	BLOWS PER 6'	RECOVERY ROD%	COLOR	CONSISTENCY HARDNESS	MATERIAL DESCRIPTION		CLASS USCS	REMARKS
1						Brown and Grey	Gravelly	Black and grey, soil with silty clay, C-F (coarse to fine) gravel and M-F (medium to fine) sand with traces of coal. Layer was moist.			0.0 ppm Readings on Photoionization Detector
						Brown	Tight	Brown, tight, silty clay with M-F sand and traces of C-F gravel. Layer was damp.			
2											0.0 ppm Readings on Photoionization Detector
3						Light Brown	Granular	Light brown, granular, M-F sand with traces of silt (loam). Layer was damp to wet.			
4											0.0 ppm Readings on Photoionization Detector
5											
6						Brown	Granular	Brown, granular, M-F sand with traces of silt. Layer was wet.			0.0 ppm Readings on Photoionization Detector
7											
8						Light Brown and Grey	Granular	Light brown and grey, granular, M-F sand with traces of silt and C-F gravel. Layer was moist.			

COMMENTS: Photoionization readings were taken with a Mini-Rae 2000. A subsurface soil sample was taken from 48-56 inches below surface for TAL Metals, TCL Semi-Volatiles, PCB/Pest and TCL Volatiles. Surface sample for TAL Metals, TCL SVOC, Pest/PCB.

PROJECT NO.: \_\_\_\_\_  
BORING NO.: RR-BH-02

**Panamerican Environmental, Inc.**  
 2390 Clinton Street  
 Buffalo, New York 14227

										<b>GEOPROBE LOG</b>	
										BORING NO.: RR-BH-02	
PROJECT: Remington Rand - City of North Tonawanda										SHEET: 2 OF 3	
CLIENT: The Kissling Intrests, LLC										JOB NO.: N/A	
BORING CONTRACTOR: Environmental Services of Vermont										BORING LOCATION: Near Transformer building	
GROUNDWATER: Not Observed										GROUND ELEVATION: NA	
DATE	TIME	LEVEL	TYPE		TYPE	CAS.	SAMPLER	CORE	TUBE	DATE STARTED: April 27, 2009	
					DIA.					DATE FINISHED: April 27, 2009	
					WT.					DRILLER: A. Morse	
					FALL					GEOLOGIST: J. Ryszkiewicz	
										* POCKET PENETROMETER READING	
										REVIEWED BY: N/A	
DEPTH FEET	STRATA	SAMPLE				DESCRIPTION				REMARKS	
		*S* NO.	CORE NO.	BLOWS PER 5'	RECOVERY ROCK	COLOR	CONSISTENCY HARDNESS	MATERIAL DESCRIPTION	CLASS USCS		
9				44 48		Light Brown and Grey	Granular	Light brown and grey, granular, M-F sand with traces of silt and C-F gravel. Layer was moist.		0.0 ppm Readings on Photoionization Detector	
10											
11				40 48						0.0 ppm Readings on Photoionization Detector	
12											
13						Grey and Black	Gravelly	Grey and black, loose and gravelly, M-F sand and C-F gravel and traces of silt. Layer was wet.		0.0 ppm Readings on Photoionization Detector	
14											
15				42 48						0.0 ppm Readings on Photoionization Detector	
16											

COMMENTS: Photoionization readings were taken with a Mini-Rae 2000. A subsurface soil sample was taken from 48-56 inches below surface for TAL Metals, TCL Semi-Volatiles, PCB/Pest and TCL Volatiles. Surface sample for TAL Metals, TCL SVOC, Pest/PCB.

PROJECT NO.:  
 BORING NO.: RR-BH-02

**Panamerican Environmental, Inc.**  
 2390 Clinton Street  
 Buffalo, New York 14227

										<b>GEOPROBE LOG</b>	
										BORING NO.: RR-BH-02	
PROJECT: Remington Rand - City of North Tonawanda										SHEET: 3 OF 3	
CLIENT: The Kissling Intrests, LLC										JOB NO.: N/A	
BORING CONTRACTOR: Environmental Services of Vermont										BORING LOCATION: Near Transformer building	
GROUNDWATER: Not Observed										GROUND ELEVATION: NA	
DATE	TIME	LEVEL	TYPE		TYPE	CAS.	SAMPLER	CORE	TUBE	DATE STARTED: April 27, 2009	
					DIA.					DATE FINISHED: April 27, 2009	
					WT.					DRILLER: A. Morse	
					FALL					GEOLOGIST: J. Ryszkiewicz	
* POCKET PENETROMETER READING										REVIEWED BY: N/A	
DEPTH FEET	STRATA	*S* NO.	CORE NO.	BLOWS PER 6'	RECOVERY ROD%	COLOR	CONSISTENCY HARDNESS	MATERIAL DESCRIPTION		CLASS USCS	REMARKS
					42 48	Grey and Black	Gravelly	Grey and black, loose and gravelly, M-F sand and C-F gravel and traces of silt. Layer was wet.			0.0 ppm Readings on Photoionization Detector
17											
18					25 48	Reddish Brown	Tight	Reddish brown, tight, clay till with M-F sand and C-F gravel and traces of silt. Layer was moist.			
19								End of boring at 19 feet bgs			0.0 ppm Readings on PID
20											
21											
22											
23											
24											

COMMENTS: Photoionization readings were taken with a Mini-Rae 2000. A subsurface soil sample was taken from 48-56 inches below surface for TAL Metals, TCL Semi-Volatiles, PCB/Pest and TCL Volatiles. Surface sample for TAL Metals, TCL SVOC, Pest/PCB.

PROJECT NO.:  
 BORING NO.: RR-BH-02

**Panamerican Environmental, Inc.**  
 2390 Clinton Street  
 Buffalo, New York 14227

										<b>GEOPROBE LOG</b>	
										BORING NO.: RR-BH-03	
PROJECT: Remington Rand - City of North Tonawanda										SHEET: 1 OF 2	
CLIENT: The Kissling Intrests, LLC										JOB NO.: N/A	
BORING CONTRACTOR: Environmental Services of Vermont										BORING LOCATION: Near Transformer Bldg	
GROUNDWATER: Not Observed										GROUND ELEVATION: NA	
DATE	TIME	LEVEL	TYPE		TYPE	CAS.	SAMPLER	CORE	TUBE	DATE STARTED: April 27, 2009	
					DIA.					DATE FINISHED: April 27, 2009	
					WT.					DRILLER: A. Morse	
					FALL					GEOLOGIST: J. Ryszkiewicz	
										REVIEWED BY: N/A	
										* POCKET PENETROMETER READING	
DEPTH FEET	STRATA	SAMPLE				DESCRIPTION				CLASS USCS	REMARKS
		"S" NO.	CORE NO.	BLOWS PER 6'	RECOVERY RCD%	COLOR	CONSISTENCY HARDNESS	MATERIAL DESCRIPTION			
1						Brown and Grey	Gravelly	Black and grey, soil with silty clay, C-F (coarse to fine) gravel and M-F (medium to fine) sand with traces of coal. Layer was moist.			0.0 ppm Readings on Photoionization Detector
2					40 48	Brown	Granular	Brown, granular, M-F sand with traces of silt. Layer was wet.			0.0 ppm Readings on Photoionization Detector
3											
4					20 48	Black and Grey	Granular	Black and grey, granular, M-F sand with traces of silt and C-F gravel. Layer was moist.			0.0 ppm Readings on Photoionization Detector
5											
6											
7					35 48	Brown	Granular	Black and grey, granular, M-F sand with traces of silt and C-F gravel. Layer was moist.			0.0 ppm Readings on Photoionization Detector
8											

COMMENTS: Photoionization readings were taken with a Mini-Rae 2000. A surface soil sample for PCB's only.

PROJECT NO.:  
 BORING NO.: RR-BH-03



**Panamerican Environmental, Inc.**  
 2390 Clinton Street  
 Buffalo, New York 14227

										<b>GEOPROBE LOG</b>	
										BORING NO.: RR-BH-03	
PROJECT: Remington Rand - City of North Tonawanda										SHEET: 2 OF 2	
CLIENT: The Kissling Intrests, LLC										JOB NO.: N/A	
BORING CONTRACTOR: Environmental Services of Vermont										BORING LOCATION: Near Transformer building	
GROUNDWATER: Not Observed										GROUND ELEVATION: NA	
DATE	TIME	LEVEL	TYPE		TYPE	CAS.	SAMPLER	CORE	TUBE	DATE STARTED: April 27, 2009	
					DIA.					DATE FINISHED: April 27, 2009	
					WT.					DRILLER: A. Morse	
					FALL					GEOLOGIST: J. Ryszkiewicz	
										* POCKET PENETROMETER READING	
										REVIEWED BY: N/A	
DEPTH FEET	STRATA	SAMPLE				DESCRIPTION				CLASS USCS	REMARKS
		*S NO.	CORE NO.	BLOWS PER 6"	RECOVERY ROD%	COLOR	CONSISTENCY HARDNESS	MATERIAL DESCRIPTION			
9						Grey and Black	Gravelly	Grey and black, loose and gravelly, M-F sand and C-F gravel and traces of silt. Layer was wet.		0.0 ppm Readings on Photoionization Detector	
10					45 48						
11						Reddish Brown	Tight	Reddish brown, tight, clay till with M-F sand and C-F gravel and traces of silt. Layer was moist.		0.0 ppm Readings on Photoionization Detector	
12								End of boring at 11.7 feet bgs			
13										0.0 ppm Readings on Photoionization Detector	
14											
15										0.0 ppm Readings on Photoionization Detector	
16											

COMMENTS: Photoionization readings were taken with a Mini-Rae 2000. A surface soil sample for PCB's only.

PROJECT NO.: \_\_\_\_\_
BORING NO.: RR-BH-03

**Panamerican Environmental, Inc.**  
 2390 Clinton Street  
 Buffalo, New York 14227

										<b>GEOPROBE LOG</b>	
										BORING NO.: RR-BH-04	
PROJECT: Remington Rand - City of North Tonawanda										SHEET: 1 OF 2	
CLIENT: The Kissling Intrests, LLC										JOB NO.: N/A	
BORING CONTRACTOR: Environmental Services of Vermont										BORING LOCATION: Near Rear Transformer	
GROUNDWATER: Not Observed										GROUND ELEVATION: NA	
DATE	TIME	LEVEL	TYPE		TYPE	CAS.	SAMPLER	CORE	TUBE	DATE STARTED: April 27, 2009	
					DIA.					DATE FINISHED: April 27, 2009	
					WT.					DRILLER: A. Morse	
					FALL					GEOLOGIST: J. Ryszkiewicz	
										REVIEWED BY: N/A	
										* POCKET PENETROMETER READING	
DEPTH FEET	STRATA	'S' NO.	CORE NO.	BLOWS PER 6"	RECOVERY ROCK	COLOR	CONSISTENCY HARDNESS	DESCRIPTION MATERIAL DESCRIPTION		CLASS USCS	REMARKS
1						Brown and Grey	Gravelly	Black and grey, soil with silty clay, C-F (coarse to fine) gravel and M-F (medium to fine) sand with traces of coal. Layer was moist.			0.0 ppm Readings on Photoionization Detector
2					30 48	Dark Brown	Tight	Dark Brown, tight, silty clay with traces of C-F gravel.			
3											0.0 ppm Readings on Photoionization Detector
4					24 48	Light to Dark Grey	Soft	Light to dark grey, soft, M-F sand with traces of silt and C-F gravel. Layer was moist.			0.0 ppm Readings on Photoionization Detector
5											
6					33 48						
7						Black	Tight	Black, tight, silty clay with traces of C-F gravel and M-F sand. Layer was wet.			0.0 ppm Readings on Photoionization Detector
8					44 48	Grey and Black	Gravelly	Grey and black, loose and gravelly, M-F sand and C-F gravel and traces of silt. Layer was wet.			

COMMENTS: Photoionization readings were taken with a Mini-Rae 2000. A subsurface soil sample was taken from 48-60 inches below surface for TAL Metals, TCL Semi-Volatiles, PCB/Pest and TCL Volatiles. Surface sample for PCB's only.

PROJECT NO.:  
 BORING NO.: RR-BH-04

**Panamerican Environmental, Inc.**  
 2390 Clinton Street  
 Buffalo, New York 14227

										<b>GEOPROBE LOG</b>	
										BORING NO.: RR-BH-04	
PROJECT: Remington Rand - City of North Tonawanda										SHEET: 2 OF 2	
CLIENT: The Kissling Intrests, LLC										JOB NO.: N/A	
BORING CONTRACTOR: Environmental Services of Vermont										BORING LOCATION: Near Rear Transformer	
GROUNDWATER: Not Observed										GROUND ELEVATION: NA	
DATE	TIME	LEVEL	TYPE		TYPE	CAS.	SAMPLER	CORE	TUBE	DATE STARTED: April 27, 2009	
					DIA.					DATE FINISHED: April 27, 2009	
					WT.					DRILLER: A. Morse	
					FALL					GEOLOGIST: J. Ryszkiewicz	
										* POCKET PENETROMETER READING	
										REVIEWED BY: N/A	
DEPTH FEET	STRATA	SAMPLE				DESCRIPTION				REMARKS	
		*S NO.	CORE NO.	BLOVS PER 6"	RECOVERY RDN	COLOR	CONSISTENCY HARDNESS	MATERIAL DESCRIPTION	CLASS USCS		
9					44 48					0.0 ppm Readings on Photoionization Detector	
10											
11						Grey and Black	Gravelly	Grey and black, loose and gravelly, M-F sand and C-F gravel and traces of silt. Layer was wet.		0.0 ppm Readings on Photoionization Detector	
12					44 48						
13										0.0 ppm Readings on Photoionization Detector	
14								End of boring at 13.8 feet bgs			
15											
16											

COMMENTS: Photoionization readings were taken with a Mini-Rae 2000. A subsurface soil sample was taken from 48-60 inches below surface for TAL Metals, TCL Semi-Volatiles, PCB/Pest and TCL Volatiles. Surface sample for PCB's only.

PROJECT NO.:  
 BORING NO.: RR-BH-04

**Panamerican Environmental, Inc.**  
 2390 Clinton Street  
 Buffalo, New York 14227

										<b>GEOPROBE LOG</b>	
										BORING NO.: RR-BH-05	
PROJECT: Remington Rand - City of North Tonawanda										SHEET: 1 of 2	
CLIENT: The Kissling Intrests, LLC										JOB NO.: N/A	
BORING CONTRACTOR: Environmental Services of Vermont										BORING LOCATION: Near Rear Transformer	
GROUNDWATER: Not Observed										GROUND ELEVATION: NA	
DATE	TIME	LEVEL	TYPE		TYPE	CAS.	SAMPLER	CORE	TUBE	DATE STARTED: April 27, 2009	
					DIA.					DATE FINISHED: April 27, 2009	
					WT.					DRILLER: A. Morse	
					FALL					GEOLOGIST: J. Ryszkiewicz	
										* POCKET PENETROMETER READING	
										REVIEWED BY: N/A	
DEPTH FEET	STRATA	*S NO.	CORE NO.	BLOWS PER 6'	RECOVERY R00%	COLOR	CONSISTENCY HARDNESS	MATERIAL DESCRIPTION		CLASS USCS	REMARKS
1						Brown and Grey	Gravelly	Brown and grey, soil with silty clay, C-F (coarse to fine) gravel and M-F (medium to fine) sand. Layer was moist.			0.0 ppm Readings on Photoionization Detector
2					33 48	Dark Brown	Tight	Dark Brown, tight, silty clay with traces of C-F gravel.			
3											0.0 ppm Readings on Photoionization Detector
4											
5					47 48	Light Brown to Dark Grey	Soft	Light brown to dark grey, soft, M-F sandy loam with traces of silt and C-F gravel. Layer was moist.			0.0 ppm Readings on Photoionization Detector
6											
7											0.0 ppm Readings on Photoionization Detector
8					44 48	Brown	Gravelly	Brown, loose and gravelly, M-F sand and C-F gravel and traces of silt. Layer was wet.			

COMMENTS: Photoionization readings were taken with a Mini-Rae 2000. A surface soil sample was taken for TAL Metals, TCL SVOC, Pest/PCB.

PROJECT NO.:  
 BORING NO.: RR-BH-05

**Panamerican Environmental, Inc.**  
2390 Clinton Street  
Buffalo, New York 14227

										<b>GEOPROBE LOG</b>	
										BORING NO.: RR-BH-05	
PROJECT: Remington Rand - City of North Tonawanda										SHEET: 2 OF 2	
CLIENT: The Kissling Intrests, LLC										JOB NO.: N/A	
BORING CONTRACTOR: Environmental Services of Vermont										BORING LOCATION: Near Rear Transformer	
GROUNDWATER: Not Observed						CAS.	SAMPLER	CORE	TUBE	GROUND ELEVATION: NA	
DATE	TIME	LEVEL	TYPE		TYPE					DATE STARTED: April 27, 2009	
					DIA.					DATE FINISHED: April 27, 2009	
					WT.					DRILLER: A. Morse	
					FALL					GEOLOGIST: J. Ryszkiewicz	
								* POCKET PENETROMETER READING		REVIEWED BY: N/A	
DEPTH FEET	STRATA	SAMPLE				DESCRIPTION				CLASS USCS	REMARKS
		*S' NO.	CORE NO.	BLOWS PER 6'	RECOVERY RCD%	COLOR	CONSISTENCY HARDNESS	MATERIAL DESCRIPTION			
9				<u>44</u> <u>48</u>		Brown	Gravelly	Brown, loose and gravelly, M-F sand and C-F gravel and traces of silt. Layer was wet.		0.0 ppm Readings on Photoionization Detector	
10											
11				<u>48</u> <u>48</u>		Grey and Black	Gravelly	Grey and black, loose and gravelly, M-F sand and C-F gravel and traces of silt. Layer was wet.		0.0 ppm Readings on Photoionization Detector	
12											
13								End of boring at 14.3 feet bgs		0.0 ppm Readings on Photoionization Detector	
14											
15											
16											

COMMENTS: Photoionization readings were taken with a Mini-Rae 2000. A surface soil sample was taken for TAL Metals, TCL SVOC, Pest/PCB

PROJECT NO.: \_\_\_\_\_ BORING NO.: RR-BH-05

**Panamerican Environmental, Inc.**  
 2390 Clinton Street  
 Buffalo, New York 14227

										<b>GEOPROBE LOG</b>	
										BORING NO.: RR-BH-06	
PROJECT: Remington Rand - City of North Tonawanda										SHEET: 1 OF 3	
CLIENT: The Kissling Intrests, LLC										JOB NO.: N/A	
BORING CONTRACTOR: Environmental Services of Vermont										BORING LOCATION: Near Rear Transformer	
GROUNDWATER: Not Observed										GROUND ELEVATION: NA	
DATE	TIME	LEVEL	TYPE		TYPE	CAS.	SAMPLER	CORE	TUBE	DATE STARTED: April 27, 2009	
					DIA.					DATE FINISHED: April 27, 2009	
					WT.					DRILLER: A. Morse	
					FALL					GEOLOGIST: J. Ryszkiewicz	
										REVIEWED BY: N/A	
										* POCKET PENETROMETER READING	
DEPTH FEET	STRATA	SAMPLE				DESCRIPTION				CLASS USCS	REMARKS
"S" NO.	CORE NO.	BLOWS PER 6"	RECOVERY ROD%	COLOR	CONSISTENCY HARDNESS	MATERIAL DESCRIPTION					
1				Brown and Grey	Gravelly	Brown and grey, soil with silty clay, C-F (coarse to fine) gravel and M-F (medium to fine) sand. Layer was moist.				0.0 ppm Readings on Photoionization Detector	
2											
3										0.0 ppm Readings on Photoionization Detector	
4				Brown to Grey	Soft	Brown to grey, soft, M-F sand with traces of clay and C-F gravel. Layer was moist.				0.0 ppm Readings on Photoionization Detector	
5											
6											
7				Brown	Gravelly	Brown, loose and gravelly, M-F sand and C-F gravel and traces of silt. Layer was wet.				0.0 ppm Readings on Photoionization Detector	
8											

COMMENTS: Photoionization readings were taken with a Mini-Rae 2000. A subsurface soil sample was taken from 24-36 inches below surface for TAI Metals, TCI Semi-Volatiles, PCB/Pest and TCL Volatiles. Surface sample for PCB's only.

PROJECT NO.:  
 BORING NO.: RR-BH-06

**Panamerican Environmental, Inc.**  
 2390 Clinton Street  
 Buffalo, New York 14227

										<b>GEOPROBE LOG</b>	
										BORING NO.: <b>RR-BH-06</b>	
PROJECT: <b>Remington Rand - City of North Tonawanda</b>										SHEET: <b>2</b> OF <b>3</b>	
CLIENT: <b>The Kissling Intrests, LLC</b>										JOB NO.: <b>N/A</b>	
BORING CONTRACTOR: <b>Environmental Services of Vermont</b>										BORING LOCATION: <b>Near Rear Transformer</b>	
GROUNDWATER: <b>Not Observed</b>										GROUND ELEVATION: <b>NA</b>	
DATE	TIME	LEVEL	TYPE		TYPE	CAS.	SAMPLER	CORE	TUBE	DATE STARTED: <b>April 27, 2009</b>	
					DIA.					DATE FINISHED: <b>April 27, 2009</b>	
					WT.					DRILLER: <b>A. Morse</b>	
					FALL					GEOLOGIST: <b>J. Ryszkiewicz</b>	
* POCKET PENETROMETER READING										REVIEWED BY: <b>N/A</b>	
DEPTH FEET	STRATA	SAMPLE				DESCRIPTION				CLASS USCS	REMARKS
		*S* NO.	CORE NO.	BLOWS PER 6"	RECOVERY RQDN	COLOR	CONSISTENCY HARDNESS	MATERIAL DESCRIPTION			
9				45 48		Brown	Gravelly	Brown, loose and gravelly, M-F sand and C-F gravel and traces of silt. Layer was wet.		0.0 ppm Readings on Photoionization Detector	
10											
11				50 48		Grey	Granular	Grey, granular, M-F sand with traces of silt and C-F gravel. Layer was moist.		0.0 ppm Readings on Photoionization Detector	
12											
13						Brown	Gravelly	Brown, loose and gravelly, M-F sand and C-F gravel and traces of silt. Layer was wet.		0.0 ppm Readings on Photoionization Detector	
14											
15				42 48		Grey	Granular	Grey, granular, C-F gravel with traces of M-F sand. Layer was wet.		0.0 ppm Readings on Photoionization Detector	
16											

COMMENTS: Photoionization readings were taken with a Mini-Rae 2000. A subsurface soil sample was taken from 24-36 inches below surface for TAI Metals, TCI Semi-Volatiles, PCB/Pest and TCL Volatiles. Surface sample for PCB's only.

PROJECT NO.: \_\_\_\_\_  
 BORING NO.: **RR-BH-06**

**Panamerican Environmental, Inc.**  
 2390 Clinton Street  
 Buffalo, New York 14227

										<b>GEOPROBE LOG</b>	
										BORING NO.: RR-BH-06	
PROJECT: Remington Rand - City of North Tonawanda										SHEET: 3 OF 3	
CLIENT: The Kissling Intrests, LLC										JOB NO.: N/A	
BORING CONTRACTOR: Environmental Services of Vermont										BORING LOCATION: Near Rear Transformer	
GROUNDWATER: Not Observed										GROUND ELEVATION: NA	
DATE	TIME	LEVEL	TYPE			CAS.	SAMPLER	CORE	TUBE	DATE STARTED: April 27, 2009	
										DATE FINISHED: April 27, 2009	
					DIA.					DRILLER: A. Morse	
					WT.					GEOLOGIST: J. Ryszkiewicz	
					FALL					REVIEWED BY: N/A	
* POCKET PENETROMETER READING											
DEPTH FEET	STRATA	SAMPLE				DESCRIPTION				REMARKS	
		*S NO.	CORE NO.	BLOWS PER 6'	RECOVERY RODN	COLOR	CONSISTENCY HARDNESS	MATERIAL DESCRIPTION	CLASS USCS		
17				42 48		Grey and Black	Gravelly	Grey and black, loose and gravelly, M-F sand and C-F gravel and traces of silt. Layer was wet.		0.0 ppm Readings on Photoionization Detector	
18				24 48		Reddish Brown	Tight	Reddish brown, tight, clay till with M-F sand and C-F gravel and traces of silt. Layer was moist.		0.0 ppm Readings on Photoionization Detector	
19											
20								End of boring at 19.7 feet bgs			
21											
22											
23											
24											

COMMENTS: Photoionization readings were taken with a Mini-Rae 2000. A subsurface soil sample was taken from 24-36 inches below surface for TAI Metals, TCL Semi-Volatiles, PCB/Pest and TCL Volatiles. Surface sample for PCB's only.

PROJECT NO.:  
 BORING NO.: RR-BH-06



**Panamerican Environmental, Inc.**  
 2390 Clinton Street  
 Buffalo, New York 14227

										<b>GEOPROBE LOG</b>	
										BORING NO.: RR-BH-07	
PROJECT: Remington Rand - City of North Tonawanda										SHEET: 1 of 2	
CLIENT: The Kissling Intrests, LLC										JOB NO.: N/A	
BORING CONTRACTOR: Environmental Services of Vermont										BORING LOCATION: Front Ramp	
GROUNDWATER: Not Observed										GROUND ELEVATION: NA	
DATE	TIME	LEVEL	TYPE		CAS.	SAMPLER	CORE	TUBE	DATE STARTED: April 27, 2009		
									DATE FINISHED: April 27, 2009		
									DRILLER: A. Morse		
									GEOLOGIST: J. Ryszkiewicz		
										REVIEWED BY: N/A	
										* POCKET PENETROMETER READING	
DEPTH FEET	STRATA	SAMPLE				DESCRIPTION				CLASS USCS	REMARKS
		'S' NO.	CORE NO.	BLOWS PER 6"	RECOVERY ROD%	COLOR	CONSISTENCY HARDNESS	MATERIAL DESCRIPTION			
1						Grey	Granular	Grey, granular, concrete with C-F (coarse to fine) gravel and M-F (medium to fine) sand.			0.0 ppm Readings on Photoionization Detector
2					32/48	Light Brown	Soft	Light brown, soft, M-F sandy loam with traces of silt and C-F gravel.			
3						Brown	Plastic-like	Brown, plastic-like, silty clay with traces of M-F sand.			
4					40/48	Black	Tight	Black, tight, silty clay with traces of M-F sand and C-F gravel.			
5											0.0 ppm Readings on Photoionization Detector
6											
7					47/48	Reddish Brown	Very Tight	Reddish brown, very tight, silty clay with M-F sand and C-F gravel. Layer was wet.			0.0 ppm Readings on Photoionization Detector
8											

COMMENTS: Photoionization readings were taken with a Mini-Rae 2000. A surface soil sample was taken from 24-36 inches below surface for TAL Metals, TCL Semi-Volatiles, PCB/Pest and TCL Volatiles.

PROJECT NO.:  
 BORING NO.: RR-BH-07

**Panamerican Environmental, Inc.**  
 2390 Clinton Street  
 Buffalo, New York 14227

										<b>GEOPROBE LOG</b>	
										BORING NO.: RR-BH-07	
PROJECT: Remington Rand - City of North Tonawanda										SHEET: 2 OF 2	
CLIENT: The Kissling Intrests, LLC										JOB NO.: N/A	
BORING CONTRACTOR: Environmental Services of Vermont										BORING LOCATION: Front Ramp	
GROUNDWATER: Not Observed										GROUND ELEVATION: NA	
DATE	TIME	LEVEL	TYPE		TYPE	CAS.	SAMPLER	CORE	TUBE	DATE STARTED: April 27, 2009	
					DIA.					DATE FINISHED: April 27, 2009	
					WT.					DRILLER: A. Morse	
					FALL					GEOLOGIST: J. Ryszkiewicz	
										REVIEWED BY: N/A	
										* POCKET PENETROMETER READING	
DEPTH FEET	STRATA	SAMPLE				DESCRIPTION				CLASS USCS	REMARKS
		*S* NO.	CORE NO.	BLOWS PER 6"	RECOVERY ROOM	COLOR	CONSISTENCY HARDNESS	MATERIAL DESCRIPTION			
9					47 48						0.0 ppm Readings on Photoionization Detector
10											
11						Reddish Brown	Very Tight	Reddish brown, very tight, silty clay with M-F sand and C-F gravel. Layer was wet.			0.0 ppm Readings on Photoionization Detector
12					48 48						
13											0.0 ppm Readings on Photoionization Detector
14								End of boring at 13.9 feet bgs			
15											
16											

COMMENTS: Photoionization readings were taken with a Mini-Rae 2000. A subsurface soil sample was taken from 24-36 inches below surface for TAL Metals, TCL Semi-Volatiles, PCB/Pest and TCL Volatiles.

PROJECT NO.:  
 BORING NO.: RR-BH-07

**Panamerican Environmental, Inc.**  
 2390 Clinton Street  
 Buffalo, New York 14227

										<b>GEOPROBE LOG</b>	
										BORING NO.: RR-SF-SS-01	
PROJECT: Remington Rand - City of North Tonawanda										SHEET: 1 OF 1	
CLIENT: The Kissling Intrests, LLC										JOB NO.: N/A	
BORING CONTRACTOR: Environmental Services of Vermont										BORING LOCATION: Indoor - SubFloor	
GROUNDWATER: Not Observed										GROUND ELEVATION: NA	
DATE	TIME	LEVEL	TYPE		TYPE	CAS.	SAMPLER	CORE	TUBE	DATE STARTED: May 20, 2009	
					DIA.					DATE FINISHED: May 20, 2009	
					WT.					DRILLER: A. Morse	
					FALL					GEOLOGIST: J. Ryszkiewicz	
										REVIEWED BY: N/A	
* POCKET PENETROMETER READING											
DEPTH FEET	STRATA	SAMPLE				DESCRIPTION				CLASS USCS	REMARKS
		"S" NO.	CORE NO.	BLOYS PER 6'	RECOVERY ROD%	COLOR	CONSISTENCY HARDNESS	MATERIAL DESCRIPTION			
						Grey	Granular	Grey, granular, concrete		0.0 ppm Readings on Photoionization Detector	
1						Black	Granular	Black, granular, fill consisting of cinder, C-F gravel, slag and trace of M-F sand			
2											
3						Light Brown	Soft	Light brown, soft, sandy silt. Layer was damp to wet.		0.0 ppm Readings on PID	
4								End of hand auger at 3 feet bgs			
5											
6											
7											
8											

COMMENTS: Photoionization readings were taken with a Mini-Rae 2000. This location was "hand augered" do to the location within the structure.

PROJECT NO.: \_\_\_\_\_
BORING NO.: RR-SF-SS-01

**Panamerican Environmental, Inc.**  
 2390 Clinton Street  
 Buffalo, New York 14227

										<b>GEOPROBE LOG</b>	
										BORING NO.: RR-SF-SS-02	
PROJECT: Remington Rand - City of North Tonawanda										SHEET: 1 OF 1	
CLIENT: The Kissling Intrests, LLC										JOB NO.: N/A	
BORING CONTRACTOR: Environmental Services of Vermont										BORING LOCATION: Indoor - SubFloor	
GROUNDWATER: Not Observed										GROUND ELEVATION: NA	
DATE	TIME	LEVEL	TYPE		TYPE	CAS.	SAMPLER	CORE	TUBE	DATE STARTED: May 20, 2009	
					DIA.					DATE FINISHED: May 20, 2009	
					WT.					DRILLER: A. Morse	
					FALL					GEOLOGIST: J. Ryszkiewicz	
										REVIEWED BY: N/A	
										* POCKET PENETROMETER READING	
DEPTH FEET	STRATA	SAMPLE				DESCRIPTION				CLASS USCS	REMARKS
'S' NO.	CORE NO.	BLOWS PER 6'	RECOVERY ROD%	COLOR	CONSISTENCY HARDNESS	MATERIAL DESCRIPTION					
				Grey	Granular	Grey, granular, concrete					0.0 ppm Readings on Photoionization Detector
				Black	Granular	Black, granular, cinder, C-F (coarse to fine) gravel and M-F (medium to fine) sand.					
1				Light Brown	Soft	Light brown, soft, M-F sandy loam with traces of silt and C-F gravel.					
2											0.0 ppm Readings on Photoionization Detector
3											
4											
5				Reddish Brown	Very Tight	Reddish brown, very tight, silty clay with M-F sand and C-F gravel. Layer was wet.					0.0 ppm Readings on PID
6											
7											
8						End of boring at 5 feet bgs					

COMMENTS: Photoionization readings were taken with a Mini-Rae 2000.

PROJECT NO.:
BORING NO.: RR-SF-SS-02

**Panamerican Environmental, Inc.**  
 2390 Clinton Street  
 Buffalo, New York 14227

										<b>GEOPROBE LOG</b>	
										BORING NO.: RR-SF-SS-03	
PROJECT: Remington Rand - City of North Tonawanda										SHEET: 1 OF 1	
CLIENT: The Kissling Intrests, LLC										JOB NO.: N/A	
BORING CONTRACTOR: Environmental Services of Vermont										BORING LOCATION: Indoor - SubFloor	
GROUNDWATER: Not Observed										GROUND ELEVATION: NA	
DATE	TIME	LEVEL	TYPE		TYPE	CAS.	SAMPLER	CORE	TUBE	DATE STARTED: May 20, 2009	
					DIA.					DATE FINISHED: May 20, 2009	
					WT.					DRILLER: A. Morse	
					FALL					GEOLOGIST: J. Ryszkiewicz	
										REVIEWED BY: N/A	
										* POCKET PENETROMETER READING	
DEPTH FEET	STRATA	SAMPLE				DESCRIPTION				CLASS USCS	REMARKS
'S' NO.	CORE NO.	BLOWS PER 6'	RECOVERY ROD%	COLOR	CONSISTENCY HARDNESS	MATERIAL DESCRIPTION					
1				Grey	Granular	Grey, granular, concrete					0.0 ppm Readings on Photoionization Detector
2											
3			48 48	Black	Granular	Black, granular, cinder, C-F (coarse to fine) gravel and M-F (medium to fine) sand.					0.0 ppm Readings on Photoionization Detector
4											
5											0.0 ppm Readings on Photoionization Detector
6			48 48	Reddish Brown	Very Tight	Reddish brown, very tight, silty clay with M-F sand and C-F gravel. Layer was wet.					0.0 ppm Readings on Photoionization Detector
7											
8						End of boring at 8 feet bgs					

COMMENTS: Photoionization readings were taken with a Mini-Rae 2000.

PROJECT NO.: \_\_\_\_\_
BORING NO.: RR-SF-SS-03

**Panamerican Environmental, Inc.**  
 2390 Clinton Street  
 Buffalo, New York 14227

										<b>GEOPROBE LOG</b>	
										BORING NO.: RR-SF-SS-04	
PROJECT: Remington Rand - City of North Tonawanda										SHEET: 1 OF 2	
CLIENT: The Kissling Intrests, LLC										JOB NO.: N/A	
BORING CONTRACTOR: Environmental Services of Vermont										BORING LOCATION: Indoor - SubFloor	
GROUNDWATER: Not Observed										GROUND ELEVATION: NA	
DATE	TIME	LEVEL	TYPE		TYPE	CAS.	SAMPLER	CORE	TUBE	DATE STARTED: May 20, 2009	
					DIA.					DATE FINISHED: May 20, 2009	
					WT.					DRILLER: A. Morse	
					FALL					GEOLOGIST: J. Ryszkiewicz	
										REVIEWED BY: N/A	
										* POCKET PENETROMETER READING	
DEPTH FEET	STRATA	SAMPLE				DESCRIPTION				CLASS USCS	REMARKS
		'S' NO.	CORE NO.	BLOWS PER 6"	RECOVERY ROD%	COLOR	CONSISTENCY HARDNESS	MATERIAL DESCRIPTION			
1						Grey	Granular	Grey, granular, concrete		0.0 ppm Readings on Photoionization Detector	
2					48 48	Black	Granular	Black, granular, cinder, C-F (coarse to fine) gravel and M-F (medium to fine) sand.		0.0 ppm Readings on Photoionization Detector	
3											
4						Light Brown	Tight	Light brown, tight, silty clay with M-F sand. Layer was damp.		0.0 ppm Readings on Photoionization Detector	
5											
6					48 48	Reddish Brown	Very Tight	Reddish brown, very tight, silty clay with M-F sand and C-F gravel. Layer was wet.		0.0 ppm Readings on Photoionization Detector	
7										Up to 175 ppm Readings on Photoionization Detector	
8											

COMMENTS: Photoionization readings were taken with a Mini-Rae 2000.

PROJECT NO.: \_\_\_\_\_

BORING NO.: RR-SF-SS-04

**Panamerican Environmental, Inc.**  
 2390 Clinton Street  
 Buffalo, New York 14227

										<b>GEOPROBE LOG</b>	
										BORING NO.: RR-SF-SS-04	
PROJECT: Remington Rand - City of North Tonawanda										SHEET: 2 OF 2	
CLIENT: The Kissling Intrests, LLC										JOB NO.: N/A	
BORING CONTRACTOR: Environmental Services of Vermont										BORING LOCATION: Indoor - Subfloor	
GROUNDWATER: Not Observed										GROUND ELEVATION: NA	
DATE	TIME	LEVEL	TYPE	TYPE		CAS.	SAMPLER	CORE	TUBE	DATE STARTED: May 20, 2009	
				DIA.						DATE FINISHED: May 20, 2009	
				WT.						DRILLER: A. Morse	
				FALL						GEOLOGIST: J. Ryszkiewicz	
										* POCKET PENETROMETER READING	
										REVIEWED BY: N/A	
DEPTH FEET	STRATA	SAMPLE				DESCRIPTION				CLASS USCS	REMARKS
		*S* NO.	CORE NO.	BLOYS PER 6'	RECOVERY RDN%	COLOR	CONSISTENCY HARDNESS	MATERIAL DESCRIPTION			
9											Up to 1.5 ppm Readings on Photoionization Detector
10				48 48		Reddish Brown	Very Tight	Reddish brown, very tight, silty clay with M-F sand and C-F gravel. Layer was wet.			
11											0.0 ppm Readings on Photoionization Detector
12								End of boring at 12 feet bgs			
13											
14											
15											
16											

COMMENTS: Photoionization readings were taken with a Mini-Rae 2000.

PROJECT NO.:
BORING NO.: RR-SS-SF-04

**Panamerican Environmental, Inc.**  
 2390 Clinton Street  
 Buffalo, New York 14227

										<b>GEOPROBE LOG</b>	
										BORING NO.: <b>RR-SF-SS-05</b>	
PROJECT: <b>Remington Rand - City of North Tonawanda</b>										SHEET: <b>1 OF 1</b>	
CLIENT: <b>The Kissling Intrests, LLC</b>										JOB NO.: <b>N/A</b>	
BORING CONTRACTOR: <b>Environmental Services of Vermont</b>										BORING LOCATION: <b>Indoor - SubFloor</b>	
GROUNDWATER: <b>Not Observed</b>										GROUND ELEVATION: <b>NA</b>	
DATE	TIME	LEVEL	TYPE		TYPE	CAS.	SAMPLER	CORE	TUBE	DATE STARTED: <b>May 20, 2009</b>	
					DIA.					DATE FINISHED: <b>May 20, 2009</b>	
					WT.					DRILLER: <b>A. Morse</b>	
					FALL					GEOLOGIST: <b>J. Ryszkiewicz</b>	
										REVIEWED BY: <b>N/A</b>	
* POCKET PENETROMETER READING											
DEPTH FEET	STRATA	SAMPLE				DESCRIPTION				CLASS USCS	REMARKS
		*S NO.	CORE NO.	BLOWS PER 6'	RECOVERY RDN	COLOR	CONSISTENCY HARDNESS	MATERIAL DESCRIPTION			
1						Grey	Granular	Grey, granular, concrete		0.0 ppm Readings on Photoionization Detector	
2					30 48	Light Brown and Grey	Granular	Light brown and grey, layered, silty clay with traces of C-F (coarse to fine) gravel and M-F (medium to fine) sand.			
3											
4					36 48	Light to Dark Grey	Soft	Light to dark grey, soft, silty clay with M-F sand. Layer was damp to wet.		0.0 ppm Readings on Photoionization Detector	
5										0.0 ppm Readings on Photoionization Detector	
6								End of boring at 5.5 feet bgs			
7											
8											

COMMENTS: Photoionization readings were taken with a Mini-Rae 2000.  
 PROJECT NO.: \_\_\_\_\_  
 BORING NO.: **RR-SF-SS-05**



**Panamerican Environmental, Inc.**  
 2390 Clinton Street  
 Buffalo, New York 14227

										<b>GEOPROBE LOG</b>	
										BORING NO.: RR-SF-SS-06	
PROJECT: Remington Rand - City of North Tonawanda										SHEET: 1 OF 1	
CLIENT: The Kissling Intrests, LLC										JOB NO.: N/A	
BORING CONTRACTOR: Environmental Services of Vermont										BORING LOCATION: Indoor - SubFloor	
GROUNDWATER: Not Observed										GROUND ELEVATION: NA	
DATE	TIME	LEVEL	TYPE		TYPE	CAS.	SAMPLER	CORE	TUBE	DATE STARTED: May 20, 2009	
					DIA.					DATE FINISHED: May 20, 2009	
					WT.					DRILLER: A. Morse	
					FALL					GEOLOGIST: J. Ryszkiewicz	
										* POCKET PENETROMETER READING	
										REVIEWED BY: N/A	
DEPTH FEET	STRATA	SAMPLE				DESCRIPTION				CLASS USCS	REMARKS
		*S* NO.	CORE NO.	BLOWS PER 6"	RECOVERY RCD%	COLOR	CONSISTENCY HARDNESS	MATERIAL DESCRIPTION			
1				24 48		Grey	Granular	Grey, granular, concrete		0.0 ppm Readings on Photoionization Detector	
2					Black	Granular	Black, granular, cinder, C-F (coarse to fine) gravel and M-F (medium to fine) sand.				
3											
4				36 48	Reddish Brown	Very Tight	Reddish brown, very tight, silty clay with M-F sand and C-F gravel. Layer was wet.		0.0 ppm Readings on Photoionization Detector		
5					Light Brown	Soft	Light brown, soft, M-F sandy loam with traces of silt and C-F gravel. Layer was damp		0.0 ppm Readings on PID		
6							End of boring at 5 feet bgs				
7											
8											

COMMENTS: Photoionization readings were taken with a Mini-Rae 2000.

PROJECT NO.: \_\_\_\_\_
BORING NO.: RR-SF-SS-06

**Panamerican Environmental, Inc.**  
 2390 Clinton Street  
 Buffalo, New York 14227

										<b>GEOPROBE LOG</b>	
										BORING NO.: RR-SF-SS-07	
PROJECT: Remington Rand - City of North Tonawanda										SHEET: 1 OF 1	
CLIENT: The Kissling Intrests, LLC										JOB NO.: N/A	
BORING CONTRACTOR: Environmental Services of Vermont										BORING LOCATION: Indoor - SubFloor	
GROUNDWATER: Not Observed										GROUND ELEVATION: NA	
DATE	TIME	LEVEL	TYPE		TYPE	CAS.	SAMPLER	CORE	TUBE	DATE STARTED: May 20, 2009	
					DIA.					DATE FINISHED: May 20, 2009	
					WT.					DRILLER: A. Morse	
					FALL					GEOLOGIST: J. Ryszkiewicz	
										* POCKET PENETROMETER READING	
										REVIEWED BY: N/A	
DEPTH FEET	STRATA	SAMPLE				DESCRIPTION				CLASS USCS	REMARKS
		*S* NO.	CORE NO.	BLOWS PER 6"	RECOVERY ROD%	COLOR	CONSISTENCY HARDNESS	MATERIAL DESCRIPTION			
1						Grey	Granular	Grey, granular, concrete		0.0 ppm Readings on Photoionization Detector	
2					30 48						
3						Light Brown and Grey	Granular	- Light brown and grey, layered, silty clay with traces of C-F (coarse to fine) gravel and M-F (medium to fine) sand.		0.0 ppm Readings on Photoionization Detector	
4					36 48						
5						Light Brown	Soft	- Light to dark grey, soft, sandy silt. Layer was damp to wet.		0.0 ppm Readings on Photoionization Detector	
6											
7								- End of boring at 6.6 feet bgs			
8											

COMMENTS: Photoionization readings were taken with a Mini-Rae 2000.

PROJECT NO.: \_\_\_\_\_  
 BORING NO.: RR-SF-SS-07

**Panamerican Environmental, Inc.**  
 2390 Clinton Street  
 Buffalo, New York 14227

										<b>GEOPROBE LOG</b>	
										BORING NO.: RR-SF-SS-08	
PROJECT: Remington Rand - City of North Tonawanda										SHEET: 1 of 1	
CLIENT: The Kissling Intrests, LLC										JOB NO.: N/A	
BORING CONTRACTOR: Environmental Services of Vermont										BORING LOCATION: Indoor - SubFloor	
GROUNDWATER: Not Observed										GROUND ELEVATION: NA	
DATE	TIME	LEVEL	TYPE		TYPE	CAS.	SAMPLER	CORE	TUBE	DATE STARTED: May 20, 2009	
					DIA.					DATE FINISHED: May 20, 2009	
					WT.					DRILLER: A. Morse	
					FALL					GEOLOGIST: J. Ryszkiewicz	
										REVIEWED BY: N/A	
										* POCKET PENETROMETER READING	
DEPTH FEET	STRATA	SAMPLE				DESCRIPTION				CLASS USCS	REMARKS
		*S* NO.	CORE NO.	BLOWS PER 6'	RECOVERY RDN	COLOR	CONSISTENCY HARDNESS	MATERIAL DESCRIPTION			
1						Grey	Granular	Grey, granular, concrete		0.0 ppm Readings on Photoionization Detector	
2					30 48	Black	Granular	Black, granular, M-F sand with trace silt. Layer was damp.			
3											
4					30 48	Light Brown	Soft	Light brown, soft, sandy silt. Layer was damp to wet.			
5								Refusal of boring at 5 feet bgs		0.0 ppm Readings on Photoionization Detector	
6										0.0 ppm Readings on PID	
7											
8											

COMMENTS: Photoionization readings were taken with a Mini-Rae 2000.

PROJECT NO.:

BORING NO.: RR-SF-SS-08

# TEST PIT LOG

PROJECT: Remington Rand - City of North Tonawanda, NY		SHEET: 1 OF 1
CLIENT: The Kissling Intrests, LLC	JOB NUMBER: E8033	
CONTRACTOR: Ridgeway Environmental Services	LOCATION: 184 Sweeney Street, N. Tonawanda	
DATE STARTED: April 30, 2009	GROUND ELEVATION: N/A	
DATE COMPLETED: April 30, 2009	OPERATOR: B. Broomfield	
PIT NUMBER: RR-TP-01	GEOLOGIST: J. Ryszkiewicz	
	GROUND WATER: N/A	

DEPTH (FT)	SAMPLE		DESCRIPTION
	NO.	TYPE	
1			- Black and grey, granular fill, including concrete, C-F (coarse to fine) gravel, M-F (medium to fine) sand and traces of wood, ash, C&D debris and organic material.
2			
3			
4	01B		
5			- Light brown, tight, silty clay with traces of M-F sand
6			
7			
8			
9			- Black, very tight, clay with traces of silt and M-F sand
10			
11			
12			
			Ended test trench @ 10 ft. bgs

COMMENTS: Size of Test Pit: 10'D x 5'W x 11'L  
 Photoionization readings were taken with a Mini-Rae 2000  
 No other readings other than background were recorded  
 Subsurface Soil sample was taken at this location  
 Samples were analyzed for TAL Metals, TCL VOC (plus STARS + TIC) and TCL SVOC (plus STARS + TIC)

# TEST PIT LOG

PROJECT: Remington Rand - City of North Tonawanda, NY		SHEET: 1 OF 1
CLIENT: The Kissling Intrests, LLC		JOB NUMBER: E8033
CONTRACTOR: Ridgeway Environmental Services		LOCATION: 184 Sweeney Street, N. Tonawanda
DATE STARTED: April 30, 2009		GROUND ELEVATION: N/A
DATE COMPLETED: April 30, 2009		OPERATOR: B. Broomfield
PIT NUMBER: RR-TP-02		GEOLOGIST: J. Ryszkiewicz
		GROUND WATER: N/A

DEPTH (FT)	SAMPLE		DESCRIPTION
	NO.	TYPE	
1			- Black and grey, fill including tar and gravel bedding for a driveway
2			- Brown and grey, granular fill, including concrete, C-F (coarse to fine) gravel, M-F (medium to fine) sand and traces of wood, C&D debris and organic material.
3			
4	02B		
5			- Light brown, tight, silty clay with traces of M-F sand
6			
7			
8			- Black, very tight, clay with traces of silt and M-F sand
9			
10			
11			Ended test trench @ 11 ft. bgs
12			

COMMENTS: Size of Test Pit: 11'D x 6'W x 12'L  
 Photoionization readings were taken with a Mini-Rae 2000  
 No other readings other than background were recorded  
 Subsurface Soil sample was taken at this location  
 Samples were analyzed for TAL Metals, TCL VOC (plus STARS + TIC) and TCL SVOC (plus STARS + TIC)

# TEST PIT LOG

PROJECT: Remington Rand - City of North Tonawanda, NY		SHEET: 1 OF 1
CLIENT: The Kissling Intrests, LLC		JOB NUMBER: E8033
CONTRACTOR: Ridgeway Environmental Services		LOCATION: 184 Sweeney Street, N. Tonawanda
DATE STARTED: April 30, 2009		GROUND ELEVATION: N/A
DATE COMPLETED: April 30, 2009		OPERATOR: B. Broomfield
PIT NUMBER: RR-TP-03		GEOLOGIST: J. Ryszkiewicz
		GROUND WATER: N/A

DEPTH (FT)	SAMPLE		DESCRIPTION
	NÓ.	TYPE	
	03A		- Black and grey, fill including tar and gravel bedding for a driveway
1			
2			- Black and grey, granular fill, including concrete, C-F (coarse to fine) gravel, M-F (medium to fine) sand and traces of wood, C&D debris and organic material.
3			
4			
5			
6			- Light brown, tight, silty clay with traces of M-F sand
7			
8			- Black, very tight, clay with traces of silt and M-F sand
9			Ended test trench @ 8.5 ft. bgs
10			
11			
12			

COMMENTS: Size of Test Pit: 8.5'D x 5'W x 10'L  
 Photoionization readings were taken with a Mini-Rae 2000  
 No other readings other than background were recorded  
 Surface Soil sample was taken at this location  
 Samples were analyzed for TAL Metals, TCL SVOC (plus STARS + TIC), Pést/PCB

# TEST PIT LOG

PROJECT: Remington Rand - City of North Tonawanda, NY		SHEET: 1 OF 1
CLIENT: The Kissling Intrests, LLC	JOB NUMBER: E8033	
CONTRACTOR: Ridgeway Environmental Services	LOCATION: 184 Sweeney Street, N. Tonawanda	
DATE STARTED: April 30, 2009	GROUND ELEVATION: N/A	
DATE COMPLETED: April 30, 2009	OPERATOR: B. Broomfield	
PIT NUMBER: RR-TP-04	GEOLOGIST: J. Ryszkiewicz	
	GROUND WATER: N/A	

DEPTH (FT)	SAMPLE		DESCRIPTION
	NO.	TYPE	
1			- Black and grey, fill including tar and gravel bedding for a driveway
2			
3			- Black and grey, granular fill, including concrete, C-F (coarse to fine) gravel, M-F (medium to fine) sand and traces of wood, C&D debris and organic material.
4	04B		
5			
6			
7			- Light brown, tight, silty clay with traces of M-F sand
8			
9			
10			- Black, very tight, clay with traces of silt and M-F sand. Water was observed
11			Ended test trench @ 10 ft. bgs
12			

COMMENTS: Size of Test Pit: 10'D x 6'W x 10'L  
 Photoionization readings were taken with a Mini-Rae 2000  
 No other readings other than background were recorded  
 Subsurface Soil sample was taken at this location  
 Samples were analyzed for TAL Metals, TCL VOC (plus STARS + TIC) and TCL SVOC (plus STARS + TIC)

# TEST PIT LOG

PROJECT: Remington Rand - City of North Tonawanda, NY		SHEET: 1 of 1
CLIENT: The Kissling Intrests, LLC	JOB NUMBER: E8033	
CONTRACTOR: Ridgeway Environmental Services	LOCATION: 184 Sweeney Street, N. Tonawanda	
DATE STARTED: April 30, 2009	GROUND ELEVATION: N/A	
DATE COMPLETED: April 30, 2009	OPERATOR: B. Broomfield	
PIT NUMBER: RR-TP-05	GEOLOGIST: J. Ryszkiewicz	
	GROUND WATER: N/A	

DEPTH (FT)	SAMPLE		DESCRIPTION
	NO.	TYPE	
1	05A		- Black and grey, fill including tar and gravel bedding for a driveway
2			
3			- Black and grey, granular fill, including cinder, M-F (medium to fine) sand, C-F (coarse to fine) gravel, and traces of wood, C&D debris and organic material.
4			
5			
6			
7			
8			- Light brown and grey, tight, silty clay with traces of M-F sand
9			
10			Ended test trench @ 10 ft. bgs
11			
12			

COMMENTS: Size of Test Pit: 10'D x 5'W x 9.5'L  
 Photoionization readings were taken with a Mini-Rae 2000  
 No other readings other than background were recorded  
 Surface Soil sample was taken at this location  
 Samples were analyzed for TAL Metals, TCL SVOC, Pesticides and PCB's.



# TEST PIT LOG

PROJECT: Remington Rand - City of North Tonawanda, NY		SHEET: 1 OF 1
CLIENT: The Kissling Intrests, LLC	JOB NUMBER: E8033	
CONTRACTOR: Ridgeway Environmental Services	LOCATION: 184 Sweeney Street, N. Tonawanda	
DATE STARTED: April 30, 2009	GROUND ELEVATION: N/A	
DATE COMPLETED: April 30, 2009	OPERATOR: B. Broomfield	
PIT NUMBER: RR-TP-06	GEOLOGIST: J. Ryszkiewicz	
	GROUND WATER: N/A	

DEPTH (FT)	SAMPLE		DESCRIPTION
	NO.	TYPE	
1			- Black and grey, fill including tar and gravel bedding for a driveway
2			
3			- Black and grey, granular fill, including concrete, cinder, C-F (coarse to fine) gravel, M-F (medium to fine) sand and traces of wood, C&D debris (brick and piping).
4			
5			
6	06B		- Grey, tight, silty clay with traces of M-F sand
7			Ended test trench @ 10 ft. bgs
8			
9			
10			
11			
12			

COMMENTS: Size of Test Pit: 6.5'D x 9'W x 12'L  
 Photoionization readings were taken with a Mini-Rae 2000  
 No other readings other than background were recorded  
 Subsurface Soil sample was taken at this location  
 Samples were analyzed for TAL Metals, TCL VOC (plus STARS + TIC) and TCL SVOC (plus STARS + TIC)

# TEST PIT LOG

PROJECT: Remington Rand - City of North Tonawanda, NY		SHEET: 1 OF 1
CLIENT: The Kissling Intrests, LLC	JOB NUMBER: E8033	
CONTRACTOR: Ridgeway Environmental Services	LOCATION: 184 Sweeney Street, N. Tonawanda	
DATE STARTED: April 30, 2009	GROUND ELEVATION: N/A	
DATE COMPLETED: April 30, 2009	OPERATOR: B. Broomfield	
PIT NUMBER: RR-TP-07	GEOLOGIST: J. Ryszkiewicz	
	GROUND WATER: N/A	

DEPTH (FT)	SAMPLE		DESCRIPTION
	NO.	TYPE	
	07A		
1			- Black and grey, granular fill, including concrete, C-F (coarse to fine) gravel, M-F (medium to fine) sand and traces of wood, C&D debris and organic material. Up to 25.4 ppm on Photoionization Detector.
2			
3			
4			
5			- Light brown, soft, M-F sand and silt. Layer was moist. Up to 336 ppm at highest reading (6' bgs).
6	07B		
7			
8			
9			- Grey, very tight, clay with traces of silt and M-F sand. Up to 46.7 ppm at bottom of stratigraphy.
10			
11			
12			
			Ended test trench @ 10.5 ft. bgs

COMMENTS: Size of Test Pit: 10.5'D x 7'W x 17'L  
 Photoionization readings were taken with a Mini-Rae 2000  
 Surface and Subsurface Soil samples were taken at this location  
 Surface Samples were analyzed for TAL Metals, TCL SVOC, Pest/PCB  
 Subsurface Samples were analyzed for TAL Metals, TCL VOC (plus STARTS + TIC), TCL SVOC (plus STARS + TIC) and PCBs.

# TEST PIT LOG

PROJECT: Remington Rand - City of North Tonawanda, NY		SHEET: 1 OF 1
CLIENT: The Kissling Intrests, LLC	JOB NUMBER: E8033	
CONTRACTOR: Ridgeway Environmental Services	LOCATION: 184 Sweeney Street, N. Tonawanda	
DATE STARTED: April 30, 2009	GROUND ELEVATION: N/A	
DATE COMPLETED: April 30, 2009	OPERATOR: B. Broomfield	
PIT NUMBER: RR-TP-08	GEOLOGIST: J. Ryszkiewicz	
	GROUND WATER: N/A	

DEPTH (FT)	SAMPLE		DESCRIPTION
	NO.	TYPE	
	08A		
1			- Black and grey, granular fill, including concrete, C-F (coarse to fine) gravel, M-F (medium to fine) sand and traces of wood, C&D debris and organic material. Up to 12.6 ppm on Photoionization Detector.
2			
3			
4			
5			- Grey, soft, M-F sand and silt. Layer was moist. Up to 146 ppm at highest reading (5' bgs).
6			
7			
8			
9	08B		- Greenish grey, soft, silt and M-F sand. Layer was moist. Up to 25.3 ppm at bottom of stratigraphy.
10			Ended test trench @ 10 ft. bgs
11			
12			

COMMENTS: Size of Test Pit: 10'D x 5'W x 11'L  
 Photoionization readings were taken with a Mini-Rae 2000  
 Surface and Subsurface Soil samples were taken at this location  
 Surface Samples were analyzed for TAL Metals, TCL SVOC, Pest/PCB  
 Subsurface Samples were analyzed for TAL Metals, TCL VOC (plus STARTS + TIC), TCL SVOC (plus STARS + TIC) and PCBs.

# TEST PIT LOG

PROJECT: Remington Rand - City of North Tonawanda, NY		SHEET: 1 OF 1
CLIENT: The Kissling Intrests, LLC	JOB NUMBER: E8033	
CONTRACTOR: Ridgeway Environmental Services	LOCATION: 184 Sweeney Street, N. Tonawanda	
DATE STARTED: April 30, 2009	GROUND ELEVATION: N/A	
DATE COMPLETED: April 30, 2009	OPERATOR: B. Broomfield	
PIT NUMBER: RR-TP-09	GEOLOGIST: J. Ryszkiewicz	
	GROUND WATER: N/A	

DEPTH (FT)	SAMPLE		DESCRIPTION
	NO.	TYPE	
1	09A		- Black and grey, granular fill, including topsoil, concrete, C-F (coarse to fine) gravel, M-F (medium to fine) sand and traces of wood, C&D debris and organic material.
2			
3	09B		
4			- Light brown to grey, soft, silty clay with traces of M-F sand. Layer was moist.
5			
6			
7			
8			
9			- Black, tight, silty clay and traces of M-F sand. Layer was wet on bottom.
10			
11			
12			
			Ended test trench @ 10 ft. bgs

COMMENTS: Size of Test Pit: 10'D x 6'W x 8'L  
 Photoionization readings were taken with a Mini-Rae 2000  
 No other readings other than background were recorded  
 Surface and Subsurface Soil samples were taken at this location  
 Surface Samples were analyzed for TAL Metals, TCL SVOC, Pest/PCB  
 Subsurface Samples were analyzed for TAL Metals, TCL VOC (plus STARTS + TIC), TCL SVOC (plus STARTS + TIC) and PCBs.

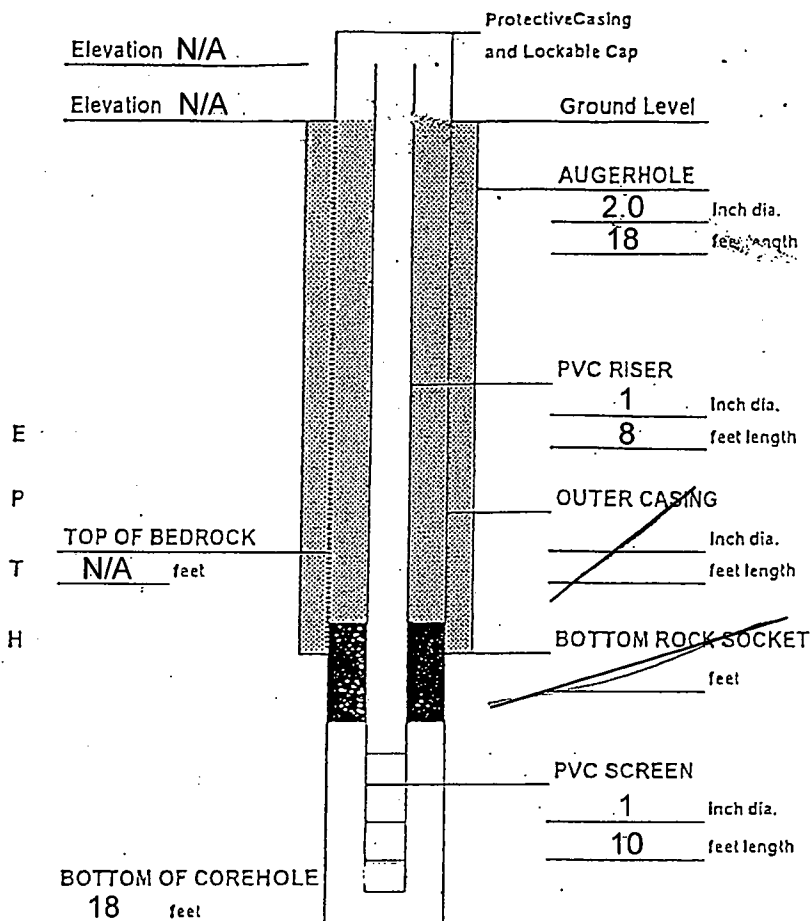
# TEST PIT LOG

PROJECT: Remington Rand - City of North Tonawanda, NY		SHEET: 1 OF 1
CLIENT: The Kissling Intrests, LLC	JOB NUMBER: E8033	
CONTRACTOR: Ridgeway Environmental Services	LOCATION: 184 Sweeney Street, N. Tonawanda	
DATE STARTED: April 30, 2009	GROUND ELEVATION: N/A	
DATE COMPLETED: April 30, 2009	OPERATOR: B. Broomfield	
PIT NUMBER: RR-TP-10	GEOLOGIST: J. Ryszkiewicz	
		GROUND WATER: N/A

DEPTH (FT)	SAMPLE		DESCRIPTION
	NO.	TYPE	
1	10A		- Black and grey, granular fill, including concrete, C-F (coarse to fine) gravel, M-F (medium to fine) sand and traces of wood and C&D debris.
2			
3	10B		
4			- Light brown to grey, soft, silty M-F sand with traces of clay. Layer was moist.
5			
6			
7			
8			
9			- Black, tight, silty clay and traces of M-F sand. Layer was wet on bottom.
10			
11			Ended test trench @ 10 ft. bgs.
12			

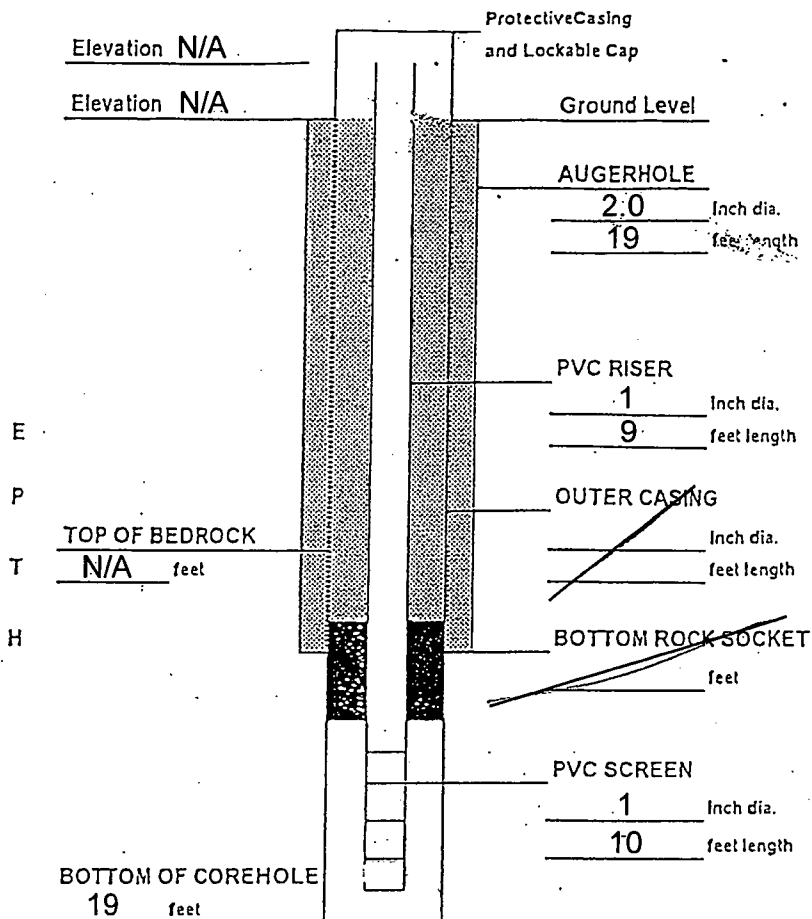
COMMENTS: Size of Test Pit: 10'D x 7'W x 20'L  
 Photoionization readings were taken with a Mini-Rae 2000  
 No other readings other than background were recorded  
 Surface and Subsurface Soil samples were taken at this location  
 Surface Samples were analyzed for TAL Metals, TCL SVOC, Pest/PCB  
 Subsurface Samples were analyzed for TAL Metals, TCL VOC (plus STARTS + TIC), TCL SVOC (plus STARTS + TIC) and PCBs.

DRILLING SUMMARY	
Geologist: J. Ryszkiewicz	
Drilling Company: EPS of Vermont	
Driller: Adam Morse	
Rig Make/Model: Geoprobe	
Date: April 28, 2009	
GEOLOGIC LOG	
Depth(ft.)	Description
	See boring log RR-MW-01



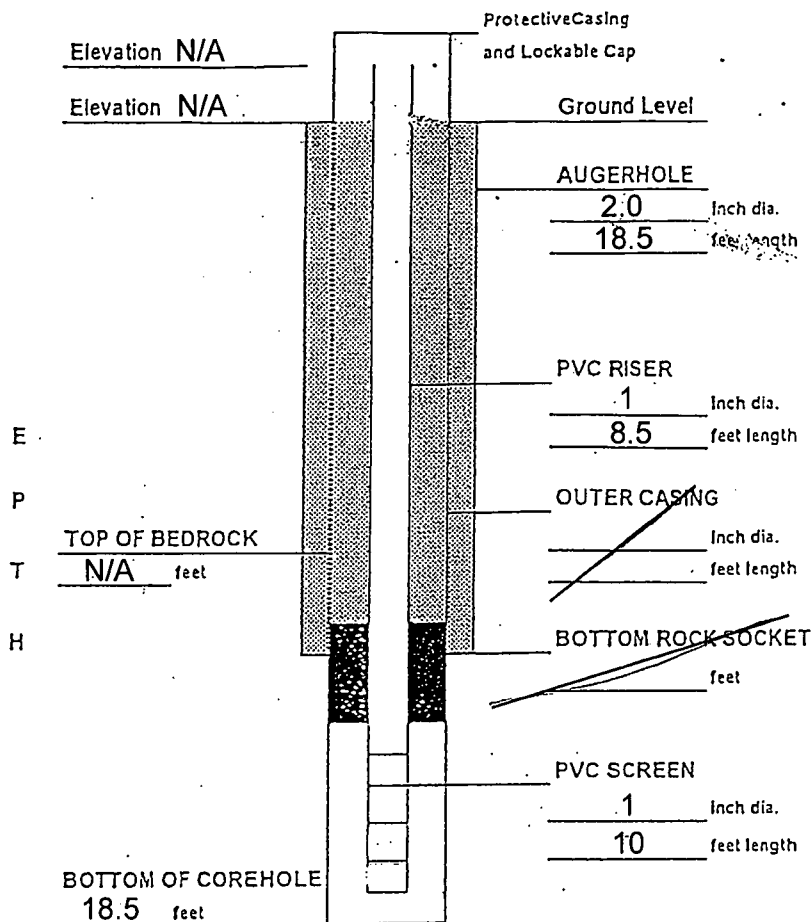
WELL DESIGN		
CASING MATERIAL	SCREEN MATERIAL	FILTER MATERIAL
Surface:	Type: 1" threaded PVC	Type: Sand Setting: 2' - 18' bgs
Monitor:	Slot Size: 0.01	SEAL MATERIAL
		Type: Grout Setting:
COMMENTS	ROCK CORING	LEGEND
Grout from 2' to 0' bgs	Cored Interval:	Cement/Bentonite Grout
	Core Diameter:	Bentonite Seal
	Reamed Diameter:	Silica Sandpack
		Bedrock
Client: The Kissling Intrests, LLC	Location:	Project No.: E8033
	WELL CONSTRUCTION DETAILS	Well Number: RR-MW-01

DRILLING SUMMARY	
Geologist: J. Ryszkiewicz	
Drilling Company: EPS of Vermont	
Driller: Adam Morse	
Rig Make/Model: Geoprobe	
Date: April 28, 2009	
GEOLOGIC LOG	
Depth(ft.)	Description
	See boring log RR-MW-02



WELL DESIGN		
CASING MATERIAL	SCREEN MATERIAL	FILTER MATERIAL
Surface:	Type: 1" threaded PVC	Type: Sand Setting: 2' - 19' bgs
Monitor:	Slot Size: 0.01	SEAL MATERIAL
		Type: Grout Setting:
COMMENTS	ROCK CORING	LEGEND
Grout from 2' to 0' bgs	Cored Interval:	Cement/Bentonite Grout
	Coring Diameter:	Bentonite Seal
	Reamed Diameter:	Silica Sandpack
		Bedrock
Client: The Kissling Intrests, LLC	Location:	Project No.: E8033
	WELL CONSTRUCTION DETAILS	Well Number: RR-MW-02

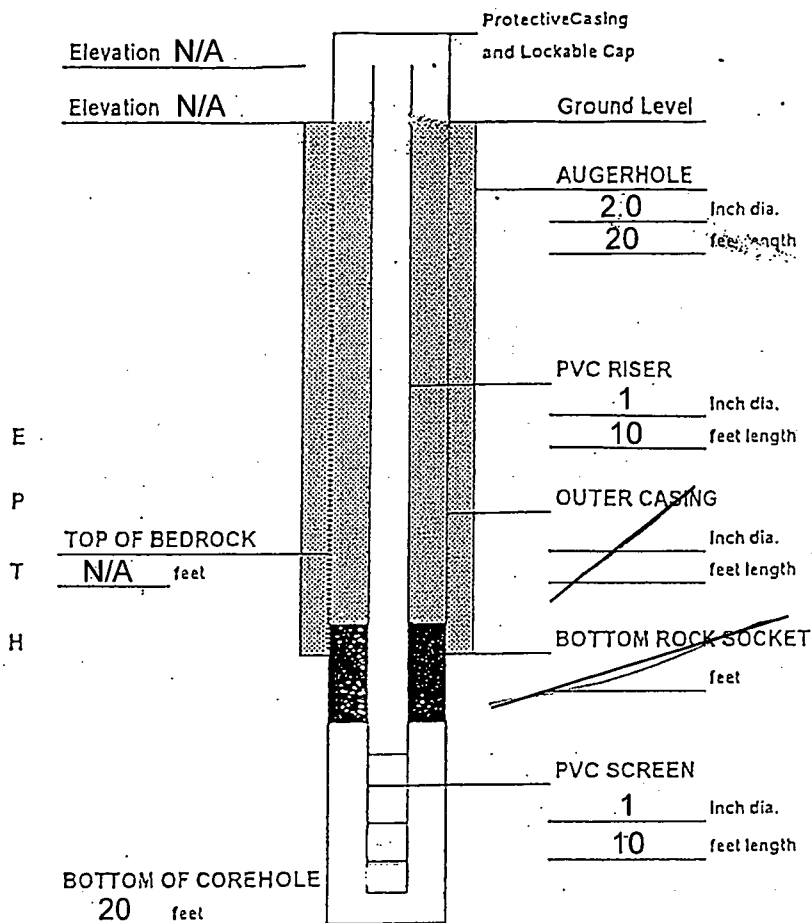
DRILLING SUMMARY	
Geologist: J. Ryszkiewicz	
Drilling Company: EPS of Vermont	
Driller: Adam Morse	
Rig Make/Model: Geoprobe	
Date: April 28, 2009	
GEOLOGIC LOG	
Depth(ft.)	Description
	See boring log RR-MW-03



WELL DESIGN		
CASING MATERIAL	SCREEN MATERIAL	FILTER MATERIAL
Surface:	Type: 1" threaded PVC	Type: Sand Setting: 2' - 18.5' bgs
Monitor:	Slot Size: 0.01	SEAL MATERIAL
		Type: Grout Setting:
COMMENTS	ROCK CORING	LEGEND
Grout from 2' to 0' bgs	Cored Interval:	Cement/Bentonite Grout
	Core Diameter:	Bentonite Seal
	Reamed Diameter:	Silica Sandpack
		Bedrock
Client: The Kissling Intrests, LLC	Location:	Project No.: E8033
	WELL CONSTRUCTION DETAILS	Well Number: RR-MW-03

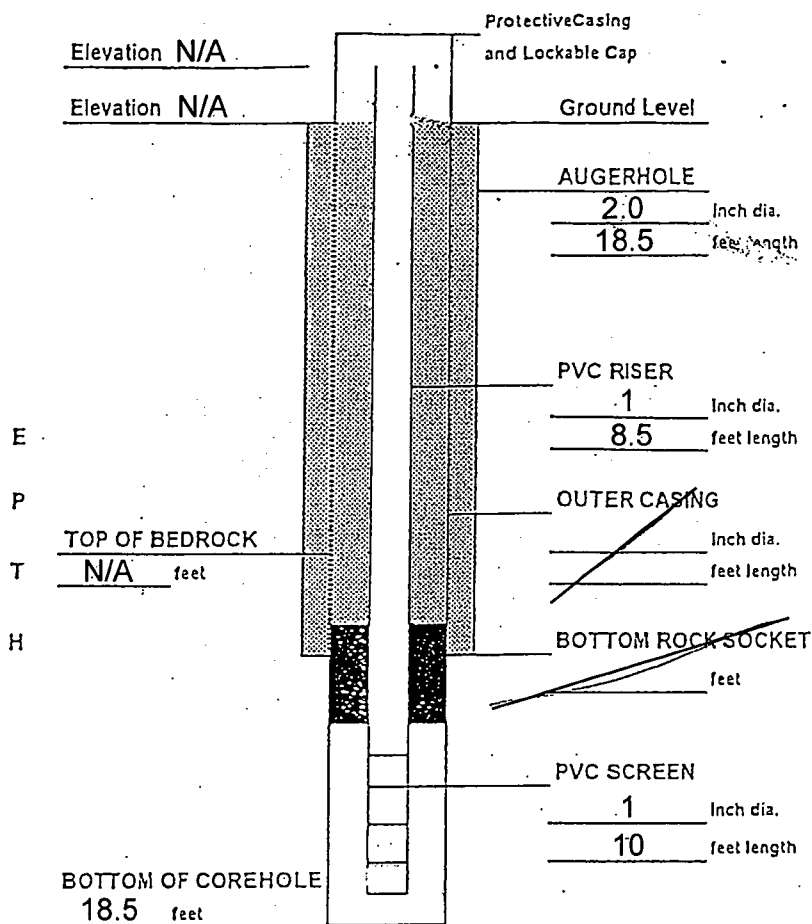


DRILLING SUMMARY	
Geologist:	J. Ryszkiewicz
Drilling Company:	EPS of Vermont
Driller:	Adam Morse
Rig Make/Model:	Geoprobe
Date:	April 28, 2009
GEOLOGIC LOG	
Depth(ft.)	Description
	See boring log RR-MW-04



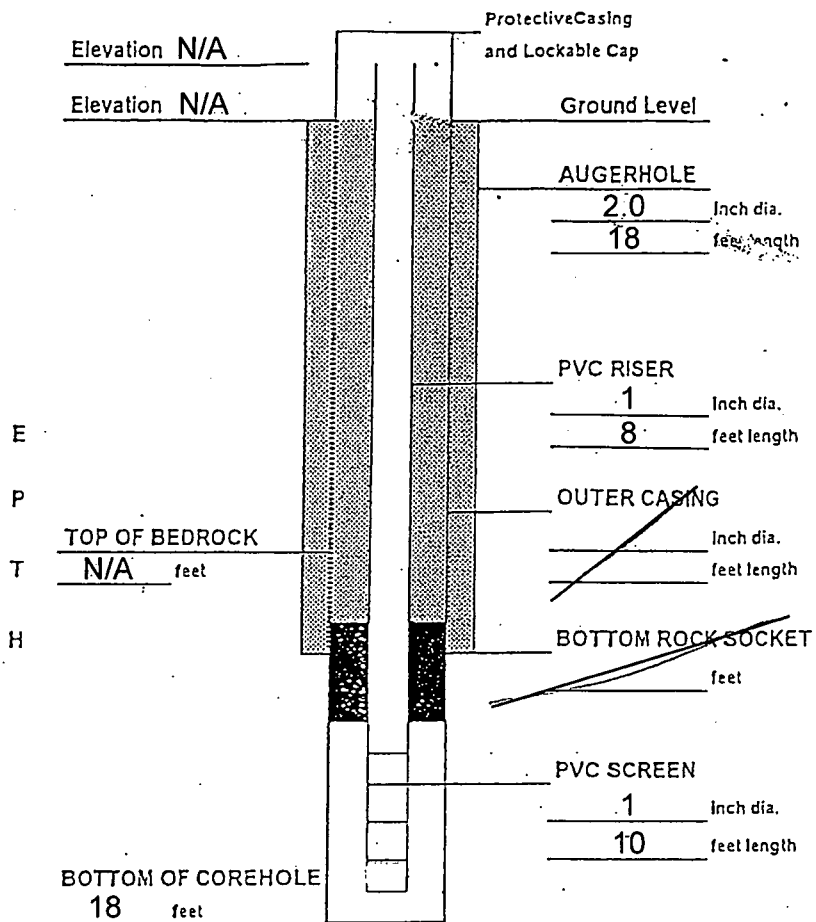
WELL DESIGN		
CASING MATERIAL	SCREEN MATERIAL	FILTER MATERIAL
Surface:	Type: 1" threaded PVC	Type: Sand Setting: 2' - 20' bgs
Monitor:	Slot Size: 0.01	SEAL MATERIAL
		Type: Grout Setting:
COMMENTS	ROCK CORING	LEGEND
Grout from 2' to 0' bgs	Cored Interval:	Cement/Bentonite Grout
	Core Diameter:	Bentonite Seal
	Reamed Diameter:	Silica Sandpack
		Bedrock
Client: The Kissling Intrests, LLC	Location:	Project No.: E8033
WELL CONSTRUCTION DETAILS		Well Number: RR-MW-04

DRILLING SUMMARY	
Geologist:	J. Ryszkiewicz
Drilling Company:	EPS of Vermont
Driller:	Adam Morse
Rig Make/Model:	Geoprobe
Date:	April 28, 2009
GEOLOGIC LOG	
Depth(ft.)	Description
	See boring log RR-MW-05



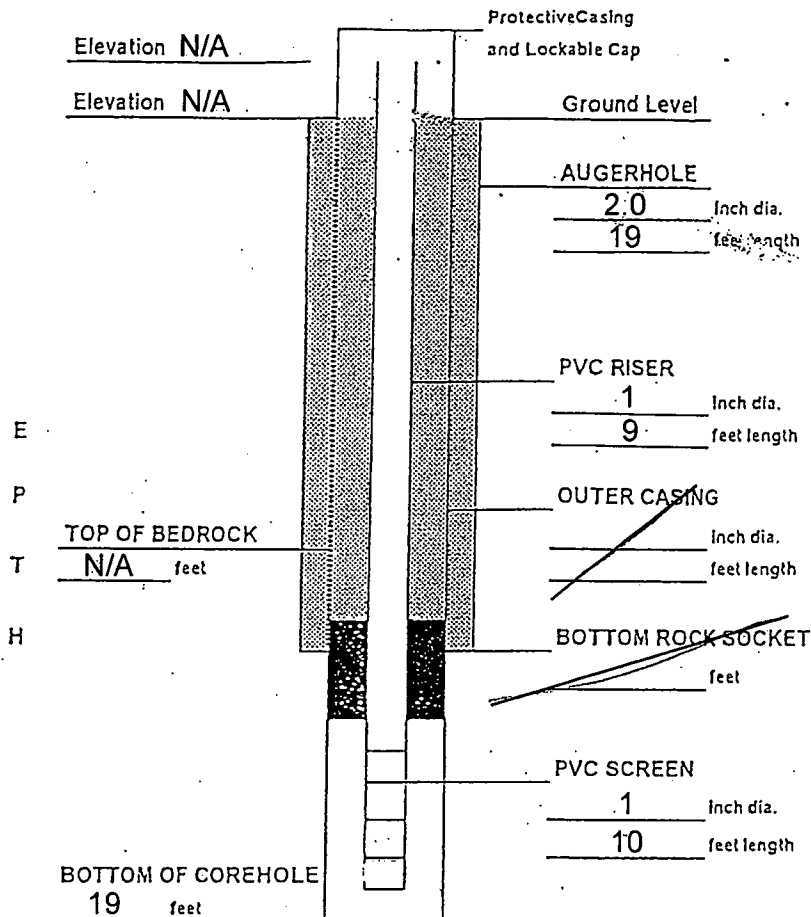
WELL DESIGN		
CASING MATERIAL	SCREEN MATERIAL	FILTER MATERIAL
Surface:	Type: 1" threaded PVC	Type: Sand Setting: 2' - 18.5' bgs
Monitor:	Slot Size: 0.01	SEAL MATERIAL
		Type: Grout Setting:
COMMENTS	ROCK CORING	LEGEND
Grout from 2' to 0' bgs	Cored Interval:	Cement/Bentonite Grout
	Core Diameter:	Bentonite Seal
	Reamed Diameter:	Silica Sandpack
		Bedrock
Client: The Kissling Intrests, LLC	Location:	Project No.: E8033
	WELL CONSTRUCTION DETAILS	Well Number: RR-MW-05

DRILLING SUMMARY	
Geologist: J. Ryszkiewicz	
Drilling Company: EPS of Vermont	
Driller: Adam Morse	
Rig Make/Model: Geoprobe	
Date: April 28, 2009	
GEOLOGIC LOG	
Depth(ft.)	Description
	See boring log RR-MW-01
WELL DESIGN	



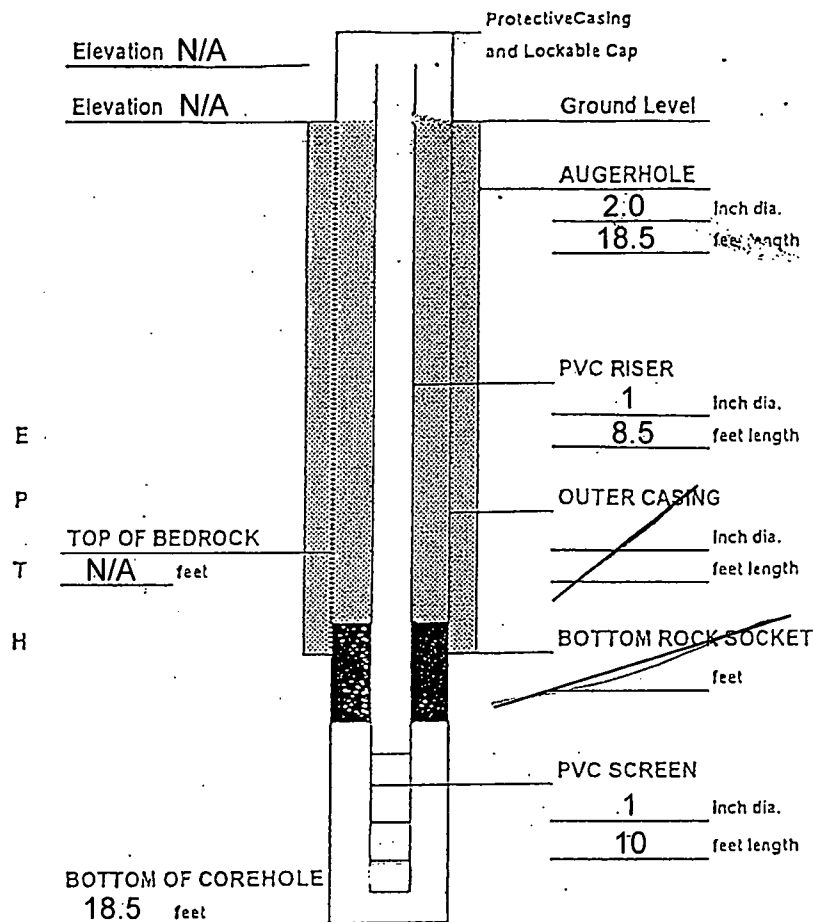
CASING MATERIAL	SCREEN MATERIAL	FILTER MATERIAL
Surface:	Type: 1" threaded PVC	Type: Sand Setting: 2' - 18' bgs
Monitor:	Slot Size: 0.01	SEAL MATERIAL
		Type: Grout Setting:
COMMENTS	ROCK CORING	LEGEND
Grout from 2' to 0' bgs	Cored Interval:	Cement/Bentonite Grout
	Core Diameter:	Bentonite Seal
	Reamed Diameter:	Silica Sandpack
		Bedrock
Client: The Kissling Intrests, LLC	Location:	Project No.: E8033
	WELL CONSTRUCTION DETAILS	Well Number: RR-MW-01

DRILLING SUMMARY	
Geologist:	J. Ryszkiewicz
Drilling Company:	EPS of Vermont
Driller:	Adam Morse
Rig Make/Model:	Geoprobe
Date:	April 28, 2009
GEOLOGIC LOG	
Depth(ft.)	Description
	See boring log RR-MW-02



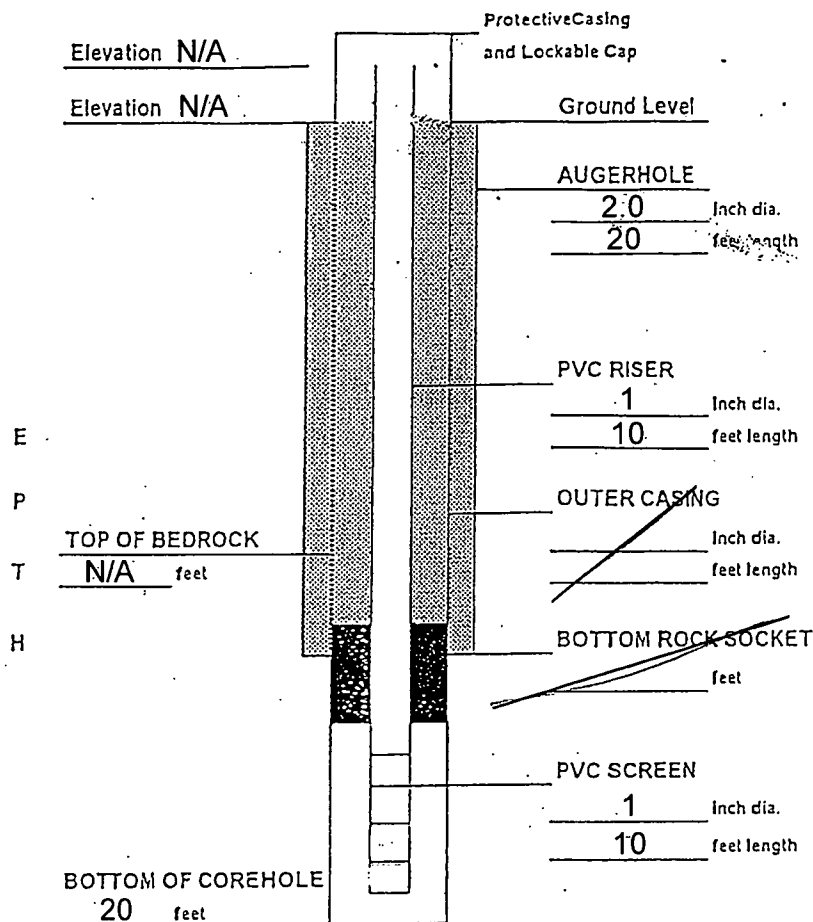
WELL DESIGN		
CASING MATERIAL	SCREEN MATERIAL	FILTER MATERIAL
Surface:	Type: 1" threaded PVC	Type: Sand Setting: 2' - 19' bgs
Monitor:	Slot Size: 0.01	SEAL MATERIAL
		Type: Grout Setting:
COMMENTS	ROCK CORING	LEGEND
Grout from 2' to 0' bgs	Cored Interval:	Cement/Bentonite Grout
	Core Diameter:	Bentonite Seal
	Reamed Diameter:	Silica Sandpack
		Bedrock
Client: The Kissling Intrests, LLC	Location:	Project No.: E8033
	WELL CONSTRUCTION DETAILS	Well Number: RR-MW-02

DRILLING SUMMARY	
Geologist:	J. Ryszkiewicz
Drilling Company:	EPS of Vermont
Driller:	Adam Morse
Rig Make/Model:	Geoprobe
Date:	April 28, 2009
GEOLOGIC LOG	
Depth(ft.)	Description
	See boring log RR-MW-03



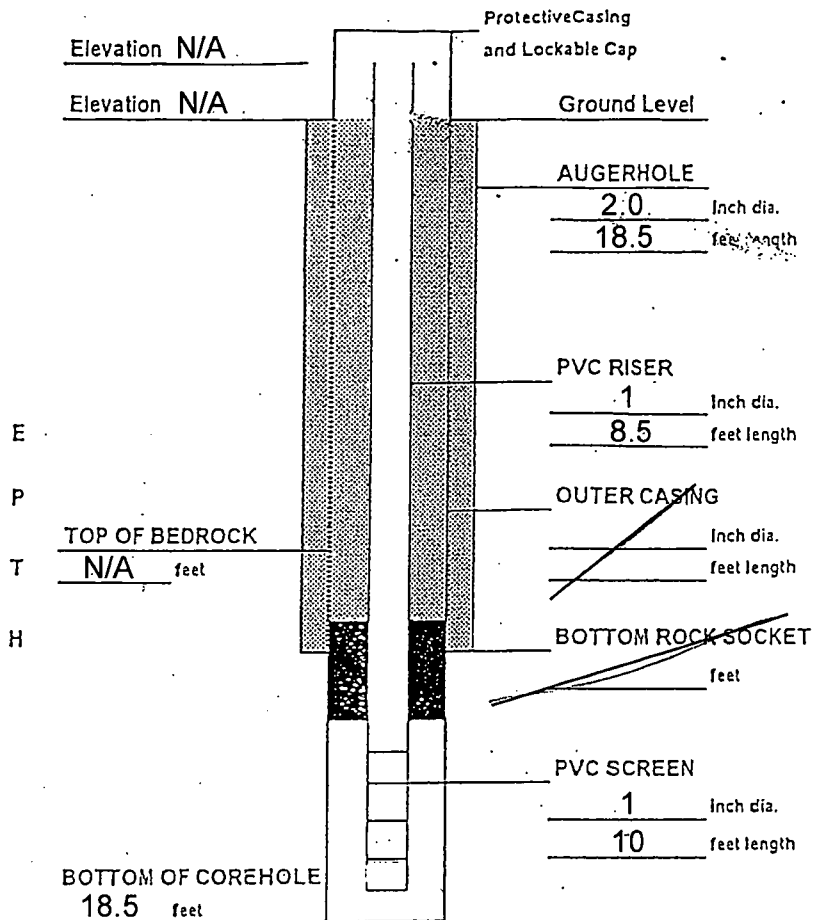
WELL DESIGN		
CASING MATERIAL	SCREEN MATERIAL	FILTER MATERIAL
Surface:	Type: 1" threaded PVC	Type: Sand Setting: 2' - 18.5' bgs
Monitor:	Slot Size: 0.01	SEAL MATERIAL
		Type: Grout Setting:
COMMENTS	ROCK CORING	LEGEND
Grout from 2' to 0' bgs	Cored Interval: Core Diameter: Reamed Diameter:	<div style="display: flex; align-items: center;"> <div style="width: 20px; height: 10px; background-color: #cccccc; border: 1px solid black;"></div> <div>Cement/Bentonite Grout</div> </div> <div style="display: flex; align-items: center;"> <div style="width: 20px; height: 10px; background-color: #333333; border: 1px solid black;"></div> <div>Bentonite Seal</div> </div> <div style="display: flex; align-items: center;"> <div style="width: 20px; height: 10px; background-color: #ffffff; border: 1px solid black;"></div> <div>Silica Sandpack</div> </div> <div style="display: flex; align-items: center;"> <div style="width: 20px; height: 10px; background-color: #666666; border: 1px solid black;"></div> <div>Bedrock</div> </div>
Client: The Kissling Intrests, LLC	Location:	Project No.: E8033
WELL CONSTRUCTION DETAILS		Well Number: RR-MW-03

DRILLING SUMMARY	
Geologist: J. Ryszkiewicz	
Drilling Company: EPS of Vermont	
Driller: Adam Morse	
Rig Make/Model: Geoprobe	
Date: April 28, 2009	
GEOLOGIC LOG	
Depth(ft.)	Description
	See boring log RR-MW-04



WELL DESIGN		
CASING MATERIAL	SCREEN MATERIAL	FILTER MATERIAL
Surface:	Type: 1" threaded PVC	Type: Sand Setting: 2' - 20' bgs
Monitor:	Slot Size: 0.01	SEAL MATERIAL
		Type: Grout Setting:
COMMENTS	ROCK CORING	LEGEND
Grout from 2' to 0' bgs	Cored Interval:	Cement/Bentonite Grout
	Core Diameter:	Bentonite Seal
	Reamed Diameter:	Silica Sandpack
		Bedrock
Client: The Kissling Intrests, LLC	Location:	Project No.: E8033
WELL CONSTRUCTION DETAILS		Well Number: RR-MW-04

DRILLING SUMMARY	
Geologist: J. Ryszkiewicz	
Drilling Company: EPS of Vermont	
Driller: Adam Morse	
Rig Make/Model: Geoprobe	
Date: April 28, 2009	
GEOLOGIC LOG	
Depth(ft.)	Description
	See boring log RR-MW-05



WELL DESIGN		
CASING MATERIAL	SCREEN MATERIAL	FILTER MATERIAL
Surface:	Type: 1" threaded PVC	Type: Sand Setting: 2' - 18.5' bgs
Monitor:	Slot Size: 0.01	SEAL MATERIAL
		Type: Grout Setting:
COMMENTS	ROCK CORING	LEGEND
Grout from 2' to 0' bgs	Cored Interval:	Cement/Bentonite Grout
	Core Diameter:	Bentonite Seal
	Reamed Diameter:	Silica Sandpack
		Bedrock
Client: The Kissling Intrests, LLC	Location:	Project No.: E8033
	WELL CONSTRUCTION DETAILS	Well Number: RR-MW-05

# APPENDIX B

## Data Usability Summary Report (DUSR Text Only)



**ChemWorld Environmental, Inc.**

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301-294-6144 Phone and Fax

September 8, 2009

Mr. John Berry  
Panamerican Environmental, Inc.  
2390 Clinton Street  
Buffalo, New York 14227

**RE: Data Usability Summary Report (DUSR) #1  
Remington Rand Project**  
Test America Buffalo Laboratories, Amherst, NY  
Lab Work Order Nos: RSD1084 and RSD1262  
Soil / Solid Samples  
Analyses for Volatile Organics, Semi-Volatile Organics (Base/Neutral and Acid Extractables),  
Pesticides, Polychlorinated Biphenyls (PCBs) and Inorganics (Metals)

Dear Mr. Berry:

Data Usability Summary Report (DUSR) technical services were performed by ChemWorld Environmental, Inc. for the Remington Rand Project for the soil / solid sampling events of April 27 - 30, 2009. The DUSR review was performed in accordance with United States Environmental Protection Agency (USEPA) Region II data validation guidelines and New York State Department of Environmental Conservation (NYSDEC) Analytical Service Protocols (ASP) requirements, where applicable.

The analytical data from the Lab Work Order Nos. noted above were reviewed (screened) for the parameters noted. The data screening consisted of a review of the Quality Control (QC) Summary Forms and a brief review of various chromatograms and quantitation reports. The QC Forms were reviewed to determine whether any data required qualification based upon QC deviations noted on the Forms. The associated Analytical Data Result Forms are included as Attachment A. These Forms include data qualifiers as described within this letter report. Unless otherwise noted, all results included on the Forms are considered usable, based upon the DUSR review items noted below. Attachment B includes copies of the associated Case Narratives and the Chain-of-Custody forms.

The DUSR review items include the following, as method appropriate:

- Completeness of Data Package
- Chain-of-Custody Review
- Holding Times from Collection
- Surrogate Recovery
- GC/MS Instrument Performance Check
- Initial and Continuing Calibration
- Matrix Spike / Matrix Spike Duplicates (MS/MSD)
- Matrix Spike Blanks (MSB)
- Internal Standards
- Tentatively Identified Compounds (TICs)
- Method and Field Blanks
- Contract Required Detection Limit (CRDL) Standards for ICP
- Laboratory Duplicate Samples
- Laboratory Control Samples (LCS)
- ICP Interference Check
- ICP Serial Dilution

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The QC Summary Forms included various deviations based upon the acceptable limits for quality control. The following should be noted regarding qualification of the data set for the review items above.

Volatiles – Soil / Solid, Lab Work Order No. RSD1084

*Method Blanks:* One soil method blank was analyzed for the associated samples. Two Volatile Organic compounds were detected in the soil method blank. The Volatiles include Methylene Chloride at 1.5 ug/Kg and Napthalene at 2.0 ug/Kg. Limits of ten times the Methylene Chloride result and five times the Napthalene result were used for review and qualification of the associated soil samples. Sample results found to be reported below the method blank limit and below the Contract Required Quantitation Limit (CRQL), were qualified as 'U', not detected, at the CRQL.

Volatiles – Soil / Solid, Lab Work Order No. RSD1262

*Surrogate Recovery:* Samples RR-TP-08B and RR-TP-08B-RE generated low recovery for 4-Bromofluorobenzene at 56% for each analysis (Limit 72-126). These samples were qualified as 'J', estimated, for the positive results and 'UJ', estimated, for the non-detectable results for Volatiles.

*LCS:* The LCS generated high recovery at 125% for sec-Butylbenzene (Limit 74-120). The associated results for the soil samples were qualified as 'J', estimated, for the positive results, only, for sec-Butylbenzene.

*MS/MSD:* The site-specific MS and MSD for sample RR-TP-09B generated poor accuracy (Percent Recovery) for 4 Volatile compounds. The recoveries for Benzene, Chlorobenzene, Toluene and Trichloroethene ranged from 53% to 77% (Limit Range of 74-129%). In addition, the site-specific MS and MSD for RR-TP-02B generated low recovery for Chlorobenzene at 68% and 53% (Limit 76-124). These samples were qualified as 'J', estimated, for the positive results and 'UJ', estimated, for the non-detectable results for the 4 Volatile compounds affected.

*Continuing Calibration:* Two continuing calibrations analyzed on 05/09/09 at 13:23 and 05/11/09 at 21:08 generated Percent Difference (%D) at greater than the 25% limit. The compounds 4-Isopropyltoluene and Methylene Chloride generated high %D's in the range of 32.5% to 146%. The associated samples were qualified as 'UJ', estimated, for the non-detectable results for these compounds. Positive results were not detected for the compounds affected.

Semi-Volatiles – Soil / Solid, Lab Work Order No. RSD1084

*Tentatively Identified Compounds (TICs):* One TIC was detected in the associated Method Blank for 1,1,2,2-Tetrachloroethane at 400 ug/Kg. TIC results for the samples were qualified as 'R', unusable, for this TIC result, due to the fact that it is a compound of interest on the Volatile Organic list analyzed for this project.

Semi-Volatiles – Soil / Solid, Lab Work Order No. RSD1262

*MS/MSD:* The site-specific MS and MSD for sample RR-TP-09B generated poor accuracy for 6 Semi-Volatile compounds. The recoveries ranged from 0% to 135% (Limit Range of 31-133%). It should be noted that the associated Laboratory Control Samples for these compounds generated acceptable recovery. Sample RR-TP-09B was qualified as 'J', estimated, for the positive results and 'UJ', estimated, for the non-detectable results for the 6 Semi-Volatile compounds affected. The compounds include: Acetophenone, Biphenyl, Bis (2-Chloroethoxy)methane, Chrysene, Fluoranthene and Hexachlorocyclopentadiene.

In addition, the site-specific MS and MSD for RR-TP-02B generated low recovery for Biphenyl and Bis(2-Chloroethoxy) methane in the range of 55% to 69% (Limit Range 61-133). Sample RR-TP-02B was qualified as 'UJ', estimated, for the non-detectable results for these 2 compounds. Positive results were not detected for the compounds affected.

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*Method Blanks:* One soil method blank was analyzed for the associated samples. Bis(2-ethylhexyl) phthalate was detected in the method blank at 95 ug/Kg. A limit of ten times this result was used for review and qualification of the associated soil samples. Sample results found to be reported below the method blank limit and below the CRQL, were qualified as 'U', not detected, at the CRQL. Results reported over the method blank limit do not require qualification.

*Tentatively Identified Compounds (TICs):* Two TIC's were detected in the associated Method Blank for 1,1,2,2-Tetrachloroethane at 390 ug/Kg and 1,1,2-Trichloroethane at 180 ug/Kg. TIC results for the samples were qualified as 'R', unusable, for both of these TIC results, due to the fact that they are compounds of interest on the Volatile Organic list analyzed for this project.

Pesticides – Soil / Solid, Lab Work Order No. RSD1084

*Initial Calibration:* One initial calibration analyzed on 04/01/09 generated a Percent Relative Standard Deviation (%RSD) for 4,4'-DDT at 26.83% (Limit 20%). The associated samples RR-BH-02A and RR-BH-05A were qualified as 'J', estimated, for the positive result and 'UJ', estimated, for the non-detectable result for 4,4'-DDT.

*Continuing Calibrations:* Two continuing calibrations analyzed on 05/04/09 at 18:21 and 05/04/09 at 23:09 generated Percent Difference (%D's) of greater than the 15% limit for various Pesticide compounds. The %D's were generated in the range of 16.5% to 24.4% for 4,4'-DDE, 4,4'-DDT, Dieldrin and Endrin Aldehyde. The associated samples were qualified as 'J', estimated, for the positive results and 'UJ', estimated, for the non-detectable results for the compounds noted.

Pesticides – Soil / Solid, Lab Work Order No. RSD1262

*Percent Difference Between Two GC Columns:* Samples RR-TP-03A, RR-TP-07A, RR-TP-08A, RR-TP-09A and RR-TP-10A generated %D's that exceeded the 25% limit, comparing results between the two GC columns. The %D's were generated in the range of 35% to 405% for various Pesticides. The Pesticides include: Endosulfan Sulfate, Endrin, 4,4'-DDT and gamma-Chlordane. The samples noted were qualified as 'J', estimated, for the respective result where the %D was generated from 26% to 70%. The samples results were qualified as 'JN', presumptively present at an approximated quantity, where the %D exceeds 70%.

PCBs – Soil / Solid, Lab Work Order No. RSD1084

*Continuing Calibrations:* Three continuing calibrations analyzed on 04/29/09 at 09:32, 04/29/09 at 11:45, and 04/29/09 at 13:58 generated %D's of greater than the 15% limit for Aroclor-1016 and Aroclor-1260. The %D's were in the range of 17.4% to 29.5%. The associated samples were qualified as 'J', estimated, for the positive results and 'UJ', estimated, for the non-detectable results for Aroclor-1016 and Aroclor-1260.

*Percent Difference Between Two GC Columns:* Samples RR-BH-03A, RR-BH-05A and RR-BH-06A generated %D's that exceeded the 25% limit, comparing results between the two GC columns. The %D's were generated in the range of 51% to 133% for Aroclor-1254 and Aroclor-1260. The samples noted were qualified as 'J', estimated, where the %D was generated from 26% to 70%. The samples results were qualified as 'JN', presumptively present at an approximated quantity, where the %D exceeds 70%.

PCBs – Soil / Solid, Lab Work Order No. RSD1262

*Percent Difference Between Two GC Columns:* Samples RR-TP-03A, RR-TP-07A, RR-TP-08A, RR-TP-09A, RR-TP-09B and RR-TP-10A generated %D's that exceeded the 25% limit, comparing results between the two GC columns. The %D's were generated in the range of 50% to 194% for Aroclor-1248 and Aroclor-1260. The samples noted were qualified as 'J', estimated, for the respective

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result where the %D was generated from 26% to 70%. The sample results were qualified as 'JN', presumptively present at an approximated quantity, where the %D exceeds 70%.

Inorganics – Soil / Solid Lab Work Order No. RSD1084

*Matrix Spike (MS):* One site-specific MS sample for RR-BH-06B was analyzed for Mercury for the soil samples. High spike recovery for was generated for Mercury at 183% (Limit 75-125) and poor precision was generated for the MS/MSD set at 36% Relative Percent Difference (RPD - Limit 20%). The soil samples were qualified as 'J', estimated, for the Mercury results.

*CRDL Standard:* The CRDL Standard generated low recovery for Thallium at 66.8% (Limit 70-130). The samples affected were qualified as 'UJ', estimated, for the non-detectable results for Thallium.

*Preparation Blanks:* One preparation blank was analyzed for the soil / solid samples. The following inorganics were detected in the preparation blank.

(Soil / Solid Preparation Blank)

Aluminum	0.40 mg/Kg
Barium	0.02 mg/Kg
Cadmium	0.032 mg/Kg
Calcium	5.20 mg/Kg
Chromium	0.138 mg/Kg
Potassium	6.3 mg/Kg
Selenium	0.20 mg/Kg
Copper	0.04 mg/Kg
Iron	0.70 mg/Kg
Lead	0.09 mg/Kg
Magnesium	0.70 mg/Kg
Manganese	0.04 mg/Kg
Nickel	0.008 mg/Kg
Sodium	2.8 mg/Kg
Thallium	0.10 mg/Kg
Zinc	0.30 mg/Kg

Limits of ten times the inorganic results above were used for review and qualification of the associated soil / solid samples. Sample results that were found to be less than the respective Preparation Blank Limit were qualified as 'U', not detected. Sample results that exceed the respective Preparation Blank Limit do not require qualification.

*Matrix Spike (MS):* One site-specific MS and MS Duplicate sample set for RR-BH-02A was analyzed for the soil samples. High spike recovery for was generated for Antimony at 129% and 131% and Chromium at 213% and 615% (Limit 75-125). The soil samples were qualified as 'J', estimated, for the positive results, only, for Antimony and Chromium.

*ICP Serial Dilution:* One sample, RR-BH-02A, was used for ICP Serial Dilution. The following inorganics generated %D's of greater than 10% for Serial Dilution:

RR-BH-02A

Cadmium	12%
Nickel	12%

The associated sample results for the inorganics noted above were qualified as 'J', estimated, for the positive results, where the sample result exceeds 50 times the respective Instrument Detection Limit (IDL).

Inorganics – Soil / Solid Lab Work Order No. RSD1262

*CRDL Standard:* The CRDL Standard generated high recovery for Silver at 146% (Limit 70-130). The samples affected were qualified as 'J', estimated, for the positive results for Silver.

*Preparation Blanks:* One preparation blank was analyzed for the soil / solid samples. The following inorganics were detected in the preparation blank.

(Soil / Solid Preparation Blank)

Aluminum	0.40 mg/Kg
Antimony	0.20 mg/Kg
Barium	0.012 mg/Kg
Beryllium	0.007 mg/Kg
Cadmium	0.001 mg/Kg
Calcium	4.60 mg/Kg
Chromium	0.059 mg/Kg
Copper	0.02 mg/Kg
Iron	1.60 mg/Kg
Magnesium	0.50 mg/Kg
Manganese	0.03 mg/Kg
Potassium	4.0 mg/Kg
Selenium	0.09 mg/Kg
Silver	0.20 mg/Kg
Sodium	2.8 mg/Kg
Zinc	0.40 mg/Kg

Limits of ten times the inorganic results above were used for review and qualification of the associated soil / solid samples. Sample results that were found to be less than the respective Preparation Blank Limit were qualified as 'U', not detected. Sample results that exceed the respective Preparation Blank Limit do not require qualification.

*Matrix Spike (MS):* One site-specific MS and MS Duplicate sample for RR-TP-02B were analyzed for Inorganics for the soil samples. Low and high spike recovery was generated for Barium and low spike recovery was generated for Aluminum, Antimony and Chromium. These recoveries were in the range of 0% to 171% (Limit 75-125). Soil sample RR-TP-02B was qualified as 'J', estimated, for the positive results and 'UJ', estimated, for the non-detectable results for the Inorganics noted.

In addition, a site-specific MS and MS Duplicate sample for RR-TP-09B were analyzed for Inorganics and generated low spike recovery for Antimony at 62% and 51% and very high recovery for Magnesium at 5010% and 416%. Sample RR-TP-09B was qualified as 'J', estimated, for the positive results and 'UJ', estimated, for the non-detectable results for Antimony. The Magnesium results were qualified as 'J', estimated, for the positive results, only, for soils.

All of the remaining soil sample results for Antimony were qualified as 'J', estimated, for the positive results and 'UJ', estimated, for the non-detectable results, due to the fact that Antimony generated low spike recovery for both of the MS and MS Duplicate sets.

*ICP Serial Dilution:* One sample, RR-TP-02A, was used for ICP Serial Dilution. The following inorganics generated %D's of greater than 10% for Serial Dilution:

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RR-TP-02A

Aluminum	13%
Beryllium	23%
Calcium	15%
Chromium	14%
Iron	15%
Lead	16%
Magnesium	15%
Manganese	15%
Vanadium	12%
Zinc	18%

The associated sample results for the inorganics noted above were qualified as 'J', estimated, for the positive results, where the sample result exceeds 50 times the respective IDL.

Please contact me by telephone or Fax at 301-294-6144, should you require additional information or clarification regarding this Letter Report.

Sincerely,

*Andrea P. Schuessler aps*

Andrea P. Schuessler, CHMM  
ChemWorld Environmental, Inc.

c: PA-2009.6 file

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September 10, 2009

Mr. John Berry  
Panamerican Environmental, Inc.  
2390 Clinton Street  
Buffalo, New York 14227

**RE: Data Usability Summary Report (DUSR) #2  
Remington Rand Project**

Laboratory: Test America Buffalo Laboratories, Amherst, NY (Water and Soil analyses)  
Test America, Inc., Knoxville, TN (Air Analyses)  
Lab Work Order / Lot Nos. RSE0050, H9E140259 (Knoxville – Air Analyses), RSE0758 and  
RSG0123 (Total and Dissolved Inorganics, only)  
Water, Soil / Solid and Air Samples  
Analyses for Volatile Organics, Volatiles in Air (Method TO-15), Semi-Volatile Organics  
(Base/Neutral and Acid Extractables), Pesticides, Polychlorinated Biphenyls (PCBs) and  
Inorganics (Metals) – Total and Dissolved

Dear Mr. Berry:

Data Usability Summary Report (DUSR) technical services were performed by ChemWorld Environmental, Inc. for the Remington Rand Project for the water, soil / solid and air sampling events of May 1 – July 2, 2009. The DUSR review was performed in accordance with United States Environmental Protection Agency (USEPA) Region II data validation guidelines and New York State Department of Environmental Conservation (NYSDEC) Analytical Service Protocols (ASP) requirements, where applicable.

The analytical data from the Lab Work Order Nos. noted above were reviewed (screened) for the parameters noted. The data screening consisted of a review of the Quality Control (QC) Summary Forms and a brief review of various chromatograms and quantitation reports. The QC Forms were reviewed to determine whether any data required qualification based upon QC deviations noted on the Forms. The associated Analytical Data Result Forms are included as Attachment A. These Forms include data qualifiers as described within this letter report. Unless otherwise noted, all results included on the Forms are considered usable, based upon the DUSR review items noted below. Attachment B includes copies of the associated Case Narratives and the Chain-of-Custody forms.

The DUSR review items include the following, as method appropriate:

- Completeness of Data Package
- Chain-of-Custody Review
- Holding Times from Verified Time of Sample Receipt (VTSR) and Collection
- Surrogate Recovery
- GC/MS Instrument Performance Check
- Initial and Continuing Calibration
- Matrix Spike / Matrix Spike Duplicates (MS/MSD)
- Matrix Spike Blanks (MSB)
- Internal Standards
- Tentatively Identified Compounds (TICs)
- Method and Field Blanks
- Contract Required Detection Limit (CRDL) Standards for ICP
- Laboratory Duplicate Samples
- Laboratory Control Samples (LCS)
- ICP Interference Check
- ICP Serial Dilution

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The QC Summary Forms included various deviations based upon the acceptable limits for quality control. The following should be noted regarding qualification of the data set for the review items above.

Volatiles – Water, Lab Work Order No. RSE0050

*Initial Calibration:* One initial calibration analyzed on 05/06/09 generated Percent Relative Standard Deviation (%RSD) of greater than the 30% limit or Average Relative Response Factors (AvgRRF) of less than the Limit of 0.05 for 3 Volatile compounds. Acetone and 1,2-Dibromo-3-chloropropane generated AvgRRF's at 0.035 and 0.038, respectively. The compound Methylene Chloride generated a high %RSD of 60.3%. The associated samples were qualified as 'J', estimated, for the positive results and 'UJ', estimated, for the non-detectable results for these compounds.

*Continuing Calibration:* One continuing calibration analyzed on 05/08/09 at 09:53 generated Percent Difference (%D) of greater than the 25% limit and Relative Response Factors (RRF) of less than the 0.05 limit for 4 Volatile compounds. Acetone, 2-Butanone and 1,2-Dibromo-3-chloropropane generated RRF's in the range of 0.031 to 0.045. The compound 1,2,4-Trichlorobenzene generated a high %D of 26.7%. The associated samples were qualified as 'J', estimated, for the positive results and 'UJ', estimated, for the non-detectable results for these compounds.

Volatiles – Air, Lab Lot No. H9E140259

*Continuing Calibration:* Two continuing calibrations analyzed on 05/22/09 at 10:23 and 05/29/09 at 10:43 generated %D at greater than the 30% limit. The compounds Carbon Tetrachloride and 1,1,2-Trichloroethane generated high %D's in the range of 31.4% to 38.1%. The associated samples were qualified as 'J', estimated, for the positive results and 'UJ', estimated, for the non-detectable results for the two compounds.

*Laboratory Control Samples (LCS):* Two LCS's generated high recovery for Carbon Tetrachloride at 131.7% and 138.1% (Limit 70-130). The associated results for the air samples were qualified as 'J', estimated, for the positive results, only, for Carbon Tetrachloride.

Volatiles – Soil/Solid, Lab Work Order No. RSE0758

*LCS:* One LCS generated low recovery for Dichlorodifluoromethane at 54% (Limit 57-142). High recovery was generated in another LCS for 1,1,2,2-Tetrachloroethane and Isopropylbenzene at 125% and 122%, respectively. The associated results for Dichlorodifluoromethane were qualified as 'UJ', estimated, for the non-detectable results. Positive results were not detected for this compound. In addition, qualification was not required in relation to the high recovery for 1,1,2,2-Tetrachloroethane and Isopropylbenzene, due to the fact that these compounds were also not detected.

*Initial Calibration:* Two initial calibrations analyzed on 05/06/09 and 05/29/09 generated %RSD's of greater than the 30% limit for Methylene Chloride at 67.3% and 65.9%. The associated samples were qualified as 'J', estimated, for the positive results, only, for Methylene Chloride.

*Continuing Calibrations:* Two continuing calibrations analyzed on 05/22/09 at 11:56 and 05/26/09 at 20:35 generated %D's of greater than the 25% limit for 5 Volatile compounds. Carbon Disulfide, 1,1,2-Trichlorotrifluoroethane, 1,2-Dibromo-3-chloropropane, 4-Isopropyltoluene and Methylene Chloride generated %D's in the range of 26.8% to 93.4%. The associated samples were qualified as 'J', estimated, for the positive results and 'UJ', estimated, for the non-detectable results for these compounds.

Semi-Volatiles – Water and Soil/Solid, Lab Work Order No. RSE0050

*Continuing Calibration:* One continuing calibration analyzed on 05/12/09 at 13:28 generated a %D at greater than the 25% limit for 4-Nitrophenol at 38.2%. The associated samples were qualified as 'UJ',



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estimated, for the non-detectable results for this compound. Positive results were not detected for 4-Nitrophenol.

Semi-Volatiles – Soil / Solid, Lab Work Order No. RSE0758

Qualification of the data set for Semi-Volatile Organics was not required. The associated quality control information was found to be generated within acceptable limits or the data did not require qualification based upon the QC in the data package.

Pesticides – Soil/Solid, Lab Work Order No. RSE0050

*Continuing Calibrations:* One continuing calibration analyzed on 05/08/09 at 15:46 generated %D's of greater than the 15% limit for various Pesticide compounds. The %D's were generated in the range of 16.7% to 28.0% for 4,4'-DDT, Endrin Aldehyde, Heptachlor and Methoxychlor. The associated samples were qualified as 'J', estimated, for the positive results and 'UJ', estimated, for the non-detectable results for the compounds noted.

*Percent Difference Between Two GC Columns:* Sample RR-SS-08A generated a %D for 4,4'-DDT that exceeded the 25% limit, comparing results between the two GC columns. The % D generated was 55%. Sample RR-SS-08A was qualified as 'J', estimated, for 4,4'-DDT.

Pesticides – Soil / Solid, Lab Work Order No. RSE0758

*Percent Difference Between Two GC Columns:* Samples RR-SS-EN, RR-SS-DNE, RR-SS-ES and RR-SS-DC generated %D's that exceeded the 25% limit, comparing results between the two GC columns. The %D's were generated in the range of 32% to 188% for various Pesticides. The Pesticides include: 4,4'-DDT, alpha-Chlordane, Endrin, 4,4'-DDE, Endosulfan II and gamma-Chlordane. The samples noted were qualified as 'J', estimated, for the respective result where the %D was generated from 26% to 70%. The samples results were qualified as 'JN', presumptively present at an approximated quantity, where the %D exceeds 70%.

*Method Blanks:* One soil method blank was analyzed for the associated samples. Gamma-Chlordane was detected in the soil method blank at 1.5 ug/Kg. A limits of five times this gamma-Chlordane result was used for review and qualification of the associated soil samples. Sample results found to be reported below the method blank limit and below the Contract Required Quantitation Limit (CRQL), were qualified as 'U', not detected, at the CRQL. Sample results reported below the method blank limit and above the CRQL were qualified as 'U', not detected. Sample results that exceed the method blank limit do not require qualification.

PCBs – Soil / Solid, Lab Work Order No. RSE0050

*Surrogate Recovery:* High surrogate recovery for DCB was generated for sample RR-SS-13A at 156% (Limit 60-150). This sample was qualified as 'J', estimated, for the positive results, only, for PCBs.

*Continuing Calibration:* One continuing calibration analyzed on 05/07/09 at 06:58 generated %D's of greater than the 15% limit for Aroclor-1016 and Aroclor-1260. The %D's were in the range of 18.8% to 28.1%. The associated samples were qualified as 'J', estimated, for the positive results and 'UJ', estimated, for the non-detectable results for Aroclor-1016 and Aroclor-1260.

*Percent Difference Between Two GC Columns:* Samples RR-SS-11A and RR-SS-13A generated %D's that exceeded the 25% limit, comparing results between the two GC columns. The %D's were generated in the range of 42% to 86% for Aroclor-1254, only. The samples noted were qualified as 'J', estimated, where the %D was generated from 26% to 70%. The samples results were qualified as 'JN', presumptively present at an approximated quantity, where the %D exceeds 70%.

**ChemWorld Environmental, Inc.**14 Orchard Way North, Rockville, MD 20854  
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*Percent Difference Between Two GC Columns:* Samples RR-TP-03A, RR-SS-SF-08 and RR-SS-DNE generated %D's that exceeded the 25% limit, comparing results between the two GC columns. The %D's were generated in the range of 53% to 87% for Aroclor-1254 and Aroclor-1260. The samples noted were qualified as 'J', estimated, for the respective result where the %D was generated from 26% to 70%. The sample results were qualified as 'JN', presumptively present at an approximated quantity, where the %D exceeds 70%.

Inorganics – Water and Soil / Solid, Lab Work Order No. RSE0050

*Preparation Blanks:* One preparation blank was analyzed for the soil / solid samples and one for the water samples. The following inorganics were detected in both of the preparation blanks.

(Soil / Solid Preparation Blank)

Aluminum	0.40 mg/Kg
Barium	0.02 mg/Kg
Cadmium	0.032 mg/Kg
Calcium	5.20 mg/Kg
Chromium	0.138 mg/Kg
Potassium	6.3 mg/Kg
Selenium	0.20 mg/Kg
Copper	0.04 mg/Kg
Iron	0.70 mg/Kg
Lead	0.09 mg/Kg
Magnesium	0.70 mg/Kg
Manganese	0.04 mg/Kg
Nickel	0.008 mg/Kg
Sodium	2.8 mg/Kg
Thallium	0.10 mg/Kg
Zinc	0.30 mg/Kg

(Water Preparation Blank)

Aluminum	0.015 mg/L
Calcium	0.04 mg/L
Cobalt	0.0001 mg/L
Lead	0.0004 mg/L
Magnesium	0.17 mg/L
Silver	0.0002 mg/L
Zinc	0.0021 mg/L

Limits of ten times the inorganic results above were used for review and qualification of the associated soil / solid and water samples. Sample results that were found to be less than the respective Preparation Blank Limit were qualified as 'U', not detected. Sample results that exceed the respective Preparation Blank Limit do not require qualification.

*ICP Serial Dilution:* One sample, RR-MW-02, was used for ICP Serial Dilution. The following inorganics generated %D's of greater than 10% for Serial Dilution:

RR-MW-02

Aluminum	44%
Barium	24%
Chromium	36%

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Potassium      40%  
Vanadium       37%

The associated sample results for the inorganics noted above were qualified as 'J', estimated, for the positive results, where the sample result exceeds 50 times the respective Instrument Detection Limit (IDL).

Inorganics – Soil / Solid, Lab Work Order No. RSE0758

*CRDL Standard:* The CRDL Standard generated high recovery for Cadmium at 132% (Limit 70-130). The samples affected were qualified as 'J', estimated, for the positive results for Cadmium.

*Preparation Blanks:* One preparation blank was analyzed for the soil / solid samples. The following inorganics were detected in the preparation blank.

(Soil / Solid Preparation Blank)

Aluminum	1.40 mg/Kg
Antimony	0.10 mg/Kg
Arsenic	0.07 mg/Kg
Barium	0.140 mg/Kg
Beryllium	0.002 mg/Kg
Cadmium	0.004 mg/Kg
Calcium	16.4 mg/Kg
Chromium	0.006 mg/Kg
Copper	0.09 mg/Kg
Iron	3.70 mg/Kg
Lead	0.20 mg/Kg
Magnesium	1.60 mg/Kg
Manganese	0.08 mg/Kg
Potassium	2.7 mg/Kg
Silver	0.046 mg/Kg
Zinc	0.50 mg/Kg

Limits of ten times the inorganic results above were used for review and qualification of the associated soil / solid samples. Sample results that were found to be less than the respective Preparation Blank Limit were qualified as 'U', not detected. Sample results that exceed the respective Preparation Blank Limit do not require qualification.

*Matrix Spike (MS):* One site-specific MS and MS Duplicate sample for RR-SS-SF-04 were analyzed for Inorganics for the soil samples. High spike recovery was generated for Iron and low spike recovery was generated for Antimony and Magnesium. These recoveries were in the range of 57% to 403% (Limit 75-125). The soil samples were qualified as 'J', estimated, for the positive results and 'UJ', estimated, for the non-detectable results for Antimony and Magnesium. Positive results, only, were qualified as 'J', estimated, for Iron.

Inorganics (Total and Dissolved) – Water, Lab Work Order No. RSG0123

Qualification of the data set for Total and Dissolved Inorganics was not required. The associated quality control information was found to be generated within acceptable limits.

**ChemWorld Environmental, Inc.**

**14 Orchard Way North, Rockville, MD 20854  
301-294-6144 Phone and Fax**

Please contact me by telephone or Fax at 301-294-6144, should you require additional information or clarification regarding this Letter Report.

Sincerely,

*Andrea P. Schuessler aps*

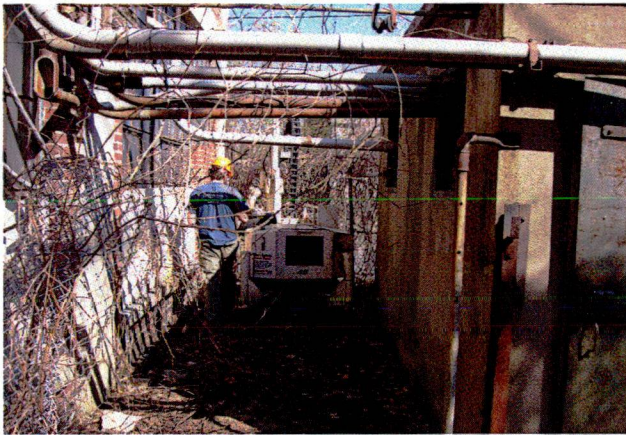
Andrea P. Schuessler, CHMM  
ChemWorld Environmental, Inc.

c: PA-2009.7 file

## APPENDIX C

### Photographs





**Photograph 1.** Location of RR-BH-02, facing north near transformer house



**Photograph 2.** Location of RR-BH-04, facing south



**Photograph 3.** Location of RR-BH-05, facing west



**Photograph 4.** Location of RR-BH-07, facing north



**Photograph 5.** Location of RR-MW-01, facing west

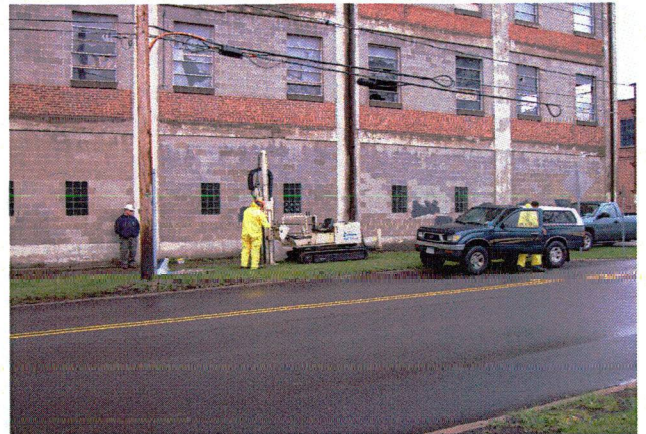


**Photograph 6.** Location of RR-MW-02, facing north





**Photograph 7.** Location of RR-MW-01, facing north



**Photograph 8.** Location of RR-MW-05, facing southwest



**Photograph 9.** Developing well at RR-MW-04



**Photograph 10.** Location of RR-TP-01, facing west



**Photograph 11.** Decon of the excavator bucket after RR-TP-01



**Photograph 12.** Location of RR-TP-05, facing southwest





**Photograph 13.** Location of RR-TP-07, facing southwest



**Photograph 14.** Stratigraphy of RR-TP-07



**Photograph 15.** Location of RR-TP-08, facing south



**Photograph 16.** Location of RR-TP-10, facing southeast



**Photograph 17.** Location of RR-SS-11, to rear of large courtyard transformer



**Photograph 18.** Location of RR-SS-13



## APPENDIX D

### Stohl Transformer Sampling Report



# STOHL ENVIRONMENTAL, LLC

Environmental – Asbestos, Lead and Mold Consultants

4169 Allendale Pkwy., Suite 100  
Blasdell New York 14219

☎ (716) 312-0070

☎ (716) 312-8092

September 17, 2009

Mr. Jonathan H. Morris, AIA  
Carmina Wood Morris PC  
487 Main Street, Suite 600  
Buffalo, NY 14203

RE: Transformer Sampling Results  
Former Remington Rand Facility  
184 Sweeney Street  
North Tonawanda, New York 14120  
Project No. 2009-260/09MS123

Dear Mr. Morris:

In accordance with the approved proposal for environmental services at the above-reference site (the Site), Stohl Environmental, LLC (Stohl), collected samples from ten pad-mounted transformers, two circuit breaker fluid reservoirs and stained soil/concrete (located proximate to one of the transformer units) on August 14, 2009. Prior to the sampling event, Edward A. Simoncelli (licensed electrician) of Simoncelli Electric (SE), completed an inspection of the transformer units and confirmed that they were not energized. A copy of the letter associated with this inspection is attached. The following summarizes the sampling event and analytical data.

Nine of the transformers are located on the northern portion of the Site (along Tremont Street) and are located on concrete slabs within a chain-link enclosure. Two fluid reservoirs, apparently associated with two circuit breakers, are located within a historic power house proximate the transformer pad. Oil from each transformer (identified as T-1 through T-9) and the fluid reservoirs (identified as C-1 and C-2) was collected using dedicated tubing. [Note that as fluid reservoir C-1 had three separate oil storage compartments, a composite sample was collected.] The samples were transferred into laboratory-supplied containers and placed into an iced cooler for transport to the laboratory.

The remaining transformer (T-10) is located on a single concrete slab south of the other transformers. An oil sample was collected for laboratory analysis via a stopcock near the base of this transformer. In addition, black staining (likely oil) was noted proximate to this transformer. Two samples, one soil (S-T10) and one concrete SC-T10), were also collected for analysis. The samples were transferred into laboratory-supplied containers and placed into an iced cooler for transport to the laboratory.

A site map depicting transformer sampling locations is attached. All samples were submitted under chain-of-custody to TestAmerica of Amherst, New York (TestAmerica) for polychlorinated biphenyl (PCB) analysis. The laboratory analytical data report is attached and a summary of results is provided on the following page.

Sample ID	PCB Concentration (mg/kg)
T-1	6.9
T-2	5.6
T-3	6.9
T-4	3.9
T-5	3.4
T-6	8.1
T-7	ND <1.8
T-8	ND <1.5
T-9	ND <1.5
T-10	240
C-1	ND<1.5
C-2	ND<1.3
S-T10	120
SC-T10	13

Notes:

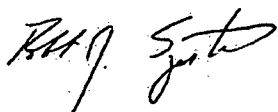
mg/kg = milligrams per kilogram or parts per million, ppm

ND – no PCBs detected below detection limit shown

We trust that this report satisfies your current needs. Should you have any questions, please do not hesitate to contact the undersigned.

Sincerely,

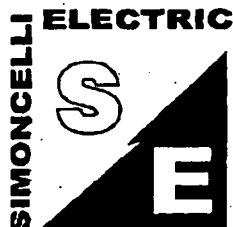
Stohl Environmental, LLC



Robert J. Szustakowski  
Sr. Vice President

Attachments    Electrician's letter  
                         Site Map  
                         Analytical results

**ELECTRICIAN'S LETTER**



**Simoncelli Electric, Inc.**  
*Commercial / Residential*

3740 California Road • Orchard Park, New York 14127 • 716 / 662-2780 FAX 716 / 662-3747

August 10, 2009

**Via Fax (716) 592-9373 and Regular Mail**

Mr. Eric Warren  
Russo Development, Inc.  
535 West Main Street  
Springville, New York 14141

**Re: 184 Sweeney Street, North Tonawanda**

Dear Eric,

I have made a visual inspection of 184 Sweeney Street, North Tonawanda and have found the following:

- A. The nine (9) transformers located in the rear substation are disconnected and therefore are totally de-energized.
- B. The rear pad mount transformer is fed from the substation and that feed has been removed so therefore the transformer is de-energized also.
- C. The primary feed from National Grid Pole #135 on Tremont Street has had the fuses removed but National Grid should be notified to come out and cut or remove the feeder from the fuse holder.
- D. The substation still has National Grid meters and metering transformers which are de-energized but should be removed.
- E. The substation has two (2) primary type oil circuit breakers which are de-energized but should be removed.

If you should have any other questions please feel free to contact my office.

Sincerely,

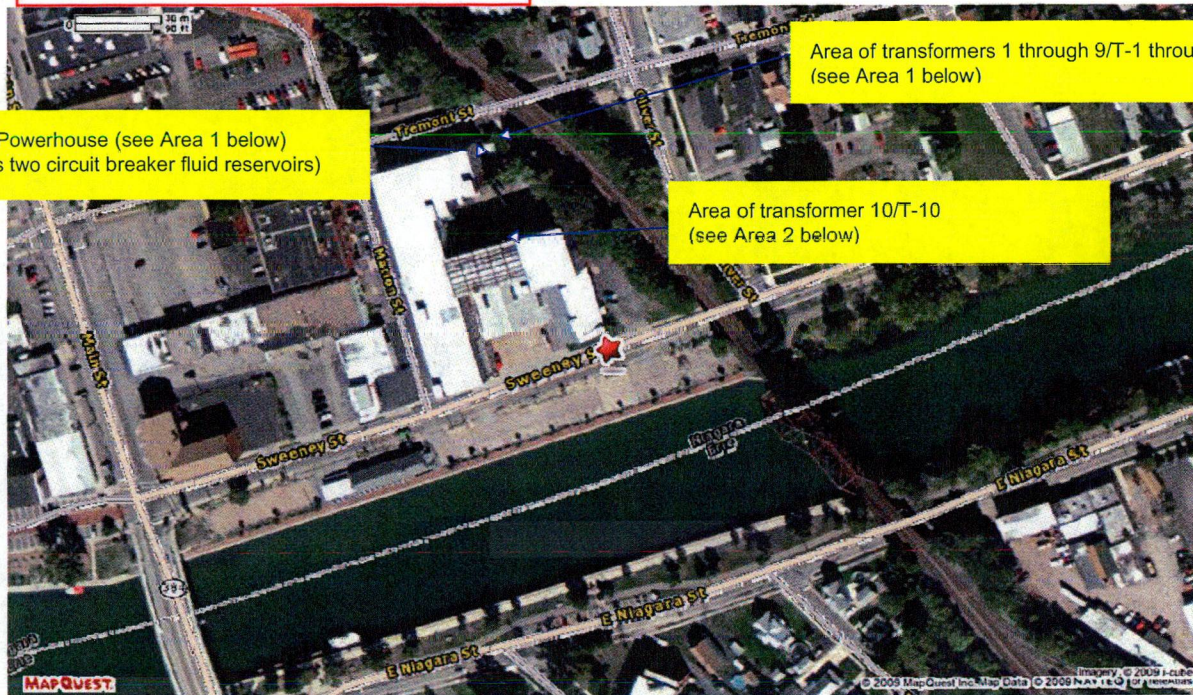
**SIMONCELLI ELECTRIC INC.**

Edward A. Simoncelli  
President

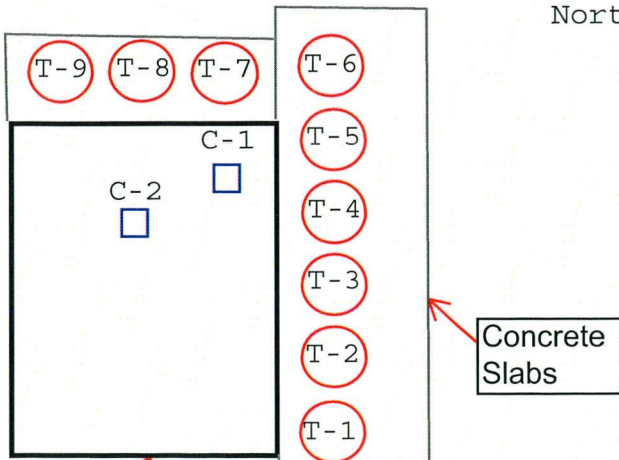
City of North Tonawanda License #322-09

**SITE MAP**

SITE MAP  
 2009-260/09MS123  
 Former Remington Rand Facility  
 184 Sweeney Street  
 North Tonawanda, New York 14120





AREA 1  
 (Sample Locations)



Concrete  
 Slabs

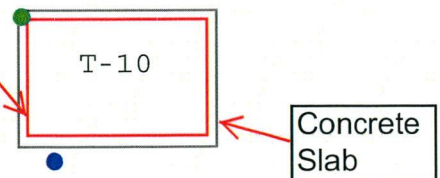
Historic  
 Powerhouse

-  Fluid Reservoir
-  Pad-Mounted Transformer



AREA 2  
 (Sample Locations)



Location of valve  
 used for sample collection



Concrete  
 Slab

-  Soil Sample Location (S-T10)
-  Soil/Concrete Sample Location (SC-T10)

Drawings Not To Scale

**ANALYTICAL RESULTS**



## Analytical Report

SDG Number: RSH0425

### Project Description(s)

Remington Rand Transformers PCB Analysis  
Remington Rand Transformers PCB Analysis

For:

Bryan Mayback

**MS Analytical**

4169 Allendale Parkway, Suite 200  
Blasdale, NY 14219



Paul Morrow

Project Manager

Paul.Morrow@testamericainc.com

Monday, August 24, 2009

The test results in this report meet all NELAP requirements for analytes for which accreditation is required or available. Any exception to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. All questions regarding this test report should be directed to the TestAmerica Project manager who has signed this report.

MS Analytical  
4169 Allendale Parkway, Suite 200  
Blasdale, NY 14219

SDG Number: RSH0425

Received: 08/14/09  
Reported: 08/24/09 16:49

Project: Remington Rand Transformers PCB Analysis  
Project Number: Remington Rand Transformers PCB Analysis

## TestAmerica Buffalo Current Certifications

As of 1/27/2009

<b>STATE</b>	<b>Program</b>	<b>Cert # / Lab ID</b>
<b>Arkansas</b>	CWA, RCRA, SOIL	88-0686
<b>California*</b>	NELAP CWA, RCRA	01169CA
<b>Connecticut</b>	SDWA, CWA, RCRA, SOIL	PH-0568
<b>Florida*</b>	NELAP CWA, RCRA	E87672
<b>Georgia*</b>	SDWA, NELAP CWA, RCRA	956
<b>Illinois*</b>	NELAP SDWA, CWA, RCRA	200003
<b>Iowa</b>	SW/CS	374
<b>Kansas*</b>	NELAP SDWA, CWA, RCRA	E-10187
<b>Kentucky</b>	SDWA	90029
<b>Kentucky UST</b>	UST	30
<b>Louisiana*</b>	NELAP CWA, RCRA	2031
<b>Maine</b>	SDWA, CWA	NY0044
<b>Maryland</b>	SDWA	294
<b>Massachusetts</b>	SDWA, CWA	M-NY044
<b>Michigan</b>	SDWA	9937
<b>Minnesota</b>	SDWA, CWA, RCRA	036-999-337
<b>New Hampshire*</b>	NELAP SDWA, CWA	233701
<b>New Jersey*</b>	NELAP, SDWA, CWA, RCRA,	NY455
<b>New York*</b>	NELAP, AIR, SDWA, CWA, RCRA, CLP	10026
<b>Oklahoma</b>	CWA, RCRA	9421
<b>Pennsylvania*</b>	NELAP CWA, RCRA	68-00281
<b>Tennessee</b>	SDWA	02970
<b>Texas*</b>	NELAP CWA, RCRA	T104704412-08-TX
<b>USDA</b>	FOREIGN SOIL PERMIT	S-41579
<b>USDOE</b>	Department of Energy	DOECAP-STB
<b>Virginia</b>	SDWA	278
<b>Washington*</b>	NELAP CWA, RCRA	C1677
<b>Wisconsin</b>	CWA, RCRA	998310390
<b>West Virginia</b>	CWA, RCRA	252

\*As required under the indicated accreditation, the test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report.

MS Analytical  
4169 Allendale Parkway, Suite 200  
Blasdale, NY 14219

SDG Number: RSH0425

Received: 08/14/09  
Reported: 08/24/09 16:49

Project: Remington Rand Transformers PCB Analysis  
Project Number: Remington Rand Transformers PCB Analysis

## Case Narrative

According to 40CFR Part 136.3, pH, Chlorine Residual, Dissolved Oxygen, Sulfite, and Temperature analyses are to be performed immediately after aqueous sample collection. When these parameters are not indicated as field (e.g. field-pH), they were not analyzed immediately, but as soon as possible after laboratory receipt.

There are pertinent documents appended to this report, 2 pages, are included and are an integral part of this report. Reproduction of this analytical report is permitted only in its entirety. This report shall not be reproduced except in full without the written approval of the laboratory.

TestAmerica Laboratories, Inc. certifies that the analytical results contained herein apply only to the samples tested as received by our Laboratory.

MS Analytical  
4169 Allendale Parkway, Suite 200  
Blasdale, NY 14219

SDG Number: RSH0425

Received: 08/14/09  
Reported: 08/24/09 16:49

Project: Remington Rand Transformers PCB Analysis  
Project Number: Remington Rand Transformers PCB Analysis

## DATA QUALIFIERS AND DEFINITIONS

**D08** Dilution required due to high concentration of target analyte(s)  
**QSU** Sulfur (EPA 3660) clean-up performed on extract.  
**Z3** The sample required a dilution due to the nature of the sample matrix. Because of this dilution, the surrogate spike concentration in the sample was reduced to a level where the recovery calculation does not provide useful information.  
**Z5** Due to sample matrix effects, the surrogate recovery was outside acceptance limits. Secondary surrogate recovery was within the acceptance limits.  
**NR** Any inclusion of NR indicates that the project specific requirements do not require reporting estimated values below the laboratory reporting limit.

## ADDITIONAL COMMENTS

Results are reported on a wet weight basis unless otherwise noted.

MS Analytical  
4169 Allendale Parkway, Suite 200  
Blasdale, NY 14219

SDG Number: RSH0425

Received: 08/14/09  
Reported: 08/24/09 16:49

Project: Remington Rand Transformers PCB Analysis  
Project Number: Remington Rand Transformers PCB Analysis

## Executive Summary - Detections

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Client ID: SC-T10 (RSH0425-01 - Solid)					Sampled: 08/14/09 12:00			Recvd: 08/14/09 17:10		
<u>Polychlorinated Biphenyls by EPA Method 8082</u>										
Aroclor 1248	13		1.1	0.22	mg/kg dry	50.0	08/19/09 14:28	SCH	9H17035	8082
<u>General Chemistry Parameters</u>										
Percent Solids	75		0.010	NR	%	1.00	08/16/09 12:14	KMB	9H15011	Dry Weight
Client ID: S-T10 (RSH0425-02 - Solid)					Sampled: 08/14/09 12:10			Recvd: 08/14/09 17:10		
<u>Polychlorinated Biphenyls by EPA Method 8082</u>										
Aroclor 1242	120		17	3.8	mg/kg dry	500	08/19/09 14:43	SCH	9H17035	8082
<u>General Chemistry Parameters</u>										
Percent Solids	48		0.010	NR	%	1.00	08/16/09 12:16	KMB	9H15011	Dry Weight
Client ID: T-10 (RSH0449-10 - Waste)					Sampled: 08/14/09 12:15			Recvd: 08/14/09 13:20		
<u>Polychlorinated Biphenyls by EPA Method 8082</u>										
Aroclor 1242	240	D08	8.3	8.3	mg/kg	5.00	08/17/09 15:26	JxM	9H16001	8082
Client ID: T-1 (RSH0449-01 - Waste)					Sampled: 08/14/09 10:10			Recvd: 08/14/09 13:20		
<u>Polychlorinated Biphenyls by EPA Method 8082</u>										
Aroclor 1260	6.9		1.6	1.6	mg/kg	1.00	08/17/09 12:43	JxM	9H16001	8082
Client ID: T-2 (RSH0449-02 - Waste)					Sampled: 08/14/09 10:20			Recvd: 08/14/09 13:20		
<u>Polychlorinated Biphenyls by EPA Method 8082</u>										
Aroclor 1260	5.6		1.9	1.9	mg/kg	1.00	08/17/09 12:58	JxM	9H16001	8082
Client ID: T-3 (RSH0449-03 - Waste)					Sampled: 08/14/09 10:30			Recvd: 08/14/09 13:20		
<u>Polychlorinated Biphenyls by EPA Method 8082</u>										
Aroclor 1260	6.9		1.7	1.7	mg/kg	1.00	08/17/09 13:13	JxM	9H16001	8082
Client ID: T-4 (RSH0449-04 - Waste)					Sampled: 08/14/09 10:40			Recvd: 08/14/09 13:20		
<u>Polychlorinated Biphenyls by EPA Method 8082</u>										
Aroclor 1260	3.9		1.7	1.7	mg/kg	1.00	08/17/09 13:28	JxM	9H16001	8082
Client ID: T-5 (RSH0449-05 - Waste)					Sampled: 08/14/09 10:50			Recvd: 08/14/09 13:20		
<u>Polychlorinated Biphenyls by EPA Method 8082</u>										
Aroclor 1260	3.4		1.6	1.6	mg/kg	1.00	08/17/09 14:12	JxM	9H16001	8082
Client ID: T-6 (RSH0449-06 - Waste)					Sampled: 08/14/09 11:00			Recvd: 08/14/09 13:20		
<u>Polychlorinated Biphenyls by EPA Method 8082</u>										
Aroclor 1260	8.1		1.7	1.7	mg/kg	1.00	08/17/09 14:27	JxM	9H16001	8082

MS Analytical  
4169 Allendale Parkway, Suite 200  
Blasdale, NY 14219

SDG Number: RSH0425

Received: 08/14/09  
Reported: 08/24/09 16:49

Project: Remington Rand Transformers PCB Analysis  
Project Number: Remington Rand Transformers PCB Analysis

## Sample Summary

Sample Identification	Lab Number	Client Matrix	Date/Time Sampled	Date/Time Received	Sample Qualifiers
C-1 COMP	RSH0449-11	Waste	08/14/09 12:00	08/14/09 13:20	
C-2	RSH0449-12	Waste	08/14/09 11:50	08/14/09 13:20	
SC-T10	RSH0425-01	Solid	08/14/09 12:00	08/14/09 17:10	
S-T10	RSH0425-02	Solid	08/14/09 12:10	08/14/09 17:10	
T-10	RSH0449-10	Waste	08/14/09 12:15	08/14/09 13:20	
T-1	RSH0449-01	Waste	08/14/09 10:10	08/14/09 13:20	
T-2	RSH0449-02	Waste	08/14/09 10:20	08/14/09 13:20	
T-3	RSH0449-03	Waste	08/14/09 10:30	08/14/09 13:20	
T-4	RSH0449-04	Waste	08/14/09 10:40	08/14/09 13:20	
T-5	RSH0449-05	Waste	08/14/09 10:50	08/14/09 13:20	
T-6	RSH0449-06	Waste	08/14/09 11:00	08/14/09 13:20	
T-7	RSH0449-07	Waste	08/14/09 11:20	08/14/09 13:20	
T-8	RSH0449-08	Waste	08/14/09 11:30	08/14/09 13:20	
T-9	RSH0449-09	Waste	08/14/09 11:40	08/14/09 13:20	

MS Analytical  
4169 Allendale Parkway, Suite 200  
Blasdale, NY 14219

SDG Number: RSH0425

Received: 08/14/09  
Reported: 08/24/09 16:49

Project: Remington Rand Transformers PCB Analysis  
Project Number: Remington Rand Transformers PCB Analysis

## Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Client ID: C-1 COMP (RSH0449-11 - Waste)						Sampled: 08/14/09 12:00		Recvd: 08/14/09 13:20		
<b><u>Polychlorinated Biphenyls by EPA Method 8082</u></b>										
Aroclor 1016	ND		1.5	1.5	mg/kg	1.00	08/17/09 15:41	JxM	9H16001	8082
Aroclor 1221	ND		1.5	1.5	mg/kg	1.00	08/17/09 15:41	JxM	9H16001	8082
Aroclor 1232	ND		1.5	1.5	mg/kg	1.00	08/17/09 15:41	JxM	9H16001	8082
Aroclor 1242	ND		1.5	1.5	mg/kg	1.00	08/17/09 15:41	JxM	9H16001	8082
Aroclor 1248	ND		1.5	1.5	mg/kg	1.00	08/17/09 15:41	JxM	9H16001	8082
Aroclor 1254	ND		1.5	1.5	mg/kg	1.00	08/17/09 15:41	JxM	9H16001	8082
Aroclor 1260	ND		1.5	1.5	mg/kg	1.00	08/17/09 15:41	JxM	9H16001	8082
Aroclor 1262	ND		1.5	1.5	mg/kg	1.00	08/17/09 15:41	JxM	9H16001	8082
Aroclor 1268	ND		1.5	1.5	mg/kg	1.00	08/17/09 15:41	JxM	9H16001	8082
Decachlorobiphenyl	99 %		Surr Limits: (34-148%)				08/17/09 15:41	JxM	9H16001	8082
Tetrachloro-m-xylene	78 %		Surr Limits: (35-134%)				08/17/09 15:41	JxM	9H16001	8082

MS Analytical  
4169 Allendale Parkway, Suite 200  
Blasdale, NY 14219

SDG Number: RSH0425

Project: Remington Rand Transformers PCB Analysis  
Project Number: Remington Rand Transformers PCB Analysis

Received: 08/14/09  
Reported: 08/24/09 16:49

## Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Client ID: C-2 (RSH0449-12 - Waste)						Sampled: 08/14/09 11:50		Recvd: 08/14/09 13:20		
<b>Polychlorinated Biphenyls by EPA Method 8082</b>										
Aroclor 1016	ND		1.3	1.3	mg/kg	1.00	08/17/09 15:56	JxM	9H16001	8082
Aroclor 1221	ND		1.3	1.3	mg/kg	1.00	08/17/09 15:56	JxM	9H16001	8082
Aroclor 1232	ND		1.3	1.3	mg/kg	1.00	08/17/09 15:56	JxM	9H16001	8082
Aroclor 1242	ND		1.3	1.3	mg/kg	1.00	08/17/09 15:56	JxM	9H16001	8082
Aroclor 1248	ND		1.3	1.3	mg/kg	1.00	08/17/09 15:56	JxM	9H16001	8082
Aroclor 1254	ND		1.3	1.3	mg/kg	1.00	08/17/09 15:56	JxM	9H16001	8082
Aroclor 1260	ND		1.3	1.3	mg/kg	1.00	08/17/09 15:56	JxM	9H16001	8082
Aroclor 1262	ND		1.3	1.3	mg/kg	1.00	08/17/09 15:56	JxM	9H16001	8082
Aroclor 1268	ND		1.3	1.3	mg/kg	1.00	08/17/09 15:56	JxM	9H16001	8082
Decachlorobiphenyl	105 %		Surr Limits: (34-148%)				08/17/09 15:56	JxM	9H16001	8082
Tetrachloro-m-xylene	78 %		Surr Limits: (35-134%)				08/17/09 15:56	JxM	9H16001	8082



MS Analytical  
4169 Allendale Parkway, Suite 200  
Blasdale, NY 14219

SDG Number: RSH0425

Received: 08/14/09  
Reported: 08/24/09 16:49

Project: Remington Rand Transformers PCB Analysis  
Project Number: Remington Rand Transformers PCB Analysis

## Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Client ID: SC-T10 (RSH0425-01 - Solid)						Sampled: 08/14/09 12:00		Recvd: 08/14/09 17:10		
<b><u>Polychlorinated Biphenyls by EPA Method 8082</u></b>										
Aroclor 1016	ND		1.1	0.22	mg/kg dry	50.0	08/19/09 14:28	SCH	9H17035	8082
Aroclor 1221	ND		1.1	0.22	mg/kg dry	50.0	08/19/09 14:28	SCH	9H17035	8082
Aroclor 1232	ND		1.1	0.22	mg/kg dry	50.0	08/19/09 14:28	SCH	9H17035	8082
Aroclor 1242	ND		1.1	0.24	mg/kg dry	50.0	08/19/09 14:28	SCH	9H17035	8082
Aroclor 1248	13		1.1	0.22	mg/kg dry	50.0	08/19/09 14:28	SCH	9H17035	8082
Aroclor 1254	ND		1.1	0.23	mg/kg dry	50.0	08/19/09 14:28	SCH	9H17035	8082
Aroclor 1260	ND		1.1	0.23	mg/kg dry	50.0	08/19/09 14:28	SCH	9H17035	8082
Aroclor 1262	ND		1.1	0.23	mg/kg dry	50.0	08/19/09 14:28	SCH	9H17035	8082
Aroclor 1268	ND		1.1	0.23	mg/kg dry	50.0	08/19/09 14:28	SCH	9H17035	8082
Decachlorobiphenyl	*	Z3	Surr Limits: (34-148%)				08/19/09 14:28	SCH	9H17035	8082
Tetrachloro-m-xylene	*	Z3	Surr Limits: (35-134%)				08/19/09 14:28	SCH	9H17035	8082
<b><u>General Chemistry Parameters</u></b>										
Percent Solids	75		0.010	NR	%	1.00	08/16/09 12:14	KMB	9H15011	Dry Weight

MS Analytical  
4169 Allendale Parkway, Suite 200  
Blasdale, NY 14219

SDG Number: RSH0425

Received: 08/14/09

Reported: 08/24/09 16:49

Project: Remington Rand Transformers PCB Analysis

Project Number: Remington Rand Transformers PCB Analysis

## Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Client ID: S-T10 (RSH0425-02 - Solid)						Sampled: 08/14/09 12:10		Recvd: 08/14/09 17:10		

### Polychlorinated Biphenyls by EPA Method 8082

Aroclor 1016	ND		17	3.4	mg/kg dry	500	08/19/09 14:43	SCH	9H17035	8082
Aroclor 1221	ND		17	3.4	mg/kg dry	500	08/19/09 14:43	SCH	9H17035	8082
Aroclor 1232	ND		17	3.4	mg/kg dry	500	08/19/09 14:43	SCH	9H17035	8082
Aroclor 1242	120		17	3.8	mg/kg dry	500	08/19/09 14:43	SCH	9H17035	8082
Aroclor 1248	ND		17	3.4	mg/kg dry	500	08/19/09 14:43	SCH	9H17035	8082
Aroclor 1254	ND		17	3.7	mg/kg dry	500	08/19/09 14:43	SCH	9H17035	8082
Aroclor 1260	ND		17	3.7	mg/kg dry	500	08/19/09 14:43	SCH	9H17035	8082
Aroclor 1262	ND		17	3.7	mg/kg dry	500	08/19/09 14:43	SCH	9H17035	8082
Aroclor 1268	ND		17	3.7	mg/kg dry	500	08/19/09 14:43	SCH	9H17035	8082

Decachlorobiphenyl	*	Z3	Surr Limits: (34-148%)				08/19/09 14:43	SCH	9H17035	8082
Tetrachloro-m-xylene	*	Z3	Surr Limits: (35-134%)				08/19/09 14:43	SCH	9H17035	8082

### General Chemistry Parameters

Percent Solids	48		0.010	NR	%	1.00	08/16/09 12:16	KMB	9H15011	Dry Weight
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SDG Number: RSH0425

Received: 08/14/09  
Reported: 08/24/09 16:49

Project: Remington Rand Transformers PCB Analysis  
Project Number: Remington Rand Transformers PCB Analysis

## Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Client ID: T-10 (RSH0449-10 - Waste)						Sampled: 08/14/09 12:15		Recvd: 08/14/09 13:20		
<b><u>Polychlorinated Biphenyls by EPA Method 8082</u></b>										
Aroclor 1016	ND	D08	8.3	8.3	mg/kg	5.00	08/17/09 15:26	JxM	9H16001	8082
Aroclor 1221	ND	D08	8.3	8.3	mg/kg	5.00	08/17/09 15:26	JxM	9H16001	8082
Aroclor 1232	ND	D08	8.3	8.3	mg/kg	5.00	08/17/09 15:26	JxM	9H16001	8082
Aroclor 1242	240	D08	8.3	8.3	mg/kg	5.00	08/17/09 15:26	JxM	9H16001	8082
Aroclor 1248	ND	D08	8.3	8.3	mg/kg	5.00	08/17/09 15:26	JxM	9H16001	8082
Aroclor 1254	ND	D08	8.3	8.3	mg/kg	5.00	08/17/09 15:26	JxM	9H16001	8082
Aroclor 1260	ND	D08	8.3	8.3	mg/kg	5.00	08/17/09 15:26	JxM	9H16001	8082
Aroclor 1262	ND	D08	8.3	8.3	mg/kg	5.00	08/17/09 15:26	JxM	9H16001	8082
Aroclor 1268	ND	D08	8.3	8.3	mg/kg	5.00	08/17/09 15:26	JxM	9H16001	8082
Decachlorobiphenyl	139 %	D08	Surr Limits: (34-148%)				08/17/09 15:26	JxM	9H16001	8082
Tetrachloro-m-xylene	130 %	D08	Surr Limits: (35-134%)				08/17/09 15:26	JxM	9H16001	8082

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4169 Allendale Parkway, Suite 200  
Blasdale, NY 14219

SDG Number: RSH0425

Received: 08/14/09  
Reported: 08/24/09 16:49

Project: Remington Rand Transformers PCB Analysis  
Project Number: Remington Rand Transformers PCB Analysis

## Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Client ID: T-1 (RSH0449-01 - Waste)						Sampled: 08/14/09 10:10		Recvd: 08/14/09 13:20		
<b><u>Polychlorinated Biphenyls by EPA Method 8082</u></b>										
Aroclor 1016	ND		1.6	1.6	mg/kg	1.00	08/17/09 12:43	JxM	9H16001	8082
Aroclor 1221	ND		1.6	1.6	mg/kg	1.00	08/17/09 12:43	JxM	9H16001	8082
Aroclor 1232	ND		1.6	1.6	mg/kg	1.00	08/17/09 12:43	JxM	9H16001	8082
Aroclor 1242	ND		1.6	1.6	mg/kg	1.00	08/17/09 12:43	JxM	9H16001	8082
Aroclor 1248	ND		1.6	1.6	mg/kg	1.00	08/17/09 12:43	JxM	9H16001	8082
Aroclor 1254	ND		1.6	1.6	mg/kg	1.00	08/17/09 12:43	JxM	9H16001	8082
Aroclor 1260	6.9		1.6	1.6	mg/kg	1.00	08/17/09 12:43	JxM	9H16001	8082
Aroclor 1262	ND		1.6	1.6	mg/kg	1.00	08/17/09 12:43	JxM	9H16001	8082
Aroclor 1268	ND		1.6	1.6	mg/kg	1.00	08/17/09 12:43	JxM	9H16001	8082
Decachlorobiphenyl	118 %		Surr Limits: (34-148%)				08/17/09 12:43	JxM	9H16001	8082
Tetrachloro-m-xylene	79 %		Surr Limits: (35-134%)				08/17/09 12:43	JxM	9H16001	8082

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4169 Allendale Parkway, Suite 200  
Blasdale, NY 14219

SDG Number: RSH0425

Received: 08/14/09  
Reported: 08/24/09 16:49

Project: Remington Rand Transformers PCB Analysis  
Project Number: Remington Rand Transformers PCB Analysis

## Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Client ID: T-2 (RSH0449-02 - Waste)						Sampled: 08/14/09 10:20		Recvd: 08/14/09 13:20		
<b><u>Polychlorinated Biphenyls by EPA Method 8082</u></b>										
Aroclor 1016	ND		1.9	1.9	mg/kg	1.00	08/17/09 12:58	JxM	9H16001	8082
Aroclor 1221	ND		1.9	1.9	mg/kg	1.00	08/17/09 12:58	JxM	9H16001	8082
Aroclor 1232	ND		1.9	1.9	mg/kg	1.00	08/17/09 12:58	JxM	9H16001	8082
Aroclor 1242	ND		1.9	1.9	mg/kg	1.00	08/17/09 12:58	JxM	9H16001	8082
Aroclor 1248	ND		1.9	1.9	mg/kg	1.00	08/17/09 12:58	JxM	9H16001	8082
Aroclor 1254	ND		1.9	1.9	mg/kg	1.00	08/17/09 12:58	JxM	9H16001	8082
Aroclor 1260	5.6		1.9	1.9	mg/kg	1.00	08/17/09 12:58	JxM	9H16001	8082
Aroclor 1262	ND		1.9	1.9	mg/kg	1.00	08/17/09 12:58	JxM	9H16001	8082
Aroclor 1268	ND		1.9	1.9	mg/kg	1.00	08/17/09 12:58	JxM	9H16001	8082
Decachlorobiphenyl	111 %		Surr Limits: (34-148%)				08/17/09 12:58	JxM	9H16001	8082
Tetrachloro-m-xylene	79 %		Surr Limits: (35-134%)				08/17/09 12:58	JxM	9H16001	8082

MS Analytical  
4169 Allendale Parkway, Suite 200  
Blasdale, NY 14219

SDG Number: RSH0425

Received: 08/14/09

Reported: 08/24/09 16:49

Project: Remington Rand Transformers PCB Analysis

Project Number: Remington Rand Transformers PCB Analysis

## Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Client ID: T-3 (RSH0449-03 - Waste)						Sampled: 08/14/09 10:30		Recvd: 08/14/09 13:20		
<u>Polychlorinated Biphenyls by EPA Method 8082</u>										
Aroclor 1016	ND		1.7	1.7	mg/kg	1.00	08/17/09 13:13	JxM	9H16001	8082
Aroclor 1221	ND		1.7	1.7	mg/kg	1.00	08/17/09 13:13	JxM	9H16001	8082
Aroclor 1232	ND		1.7	1.7	mg/kg	1.00	08/17/09 13:13	JxM	9H16001	8082
Aroclor 1242	ND		1.7	1.7	mg/kg	1.00	08/17/09 13:13	JxM	9H16001	8082
Aroclor 1248	ND		1.7	1.7	mg/kg	1.00	08/17/09 13:13	JxM	9H16001	8082
Aroclor 1254	ND		1.7	1.7	mg/kg	1.00	08/17/09 13:13	JxM	9H16001	8082
Aroclor 1260	6.9		1.7	1.7	mg/kg	1.00	08/17/09 13:13	JxM	9H16001	8082
Aroclor 1262	ND		1.7	1.7	mg/kg	1.00	08/17/09 13:13	JxM	9H16001	8082
Aroclor 1268	ND		1.7	1.7	mg/kg	1.00	08/17/09 13:13	JxM	9H16001	8082
Decachlorobiphenyl	109 %		Surr Limits: (34-148%)				08/17/09 13:13	JxM	9H16001	8082
Tetrachloro-m-xylene	78 %		Surr Limits: (35-134%)				08/17/09 13:13	JxM	9H16001	8082

MS Analytical  
4169 Allendale Parkway, Suite 200  
Blasdale, NY 14219

SDG Number: RSH0425

Received: 08/14/09  
Reported: 08/24/09 16:49

Project: Remington Rand Transformers PCB Analysis  
Project Number: Remington Rand Transformers PCB Analysis

## Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Client ID: T-4 (RSH0449-04 - Waste)						Sampled: 08/14/09 10:40		Recvd: 08/14/09 13:20		
<b><u>Polychlorinated Biphenyls by EPA Method 8082</u></b>										
Aroclor 1016	ND		1.7	1.7	mg/kg	1.00	08/17/09 13:28	JxM	9H16001	8082
Aroclor 1221	ND		1.7	1.7	mg/kg	1.00	08/17/09 13:28	JxM	9H16001	8082
Aroclor 1232	ND		1.7	1.7	mg/kg	1.00	08/17/09 13:28	JxM	9H16001	8082
Aroclor 1242	ND		1.7	1.7	mg/kg	1.00	08/17/09 13:28	JxM	9H16001	8082
Aroclor 1248	ND		1.7	1.7	mg/kg	1.00	08/17/09 13:28	JxM	9H16001	8082
Aroclor 1254	ND		1.7	1.7	mg/kg	1.00	08/17/09 13:28	JxM	9H16001	8082
Aroclor 1260	3.9		1.7	1.7	mg/kg	1.00	08/17/09 13:28	JxM	9H16001	8082
Aroclor 1262	ND		1.7	1.7	mg/kg	1.00	08/17/09 13:28	JxM	9H16001	8082
Aroclor 1268	ND		1.7	1.7	mg/kg	1.00	08/17/09 13:28	JxM	9H16001	8082
Decachlorobiphenyl	105 %		Surr Limits: (34-148%)				08/17/09 13:28	JxM	9H16001	8082
Tetrachloro-m-xylene	78 %		Surr Limits: (35-134%)				08/17/09 13:28	JxM	9H16001	8082

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4169 Allendale Parkway, Suite 200  
Blasdale, NY 14219

SDG Number: RSH0425

Received: 08/14/09  
Reported: 08/24/09 16:49

Project: Remington Rand Transformers PCB Analysis  
Project Number: Remington Rand Transformers PCB Analysis

## Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Client ID: T-5 (RSH0449-05 - Waste)						Sampled: 08/14/09 10:50		Recvd: 08/14/09 13:20		
<b><u>Polychlorinated Biphenyls by EPA Method 8082</u></b>										
Aroclor 1016	ND		1.6	1.6	mg/kg	1.00	08/17/09 14:12	JxM	9H16001	8082
Aroclor 1221	ND		1.6	1.6	mg/kg	1.00	08/17/09 14:12	JxM	9H16001	8082
Aroclor 1232	ND		1.6	1.6	mg/kg	1.00	08/17/09 14:12	JxM	9H16001	8082
Aroclor 1242	ND		1.6	1.6	mg/kg	1.00	08/17/09 14:12	JxM	9H16001	8082
Aroclor 1248	ND		1.6	1.6	mg/kg	1.00	08/17/09 14:12	JxM	9H16001	8082
Aroclor 1254	ND		1.6	1.6	mg/kg	1.00	08/17/09 14:12	JxM	9H16001	8082
Aroclor 1260	3.4		1.6	1.6	mg/kg	1.00	08/17/09 14:12	JxM	9H16001	8082
Aroclor 1262	ND		1.6	1.6	mg/kg	1.00	08/17/09 14:12	JxM	9H16001	8082
Aroclor 1268	ND		1.6	1.6	mg/kg	1.00	08/17/09 14:12	JxM	9H16001	8082
Decachlorobiphenyl	106 %		Surr Limits: (34-148%)				08/17/09 14:12	JxM	9H16001	8082
Tetrachloro-m-xylene	78 %		Surr Limits: (35-134%)				08/17/09 14:12	JxM	9H16001	8082



MS Analytical  
4169 Allendale Parkway, Suite 200  
Blasdale, NY 14219

SDG Number: RSH0425

Received: 08/14/09

Reported: 08/24/09 16:49

Project: Remington Rand Transformers PCB Analysis

Project Number: Remington Rand Transformers PCB Analysis

## Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Client ID: T-6 (RSH0449-06 - Waste)						Sampled: 08/14/09 11:00		Recvd: 08/14/09 13:20		
<b>Polychlorinated Biphenyls by EPA Method 8082</b>										
Aroclor 1016	ND		1.7	1.7	mg/kg	1.00	08/17/09 14:27	JxM	9H16001	8082
Aroclor 1221	ND		1.7	1.7	mg/kg	1.00	08/17/09 14:27	JxM	9H16001	8082
Aroclor 1232	ND		1.7	1.7	mg/kg	1.00	08/17/09 14:27	JxM	9H16001	8082
Aroclor 1242	ND		1.7	1.7	mg/kg	1.00	08/17/09 14:27	JxM	9H16001	8082
Aroclor 1248	ND		1.7	1.7	mg/kg	1.00	08/17/09 14:27	JxM	9H16001	8082
Aroclor 1254	ND		1.7	1.7	mg/kg	1.00	08/17/09 14:27	JxM	9H16001	8082
Aroclor 1260	8.1		1.7	1.7	mg/kg	1.00	08/17/09 14:27	JxM	9H16001	8082
Aroclor 1262	ND		1.7	1.7	mg/kg	1.00	08/17/09 14:27	JxM	9H16001	8082
Aroclor 1268	ND		1.7	1.7	mg/kg	1.00	08/17/09 14:27	JxM	9H16001	8082
Decachlorobiphenyl	108 %		Surr Limits: (34-148%)				08/17/09 14:27	JxM	9H16001	8082
Tetrachloro-m-xylene	79 %		Surr Limits: (35-134%)				08/17/09 14:27	JxM	9H16001	8082

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4169 Allendale Parkway, Suite 200  
Blasdale, NY 14219

SDG Number: RSH0425

Received: 08/14/09  
Reported: 08/24/09 16:49

Project: Remington Rand Transformers PCB Analysis  
Project Number: Remington Rand Transformers PCB Analysis

## Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Client ID: T-7 (RSH0449-07 - Waste)						Sampled: 08/14/09 11:20		Recvd: 08/14/09 13:20		
<b><u>Polychlorinated Biphenyls by EPA Method 8082</u></b>										
Aroclor 1016	ND		1.8	1.8	mg/kg	1.00	08/17/09 14:42	JxM	9H16001	8082
Aroclor 1221	ND		1.8	1.8	mg/kg	1.00	08/17/09 14:42	JxM	9H16001	8082
Aroclor 1232	ND		1.8	1.8	mg/kg	1.00	08/17/09 14:42	JxM	9H16001	8082
Aroclor 1242	ND		1.8	1.8	mg/kg	1.00	08/17/09 14:42	JxM	9H16001	8082
Aroclor 1248	ND		1.8	1.8	mg/kg	1.00	08/17/09 14:42	JxM	9H16001	8082
Aroclor 1254	ND		1.8	1.8	mg/kg	1.00	08/17/09 14:42	JxM	9H16001	8082
Aroclor 1260	ND		1.8	1.8	mg/kg	1.00	08/17/09 14:42	JxM	9H16001	8082
Aroclor 1262	ND		1.8	1.8	mg/kg	1.00	08/17/09 14:42	JxM	9H16001	8082
Aroclor 1268	ND		1.8	1.8	mg/kg	1.00	08/17/09 14:42	JxM	9H16001	8082
Decachlorobiphenyl	114 %		Surr Limits: (34-148%)				08/17/09 14:42	JxM	9H16001	8082
Tetrachloro-m-xylene	78 %		Surr Limits: (35-134%)				08/17/09 14:42	JxM	9H16001	8082

MS Analytical  
4169 Allendale Parkway, Suite 200  
Blasdale, NY 14219

SDG Number: RSH0425

Received: 08/14/09  
Reported: 08/24/09 16:49

Project: Remington Rand Transformers PCB Analysis  
Project Number: Remington Rand Transformers PCB Analysis

## Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Client ID: T-8 (RSH0449-08 - Waste)						Sampled: 08/14/09 11:30		Recvd: 08/14/09 13:20		
<b><u>Polychlorinated Biphenyls by EPA Method 8082</u></b>										
Aroclor 1016	ND		1.5	1.5	mg/kg	1.00	08/17/09 14:57	JxM	9H16001	8082
Aroclor 1221	ND		1.5	1.5	mg/kg	1.00	08/17/09 14:57	JxM	9H16001	8082
Aroclor 1232	ND		1.5	1.5	mg/kg	1.00	08/17/09 14:57	JxM	9H16001	8082
Aroclor 1242	ND		1.5	1.5	mg/kg	1.00	08/17/09 14:57	JxM	9H16001	8082
Aroclor 1248	ND		1.5	1.5	mg/kg	1.00	08/17/09 14:57	JxM	9H16001	8082
Aroclor 1254	ND		1.5	1.5	mg/kg	1.00	08/17/09 14:57	JxM	9H16001	8082
Aroclor 1260	ND		1.5	1.5	mg/kg	1.00	08/17/09 14:57	JxM	9H16001	8082
Aroclor 1262	ND		1.5	1.5	mg/kg	1.00	08/17/09 14:57	JxM	9H16001	8082
Aroclor 1268	ND		1.5	1.5	mg/kg	1.00	08/17/09 14:57	JxM	9H16001	8082
Decachlorobiphenyl	96 %		Surr Limits: (34-148%)				08/17/09 14:57	JxM	9H16001	8082
Tetrachloro-m-xylene	76 %		Surr Limits: (35-134%)				08/17/09 14:57	JxM	9H16001	8082

MS Analytical  
4169 Allendale Parkway, Suite 200  
Blasdale, NY 14219

SDG Number: RSH0425

Received: 08/14/09  
Reported: 08/24/09 16:49

Project: Remington Rand Transformers PCB Analysis  
Project Number: Remington Rand Transformers PCB Analysis

## Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Client ID: T-9 (RSH0449-09 - Waste)						Sampled: 08/14/09 11:40		Recvd: 08/14/09 13:20		
<b><u>Polychlorinated Biphenyls by EPA Method 8082</u></b>										
Aroclor 1016	ND	D08	1.5	1.5	mg/kg	1.00	08/17/09 15:12	JxM	9H16001	8082
Aroclor 1221	ND	D08	1.5	1.5	mg/kg	1.00	08/17/09 15:12	JxM	9H16001	8082
Aroclor 1232	ND	D08	1.5	1.5	mg/kg	1.00	08/17/09 15:12	JxM	9H16001	8082
Aroclor 1242	ND	D08	1.5	1.5	mg/kg	1.00	08/17/09 15:12	JxM	9H16001	8082
Aroclor 1248	ND	D08	1.5	1.5	mg/kg	1.00	08/17/09 15:12	JxM	9H16001	8082
Aroclor 1254	ND	D08	1.5	1.5	mg/kg	1.00	08/17/09 15:12	JxM	9H16001	8082
Aroclor 1260	ND	D08	1.5	1.5	mg/kg	1.00	08/17/09 15:12	JxM	9H16001	8082
Aroclor 1262	ND	D08	1.5	1.5	mg/kg	1.00	08/17/09 15:12	JxM	9H16001	8082
Aroclor 1268	ND	D08	1.5	1.5	mg/kg	1.00	08/17/09 15:12	JxM	9H16001	8082
Decachlorobiphenyl	104 %	D08	Surr Limits: (34-148%)				08/17/09 15:12	JxM	9H16001	8082
Tetrachloro-m-xylene	77 %	D08	Surr Limits: (35-134%)				08/17/09 15:12	JxM	9H16001	8082

MS Analytical  
4169 Allendale Parkway, Suite 200  
Blasdale, NY 14219

SDG Number: RSH0425

Received: 08/14/09

Reported: 08/24/09 16:49

Project: Remington Rand Transformers PCB Analysis

Project Number: Remington Rand Transformers PCB Analysis

## SAMPLE EXTRACTION DATA

Parameter	Batch	Lab Number	Wt/Vol Extracte	Units	Extract Volume	Units	Date Prepared	Lab Tech	Extraction Method
General Chemistry Parameters									
Dry Weight	9H15011	RSH0425-01	10.00	g	10.00	g	08/15/09 11:00	CJM	Dry Weight
Dry Weight	9H15011	RSH0425-02	10.00	g	10.00	g	08/15/09 11:00	CJM	Dry Weight
Polychlorinated Biphenyls by EPA Method 8082									
8082	9H17035	RSH0425-02	30.14	g	10.00	mL	08/18/09 08:00	BML	3550B GC
8082	9H17035	RSH0425-01	30.18	g	10.00	mL	08/18/09 08:00	BML	3550B GC

## SAMPLE EXTRACTION DATA

Parameter	Batch	Lab Number	Wt/Vol Extracte	Units	Extract Volume	Units	Date Prepared	Lab Tech	Extraction Method
Polychlorinated Biphenyls by EPA Method 8082									
8082	9H16001	RSH0449-02	0.13	g	10.00	mL	08/17/09 09:00	CXM	3580A
8082	9H16001	RSH0449-07	0.14	g	10.00	mL	08/17/09 09:00	CXM	3580A
8082	9H16001	RSH0449-03	0.15	g	10.00	mL	08/17/09 09:00	CXM	3580A
8082	9H16001	RSH0449-04	0.15	g	10.00	mL	08/17/09 09:00	CXM	3580A
8082	9H16001	RSH0449-06	0.15	g	10.00	mL	08/17/09 09:00	CXM	3580A
8082	9H16001	RSH0449-10	0.15	g	10.00	mL	08/17/09 09:00	CXM	3580A
8082	9H16001	RSH0449-01	0.16	g	10.00	mL	08/17/09 09:00	CXM	3580A
8082	9H16001	RSH0449-05	0.16	g	10.00	mL	08/17/09 09:00	CXM	3580A
8082	9H16001	RSH0449-08	0.17	g	10.00	mL	08/17/09 09:00	CXM	3580A
8082	9H16001	RSH0449-09	0.17	g	10.00	mL	08/17/09 09:00	CXM	3580A
8082	9H16001	RSH0449-11	0.17	g	10.00	mL	08/17/09 09:00	CXM	3580A
8082	9H16001	RSH0449-12	0.19	g	10.00	mL	08/17/09 09:00	CXM	3580A

MS Analytical  
4169 Allendale Parkway, Suite 200  
Blasdale, NY 14219

SDG Number: RSH0425

Received: 08/14/09  
Reported: 08/24/09 16:49

Project: Remington Rand Transformers PCB Analysis  
Project Number: Remington Rand Transformers PCB Analysis

## LABORATORY QC DATA

Analyte	Source Result	Spike Level	RL	MDL	Units	Result	% REC	% REC Limits	% RPD	RPD Limit	Data Qualifiers
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### Polychlorinated Biphenyls by EPA Method 8082

#### Blank Analyzed: 08/17/09 (Lab Number:9H16001-BLK1, Batch: 9H16001)

Aroclor 1016			2.5	2.5	mg/kg	ND					
Aroclor 1221			2.5	2.5	mg/kg	ND					
Aroclor 1232			2.5	2.5	mg/kg	ND					
Aroclor 1242			2.5	2.5	mg/kg	ND					
Aroclor 1248			2.5	2.5	mg/kg	ND					
Aroclor 1254			2.5	2.5	mg/kg	ND					
Aroclor 1260			2.5	2.5	mg/kg	ND					
Aroclor 1262			2.5	2.5	mg/kg	ND					
Aroclor 1268			2.5	2.5	mg/kg	ND					

Surrogate: Decachlorobiphenyl					mg/kg		125	34-148			
Surrogate: Tetrachloro-m-xylene					mg/kg		108	35-134			

#### LCS Analyzed: 08/17/09 (Lab Number:9H16001-BS1, Batch: 9H16001)

Aroclor 1016	50		2.5	2.5	mg/kg	60.0	120	59-154			
Aroclor 1260	50		2.5	2.5	mg/kg	74.2	148	51-179			

Surrogate: Decachlorobiphenyl					mg/kg		142	34-148			
Surrogate: Tetrachloro-m-xylene					mg/kg		135	35-134			Z5

#### LCS Dup Analyzed: 08/17/09 (Lab Number:9H16001-BSD1, Batch: 9H16001)

Aroclor 1016	50		2.5	2.5	mg/kg	57.9	116	59-154	4	50	
Aroclor 1260	50		2.5	2.5	mg/kg	72.0	144	51-179	3	50	

Surrogate: Decachlorobiphenyl					mg/kg		139	34-148			
Surrogate: Tetrachloro-m-xylene					mg/kg		130	35-134			

### Polychlorinated Biphenyls by EPA Method 8082

#### Blank Analyzed: 08/19/09 (Lab Number:9H17035-BLK1, Batch: 9H17035)

Aroclor 1016			0.016	0.0032	mg/kg wet	ND					QSU
Aroclor 1221			0.016	0.0032	mg/kg wet	ND					QSU
Aroclor 1232			0.016	0.0032	mg/kg wet	ND					QSU
Aroclor 1242			0.016	0.0035	mg/kg wet	ND					QSU
Aroclor 1248			0.016	0.0032	mg/kg wet	ND					QSU
Aroclor 1254			0.016	0.0034	mg/kg wet	ND					QSU
Aroclor 1260			0.016	0.0034	mg/kg wet	ND					QSU
Aroclor 1262			0.016	0.0034	mg/kg wet	ND					QSU

TestAmerica Buffalo

10 Hazelwood Drive Amherst, NY 14228 tel 716-691-2600 fax 716-691-7991

www.testamericainc.com

MS Analytical  
4169 Allendale Parkway, Suite 200  
Blasdale, NY 14219

SDG Number: RSH0425

Received: 08/14/09  
Reported: 08/24/09 16:49

Project: Remington Rand Transformers PCB Analysis  
Project Number: Remington Rand Transformers PCB Analysis

## LABORATORY QC DATA

Analyte	Source Result	Spike Level	RL	MDL	Units	Result	% REC	% REC Limits	% RPD	RPD Limit	Data Qualifiers
<b>Polychlorinated Biphenyls by EPA Method 8082</b>											
<b>Blank Analyzed: 08/19/09 (Lab Number:9H17035-BLK1, Batch: 9H17035)</b>											
Aroclor 1268			0.016	0.0034	mg/kg wet	ND					QSU
Surrogate: Decachlorobiphenyl					mg/kg wet		106	34-148			QSU
Surrogate: Tetrachloro-m-xylene					mg/kg wet		82	35-134			QSU
<b>LCS Analyzed: 08/19/09 (Lab Number:9H17035-BS1, Batch: 9H17035)</b>											
Aroclor 1016		0.16	0.016	0.0032	mg/kg wet	0.125	77	59-154			QSU
Aroclor 1221			0.016	0.0032	mg/kg wet	ND		0-200			QSU
Aroclor 1232			0.016	0.0032	mg/kg wet	ND		0-200			QSU
Aroclor 1242			0.016	0.0035	mg/kg wet	ND		0-200			QSU
Aroclor 1248			0.016	0.0032	mg/kg wet	ND		0-200			QSU
Aroclor 1254			0.016	0.0034	mg/kg wet	ND		0-200			QSU
Aroclor 1260		0.16	0.016	0.0034	mg/kg wet	0.164	101	51-179			QSU
Aroclor 1262			0.016	0.0035	mg/kg wet	ND		0-200			QSU
Aroclor 1268			0.016	0.0034	mg/kg wet	ND		0-200			QSU
Surrogate: Decachlorobiphenyl					mg/kg wet		100	34-148			QSU
Surrogate: Tetrachloro-m-xylene					mg/kg wet		78	35-134			QSU
<b>LCS Dup Analyzed: 08/19/09 (Lab Number:9H17035-BSD1, Batch: 9H17035)</b>											
Aroclor 1016		0.17	0.017	0.0032	mg/kg wet	0.150	91	59-154	18	50	QSU
Aroclor 1221			0.017	0.0032	mg/kg wet	ND		0-200		200	QSU
Aroclor 1232			0.017	0.0032	mg/kg wet	ND		0-200		200	QSU
Aroclor 1242			0.017	0.0036	mg/kg wet	ND		0-200		200	QSU
Aroclor 1248			0.017	0.0032	mg/kg wet	ND		0-200		200	QSU
Aroclor 1254			0.017	0.0035	mg/kg wet	ND		0-200		200	QSU
Aroclor 1260		0.17	0.017	0.0035	mg/kg wet	0.187	113	51-179	13	50	QSU
Aroclor 1262			0.017	0.0035	mg/kg wet	ND		0-200		200	QSU
Aroclor 1268			0.017	0.0035	mg/kg wet	ND		0-200		200	QSU
Surrogate: Decachlorobiphenyl					mg/kg wet		106	34-148			QSU
Surrogate: Tetrachloro-m-xylene					mg/kg wet		90	35-134			QSU

# Chain of Custody Record

Temperature on Receipt \_\_\_\_\_

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TAL-412a (1007)

Client <b>MS Analytical, LLC</b>	Project Manager <b>Bryan Mayback</b>	Date <b>8/14/09</b>	Chain of Custody Number <b>160746</b>
Address <b>4169 Allendale Parkway</b>	Telephone Number (Area Code)/Fax Number	Lab Number	Page _____ of _____

City <b>Bklyn</b>	State <b>NY</b>	Zip Code <b>11219</b>	Site Contact	Lab Contact	Analysis (Attach list if more space is needed)
Project Name and Location (State) <b>Historic Remington Road Facility North Tonawanda, NY</b>			Carrier/Waybill Number		

Contract/Purchase Order/Quote No. <b>Project # 09MS123</b>	Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix				Containers & Preservatives								Special Instructions/ Conditions of Receipt	
				Air	Acidic	Soil	Slur	Urease	ASD/DA	ANES	ACI	NOCH	ZnO	AlOH			
	SC-T1	8/14/09	1020				X	X									
	SC-T2		1035				X	X									
	SC-T3		1050				X	X									
	SC-T4		1100				X	X									
	SC-T5		1110				X	X									
	SC-T6		1120				X	X									
	SC-T7		1130				X	X									
	SC-T8		1140				X	X									
	SC-T9		1150				X	X									
	SC-T10		1200				X	X									
	S-T10		1210				X	X									

Possible Hazard Identification	Sample Disposal	(A fee may be assessed if samples are retained longer than 1 month)
<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Solid Inert <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown	<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months	

Turn Around Time Required	QC Requirements (Specify)
<input type="checkbox"/> 24 Hours <input type="checkbox"/> 48 Hours <input type="checkbox"/> 7 Days <input type="checkbox"/> 14 Days <input type="checkbox"/> 21 Days <input type="checkbox"/> Other _____	

1. Relinquished By <b>Bryan Mayback (Mayback)</b>	Date <b>8/14/09</b>	Time <b>1250</b>	1. Received By <b>[Signature]</b>	Date <b>8-14-09</b>	Time <b>1250</b>
2. Relinquished By <b>[Signature]</b>	Date <b>8-14-09</b>	Time <b>17:10</b>	2. Received By <b>[Signature]</b>	Date <b>8-14-09</b>	Time <b>1710</b>
3. Relinquished By	Date	Time	3. Received By	Date	Time

Comments: **Please Analyze SC-T10 + S-T10, place the rest on Hold**

DISTRIBUTION: WHITE - Returned to Client with Report. CANARY - Stays with the Sample. PINK - Field Copy



# Chain of Custody Record

Temperature on Receipt \_\_\_\_\_

Drinking Water? Yes ☐ No ☐

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

1AL-4124 (1007)

Client <b>MS ANALYTICAL LLC</b>		Project Manager <b>PM</b>		Date <b>8-14-09</b>	Chain of Custody Number <b>161254</b>
Address <b>184 SWEENEY ST</b>		Telephone Number (Area Code)/Fax Number		Lab Number	Page <b>1</b> of <b>2</b>

City <b>N. TONAWANDA</b>	State	Zip Code	Site Contact	Lab Contact	Analysis (Attach list if more space is needed)
-----------------------------	-------	----------	--------------	-------------	--

Project Name and Location (State) <b>REMINGTON RAND BLDG.</b>	Carrier/Waybill Number	Special Instructions/ Conditions of Receipt
--	------------------------	--

Contract/Purchase Order/Quote No.			Matrix					Containers & Preservatives								PCB					Conditions of Receipt						
Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Air	Aqueous	Soil	SW	D/L	Urea	MSO4	PHOS	NO3	NO2	NO	CO	CH4							OTHER					
T-1	8-14-09	1010					X	X										1									
T-2		1020																1									
T-3		1030																1									
T-4		1040																1									
T-5		1050																1									
T-6		1100																1									
T-7		1120																1									
T-8		1130																1									
T-9		1140																1									
T-10		1215																1									
C-1 COMP		1200																1									
C-2	✓	1150						✓	✓									1									

Possible Hazard Identification	Sample Disposal	(A fee may be assessed if samples are retained longer than 1 month)
<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown	<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months	

Turn Around Time Required	QC Requirements (Specify)
<input type="checkbox"/> 24 Hours <input type="checkbox"/> 48 Hours <input type="checkbox"/> 7 Days <input type="checkbox"/> 14 Days <input type="checkbox"/> 21 Days <input type="checkbox"/> Other _____	

1. Relinquished By 	Date <b>8-14-09</b>	Time <b>1320</b>	1. Received By 	Date <b>8/14/09</b>	Time <b>1320</b>
2. Relinquished By 	Date	Time	2. Received By	Date	Time
3. Relinquished By	Date	Time	3. Received By	Date	Time

Comments

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

**25.1** No ice

## APPENDIX E

### NYSDOH Soil Vapor/Indoor Air Matrices

# Soil Vapor/Indoor Air Matrix 1

October 2006

SUB-SLAB VAPOR CONCENTRATION of COMPOUND (mcg/m <sup>3</sup> )	INDOOR AIR CONCENTRATION of COMPOUND (mcg/m <sup>3</sup> )			
	< 0.25	0.25 to < 1	1 to < 5.0	5.0 and above
< 5	1. No further action	2. Take reasonable and practical actions to identify source(s) and reduce exposures	3. Take reasonable and practical actions to identify source(s) and reduce exposures	4. Take reasonable and practical actions to identify source(s) and reduce exposures
5 to < 50	5. No further action	6. MONITOR	7. MONITOR	8. MITIGATE
50 to < 250	9. MONITOR	10. MONITOR / MITIGATE	11. MITIGATE	12. MITIGATE
250 and above	13. MITIGATE	14. MITIGATE	15. MITIGATE	16. MITIGATE

## No further action:

Given that the compound was not detected in the indoor air sample and that the concentration detected in the sub-slab vapor sample is not expected to significantly affect indoor air quality, no additional actions are needed to address human exposures.

## Take reasonable and practical actions to identify source(s) and reduce exposures:

The concentration detected in the indoor air sample is likely due to indoor and/or outdoor sources rather than soil vapor intrusion given the concentration detected in the sub-slab vapor sample. Therefore, steps should be taken to identify potential source(s) and to reduce exposures accordingly (e.g., by keeping containers tightly capped or by storing volatile organic compound-containing products in places where people do not spend much time, such as a garage or outdoor shed). Resampling may be recommended to demonstrate the effectiveness of actions taken to reduce exposures.

## MONITOR:

Monitoring, including sub-slab vapor, basement air, lowest occupied living space air, and outdoor air sampling, is needed to determine whether concentrations in the indoor air or sub-slab vapor have changed. Monitoring may also be needed to determine whether existing building conditions (e.g., positive pressure heating, ventilation and air-conditioning systems) are maintaining the desired mitigation endpoint and to determine whether changes are needed. The type and frequency of monitoring is determined on a site-specific and building-specific basis, taking into account applicable environmental data and building operating conditions. Monitoring is an interim measure required to evaluate exposures related to soil vapor intrusion until contaminated environmental media are remediated.

## MITIGATE:

Mitigation is needed to minimize current or potential exposures associated with soil vapor intrusion. The most common mitigation methods are sealing preferential pathways in conjunction with installing a sub-slab depressurization system, and changing the pressurization of the building in conjunction with monitoring. The type, or combination of types, of mitigation is determined on a building-specific basis, taking into account building construction and operating conditions. Mitigation is considered a temporary measure implemented to address exposures related to soil vapor intrusion until contaminated environmental media are remediated.

## MONITOR / MITIGATE:

Monitoring or mitigation may be recommended after considering the magnitude of sub-slab vapor and indoor air concentrations along with building- and site- specific conditions.

## Soil Vapor/Indoor Air Matrix 2

October 2006

SUB-SLAB VAPOR CONCENTRATION of COMPOUND (mcg/m <sup>3</sup> )	INDOOR AIR CONCENTRATION of COMPOUND (mcg/m <sup>3</sup> )			
	< 3	3 to < 30	30 to < 100	100 and above
< 100	1. No further action	2. Take reasonable and practical actions to identify source(s) and reduce exposures	3. Take reasonable and practical actions to identify source(s) and reduce exposures	4. Take reasonable and practical actions to identify source(s) and reduce exposures
100 to < 1,000	5. MONITOR	6. MONITOR / MITIGATE	7. MITIGATE	8. MITIGATE
1,000 and above	9. MITIGATE	10. MITIGATE	11. MITIGATE	12. MITIGATE

### No further action:

Given that the compound was not detected in the indoor air sample and that the concentration detected in the sub-slab vapor sample is not expected to significantly affect indoor air quality, no additional actions are needed to address human exposures.

### Take reasonable and practical actions to identify source(s) and reduce exposures:

The concentration detected in the indoor air sample is likely due to indoor and/or outdoor sources rather than soil vapor intrusion given the concentration detected in the sub-slab vapor sample. Therefore, steps should be taken to identify potential source(s) and to reduce exposures accordingly (e.g., by keeping containers tightly capped or by storing volatile organic compound-containing products in places where people do not spend much time, such as a garage or outdoor shed). Resampling may be recommended to demonstrate the effectiveness of actions taken to reduce exposures.

### MONITOR:

Monitoring, including sub-slab vapor, basement air, lowest occupied living space air, and outdoor air sampling, is needed to determine whether concentrations in the indoor air or sub-slab vapor have changed. Monitoring may also be needed to determine whether existing building conditions (e.g., positive pressure heating, ventilation and air-conditioning systems) are maintaining the desired mitigation endpoint and to determine whether changes are needed. The type and frequency of monitoring is determined on a site-specific and building-specific basis, taking into account applicable environmental data and building operating conditions. Monitoring is an interim measure required to evaluate exposures related to soil vapor intrusion until contaminated environmental media are remediated.

### MITIGATE:

Mitigation is needed to minimize current or potential exposures associated with soil vapor intrusion. The most common mitigation methods are sealing preferential pathways in conjunction with installing a sub-slab depressurization system, and changing the pressurization of the building in conjunction with monitoring. The type, or combination of types, of mitigation is determined on a building-specific basis, taking into account building construction and operating conditions. Mitigation is considered a temporary measure implemented to address exposures related to soil vapor intrusion until contaminated environmental media are remediated.

### MONITOR / MITIGATE:

Monitoring or mitigation may be recommended after considering the magnitude of sub-slab vapor and indoor air concentrations along with building- and site- specific conditions.