CORNERSTONE ENTERPRISES, INCORPORATED

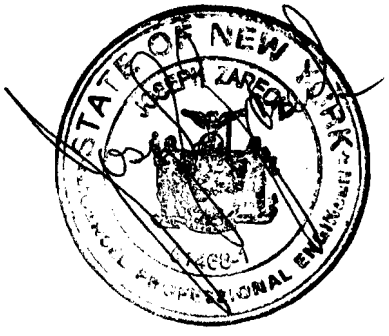
DUTCHESS COUNTY, NEW YORK

REMEDIAL INVESTIGATION WORK PLAN

NYSDEC SPILL #90-12530
NYSDEC BCP SITE #C314116

Prepared For:

NYSDEC Region 3
21 South Putt Corners Road
New Paltz, New York 12561



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I, Joseph Zarecki, PE, certify that I am currently a New York State Professional Engineer as defined in 6 NYCRR Part 375, and that this Report was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the DER Technical Guidance for Site Investigation and Remediation (DER 10).

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1.0 INTRODUCTION

This Report has been prepared to complete the Remedial Investigation Work Plan for Cornerstone Enterprises, Incorporated (BCP # C314116) originally prepared by Conrad Geoscience Corporation of Poughkeepsie, New York (see Appendix A). The intent of this document is to provide a scope of work and a plan to implement the work necessary to satisfactorily complete the requirements for an acceptable final Remedial Investigation Report.

This Report document is being completed based on information obtained and in conjunction with the previously submitted Remedial Investigation Work Plan; prepared by Conrad Geoscience Corporation, dated July 2007 (see Appendix A). The intended goal of the remediation is to achieve Restricted Residential soil clean-up objectives as defined in 6NYCRR Part 375 Environmental Remediation Programs.

2.0 BACKGROUND AND SITE DESCRIPTION

Cornerstone Enterprises, Incorporated entered into a Brownfield Cleanup agreement (BCP) with the New York State Department of Conservation (NYSDEC) in January 2007, to investigate and remediate a 0.19-acre property located in the Village of Pawling, Dutchess County, New York. The soil clean-up objectives of the remediation are to achieve the requirements for Restricted Residential Use.

Since the submission of the July 2007 Conrad Geoscience Corporation Remedial Investigation Work Plan, additional work has been conducted on the site and identified in the *Draft* Remedial Investigation and Interim Remedial Measure Report, prepared and submitted in June 2008 by Conrad Geoscience Corporation. During the Remedial Investigations, soil borings in the vicinity of two (2) known UST's indicated that a petroleum release had occurred. Soil in the area of the floor drain outfall and surface soil samples collected all indicated that the site had been impacted from previous on-site activities. Groundwater samples were also collected indicating a potential impact to the groundwater due to contaminants.

Upon the verification of a petroleum release, Interim Remedial Measure(s) were implemented to eliminate the known source of groundwater contamination. Based on information obtained during the Remedial Investigation the two (2) known UST's were vented, cleaned and removed. During the removal of the two (2) known tanks, two (2) additional tanks were discovered and removed following the approved protocol for tank removal. The tank removals were performed from April 16, 2008 to April 17, 2008. Tank registration documents were prepared in accordance with 6NYCRR Part 612-614 re-registering these tanks as "Closed-Removed." Contaminated soil was removed in the period from April 16, 2008 to May 1, 2008 and contaminated groundwater was removed on April 17, 2008 and May 5, 2008. The excavation was then backfilled on May 15, 2008. On May 14, 2008, contaminated soil at the floor drain discharge at the rear of the building was removed to approximately three (3) feet below finished grade and one (1) foot below groundwater. Groundwater

was removed on May 14, 2008 and the excavation backfilled on May 15, 2008. Post-excavation samples were obtained prior to the backfilling of the excavations; results are included in the DRAFT Remedial Investigation and Interim Remedial Measure Report, prepared by Conrad Geoscience Corporation, dated June 2008.

On the southeast side of the property, in the area identified as the former ramp, previous remedial work included the removal of approximately 1-foot of the existing surface layer of earth material, to date no backfill material has been placed in this area to replace the 1-foot of material removed. Post excavation samples were obtained immediately after the excavation and results are included in the DRAFT Remedial Investigation and Interim Remedial Measure Report, prepared by Conrad Geosciences Corporation, dated June 2008.

3.0 OBJECTIVES

The following is a summary of this Report to the Remedial Investigation Work Plan:

- Conduct soil sampling at various locations on the site to determine overall condition of the soil contamination and identify areas requiring additional remediation.
- Conduct groundwater sampling, determine depth to groundwater from a set benchmark, determine groundwater flow within the soil, identify and plot contaminant plume within the groundwater. Additionally, determine if groundwater discharges into the stream along the eastern site boundary and assess the contaminant loading to the stream, results shall be considered in the offsite exposure assessment.
- Collect and test sediment samples at four (4) locations within the adjacent stream, downstream of site, adjacent to site and upstream of site to determine if stream sediment has been contaminated.
- Collect samples from the previously installed backfill material to confirm fill material is free of contaminants and, at minimum, must meet the Restricted Residential Soil Cleanup Objectives (SCO's) in Section 6.8 of 6 NYCRR Part 375.
- Review of the stream sediment sample results shall be conducted to determine whether there have been impacts in the adjacent stream. The sediment testing results shall be compared to the site data to determine if any potential contaminants are found within the stream sediments. If no potential contaminants are identified, no further offsite characterization shall be conducted. However, if the occurrence of similar contaminants is found within the stream sedimentation a Fish and Wildlife Impact Resources Assessment Part 1 shall be conducted. A Fish and Wildlife Resources Impact Assessment Part 1: Resource Characterization would identify actual or potential impacts to fish and wildlife resources from site contaminants of ecological concern.

- Conduct an evaluation of the potential for soil vapor intrusion for the site. This evaluation shall include soil vapor samples, sub-slab vapor samples, indoor air samples and outdoor air samples.

4.0 FIELD ACTIVITIES PLAN

4.1 TASK 1: Subsurface Investigation

4.1.1 Subsurface Soil Sampling

Previous subsurface work performed on the site identified tank locations and additional areas of contamination on the site. Based on the sampling results four (4) UST's were identified and removed, including the removal of approximately 820 tons of soil from the tank and fuel island areas. Approximately 70 tons of soil was removed from the floor drain outfall area at the rear of the building. Once the contaminated soil had been removed to the extent planned for the interim remedial measure (IRM), soil samples were obtained from the side walls and floor of the excavations; the locations and results can be found in the Remedial Investigation and Interim Remedial Measure Report, prepared by Conrad Geoscience Corporation, dated June 2008 (see Appendix A).

Since the submission of the DRAFT Remedial Investigation and Interim Remedial Measure Report in June 2008, it has been identified that the samples originally obtained were incomplete and inconclusive for accurate determinations. Samples will be collected for the full Target Compound List/Target Analyte List (TCL/TAL)+30 Tentatively Identified Compounds (TIC). Analysis must include all contaminants listed at Part 375-6.8, including volatile organic compounds (VOC), semi-volatile organic compounds (SVOC), inorganics (metals and cyanide), polychlorinated biphenyls (PCBs) and pesticides.

The bulk of the soil from the interior of the site has been removed and replaced, in addition to soil boring the import fill to obtain samples, two (2) of the borings, as identified in Appendix C, Figure 1, shall extend below the imported fill. The two (2) soil samples obtained shall be from the existing material in the area from 0 –6" below the imported fill.

All soil borings will be collected prior to the collection of groundwater samples and shall be conducted in accordance with the NYSDEC/USEPA protocols and will be sampled continuously from the ground surface to the depth of 20 feet below grade or to refusal, or to a depth necessary so as to fully delineate the extent of contamination. Should any boring encounter refusal prior to attaining a depth necessary to fully delineate the extent of contamination, the boring

shall be relocated to allow for the proper horizontal and vertical delineation of soil contamination down to the water table. Soil borings will be placed to identify the horizontal and vertical extent of the contamination onsite and to better assess the concentrations of the contaminant within the soil. Two (2) soil borings shall be installed just south of the gasoline underground storage tank excavation area; soil cores must be logged as defined in this section. If impacted soils are encountered, a sample must be collected for laboratory analysis for the parameters defined above and additional soil boring shall be installed to delineate the extent of the contamination onsite.

Site soil borings are to be completed using a track mounted Geoprobe$_{TM}$ unit equipped with a 5-foot long 1.75-inch diameter core barrels fitted with acetate liners. Undisturbed soil samples will be collected continuously in discrete 2-foot increments and will be screened in the field; the sample increment registering the highest field measurement reading will be collected and analyzed for contaminants. If the designated sampling point is within the saturated zone, a sample of the saturated soil will be collected when sample recovery is possible.

A detailed log for each core (samples will not need to be collected from SB7 and SB8 for laboratory analysis unless an impact is noted) will utilize the soil description procedure as described in the New York State Department of Transportation (NYSDOT) Soil Mechanics Bureau STP-2, dated April 2007, as amended. The logs will include lithology, grain size, stratigraphic changes, color, occurrence of sheens or non-aqueous phase liquids (NAPLs), and the occurrence of groundwater. Each soil core sample will be screened for volatile organic compounds (VOCs) using a properly calibrated photoionization detector (PID) and headspace techniques; readings will be recorded. Soil cores that are visibly contaminated, have obvious petroleum odors, or have elevated PID readings in excess of 50 ppb, will not be placed back into the soil. Contaminated cores will be placed in 55-gallon drums and held on site pending the contaminant characterization and offsite disposal. "Clean" soil cores will be used to backfill the boring from which they came. A minimum of one (1) sample from each boring will be collected and submitted to a NYSDOH approved laboratory for analysis of the full Target Compound List/Target Analyte List (TCL/TAL)+30 Tentatively Identified Compounds (TIC). Analysis must include all contaminants listed at Part 375-6.8, including volatile organic compounds (VOC), semi-volatile organic compounds (SVOC), inorganics (metals and cyanide), polychlorinated biphenyls (PCBs) and pesticides in effect as of the date the laboratory is performing the analysis.

4.1.2 Groundwater Sampling

Groundwater sampling will be collected from up to 11 locations using groundwater sampling tools, and will include the installation of six (6) new permanent monitoring wells. Five (5) existing groundwater sampling wells

remain in the area of the site from previous site testing. Two (2) from the subject property and three (3) from the adjacent property, these wells shall also be sampled if access is possible and well condition is viable. The sampling locations, as shown in Appendix A, Figure 1, are to be placed as shown along the southeast property boundary and along the existing building structure. All wells are to be sampled (see Well Development) upon installation of the additional required wells. All of the proposed groundwater wells are to remain in place for the use in monitoring and/or an air sparging/vapor extraction remediation process. Locations for the groundwater sampling wells were chosen to evaluate the potential for site related contaminants to impact adjacent properties and to develop a groundwater contour map to identify the extent of an existing plume of contaminants on the site. Additionally, the depth to and elevation of groundwater and flow direction will be determined.

Soil borings will be collected prior to the collection of the groundwater, they will be screened in the field using a PID and headspace techniques. In the locations, as shown on Figure 1, permanent monitoring/sampling wells are proposed to be installed and are to remain in place for future use in monitoring of the site.

4.1.3 Well Installation

The methodology for the development of the groundwater monitoring wells shall employ a Geoprobe machine to drive soil-probing equipment into the subsurface. The machine will drive steel probe rods (with inner diameter openings) into the ground, which will collectively serve as protective casing through which well screens and risers are installed. The sampler uses the correct number of probes based on the desired well depth for a groundwater sampling event. Next, the sampler inserts pre-connected PVC screens/risers, or another monitoring device, into the inner opening of the probe rods, (ensuring the well riser is sufficiently above the ground when well casing is removed). After retracting the probe rods and grouting the surrounding hole, the sampler may use the well for groundwater monitoring purposes.

The groundwater monitoring well construction shall consist of a 2" diameter schedule 40 PVC well riser, and 10 feet of schedule 40 PVC with 0.020 inch slot size well screen. The well screen shall be installed approximately seven (7) feet below groundwater. Upon placement of the well riser and well screen the space around the well screen shall be filled with sand, from the bottom of the well to approximately one (1) foot above the screen, to serve as a filter pack. A minimum of one (1) foot of a bentonite seal shall be placed in the annular space above the sand layer. The remaining annular space above the bentonite shall be grouted to within one (1) foot of the ground surface. The well shall be completed with a minimum of 2 – 3 feet riser sticking above the grade, and each well shall have a locking steel protective casing installed.

Each well shall be surveyed to identify a set point on each well for determining the depth to the groundwater and the direction of groundwater flow.

An electronic water level detector, capable of measuring to 0.01-foot accuracy and detecting non-aqueous phase liquids (NAPLs), shall be used for the measurement of the water level within the well. For consistency it is suggested that a measurement point is established on each well, typically depth measurement should be taken from the highest point of the inner well casing. These measurement points should also be located with respect to a set benchmark on the property to provide a consistent working point and allow for a determination of the water levels throughout the site relative to the same point elevation. If accessible and access obtained, depth to water measurements should be collected from the wells installed on the adjacent property.

4.1.4 Well Development

The method to be used for extraction of the water sample is identified as "Low Stress (low flow) Purging and Sampling" and shall follow the protocol provided in the US EPA Region 1 "Low Stress (low flow) Purging and Sampling for the Collection of Ground Water Samples from Monitoring Wells" Standard Operating Procedure (SOP). This method suggests that the sampling point of the pump intake within the well should be the mid point of the saturated screen length. This point shall be field determined based on the depth of the well screen installation and the water level at the time of sampling. Field parameters must be stabilized prior to sample collection. Development is considered achieved when the indicator field parameters are within the following limits: Turbidity: is less than 50 nephelometric turbitity units (NTUs) for three (3) successive readings or until water quality indicators have stabilized, whichever comes first. The criteria for stabilization should be three (3) successive readings within 10% for pH, temperature and specific conductivity. Existing wells should be redeveloped consistent with these procedures at the same time. Groundwater samples must not be collected until at least one (1) week following well development.

Sampling procedure shall be as follows:

1. A photoioniziation detector (PID) or similar instrument should be used to measure levels of VOCs immediately upon opening the well.
2. Open well and obtain water level measurement, it is recommended that this be performed the day before the sampling is to occur.
3. Check the wells for NAPLs or DNAPLs before the initial sampling round.
4. Install the pump to the specified depth and as described above. Again measure the water level.

5. Purge the well at the pumps lowest speed setting and slowly increase until discharge occurs. Check the water level and adjust the pump speed so little or no water level drawdown occurs (0.3 feet), continue purging until indicator field parameters stabilize.
6. Monitor and record water level every 3 to 5 minutes, or as required, during purging. Record any pumping rate adjustments (time and flow rate). To ensure stabilization of the indicator parameters the pumping rates should be reduced to the minimum capabilities of the pump, if required.
7. During pump start up drawdown may exceed the 0.3 feet target but must recover as pump flow adjustments are made. Purge volume calculations should utilize stabilized drawdown value. Do not allow the water level to fall to the intake level; if static water level is above the well screen do not drop the water level below the top of the screen. The final purge volume must be greater than the stabilized drawdown volume plus the extraction tube. Once the required pumping rate is determined and the indicator parameters are achieved sampling may be conducted.
8. Collection of water samples for laboratory analysis must be collected before water has passed through the flow-through cell. VOC samples should be collected first and placed directly into pre-preserved sample containers. Preservative shall be added according to analytic methods such as EPA SW-846.
9. For subsequent samplings from the same well, obtain water level measurements, and review previous reports and attempt to duplicate the previous sampling event for intake depth and pumping rates.
10. Once samples have been obtained remeasure the water level and measure the depth of the well. Pumping tubing shall be dedicated to the well and left for future sampling, decontaminated, or properly discarded.
11. Secure the well.

All groundwater samples will be submitted to a NYSDOH approved laboratory for analysis the full Target Compound List/Target Analyte List (TCL/TAL)+30 Tentatively Identified Compounds (TIC). Analysis must include all contaminants listed at Part 375-6.8, including volatile organic compounds (VOC), semi-volatile organic compounds (SVOC), inorganics (metals and cyanide), polychlorinated biphenyls (PCBs) and pesticides in effect as of the date the laboratory is performing the analysis.

Water removed from the well during development and purging, must be containerized for proper disposal.

4.1.5 Replacement Fill Sampling

According to previous documentation from the site, approximately 600 cubic yards of fill was delivered to the site to backfill the excavation previously conducted on site. This material has been in place on the site since June of 2008. Based on the estimated volume of material imported to the site two (2) composite samples must be collected for analysis for SVOCs, metals, cyanide, PCBs and pesticides. Each composite shall be comprised of five (5) equally sized sub-samples collected from five (5) distinct locations distributed throughout each half of the volume of the backfill that the samples is intended to characterize. Six (6) grab samples must be collected for analysis of VOCs from six (6) distinct locations distributed throughout the volume of the backfill. Collection of these samples will require that soil borings are done in the previously excavated and backfilled areas. Soil boring shall be logged in accordance with Section 4.1.1. If impacted soil is encountered, a sample must be collected from the impacted interval and analyzed for the full Target Compound List/Target Analyte List (TCL/TAL)+30 Tentatively Identified Compounds (TIC). Analysis must include all contaminants listed at Part 375-6.8, including volatile organic compounds (VOC), semi-volatile organic compounds (SVOC), inorganics (metals and cyanide), polychlorinated biphenyls (PCBs) and pesticides in effect as of the date the laboratory is performing the analysis. The results of this sampling will be determined utilizing the Restricted Residential Soil Cleanup Objectives as identified in Section 6.8 of 6 NYCRR Part 375. It should be further noted that the entire site, excepting the building, is to be covered with an asphalt surface, this shall provide a further increase in the protection of human and environmental health.

4.2 TASK 2: Stream Sediment Sampling

Four (4) stream sediment samples will be collected from upstream, one (1) sample immediately down gradient of the storm drain on East Main Street near the northeast corner of the site, two (2) in vicinity of historic discharges adjacent to the property and retaining wall and one (1) downstream from the site. The NYSDEC Representatives shall identify the two (2) historic discharge locations in the field. Additional sediment samples may be required by the NYSDEC based on field observations and/or sediment data. Previous investigations within the site indicate that the potential for stream sediment contamination is possible. Each sediment sample will be obtained beginning at the downstream point and moving up stream so to avoid the potential to corrupt the downstream samples from upstream points. Samples will be submitted to a NYSDOH approved laboratory for analysis for the full Target Compound List/Target Analyte List (TCL/TAL)+30 Tentatively Identified Compounds (TIC). Analysis must include all contaminants listed at Part 375-6.8, including volatile organic compounds (VOC), semi-volatile organic compounds (SVOC), inorganics (metals and cyanide), polychlorinated biphenyls (PCBs) and pesticides in effect as of the date the laboratory is performing the analysis.

Sediment samples must also be collected for the analysis of Total Organic Carbon (TOC) by the Lloyd Khan Method at each location.

4.3 TASK 3: Soil Vapor Intrusion

To determine the potential for soil vapor intrusion on the site it is necessary to collect several types of samples; soil vapor (gas) samples, sub-slab soil gas samples, crawl space air samples, indoor air samples and outdoor air samples. As identified in the New York State Department of Health's Guidance for Evaluating Soil Vapor Intrusion in the State of New York, dated October 2006, soil vapor samples shall be collected from native or undisturbed soils away from fill material and approximately 10 feet away from the building. Since much of the material from the site has been removed or disturbed this will limit the areas available for soil vapor testing around the building. Additional testing along the perimeter may be conducted, if necessary, to evaluate the potential for offsite vapor contamination. Soil vapor samples shall be collected at a depth comparable to the depth of the foundation footings or at least one (1) foot above the water table in areas where the water table is above the footing elevation.

4.3.1 Sub-Slab Vapor

During colder months, heating systems should be operating to maintain normal indoor air temperatures (ie: 65-75°F) for at least 24 hours prior to and during the scheduled sampling time. Prior to installation of the sub-slab vapor probe, the building floor should be inspected and any penetrations (cracks, floor drains, utility perforations, sumps, etc.) should be noted and recorded. Probes should be installed at locations where the potential for ambient air infiltration via floor penetrations is minimal. Any large cracks should be sealed prior to sampling.

Sub-slab vapor samples shall be collected from the soil or aggregate directly under the building slab. A minimum of one (1) sample shall be collected from a single central location away from building foundation footings. Sub-slab sampling shall not be used for the building portion of earthen floor or unlined crawl space.

Indoor, outdoor and crawl space air sampling shall be conducted concurrently. Indoor air sampling shall include the air within the building including the areas of earthen floors, that is, one (1) sample from within in the basement of the building and one (1) sample from within the crawl space of the building, all taken at a height of approximately three (3) feet above the floor. Outdoor air sampling shall be obtained at a height of approximately three (3) feet above the ground, in locations upwind from the building, and away from any obvious sources of volatile chemicals. One (1) outdoor sample is required when indoor

air and sub-slab sampling in the building is performed. All of these samples shall be obtained simultaneously for this project.

4.3.2 Permanent Set Up for Reuse in the Future

A brass or like threaded tube and coupler must be installed so that the tube extends two (2) inches below the bottom of the slab and so that the coupler is flush with the tope of the slab. The coupler will accept a threaded plug to seal the port when not in use. To install the sample port, a ½ inch diameter hole should be drilled through the concrete floor and ⅛ inch bit should be used to countersink the hole deep enough to accept the coupler so the coupler is flush with the floor. The threaded tube will then be installed in the hole and a bead of permagum or like non-VOC containing sealant should be placed at the bottom of the coupler where it meets the threaded tube to seal the sample port in place, flush with the floor. The annular space around the coupler will then be filled with cement/bentonite to permanently seal the sample port in place. Insert the threaded plug until sampling starts so as not to contaminate the indoor air.

Twenty-four to forty-eight hours later, once the cement/bentonite seal has cured, connect the Teflon tubing to the sampling port, purge 2-3 volumes of sampling train into a tedlar bag via personal air pump at a flow rate which is less than 0.2 Liters/minute (L/min). Use a bucket or shroud to create a helium enriched environment around the sampling port and use the personal air pump to fill a tedlar bag to determine if there is an ambient air leak. Use a real time helium detector to determine if there is helium in the sample. If greater than 10% helium, rehydrate bentonite/reseal the sample port and repeat helium tracer procedure.

Once the sampling ports have been determined to be tight, connect the tubing to a certified clean six (6) liter summa canister with a regulator set at or below 0.2 L/min. The work plan must include the duration over which the samples will be collected.

4.3.3 Indoor Air

Co-locate the indoor air sample with the sub-slab sample. The sample flow rate must be less than 0.2 L/min. The sample(s) must be collected in a certified clean six (6) liter summa canister placed three (3) to five (5) feet off the ground to replicate the breathing zone.

4.3.4 All Samples

Do not let the canister go ambient. Close the regulator if the vacuum drops to –2 inches of mercury. Periodically check the gauge to make sure the regulator

is not faulty (which may be evidenced by large/unequal drops in vacuum level). The following field notes must be recorded and included in the Remedial Investigation Report for each sample.

1. Sample identification
2. Date and time of sample collection
3. Sampling depth (ie: thickness of slab)
4. Volume purged
5. Canister vacuum before and after sample collection
6. Moisture content of the surface/sub-slab sampling zone
7. Chain of custody protocols

Sample locations must be photo documented. All samples must be sent to a NYSDOH Environmental Laboratory Approval Program (ELAP) certified laboratory for TO-15 analysis. All samples must meet one (1) microgram per cubic meter (ug/m^3) method detection limit. Indoor air samples must meet 0.25 ug/m^3 method detection limit for trichloroethene, vinyl chloride and carbon tetrachloride. All analytical results for air/vapor samples must be validated by a third party. If there are any questions regarding soil vapor/air sampling, please call Nathan Walz, the NYSDOH Project Manager, at 1-800-458-1158 extension 27880.

4.3.5 Building Survey

A building survey of the Riley's Garage must be conducted in accordance with the NYSDOH, Section 2.11, Surveys and pre-sampling building preparation, with reference to the NYSDOH Indoor Air Sampling & Analysis Guidance, dated February 1, 2005 (see Appendix B).

A pre-sampling inspection will be performed prior to each sampling event. The inspection will evaluate the type of structure floor layout, air flows and physical condition of the building. This information along with information on sources of potential indoor contamination will be identified will be identified on the building inventory form (see Appendix B).

Items to be included in the building inventory include the following:

1. Construction characteristics, including foundation cracks and utility penetrations or other openings that may serve as preferential pathways for vapor intrusion.
2. Recent renovations or maintenance to the building (ie: fresh paint, new carpet or furniture.
3. Mechanical equipment that can affect pressure gradients (ie: heating systems, clothes dryer or exhaust fans).
4. Use or storage of petroleum products (ie: fuel containers, gasoline operated equipment and unvented kerosene heaters.

5. Recent use of petroleum based finishes or products containing volatile chemicals.

Each room on the floor of the building being tested should be inspected.

The presence and description of odors and portable vapor monitoring equipment reading from a photoionization detector (PID) should be recorded and used to assist in evaluating potential sources. Reading will be taken near products stored or used in the building.

To avoid potential interferences and dilution effects, occupants should make a reasonable effort to avoid the following for 24-hours prior to sampling (see Appendix B):

1. Opening any windows, fireplace dampers, openings or vents.
2. Operating ventilation fans unless special arrangements are made.
3. Smoking in the building.
4. Painting.
5. Using wood stoves, fireplaces or other auxiliary heating equipment (ie: kerosene heaters).
6. Operating or storing automobiles in an attached garage.
7. Allowing containers of gasoline or oil to remain with the building, except for fuel oil tanks
8. Cleaning, waxing or polishing furniture or floors with petroleum or oil based products.
9. Using air fresheners or odor eliminators.
10. Engaging in any hobbies that use materials containing volatile organic chemicals.
11. Using cosmetics, including hairspray, nail polish, nail polish remover, perfume/cologne, etc.
12. Applying pesticides.

4.3.6 Product Inventory

The primary objective of the product inventory is to identify potential air sampling interference by characterizing the occurrence and use of chemicals and products throughout the building.

The inventory will be provided for each room in the building. The presence and description of odors and portable photoionization detector (PID) readings will be noted and used to help evaluate potential sources.

Products in the building will be inventoried every time air is tested to provide an accurate assessment of the potential contribution of volatile chemicals.

Any and all products will be documented and photographed the labels including the ingredients

4.4 TASK 4: FISH AND WILDLIFE RESOURCES IMPACT ANALYSIS

Review of the stream sediment sample results shall be conducted to determine whether there have been impacts in the adjacent stream. Sediment data must be compared to all site data to determine if the site has impacted the stream. If no potential contaminants are identified no further offsite characterization shall be conducted. If the Remedial Investigation shows that the site is impacting or has impacted the sediment quality a Fish and Wildlife Resources Impact Assessment Part 1 shall be conducted. A Fish and Wildlife Resources Impact Assessment (FWRIA) Part 1: Resource Characterization would identify actual or potential impacts to fish and wildlife resources from site contaminants of ecological concern.

The FWRIA, if necessary, shall include only Part 1 and include as follows:

Part 1: Resource Characterization shall be conducted as indicated in Sections 3.10(c)(1) through 3.10(c)(5) and shall consist of five (5) steps conducted by a qualified biologist, ecologist or other professional experienced in habitat assessment and assessment of contaminant impacts. The five (5) steps shall include:

1. Identify fish and wildlife resources based upon knowledge of the site and a search of NYSDEC records and/or other resources. Any resources identified shall be indicated on a site map. If no resources are identified on the site, adjacent to, or down gradient from the site or area of concern, no further work on the FWRIA is required.
2. Identify contaminant migration pathways and any fish or wildlife exposure pathways. If no pathways are identified, no further work on the FWRIA is required.
3. Describe the resources on the site and within one-half mile of the site.
4. Identify contaminants of ecological concern as defined in Section 1.3 of DER-10.
5. Based on the resources and pathways identified and the toxicity of the contaminants of ecological concern, draw conclusions regarding actual or potential adverse impacts to fish and wildlife resources. If actual or potential impacts are identified a FWRIA Part 2: Ecological Impact Assessment should be conducted in accordance with Section 3.10.2.

The results obtained from the FWRIA Part 1, as defined in the DER-10 Section 3.10.1, study will determine the need to further conduct the Part 2 of the FWRIA. If this is deemed necessary a Work Plan for the FWRIA Part 2, as defined in DER-10 Section 3.10.2, will be provided with the submission of the Remedial Investigation Report.

4.5 TASK 5: INVESTIGATION REPORTING

Upon receipt of laboratory reports, the Final Remediation Investigation Report will be prepared. This final report format and content shall be consistent with Section 3.14 of DER-10 and will address the following:

- Identify and characterize the source(s) of contamination
- Describe the amount, concentration, environmental fate and transport (as necessary), phase (e.g. gas, liquid, solid), location and any other significant characteristics of substances present
- Define hydro-geological factors as required
- Identify routes of exposure and human population(s) at risk.
- If necessary, based on review of the stream sediment sampling, identify actual or adverse impacts to fish and wildlife resources and any other resources.
- Identify surface water classifications and existing water use designations
- As per 6 NYCRR Part 375 Environmental Remediation Program Section 375-3.8(b)(2) "Remedial program", a volunteer shall; perform a qualitative exposure assessment of the contamination that has migrated from the site in accordance with ECL 27-1415(2)(b) and department guidance. This is based on the assumption that it contamination has migrated from the site. For sites being addressed by the Volunteer, as this site is, the volunteer has no obligation to implement a remedy to address an off-site exposure identified by this assessment. This assessment must discuss all potential migration and exposure scenarios, including, but not limited to: exposure to contaminants in soil vapor; migration of and exposure to contaminated groundwater; migration of and exposure to contaminated sediments and surface water.
- Conclusions and recommendations, which summarize the extent of the areas of concern, identify any unacceptable exposure pathways, and recommend any future work, including an update conceptual model of the site.

5.0 SAMPLING ANALYSIS PLAN, QA/QC

The table below provides a summary of the soil, groundwater and quality control samples to be obtained during the above-described work. All samples must be analyzed by a NYSDOH Environmental Laboratory Approval Program (ELAP) certified laboratory; certified to analyze environmental media using the methods specified in the work plan. Standard Operating Procedures will ensure sample integrity and quality and may be found in the Appendix of the Conrad Geoscience Remedial Investigation Work Plan, dated July 3, 2007. The collection of all QA/QC samples (excluding samples from SB7 and SB8 as noted in Section 4.1.1, 6th paragraph), are required for each environmental media: soil, groundwater and soil vapor samples obtained, this includes:

Field Duplicates: 1 duplicate per 20 samples, with a minimum of 1 per sampling event.

Matrix Spike/Matrix Spike Duplicates (MS/MSD): (1) MS/MSD per 20 samples, with a minimum of 1 sample per sampling event.

Trip Blanks: (1) per sampling event, which includes VOC samples

Field Blanks: (1) per sampling event.

Field duplicates are to be sent to the laboratory as blind duplicates and field personnel must note the location from which the duplicate sample was collected on the appropriate boring log(s) and /or in field notes.

SAMPLE TYPE/AREA	ANALYSIS		
	TCL/TAL+30 TIC		
Soil			
Existing Replacement Fill Samples (From soil borings in Imported Fill)	6	Grab	VOCs
Existing Replacement Fill Samples (From soil borings in Imported Fill)	2	Composite	SVOCs, Metals, PCBs/Pesticides, Cyanide
Soil Samples from Below Imported Fill (Samples obtained from 0-6" below imported fill)	2	Grab	SVOCs, Metals, PCBs/Pesticides, Cyanide, VOCs
Soil Samples from Groundwater Monitoring Well Borings	6	Grab	SVOCs, Metals, PCBs/Pesticides, Cyanide, VOCs
Soil samples south of Excavation Area	2	Grab	SVOCs, Metals, PCBs/Pesticides, Cyanide, VOCs
Groundwater			
Groundwater Samples From New Monitoring Wells	6		
Groundwater Samples From Existing Monitoring Wells (If Possible)	3-5		
Stream			
Sediment Samples	4		
Air Vapor Intrusion			
Sub-slab Vapor	1		
Indoor, Outdoor, crawl Space	3 each area		
Quality Control			
Field Duplicates	1 per 20 Samples	1 minimum per Event	
Matrix Spike/Matrix Spike Duplicates	1 per 20 Samples	1 minimum per Event	
Trip Blanks (1 per sample event)	1 per sample Event		Including VOC samples
Field Blanks:	1 per sample Event		

The Standards, Criteria and Guidance (SCGs) applicable for the analysis of groundwater 6 NYCRR Part 703 and the NYSDEC's Guidance document "Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations" (TOGS 1.1.1). SCGs applicable for the soil are the Soil Cleanup Objectives (SCOs) found in 6 NYCRR 375.6.8(b). The SCGs applicable for sediments are found in the NYSDEC's "Technical Guidance for Screening Contaminated Sediments". The SCGs applicable for soil vapor intrusion (SVI) are found in the NYSDOH SVI Guidance.

Laboratory testing methods of each sample shall be as follows:

- VOCs – EPA Method 8260
- SVOCs – EPA Method 8270
- Metals – EPA Method 6010 and 7471 for Mercury
- Total Cyanide – EPA Method 9012
- PCBs – EPA Method 8082
- Pesticides – EPA Method 8081
- VOCs in vapor/air – EPA Method TO-15

Chromium data associated with the imported fill must be speciated to give results for hexavalent and trivalent forms.

The Restricted Use Soil Clean up Objectives shall follow Table 375-6.8(b) for the Protection of Public Health for Restricted Residential Objectives. Tables shall be included in comparison analysis, which identify the Recommended Soil Cleanup objectives, Restricted Use Cleanup Objectives for Restricted Residential for the Protection of Public Health, and Protection of Groundwater, and Groundwater Maximum Allowable Concentration of groundwater effluent for Class GA water. Each table shall also include the method detection limit as appropriate for comparison for each sample. For each resource that exceeds the applicable clean up objectives the value shall be identified in bold print in the comparison tables.

A NYSDEC ASP Category B data package must be provided and shall include, but may not be limited to, the following:

1. A detailed report narrative summarizing the contents and results.
2. Chain of Custody Documentation
3. Sample Information:
    a. Date collected
    b. Date extracted or digested
    c. Date analyzed
    d. Analytical method and reference
4. Data (including all raw data and CLP-like summary forms)
    a. Samples

b. Laboratory duplicates specifying applicable control limits for all quality control sample results
c. Method blanks
d. Spikes, and required spike blanks
e. Surrogate recoveries
f. Internal standard recoveries
g. Calibration (initial and continuing)
h. Any other applicable QC data

5. Miscellaneous
   a. Method detection limits and/or instrument detection limits
   b. Percent solids (where applicable)
   c. Run logs
   d. Standard preparation logs
   e. Sample preparation logs

All sample data and its corresponding QA/QC data shall be maintained accessible either in hard copy or electronic format.

Data Usability Summary Reports (DUSR) must also be provided. The DSUR shall be prepared by an Environmental Scientist who must hold a Bachelors Degree in a relevant natural or physical science or field of engineering and must submit a resume to the Division's Quality Assurance Unit documenting experience in environmental sampling, analysis and data review. DUSR is to be developed by reviewing and evaluating the analytical data package at which time it shall be determined that the data package is complete as defined under the requirement for the NYSDEC ASP Category B deliverables. Specific items such as the verification of holding times, data generation in accordance with the established analytical protocols, evaluation to determine if raw data confirms the results provided in the data summary sheets and quality control verification forms are to be included with the additional requirements as identified in Appendix 2B of the DER-10. The Category B data package and the DUSR must be provided to confirm all final data.

6.0 SITE SPECIFIC HEALTH AND SAFETY PLAN

In accordance with NYSDEC and OSHA requirements, a site specific Health and Safety Plan previously prepared by Conrad Geoscience Corporation and addendum prepared as part of the Interim Remedial Measure Work Plan – UST Removal dated November 7, 2007 and approved by the NYSDEC. All work within this proposed work scope shall comply with these approved documents.

7.0 SITE SPECIFIC COMMUNITY AIR MONITORING PLAN

In accordance with NYSDEC and NYSDOH requirements, a site specific Community Air Monitoring Plan, prepared by Conrad Geoscience Corporation dated May 16, 2007, is to be implemented in conformance with the NYSDOH Generic Community

Air Monitoring Plan as contained in the Appendix 1A of the "Draft DER-10 Technical Guidance for Site Investigation and Remediation", December 2002 (12/25/02), and TAGM 4031. The Community Air Monitoring Plan (CAMP) must be implemented during all intrusive activities, including Tasks 1 and 2.

8.0 SCHEDULE

We anticipate completing the fieldwork identified in this plan within the months of October and November of 2010, weather permitting. A report is to be prepared once all testing results are provided, which we anticipate would be provided to the NYSDEC in the month of January 2011. The number of field days required for each task is outlined below.

TASK	DESCRIPTION	TIME TO COMPLETE	MONTHS
TASK 1: Sub-Surface Investigations	Subsurface soil sampling	3 FIELD DAYS	October 2010
	Groundwater sampling	3 FIELD DAYS	October 2010
	Replacement fill sampling	2 FIELD DAYS	October 2010
	Surface soil sampling	1.0 FIELD DAYS	October 2010
TASK 2: Stream Sediment Sampling	Sediment sampling within the stream	0.5 FIELD DAYS	October 2010
TASK 3: Air Vapor Intrusion	Air sampling on site	1 FIELD DAY	September 2010
TASK 4: Fish and Wildlife Impact	Part 1: Impact Assessment	4 WEEKS	October/November 2010
TASK 5: Investigation Reporting	Report Preparation	4 WEEKS	January 2011

9.0 RESUME

As requested, resume of project personnel is included in Appendix D.

APPENDIX A:

Remedial Investigation and Intermin Remedial Mesaure Report Prepared by Conrad Geoscience Corp.

Remedial Investigation and Interim Remedial Measure Report

33 East Main Street, Village of Pawling, New York

NYSDEC Spill #90-12530
NYSDEC BCA #C314116

Conrad Geoscience Corp. File #RP060080

June 2008

Prepared for:

New York State Department of Environmental Conservation
21 South Putt Corners Road
New Paltz, New York 12561

Prepared by:

Conrad Geoscience Corp.
One Civic Center Plaza, Suite 501
Poughkeepsie, New York 12603

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Remedial Investigation and Interim Remedial Measure Report

33 East Main Street, Village of Pawling, New York

June 2008

Conrad Geoscience has completed the State-approved Remedial Investigation (RI) Work Plan and Interim Remedial Measure (IRM) on behalf of the property owner, Cornerstone Enterprises, LLC. The objective of the RI was to assemble information regarding the distribution and extent of subsurface contaminants and contaminant sources. The RI included soil and groundwater sampling. Based on the RI data, an IRM was performed to excavate on-site tanks and petroleum-contaminated soil. Below is a summary of the RI and IRM data and a discussion of the results.

1.0 SITE DESCRIPTION

The subject property is located at 33 East Main Street in the Village of Pawling, New York (Figure 1). The property operated as an automotive maintenance facility and retail gasoline station until 1985 (Riley's Garage). The 0.19-acre property situated on the south side of East Main Street includes a 10,000 ft^2 building (two-story plus basement), and a parking area in the northern and eastern part of the property. A tributary to the East Branch Croton River borders the eastern property boundary, and flows to the south (Figure 2). Two USTs were known to be present on-site, including one 1,000-gallon gasoline UST and one 550-gallon waste oil UST. The contents of these tanks were evacuated in July 2007. Two additional USTs that formerly held gasoline were uncovered during the IRM.

2.0 REMEDIAL INVESTIGATION RESULTS

2.1 Sampling

2.1.1 Subsurface Soil Sampling

NYSDEC approved the Remedial Investigation Work Plan and supporting documents in July 2007. The RI work included soil and groundwater sampling; and floor drain tracing and sampling, as summarized below.

On August 14 and 15, 2007, 24 subsurface soil samples were collected from 24 soil borings (GB-1 through GB-24) (Figure 3). On September 24, 2007, additional

subsurface soil samples were collected from three soil borings (GBSH-1 through GBSH-3) (Figure 3).

In accordance with NYSDEC Technical Guidance Document DER-10, soil borings were placed in the vicinity of the known tanks and associated piping, and in other potential areas of petroleum discharge. Borings were also completed along the southern and eastern property boundaries to determine if site-related contaminants were moving off-site. Sampling was also conducted along the western property boundary to determine whether contaminants from up-gradient sources had impacted the subject property.

Soil borings around the exterior of the building (GB-1 through GB-24) were completed using a track-mounted Geoprobe$_{TM}$ unit equipped with 4-foot long, 1 ¾-inch diameter core barrels (macro-cores) fitted with acetate liners. All soil borings were conducted in accordance with NYSDEC/USEPA protocols. Borings were sampled continuously from the ground surface to a maximum depth of 17.7 feet below grade, to groundwater, or to refusal, whichever was encountered first.

Soil borings beneath the basement floor (GBSH-1 through GBSH-3) were completed using a Geoprobe$_{TM}$ slide hammer. Borings were sampled continuously from the ground surface to a maximum depth of 9 feet below grade, to groundwater, or to refusal, whichever was encountered first.

The project geologist kept a detailed log of each core: lithology, grain size, stratigraphic changes, color, and occurrence of groundwater were recorded (Appendix A). Conrad Geoscience screened soil samples in the field for the presence of volatile organic compounds (VOCs) using a photoionization detector (PID) and headspace techniques. At each location, the soil sample with the highest PID reading was submitted to a NYSDOH-approved laboratory for analysis of the STARS lists of VOCs and semi-volatile organic compounds (SVOCs) via USEPA Methods 8260 and 8270, respectively, and the eight RCRA metals.

2.1.2 Groundwater Sampling

Groundwater samples were collected from 10 soil borings using temporary well screens and a peristaltic pump (GW-1 through GW-10). Groundwater sample locations were along property boundaries and down-gradient of suspected contaminant sources (Figure 4). These locations were selected to evaluate the potential for off-site contaminant migration, and to evaluate the possibility of site impacts from adjacent properties.

Soil borings were completed prior to collection of groundwater samples and were screened in the field for the presence of VOCs using a PID and headspace techniques. Soil borings were logged in accordance with the procedures outlined in Section 2.1. Groundwater samples were submitted to a NYSDOH approved laboratory for analysis of the TCL list of VOCs via USEPA Method 8260, SVOCs via USEPA Method 8270, and the eight RCRA metals.

Depth-to-water measurements were collected from the ground surface at each sample location. Depth-to-water measurements were not collected from GW-2 due to borehole collapse. These measurements are as follows:

Temporary Well ID	Depth-to-water August 15, 2007
GW-1	8.08'
GW-2	Not Accessible
GW-3	7.75'
GW-4	7.4'
GW-5	7.02'
GW-6	7.24'
GW-7	6.62'
GW-8	7.33'
GW-9	8.96'
GW-10	8.43'

Based on site topography and depth-to-water measurements, groundwater is presumed to flow in a southerly direction. Groundwater elevations and direction of groundwater flow cannot be more precisely calculated because the temporary screens installed for collection of samples could not be accurately surveyed.

2.1.3 Surface Soil Sampling

In order to evaluate the extent of contaminants in surface soil, six surface soil samples were collected from the southern part of the subject property on January 15, 2008 (Figure 5). Sampling was biased to represent locations under and adjacent to the former auto ramp depicted in historical Sanborn Fire Insurance Maps. Samples were collected from a depth of 0-2 inches below ground surface after removal of vegetative cover. Soil samples were analyzed for the STARS list of VOCs and SVOCs via USEPA Methods 8260 and 8270, respectively, and the eight RCRA metals.

2.1.4 Floor Drain Tracing

Conrad Geoscience inspected the floor drain in the garage interior and inspected the building for other potential contaminant pathways (cracked concrete, slop sinks, etc.). The floor drain was traced by jetting water into the drain. The drain discharged onto the ground surface near the southeastern corner of the building.

One soil sample was collected in the vicinity of the floor drain inside the building (GBSH-1) (Figure 3). Soil samples were collected using a Geoprobe$_{TM}$ slide hammer. Samples were screened in the field for the presence of VOCs using a PID and headspace techniques and were submitted to a NYSDOH-approved laboratory for analysis of the VOCs via USEPA Method 8260 STARS, SVOCs via USEPA Method 8270 STARS, and the eight RCRA metals.

2.2 Results

2.2.1 Subsurface Soil Quality

Soil sample results are summarized in Tables 1 through 6. Analytical reports are attached (see Appendix B). Following is a discussion of these results:

Four of the 27 soil samples contained VOCs at concentrations exceeding NYSDEC 6NYCRR Part 375 *Unrestricted Use Soil Cleanup Objectives* (Tables 1 and 2):

- GB-7: 1,2,4-Trimethylbenzene (13,400 µg/kg); m,p-Xylene (7,080 µg/kg);
- GB-8: 1,2,4-Trimethylbenzene (8,240 µg/kg); m,p-Xylene (2,280 µg/kg);
- GB-23: m,p-Xylene (1,940 µg/kg);
- GB-24: 1,2,4-Trimethylbenzene (15,800 µg/kg); m,p-Xylene (10,000 µg/kg).

Two of the 27 soil samples contained SVOCs at concentrations exceeding NYSDEC 6NYCRR Part 375 *Unrestricted Use Soil Cleanup Objectives* (Tables 3 and 4):

- GB-16: Indeno (1,2,3-cd) pyrene (768 µg/kg);
- GBSH-1: Indeno (1,2,3-cd) pyrene (570 µg/kg).

Three of the 27 soil samples contained metals at concentrations exceeding NYSDEC 6NYCRR Part 375 *Unrestricted Use Soil Cleanup Objectives* (Tables 5 and 6):

- GB-13: Lead (404 mg/kg); Mercury (0.4585 mg/kg);
- GB-16: Cadmium (3.43 mg/kg); Lead (1,670 mg/kg); Mercury (0.2062 mg/kg);
- GBSH-1: Lead (322 mg/kg); Mercury (0.3737 mg/kg).

2.2.2 Groundwater Quality

Groundwater sample results are summarized in Tables 7 through 9. Analytical reports are attached (see Appendix B). Following is a discussion of these results:

Four of the 10 groundwater samples contained VOCs at concentrations exceeding NYSDEC 6NYCRR Part 700-705 groundwater standards (Table 7):

- GW-6: Ethylbenzene (113 µg/l);
- GW-7: Benzene (1.56 µg/l);
- GW-9: Benzene (7.65 µg/l); Ethylbenzene (809 µg/l); m,p-Xylene (2,900 µg/l); o-Xylene (38.4 µg/l);
- GW-10: Ethylbenzene (662 µg/l); m,p-Xylene (1,830 µg/l); o-Xylene (179 µg/l).

One of the 10 groundwater samples contained SVOCs at concentrations exceeding NYSDEC 6NYCRR Part 700-705 groundwater standards (Table 8):

- GW-9: Naphthalene (130 µg/l).

All ten of the groundwater samples collected contained lead at concentrations exceeding NYSDEC 6NYCRR Part 700-705 groundwater standards (Table 9). The following are additional exceedences of NYSDEC 6NYCRR Part 700-705 groundwater standards:

- GW-4: Chromium (0.057 mg/l);
- GW-7: Barium (2.61 mg/l); Chromium (0.067 mg/l);
- GW-8: Barium (3.41 mg/l); Chromium (0.124 mg/l).

2.2.3 Surface Soil Quality

Surface soil sample results are summarized in Tables 10 through 12. Analytical reports are attached (see Appendix B). Following is a discussion of the results:

None of the six surface soil samples contained VOCs at concentrations exceeding NYSDEC 6NYCRR Part 375 *Unrestricted Use Soil Cleanup Objectives* (Table 10).

Two of the six surface soil samples contained SVOCs at concentrations exceeding NYSDEC 6NYCRR Part 375 *Unrestricted Use Soil Cleanup Objectives* (Table 11):

- SS-3: Indeno(1,2,3-cd)pyrene (526 µg/kg);
- SS-5: Benzo(a)anthracene (1,970 µg/kg); Benzo(a)pyrene (1,630 µg/kg); Benzo(b)fluoranthene (1,650 µg/kg); Benzo(k)fluoranthene (1,120 µg/kg); Chrysene (1,770 µg/kg); Indeno(1,2,3-cd)pyrene (770 µg/kg).

Five of the six surface soil samples contained metals at concentrations exceeding NYSDEC 6NYCRR Part 375 *Unrestricted Use Soil Cleanup Objectives* (Table 12):

- SS-1: Cadmium (16.1 mg/kg); Chromium (31.6 mg/kg); Lead (2,080 mg/kg); Mercury (0.2110 mg/kg);
- SS-2: Lead (654 mg/kg);
- SS-4: Lead (68.6 mg/kg); Mercury (0.4616 mg/kg);
- SS-5: Lead (79.2 mg/kg);
- SS-6: Lead (137 mg/kg).

2.3 Private Well Survey

On June 6, 2008, a private well survey for homes and businesses within a ½-mile radius of the subject property was performed. Utilizing municipal data, a previous private well survey, and a visual inspection from public roads, properties that utilize private wells versus municipal water were determined (Appendix C). The closest private wells are located approximately 1,450 feet east of the subject property.

2.4 Discussion of RI Results

Soil borings completed in the vicinity of the two known USTs indicated that a petroleum release had occurred from the known gasoline tank and associated piping. Soil in the immediate vicinity of the waste oil UST did not appear to be impacted. Soil in the vicinity of the floor drain outfall was determined to have been impacted from disposal of petroleum-related wastes into this drain. Surface soil in the vicinity of the former automotive ramp had been impacted by previous on-site activities, which may have included surficial storage or disposal of automotive wastes and battery leakage.

Groundwater has been impacted along the western property boundary (GW-9 and GW-10). Based on the assumed direction of groundwater flow, however, these contaminants appear to originate from off-site sources. Two groundwater samples collected in the gasoline tank area, and downgradient, were slightly impacted by VOCs. All of the groundwater samples contained lead that slightly exceeded standards and some samples contained other slight exceedences of metals.

3.0 INTERIM REMEDIAL MEASURE RESULTS

Based on preliminary RI data, Conrad Geoscience proposed to excavate on-site tanks and contaminated soil as an Interim Remedial Measure (IRM). The objective of this work was to eliminate ongoing sources of groundwater contamination. All work conformed to the State-approved Site Specific Health and Safety Plan (HASP) and the Community Air Monitoring Plan (CAMP).

3.1 Tank Excavation and Removal

Cornerstone Enterprises retained Mangiardi Trucking to perform soil and tank excavation and transport/disposal of contaminated soil. Tank venting, cleaning and disposal were performed by Dutchess Environmental Construction. Sludge emptied from the tanks was transported and disposed by EnviroWaste. Conrad Geoscience personnel documented field activities, collected post-excavation soil samples, provided on-site health and safety oversight, and performed perimeter air monitoring. During excavation and removal of the tanks (Figure 6), a Conrad Geoscience geologist inspected and documented the condition of the tanks and surrounding soils, and screened excavated soil for the presence of VOCs using a PID and headspace techniques.Photographs are included in Appendix D. Perimeter air monitoring logs are included in Appendix E.

On April 16, 2008, the top of the 550-gallon waste oil UST (hereafter referred to as "Tank #1") was uncovered. The tank was vented and cleaned of remaining sludge. On the same day, the known gasoline UST (hereafter referred to as "Tank #2") was uncovered, vented, and cleaned of any remaining sludge. The 2,000-gallon gasoline UST was excavated and placed on 6-mil plastic sheeting. Small seepage holes were observed in the tank wall. Both tanks were removed from the site on April 16, 2008.

On April 16, 2008, a third UST (hereafter referred to as "Tank #3") was uncovered next to and west of the known gasoline UST. The 2,000-gallon tank did not contain any liquid, but vapors from the tank suggested it formerly stored gasoline. The tank was vented, cleaned, and excavated on April 16, 2008. Several corrosion holes were observed. The tank was removed from the site on April 17, 2008.

On April 17, 2008, a fourth UST (hereafter referred to as "Tank #4") was uncovered next to and west of Tank #3, along the eastern side of the on-site building. Vapors from the 1,000-gallon tank suggested the tank formerly stored gasoline. The tank was vented, cleaned of remaining sludge, and removed from the site on April 17, 2008. Several corrosion holes were observed.

In accordance with 6NYCRR Part 612-614, tank registration documents were prepared, re-registering these tanks as "Closed - Removed."

3.2 Excavation of Petroleum-Contaminated Soil

During soil excavation, a PID was used to screen soil for VOCs using headspace techniques. Soil with PID readings greater than 50 ppm was considered contaminated and was removed for off-site disposal. Final excavation limits were guided by PID readings and proximity to nearby infrastructure.

On April 16, 2008, contaminated soil encountered in the waste oil UST excavation was removed (Figure 6). Groundwater was encountered in the bottom of the excavation at about 9 feet below grade.

Contaminated soil was encountered in the area of the gasoline USTs and former pump island (Figure 6). Groundwater was encountered in this excavation at about 9 feet below grade. Sorbent pads were placed in the excavation. On April 17, 2008, EnviroWaste removed contaminated groundwater from the gasoline UST half of the excavation using a vac truck. On May 5, 2008, groundwater in both halves of the excavation was skimmed and removed by Savarese Septic Service, LLC using a vac truck. The combined gasoline UST and pump island excavation was completed on May 1, 2008. The floor of the combined gasoline UST and pump island excavation was approximately 12 feet below grade. The excavation was backfilled on May 5, 2008.

On May 14, 2008, contaminated soil in the vicinity of the floor drain outfall was removed (Figure 6). The floor of the excavation was located approximately 3 feet below grade at the rear of the building where the surface elevation is lowest. Land surface elevation rises to the west. Groundwater was encountered approximately 2 feet below grade. On May 14, 2008, groundwater in the excavation was skimmed and removed by Savarese Septic Service, LLC. The excavation was backfilled on May 15, 2008.

In total, approximately 820 tons of soil were removed from the waste oil UST excavation and gasoline UST and pump island excavations. Approximately 70 tons of soil were removed from the floor drain outfall excavation. Disposal receipts are attached (see Appendix F).

3.3 Post-Excavation Soil Samples

3.3.1 Sampling

Upon completion of excavation activities, post-excavation soil samples were collected from the sidewalls and bottom of the excavations in accordance with DER-10 (Figure 6).

Post-excavation soil samples PE-1 through PE-5 were collected from the sidewalls and floor of the waste oil UST excavation. Post-excavation soil samples PE-6 through PE-8, and PE-10 through PE-17 were collected from the sidewalls and bottom of the combined gasoline UST and pump island excavation. Post-excavation soil samples PE-18 through PE-22 were collected from the floor drain outfall excavation. Samples were submitted to a NYSDOH-approved laboratory.

Samples from the waste oil UST excavation and floor drain outfall excavation were analyzed for the STARS list of VOCs via USEPA Method 8021 and the STARS list of SVOCs via USEPA Method 8270. Samples from the combined gasoline UST and pump island excavation were analyzed for the STARS list of VOCs via USEPA Method 8021.

3.3.2 Results

Results of the Post-Excavation Soil Sample results are summarized in Tables 13 and 14. Analytical reports are attached (see Appendix B). Following is a discussion of the results.

3.3.2.1 Comparison to Unrestricted Use SCOs

When post-excavation soil sample results are compared to NYSDEC 6NYCRR Part 375 *Unrestricted Use Soil Cleanup Objectives,* the results are as follows:

Eight of the 21 post-excavation soil samples contained VOCs at concentrations exceeding *Unrestricted Use* SCOs (Table 13):

- PE-6: Ethylbenzene (6,220 µg/kg); n-PropylBenzene (21,100 µg/kg); 1,2,4-Trimethylbenzene (169,000 µg/kg); 1,3,5-Trimethylbenzene (69,400 µg/kg); m,p-Xylene (37,000 µg/kg);

- PE-7: Ethylbenzene (2,090 µg/kg); m,p-Xylene (1,140 µg/kg);
- PE-8: m,p-Xylene (279 µg/kg);

- PE-10: Ethylbenzene (34,100 µg/kg); n-PropylBenzene (16,400 µg/kg); 1,2,4-Trimethylbenzene (98,400 µg/kg); 1,3,5-Trimethylbenzene (26,700 µg/kg); m,p-Xylene (37,500 µg/kg);

- PE-11: 1,2,4-Trimethylbenzene (4,370 µg/kg); m,p-Xylene (365 µg/kg);
- PE-12: m,p-Xylene (762 µg/kg); o-Xylene (503 µg/kg);
- PE-20: m,p-Xylene (360 µg/kg);
- PE-21: 1,2,4-Trimethylbenzene (93,200 µg/kg); 1,3,5-Trimethylbenzene (29,500 µg/kg); m,p-Xylene (559,000 µg/kg).

One of the 21 post-excavation soil samples contained SVOCs at concentrations exceeding *Unrestricted Use* SCOs (Table 14):

- PE-21: Benzo (a) anthracene (2,320 µg/kg); Benzo (a) pyrene (2,520 µg/kg); Benzo (b) fluoranthene (2,360 µg/kg); Chrysene (3,320 µg/kg); Indeno (1,2,3-cd) pyrene (1,820 µg/kg).

3.3.2.2 Comparison to Restricted-Residential Use SCOs

When post-excavation soil sample results are compared to the NYSDEC 6NYCRR Part 375 *Restricted-Residential Use Soil Cleanup Objectives*, the results are as follows:

Only three of the twenty-one post-excavation soil samples analyzed for VOCs contained VOCs at concentrations exceeding *Restricted-Residential Use* SCOs (Table 13):

- PE-6: 1,2,4-Trimethylbenzene (169,000 µg/kg); 1,3,5-Trimethylbenzene (69,400 µg/kg);
- PE-10: 1,2,4-Trimethylbenzene (98,400 µg/kg);
- PE-21: 1,2,4-Trimethylbenzene (93,200 µg/kg); m,p-Xylene (559,000 µg/kg).

Only one of the twenty-one post-excavation soil samples analyzed for SVOCs contained SVOCs at concentrations exceeding *Restricted-Residential Use* SCOs (Table 14):

- PE-21: Benzo (a) anthracene (2,320 µg/kg); Benzo (a) pyrene (2,520 µg/kg); Benzo (b) fluoranthene (2,360 µg/kg); Indeno (1,2,3-cd) pyrene (1,820 µg/kg).

3.4 Site Restoration

The waste oil UST excavation was backfilled to grade with clean fill on April 17, 2008. The pump island excavation was partially backfilled on April 18, 2008. The combined gasoline UST and pump island excavation were backfilled to grade on May 5 and 6, 2008. The floor drain outfall excavation was backfilled on May 15, 2008 with clean backfill.

3.5 Discussion of IRM Results

Soil removal in the combined gasoline UST and pump island excavation was limited by proximity to the foundation of the on-site building, the sidewalk, a retaining wall, and groundwater. Soil removal in the floor drain outfall excavation was limited by proximity to the foundation of the on-site building, the adjacent stream, the property boundary, and groundwater.

Soil in the vicinity of the waste oil tank meets the standards for *Unrestricted Use*. However, post-excavation soil sampling indicates that hydrocarbons in subsurface soil exceed the Un*restricted Use* criteria in eight of 21 samples, representing soil in the vicinity of the former pump island, gasoline tanks, and floor drain outfall.

Three samples representing subsurface soil along the building foundation sidewalls (PE-6 and PE-10) and at the western property boundary (PE-21) exceeded *Restricted Residential* standards. This soil could not be removed because it is underneath the on-site building or beyond the subject property boundary. All remaining subsurface soil meets the SCOs for *Restricted-Residential Use*.

All contaminant source material that can feasibly be removed has been removed and disposed of off-site. Removal of storage tanks and contaminated soil has effectively eliminated the sources of groundwater contamination.

4.0 SURFACE SOIL REMOVAL

4.1 Excavation

On May 14 and 15, 2008, a 1-foot layer of surface soil was removed from the area of the former ramp, and post-excavation soil samples were collected (Figure 7).

4.2 Sampling

Following the removal of surface soil, five post-excavation surface soil samples—SS-1D through SS-5D—were collected in the approximate location of the previous surface soil samples SS-1 through SS-5. Samples were collected from a depth of 0-3 inches below the newly exposed ground surface. Because none of the previous surface soil samples in these locations contained detectable VOCs, these new samples were analyzed only for the STARS list of SVOCs via USEPA Method 8270 and eight RCRA

metals.

4.3 Results

Results of post-excavation surface soil sampling are summarized in Tables 15 and 16. Analytical reports are attached (see Appendix B). Following is a discussion of the results.

4.3.1 Comparison to Unrestricted Use SCOs

When the post-excavation surface soil sample results are compared to the NYSDEC 6NYCRR Part 375 *Unrestricted Use Soil Cleanup Objectives*, the results are as follows:

None of the five post-excavation surface soil samples exceeded the standards for SVOCs for the *Unrestricted Use* SCOs (Table 15).

When compared to the *Unrestricted Use* SCOs, all five post-excavation surface soil samples had at least one exceedence for metals:

- SS-1D: Lead (140 mg/kg); Mercury (0.2533 mg/kg);
- SS-2D: Lead (410 mg/kg); Mercury (1.23 mg/kg); Silver (3.16 mg/kg);
- SS-3D: Lead (86.7 mg/kg); Mercury (0.3294 mg/kg);
- SS-4D: Lead (155 mg/kg); Mercury (0.2609 mg/kg);
- SS-5D: Lead (512 mg/kg).

4.3.1 Comparison to Restricted-Residential Use SCOs

When the post-excavation surface soil sample results are compared to NYSDEC 6NYCRR Part 375 *Restricted-Residential Use Soil Cleanup Objectives*, the results are as follows:

None of the five post-excavation surface soil samples contained SVOCs at concentrations exceeding *Restricted-Residential Use* SCOs (Table 15).

Two of the five post-excavation surface soil samples contained metals at concentrations exceeding *Restricted-Residential Use* SCOs (Table 16):

- SS-2D: Lead (410 mg/kg); Mercury (1.23 mg/kg);
- SS-5D: Lead (512 mg/kg).

4.4 Discussion of Results

During removal of surface soil, small areas containing tar particles were uncovered. This tar is likely to represent the source of SVOCs and metals in the surface soil.

Two of the post-excavation surface soil samples exceed the *Restricted-Residential Use* SCOs for lead and mercury (SS-2D and SS-5D). We are informed by Cornerstone Enterprises that Site redevelopment plans call for this area to be capped with pavement, which will effectively eliminate the potential for exposure to soils that contain lead.

5.0 RECOMMENDATIONS

Except for minor areas beneath the on-site building where residual petroleum is present in soils, and two surface soil locations where lead and/or mercury are moderately elevated, soil on the subject property meets the NYSDEC soil cleanup objectives for *Restricted-Residential Use*, which applies to property under common ownership or a single managing entity, and prohibits vegetable gardens, single-family housing, and active recreational uses that are public uses with a reasonable potential for soil contact.

While VOCs in some on-site groundwater samples exceed applicable standards, the removal of four underground storage tanks and approximately 820 tons of contaminated soil has effectively eliminated ongoing sources of groundwater contamination. The only possible exception is in the southern part of the subject property where an up-gradient, off-site source of gasoline contamination appears to have affected soil and groundwater quality along the rear of the on-site garage building. All excavatable soil in this impacted area has been removed from the vadose zone.

We further note that all businesses and residences in the vicinity of the subject property are connected to central water (the nearest supply wells are approximately 1,450 feet to the east). Therefore, there is no potential exposure to residual VOCs in groundwater at this site.

Based on the RI and IRM results presented herein, Conrad Geoscience Corp. recommends that no further remedial action is warranted and that the remediated site now meets the criteria for *Restricted-Residential Use* as per NYSDEC 6NYCRR Part 375.

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Figure 1	
Prepared By:	ADQ 03/30/08
Reviewed By:	
Revised By:	SPL 6/5/08
Approved By:	JAC 6/5/08

SITE LOCATION MAP

CORNERSTONE ENTERPRISES, INC.
Main Street, Pawling, NY
RP060080

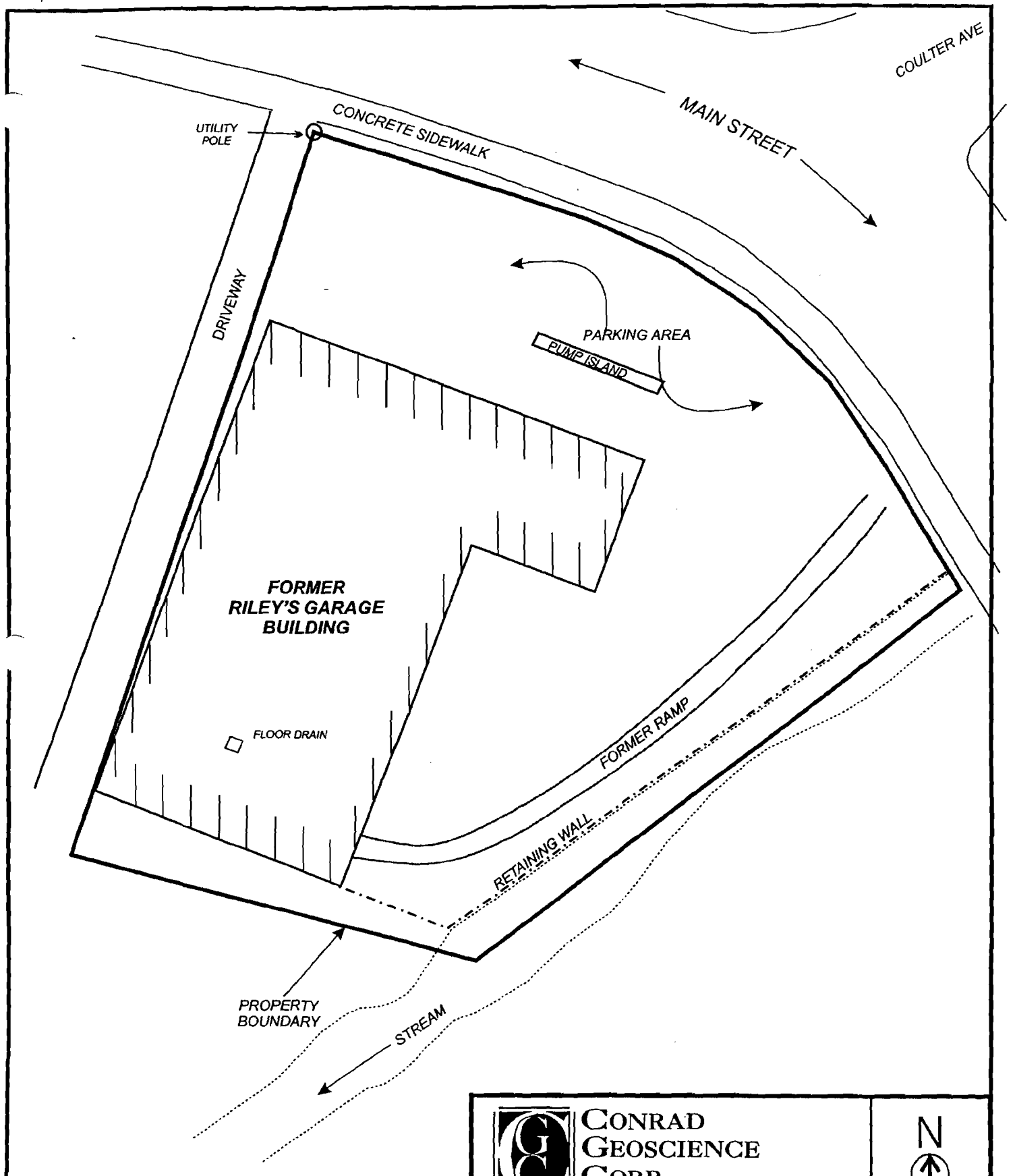

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Figure 2		SELECTED SITE FEATURES MAP
Prepared By:	SPL 09-30-07	
Reviewed By:		CORNERSTONE ENTERPRISES, INC. Main Street, Pawling, NY
Revised By:	SPL 05-02-08	
Approved By:	JAC 05-05-08	RP060080

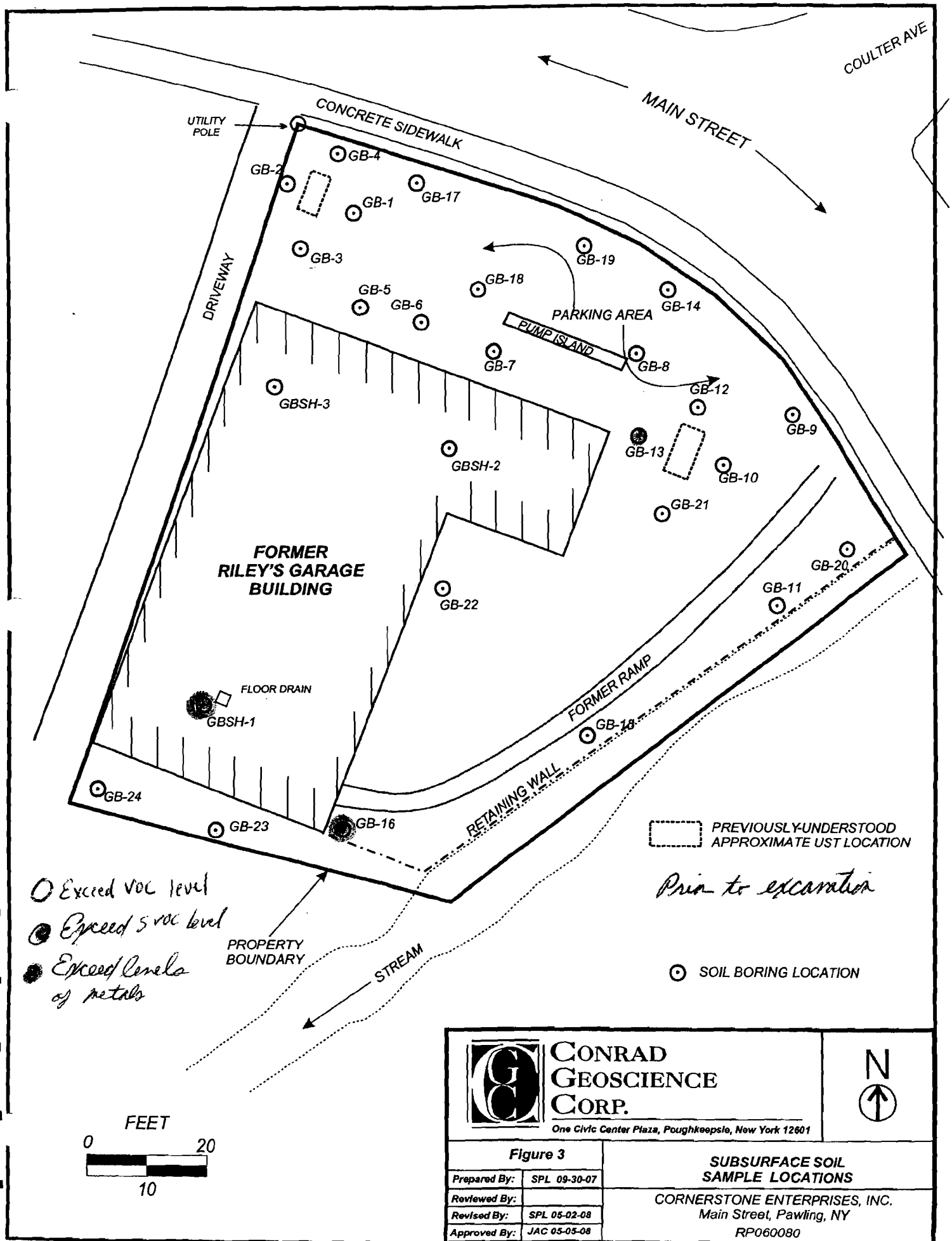

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Figure 3		SUBSURFACE SOIL SAMPLE LOCATIONS
Prepared By:	SPL 09-30-07	CORNERSTONE ENTERPRISES, INC. Main Street, Pawling, NY RP060080
Reviewed By:		
Revised By:	SPL 05-02-08	
Approved By:	JAC 05-05-08	

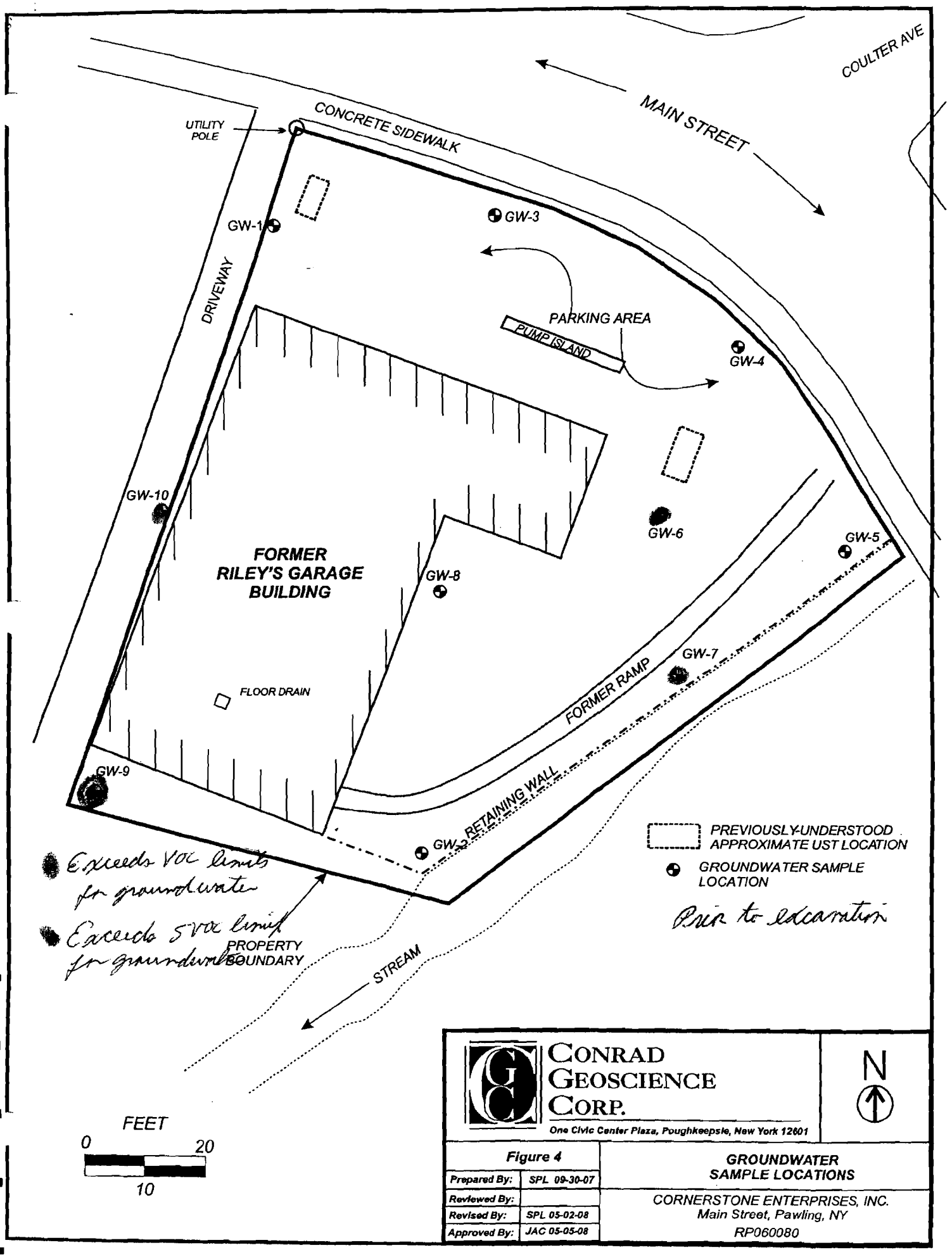

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Figure 4		GROUNDWATER SAMPLE LOCATIONS
Prepared By:	SPL 09-30-07	
Reviewed By:		CORNERSTONE ENTERPRISES, INC. Main Street, Pawling, NY
Revised By:	SPL 05-02-08	
Approved By:	JAC 05-05-08	RP060080

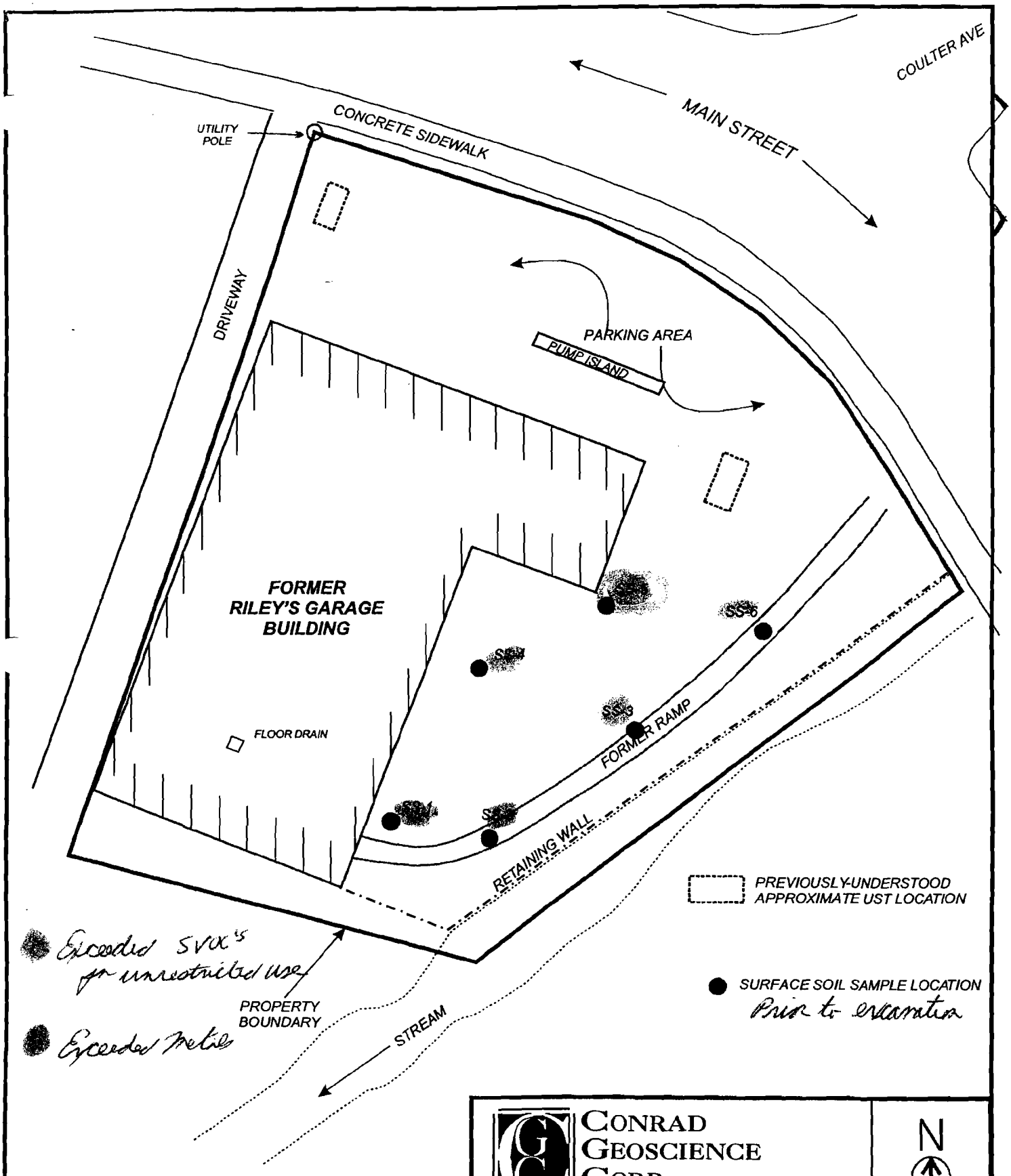

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Figure 5		SURFACE SOIL SAMPLE LOCATIONS
Prepared By:	SPL 09-30-07	
Reviewed By:		CORNERSTONE ENTERPRISES, INC. Main Street, Pawling, NY
Revised By:	SPL 05-02-08	
Approved By:	JAC 05-05-08	RP060080

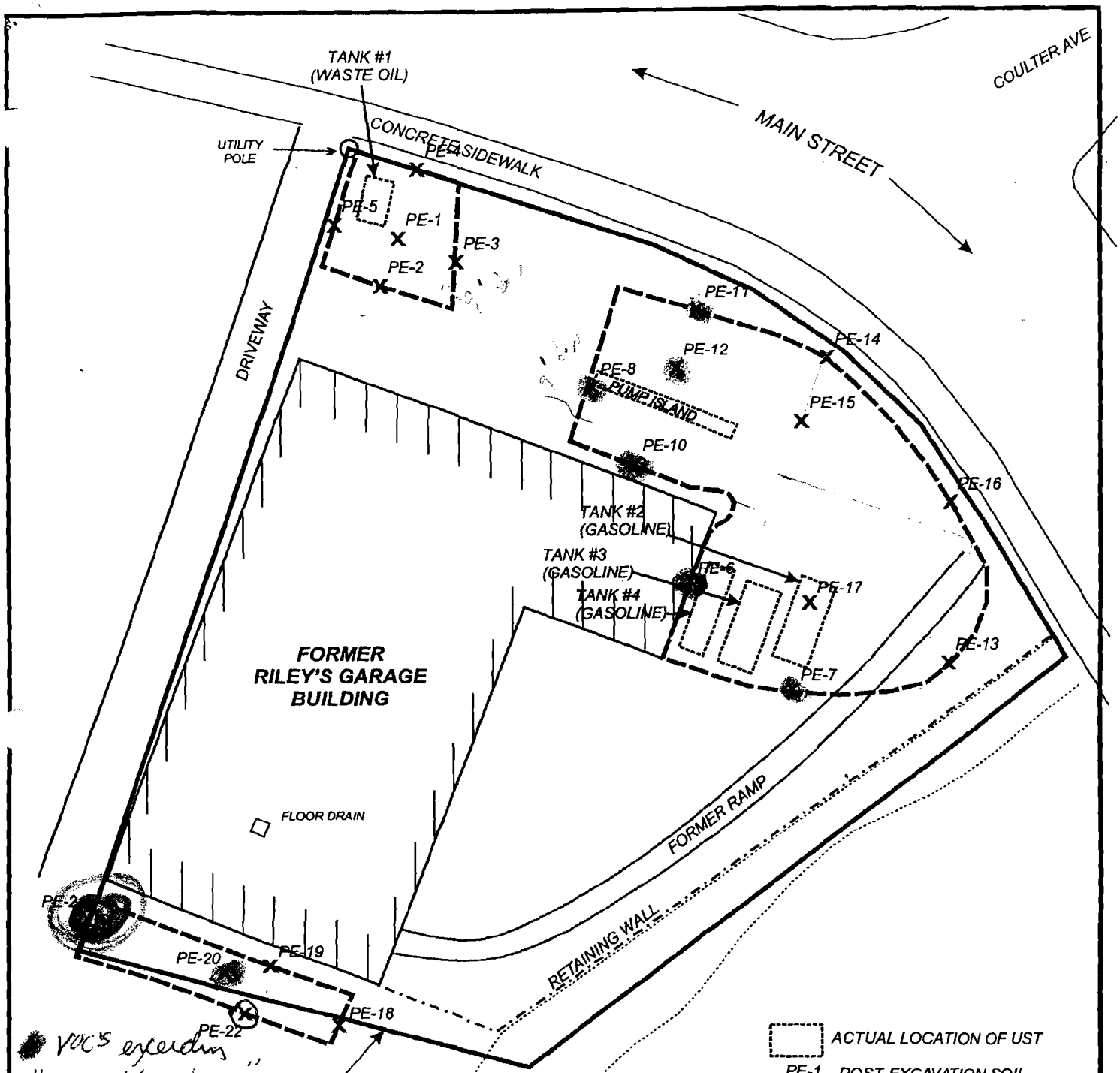

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Figure 6		SOIL EXCAVATION LIMITS AND POST-EXCAVATION SOIL SAMPLE LOCATIONS
Prepared By:	SPL 09-30-07	CORNERSTONE ENTERPRISES, INC. Main Street, Pawling, NY RP060080
Reviewed By:		
Revised By:	SPL 05-02-08	
Approved By:	JAC 05-05-08	

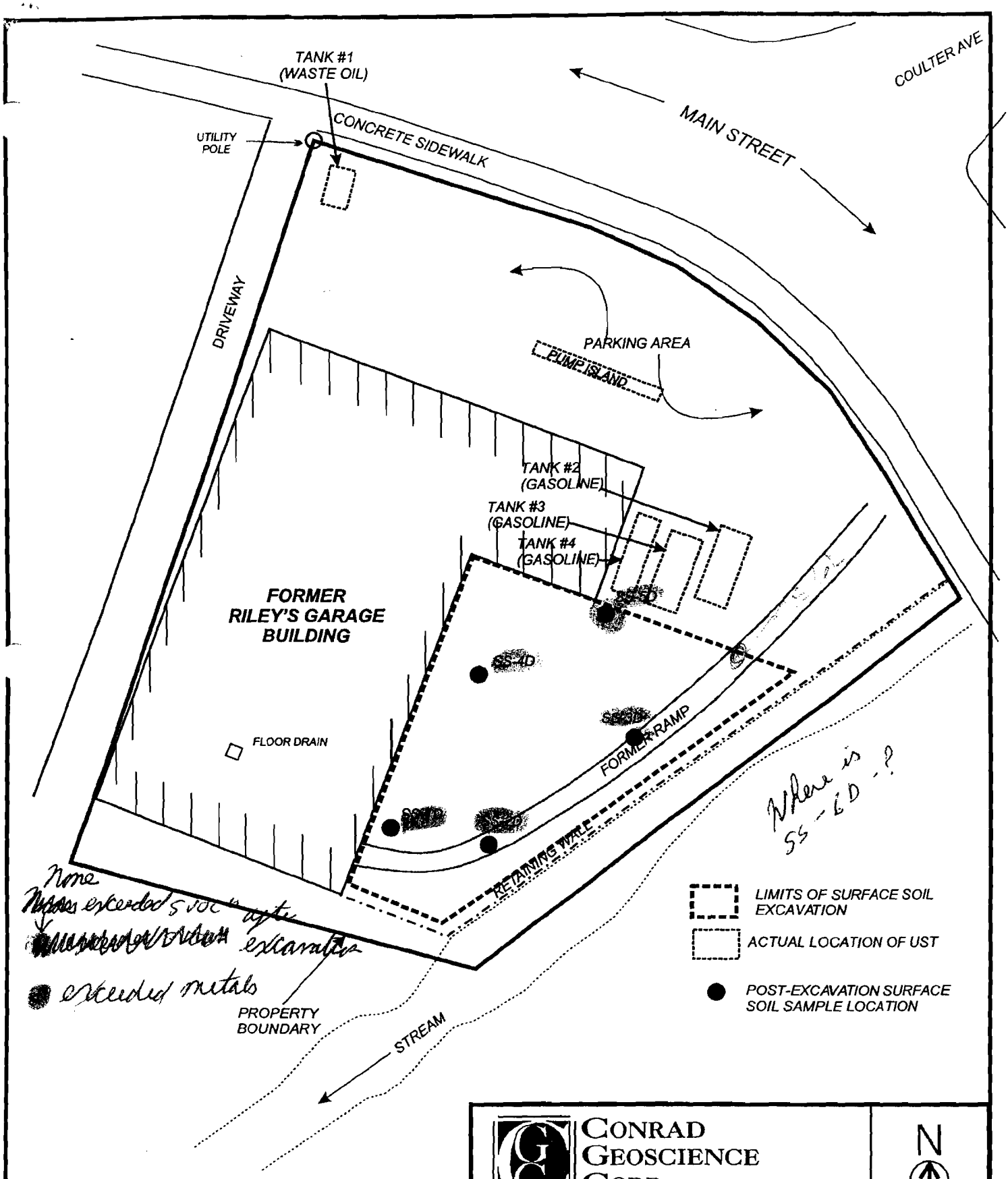

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Figure 7		SURFACE SOIL EXCAVATION LIMITS AND POST-EXCAVATION SOIL SAMPLE LOCATIONS
Prepared By:	SPL 09-30-07	CORNERSTONE ENTERPRISES, INC. Main Street, Pawling, NY RP060080
Reviewed By:		
Revised By:	SPL 05-02-08	
Approved By:	JAC 05-05-08	

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SOIL BORING LOG

BOREHOLE NO.: **GB-1**

TOTAL DEPTH: **12'**

PROJECT INFORMATION		DRILLING INFORMATION	
PROJECT #:	**RP060080**	DRILLING CO.:	**Syska**
SITE LOCATION:	**Riley's Garage - Pawling**	RIG TYPE:	**Geoprobe 54DT**
LOGGED BY:	**B. Goodwin, C. Brown, S. LaRose**	METHOD OF DRILLING:	**Direct Push**
PROJECT MANAGER:	**Chris Brown**	SAMPLING METHODS:	**4' Macro Core**
DATES DRILLED:	**8-14-07 and 8-15-07**	HAMMER WT./DROP	**N/A**
		DEPTH TO WATER	**9'**

NOTES:
80 degrees F

▽ Water level during drilling

DEPTH	SOIL SYMBOLS	SOIL DESCRIPTION	Sample Depth	PID (ppm)
0		ASPHALT		
		SW: Brown, dry, well-graded fine sand, trace silt. No petroleum odor.		0.0 ppm
				0.0 ppm
		GP: Brown, moist to wet, coarse sand and gravel mixture, poorly graded gravel. Moisture increases with depth. No petroleum odor detected 8'-9' bls.		0.0 ppm
-5				0.0 ppm
			Collected sample from 8' to 9' interval.	0.0 ppm
		SW: Brown, fine to medium grained sand, no gravel.		
-10				

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SOIL BORING LOG

BOREHOLE NO.: **GB-2**

TOTAL DEPTH: **12'**

PROJECT INFORMATION		DRILLING INFORMATION	
PROJECT #:	**RP060080**	DRILLING CO.:	**Syska**
SITE LOCATION:	**Riley's Garage - Pawling**	RIG TYPE:	**Geoprobe 54DT**
LOGGED BY:	**B. Goodwin, C. Brown, S. LaRose**	METHOD OF DRILLING:	**Direct Push**
PROJECT MANAGER:	**Chris Brown**	SAMPLING METHODS:	**4' Macro Core**
DATES DRILLED:	**8-14-07 and 8-15-07**	HAMMER WT./DROP	**N/A**
		DEPTH TO WATER	**9'**

NOTES:
80 degrees F

▽ Water level during drilling

DEPTH	SOIL SYMBOLS	SOIL DESCRIPTION	Sample Depth	PID (ppm)
0		TOPSOIL: Brown, dry		0.0 ppm
		COAL: Coal and ash, black and gray, dry. No petroleum odor.		0.0 ppm
-5		SW: Brown, dry, medium to coarse sand, trace gravel. No petroleum odor.		0.0 ppm
		GP: Brown, moist, coarse sand with gravel, gravel-sand mixture. No petroleum odor.		0.0 ppm
		SW: Brown, saturated, fine to medium sand, well-graded sand, no gravel. No petroleum odor.	Collected sample from 8' to 9' interval.	0.0 ppm
-10				

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SOIL BORING LOG

BOREHOLE NO.: **GB-3**

TOTAL DEPTH: **12'**

PROJECT INFORMATION		DRILLING INFORMATION	
PROJECT #:	**RP060080**	DRILLING CO.:	**Syska**
SITE LOCATION:	**Riley's Garage - Pawling**	RIG TYPE:	**Geoprobe 54DT**
LOGGED BY:	**B. Goodwin, C. Brown, S. LaRose**	METHOD OF DRILLING:	**Direct Push**
PROJECT MANAGER:	**Chris Brown**	SAMPLING METHODS:	**4' Macro Core**
DATES DRILLED:	**8-14-07 and 8-15-07**	HAMMER WT./DROP	**N/A**
		DEPTH TO WATER	**9'**

NOTES:
80 degrees F

▽ Water level during drilling

DEPTH	SOIL SYMBOLS	SOIL DESCRIPTION	Sample Depth	PID (ppm)
0		ASPHALT		
		SW: Brown and black, dry to moist (not wet), well-graded sand, sand-silt mixture with coal fragments. Gravel content increases with depth.		0.0 ppm
-5		GP: Poorly graded gravel, medium to coarse sand, gravel-sand mixture, moist to wet.		0.0 ppm
		SW: Brown, wet, fine sand	▽ Collected sample from 8' to 9' interval.	
-10				

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SOIL BORING LOG

BOREHOLE NO.: **GB-4**

TOTAL DEPTH: **10.5'**

PROJECT INFORMATION		DRILLING INFORMATION	
PROJECT #:	**RP060080**	DRILLING CO.:	**Syska**
SITE LOCATION:	**Riley's Garage - Pawling**	RIG TYPE:	**Geoprobe 54DT**
LOGGED BY:	**B. Goodwin, C. Brown, S. LaRose**	METHOD OF DRILLING:	**Direct Push**
PROJECT MANAGER:	**Chris Brown**	SAMPLING METHODS:	**4' Macro Core**
DATES DRILLED:	**8-14-07 and 8-15-07**	HAMMER WT./DROP	**N/A**
		DEPTH TO WATER	**9'**

NOTES:
80 degrees F

▽ Water level during drilling

DEPTH	SOIL SYMBOLS	SOIL DESCRIPTION	Sample Depth	PID (ppm)
0		ASPHALT		
		COAL: Ash, gravel, coal fragments, dry, brown/black		
		SW: Brown, moist, medium to fine sand with trace gravel, some silt.		0.0 ppm
-5		GP: Brown, moist, medium to coarse grained. At 8' bls: wet, gravelly.		0.0 ppm
		SW: Brown, wet, fine to medium sand, trace to some gravel. Refusal encountered at 10.5'.	Collected sample from 8' to 9' interval.	
-10				

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SOIL BORING LOG

BOREHOLE NO.: **GB-5**

TOTAL DEPTH: **12'**

PROJECT INFORMATION		DRILLING INFORMATION	
PROJECT #:	**RP060080**	DRILLING CO.:	**Syska**
SITE LOCATION:	**Riley's Garage - Pawling**	RIG TYPE:	**Geoprobe 54DT**
LOGGED BY:	**B. Goodwin, C. Brown, S. LaRose**	METHOD OF DRILLING:	**Direct Push**
PROJECT MANAGER:	**Chris Brown**	SAMPLING METHODS:	**4' Macro Core**
DATES DRILLED:	**8-14-07 and 8-15-07**	HAMMER WT./DROP	**N/A**
		DEPTH TO WATER	**9'**

NOTES:
80 degrees F

▽ Water level during drilling

DEPTH	SOIL SYMBOLS	SOIL DESCRIPTION	Sample Depth	PID (ppm)
0		ASPHALT		
		FILL: Gray, dry.		
		SW: Brown, dry, fine to medium sand with gravel. No petroelum odor. Grades into next lower lithology.		
		GP: Brown, dry, fine to medium sand with gravel, gravel-sand mixture. No petroelum odor.		0.0 ppm
		SHATTERED: Gray, dry, large rock pieces.		
-5		SM: Brown, dry to moist, fine sand and silt, silty sands, slight plasticity. No petroelum odor.		0.0 ppm
		GP: Brown, dry, poorly graded gravel, gravel-sand mixture. No petroleum odor.		0.0 ppm
		ML: Brown, dry to moist, slight plasticity, inorganic silt, sandy silt. No petroleum odor.		
		SW: Brown, wet, fine to medium sand.	▽ Collected sample from 8' to 9' interval.	
-10		GP: Brown, saturated, coarse sand and gravel, gravel-sand mixture.		0.0 ppm

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SOIL BORING LOG

BOREHOLE NO.: **GB-6**

TOTAL DEPTH: **12'**

PROJECT INFORMATION		DRILLING INFORMATION	
PROJECT #:	**RP060080**	DRILLING CO.:	**Syska**
SITE LOCATION:	**Riley's Garage - Pawling**	RIG TYPE:	**Geoprobe 54DT**
LOGGED BY:	**B. Goodwin, C. Brown, S. LaRose**	METHOD OF DRILLING:	**Direct Push**
PROJECT MANAGER:	**Chris Brown**	SAMPLING METHODS:	**4' Macro Core**
DATES DRILLED:	**8-14-07 and 8-15-07**	HAMMER WT./DROP	**N/A**
		DEPTH TO WATER	**9'**

NOTES:
80 degrees F

▽ Water level during drilling

DEPTH	SOIL SYMBOLS	SOIL DESCRIPTION	Sample Depth	PID (ppm)
0		ASPHALT: Asphalt and fill		
		GP: Brown, dry, fine sand and gravel, large rock fragments.		0.0 ppm
		SHATTERED: White, dry, rock and rock flour.		
		SW: Brown, dry, fine sand. Wood at bottom of interval.		0.0 ppm
-5		GP: Brown, dry to moist, poorly graded gravel, gravel-sand mixture.		
		ML: Brown to black, moist, medium plasticity, sandy silt, inorganic silt. Strong petroleum odor and petroleum staining at bottom of interval.		212 ppm
-10		GP: Brown and black, wet/saturated, gravel-sand mixture with varying amounts of gravel. Petroelum odor. ▽	Collected sample from 8' to 10' interval.	297 ppm

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SOIL BORING LOG

BOREHOLE NO.: **GB-7**

TOTAL DEPTH: **12'**

PROJECT INFORMATION		DRILLING INFORMATION	
PROJECT #:	**RP060080**	DRILLING CO.:	**Syska**
SITE LOCATION:	**Riley's Garage - Pawling**	RIG TYPE:	**Geoprobe 54DT**
LOGGED BY:	**B. Goodwin, C. Brown, S. LaRose**	METHOD OF DRILLING:	**Direct Push**
PROJECT MANAGER:	**Chris Brown**	SAMPLING METHODS:	**4' Macro Core**
DATES DRILLED:	**8-14-07 and 8-15-07**	HAMMER WT./DROP	**N/A**
		DEPTH TO WATER	**9'**

NOTES:
80 degrees F

▽ Water level during drilling

DEPTH	SOIL SYMBOLS	SOIL DESCRIPTION	Sample Depth	PID (ppm)
0		ASPHALT		
		COAL: Coal, ash, weathered rock		
		SW: Light brown, medium to fine sand, trace gravel, moist (not dry), grain size increases with depth. Coarser gravel at 6' bls. No petroleum odor.		1.2 ppm 2.3 ppm
-5		ML: Black, moist, fine sand, trace silt and clay. Petroleum odor.	Collected sample from 6' to 8' interval.	3275 ppm
		GP: Medium to coarse sand with gravel, gravel-sand mixture, wet.	▽	2800 ppm
-10				

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SOIL BORING LOG

BOREHOLE NO.: **GB-8**

TOTAL DEPTH: **12'**

PROJECT INFORMATION		DRILLING INFORMATION	
PROJECT #:	**RP060080**	DRILLING CO.:	**Syska**
SITE LOCATION:	**Riley's Garage - Pawling**	RIG TYPE:	**Geoprobe 54DT**
LOGGED BY:	**B. Goodwin, C. Brown, S. LaRose**	METHOD OF DRILLING:	**Direct Push**
PROJECT MANAGER:	**Chris Brown**	SAMPLING METHODS:	**4' Macro Core**
DATES DRILLED:	**8-14-07 and 8-15-07**	HAMMER WT./DROP	**N/A**
		DEPTH TO WATER	**8'**

NOTES:
80 degrees F

▽ Water level during drilling

DEPTH	SOIL SYMBOLS	SOIL DESCRIPTION	Sample Depth	PID (ppm)
0		ASPHALT: Asphalt and fill		
		GP: Brown, dry, poorly graded gravel, gravel-sand mixture. No petroleum odor.		0.6 ppm
		SW: Brown, dry, well-graded sand. No petroleum odor.		3.2 ppm
-5		GP: Brown, moist, poorly graded gravel, gravel-sand mixture. No petroleum odor.		
		ML: Gray/black, inorganic silt, sandy silt, silt with clay. Strong petroleum odor. Petroleum staining.	Collected sample from 6' to 8' interval.	1925 ppm
		GP: Brown, saturated, poorly graded gravel, gravel-sand mixture. Petroleum odor from 8' to 10' bls, but no odor at bottom of interval. ▽		2665 ppm
-10				5.0 ppm

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SOIL BORING LOG

BOREHOLE NO.: **GB-9**

TOTAL DEPTH: **8'**

PROJECT INFORMATION		DRILLING INFORMATION	
PROJECT #:	**RP060080**	DRILLING CO.:	**Syska**
SITE LOCATION:	**Riley's Garage - Pawling**	RIG TYPE:	**Geoprobe 54DT**
LOGGED BY:	**B. Goodwin, C. Brown, S. LaRose**	METHOD OF DRILLING:	**Direct Push**
PROJECT MANAGER:	**Chris Brown**	SAMPLING METHODS:	**4' Macro Core**
DATES DRILLED:	**8-14-07 and 8-15-07**	HAMMER WT./DROP	**N/A**
		DEPTH TO WATER	**8'**

NOTES:
80 degrees F

▽ Water level during drilling

DEPTH	SOIL SYMBOLS	SOIL DESCRIPTION	Sample Depth	PID (ppm)
0		ASPHALT: Asphalt gravel.		
		SW: Well-graded sand. No petroleum odor or discoloration.		0.0 ppm
		ML: Inorganic silt, sandy silt.		0.0 ppm
-5				152 ppm
		GP: Poorly graded gravel, gravel-sand mixture.	Collected sample from 7' to 8' interval.	3500 ppm

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SOIL BORING LOG

BOREHOLE NO.: **GB-10**

TOTAL DEPTH: **12'**

PROJECT INFORMATION		DRILLING INFORMATION	
PROJECT #:	**RP060080**	DRILLING CO.:	**Syska**
SITE LOCATION:	**Riley's Garage - Pawling**	RIG TYPE:	**Geoprobe 54DT**
LOGGED BY:	**B. Goodwin, C. Brown, S. LaRose**	METHOD OF DRILLING:	**Direct Push**
PROJECT MANAGER:	**Chris Brown**	SAMPLING METHODS:	**4' Macro Core**
DATES DRILLED:	**8-14-07 and 8-15-07**	HAMMER WT./DROP	**N/A**
		DEPTH TO WATER	**8'**

NOTES:
80 degrees F

▽ Water level during drilling

DEPTH	SOIL SYMBOLS	SOIL DESCRIPTION	Sample Depth	PID (ppm)
0		ASPHALT: Asphalt, gravel		
		SHATTERED: White concrete/limestone rock		
		ML: Brown, moist, inorganic silt, sandy silt, silt with clay. No petroleum odor.		2.1 ppm
-5		ML: Gray, moist, inorganic silt, sandy silt, silt with clay. Slight petroleum odor. Petroleum staining.	Collected sample from 6' to 8' interval.	842 ppm
		GP: Brown-black, saturated, poorly graded gravel, gravel-sand mixture. Slight petroleum odor from 8-10' bls, but no petroleum odor from 10-12' bls. ▽		8.4 ppm
-10				0.9 ppm

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SOIL BORING LOG

BOREHOLE NO.: **GB-11**

TOTAL DEPTH: **11.6'**

PROJECT INFORMATION		DRILLING INFORMATION	
PROJECT #:	**RP060080**	DRILLING CO.:	**Syska**
SITE LOCATION:	**Riley's Garage - Pawling**	RIG TYPE:	**Geoprobe 54DT**
LOGGED BY:	**B. Goodwin, C. Brown, S. LaRose**	METHOD OF DRILLING:	**Direct Push**
PROJECT MANAGER:	**Chris Brown**	SAMPLING METHODS:	**4' Macro Core**
DATES DRILLED:	**8-14-07 and 8-15-07**	HAMMER WT./DROP	**N/A**
		DEPTH TO WATER	**8'**

NOTES:
80 degrees F

▽ Water level during drilling

DEPTH	SOIL SYMBOLS	SOIL DESCRIPTION	Sample Depth	PID (ppm)
0		TOPSOIL: Black, dry, topsoil.		
		SHATTERED: White to brown, rocks, rock flour, some gravel-sand mixture. No petroleum odor.		
-5		GP: Brown, moist, poorly graded gravel, gravel-sand mixture.		20 ppm
		ML: Brown-black, wet, inorganic silt, sandy silt, silt with clay. Petroleum odor.	Collected sample from 6' to 8' interval.	881 ppm
		GP: Brown-black, wet, poorly graded gravel, gravel-sand mixture. ▽		9 ppm
-10		SW: Brown to tan, wet, well-graded sand. Refusal encountered at 11.6' bls.		

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SOIL BORING LOG

BOREHOLE NO.: **GB-12**

TOTAL DEPTH: **8'**

PROJECT INFORMATION		DRILLING INFORMATION	
PROJECT #:	**RP060080**	DRILLING CO.:	**Syska**
SITE LOCATION:	**Riley's Garage - Pawling**	RIG TYPE:	**Geoprobe 54DT**
LOGGED BY:	**B. Goodwin, C. Brown, S. LaRose**	METHOD OF DRILLING:	**Direct Push**
PROJECT MANAGER:	**Chris Brown**	SAMPLING METHODS:	**4' Macro Core**
DATES DRILLED:	**8-14-07 and 8-15-07**	HAMMER WT./DROP	**N/A**
		DEPTH TO WATER	**Not Encountered**

NOTES:
80 degrees F

▽ Water level during drilling

DEPTH	SOIL SYMBOLS	SOIL DESCRIPTION	Sample Depth	PID (ppm)
0		ASPHALT		
		GP: Black, dry, gravel-sand mix, poorly graded gravel.		
		SW: Tan to black, dry to moist, well-graded fine-grained sand. Tan from 3-4' bls, brown from 4-6' bls, black from 6-8' bls. Dry from 3-6' bls, moist from 6-8' bls. Boring abandoned at 8' bls due to cave-in.		1.2 ppm
-5			Collected sample from 6' to 8' interval.	4300 ppm

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SOIL BORING LOG

BOREHOLE NO.: **GB-13**

TOTAL DEPTH: **4'**

PROJECT INFORMATION		DRILLING INFORMATION	
PROJECT #:	**RP060080**	DRILLING CO.:	**Syska**
SITE LOCATION:	**Riley's Garage - Pawling**	RIG TYPE:	**Geoprobe 54DT**
LOGGED BY:	**B. Goodwin, C. Brown, S. LaRose**	METHOD OF DRILLING:	**Direct Push**
PROJECT MANAGER:	**Chris Brown**	SAMPLING METHODS:	**4' Macro Core**
DATES DRILLED:	**8-14-07 and 8-15-07**	HAMMER WT./DROP	**N/A**
		DEPTH TO WATER	**Not Encountered**

NOTES:
80 degrees F

▽ Water level during drilling

DEPTH	SOIL SYMBOLS	SOIL DESCRIPTION	Sample Depth	PID (ppm)
0		GP: Topsoil, sand-silt-gravel mixture. Refusal encountered at 4' bls.	Collected sample from 2' to 4' interval.	

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SOIL BORING LOG

BOREHOLE NO.: **GB-14**

TOTAL DEPTH: **12'**

PROJECT INFORMATION		DRILLING INFORMATION	
PROJECT #:	**RP060080**	DRILLING CO.:	**Syska**
SITE LOCATION:	**Riley's Garage - Pawling**	RIG TYPE:	**Geoprobe 54DT**
LOGGED BY:	**B. Goodwin, C. Brown, S. LaRose**	METHOD OF DRILLING:	**Direct Push**
PROJECT MANAGER:	**Chris Brown** -	SAMPLING METHODS:	**4' Macro Core**
DATES DRILLED:	**8-14-07 and 8-15-07**	HAMMER WT./DROP	**N/A**
		DEPTH TO WATER	**9'**

NOTES:
80 degrees F

▽ Water level during drilling

DEPTH	SOIL SYMBOLS	SOIL DESCRIPTION		Sample Depth	PID (ppm)
0		ASPHALT: Black, dry, gravel, asphalt.			
		SW: Brown, dry, fine well-graded sand, trace gravel.			0.0 ppm
-5		BLANK: Unknown lithology due to very poor recovery. Strong petroleum odor at bottom 6 inches of interval/			316 ppm
		ML: Black, inorganic silt, sandy silt, silt with clay. Petroleum odor.	▽	Collected sample from 9' to 10' interval.	230 ppm 2500 ppm
-10		GP: Black to brown, wet, gravel-sand mixture. Slight petroleum odor 10-11' bls, little to no petroleum odor 11-12' bls. Black 10-11' bls, brown 11-12' bls.			218 ppm 14.5 ppm

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SOIL BORING LOG

BOREHOLE NO.: **GB-15**

TOTAL DEPTH: **12'**

PROJECT INFORMATION		DRILLING INFORMATION	
PROJECT #:	**RP060080**	DRILLING CO.:	**Syska**
SITE LOCATION:	**Riley's Garage - Pawling**	RIG TYPE:	**Geoprobe 54DT**
LOGGED BY:	**B. Goodwin, C. Brown, S. LaRose**	METHOD OF DRILLING:	**Direct Push**
PROJECT MANAGER:	**Chris Brown**	SAMPLING METHODS:	**4' Macro Core**
DATES DRILLED:	**8-14-07 and 8-15-07**	HAMMER WT./DROP	**N/A**
		DEPTH TO WATER	**7'**

NOTES:
80 degrees F

▽ Water level during drilling

DEPTH	SOIL SYMBOLS	SOIL DESCRIPTION		Sample Depth	PID (ppm)
0		TOPSOIL			
		FILL: Black, dry.			
		SW: Brown, dry to wet, well-graded sand. No petroleum odor 1.5-4' bls. Wet from 4-9' bls.			0.0 ppm
-5			▽	Collected sample from 6' to 8' interval.	0.0 ppm
		GP: Gray-black, medium to coarse sand and gravel, gravel-sand mixture.			0.0 ppm
-10					

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SOIL BORING LOG

BOREHOLE NO.: **GB-16**

TOTAL DEPTH: **12'**

PROJECT INFORMATION		DRILLING INFORMATION	
PROJECT #:	**RP060080**	DRILLING CO.:	**Syska**
SITE LOCATION:	**Riley's Garage - Pawling**	RIG TYPE:	**Geoprobe 54DT**
LOGGED BY:	**B. Goodwin, C. Brown, S. LaRose**	METHOD OF DRILLING:	**Direct Push**
PROJECT MANAGER:	**Chris Brown**	SAMPLING METHODS:	**4' Macro Core**
DATES DRILLED:	**8-14-07 and 8-15-07**	HAMMER WT./DROP	**N/A**
		DEPTH TO WATER	**7'**

NOTES:
80 degrees F

▽ Water level during drilling

DEPTH	SOIL SYMBOLS	SOIL DESCRIPTION		Sample Depth	PID (ppm)
0		TOPSOIL			
		GP: Poorly graded gravel, gravel-sand mixture, wet at 4' bls. Poor recovery.			0.0 ppm
-5		SW: Brown, wet, well-graded sand, gravel-sand-silt mix.			
		FILL: Fill, large brick. 8' bls: black, wet, no petroleum odor, sandy silt.	▽	Collected sample from 7' to 8' interval.	0.0 ppm
-10		GP: Brown, wet, poorly graded grave, gravel-sand mixture. No petroleum odor or sheen.			

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SOIL BORING LOG

BOREHOLE NO.: **GB-17**

TOTAL DEPTH: **12'**

PROJECT INFORMATION		DRILLING INFORMATION	
PROJECT #:	**RP060080**	DRILLING CO.:	**Syska**
SITE LOCATION:	**Riley's Garage - Pawling**	RIG TYPE:	**Geoprobe 54DT**
LOGGED BY:	**B. Goodwin, C. Brown, S. LaRose**	METHOD OF DRILLING:	**Direct Push**
PROJECT MANAGER:	**Chris Brown**	SAMPLING METHODS:	**4' Macro Core**
DATES DRILLED:	**8-14-07 and 8-15-07**	HAMMER WT./DROP	**N/A**
		DEPTH TO WATER	**9'**

NOTES:
80 degrees F

▽ Water level during drilling

DEPTH	SOIL SYMBOLS	SOIL DESCRIPTION	Sample Depth	PID (ppm)
0		GP: Brown, dry to wet, poorly graded gravel, gravel-sand mixture. Dry from 0-9' bls, wet from 9-12' bls.		0.0 ppm
-5			Collected sample from 6' to 8' interval.	0.0 ppm
-10		▽		0.0 ppm

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SOIL BORING LOG

BOREHOLE NO.: **GB-18**

TOTAL DEPTH: **12'**

PROJECT INFORMATION		DRILLING INFORMATION	
PROJECT #:	**RP060080**	DRILLING CO.:	**Syska**
SITE LOCATION:	**Riley's Garage - Pawling**	RIG TYPE:	**Geoprobe 54DT**
LOGGED BY:	**B. Goodwin, C. Brown, S. LaRose**	METHOD OF DRILLING:	**Direct Push**
PROJECT MANAGER:	**Chris Brown**	SAMPLING METHODS:	**4' Macro Core**
DATES DRILLED:	**8-14-07 and 8-15-07**	HAMMER WT./DROP	**N/A**
		DEPTH TO WATER	**9'**

NOTES:
80 degrees F

▽ Water level during drilling

DEPTH	SOIL SYMBOLS	SOIL DESCRIPTION	Sample Depth	PID (ppm)
0		GP: Brown, dry, gravel-sand mixture, poorly graded gravel.		
-5		SW: Brown, dry, well-graded gravel.	Collected sample from 6' to 8' interval.	0.0 ppm
		ML: Brown-black, dry to moist with depth, inorganic silt, sandy silt, silt with clay.		
-10		GP: Wet, poorly graded gravel, gravel-sand mixture. ▽		2.4 ppm
		SW: Light brown, wet, well-graded sand.		

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SOIL BORING LOG

BOREHOLE NO.: **GB-19**

TOTAL DEPTH: **12'**

PROJECT INFORMATION		DRILLING INFORMATION	
PROJECT #:	**RP060080**	DRILLING CO.:	**Syska**
SITE LOCATION:	**Riley's Garage - Pawling**	RIG TYPE:	**Geoprobe 54DT**
LOGGED BY:	**B. Goodwin, C. Brown, S. LaRose**	METHOD OF DRILLING:	**Direct Push**
PROJECT MANAGER:	**Chris Brown**	SAMPLING METHODS:	**4' Macro Core**
DATES DRILLED:	**8-14-07 and 8-15-07**	HAMMER WT./DROP	**N/A**
		DEPTH TO WATER	**9'**

NOTES:
80 degrees F

▼ Water level during drilling

DEPTH	SOIL SYMBOLS	SOIL DESCRIPTION	Sample Depth	PID (ppm)
0		GP: Brown, dry, poorly graded gravel, gravel-sand mixture.		0.0 ppm
-5		ML: Brown, dry, sandy silt, silt with clay, inorganic silt.		0.0 ppm
		GP: Wet, poorly graded gravel, gravel-sand mixture.	Collected sample from 8' to 10' interval.	0.0 ppm
-10		SHATTERED: Pulverized rock flour.		

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SOIL BORING LOG

BOREHOLE NO.: **GB-20**

TOTAL DEPTH: **12'**

PROJECT INFORMATION		DRILLING INFORMATION	
PROJECT #:	**RP060080**	DRILLING CO.:	**Syska**
SITE LOCATION:	**Riley's Garage - Pawling**	RIG TYPE:	**Geoprobe 54DT**
LOGGED BY:	**B. Goodwin, C. Brown, S. LaRose**	METHOD OF DRILLING:	**Direct Push**
PROJECT MANAGER:	**Chris Brown**	SAMPLING METHODS:	**4' Macro Core**
DATES DRILLED:	**8-14-07 and 8-15-07**	HAMMER WT./DROP	**N/A**
		DEPTH TO WATER	**8'**

NOTES:
80 degrees F

▽ Water level during drilling

DEPTH	SOIL SYMBOLS	SOIL DESCRIPTION	Sample Depth	PID (ppm)
0		ASPHALT: Asphalt, gravel and sand mixture.		
		GP: Gravel-sand mixture, poorly graded gravel. Wet and gray at 4' bls.		0.0 ppm
-5		ML: Brown, moist, sandy silt, trace gravel in small layers.	Collected sample from 6' to 8' interval.	0.0 ppm
		GP: Brown, wet, medium to coarse sand and gravel, gravel-sand mixture. No petroleum odor. ▽		0.0 ppm
-10				

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SOIL BORING LOG

BOREHOLE NO.: **GB-21**

TOTAL DEPTH: **12'**

PROJECT INFORMATION		DRILLING INFORMATION	
PROJECT #:	**RP060080**	DRILLING CO.:	**Syska**
SITE LOCATION:	**Riley's Garage - Pawling**	RIG TYPE:	**Geoprobe 54DT**
LOGGED BY:	**B. Goodwin, C. Brown, S. LaRose**	METHOD OF DRILLING:	**Direct Push**
PROJECT MANAGER:	**Chris Brown**	SAMPLING METHODS:	**4' Macro Core**
DATES DRILLED:	**8-14-07 and 8-15-07**	HAMMER WT./DROP	**N/A**
		DEPTH TO WATER	**9'**

NOTES:
80 degrees F

▽ Water level during drilling

DEPTH	SOIL SYMBOLS	SOIL DESCRIPTION	Sample Depth	PID (ppm)
0		GP: Brown, dry, asphalt, and gravel-sand mixture.		0.0 ppm
-5		ML: Black, fine grained sandy silt, no gravel. Petroleum odor.		
		SW: Black, fine to medium grained sand. Petroleum odor 7-8' bls. Wet from 8-12' bls.	Collected sample from 7' to 8' interval.	1960 ppm
		▽		414 ppm
-10				

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SOIL BORING LOG

BOREHOLE NO.: **GB-22**

TOTAL DEPTH: **12'**

PROJECT INFORMATION		DRILLING INFORMATION	
PROJECT #:	**RP060080**	DRILLING CO.:	**Syska**
SITE LOCATION:	**Riley's Garage - Pawling**	RIG TYPE:	**Geoprobe 54DT**
LOGGED BY:	**B. Goodwin, C. Brown, S. LaRose**	METHOD OF DRILLING:	**Direct Push**
PROJECT MANAGER:	**Chris Brown**	SAMPLING METHODS:	**4' Macro Core**
DATES DRILLED:	**8-14-07 and 8-15-07**	HAMMER WT./DROP	**N/A**
		DEPTH TO WATER	**10'**

NOTES:
80 degrees F

▽ Water level during drilling

DEPTH	SOIL SYMBOLS	SOIL DESCRIPTION	Sample Depth	PID (ppm)
0		TOPSOIL		
		GP: Brown, dry, gravel-sand mixture.		0.0 ppm
-5		SW: Brown, moist, well-graded sand. Petroleum odor.		0.0 ppm
		ML: Black to gray, moist, sandy silt, trace clay.	Collected sample from 8' to 10' interval.	0.0 ppm
-10		GP: Black to gray, medium to coarse sand with gravel, gravel-sand mixture. Sulfur odor. ▽		0.0 ppm

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SOIL BORING LOG

BOREHOLE NO.: **GB-23**

TOTAL DEPTH: **8'**

PROJECT INFORMATION		DRILLING INFORMATION	
PROJECT #:	**RP060080**	DRILLING CO.:	**Syska**
SITE LOCATION:	**Riley's Garage - Pawling**	RIG TYPE:	**Geoprobe 54DT**
LOGGED BY:	**B. Goodwin, C. Brown, S. LaRose**	METHOD OF DRILLING:	**Direct Push**
PROJECT MANAGER:	**Chris Brown**	SAMPLING METHODS:	**4' Macro Core**
DATES DRILLED:	**8-14-07 and 8-15-07**	HAMMER WT./DROP	**N/A**
		DEPTH TO WATER	**5'**

NOTES:
80 degrees F

▽ Water level during drilling

DEPTH	SOIL SYMBOLS	SOIL DESCRIPTION	Sample Depth	PID (ppm)
0		TOPSOIL		
		GP: Black, wet, gravel-sand mixture. Strong odor and sheen at 3' bls.	Collected sample from 3' to 4' interval.	713 ppm
		ML: Black, fine sand and silt.		
-5		GP: Gravel-sand mixture. Black from 5-6' bls, brown from 6-8' bls. ▽		64 ppm
				0.2 ppm

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SOIL BORING LOG

BOREHOLE NO.: **GB-24**

TOTAL DEPTH: **16'**

PROJECT INFORMATION		DRILLING INFORMATION	
PROJECT #:	**RP060080**	DRILLING CO.:	**Syska**
SITE LOCATION:	**Riley's Garage - Pawling**	RIG TYPE:	**Geoprobe 54DT**
LOGGED BY:	**B. Goodwin, C. Brown, S. LaRose**	METHOD OF DRILLING:	**Direct Push**
PROJECT MANAGER:	**Chris Brown**	SAMPLING METHODS:	**4' Macro Core**
DATES DRILLED:	**8-14-07 and 8-15-07**	HAMMER WT./DROP	**N/A**
		DEPTH TO WATER	**14'**

NOTES:
80 degrees F

▽ Water level during drilling

DEPTH	SOIL SYMBOLS	SOIL DESCRIPTION	Sample Depth	PID (ppm)
0		GP: Light brown, dry, gravel-sand mixture.		0.0 ppm
-5		GP: Black, moist, gravel-sand mixture. Petroleum odor.		345 ppm
-10		GP: Brown, wet, gravel-sand mixture. Petroleum odor and sheen. Refusal encountered at 17.7 feet.	Collected sample from 10' to 12' interval.	650 ppm
-15			▽	489 ppm

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FACSIMILE COVER PAGE

DATE: October 27, 2008 **PROJECT #**

TO: Kelly Liffland FAX # 845-855-0269

FROM: Stephanie LaRose

CC:

Number of Pages Including Cover Sheet: 31

MESSAGE:

Kelly,

Here are the tables from the RI/IRM report.

Table 1. **Volatile Organic Compounds (VOCs) in Geoprobe™ Soil Boring Samples; USEPA Method 8021 (STARS); collected August 14 and 15, 2007; Former Riley's Garage, 33 East Main Street, Pawling, New York; Conrad Geoscience File #RP060080**

Constituent	NYSDEC Limit[1]	Sample Identification					
		GB-1 (8'-9')	GB-2 (8'-9')	GB-3 (8'-9')	GB-4 (8'-9')	GB-5 (8'-9')	GB-6 (8'-10')
Benzene	60	ND<9.48	ND<8.67	ND<7.60	ND<8.02	ND<8.80	ND<10.5
n-Butylbenzene	12,000	ND<47.4	ND<43.3	ND<38.0	ND<40.1	ND<44.0	ND<52.4
sec-Butylbenzene	11,000	ND<9.48	ND<8.67	ND<7.60	ND<8.02	ND<8.80	16.5
tert-Butylbenzene	5,900	ND<23.7	ND<21.7	ND<19.0	ND<20.0	ND<22.0	ND<26.2
Ethylbenzene	1,000	ND<9.48	ND<8.67	ND<7.60	ND<8.02	ND<8.80	ND<10.5
n-Propylbenzene	3,900	ND<9.48	ND<8.67	ND<7.60	ND<8.02	ND<8.80	15.8
Isopropylbenzene	NE	ND<47.4	ND<43.3	ND<38.0	ND<40.1	ND<44.0	ND<52.4
p-Isopropyltoluene	NE	ND<47.4	ND<43.3	ND<38.0	ND<40.1	ND<44.0	ND<52.4
Naphthalene	NE	ND<23.7	ND<21.7	ND<19.0	ND<20.0	ND<22.0	130
Toluene	700	ND<9.48	ND<8.67	ND<7.60	ND<8.02	ND<8.80	ND<10.5
1,2,4-Trimethylbenzene	3,600	ND<9.48	ND<8.67	ND<7.60	ND<8.02	ND<8.80	ND<10.5
1,3,5-Trimethylbenzene	8,400	ND<9.48	ND<8.67	ND<7.60	ND<8.02	ND<8.80	147
m,p-Xylene	260	ND<9.48	ND<8.67	ND<7.60	ND<8.02	ND<8.80	ND<10.5
o-Xylene	260	ND<9.48	ND<8.67	ND<7.60	ND<8.02	ND<8.80	ND<10.5
Methyl tert-butyl Ether	930	ND<9.48	ND<8.67	ND<7.60	ND<8.02	ND<8.80	ND<10.5
Total VOCs	NE	0	0	0	0	0	302.3

Notes:
All concentrations are in ug/kg;
1 – Standards are for soils according to NYSDEC 6NYCRR Part 375, *Unrestricted Use Soil Cleanup Objectives*, unless otherwise indicated;
ND = Not detected, detection limit listed;
Boldface type designates those compounds detected at concentrations exceeding NYSDEC Unrestricted Use Limit.
E = Result has been estimated, calibration limit exceeded

Table 1 cont'd. **Volatile Organic Compounds (VOCs) in Geoprobe™ Soil Boring Samples; USEPA Method 8021 (STARS); collected August 14 and 15; Former Riley's Garage, 33 East Main Street, Pawling, New York; Conrad Geoscience File #RP060080**

Constituent	NYSDEC Limit[1]	Sample Identification					
		GB-7 (6'-8')	GB-8 (6'-8')	GB-9 (7'-8')	GB-10 (6'-8')	GB-11 (6'-8')	GB-12 (6'-8')
Benzene	60	ND<533	ND<117	ND<18.2	ND<12.3	ND<10.6	ND<81.5
n-Butylbenzene	12,000	ND<2,660	ND<586	ND<90.9	ND<61.4	ND<52.9	ND<408
sec-Butylbenzene	11,000	ND<533	483	22.5	72.1	ND<10.6	ND<81.5
tert-Butylbenzene	5,900	ND<1,330	ND<293	ND<45.5	ND<30.7	ND<26.5	ND<204
Ethylbenzene	1,000	4,980	ND<117	ND<18.2	ND<12.3	ND<10.6	ND<81.5
n-Propylbenzene	3,900	2,490	1,780	32.2	213	ND<10.6	ND<81.5
Isopropylbenzene	NE	ND<2,660	ND<586	ND<90.9	ND<61.4	ND<52.9	ND<408
p-Isopropyltoluene	NE	ND<2,660	637	ND<90.9	ND<61.4	ND<52.9	ND<408
Naphthalene	NE	1,610	653	ND<45.5	176	ND<26.5	ND<204
Toluene	700	ND<533	ND<117	ND<18.2	ND<12.3	ND<10.6	ND<81.5
1,2,4-Trimethylbenzene	3,600	13,400	8,240	ND<18.2	711	ND<10.6	ND<81.5
1,3,5-Trimethylbenzene	8,400	5,050	3,090	ND<18.2	88.0	ND<10.6	ND<81.5
m,p-Xylene	260	7,080	2,280	ND<18.2	23.3	ND<10.6	ND<81.5
o-Xylene	260	ND<533	ND<117	ND<18.2	ND<12.3	ND<10.6	ND<81.5
Methyl tert-butyl Ether	930	ND<533	ND<117	ND<18.2	ND<12.3	ND<10.6	ND<81.5
Total VOCs	NE	34,810	17,143	54.7	1,263.4	0	0

Notes:
All concentrations are in ug/kg;
1 – Standards are for soils according to NYSDEC 6NYCRR Part 375, *Unrestricted Use Soil Cleanup Objectives*, unless otherwise indicated;
ND = Not detected, detection limit listed;
Boldface type designates those compounds detected at concentrations exceeding NYSDEC Unrestricted Use Limit.
E = Result has been estimated, calibration limit exceeded

Table 1 cont'd. **Volatile Organic Compounds (VOCs) in Geoprobe™ Soil Boring Samples; USEPA Method 8021 (STARS); collected August 14 and 15; Former Riley's Garage, 33 East Main Street, Pawling, New York; Conrad Geoscience File #RP060060**

Constituent	NYSDEC Limit[1]	Sample Identification					
		GB-13 (2'-4')	GB-14 (9'-10')	GB-15 (6'-8')	GB-16 (7'-8')	GB-17 (6'-8')	GB-18 (6'-8')
Benzene	60	ND<9.07	ND<10.2	ND<13.3	ND<8.36	ND<6.41	ND<15.7
n-Butylbenzene	12,000	ND<45.4	ND<51.1	ND<66.6	ND<41.8	ND<32.0	ND<78.5
sec-Butylbenzene	11,000	ND<9.07	82.6	ND<13.3	ND<8.36	ND<6.41	ND<15.7
tert-Butylbenzene	5,900	ND<22.7	ND<25.5	ND<33.3	ND<20.9	ND<16.0	ND<39.2
Ethylbenzene	1,600	ND<9.07	ND<10.2	ND<13.3	ND<8.36	ND<6.41	ND<15.7
n-PropylBenzene	3,900	ND<9.07	140	ND<13.3	ND<8.36	ND<6.41	ND<15.7
Isopropylbenzene	NE	ND<45.4	ND<51.1	ND<66.6	ND<41.8	ND<32.0	ND<78.5
p-Isopropyltoluene	NE	ND<45.4	201	ND<66.6	ND<41.8	ND<32.0	ND<78.5
Naphthalene	NE	ND<22.7	ND<25.5	ND<33.3	ND<20.9	ND<16.0	ND<39.2
Toluene	700	ND<9.07	ND<10.2	ND<13.3	10.4	ND<6.41	ND<15.7
1,2,4-Trimethylbenzene	3,600	ND<9.07	173	ND<13.3	ND<8.36	ND<6.41	ND<15.7
1,3,5-Trimethylbenzene	8,400	ND<9.07	304	ND<13.3	ND<8.36	ND<6.41	ND<15.7
m,p-Xylene	260	ND<9.07	110.3	ND<13.3	12.5	ND<6.41	ND<15.7
o-Xylene	260	ND<9.07	ND<10.2	ND<13.3	ND<8.36	ND<6.41	ND<15.7
Methyl tert-butyl Ether	930	ND<9.07	ND<10.2	ND<13.3	ND<8.36	ND<6.41	ND<15.7
Total VOCs	NE	0	921.1	0	22.9	0	0

Notes:
All concentrations are in ug/kg;
1 – Standards are for soils according to NYSDEC 6NYCRR Part 375, *Unrestricted Use Soil Cleanup Objectives*, unless otherwise indicated;
ND = Not detected, detection limit listed;
Boldface type designates those compounds detected at concentrations exceeding NYSDEC Unrestricted Use Limit.
E = Result has been estimated, calibration limit exceeded

Table II cont'd. **Volatile Organic Compounds (VOCs) in Geoprobe™ Soil Boring Samples; USEPA Method 8021 (STARS); collected August 14 and 15; Former Riley's Garage, 33 East Main Street, Pawling, New York; Conrad Geoscience File #RP060080**

Constituent	NYSDEC Limit[1]	Sample Identification					
		GB-19 (8'-10')	GB-20 (6'-8')	GB-21 (7'-9')	GB-22 (8'-10')	GB-23 (3'-4')	GB-24 (10'-12')
Benzene	60	ND<8.82	ND<7.07	ND<150	ND<9.73	ND<158	ND<104
n-Butylbenzene	12,000	ND<44.1	ND<35.3	ND<752	ND<48.6	ND<791	ND<522
sec-Butylbenzene	11,000	ND<8.82	ND<7.07	757	ND<9.73	159	ND<104
tert-Butylbenzene	5,900	ND<22.1	ND<17.7	ND<376	ND<24.3	ND<395	ND<261
Ethylbenzene	1,000	ND<8.82	ND<7.07	870	ND<9.73	ND<158	215
n-PropylBenzene	3,900	ND<8.82	ND<7.07	1,980	ND<9.73	726	2,390
Isopropylbenzene	NE	ND<44.1	ND<35.3	811	ND<48.6	ND<791	1,090
p-Isopropyltoluene	NE	ND<44.1	ND<35.3	2,020	ND<48.6	ND<791	ND<522
Naphthalene	NE	ND<22.1	ND<17.7	2,680	ND<24.3	677	4,290
Toluene	700	ND<8.82	ND<7.07	ND<150	ND<9.73	ND<158	ND<104
1,2,4-Trimethylbenzene	3,600	ND<8.82	ND<7.07	3,110	ND<9.73	3,410	15,800 E
1,3,5-Trimethylbenzene	8,400	ND<8.82	ND<7.07	4,290	ND<9.73	1,650	4,720
m,p-Xylene	260	ND<8.82	ND<7.07	202	ND<9.73	1,940	10,900
o-Xylene	280	ND<8.82	ND<7.07	ND<150	ND<9.73	ND<158	ND<104
Methyl tert-butyl Ether	930	ND<8.82	ND<7.07	ND<150	ND<9.73	ND<158	ND<104
Total VOCs	NE	0	0	16,720	0	8,582	22,705

Notes:
All concentrations are in ug/kg;
1 – Standards are for soils according to NYSDEC 6NYCRR Part 375, *Unrestricted Use Soil Cleanup Objectives*, unless otherwise indicated;
ND = Not detected, detection limit listed;
Boldface type designates those compounds detected at concentrations exceeding NYSDEC Unrestricted Use Limit.
E = Result has been estimated, calibration limit exceeded

Table 2. **Volatile Organic Compounds (VOCs) in Slide Hammer Soil Boring Samples; USEPA Method 8021 (STARS); collected September 24, 2007; Former Riley's Garage, 33 East Main Street, Pawling, New York; Conrad Geoscience File #RP060080**

Constituent	NYSDEC Limit[1]	Sample Identification		
		GBSH-1 (2.5-6')	GBSH-2 (0-3')	GBSH-3 (0-3')
Benzene	60	ND<9.04	ND<12.6	ND<9.53
n-Butylbenzene	12,000	ND<45.2	ND<63.1	ND<47.7
sec-Butylbenzene	11,000	ND<9.04	104	ND<9.53
tert-Butylbenzene	5,900	ND<22.6	ND<31.6	ND<23.8
Ethylbenzene	1,000	26.7	66.3	ND<9.53
n-Propylbenzene	3,900	60.3	223	ND<9.53
Isopropylbenzene	NE	ND<45.2	90.1	ND<47.7
p-Isopropyltoluene	NE	ND<45.2	86.5	ND<47.7
Naphthalene	NE	ND<22.6	41.1	ND<23.8
Toluene	700	67.1	ND<12.6	ND<9.53
1,2,4-Trimethylbenzene	3,600	287	63.1	ND<9.53
1,3,5-Trimethylbenzene	8,400	116	829	778
m,p-Xylene	260	60.1	15.1	ND<9.53
o-Xylene	260	ND<9.04	ND<12.6	ND<9.53
Methyl tert-butyl Ether	930	ND<9.04	ND<12.6	ND<9.53
Total VOCs	NE	627.2	1,618.2	778

Notes:
All concentrations are in ug/kg;
1 – Standards are for soils according to NYSDEC 6NYCRR Part 375, *Unrestricted Use Soil Cleanup Objectives*, unless otherwise indicated;
ND = Not detected, detection limit listed;
Boldface type designates those compounds detected at concentrations exceeding NYSDEC Unrestricted Use Limit.
E = Result has been estimated, calibration limit exceeded.

Table 3. **Semi-Volatile Organic Compounds (SVOCs) in Geoprobe™ Soil Samples;** USEPA Method 8270 (STARS); collected **August 14 and 15, 2007;** Former Riley's Garage, 33 East Main Street, Pawling, New York; Conrad Geoscience File # RP0600060

Constituent	NYSDEC Limit[1]	Sample Identification							
		GB-1 (8'-9')	GB-2 (8'-9')	GB-3 (8'-9')	GB-4 (8'-9')	GB-5 (8'-9')	GB-6 (8'-10')	GB-7 (5'-6')	GB-8 (5'-6')
Acenaphthene	20,000	ND<336	ND<346	ND<330	ND<344	ND<393	ND<383	ND<378	ND<403
Acenaphthylene	100,000	ND<336	ND<346	ND<330	ND<344	ND<393	ND<383	ND<378	ND<403
Anthracene	100,000	ND<336	ND<346	ND<330	ND<344	ND<393	ND<383	ND<378	ND<403
Benzo (a) anthracene	1,000	ND<336	ND<346	ND<330	ND<344	ND<393	ND<383	ND<378	ND<403
Benzo (a) pyrene	1,000	ND<336	ND<346	ND<330	ND<344	ND<393	ND<383	ND<378	ND<403
Benzo (b) fluoranthene	1,000	ND<336	ND<346	ND<330	ND<344	ND<393	ND<383	ND<378	ND<403
Benzo (g,h,i) perylene	100,000	ND<336	ND<346	ND<330	ND<344	ND<393	ND<383	ND<378	ND<403
Benzo (k) fluoranthene	800	ND<336	ND<346	ND<330	ND<344	ND<393	ND<383	ND<378	ND<403
Chrysene	1,000	ND<336	ND<346	ND<330	ND<344	ND<393	ND<383	ND<378	ND<403
Dibenz (a,h) anthracene	330	ND<336	ND<346	ND<330	ND<344	ND<393	ND<383	ND<378	ND<403
Fluoranthene	100,000	ND<336	ND<346	ND<330	ND<344	ND<393	ND<383	ND<378	ND<403
Fluorene	30,000	ND<336	ND<346	ND<330	ND<344	ND<393	ND<383	ND<378	ND<403
Indeno (1,2,3-cd) pyrene	500	ND<336	ND<346	ND<330	ND<344	ND<393	ND<383	ND<378	ND<403
Naphthalene	12,000	ND<336	ND<346	ND<330	ND<344	ND<393	ND<383	779	ND<403
Phenanthrene	100,000	ND<336	ND<346	ND<330	ND<344	ND<393	ND<383	ND<378	ND<403
Pyrene	100,000	ND<336	ND<346	ND<330	ND<344	ND<393	ND<383	ND<378	ND<403
Total SVOCs	N/A	0	0	0	0	0	0	0	0

Notes:
All concentrations are in ug/kg;
1 - Standards are for soils according NYSDEC Part 375, *Unrestricted Use Soil Cleanup Objectives*;
ND = Not detected, detection limit listed;
MDL = Method Detection Limit;
Boldface type designates those compounds detected at concentrations exceeding NYSDEC Unrestricted Use Limit
E = Exceeded calibration range of instrument

Table 3 cont'd **Semi-Volatile Organic Compounds (SVOCs) in Geoprobe™ Soil Samples;** USEPA Method 8270 (STARS); **collected August 14 and 15, 2007;** Former Riley's Garage, 33 East Main Street, Pawling, New York; Conrad Geoscience File #1RP060080

Constituent	NYSDEC Limit[1]	Sample Identification							
		GB-9 (7'-8')	GB-10 (6'-8')	GB-11 (6'-8')	GB-12 (6'-8')	GB-13 (2'-4')	GB-14 (9'-10')	GB-15 (5'-8')	GB-16 (7'-8')
Acenaphthene	20,000	ND<338	ND<389	ND<405	ND<327	ND<319	ND<327	ND<408	ND<353
Acenaphthylene	100,000	ND<338	ND<389	ND<405	ND<327	ND<319	ND<327	ND<408	401
Anthracene	100,000	ND<338	ND<389	ND<405	ND<327	ND<319	ND<327	ND<408	ND<353
Benzo (a) anthracene	1,000	ND<338	ND<389	ND<405	ND<327	ND<319	ND<327	ND<408	586
Benzo (a) pyrene	1,000	ND<338	ND<389	ND<405	ND<327	ND<319	ND<327	ND<408	661
Benzo (b) fluoranthene	1,000	ND<338	ND<389	ND<405	ND<327	ND<319	ND<327	ND<408	595
Benzo (g,h,i) perylene	100,000	ND<338	ND<389	ND<405	ND<327	ND<319	ND<327	ND<408	1,470
Benzo (k) fluoranthene	800	ND<338	ND<389	ND<405	ND<327	ND<319	ND<327	ND<408	457
Chrysene	1,000	ND<338	ND<389	ND<405	ND<327	ND<319	ND<327	ND<408	574
Dibenz(a,h) anthracene	330	ND<338	ND<389	ND<405	ND<327	ND<319	ND<327	ND<408	ND<353
Fluoranthene	100,000	ND<338	ND<389	ND<405	ND<327	ND<319	ND<327	ND<408	754
Fluorene	30,000	ND<338	ND<389	ND<405	ND<327	ND<319	ND<327	ND<408	ND<353
Indeno (1,2,3-cd) pyrene	500	ND<338	ND<389	ND<405	ND<327	ND<319	ND<327	ND<408	768
Naphthalene	12,000	ND<338	ND<389	ND<405	ND<327	ND<319	ND<327	ND<408	ND<353
Phenanthrene	100,000	ND<338	ND<389	ND<405	ND<327	ND<319	ND<327	ND<408	ND<353
Pyrene	100,000	ND<338	ND<389	ND<405	ND<327	ND<319	ND<327	ND<408	689
Total SVOCs	N/A	0	0	0	0	0	0	0	6,855

Notes:
All concentrations are in ug/kg;
1 - Standards are for soils according NYSDEC Part 375, *Unrestricted Use Soil Cleanup Objectives*;
ND = Not detected, detection limit listed;
MDL= Method Detection Limit;
Boldface type designates those compounds detected at concentrations exceeding NYSDEC Unrestricted Use Limit.
E = Exceeded calibration range of instrument

Table 3 cont'd **Semi-Volatile Organic Compounds (SVOCs) In Geoprobe™ Soil Samples; USEPA Method 8270 (STARS); collected August 14 and 15, 2007; Former Riley's Garage, 33 East Main Street, Pawling, New York; Conrad Geoscience File # RR060060**

Constituent	NYSDEC Limit[1]	Sample Identification							
		GB-17 (5'-6')	GB-18 (5'-8')	GB-19 (8'-10')	GB-20 (5'-6')	GB-21 (7'-8')	GB-22 (8'-10')	GB-23 (3'-4')	GB-24 (10'-12')
Acenaphthene	20,000	ND<312	ND<499	ND<337	ND<838	ND<378	ND<352	ND<326	ND<330
Acenaphthylene	100,000	ND<312	ND<499	ND<337	ND<838	ND<378	ND<352	ND<326	ND<330
Anthracene	100,000	ND<312	ND<499	ND<337	ND<838	ND<378	ND<352	ND<326	ND<330
Benzo (a) anthracene	1,000	ND<312	ND<499	ND<337	ND<838	ND<378	ND<352	337	ND<330
Benzo (a) pyrene	1,000	ND<312	ND<499	ND<337	ND<838	ND<378	ND<352	ND<326	ND<330
Benzo (b) fluoranthene	1,000	ND<312	ND<499	ND<337	ND<838	ND<378	ND<352	379	ND<330
Benzo (g,h,i) perylene	100,000	ND<312	ND<499	ND<337	ND<838	ND<378	ND<352	ND<326	ND<330
Benzo (k) fluoranthene	800	ND<312	ND<499	ND<337	ND<838	ND<378	ND<352	347	ND<330
Chrysene	1,000	ND<312	ND<499	ND<337	ND<838	ND<378	ND<352	518	ND<330
Dibenz (a,h) anthracene	330	ND<312	ND<499	ND<337	ND<838	ND<378	ND<352	ND<326	ND<330
Fluoranthene	100,000	ND<312	ND<499	462	ND<838	ND<378	ND<352	1,030	ND<330
Fluorene	30,000	ND<312	ND<499	ND<337	ND<838	ND<378	ND<352	ND<326	ND<330
Indeno (1,2,3-cd) pyrene	500	ND<312	ND<499	ND<337	ND<838	ND<378	ND<352	ND<326	ND<330
Naphthalene	12,000	ND<312	ND<499	ND<337	ND<838	820	ND<352	ND<326	2,550
Phenanthrene	100,000	ND<312	ND<499	344	ND<838	ND<378	ND<352	ND<326	ND<330
Pyrene	100,000	ND<312	ND<499	349	ND<838	ND<378	ND<352	761	ND<330
Total SVOCs	N/A	0	0	1,155	0	0	0	3,367	2,550

Notes:
All concentrations are in ug/kg;
1 - Standards are for soils according NYSDEC Part 375, *Unrestricted Use Soil Cleanup Objectives*;
ND = Not detected, detection limit listed;
MDL= Method Detection Limit;
Boldface type designates those compounds detected at concentrations exceeding NYSDEC Unrestricted Use Limit.
E = Exceeded calibration range of instrument

Table 4: **Semi-Volatile Organic Compounds (SVOCs) In Slide Hammer Soil Samples; USEPA Method 8270 (STARS); collected September 24, 2007; Former Riley's Garage, 33 East Main Street, Pawling, New York; Conrad Geoscience File # RPR060080**

Constituent	NYSDEC Limit[1]	Sample Identification		
		GBSH-1 (2.5-6')	GBSH-2 (0-3')	GBSH-3 (0-3')
Acenaphthene	20,000	ND<306	ND<372	ND<343
Acenaphthylene	100,000	326	ND<372	ND<343
Anthracene	100,000	ND<306	ND<372	ND<343
Benzo (a) anthracene	1,000	316	ND<372	ND<343
Benzo (a) pyrene	1,000	499	ND<372	ND<343
Benzo (b) fluoranthene	1,000	375	ND<372	ND<343
Benzo (g,h,i) perylene	100,000	986	ND<372	ND<343
Benzo (k) fluoranthene	800	ND<306	ND<372	ND<343
Chrysene	1,000	341	ND<372	ND<343
Dibenz (a,h) anthracene	330	ND<306	ND<372	ND<343
Fluoranthene	100,000	467	ND<372	ND<343
Fluorene	30,000	ND<306	ND<372	ND<343
Indeno (1,2,3-cd) pyrene	500	570	ND<372	ND<343
Naphthalene	12,000	ND<306	ND<372	ND<343
Phenanthrene	100,000	ND<306	ND<372	ND<343
Pyrene	100,000	424	ND<372	ND<343
Total SVOCs	N/A	4,304	0	0

Notes:
All concentrations are in ug/kg;
1 - Standard use for soils according NYSDEC Part 375, *Unrestricted Use Soil Cleanup Objectives*;
ND = Not detected, detection limit listed;
MDL=Method Detection Limit;
Boldface type designates those compounds detected at concentrations exceeding NYSDEC Unrestricted Use Limit;
E = Exceeded calibration range of instrument.

Table 5. **8 RCRA Metals in Geoprobe™ Soil Samples;** USEPA Method 6010 and 7471; collected **August 14 and 15, 2007;** Former Riley's Garage, 33 East Main Street, Pawling, New York; Conrad Geoscience File # RP060080

Chemical Constituent	NYSDEC Limit[1]	GB-1 (8'-9')	GB-2 (8'-9')	GB-3 (8'-9')	GB-4 (8'-9')	GB-5 (8'-9')	GB-6 (8'-10')	GB-7 (6'-8')	GB-8 (6'-8')
Arsenic	13	5.91	8.74	5.02	6.01	6.06	4.25	5.81	5.90
Barium	350	36.3	69.3	44.3	19.7	74.1	48.4	59.0	70.1
Cadmium	2.5	ND < 0.499	ND < 0.395	ND < 0.486	ND < 0.544	ND < 0.660	ND < 0.623	ND < 0.633	ND < 0.547
Chromium	30	16.7	20.3	17.9	17.3	16.4	11.7	18.5	22.1
Lead	63	5.36	22.6	8.24	7.05	29.0	8.89	6.30	7.53
Mercury	0.18	0.0095	0.0889	0.0217	0.0137	0.0138	0.0268	0.0274	0.0418
Selenium	3.9	1.99	ND < 0.395	ND < 0.485	ND < 0.544	ND < 0.660	ND < 0.623	ND < 0.633	ND < 0.547
Silver	2	ND < 0.998	ND < 0.791	ND < 0.968	ND < 1.09	ND < 1.32	ND < 1.24	ND < 1.27	ND < 1.10

Notes:
1 – Standards are for soils according NYSDEC Part 375, *Unrestricted Use Soil Cleanup Objectives;*
All concentrations are in mg/kg unless otherwise indicated;
Boldface type designates those compounds detected at concentrations exceeding NYSDEC Unrestricted Use Limit;
B = Method blank contained trace levels of analyte;
NE = No standard established.
D = Duplicate results outside QC limits. May indicate a non-homogenous matrix.
M = Matrix spike recoveries outside QC limits. Matrix bias indicated.

Table 5 cont'd **8 RCRA Metals in Geoprobe™ Soil Samples**; USEPA Method 6010 and 7471; collected **August 14 and 15, 2007**; Former Riley's Garage, 33 East Main Street, Pawling, New York; Conrad Geoscience File # RP060080

Chemical Constituent	NYSDEC Limit[1]	GB-9 (7'-8')	GB-10 (8'-8')	GB-11 (6'-8')	GB-12 (6'-8')	GB-13 (2'-4')	GB-14 (9'-10')	GB-15 (6'-8')	GB-16 (7'-8')
Arsenic	13	3.35	3.85	3.66	2.99	5.83	3.91	5.20	9.43
Barium	350	26.7	49.3	44.1	37.1	94.4	51.1	48.9	329
Cadmium	2.5	ND < 0.397	ND < 0.682	ND < 0.491	ND < 0.520	0.777	ND < 0.369	ND < 0.627	3.34
Chromium	30	10.5	14.4	14.2	12.9	19.8	15.3	16.5	19.3
Lead	63	2.10	6.34	27.8	5.18	404	27.6	13.3	1670
Mercury	0.18	0.0082	0.0173	0.1085	0.0119	0.4585	0.0210	0.0447	0.2062
Selenium	3.9	ND < 0.400	ND < 0.682	ND < 0.491	ND < 0.520	1.56	ND < 0.369	ND < 0.627	ND < 0.572
Silver	2	ND < 0.801	ND < 1.36	ND < 0.982	ND < 1.04	ND < 1.06	ND < 0.739	ND < 1.25	ND < 1.14

Notes:
1 – Standards are for soils according NYSDEC Part 375, *Unrestricted Use Soil Cleanup Objectives;*
All concentrations are in mg/kg unless otherwise indicated;
Boldface type designates those compounds detected at concentrations exceeding NYSDEC Unrestricted Use Limit;
B = Method blank contained trace levels of analyte;
NE = No standard established.
D = Duplicate results outside QC limits. May indicate a non-homogenous matrix.
M = Matrix spike recoveries outside QC limits. Matrix bias indicated.

Table 5 cont'd **8 RCRA Metals in Geoprobe™ Soil Samples;** USEPA Method 6010 and 7471; collected **August 14 and 15, 2007;** Former Riley's Garage, 33 East Main Street, Pawling, New York; Conrad Geoscience File # RP060080

Chemical Constituent	NYSDEC Limit[1]	GB-17 (6'-8')	GB-18 (6'-8')	GB-19 (8'-10')	GB-20 (6'-8')	GB-21 (7'-8')	GB-22 (8'-10')	GB-23 (3'-4')	GB-24 (10'-12')
Arsenic	13	4.25	6.15	3.31	3.99	2.99	3.46	3.43	4.14 D
Barium	350	35.4	104	25.8	48.6	33.5	47.3	36.0	39.6 D,M
Cadmium	2.5	ND < 0.542	ND < 0.802	ND < 0.323	ND < 0.445	ND < 0.552	ND < 0.426	ND < 0.514	ND < 0.465
Chromium	30	16.1	23.0	8.59	14.0	10.6	16.1	8.91	13.8 D
Lead	63	6.57	8.14	18.4	15.4	2.37	7.19	3.45	5.25 D
Mercury	0.18	0.0354	0.0739	0.0276	0.0322 D,M	ND < 0.0102	0.0168	ND < 0.0069	0.0078
Selenium	3.9	ND < 0.542	ND < 0.802	ND < 0.323	ND < 0.445	1.87	ND < 0.426	ND < 0.514	ND < 0.465
Silver	2	ND < 1.08	ND < 1.60	ND < 0.644	ND < 0.892	ND < 1.10	ND < 0.852	ND < 1.03	ND < 0.930

Notes:
1 – Standards are for soils according NYSDEC Part 375, *Unrestricted Use Soil Cleanup Objectives;*
All concentrations are in mg/kg unless otherwise indicated;
Boldface type designates those compounds detected at concentrations exceeding NYSDEC Unrestricted Use Limit;
B = Method blank contained trace levels of analyte;
NE = No standard established.
D = Duplicate results outside QC limits. May indicate a non-homogenous matrix.
M = Matrix spike recoveries outside QC limits. Matrix bias indicated.

Table 6. **8 RCRA Metals in Slide Hammer Soil Samples;** USEPA Method 6010 and 7471; collected **September 24, 2007;** Former Riley's Garage, 33 East Main Street, Pawling, New York; Conrad Geoscience File # RP060080

Chemical Constituent	NYSDEC Limit[1]	GBSH-1 (2.5-6')	GBSH-2 (0-3')	GBSH-3 (0-3')	Laboratory Method Blank
Arsenic	13	5.02	3.71	3.86 D	ND<0.500
Barium	350	63.4	57.7	38.2	ND<2.00
Cadmium	2.5	1.50	ND<0.378	0.444	ND<0.500
Chromium	30	10.3	11.7	11.8 D	ND<1.00
Lead	63	322	34.3	19.6 D	ND<0.500
Mercury	0.18	0.3737	0.1083	0.0205	ND<0.0080
Selenium	3.9	1.80 B	ND<0.378	ND<0.444	0.687
Silver	2	ND<0.851	ND<7.56	ND<0.889	ND<1.00

Notes:
1 – Standards are for soils according NYSDEC Part 375, *Unrestricted Use Soil Cleanup Objectives;*
All concentrations are in mg/kg unless otherwise indicated;
Boldface type designates those compounds detected at concentrations exceeding NYSDEC Unrestricted Use Limit;
B = Method blank contained trace levels of analyte;
NE = No standard established.
D = Duplicate results outside QC limits. May indicate a non-homogenous matrix.
M = Matrix spike recoveries outside QC limits. Matrix bias indicated.

Table 7. **Volatile Organic Compounds (VOCs) In Groundwater Samples; USEPA Method 8260; collected August 15, 2007; Former Riley's Garage, 33 East Main Street, Pawling, New York; Conrad Geoscience File #RP060080**

Constituent	NYSDEC Limit[1]	Sample Identification				
		GW-1	GW-2	GW-3	GW-4	GW-5
Bromodichloromethane	50	ND<2.00	ND<2.00	ND<2.00	ND<2.00	ND<2.00
Bromomethane	5	ND<2.00	ND<2.00	ND<2.00	ND<2.00	ND<2.00
Bromoform	50	ND<5.00	ND<5.00	ND<5.00	ND<5.00	ND<5.00
Carbon tetrachloride	5	ND<2.00	ND<2.00	ND<2.00	ND<2.00	ND<2.00
Chloroethane	5	ND<2.00	ND<2.00	ND<2.00	ND<2.00	ND<2.00
Chloromethane	5	ND<2.00	ND<2.00	ND<2.00	ND<2.00	ND<2.00
2-Chloroethyl vinyl ether	50	ND<10.0	ND<10.0	ND<10.0	ND<10.0	ND<10.0
Chloroform	7	ND<2.00	ND<2.00	ND<2.00	ND<2.00	ND<2.00
Dibromochloromethane	50	ND<2.00	ND<2.00	ND<2.00	ND<2.00	ND<2.00
1,1-Dichloroethane	5	ND<2.00	ND<2.00	ND<2.00	ND<2.00	ND<2.00
1,2-Dichloroethane	0.6	ND<2.00	ND<2.00	ND<2.00	ND<2.00	ND<2.00
1,1-Dichloroethene	5	ND<2.00	ND<2.00	ND<2.00	ND<2.00	ND<2.00
cis-1, 2-Dichloroethene	5	ND<2.00	ND<2.00	ND<2.00	ND<2.00	ND<2.00
trans-1,2-Dichloroethene	5	ND<2.00	ND<2.00	ND<2.00	ND<2.00	ND<2.00
1,2-Dichloropropane	1	ND<2.00	ND<2.00	ND<2.00	ND<2.00	ND<2.00
cis-1,3-Dichloropropene	5	ND<2.00	ND<2.00	ND<2.00	ND<2.00	ND<2.00
trans-1,3-Dichloropropene	5	ND<2.00	ND<2.00	ND<2.00	ND<2.00	ND<2.00
Methylene chloride	5	ND<5.00	ND<5.00	ND<5.00	ND<5.00	ND<5.00
1,1,2,2-Tetrachloroethane	5	ND<2.00	ND<2.00	ND<2.00	ND<2.00	ND<2.00
Tetrachloroethene	5	ND<2.00	ND<2.00	ND<2.00	ND<2.00	ND<2.00
1,1,1-Trichloroethane	5	ND<2.00	ND<2.00	ND<2.00	ND<2.00	ND<2.00
1,1,2-Trichloroethane	1	ND<2.00	ND<2.00	ND<2.00	ND<2.00	ND<2.00
Trichloroethene	5	ND<2.00	ND<2.00	ND<2.00	ND<2.00	ND<2.00
Trichlorofluoromethane	5	ND<2.00	ND<2.00	ND<2.00	ND<2.00	ND<2.00
Vinyl Chloride	2	ND<2.00	ND<2.00	ND<2.00	ND<2.00	ND<2.00

Notes:
1 - Standards are for Class GA groundwater according to 6NYCRR Part 700-705.
All concentrations are in ug/L unless otherwise indicated.
ND=Not detected, detection limit listed.
Boldface type designates those compounds detected at concentrations exceeding NYSDEC standard.
E = Exceeded calibration range of instrumentation.

Table 7 (cont.) **Volatile Organic Compounds (VOCs) in Groundwater Samples;** USEPA Method 8260; collected **August 15, 2007**; Former Riley's Garage, 33 East Main Street, Pawling, New York;
Conrad Geoscience File #RP060080

Constituent	NYSDEC Limit[1]	Sample Identification				
		GW-1	GW-2	GW-3	GW-4	GW-5
[illegible]						
Benzene	0.7	ND<0.700	ND<0.700	ND<0.700	ND<0.700	ND<0.700
Chlorobenzene	5	ND<2.00	ND<2.00	ND<2.00	ND<2.00	ND<2.00
Ethylbenzene	5	ND<2.00	ND<2.00	ND<2.00	ND<2.00	ND<2.00
Toluene	5	ND<2.00	ND<2.00	ND<2.00	ND<2.00	ND<2.00
m/p-Xylene	5	ND<2.00	ND<2.00	ND<2.00	ND<2.00	ND<2.00
o-Xylene	5	ND<2.00	ND<2.00	ND<2.00	ND<2.00	ND<2.00
Styrene	5	ND<5.00	ND<5.00	ND<5.00	ND<5.00	ND<5.00
1,2-Dichlorobenzene	5	ND<2.00	ND<2.00	ND<2.00	ND<2.00	ND<2.00
1,3-Dichlorobenzene	5	ND<2.00	ND<2.00	ND<2.00	ND<2.00	ND<2.00
1,4-Dichlorobenzene	5	ND<2.00	ND<2.00	ND<2.00	ND<2.00	ND<2.00
Acetone	50	ND<10.0	ND<10.0	ND<10.0	ND<10.0	ND<10.0
2-Butanone	50	ND<10.0	ND<10.0	ND<10.0	ND<10.0	ND<10.0
2-Hexanone	50	ND<5.00	ND<5.00	ND<5.00	ND<5.00	ND<5.00
4-Methyl-2-pentanone	50	ND<5.00	ND<5.00	ND<5.00	ND<5.00	ND<5.00
Carbon disulfide	50	ND<5.00	ND<5.00	ND<5.00	ND<5.00	ND<5.00
Vinyl acetate	50	ND<5.00	ND<5.00	ND<5.00	ND<5.00	ND<5.00

Notes:
1 - Standards are for Class GA groundwater according to 6NYCRR Part 700-706.
All concentrations are in ug/L unless otherwise indicated.
ND=Not detected, detection limit listed.
Boldface type designates those compounds detected at concentrations exceeding NYSDEC standard.
E = Exceeded calibration range of instrumentation.

Table 7 (cont.) **Volatile Organic Compounds (VOCs) in Groundwater Samples;** USEPA Method 8260; collected **August 15, 2007;** Former Riley's Garage, 33 East Main Street, Pawling; New York;
Conrad Geoscience File #RP060080

Constituent	NYSDEC Limit[1]	Sample Identification					
		GW-6	GW-7	GW-8	GW-9	GW-10	TB-1
Bromodichloromethane	50	ND<20.0	ND<2.00	ND<2.00	ND<20.0	ND<20.0	ND<2.00
Bromomethane	5	ND<20.0	ND<2.00	ND<2.00	ND<20.0	ND<20.0	ND<2.00
Bromoform	50	ND<50.0	ND<5.00	ND<5.00	ND<50.0	ND<50.0	ND<5.00
Carbon tetrachloride	5	ND<20.0	ND<2.00	ND<2.00	ND<20.0	ND<20.0	ND<2.00
Chloroethane	5	ND<20.0	ND<2.00	ND<2.00	ND<20.0	ND<20.0	ND<2.00
Chloromethane	5	ND<20.0	ND<2.00	ND<2.00	ND<20.0	ND<20.0	ND<2.00
2-Chloroethyl vinyl ether	50	ND<100	ND<10.0	ND<10.0	ND<100	ND<100	ND<10.0
Chloroform	7	ND<20.0	ND<2.00	ND<2.00	ND<20.0	ND<20.0	ND<2.00
Dibromochloromethane	50	ND<20.0	ND<2.00	ND<2.00	ND<20.0	ND<20.0	ND<2.00
1,1-Dichloroethane	5	ND<20.0	ND<2.00	ND<2.00	ND<20.0	ND<20.0	ND<2.00
1,2-Dichloroethane	0.6	ND<20.0	ND<2.00	ND<2.00	ND<20.0	ND<20.0	ND<2.00
1,1-Dichloroethene	5	ND<20.0	ND<2.00	ND<2.00	ND<20.0	ND<20.0	ND<2.00
cis-1, 2-Dichloroethene	5	ND<20.0	ND<2.00	ND<2.00	ND<20.0	ND<20.0	ND<2.00
trans-1,2-Dichloroethene	5	ND<20.0	ND<2.00	ND<2.00	ND<20.0	ND<20.0	ND<2.00
1,2-Dichloropropane	1	ND<20.0	ND<2.00	ND<2.00	ND<20.0	ND<20.0	ND<2.00
cis-1,3-Dichloropropene	5	ND<20.0	ND<2.00	ND<2.00	ND<20.0	ND<20.0	ND<2.00
trans-1,3-Dichloropropene	5	ND<20.0	ND<2.00	ND<2.00	ND<20.0	ND<20.0	ND<2.00
Methylene chloride	5	ND<50.0	ND<5.00	ND<5.00	ND<50.0	ND<50.0	ND<5.00
1,1,2,2-Tetrachloroethane	5	ND<20.0	ND<2.00	ND<2.00	ND<20.0	ND<20.0	ND<2.00
Tetrachloroethene	5	ND<20.0	ND<2.00	ND<2.00	ND<20.0	ND<20.0	ND<2.00
1,1,1-Trichloroethane	5	ND<20.0	ND<2.00	ND<2.00	ND<20.0	ND<20.0	ND<2.00
1,1,2-Trichloroethane	1	ND<20.0	ND<2.00	ND<2.00	ND<20.0	ND<20.0	ND<2.00
Trichloroethene	5	ND<20.0	ND<2.00	ND<2.00	ND<20.0	ND<20.0	ND<2.00
Trichlorofluoromethane	5	ND<20.0	ND<2.00	ND<2.00	ND<20.0	ND<20.0	ND<2.00
Vinyl Chloride	2	ND<20.0	ND<2.00	ND<2.00	ND<20.0	ND<20.0	ND<2.00

Notes:
1 - Standards are for Class GA groundwater according to 6NYCRR Part 700-705.
All concentrations are in ug/L unless otherwise indicated.
ND=Not detected, detection limit listed.
Boldface type designates those compounds detected at concentrations exceeding NYSDEC standard.
E = Exceeded calibration range of instrumentation.

Table 7 (cont.) **Volatile Organic Compounds (VOCs) in Groundwater Samples;** USEPA Method 8260; collected **August 15, 2007;** Former Riley's Garage, 33 East Main Street, Pawling, New York;
Conrad Geoscience File #RP060080

Constituent	NYSDEC Limit[1]	Sample Identification					
		GW-6	GW-7	GW-8	GW-9	GW-10	TB-1
Benzene	0.7	ND<7.00	**1.56**	ND<0.700	**7.65**	ND<7.00	ND<0.700
Chlorobenzene	5	ND<20.0	ND<2.00	ND<2.00	ND<20.0	ND<20.0	ND<2.00
Ethylbenzene	5	**113**	ND<2.00	ND<2.00	**809**	**662**	ND<2.00
Toluene	5	ND<20.0	ND<2.00	ND<2.00	ND<20.0	ND<20.0	ND<2.00
m/p-Xylene	5	ND<20.0	ND<2.00	ND<2.00	**2,900**	**1,830**	ND<2.00
o-Xylene	5	ND<20.0	ND<2.00	ND<2.00	**38.4**	**179**	ND<2.00
Styrene	5	ND<50.0	ND<5.00	ND<5.00	ND<50.0	ND<50.0	ND<5.00
1,2-Dichlorobenzene	5	ND<20.0	ND<2.00	ND<2.00	ND<20.0	ND<20.0	ND<2.00
1,3-Dichlorobenzene	5	ND<20.0	ND<2.00	ND<2.00	ND<20.0	ND<20.0	ND<2.00
1,4-Dichlorobenzene	5	ND<20.0	ND<2.00	ND<2.00	ND<20.0	ND<20.0	ND<2.00
Acetone	50	ND<100	ND<10.0	ND<10.0	ND<100	ND<100	ND<10.0
2-Butanone	50	ND<100	ND<10.0	ND<10.0	ND<100	ND<100	ND<10.0
2-Hexanone	50	ND<50.0	ND<5.00	ND<5.00	ND<50.0	ND<50.0	ND<5.00
4-Methyl-2-pentanone	50	ND<50.0	ND<5.00	ND<5.00	ND<50.0	ND<50.0	ND<5.00
Carbon disulfide	50	ND<50.0	ND<5.00	ND<5.00	ND<50.0	ND<50.0	ND<5.00
Vinyl acetate	50	ND<50.0	ND<5.00	ND<5.00	ND<50.0	ND<50.0	ND<5.00

Notes:
1 - Standards are for Class GA groundwater according to 6NYCRR Part 700-705.
All concentrations are in ug/L unless otherwise indicated.
ND=Not detected, detection limit listed.
Boldface type designates those compounds detected at concentrations exceeding NYSDEC standard.
E = Exceeded calibration range of instrumentation.

Table 6: **Semi-Volatile Organic Compounds (SVOCs) in Groundwater Samples;** USEPA Method 8270 (STARS);
collected **August 16, 2007;**
Former Riley's Garage, 33 East Main Street, Pawling, New York;
Conrad Geoscience File #RP060080

Chemical Constituent	NYSDEC Limit[1]	Sample Identification									
		GW-1	GW-2	GW-3	GW-4	GW-5	GW-6	GW-7	GW-8	GW-9	GW-10
Acenaphthene	20	ND<10.0	ND<10.0	ND<10.0	ND<10.0	ND<10.0	ND<10.0	ND<10.0	ND<10.0	ND<10.0	ND<10.0
Acenaphthylene	NE	ND<10.0	ND<10.0	ND<10.0	ND<10.0	ND<10.0	ND<10.0	ND<10.0	ND<10.0	ND<10.0	ND<10.0
Anthracene	50	ND<10.0	ND<10.0	ND<10.0	ND<10.0	ND<10.0	ND<10.0	ND<10.0	ND<10.0	ND<10.0	ND<10.0
Benzo (a) anthracene	0.002	ND<10.0	ND<10.0	ND<10.0	ND<10.0	ND<10.0	ND<10.0	ND<10.0	ND<10.0	ND<10.0	ND<10.0
Benzo (a) pyrene	0.002	ND<10.0	ND<10.0	ND<10.0	ND<10.0	ND<10.0	ND<10.0	ND<10.0	ND<10.0	ND<10.0	ND<10.0
Benzo (b) fluoranthene	0.002	ND<10.0	ND<10.0	ND<10.0	ND<10.0	ND<10.0	ND<10.0	ND<10.0	ND<10.0	ND<10.0	ND<10.0
Benzo (g,h,i) perylene	0.002	ND<10.0	ND<10.0	ND<10.0	ND<10.0	ND<10.0	ND<10.0	ND<10.0	ND<10.0	ND<10.0	ND<10.0
Benzo (k) fluoranthene	0.002	ND<10.0	ND<10.0	ND<10.0	ND<10.0	ND<10.0	ND<10.0	ND<10.0	ND<10.0	ND<10.0	ND<10.0
Chrysene	0.002	ND<10.0	ND<10.0	ND<10.0	ND<10.0	ND<10.0	ND<10.0	ND<10.0	ND<10.0	ND<10.0	ND<10.0
Dibenz (a,h) anthracene	50	ND<10.0	ND<10.0	ND<10.0	ND<10.0	ND<10.0	ND<10.0	ND<10.0	ND<10.0	ND<10.0	ND<10.0
Fluoranthene	50	ND<10.0	ND<10.0	ND<10.0	ND<10.0	ND<10.0	ND<10.0	ND<10.0	ND<10.0	ND<10.0	ND<10.0
Fluorene	50	ND<10.0	ND<10.0	ND<10.0	ND<10.0	ND<10.0	ND<10.0	ND<10.0	ND<10.0	ND<10.0	ND<10.0
Indeno (1,2,3-cd)pyrene	0.002	ND<10.0	ND<10.0	ND<10.0	ND<10.0	ND<10.0	ND<10.0	ND<10.0	ND<10.0	ND<10.0	ND<10.0
Naphthalene	10	ND<10.0	ND<10.0	ND<10.0	ND<10.0	ND<10.0	ND<10.0	ND<10.0	ND<10.0	**130**	ND<10.0
Phenanthrene	50	ND<10.0	ND<10.0	ND<10.0	ND<10.0	ND<10.0	ND<10.0	ND<10.0	ND<10.0	ND<10.0	ND<10.0
Pyrene	50	ND<10.0	ND<10.0	ND<10.0	ND<10.0	ND<10.0	ND<10.0	ND<10.0	ND<10.0	ND<10.0	ND<10.0
Total SVOCs	NE	0	0	0	0	0	0	0	0	0	0

Notes:
All concentrations are in ug/L;
1 - Standards are for groundwater according 6NYCRR Part 700-705; Class GA Groundwater;
ND = Not detected, detection limit listed;
NE = Not established;
Boldface type designates those compounds detected at concentrations exceeding NYSDEC limit.

Table 9. **6 RCRA Metals in Groundwater Samples;** USEPA Method SW846 6010; **collected August 15, 2007;**
Former Riley's Garage, 33 East Main Street, Pawling, New York;
Conrad Geoscience File # RP060080

Constituent	NYSDEC Limit[1]	Sample Number									
		GW-1	GW-2	GW-3	GW-4	GW-5	GW-6	GW-7	GW-8	GW-9	GW-10
Inorganic Constituents (Metals)											
Arsenic	0.025	<0.005	0.008	<0.005	0.013	0.007	<0.005	0.026	0.025	<0.005	0.018
Barium	1.000	0.182	0.806	0.418	0.537	0.175	0.193	**2.61**	**3.41**	0.325	0.583
Cadmium	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.005
Chromium	0.050	<0.010	<0.010	0.012	**0.057**	<0.010	<0.010	**0.067**	**0.124**	<0.010	0.047
Lead	0.025	**0.075**	**0.033**	**0.063**	**0.134**	**0.258**	**0.056**	**0.172**	**0.065**	**0.080**	**0.636**
Mercury	0.0007	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Selenium	0.010	0.007	0.007	0.006	<0.005	<0.005	<0.005	<0.005	0.006	<0.005	<0.005
Silver	0.050	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010

Notes:
1 - Standards are for Class GA groundwater according to 6NYCRR Part 700-705;
All concentrations are in ppm (mg/L) unless otherwise indicated;
ND=Not detected, detection limit listed;
Boldface type designates those compounds detected at concentrations exceeding NYSDEC standard;
E = Exceeded calibration range of instrumentation

Table 10. **Volatile Organic Compounds (VOCs) In Surface Soil Boring Samples;** USEPA Method 8021 (STARS); collected **January 15, 2008;** Former Riley's Garage, 33 East Main Street, Pawling, New York;
Conrad Geoscience File #RP060080

Constituent	NYSDEC Limit[1]	Sample Identification					
		SS-1	SS-2	SS-3	SS-4	SS-5	SS-6
Benzene	60	ND<11.3	ND<12.4	ND<11.2	ND<10.6	ND<9.96	ND<8.45
n-Butylbenzene	12,000	ND<56.4	ND<62.1	ND<55.9	ND<53.1	ND<49.8	ND<42.3
sec-Butylbenzene	11,000	ND<11.3	ND<12.4	ND<11.2	ND<10.6	ND<9.96	ND<8.45
tert-Butylbenzene	5,900	ND<28.2	ND<31.1	ND<27.9	ND<26.5	ND<24.9	ND<21.1
Ethylbenzene	1,000	ND<11.3	ND<12.4	ND<11.2	ND<10.6	ND<9.96	ND<8.45
n-PropylBenzene	3,900	ND<11.3	ND<12.4	ND<11.2	ND<10.6	ND<9.96	ND<8.45
Isopropylbenzene	NE	ND<56.4	ND<62.1	ND<55.9	ND<53.1	ND<49.8	ND<42.3
p-Isopropyltoluene	NE	ND<56.4	ND<62.1	ND<55.9	ND<53.1	ND<49.8	ND<42.3
Naphthalene	NE	ND<28.2	ND<31.1	ND<27.9	ND<26.5	ND<24.9	ND<21.1
Toluene	700	ND<11.3	ND<12.4	ND<11.2	ND<10.6	ND<9.96	ND<8.45
1,2,4-Trimethylbenzene	3,600	ND<11.3	ND<12.4	ND<11.2	ND<10.6	ND<9.96	ND<8.45
1,3,5-Trimethylbenzene	8,400	ND<11.3	ND<12.4	ND<11.2	ND<10.6	ND<9.96	ND<8.45
m,p-Xylene	260	ND<11.3	ND<12.4	ND<11.2	ND<10.6	ND<9.96	ND<8.45
o-Xylene	260	ND<11.3	ND<12.4	ND<11.2	ND<10.6	ND<9.96	ND<8.45
Methyl tert-butyl Ether	930	ND<11.3	ND<12.4	ND<11.2	ND<10.6	ND<9.96	ND<8.45
Total VOCs	NE	ND	ND	ND	ND	ND	ND

Notes: All concentrations are in ug/kg;
1 – Standards are for soils according to NYSDEC 6NYCRR Part 375, *Unrestricted Use Soil Cleanup Objectives*, unless otherwise indicated;
ND = Not detected, detection limit listed;
Boldface type designates those compounds detected at concentrations exceeding Unrestricted Use Soil Cleanup Objectives;
E = Result has been estimated, calibration limit exceeded;
NE = Not Established for this compound.

Table 11. **Semi-Volatile Organic Compounds (SVOCs) in Surface Soil Samples;** USEPA Method 8270 (STARS); collected **January 15, 2008;** Former Riley's Garage, 33 East Main Street, Pawling, New York;
Conrad Geoscience File # RP060080

Constituent	NYSDEC Limit[1]	Sample Identification					
		SS-1	SS-2	SS-3	SS-4	SS-5	SS-6
Semi-Volatile Compounds							
Acenaphthene	20,000	ND<849	ND<415	ND<379	ND<391	650	ND<343
Acenapthylene	100,000	ND<849	ND<415	ND<379	ND<391	ND<358	ND<343
Anthracene	100,000	ND<849	ND<415	ND<379	ND<391	1,400	ND<343
Benzo (a) anthracene	1,000	ND<849	507	846	660	**1,970**	ND<343
Benzo (a) pyrene	1,000	ND<849	602	768	695	**1,630**	ND<343
Benzo (b) fluoranthene	1,000	ND<849	778	864	492	**1,850**	369
Benzo (g,h,i) perylene	100,000	ND<849	584	560	ND<391	914	ND<343
Benzo (k) fluoranthene	800	ND<849	421	596	617	**1,120**	ND<343
Chrysene	1,000	ND<849	587	869	669	**1,770**	ND<343
Dibenz (a,h) anthracene	330	ND<849	ND<415	ND<379	ND<391	ND<358	ND<343
Fluoranthene	100,000	1,020	960	1,700	1,440	5,340	610
Fluorene	30,000	ND<849	ND<415	ND<379	ND<391	680	ND<343
Indeno (1,2,3-cd) pyrene	500	ND<849	ND<415	526	ND<391	**770**	ND<343
Naphthalene	12,000	ND<849	ND<415	ND<379	ND<391	ND<358	ND<343
Phenanthrene	100,000	ND<849	ND<415	656	684	5,070	ND<343
Pyrene	100,000	877	744	1,140	1,180	3,620	424
Total SVOCs	N/A	1,897	5,183	8,525	6,437	26,584	1,403

Notes:
All concentrations are in ug/kg;
1 - Standards are for soils according NYSDEC Part 375, *Unrestricted Use Soil Cleanup Objectives*;
ND = Not detected, detection limit listed;
Boldface type designates those compounds detected at concentrations exceeding NYSDEC Unrestricted Use Limit.

Table 12. **8 RCRA Metals in Surface Soil Samples;** USEPA Method 6010 and 7471; collected **January 15, 2008;** Former Riley's Garage, 33 East Main Street, Pawling, New York;
Conrad Geoscience File # RP060080

Chemical Constituent	NYSDEC Limit[1]	SS-1	SS-2	SS-3	SS-4	SS-5	SS-6
Arsenic	13	7.17	5.84	3.60	5.08	3.14	3.40
Barium	350	182	113	33.6	53.0	41.5	34.9
Cadmium	2.5	**16.1**	2.35	0.507	ND<0.384	ND<0.557	0.624
Chromium	30	**31.6**	25.6	14.2	17.5	16.8	19.4
Lead	63	**2,080**	**654**	58.9	68.6	79.2	**137**
Mercury	0.18	**0.2110**	0.1596	0.0250	**0.4616**	0.0593	0.0379 D
Selenium	3.9	1.53	1.36	0.984	1.16	1.93	2.35
Silver	2	ND<0.966	ND<1.13	ND<0.672	ND<0.767	ND<1.11	ND<1.05

Notes:
1 – Standards are for soils according NYSDEC Part 375, *Unrestricted Use Soil Cleanup Objectives;*
All concentrations are in mg/kg unless otherwise indicated;
Boldface type designates those compounds detected at concentrations exceeding NYSDEC Unrestricted Use Limit;
NE = No standard established;
D = Duplicate results outside QC limits. May indicate a non-homogenous matrix.

Table 13. **Volatile Organic Compounds (VOCs) – Post-Excavation Soil Boring Samples;** USEPA Method 8021 (STARS); collected **April 17 – May 14, 2008;** Former Riley's Garage, 33 East Main Street, Pawling, New York; Conrad Geoscience File #RP060080

Constituent	NYSDEC Limit[1]	NYSDEC Limit[2]	Sample Identification					
			PE-1	PE-2	PE-3	PE-4	PE-5	PE-6
Benzene	60	4,800	ND<8.12	ND<8.89	ND<8.53	ND<10.4	ND<9.05	ND<1,370
n-Butylbenzene	12,000	100,000	ND<40.6	ND<44.4	ND<42.7	ND<51.8	ND<45.2	ND<6,830
sec-Butylbenzene	11,000	100,000	ND<8.12	ND<8.89	ND<8.53	ND<10.4	ND<9.05	4,490
tert-Butylbenzene	5,900	100,000	ND<20.3	ND<22.2	ND<21.3	ND<25.9	ND<22.6	ND<3,420
Ethylbenzene	1,000	41,000	ND<8.12	ND<8.89	ND<8.53	ND<10.4	ND<9.05	**6,220**
n-PropylBenzene	3,900	100,000	ND<8.12	ND<8.89	ND<8.53	ND<10.4	ND<9.05	**21,100**
Isopropylbenzene	NE	NE	ND<40.6	ND<44.4	ND<42.7	ND<51.8	ND<45.2	ND<6,830
p-Isopropyltoluene	NE	NE	ND<40.6	ND<44.4	ND<42.7	ND<51.8	ND<45.2	ND<6,830
Naphthalene	NE	NE	ND<20.3	ND<22.2	ND<21.3	ND<25.9	ND<22.6	17,900
Toluene	700	100,000	ND<8.12	ND<8.89	ND<8.53	ND<10.4	ND<9.05	ND<1,370
1,2,4-Trimethylbenzene	3,600	52,000	ND<8.12	ND<8.89	ND<8.53	ND<10.4	ND<9.05	***169,000***
1,3,5-Trimethylbenzene	8,400	52,000	ND<8.12	ND<8.89	ND<8.53	ND<10.4	ND<9.05	***69,400***
m,p-Xylene	260	100,000	ND<8.12	ND<8.89	ND<8.53	ND<10.4	ND<9.05	**37,000**
o-Xylene	260	100,000	ND<8.12	ND<8.89	ND<8.53	ND<10.4	ND<9.05	ND<1,370
Methyl tert-butyl Ether	930	100,000	ND<8.12	ND<8.89	ND<8.53	ND<10.4	ND<9.05	ND<1,370
Total VOCs	NE	NE	ND	ND	ND	ND	ND	325,050

Notes: All concentrations are in ug/kg;
1 – Standards are for soils according to NYSDEC 6NYCRR Part 375, *Unrestricted Use Soil Cleanup Objectives*, unless otherwise indicated;
2 – Standards are for soils according to NYSDEC 6NYCRR Part 375, *Restricted-Residential Use Soil Cleanup Objectives*, unless otherwise indicated;
ND = Not detected, detection limit listed;
Boldface type designates those compounds detected at concentrations exceeding Unrestricted Use Soil Cleanup Objectives;
Boldface italic type designates those compounds detected at concentrations exceeding Restricted-Residential Use Soil Cleanup Objectives;
E = Result has been estimated, calibration limit exceeded;
NE = Not Established for this compound.
M = Matrix spike recoveries outside QC limits. Matrix bias indicated.

Table 13 cont'd. **Volatile Organic Compounds (VOCs) in Post-Excavation Soil Boring Samples;** USEPA Method 8021 (STARS); collected **April 17 – May 14, 2008;** Former Riley's Garage, 33 East Main Street, Pawling, New York; Conrad Geoscience File #RP080080

Constituent	NYSDEC Limit[1]	NYSDEC Limit[2]	Sample Identification					
			PE-7	PE-8	PE-10	PE-11	PE-12	PE-13
Volatile Organic Compounds								
Benzene	60	4,800	ND<52.0	ND<40.4	ND<4,290	ND<32.7 M	ND<76.5	ND<17.2
n-Butylbenzene	12,000	100,000	ND<260	ND<202	ND<21,500	ND<164	ND<382	ND<86.1
sec-Butylbenzene	11,000	100,000	497	181	ND<4,290	537	ND<76.5	ND<17.2
tert-Butylbenzene	5,900	100,000	ND<130	ND<101	ND<10,700	ND<81.9	ND<191	ND<43.0
Ethylbenzene	1,000	41,000	2,090	ND<40.4	34,100	ND<32.7 M	156	ND<17.2
n-PropylBenzene	3,900	100,000	1,560	469	15,400	622	ND<76.5	ND<17.2
Isopropylbenzene	NE	NE	985	ND<202	ND<21,500	391	ND<382	ND<86.1
p-Isopropyltoluene	NE	NE	1,080	354	ND<21,500	1,300	ND<382	ND<86.1
Naphthalene	NE	NE	2,750	308	ND<10,700	547	319	ND<43.0
Toluene	700	100,000	ND<52.0	ND<40.4	ND<4,290	ND<32.7	171	ND<17.2
1,2,4-Trimethylbenzene	3,600	52,000	2,170	2,510	***98,400***	**4,370 E**	750	61.9
1,3,5-Trimethylbenzene	8,400	52,000	3,330	874	**26,700**	1,810	626	85.6
m,p-Xylene	260	100,000	**1,140**	**279**	**37,500**	**365**	**762**	82.5
o-Xylene	260	100,000	108	ND<40.4	ND<4,290	ND<32.7	**503**	42.2
Methyl tert-butyl Ether	930	100,000	ND<52.0	ND<40.4	ND<4,290	ND<32.7	ND<76.5	ND<17.2
Total VOCs	NE	NE	15,710	4,975	213,100	9,942	3,287	272.2

Notes: All concentrations are in ug/kg;
1 – Standards are for soils according to NYSDEC 6NYCRR Part 375, *Unrestricted Use Soil Cleanup Objectives*, unless otherwise indicated;
2 – Standards are for soils according to NYSDEC 6NYCRR Part 375, *Restricted-Residential Use Soil Cleanup Objectives*, unless otherwise indicated;
ND = Not detected, detection limit listed;
Boldface type designates those compounds detected at concentrations exceeding Unrestricted Use Soil Cleanup Objectives;
Boldface Italic type designates those compounds detected at concentrations exceeding Restricted-Residential Use Soil Cleanup Objectives;
E = Result has been estimated, calibration limit exceeded;
NE = Not Established for this compound.
M = Matrix spike recoveries outside QC limits. Matrix bias indicated.

Table 13 cont'd. **Volatile Organic Compounds (VOCs) in Post-Excavation Soil Boring Samples;** USEPA Method 8021 (STARS); collected **April 17 – May 14, 2008;** Former Riley's Garage, 33 East Main Street, Pawling, New York; Conrad Geoscience File #RP080080

Constituent	NYSDEC Limit[1]	NYSDEC Limit[2]	Sample Identification			
			PE-14	PE-15	PE-16	PE-17
Benzene	60	4,800	ND<9.65	ND<9.33	ND<9.59	ND<7.16
n-Butylbenzene	12,000	100,000	ND<48.2	ND<46.7	ND<47.9	ND<35.8
sec-Butylbenzene	11,000	100,000	ND<9.65	ND<9.33	ND<9.59	ND<7.16
tert-Butylbenzene	5,900	100,000	ND<24.1	ND<23.3	ND<24.0	ND<17.9
Ethylbenzene	1,000	41,000	ND<9.65	ND<9.33	ND<9.59	ND<7.16
n-PropylBenzene	3,900	100,000	ND<9.65	ND<9.33	ND<9.59	ND<7.16
Isopropylbenzene	NE	NE	ND<48.2	ND<46.7	ND<47.9	ND<35.8
p-Isopropyltoluene	NE	NE	ND<48.2	ND<46.7	ND<47.9	ND<35.8
Naphthalene	NE	NE	ND<24.1	ND<23.3	ND<24.0	ND<17.9
Toluene	700	100,000	ND<9.65	ND<9.33	ND<9.59	ND<7.16
1,2,4-Trimethylbenzene	3,600	52,000	15.4	ND<9.33	ND<9.59	30.7
1,3,5-Trimethylbenzene	8,400	52,000	11.4	ND<9.33	ND<9.59	78.4
m,p-Xylene	260	100,000	15.7	ND<9.33	ND<9.59	41.2
o-Xylene	260	100,000	ND<9.65	ND<9.33	ND<9.59	19.5
Methyl tert-butyl Ether	930	100,000	ND<9.65	ND<9.33	ND<9.59	ND<7.16
Total VOCs	NE	NE	42.5	ND	ND	169.8

Notes: All concentrations are in ug/kg;
1 – Standards are for soils according to NYSDEC 6NYCRR Part 375, *Unrestricted Use Soil Cleanup Objectives*, unless otherwise indicated;
2 – Standards are for soils according to NYSDEC 6NYCRR Part 375, *Restricted-Residential Use Soil Cleanup Objectives*, unless otherwise indicated;
ND = Not detected, detection limit listed;
Boldface type designates those compounds detected at concentrations exceeding Unrestricted Use Soil Cleanup Objectives;
Boldface Italic type designates those compounds detected at concentrations exceeding Restricted-Residential Use Soil Cleanup Objectives;
E = Result has been estimated, calibration limit exceeded;
NE = Not Established for this compound.
M = Matrix spike recoveries outside QC limits. Matrix bias indicated.

Table 13 cont'd. **Volatile Organic Compounds (VOCs) in Post-Excavation Soil Boring Samples;** USEPA Method 8021 (STARS); collected **April 17 – May 14, 2008;** Former Riley's Garage, 33 East Main Street, Pawling, New York; Conrad Geoscience File #RP060080

Constituent	NYSDEC Limit[1]	NYSDEC Limit[2]	Sample Identification				
			PE-18	PE-19	PE-20	PE-21	PE-22
Benzene	60	4,800	ND<69.5	ND<11.6	ND<12.9	ND<14,600	ND<11.5
n-Butylbenzene	12,000	100,000	ND<348	ND<58.1	ND<64.4	ND<73,000	ND<57.4
sec-Butylbenzene	11,000	100,000	ND<69.5	ND<11.6	ND<12.9	ND<14,600	21.4
tert-Butylbenzene	5,900	100,000	ND<174	ND<29.0	ND<32.2	ND<36,500	ND<28.7
Ethylbenzene	1,000	41,000	ND<69.5	ND<11.6	34.6	20,200	23.0 M
n-PropylBenzene	3,900	100,000	ND<69.5	ND<11.6	39.6	ND<14,600	41.9
Isopropylbenzene	NE	NE	ND<348	ND<58.1	ND<64.4	ND<73,000	ND<57.4
p-Isopropyltoluene	NE	NE	ND<348	ND<58.1	ND<64.4	ND<73,000	ND<57.4
Naphthalene	NE	NE	ND<174	49.4	73.2	ND<36,500	365
Toluene	700	100,000	ND<69.5	ND<11.6	ND<12.9	ND<14,600	ND<11.5
1,2,4-Trimethylbenzene	3,600	52,000	ND<69.5	ND<11.6	250	***93,200***	153
1,3,5-Trimethylbenzene	8,400	52,000	ND<69.5	ND<11.6	135	**29,500**	113
m,p-Xylene	260	100,000	ND<69.5	ND<11.6	360	***559,000***	167
o-Xylene	260	100,000	ND<69.5	ND<11.6	ND<12.9	ND<14,600	ND<11.5
Methyl tert-butyl Ether	930	100,000	ND<69.5	ND<11.6	ND<12.9	ND<14,600	ND<11.5
Total VOCs	NE	NE	ND	49.4	892.4	701,900	884.3

Notes: All concentrations are in ug/kg;
1 – Standards are for soils according to NYSDEC 6NYCRR Part 375, *Unrestricted Use Soil Cleanup Objectives*, unless otherwise indicated;
2 – Standards are for soils according to NYSDEC 6NYCRR Part 375, *Restricted-Residential Use Soil Cleanup Objectives*, unless otherwise indicated;
ND = Not detected, detection limit listed;
Boldface type designates those compounds detected at concentrations exceeding Unrestricted Use Soil Cleanup Objectives;
Boldface italic type designates those compounds detected at concentrations exceeding Restricted-Residential Use Soil Cleanup Objectives;
E = Result has been estimated, calibration limit exceeded;
NE = Not Established for this compound.
M = Matrix spike recoveries outside QC limits. Matrix bias indicated.

Table 14. **Semi-Volatile Organic Compounds (SVOCs) in Post-Excavation Soil Samples;** USEPA Method 8270 (STARS); **collected April 17, 2008 and May 14, 2008;** Former Riley's Garage, 33 East Main Street, Pawling, New York; Conrad Geoscience File # RP060080

Constituent	NYSDEC Limit[1]	NYSDEC Limit[2]	Sample Identification				
			PE-1	PE-2	PE-3	PE-4	PE-5
Semi-Volatile Organic Compounds							
Acenaphthene	20,000	100,000	ND<333	ND<334	ND<339	ND<318	ND<332
Acenapthylene	100,000	100,000	ND<333	ND<334	ND<339	ND<318	ND<332
Anthracene	100,000	100,000	ND<333	ND<334	ND<339	ND<318	ND<332
Benzo (a) anthracene	1,000	1,000	ND<333	ND<334	ND<339	ND<318	ND<332
Benzo (a) pyrene	1,000	1,000	ND<333	ND<334	ND<339	ND<318	ND<332
Benzo (b) fluoranthene	1,000	1,000	ND<333	ND<334	ND<339	ND<318	ND<332
Benzo (g,h,i) perylene	100,000	100,000	ND<333	ND<334	ND<339	ND<318	ND<332
Benzo (k) fluoranthene	800	3,900	ND<333	ND<334	ND<339	ND<318	ND<332
Chrysene	1,000	3,900	ND<333	ND<334	ND<339	ND<318	ND<332
Dibenz (a,h) anthracene	330	330	ND<333	ND<334	ND<339	ND<318	ND<332
Fluoranthene	100,000	100,000	ND<333	ND<334	ND<339	ND<318	ND<332
Fluorene	30,000	100,000	ND<333	ND<334	ND<339	ND<318	ND<332
Indeno (1,2,3-cd) pyrene	500	500	ND<333	ND<334	ND<339	ND<318	ND<332
Naphthalene	12,000	100,000	ND<333	ND<334	ND<339	ND<318	ND<332
Phenanthrene	100,000	100,000	ND<333	ND<334	ND<339	ND<318	ND<332
Pyrene	100,000	100,000	ND<333	ND<334	ND<339	ND<318	ND<332
Total SVOCs	NE	NE	ND	ND	ND	ND	ND

Notes: All concentrations are in ug/kg;
1 – Standards are for soils according to NYSDEC 6NYCRR Part 375, *Unrestricted Use Soil Cleanup Objectives*, unless otherwise indicated;
2 – Standards are for soils according to NYSDEC 6NYCRR Part 375, *Restricted-Residential Use Soil Cleanup Objectives*, unless otherwise indicated;
ND = Not detected, detection limit listed;
Boldface type designates those compounds detected at concentrations exceeding Unrestricted Use Soil Cleanup Objectives;
Boldface Italic type designates those compounds detected at concentrations exceeding Restricted-Residential Use Soil Cleanup Objectives;
E = Result has been estimated, calibration limit exceeded;
NE = Not Established for this compound.

Table 14 cont'd. **Semi-Volatile Organic Compounds (SVOCs) in Post-Excavation Soil Samples; USEPA Method 8270 (STARS); collected April 17, 2008 and May 14, 2008; Former Riley's Garage, 33 East Main Street, Pawling, New York; Conrad Geoscience File # RP080080**

Constituent	NYSDEC Limit[1]	NYSDEC Limit[2]	Sample Identification				
			PE-18	PE-19	PE-20	PE-21	PE-22
Semivolatile Organic Compounds (SVOCs)							
Acenaphthene	20,000	100,000	ND<412	ND<346	ND<367	ND<692	ND<414
Acenaphthylene	100,000	100,000	ND<412	ND<346	ND<367	ND<692	ND<414
Anthracene	100,000	100,000	ND<412	ND<346	ND<367	772	ND<414
Benzo (a) anthracene	1,000	1,000	ND<412	ND<346	ND<367	***2,320***	ND<414
Benzo (a) pyrene	1,000	1,000	ND<412	ND<346	ND<367	**2,520**	ND<414
Benzo (b) fluoranthene	1,000	1,000	ND<412	ND<346	ND<367	***2,360***	ND<414
Benzo (g,h,i) perylene	100,000	100,000	ND<412	ND<346	ND<367	1,970	ND<414
Benzo (k) fluoranthene	800	3,900	ND<412	ND<346	ND<367	2,200	ND<414
Chrysene	1,000	3,900	ND<412	ND<346	ND<367	**3,320**	474
Dibenz (a,h) anthracene	330	330	ND<412	ND<346	ND<367	ND<692	ND<414
Fluoranthene	100,000	100,000	ND<412	ND<346	ND<367	5,300	987
Fluorene	30,000	100,000	ND<412	ND<346	ND<367	ND<692	ND<414
Indeno (1,2,3-cd) pyrene	500	500	ND<412	ND<346	ND<367	***1,820***	ND<414
Naphthalene	12,000	100,000	ND<412	ND<346	ND<367	6,410	ND<414
Phenanthrene	100,000	100,000	ND<412	ND<346	ND<367	1,670	508
Pyrene	100,000	100,000	ND<412	ND<346	ND<367	2,030	579
Total SVOCs	NE	NE	ND	ND	ND	32,692	2,528

Notes: All concentrations are in ug/kg;
1 – Standards are for soils according to NYSDEC 6NYCRR Part 375, *Unrestricted Use Soil Cleanup Objectives*, unless otherwise indicated;
2 – Standards are for soils according to NYSDEC 6NYCRR Part 375, *Restricted-Residential Use Soil Cleanup Objectives*, unless otherwise indicated;
ND = Not detected, detection limit listed;
Boldface type designates those compounds detected at concentrations exceeding Unrestricted Use Soil Cleanup Objectives;
Boldface Italic type designates those compounds detected at concentrations exceeding Restricted-Residential Use Soil Cleanup Objectives;
E = Result has been estimated, calibration limit exceeded;
NE = Not Established for this compound.

Table 15. **Semi-Volatile Organic Compounds (SVOCs) in Post-Excavation Surface Soil Samples;** USEPA Method 8270 (STARS); collected **May 15, 2008;** Former Riley's Garage, 33 East Main Street, Pawling, New York; Conrad Geoscience File # RP060080

Constituent	NYSDEC Limit[1]	NYSDEC Limit[2]	Sample Identification				
			SS-1D	SS-2D	SS-3D	SS-4D	SS-5D
Acenaphthene	20,000	100,000	ND<323	ND<337	ND<345	ND<319	ND<328
Acenapthylene	100,000	100,000	ND<323	ND<337	ND<345	ND<319	ND<328
Anthracene	100,000	100,000	ND<323	ND<337	ND<345	ND<319	ND<328
Benzo (a) anthracene	1,000	1,000	ND<323	ND<337	ND<345	ND<319	ND<328
Benzo (a) pyrene	1,000	1,000	ND<323	ND<337	ND<345	ND<319	ND<328
Benzo (b) fluoranthene	1,000	1,000	ND<323	ND<337	ND<345	ND<319	343
Benzo (g,h,i) perylene	100,000	100,000	ND<323	ND<337	ND<345	ND<319	ND<328
Benzo (k) fluoranthene	800	3,900	ND<323	ND<337	ND<345	ND<319	ND<328
Chrysene	1,000	3,900	ND<323	ND<337	ND<345	ND<319	359
Dibenz (a,h) anthracene	330	330	ND<323	ND<337	ND<345	ND<319	ND<328
Fluoranthene	100,000	100,000	ND<323	379	ND<345	494	586
Fluorene	30,000	100,000	ND<323	ND<337	ND<345	ND<319	ND<328
Indeno (1,2,3-cd) pyrene	500	500	ND<323	ND<337	ND<345	ND<319	ND<328
Naphthalene	12,000	100,000	ND<323	ND<337	ND<345	ND<319	ND<328
Phenanthrene	100,000	100,000	ND<323	ND<337	ND<345	ND<319	358
Pyrene	100,000	100,000	ND<323	346	ND<345	434	580
Total SVOCs	NE	NE	ND	725	ND	928	2,226

Notes: All concentrations are in ug/kg;
1 – Standards are for soils according to NYSDEC 6NYCRR Part 375, *Unrestricted Use Soil Cleanup Objectives*, unless otherwise indicated;
2 – Standards are for soils according to NYSDEC 6NYCRR Part 375, *Restricted-Residential Use Soil Cleanup Objectives*, unless otherwise indicated;
ND = Not detected, detection limit listed;
Boldface type designates those compounds detected at concentrations exceeding Unrestricted Use Soil Cleanup Objectives;
***Boldface italic* type designates those compounds detected at concentrations exceeding Restricted-Residential Use Soil Cleanup Objectives;**
E = Result has been estimated, calibration limit exceeded;
NE = Not Established for this compound.

Table 16. **8 RCRA Metals in Post-Excavation Surface Soil Samples;** USEPA Method 6010 and 7471; collected **May 15, 2008;** Former Riley's Garage, 33 East Main Street, Pawling, New York;
Conrad Geoscience File # RP060080

Chemical Constituent	NYSDEC Limit[1]	NYSDEC Limit[2]	SS-1D	SS-2D	SS-3D	SS-4D	SS-5D
Arsenic	13	16	2.11	4.99	9.14	3.07	5.21
Barium	350	400	87.7	181	76.7	78.4	84.6
Cadmium	2.5	4.3	ND<0.524	2.09	ND<0.602	ND<0.468	1.17
Chromium	30	110-180[3]	13.5	17.9	13.0	15.8	28.7
Lead	63	400	140	***410***	88.7	155	***512***
Mercury	0.18	0.81	0.2533	***1.23***	0.3294	0.2609	0.1654
Selenium	3.9	180	2.12	2.29	3.65	1.57	2.22
Silver	2	180	ND<1.05	3.16	ND<1.20	ND<0.935	ND<0.879

Notes:
All concentrations are in mg/kg;
1 – Standards are for soils according to NYSDEC 6NYCRR Part 375, *Unrestricted Use Soil Cleanup Objectives*, unless otherwise indicated;
2 – Standards are for soils according to NYSDEC 6NYCRR Part 375, *Restricted-Residential Use Soil Cleanup Objectives*, unless otherwise indicated;
3 – Lower value is for hexavalent chromium and higher value is for trivalent chromium;
ND = Not detected, detection limit listed;
Boldface type designates those compounds detected at concentrations exceeding Unrestricted Use Soil Cleanup Objectives;
Boldface Italic type designates those compounds detected at concentrations exceeding Restricted-Residential Use Soil Cleanup Objectives.

APPENDIX B:

NYSDOH's Indoor Air Sampling & Analysis Guidance dated February 1, 2005

NEW YORK STATE DEPARTMENT OF HEALTH
DIVISION OF ENVIRONMENTAL HEALTH ASSESSMENT
CENTER FOR ENVIRONMENTAL HEALTH

INDOOR AIR SAMPLING & ANALYSIS GUIDANCE
February 1, 2005

SCOPE

Air testing for specific chemical compounds is an investigative tool used to characterize the nature and extent of contaminants in air and to determine whether contaminant sources affect indoor air quality. The purpose of this document is to outline the recommended procedure for testing indoor air for volatile chemicals.

This document provides guidance for preparing sampling locations and collecting samples for laboratory analysis to ensure the integrity of the test results and allow for meaningful interpretation of the data. The steps discussed include; pre-sampling inspection and preparation of buildings, product inventories, and the collection and analysis of samples.

Forms (attached) - Indoor Air Quality Questionnaire and Building Inventory
- Product Inventory Form

GUIDANCE

1. Pre-Sampling Inspection:

A pre-sampling inspection should be performed prior to each sampling event to identify conditions that may affect or interfere with the proposed testing. The inspection should evaluate the type of structure, floor layout, physical conditions, and airflows of the building(s) being studied. The inspection information should be identified on the attached Indoor Air Quality Questionnaire and Building Inventory form. In addition, potential sources of chemicals of concern should be evaluated within the building by conducting a product inventory. The primary objective of the product inventory is to identify potential air sampling interference by characterizing the occurrence and use of chemicals and products throughout the building, keeping in mind the goal of the investigation and site specific contaminants of concern. For example, it is not necessary to provide detailed information for each individual container of like items. However it is necessary to indicate that "20 bottles of perfume" or "12 cans of latex paint" were present with containers in good condition. This information is used to help formulate the indoor environment profile.

Each room on the floor of the building being tested and on lower floors, if possible, should be inspected and an inventory provided. This is important because even products stored in another area of a building can affect the air of the room being tested.

For example, when testing for a petroleum spill, all indoor sources of petroleum hydrocarbons should be scrutinized. These can include household and commercial products containing volatile organic compounds (VOCs), petroleum products including fuel from gasoline-operated equipment, unvented space heaters and heating oil tanks, storage and/or recent use of petroleum-based finishes and paints or products containing petroleum distillates. This information should be detailed on the Product Inventory Form.

The presence and description of odors (e.g. solvent, moldy) and portable vapor monitoring equipment readings (e.g., photoionization detectors [PIDs] for VOCs, Jerome Mercury Vapor Analyzer for mercury) should be used to help evaluate potential sources. This includes taking readings near products stored or used in the building. Products in buildings should be inventoried **every time** air is tested to provide an accurate assessment of the potential contribution of volatile chemicals. If available, chemical ingredients of interest should be recorded for each product. If the ingredients are not listed on the label, record the product's exact and full name, and the manufacturer's name, address and phone number, if available. In some cases, Material Safety Data Sheets may be useful for identifying confounding sources

of volatile chemicals in air. Adequately documented photographs of the products and their labeled ingredients can supplement the inventory and facilitate recording the information.

2. Preparation of Building

Potential interference from products or activities releasing volatile chemicals may need to be controlled. Removing the source from the indoor environment prior to testing is the most effective means of reducing the interference. Ensuring that containers are tightly sealed may be acceptable. When testing for VOCs, containers should be tested with a PID to determine whether VOCs are leaking. The inability to eliminate potential interference may be justification for not testing, especially when testing for similar compounds at low levels. The investigator should consider the possibility that chemicals may adsorb onto porous materials and may take time to dissipate.

In some cases, the goal of the testing is to evaluate the impact from products used or stored in the building (e.g., pesticide misapplications, school renovation projects). If the goal of testing is to determine whether products are an indoor volatile chemical contaminant source, then removing these sources does not apply.

Once interfering conditions are corrected (if applicable), ventilation may be needed prior to testing to eliminate residual contamination in the indoor air. If ventilation is appropriate, it should be completed 24 hours or more prior to the scheduled sampling time. Where applicable, ventilation can be accomplished by operating the building's heating ventilation and air conditioning (HVAC) system to maximize outside air intake. Opening windows and doors and operating exhaust fans may also help or may be needed if the building has no HVAC system.

Air samples are sometimes designed to represent typical exposure in a mechanically ventilated building, and the operation of HVAC systems during sampling should be noted (see HVAC section on the attached indoor air quality questionnaire). In general, the building's HVAC system should be operating under normal conditions. Unnecessary building ventilation should be avoided within the 24 hours prior to and during testing. During colder months, heating systems should be operating under normal occupied conditions (i.e., 65°-75° F) for at least 24 hours prior to and during the scheduled sampling time.

Depending on the goal of the indoor air sampling, some situations may warrant deviation from the above protocol regarding building ventilation. In such instances, building conditions and sampling efforts should be understood and noted within the framework and scope of the investigation.

FOR 24 HOURS PRIOR TO SAMPLING, ALL REASONABLE MEASURES SHOULD BE TAKEN TO AVOID

- Opening any windows, fireplace dampers, openings, or vents
- Operating ventilation fans unless special arrangements are made
- Smoking in the house
- Painting
- Using wood stoves, fireplaces or other auxiliary heating equipment (e.g., kerosene heaters)
- Operating or storing automobiles in an attached garage
- Allowing containers of gasoline or oil to remain within the house, except for fuel oil tanks
- Cleaning, waxing, or polishing furniture or floors with petroleum- or oil-based products
- Using air fresheners or odor eliminators
- Engaging in any hobbies that use materials containing volatile organic chemicals
- Using cosmetics, including hairspray, nail polish, nail polish removers, perfume/cologne, etc.
- Applying pesticides

3. Collection of Samples

Air samples should be collected from an adequate number of locations to understand likely sources of volatile chemicals and to assess potential exposure to occupants in various locations. In private residences, air samples should be collected from the basement, first floor living space, and from outdoors. In settings with diurnal occupancy patterns such as schools and office buildings, samples should be collected during normally occupied periods to be representative of typical exposure. However, in special circumstances it may be necessary to collect air samples at other times in order to minimize disruptions to normal building activities. Sample collection intakes should be located to approximate the breathing zone for building occupants (i.e., three feet above the floor level where occupants are normally seated or sleep). To ensure that an air sample is representative of the conditions being tested sampled and to avoid undue influence from sampling personnel, samples should be collected for at least a one-hour period, and personnel should avoid lingering in the immediate area of the sampling device while samples are being collected. If the goal of the sampling is to represent average concentrations over longer time periods then longer duration sampling periods may be appropriate. The sampling team members should avoid actions (e.g., fueling vehicles, using permanent marking pens) that can cause sample interference in the field.

Sample collection techniques vary depending on the analytical method(s) being used, and sample flow rates must conform to the specifications in the sample collection method. Some methods specify collecting samples in duplicate (e.g., Passive Sampling Devices for tetrachloroethene). Sampling personnel should be completely familiar with the sampling protocol for the particular method being used.

a. Quality Assurance/Quality Control

Extreme care should be taken during all aspects of sample collection to ensure that high-quality data are obtained. Appropriate QA/QC measures must be followed for sample collection and laboratory analysis. Items that should be addressed in sampling protocols include sampling techniques, certified-clean sampling apparatus, appropriate sample holding times, temperatures, and pressures. In addition, laboratory accession procedures must be followed including; field documentation (sample collection information and locations), chain of custody, field blanks, field sample duplicates and laboratory duplicates, as appropriate.

b. Sampling Information

Detailed information must be gathered at the time of sampling to document conditions prior to and during sampling to aid in interpretation of the test results. The information should be recorded on the building inventory form along with the date and the investigator's initials. Floor plan sketches (section 11) should be drawn for each floor and should include the floor layout with sample locations, chemical storage areas, garages, doorways, stairways, location of basement sumps, HVAC systems including air supplies and returns, compass orientation (north) and any other pertinent information. In addition, observations such as odors, PID readings, and airflow patterns should be recorded on the building inventory form. Smoke tubes or other devices are helpful and should be used to confirm pressure relationships and air flow patterns, especially between floor levels and between suspected contaminant sources and other areas. The NYSDOH Wadsworth Laboratories requires that information on odors and PID readings also be recorded on the associated sample accession forms for VOC analyses.

Outdoor plot sketches (section 12) should include the building site, area streets, outdoor sample location, the location of potential interference (e.g., gas stations, factories, lawn mowers), wind direction and compass orientation (north).

c. Sample Analysis

New York State Law requires laboratories analyzing environmental samples from New York State to have current Environmental Laboratory Approval Program (ELAP) certification for the appropriate analyte/matrix combinations. Samples must be analyzed by methods that can achieve minimum reporting limits to allow for comparison to background levels (halogenated VOCs are typically 1 microgram per cubic meter ($\mu g/m^3$) or less). The laboratory should verify that they are capable of detecting the appropriate target compounds (see below) and can report them at the appropriate reporting limit (typically 1 $\mu g/m^3$ or less). Check with an ELAP representative at 518-485-5570 or by e-mail at elap@health.state.ny.us for questions about a laboratory's current certification status.

Indoor air sampling to evaluate potential impacts from chemical contaminant sources (i.e., old spills, soil vapor, groundwater) should generally include the contaminant(s) of concern and potential breakdown products (e.g., 1,1,1-trichloroethane analysis should also include 1,1-dichloroethane, 1,1-dichloroethene, cis-1,2-dichloroethene, trans-1,2-dichloroethene, chloroethane and vinyl chloride).

Petroleum products are often a mixture of many individual compounds. Specific aromatic and aliphatic compounds can be good indicators for individual petroleum products (e.g., gasoline, diesel, fuel oil, and kerosene). The primary aromatic compounds benzene, toluene, ethylbenzene, xylenes (BTEX), and trimethylbenzenes should be included in all analyses. Analytical methods using a mass spectrometer detector allow for the identification and quantitation of aromatic and aliphatic hydrocarbons and for oxygenated compounds such as ethanol and methyl tertiary butyl ether (MTBE). Analyzing for specific indicator compounds as suggested below can aid in differentiating potential petroleum sources.

Indicator compounds for gasoline may include BTEX, trimethylbenzene isomers, the appropriate oxygenate additives (MTBE, ethanol, etc.), and the individual C-4 to C-8 aliphatics (e.g., hexane, cyclohexane, dimethylpentane, and 2,2,4-trimethylpentane [iso-octane]).

Indicator compounds for middle distillate fuels (#2 fuel oil, diesel, and kerosene) may include n-nonane, n-decane, n-undecane, n-dodecane, ethylbenzene, xylenes, trimethylbenzene isomers, tetramethylbenzene isomers, naphthalene, 1-methylnaphthalene, and 2-methylnaphthalene.

Indicator compounds for manufactured gas plant (MGP) wastes may include ethylbenzene, xylenes, trimethylbenzene isomers, tetramethylbenzene isomers, thiophenes, indane, indene and naphthalene.

Indicator compounds for natural gas or liquefied petroleum (LP) gas may include propane, propene, butane, iso-butane, iso-pentane and n-pentane. Natural gas and LP gas also contain higher molecular weight aliphatic, olefinic, and some aromatic compounds, but at levels much lower than the listed indicator compounds.

In some cases, a more comprehensive list of compounds may be necessary that includes indicator compounds of different petroleum mixtures to help identify sources and potential interferences. For additional information on sampling and appropriate target compounds, contact the Indoor Health Assessment Section of the Bureau of Toxic Substance Assessment (BTSA) at (518) 402-7810 or the appropriate Bureau of Environmental Exposure (BEEI) project manager (518) 402-7850.

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

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

Preparer's Name _____ Date/Time Prepared _____

Preparer's Affiliation _____ Phone No. _____

Purpose of Investigation _____

1. OCCUPANT:

Interviewed: Y / N

Last Name: _____ First Name: _____

Address: _____

County: _____

Home Phone: _____ Office Phone: _____

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

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

Interviewed: Y / N

Last Name: _____ First Name: _____

Address: _____

County: _____

Home Phone: _____ Office Phone: _____

3. BUILDING CHARACTERISTICS

Type of Building: (Circle appropriate response)

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

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

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

If multiple units, how many? _____

If the property is commercial, type?

Business Type(s) _____

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

Other characteristics:

Number of floors_____ Building age_____

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

4. AIRFLOW

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

Airflow between floors

_____

_____

_____

Airflow near source

_____

_____

_____

Outdoor air infiltration

_____

_____

_____

Infiltration into air ducts

_____

_____

_____

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

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

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

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

_____

_____

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

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

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

The primary type of fuel used is:

Natural Gas	Fuel Oil	Kerosene
Electric	Propane	Solar
Wood	Coal	

Domestic hot water tank fueled by: _____

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

Are there air distribution ducts present? Y / N

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

_____

_____

_____

_____

7. OCCUPANCY

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

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

8. FACTORS THAT MAY INFLUENCE INDOOR AIR QUALITY

a. Is there an attached garage? Y / N

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

If yes, what types of solvents are used? _____

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

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

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

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

9. WATER AND SEWAGE

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

10. RELOCATION INFORMATION (for oil spill residential emergency)

a. Provide reasons why relocation is recommended: _____

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

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

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

11. FLOOR PLANS

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

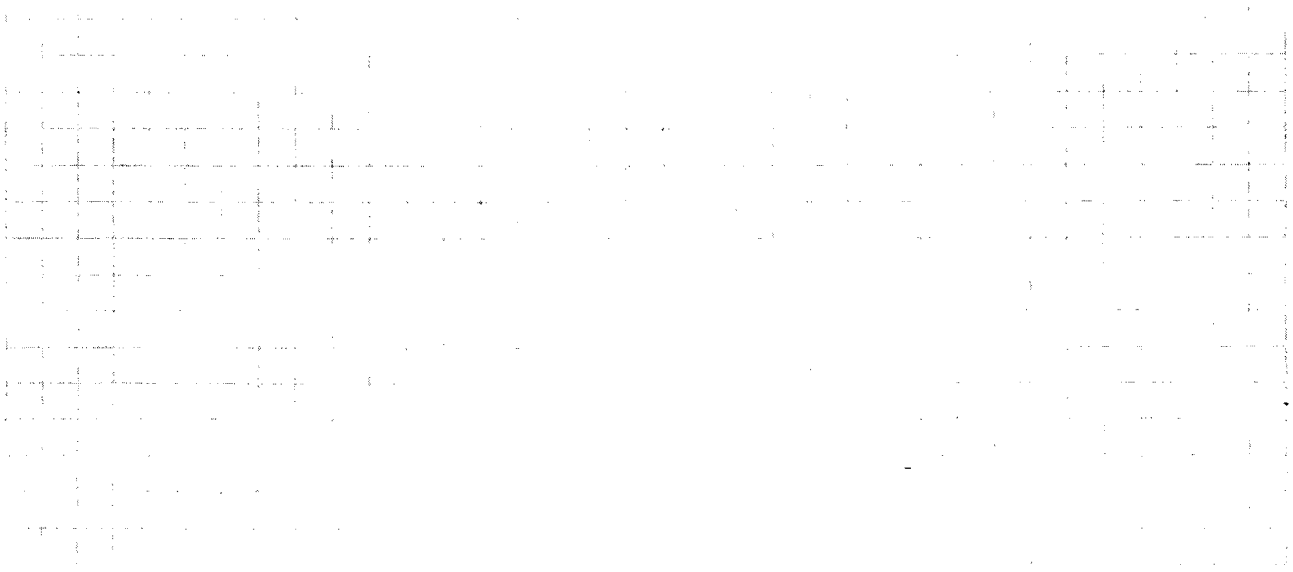
Basement:

First Floor:

12. OUTDOOR PLOT

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

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



13. PRODUCT INVENTORY FORM

Make & Model of field instrument used: _____

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

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

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

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INDOOR AIR QUALITY QUESTIONNAIRE AND BUILDING INVENTORY
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Business Type(s) _____

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

Other characteristics:

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

Airflow between floors

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Airflow near source

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g. Foundation walls:	unsealed	sealed	sealed with _____	
h. The basement is:	wet	damp	dry	moldy
i. The basement is:	finished	unfinished	partially finished	
j. Sump present?	Y / N			
k. Water in sump?	Y / N / not applicable			

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

_____

_____

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Space Heaters	Stream radiation	Radiant floor	
Electric baseboard	Wood stove	Outdoor wood boiler	Other _____

The primary type of fuel used is:

Natural Gas	Fuel Oil	Kerosene
Electric	Propane	Solar
Wood	Coal	

Domestic hot water tank fueled by: _____

Boiler/furnace located in:	Basement	Outdoors	Main Floor	Other_____
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Describe the supply and cold air return ductwork, and its condition where visible, including whether there is a cold air return and the tightness of duct joints. Indicate the locations on the floor plan diagram.

_____

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_____

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Level	**General Use of Each Floor (e.g., familyroom, bedroom, laundry, workshop, storage)**
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n. Is there a bathroom exhaust fan? Y / N If yes, where vented? _____

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

Are there odors in the building? Y / N
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Is the system active or passive? Active/Passive

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

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

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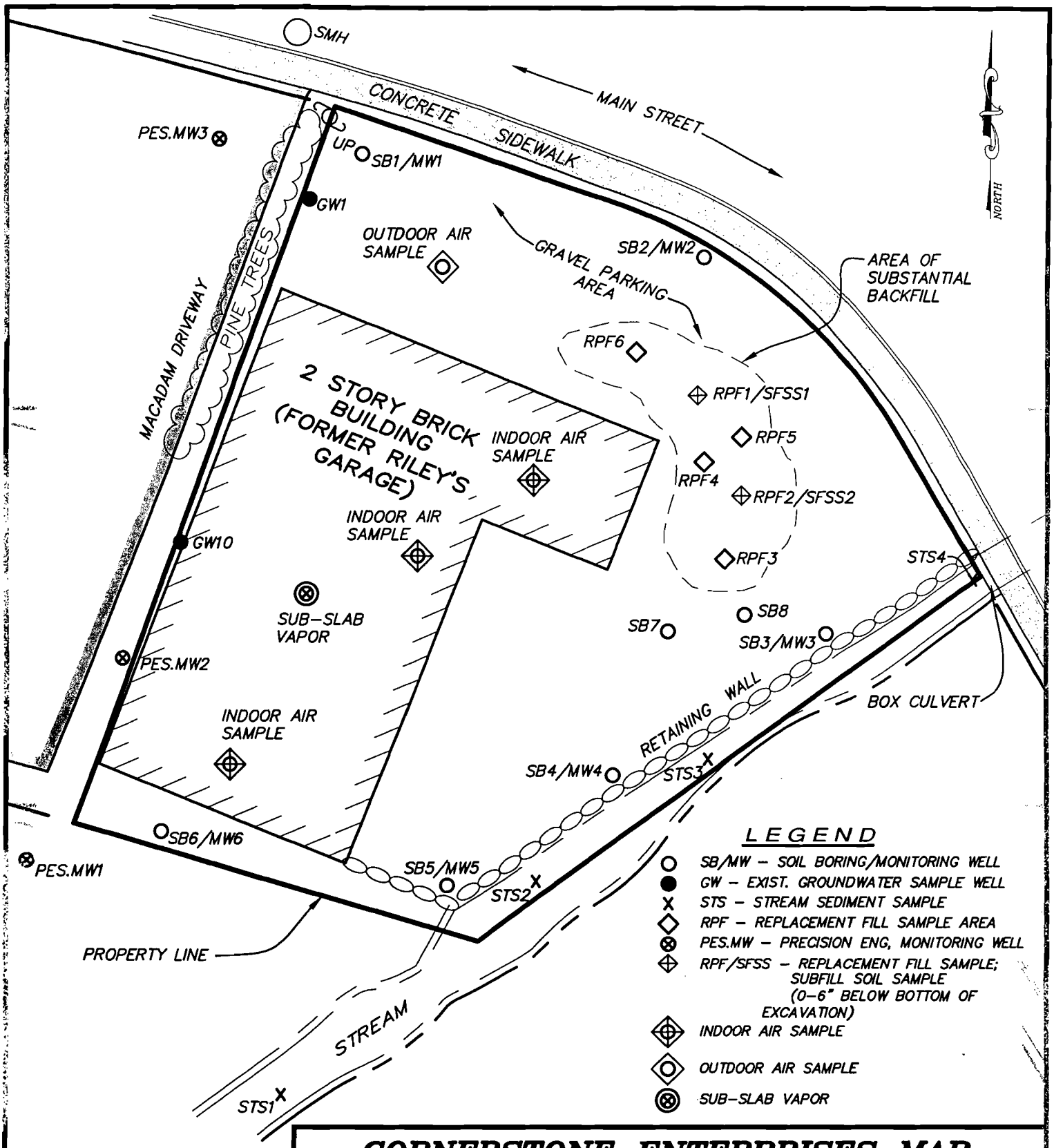
** Photographs of the **front and back** of product containers can replace the handwritten list of chemical ingredients. However, the photographs must be of good quality and ingredient labels must be legible.

APPENDIX C:
Figure 1



CORNERSTONE ENTERPRISES MAP

TOWN OF PAWLING, DUTCHESS COUNTY, NEW YORK

SCALE: 1"=20'	APPROVED BY: JZ	DESIGN BY: GS	DRAWN BY: JC
DATE: 07–06–09	PROJECT NO. 2005.071		SHEET: FIGURE 1

REVISION: 10/22/2010 (PER NYSDEC COMMENTS)
REVISION: 05/13/2010 (PER NYSDEC COMMENTS)
REVISION: 11/05/2009 (PER NYSDEC COMMENTS)

ZARECKI & ASSOCIATES, L.L.C.
Consulting Engineers - Land Surveyors - Architects
11 West Main St. Pawling, NY 12564
845.855.3771
845.855.3772 (Fax)
Ridgefield, CT 06877
203.438.7094

APPENDIX D
Resume

JOSEPH ZARECKI, P.E.

PROJECT EXECUTIVE

EDUCATION:

- 1976 - THE CITY UNIVERSITY OF NEW YORK
  THE CITY COLLEGE SCHOOL OF ENGINEERING
  Bachelor of Engineering (Civil)

LICENSURE:

- 1984 - THE UNIVERSITY OF THE STATE OF NEW YORK
  Education Department: Professional Engineer - Licensed #61468
- 1994 - STATE OF CONNECTICUT
  Department of Consumer Protection - Licensed #18328

PROFESSIONAL AFFLILIATION:

- Member Mid-Hudson Consulting Civil Engineers Society
- Member National Society of Professional Engineers
- Member New York State Society of Professional Engineers
- Member American Water Works Association

PROFESSIONAL EXPERIENCE:

Mr. Joseph Zarecki, P.E. has been associated with its inception providing professional consulting services in the following areas: project planning, project cost estimating, critical path analysis, engineering design and specifications.

Over twenty years of Civil Engineering experience, both national and international.

The engineering administration included interaction with governmental agencies:

- Federal - Army Corps of Engineers: Environmental Protection Agency
- State - New York State Department of Transportation
- County - Dutchess County Department of Public Works, Dutchess County Department of Health
- Local - Town Municipalities - Town Engineer of Town of Pawling, NY, Village of Pawling, NY and Town of Sherman, Ct..

Mr. Joseph Zarecki's engineering and design experience includes a wide variety of services:

- Geotechnical
- Design of road, water and sewer distribution systems
- Subdivision designs and alterations
- Site developments
- Pond and dam designs as well as reconstruction designs
- Structural design - residential and commercial

Construction experience has included the following facets of the field of engineering:

- Pond and dam construction
- Road construction
- Bridge construction

- Airport/runway construction
- Water and sewer distribution systems
- Commercial and residential buildings
- Housing development and construction

- Zarecki & Associates, LLC - 1998 to present
- Fowler & Zarecki - 1994 to 1998
- Joseph Zarecki Consulting Engineers - 1985 to 1994
- Erickson & Silreon
- George A. Fuller
- Louis Berger Inton
- Gibbons & Hyland
- Norelli & Oliver