

FINAL ENGINEERING REPORT

FORMER “SAKMANN RESTAURANT CORP.” PROPERTY

**LOCATED AT U.S. ROUTE 9W
TOWN OF HIGHLANDS
ORANGE COUNTY, NEW YORK**

**NYSDEC Voluntary Cleanup Site Number: V-00083-3
(Index Number: W3-0962-03-07)**

NYSDEC Spill Numbers: 0107005 and 0507282

Revised May 2009

ESI File: SF01123.60

Prepared By:



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The undersigned have reviewed this Final Engineering Report (FER) and certify to Highlands Battlesite Properties, LLC and Palisades Interstate Park Commission that the information provided in this document is accurate as of the date of issuance by this office. Any and all questions or comments, including requests for additional information, should be submitted to the undersigned.

I certify that the final Remedial Action Work Plan as described in this FER was implemented and that all activities were completed substantially in accordance with the NYSDEC-approved final Remedial Action Work Plan and were personally witnessed by a person under my direct supervision.

Paul H. Ciminello
President

Philip A. Bell, P.E.
Project Engineer (Lic #081943)



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Site Location and History

The Site consists of the 1.5-acre former Sakmann Restaurant Corporation property located at U.S. Route 9W, Hamlet of Fort Montgomery, Town of Highlands, Orange County, New York. The property has frontage on the eastern side of U.S. Route 9W and on the northern side of Mine Dock Road.

The southern third of the property is vacant unimproved land. The northern two-thirds of the property includes the locations of a former gasoline station/automotive repair facility (Garage, no longer present on-site) and the former Trading Post Restaurant (Restaurant). A paved parking lot is present to the west of the Restaurant; remaining areas are unimproved.

Previous Environmental Investigations

A Combined Phase I and II Environmental Site Assessment, conducted by ESI in September 2001, documented the presence of waste-oil contamination in the Garage basement, originating from discharges to a floor drain in a repair bay. Based on these findings, a spill event (number 0107005) was reported to the NYSDEC in October 2001. The assessment also identified five underground storage tanks (USTs), associated with the former gasoline station, that were abandoned and closed-in-place in June 1988 and a fuel-oil UST of unknown capacity was located near the northwest corner of the Restaurant. In addition, the presence of low-grade contamination by polycyclic aromatic hydrocarbons (PAHs) and metals in fill-type soils was documented to the north of the Garage.

Fieldwork conducted by HydroScience, Inc. in October 2001 indicated that the northern repair bay floor drain was not connected to any subsurface conduit and that the drain discharged directly to soils located beneath the concrete floor slab. The floor drain was reportedly sealed by HydroScience personnel following their subsurface investigation.

A Summary Report of Subsurface Investigation documented additional on-site investigative work conducted by ESI in November and December 2001. Soil borings were extended in the Garage repair bays, basement, and near the exterior eastern wall of the basement, in order to further delineate the horizontal and vertical extent of known contamination. Contamination by volatile organic compounds (VOCs, including chlorinated solvents) was confirmed in soils located under the repair bay slab. Significant contamination was limited to subsurface soils in close proximity to the floor drain and contamination was shown to diminish with increasing depth. TCLP laboratory data documented an elevated potential for contaminant migration into groundwater.

A Preliminary Investigation Report documented the installation of six on-site groundwater monitoring wells, and the results of soil and groundwater sampling, conducted by EnviroTrac Ltd. in April and May, 2002. Cis-1,2-dichloroethylene (DCE) and MTBE were detected above NYSDEC guidance levels in wells located to the east of the Garage. Low levels of DCE were detected in MW-2D and MW-3D, and low levels of MTBE were detected in MW-1D, MW-2D, and MW-4S. Low levels of DCE and tetrachloroethylene were detected in the potable supply well servicing the adjoining Provan property to the east.

The Preliminary Investigation Report also documented the presence of low levels of VOCs (primarily BTEX compounds) in soils located in the immediate vicinity of the Garage. Peak concentrations occurred to the north of the Garage at a depth of 7 to 9' below surface grade. Total xylenes were detected at concentrations marginally exceeding NYSDEC TAGM 4046 recommended soil cleanup objectives; all other VOCs were detected at low concentrations. No chlorinated hydrocarbons were detected.

Additional water sampling was conducted by ESI in July 2003, and February, May, and August 2004. Comparison of data from 2004 with data from 2002 indicated that low-level groundwater contamination had been reduced, but continued to be persistent. No VOCs were detected in the on-site potable supply (July 2003) or at the adjoining Provan residence.

Summary of Remedy

Under the NYSDEC approved Remedial Action Work Plan the following tasks were completed:

- Investigation of soil gas and air quality in the vicinity of the Restaurant;
- Demolition of the former Garage and remediation of subslab contaminated soils;
- Soil investigations in soils located exterior to the former Garage;
- Removal of the abandoned fuel-oil UST and associated petroleum-impacted soils;
- Installation of a soil barrier layer over areas of low-grade soil contamination;
- Post-remediation groundwater sampling events; and,
- Implementation of the Site Management Plan and associated institutional controls.

Soil gas data for the parking lot to the west of the building are consistent with the historic use of the property as a filling station and automotive repair facility, and may potentially be related to the presence of historic fill materials. Detected analyte concentrations are relatively low level and are not suggestive of significant subsurface contamination. Existing data, however, suggest that indoor air quality at the former Restaurant should be re-evaluated if the structure will be reused.

The former Garage was removed and the absence of significant VOC or PAH concentrations in Garage excavation endpoint samples indicates that contaminated soils have been satisfactorily excavated. NYSDEC Spill Number 0107005 was closed on October 21, 2008. Data from the analysis of soils from the area of the septic system, and from soils located on the western portion of the Site, support the conclusion that any releases from former interior conduits or from the former tanks have not significantly impacted remaining on-site soils.

No significant contamination was found in the vicinity of the former fuel-oil underground storage tank; the tank has been properly excavated and removed, and NYSDEC Spill Number 0507282 was closed on October 21, 2008.

Low-level PAH and metal concentrations in remaining soils are likely to be associated with the presence of historic fill materials. The presence of the soil barrier layer, and the implementation of the Site Management Plan (SMP) and institutional controls, will ensure that remaining impacted materials do not represent a significant threat to the environment or users of the property.

On- and off-site groundwater quality data have been collected from 2002 through October 2008. Groundwater contamination likely to be attributable to releases of chlorinated solvents from interior conduits at the former Garage appeared to have significantly attenuated prior to soil removal activities in September 2005. No significant contamination has been documented in the Provan and on-site supply wells, or in any on-site monitoring wells following remediation. These findings support the conclusion that contaminated soils formerly located at the property have not significantly impacted local groundwater resources and active on-site groundwater remediation is not necessary.



1.0 INTRODUCTION

1.1 Purpose

This Final Engineering Report (FER) summarizes relevant environmental investigation and remediation services performed by Ecosystems Strategies, Inc. (ESI) to satisfy the New York State Department of Environmental Conservation (NYSDEC) approved Remedial Action Work Plan (RAWP), hereafter referenced as the (Work Plan). All work outlined in this report was performed by ESI, authorized subcontractors, and independent contractors working directly for Highlands Battlesite Properties, LLC at the “former Sakmann Restaurant Corporation” property, located on U.S. Route 9W in the Town of Highlands, Orange County, New York (the “Site”). The work summarized in this FER was performed to address known environmental contamination identified by ESI during previous investigations of the property, conducted from 2001 to 2004.

The specific purpose of this FER is to satisfy the requirements set forth in the NYSDEC Voluntary Cleanup Program (VCP) and to document all investigative and remedial activities performed on the Site. Remedial activities (see Section 2.0) were deemed necessary based upon information obtained from prior fieldwork, which documented soil and groundwater contamination. This FER: 1) describes each response action specified in the Work Plan and details all activities necessary to satisfy the Work Plan; (2) provides all laboratory data, manifests, and other documentation generated during the satisfactory completion of these response actions; (3) specifies any variations or deviations from the recommended response actions inclusive of any correspondence with the NYSDEC; and, (4) provides conclusions and recommendations regarding remaining environmental conditions.

1.2 Limitations

This written analysis is a summary of fieldwork activities conducted at the Site and is not relevant to any other property. It is a representation of the property analyzed as of the respective dates of fieldwork. This FER cannot be held accountable for activities or events resulting in contamination after the dates of fieldwork. Services summarized in this FER were performed in accordance with generally accepted practices and established NYSDEC protocols. Unless specifically noted, the findings and conclusions contained herein must be considered not as scientific certainties but as probabilities based on professional judgment.

1.3 Site Location and Description

The Site is defined as the approximately 1.5-acre former Sakmann Restaurant Corporation property and structures located at U.S. Route 9W, Hamlet of Fort Montgomery, Town of Highlands, Orange County, New York. The property is an irregularly shaped parcel with frontage on the eastern side of U.S. Route 9W and on the northern side of Mine Dock Road. The southern third of the property is vacant unimproved land; the northern two-thirds are the locations of a former gasoline station/automotive repair facility (the “Garage”, now demolished) and the former Trading Post Restaurant (Restaurant). A paved parking lot is present to the west of the Restaurant; remaining areas are unimproved. Six groundwater-monitoring wells are located on the property. Monitoring well MW-3D was buried during the installation of the barrier layer. This well was decommissioned per NYSDEC guidelines on February 26, 2009 (see Appendix K for documentation of the well closure).

A Site Location Map is provided as Figure 1 and a Remedial Activities Map is provided as Figure 2, in Appendix A.



1.4 Previous Environmental Investigations

A Combined Phase I and II Environmental Site Assessment (Phase I and II ESA) conducted by ESI in September 2001 documented the presence of waste-oil contamination in the Garage basement, originating from discharges to a floor drain in a repair bay. Information provided by the then current tenant of the Garage indicated that the floor drain was receiving wastewater discharges containing de-greasers. Laboratory analysis of subsurface soils in the vicinity of the floor drain documented the presence of multiple volatile organic compounds (VOCs) at concentrations above NYSDEC guidance levels (including BTEX, MTBE, and chlorinated hydrocarbons). Based on these findings, a spill event (number 0107005) was reported to the NYSDEC in October 2001. ESI concluded that the source of the subsurface contamination (and the visible waste-oil contamination in the basement) was likely to be the discharge of oil and chlorinated solvents to the northern Garage repair bay floor drain.

The Phase I and II ESA indicated that underground storage tanks (USTs) associated with the former gasoline station (five tanks near the southwestern and northwestern corners of the Garage) were abandoned and closed-in-place in June 1988, and that a fuel-oil UST of unknown capacity was located near the northwest corner of the Restaurant. The Phase I and II ESA additionally documented the presence of low-grade contamination by polycyclic aromatic hydrocarbons (PAHs) and metals in fill-type soils located to the north of the Garage. No consistent pattern of contamination was documented during the subsurface investigation. ESI concluded that contaminated areas to the north of the Garage were likely to be limited in extent and recommended that response actions be confined to the installation of a protective barrier layer (e.g., clean fill or asphalt pavement).

Fieldwork conducted by HydroScience, Inc. in October 2001 indicated that the northern repair bay floor drain was not connected to any subsurface conduit and that the drain discharged directly to soils located beneath the concrete floor slab. The floor drain was reportedly sealed by HydroScience personnel following their subsurface investigation.

A Summary Report of Subsurface Investigation (Summary Report) documented additional on-site investigative work conducted by ESI in November and December 2001. Soil borings were extended in the Garage repair bays, basement, and near the exterior eastern wall of the basement, in order to further delineate the horizontal and vertical extent of known contamination. Contamination by VOCs (including chlorinated solvents) was confirmed in soils located under the repair bay slab. Significant contamination was limited to subsurface soils in close proximity to the floor drain and contamination was shown to diminish with increasing depth. TCLP laboratory data documented an elevated potential for contaminant migration into groundwater.

No significant levels of VOCs were detected in soil samples from beneath the basement floor or from the exterior basement wall. These findings supported the conclusion that contamination present under the repair bay floor did not significantly extend beneath the basement slab and that it is unlikely that contaminants present in the basement interior had significantly migrated to exterior subsurface soils. The Summary Report, however, suggested that soils located underneath the basement slab, in close proximity to the southern basement wall, could potentially be contaminated with VOCs.

Based on the findings of the Phase I and II ESA and the Summary Report, ESI recommended that the basement should be properly cleaned, and that contaminated soils located under the repair bay slab, and under the basement slab near the southern basement wall, be excavated and disposed of off-site. The total volume of contaminated soil warranting remedial action was estimated to be between 70 and 120 cubic yards. No remediation of soils located beneath the northern portion of the basement slab was recommended.



A Preliminary Investigation Report documented the installation of six on-site groundwater monitoring wells, and the results of soil and groundwater sampling, conducted by EnviroTrac Ltd. in April and May, 2002. Appendix A of this report included well logs; however, the logs were not included in the report provided to ESI for review. Cis-1,2-dichloroethylene (DCE) and MTBE were detected above NYSDEC guidance levels in wells located to the east of the Garage (MW-2S and MW-3D). Peak concentrations of DCE (guidance level 5 µg/L) and MTBE (guidance level 10 µg/L) were 58 µg/L and 22 µg/L, respectively. Low levels of DCE (below guidance levels) were detected in MW-2D and MW-3D, and low levels of MTBE were detected in MW-1D, MW-2D and MW-4S. Low levels of DCE and tetrachloroethylene (PCE, guidance level 5 µg/L) were detected at concentrations of 2.8 µg/L and 1.1 µg/L, respectively, in the potable supply well servicing the adjoining Provan property to the east.

The Preliminary Investigation Report also documented the presence of low levels of VOCs (primarily BTEX compounds) in soils located in the immediate vicinity of the Garage. Peak concentrations occurred to the north of the Garage at a depth of 7-9' below surface grade (bsg). Total xylenes were detected at concentrations marginally exceeding NYSDEC TAGM 4046 recommended soil cleanup objectives (RSCOs); all other VOCs were detected at low concentrations. No chlorinated hydrocarbons were detected.

Additional water sampling was conducted by ESI in July 2003, and February, May, and August 2004 (monitoring well MW-2S was buried by debris and could not be located by ESI during these sampling events). Comparison of data from 2004 with data from 2002 indicated that low-level groundwater contamination had been reduced, but continued to be persistent. No VOCs were detected in the on-site potable supply (July 2003) or at the adjoining Provan residence.

Relevant excerpts from previous reports are included as attachments to the Remedial Action Work Plan (see Section 1.5, below).

1.5 Voluntary Cleanup Program Status

Highlands Battlesite Properties, LLC entered the Voluntary Cleanup Program in November 2003 and a Remedial Action Work Plan (RAWP) was approved as a "final" document by the NYSDEC and New York State Department of Health (NYSDOH) in January 2005. The RAWP specified removal of an on-site fuel oil UST, demolition of the Garage and remediation of contaminated soil, additional soil and soil vapor characterization, installation of a soil barrier layer, and continued monitoring of on-site groundwater monitoring wells.

During the course of the environmental investigation and remediation, NYSDEC personnel requested specific modifications to the scope of work presented in the RAWP. These changes were incorporated into an approved Supplemental Work Plan, issued in December 2005, which called for documentation of indoor air quality at the Restaurant and additional soil investigation. Following building demolition and soil removal activities, contractors for the property owner imported soils for use as a barrier layer. A portion of this material was not from an approved source and a Scope of Work for Investigation of Imported Cover Soils (SOW) was developed to document soil quality. The soils were documented to be acceptable for use as backfill and were subsequently covered by an approved barrier layer of imported certified clean soil. NYSDEC requested ESI to incorporate the Supplemental Work Plan and the SOW into a revised RAWP, which was accepted as a Final document in July 2007 and issued in August 2007. The revised RAWP is incorporated by reference in this FER (a copy of the RAWP is provided as Appendix G).

The Site is intended for use as a parking lot and landscaped area serving the nearby Fort Montgomery historic site. Use of the Site will be in conformance with NYSDEC Part 375 (Remedial Program) regulations for "Restricted Commercial Use".



2.0 SUMMARY OF REMEDIAL ACTIVITIES

2.1 Summary of Services

The following remedial services and required tasks have been completed for the Site, in accordance with the NYSDEC approved Work Plan:

- Investigation of soil gas and air quality in the vicinity of the Restaurant (Section 2.2).
- Demolition of the former Garage (Section 2.3);
- Remediation of contaminated soil beneath the Garage slab (Section 2.4);
- Soil investigations at former septic system and west of the Garage (Section 2.5);
- Removal of the abandoned fuel-oil UST and confirmatory sampling (Section 2.6);
- Installation of a soil barrier layer over areas of low-grade soil contamination (Section 2.7);
- Post-remediation groundwater sampling events (Section 2.8);
- Implementation of an approved Site Management Plan (Section 2.9); and,
- Implementation of Required Institutional Controls.

Each fieldwork task is described below, including relevant field observations, analytical data, disposal manifests, and other supporting documentation. The locations of sampling and fieldwork activities are shown on Figure 2, Appendix A, and relevant photographs of remedial activities are provided in Appendix F.

All samples collected for chemical analysis to document site integrity were submitted to York Analytical Laboratories, Inc. (York Laboratories), a New York State Department of Health-certified laboratory (ELAP Certification Number 10854), following protocols specified in the Work Plan. Complete laboratory reports are provided in Appendix C and a Data Useability Summary Report ("DUSR") is provided in Appendix D. The DUSR was conducted in accordance with established procedures as specified by the NYSDEC and assessed the integrity of data generated from soil and water samples from the Site and analyzed by York Laboratories. Specific factors considered as part of the DUSR were sample handling (e.g., chain of custody procedures), laboratory management of the sample (e.g., holding times and equipment calibration), and laboratory deliverables (e.g., reporting calculations and reporting limits). The DUSR concludes that for all water and soil samples submitted for consideration, all data are valid representations of Site conditions.

Fieldwork activities were performed by ESI, except for the following activities performed by subcontractors under ESI's direct supervision: demolition, soil and tank excavation, and site grading (Hudson Canyon Construction Inc.); UST pump out (Enviro Waste Oil Recovery, LLC); test pit extension and supplemental soil excavation (Karl Mannain & Sons Excavators); tank disposal services and soil stockpile loading (Luzon Environmental Services); stockpile transport and off-site disposal (Allied Environmental Group, Inc.); and soil barrier layer installation (Westcon Construction and Nannini and Callahan Excavating Inc.). Fieldwork was conducted following an approved Health and Safety Plan (Work Plan Section 2.2.5) and an approved Community Air Monitoring Plan (Work Plan Section 2.2.6).



2.2 Pre-Remediation Soil Gas Survey and Indoor Air Quality Testing

2.2.1 Approved Task

[Work Plan Section 2.2.7] "A soil gas survey will be completed prior to the start of on-site remediation activities... in the vicinity of the now vacant Trading Post Restaurant. Sampling will be conducted beneath the slab of the former Restaurant and beneath the asphalt-paved parking lot... Indoor air-quality sampling will be conducted at the former Trading Post Restaurant..."

2.2.2 Specific Remedial Actions Completed

A pre-remediation soil gas survey was conducted on June 14, 2005. Eleven soil gas samples were collected from borings extended at portions of the southern parking lot (SG-1 to SG-7) and from beneath the concrete slab of the former Trading Post Restaurant (SG-8 to SG-11). Sample locations were chosen based on consultation with NYSDEC field personnel.

Borings were extended using properly decontaminated, hand-held Geoprobe equipment (to a maximum depth of 5' bsg at exterior locations and to 2" below the slab at interior locations). No overt evidence of significant soil contamination (staining, odors, and photoionization detector [PID] readings) was observed during the extension of borings. Multiple boring refusals (likely to be on bedrock) were encountered at the southern end of the parking lot. Samples were collected through an air-stone attached to 1/4" Teflon tubing, fixed in-place with clean silica sand, and sealed off from surface infiltration with a non-VOC containing caulk. Each boring was sufficiently purged using a GilAir-3 air sampling pump.

Post-remediation indoor air-quality sampling was conducted at the Restaurant on February 8, 2006, following a NYSDEC/NYSDOH approved protocol. One air sample was collected from an area located inside the basement (Air-1) and one sample was collected from an outside location (Air-2), which served as a background sample. A pre-sampling inspection and instrument screening of the building did not identify any potential sources of VOCs at the building.

All soil-gas and air quality samples were collected into laboratory-supplied Summa canisters equipped with 1-hour flow controllers, and were submitted for analysis of VOCs (USEPA Method TO-15). Detected analytes in soil gas included low levels of PCE (peak concentrations of 89.7 $\mu\text{g}/\text{m}^3$ at SG-4, average detected concentration of 22.4 $\mu\text{g}/\text{m}^3$ [detected in 5 out of 11 samples]), BTEX compounds, and MEK. The number of detected analytes, and analyte concentrations in general, were lower at the building compared to the parking lot. [Note: acetone concentrations, a common laboratory contaminant, comprise approximately 50% of total VOC concentrations in 8 of the 11 samples.] No significant concentrations of VOCs were detected in air quality samples.

VOCs in soil gas and air samples are summarized in Table 1, Appendix B.

2.2.3 Deviations from Work Plan

No significant deviations from the Work Plan occurred.

2.3 Demolition of the Garage

2.3.1 Approved Task

[Work Plan Section 2.3.1] "The former Garage building will be demolished prior to soil excavation and site restoration activities..."



2.3.2 Specific Remedial Actions Completed

Above-grade portions of the Garage were demolished on September 13, 2005. The concrete slab (covering contaminated soil) in the former repair bays, and the concrete-block basement wall, were removed on September 14, 2005. All aerial portions of the building, and demolished foundation components, were placed in refuse containers, which were subsequently hauled from the Site for proper off-site disposal. Portions of the concrete basement walls and footings were left in place, except for any foundation components that were stained, which were stockpiled along with contaminated soil (see Section 2.4.4, below), pending off-site disposal.

2.3.3 Deviations from Work Plan

No significant deviations from the Work Plan occurred.

2.4 Remediation of Contaminated Soil Beneath the Garage Slab

2.4.1 Approved Task

[Work Plan Section 2.3.3] "Known contaminated soils in the vicinity of the former Garage structure...will be excavated and removed from the Site..."

2.4.2 Specific Remedial Actions Completed

Soil beneath the former repair bay building slab were excavated on September 14, 2007. Sandy fill exhibiting evidence of petroleum contamination (staining, mild odors, and PID readings below 20 ppm) was encountered in the vicinity of the closed northern floor drain, the area previously identified as the source of subsurface discharges of petroleum and chlorinated solvents. Overtly contaminated soils were limited to an approximately 4' by 4' by 3' deep area. No field evidence of contamination was observed at the location of the closed southern floor drain. Both drains appeared to have discharged directly to the subsurface. Based on existing data, an area measuring approximately 8' by 25' by 8' deep was excavated in order to remove all potentially contaminated soils (including concrete blocks from the base of the southern basement wall).

Fill soils and debris materials (masonry, glass, and minimal quantities of metal) were encountered throughout the excavation area. A hydraulic lift located at the southern end of the repair bay was removed from the ground and surrounding soils (minimally impacted by a release of hydraulic oil from the lift during removal) were excavated. No evidence of contamination was observed at the eastern, southern, and western excavation walls, or beneath the footing of the southern basement wall (the northern extent of the excavation).

Eleven confirmatory endpoint samples were collected from the excavation area (three bottom samples, two from each wall [east, south, and west], and two from beneath the footing of the southern basement wall). All samples were submitted for laboratory analysis of VOCs (USEPA Method 8260). Samples were additionally analyzed for PAHs (USEPA Method 8270), and selected metals (arsenic, cadmium, chromium, and lead) in order to facilitate closure of a USEPA file regarding discharges to the former floor drain. Results were compared to 6 NYCRR Subpart 375-6, Soil Cleanup Objectives (SCOs) for "Restricted Commercial" use (Table 375-6.8(b)). Trace levels of PCE (peak concentration of .010 parts per million [ppm], guidance level of 150 ppm) were detected in samples EP-B-3, EP-S-1, and EP-S-2. No other VOCs were detected in any samples. Low levels of PAHs and metals (arsenic, cadmium, chromium, and lead) were detected in all samples, with the exception of EP-S-2, which contained no detectable PAH analytes. Confirmatory soil sampling data are summarized in Tables 2, 3, and 4, Appendix B.



Allied Environmental Group, Inc was retained by ESI to dispose of excavated soil. Stockpiled material (85.41 tons) was characterized as per the requirements of the repository and was disposed of off-site at Clean Earth of Carteret, Inc., Carteret, New Jersey on March 30 and 31, 2006. Waste Disposal Manifests are included in Appendix E.

2.4.3 Deviations from Work Plan

No significant deviations from the Work Plan occurred.

2.5 Soil Investigations at Former Septic System and West of the Garage

2.5.1 Approved Task

[Work Plan Section 2.3.3] "Subsurface soils in the vicinity of the septic system and to the west of the garage will be exposed using a backhoe... Soil sampling will be conducted..."

2.5.2 Specific Remedial Actions Completed

Two exploratory trenches (approximately 30' long by 4' deep) were extended east of the former Garage in the vicinity of the suspected former septic system on September 14, 2007. Fill-type soils were observed in both trenches and an abandoned hydraulic lift was discovered on its side near the northeastern exterior wall of the former garage (the lift was excavated and stockpiled on-site). The side of a metal septic tank was encountered at the eastern basement wall. A single 8' section of perforated plastic pipe extended from the tank in a northeasterly direction; no additional piping was encountered at the end of the pipe or in any other trench areas. No overt evidence of contamination was noted in exposed soils or at the wall or base of the septic tank. Water trapped in the tank near the opening for the perforated pipe did not exhibit any sheens or odors.

Four samples (SEPT-1 to SEPT-4) were collected from the exploratory trenches, from areas most likely to have received liquid discharges from the septic system. Three samples were collected from the trench located near the building wall (at the base of the septic tank, the end of the perforated pipe, and near the abandoned hydraulic lift). All samples were submitted for laboratory analysis of VOCs (USEPA Method 8260) and RCRA metals, as per the Work Plan, and were additionally analyzed for PAHs (USEPA Method 8270) at the request of the USEPA.

No VOCs were detected in any samples. Elevated concentrations of several PAHs (e.g., benzo(a)anthracene at 16 ppm, guidance level of 5.6 ppm) were detected at SEPT-1, collected near the abandoned hydraulic lift in the sample location least likely to have received septic discharges. Slightly elevated levels of benzo(a)pyrene were detected at SEPT-2 and SEPT-4 (peak concentration 1.7 ppm, guidance level 1.0 ppm). A slightly elevated concentration of barium (464 ppm, guidance level 400 ppm) was detected in sample SEPT-3. Based on laboratory data and communication with NYSDEC personnel, no excavation activities were conducted in the vicinity of sample SEPT-4.

Five test pits were extended to the west of the former Garage in the vicinity of MW-1 (maximum depth 12' bsg) on January 19, 2006. Subsurface soils consisted of variable texture fill materials. Soils exhibiting mild petroleum odors were encountered in test pits TP-2 and TP-3, extended near the southwestern corner of the former Garage building. The outer casing of a closed UST and several small pipes were encountered in these areas. Water trapped in the piping exhibited a mild petroleum odor. A soil sample from each test pit was submitted for laboratory analysis of VOCs (USEPA Method 8260). Trace concentrations of BTEX and related compounds were detected in samples TP-2 and TP-3 (peak individual concentration of 0.038 ppm); no halogenated VOCs or other petroleum-based compounds were detected in any samples.



Data from sampling at trenches and test pits are summarized in Tables 2, 3, and 4, Appendix B.

2.5.3 Deviations from Work Plan

No significant deviations from the Work Plan occurred.

2.6 Removal of Abandoned Fuel-Oil UST and Confirmatory Sampling

2.6.1 Approved Task

[Work Plan Section 2.3.2] “The abandoned fuel-oil UST located near the former restaurant building, along with any appurtenant piping and/or petroleum impacted soil, will be excavated and removed from the Site... Manual soil borings will be extended, as necessary, to document any areas of remaining post excavation soil contamination.”

2.6.2 Specific Remedial Actions Completed

The top of the UST was exposed on September 15, 2006 and the tank was excavated, pumped of residual product (approximately 170 gallons of oily water and sludge), and removed from the ground on September 16. The UST was found to be a single wall, steel tank with an estimated capacity of 1,000 gallons (approximately 4' in diameter by 11' long). The body of the tank was sound, with the exception of several small holes at the bottom of the northern end.

Surrounding soils consisted of coarse fill materials. No evidence of a gross release was observed. Several cubic feet of minimally impacted petroleum contaminated soil (mild odor and low-level PID readings) were excavated from the northwestern corner of the tank grave; no other overt evidence of contamination was noted at the walls or bottom of the excavation, or in soils to the northeast of the tank (an area at lower elevation) at the approximate depth of the tank invert. Seven samples were collected from the vicinity of the former tank (six confirmatory endpoint samples from the tank grave [two bottom and four wall samples] and one sample from a nearby downgradient location [FT-NE]). All samples were submitted for laboratory analysis of VOCs (USEPA Method 8021, STARS List) and PAHs (USEPA Method 8270).

No VOCs were detected in any samples. All samples contained low-levels of PAHs, at concentrations below applicable restricted use SCOs (soils contained PAHs at concentrations above TAGM 4046 RSCOs, at levels similar to concentrations documented in other Site areas). PAHs at FT-NE, located downgradient from the tank grave in an area containing asphalt fragments, occur at concentrations approximately three to four times the levels detected in the UST endpoint samples. An additional hand-held boring, 2FT-NE, was extended to the northeast of the former UST location on January 19, 2006 to document the quality of suspect fill materials; two PAH compounds were detected at concentrations above applicable SCOs in near surface soils. Data from confirmatory soil samples are summarized in Table 5, Appendix B.

Based on field conditions and laboratory data, spill number 0507282 was subsequently reported to the NYSDEC. The former UST, along with the excavated hydraulic lift and an abandoned 275-gallon fuel oil tank, were removed from the Site on March 30, 2006. The spill was subsequently closed by the NYSDEC on October 21, 2008. Tank and waste disposal documentation is included in Appendix E.



2.6.3 Deviations from Work Plan

The number of hand borings completed in the vicinity of FT-NE was reduced based on encountered field conditions; data from the completed boring is considered to be sufficient for characterizing soil integrity in this area. No other deviations from the Work Plan occurred.

2.7 Installation of Soil Barrier Layer

2.7.1 Approved Task

[Work Plan Section 2.3.7] "A cover of clean soil will be placed as a barrier layer at: 1) all areas located to the north of the former Garage structure where low-grade PAH and metals contamination has been documented; and, 2) in the vicinity of the septic system and to the west of the garage (if warranted by documented contaminant concentrations and required by the NYSDEC)... Material for use as a final cover must meet the NYSDEC Soil Cleanup Objectives (SCOs) for Protection of Public Health, Unrestricted Use... Any imported materials to be used as backfill must meet the SCOs for Protection of Public Health, Restricted Commercial Use... A marker layer... will first be placed on all areas which are targeted for the placement of the barrier layer. After the marker layer has been appropriately placed, a minimum of 18 inches of certified clean soil material will be placed on the site in the designated areas... For all covered areas having exposed soils, the final layer of soil will contain sufficient organic matter to permit re-vegetation. This final layer may be replaced with topsoil in areas where final landscaping has been determined. All finished grades that receive topsoil shall be raked smooth, seeded and mulched, and water periodically as necessary to insure proper stabilization of soil areas."

2.7.2 Specific Remedial Actions Completed

Installation of the soil barrier layer was originally contracted to Westcon Construction ("Westcon"). Proposed source materials were sampled by ESI on September 1, 2006 (composite soil sample WSP-1) and were accepted for on-site use by NYSDEC on September 15. Preparatory grading, placement of the marker layer, and installation of the cover soils began during the week of October 2. Inspection of the imported soil revealed the presence of minor quantities of debris (brick, asphalt, tile fragments, and some metal); Westcon personnel indicated that they had switched to a different (i.e. unapproved) soil source during the installation process and ESI therefore requested that all work cease pending a determination of soil quality.

ESI collected a second composite soil sample (WSP-2) from the imported material on October 6. Based on the presence of several compounds (chlordane, PCBs, lead, and zinc) at levels slightly above the Part 375 "Unrestricted Use" SCOs, a Scope of Work for additional soil testing was developed and approved by the NYSDEC. Five soil samples (WSC-1 to WSC-5) were collected from surface soils according to the approved protocol on February 7, 2007. NYSDEC subsequently requested that additional analytes be considered and ESI collected a second round of samples (WSC-1A to WSC-5A) from the original sampling locations. No field evidence of contamination was noted during collection of the samples. Several analytes (pesticides, PAHs, and metals) were found at concentrations above Unrestricted Use SCOs but well below the SCOs for Restricted Commercial Use. NYSDEC issued a letter on January 11, 2007, indicating that the imported soils were not acceptable as a cover layer, but could serve as subsurface fill.

Completion of the barrier cover layer was begun during the week of June 25, 2007 by Nannini and Callahan Excavating Inc., using soils imported from the Callahan and Nannini Quarry in Salisbury Mills, New York. A composite soil sample (CNQ-1), collected by ESI from the quarry source area on June 12, was documented to contain no detectable concentrations of VOCs, SVOCs, pesticides, and PCBs, and concentrations of metals below Restricted Commercial Use SCOs. NYSDEC issued a letter on June 21, 2007, indicating that these soils were acceptable for



use as the final cover. Previously imported materials were regraded and covered with a marker layer, the barrier layer was installed to a minimum thickness of 18 inches, and the surface was seeded and secured with biodegradable landscaping materials. A full layer of vegetation had been established by the fall of 2007. Minor breaks in the cut edge of the surrounding asphalt pavement were repaired following the completion of construction activities.

Data from sampling of imported soils is summarized in Tables 6, 7, 8, and 9, Appendix B, and the extent of the completed barrier cover layer is shown on Figure 2, Appendix A.

2.7.3 Deviations from Work Plan

No significant deviations from the Work Plan occurred (all imported materials meet applicable SCOs for final on-site use).

2.8 Post-Remediation Groundwater Monitoring

2.8.1 Approved Task

[Work Plan Section 2.3.8] “At the completion of all soil excavation work, all six on-site groundwater monitoring wells... the on-site potable supply well, (and, if necessary the downgradient off-site potable supply well servicing the adjoining Provan property), will be sampled quarterly (for five consecutive quarters) to document groundwater quality. The need for additional sampling rounds shall be determined by the NYSDEC.”

2.8.2 Specific Remedial Actions Completed

2.8.2.1 Fieldwork Methodology

Post-remediation monitoring of groundwater quality was conducted from December 2005 to October 2008. The on-site potable supply well (an approximately 200-foot deep bedrock well) was not sampled (the condition of the sanitary seal was such that any attempt to open the well may have impaired its future ability to function, and power was not available to the submersible pump, precluding sampling through interior faucets; given these conditions and the absence of detectable concentrations of VOCs in the water supply well in September 2001 [documented in the Phase I and II ESA], NYSDEC field personnel concurred with ESI that additional sampling would not be conducted). Sampling of the off-site Provan supply well was conducted in 2007 and 2008.

Post-remediation sampling of on-site monitoring wells MW-1S, MW-1D, MW-2S, MW-2D, MW-3D and MW-4S was conducted in December 2005 (the first round of sampling following soil removal activities in September 2005), March, June, and October 2006, April and July 2007, and August 2008. All wells were originally flush mounted with PVC casings, with the exception of MW-3D, which was a stick-up steel casing well. The PVC well casings were vertically extended by ESI in August 2006 in order to accommodate the proposed soil cover. Monitoring well MW-3D was damaged during the installation of the soil cover. In order to protect the well from further damage, the top of MW-3D was shallowly buried beneath the final cover soils. This well was decommissioning per NYSDEC guidelines on February 26, 2009 (see Appendix K).

Fieldwork methodology consisted of recording of basic climatological data, wellhead screening with a PID, measurement of static groundwater levels from the top of the well casing to the nearest 0.01 foot, and collection of groundwater samples using USEPA “Low Flow” protocols (see below). No significant PID readings have been recorded while screening the casings prior to sampling and no wells exhibited petroleum odors or sheens.



Given the changes in the elevations of the well casings and initial uncertainty regarding expected final surface grade height, groundwater flow was not directly determined from static depth to water measurements during the post-remediation groundwater monitoring events; direction of groundwater flow, however, had previously been documented (July 2003 to June 2006) to generally be in an overall northeasterly direction toward the nearby Hudson River, the expected outcome given the presence of very steep downward slopes at the eastern margin of the Site. Groundwater Flow Maps (June 2003 to June 2006) are provided in Appendix H. Sampling equipment included a Grundfos (stainless-steel) submersible pump and Redi-Flow Frequency Modulator (pump control), Horiba U-22 Flow-Thru Cell (twelve parameter), and dedicated plastic tubing. All sample collection equipment was properly decontaminated prior to the initiation of sampling and between sample locations to avoid cross-contamination.

All wells were sampled with the pump located near the well bottom (note: the metal casing of MW-3D was partially bent during the installation of the soil cover in June 2007 and could not accommodate the pump during the July 2007 sampling round; groundwater was therefore sampled with a disposable bailer dropped to near the bottom of the well). Wells were purged until drawdown and key indicator parameters stabilized (DO \pm 0.2 mg/L, redox \pm 20 mv, turbidity \pm 10 %, specific conductance \pm 03-05%, and temperature \pm 3%).

Water samples from the off-site Provan supply well were collected in May and July 2007 from interior faucets located up-system of the installed water filtration/treatment system. The potable water supply was allowed to flow freely for a minimum of twenty minutes prior to sample collection. No overt evidence of contamination (odors, discoloration, or sheen) was observed during purging of the pressure tank or during sampling.

Each groundwater sample was collected into two laboratory-supplied 40-ml sample vials preserved with hydrochloric acid. Sample vials and trip blanks were maintained at cold temperatures and transported to the laboratory for analysis of VOCs (USEPA Method 8260).

2.8.2.2 Discussion of Laboratory Data

A memorandum tabulating existing data, and identifying trends in on-site contaminant concentrations, was provided to the Volunteer and the NYSDEC after each sampling round. VOCs in on-site groundwater, including pre-remediation laboratory results from work completed by EnviroTrac in 2002 and ESI from 2003 through 2006, are summarized in Table 10, and VOCs in the off-site Provan supply well are summarized in Table 11, Appendix B.

On-Site Sampling Events from May 2002 through February 2004

Elevated concentrations of DCE (peak value 58 μ g/L, guidance level 5 μ g/L) and/or MTBE (peak value 22 μ g/L, guidance level 10 μ g/L) were detected at MW-2S, MW-2D, and MW-3D, located downgradient of the former area of VOC-contaminated soil, during one or more of the sampling events. PCE (guidance level 5 μ g/L) was detected at a peak concentration of 2 μ g/L (low levels of PCE and DCE were also present at cross-gradient well MW-4S). Low levels of MTBE were also detected upgradient well MW-1D and MW04S. No VOCs were detected in upgradient well MW-1S.

On-Site Sampling Events from May 2004 through July 2007

Concentrations of DCE and MTBE in downgradient wells MW-2S, MW-2D, and MW-3D decreased to 5 μ g/L or less. Low-level concentrations of MTBE at MW-1D and MW-4S remained relatively stable, with MTBE becoming non-detect at MW-4S by October 2006.



A trace concentration of PCE (peak value 1.3 µg/L) was detected at MW-1S in June 2005 and then again in June 2006, but has not since been detected. Fieldwork conducted in January 2006 documented an absence of halogenated hydrocarbons in soils located at the western (upgradient) portion of the Site, supporting the conclusion that the low-level PCE concentrations at MW-1S were not indicative of a significant upgradient PCE source.

Petroleum-based VOCs (other than MTBE) appear in groundwater for the first time in June 2006, when a slightly elevated concentration of p-isopropyltoluene (7.5 µg/L, guidance level 5 µg/L) was detected in MW-1S, and low levels (peak concentration 2.0 µg/L in MW-1D) were detected in all other wells. A low level of n-butylbenzene (1.3 µg/L, guidance level 5 µg/L) was detected in MW-1S, but was not found in any other wells. These compounds were not detected in any subsequent sampling rounds and their presence in groundwater may have been related to soils remaining in the vicinity of MW-1S and MW-1D (documented to contain slight petroleum odors and very low levels of residual petroleum compounds), which were disturbed during the extension of test pits in January 2006.

On-site Sampling Event August 2008

Low levels of MTBE were detected in MW-1D (6 µg/L), MW-2S (3 µg/L), and MW-4S (2 µg/L). A low level of PCE was detected in MW-4S (2 µg/L). No VOCs were detected in MW-1S and MW-2D. No other reportable concentrations of VOCs were detected in any of the samples.

Off-Site Testing at the Provan Supply Well

ESI personnel conducted sampling activities at the Provan residence in May and July 2007 and October 2008. A low-level of PCE (2 µg/L) was detected during the May 2007 and the October 2008 sampling events. No other VOCs were detected above laboratory minimum detection limits during the 2007 and 2008 sampling events. Previous sampling by EnviroTrac in January 2002 had documented low levels of DCE and PCE (2.8 µg/L and 1.1 µg/L, respectively); sampling by ESI in July 2003, however, had documented no detectable VOCs.

Copies of the most recent groundwater reports for both the on-site monitoring wells and the off-site Provan supply well are provided in Appendix H. Protocols for additional groundwater sampling are specified in the Site Management Plan, discussed in Section 2.9, below.

2.8.3 Deviations from Work Plan

Post-remediation sampling of the off-site Provan supply well was conducted only in May and July 2007 and October 2008, and on-site quarterly sampling was not completed in January 2007. Minor adjustments were made to fieldwork methodology for determining on-site groundwater flow beginning in October 2006, and for sample collection at MW-3D in July 2007. In addition, MW-3D could not be located during the August 2008 sampling event. It is ESI's opinion that all Work Plan elements required for the collection of sufficient, accurate relevant data have been accomplished and that no significant deviations from the Work Plan have occurred.



2.9 Implementation of Site Management Plan and Institutional Controls

The site remediation activities implemented as part of the Work Plan (summarized in Section 2.2 through 2.8 above) resulted in contaminants remaining on the Site and the installation of a soil barrier layer. The Volunteer has therefore prepared a Site Management Plan (SMP), which sets guidelines for management of subsurface soils and the long-term maintenance of the cover systems, provides for annual inspections of the barrier layer by a licensed professional engineer to document SMP compliance, and specifies protocols and reporting requirements for final sampling and closure of the monitoring wells. A copy of the SMP is provided as Appendix I.

In accordance with Work Plan Section 2.3.9, the Volunteer has recorded and filed a Deed Restriction, identifying the area subject to the barrier layer (a copy of the Deed Restriction and Orange County Clerk's Office Recording Page is included in Appendix J). The restriction will be designated on filed maps.



3.0 CONCLUSIONS

This FER documents services completed to satisfy the Remedial Action Work Plan for the former Sakmann Restaurant Corporation Site located on U.S. Route 9W in the Town of Highlands, Orange County, New York (VCP Site ID: V-00083-3). The following tasks were completed:

- Investigation of soil gas and air quality in the vicinity of the Restaurant;
- Demolition of the former Garage and remediation of subslab contaminated soils;
- Soil investigations in soils located exterior to the former Garage;
- Removal of the abandoned fuel-oil UST and associated petroleum-impacted soils;
- Installation of a soil barrier layer over areas of low-grade soil contamination;
- Post-remediation groundwater sampling events; and,
- Implementation of the Site Management Plan and associated institutional controls.

Soil in the Vicinity of the Former Garage and Northern Portion of the Site

The absence of significant VOC or PAH concentrations in Garage excavation endpoint samples indicates that contaminated soils have been satisfactorily excavated and NYSDEC Spill Number 0107005 was closed on October 21, 2008. Data from the analysis of soils from the area of the septic system, and from soils located on the western portion of the Site (closed storage tank area), support the conclusion that any releases from former interior conduits or from the former tanks have not significantly impacted remaining on-site soils (concentrations of organic compounds and metals in residual soils are well below the SCOs for Restricted Commercial Use, and in general only marginally exceed TAGM 4046 RSCOs). Low-level PAH and metal concentrations in remaining soils are likely to be associated with the presence of historic fill materials. The presence of the soil barrier layer, and the implementation of the Site Management Plan (SMP) and institutional controls, will ensure that remaining impacted materials do not represent a significant threat to the environment or users of the property.

Soil in the Vicinity of the Existing On-Site Building (Former Restaurant)

No significant contamination is present in the vicinity of the former fuel-oil underground storage tank; the tank has been properly excavated and removed, and NYSDEC Spill Number 0507282 was closed on October 21, 2008. Residual organic compounds (PAHs) in surrounding area soils have been placed beneath the barrier layer and do not represent an exposure risk. Soil gas data for the parking lot to the west of the building are consistent with the historic use of the property as a filling station and automotive repair facility, and may potentially be related to the presence of historic fill materials. Detected analyte concentrations are relatively low level and are not suggestive of significant subsurface contamination. Existing data, however, suggest that indoor air quality at the former Restaurant should be re-evaluated if the structure will be reused.

Groundwater Quality at the Site and at the Downgradient Provan Residence

On- and off-site- groundwater quality data have been collected from 2002 through October 2008. Groundwater contamination likely to be attributable to releases of chlorinated solvents from interior conduits at the former Garage appears to have significantly attenuated prior to soil removal activities in September 2005. No significant contamination has been documented in the Provan and on-site supply wells, or in any on-site monitoring wells following remediation. These findings support the conclusion that contaminated soils formerly located at the property have not significantly impacted local groundwater resources and active on-site groundwater remediation is not necessary.

APPENDIX A

Figures



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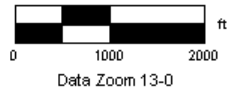


Figure 1 - Site Location Map
Final Engineering Report

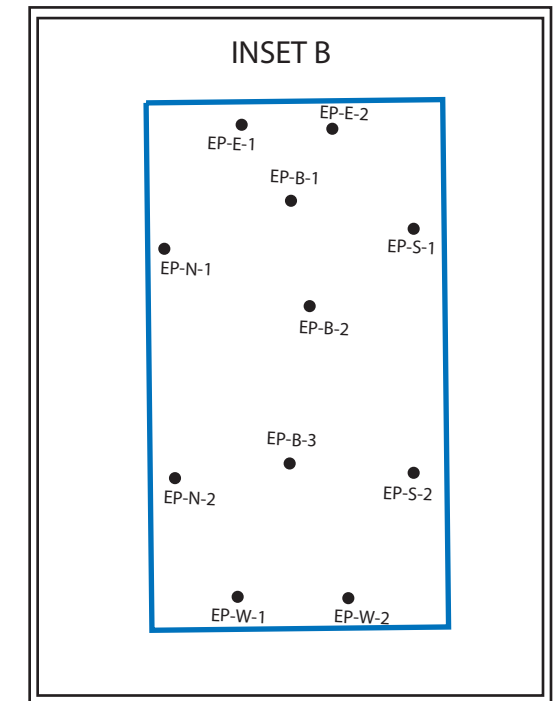
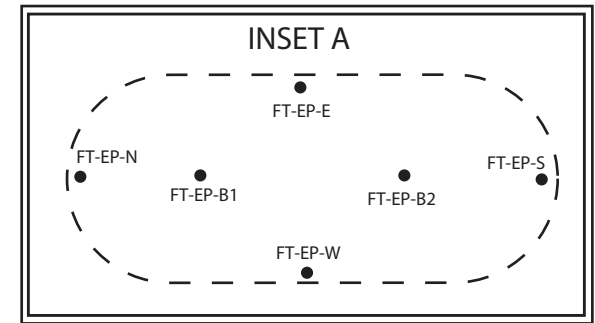
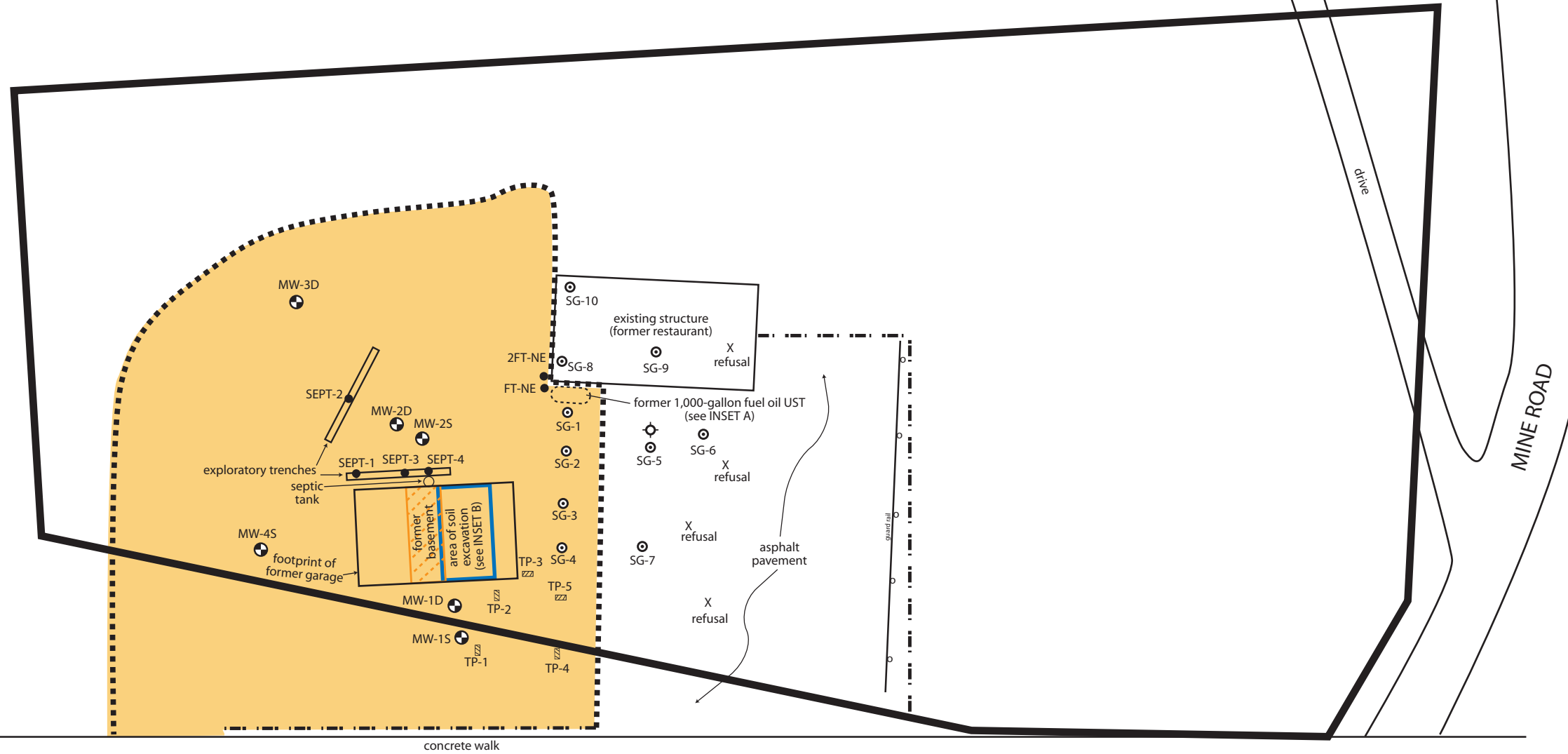
Former Sakmann Restaurant Corp. Property
 U.S. Route 9W
 Town of Highlands
 Orange County, New York



ESI File: SF01123.60

January 2009

Appendix A



U.S. ROUTE 9W

- Legend:**
- property border *
 - extent of installed barrier soil layer
 - monitoring well location
 - supply well location
 - soil sample location
 - soil gas sample location
 - test pit location
 - edge of asphalt

Figure 2 - Remedial Activities Map

Final Engineering Report
 Former Sakmann Restaurant Corp. Property
 U.S. Route 9W
 Town of Highlands
 Orange County, New York

ESI File: SF01123. 60

Scale:

January 2009

Appendix A

* Property border based on the 2003 survey of the Site prepared by Lane & Tully Engineering and Surveying, P.C.

APPENDIX B

Data Summary Tables

Table 1: VOCs in Soil Gas and Indoor Air

Results in $\mu\text{g}/\text{m}^3$

Compound (USEPA TO-15)	Sample ID												
	SG-1	SG-2	SG-3	SG-4	SG-5	SG-6	SG-7	SG-8	SG-9	SG-10	SG-11	Air-1	Air-2
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromoethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorotetrafluoroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Butadiene	ND	ND	ND	9.43	ND	38.2	ND	ND	2.47	ND	ND	ND	ND
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dioxane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,2,4-Trimethylpentane	ND	ND	13.8	166	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Ethyltoluene	2.50	6.99	ND	3.00	2.50	2.50	2.50	4.49	ND	ND	ND	ND	ND
Acetone	50.8	45.9	106	128	162	135	143	53.2	45.9	14.7	82.2	9.91	10.90
Allyl Chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	2.60	ND	ND	6.17	6.17	35.7	2.60	ND	ND	ND	ND	ND	ND
Benzyl Chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Disulfide	ND	ND	3.17	162	4.75	14.6	5.07	ND	3.17	ND	ND	ND	ND
Carbon Tetrachloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane	ND	ND	ND	ND	ND	2.52	1.68	ND	ND	ND	ND	0.84	ND
cis-1,2-Dichloroethylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cyclohexane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dichlorodifluoromethane	ND	ND	ND	ND	ND	ND	ND	11.6	7.54	28.2	9.6	2.01	2.01
Ethyl acetate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	2.21	4.86	3.09	2.65	ND	3.53	ND	ND	ND	ND	ND	ND	ND
Freon-113	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachloro-1,3-Butadiene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isopropanol	8.25	4.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl Butyl ketone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl Ethyl ketone	ND	ND	22.8	30.0	45.0	36.0	42.0	21.6	ND	ND	39.00	ND	ND
Methyl Isobutyl ketone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene Chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MTBE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
n-Heptane	ND	ND	ND	16.6	ND	16.2	ND	ND	ND	ND	ND	ND	ND
n-Hexane	ND	ND	ND	21.1	9.30	10.4	6.08	ND	ND	ND	ND	ND	ND
o-Xylene	2.21	8.83	4.42	3.97	2.65	3.97	2.65	3.09	ND	ND	4.42	ND	ND
p- & m-Xylenes	3.53	11.5	7.07	5.30	3.97	4.86	3.09	3.53	ND	ND	4.86	ND	ND
Propylene	12.2	ND	66.4	112	68.1	227	54.2	ND	22.7	ND	8.74	ND	ND
Styrene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethylene	ND	ND	3.45	89.7	4.83	ND	6.21	7.59	ND	ND	ND	ND	ND
Tetrahydrofuran	8.40	ND	ND	12.0	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	5.75	6.52	4.98	14.6	6.52	24.5	4.98	1.92	ND	ND	3.07	ND	ND
trans-1,2-Dichloroethylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl acetate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl Bromide	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl Chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
total VOCs	98.5	89.1	235	783	316	555	274	107	81.8	42.9	151.9	ND	ND

Notes: ND = not detected

Table 2: VOCs in Subsurface Soils

 SCOs and results in mg/Kg. Results in **bold** exceed Restricted Commercial Use SCOs.

VOCs (USEPA 8260)	"Restricted Commercial Use" SCO	Sample Identification										
		EP-B-1	EP-B-2	EP-B-3	EP-E-1	EP-E-2	EP-S-1	EP-S-2	EP-W-1	EP-W-2	EP-N-1	EP-N-2
1,1,1,2-Tetrachloroethane	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	500	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	0.6*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	240	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethylene	500**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloropropylene	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichlorobenzene	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichloropropane	0.4*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trimethylbenzene	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	3.4*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	190	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromoethane	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	500	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	30	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethylene (total)	500	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	190	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	280	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichloropropane	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	130	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1-Chlorohexane	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,2-Dichloropropane	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chlorotoluene	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chlorotoluene	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	44	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromobenzene	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromochloromethane	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	22	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	500	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	1.9*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	350	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cis-1,3-Dichloropropylene	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromomethane	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dichlorodifluoromethane	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	390	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	2.3*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl tert-butyl ether (MTBE)	500	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	500	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
naphthalene	500	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
n-Butylbenzene	500	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
n-Propylbenzene	500	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
o-Xylene	500***	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
p-&m-Xylenes	500***	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
total Xylenes	500	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
p-Isopropyltoluene	10*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
sec-Butylbenzene	500	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Styrene	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
tert-Butylbenzene	500	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethylene	150	ND	ND	ND	0.008	ND	0.01	0.006	ND	ND	ND	ND
Toluene	500	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropylene	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethylene	200	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	13	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Notes:

* = SCO not established, guidance level based on NYSDEC TAGM 4046 and subsequent memoranda. ** = Guidance level for individual isomers *** = Guidance level for individual isomers
 NE = Guidance level not established (as per TAGM 4046 total individual and sum of VOCs must be less than 10 ppm)
 ND = not detected n/a = not analyzed

Table 2: VOCs in Subsurface Soils (continued)

SCOs and results in mg/Kg. Results in **bold** exceed Restricted Commercial Use SCOs.

VOCs (USEPA 8260)	"Restricted Commercial Use" SCO									
		SEPT-1	SEPT-2	SEPT-3	SEPT-4	TP-1	TP-2	TP-3	TP-4	TP-5
1,1,1,2-Tetrachloroethane	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	500	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	0.6*	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	240	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethylene	500**	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloropropylene	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichlorobenzene	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichloropropane	0.4*	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trimethylbenzene	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	3.4*	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	190	ND	ND	ND	ND	ND	0.021	0.013	ND	ND
1,2-Dibromo-3-chloropropane	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromoethane	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	500	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	30	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethylene (total)	500	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	190	ND	ND	ND	ND	ND	0.036	ND	ND	ND
1,3-Dichlorobenzene	280	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichloropropane	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	130	ND	ND	ND	ND	ND	ND	ND	ND	ND
1-Chlorohexane	NE	ND	ND	ND	ND	n/a	n/a	n/a	n/a	n/a
2,2-Dichloropropane	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chlorotoluene	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chlorotoluene	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	44	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromobenzene	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromochloromethane	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	22	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	500	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	1.9*	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	350	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cis-1,3-Dichloropropylene	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromomethane	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dichlorodifluoromethane	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	390	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	2.3*	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl tert-butyl ether (MTBE)	500	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	500	ND	ND	ND	ND	ND	ND	ND	ND	ND
naphthalene	500	ND	ND	ND	ND	ND	ND	ND	ND	ND
n-Butylbenzene	500	ND	ND	ND	ND	ND	ND	0.013	ND	ND
n-Propylbenzene	500	ND	ND	ND	ND	ND	ND	ND	ND	ND
o-Xylene	500***	ND	ND	ND	ND	ND	0.011	0.015	ND	ND
p-&m-Xylenes	500***	ND	ND	ND	ND	ND	ND	ND	ND	ND
total Xylenes	500	ND	ND	ND	ND	ND	0.011	0.015	ND	ND
p-Isopropyltoluene	10*	ND	ND	ND	ND	ND	ND	ND	ND	ND
sec-Butylbenzene	500	ND	ND	ND	ND	ND	ND	ND	ND	ND
Styrene	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND
tert-Butylbenzene	500	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethylene	150	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	500	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropylene	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethylene	200	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	13	ND	ND	ND	ND	ND	ND	ND	ND	ND

Notes:

* = SCO not established, guidance level based on NYSDEC TAGM 4046 and subsequent memoranda. ** = Guidance level for NE = Guidance level not established (as per TAGM 4046 total individual and sum of VOCs must be less than 10 ppm)
ND = not detected n/a = not analyzed

Table 3: PAHs in Subsurface Soils

SCOs and results in mg/Kg. Results in **bold** exceed Restricted Commercial Use SCOs.

PAHs (USEPA 8270)	"Restricted Commercial Use" SCO	Sample Identification														
		EP-B-1	EP-B-2	EP-B-3	EP-E-1	EP-E-2	EP-S-1	EP-S-2	EP-W-1	EP-W-2	EP-N-1	EP-N-2	SEPT-1	SEPT-2	SEPT-3	SEPT-4
Acenaphthene	500	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.6	0.28	ND	ND
Acenaphthylene	500	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Anthracene	500	ND	ND	0.07	ND	ND	ND	ND	ND	0.064	ND	ND	5.9	0.69	0.41	0.48
Benzo(a)anthracene	5.6	0.1	0.17	0.27	0.34	ND	0.12	ND	0.11	0.31	0.37	ND	16	2.1	1.3	1.4
Benzo(a)pyrene	1	0.16	0.18	0.34	0.37	ND	ND	ND	0.097	0.28	0.34	ND	13	1.7	0.85	1.3
Benzo(b)fluoranthene	5.6	0.12	0.15	0.39	0.28	ND	ND	ND	0.083	0.17	ND	ND	14	1.8	0.62	1
Benzo(g,h,i)perylene	500	0.1	0.088	0.17	0.21	ND	ND	ND	ND	0.069	ND	ND	8.4	0.35	ND	ND
Benzo(k)fluoranthene	56	0.29	0.15	0.34	0.33	ND	ND	ND	0.095	0.27	0.33	ND	13	1.8	0.88	1.3
Chrysene	56	0.17	0.25	0.43	0.53	ND	0.22	ND	0.18	0.46	0.49	ND	18	2.3	1.3	1.8
Dibenzo(a,h)anthracene	0.56	ND	ND	0.06	ND	ND	ND	ND	ND	ND	ND	ND	4.2	0.27	ND	ND
Fluoranthene	500	0.22	0.37	0.8	0.72	ND	ND	ND	0.24	0.57	0.54	0.14	40	4.3	2.2	2.9
Fluorene	500	ND	ND	ND	ND	0.28	0.22	ND	ND	ND	ND	ND	1.6	0.25	ND	ND
Indeno(1,2,3-cd)pyrene	5.6	0.073	0.11	0.14	0.21	ND	ND	ND	ND	0.077	ND	ND	9.1	0.44	ND	0.25
n/aphthalene	500	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Phen/anthrene	500	0.14	0.23	0.37	0.48	0.21	0.24	ND	0.17	0.45	ND	ND	34	2.4	1.4	1.6
Pyrene	500	0.24	0.43	0.7	0.73	0.3	0.34	ND	0.26	0.79	ND	0.18	30	3.5	2.1	2.5

Notes:
ND = not detected

Table 4: Metals in Subsurface Soils

SCOs and results in mg/Kg. Results in **bold** exceed Restricted Commercial Use SCOs.

Metals	Commercial Use" SCO	Sample Identification														
		EP-B-1	EP-B-2	EP-B-3	EP-E-1	EP-E-2	EP-S-1	EP-S-2	EP-W-1	EP-W-2	EP-N-1	EP-N-2	SEPT-1	SEPT-2	SEPT-3	SEPT-4
Arsenic	16	3.25	6.49	5.95	6.57	5.67	4.4	5.89	5.78	7.19	6.79	6.96	5.74	5.59	5.87	4.94
Barium	400	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	255	99.8	464	138
Cadmium	9.3	2.17	1.11	0.98	3.3	0.95	0.83	0.86	1.03	0.91	0.94	0.91	1.46	0.93	0.84	1.16
Chromium	1500	13.7	14.5	14.7	17.7	16.2	14.7	16.8	13.4	11.2	17.3	16.9	13.2	12.3	13.9	15.6
Lead	1000	46.7	130	138	545	59.9	206	26.1	187	219	136	150	294	407	680	604
Mercury	2.8	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0.35	ND	ND	ND
Selenium	1500	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	3.88	4.57	4.44	5.53
Silver	1500	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	ND	ND	ND	ND

Notes:
ND = not detected n/a = not analyzed

Table 5: VOCs/PAHs in UST Endpoint Samples

SCOs and results in mg/Kg. Results in **bold** exceed Restricted Commercial Use SCOs.

	Petroleum Compounds	"Restricted Commercial Use" SCO	Sample Identification										
			FT-EP-E	FT-EP-S	FT-EP-W	FT-EP-N	FT-EP-B1	FT-EP-B2	FT-NE	2FT-NE(1')	2FT-NE(3')	2FT-NE(5')	
VOCs (USEPA 8260, STARS List)	1,2,4-Trimethylbenzene	52	ND	ND	ND	ND	ND	ND	ND	ND	n/a	n/a	n/a
	1,3,5-Trimethylbenzene	52	ND	ND	ND	ND	ND	ND	ND	ND	n/a	n/a	n/a
	Benzene	4.8	ND	ND	ND	ND	ND	ND	ND	ND	n/a	n/a	n/a
	Ethylbenzene	41	ND	ND	ND	ND	ND	ND	ND	ND	n/a	n/a	n/a
	Isopropylbenzene	2.3*	ND	ND	ND	ND	ND	ND	ND	ND	n/a	n/a	n/a
	Methyl tert-butyl ether (MTBE)	100	ND	ND	ND	ND	ND	ND	ND	ND	n/a	n/a	n/a
	n/aphthalene	100	ND	ND	ND	ND	ND	ND	ND	ND	n/a	n/a	n/a
	n-Butylbenzene	100	ND	ND	ND	ND	ND	ND	ND	ND	n/a	n/a	n/a
	n-Propylbenzene	100	ND	ND	ND	ND	ND	ND	ND	ND	n/a	n/a	n/a
	o-Xylene	100**	ND	ND	ND	ND	ND	ND	ND	ND	n/a	n/a	n/a
	p-&m-Xylenes	100**	ND	ND	ND	ND	ND	ND	ND	ND	n/a	n/a	n/a
	total Xylenes	100	ND	ND	ND	ND	ND	ND	ND	ND	n/a	n/a	n/a
	p-Isopropyltoluene	10*	ND	ND	ND	ND	ND	ND	ND	ND	n/a	n/a	n/a
	sec-Butylbenzene	100	ND	ND	ND	ND	ND	ND	ND	ND	n/a	n/a	n/a
tert-Butylbenzene	100	ND	ND	ND	ND	ND	ND	ND	ND	n/a	n/a	n/a	
Toluene	100	ND	ND	ND	ND	ND	ND	ND	ND	n/a	n/a	n/a	
PAHs (USEPA 8270, STARS List)	Acenaphthene	500	ND	ND	ND	ND	ND	ND	ND	0.45	ND	ND	ND
	Acenaphthylene	500	ND	ND	ND	ND	ND	ND	ND	ND	n/a	n/a	n/a
	Anthracene	500	ND	ND	ND	ND	ND	ND	ND	1.20	2.20	2.40	ND
	Benzo(a)anthracene	5.6	0.68	0.68	0.45	0.48	0.53	0.37	2.90	6.70	4.60	ND	ND
	Benzo(a)pyrene	1	0.70	0.78	0.47	0.55	0.67	0.51	2.80	5.30	3.30	ND	ND
	Benzo(b)fluoranthene	5.6	0.58	0.49	0.43	0.42	0.58	0.36	2.70	4.10	3.30	ND	ND
	Benzo(g,h,i)perylene	500	0.31	0.32	ND	ND	ND	ND	0.73	ND	ND	ND	ND
	Benzo(k)fluoranthene	56	0.73	0.86	0.52	0.62	0.61	0.47	2.70	5.00	3.00	ND	ND
	Chrysene	56	1.00	1.20	0.64	0.67	0.84	0.73	3.40	6.40	4.20	ND	ND
	Dibenzo(a,h)anthracene	0.56	ND	ND	ND	ND	ND	ND	0.52	ND	ND	ND	ND
	Fluoranthene	500	1.80	1.90	1.10	1.00	1.40	1.00	0.66	13.00	9.20	1.10	ND
	Fluorene	500	ND	ND	ND	ND	ND	ND	0.65	ND	ND	ND	ND
	Indeno(1,2,3-cd)pyrene	5.6	0.35	0.34	ND	ND	ND	ND	0.94	1.70	ND	ND	ND
	naphthalene	500	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Phenanthrene	500	1.20	1.40	0.95	0.61	0.87	0.69	4.20	7.60	7.20	ND	ND
Pyrene	500	1.80	1.80	1.00	1.10	1.30	0.94	5.10	10.00	7.00	0.95	ND	

Notes:

* = SCO not established, guidance level based on NYSDEC TAGM 4046 and subsequent memoranda

** = Guidance level for total xylenes

ND = not detected n/a = not analyzed

Table 6: VOCs in Imported Soils

 SCOs and results in mg/Kg. Results in **bold** exceed Restricted Commercial Use SCOs.

VOCs (USEPA 8260)	"Unrestricted Use" SCO	WSP-2	WSC-1	WSC-2	WSC-3	WSC-4	WSC-5	(Final Cover) CNQ-1
1,1,1,2-Tetrachloroethane	NE	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	0.68	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	0.6*	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	NE	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	0.27	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethylene	0.33	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloropropylene	NE	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichlorobenzene	NE	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichloropropane	0.4*	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trimethylbenzene	NE	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	3.4*	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	3.6	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane	NE	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromoethane	NE	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	1.1	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	0.02	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethylene (total)	0.19**	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	NE	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	8.4	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	2.4	ND	ND	ND	ND	ND	ND	ND
1,3-Dichloropropane	NE	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	1.8	ND	ND	ND	ND	ND	ND	ND
1,4-Dioxane	0.1	n/a	ND	ND	ND	ND	ND	ND
1-Chlorohexane	NE	ND	ND	ND	ND	ND	ND	ND
2,2-Dichloropropane	NE	ND	ND	ND	ND	ND	ND	ND
2-Chlorotoluene	NE	ND	ND	ND	ND	ND	ND	ND
4-Chlorotoluene	NE	ND	ND	ND	ND	ND	ND	ND
Acetone	0.05	n/a	ND	ND	ND	ND	ND	ND
Benzene	0.06	ND	ND	ND	ND	ND	ND	ND
Bromobenzene	NE	ND	ND	ND	ND	ND	ND	ND
Bromochloromethane	NE	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	NE	ND	ND	ND	ND	ND	ND	ND
Bromoform	NE	ND	ND	ND	ND	ND	ND	ND
Bromomethane	NE	ND	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	0.76	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	1.1	ND	ND	ND	ND	ND	ND	ND
Chloroethane	1.9*	ND	ND	ND	ND	ND	ND	ND
Chloroform	0.37	ND	ND	ND	ND	ND	ND	ND
Chloromethane	NE	ND	ND	ND	ND	ND	ND	ND
Cis-1,3-Dichloropropylene	NE	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	NE	ND	ND	ND	ND	ND	ND	ND
Dibromomethane	NE	ND	ND	ND	ND	ND	ND	ND
Dichlorodifluoromethane	NE	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	1	ND	ND	ND	ND	ND	ND	ND
Hexachlorobenzene	0.33	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	NE	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	2.3*	ND	ND	ND	ND	ND	ND	ND
Methyl butyl ketone (2-Hexanone)	NE	n/a	ND	ND	ND	ND	ND	ND
Methyl ethyl ketone (2-Butanone)	0.12	n/a	ND	ND	ND	ND	ND	ND
Methyl isobutyl ketone (MIBK)	NE	n/a	ND	ND	ND	ND	ND	ND
Methyl tert-butyl ether (MTBE)	0.93	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	0.05	ND	ND	ND	ND	ND	ND	ND
naphthalene	12	ND	ND	ND	ND	ND	ND	ND
n-Butylbenzene	12	ND	ND	ND	ND	ND	ND	ND
n-Propylbenzene	3.9	ND	ND	ND	ND	ND	ND	ND
o-Xylene	0.26***	ND	ND	ND	ND	ND	ND	ND
p-&m-Xylenes	0.26***	ND	ND	ND	ND	ND	ND	ND
total Xylenes	0.26	ND	ND	ND	ND	ND	ND	ND
p-Isopropyltoluene	10*	ND	ND	ND	ND	ND	ND	ND
sec-Butylbenzene	11	ND	ND	ND	ND	ND	ND	ND
Styrene	NE	ND	ND	ND	ND	ND	ND	ND
tert-Butylbenzene	5.9	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethylene	1.3	ND	ND	ND	ND	ND	0.026	ND
Toluene	0.7	ND	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropylene	NE	ND	ND	ND	ND	ND	ND	ND
Trichloroethylene	0.47	ND	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane	NE	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	0.02	ND	ND	ND	ND	ND	ND	ND

Notes:

* = SCO not established, guidance level based on NYSDEC TAGM 4046 and subsequent memoranda.

** = Guidance level for cis isomer 0.25 ppm, guidance level for trans isomer 0.19 ppm *** = Guidance level for total xylenes

NE = Guidance level not established (as per TAGM 4046 total individual and sum of VOCs must be less than 10 ppm)

ND = not detected n/a = not analyzed

Table 7: SVOCs in Imported Soils

 SCO and results in mg/Kg. Results in **bold** exceed Restricted Commercial Use SCOs.

SVOCs (USEPA 8270)	"Unrestricted Use" SCO	WSP-2	WSC-1	WSC-2	WSC-3	WSC-4	WSC-5	(Final Cover) CNQ-1
1,2,4-Trichlorobenzene	NE	n/a	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	NE	n/a	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	NE	n/a	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	NE	n/a	ND	ND	ND	ND	ND	ND
2,4,5-Trichlorophenol	0.1*	n/a	ND	ND	ND	ND	ND	ND
2,4,6-Trichlorophenol	NE	n/a	ND	ND	ND	ND	ND	ND
2,4-Dichlorophenol	0.4*	n/a	ND	ND	ND	ND	ND	ND
2,4-Dimethylphenol	NE	n/a	ND	ND	ND	ND	ND	ND
2,4-Dinitrophenol	0.2*	n/a	ND	ND	ND	ND	ND	ND
2,4-Dinitrotoluene	NE	n/a	ND	ND	ND	ND	ND	ND
2,6-Dinitrotoluene	1*	n/a	ND	ND	ND	ND	ND	ND
2-Chloronaphthalene	NE	n/a	ND	ND	ND	ND	ND	ND
2-Chlorophenol	0.8*	n/a	ND	ND	ND	ND	ND	ND
2-Methylnaphthalene	36.4*	ND	ND	ND	ND	ND	ND	ND
2-Methylphenol	0.1*	n/a	ND	ND	ND	ND	ND	ND
2-Nitroaniline	0.43*	n/a	ND	ND	ND	ND	ND	ND
2-Nitrophenol	0.33*	n/a	ND	ND	ND	ND	ND	ND
3,3-Dichlorobenzidine	NE	n/a	ND	ND	ND	ND	ND	ND
3-Methylphenol	NE	n/a	ND	ND	ND	ND	ND	ND
3-Nitroaniline	0.5*	n/a	ND	ND	ND	ND	ND	ND
4,6-Dinitro-2-methylphenol	NE	n/a	ND	ND	ND	ND	ND	ND
4-Bromophenyl phenyl ether	NE	n/a	ND	ND	ND	ND	ND	ND
4-Chloro-3-methylphenol	0.24*	n/a	ND	ND	ND	ND	ND	ND
4-Chloroaniline	0.22*	n/a	ND	ND	ND	ND	ND	ND
4-Chlorophenyl phenyl ether	NE	n/a	ND	ND	ND	ND	ND	ND
4-Methylphenol	0.9*	n/a	ND	ND	ND	ND	ND	ND
4-Nitroaniline	NE	n/a	ND	ND	ND	ND	ND	ND
4-Nitrophenol	0.1*	n/a	ND	ND	ND	ND	ND	ND
Acenaphthene	20	ND	ND	ND	ND	ND	ND	ND
Acenaphthylene	100	ND	ND	ND	ND	ND	ND	ND
Aniline	0.1*	n/a	ND	ND	ND	ND	ND	ND
Anthracene	100	ND	ND	ND	0.37	ND	ND	ND
Benazidine	NE	n/a	ND	ND	ND	ND	ND	ND
Benzo(a)anthracene	1	0.54	ND	ND	0.75	ND	0.52	ND
Benzo(a)pyrene	1	ND	ND	ND	ND	ND	ND	ND
Benzo(b)fluoranthene	1	ND	ND	ND	ND	ND	ND	ND
Benzo(g,h,i)perylene	100	ND	ND	ND	ND	ND	ND	ND
Benzo(k)fluoranthene	0.8	ND	ND	ND	ND	ND	ND	ND
Benzyl alcohol	NE	n/a	ND	ND	ND	ND	ND	ND
Bis(2-chloroethoxy)methane	NE	n/a	ND	ND	ND	ND	ND	ND
Bis(2-chloroethyl)ether	NE	n/a	ND	ND	ND	ND	ND	ND
Bis(2-chloroisopropyl)ether	NE	n/a	ND	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate	50*	n/a	ND	ND	ND	ND	ND	ND
Butyl benzyl phthalate	50*	n/a	ND	ND	ND	ND	ND	ND
Chrysene	1	0.7	0.34	0.38	1	ND	0.74	ND
Dibenzo(a,h)anthracene	0.33	ND	ND	ND	ND	ND	ND	ND
Dibenzofuran	6.2*	n/a	ND	ND	ND	ND	ND	ND
Diethyl phthalate	7.1*	n/a	ND	ND	ND	ND	ND	ND
Dimethyl phthalate	2*	n/a	ND	ND	ND	ND	ND	ND
Di-n-butyl phthalate	8.1*	n/a	ND	ND	ND	ND	ND	ND
Di-n-octyl phthalate	50*	n/a	ND	ND	ND	ND	ND	ND
Fluoranthene	100	1.1	0.73	0.78	2.4	0.91	1.8	ND
Fluorene	30	ND	ND	ND	ND	ND	ND	ND
Hexachlorobenzene	410	n/a	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	NE	n/a	ND	ND	ND	ND	ND	ND
Hexachlorocyclopentadiene	NE	n/a	ND	ND	ND	ND	ND	ND
Hexachloroethane	NE	n/a	ND	ND	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene	0.5	ND	ND	ND	ND	ND	ND	ND
Isophorone	4.4*	n/a	ND	ND	ND	ND	ND	ND
m-Cresol(s)	0.33	n/a	ND	ND	ND	ND	ND	ND
Naphthalene	12	ND	ND	ND	ND	ND	ND	ND
n-Nitroso-di-n-propylamine	NE	n/a	ND	ND	ND	ND	ND	ND
n-Nitrosodiphenylamine	NE	n/a	ND	ND	ND	ND	ND	ND
Nitrobenzene	0.2*	n/a	ND	ND	ND	ND	ND	ND
o-Cresol(s)	0.33	n/a	ND	ND	ND	ND	ND	ND
p-Cresol(s)	0.33	n/a	ND	ND	ND	ND	ND	ND
Pentachlorophenol	0.8	n/a	ND	ND	ND	ND	ND	ND
Phenanthrene	100	0.93	0.39	0.45	1.9	0.57	1.3	ND
Phenol	0.33	n/a	ND	ND	ND	ND	ND	ND
Pyrene	100	0.93	0.64	0.73	2.4	0.9	1.5	ND
Pyridine	NE	n/a	ND	ND	ND	ND	ND	ND

Notes:

* = SCO not established, guidance level based on NYSDEC TAGM 4046 and subsequent memoranda.

NE = Guidance level not established (as per TAGM 4046 individual SVOCs must be less than 50 ppm)

ND = not detected n/a = not analyzed

Table 8: Metals in Imported Soils
 SCOs and results in mg/Kg. Results in **bold** exceed Unrestricted Use SCOs.

Metals (USEPA 6010/7471)	"Unrestricted Use" SCO	WSP-2	WSC-1	WSC-1A	WSC-2	WSC-2A	WSC-3	WSC-3A	WSC-4	WSC-4A	WSC-5	WSC-5A	(Final Cover) CNQ-1
Aluminum	SB*	8390	7680	n/a	7460	n/a	9890	n/a	6960	n/a	6790	n/a	10700
Antimony	SB*	ND	5.19	n/a	4.35	n/a	4.28	n/a	4.08	n/a	4.06	n/a	ND
Arsenic	13	1.66	5.04	n/a	3.92	n/a	3.3	n/a	4.84	n/a	3.99	n/a	3.73
Barium	350	94.5	79.6	n/a	73.4	n/a	66.7	n/a	235	n/a	73.6	n/a	56.5
Beryllium	7.2	ND	ND	n/a	ND	n/a	ND	n/a	ND	n/a	ND	n/a	ND
Cadmium	2.5	ND	ND	n/a	ND	n/a	ND	n/a	0.59	n/a	ND	n/a	ND
Calcium	SB*	9680	4360	n/a	5800	n/a	6760	n/a	20900	n/a	9020	n/a	17000
Chromium (⁺³)	30	23.6	17.1	n/a	19.6	n/a	16	n/a	18.6	n/a	15.9	n/a	15
Chromium (⁺⁶)	1	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	ND
Cobalt	30 or SB*	8.76	8.19	n/a	8.41	n/a	7.43	n/a	5.84	n/a	7.38	n/a	9.55
Copper	50	30.3	25.4	n/a	25.7	n/a	25.4	n/a	40	n/a	28.6	n/a	26.7
Iron	2,000 or SB*	16000	14000	n/a	14100	n/a	12700	n/a	14800	n/a	12700	n/a	20700
Cyanide (total)	27	n/a	n/a	ND	n/a	ND	n/a	ND	n/a	ND	n/a	ND	ND
Lead	63	89.8	69.5	n/a	63.9	n/a	54.5	n/a	207	n/a	73.9	n/a	12.3
Magnesium	SB*	5260	2540	n/a	3320	n/a	3670	n/a	6890	n/a	4150	n/a	6050
Manganese	1600	303	305	n/a	326	n/a	246	n/a	254	n/a	249	n/a	641
Mercury	0.18	0.13	ND	n/a	ND	n/a	ND	n/a	ND	n/a	ND	n/a	ND
Nickel	30	28.5	23.6	n/a	24.7	n/a	18.5	n/a	12.3	n/a	17.5	n/a	22.2
Potassium	SB*	1670	849	n/a	796	n/a	913	n/a	1210	n/a	948	n/a	1070
Selenium	3.9	ND	ND	n/a	ND	n/a	ND	n/a	ND	n/a	ND	n/a	ND
Silver	2	ND	ND	n/a	ND	n/a	ND	n/a	ND	n/a	ND	n/a	ND
Sodium	SB*	786	302	n/a	283	n/a	265	n/a	471	n/a	288	n/a	283
Sulphur	NE	ND	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Thallium	SB*	ND	ND	n/a	ND	n/a	ND	n/a	ND	n/a	ND	n/a	ND
Vanadium	150 or SB*	26.8	22.1	n/a	22.1	n/a	22.2	n/a	21.2	n/a	20.6	n/a	15.5
Zinc	109	116	82.6	n/a	76.8	n/a	79.8	n/a	117	n/a	83.4	n/a	62.9

Notes:

* = SCO not established, guidance level based on NYSDEC TAGM 4046

NE = SCO not established (no applicable TAGM 4046 RSCO)

ND = not detected n/a = not analyzed

Table 9: PCBs/Pesticides in Imported Soils

 SCOs and results in mg/Kg. Results in **bold** exceed Unrestricted Use SCOs.

PCBs/Pesticides (USEPA 8081)	"Unrestricted Use" SCO	WSP-2	WSC-1	WSC-1A	WSC-2	WSC-2A	WSC-3	WSC-3A	WSC-4	WSC-4A	WSC-5	WSC-5A	(Final Cover) CNQ-1
PCBs	0.1	0.16	ND	---	ND	n/a	ND	n/a	ND	n/a	ND	n/a	ND
2,4-D	NE	n/a	n/a	ND	n/a	ND	n/a	ND	n/a	ND	n/a	ND	ND
2,4,5-TP Acid (Silvex)	3.8	n/a	n/a	ND	n/a	ND	n/a	ND	n/a	ND	n/a	ND	ND
4,4'-DDD	0.0033	ND	ND	n/a	ND	n/a	ND	n/a	ND	n/a	ND	n/a	ND
4,4'-DDE	0.0033	ND	ND	n/a	ND	n/a	ND	n/a	ND	n/a	ND	n/a	ND
4,4'-DDT	0.0033	ND	ND	n/a	ND	n/a	0.0176	n/a	0.0266	n/a	ND	n/a	ND
Aldrin	0.005	ND	ND	n/a	ND	n/a	ND	n/a	ND	n/a	ND	n/a	ND
alpha-BHC	0.02	ND	ND	n/a	ND	n/a	ND	n/a	ND	n/a	ND	n/a	ND
beta-BHC	0.036	ND	ND	n/a	ND	n/a	ND	n/a	ND	n/a	ND	n/a	ND
Chlordane (alpha)	0.094	0.471	0.649	n/a	0.604	n/a	0.678	n/a	0.18	n/a	0.524	n/a	ND
delta-BHC	0.04	ND	ND	n/a	ND	n/a	ND	n/a	ND	n/a	ND	n/a	ND
Dibenzofuran	7	ND	ND	n/a	ND	n/a	ND	n/a	ND	n/a	ND	n/a	ND
Dieldrin	0.005	ND	ND	n/a	ND	n/a	ND	n/a	ND	n/a	ND	n/a	ND
Endosulfan I	2.4	ND	ND	n/a	ND	n/a	ND	n/a	ND	n/a	ND	n/a	ND
Endosulfan II	2.4	ND	ND	n/a	ND	n/a	ND	n/a	ND	n/a	ND	n/a	ND
Endosulfan sulfate	2.4	ND	ND	n/a	ND	n/a	ND	n/a	ND	n/a	ND	n/a	ND
Endrin	0.014	ND	ND	n/a	ND	n/a	ND	n/a	ND	n/a	ND	n/a	ND
gamma-BHC (Lindane)	0.1	ND	ND	n/a	ND	n/a	ND	n/a	ND	n/a	ND	n/a	ND
Heptachlor	0.042	0.0122	0.0141	n/a	0.0122	n/a	0.0145	n/a	ND	n/a	0.0083	n/a	ND
Methoxychlor	NE	ND	ND	n/a	ND	n/a	ND	n/a	ND	n/a	ND	n/a	ND
Toxaphene	NE	ND	ND	n/a	ND	n/a	ND	n/a	ND	n/a	ND	n/a	ND

Notes:

ND = not detected NE = SCO not established (no applicable TAGM 4046 RSCO)

Table 10: VOCs in On-Site Groundwater

Guidance levels and results in µg/L. Results in **bold** exceed guidance levels.

VOCs (USEPA 8260)	Guidance Level	Monitoring Well MW-1S												
		Sampling Date (month/year)												
		5/02	7/03	2/04	5/04	8/04	1/05	6/05	12/05	3/06	6/06	10/06	4/07	7/07
1,1,1,2-Tetrachloroethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethylene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloropropylene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichlorobenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichloropropane	0.04	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trimethylbenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane	0.04	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromoethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethylene (total)	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichloropropane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1-Chlorohexane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,2-Dichloropropane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chlorotoluene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chlorotoluene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromobenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromochloromethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cis-1,3-Dichloropropylene	0.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromomethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dichlorodifluoromethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	0.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl tert-butyl ether (MTBE)	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
n-Butylbenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.3*	ND	ND	ND
n-Propylbenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
o-Xylene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
p-&m-Xylenes	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
p-Isopropyltoluene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.5	ND	ND	ND
sec-Butylbenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Styrene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
tert-Butylbenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethylene	5	ND	ND	ND	ND	ND	ND	1	ND	ND	1.3*	ND	ND	ND
Toluene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropylene	0.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethylene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Notes:

Guidance levels based on NYSDEC Division of Water TOGS 1.1.1 (June 1998, amended through June 2004)

ND = not detected n/a = not available (well not found) * Estimated value ("J" compound), based on a MDL of 5 µg/L

Table 10: VOCs in On-Site Groundwater (continued)

Guidance levels and results in µg/L. Results in **bold** exceed guidance levels.

VOCs (USEPA 8260)	Guidance Level	Monitoring Well MW-1D												
		Sampling Date (month/year)												
		5/02	7/03	2/04	5/04	8/04	1/05	6/05	12/05	3/06	6/06	10/06	4/07	7/07
1,1,1,2-Tetrachloroethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethylene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloropropylene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichlorobenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichloropropane	0.04	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trimethylbenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane	0.04	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromoethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethylene (total)	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichloropropane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1-Chlorohexane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,2-Dichloropropane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chlorotoluene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chlorotoluene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromobenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromochloromethane	5	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	7	6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane	5	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cis-1,3-Dichloropropylene	0.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromomethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dichlorodifluoromethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	0.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl tert-butyl ether (MTBE)	10	ND	4	4	5	8	ND	6	6	3*	1.2*	3*	3*	3*
Methylene chloride	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
n-Butylbenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
n-Propylbenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
o-Xylene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
p-&m-Xylenes	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
p-Isopropyltoluene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
sec-Butylbenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Styrene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
tert-Butylbenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethylene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropylene	0.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethylene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Notes:

Guidance levels based on NYSDEC Division of Water TOGS 1.1.1 (June 1998, amended through June 2004)

ND = not detected n/a = not available (well not found) * Estimated value ("J" compound), based on a MDL of 5 ug/L

Table 10: VOCs in On-Site Groundwater (continued)

Guidance levels and results in µg/L. Results in **bold** exceed guidance levels.

VOCs (USEPA 8260)	Guidance Level	Monitoring Well MW-2S													
		Sampling Date (month/year)													
		5/02	7/03	2/04	5/04	8/04	1/05	6/05	12/05	3/06	6/06	10/06	4/07	7/07	
1,1,1,2-Tetrachloroethane	5	ND	n/a	n/a	n/a	n/a	ND	ND	ND	ND	ND	ND	ND	ND	
1,1,1-Trichloroethane	5	ND	n/a	n/a	n/a	n/a	ND	ND	ND	ND	ND	ND	ND	ND	
1,1,2,2-Tetrachloroethane	5	ND	n/a	n/a	n/a	n/a	ND	ND	ND	ND	ND	ND	ND	ND	
1,1,2-Trichloroethane	1	ND	n/a	n/a	n/a	n/a	ND	ND	ND	ND	ND	ND	ND	ND	
1,1-Dichloroethane	5	ND	n/a	n/a	n/a	n/a	ND	ND	ND	ND	ND	ND	ND	ND	
1,1-Dichloroethylene	5	ND	n/a	n/a	n/a	n/a	ND	ND	ND	ND	ND	ND	ND	ND	
1,1-Dichloropropylene	5	ND	n/a	n/a	n/a	n/a	ND	ND	ND	ND	ND	ND	ND	ND	
1,2,3-Trichlorobenzene	5	ND	n/a	n/a	n/a	n/a	ND	ND	ND	ND	ND	ND	ND	ND	
1,2,3-Trichloropropane	0.04	ND	n/a	n/a	n/a	n/a	ND	ND	ND	ND	ND	ND	ND	ND	
1,2,3-Trimethylbenzene	5	ND	n/a	n/a	n/a	n/a	ND	ND	ND	ND	ND	ND	ND	ND	
1,2,4-Trichlorobenzene	5	ND	n/a	n/a	n/a	n/a	ND	ND	ND	ND	ND	ND	ND	ND	
1,2,4-Trimethylbenzene	5	ND	n/a	n/a	n/a	n/a	ND	ND	ND	ND	ND	ND	ND	ND	
1,2-Dibromo-3-chloropropane	0.04	ND	n/a	n/a	n/a	n/a	ND	ND	ND	ND	ND	ND	ND	ND	
1,2-Dibromoethane	5	ND	n/a	n/a	n/a	n/a	ND	ND	ND	ND	ND	ND	ND	ND	
1,2-Dichlorobenzene	3	ND	n/a	n/a	n/a	n/a	ND	ND	ND	ND	ND	ND	ND	ND	
1,2-Dichloroethylene (total)	5	58	n/a	n/a	n/a	n/a	ND	2	2	1*	1.3*	ND	n/a	ND	
1,2-Dichloropropane	1	ND	n/a	n/a	n/a	n/a	ND	ND	ND	ND	ND	ND	ND	ND	
1,3,5-Trimethylbenzene	5	ND	n/a	n/a	n/a	n/a	ND	ND	ND	ND	ND	ND	ND	ND	
1,3-Dichlorobenzene	3	ND	n/a	n/a	n/a	n/a	ND	ND	ND	ND	ND	ND	ND	ND	
1,3-Dichloropropane	5	ND	n/a	n/a	n/a	n/a	ND	ND	ND	ND	ND	ND	ND	ND	
1,4-Dichlorobenzene	3	ND	n/a	n/a	n/a	n/a	ND	ND	ND	ND	ND	ND	ND	ND	
1-Chlorohexane	5	ND	n/a	n/a	n/a	n/a	ND	ND	ND	ND	ND	ND	ND	ND	
2,2-Dichloropropane	5	ND	n/a	n/a	n/a	n/a	ND	ND	ND	ND	ND	ND	ND	ND	
2-Chlorotoluene	5	ND	n/a	n/a	n/a	n/a	ND	ND	ND	ND	ND	ND	ND	ND	
4-Chlorotoluene	5	ND	n/a	n/a	n/a	n/a	ND	ND	ND	ND	ND	ND	ND	ND	
Benzene	1	ND	n/a	n/a	n/a	n/a	ND	ND	ND	ND	ND	ND	ND	ND	
Bromobenzene	5	ND	n/a	n/a	n/a	n/a	ND	ND	ND	ND	ND	ND	ND	ND	
Bromochloromethane	5	ND	n/a	n/a	n/a	n/a	ND	ND	ND	ND	ND	ND	ND	ND	
Bromodichloromethane	50	ND	n/a	n/a	n/a	n/a	ND	ND	ND	ND	ND	ND	ND	ND	
Bromoform	50	ND	n/a	n/a	n/a	n/a	ND	ND	ND	ND	ND	ND	ND	ND	
Bromomethane	5	ND	n/a	n/a	n/a	n/a	ND	ND	ND	ND	ND	ND	ND	ND	
Carbon tetrachloride	5	ND	n/a	n/a	n/a	n/a	ND	ND	ND	ND	ND	ND	ND	ND	
Chlorobenzene	5	ND	n/a	n/a	n/a	n/a	ND	ND	ND	ND	ND	ND	ND	ND	
Chloroethane	5	ND	n/a	n/a	n/a	n/a	ND	ND	ND	ND	ND	ND	ND	ND	
Chloroform	7	1	n/a	n/a	n/a	n/a	ND	ND	ND	ND	ND	ND	ND	ND	
Chloromethane	5	ND	n/a	n/a	n/a	n/a	ND	ND	ND	ND	ND	ND	ND	ND	
Cis-1,3-Dichloropropylene	0.4	ND	n/a	n/a	n/a	n/a	ND	ND	ND	ND	ND	ND	ND	ND	
Dibromochloromethane	5	ND	n/a	n/a	n/a	n/a	ND	ND	ND	ND	ND	ND	ND	ND	
Dibromomethane	5	ND	n/a	n/a	n/a	n/a	ND	ND	ND	ND	ND	ND	ND	ND	
Dichlorodifluoromethane	5	ND	n/a	n/a	n/a	n/a	ND	ND	ND	ND	ND	ND	ND	ND	
Ethylbenzene	5	ND	n/a	n/a	n/a	n/a	ND	ND	ND	ND	ND	ND	ND	ND	
Hexachlorobutadiene	0.5	ND	n/a	n/a	n/a	n/a	ND	ND	ND	ND	ND	ND	ND	ND	
Isopropylbenzene	5	ND	n/a	n/a	n/a	n/a	ND	ND	ND	ND	ND	ND	ND	ND	
Methyl tert-butyl ether (MTBE)	10	22	n/a	n/a	n/a	n/a	ND	1	1	3*	3.5*	3*	n/a	2*	
Methylene chloride	5	ND	n/a	n/a	n/a	n/a	ND	ND	ND	ND	ND	ND	ND	ND	
Naphthalene	10	ND	n/a	n/a	n/a	n/a	ND	ND	ND	ND	ND	ND	ND	ND	
n-Butylbenzene	5	ND	n/a	n/a	n/a	n/a	ND	ND	ND	ND	ND	ND	ND	ND	
n-Propylbenzene	5	ND	n/a	n/a	n/a	n/a	ND	ND	ND	ND	ND	ND	ND	ND	
o-Xylene	5	ND	n/a	n/a	n/a	n/a	ND	ND	ND	ND	ND	ND	ND	ND	
p-&m-Xylenes	5	ND	n/a	n/a	n/a	n/a	ND	ND	ND	ND	ND	ND	ND	ND	
p-Isopropyltoluene	5	ND	n/a	n/a	n/a	n/a	ND	ND	ND	ND	1*	ND	n/a	ND	
sec-Butylbenzene	5	ND	n/a	n/a	n/a	n/a	ND	ND	ND	ND	ND	ND	ND	ND	
Styrene	5	ND	n/a	n/a	n/a	n/a	ND	ND	ND	ND	ND	ND	ND	ND	
tert-Butylbenzene	5	ND	n/a	n/a	n/a	n/a	ND	ND	ND	ND	ND	ND	ND	ND	
Tetrachloroethylene	5	2	n/a	n/a	n/a	n/a	ND	2	3	2*	1.9*	2*	n/a	ND	
Toluene	5	ND	n/a	n/a	n/a	n/a	ND	ND	ND	ND	ND	ND	ND	ND	
trans-1,3-Dichloropropylene	0.4	ND	n/a	n/a	n/a	n/a	ND	ND	ND	ND	ND	ND	ND	ND	
Trichloroethylene	5	ND	n/a	n/a	n/a	n/a	ND	ND	ND	ND	ND	ND	ND	ND	
Trichlorofluoromethane	5	ND	n/a	n/a	n/a	n/a	ND	ND	ND	ND	ND	ND	ND	ND	
Vinyl chloride	2	ND	n/a	n/a	n/a	n/a	ND	ND	ND	ND	ND	ND	ND	ND	

Notes:

Guidance levels based on NYSDEC Division of Water TOGS 1.1.1 (June 1998, amended through June 2004)

ND = not detected n/a = not available (well not found) * Estimated value ("J" compound), based on a MDL of 5 µg/L

Table 10: VOCs in On-Site Groundwater (continued)

Guidance levels and results in µg/L. Results in **bold** exceed guidance levels.

VOCs (USEPA 8260)	Guidance Level	Monitoring Well MW-2D												
		Sampling Date (month/year)												
		5/02	7/03	2/04	5/04	8/04	1/05	6/05	12/05	3/06	6/06	10/06	4/07	7/07
1,1,1,2-Tetrachloroethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethylene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloropropylene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichlorobenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichloropropane	0.04	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trimethylbenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane	0.04	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromoethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethylene (total)	5	1	21	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichloropropane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1-Chlorohexane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,2-Dichloropropane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chlorotoluene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chlorotoluene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromobenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromochloromethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cis-1,3-Dichloropropylene	0.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromomethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dichlorodifluoromethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	0.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl tert-butyl ether (MTBE)	10	ND	1	ND	2	3	ND	1	2	2*	2*	1*	2*	ND
Methylene chloride	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
n-Butylbenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
n-Propylbenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
o-Xylene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
p-&m-Xylenes	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
p-Isopropyltoluene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.5*	ND	ND	ND
sec-Butylbenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Styrene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
tert-Butylbenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethylene	5	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropylene	0.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethylene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Notes:

Guidance levels based on NYSDEC Division of Water TOGS 1.1.1 (June 1998, amended through June 2004)

ND = not detected n/a = not available (well not found) * Estimated value ("J" compound), based on a MDL of 5 ug/L

Table 10: VOCs in On-Site Groundwater (continued)

Guidance levels and results in µg/L. Results in **bold** exceed guidance levels.

VOCs (USEPA 8260)	Guidance Level	Monitoring Well MW-3D												
		Sampling Date (month/year)												
		5/02	7/03	2/04	5/04	8/04	1/05	6/05	12/05	3/06	6/06	10/06	4/07	7/07
1,1,1,2-Tetrachloroethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethylene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloropropylene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichlorobenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichloropropane	0.04	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trimethylbenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane	0.04	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromoethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethylene (total)	5	21	20	9	ND	5	ND	5	4	3*	3.8*	4*	5*	ND
1,2-Dichloropropane	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichloropropane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1-Chlorohexane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,2-Dichloropropane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chlorotoluene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chlorotoluene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromobenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromochloromethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cis-1,3-Dichloropropylene	0.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromomethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dichlorodifluoromethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	0.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl tert-butyl ether (MTBE)	10	19	9	4	7	3	ND	3	3	2*	2.9*	2*	ND	ND
Methylene chloride	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
n-Butylbenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
n-Propylbenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
o-Xylene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
p-&m-Xylenes	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
p-Isopropyltoluene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
sec-Butylbenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Styrene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
tert-Butylbenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethylene	5	2	2	1	ND	ND	ND	1	2	1*	1.2*	1*	1*	ND
Toluene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropylene	0.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethylene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Notes:

Guidance levels based on NYSDEC Division of Water TOGS 1.1.1 (June 1998, amended through June 2004)

ND = not detected n/a = not available (well not found) * Estimated value ("J" compound)

Table 10: VOCs in On-Site Groundwater (continued)

Guidance levels and results in µg/L. Results in **bold** exceed guidance levels.

VOCs (USEPA 8260)	Guidance Level	Monitoring Well MW-4S												
		Sampling Date (month/year)												
		5/02	7/03	2/04	5/04	8/04	1/05	6/05	12/05	3/06	6/06	10/06	4/07	7/07
1,1,1,2-Tetrachloroethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethylene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloropropylene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichlorobenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichloropropane	0.04	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trimethylbenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane	0.04	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromoethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethylene (total)	5	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichloropropane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1-Chlorohexane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,2-Dichloropropane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chlorotoluene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chlorotoluene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromobenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromochloromethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cis-1,3-Dichloropropylene	0.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromomethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dichlorodifluoromethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	0.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl tert-butyl ether (MTBE)	10	ND	3	1	1	1	ND	1	4	4*	1.2*	ND	ND	ND
Methylene chloride	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
n-Butylbenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
n-Propylbenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
o-Xylene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
p-&m-Xylenes	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
p-Isopropyltoluene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8*	ND	ND	ND
sec-Butylbenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Styrene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
tert-Butylbenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethylene	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropylene	0.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethylene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Notes:

Guidance levels based on NYSDEC Division of Water TOGS 1.1.1 (June 1998, amended through June 2004)

ND = not detected n/a = not available (well not found) * Estimated value ("J" compound)

Table 11: VOCs in Provan Supply Well

Guidance levels and results in µg/L. Results in **bold** exceed guidance levels.

VOCs (USEPA 8260)	Guidance Level	Provan Supply Well			
		Sampling Date (month/year)			
		1/02	7/03	5/07	7/07
1,1,1,2-Tetrachloroethane	5	ND	ND	ND	ND
1,1,1-Trichloroethane	5	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	5	ND	ND	ND	ND
1,1,2-Trichloroethane	1	ND	ND	ND	ND
1,1-Dichloroethane	5	ND	ND	ND	ND
1,1-Dichloroethylene	5	ND	ND	ND	ND
1,1-Dichloropropylene	5	ND	ND	ND	ND
1,2,3-Trichlorobenzene	5	ND	ND	ND	ND
1,2,3-Trichloropropane	0.04	ND	ND	ND	ND
1,2,3-Trimethylbenzene	5	ND	ND	ND	ND
1,2,4-Trichlorobenzene	5	ND	ND	ND	ND
1,2,4-Trimethylbenzene	5	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane	0.04	ND	ND	ND	ND
1,2-Dibromoethane	5	ND	ND	ND	ND
1,2-Dichlorobenzene	3	ND	ND	ND	ND
1,2-Dichloroethylene (total)	5	2.8	ND	ND	ND
1,2-Dichloropropane	1	ND	ND	ND	ND
1,3,5-Trimethylbenzene	5	ND	ND	ND	ND
1,3-Dichlorobenzene	3	ND	ND	ND	ND
1,3-Dichloropropane	5	ND	ND	ND	ND
1,4-Dichlorobenzene	3	ND	ND	ND	ND
1-Chlorohexane	5	ND	ND	ND	ND
2,2-Dichloropropane	5	ND	ND	ND	ND
2-Chlorotoluene	5	ND	ND	ND	ND
4-Chlorotoluene	5	ND	ND	ND	ND
Benzene	1	ND	ND	ND	ND
Bromobenzene	5	ND	ND	ND	ND
Bromochloromethane	5	ND	ND	ND	ND
Bromodichloromethane	50	ND	ND	ND	ND
Bromoform	50	ND	ND	ND	ND
Bromomethane	5	ND	ND	ND	ND
Carbon tetrachloride	5	ND	ND	ND	ND
Chlorobenzene	5	ND	ND	ND	ND
Chloroethane	5	ND	ND	ND	ND
Chloroform	7	ND	ND	ND	ND
Chloromethane	5	ND	ND	ND	ND
Cis-1,3-Dichloropropylene	0.4	ND	ND	ND	ND
Dibromochloromethane	5	ND	ND	ND	ND
Dibromomethane	5	ND	ND	ND	ND
Dichlorodifluoromethane	5	ND	ND	ND	ND
Ethylbenzene	5	ND	ND	ND	ND
Hexachlorobutadiene	0.5	ND	ND	ND	ND
Isopropylbenzene	5	ND	ND	ND	ND
Methyl tert-butyl ether (MTBE)	10	ND	ND	ND	ND
Methylene chloride	5	ND	ND	ND	ND
Naphthalene	10	ND	ND	ND	ND
n-Butylbenzene	5	ND	ND	ND	ND
n-Propylbenzene	5	ND	ND	ND	ND
o-Xylene	5	ND	ND	ND	ND
p-&m-Xylenes	5	ND	ND	ND	ND
p-Isopropyltoluene	5	ND	ND	ND	ND
sec-Butylbenzene	5	ND	ND	ND	ND
Styrene	5	ND	ND	ND	ND
tert-Butylbenzene	5	ND	ND	ND	ND
Tetrachloroethylene	5	1.1	ND	2*	ND
Toluene	5	ND	ND	ND	ND
trans-1,3-Dichloropropylene	0.4	ND	ND	ND	ND
Trichloroethylene	5	ND	ND	ND	ND
Trichlorofluoromethane	5	ND	ND	ND	ND
Vinyl chloride	2	ND	ND	ND	ND

Notes:

Guidance levels based on NYSDEC Division of Water TOGS 1.1.1 (June 1998, amended through June 2004)
ND = not detected n/a = not available (well not found) * Estimated value ("J" compound)

APPENDIX C

***Laboratory Reports
(provided on CD)***

APPENDIX D

Data Usability Summary Report

York Analytical Labs Project/SGD No. 07040331

Data Useability Summary Review

General Information

Five (5) aqueous samples and one trip blank sample were collected on April 10, 2007 and submitted to York Analytical Laboratories, Inc., Stratford, Connecticut on April 11, 2007.

York is a participant of both the New York State Department of Health Environmental Laboratory Approval Program (ELAP #10854) as well as the National Environmental Laboratory Accreditation Program (NELAP #10854).

The laboratory performed Volatiles analysis in accordance with the requirements cited within EPA SW-846 8260 as requested on the Chain-of-Custody sheet for the SDG.

This review presents the data evaluation performed on samples associated with this SDG, specifically pertaining to the quality control recoveries and adherence to method requirements. Evaluation of the data included a review of the following:

- Sample Integrity (Chain-of-custody)
- Holding times
- GC/MS Tunes
- Initial and continuing calibration
- Method blanks
- Laboratory control samples
- Matrix Spikes/Matrix Spike Duplicates
- Sample Dilutions
- Reporting limits
- Chromatographic Evaluation (carry-over)
- Sample result verification/Reporting Calculations

The data were qualified following general guidelines in the USEPA's Contract laboratory Program National Functional Guidelines for Organic Data Review, EPA 540/R-99-008 (USEPA October 1999). DUSRs were prepared for each laboratory report (based on sample delivery group) as specified in NYSDEC's Guidance for the Development of Quality Assurance Plans and Data Usability Summary Reports (July 1999).

Any deviations from acceptable QC specifications are discussed in the DUSRs. Qualifiers were added to the data, when appropriate, to indicate potential concerns with data usability.

The laboratory reports are attached with appropriate data validation qualifiers, manually notated.

Data Usability Summary Report

SDG/Data Package 07040331

Sample Integrity (Chain-of-custody)

All chain-of-custody was maintained from the field, to the lab courier to the lab log-in for analysis in the lab. All documentation was provided support proper maintenance of sample integrity.

Holding times

All holding times were met for this SDG. It is noted that although the chain-of-custody indicates that 2 x 40 mL vials were provided for each sample, these were HCl preserved vials as indicated

by the laboratory pH log. The holding time for HCl preserved aqueous volatiles is 14 days from collection. These samples were analyzed within 8 days of collection.

GC/MS Tunes

The initial calibration and continuing calibrations tunes indicated that all method criteria for the tuning compound p-bromofluorobenzene were met including 12 hour analysis requirements and mass ratios. The mass ratios were determined using an average across the apex of the peak as required in the method.

Initial and Continuing calibration

The initial calibrations the samples in this SDG were run under were 2 different calibration curves: V2C205A and V3135A. All % RSDs for all compounds met method requirements.

The continuing calibrations for this SDG were done under 2 separate batches: QBV2041607A and QBV3041707B.

For batch QBV2041607A, which affects samples 07040331-01,-03 and -05, only methylene chloride exhibited a % difference greater than method limits. This is due to its presence in the method blank. Data for methylene chloride should be considered estimated and "J" flagged. Since no methylene chloride was detected in the field samples at > 10 times the method blank, the data are not affected further.

For batch QBV3041707B which affects samples 07040331-02,-04 and -06, only bromomethane exhibited a % difference greater than 25%. Data for bromomethane should be considered estimated and "UJ" flagged, since no bromomethane was detected in the field samples the data are not affected further.

Method Blanks

In the method blanks for both analytical batches, only methylene chloride was found. In batch QBV2041607A, methylene chloride was found at 8 ppb. In batch QBV3041707B, methylene chloride was found at 5 ppb.

Laboratory Control Samples

The Laboratory control samples (LCS) for both analytical batches consisted of full list spikes and recovered within method and laboratory generated control limits.

Matrix Spikes/Matrix Spike Duplicates (MS/MSD)

The MS/MSD for this SDG was non-site specific. The recoveries and RPDs for all compounds were within laboratory generated control limits. It is noted that these data would not affect this SDG since they were non-site specific samples.

Sample Dilutions

No sample dilutions were required for this SDG.

Reporting limits

The reporting limits for Volatiles for this SDG were 5.0 ppb. This reflects the lowest standard used for calibration and is in compliance with method requirements.

Chromatographic Evaluation (carry-over)

Examination of the chromatograms (Total Ion Chromatograms) indicated no carry-over which could affect quantitative and qualitative analysis.

Sample Result Verification/Reporting Calculations

Examination of the initial calibration response factors Rfs and RSDs, and continuing calibration Rfs and %Ds indicated no calculation issues.

A check of the surrogate calculations and target compound calculations also verified that the data as reported is free from calculation errors.

Since the package was not initially destined for a DUSR, flags were not assigned to the data by the laboratory. The SDG Technical Report attached reflects all necessary flags re-reported for this review.

Summary

All data met method requirements with any exceptions duly noted above. Any validation flags are manually annotate on the attached SDG Technical Report from the laboratory.

York Analytical Labs Project/SGD No. 07050908

Data Useability Summary Review

General Information

One (1) aqueous sample collected on May 25, 2007 was submitted to York Analytical Laboratories, Inc., Stratford, Connecticut on May 30, 2007.

York is a participant of both the New York State Department of Health Environmental Laboratory Approval Program (ELAP #10854) as well as the National Environmental Laboratory Accreditation Program (NELAP #10854).

The laboratory performed Volatiles analysis in accordance with the requirements cited within EPA SW-846 8260 as requested on the Chain-of-Custody sheet for the SDG.

This review presents the data evaluation performed on samples associated with this SDG, specifically pertaining to the quality control recoveries and adherence to method requirements. Evaluation of the data included a review of the following:

- Sample Integrity (Chain-of-custody)
- Holding times
- GC/MS Tunes
- Initial and continuing calibration
- Method blanks
- Laboratory control samples
- Matrix Spikes/Matrix Spike Duplicates
- Sample Dilutions
- Reporting limits
- Chromatographic Evaluation (carry-over)
- Sample result verification/Reporting Calculations

The data were qualified following general guidelines in the USEPA's Contract laboratory Program National Functional Guidelines for Organic Data Review, EPA 540/R-99-008 (USEPA October 1999). DUSRs were prepared for each laboratory report (based on sample delivery group) as specified in NYSDEC's Guidance for the Development of Quality Assurance Plans and Data Usability Summary Reports (July 1999).

Any deviations from acceptable QC specifications are discussed in the DUSRs. Qualifiers were added to the data, when appropriate, to indicate potential concerns with data usability.

The laboratory reports are attached with appropriate data validation qualifiers, manually notated.

Data Usability Summary Report

SDG/Data Package 07050908

Sample Integrity (Chain-of-custody)

All chain-of-custody was maintained from the field, to the lab courier to the lab log-in for analysis in the lab. All documentation was provided support proper maintenance of sample integrity.

Holding times

All holding times were met for this SDG. It is noted that although the chain-of-custody indicates that 2 x 40 mL vials were provided for each sample, these were HCl preserved vials as indicated by the laboratory pH log. The holding time for HCl preserved aqueous volatiles is 14 days from collection. These samples were analyzed within 14 days of collection.

GC/MS Tunes

The initial calibration and continuing calibrations tunes indicated that all method criteria for the tuning compound p-bromofluorobenzene were met including 12 hour analysis requirements and mass ratios. The mass ratios were determined using an average across the apex of the peak as required in the method.

Initial and Continuing calibration

The initial calibrations for the samples in this SDG were run under calibration curve: V1C219A. All % RSDs for all compounds met method requirements.

The continuing calibration for this SDG was under batch: QBV1060507A.

For batch QBV1060507A, methylene chloride, trichlorofluoromethane, 1,2,4-trichlorobenzene, and naphthalene exhibited a % difference greater than 25%. With the exception of methylene chloride, these compounds are flagged accordingly with a "UJ" flag. For methylene chloride, the flag is a "J" since it was detected in the sample.

Method Blanks

In the method blanks for both analytical batches, only methylene chloride was found.

In batch QBV1060507A, methylene chloride was found at 11 ppb.

Laboratory Control Samples

The Laboratory control samples (LCS) for both analytical batches consisted of full list spikes and recovered within method and laboratory generated control limits.

Matrix Spikes/Matrix Spike Duplicates (MS/MSD)

The MS/MSD for this SDG was non-site specific. The recoveries and RPDs for all compounds were within laboratory generated control limits. It is noted that these data would not affect this SDG since they were non-site specific samples.

Sample Dilutions

No sample dilutions were required for this SDG.

Reporting limits

The reporting limits for Volatiles for this SDG were 5.0 ppb. This reflects the lowest standard used for calibration and is in compliance with method requirements.

Chromatographic Evaluation (carry-over)

Examination of the chromatograms (Total Ion Chromatograms) indicated no carry-over which could affect quantitative and qualitative analysis.

Sample Result Verification/Reporting Calculations

Examination of the initial calibration response factors Rfs and RSDs, and continuing calibration Rfs and %Ds indicated no calculation issues.

A check of the surrogate calculations and target compound calculations also verified that the data as reported is free from calculation errors.

Since the package was not initially destined for a DUSR, flags were not assigned to the data by the laboratory. The SDG Technical Report attached reflects all necessary flags re-reported for this review.

Summary

All data met method requirements with any exceptions duly noted above. Any validation flags are manually annotate on the attached SDG Technical Report from the laboratory.

York Analytical Labs Project/SGD No. 07060443

Data Useability Summary Review

General Information

One (1) soil sample collected on June 12, 2007 was submitted to York Analytical Laboratories, Inc., Stratford, Connecticut on June 13, 2007.

York is a participant of both the New York State Department of Health Environmental Laboratory Approval Program (ELAP #10854) as well as the National Environmental Laboratory Accreditation Program (NELAP #10854).

The laboratory performed Volatiles, Pesticides, SVOCs, herbicides, PCBs, metals, cyanide, and hexavalent chromium analyses in accordance with the requirements cited within EPA SW-846 as requested on the Chain-of-Custody sheet for the SDG.

This review presents the data evaluation performed on samples associated with this SDG, specifically pertaining to the quality control recoveries and adherence to method requirements. Evaluation of the data included a review of the following:

- Sample Integrity (Chain-of-custody)
- Holding times
- GC/MS Tunes
- Initial and continuing calibration
- Method blanks
- Laboratory control samples
- Matrix Spikes/Matrix Spike Duplicates
- Sample Dilutions
- Reporting limits
- Chromatographic Evaluation (carry-over)
- Sample result verification/Reporting Calculations

The data were qualified following general guidelines in the USEPA's Contract laboratory Program National Functional Guidelines for Organic and Inorganics Data Review, EPA 540/R-99-008 (USEPA October 1999). DUSRs were prepared for each laboratory report (based on sample delivery group) as specified in NYSDEC's Guidance for the Development of Quality Assurance Plans and Data Usability Summary Reports (July 1999).

Any deviations from acceptable QC specifications are discussed in the DUSRs. Qualifiers were added to the data, when appropriate, to indicate potential concerns with data usability.

The laboratory reports are attached with appropriate data validation qualifiers, manually notated.

Data Usability Summary Report

SDG/Data Package 07060443

Sample Integrity (Chain-of-custody)

All chain-of-custody was maintained from the field, to the lab courier to the lab log-in to analysis in the lab. All documentation was provided support proper maintenance of sample integrity.

Holding times

All holding times were met for extraction, preparation and analysis for this SDG.

VOLATILES

GC/MS Tunes

The initial calibration and continuing calibrations tunes indicated that all method criteria for the tuning compound p-bromofluorobenzene were met including 12 hour analysis requirements and mass ratios. The mass ratios were determined using an average across the apex of the peak as required in the method.

Initial and Continuing calibration

The initial calibrations the samples in this SDG were run under calibration curve: V1C219A. All % RSDs for all compounds met method requirements with the exception of methylene chloride. Values for this compound are "J" flagged accordingly and the MDL is "UJ" flagged.

The continuing calibration for this SDG was under batch: QBV1061507B.

For batch QBV1061507B, dichlorodifluoromethane, chloromethane, bromomethane and trichlorofluoromethane exhibited a % difference greater than 25%. With the exception of methylene chloride, these compounds which are not detected in the sample are flagged accordingly with a "UJ" flag. For methylene chloride, the flag is a "J" since it was detected in the sample.

Method Blanks

In the method blank for the analytical batch, only methylene chloride was found at 11 ppb and acetone was found at 11 ppb as well.

Laboratory Control Samples

The Laboratory control samples (LCS) for both analytical batches consisted of full list spikes and recovered within method and laboratory generated control limits.

Matrix Spikes/Matrix Spike Duplicates (MS/MSD)

The MS/MSD for this SDG was non-site specific. The recoveries and RPDs for all compounds were within laboratory generated control limits. It is noted that these data would not affect this SDG since they were non-site specific samples.

Sample Dilutions

No sample dilutions were required for this SDG.

Reporting limits

The reporting limits for Volatiles for this SDG were 5.0 ppb. This reflects the lowest standard used for calibration and is in compliance with method requirements.

Chromatographic Evaluation (carry-over)

Examination of the chromatograms (Total Ion Chromatograms) indicated no carry-over which could affect quantitative and qualitative analysis.

Sample Result Verification/Reporting Calculations

Examination of the initial calibration response factors Rfs and RSDs, and continuing calibration Rfs and %Ds indicated no calculation issues.

A check of the surrogate calculations and target compound calculations also verified that the data as reported is free from calculation errors.

Since the package was not initially destined for a DUSR, flags were not assigned to the data by the laboratory. The SDG Technical Report attached reflects all necessary flags re-reported for this review.

It is noted that 1,4-Dioxane was determined by the laboratory as a VOA tentatively identified compound (TIC). It's MDL has been flagged "UJ" since it is estimated.

Semi-Volatiles

GC/MS Tunes

The initial calibration and continuing calibrations tunes indicated that all method criteria for the tuning compound DFTPP were met including 12 hour analysis requirements and mass ratios. The mass ratios were determined using an average across the apex of the peak as required in the method.

Initial and Continuing calibration

The initial calibrations the samples in this SDG were run under calibration curve: BNA3M40. All % RSDs for all compounds met method requirements.

The continuing calibration for this SDG was under batch: QBSV3061407.

For batch QBSV3061407, 2,4-dinitrophenol, 4-nitrophenol, 4,6-dinitro-2-methylphenol, hexachlorobenzene, benzidine, and dibenzo(a,h)anthracene exhibited a % difference greater than 25%. These compounds were not detected in the sample. The reporting limit (MDL) is flagged accordingly with a "UJ" flag.

Method Blanks

No target compounds detected in the method blank.

Laboratory Control Samples

The Laboratory control samples (LCS) for both analytical batches consisted of full list spikes and recovered within method and laboratory generated control limits.

Matrix Spikes/Matrix Spike Duplicates (MS/MSD)

The MS/MSD for this SDG was non-site specific. The recoveries and RPDs for all compounds were within laboratory generated control limits. It is noted that these data would not affect this SDG since they were non-site specific samples.

Sample Dilutions

No sample dilutions were required for this SDG.

Surrogate Recoveries

All surrogates recovered within laboratory control limits.

Internal Standards

All internal standards met the -50 +100% criteria for this sample with the exception of d12-perylene which exhibited suppression (26% of the CCV IS area). Due to this occurrence, the laboratory re-ran the sample giving the same result. Based upon this the MDL (RL) for compounds quantitated under this ISTD are flagged "UJ".

Reporting limits

The reporting limits for Semi-Volatiles for this SDG were 165 ppb. This reflects the lowest standard used for calibration and is in compliance with method requirements.

Chromatographic Evaluation (carry-over)

Examination of the chromatograms (Total Ion Chromatograms) indicated no carry-over which could affect quantitative and qualitative analysis.

Sample Result Verification/Reporting Calculations

Examination of the initial calibration response factors Rfs and RSDs, and continuing calibration Rfs and %Ds indicated no calculation issues.

A check of the surrogate calculations and target compound calculations also verified that the data as reported is free from calculation errors.

Pesticides

DDT/Endrin Breakdown

The data indicated that method criteria for DDT and Endrin breakdown were met initial calibration and batch QBPEST1-061407A.

Initial and Continuing calibration

The initial calibrations the samples in this SDG were run under calibration curve: PEST0320. All % RSDs for all compounds met method requirements.

The continuing calibration for this SDG was under batch: QBPEST1-061407A.

All compounds met CCV criteria.

Method Blanks

No target compounds detected in the method blank.

Laboratory Control Samples

The Laboratory control samples (LCS) for the analytical batch consisted of CLP list spikes and recovered within method and laboratory generated control limits.

Matrix Spikes/Matrix Spike Duplicates (MS/MSD)

The MS/MSD for this SDG was site specific. The recoveries for all compounds were within Lab control limits. The RPDs for certain compounds were outside laboratory generated control limits.

It is noted that this RPD issue would not affect this SGD since the LCS was within limits. No action is necessary.

Sample Dilutions

No sample dilutions were required for this SDG.

Surrogate Recoveries

All surrogates recovered within laboratory control limits.

Reporting limits

The reporting limits for pesticides are as listed on the report. This reflects the lowest standard used for calibration and is in compliance with method requirements.

Chromatographic Evaluation (carry-over)

Examination of the chromatograms (Total Ion Chromatograms) indicated no carry-over which could affect quantitative and qualitative analysis.

Sample Result Verification/Reporting Calculations

Examination of the initial calibration response factors Cfs and RSDs, and continuing calibration Rfs and %Ds indicated no calculation issues.

A check of the surrogate calculations and target compound calculations also verified that the data as reported is free from calculation errors.

PCBs

Initial and Continuing calibration

The initial calibrations the samples in this SDG were run under calibration curve: PCB-1314. All % RSDs for all Aroclor 1016, 1260 and 1254 met method requirements.

The continuing calibration for this SDG was under batch: QBPCB2-061407A,

All aroclors (1016, 1260 and 1254) met CCV criteria.

Method Blanks

No target compounds detected in the method blank.

Laboratory Control Samples

The Laboratory control samples (LCS) for the analytical batch consisted of PCB 1254 spike and recovered within method and laboratory generated control limits.

Matrix Spikes/Matrix Spike Duplicates (MS/MSD)

The MS/MSD for this SDG was non-site specific. The recoveries were within Lab control limits. The RPDs were within control limits.

Sample Dilutions

No sample dilutions were required for this SDG.

Surrogate Recoveries

All surrogates recovered within laboratory control limits.

Reporting limits

The reporting limits for PCBs are as listed on the report. This reflects the lowest standard used for calibration and is in compliance with method requirements.

Chromatographic Evaluation (carry-over)

Examination of the chromatograms (Total Ion Chromatograms) indicated no carry-over which could affect quantitative and qualitative analysis.

Sample Result Verification/Reporting Calculations

Examination of the initial calibration response factors Cfs and RSDs, and continuing calibration Rfs and %Ds indicated no calculation issues.

A check of the surrogate calculations and target compound calculations also verified that the data as reported is free from calculation errors.

Herbicides

Initial and Continuing calibration

The initial calibrations for the samples in this SDG were run under calibration curve: HERB0521. All % RSDs for all the target herbicides met method requirements.

The continuing calibration for this SDG was under batch: QBH061807A.

Target herbicides met CCV criteria.

Method Blanks

No target compounds were detected in the method blank.

Laboratory Control Samples

The Laboratory control samples (LCS) for the analytical batch recovered within method and laboratory generated control limits.

Matrix Spikes/Matrix Spike Duplicates (MS/MSD)

The MS/MSD for this SDG was non-site specific. The recoveries were within Lab control limits. The RPDs were within control limits.

Sample Dilutions

No sample dilutions were required for this SDG.

Surrogate Recoveries

Surrogate recovery was within laboratory control limits.

Reporting limits

The reporting limits for target herbicides are as listed on the report. This reflects the lowest standard used for calibration and is in compliance with method requirements.

Chromatographic Evaluation (carry-over)

Examination of the chromatograms (Total Ion Chromatograms) indicated no carry-over which could affect quantitative and qualitative analysis.

Sample Result Verification/Reporting Calculations

Examination of the initial calibration response factors Cfs and RSDs, and continuing calibration Rfs and %Ds indicated no calculation issues.

A check of the surrogate calculation and target compound calculations also verified that the data as reported is free from calculation errors.

Metals (except Mercury)

Initial and Continuing calibration

The initial calibrations for the samples in this SDG were run under daily calibration curve: QBI061307A. All initial calibration verification(ICV) and initial calibration blank (ICB) data met method criteria.

The continuing calibration verifications (CCV) and continuing calibration blanks (CCB) met method criteria.

Preparation Blanks

No target metals were detected in the preparation blank for the digestion batch QBM061207A.

Laboratory Control Samples

The Laboratory control sample (LCS) for the analytical batch QBM061207A recovered within method and laboratory generated control limits.

Matrix Spikes/Duplicates (MS/DUP)

The MS/DUP for this SDG was non-site specific. The Spike recoveries were within Lab control limits. The % Differences for the target metals for the non-site specific sample and its DUP were within control limits.

Serial Dilutions

The serial dilution for this analytical batch was non-site specific. The 1:5 SD met method requirements.

Sample Dilutions

No sample dilutions were required for this SDG.

Reporting limits

The reporting limits for target metals are as listed on the report. This reflects the laboratory MDL and is in compliance with method requirements.

Sample Result Verification/Reporting Calculations

Examination of the initial calibration and continuing calibration data indicated no calculation issues.

A check of the target metals calculations also verified that the data as reported is free from calculation errors.

Mercury

Initial and Continuing calibration

The initial calibrations for the samples in this SDG were run under daily calibration curve: QBHG061307A. All initial calibration verification(ICV) and initial calibration blank (ICB) data met method criteria.

The continuing calibration verifications (CCV) and continuing calibration blanks (CCB) met method criteria.

Preparation Blanks

No mercury was detected in the preparation blank for the digestion batch QBHG061307A.

Laboratory Control Samples

The Laboratory control sample (LCS) for the analytical batch QBHG061307A recovered within method and laboratory generated control limits.

Matrix Spikes/Duplicates (MS/DUP)

The MS/DUP for this SDG was non-site specific. The Spike recovery was within Lab control limits. The % Differences for the mercury for the non-site specific sample and its DUP were within control limits.

Sample Dilutions

No sample dilutions were required for this SDG.

Reporting limits

The reporting limits for target metals are as listed on the report. This reflects the laboratory MDL and is in compliance with method requirements.

Sample Result Verification/Reporting Calculations

Examination of the initial calibration and continuing calibration data indicated no calculation issues.

A check of the target metals calculations also verified that the data as reported is free from calculation errors.

Chromium, Hexavalent

Initial and Continuing calibration

The initial calibrations for the samples in this SDG were run under calibration curve: QBCR6051307. All initial calibration verification (ICV) and initial calibration blank (ICB) data met method criteria.

The continuing calibration verifications (CCV) and continuing calibration blanks (CCB) met method criteria.

Preparation Blanks

No hexavalent chromium was detected in the preparation blank for the digestion batch QBCr6061307A.

Laboratory Control Samples

The Laboratory control sample (LCS) for the analytical batch QBCr6061307 recovered within method and laboratory generated control limits.

Matrix Spikes/Duplicates (MS/DUP)

The MS/DUP for this SDG was site specific. The Spike recovery was within Lab control limits. The % Differences for the site specific sample and its DUP were within control limits. (Both sample and Dup were not detected therefore the RPD is meaningless.

Sample Dilutions

No sample dilutions were required for this SDG.

Reporting limits

The reporting limits for target metals are as listed on the report. This reflects the laboratory MDL and is in compliance with method requirements.

Sample Result Verification/Reporting Calculations

Examination of the initial calibration and continuing calibration data indicated no calculation issues.

A check of the mercury calculations also verified that the data as reported is free from calculation errors.

Cyanide, total

Initial and Continuing calibration

The initial calibrations for the samples in this SDG were run under daily calibration curve: QBCN061407A. All initial calibration verification(ICV) and initial calibration blank (ICB) data met method criteria.

The continuing calibration verifications (CCV) and continuing calibration blanks (CCB) met method criteria.

Method Blanks

No cyanide was detected in the Method blank for the digestion batch QBCN061407A.

Laboratory Control Samples

The Laboratory control sample (LCS) for the analytical batch QBCN061407A recovered within method and laboratory generated control limits.

Matrix Spikes/Duplicates (MS/DUP)

The MS/DUP for this SDG was non-site specific. The Spike recovery was within Lab control limits. The % Differences for the mercury for the non-site specific sample and its DUP were within control limits.

Sample Dilutions

No sample dilutions were required for this SDG.

Reporting limits

The reporting limits for target metals are as listed on the report. This reflects the laboratory MDL and is in compliance with method requirements.

Sample Result Verification/Reporting Calculations

Examination of the initial calibration and continuing calibration data indicated no calculation issues.

A check of the target metals calculations also verified that the data as reported is free from calculation errors.

Summary

All data for this SDG met method requirements with any exceptions duly noted above. Any validation flags are manually annotate on the attached SDG Technical Report from the laboratory.

York Analytical Labs Project/SGD No. 07070240

Data Useability Summary Review

General Information

Six (6) aqueous samples collected on July 6, 2007 were submitted to York Analytical Laboratories, Inc., Stratford, Connecticut on July 10, 2007.

York is a participant of both the New York State Department of Health Environmental Laboratory Approval Program (ELAP #10854) as well as the National Environmental Laboratory Accreditation Program (NELAP #10854).

The laboratory performed Volatiles analysis in accordance with the requirements cited within EPA SW-846 8260 as requested on the Chain-of-Custody sheet for the SDG.

This review presents the data evaluation performed on samples associated with this SDG, specifically pertaining to the quality control recoveries and adherence to method requirements. Evaluation of the data included a review of the following:

- Sample Integrity (Chain-of-custody)
- Holding times
- GC/MS Tunes
- Initial and continuing calibration
- Method blanks
- Laboratory control samples
- Matrix Spikes/Matrix Spike Duplicates
- Sample Dilutions
- Reporting limits
- Chromatographic Evaluation (carry-over)
- Sample result verification/Reporting Calculations

The data were qualified following general guidelines in the USEPA's Contract laboratory Program National Functional Guidelines for Organic Data Review, EPA 540/R-99-008 (USEPA October 1999). DUSRs were prepared for each laboratory report (based on sample delivery group) as specified in NYSDEC's Guidance for the Development of Quality Assurance Plans and Data Usability Summary Reports (July 1999).

Any deviations from acceptable QC specifications are discussed in the DUSRs. Qualifiers were added to the data, when appropriate, to indicate potential concerns with data usability.

The laboratory reports are attached with appropriate data validation qualifiers, manually notated.

Data Usability Summary Report **SDG/Data Package 07070240**

Sample Integrity (Chain-of-custody)

All chain-of-custody was maintained from the field, to the lab courier to the lab log-in for analysis in the lab. All documentation was provided support proper maintenance of sample integrity.

Holding times

All holding times were met for this SDG. It is noted that although the chain-of-custody indicates that 2 x 40 mL vials were provided for each sample, these were HCl preserved vials as indicated by the laboratory pH log. The holding time for HCl preserved aqueous volatiles is 14 days from collection. These samples were analyzed within 2 days of collection.

GC/MS Tunes

The initial calibration and continuing calibrations tunes indicated that all method criteria for the tuning compound p-bromofluorobenzene were met including 12 hour analysis requirements and mass ratios. The mass ratios were determined using an average across the apex of the peak as required in the method.

Initial and Continuing calibration

The initial calibrations for the samples in this SDG were run under calibration curve: V3C140B. All % RSDs for all compounds met method requirements.

The continuing calibration for this SDG was under batch: QBV3071107B.

For batch QBV3071107B, no compounds exhibited a % difference greater than 25%.

Method Blanks

In the method blanks for both analytical batches, only methylene chloride was found.

In batch QBV3071107B, methylene chloride was found at 6 ppb.

Laboratory Control Samples

The Laboratory control samples (LCS) for both analytical batches consisted of full list spikes and recovered within method and laboratory generated control limits.

Matrix Spikes/Matrix Spike Duplicates (MS/MSD)

The MS/MSD for this SDG was non-site specific. The recoveries and RPDs for all compounds were within laboratory generated control limits. It is noted that these data would not affect this SDG since they were non-site specific samples.

Sample Dilutions

No sample dilutions were required for this SDG.

Reporting limits

The reporting limits for Volatiles for this SDG were 5.0 ppb. This reflects the lowest standard used for calibration and is in compliance with method requirements.

Chromatographic Evaluation (carry-over)

Examination of the chromatograms (Total Ion Chromatograms) indicated no carry-over which could affect quantitative and qualitative analysis.

Sample Result Verification/Reporting Calculations

Examination of the initial calibration response factors Rfs and RSDs, and continuing calibration Rfs and %Ds indicated no calculation issues.

A check of the surrogate calculations and target compound calculations also verified that the data as reported is free from calculation errors.

Since the package was not initially destined for a DUSR, flags were not assigned to the data by the laboratory. The SDG Technical Report attached reflects all necessary flags re-reported for this review.

Summary

All data met method requirements with any exceptions duly noted above. Any validation flags are manually annotate on the attached SDG Technical Report from the laboratory.

York Analytical Labs Project/SGD No. 07070400

Data Useability Summary Review

General Information

One (1) aqueous sample collected on July 12, 2007 was submitted to York Analytical Laboratories, Inc., Stratford, Connecticut on July 12, 2007.

York is a participant of both the New York State Department of Health Environmental Laboratory Approval Program (ELAP #10854) as well as the National Environmental Laboratory Accreditation Program (NELAP #10854).

The laboratory performed Volatiles analysis in accordance with the requirements cited within EPA SW-846 8260 as requested on the Chain-of-Custody sheet for the SDG.

This review presents the data evaluation performed on samples associated with this SDG, specifically pertaining to the quality control recoveries and adherence to method requirements. Evaluation of the data included a review of the following:

- Sample Integrity (Chain-of-custody)
- Holding times
- GC/MS Tunes
- Initial and continuing calibration
- Method blanks
- Laboratory control samples
- Matrix Spikes/Matrix Spike Duplicates
- Sample Dilutions
- Reporting limits
- Chromatographic Evaluation (carry-over)
- Sample result verification/Reporting Calculations

The data were qualified following general guidelines in the USEPA's Contract laboratory Program National Functional Guidelines for Organic Data Review, EPA 540/R-99-008 (USEPA October 1999). DUSRs were prepared for each laboratory report (based on sample delivery group) as specified in NYSDEC's Guidance for the Development of Quality Assurance Plans and Data Usability Summary Reports (July 1999).

Any deviations from acceptable QC specifications are discussed in the DUSRs. Qualifiers were added to the data, when appropriate, to indicate potential concerns with data usability.

The laboratory reports are attached with appropriate data validation qualifiers, manually notated.

Data Usability Summary Report **SDG/Data Package 07070400**

Sample Integrity (Chain-of-custody)

All chain-of-custody was maintained from the field, to the lab courier to the lab log-in for analysis in the lab. All documentation was provided support proper maintenance of sample integrity.

Holding times

All holding times were met for this SDG. It is noted that although the chain-of-custody indicates that 2 x 40 mL vials were provided for each sample, these were HCl preserved vials as indicated by the laboratory pH log. The holding time for HCl preserved aqueous volatiles is 14 days from collection. These samples were analyzed within 7 days of collection.

GC/MS Tunes

The initial calibration and continuing calibrations tunes indicated that all method criteria for the tuning compound p-bromofluorobenzene were met including 12 hour analysis requirements and mass ratios. The mass ratios were determined using an average across the apex of the peak as required in the method.

Initial and Continuing calibration

The initial calibrations for the samples in this SDG were run under calibration curve: V2C211B. All % RSDs for all compounds met method requirements.

The continuing calibration for this SDG was under batch: QBV2071807B.

For batch QBV2071807B, dichlorodifluoromethane, bromoform, 1,2-dibromo-3-chloropropane, and naphthalene exhibited a % difference greater than 25%. With the exception of methylene chloride, these compounds are flagged accordingly with a "UJ" flag. For methylene chloride, the flag is a "J" since it was detected in the sample.

Method Blanks

In the method blanks for both analytical batches, only methylene chloride was found.

In batch QBV2071807B, methylene chloride was found at 7 ppb.

Laboratory Control Samples

The Laboratory control samples (LCS) for both analytical batches consisted of full list spikes and recovered within method and laboratory generated control limits.

Matrix Spikes/Matrix Spike Duplicates (MS/MSD)

The MS/MSD for this SDG was non-site specific. The recoveries and RPDs for all compounds were within laboratory generated control limits. It is noted that these data would not affect this SDG since they were non-site specific samples.

Sample Dilutions

No sample dilutions were required for this SDG.

Reporting limits

The reporting limits for Volatiles for this SDG were 5.0 ppb. This reflects the lowest standard used for calibration and is in compliance with method requirements.

Chromatographic Evaluation (carry-over)

Examination of the chromatograms (Total Ion Chromatograms) indicated no carry-over which could affect quantitative and qualitative analysis.

Sample Result Verification/Reporting Calculations

Examination of the initial calibration response factors Rfs and RSDs, and continuing calibration Rfs and %Ds indicated no calculation issues.

A check of the surrogate calculations and target compound calculations also verified that the data as reported is free from calculation errors.

Since the package was not initially destined for a DUSR, flags were not assigned to the data by the laboratory. The SDG Technical Report attached reflects all necessary flags re-reported for this review.

Summary

All data met method requirements with any exceptions duly noted above. Any validation flags are manually annotate on the attached SDG Technical Report from the laboratory.

York Analytical Labs Project/SGD No. 07070401

Data Useability Summary Review

General Information

One (1) aqueous sample collected on July 12, 2007 was submitted to York Analytical Laboratories, Inc., Stratford, Connecticut on July 12, 2007.

York is a participant of both the New York State Department of Health Environmental Laboratory Approval Program (ELAP #10854) as well as the National Environmental Laboratory Accreditation Program (NELAP #10854).

The laboratory performed Volatiles analysis in accordance with the requirements cited within EPA SW-846 8260 as requested on the Chain-of-Custody sheet for the SDG.

This review presents the data evaluation performed on samples associated with this SDG, specifically pertaining to the quality control recoveries and adherence to method requirements. Evaluation of the data included a review of the following:

- Sample Integrity (Chain-of-custody)
- Holding times
- GC/MS Tunes
- Initial and continuing calibration
- Method blanks
- Laboratory control samples
- Matrix Spikes/Matrix Spike Duplicates
- Sample Dilutions
- Reporting limits
- Chromatographic Evaluation (carry-over)
- Sample result verification/Reporting Calculations

The data were qualified following general guidelines in the USEPA's Contract laboratory Program National Functional Guidelines for Organic Data Review, EPA 540/R-99-008 (USEPA October 1999). DUSRs were prepared for each laboratory report (based on sample delivery group) as specified in NYSDEC's Guidance for the Development of Quality Assurance Plans and Data Usability Summary Reports (July 1999).

Any deviations from acceptable QC specifications are discussed in the DUSRs. Qualifiers were added to the data, when appropriate, to indicate potential concerns with data usability.

The laboratory reports are attached with appropriate data validation qualifiers, manually notated.

Data Usability Summary Report

SDG/Data Package 07070401

Sample Integrity (Chain-of-custody)

All chain-of-custody was maintained from the field, to the lab courier to the lab log-in for analysis in the lab. All documentation was provided support proper maintenance of sample integrity.

Holding times

All holding times were met for this SDG. It is noted that although the chain-of-custody indicates that 2 x 40 mL vials were provided for each sample, these were HCl preserved vials as indicated by the laboratory pH log. The holding time for HCl preserved aqueous volatiles is 14 days from collection. These samples were analyzed within 7 days of collection.

GC/MS Tunes

The initial calibration and continuing calibrations tunes indicated that all method criteria for the tuning compound p-bromofluorobenzene were met including 12 hour analysis requirements and mass ratios. The mass ratios were determined using an average across the apex of the peak as required in the method.

Initial and Continuing calibration

The initial calibrations for the samples in this SDG were run under calibration curve: V2C211B. All % RSDs for all compounds met method requirements.

The continuing calibration for this SDG was under batch: QBV2071807B.

For batch QBV2071807B, dichlorodifluoromethane, bromoform, 1,2-dibromo-3-chloropropane, and naphthalene exhibited a % difference greater than 25%. With the exception of methylene chloride, these compounds are flagged accordingly with a "UJ" flag. For methylene chloride, the flag is a "J" since it was detected in the sample.

Method Blanks

In the method blanks for both analytical batches, only methylene chloride was found.

In batch QBV2071807B, methylene chloride was found at 7 ppb.

Laboratory Control Samples

The Laboratory control samples (LCS) for both analytical batches consisted of full list spikes and recovered within method and laboratory generated control limits.

Matrix Spikes/Matrix Spike Duplicates (MS/MSD)

The MS/MSD for this SDG was non-site specific. The recoveries and RPDs for all compounds were within laboratory generated control limits. It is noted that these data would not affect this SDG since they were non-site specific samples.

Sample Dilutions

No sample dilutions were required for this SDG.

Reporting limits

The reporting limits for Volatiles for this SDG were 5.0 ppb. This reflects the lowest standard used for calibration and is in compliance with method requirements.

Chromatographic Evaluation (carry-over)

Examination of the chromatograms (Total Ion Chromatograms) indicated no carry-over which could affect quantitative and qualitative analysis.

Sample Result Verification/Reporting Calculations

Examination of the initial calibration response factors Rfs and RSDs, and continuing calibration Rfs and %Ds indicated no calculation issues.

A check of the surrogate calculations and target compound calculations also verified that the data as reported is free from calculation errors.

Since the package was not initially destined for a DUSR, flags were not assigned to the data by the laboratory. The SDG Technical Report attached reflects all necessary flags re-reported for this review.

Summary

All data met method requirements with any exceptions duly noted above. Any validation flags are manually annotate on the attached SDG Technical Report from the laboratory.

APPENDIX E

Waste Disposal Manifests

LUZON ENVIRONMENTAL SERVICES

P.O. BOX 1070, WOODRIDGE, NY 12789

www.luzonenvironmental.com

1246 GLEN WILD ROAD
 WOODRIDGE, NY 12789
 845-434-7805
 FAX: 845-434-0307
 1-800-828-8249 EMERGENCY NO.

NON-HAZARDOUS WASTE MANIFEST

GENERATOR

Generator Name Eco-Systems Shipping Location SAV
 Address (Trading Post) Address _____
FERT MONTGOMERY NY EPA ID# _____
 Phone No. 914-425-8392 Phone No. _____

Lab Number	Description of Waste	Quantity	Units	Containers No.	Containers Type	Codes
	WASTE PETROLEUM OIL COMBUSTIBLE LIQUID UN 1270 III <i>Empty Petroleum Tank</i>	<u>0002</u>	<u>7</u>	<u>1</u>	<u>T</u>	G - Gallons D - Drum C - Carton B - Bag T - Truck P - Pounds Y - Yards O - Other

I hereby certify that the above named material is not a hazardous waste nor does it contain PCB's as defined by 40 CFR Part 261, or any applicable state law.

*Highwood Park
West of the site per [unclear]*

Generator Authorized Agent Name _____

Signature _____

033006

Shipment Date

TRANSPORTER

Transporter Name LUZON OIL CO., INC. Driver Name (Print) Chad Hancock
 Address P.O. BOX 1070 Vehicle No. / License No. 210
WOODRIDGE, N.Y. 12789 Vehicle Certification 3A-005

I hereby certify that the aboved named material was picked up at the generator site listed above.

I hereby certify that the aboved named material was delivered without incident to the destination listed below.

Driver Signature _____

Shipment Date

033006

Driver Signature _____

Delivery Date

033006

DESTINATION

This is to certify that 1-275 Gallon tank 1-100 gallon tank of the above cited waste material was received at _____
 (Total amount or portion in cubic yards, gallons, or truck loads)

Site Name LUZON OIL CO., INC. Phone No. 845-434-7805

Address 1246 GLEN WILD ROAD, WOODRIDGE, N.Y. 12789

I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.

Name of Authorized Agent _____ Signature _____ Receipt Date 033006

White - Destination

Canary - Transporter

Pink - Return to Generator

Gold - Leave with Generator

Job No.				Date	11/11/06			
Name	ECO SYSTEMS			Contact	SCOTT			
Address	11011 Monticello			Phone No.	914-475-5343			
Service				Util Markout#				
Job Type		Qty	Size	Employee	Leave	Arrive	Leave	Arrive
	Abandon			Ving	7:20	8:15	8:10	
	Clean			Crab	↓	↓	↓	
	Dipsosal							
	Install							
	Maintenance/Repair							
	Pump-Out							
	Removal							
	Spill Response							
	Test							
Disposal		Materials		Quantity	Unit	Equip.	Leave	Arrive
Liquid		55 - gallon Drums			Each	127		
Tank		85 - gallon Drums			Each	128		
Drum		Drum Liners		2112	Each	130		
		Caution Tape			Roll	132		
Contamination		4" Absorbent Boom			Bale	133		
Start	Stop	8" Absorbent Boom			Bale	134		
		Grade 200 Pads			Bale	136		
		Hard Boom			Foot	V119		
		Absorbent Sweep			Bale	V218		
How Much ?		Polyethylene Plastic			Roll	207		
		Bio-Solve -1 or 5 gallon			Each	212		
tons	yards	Speedy Dry 40-lbs			Bag	219		
NYS DEC		Bale-Well Sampler			Each	220		
Spill #:	Rep:	Plastic Bags			Each	V1		
		Camera			Each	V2		
Inspectors		Sakrete			Bag	V3		
Town	Village	Grass Seed			Lbs.	135		
		Hay/Straw			Bale	206		
DEC	DEP	Top Soil			Ton/Yard	(210)		
		Bank Run			Ton/Yard	213		
Insurance Adjuster		Pea Gravel			Ton/Yard	PV-1		
		Concrete			Ton/Yard	PV-2		
C.O.D.		Tank			Each	Backhoe		
Sub Amt \$		Piping:				(Skid Steer)		
\$						(Excavator)		
Tax % \$						Trackhoe		
Amt Due \$						Breaker		
Job Complete ?						(Trailer)		
Yes	(No)					Trailer		
						Foam Trl		
						PID Meter		

Comments: removed for disposal - Hydraulic lifts
 1-100-UST - 1-27th AST.
 Also loaded 2 Tractor of C.B.
 Site was left clean

Employee Signature: *[Signature]*

Customer Signature: *[Signature]*

Job No.				Date	MAR 31 2006			
Name	ECO SYSTEMS			Contact				
Address				Phone No.				
Service	FOIT / MONTGOMERY			Util Markout#				
Job Type		Qty	Size	Employee	Leave	Arrive	Leave	Arrive
	Abandon			Vinny	9:20	8:25	10:10	
	Clean			Clad	↓	↓	↓	
	Dipsosal							
	Install							
	Maintenance/Repair							
	Pump-Out							
	Removal							
	Spill Response							
	Test							
Disposal		Materials		Quantity	Unit	Equip.	Leave	Arrive
Liquid		55 - gallon Drums			Each	127		
Tank		85 - gallon Drums			Each	128		
Drum		Drum Liners			Each	130		
		Caution Tape			Roll	132		
Contamination		4" Absorbent Boom			Bale	133		
Start	Stop	8" Absorbent Boom			Bale	134		
		Grade 200 Pads			Bale	136		
		Hard Boom			Foot	V119		
		Absorbent Sweep			Bale	V218		
How Much ?		Polyethylene Plastic			Roll	207		
		Bio-Solve -1 or 5 gallon			Each	212		
tons	yards	Speedy Dry 40-lbs			Bag	219		
NYS DEC		Bale-Well Sampler			Each	220		
Spill #:	Rep:	Plastic Bags			Each	V1		
		Camera			Each	V2		
Inspectors		Sakrete			Bag	V3		
Town	Village	Grass Seed			Lbs.	135		
		Hay/Straw			Bale	206		
DEC	DEP	Top Soil			Ton/Yard	210		
		Bank Run			Ton/Yard	213		
Insurance Adjuster		Pea Gravel			Ton/Yard	PV-1		
		Concrete			Ton/Yard	PV-2		
C.O.D.		Tank			Each	Backhoe		
Sub Amt \$		Piping:				Skid Steer		
\$						Excavator		
Tax % \$						Trackhoe		
Amt Due \$						Breaker		
Job Complete ?						Trailer		
<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No					Trailer		
						Foam Tri		
						PID Meter		

Comments: Loaded 1 load of C.S.
 Site was left clean.
 & graded off

Employee Signature: *[Signature]*

Customer Signature: *[Signature]*

Log Number

ALLIED ENVIRONMENTAL GROUP, INC.

2163 MERRICK AVE., MERRICK, NY 11566 • TEL: 1-800-969-DIRT • FAX: 516-867-6480

NON-HAZARDOUS MATERIAL MANIFEST

GENERATOR

Generator Name Hobart B. Alessi P.E. Shipping Location _____
 Address 455th Civil Center Apt 1 Address US Rt - 9W
Payson Keepse NY Ft Montgomery - NY
 Phone No. _____ Phone No. _____

Approval Number	Description of Material	Codes	Gross Weight	Net Weight (Tons)
			Tare Weight	
			Net Weight	

I hereby certify that the above named material does not contain free liquid as defined by 40 CFR Part 260.10 or any applicable state law, is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, is not a DOT hazardous substance as defined by 49 CFR Part 172 or any applicable state law, has been fully and accurately described above, classified, packaged and is in proper condition for transportation according to applicable regulations.

Generator Authorized Agent Name Ecocycle Inc Signature [Signature] Shipment Date 3/30/06

TRANSPORTER

Transporter Name Rainbow (TEU) Driver Name (Print) Randall Pereira
 Address _____ Vehicle License No./State AH 690 C
 _____ Truck Number TEU 27
 State Permit # _____

I hereby certify that the above named material was picked up at the generator site listed above.

I hereby certify that the above named material was delivered without incident to the destination listed below.

Driver Signature [Signature] Shipment Date 3/30/06 Driver Signature [Signature] Delivery Date 3/30/06

DESTINATION

Site Name _____ Phone No. _____
 Address _____ State Permit # _____

I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.

Name of Authorized Agent _____ Signature _____ Receipt Date _____

GENERATOR

ALLIED ENVIRONMENTAL GROUP, INC.

2163 MERRICK AVE., MERRICK, NY 11566 • TEL: 1-800-969-DIRT • FAX: 516-867-6480

Log Number

NON-HAZARDOUS MATERIAL MANIFEST

GENERATOR

Generator Name Hughes Resource #305 Shipping Location _____
 Address 10 SHET CIVIC CENTER PLAZA Address US RT 9W
Poughkeepsie NY Fort Montgomery NY
 Phone No. _____ Phone No. _____

Approval Number	Description of Material	Codes	Gross Weight	Net Weight (Tons)
			Tare Weight	
			Net Weight	

I hereby certify that the above named material does not contain free liquid as defined by 40 CFR Part 260.10 or any applicable state law, is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, is not a DOT hazardous substance as defined by 49 CFR Part 172 or any applicable state law, has been fully and accurately described above, classified, packaged and is in proper condition for transportation according to applicable regulations.

Generator Authorized Agent Name Francis Anthony Signature [Signature] Shipment/Date 3/30/06

TRANSPORTER

Transporter Name TELL TRUCKING Driver Name (Print) Osman A. Ortega
 Address 182 CUTWATER ST Vehicle License No./State AJ S10R-NS
Port Newark Truck Number 15
 State Permit # NS 662

I hereby certify that the above named material was picked up at the generator site listed above.

I hereby certify that the above named material was delivered without incident to the destination listed below.

Driver Signature [Signature] Shipment Date 03-30-06 Driver Signature [Signature] Delivery Date 03-30-06

DESTINATION

Site Name _____ Phone No. _____
 Address _____ State Permit # _____

I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.

Name of Authorized Agent _____ Signature _____ Receipt Date _____

GENERATOR

ALLIED ENVIRONMENTAL GROUP, INC.

2163 MERRICK AVE., MERRICK, NY 11566 • TEL: 1-800-969-DIRT • FAX: 516-867-6480

Log Number

NON-HAZARDOUS MATERIAL MANIFEST

GENERATOR

Generator Name Highland Battlesite Shipping Location _____
 Address Pro Llc / ShLT Address US RT 9W
Civic Center Plaza FT Montgomery NY
 Phone No. Poughkeepsie NY Phone No. _____

Approval Number	Description of Material	Codes	Gross Weight	Net Weight (Tons)
			Tare Weight	
			Net Weight	

I hereby certify that the above named material does not contain free liquid as defined by 40 CFR Part 260.10 or any applicable state law, is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, is not a DOT hazardous substance as defined by 49 CFR Part 172 or any applicable state law, has been fully and accurately described above, classified, packaged and is in proper condition for transportation according to applicable regulations.

CARL FICHERSBENGER
HIGHLAND FALLS BATTLESITE LLC
 Generator Authorized Agent Name _____ Signature _____ Shipment Date 3/31/06

TRANSPORTER

Transporter Name Rainbow (TEU) Driver Name (Print) Randall Pereira
 Address Ledge wood NJ Vehicle License No./State AH 690 C
 Truck Number TEU 27

State Permit # _____

I hereby certify that the above named material was picked-up at the generator site listed above.

I hereby certify that the above named material was delivered without incident to the destination listed below.

Driver Signature [Signature] Shipment Date 3/31/06 Driver Signature [Signature] Delivery Date 3/31/06

DESTINATION

Site Name _____ Phone No. _____
 Address _____ State Permit # _____

I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.

Name of Authorized Agent _____ Signature _____ Receipt Date _____

GENERATOR

CBC
Delivery Report - DR & Approval#

3/31/06

1

From: 3/27/06
To: 3/31/06
Approval# 260390
Generator HIGHLANDS BATTLE SITE PROPERTIES LLC
Origin US ROUTE 9W
FT MONTGOMERY, NY 10922

#Loads 3
TOTAL 85.41

<u>Date</u>	<u>Ticket#</u>	<u>Approval #</u>	<u>Truck#</u>	<u>Loc.</u>	<u>Manifest#s.</u>	<u>Net Tons</u>
3/30/06	3830	260390	TEV 27	A3		30.78
3/30/06	3841	260390	15	A3		29.04
3/31/06	3922	260390	TEV 27	A1		25.59

CLEAN EARTH OF CARTERET, INC

24 Middlesex Avenue
Carteret, NJ 07008
(732)-541-8909
INCOMING LOAD TICKET

Date 3/30/06
Time 11:36 AM
Ticket# 3830

Approval # 260390

<u>Type of Material</u>	<u>Gross</u>	<u>Tare</u>	<u>Net Tons</u>	<u>#Drums</u>
NON SPECIFIC SOURCE	89,360	27,800	30.78	

[Handwritten Signature] SF01123.4

WM ID# 3 TOM DURANTE

Signature _____

Bill of Lading#

Manifest#

St. Manifest#

Trans. ID# 140

Transporter RAINBOW TRANS

DE-SW Permit#

Trans. Addr. 167 STEPHENS PARK RD
HACKETTSTOWN, NJ 07840-5518

Driver RANDALL

Truck # TEV 27

Customer ALLIED ENVIRONMENTAL GROUP, INC

Generator HIGHLANDS BATTLE SITE PROPERTIES LLC

Generator Site US ROUTE 9W
FT MONTGOMERY, NY 10922

OK 59

Contact 1 STU BERRY 800-969-DIRT

Contact 2 ALLAN PARKER

NOTES 1:

NOTES 2:

THANK YOU

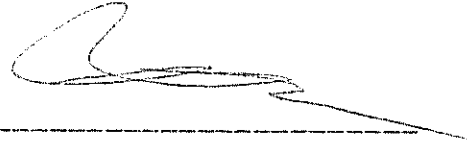
CLEAN EARTH OF CARTERET, INC

24 Middlesex Avenue
Carteret, NJ 07008
(732)-541-8909
INCOMING LOAD TICKET

Date 3/30/06
Time 12:43 PM
Ticket# 3841

Approval # 260390

<u>Type of Material</u>	<u>Gross</u>	<u>Tare</u>	<u>Net Tons</u>	<u>#Drums</u>
NON SPECIFIC SOURCE	85,780	27,700	29.04	



WM ID# 3 TOM DURANTE

Signature _____

Bill of Lading#
Manifest#
St. Manifest#

Trans. ID# 119
Transporter TEV TRUCKING
Trans. Addr.

DE-SW Permit#

Driver OSMAN Truck # 15

Customer ALLIED ENVIRONMENTAL GROUP, INC
Generator HIGHLANDS BATTLE SITE PROPERTIES LLC
Generator Site US ROUTE 9W
FT MONTGOMERY, NY 10922

Contact 1 STU BERRY 800-969-DIRT
Contact 2 ALLAN PARKER

NOTES 1:

NOTES 2:

THANK YOU

CLEAN EARTH OF CARTERET, INC

24 Middlesex Avenue
Carteret, NJ 07008
(732)-541-8909


INCOMING LOAD TICKET

Date 3/31/06
Time 11:38 AM
Ticket# 3922

Approval # 260390

<u>Type of Material</u>	<u>Gross</u>	<u>Tare</u>	<u>Net Tons</u>	<u>#Drums</u>
NON SPECIFIC SOURCE	78,980	27,800	25.59	

WM ID# 3 TOM DURANTE
Bill of Lading#
Manifest#
St. Manifest#

Signature 

Trans. ID# 140
Transporter RAINBOW TRANS
Trans. Addr. 167 STEPHENS PARK RD
HACKETTSTOWN, NJ 07840-5518

DE-SW Permit#

Driver RANDALL Truck # TEV 27
Customer ALLIED ENVIRONMENTAL GROUP, INC
Generator HIGHLANDS BATTLE SITE PROPERTIES LLC
Generator Site US ROUTE 9W
FT MONTGOMERY, NY 10922

Contact 1 STU BERRY 800-969-DIRT
Contact 2 ALLAN PARKER

NOTES 1:
NOTES 2:

THANK YOU

APPENDIX F

Photographs

PHOTOGRAPHS



- 1. Former garage basement wall, exposed following building demolition (seen from northwestern corner, looking southeast)**



- 2. Area of PCE-contaminated soil at southern end of former garage (area of repair bays), exposed following building demolition (seen from southeastern corner, looking northwest)**

PHOTOGRAPHS



3. Excavation of PCE-contaminated soil at former repair bays (looking west)



4. Excavation of PCE-contaminated soil at former repair bays (looking southwest)

PHOTOGRAPHS



5. **Former fuel oil underground storage tank at western side of restaurant**



6. **Former fuel oil underground storage tank, stored on plastic prior to off-site disposal**

PHOTOGRAPHS



- 7. Extension of test pits at western side of Site near former fuel-pump island and concrete pads**



- 8. Extension of test pit at southwestern corner of restaurant, near former fuel oil underground storage tank**

PHOTOGRAPHS



9. Installation of final soil barrier layer at western portion of Site



10. Installation of final soil barrier layer at eastern portion of Site

APPENDIX G

Final Remedial Action Work Plan

REMEDIAL ACTION WORKPLAN

FOR THE FORMER "SAKMANN" PROPERTY

**LOCATED AT U.S. ROUTE 9W
TOWN OF HIGHLANDS
ORANGE COUNTY, NEW YORK**

**Voluntary Cleanup Site Number: V-00083-3
Index Number: W3-0962-03-07**

**January 2005
(Revised July 2007)
(Revised August 2007)**

**ECOSYSTEMS STRATEGIES, INC.
24 DAVIS AVENUE
POUGHKEEPSIE, NEW YORK 12603
(845) 452-1658**

ESI File: SF01123.40

REMEDIAL ACTION WORKPLAN
FOR THE FORMER "SAKMANN" PROPERTY

**LOCATED AT U.S. ROUTE 9W
TOWN OF HIGHLANDS
ORANGE COUNTY, NEW YORK**

**January 2005
(Revised July 2007)
(Revised August 2007)**

Prepared By:

**Ecosystems Strategies, Inc.
24 Davis Avenue
Poughkeepsie, New York 12603**

Prepared For:

**Highlands Battlesite Properties, LLC
One Civic Center Plaza, Suite 200,
Poughkeepsie, New York, 12601**

**Palisades Interstate Park Commission
Administration Building
Bear Mountain State Park
Bear Mountain, New York 10911**

**The undersigned have reviewed this Remedial Action Workplan (RAWP)
and certifies to Highlands Battlesite Properties, LLC that the information provided
in this document is accurate as of the date of issuance by this office.**

**Paul H. Ciminello
Ecosystems Strategies, Inc.**

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- 1.2 Site Location and Description
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- 1.4 Proposed Future Use of the Site

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- 2.1 Overview of Proposed Remediation Services
- 2.2 Proposed Site Preparation Services
 - 2.2.1 Agency Notification
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 - 2.3.1 Demolition of Former Garage Building
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 - 2.3.9 Post-Remediation Institutional Controls
 - 2.3.10 Documentation of Site Remediation and/or Closure
 - 2.3.11 Time Schedule

APPENDICES

- A Maps*
- B Previous Environmental Reports*
- C Health and Safety Plan*
- D Community Air Monitoring Plan*
- E Engineering Evaluation*

Summary of Revisions to the Approved Remedial Investigation Workplan

This revised RAWP was originally approved as a “final” document by the NYSDEC and NYSDOH in January 2005, and recommended the following: 1) removal of an on-site fuel oil underground storage tank near a former restaurant building; 2) demolition of a former on-site garage; 3) removal of contaminated soil located beneath the garage; 4) investigation of soil and soil vapor at various locations to further characterize overall Site conditions and to document the effectiveness of tank closure and soil removal activities; 5) installation of a barrier layer of soil; and, 6) continued monitoring of on-site groundwater monitoring wells.

During the course of the environmental investigation and remediation, NYSDEC personnel requested specific modifications to the scope of work presented in the RAWP. These changes were incorporated into an approved Supplemental Workplan, issued in December 2005, which called for documentation of indoor air quality at the restaurant building and additional investigation of on-site soils.

Following building demolition and soil removal activities, contractors for the property owner imported soils for use as a barrier layer. This material was not from an approved source and a Scope of Work for Investigation of Imported Cover Soils (SOW) was developed to document soil quality. The soils were documented to be unacceptable for use as a clean cover; however, the NYSDEC determined that this material could remain on the Site as backfill. The owner subsequently imported certified clean soil from an acceptable source and completed the installation of the barrier layer.

The following tasks, as specified in the RAWP, Supplemental Workplan, and SOW have been accomplished as of the date of this revised RAWP:

- pre-remediation soil gas survey;
- demolition of the former garage structure;
- closure of the fuel-oil underground storage tank at the former restaurant building;
- Indoor air quality testing at the former restaurant;
- soil sampling at the former garage septic system and to the west of the building;
- excavation of contaminated soils at the former garage and UST;
- post-excavation confirmatory endpoint sampling;
- restoration of the site to original grade;
- documentation of the integrity of imported backfill materials and clean cover soils;
- installation of barrier soil layer; and,
- ongoing post-remediation groundwater sampling.

The approved Supplemental Workplan and SOW, at the request of the NYSDEC, have been incorporated into this revised RAWP. Significant areas of revision are noted in the text *in italics*.

REMEDIAL ACTION WORKPLAN
PREPARED FOR THE
FORMER “SAKMANN PROPERTY”
LOCATED IN THE TOWN OF HIGHLANDS
ORANGE COUNTY, NEW YORK

Executive Summary

(Note: Original Text from Approved 2005 Workplan)

This RAWP details remedial services proposed to address known soil contamination on the former “Sakmann” property located on U.S. Route 9W in the Town of Highlands, Orange County, New York. This Site has been historically used as a gasoline station and automotive repair facility (underground storage tanks [USTs] and appurtenant piping associated with the former gasoline station were closed-in-place in June, 1988). Soils located beneath the former automotive repair garage at the central portion of the site have been contaminated with volatile organic compounds (including chlorinated hydrocarbons, BTEX compounds, and MTBE) at concentrations above NYSDEC guidance levels. VOC contamination is likely to be limited to soils located directly beneath the building. Current analytical data confirm the continuing presence of low level groundwater contamination by MTBE. Low grade PAH and metals contamination has been documented in fill-type soils located to the north of the former garage.

Proposed future use of the site is anticipated to include a scenic and interpretive overlook and a tourist-oriented restaurant. All on-site uses will be conducted in support of the adjacent Highlands Battle Site operated by the Palisades Interstate Parks Commission (PIPC). Remediation will be completed following the demolition of the former garage structure.

Remedial actions are proposed to: 1) excavate VOC-contaminated soil from beneath the former garage building; 2) document the presence or absence of contamination at the septic system and excavate or cover soils in this area warranting remedial action; 3) excavate and remove an abandoned fuel-oil UST, along with any appurtenant piping and/or petroleum impacted soil, located near the former restaurant; and, 4) placement of a barrier layer (consisting of clean fill, asphalt paving, or other engineering equivalent) on the northern portions of the Site where low grade contamination is present in on-site fill materials. Upon completion of all remedial activities, a final Summary Report of Remedial Activities will be prepared and submitted to the NYSDEC for review, and a “No Further Action” letter will be issued by the NYSDEC.

No active remediation of on-site groundwater is anticipated at this time. All on-site groundwater wells (six monitoring wells and the potable water supply well) will be monitored quarterly (up to five quarters, or longer if required by the NYSDEC) to document the continued absence of significant groundwater contamination.

1.0 Introduction

1.1 Purpose

The purpose of this Remedial Action Workplan (RAWP) is to provide guidance on the manner in which site remediation services are provided to address known environmental conditions (see Section 1.3, below) on the former "Sakmann" property, located on U.S. Route 9W in the Town of Highlands, Orange County, New York (hereafter referred to as the "Site"). It is the expressed intent of this RAWP to provide specific actions which will adequately address each identified environmental condition such that upon completion of all activities no adverse health impacts will result from future development of the Site.

This RAWP has been submitted for review to the New York State Department of Environmental Conservation (NYSDEC) and the New York State Department of Health (NYSDOH), and has incorporated specific comments made by these agencies; this RAWP, therefore, is considered to be a "Final" document. [Note: This revised document incorporates descriptions of investigative activities that were approved by the NYSDEC after the acceptance of the original document in 2005.]

1.2 Site Location and Description

The Site is defined as the approximately 1.5-acre former Sakmann Restaurant Corporation property and structures located at U.S. Route 9W, Hamlet of Fort Montgomery, Town of Highlands, Orange County, New York. A Site Location Map and a Proposed Remedial Activities Map are provided in Appendix A of this RAWP.

The property is an irregularly shaped parcel which has approximately 350 feet of frontage on the eastern side of U.S. Route 9W and approximately 150 feet of frontage on the northern side of Mine Dock Road. The southern third of the property is vacant forested land; the northern two-thirds contain two, one-story structures: the former Trading Post Restaurant (restaurant) and a former gasoline station/automotive repair facility (Garage). A paved parking lot is present to the west of the restaurant. The Garage is surrounded by paved parking areas to the south and west and by open areas of graded, gravelly fill to the north and east.

Topography in the area surrounding the Site slopes moderately to steeply downward to the east (toward the Hudson River, located approximately 0.25 mile to the east) and to the south (toward a small easterly flowing stream tributary to the Hudson River located approximately 0.05 mile south). Topography in the immediate vicinity of the on-site structures and parking lots, however, has been made relatively level through the placement of fill materials.

Six bedrock groundwater monitoring wells (installed by Envirotrac, LTD. in April and May, 2002) are located on the Site, to the west, north, and east of the garage. During well installation, overburden soils were documented to consist of sands containing gravel, rock fragments, and fill materials. Bedrock, consisting of fractured metamorphic rock, was encountered at depths ranging from approximately 6' to 30' below surface grade (bsg), and groundwater was detected at depths ranging from approximately 26' to 37' bsg. Based on static groundwater elevations, Envirotrac documented general groundwater flow to be to the east, toward the Hudson River. Existing groundwater elevation data supports this finding (see the Groundwater Flow Map in Appendix A).

1.3 Known Environmental Conditions of Concern

A Combined Phase I and II Environmental Site Assessment (Phase I and II ESA) of the former Sakmann Property was conducted by Ecosystems Strategies, Inc. (ESI) in September 2001. The Phase I and II ESA documented the presence of waste-oil contamination in the Garage basement due to discharges to a repair bay floor drain. Information provided by the then current tenant of the Garage indicated that the floor drain was receiving wastewater discharges containing degreasers. Laboratory analysis of subsurface soils in the vicinity of the floor drain documented the presence of multiple volatile organic compounds (VOCs) at concentrations above NYSDEC guidance levels (including BTEX, MTBE and chlorinated hydrocarbons). Based on these findings a spill event (number 0107005) was reported to the NYSDEC in October, 2001 by representatives of the property owner. ESI concluded that the source of the subsurface contamination (and the visible waste-oil contamination in the basement) was likely to be the discharge of oil and chlorinated solvents to the northern Garage repair bay floor drain.

The Phase I and II ESA indicated that USTs associated with the former gasoline station (one 4,000-gallon, two 3,000-gallon, and two 2,000-gallon tanks, located near the southwestern and northwestern corners of the garage) were abandoned and closed-in-place on June 3, 1988, and that a fuel-oil UST of unknown capacity is located near the northwest corner of the restaurant.

The Phase I and II ESA additionally documented the presence of low-grade contamination by polynuclear aromatic hydrocarbons (PAHs) and metals in fill-type soils located to the north of the garage. No consistent pattern of contamination was documented during the subsurface investigation. ESI concluded that contaminated areas to the north of the Garage were likely to be limited in extent and recommended that response actions be confined to the installation of a protective barrier layer (e.g., clean fill or asphalt pavement).

In October, 2001, fieldwork conducted by HydroScience, Inc. indicated that the northern repair bay floor drain was not connected to any subsurface conduit and that the drain discharged directly to soils located beneath the concrete floor slab. The floor drain was reportedly sealed by HydroScience personnel following their subsurface investigation.

A Summary Report of Subsurface Investigation (Summary Report) documented additional on-site investigative work conducted by ESI in November and December, 2001. Soil borings were extended in the Garage repair bays, basement, and near the exterior eastern wall of the basement, in order to further delineate the horizontal and vertical extent of known contamination.

The Summary Report confirmed the presence of VOC contamination (including chlorinated hydrocarbons) in soils located under the Garage repair bay slab. Significant contamination was limited to subsurface soils located in close proximity to the floor drain and contamination was shown to diminish with increasing depth. TCLP laboratory data documented an elevated potential for contaminant migration in groundwater.

No significant levels of VOCs were detected in soil samples from beneath the basement floor or from the exterior basement wall. These findings supported the conclusion that contamination present under the repair bay floor did not significantly extend beneath the basement slab and that it is unlikely that contaminants present in the basement interior had significantly migrated to exterior subsurface soils. The Summary Report, however, suggested that soils located underneath the basement slab, in close proximity to the southern basement wall, could potentially be contaminated with VOCs. A copy of the Summary Report is included as Appendix B of this RAWP.

Based on the findings of the Phase I and II ESA and the Summary Report, ESI recommended that the basement should be properly cleaned, and that contaminated soils located under the repair bay slab, and under the basement slab near the southern basement wall, be excavated and disposed of off-site. The total volume of contaminated soil warranting remedial action was estimated to be between 70 and 120 cubic yards (tetrachloroethylene concentrations in contaminated soils were documented at levels suggesting that excavated materials would require pretreatment prior to final disposal). No remediation of soils located beneath the northern portion of the basement slab was recommended [*note for 2007 revision: the garage has been demolished and all contaminated soils have been removed*].

A Preliminary Investigation Report documented the installation of on-site groundwater monitoring wells, and the results of soil and groundwater sampling, conducted by EnviroTrac Ltd. in April and May, 2002. Cis-1,2 dichloroethylene (DCE) and methyl tertiary-butyl ether (MTBE) were detected above NYSDEC groundwater quality standards in wells located to the east of the Garage (MW-2S and MW-3D). Peak concentrations of DCE (groundwater quality standard 5 µg/L) and MTBE (groundwater quality standard 10 µg/L) were 58 µg/L and 22 µg/L, respectively. Low levels of DCE (below groundwater quality standards) were detected in MW-2D and MW-3D, and low levels of MTBE were detected in MW-1D, MW-2D and MW-4S. Low levels of DCE and tetrachloroethylene (PCE, groundwater quality standard 5 µg/L) were detected at concentrations of 2.8 µg/L and 1.1 µg/L, respectively, in the potable supply well servicing the adjoining Provan property to the east.

The Preliminary Investigation Report also documented the presence of low levels of VOCs (primarily BTEX compounds) in soils located in the immediate vicinity of the Garage. Peak concentrations occurred to the north of the Garage at a depth of 7-9' bsg. Total xylenes were detected at concentrations marginally exceeding NYSDEC guidance levels (as per TAGM 4046); all other VOCs were detected at concentrations below guidance levels. No chlorinated hydrocarbons were detected in any soil samples.

Additional water sampling was conducted by ESI in July 2003, and February, May, and August 2004 (monitoring well MW-2S was not located by ESI during these sampling events). All samples were submitted for analysis of VOCs utilizing USEPA Method 8260. No VOCs were detected in a potable well water sample obtained in July 2003 from the Provan residence. Comparison of current analytical results with groundwater data from 2002 indicates that low-level groundwater contamination has been reduced, but continues to persist at the Site [*note for 2007 revision: post remedial groundwater sampling from June 2005 through April 2007 indicates an absence of significant groundwater contamination and documents remaining analytes at concentrations below guidance levels*]. Groundwater quality data is provided as Appendix B of this RAWP.

1.4 Proposed Future Use of the Site

Proposed future use of the Site is anticipated to include a scenic overlook, tourist information/interpretive center, and a restaurant. Remediation will be completed as if the entire Site will be used for the most restrictive activities. Current site development plans include the demolition of the Garage [*note for 2007 revision: the garage has been demolished and the southern portion of the property is currently used as a parking lot*].

2.0 Proposed Site Remediation Services

This section of the RAWP details activities which are proposed to be conducted to address the known environmental conditions on the Site, as identified in Section 1.3, above. A Proposed Remedial Activities Map depicting relevant Site features, conditions of concern, and areas of proposed remedial activities, is provided in Appendix A of this RAWP. All proposed work will be conducted according to a site specific Health and Safety Plan (HASP), provided as Appendix C of this RAWP.

For the purpose of the work detailed in these specifications, the "Owner" is defined as Highlands Battlesite Properties, LLC, which will contract with the environmental consultant and/or remediation firm (hereafter referred to as the On-site Coordinator (OSC) to provide the services detailed below. A representative of the owner or Palisades Interstate Parks Commission (PIPC), serving as a liaison engineer (Owner's or Director's Representative) between contractor and DEC, will be involved to oversee the work.

2.1 Overview of Proposed Remediation Services

The proposed remedial services described in detail in subsequent sections of this RAWP consist of the following):

1. Demolition of the former garage structure (Section 2.3.1, below).
2. Excavation and removal of the abandoned fuel-oil UST located near the former restaurant building (Section 2.3.2, below);
3. Collection of soil samples in the vicinity of the septic system servicing the former garage, *and to the west of the building*, to document the presence or absence of contamination (Section 2.3.3, below);
4. Excavation of contaminated soils in the vicinity of the former Garage structure (and, if necessary, at the abandoned fuel-oil UST and the septic system) and disposal of excavated soil at a properly permitted facility (Section 2.3.4, below);
5. Post-excavation soil sampling to document acceptable contaminant levels in remaining soils (Section 2.3.5 below);
6. Restoration of the site to original grade at the conclusion of all soil removal and soil sampling services (Section 2.3.6, below);
7. Placement of a barrier layer (Section 2.3.7) on areas of low-grade PAH and metals contamination located to the north of the former Garage structure (and, if warranted by the results of soil sampling, in the septic system area *and to the west of the building*);
8. Post-remediation groundwater sampling (monitored on a quarterly basis) to document the continued absence of significant groundwater contamination (Section 2.3.8); and,
9. Preparation of a final Report to the Owner and the NYSDEC (Section 2.3.9 below).

Prior to, or in conjunction with, the initiation of the actions described below in Sections 2.3.1 through 2.3.9, the tasks detailed in Section 2.2, below, will also be conducted.

2.2 Proposed Site Preparation Services

This section of the RAWP provides details on activities and services necessary to be initiated and/or completed prior to the implementation of Site remediation services.

2.2.1 Agency Notification

The NYSDEC will be notified in writing at least five (5) business days prior to the start of fieldwork. Notification of subsequent field activities will be in accordance with reasonable business practice, with verbal notification for immediate (within 48 hours) activities and written notification otherwise. Written notifications will be transmitted to the NYSDEC via facsimile.

2.2.2 Equipment Calibration

A photo-ionization detector (PID) will be utilized to screen encountered materials for the presence of volatile vapors. The PID will be calibrated at the onset of each workday, and a written calibration log will be maintained for this project. The PID will be calibrated to read parts per million gas equivalents of isobutylene in accordance with protocols set forth by the equipment manufacturer.

2.2.3 Clean-up Levels

Site clean-up will be achieved when remaining soils in the area of excavation are documented to contain concentrations of VOCs at levels below NYSDEC Recommended Soil Clean-Up Objectives, as defined in the NYSDEC's Technical and Administrative Guidance Memorandum #4046 (TAGM), dated January 24, 1994, as modified by subsequent NYSDEC memoranda. A barrier layer (see Section 2.3.7 below) will be placed above low-grade PAH and metals contamination in soils located to the north of the former Garage and, if warranted, at the septic system *and west of the garage*), no clean-up levels with respect to these compounds are appropriate.

Post remediation groundwater samples will be collected to document acceptable groundwater concentrations of VOCs.

2.2.4 Site Remediation Coordination Activities

Prior to the initiation of fieldwork, all subcontractors will be notified of the components of the Health and Safety Plan (see 2.3.5, below). All necessary insurance certificates will be secured from subcontractors by the Owner and/or by the OSC.

An assessment of subsurface soil characteristics, including soil type, the presence of foreign materials, field indications of contamination (e.g., unusual coloration patterns, or odors), and instrument indications of contamination (i.e., PID readings) will be made by the OSC during all site remediation work.

The OSC will be responsible for identifying any soils which, in the opinion of the OSC, may contain elevated concentrations of contaminants and should, therefore, require special handling. Those soils identified by the OSC will be removed to the soil stockpiling area (see Section 2.3.3 below) for characterization and proper disposition. The OSC will monitor the removal of all contaminated soil, including monitoring the trucks and establishing the designated truck routes. The OSC will also ensure that any unforeseen environmental conditions are managed in accordance with applicable federal and state regulations.

2.2.5 Health and Safety Plan

The site-specific HASP will be reviewed with site personnel prior to the initiation of fieldwork. This HASP will be reviewed with the appropriate subcontractors prior to the initiation of fieldwork. All proposed work will be performed in "Level D" personal protective equipment; however, field personnel (including subcontractors) will be prepared to continue services wearing more protective levels of equipment should field conditions warrant.

2.2.6 Community Air Monitoring Plan

Field monitoring of dust and VOCs will be conducted in accordance with the Community Air Monitoring Plan provided in Appendix D. Continuous Dust Monitoring will be performed at the upwind (background) and downwind perimeters of the exclusion zone during all soil excavation activities using real-time monitoring equipment capable of measuring particulate matter less than 10 micrometers in size and capable of integrating over a period of 15 minutes (or less).

Downwind particulate levels $100 \mu\text{g}/\text{m}^3$ greater than background, or evidence of visible dust leaving the work area, will result in the implementation of dust suppression activities, including, but not limited to, watering the excavation area or ceasing excavation. Work will continue so long as the downwind particulate concentration is within $100 \mu\text{g}/\text{m}^3$ of the upwind level; work will be stopped if the downwind particulate levels are greater than $100 \mu\text{g}/\text{m}^3$ above the upwind level.

Monitoring for VOCs will occur periodically at the downwind perimeter of the work area. Recorded PID readings consistently in excess of 5 ppm will be considered evidence of unacceptable air emissions, and proper procedures to reduce emissions will be instituted. PID readings in excess of 25 ppm above background will necessitate ceasing work and the implementation of monitoring at the nearest residential or commercial structure.

2.2.7 Pre-Remediation Soil Gas Survey and Indoor Air Quality Testing

A soil gas survey will be completed prior to the start of on-site remediation activities in order to further document existing site environmental conditions in the vicinity of the now vacant Trading Post Restaurant. Sampling will be conducted beneath the slab of the former restaurant and beneath the asphalt-paved parking lot, areas that are a potential source of trapped volatile organic vapors. If required by the NYSDEC and/or the NYSDOH, a second round of sampling will be conducted following the completion of remedial activities. The results of the soil gas survey(s) shall be used to 1) provide additional data regarding known on-site contamination, which could potentially be used to guide remediation activities, and 2) should the restaurant be reopened for public use, or if a new enclosed structure is to be built, provide guidance on the need for post-remediation air-quality testing and/or the need for the implementation of additional remedial strategies designed to produce acceptable indoor air-quality conditions.

Soil gas sampling locations shall be selected after consultation with NYSDEC personnel. It is anticipated that two to four borings will be extended beneath the restaurant foundation slab, and that four to eight borings will be extended in a grid pattern at asphalt covered portions of the parking lot. Borings will be extended to a maximum depth of 4 to 6' bsg using (as appropriate) properly decontaminated hand-held or machine-mounted Geoprobe equipment. A hollow, 1.5" steel rod with an expendable tip will be placed in each boring, the expendable tip will be removed from the rod, and an air-stone attached to $\frac{1}{4}$ " Teflon tubing will be inserted into the rod and lowered to the invert of the boring. The rod will be removed and clean silica sand will be used to fix the air-stone in place. The boring will then be sealed using a non-VOC containing caulk, in order to prevent the infiltration of surface air. Each soil-gas boring will be sufficiently purged using a GilAir 3 air sampling pump. Soil-gas samples will be collected into Summa canisters following purging and will be submitted for laboratory analysis of VOCs (USEPA Method TO-15, detection limit $1 \text{ mcg}/\text{m}^3$). Purging and sampling flow rates will not exceed 0.2 liters/minute.

Indoor air-quality sampling will be conducted at the former Trading Post restaurant, following a NYSDEC/NYSDOH approved protocol. One air sample will be collected from an area located inside the basement and one sample will be collected from an outside location, which will serve as a background sample. Prior to sampling, a preliminary inspection and instrument screening of the building will be conducted to inventory any potential sources of VOCs. Samples will be collected into Summa canisters equipped with 1-hour flow controllers, in order to prevent sample interference caused by the momentary presence of sampling personnel or other persons in the vicinity of the canisters. Samples will be submitted for laboratory analysis of VOCs (USEPA Method TO-15, detection limit 1 mcg/m³).

2.3 Proposed Specific Remediation Services

This section of the RAWP provides a detailed description of the remedial tasks that will be conducted at the subject property. During the course of all remedial activities, appropriate measures (e.g., vehicle traffic patterns, stormwater run-off controls) will be implemented to ensure that contaminated soil is minimally disturbed.

As required, an Engineering Evaluation of this proposed remediation is provided in Appendix E of this RAWP.

2.3.1 Demolition of Former Garage Building

The former Garage building will be demolished prior to soil excavation and site restoration activities. A pre-demolition survey will be conducted prior to building demolition in order to document the presence or absence of asbestos containing materials (ACMs), equipment containing PCBs, or other hazardous on-site materials. Any such identified materials will be removed from the structure before the start of building demolition, and will be properly disposed of off-site in accordance with applicable regulations. Regulated materials that are temporarily stockpiled on-site will be removed from the subject property at the end of each work day. Documentation of proper removal, including manifests and laboratory testing will be included in the final project report (see section 2.3.10).

Demolition debris and any other regulated materials will be disposed of in a manner consistent with applicable NYSDEC regulations (6 NYCRR, Part 360). Materials will be removed from the property by an appropriately licensed hauler who will be responsible for exiting the site and traveling on a pre-determined truck route. Trucks will be covered and leak-proof and appropriate measures will be taken to control the generation of fugitive dust from the trucks during transports. All manifests and supporting documentation of waste disposal will be obtained for inclusion in the final Report.

The OSC will be responsible for ensuring that all necessary demolition and disposal permits have been secured by subcontractors. The OSC will monitor survey and demolition activities to ensure that known areas of soil contamination are not disturbed and that any encountered materials requiring special handling are properly managed.

2.3.2 Excavation of Fuel-Oil UST

The abandoned fuel-oil UST located near the former restaurant building, along with any appurtenant piping and/or petroleum impacted soil, will be excavated and removed from the Site, following the procedure outlined below (protocols for the handling and disposal of excavated soils, and post excavation confirmatory endpoint sampling, are detailed in Sections 2.3.4 and 2.3.5, below).

The tank and ancillary piping will be exposed with a backhoe and excavated soils will be field screened for contamination. Soils exhibiting field evidence of contamination will be segregated and stockpiled on plastic. The tank will be opened and visually inspected. Encountered liquid will be identified (e.g., gasoline, fuel oil, etc.) and will be removed from the tank by a licensed liquid waste transporter/disposal firm. The tank will be removed from the ground, and a photographic record will be made of the tank (the condition of the tank will be further documented by a visual inspection of the interior of the tank, if possible). The tank will be cleaned of residual product and removed from the Site for off-site disposal.

Proper disposal manifests will be prepared and signed by the OSC as representative of the owner and documentation will be provided to the owner for inclusion in the final Report.

2.3.3 Investigation of Septic System and Soils to West of Garage

Subsurface soils in the vicinity of the septic system *and to the west of the garage* will be exposed using a backhoe. *At least four test pits and/or trenches will be extended west of the garage (in the vicinity of monitoring well MW-1S) to a maximum depth 12'.* Any septic system piping extending from the building will be followed until the terminus is located. Soil sampling will be conducted according to the protocols described in Section 2.3.5, including in the vicinity of all encountered septic system components (piping, septic tank, drywell, and/or leach field).

2.3.4 Excavation of Contaminated Soils

Known contaminated soils in the vicinity of the former Garage structure, and any significantly contaminated soils (i.e. analyte concentrations above NYSDEC guidance levels) encountered in test pits, will be excavated and removed from the Site (soils at the Garage will be excavated subsequent to demolition activities). All appropriate disposal documentation will be maintained by the Owner for inclusion in the final Report.

1. Surface material such as metals, wood, and other miscellaneous surface debris will be removed and stockpiled or properly disposed of off-site. Any subsurface debris encountered during the excavation of on-site soils will be disposed of in a manner consistent with applicable NYSDEC regulations (6 NYCRR, Part 360).
2. Excavation of soils will be conducted in a manner consistent with field conditions and technical observations from field personnel. At this time, it is anticipated that between 70 and 120 cubic yards of VOC-contaminated soil will be excavated for off-site disposal in the vicinity of the former Garage structure (the exact volume of soil will be determined by post-excavation confirmatory endpoint sample data). Excavation of soils in the vicinity of the UST and septic system will be based on observed field evidence of petroleum contamination and/or analytical data. Excavation will extend to the depth required to remove contaminated soil, or until practical limitations restrict soil removal (e.g., bedrock is encountered).
3. All excavated soils stored on-site will be placed on double-lined, 6-mil plastic sheeting and covered with a single sheet of 6-mil plastic. The stockpile will be located to minimize the likelihood of direct contact with standing water or water resulting from a storm event. The integrity of the overlaying plastic will be periodically inspected, and replacement of the plastic will occur when appropriate until such time as all soils are removed from the site.
4. All contaminated materials will be removed from the property by an appropriately licensed hauler who will be responsible for exiting the site and traveling on a pre-determined truck route. Trucks will be covered and leak-proof and appropriate measures will be taken to control the generation of fugitive dust from the trucks during transports.

2.3.5 Post-Excavation Soil Sampling

Soil samples will be collected using decontaminated stainless steel trowels and dedicated, disposable latex gloves. Samples will be placed in pre-cleaned jars provided by the laboratory. After sample collection, the sample containers will be placed in a cooler prior to overnight transport to a NYSDOH-certified laboratory for analysis. Appropriate chain of custody procedures will be followed.

Area of Former Garage

Upon completion of excavation activities, soils proposed to remain on the Site will be sampled and analyzed for VOCs using USEPA Method 8260. The total number of confirmatory soil samples collected for laboratory analysis will depend on the final dimensions of the excavation. A minimum of three floor samples and one sample per sidewall (seven samples total) will be collected to document the integrity of remaining on-site soils.

Area of Septic System and Area West of Garage

Exposed soils will be visually inspected and screened with the PID. In the septic system area, a minimum of four to six soil samples will be collected from the strata most likely to have received liquid discharges, and from any overtly impacted areas. All samples will be analyzed for VOCs (USEPA Method 8260) and RCRA metals. *In the area west of the garage (the vicinity of monitoring well MW-1S), a minimum of one soil sample from each test pit will be collected and submitted for laboratory analysis, with collection biased toward areas of overtly contaminated materials. If encountered, samples will also be collected from the groundwater interface. All samples will be analyzed for total VOCs (USEPA Method 8260).* The need for additional analyses (i.e. PAHs and/or PCBs) at either location will be based on encountered field conditions and consultation with NYSDEC personnel.

Laboratory results which indicate that a release has occurred, or sufficient field evidence of a reportable spill, will be reported to the NYSDEC. If contamination above TAGM guidance levels is documented, the NYSDEC shall determine the need for response actions (i.e. soil removal and/or the installation of a protective barrier layer). Required response actions will be conducted, as appropriate, according to the protocols described in Sections 2.3.4, 2.3.6, and 2.3.7.

Area of UST

Underlying and surrounding soils will be visually inspected and screened with the PID. In the event that no field evidence of contamination is identified, a minimum of five soil samples will be collected for laboratory analysis (one sample from each wall, at a point no shallower than the corresponding midpoint of the former tank, and one sample from the base of the tank "grave" at a point underneath the midpoint of the former tank). If the excavated tank is greater than 2,000-gallons in capacity, a minimum of two samples will be collected from the base of the grave. Samples will be analyzed for SVOCs (PAHs only) using USEPA Method 8270 and VOCs (STARS list only) using USEPA Method 8021. *Manual soil borings will be extended, as necessary, to document any areas of remaining post excavation soil contamination.*

Laboratory results which indicate that a release has occurred, or sufficient field evidence of a reportable spill, will be reported to the NYSDEC. All encountered tanks will be properly registered with the NYSDEC.

2.3.6 Site Restoration in Soil Removal Area

The Site will be regraded to approximate original grade at the conclusion of all soil removal and inspection (including, if warranted, NYSDEC inspection) services. To the extent possible, on-site non-contaminated soils will be used for site regrading. In the event that soil importation is necessary, the Owner and/or OSC will secure only certified clean soil material.

2.3.7 Installation of Clean Soil Barrier Layer or Equivalent

A cover of clean soil will be placed as a barrier layer at: 1) all areas located to the north of the former Garage structure where low-grade PAH and metals contamination has been documented; and, 2) in the vicinity of the septic system *and to the west of the garage* (if warranted by documented contaminant concentrations and required by the NYSDEC). A barrier layer will not be required in any areas where impacted soils have been sufficiently excavated during the course of the soil remediation services described above (see Proposed Remedial Activities Map in Appendix A).

The OSC will be responsible for securing a source of certified clean soil for the owner. *In the event that any soil placed on the Site is from a non-approved source, samples of the imported material will be collected according to a NYSDEC approved, site-specific sampling plan. Material for use as a final cover must meet the NYSDEC Soil Cleanup Objectives (SCOs) for Protection of Public Health, Unrestricted Use, as specified in 6 NYCRR Part 375, Table 375-6.8(a). Any imported materials to be used as backfill must meet the SCOs for Protection of Public Health, Restricted Commercial Use, as specified in 6 NYCRR Part 375, Table 375-6.8(b).*

A marker layer consisting of an easily identifiable, non-biodegradable layer such as high visible porous plastic mesh will first be placed on all areas which are targeted for the placement of the barrier layer. After the marker layer has been appropriately placed, a minimum of 18 inches of certified clean soil material will be placed on the site in the designated areas. Soil material will be placed and compacted in lifts not exceeding 12 inches compacted depth. For all covered areas having exposed soils, the final layer of soil will contain sufficient organic matter to permit re-vegetation. This final layer may be replaced with topsoil in areas where final landscaping has been determined. All finished grades that receive topsoil shall be raked smooth, seeded and mulched, and water periodically as necessary to insure proper stabilization of soil areas.

The 18 inch soil barrier layer may also be substituted by any of the following:

- asphalt or concrete
- geocomposite liner (GCL)
- on-site buildings

The specific thickness of each of these alternative materials will be dependent on ultimate site development plans but will not be less than 3". The determination to utilize substitute materials will be made based on design considerations but will not be considered approved until written approval from the NYSDEC is received. A grading and cover plan illustrating the locations of structures, parking areas, landscaping and clean fill or equivalent substitute as well as the depth to contaminated soil will be provided to the NYSDEC after site development plans have been finalized. It will be the responsibility of the Owner to provide adequate justification for any and all proposed substitutes.

2.3.8 Post-Remediation Groundwater Sampling

At the completion of all soil excavation work, all six on-site groundwater monitoring wells (MW-1S, MW-1D, MW-2S, MW-2D, MW-3D, and MW-4S), the on-site potable supply well, (and, if necessary the downgradient offsite potable supply well servicing the adjoining Provan property), will be sampled quarterly (for five consecutive quarters) to document groundwater quality. The need for additional sampling rounds shall be determined by the NYSDEC.

Prior to the initiation of sampling procedures, basic climatological data (e.g., temperature, precipitation, etc.) and any field indications of contamination (e.g. well head PID readings for organic vapors) will be recorded in field logs. For all monitoring wells, static groundwater level will be measured from the top of the well casing (not protective casing) to the nearest 0.01 foot, and will be recorded in field logs.

All groundwater samples will be collected in a manner consistent with USEPA and NYSDEC sample collection protocols. All sample collection equipment will be properly decontaminated prior to the initiation of sampling and between sample locations to avoid cross-contamination.

On-site monitoring wells will be sampled utilizing USEPA "Low-Flow" methodology. At this time it is anticipated that sampling equipment will include a Grundfoss (stainless-steel) submersible pump, Horiba U-23 flow-through cell (twelve parameter), a Grundfoss Redi-Flow frequency modulator (pump control), and dedicated plastic tubing. All wells will be sampled with the pump located at the well bottom. Collection points for potable supply well samples will be located up-system of any water filtration or treatment systems. The potable water supply will be allowed to flow freely for a minimum of twenty minutes prior to the collection of samples.

Each water sample will be collected into two 40-ml sample vials (containing hydrochloric acid as a preservative) provided by the laboratory. After sample collection, the vials will be placed in a cool (4° C), dry place prior to their transport to the laboratory. At the completion of sampling, all groundwater samples will be transported via overnight delivery to a New York State Department of Health-approved laboratory. Appropriate chain of custody procedures will be followed. Water samples will be submitted for analysis of VOCs (including MTBE), using USEPA Method 8260. All analyses will be performed by a certified NYSDOH approved laboratory.

After each sampling round, a memorandum tabulating groundwater data will be provided to the NYSDEC. Complete laboratory data package will be attached. After all sampling rounds have been completed, a complete assessment of groundwater quality will be prepared and included in the final Summary Report (see Section 2.3.9 below). Groundwater wells will be properly closed only upon receipt of written approval from the NYSDEC.

2.3.9 Post-Remediation Institutional Controls

The following actions will constitute post-remediation institutional controls at this Site:

A Deed Restriction will be prepared identifying the area subject to the barrier layer. The restriction will be designated on filed maps.

Annual inspections will be conducted of the barrier layer by a Project Engineer, licensed to practice in New York and to document any change in the layer's integrity. Identifications of substantive changes which, in the opinion of the Project Engineer, represent damage to the barrier layer will be made in writing to the owner and to the NYSDEC. The owner will provide to the NYSDEC evidence of restoration of the barrier layer.

2.3.10 Documentation of Site Remediation and/or Closure

At the completion of all Site closure services, a final Report summarizing all services performed on the subject property will be prepared. This Report will document the proper handling, removal, and off-site disposal of any wastes requiring special handling and will include results of any laboratory analyses generated during activities described in this RAWP. Also included in this Report will be maps illustrating Site closure activities. The NYSDEC will review the submitted Report and provide a written response to the Owner. As required, the final Report will be signed by a professional engineer licensed to practice in New York State.

2.3.11 Time Schedule

The schedule outlined below will be maintained unless revised by mutual consent of the NYSDEC and the Owner. All excavation and site restoration activities will commence subsequent to the demolition of the Garage.

Within ninety (90) days of the approval of the RAWP, the garage will be demolished the UST (and any surrounding contaminated soils) will be removed, soils contaminated with VOCs will be excavated, soil samples documenting remaining site integrity will be collected and analyzed, and site restoration activities in the vicinity of the VOC-contaminated soil removal area will have been completed.

Within thirty (30) days of final soil excavation, groundwater sampling will have been conducted.

Within sixty (60) days of soil removal, the barrier layer for soils containing low-grade PAH and metals contamination will be installed.

Within sixty (60) days of completion of the barrier layer installation, a final Report will be submitted to the NYSDEC. Within fifty (50) days of the receipt of this Report, the NYSDEC will provide written response to the Owner as to the adequacy of Site Remediation Services. Satisfactory completion of all services will necessitate the NYSDEC issuing a "No Further Action" letter.

APPENDIX H

Groundwater Reports and Groundwater Flow Maps

Ecosystems Strategies, Inc.

24 Davis Avenue, Poughkeepsie, New York 12603-2332

Environmental Services and Solutions

TEL: 845-452-1658 • FAX: 845-485-7083 •

EMAIL: mail@ecosystemsstrategies.com

October 19, 2007

Rita Shaheen
Highlands Battle Site Properties, LLC
C/O Scenic Hudson Land Trust, Inc
One Civic Center Plaza, Suite 200
Poughkeepsie, NY 12601

Re: Letter Report of Potable Supply-Well Sampling
Provan Residence located at 28 Tonneson Drive
Adjoining the former Sakmann property (Voluntary Cleanup Site Number: V-00083-3)
Town of Highlands, Orange County, New York
ESI File: SF01123.43

Dear Ms. Shaheen:

This Letter Report of Potable Supply-Well Sampling (Letter Report) summarizes the investigative work performed by Ecosystems Strategies, Inc. (ESI) to document the presence or absence of hydrocarbon-based contamination in the supply well at the Provan residence. ESI personnel conducted sampling activities on July 12, 2007 (the well was previously sampled by ESI in May 2007). This is the second sampling event conducted at this property following the excavation of tetrachloroethylene ("PCE") contaminated soils at the former Sakmann site in June 2005. Six rounds of post-remedial groundwater monitoring have been conducted at the Sakmann site, which document concentrations of MTBE, PCE, and DCE (a breakdown product of PCE) in on-site monitoring wells at levels below New York State Department of Environmental Conservation (NYSDEC) groundwater protection standards.

Fieldwork

Sampling Methodology

ESI personnel conducted sampling activities at the Provan residence on July 12, 2007. A pre-filtration water sample was collected from the pressure tank, which was allowed to discharge for approximately twenty minutes prior to collection, in order to allow for a representative sample of groundwater to be collected.

The sample was collected into two 40-ml sample vials (containing hydrochloric acid as a preservative) provided by the laboratory, consistent with NYSDEC sample collection protocols. After sample collection, the vials were maintained at 4°C and transported to York Analytical Labs, Inc., a New York State Department of Health-approved laboratory (ELAP Certification Number 10854). Appropriate chain of custody procedures were followed.

Fieldwork Observations

No overt evidence of contamination (odors, discoloration, or sheen) was observed during purging of the pressure tank or during sampling.

R. Shaheen
October 19, 2007
ESI File: SF01123.43
Page 2 of 2

Laboratory Analysis

The guidance levels identified in this Letter Report are determined based on the NYSDEC's Division of Water Technical & Operational Guidance Series 1.1.1 Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations (TOGS 1.1.1). All compounds are presented with their respective guidance levels.

Water sample "Provan Well" was submitted for analysis of volatile organic compounds (VOCs) utilizing USEPA Method 8260 (plus MTBE), and the laboratory was requested to report any estimated compound concentrations (a/k/a "J" compounds). No VOCs were detected in the sample (PCE had previously been found during the May sampling event at a concentration of 2 µg/L, well below the guidance level of 5 µg/L).

VOC concentrations in water samples from both sampling events are summarized in Table 1 (Attachment A), and the laboratory report is provided as Attachment B.

Conclusions

This office has completed the water sampling services summarized above at the Provan residence at 28 Tonneson Drive, Town of Highlands, Orange County, New York, located immediately east of the former Sakmann property. Current laboratory data indicate an absence of VOC contamination in the Provan supply well, and previous data indicate only low-level concentrations of one VOC (PCE). These findings are consistent with results from the post-remediation sampling events at the Sakmann site, which document the continuing absence of significant groundwater contamination at that property, and support the conclusion that contaminated soils formerly located at the Sakmann site have not significantly impacted the Provan supply well. It is the opinion of this office that further investigation of the Provan supply well is therefore not warranted.

Please call me at (845) 452-1658 should you have any questions or comments.

Sincerely,

ECOSYSTEMS STRATEGIES, INC.



Paul H. Ciminello
President

Attachment A – Table 1: Summary of Detected VOCs in Groundwater
Attachment B – Complete Laboratory Results

cc: K. Kulow
J. Rashak
G. Provan
File

Table 1: VOCs in Provan Supply WellAll results provided in µg/L. Results in **bold** exceed designated guidance levels.

Compound (USEPA Method 8260)	Guidance Level	Sample Date	
		5/24/2007	7/12/2007
1,1,1,2-Tetrachloroethane	5	ND	ND
1,1,1-Trichloroethane	5	ND	ND
1,1,2,2-Tetrachloroethane	5	ND	ND
1,1,2-Trichloroethane	1	ND	ND
1,1-Dichloroethane	5	ND	ND
1,1-Dichloroethylene	5	ND	ND
1,1-Dichloropropylene	5	ND	ND
1,2,3-Trichlorobenzene	5	ND	ND
1,2,3-Trichloropropane	0.04	ND	ND
1,2,3-Trimethylbenzene	5	ND	ND
1,2,4-Trichlorobenzene	5	ND	ND
1,2,4-Trimethylbenzene	5	ND	ND
1,2-Dibromo-3-chloropropane	0.04	ND	ND
1,2-Dibromoethane	5	ND	ND
1,2-Dichlorobenzene	3	ND	ND
1,2-Dichloroethane	5	ND	ND
1,2-Dichloroethylene (total)	5	ND	ND
1,2-Dichloropropane	1	ND	ND
1,3,5-Trimethylbenzene	5	ND	ND
1,3-Dichlorobenzene	3	ND	ND
1,3-Dichloropropane	5	ND	ND
1,4-Dichlorobenzene	3	ND	ND
1-Chlorohexane	5	ND	ND
2,2-Dichloropropane	5	ND	ND
2-Chlorotoluene	5	ND	ND
4-Chlorotoluene	5	ND	ND
Benzene	1	ND	ND
Bromobenzene	5	ND	ND
Bromochloromethane	5	ND	ND
Bromodichloromethane	50	ND	ND
Bromoform	50	ND	ND
Bromomethane	5	ND	ND
Carbon tetrachloride	5	ND	ND
Chlorobenzene	5	ND	ND
Chloroethane	5	ND	ND
Chloroform	7	ND	ND
Chloromethane	5	ND	ND
Cis-1,3-Dichloropropylene	0.4	ND	ND
Dibromochloromethane	5	ND	ND
Dibromomethane	5	ND	ND
Dichlorodifluoromethane	5	ND	ND
Ethylbenzene	5	ND	ND
Hexachlorobutadiene	0.5	ND	ND
Isopropylbenzene	5	ND	ND
Methyl tert-butyl ether (MTBE)	10	ND	ND
Methylene chloride	5	ND	ND
Naphthalene	10	ND	ND
n-Butylbenzene	5	ND	ND
n-Propylbenzene	5	ND	ND
o-Xylene	5	ND	ND
p-&m-Xylenes	5	ND	ND
p-Isopropyltoluene	5	ND	ND
sec-Butylbenzene	5	ND	ND
Styrene	5	ND	ND
tert-Butylbenzene	5	ND	ND
Tetrachloroethylene	5	2J	ND
Toluene	5	ND	ND
trans-1,3-Dichloropropylene	0.4	ND	ND
Trichloroethylene	5	ND	ND
Trichlorofluoromethane	5	ND	ND
Vinyl chloride	2	ND	ND

Notes:
Guidance levels based on NYSDEC Division of Water TOGS 1.1.1
ND = Not Detected J = estimated concentration

Technical Report

prepared for:

Ecosystems Strategies, Inc.
24 Davis Avenue
Poughkeepsie, NY 12603
Attention: Scott Spitzer

Report Date: 7/19/2007
Re: Client Project ID: SF01123.44
York Project No.: 07070401

CT License No. PH-0723

New York License No. 10854



Report Date: 7/19/2007
 Client Project ID: SF01123.44
 York Project No.: 07070401

Ecosystems Strategies, Inc.
 24 Davis Avenue
 Poughkeepsie, NY 12603
 Attention: Scott Spitzer

Purpose and Results

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on 07/12/07. The project was identified as your project "SF01123.44".

The analyses were conducted utilizing appropriate EPA, Standard Methods, and ASTM methods as detailed in the data summary tables.

All samples were received in proper condition meeting the NELAC acceptance requirements for environmental samples except those indicated under the Notes section of this report.

All the analyses met the method and laboratory standard operating procedure requirements except as indicated under the Notes section of this report, or as indicated by any data flags, the meaning of which is explained in the attachment to this report, if applicable.

The results of the analyses, which are all reported on an as-received basis unless otherwise noted, are summarized in the following table(s).

Analysis Results

Client Sample ID			Provan Well		
York Sample ID			07070401-01		
Matrix			WATER		
Parameter	Method	Units	Result	Qualifier	RL
Volatiles, 8260 List + MTBE	SW846-8260	ug/L	---	---	---
1,1,1,2-Tetrachloroethane			Not detected		5.0
1,1,1-Trichloroethane			Not detected		5.0
1,1,2,2-Tetrachloroethane			Not detected		5.0
1,1,2-Trichloroethane			Not detected		5.0
1,1-Dichloroethane			Not detected		5.0
1,1-Dichloroethylene			Not detected		5.0
1,1-Dichloropropylene			Not detected		5.0
1,2,3-Trichlorobenzene			Not detected		5.0
1,2,3-Trichloropropane			Not detected		5.0
1,2,3-Trimethylbenzene			Not detected		5.0
1,2,4-Trichlorobenzene			Not detected		5.0
1,2,4-Trimethylbenzene			Not detected		5.0

Client Sample ID			Provan Well		
York Sample ID			07070401-01		
Matrix			WATER		
Parameter	Method	Units	Result	Qualifier	RL
1,2-Dibromo-3-chloropropane			Not detected		5.0
1,2-Dibromoethane			Not detected		5.0
1,2-Dichlorobenzene			Not detected		5.0
1,2-Dichloroethane			Not detected		5.0
1,2-Dichloroethylene (Total)			Not detected		5.0
1,2-Dichloropropane			Not detected		5.0
1,3,5-Trimethylbenzene			Not detected		5.0
1,3-Dichlorobenzene			Not detected		5.0
1,3-Dichloropropane			Not detected		5.0
1,4-Dichlorobenzene			Not detected		5.0
2,2-Dichloropropane			Not detected		5.0
2-Chlorotoluene			Not detected		5.0
4-Chlorotoluene			Not detected		5.0
Benzene			Not detected		5.0
Bromobenzene			Not detected		5.0
Bromochloromethane			Not detected		5.0
Bromodichloromethane			Not detected		5.0
Bromoform			Not detected		5.0
Bromomethane			Not detected		5.0
Carbon tetrachloride			Not detected		5.0
Chlorobenzene			Not detected		5.0
Chloroethane			Not detected		5.0
Chloroform			Not detected		5.0
Chloromethane			Not detected		5.0
cis-1,3-Dichloropropylene			Not detected		5.0
Dibromochloromethane			Not detected		5.0
Dibromomethane			Not detected		5.0
Dichlorodifluoromethane			Not detected		5.0
Ethylbenzene			Not detected		5.0
Hexachlorobutadiene			Not detected		5.0
Isopropylbenzene			Not detected		5.0
Methyl tert-butyl ether (MTBE)			Not detected		5.0
Methylene chloride			Not detected		5.0
Naphthalene			Not detected		5.0
n-Butylbenzene			Not detected		5.0
n-Propylbenzene			Not detected		5.0
o-Xylene			Not detected		5.0
p- & m-Xylenes			Not detected		5.0
p-Isopropyltoluene			Not detected		5.0
sec-Butylbenzene			Not detected		5.0
Styrene			Not detected		5.0
tert-Butylbenzene			Not detected		5.0

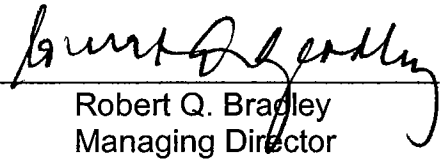
Client Sample ID			Provan Well		
York Sample ID			07070401-01		
Matrix			WATER		
Parameter	Method	Units	Result	Qualifier	RL
Tetrachloroethylene			Not detected		5.0
Toluene			Not detected		5.0
trans-1,3-Dichloropropylene			Not detected		5.0
Trichloroethylene			Not detected		5.0
Trichlorofluoromethane			Not detected		5.0
Vinyl chloride			Not detected		5.0

Units Key: For Waters/Liquids: mg/L = ppm ; ug/L = ppb

For Soils/Solids: mg/kg = ppm ; ug/kg = ppb

Notes for York Project No. 07070401

1. The "RL" is the REPORTING LIMIT and is adjusted for any dilution necessary due to the levels of target and/or non-target analytes and matrix interference. This REPORTING LIMIT is based upon the lowest standard utilized for calibration where applicable.
2. Samples are retained for a period of thirty days after submittal of report, unless other arrangements are made.
3. York's liability for the above data is limited to the dollar value paid to York for the referenced project.
4. This report shall not be reproduced without the written approval of York Analytical Laboratories, Inc.
5. All samples were received in proper condition for analysis with proper documentation.
6. All analyses conducted met method or Laboratory SOP requirements.
7. It is noted that no analyses reported herein were subcontracted to another laboratory.
8. Other attachments to this report, including Chain-of-custody documentation and Case narratives are hereby made a part of this report.

Approved By: 
 Robert Q. Bradley
 Managing Director

Date: 7/19/2007

April 20, 2007

Seth McKee
Highlands Battle Site Properties, LLC
C/O Scenic Hudson Land Trust, Inc
One Civic Center Plaza, Suite 200
Poughkeepsie, NY 12601

Re: Letter Report of Groundwater Sampling performed on the former "Sakmann Property" located on U.S. Route 9W, Town of Highlands, Orange County, New York
Voluntary Cleanup Site Number: V-00083-3
ESI File: SF01123.43

Dear Mr. McKee:

This Letter Report of Groundwater Sampling (Letter Report) summarizes the investigative work performed by Ecosystems Strategies, Inc. (ESI) on the above-referenced property to document the presence or absence of hydrocarbon contamination in on-site groundwater. ESI personnel conducted well sampling activities at six (6) on-site monitoring wells (MW-1S, MW-1D, MW-2S, MW-2D, MW-3D and MW-4S) on April 10, 2007. This is the fifth round of groundwater sampling conducted following the excavation of tetrachloroethylene ("PCE") contaminated soils in June 2005.

Summary of Services

The following services were performed by ESI:

- Conducted field screening and depth of groundwater measurements at each of the six (6) monitoring wells;
- Collected groundwater samples from five wells (MW-2S could not be sampled) and submitted samples for laboratory analysis of volatile organic compounds (VOCs); and,
- Compared previous data (from the EnviroTrac 2002 sampling event and ESI's 2003 through 2006 sampling events) with current (April 2007) groundwater data.

Fieldwork

Groundwater Sampling Methodology

ESI personnel conducted sampling activities at monitoring wells MW-1S, MW-1D, MW-2S, MW-2D, MW-3D and MW-4S on April 10, 2007. The PVC well casings had been vertically extended by ESI personnel during August 2006 in order to accommodate the proposed soil cover. The casings had not been set to final height (the cover has not been completed) and the wells were not resurveyed. Depth-to-water data were collected but no groundwater-flow map was generated. Given the Site's steep topographic configuration, and the documented long-term consistency of groundwater flow, groundwater flow during the April sampling event is expected to have been in an easterly direction, to the nearby Hudson River.

S. McKee
 April 20, 2007
 ESI File: SF01123.43
 Page 2 of 4

The Groundwater Flow Map produced during the June 2006 sampling event has been provided, for reference purposes, as Attachment A to this Letter Report.

All wells were sampled utilizing the USEPA Low-Flow Method (MW-2S could not be sampled due to poor recharge). Sampling equipment included a Grundfoss (stainless-steel) submersible Pump, Horiba U-22 Flow-Thru Cell (twelve parameter), and a Grundfoss Redi-Flow Frequency Modulator (pump control). Purge-water was screened for visual or olfactory indications of petroleum contamination (see the Fieldwork Observations Section, below).

All groundwater samples were collected in a manner consistent with New York State Department of Environmental Conservation (NYSDEC) sample collection protocols. All sample collection equipment was properly decontaminated prior to the initiation of sampling and between sample locations to avoid cross-contamination. All wells were sampled with the pump located at the well bottom. Each groundwater sample was collected into two 40-ml sample vials (containing hydrochloric acid as a preservative) provided by the laboratory. After sample collection, the vials were placed in a cool (4° C), dry place prior to their transport to the laboratory (a trip blank was included in the sample cooler on both sampling days). At the completion of sampling, all groundwater samples were transported via courier to York Analytical Labs, Inc., a New York State Department of Health-approved laboratory (ELAP Certification Number 10854). Appropriate chain of custody procedures were followed.

Fieldwork Observations

No positive PID readings were recorded during initial screening of the monitoring wells and no wells exhibited petroleum odors or sheens. Table 1, below, presents the depth to water recorded for all monitoring wells (through the April 2007 sampling event).

Table 1: Depth to Water

Monitoring Well	Depth to Water (feet)									
	7/03	2/04	5/04	8/04	1/05	6/05	12/05	3/06	6/06	4/07
MW-1S	24.86	26.20	25.20	24.90	25.85	26.35	25.3	27.14	23.76	29.55
MW-1D	31.33	31.30	31.84	31.50	33.20	31.88	30.11	31.90	30.33	33.57
MW-2S	No data	No data	No data	No data	30.20	31.56	30.31	31.90	29.81	37.00
MW-2D	30.2	30.72	30.90	30.57	31.50	31.29	29.39	31.58	29.47	34.60
MW-3D	33.35	34.42	34.20	34.00	33.90	33.75	32.66	33.95	31.81	32.31
MW-4S	N/A	31.41	31.85	31.60	33.50	31.91	31.45	32.84	30.33	36.80

Laboratory Analysis

Groundwater Protection Standards

The guidance levels identified in this Letter Report are determined based on the NYSDEC's Division of Water Technical & Operational Guidance Series 1.1.1 Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations, June 1998, as modified through June 2004 (TOGS 1.1.1). All compounds referenced below are presented with their respective guidance levels.

S. McKee
April 20, 2007
ESI File: SF01123.43
Page 3 of 4

April 2007 Sampling Event

All samples were submitted for analysis of VOCs utilizing USEPA Method 8260. Low levels of MTBE (guidance level 10 µg/L) were detected in MW-1D (3 µg/L) and MW-2D (1 µg/L). Low levels of PCE (1 µg/L), dichloroethylene (5 µg/L, "DCE", a breakdown product of PCE), and chloroethane (2 µg/L) were detected in MW-3D (guidance level of 5 µg/L for all compounds). No VOCs were detected in wells MW-1S and MW-4S, or in the trip blank. [Note: contaminant concentrations below 5 µg/L are estimated values, i.e. "J" compounds].

Detected VOC concentrations for all ESI sampling rounds are presented in Table 2 (Attachment B), and laboratory results (April 2007) are provided as Attachment C.

Comparison of Current and Previous Laboratory Data

Current laboratory data are consistent with results from the 2004 and later pre-remediation sampling events, and the 2005 post-remediation sampling events, which show a significant reduction from VOC concentrations documented in 2002 and 2003, and document the continuing absence of significant groundwater contamination. The presence of low levels of chloroethane, which appear for the first time, is not a significant indication of contamination and may be related to the ongoing breakdown of existing, low-level concentrations of chlorinated compounds. Current concentrations of PCE, DCE, and MTBE are consistent with previous findings, indicating an absence of significant on-site sources of these compounds.

Conclusions

This office has completed the groundwater sampling services summarized above on the former Sakmann Property located on US Route 9W, Town of Highlands, Orange County, New York. Current sampling data are generally consistent with previous data (2004 to 2006), which show only low-levels of MTBE, PCE, and DCE in on-site monitoring wells. No petroleum-related hydrocarbons (other than MTBE) were found in on-site groundwater (a source of MTBE contamination is known to be present in the local area, upgradient of the property). Previously detected low-level concentrations of p-isopropyltoluene and n-butylbenzene, detected only in June 2006, were not found during the October 2006 and April 2007 sampling event, indicating an absence of a significant on-site source of petroleum contamination. These findings support the conclusion that contaminated soils formerly located at the property have not significantly impacted local groundwater resources. It is the opinion of this office that active on-site groundwater remediation is not necessary.

Given the consistent absence of significant contamination, ESI recommends that the NYSDEC be petitioned for closure of the on-site monitoring wells.

S. McKee
April 20, 2007
ESI File: SF01123.43
Page 4 of 4

Please review this information and call me at (845) 452-1658 should you have any questions or comments.

Sincerely,

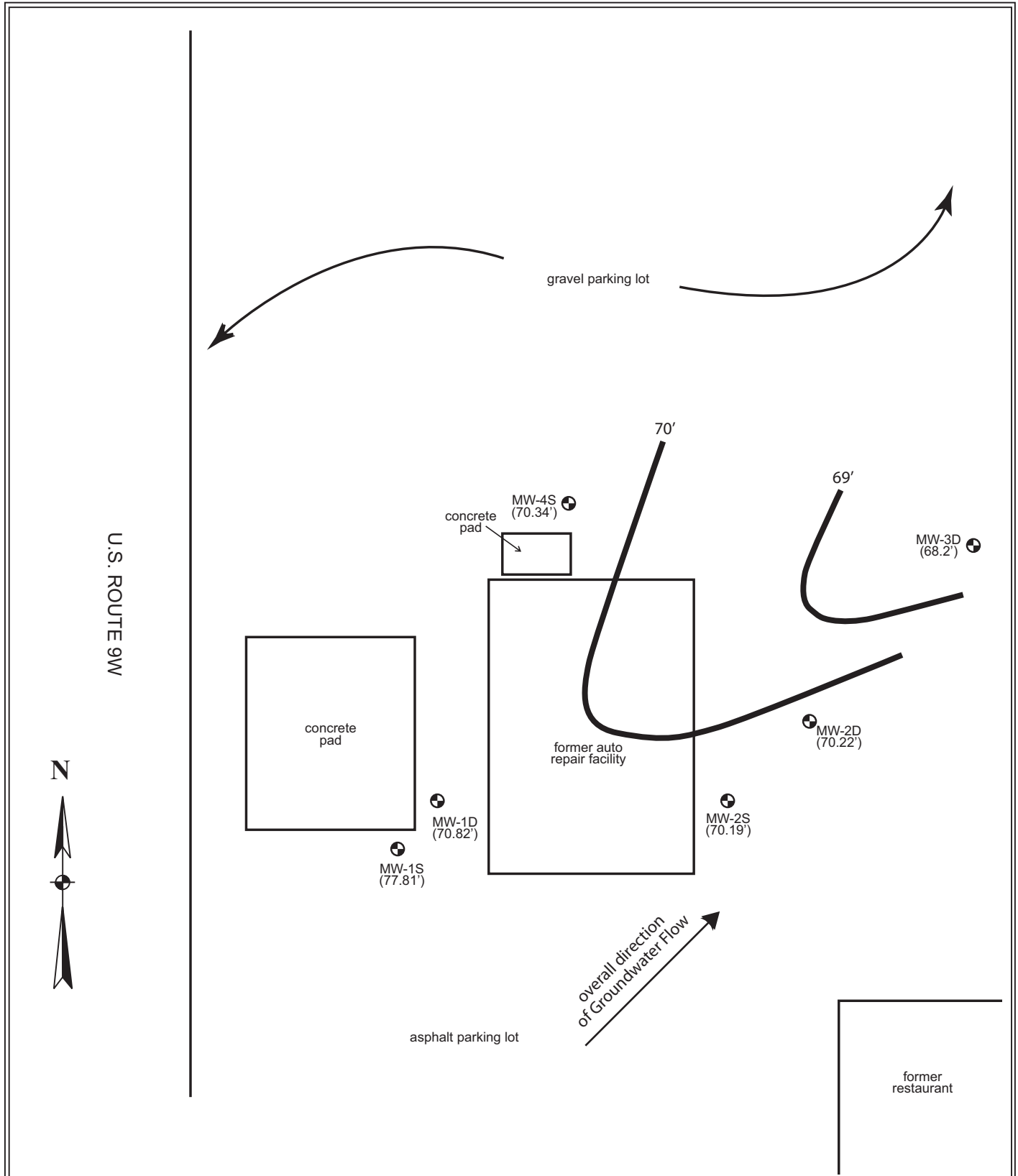
ECOSYSTEMS STRATEGIES, INC.



Paul H. Ciminello
President

Attachment A – Groundwater Flow Map
Attachment B – Table 2: Summary of Detected VOCs in Groundwater
Attachment C – Complete Laboratory Results

cc: K. Kulow
J. Rashak
File



All feature locations are approximate.
 Map based on field measurements. All elevations are relative to an arbitrary benchmark of 100 feet.


<p>Groundwater Flow Map June 2006 Former Sakmann Property U.S. Route 9W Town of Highlands Orange County, New York</p>	<p>Legend:  monitoring well with groundwater elevation noted parenthetically MW-1S</p>	<p>ESI File: SF01123.43</p>
		<p>June 2006</p>
		<p>Not to Scale</p>
		<p>Attachment</p>

Table 2: Summary of Detected VOCs in Groundwater (May 2002 through April 2007 Sampling Events)

All data provided in micrograms per liter. Concentrations in **bold** exceed NYSDEC established guidance levels

VOCs (Method 8260)	Guidance Levels	Sample Identification																						
		MW-1S										MW-1D												
		5/02	7/03	2/04	5/04	8/04	1/05	6/05	12/05	3/06	6/06	10/06	4/07	5/02	7/03	2/04	5/04	8/04	1/05	6/05	12/05	3/06	6/06	10/06
Bromomethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethylene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MTBE	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4	4	5	8	ND	6	6	3*	1.2*	3*	3*
n-Butylbenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.3*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
p-Isopropyltoluene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2*	ND	ND
Tetrachloroethylene	5	ND	ND	ND	ND	ND	ND	1	ND	ND	1.3*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Table 2: Continued

VOCs (Method 8260)	Guidance Levels	Sample Identification																							
		MW-2S										MW-2D													
		5/02	7/03	2/04	5/04	8/04	1/05	6/05	12/05	3/06	6/06	10/06	4/07	5/02	7/03	2/04	5/04	8/04	1/05	6/05	12/05	3/06	6/06	10/06	4/07
Bromomethane	5	ND	NA	NA	NA	NA	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Chloroform	7	1	NA	NA	NA	NA	ND	ND	ND	ND	ND	NA	6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Chloroethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Chloromethane	5	ND	NA	NA	NA	NA	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
1,2-Dichloroethylene	5	58	NA	NA	NA	NA	ND	2	2	1*	1.3*	ND	1	21	ND	ND	ND	1	ND	ND	ND	ND	ND	ND	
MTBE	10	22	NA	NA	NA	NA	ND	1	1	3*	3.5*	3*	NA	ND	1	ND	2	3	ND	1	2	2*	2.2*	2*	1*
n-Butylbenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
p-Isopropyltoluene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	1*	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	1.5*	ND	ND	
Tetrachloroethylene	5	2	NA	NA	NA	NA	ND	2	3	2*	1.9*	2*	NA	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	

Table 2: Continued

VOCs (Method 8260)	Guidance Levels	Sample Identification																							
		MW-3D										MW-4S													
		5/02	7/03	2/04	5/04	8/04	1/05	6/05	12/05	3/06	6/06	10/06	4/07	5/02	7/03	2/04	5/04	8/04	1/05	6/05	12/05	3/06	6/06	10/06	4/07
Bromomethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Chloroform	7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Chloroethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Chloromethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
1,2-Dichloroethylene	5	21	20	9	ND	5	ND	5	4	3*	3.8*	4*	5*	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
MTBE	10	19	9	4	7	3	ND	3	3	2*	2.9*	2*	ND	ND	3	1	1	1	ND	1	4	4*	1.2*	ND	ND
n-Butylbenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
p-Isopropyltoluene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.8*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8*	ND	ND	
Tetrachloroethylene	5	2	2	1	ND	ND	ND	1	2	1*	1.2*	1*	1*	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	

NOTES:

Only detected compounds are presented.

Guidance Levels based on NYSDEC TOGS 1.1.1

* laboratory data since March 2006 utilize a MDL of 5 micrograms per liter, with "J" compounds reported to 1 micrograms per liter.

ND = Not Detected above specified detection limit.

NA =Not Available (well not sampled)

YORK

ANALYTICAL LABORATORIES, INC.

Technical Report

prepared for:

Ecosystems Strategies, Inc.
24 Davis Avenue
Poughkeepsie, NY 12603
Attention: Scott Spitzer

Report Date: 4/18/2007
Re: Client Project ID: SF01123.43
York Project No.: 07040331

CT License No. PH-0723

New York License No. 10854



Report Date: 4/18/2007
 Client Project ID: SF01123.43
 York Project No.: 07040331

Ecosystems Strategies, Inc.
 24 Davis Avenue
 Poughkeepsie, NY 12603
 Attention: Scott Spitzer

Purpose and Results

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on 04/11/07. The project was identified as your project "SF01123.43".

The analyses were conducted utilizing appropriate EPA, Standard Methods, and ASTM methods as detailed in the data summary tables.

All samples were received in proper condition meeting the NELAC acceptance requirements for environmental samples except those indicated under the Notes section of this report.

All the analyses met the method and laboratory standard operating procedure requirements except as indicated under the Notes section of this report, or as indicated by any data flags, the meaning of which is explained in the attachment to this report, if applicable.

The results of the analyses, which are all reported on an as-received basis unless otherwise noted, are summarized in the following table(s).

Analysis Results

Client Sample ID			MW-1S		MW-1D	
York Sample ID			07040331-01		07040331-02	
Matrix			WATER		WATER	
Parameter	Method	Units	Results	MDL	Results	MDL
Volatiles, 8260 List + MTBE	SW846-8260	ug/L	---	---	---	---
1,1,1,2-Tetrachloroethane			Not detected	5.0	Not detected	5.0
1,1,1-Trichloroethane			Not detected	5.0	Not detected	5.0
1,1,2,2-Tetrachloroethane			Not detected	5.0	Not detected	5.0
1,1,2-Trichloroethane			Not detected	5.0	Not detected	5.0
1,1-Dichloroethane			Not detected	5.0	Not detected	5.0
1,1-Dichloroethylene			Not detected	5.0	Not detected	5.0
1,1-Dichloropropylene			Not detected	5.0	Not detected	5.0
1,2,3-Trichlorobenzene			Not detected	5.0	Not detected	5.0
1,2,3-Trichloropropane			Not detected	5.0	Not detected	5.0
1,2,3-Trimethylbenzene			Not detected	5.0	Not detected	5.0
1,2,4-Trichlorobenzene			Not detected	5.0	Not detected	5.0
1,2,4-Trimethylbenzene			Not detected	5.0	Not detected	5.0
1,2-Dibromo-3-chloropropane			Not detected	5.0	Not detected	5.0
1,2-Dibromoethane			Not detected	5.0	Not detected	5.0
1,2-Dichlorobenzene			Not detected	5.0	Not detected	5.0
1,2-Dichloroethane			Not detected	5.0	Not detected	5.0

YORK

Client Sample ID			MW-1S		MW-1D	
York Sample ID			07040331-01		07040331-02	
Matrix			WATER		WATER	
Parameter	Method	Units	Results	MDL	Results	MDL
1,2-Dichloroethylene (Total)			Not detected	5.0	Not detected	5.0
1,2-Dichloropropane			Not detected	5.0	Not detected	5.0
1,3,5-Trimethylbenzene			Not detected	5.0	Not detected	5.0
1,3-Dichlorobenzene			Not detected	5.0	Not detected	5.0
1,3-Dichloropropane			Not detected	5.0	Not detected	5.0
1,4-Dichlorobenzene			Not detected	5.0	Not detected	5.0
2,2-Dichloropropane			Not detected	5.0	Not detected	5.0
2-Chlorotoluene			Not detected	5.0	Not detected	5.0
4-Chlorotoluene			Not detected	5.0	Not detected	5.0
Benzene			Not detected	5.0	Not detected	5.0
Bromobenzene			Not detected	5.0	Not detected	5.0
Bromochloromethane			Not detected	5.0	Not detected	5.0
Bromodichloromethane			Not detected	5.0	Not detected	5.0
Bromoform			Not detected	5.0	Not detected	5.0
Bromomethane			Not detected	5.0	Not detected	5.0
Carbon tetrachloride			Not detected	5.0	Not detected	5.0
Chlorobenzene			Not detected	5.0	Not detected	5.0
Chloroethane			Not detected	5.0	Not detected	5.0
Chloroform			Not detected	5.0	Not detected	5.0
Chloromethane			Not detected	5.0	Not detected	5.0
cis-1,3-Dichloropropylene			Not detected	5.0	Not detected	5.0
Dibromochloromethane			Not detected	5.0	Not detected	5.0
Dibromomethane			Not detected	5.0	Not detected	5.0
Dichlorodifluoromethane			Not detected	5.0	Not detected	5.0
Ethylbenzene			Not detected	5.0	Not detected	5.0
Hexachlorobutadiene			Not detected	5.0	Not detected	5.0
Isopropylbenzene			Not detected	5.0	Not detected	5.0
Methyl tert-butyl ether (MTBE)			Not detected	5.0	3	5.0
Methylene chloride			Not detected	5.0	Not detected	5.0
Naphthalene			Not detected	5.0	Not detected	5.0
n-Butylbenzene			Not detected	5.0	Not detected	5.0
n-Propylbenzene			Not detected	5.0	Not detected	5.0
o-Xylene			Not detected	5.0	Not detected	5.0
p- & m-Xylenes			Not detected	5.0	Not detected	5.0
p-Isopropyltoluene			Not detected	5.0	Not detected	5.0
sec-Butylbenzene			Not detected	5.0	Not detected	5.0
Styrene			Not detected	5.0	Not detected	5.0
tert-Butylbenzene			Not detected	5.0	Not detected	5.0
Tetrachloroethylene			Not detected	5.0	Not detected	5.0
Toluene			Not detected	5.0	Not detected	5.0
trans-1,3-Dichloropropylene			Not detected	5.0	Not detected	5.0
Trichloroethylene			Not detected	5.0	Not detected	5.0
Trichlorofluoromethane			Not detected	5.0	Not detected	5.0
Vinyl chloride			Not detected	5.0	Not detected	5.0

YORK

Client Sample ID			MW-2D		MW-3D	
York Sample ID			07040331-03		07040331-04	
Matrix			WATER		WATER	
Parameter	Method	Units	Results	MDL	Results	MDL
Volatiles, 8260 List + MTBE	SW846-8260	ug/L	---	---	---	---
1,1,1,2-Tetrachloroethane			Not detected	5.0	Not detected	5.0
1,1,1-Trichloroethane			Not detected	5.0	Not detected	5.0
1,1,2,2-Tetrachloroethane			Not detected	5.0	Not detected	5.0
1,1,2-Trichloroethane			Not detected	5.0	Not detected	5.0
1,1-Dichloroethane			Not detected	5.0	Not detected	5.0
1,1-Dichloroethylene			Not detected	5.0	Not detected	5.0
1,1-Dichloropropylene			Not detected	5.0	Not detected	5.0
1,2,3-Trichlorobenzene			Not detected	5.0	Not detected	5.0
1,2,3-Trichloropropane			Not detected	5.0	Not detected	5.0
1,2,3-Trimethylbenzene			Not detected	5.0	Not detected	5.0
1,2,4-Trichlorobenzene			Not detected	5.0	Not detected	5.0
1,2,4-Trimethylbenzene			Not detected	5.0	Not detected	5.0
1,2-Dibromo-3-chloropropane			Not detected	5.0	Not detected	5.0
1,2-Dibromoethane			Not detected	5.0	Not detected	5.0
1,2-Dichlorobenzene			Not detected	5.0	Not detected	5.0
1,2-Dichloroethane			Not detected	5.0	Not detected	5.0
1,2-Dichloroethylene (Total)			Not detected	5.0	5(cis-)	5.0
1,2-Dichloropropane			Not detected	5.0	Not detected	5.0
1,3,5-Trimethylbenzene			Not detected	5.0	Not detected	5.0
1,3-Dichlorobenzene			Not detected	5.0	Not detected	5.0
1,3-Dichloropropane			Not detected	5.0	Not detected	5.0
1,4-Dichlorobenzene			Not detected	5.0	Not detected	5.0
2,2-Dichloropropane			Not detected	5.0	Not detected	5.0
2-Chlorotoluene			Not detected	5.0	Not detected	5.0
4-Chlorotoluene			Not detected	5.0	Not detected	5.0
Benzene			Not detected	5.0	Not detected	5.0
Bromobenzene			Not detected	5.0	Not detected	5.0
Bromochloromethane			Not detected	5.0	Not detected	5.0
Bromodichloromethane			Not detected	5.0	Not detected	5.0
Bromoform			Not detected	5.0	Not detected	5.0
Bromomethane			Not detected	5.0	Not detected	5.0
Carbon tetrachloride			Not detected	5.0	Not detected	5.0
Chlorobenzene			Not detected	5.0	Not detected	5.0
Chloroethane			Not detected	5.0	2	5.0
Chloroform			Not detected	5.0	Not detected	5.0
Chloromethane			Not detected	5.0	Not detected	5.0
cis-1,3-Dichloropropylene			Not detected	5.0	Not detected	5.0
Dibromochloromethane			Not detected	5.0	Not detected	5.0
Dibromomethane			Not detected	5.0	Not detected	5.0
Dichlorodifluoromethane			Not detected	5.0	Not detected	5.0
Ethylbenzene			Not detected	5.0	Not detected	5.0
Hexachlorobutadiene			Not detected	5.0	Not detected	5.0
Isopropylbenzene			Not detected	5.0	Not detected	5.0
Methyl tert-butyl ether (MTBE)			1	5.0	Not detected	5.0
Methylene chloride			Not detected	5.0	Not detected	5.0
Naphthalene			Not detected	5.0	Not detected	5.0
n-Butylbenzene			Not detected	5.0	Not detected	5.0
n-Propylbenzene			Not detected	5.0	Not detected	5.0
o-Xylene			Not detected	5.0	Not detected	5.0

YORK

Client Sample ID			MW-2D		MW-3D	
York Sample ID			07040331-03		07040331-04	
Matrix			WATER		WATER	
Parameter	Method	Units	Results	MDL	Results	MDL
p- & m-Xylenes			Not detected	5.0	Not detected	5.0
p-Isopropyltoluene			Not detected	5.0	Not detected	5.0
sec-Butylbenzene			Not detected	5.0	Not detected	5.0
Styrene			Not detected	5.0	Not detected	5.0
tert-Butylbenzene			Not detected	5.0	Not detected	5.0
Tetrachloroethylene			Not detected	5.0	1	5.0
Toluene			Not detected	5.0	Not detected	5.0
trans-1,3-Dichloropropylene			Not detected	5.0	Not detected	5.0
Trichloroethylene			Not detected	5.0	Not detected	5.0
Trichlorofluoromethane			Not detected	5.0	Not detected	5.0
Vinyl chloride			Not detected	5.0	Not detected	5.0

Client Sample ID			MW-4S		Trip Blank	
York Sample ID			07040331-05		07040331-06	
Matrix			WATER		WATER	
Parameter	Method	Units	Results	MDL	Results	MDL
Volatiles, 8260 List + MTBE	SW846-8260	ug/L	---	---	---	---
1,1,1,2-Tetrachloroethane			Not detected	5.0	Not detected	5.0
1,1,1-Trichloroethane			Not detected	5.0	Not detected	5.0
1,1,2,2-Tetrachloroethane			Not detected	5.0	Not detected	5.0
1,1,2-Trichloroethane			Not detected	5.0	Not detected	5.0
1,1-Dichloroethane			Not detected	5.0	Not detected	5.0
1,1-Dichloroethylene			Not detected	5.0	Not detected	5.0
1,1-Dichloropropylene			Not detected	5.0	Not detected	5.0
1,2,3-Trichlorobenzene			Not detected	5.0	Not detected	5.0
1,2,3-Trichloropropane			Not detected	5.0	Not detected	5.0
1,2,3-Trimethylbenzene			Not detected	5.0	Not detected	5.0
1,2,4-Trichlorobenzene			Not detected	5.0	Not detected	5.0
1,2,4-Trimethylbenzene			Not detected	5.0	Not detected	5.0
1,2-Dibromo-3-chloropropane			Not detected	5.0	Not detected	5.0
1,2-Dibromoethane			Not detected	5.0	Not detected	5.0
1,2-Dichlorobenzene			Not detected	5.0	Not detected	5.0
1,2-Dichloroethane			Not detected	5.0	Not detected	5.0
1,2-Dichloroethylene (Total)			Not detected	5.0	Not detected	5.0
1,2-Dichloropropane			Not detected	5.0	Not detected	5.0
1,3,5-Trimethylbenzene			Not detected	5.0	Not detected	5.0
1,3-Dichlorobenzene			Not detected	5.0	Not detected	5.0
1,3-Dichloropropane			Not detected	5.0	Not detected	5.0
1,4-Dichlorobenzene			Not detected	5.0	Not detected	5.0
2,2-Dichloropropane			Not detected	5.0	Not detected	5.0
2-Chlorotoluene			Not detected	5.0	Not detected	5.0
4-Chlorotoluene			Not detected	5.0	Not detected	5.0
Benzene			Not detected	5.0	Not detected	5.0
Bromobenzene			Not detected	5.0	Not detected	5.0
Bromochloromethane			Not detected	5.0	Not detected	5.0
Bromodichloromethane			Not detected	5.0	Not detected	5.0
Bromoform			Not detected	5.0	Not detected	5.0
Bromomethane			Not detected	5.0	Not detected	5.0
Carbon tetrachloride			Not detected	5.0	Not detected	5.0

YORK

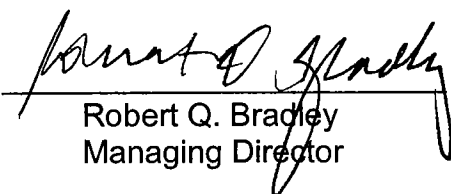
Client Sample ID			MW-4S		Trip Blank	
York Sample ID			07040331-05		07040331-06	
Matrix			WATER		WATER	
Parameter	Method	Units	Results	MDL	Results	MDL
Chlorobenzene			Not detected	5.0	Not detected	5.0
Chloroethane			Not detected	5.0	Not detected	5.0
Chloroform			Not detected	5.0	Not detected	5.0
Chloromethane			Not detected	5.0	Not detected	5.0
cis-1,3-Dichloropropylene			Not detected	5.0	Not detected	5.0
Dibromochloromethane			Not detected	5.0	Not detected	5.0
Dibromomethane			Not detected	5.0	Not detected	5.0
Dichlorodifluoromethane			Not detected	5.0	Not detected	5.0
Ethylbenzene			Not detected	5.0	Not detected	5.0
Hexachlorobutadiene			Not detected	5.0	Not detected	5.0
Isopropylbenzene			Not detected	5.0	Not detected	5.0
Methyl tert-butyl ether (MTBE)			Not detected	5.0	Not detected	5.0
Methylene chloride			Not detected	5.0	Not detected	5.0
Naphthalene			Not detected	5.0	Not detected	5.0
n-Butylbenzene			Not detected	5.0	Not detected	5.0
n-Propylbenzene			Not detected	5.0	Not detected	5.0
o-Xylene			Not detected	5.0	Not detected	5.0
p- & m-Xylenes			Not detected	5.0	Not detected	5.0
p-Isopropyltoluene			Not detected	5.0	Not detected	5.0
sec-Butylbenzene			Not detected	5.0	Not detected	5.0
Styrene			Not detected	5.0	Not detected	5.0
tert-Butylbenzene			Not detected	5.0	Not detected	5.0
Tetrachloroethylene			Not detected	5.0	Not detected	5.0
Toluene			Not detected	5.0	Not detected	5.0
trans-1,3-Dichloropropylene			Not detected	5.0	Not detected	5.0
Trichloroethylene			Not detected	5.0	Not detected	5.0
Trichlorofluoromethane			Not detected	5.0	Not detected	5.0
Vinyl chloride			Not detected	5.0	Not detected	5.0

Units Key: For Waters/Liquids: mg/L = ppm ; ug/L = ppb For Soils/Solids: mg/kg = ppm ; ug/kg = ppb

Notes for York Project No. 07040331

1. The MDL (Minimum Detectable Limit) reported is adjusted for any dilution necessary due to the levels of target and/or non-target analytes and matrix interference. This MDL is the REPORTING LIMIT and is based upon the lowest standard utilized for calibration where applicable.
2. Samples are retained for a period of thirty days after submittal of report, unless other arrangements are made.
3. York's liability for the above data is limited to the dollar value paid to York for the referenced project.
4. This report shall not be reproduced without the written approval of York Analytical Laboratories, Inc.
5. All samples were received in proper condition for analysis with proper documentation.
6. All analyses conducted met method or Laboratory SOP requirements.
7. It is noted that no analyses reported herein were subcontracted to another laboratory.

Approved By:



Robert Q. Bradley
Managing Director

Date: 4/18/2007

YORK

07040331

Company Name
Ecosystems Strategies, Inc.

Report to:
Scott Spitzer

Invoice to:
Brenda

Project ID/No.:
SF01123.43

Samples Collected by (signature):
[Signature]

Name (printed):
John Petronella

Sample No.	Location/ID	Date Sampled	Sample Matrix			Analyses Requested	Container Desc.
			Water	Soil	Air		
	MW-1S	4/10/2007	X			VOCs (8260 w/MTBE)	(2) 40-ml vials
	MW-1D	4/10/2007	X			VOCs (8260 w/MTBE)	(2) 40-ml vials
	MW-2S	4/10/2007	X			VOCs (8260 w/MTBE)	(2) 40-ml vials
	MW-2D	4/10/2007	X			VOCs (8260 w/MTBE)	(2) 40-ml vials
	MW-3D	4/10/2007	X			VOCs (8260 w/MTBE)	(2) 40-ml vials
	MW-4S	4/10/2007	X			VOCs (8260 w/MTBE)	(2) 40-ml vials
	Trip Blank	4/10/2007	X			VOCs (8260 w/MTBE)	(2) 40-ml vials

Chain-of-Custody Record

Bottles Relinquished from Lab by *[Signature]* Date/Time 4/10/07

Bottles received in field by *[Signature]* Date/Time 4/10/07

Samples Relinquished by *[Signature]* Date/Time 4/10/07

Samples Relinquished in LAB by *[Signature]* Date/Time 4/10/07

Turn-Around Time Requested-Specify Date Expected
if RUSH Requested: DATE DUE FOR RUSH: _____

X STANDARD RUSH(Define) _____

October 19, 2007

Rita Shaheen
Highlands Battle Site Properties, LLC
C/O Scenic Hudson Land Trust, Inc
One Civic Center Plaza, Suite 200
Poughkeepsie, NY 12601

Re: Letter Report of Groundwater Sampling performed on the former "Sakmann Property"
Located on U.S. Route 9W, Town of Highlands, Orange County, New York
Voluntary Cleanup Site Number: V-00083-3
ESI File: SF01123.43

Dear Ms. Shaheen:

This Letter Report of Groundwater Sampling (Letter Report) summarizes the investigative work performed by Ecosystems Strategies, Inc. (ESI) on the above-referenced property to document the presence or absence of hydrocarbon contamination in on-site groundwater. ESI personnel conducted well sampling activities at six (6) on-site monitoring wells (MW-1S, MW-1D, MW-2S, MW-2D, MW-3D and MW-4S) in July 2007. This is the sixth round of groundwater sampling conducted following the excavation of tetrachloroethylene ("PCE") contaminated soils in June 2005.

Summary of Services

The following services were performed by ESI:

- Conducted field screening and depth of groundwater measurements;
- Collected groundwater samples and submitted samples for laboratory analysis of volatile organic compounds (VOCs); and,
- Compared previous data (from the EnviroTrac 2002 sampling event and ESI's 2003 through 2006 sampling events) with current (July 2007) groundwater data.

Fieldwork

Groundwater Sampling Methodology

ESI personnel conducted sampling activities at monitoring wells MW-1S, MW-1D, MW-2S, MW-2D, and MW-4S on July 6, 2007. The PVC well casings had been vertically extended by ESI personnel during August 2006 in order to accommodate the proposed soil cover. The casings had not been set to final height and the wells were not resurveyed. MW-3, a steel stick-up well, was sampled on July 12, 2007. Depth-to-water data were collected but no groundwater-flow map was generated. Given the Site's steep topographic configuration, and the documented long-term consistency of groundwater flow, groundwater flow during the July sampling event is expected to have been in an easterly direction, to the nearby Hudson River.

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The Groundwater Flow Map produced during the June 2006 sampling event has been provided, for reference purposes, as Attachment A to this Letter Report.

The metal casing of MW-3D was damaged (partially bent) during the recent installation of the Site's soil cover and would not accommodate a submersible pump; the well was therefore sampled using a disposable bailer. All other wells were sampled utilizing the USEPA Low-Flow Method. Sampling equipment included a Grundfoss (stainless-steel) submersible Pump, Horiba U-22 Flow-Thru Cell (twelve parameter), and a Grundfoss Redi-Flow Frequency Modulator (pump control). Purge-water was screened for visual or olfactory indications of petroleum contamination (see the Fieldwork Observations Section, below).

All groundwater samples were collected in a manner consistent with New York State Department of Environmental Conservation (NYSDEC) sample collection protocols. All sample collection equipment was properly decontaminated prior to the initiation of sampling and between sample locations to avoid cross-contamination. All wells were sampled with the pump located near the well bottom (MW-3D was sampled with a bailer dropped to near the bottom of the well). Each groundwater sample was collected into two 40-ml sample vials (containing hydrochloric acid as a preservative) provided by the laboratory. After sample collection, the vials were placed in a cool (4° C), dry place prior to their transport to the laboratory (a trip blank was included in the sample cooler on both sampling days). At the completion of sampling, all groundwater samples were transported via courier to York Analytical Labs, Inc., a New York State Department of Health-approved laboratory (ELAP Certification Number 10854). Appropriate chain-of-custody procedures were followed.

Fieldwork Observations

No positive PID readings were recorded during initial screening of the monitoring wells and no wells exhibited petroleum odors or sheens. Table 1, below, presents the depth to water recorded for all monitoring wells (through the July 2007 sampling event).

Table 1: Depth to Water

Monitoring Well	Depth to Water (feet)										
	7/03	2/04	5/04	8/04	1/05	6/05	12/05	3/06	6/06	4/07	7/07
MW-1S	24.86	26.20	25.20	24.90	25.85	26.35	25.3	27.14	23.76	29.55	32.37
MW-1D	31.33	31.30	31.84	31.50	33.20	31.88	30.11	31.90	30.33	33.57	35.44
MW-2S	No data	No data	No data	No data	30.20	31.56	30.31	31.90	29.81	37.00	37.72
MW-2D	30.2	30.72	30.90	30.57	31.50	31.29	29.39	31.58	29.47	34.60	37.0
MW-3D	33.35	34.42	34.20	34.00	33.90	33.75	32.66	33.95	31.81	32.31	No data
MW-4S	No data	31.41	31.85	31.60	33.50	31.91	31.45	32.84	30.33	36.80	37.94

Laboratory Analysis

Groundwater Protection Standards

The guidance levels identified in this Letter Report are determined based on the NYSDEC's Division of Water Technical & Operational Guidance Series 1.1.1 Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations, June 1998, as modified through June 2004 (TOGS 1.1.1). All compounds referenced below are presented with their respective guidance levels.

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July 2007 Sampling Event

All samples were submitted for analysis of VOCs utilizing USEPA Method 8260. Low levels of MTBE (guidance level 10 µg/L) were detected in MW-1D (3 µg/L), MW-2D (1 µg/L), and MW-2S and MW-3D (2 µg/L). Low levels of dichloroethylene (guidance level 5 µg/L, a breakdown product of PCE) were also detected in MW-3D (1 µg/L). No VOCs were detected in wells MW-1S and MW-4S, or in the trip blank. [Note: contaminant concentrations below 5 µg/L are estimated values, i.e. "J" compounds].

Detected VOC concentrations for all ESI sampling rounds are presented in Table 2 (Attachment B), and laboratory results (July 2007) are provided as Attachment C.

Comparison of Current and Previous Laboratory Data

Current laboratory data are consistent with results from the 2004 and later pre-remediation sampling events, and the 2005 post-remediation sampling events, which show a significant reduction from VOC concentrations documented in 2002 and 2003, and document the continuing absence of significant groundwater contamination. Current concentrations of DCE and MTBE are consistent with previous findings, indicating an absence of significant on-site sources of these compounds. With the exception of a slightly elevated concentration of p-isopropyltoluene in June 2006 (7.5 µg/L, guidance level 5 µg/L), which has not subsequently been detected, no VOCs have been detected above guidance levels since the February 2004 sampling event. [Note: no significant VOC concentrations have been detected in the off-site, downgradient Provan well; see the Letter Report of Potable Supply-Well Sampling, dated October 5, 2007.]

Conclusions

This office has completed the groundwater sampling services summarized above on the former Sakmann Property located on US Route 9W, Town of Highlands, Orange County, New York. Current sampling data are consistent with previous data (2004 to 2007), which show only very low-levels of MTBE and DCE in on-site monitoring wells. No petroleum-related hydrocarbons (other than MTBE) were found in on-site groundwater (a source of MTBE contamination is known to be present in the local area, upgradient of the property). Previously detected low-level concentrations of p-isopropyltoluene and n-butylbenzene, detected only in June 2006, were not found during the subsequent sampling events, indicating an absence of a significant on-site source of petroleum contamination. These findings support the conclusion that contaminated soils formerly located at the property have not significantly impacted local groundwater resources. It is the opinion of this office that active on-site groundwater remediation is not necessary.

Given the consistent absence of significant contamination, ESI recommends that future groundwater testing should be conducted annually (next sampling event July 2008) and should be discontinued (with the concurrence of the NYSDEC and NYSDOH) if laboratory data continue to document the absence of any significant contaminant concentrations. All on-site wells should then be properly closed according to NYSDEC regulations. [Note: these recommendations are consistent with the NYSDEC approved Site Management Plan (October 2007).]

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Please review this information and call me at (845) 452-1658 should you have any questions or comments.

Sincerely,

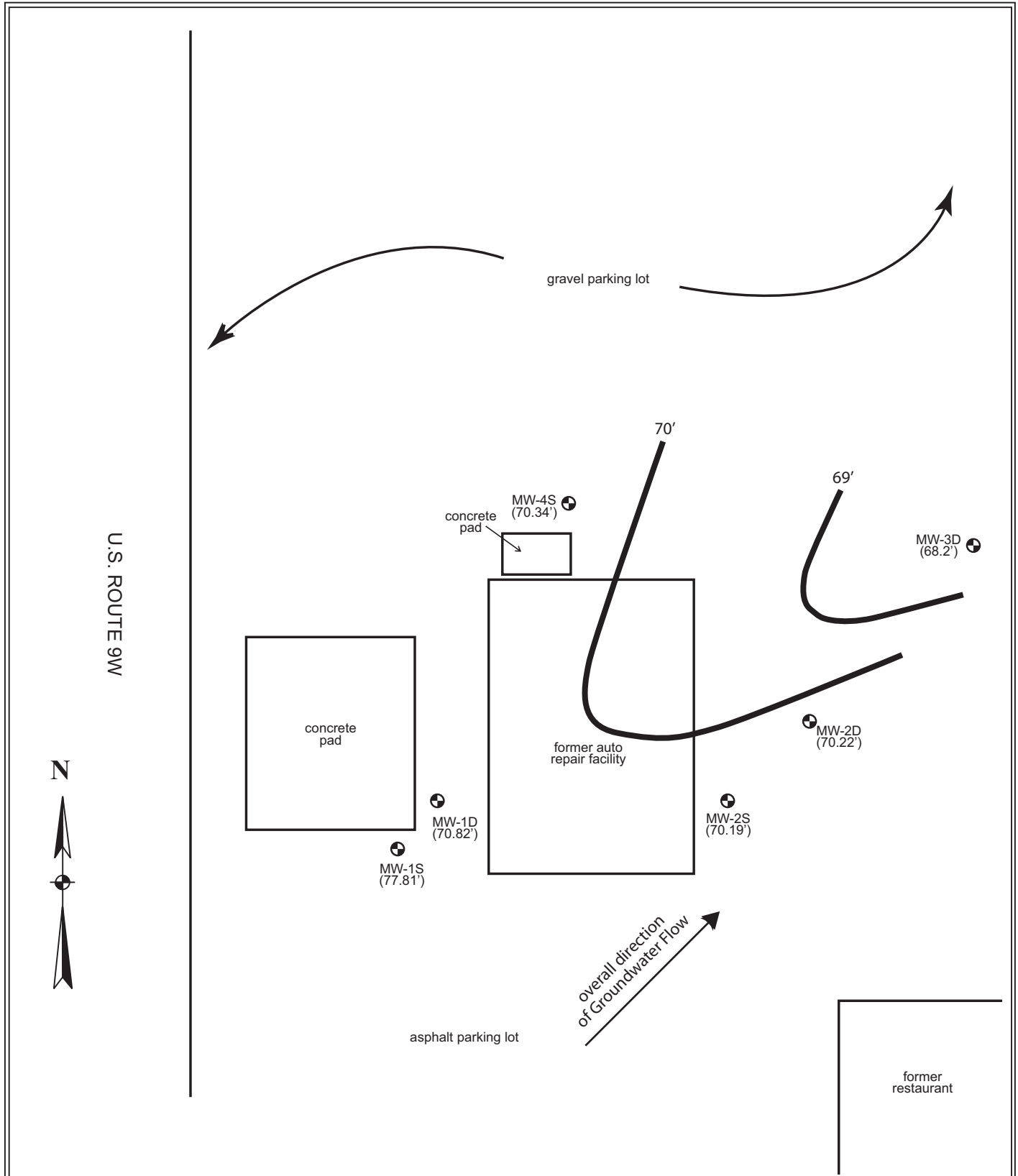
ECOSYSTEMS STRATEGIES, INC.




Paul H. Ciminello
President

Attachment A – Groundwater Flow Map
Attachment B – Table 2: Summary of Detected VOCs in Groundwater
Attachment C – Complete Laboratory Results

cc: K. Kulow
J. Rashak
File



All feature locations are approximate.
 Map based on field measurements. All elevations are relative to an arbitrary benchmark of 100 feet.

<p>Groundwater Flow Map June 2006 Former Sakmann Property U.S. Route 9W Town of Highlands Orange County, New York</p>	<p>Legend:  monitoring well with groundwater elevation noted parenthetically MW-1S</p>	<p>ESI File: SF01123.43</p>
		<p>June 2006</p>
		<p>Not to Scale</p>
		<p>Attachment</p>

**Table 2: Summary of Detected VOCs in Groundwater
(May 2002 through July 2007 Sampling Events)**

All data provided in micrograms per liter. Concentrations in **bold** exceed NYSDEC established guidance levels

VOCs (Method 8260)	Guidance Level	MW-1S													MW-1D												
		5/02	7/03	2/04	5/04	8/04	1/05	6/05	12/05	3/06	6/06	10/06	4/07	7/07	5/02	7/03	2/04	5/04	8/04	1/05	6/05	12/05	3/06	6/06	10/06	4/07	7/07
Bromomethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-DCE	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MTBE	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4	4	5	8	ND	6	6	3*	1.2*	3*	3*	3*
n-Butylbenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.3*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
p-Isopropyltoluene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2*	ND	ND	ND
PCE	5	ND	ND	ND	ND	ND	ND	1	ND	ND	1.3*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Table 2: Continued

VOCs (Method 8260)	Guidance Level	MW-2S													MW-2D												
		5/02	7/03	2/04	5/04	8/04	1/05	6/05	12/05	3/06	6/06	10/06	4/07	7/07	5/02	7/03	2/04	5/04	8/04	1/05	6/05	12/05	3/06	6/06	10/06	4/07	7/07
Bromomethane	5	ND	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	7	1	NA	NA	NA	NA	ND	ND	ND	ND	ND	NA	ND	6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane	5	ND	NA	NA	NA	NA	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-DCE	5	58	NA	NA	NA	NA	ND	2	2	1*	1.3*	ND	NA	ND	1	21	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	ND
MTBE	10	22	NA	NA	NA	NA	ND	1	1	3*	3.5*	3*	NA	2*	ND	1	ND	2	3	ND	1	2	2*	2.2*	2*	1*	2*
n-Butylbenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
p-Isopropyltoluene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	1*	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.5*	ND	ND	ND
PCE	5	2	NA	NA	NA	NA	ND	2	3	2*	1.9*	2*	NA	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Table 2: Continued

VOCs (Method 8260)	Guidance Level	MW-3D													MW-4S												
		5/02	7/03	2/04	5/04	8/04	1/05	6/05	12/05	3/06	6/06	10/06	4/07	7/07	5/02	7/03	2/04	5/04	8/04	1/05	6/05	12/05	3/06	6/06	10/06	4/07	7/07
Bromomethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-DCE	5	21	20	9	ND	5	ND	5	4	3*	3.8*	4*	5*	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MTBE	10	19	9	4	7	3	ND	3	3	2*	2.9*	2*	ND	ND	ND	3	1	1	1	ND	1	4	4*	1.2*	ND	ND	ND
n-Butylbenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
p-Isopropyltoluene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.8*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8*	ND	ND	ND
PCE	5	2	2	1	ND	ND	ND	1	2	1*	1.2*	1*	1*	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

NOTES:

Only detected compounds are presented.

Guidance Levels based on NYSDEC TOGS 1.1.1

* laboratory data since March 2006 utilize a MDL of 5 micrograms per liter, with "J" compounds reported to 1 micrograms per liter.

ND = Not Detected above specified detection limit.

NA = Not Available (well not sampled)

YORK

ANALYTICAL LABORATORIES, INC.

Technical Report

prepared for:

Ecosystems Strategies, Inc.
24 Davis Avenue
Poughkeepsie, NY 12603
Attention: Scott Spitzer

Report Date: 7/12/2007
Re: Client Project ID: SF01123.44
York Project No.: 07070240

CT License No. PH-0723

New York License No. 10854



Report Date: 7/12/2007
 Client Project ID: SF01123.44
 York Project No.: 07070240

Ecosystems Strategies, Inc.
 24 Davis Avenue
 Poughkeepsie, NY 12603
 Attention: Scott Spitzer

Purpose and Results

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on 07/10/07. The project was identified as your project "SF01123.44".

The analyses were conducted utilizing appropriate EPA, Standard Methods, and ASTM methods as detailed in the data summary tables.

All samples were received in proper condition meeting the NELAC acceptance requirements for environmental samples except those indicated under the Notes section of this report.

All the analyses met the method and laboratory standard operating procedure requirements except as indicated under the Notes section of this report, or as indicated by any data flags, the meaning of which is explained in the attachment to this report, if applicable.

The results of the analyses, which are all reported on an as-received basis unless otherwise noted, are summarized in the following table(s).

Analysis Results

Client Sample ID			MW-1S		MW-4S	
York Sample ID			07070240-01		07070240-02	
Matrix			WATER		WATER	
Parameter	Method	Units	Results	MDL	Results	MDL
Volatiles, 8260 List + MTBE	SW846-8260	ug/L	---	---	---	---
1,1,1,2-Tetrachloroethane			Not detected	5.0	Not detected	5.0
1,1,1-Trichloroethane			Not detected	5.0	Not detected	5.0
1,1,2,2-Tetrachloroethane			Not detected	5.0	Not detected	5.0
1,1,2-Trichloroethane			Not detected	5.0	Not detected	5.0
1,1-Dichloroethane			Not detected	5.0	Not detected	5.0
1,1-Dichloroethylene			Not detected	5.0	Not detected	5.0
1,1-Dichloropropylene			Not detected	5.0	Not detected	5.0
1,2,3-Trichlorobenzene			Not detected	5.0	Not detected	5.0
1,2,3-Trichloropropane			Not detected	5.0	Not detected	5.0
1,2,3-Trimethylbenzene			Not detected	5.0	Not detected	5.0
1,2,4-Trichlorobenzene			Not detected	5.0	Not detected	5.0
1,2,4-Trimethylbenzene			Not detected	5.0	Not detected	5.0
1,2-Dibromo-3-chloropropane			Not detected	5.0	Not detected	5.0
1,2-Dibromoethane			Not detected	5.0	Not detected	5.0
1,2-Dichlorobenzene			Not detected	5.0	Not detected	5.0
1,2-Dichloroethane			Not detected	5.0	Not detected	5.0

YORK

Client Sample ID			MW-1S		MW-4S	
York Sample ID			07070240-01		07070240-02	
Matrix			WATER		WATER	
Parameter	Method	Units	Results	MDL	Results	MDL
1,2-Dichloroethylene (Total)			Not detected	5.0	Not detected	5.0
1,2-Dichloropropane			Not detected	5.0	Not detected	5.0
1,3,5-Trimethylbenzene			Not detected	5.0	Not detected	5.0
1,3-Dichlorobenzene			Not detected	5.0	Not detected	5.0
1,3-Dichloropropane			Not detected	5.0	Not detected	5.0
1,4-Dichlorobenzene			Not detected	5.0	Not detected	5.0
2,2-Dichloropropane			Not detected	5.0	Not detected	5.0
2-Chlorotoluene			Not detected	5.0	Not detected	5.0
4-Chlorotoluene			Not detected	5.0	Not detected	5.0
Benzene			Not detected	5.0	Not detected	5.0
Bromobenzene			Not detected	5.0	Not detected	5.0
Bromochloromethane			Not detected	5.0	Not detected	5.0
Bromodichloromethane			Not detected	5.0	Not detected	5.0
Bromoform			Not detected	5.0	Not detected	5.0
Bromomethane			Not detected	5.0	Not detected	5.0
Carbon tetrachloride			Not detected	5.0	Not detected	5.0
Chlorobenzene			Not detected	5.0	Not detected	5.0
Chloroethane			Not detected	5.0	Not detected	5.0
Chloroform			Not detected	5.0	Not detected	5.0
Chloromethane			Not detected	5.0	Not detected	5.0
cis-1,3-Dichloropropylene			Not detected	5.0	Not detected	5.0
Dibromochloromethane			Not detected	5.0	Not detected	5.0
Dibromomethane			Not detected	5.0	Not detected	5.0
Dichlorodifluoromethane			Not detected	5.0	Not detected	5.0
Ethylbenzene			Not detected	5.0	Not detected	5.0
Hexachlorobutadiene			Not detected	5.0	Not detected	5.0
Isopropylbenzene			Not detected	5.0	Not detected	5.0
Methyl tert-butyl ether (MTBE)			Not detected	5.0	Not detected	5.0
Methylene chloride			Not detected	5.0	Not detected	5.0
Naphthalene			Not detected	5.0	Not detected	5.0
n-Butylbenzene			Not detected	5.0	Not detected	5.0
n-Propylbenzene			Not detected	5.0	Not detected	5.0
o-Xylene			Not detected	5.0	Not detected	5.0
p- & m-Xylenes			Not detected	5.0	Not detected	5.0
p-Isopropyltoluene			Not detected	5.0	Not detected	5.0
sec-Butylbenzene			Not detected	5.0	Not detected	5.0
Styrene			Not detected	5.0	Not detected	5.0
tert-Butylbenzene			Not detected	5.0	Not detected	5.0
Tetrachloroethylene			Not detected	5.0	Not detected	5.0
Toluene			Not detected	5.0	Not detected	5.0
trans-1,3-Dichloropropylene			Not detected	5.0	Not detected	5.0
Trichloroethylene			Not detected	5.0	Not detected	5.0
Trichlorofluoromethane			Not detected	5.0	Not detected	5.0
Vinyl chloride			Not detected	5.0	Not detected	5.0

YORK

Client Sample ID			MW-2D		MW-1D	
York Sample ID			07070240-03		07070240-04	
Matrix			WATER		WATER	
Parameter	Method	Units	Results	MDL	Results	MDL
Volatiles, 8260 List + MTBE	SW846-8260	ug/L	---	---	---	---
1,1,1,2-Tetrachloroethane			Not detected	5.0	Not detected	5.0
1,1,1-Trichloroethane			Not detected	5.0	Not detected	5.0
1,1,2,2-Tetrachloroethane			Not detected	5.0	Not detected	5.0
1,1,2-Trichloroethane			Not detected	5.0	Not detected	5.0
1,1-Dichloroethane			Not detected	5.0	Not detected	5.0
1,1-Dichloroethylene			Not detected	5.0	Not detected	5.0
1,1-Dichloropropylene			Not detected	5.0	Not detected	5.0
1,2,3-Trichlorobenzene			Not detected	5.0	Not detected	5.0
1,2,3-Trichloropropane			Not detected	5.0	Not detected	5.0
1,2,3-Trimethylbenzene			Not detected	5.0	Not detected	5.0
1,2,4-Trichlorobenzene			Not detected	5.0	Not detected	5.0
1,2,4-Trimethylbenzene			Not detected	5.0	Not detected	5.0
1,2-Dibromo-3-chloropropane			Not detected	5.0	Not detected	5.0
1,2-Dibromoethane			Not detected	5.0	Not detected	5.0
1,2-Dichlorobenzene			Not detected	5.0	Not detected	5.0
1,2-Dichloroethane			Not detected	5.0	Not detected	5.0
1,2-Dichloroethylene (Total)			Not detected	5.0	Not detected	5.0
1,2-Dichloropropane			Not detected	5.0	Not detected	5.0
1,3,5-Trimethylbenzene			Not detected	5.0	Not detected	5.0
1,3-Dichlorobenzene			Not detected	5.0	Not detected	5.0
1,3-Dichloropropane			Not detected	5.0	Not detected	5.0
1,4-Dichlorobenzene			Not detected	5.0	Not detected	5.0
2,2-Dichloropropane			Not detected	5.0	Not detected	5.0
2-Chlorotoluene			Not detected	5.0	Not detected	5.0
4-Chlorotoluene			Not detected	5.0	Not detected	5.0
Benzene			Not detected	5.0	Not detected	5.0
Bromobenzene			Not detected	5.0	Not detected	5.0
Bromochloromethane			Not detected	5.0	Not detected	5.0
Bromodichloromethane			Not detected	5.0	Not detected	5.0
Bromoform			Not detected	5.0	Not detected	5.0
Bromomethane			Not detected	5.0	Not detected	5.0
Carbon tetrachloride			Not detected	5.0	Not detected	5.0
Chlorobenzene			Not detected	5.0	Not detected	5.0
Chloroethane			Not detected	5.0	Not detected	5.0
Chloroform			Not detected	5.0	Not detected	5.0
Chloromethane			Not detected	5.0	Not detected	5.0
cis-1,3-Dichloropropylene			Not detected	5.0	Not detected	5.0
Dibromochloromethane			Not detected	5.0	Not detected	5.0
Dibromomethane			Not detected	5.0	Not detected	5.0
Dichlorodifluoromethane			Not detected	5.0	Not detected	5.0
Ethylbenzene			Not detected	5.0	Not detected	5.0
Hexachlorobutadiene			Not detected	5.0	Not detected	5.0
Isopropylbenzene			Not detected	5.0	Not detected	5.0
Methyl tert-butyl ether (MTBE)			2	5.0	3	5.0
Methylene chloride			Not detected	5.0	Not detected	5.0
Naphthalene			Not detected	5.0	Not detected	5.0
n-Butylbenzene			Not detected	5.0	Not detected	5.0
n-Propylbenzene			Not detected	5.0	Not detected	5.0
o-Xylene			Not detected	5.0	Not detected	5.0

YORK

Client Sample ID			MW-2D		MW-1D	
York Sample ID			07070240-03		07070240-04	
Matrix			WATER		WATER	
Parameter	Method	Units	Results	MDL	Results	MDL
p- & m-Xylenes			Not detected	5.0	Not detected	5.0
p-Isopropyltoluene			Not detected	5.0	Not detected	5.0
sec-Butylbenzene			Not detected	5.0	Not detected	5.0
Styrene			Not detected	5.0	Not detected	5.0
tert-Butylbenzene			Not detected	5.0	Not detected	5.0
Tetrachloroethylene			Not detected	5.0	Not detected	5.0
Toluene			Not detected	5.0	Not detected	5.0
trans-1,3-Dichloropropylene			Not detected	5.0	Not detected	5.0
Trichloroethylene			Not detected	5.0	Not detected	5.0
Trichlorofluoromethane			Not detected	5.0	Not detected	5.0
Vinyl chloride			Not detected	5.0	Not detected	5.0

Client Sample ID			MW-2S		Trip Blank	
York Sample ID			07070240-05		07070240-06	
Matrix			WATER		WATER	
Parameter	Method	Units	Results	MDL	Results	MDL
Volatiles, 8260 List + MTBE	SW846-8260	ug/L	---	---	---	---
1,1,1,2-Tetrachloroethane			Not detected	5.0	Not detected	5.0
1,1,1-Trichloroethane			Not detected	5.0	Not detected	5.0
1,1,2,2-Tetrachloroethane			Not detected	5.0	Not detected	5.0
1,1,2-Trichloroethane			Not detected	5.0	Not detected	5.0
1,1-Dichloroethane			Not detected	5.0	Not detected	5.0
1,1-Dichloroethylene			Not detected	5.0	Not detected	5.0
1,1-Dichloropropylene			Not detected	5.0	Not detected	5.0
1,2,3-Trichlorobenzene			Not detected	5.0	Not detected	5.0
1,2,3-Trichloropropane			Not detected	5.0	Not detected	5.0
1,2,3-Trimethylbenzene			Not detected	5.0	Not detected	5.0
1,2,4-Trichlorobenzene			Not detected	5.0	Not detected	5.0
1,2,4-Trimethylbenzene			Not detected	5.0	Not detected	5.0
1,2-Dibromo-3-chloropropane			Not detected	5.0	Not detected	5.0
1,2-Dibromoethane			Not detected	5.0	Not detected	5.0
1,2-Dichlorobenzene			Not detected	5.0	Not detected	5.0
1,2-Dichloroethane			Not detected	5.0	Not detected	5.0
1,2-Dichloroethylene (Total)			Not detected	5.0	Not detected	5.0
1,2-Dichloropropane			Not detected	5.0	Not detected	5.0
1,3,5-Trimethylbenzene			Not detected	5.0	Not detected	5.0
1,3-Dichlorobenzene			Not detected	5.0	Not detected	5.0
1,3-Dichloropropane			Not detected	5.0	Not detected	5.0
1,4-Dichlorobenzene			Not detected	5.0	Not detected	5.0
2,2-Dichloropropane			Not detected	5.0	Not detected	5.0
2-Chlorotoluene			Not detected	5.0	Not detected	5.0
4-Chlorotoluene			Not detected	5.0	Not detected	5.0
Benzene			Not detected	5.0	Not detected	5.0
Bromobenzene			Not detected	5.0	Not detected	5.0
Bromochloromethane			Not detected	5.0	Not detected	5.0
Bromodichloromethane			Not detected	5.0	Not detected	5.0
Bromoform			Not detected	5.0	Not detected	5.0
Bromomethane			Not detected	5.0	Not detected	5.0
Carbon tetrachloride			Not detected	5.0	Not detected	5.0

YORK

Client Sample ID			MW-2S		Trip Blank	
York Sample ID			07070240-05		07070240-06	
Matrix			WATER		WATER	
Parameter	Method	Units	Results	MDL	Results	MDL
Chlorobenzene			Not detected	5.0	Not detected	5.0
Chloroethane			Not detected	5.0	Not detected	5.0
Chloroform			Not detected	5.0	Not detected	5.0
Chloromethane			Not detected	5.0	Not detected	5.0
cis-1,3-Dichloropropylene			Not detected	5.0	Not detected	5.0
Dibromochloromethane			Not detected	5.0	Not detected	5.0
Dibromomethane			Not detected	5.0	Not detected	5.0
Dichlorodifluoromethane			Not detected	5.0	Not detected	5.0
Ethylbenzene			Not detected	5.0	Not detected	5.0
Hexachlorobutadiene			Not detected	5.0	Not detected	5.0
Isopropylbenzene			Not detected	5.0	Not detected	5.0
Methyl tert-butyl ether (MTBE)			2	5.0	Not detected	5.0
Methylene chloride			Not detected	5.0	Not detected	5.0
Naphthalene			Not detected	5.0	Not detected	5.0
n-Butylbenzene			Not detected	5.0	Not detected	5.0
n-Propylbenzene			Not detected	5.0	Not detected	5.0
o-Xylene			Not detected	5.0	Not detected	5.0
p- & m-Xylenes			Not detected	5.0	Not detected	5.0
p-Isopropyltoluene			Not detected	5.0	Not detected	5.0
sec-Butylbenzene			Not detected	5.0	Not detected	5.0
Styrene			Not detected	5.0	Not detected	5.0
tert-Butylbenzene			Not detected	5.0	Not detected	5.0
Tetrachloroethylene			Not detected	5.0	Not detected	5.0
Toluene			Not detected	5.0	Not detected	5.0
trans-1,3-Dichloropropylene			Not detected	5.0	Not detected	5.0
Trichloroethylene			Not detected	5.0	Not detected	5.0
Trichlorofluoromethane			Not detected	5.0	Not detected	5.0
Vinyl chloride			Not detected	5.0	Not detected	5.0

Units Key: For Waters/Liquids: mg/L = ppm ; ug/L = ppb For Soils/Solids: mg/kg = ppm ; ug/kg = ppb

Notes for York Project No. 07070240

1. The MDL (Minimum Detectable Limit) reported is adjusted for any dilution necessary due to the levels of target and/or non-target analytes and matrix interference. This MDL is the REPORTING LIMIT and is based upon the lowest standard utilized for calibration where applicable.
2. Samples are retained for a period of thirty days after submittal of report, unless other arrangements are made.
3. York's liability for the above data is limited to the dollar value paid to York for the referenced project.
4. This report shall not be reproduced without the written approval of York Analytical Laboratories, Inc.
5. All samples were received in proper condition for analysis with proper documentation.
6. All analyses conducted met method or Laboratory SOP requirements.
7. It is noted that no analyses reported herein were subcontracted to another laboratory.

Approved By: 

Robert Q. Bradley
Managing Director

Date: 7/12/2007

YORK

*0107010***Company Name**

Ecosystems Strategies, Inc.

Report to:

Scott Spitzer

Invoice to:

Brenda

Project ID/No.

SF01123.44

Samples Collected by (signature)
John M. Petronella

John Petronella

Name (printed)

Sample No.	Location/ID	Date Sampled	Sample Matrix			Analyses Requested	Container Desc.
			Water	Soil	Air		
	MW-1S	<i>7/6/07</i> 6/7/2007	X			VOCs (8260 w/MTBE)	(2) 40-ml vials
	MW-4S	<i>7/6/07</i> 6/7/2007	X			VOCs (8260 w/MTBE)	(2) 40-ml vials
	MW-2D	<i>7/6/07</i> 6/7/2007	X			VOCs (8260 w/MTBE)	(2) 40-ml vials
	MW-1D	<i>7/6/07</i> 6/7/2007	X			VOCs (8260 w/MTBE)	(2) 40-ml vials
	MW-2S	<i>7/6/07</i> 6/7/2007	X			VOCs (8260 w/MTBE)	(2) 40-ml vials
	MW-3D	<i>7/6/07</i> 6/7/2007	X			VOCs (8260 w/MTBE)	(2) 40-ml vials
	Trip Blank	<i>7/6/07</i> 6/7/2007	X			VOCs (8260 w/MTBE)	(2) 40-ml vials

Chain-of-Custody Record

Bottles Relinquished from Lab by

Date/Time

Bottles received in field by

Date/Time

Samples Relinquished by

Date/Time

Samples Relinquished by

Date/Time

Samples received by

Date/Time

Samples received in LAB by

Date/Time

Comments/Special Instructions **PLEASE REPORT "J" COMPOUNDS**Turn-Around Time Requested-Specify Date Expected
if RUSH Requested: DATE DUE FOR RUSH:*SIL*

X STANDARD RUSH(Define)

C. Nat
 Samples Relinquished by: *7/6/07*
 Date/Time: *7/6/07*
 Samples received by: *John M. Petronella*
 Date/Time: *7/6/07*
 Samples received in LAB by: *John M. Petronella*
 Date/Time: *7/6/07*

YORK

ANALYTICAL LABORATORIES, INC.

Technical Report

prepared for:

Ecosystems Strategies, Inc.
24 Davis Avenue
Poughkeepsie, NY 12603
Attention: John Petronella

Report Date: 7/19/2007
Re: Client Project ID: SF 01123.44
York Project No.: 07070400 R

CT License No. PH-0723

New Jersey License No. CT-005

New York License No. 10854



Report Date: 7/19/2007
 Client Project ID: SF 01123.44
 York Project No.: 07070400 R

Ecosystems Strategies, Inc.
 24 Davis Avenue
 Poughkeepsie, NY 12603
 Attention: John Petronella

Purpose and Results

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on 07/12/07. The project was identified as your project "SF 01123.44".

The analyses were conducted utilizing appropriate EPA, Standard Methods, and ASTM methods as detailed in the data summary tables.

All samples were received in proper condition meeting the NELAC acceptance requirements for environmental samples except those indicated under the Notes section of this report.

All the analyses met the method and laboratory standard operating procedure requirements except as indicated under the Notes section of this report, or as indicated by any data flags, the meaning of which is explained in the attachment to this report, if applicable.

The results of the analyses, which are all reported on an as-received basis unless otherwise noted, are summarized in the following table(s).

Analysis Results

Client Sample ID			MW-3D		
York Sample ID			07070400-01		
Matrix			WATER		
Parameter	Method	Units	Result	Qualifier	RL
Volatiles, 8260 List	SW846-8260	ug/L	---	---	---
1,1,1,2-Tetrachloroethane			Not detected		5.0
1,1,1-Trichloroethane			Not detected		5.0
1,1,2,2-Tetrachloroethane			Not detected		5.0
1,1,2-Trichloroethane			Not detected		5.0
1,1-Dichloroethane			Not detected		5.0
1,1-Dichloroethylene			Not detected		5.0
1,1-Dichloropropylene			Not detected		5.0
1,2,3-Trichlorobenzene			Not detected		5.0
1,2,3-Trichloropropane			Not detected		5.0
1,2,3-Trimethylbenzene			Not detected		5.0
1,2,4-Trichlorobenzene			Not detected		5.0
1,2,4-Trimethylbenzene			Not detected		5.0
1,2-Dibromo-3-chloropropane			Not detected		5.0
1,2-Dibromoethane			Not detected		5.0
1,2-Dichlorobenzene			Not detected		5.0

Client Sample ID			MW-3D		
York Sample ID			07070400-01		
Matrix			WATER		
Parameter	Method	Units	Result	Qualifier	RL
1,2-Dichloroethane			Not detected		5.0
1,2-Dichloroethylene (Total)			1 (cis-)	J	5.0
1,2-Dichloropropane			Not detected		5.0
1,3,5-Trimethylbenzene			Not detected		5.0
1,3-Dichlorobenzene			Not detected		5.0
1,3-Dichloropropane			Not detected		5.0
1,4-Dichlorobenzene			Not detected		5.0
1-Chlorohexane			Not detected		5.0
2,2-Dichloropropane			Not detected		5.0
2-Chlorotoluene			Not detected		5.0
4-Chlorotoluene			Not detected		5.0
Benzene			Not detected		5.0
Bromobenzene			Not detected		5.0
Bromochloromethane			Not detected		5.0
Bromodichloromethane			Not detected		5.0
Bromoform			Not detected		5.0
Bromomethane			Not detected		5.0
Carbon tetrachloride			Not detected		5.0
Chlorobenzene			Not detected		5.0
Chloroethane			Not detected		5.0
Chloroform			Not detected		5.0
Chloromethane			Not detected		5.0
cis-1,3-Dichloropropylene			Not detected		5.0
Dibromochloromethane			Not detected		5.0
Dibromomethane			Not detected		5.0
Dichlorodifluoromethane			Not detected		5.0
Ethylbenzene			Not detected		5.0
Hexachlorobutadiene			Not detected		5.0
Isopropylbenzene			Not detected		5.0
Methylene chloride			Not detected		5.0
MTBE			2	J	5.0
Naphthalene			Not detected		5.0
n-Butylbenzene			Not detected		5.0
n-Propylbenzene			Not detected		5.0
o-Xylene			Not detected		5.0
p- & m-Xylenes			Not detected		5.0
p-Isopropyltoluene			Not detected		5.0
sec-Butylbenzene			Not detected		5.0
Styrene			Not detected		5.0
tert-Butylbenzene			Not detected		5.0
Tetrachloroethylene			Not detected		5.0
Toluene			Not detected		5.0
trans-1,3-Dichloropropylene			Not detected		5.0
Trichloroethylene			Not detected		5.0
Trichlorofluoromethane			Not detected		5.0
Vinyl chloride			Not detected		5.0

Units Key: For Waters/Liquids: mg/L = ppm ; ug/L = ppb

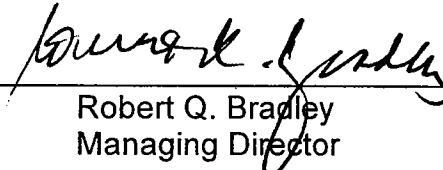
For Soils/Solids: mg/kg = ppm ; ug/kg = ppb

Report Date: 7/19/2007
Client Project ID: SF 01123.44
York Project No.: 07070400 R

Notes for York Project No. 07070400 R

1. The "RL" is the REPORTING LIMIT and is adjusted for any dilution necessary due to the levels of target and/or non-target analytes and matrix interference. This REPORTING LIMIT is based upon the lowest standard utilized for calibration where applicable.
2. Samples are retained for a period of thirty days after submittal of report, unless other arrangements are made.
3. York's liability for the above data is limited to the dollar value paid to York for the referenced project.
4. This report shall not be reproduced without the written approval of York Analytical Laboratories, Inc.
5. All samples were received in proper condition for analysis with proper documentation.
6. All analyses conducted met method or Laboratory SOP requirements.
7. It is noted that no analyses reported herein were subcontracted to another laboratory.
8. Other attachments to this report, including Chain-of-custody documentation and Case narratives are hereby made a part of this report.

Approved By: _____


Robert Q. Bradley
Managing Director

Date: 7/19/2007



Ecosystems Strategies, Inc.

24 Davis Avenue, Poughkeepsie, NY 12603

phone 845.452.1658 | fax 845.485.7083 | ecosystemsstrategies.com

August 25, 2008

Rita Shaheen
Highlands Battle Site Properties, LLC
C/O Scenic Hudson Land Trust, Inc
One Civic Center Plaza, Suite 200
Poughkeepsie, NY 12601

via EMAIL: rshaheen@scenichudson.org

Re: Letter Report of Groundwater Sampling performed on the former "Sakmann Property"
Located on U.S. Route 9W, Town of Highlands, Orange County, New York
ESI File: SF01123.42

Dear Ms. Shaheen:

This Letter Report of Groundwater Sampling (Letter Report) summarizes the investigative work performed by Ecosystem Strategies, Inc. (ESI) on the above-referenced property to document the presence or absence of hydrocarbon contamination in on-site groundwater. ESI personnel conducted well sampling activities at five (5) on-site monitoring wells (MW-1S, MW-1D, MW-2S, MW-2D, and MW-4S) in August 2008. This is the seventh round of groundwater sampling conducted following the excavation of tetrachloroethylene (PCE) contaminated soils in June 2005. MW-3D, which had been sampled in previous rounds and had been reported to be damaged, could not be located during the August 2008 sampling event and is presumed to be destroyed.

Summary of Services

The following services were performed by ESI:

- Field screening and depth of groundwater measurements at all available monitoring wells;
- Groundwater sampling and submission of the samples for laboratory analysis of volatile organic compounds (VOCs); and,
- Comparison of previous data (from the EnviroTrac 2002 sampling event and ESI's 2003 through 2007 sampling events) with current (August 2008) groundwater data.

Fieldwork

Groundwater Sampling Methodology

ESI personnel conducted groundwater sampling activities at monitoring wells MW-1S and MW-1D on August 1, 2008 and MW-2S, MW-2D and MW-4S on August 4, 2008 (see attached Well Location Map). Immediately upon removing well caps, wells were screened for volatile compounds with a properly calibrated MiniRae 2000 photoionization detector (PID). Depth-to-



R. Shaheen
August 25, 2008
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Page 2 of 4

water measurements were recorded. Given the Site's steep topographic configuration, and the documented long-term consistency of groundwater flow, groundwater flow during the August 2008 sampling event is expected to have been in an easterly direction, towards the nearby Hudson River.

All wells were sampled utilizing the United States Environmental Protection Agency (USEPA) Low-Flow Method. Sampling equipment included a Grundfos (stainless-steel) submersible pump, Grundfos Redi-Flow Frequency Modulator (pump control) and a Horiba U-22 Flow-Thru Cell (twelve parameter). Purge-water was screened for visual or olfactory indications of contamination (see the Fieldwork Observations Section, below).

All groundwater samples were collected in a manner consistent with New York State Department of Environmental Conservation (NYSDEC) sample collection protocols. All sample collection equipment was properly decontaminated prior to initiation of sampling and between sample locations to avoid cross-contamination. Each groundwater sample was collected into three (3) 40-mL sample vials (containing hydrochloric acid as a preservative) provided by the laboratory. After sample collection, the vials were kept at approximately 4° C prior to shipment for analysis. At the completion of sampling activities, all groundwater samples were transported via courier to York Analytical Laboratories, Inc., a New York State Department of Health-approved laboratory (ELAP Certification Number 10854). Appropriate chain-of-custody procedures were followed.

Fieldwork Observations

No positive PID readings were recorded during the initial screening of the monitoring wells and no purge water exhibited odors or sheens suggestive of contamination. An attempt was made by ESI personnel to locate MW-3D. MW-3D could not be visibly located and is presumed to be destroyed. Table 1, below, summarizes field observations for the August 2008 sampling event.

Table 1: Field Observations

Well ID	Depth to Groundwater	PID Reading (ppm)	Observations
MW-1S	30.65'	0	No evidence of contamination
MW-1D	34.90'	0	No evidence of contamination
MW-2S	37.98'	0	No evidence of contamination
MW-2D	36.42'	0	No evidence of contamination
MW-3D	Could not be located		
MW-4S	37.1'	0	No evidence of contamination



R. Shaheen
August 25, 2008
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Laboratory Analysis

Groundwater Protection Standards

The guidance levels identified in this Letter Report are determined based on the NYSDEC's Division of Water Technical & Operational Guidance Series 1.1.1. Ambient water Quality Standards and Guidance Values and Groundwater Effluent Limitations, June 1998, as modified through June 2004 (TOGS 1.1.1). All compounds referenced below are presented with their respective guidance levels.

August 2008 Sampling Event

All samples were submitted for analysis of VOCs plus MTBE utilizing USEPA Method 8260. Low levels of MTBE (guidance level 10 ug/L) were detected in MW-1D (6 ug/L), MW-2S (3 ug/L), and MW-4S (2 ug/L). A low level of PCE was detected in MW-4S (2 ug/L, guidance level 5 ug/L). No VOCs were detected in MW-1S and MW-2D. No other reportable concentrations of VOCs were detected in any of the samples. [Note: contaminant concentrations below 5 ug/L are estimated values, i.e. "J" compounds.]

Comparison of Current and Previous Laboratory Data

Current laboratory data document a continuing absence of significant groundwater contamination in post-remediation samples. No VOCs above guidance values have been detected since 2004, with the exception of a slightly elevated concentration of p-isopropyltoluene in June 2006 (7.5 ug/L, guidance level 5 ug/L). Current concentrations of MTBE (Non-detect to 6 ug/L) are consistent with previous findings, indicating the absence of significant on-site contamination. PCE detected in one monitoring well (MW-2S) during the current 2008 sampling event is well below the NYSDEC guidance value. [Note: no significant VOC concentrations have been detected in the off-site, downgradient Provan well last sampled in 2007. At the request of the New York State Department of Health (NYSDOH), a letter seeking permission to re-sample this well has been sent to the residence and ESI anticipates a response within the next month. Upon obtaining permission, the Provan well will be sampled and a separate letter report will be issued.]



R. Shaheen
August 25, 2008
ESI File: SF01123.42
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Conclusions

ESI has completed groundwater sampling at the former Sakmann Property located on U.S. Route 9W, Town of Highlands, Orange County, New York. Current sampling data are consistent with previous data (2004 to 2007), which indicate that only very low levels of MTBE and PCE remain in on-site monitoring wells. No petroleum-related hydrocarbons (other than MTBE) were found in on-site groundwater. A source of MTBE contamination is known to be present in the local area, upgradient of the property. These findings support the conclusion that contaminated soils, formerly located at the property, have not significantly impacted local groundwater resources. It is the opinion of this office that active on-site groundwater remediation is not necessary.

Given the continued and consistent absence of significant contamination, ESI recommends that groundwater testing be discontinued (with the approval of the NYSDEC and the NYSDOH). All on-site wells can then be properly closed in accordance with NYSDEC regulations. These recommendations are consistent with the NYSDEC approved Site Management Plan (October 2007).

Please review this document and call me at (845) 452-1658 should you have any questions or comments.

Sincerely,

ECOSYSTEMS STRATEGIES, INC.

A handwritten signature in black ink, appearing to read "Paul Ciminello".

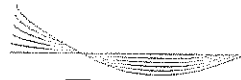
Paul Ciminello
President

Attachment A – Well Location Map

Attachment B - Table 2: Summary of Detected VOCs in Groundwater

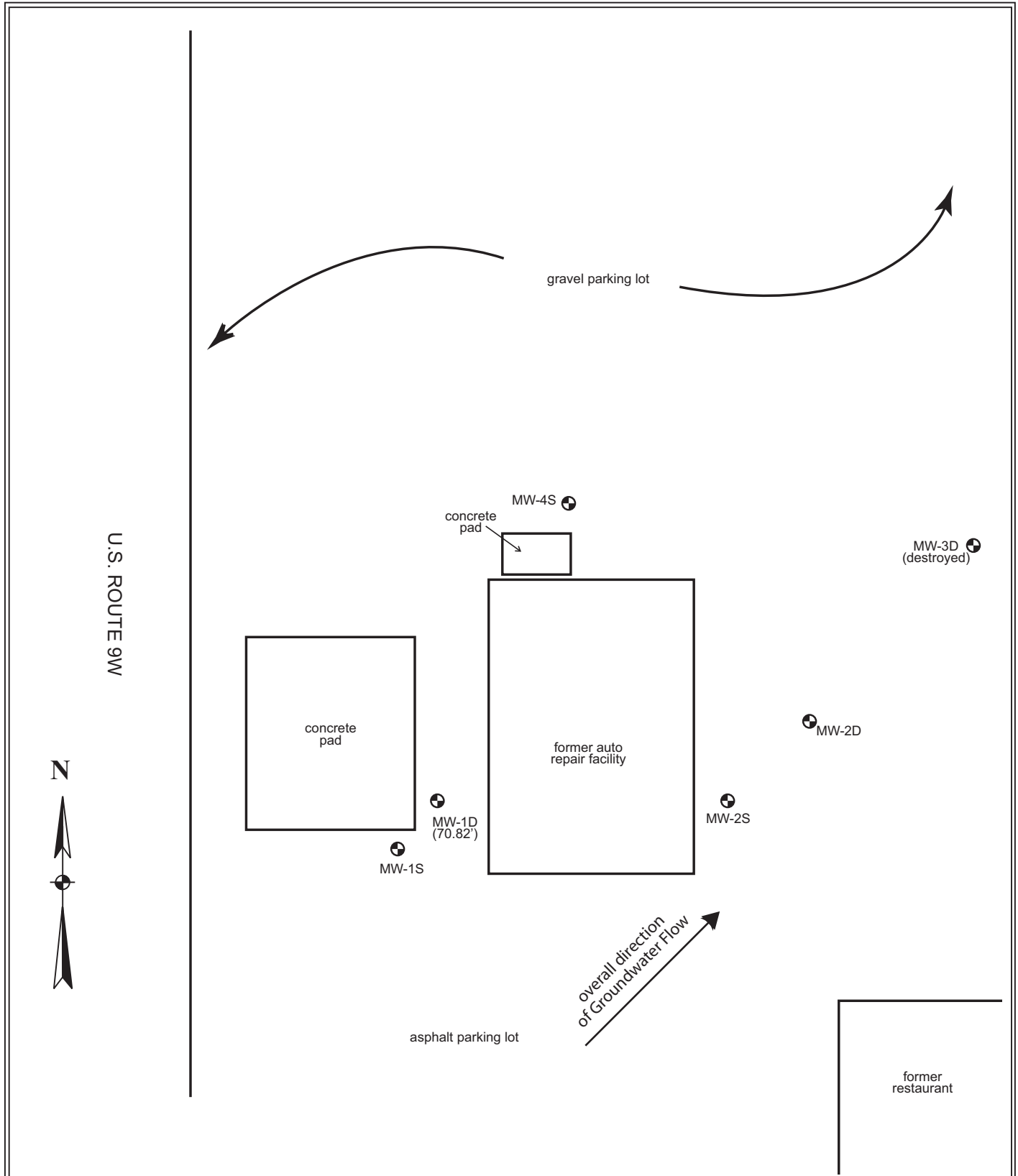
Attachment C – Complete Laboratory Results (August 2008)

cc: John Rashak, NYSDEC
Kristin Kulow, NYSDOH
File




ATTACHMENT A

Well Location Map



All feature locations are approximate.
 Map based on field measurements. All elevations are relative to an arbitrary benchmark of 100 feet.

<p>Well Location Map August 2008 Former Sakmann Property U.S. Route 9W Town of Highlands Orange County, New York</p>	<p>Legend:  monitoring well MW-1S</p>	<p>ESI File: SF01123.42</p>
		<p>August 2008</p>
		<p>Not to Scale</p>
		<p>Attachment</p>



ATTACHMENT B

Table 2: Summary of Detected VOCs in Groundwater

**Table 2: Summary of Detected VOCs in Groundwater
(May 2002 through August 2008 Sampling Events)**

All data provided in micrograms per liter (ug/L). Concentrations in **bold** exceed NYSDEC established guidance levels

VOCs (Method 8260)	Guidance Level	MW-1S													MW-1D														
		5/02	7/03	2/04	5/04	8/04	1/05	6/05	12/05	3/06	6/06	10/06	4/07	7/07	8/8	5/02	7/03	2/04	5/04	8/04	1/05	6/05	12/05	3/06	6/06	10/06	4/07	7/07	8/8
Bromomethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-DCE	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MTBE	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4	4	5	8	ND	6	6	3*	1.2*	3*	3*	3*	6	
n-Butylbenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.3*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
p-Isopropyltoluene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2*	ND	ND	ND	ND	ND
PCE	5	ND	ND	ND	ND	ND	ND	1	ND	ND	1.3*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Table 2: Continued

VOCs (Method 8260)	Guidance Level	MW-2S													MW-2D															
		5/02	7/03	2/04	5/04	8/04	1/05	6/05	12/05	3/06	6/06	10/06	4/07	7/07	8/8	5/02	7/03	2/04	5/04	8/04	1/05	6/05	12/05	3/06	6/06	10/06	4/07	7/07	8/8	
Bromomethane	5	ND	NA	NA	NA	NA	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Chloroform	7	1	NA	NA	NA	NA	ND	ND	ND	ND	ND	NA	ND	ND	6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Chloromethane	5	ND	NA	NA	NA	NA	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
1,2-DCE	5	58	NA	NA	NA	NA	ND	2	2	1*	1.3*	ND	NA	ND	ND	1	21	ND	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	
MTBE	10	22	NA	NA	NA	NA	ND	1	1	3*	3.5*	3*	NA	2*	3*	ND	1	ND	2	3	ND	1	2	2*	2.2*	2*	1*	2*	ND	
n-Butylbenzene	5	ND	NA	NA	NA	NA	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
p-Isopropyltoluene	5	ND	NA	NA	NA	NA	ND	ND	ND	ND	1*	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.5*	ND	ND	ND	ND	ND	
PCE	5	2	NA	NA	NA	NA	ND	2	3	2*	1.9*	2*	NA	ND	2*	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	

Table 2: Continued

VOCs (Method 8260)	Guidance Level	MW-3D													MW-4S															
		5/02	7/03	2/04	5/04	8/04	1/05	6/05	12/05	3/06	6/06	10/06	4/07	7/07	8/8	5/02	7/03	2/04	5/04	8/04	1/05	6/05	12/05	3/06	6/06	10/06	4/07	7/07	8/8	
Bromomethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Chloroform	7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-DCE	5	21	20	9	ND	5	ND	5	4	3*	3.8*	4*	5*	ND	NA	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
MTBE	10	19	9	4	7	3	ND	3	3	2*	2.9*	2*	ND	ND	NA	ND	3	1	1	1	ND	1	4	4*	1.2*	ND	ND	ND	2	
n-Butylbenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
p-Isopropyltoluene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.8*	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	0.8*	ND	ND	ND	ND	ND	
PCE	5	2	2	1	ND	ND	ND	1	2	1*	1.2*	1*	1*	ND	NA	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	

NOTES:

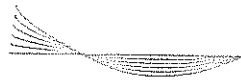
Only detected compounds are presented.

Guidance Levels based on NYSDEC TOGS 1.1.1

* Estimated value ("J" compound), based on a MDL of 5 micrograms per liter.

ND = Not Detected above specified detection limit.

NA = Not Available (well not sampled)



Ecosystems Strategies, Inc.

ATTACHMENT C

***Complete Laboratory Results
(August 2008)***

YORK

ANALYTICAL LABORATORIES, INC.

Technical Report

prepared for:

Ecosystems Strategies, Inc.
24 Davis Avenue
Poughkeepsie, NY 12603
Attention: Richard Greenemeier

Report Date: 8/12/2008
Re: Client Project ID: SF01123.42
York Project No.: 08080180

CT License No. PH-0723

New Jersey License No. CT-005

New York License No. 10854



Report Date: 8/12/2008
Client Project ID: SF01123.42
York Project No.: 08080180

Ecosystems Strategies, Inc.
24 Davis Avenue
Poughkeepsie, NY 12603
Attention: Richard Greenemeier

Purpose and Results

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on 08/05/08. The project was identified as your project "SF01123.42".

The analyses were conducted utilizing appropriate EPA, Standard Methods, and ASTM methods as detailed in the data summary tables.

All samples were received in proper condition meeting the NELAC acceptance requirements for environmental samples except those indicated under the Notes section of this report.

All the analyses met the method and laboratory standard operating procedure requirements except as indicated under the Notes section of this report, or as indicated by any data flags, the meaning of which is explained in the attachment to this report, if applicable.

The results of the analyses, which are all reported on an as-received basis unless otherwise noted, are summarized in the following table(s).

Analysis Results

Client Sample ID			MW-2D		
York Sample ID			08080180-01		
Matrix			WATER		
Parameter	Method	Units	Result	Qualifier	RL
Volatiles, 8260 List + MTBE	SW846-8260	ug/L	---	---	---
1,1,1,2-Tetrachloroethane			Not detected		5.0
1,1,1-Trichloroethane			Not detected		5.0
1,1,2,2-Tetrachloroethane			Not detected		5.0
1,1,2-Trichloroethane			Not detected		5.0
1,1-Dichloroethane			Not detected		5.0
1,1-Dichloroethylene			Not detected		5.0
1,1-Dichloropropylene			Not detected		5.0
1,2,3-Trichlorobenzene			Not detected		5.0
1,2,3-Trichloropropane			Not detected		5.0
1,2,4-Trichlorobenzene			Not detected		5.0
1,2,4-Trimethylbenzene			Not detected		5.0
1,2-Dibromo-3-chloropropane			Not detected		5.0

Client Sample ID			MW-2D		
York Sample ID			08080180-01		
Matrix			WATER		
Parameter	Method	Units	Result	Qualifier	RL
1,2-Dibromoethane			Not detected		5.0
1,2-Dichlorobenzene			Not detected		5.0
1,2-Dichloroethane			Not detected		5.0
1,2-Dichloroethylene (Total)			Not detected		5.0
1,2-Dichloropropane			Not detected		5.0
1,3,5-Trimethylbenzene			Not detected		5.0
1,3-Dichlorobenzene			Not detected		5.0
1,3-Dichloropropane			Not detected		5.0
1,4-Dichlorobenzene			Not detected		5.0
2,2-Dichloropropane			Not detected		5.0
2-Chlorotoluene			Not detected		5.0
4-Chlorotoluene			Not detected		5.0
Benzene			Not detected		5.0
Bromobenzene			Not detected		5.0
Bromochloromethane			Not detected		5.0
Bromodichloromethane			Not detected		5.0
Bromoform			Not detected		5.0
Bromomethane			Not detected		5.0
Carbon tetrachloride			Not detected		5.0
Chlorobenzene			Not detected		5.0
Chloroethane			Not detected		5.0
Chloroform			Not detected		5.0
Chloromethane			Not detected		5.0
cis-1,3-Dichloropropylene			Not detected		5.0
Dibromochloromethane			Not detected		5.0
Dibromomethane			Not detected		5.0
Dichlorodifluoromethane			Not detected		5.0
Ethylbenzene			Not detected		5.0
Hexachlorobutadiene			Not detected		5.0
Isopropylbenzene			Not detected		5.0
Methyl tert-butyl ether (MTBE)			Not detected		5.0
Methylene chloride			Not detected		5.0
Naphthalene			Not detected		5.0
n-Butylbenzene			Not detected		5.0
n-Propylbenzene			Not detected		5.0
o-Xylene			Not detected		5.0
p- & m-Xylenes			Not detected		5.0
p-Isopropyltoluene			Not detected		5.0
sec-Butylbenzene			Not detected		5.0
Styrene			Not detected		5.0
tert-Butylbenzene			Not detected		5.0
Tetrachloroethylene			Not detected		5.0
Toluene			Not detected		5.0
trans-1,3-Dichloropropylene			Not detected		5.0
Trichloroethylene			Not detected		5.0
Trichlorofluoromethane			Not detected		5.0
Vinyl chloride			Not detected		5.0

Client Sample ID			MW-2S		
York Sample ID			08080180-02		
Matrix			WATER		
Parameter	Method	Units	Result	Qualifier	RL
Volatiles, 8260 List + MTBE	SW846-8260	ug/L	---	---	---
1,1,1,2-Tetrachloroethane			Not detected		5.0
1,1,1-Trichloroethane			Not detected		5.0
1,1,2,2-Tetrachloroethane			Not detected		5.0
1,1,2-Trichloroethane			Not detected		5.0
1,1-Dichloroethane			Not detected		5.0
1,1-Dichloroethylene			Not detected		5.0
1,1-Dichloropropylene			Not detected		5.0
1,2,3-Trichlorobenzene			Not detected		5.0
1,2,3-Trichloropropane			Not detected		5.0
1,2,4-Trichlorobenzene			Not detected		5.0
1,2,4-Trimethylbenzene			Not detected		5.0
1,2-Dibromo-3-chloropropane			Not detected		5.0
1,2-Dibromoethane			Not detected		5.0
1,2-Dichlorobenzene			Not detected		5.0
1,2-Dichloroethane			Not detected		5.0
1,2-Dichloroethylene (Total)			Not detected		5.0
1,2-Dichloropropane			Not detected		5.0
1,3,5-Trimethylbenzene			Not detected		5.0
1,3-Dichlorobenzene			Not detected		5.0
1,3-Dichloropropane			Not detected		5.0
1,4-Dichlorobenzene			Not detected		5.0
2,2-Dichloropropane			Not detected		5.0
2-Chlorotoluene			Not detected		5.0
4-Chlorotoluene			Not detected		5.0
Benzene			Not detected		5.0
Bromobenzene			Not detected		5.0
Bromochloromethane			Not detected		5.0
Bromodichloromethane			Not detected		5.0
Bromoform			Not detected		5.0
Bromomethane			Not detected		5.0
Carbon tetrachloride			Not detected		5.0
Chlorobenzene			Not detected		5.0
Chloroethane			Not detected		5.0
Chloroform			Not detected		5.0
Chloromethane			Not detected		5.0
cis-1,3-Dichloropropylene			Not detected		5.0
Dibromochloromethane			Not detected		5.0
Dibromomethane			Not detected		5.0
Dichlorodifluoromethane			Not detected		5.0
Ethylbenzene			Not detected		5.0
Hexachlorobutadiene			Not detected		5.0
Isopropylbenzene			Not detected		5.0
Methyl tert-butyl ether (MTBE)			3	J	5.0
Methylene chloride			Not detected		5.0
Naphthalene			Not detected		5.0
n-Butylbenzene			Not detected		5.0

YORK

Client Sample ID			MW-2S		
York Sample ID			08080180-02		
Matrix			WATER		
Parameter	Method	Units	Result	Qualifier	RL
n-Propylbenzene			Not detected		5.0
o-Xylene			Not detected		5.0
p- & m-Xylenes			Not detected		5.0
p-Isopropyltoluene			Not detected		5.0
sec-Butylbenzene			Not detected		5.0
Styrene			Not detected		5.0
tert-Butylbenzene			Not detected		5.0
Tetrachloroethylene			2	J	5.0
Toluene			Not detected		5.0
trans-1,3-Dichloropropylene			Not detected		5.0
Trichloroethylene			Not detected		5.0
Trichlorofluoromethane			Not detected		5.0
Vinyl chloride			Not detected		5.0

Client Sample ID			MW-4S		
York Sample ID			08080180-03		
Matrix			WATER		
Parameter	Method	Units	Result	Qualifier	RL
Volatiles, 8260 List + MTBE	SW846-8260	ug/L	---	---	---
1,1,1,2-Tetrachloroethane			Not detected		5.0
1,1,1-Trichloroethane			Not detected		5.0
1,1,2,2-Tetrachloroethane			Not detected		5.0
1,1,2-Trichloroethane			Not detected		5.0
1,1-Dichloroethane			Not detected		5.0
1,1-Dichloroethylene			Not detected		5.0
1,1-Dichloropropylene			Not detected		5.0
1,2,3-Trichlorobenzene			Not detected		5.0
1,2,3-Trichloropropane			Not detected		5.0
1,2,4-Trichlorobenzene			Not detected		5.0
1,2,4-Trimethylbenzene			Not detected		5.0
1,2-Dibromo-3-chloropropane			Not detected		5.0
1,2-Dibromoethane			Not detected		5.0
1,2-Dichlorobenzene			Not detected		5.0
1,2-Dichloroethane			Not detected		5.0
1,2-Dichloroethylene (Total)			Not detected		5.0
1,2-Dichloropropane			Not detected		5.0
1,3,5-Trimethylbenzene			Not detected		5.0
1,3-Dichlorobenzene			Not detected		5.0
1,3-Dichloropropane			Not detected		5.0
1,4-Dichlorobenzene			Not detected		5.0
2,2-Dichloropropane			Not detected		5.0
2-Chlorotoluene			Not detected		5.0
4-Chlorotoluene			Not detected		5.0
Benzene			Not detected		5.0
Bromobenzene			Not detected		5.0
Bromochloromethane			Not detected		5.0
Bromodichloromethane			Not detected		5.0

Client Sample ID			MW-4S		
York Sample ID			08080180-03		
Matrix			WATER		
Parameter	Method	Units	Result	Qualifier	RL
Bromoform			Not detected		5.0
Bromomethane			Not detected		5.0
Carbon tetrachloride			Not detected		5.0
Chlorobenzene			Not detected		5.0
Chloroethane			Not detected		5.0
Chloroform			Not detected		5.0
Chloromethane			Not detected		5.0
cis-1,3-Dichloropropylene			Not detected		5.0
Dibromochloromethane			Not detected		5.0
Dibromomethane			Not detected		5.0
Dichlorodifluoromethane			Not detected		5.0
Ethylbenzene			Not detected		5.0
Hexachlorobutadiene			Not detected		5.0
Isopropylbenzene			Not detected		5.0
Methyl tert-butyl ether (MTBE)			2	J	5.0
Methylene chloride			Not detected		5.0
Naphthalene			Not detected		5.0
n-Butylbenzene			Not detected		5.0
n-Propylbenzene			Not detected		5.0
o-Xylene			Not detected		5.0
p- & m-Xylenes			Not detected		5.0
p-Isopropyltoluene			Not detected		5.0
sec-Butylbenzene			Not detected		5.0
Styrene			Not detected		5.0
tert-Butylbenzene			Not detected		5.0
Tetrachloroethylene			Not detected		5.0
Toluene			Not detected		5.0
trans-1,3-Dichloropropylene			Not detected		5.0
Trichloroethylene			Not detected		5.0
Trichlorofluoromethane			Not detected		5.0
Vinyl chloride			Not detected		5.0

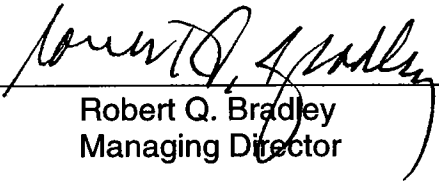
Units Key: For Waters/Liquids: mg/L = ppm ; ug/L = ppb

For Soils/Solids: mg/kg = ppm ; ug/kg = ppb

Report Date: 8/12/2008
Client Project ID: SF01123.42
York Project No.: 08080180

Notes for York Project No. 08080180

1. The "RL" is the REPORTING LIMIT and is adjusted for any dilution necessary due to the levels of target and/or non-target analytes and matrix interference. This REPORTING LIMIT is based upon the lowest standard utilized for calibration where applicable.
2. Samples are retained for a period of thirty days after submittal of report, unless other arrangements are made.
3. York's liability for the above data is limited to the dollar value paid to York for the referenced project.
4. This report shall not be reproduced without the written approval of York Analytical Laboratories, Inc.
5. All samples were received in proper condition for analysis with proper documentation.
6. All analyses conducted met method or Laboratory SOP requirements.
7. It is noted that no analyses reported herein were subcontracted to another laboratory.
8. Other attachments to this report, including Chain-of-custody documentation and Case narratives are hereby made a part of this report.

Approved By: 
Robert Q. Bradley
Managing Director

Date: 8/12/2008

Definitions for FLAGS used as a Results Suffix

Flags are sometimes used on results to indicate certain occurrences during the analysis process. The most common flags used by York are defined below.

<u>FLAG</u>	<u>DEFINITION</u>
J	J indicates an estimated value. This flag applies to Tentatively Identified Compounds or, when requested, for a target compound whose result is less than the reporting limit but whose mass spectral data meet identification criteria. For example if the reporting limit is listed as 10 ppb and the analysis shows 3 ppb, the result can be reported as 3 J. The client must request the use of J flags for the laboratory to report such flags.
B	B indicates that the analyte was also found in the associated batch method blank. This flag indicates possible/probable blank contamination and warns the data user to be aware. This mostly applies to the volatiles acetone and methylene chloride and the semi-volatiles bis-(2-ethylhexyl) phthalate and other phthalates.
E	This flag is used to indicate that the reported concentration of an analyte exceeded the calibration range of the analytical system. In this case the result reported is treated as a minimum value. This often applies where clients request an additional analyte after sample analysis, such as acetone, where the initial analysis did not require dilution since acetone was not a target compound. This flag will also apply if after numerous dilutions a specific target compound would significantly dilute out all other targets.
A	This flag indicates that the compound is a known artifact present in the sample. This flag typically refers to compounds detected in AIR samples taken into Tedlar bags. These compounds are either from the manufacturing process or, since Tedlar bags are somewhat permeable, they are subject to intrusion of common laboratory solvents such as acetone, methylene chloride, hexane and Freon-113.

YORK

ANALYTICAL LABORATORIES, INC.

Technical Report

prepared for:

Ecosystems Strategies, Inc.
24 Davis Avenue
Poughkeepsie, NY 12603
Attention: Richard Greenemeier

Report Date: 8/12/2008
Re: Client Project ID: SF01123.42
York Project No.: 08080179

CT License No. PH-0723

New Jersey License No. CT-005

New York License No. 10854



Report Date: 8/12/2008
 Client Project ID: SF01123.42
 York Project No.: 08080179

Ecosystems Strategies, Inc.
 24 Davis Avenue
 Poughkeepsie, NY 12603
 Attention: Richard Greenemeier

Purpose and Results

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on 08/05/08. The project was identified as your project "SF01123.42".

The analyses were conducted utilizing appropriate EPA, Standard Methods, and ASTM methods as detailed in the data summary tables.

All samples were received in proper condition meeting the NELAC acceptance requirements for environmental samples except those indicated under the Notes section of this report.

All the analyses met the method and laboratory standard operating procedure requirements except as indicated under the Notes section of this report, or as indicated by any data flags, the meaning of which is explained in the attachment to this report, if applicable.

The results of the analyses, which are all reported on an as-received basis unless otherwise noted, are summarized in the following table(s).

Analysis Results

Client Sample ID			MW-1S		
York Sample ID			08080179-01		
Matrix			WATER		
Parameter	Method	Units	Result	Qualifier	RL
Volatiles, 8260 List + MTBE	SW846-8260	ug/L	---	---	---
1,1,1,2-Tetrachloroethane			Not detected		5.0
1,1,1-Trichloroethane			Not detected		5.0
1,1,2,2-Tetrachloroethane			Not detected		5.0
1,1,2-Trichloroethane			Not detected		5.0
1,1-Dichloroethane			Not detected		5.0
1,1-Dichloroethylene			Not detected		5.0
1,1-Dichloropropylene			Not detected		5.0
1,2,3-Trichlorobenzene			Not detected		5.0
1,2,3-Trichloropropane			Not detected		5.0
1,2,4-Trichlorobenzene			Not detected		5.0
1,2,4-Trimethylbenzene			Not detected		5.0
1,2-Dibromo-3-chloropropane			Not detected		5.0

Client Sample ID			MW-1S		
York Sample ID			08080179-01		
Matrix			WATER		
Parameter	Method	Units	Result	Qualifier	RL
1,2-Dibromoethane			Not detected		5.0
1,2-Dichlorobenzene			Not detected		5.0
1,2-Dichloroethane			Not detected		5.0
1,2-Dichloroethylene (Total)			Not detected		5.0
1,2-Dichloropropane			Not detected		5.0
1,3,5-Trimethylbenzene			Not detected		5.0
1,3-Dichlorobenzene			Not detected		5.0
1,3-Dichloropropane			Not detected		5.0
1,4-Dichlorobenzene			Not detected		5.0
2,2-Dichloropropane			Not detected		5.0
2-Chlorotoluene			Not detected		5.0
4-Chlorotoluene			Not detected		5.0
Benzene			Not detected		5.0
Bromobenzene			Not detected		5.0
Bromochloromethane			Not detected		5.0
Bromodichloromethane			Not detected		5.0
Bromoform			Not detected		5.0
Bromomethane			Not detected		5.0
Carbon tetrachloride			Not detected		5.0
Chlorobenzene			Not detected		5.0
Chloroethane			Not detected		5.0
Chloroform			Not detected		5.0
Chloromethane			Not detected		5.0
cis-1,3-Dichloropropylene			Not detected		5.0
Dibromochloromethane			Not detected		5.0
Dibromomethane			Not detected		5.0
Dichlorodifluoromethane			Not detected		5.0
Ethylbenzene			Not detected		5.0
Hexachlorobutadiene			Not detected		5.0
Isopropylbenzene			Not detected		5.0
Methyl tert-butyl ether (MTBE)			Not detected		5.0
Methylene chloride			Not detected		5.0
Naphthalene			Not detected		5.0
n-Butylbenzene			Not detected		5.0
n-Propylbenzene			Not detected		5.0
o-Xylene			Not detected		5.0
p- & m-Xylenes			Not detected		5.0
p-Isopropyltoluene			Not detected		5.0
sec-Butylbenzene			Not detected		5.0
Styrene			Not detected		5.0
tert-Butylbenzene			Not detected		5.0
Tetrachloroethylene			Not detected		5.0
Toluene			Not detected		5.0
trans-1,3-Dichloropropylene			Not detected		5.0
Trichloroethylene			Not detected		5.0
Trichlorofluoromethane			Not detected		5.0
Vinyl chloride			Not detected		5.0

Client Sample ID			MW-1D		
York Sample ID			08080179-02		
Matrix			WATER		
Parameter	Method	Units	Result	Qualifier	RL
Volatiles, 8260 List + MTBE	SW846-8260	ug/L	---	---	---
1,1,1,2-Tetrachloroethane			Not detected		5.0
1,1,1-Trichloroethane			Not detected		5.0
1,1,2,2-Tetrachloroethane			Not detected		5.0
1,1,2-Trichloroethane			Not detected		5.0
1,1-Dichloroethane			Not detected		5.0
1,1-Dichloroethylene			Not detected		5.0
1,1-Dichloropropylene			Not detected		5.0
1,2,3-Trichlorobenzene			Not detected		5.0
1,2,3-Trichloropropane			Not detected		5.0
1,2,4-Trichlorobenzene			Not detected		5.0
1,2,4-Trimethylbenzene			Not detected		5.0
1,2-Dibromo-3-chloropropane			Not detected		5.0
1,2-Dibromoethane			Not detected		5.0
1,2-Dichlorobenzene			Not detected		5.0
1,2-Dichloroethane			Not detected		5.0
1,2-Dichloroethylene (Total)			Not detected		5.0
1,2-Dichloropropane			Not detected		5.0
1,3,5-Trimethylbenzene			Not detected		5.0
1,3-Dichlorobenzene			Not detected		5.0
1,3-Dichloropropane			Not detected		5.0
1,4-Dichlorobenzene			Not detected		5.0
2,2-Dichloropropane			Not detected		5.0
2-Chlorotoluene			Not detected		5.0
4-Chlorotoluene			Not detected		5.0
Benzene			Not detected		5.0
Bromobenzene			Not detected		5.0
Bromochloromethane			Not detected		5.0
Bromodichloromethane			Not detected		5.0
Bromoform			Not detected		5.0
Bromomethane			Not detected		5.0
Carbon tetrachloride			Not detected		5.0
Chlorobenzene			Not detected		5.0
Chloroethane			Not detected		5.0
Chloroform			Not detected		5.0
Chloromethane			Not detected		5.0
cis-1,3-Dichloropropylene			Not detected		5.0
Dibromochloromethane			Not detected		5.0
Dibromomethane			Not detected		5.0
Dichlorodifluoromethane			Not detected		5.0
Ethylbenzene			Not detected		5.0
Hexachlorobutadiene			Not detected		5.0
Isopropylbenzene			Not detected		5.0
Methyl tert-butyl ether (MTBE)			6		5.0
Methylene chloride			Not detected		5.0
Naphthalene			Not detected		5.0
n-Butylbenzene			Not detected		5.0

Client Sample ID			MW-1D		
York Sample ID			08080179-02		
Matrix			WATER		
Parameter	Method	Units	Result	Qualifier	RL
n-Propylbenzene			Not detected		5.0
o-Xylene			Not detected		5.0
p- & m-Xylenes			Not detected		5.0
p-Isopropyltoluene			Not detected		5.0
sec-Butylbenzene			Not detected		5.0
Styrene			Not detected		5.0
tert-Butylbenzene			Not detected		5.0
Tetrachloroethylene			Not detected		5.0
Toluene			Not detected		5.0
trans-1,3-Dichloropropylene			Not detected		5.0
Trichloroethylene			Not detected		5.0
Trichlorofluoromethane			Not detected		5.0
Vinyl chloride			Not detected		5.0

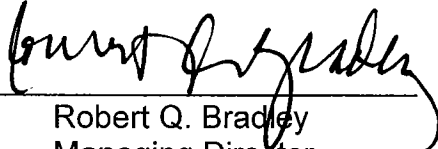
Units Key: For Waters/Liquids: mg/L = ppm ; ug/L = ppb

For Soils/Solids: mg/kg = ppm ; ug/kg = ppb

Notes for York Project No. 08080179

1. The "RL" is the REPORTING LIMIT and is adjusted for any dilution necessary due to the levels of target and/or non-target analytes and matrix interference. This REPORTING LIMIT is based upon the lowest standard utilized for calibration where applicable.
2. Samples are retained for a period of thirty days after submittal of report, unless other arrangements are made.
3. York's liability for the above data is limited to the dollar value paid to York for the referenced project.
4. This report shall not be reproduced without the written approval of York Analytical Laboratories, Inc.
5. All samples were received in proper condition for analysis with proper documentation.
6. All analyses conducted met method or Laboratory SOP requirements.
7. It is noted that no analyses reported herein were subcontracted to another laboratory.
8. Other attachments to this report, including Chain-of-custody documentation and Case narratives are hereby made a part of this report.

Approved By: _____


Robert Q. Bradley
Managing Director

Date: 8/12/2008



Ecosystems Strategies, Inc.

24 Davis Avenue, Poughkeepsie, NY 12603

phone 845.452.1658 | fax 845.485.7083 | ecosystemsstrategies.com

October 29, 2008

Rita Shaheen
Highlands Battle Site Properties, LLC
C/O Scenic Hudson, Inc
One Civic Center Plaza, Suite 200
Poughkeepsie, NY 12601

Re: Letter Report of Potable Supply Well Sampling
Provan Residence located at 28 Tonneson Drive
Adjoining the former Sakmann property (Voluntary Cleanup Site Number: V-00083-3)
Town of Highlands, Orange County, New York
ESI File: SF01123.43

Dear Ms. Shaheen:

This Letter Report of Potable Supply Well Sampling (Letter Report) summarizes the investigative work performed by Ecosystems Strategies, Inc. (ESI) to document the presence or absence of hydrocarbon-based contamination in the potable water supply well at the Provan residence. ESI personnel conducted sampling activities on October 10, 2008. Previous groundwater monitoring conducted at the Provan residence documented a low level of tetrachloroethylene (PCE, estimated 2 ug/L, guidance value 5 ug/L) in May 2007 and non-detect levels of volatile organic compounds (VOCs) in July 2007.

This is the third sampling event conducted at this property following the excavation of PCE contaminated soils at the former Sakmann site (located upgradient and adjacent to the Provan residence) in June 2005. Groundwater monitoring conducted at the Sakmann site documented concentrations of methyl tert-butyl ether (MTBE) and PCE in on-site monitoring wells at levels below New York State Department of Environmental Conservation (NYSDEC) groundwater protection standards.

Fieldwork

Sampling Methodology

A pre-filtration water sample was collected from the pressure tank, which was allowed to discharge for approximately twenty minutes prior to collection, in order to allow for a representative sample of groundwater to be collected.

The sample was collected into three 40-ml sample vials (containing hydrochloric acid as a preservative) provided by the laboratory, consistent with NYSDEC sample collection protocols. After sample collection, the vials were maintained at 4° C and transported to York Analytical Labs, Inc., a New York State Department of Health-approved laboratory (ELAP Certification Number 10854). Appropriate chain-of-custody procedures were followed.

Fieldwork Observations

No overt evidence of contamination (odors, discoloration, or sheen) was observed during purging of the pressure tank or during sampling.

R. Shaheen
October 29, 2008
ESI File: SF01123.43
Page 2 of 2

Guidance Levels

The guidance levels identified in this Letter Report are determined based on the NYSDEC's Division of Water Technical & Operational Guidance Series 1.1.1 Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations (TOGS 1.1.1). All compounds are presented with their respective guidance levels.

Laboratory Analysis

The sample (Provan) was submitted for analysis of VOCs utilizing USEPA Method 8260 (plus MTBE). Results indicate an estimated low level of PCE (2 ug/L, guidance value 5 ug/L). No other compounds analyzed for were detected. A Data Summary Table with past and present VOC concentrations is included as Attachment A. The complete laboratory report for the October 2008 sampling event is included as Attachment B.

Conclusions

Current laboratory data indicates concentrations of PCE below NYSDEC guidance values in the Provan supply well. These findings are consistent with results from the post-remediation sampling events at the Sakmann site, which document the absence of significant groundwater contamination at that property. In addition, these results support the conclusion that contaminated soils formerly located at the Sakmann site have not significantly impacted the Provan supply well.

Please call me at (845) 452-1658 should you have any questions or comments.

Sincerely,

ECOSYSTEMS STRATEGIES, INC.



Paul H. Ciminello
President

Attachment A – Data Summary Table
Attachment B – Laboratory Report (10/21/2008)

cc: K. Kulow
J. Rashak
G. Provan
File

Table 1: VOCs in Provan Supply Well

All results provided in µg/L. Results in **bold** exceed designated guidance levels.

Compound (USEPA Method 8260)	Guidance Level	Sample Date		
		5/24/2007	7/12/2007	10/10/2008
1,1,1,2-Tetrachloroethane	5	ND	ND	ND
1,1,1-Trichloroethane	5	ND	ND	ND
1,1,2-Tetrachloroethane	5	ND	ND	ND
1,1,2-Trichloroethane	1	ND	ND	ND
1,1-Dichloroethane	5	ND	ND	ND
1,1-Dichloroethylene	5	ND	ND	ND
1,1-Dichloropropylene	5	ND	ND	ND
1,2,3-Trichlorobenzene	5	ND	ND	ND
1,2,3-Trichloropropane	0.04	ND	ND	ND
1,2,3-Trimethylbenzene	5	ND	ND	ND
1,2,4-Trichlorobenzene	5	ND	ND	ND
1,2,4-Trimethylbenzene	5	ND	ND	ND
1,2-Dibromo-3-chloropropane	0.04	ND	ND	ND
1,2-Dibromoethane	5	ND	ND	ND
1,2-Dichlorobenzene	3	ND	ND	ND
1,2-Dichloroethane	5	ND	ND	ND
1,2-Dichloroethylene (total)	5	ND	ND	ND
1,2-Dichloropropane	1	ND	ND	ND
1,3,5-Trimethylbenzene	5	ND	ND	ND
1,3-Dichlorobenzene	3	ND	ND	ND
1,3-Dichloropropane	5	ND	ND	ND
1,4-Dichlorobenzene	3	ND	ND	ND
1-Chlorohexane	5	ND	ND	ND
2,2-Dichloropropane	5	ND	ND	ND
2-Chlorotoluene	5	ND	ND	ND
4-Chlorotoluene	5	ND	ND	ND
Benzene	1	ND	ND	ND
Bromobenzene	5	ND	ND	ND
Bromochloromethane	5	ND	ND	ND
Bromodichloromethane	50	ND	ND	ND
Bromoform	50	ND	ND	ND
Bromomethane	5	ND	ND	ND
Carbon tetrachloride	5	ND	ND	ND
Chlorobenzene	5	ND	ND	ND
Chloroethane	5	ND	ND	ND
Chloroform	7	ND	ND	ND
Chloromethane	5	ND	ND	ND
Cis-1,3-Dichloropropylene	0.4	ND	ND	ND
Dibromochloromethane	5	ND	ND	ND
Dibromomethane	5	ND	ND	ND
Dichlorodifluoromethane	5	ND	ND	ND
Ethylbenzene	5	ND	ND	ND
Hexachlorobutadiene	0.5	ND	ND	ND
Isopropylbenzene	5	ND	ND	ND
Methyl tert-butyl ether (MTBE)	10	ND	ND	ND
Methylene chloride	5	ND	ND	ND
Naphthalene	10	ND	ND	ND
n-Butylbenzene	5	ND	ND	ND
n-Propylbenzene	5	ND	ND	ND
o-Xylene	5	ND	ND	ND
p-&m-Xylenes	5	ND	ND	ND
p-Isopropyltoluene	5	ND	ND	ND
sec-Butylbenzene	5	ND	ND	ND
Styrene	5	ND	ND	ND
tert-Butylbenzene	5	ND	ND	ND
Tetrachloroethylene	5	2 J	ND	2 J
Toluene	5	ND	ND	ND
trans-1,3-Dichloropropylene	0.4	ND	ND	ND
Trichloroethylene	5	ND	ND	ND
Trichlorofluoromethane	5	ND	ND	ND
Vinyl chloride	2	ND	ND	ND

Notes:
Guidance levels based on NYSDEC Division of Water TOGS 1.1.1
ND = Not Detected J = estimated concentration

YORK

ANALYTICAL LABORATORIES, INC.

Technical Report

prepared for:

Ecosystems Strategies, Inc.
24 Davis Avenue
Poughkeepsie, NY 12603
Attention: Richard Greenemeier

Report Date: 10/21/2008
Re: Client Project ID: SF01123.45
York Project No.: 08100480

CT License No. PH-0723

New Jersey License No. CT-005

New York License No. 10854



Report Date: 10/21/2008
 Client Project ID: SF01123.45
 York Project No.: 08100480

Ecosystems Strategies, Inc.
 24 Davis Avenue
 Poughkeepsie, NY 12603
 Attention: Richard Greenemeier

Purpose and Results

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on 10/13/08. The project was identified as your project "SF01123.45".

The analyses were conducted utilizing appropriate EPA, Standard Methods, and ASTM methods as detailed in the data summary tables.

All samples were received in proper condition meeting the NELAC acceptance requirements for environmental samples except those indicated under the Notes section of this report.

All the analyses met the method and laboratory standard operating procedure requirements except as indicated under the Notes section of this report, or as indicated by any data flags, the meaning of which is explained in the attachment to this report, if applicable.

The results of the analyses, which are all reported on an as-received basis unless otherwise noted, are summarized in the following table(s).

Analysis Results

Client Sample ID			PROVAN		
York Sample ID			08100480-01		
Matrix			WATER		
Parameter	Method	Units	Result	Qualifier	RL
Volatiles, 8260 List + MTBE	SW846-8260	ug/L	---	---	---
1,1,1,2-Tetrachloroethane			Not detected		5.0
1,1,1-Trichloroethane			Not detected		5.0
1,1,2,2-Tetrachloroethane			Not detected		5.0
1,1,2-Trichloroethane			Not detected		5.0
1,1-Dichloroethane			Not detected		5.0
1,1-Dichloroethylene			Not detected		5.0
1,1-Dichloropropylene			Not detected		5.0
1,2,3-Trichlorobenzene			Not detected		5.0
1,2,3-Trichloropropane			Not detected		5.0
1,2,4-Trichlorobenzene			Not detected		5.0
1,2,4-Trimethylbenzene			Not detected		5.0
1,2-Dibromo-3-chloropropane			Not detected		5.0
1,2-Dibromoethane			Not detected		5.0
1,2-Dichlorobenzene			Not detected		5.0

Client Sample ID			PROVAN		
York Sample ID			08100480-01		
Matrix			WATER		
Parameter	Method	Units	Result	Qualifier	RL
1,2-Dichloroethane			Not detected		5.0
1,2-Dichloroethylene (Total)			Not detected		5.0
1,2-Dichloropropane			Not detected		5.0
1,3,5-Trimethylbenzene			Not detected		5.0
1,3-Dichlorobenzene			Not detected		5.0
1,3-Dichloropropane			Not detected		5.0
1,4-Dichlorobenzene			Not detected		5.0
2,2-Dichloropropane			Not detected		5.0
2-Chlorotoluene			Not detected		5.0
4-Chlorotoluene			Not detected		5.0
Benzene			Not detected		5.0
Bromobenzene			Not detected		5.0
Bromochloromethane			Not detected		5.0
Bromodichloromethane			Not detected		5.0
Bromoform			Not detected		5.0
Bromomethane			Not detected		5.0
Carbon tetrachloride			Not detected		5.0
Chlorobenzene			Not detected		5.0
Chloroethane			Not detected		5.0
Chloroform			Not detected		5.0
Chloromethane			Not detected		5.0
cis-1,3-Dichloropropylene			Not detected		5.0
Dibromochloromethane			Not detected		5.0
Dibromomethane			Not detected		5.0
Dichlorodifluoromethane			Not detected		5.0
Ethylbenzene			Not detected		5.0
Hexachlorobutadiene			Not detected		5.0
Isopropylbenzene			Not detected		5.0
Methyl tert-butyl ether (MTBE)			Not detected		5.0
Methylene chloride			Not detected		5.0
Naphthalene			Not detected		5.0
n-Butylbenzene			Not detected		5.0
n-Propylbenzene			Not detected		5.0
o-Xylene			Not detected		5.0
p- & m-Xylenes			Not detected		5.0
p-Isopropyltoluene			Not detected		5.0
sec-Butylbenzene			Not detected		5.0
Styrene			Not detected		5.0
tert-Butylbenzene			Not detected		5.0
Tetrachloroethylene			2	J	5.0
Toluene			Not detected		5.0
trans-1,3-Dichloropropylene			Not detected		5.0
Trichloroethylene			Not detected		5.0
Trichlorofluoromethane			Not detected		5.0
Vinyl chloride			Not detected		5.0

Units Key: For Waters/Liquids: mg/L = ppm ; ug/L = ppb

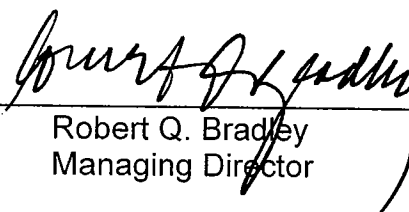
For Soils/Solids: mg/kg = ppm ; ug/kg = ppb

Report Date: 10/21/2008
Client Project ID: SF01123.45
York Project No.: 08100480

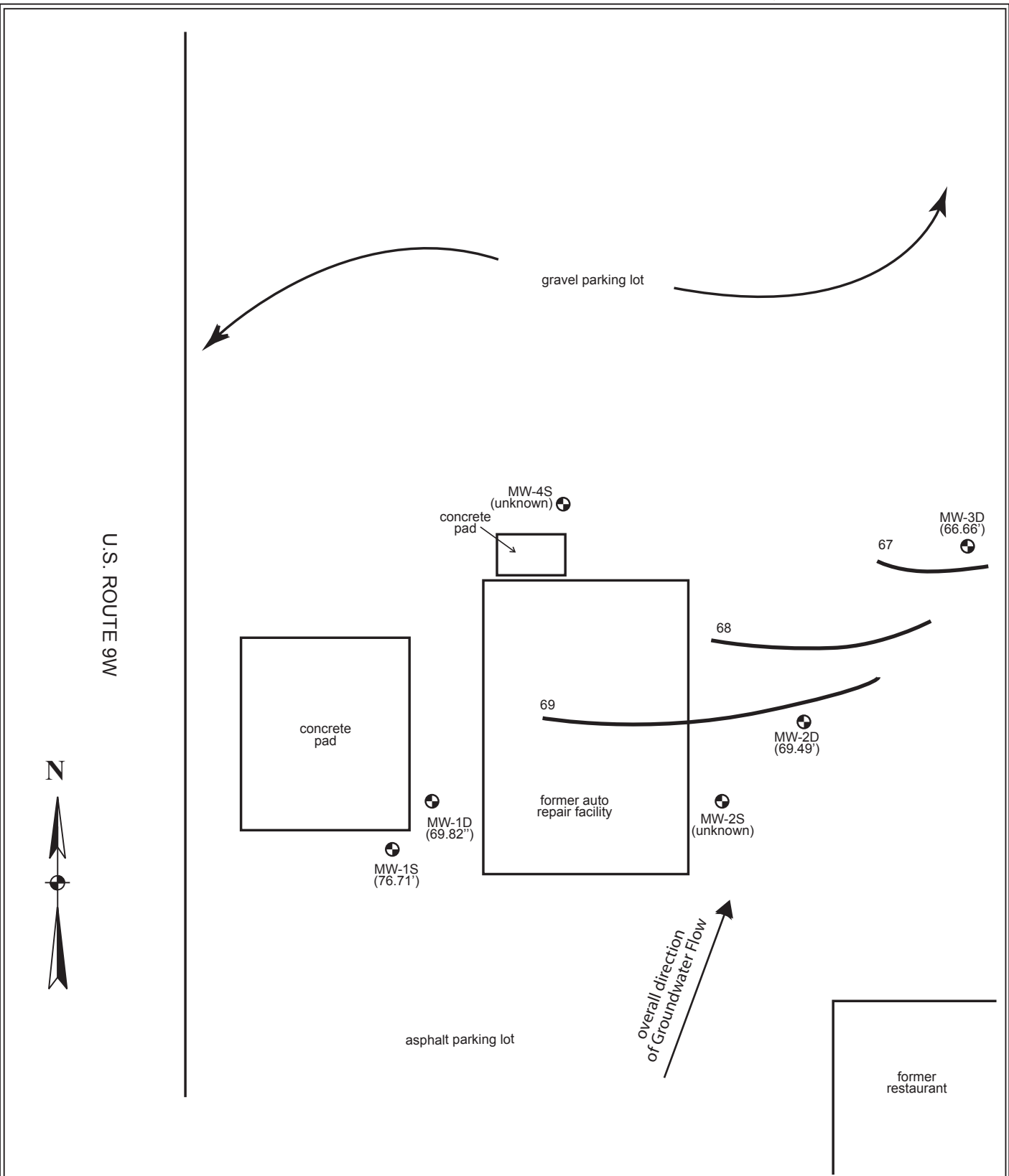
Notes for York Project No. 08100480

1. The "RL" is the REPORTING LIMIT and is adjusted for any dilution necessary due to the levels of target and/or non-target analytes and matrix interference. This REPORTING LIMIT is based upon the lowest standard utilized for calibration where applicable.
2. Samples are retained for a period of thirty days after submittal of report, unless other arrangements are made.
3. York's liability for the above data is limited to the dollar value paid to York for the referenced project.
4. This report shall not be reproduced without the written approval of York Analytical Laboratories, Inc.
5. All samples were received in proper condition for analysis with proper documentation.
6. All analyses conducted met method or Laboratory SOP requirements.
7. It is noted that no analyses reported herein were subcontracted to another laboratory.
8. Other attachments to this report, including Chain-of-custody documentation and Case narratives are hereby made a part of this report.


Approved By: _____

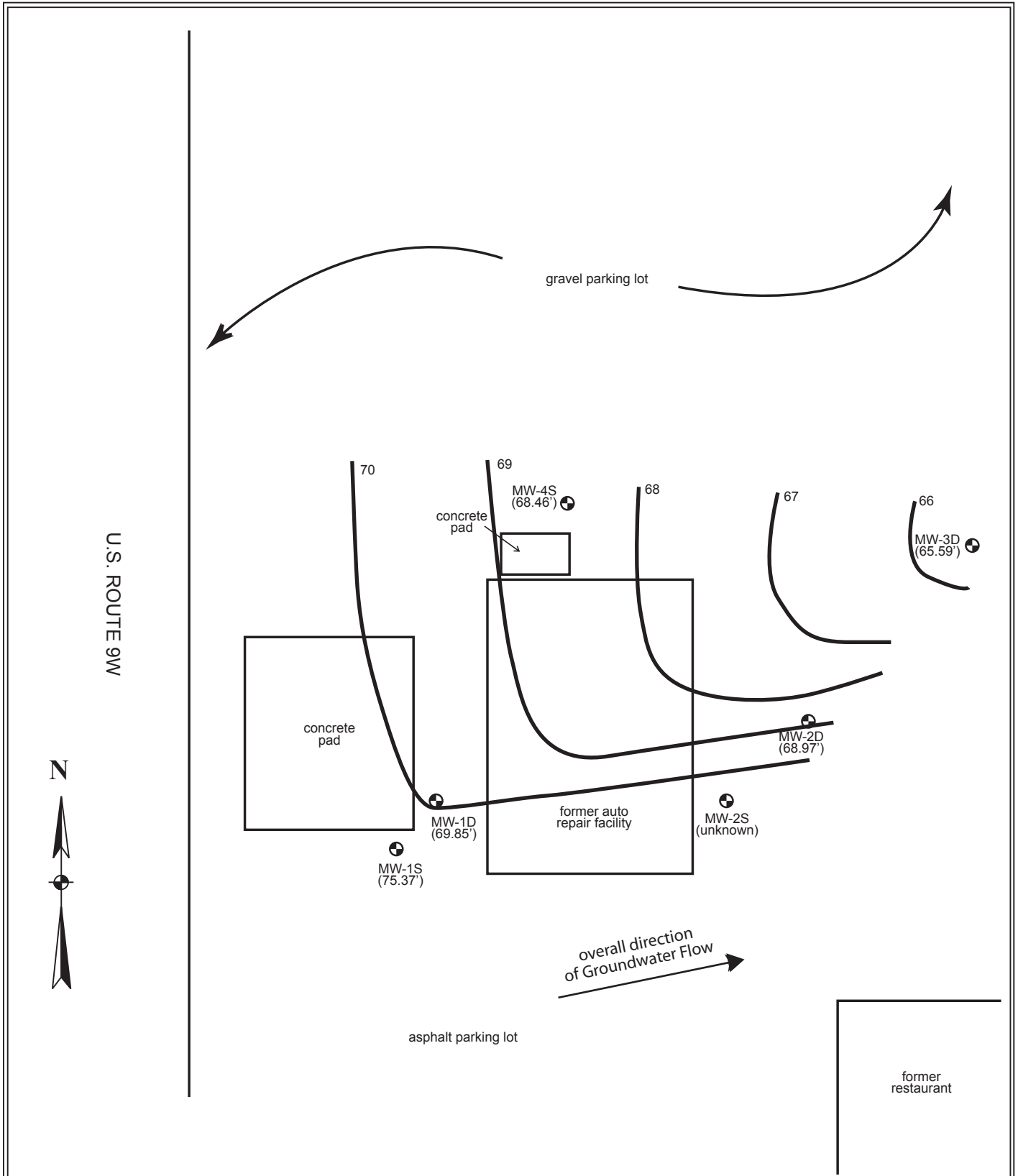

Robert Q. Bradley
Managing Director

Date: 10/21/2008




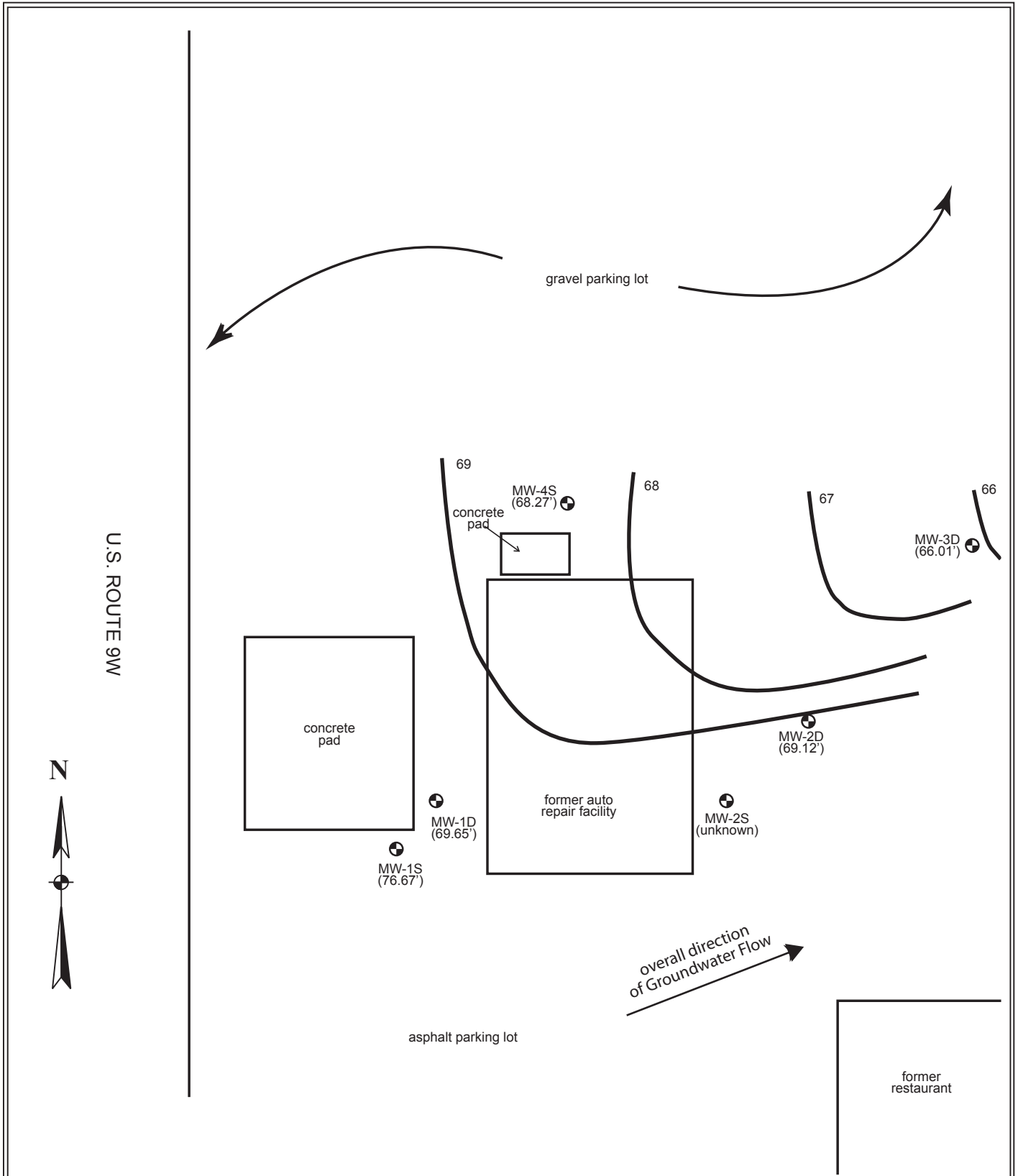
All feature locations are approximate.
 Map based on field measurements. All elevations are relative to an arbitrary benchmark of 100 feet.

<p>Groundwater Flow Map July 2003 Former Sakmann Property U.S. Route 9W Town of Highlands Orange County, New York</p>	<p>Legend:  monitoring well with groundwater elevation noted parenthetically MW-1S (76.67')</p>	<p>ESI File: SF01123.60</p>
		<p>January 2009</p>
		<p>Not to Scale</p>
		<p>Appendix H</p>




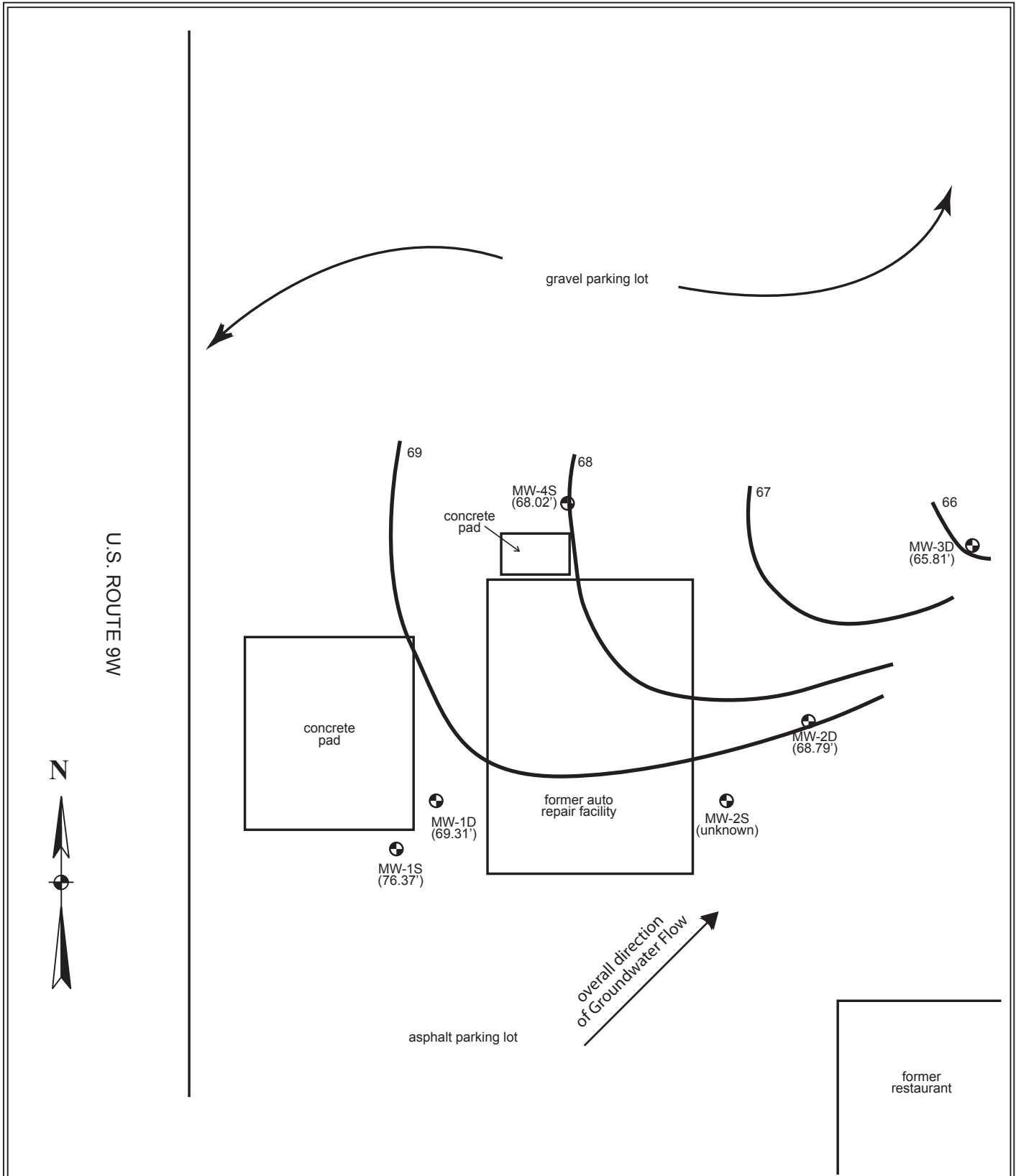
All feature locations are approximate.
 Map based on field measurements. All elevations are relative to an arbitrary benchmark of 100 feet.

<p>Groundwater Flow Map February 2004 Former Sakmann Property U.S. Route 9W Town of Highlands Orange County, New York</p>	<p>Legend:  monitoring well with groundwater elevation noted parenthetically MW-1S (76.67')</p>	<p>ESI File: SF01123.60</p>
		<p>January 2009</p>
		<p>Not to Scale</p>
		<p>Appendix H</p>




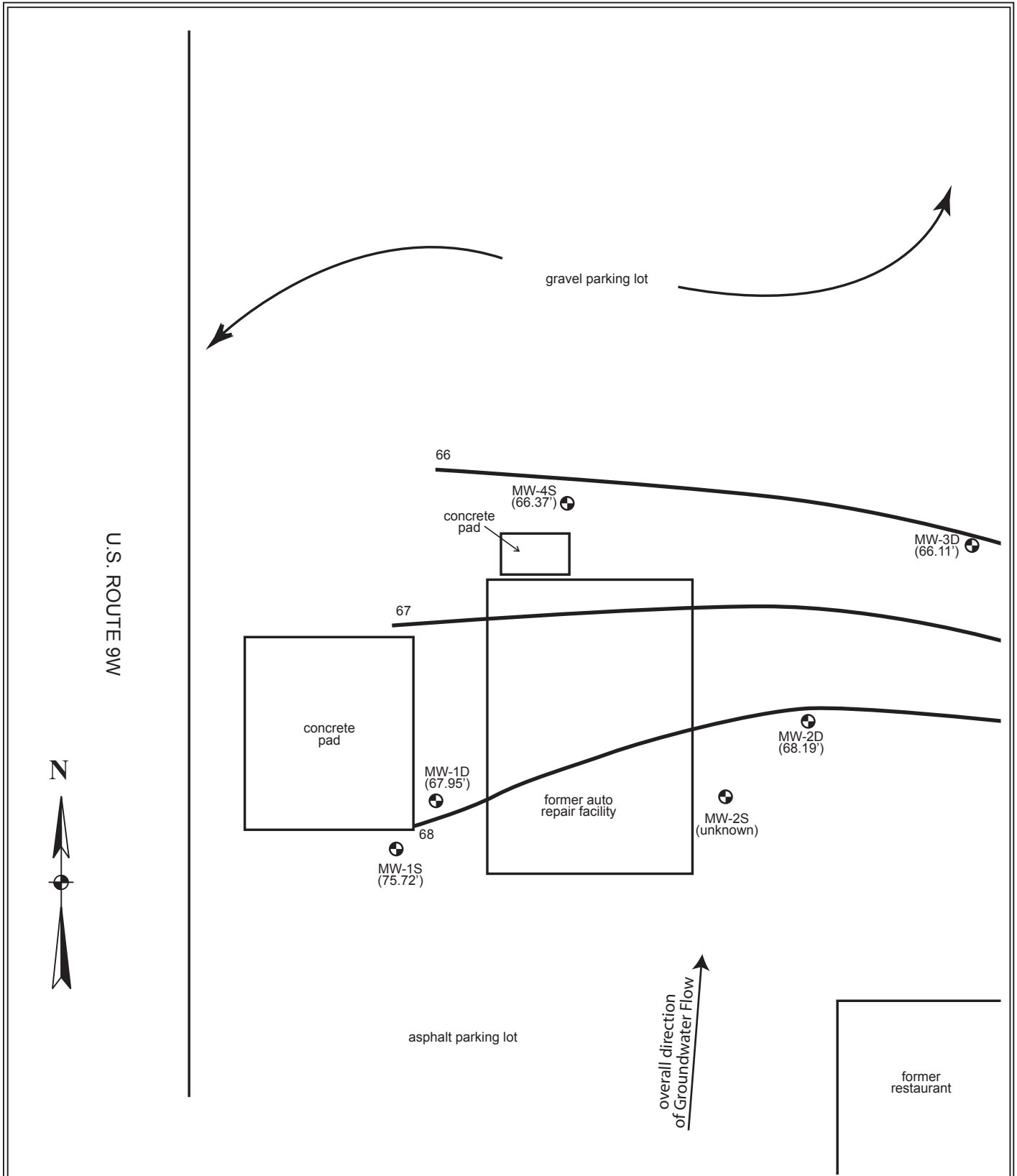
All feature locations are approximate.
 Map based on field measurements. All elevations are relative to an arbitrary benchmark of 100 feet.

<p>Groundwater Flow Map August 2004 Former Sakmann Property U.S. Route 9W Town of Highlands Orange County, New York</p>	<p>Legend:  monitoring well with groundwater elevation noted parenthetically MW-1S (76.67')</p>	<p>ESI File: SF01123.60</p>
		<p>January 2009</p>
		<p>Not to Scale</p>
		<p>Appendix H</p>




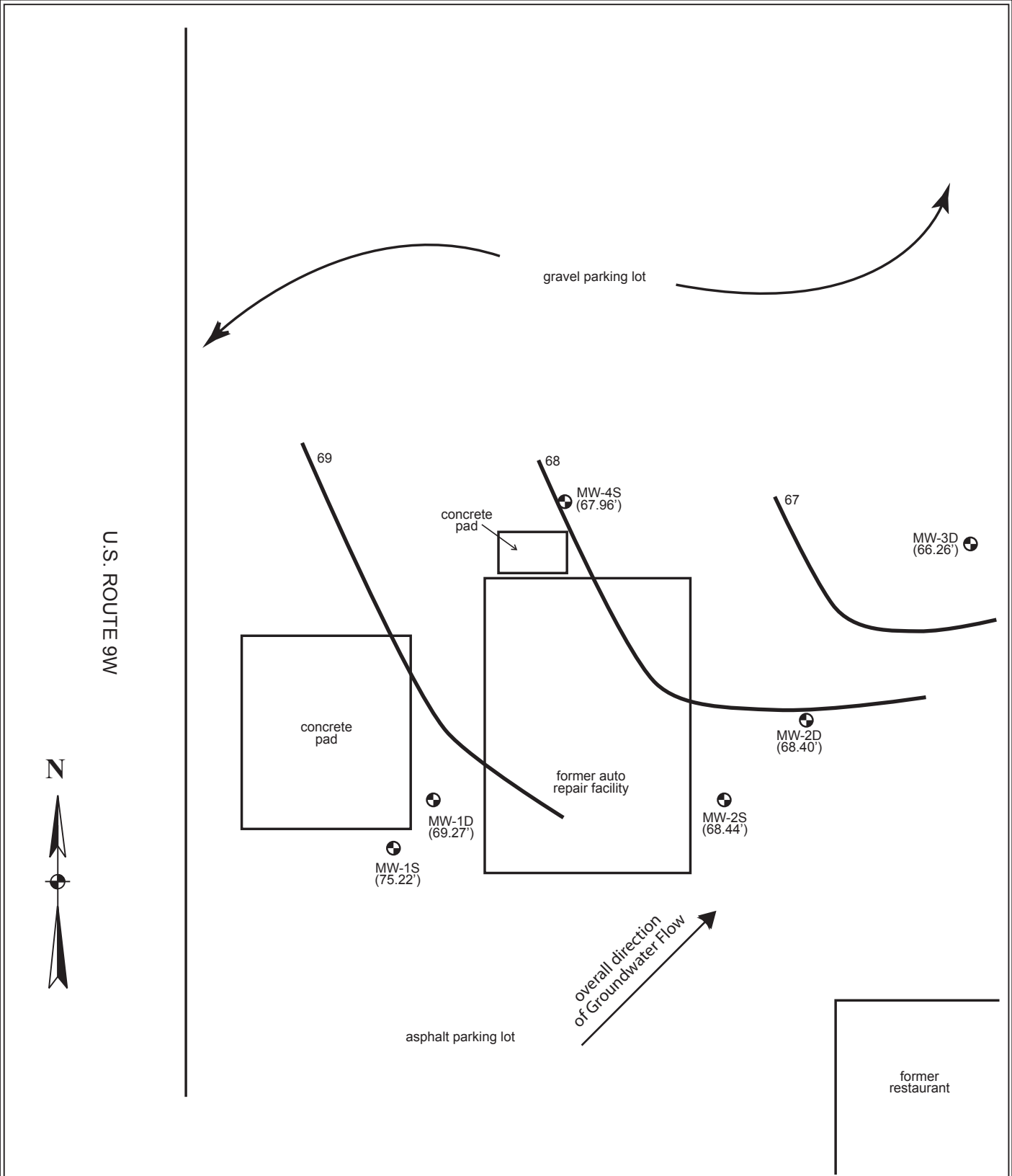
All feature locations are approximate.
 Map based on field measurements. All elevations are relative to an arbitrary benchmark of 100 feet.

<p>Groundwater Flow Map May 2004 Former Sakmann Property U.S. Route 9W Town of Highlands Orange County, New York</p>	<p>Legend:  monitoring well with groundwater elevation noted parenthetically MW-1S (76.67')</p>	<p>ESI File: SF01123.60</p>
		<p>January 2009</p>
		<p>Not to Scale</p>
		<p>Appendix H</p>




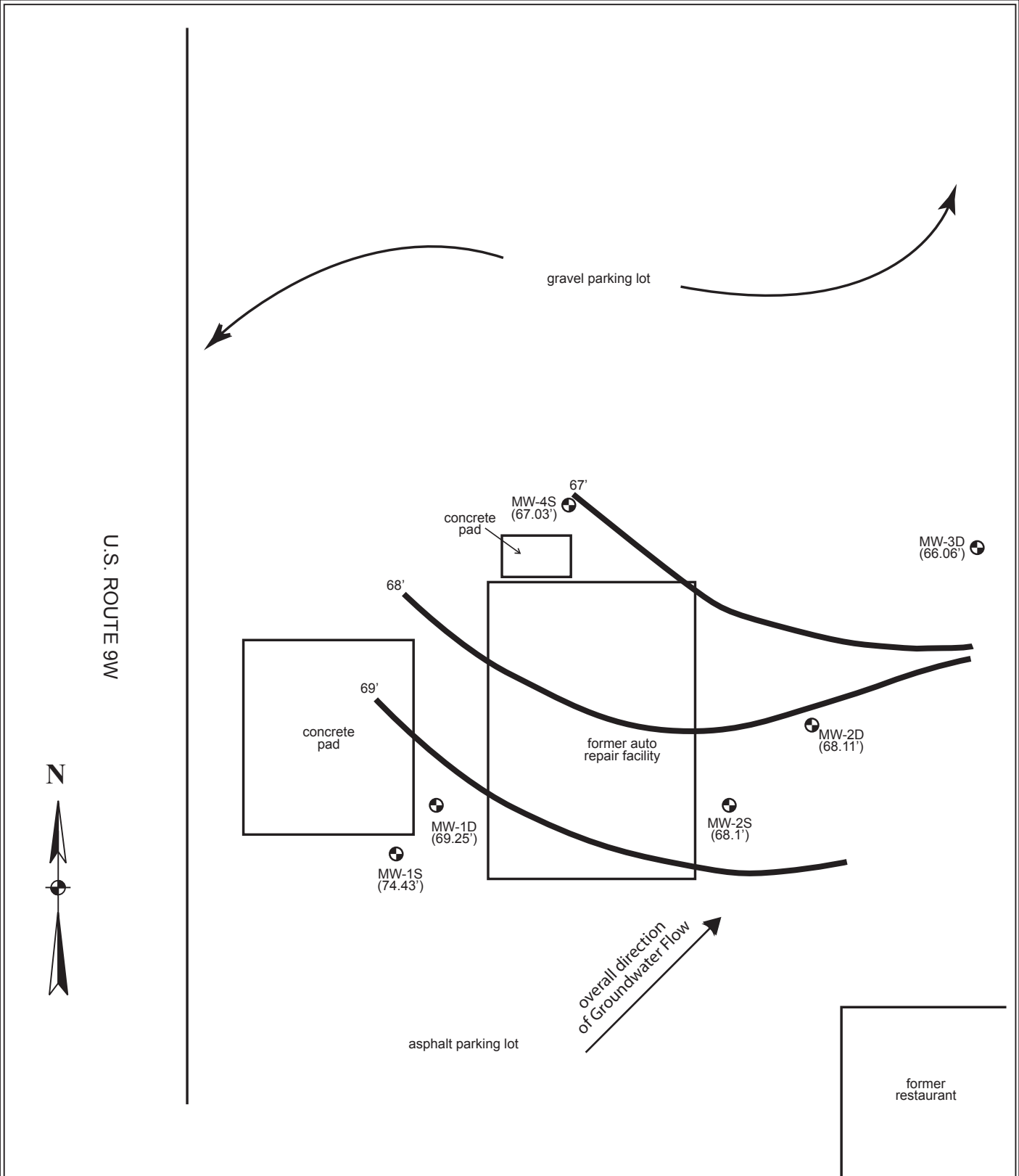
All feature locations are approximate.
 Map based on field measurements. All elevations are relative to an arbitrary benchmark of 100 feet.

<p>Groundwater Flow Map January 2005 Former Sakmann Property U.S. Route 9W Town of Highlands Orange County, New York</p>	<p>Legend:  monitoring well with groundwater elevation noted parenthetically MW-1S (76.67')</p>	<p>ESI File: SF01123.60</p>
		<p>January 2009</p>
		<p>Not to Scale</p>
		<p>Appendix H</p>



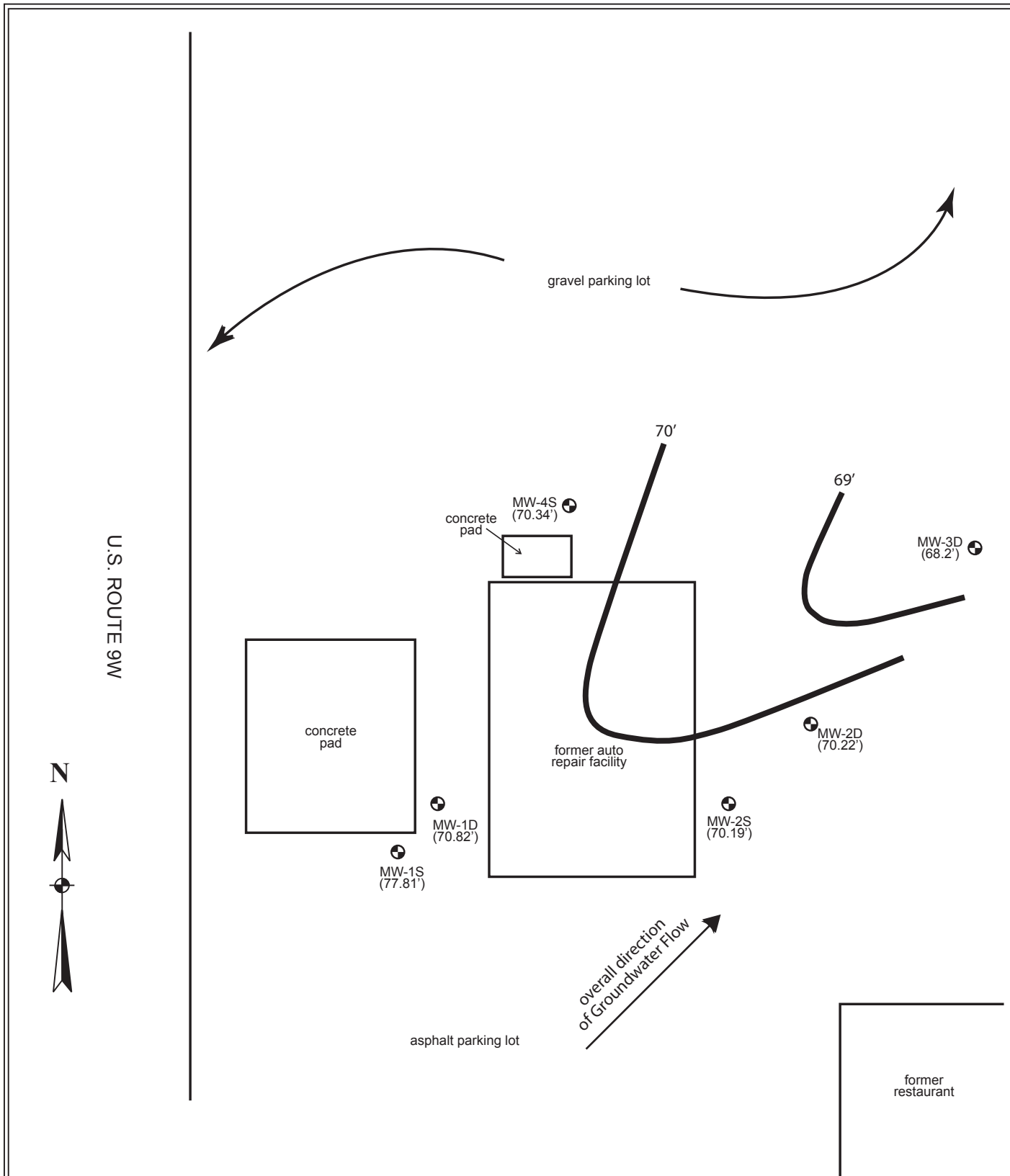
All feature locations are approximate.
 Map based on field measurements. All elevations are relative to an arbitrary benchmark of 100 feet.

<p>Groundwater Flow Map June 2005 Former Sakmann Property U.S. Route 9W Town of Highlands Orange County, New York</p>	<p>Legend:  monitoring well with groundwater elevation noted parenthetically MW-1S (76.67')</p>	<p>ESI File: SF01123.60</p>
		<p>January 2009</p>
		<p>Not to Scale</p>
		<p>Appendix H</p>




All feature locations are approximate.
 Map based on field measurements. All elevations are relative to an arbitrary benchmark of 100 feet.

<p>Groundwater Flow Map March 2006 Former Sakmann Property U.S. Route 9W Town of Highlands Orange County, New York</p>	<p>Legend: monitoring well with groundwater elevation noted parenthetically MW-1S</p>	<p>ESI File: SF01123.60</p>
		<p>January 2009</p>
		<p>Not to Scale</p>
		<p>Appendix H</p>



All feature locations are approximate.
 Map based on field measurements. All elevations are relative to an arbitrary benchmark of 100 feet.

<p>Groundwater Flow Map June 2006 Former Sakmann Property U.S. Route 9W Town of Highlands Orange County, New York</p>	<p>Legend:  monitoring well with groundwater elevation noted parenthetically MW-1S</p>	<p>ESI File: SF01123.60</p>
		<p>January 2009</p>
		<p>Not to Scale</p>
		<p>Appendix H</p>

APPENDIX I

Site Management Plan

SITE MANAGEMENT PLAN

FOR THE FORMER “SAKMANN” PROPERTY

**LOCATED AT U.S. ROUTE 9W
TOWN OF HIGHLANDS
ORANGE COUNTY, NEW YORK**

**Voluntary Cleanup Site Number: V-00083-3
Index Number: W3-0962-03-07**

October 2007 (Revised January 2009)

ESI File: SF01123.60

Prepared By:



Ecosystems Strategies, Inc.

24 Davis Avenue, Poughkeepsie, NY 12603

phone 845.452.1658 | fax 845.485.7083 | ecosystemsstrategies.com



SITE MANAGEMENT PLAN

1.0 Overview and Objectives

The Site as specified in this Site Management Plan (SMP) is the former “Sakmann” property, located on U.S. Route 9W in the Town of Highlands, Orange County, New York (hereafter referred to as the “Site”). A Site Location Map is provided as Figure 1 in the Attachment.

The user of this SMP should refer to the New York State Department of Environmental Conservation (NYSDEC) approved Remedial Action Work Plan (RAWP), and the Final Engineering Report (FER), which document previous Site investigation and remediation activities, as needed for specific Site details.

The objective of this SMP is to set guidelines for: 1) management of soil material during any future activities that would disturb the installed protective barrier layer; and, 2) sampling of on-site groundwater monitoring wells.

2.0 Nature and Extent of Environmental Conditions of Concern

The constituents of concern (COCs) for soil consist of polycyclic aromatic hydrocarbons (PAHs), metals, and areas containing petroleum odors, which have been covered beneath a barrier layer of clean, imported soil. The COCs for groundwater are low-level concentrations of volatile organic compounds (VOCs).

3.0 Contemplated Use

The Site is intended for use as a scenic gateway to the Village of Fort Montgomery and Fort Montgomery State Historic Site and will include a parking lot, landscaped areas, and an information kiosk. The Site may have limited recreational uses including benches, picnic tables, and/or scenic overlooks. In addition, the existing on-site building may be used for commercial purposes. Use of the Site will be in conformance with NYSDEC Part 375 (Remedial Program) regulations for “Restricted Commercial Use”.

4.0 Purpose and Description of Surface Cover System

Portions of the Site have been covered by a barrier layer of at least eighteen inches of certified clean fill materials, and a cover of surface vegetation has been established. The purpose of the surface cover system is to eliminate the potential for human contact with COCs and eliminate the potential for contaminated runoff from the Site. The extent of the installed soil cover layer is indicated on Figure 2 in the Attachment.

5.0 Management of Soils and Long-Term Maintenance of Cover System

The purpose of this section is to provide environmental guidelines for the management of subsurface soils and the long-term maintenance of the cover systems.

The Site Management Plan includes the following conditions:

- The barrier layer system will be repaired following any Site activities that impact its integrity, including construction and/or utilities work. Any imported materials used for this purpose will meet the criteria noted in Section 5.2, below. The repaired area must be replaced in kind, or (with NYSDEC approval) be covered with an impervious product such as concrete or asphalt, and be consistent with Section 4.0, above.



- Control of surface erosion and run-off on the Site will be maintained at all times, including during any construction activities.
- Any subsurface materials from beneath the installed cover layer, which are excavated and intended for export from the Site, must be managed, characterized, and properly disposed of in accordance with NYSDEC regulations and directives. To the extent possible, any such soils will be returned to the Site under the existing cover. Soils excavated from the cover layer will be segregated from excavated subsurface material.
- Where possible, on-site materials will be used for backfilling all on-site excavations below the cover system.
- Any off-site fill material imported to the Site for filling and grading purposes will meet NYSDEC Remedial Program Part 375 requirements for “unrestricted” use.
- Prior to any construction activities, workers are to be notified of the Site conditions with clear instructions regarding how the work is to proceed. Invasive work performed at the Site will be performed in accordance with a Health and Safety Plan and a Community Air Monitoring Plan.
- A certification that all work was performed in conformance with this SMP must be provided. The Certification Report will summarize the excavation activities, provide a location diagram, discuss the disposal and/or backfill of contaminated subsurface material, document the restoration of the soil cover and provide all air monitoring data.

5.1 Disposal of Stockpiled Subsurface Material

Subsurface material that is excavated prior to the completion of any construction activities will remain on-site to be used as fill. Material that cannot be stored on-site and is intended for export from the Site will be sampled and analyzed prior to removal. Soil will be placed on a plastic liner (bermed if necessary) and covered with a weighted plastic sheet. The stockpile area will be properly secured with tape and/or fencing. The stockpile will be inspected on a regular basis to ensure the above safeguards are effective. All exported fill material will be considered a regulated waste, subject to management under applicable NYSDEC regulations (6NYCRR, Part 360 or 370). Excavated materials that will be utilized as on-site fill should be placed below the cover system.

Subsurface material that is excavated as part of development, which cannot be used as fill below the cover system, will be characterized prior to transportation off-site for disposal at a permitted facility. Sampling frequency and required analyses will be determined by the disposal facility. The samples will be collected in accordance with applicable NYSDEC protocols, and will be transported to a laboratory certified by the NYSDOH Environmental Laboratory Approval Program (ELAP).

5.2 Cover Soil Material

Any cover soil material used to increase Site grades or elevation will be from an acceptable borrow source that is free of industrial wastes and/or other potential sources of chemical or petroleum contamination, and which has sampling data on file that is acceptable to the NYSDEC and NYSDOH. In the absence of existing acceptable data, samples will be collected to document material integrity (this requirement will be waived for materials customarily used for minor landscaping improvements [e.g., limited quantities of top soil, mulch, etc], obtained from a commercial source or from a local or state agency, which are not used to significantly alter site grades or elevations). All results will be provided to the Owner, the NYSDEC, and the NYSDOH prior to these soils being imported onto the Site.

In order to certify that soil from a specific source is free of contamination, a representative number of samples (consistent with NYSDEC Division of Environmental Remediation guidance) will be analyzed for the parameters specified in 6 NYCRR Part 375, and will meet the “Unrestricted Use” Soil Cleanup



Objectives (SCOs) for protection of public health as specified in Table 375-6.8(a). Analyses will be conducted for volatile organic compounds (VOCs, USEPA Method 8260); semi-volatile organic compounds (SVOCs, USEPA Method 8270); metals (USEPA Methods 6010 and 7471); pesticides (USEPA Method 8081); and polychlorinated biphenyls (PCBs, USEPA Method 8082). All analyses must be performed by an ELAP certified laboratory. A valid ELAP certification number must be provided with all laboratory data. Source history, field observations, and initial analytical results may warrant additional analyses.

Soils intended for importation to the Site cannot otherwise be defined as a solid waste in accordance with 6 NYCRR Part 360-1.2(a).

6.0 Annual Inspection of Cover System

The integrity of the barrier cover system will be assessed annually. Additional assessments will be conducted at any time it is suspected that the cover has been degraded due to regular use, maintenance activities, natural events, or other causes. Each assessment will include, at a minimum: an inspection for surface erosion and other surface irregularities; an assessment of the continuity of vegetative cover; and, a review of activities conducted throughout the year that may have impacted the integrity of the cover. A log will be maintained documenting inspection dates, observations, and any comments pertaining to impacts or potential impacts to the cover. Inspections will be performed by a professional engineer.

7.0 Documentation of Site Groundwater Integrity

Site groundwater quality has been documented both prior to and following the remediation of soils impacted by petroleum and chlorinated solvents. Existing data (through July 2007) indicate no significant impacts to on-site groundwater quality or to a private supply well located immediately downgradient of the Site (all contaminant concentrations are consistently below applicable guidance levels).

7.1 Additional Groundwater Sampling

All remaining on-site monitoring wells (MW-1D, MW-1S, MW2-D, MW2-S and MW4-S) and the off-site downgradient private well (Provan well) will be sampled annually (next sampling event in July 2009) according to the sampling protocols in the RAWP. If laboratory data continue to document the absence of any significant contaminant concentrations, with the concurrence of the NYSDEC and NYSDOH the sampling may be altered or discontinued.

7.2 Closure of Monitoring Wells

All on-site wells will be properly closed following written confirmation from NYSDEC that no additional sampling events are required. Wells will be closed by grouting the well in place using the standard grout mixture (one 94-pound bag of Type 1 Portland cement, 3.9 pounds powdered bentonite, and 7.8 gallons potable water), placing a ferrous metal marker in the top of the grout to indicate the location of the former monitoring well, removing the well cover, and restoring area to grade using certified clean fill (previously placed in this area on-site).

8.0 Reports

Documentation of all fieldwork events conducted according to this SMP will be provided to the Owner, NYSDEC, and NYSDOH. Deliverables will include the following documents:

- Annual Inspection Report signed by the qualified environmental professional who completed the inspection;



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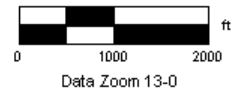


Figure 1 - Site Location Map

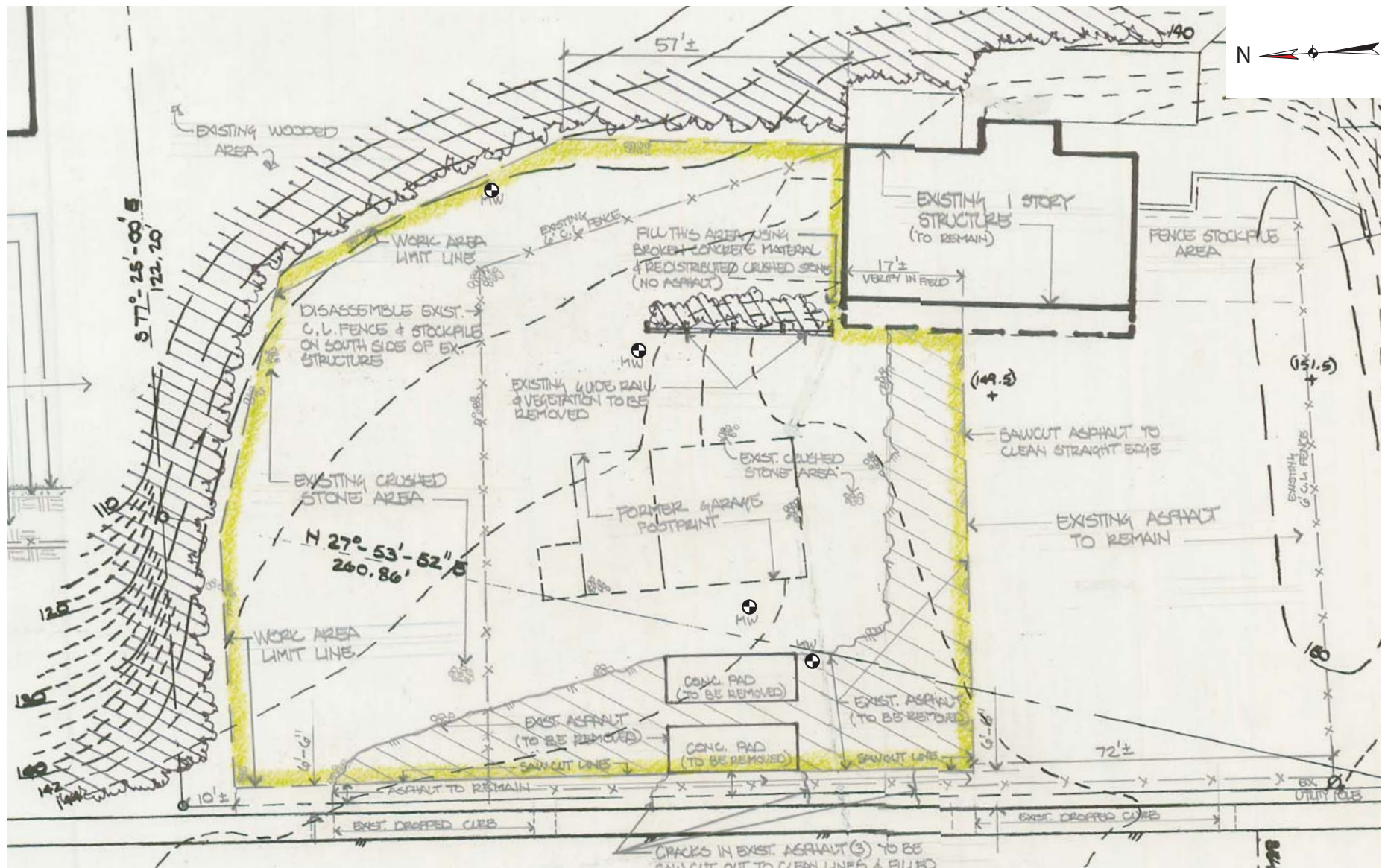
Former Sakmann Property
 U.S. Route 9W
 Town of Highlands
 Orange County, New York



ESI File: SF01123.46

October 2007

Attachment



All feature locations are approximate. This map is intended as a schematic to be used in conjunction with the associated report, and it should not be relied upon as a survey for planning or other activities.

Figure 2 - Relevant Site Details for Site Management Plan

Former Sakmann Property
 U.S. Route 9W
 Town of Highlands
 Orange County, New York

Legend:

- extent of soil cover
- monitoring well location

ESI File: SF01123.46

October 2007

Attachment

APPENDIX J

Deed Restriction

ORANGE COUNTY CLERK'S OFFICE RECORDING PAGE

THIS PAGE IS PART OF THE INSTRUMENT - DO NOT REMOVE

TYPE IN BLACK INK: NAME(S) OF PARTY(S) TO DOCUMENT

Declaration of Covenants and Restrictions of HIGHLANDS BATTLESITE PROPERTIES, LLC

SECTION 16 BLOCK 3 LOT 13

RECORD AND RETURN TO: (name and address)

George A. Rodenhausen, Rapport, Meyers, Whitbeck, Shaw & Rodenhausen, LLP, 35 Main Street, Suite 541, Poughkeepsie, NY 12601



THIS IS PAGE ONE OF THE RECORDING

ATTACH THIS SHEET TO THE FIRST PAGE OF EACH RECORDED INSTRUMENT ONLY

DO NOT WRITE BELOW THIS LINE

INSTRUMENT TYPE: DEED MORTGAGE SATISFACTION ASSIGNMENT OTHER Dec.

PROPERTY LOCATION

- 2089 BLOOMING GROVE (TN)
2001 WASHINGTONVILLE (VLG)
2003 SO. BLOOMING GROVE (VLG)
2289 CHESTER (TN)
2201 CHESTER (VLG)
2489 CORNWALL (TN)
2401 CORNWALL (VLG)
2600 CRAWFORD (TN)
2800 DEERPARK (TN)
3089 GOSHEN (TN)
3001 GOSHEN (VLG)
3003 FLORIDA (VLG)
3005 CHESTER (VLG)
3200 GREENVILLE (TN)
3489 HAMPTONBURGH (TN)
3401 MAYBROOK (VLG)
3689 HIGHLANDS (TN)
3601 HIGHLAND FALLS (VLG)
3889 MINISINK (TN)
3801 UNIONVILLE (VLG)
4089 MONROE (TN)
4001 MONROE (VLG)
4003 HARRIMAN (VLG)
4005 KIRYAS JOEL (VLG)
4289 MONTGOMERY (TN)
4201 MAYBROOK (VLG)
4203 MONTGOMERY (VLG)
4205 WALDEN (VLG)
4489 MOUNT HOPE (TN)
4401 OTISVILLE (VLG)
4600 NEWBURGH (TN)
4800 NEW WINDSOR (TN)
5089 TUXEDO (TN)
5001 TUXEDO PARK (VLG)
5200 WALLKILL (TN)
5489 WARWICK (TN)
5401 FLORIDA (VLG)
5403 GREENWOOD LAKE (VLG)
5405 WARWICK (VLG)
5600 WAWAYANDA (TN)
5889 WOODBURY (TN)
5801 HARRIMAN (VLG)
5809 WOODBURY (VLG)
CITIES
0900 MIDDLETOWN
1100 NEWBURGH
1300 PORT JERVIS
9999 HOLD

NO. PAGES 12 CROSS REF.
CERT. COPY ADD'L X-REF.
MAP# PGS.
PAYMENT TYPE: CHECK X
CASH
CHARGE
NO FEE
Taxable
CONSIDERATION \$
TAX EXEMPT
Taxable
MORTGAGE AMT. \$

MORTGAGE TAX TYPE:
(A) COMMERCIAL/FULL 1%
(B) 1 OR 2 FAMILY
(C) UNDER \$10,000
(E) EXEMPT
(F) 3 TO 6 UNITS
(H) NAT. PERSON/CR. UNION
(J) NAT. PER-CR. UN/1 OR 2
(K) CONDO

Donna L. Benson
DONNA L. BENSON
ORANGE COUNTY CLERK

Received From Rapport

RECORDED/FILED
04/15/2009/ 09:43:52
DONNA L. BENSON
County Clerk
ORANGE COUNTY, NY
FILE#20090035164
DECL / BK 12809PG 0660
RECORDING FEES 100.00
Receipt#1010925 pete



DECLARATION OF COVENANTS AND RESTRICTIONS

THIS COVENANT is made the 21th day of March, 2009, by Highlands Battlesite Properties, LLC, a New York limited liability company, having an office for the transaction of business at One Civic Center Plaza, Suite 200, Poughkeepsie, NY 12601.

WHEREAS, Highlands Battlesite Properties, LLC is the owner of the parcel of real property located on U.S. Route 9W in the Town of Highlands, Orange County, New York known as the Former Sakmann Property (the "Site" or the "Property"), and shown the survey map attached hereto as Exhibit "A"; and

WHEREAS, the Site is the subject of a New York State Department of Environmental Conservation (the "Department") Voluntary Cleanup Agreement executed by Highlands Battlesite Properties, LLC, Index No. W3-0962-03-07, Site No. V-00083, effective date December 4, 2003 (the "Agreement").

NOW, THEREFORE, Highlands Battlesite Properties, LLC, for itself and its successor, volunteers and/or assigns, covenants that:

First, the real property subject to this Declaration of Covenants and Restrictions is known as the Former Sakmann Property as shown on the map attached hereto as Exhibit A and made part hereof, and consists of the parcel of land, in the Town of Highlands, County of Orange, State of New York, together with the building and improvements thereon hereafter erected, identified as Section 16, Block 3, Lot 13, and more particularly bounded and described as set forth in Exhibit "B" annexed hereto and made a part hereof.

Second, unless prior approval by the Department or, if the Department shall no longer exist, any New York State agency or agencies subsequently created to protect the environment of the State and the health of the State's citizens, hereinafter referred to as the "Relevant Agency," is first obtained:

- The Site is intended for use as an information center, overlook, parking lot and landscaped area for the nearby Fort Montgomery historic site. The use of the Site will be in conformance with "Restricted Commercial Use" defined at 6 NYCRR Part 375-1.8(g)(2)(iii);
- The owner of the Site must comply with the *Site Management Plan: for the Former "Sakmann" Property*, dated October 2007, prepared by Ecosystems Strategies, Inc. ("SMP") annexed hereto as Exhibit "C" and made part hereof;

- The owner of the Site shall prohibit the use of the groundwater underlying the Site without treatment rendering it safe for drinking water or industrial purposes, as appropriate, unless the user first obtains permission to do so from the Department or Relevant Agency; and
- The owner of the Site shall annually, following the recording of this Declaration of Covenants and Restrictions in the Orange County Clerk's Office, submit to the Department or Relevant Agency a written statement certifying under penalty of perjury that the institutional controls required to be employed at the Site by the SMP are in place, and that nothing has occurred that would impair the ability of such controls to protect the public health and environment.

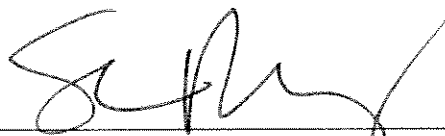
Third, the Department or Relevant Agency may enter and inspect the Site in a reasonable manner and at reasonable times to assure compliance with the above-stated restrictions.

Fourth, this declaration is and shall be deemed a covenant and shall run with the land and shall be binding on all future owners of the Site, and provides that the owner, and its successors and assigns consent to the enforcement by the Department or the Relevant Agency of the covenants and restrictions that Paragraph X of the Agreement requires to be recorded, and hereby covenant not to contest the authority of the Department or the Relevant Agency to seek enforcement.

Fifth, any deed of conveyance of the Property, or any portion thereof, shall recite, unless the Relevant Agency has consented to the termination of such covenants and restrictions, that said conveyance is subject to this Declaration of Covenants and Restrictions.

IN WITNESS WHEREOF, the undersigned has executed this instrument the day written below.

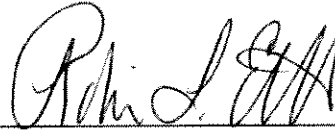
Highlands Battlesite Properties, LLC



By: Steve Rosenberg, Executive Director
The Scenic Hudson Land Trust, Inc.
Sole Member of
Highlands Battlesite Properties, LLC

STATE OF NEW YORK)
) ss.:
COUNTY OF DUTCHESS)

On the 27th day of MARCH in the year 2009 before me, the undersigned personally appeared STEVE ROSENBERG, personally known to me or proved to me on the basis of satisfactory evidence to be the individual whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his capacity, and that by his signature on the instrument, the individual, or the person upon behalf of which the individual acted, executed the instrument.



Notary Public, State of New York

ROBIN L. ELLIOTT
Notary Public, State of New York
No. 01EL6110157
Qualified in Ulster County
Commission Expires May 24, 2012

RECORD & RETURN TO:

George A. Rodenhausen, Esq.
Rapport, Meyers, Whitbeck, Shaw & Rodenhausen, LLP
35 Main Street, Suite 541
Poughkeepsie, NY 12601

EXHIBIT B

All that certain piece, plot or parcel of land situate lying and being in the TOWN OF HIGHLANDS, COUNTY OF ORANGE, State of New York, said lands being more particularly bounded and described as follows:

BEGINNING at a point being the southwesterly corner of lands herein described, said point being the intersection of the easterly line of NYS Route 9W with the northerly line of Mine Road;

THENCE RUNNING along the easterly line of said NYS Route 9W, being the westerly line of lands herein described on the following two (2) courses and distances: (1) North 18° 12' 00" East, as per Liber 1784 of Deeds at Page 219, a distance of 95.00 feet; and (2) North 27° 53' 52" East, a distance of 260.86 feet to a point being the northwesterly corner of lands herein described and the southwesterly corner of lands now or formerly of The Scenic Hudson Land Trust, Inc.;

THENCE RUNNING along a southerly line of lands of said The Scenic Hudson Land Trust, Inc., being the northerly line of lands herein described (3) South 77° 25' 00" East a distance of 122.20 feet to a point being the northeasterly corner of lands herein described;

THENCE RUNNING along a westerly line of lands of said The Scenic Hudson Land Trust, Inc., and continuing along the westerly line of lands now or formerly Provan, being the easterly line of lands herein described (4) South 12° 50' 00" West, a distance of 389.80 feet to a point being the southwesterly corner of lands of said Provan, the southeasterly corner of lands herein described and lying on the northerly line of Mine Road;

THENCE RUNNING along the northerly line of said Mine Road being the southerly line of lands herein described on the following two (2) courses and distances; (5) North 70° 50' 34" West, a distance of 162.21 feet; and (6) North 43° 53' 28" West, a distance of 45.05 feet to the point or place of BEGINNING.

EXHIBIT "B"

SITE MANAGEMENT PLAN

FOR THE FORMER "SAKMANN" PROPERTY

**LOCATED AT U.S. ROUTE 9W
TOWN OF HIGHLANDS
ORANGE COUNTY, NEW YORK**

**Voluntary Cleanup Site Number: V-00083-3
Index Number: W3-0962-03-07**

October 2007

ESI File: SF01123.40

Prepared By:

**ECOSYSTEMS STRATEGIES, INC.
24 DAVIS AVENUE
POUGHKEEPSIE, NEW YORK 12603
(845) 452-1658**

SITE MANAGEMENT PLAN

1.0 Overview and Objectives

The Site as specified in this Site Management Plan (SMP) is the former "Sakmann" property, located on U.S. Route 9W in the Town of Highlands, Orange County, New York (hereafter referred to as the "Site"). A Site Location Map is provided as Figure 1 in the Attachment.

The user of this SMP should refer to the New York State Department of Environmental Conservation (NYSDEC) approved Remedial Action Workplan (RAWP), and the Final Engineering Report (FER), which document previous Site investigation and remediation activities, as needed for specific Site details.

The objective of this SMP is to set guidelines for: 1) management of soil material during any future activities that would disturb the installed protective barrier layer; and, 2) sampling of on-site groundwater monitoring wells.

2.0 Nature and Extent of Environmental Conditions of Concern

The constituents of concern (COCs) for soil consist of polycyclic aromatic hydrocarbons (PAHs), metals, and areas containing petroleum odors, which have been covered beneath a barrier layer of clean, imported soil. The COCs for groundwater are low-level concentrations of volatile organic compounds (VOCs).

3.0 Contemplated Use

The Site is intended for use as a parking lot and landscaped area, for the nearby Fort Montgomery historic site. Use of the Site will be in conformance with NYSDEC Part 375 (Remedial Program) regulations for "Restricted Commercial Use".

4.0 Purpose and Description of Surface Cover System

Portions of the Site have been covered by a barrier layer of at least eighteen inches of certified clean fill materials, and a cover of surface vegetation has been established. The purpose of the surface cover system is to eliminate the potential for human contact with COCs and eliminate the potential for contaminated runoff from the Site. The extent of the installed soil cover layer is indicated on Figure 2 in the Attachment.

5.0 Management of Soils and Long-Term Maintenance of Cover System

The purpose of this section is to provide environmental guidelines for the management of subsurface soils and the long-term maintenance of the cover systems.

The Site Management Plan includes the following conditions:

- The barrier layer system will be repaired following any Site activities that impact its integrity, including construction and/or utilities work. Any imported materials used for this purpose will meet the criteria noted in Section 5.2, below. The repaired area must be replaced in kind, or (with NYSDEC approval) be covered with an impervious product such as concrete or asphalt, and be consistent with Section 4.0, above.
- Control of surface erosion and run-off on the Site will be maintained at all times, including during any construction activities.

- Any subsurface materials from beneath the installed cover layer, which are excavated and intended for export from the Site, must be managed, characterized, and properly disposed of in accordance with NYSDEC regulations and directives. To the extent possible, any such soils will be returned to the Site under the existing cover. Soils excavated from the cover layer will be segregated from excavated subsurface material.
- Where possible, on-site materials will be used for backfilling all on-site excavations below the cover system.
- Any off-site fill material imported to the Site for filling and grading purposes will meet NYSDEC Remedial Program Part 375 requirements for "unrestricted" use.
- Prior to any construction activities, workers are to be notified of the site conditions with clear instructions regarding how the work is to proceed. Invasive work performed at the Site will be performed in accordance with a Health and Safety Plan and a Community Air Monitoring Plan.
- A certification that all work was performed in conformance with this SMP must be provided. The Certification Report will summarize the excavation activities, provide a location diagram, discuss the disposal and/or backfill of contaminated subsurface material, document the restoration of the soil cover and provide all air monitoring data.

5.1 Disposal of Stockpiled Subsurface Material

Subsurface material that is excavated prior to the completion of any construction activities will remain on-site to be used as fill. Material that cannot be stored on-site and is intended for export from the site will be sampled and analyzed prior to removal. Soil will be placed on a plastic liner (bermed if necessary) and covered with a weighted plastic sheet. The stockpile area will be properly secured with tape and/or fencing. The stockpile will be inspected on a regular basis to ensure the above safeguards are effective. All exported fill material will be considered a regulated waste, subject to management under applicable NYSDEC regulations (6NYCRR, Part 360 or 370). Excavated materials that will be utilized as on-site fill should be placed below the cover system.

Subsurface material that is excavated as part of development, which cannot be used as fill below the cover system, will be characterized prior to transportation off-site for disposal at a permitted facility. Sampling frequency and required analyses will be determined by the disposal facility. The samples will be collected in accordance with applicable NYSDEC protocols, and will be transported to a laboratory certified by the NYSDOH Environmental Laboratory Approval Program (ELAP).

5.2 Cover Soil Material

Any cover soil material used to increase site grades or elevation will be from an acceptable borrow source that is free of industrial wastes and/or other potential sources of chemical or petroleum contamination, and which has sampling data on file that is acceptable to the NYSDEC and NYSDOH. In the absence of existing acceptable data, samples will be collected to document material integrity (this requirement will be waived for materials customarily used for minor landscaping improvements [e.g., limited quantities of top soil, mulch, etc], obtained from a commercial source or from a local or state agency, which are not used to significantly alter site grades or elevations). All results will be provided to the Owner, the NYSDEC, and the NYSDOH prior to these soils being imported onto the Site.

In order to certify that soil from a specific source is free of contamination, a representative number of samples (consistent with NYSDEC Division of Environmental Remediation guidance) will be analyzed for the parameters specified in 6 NYCRR Part 375, and will meet the "Unrestricted Use" Soil Cleanup Objectives (SCOs) for protection of public health as specified in Table 375-6.8(a). Analyses will be conducted for volatile organic compounds (VOCs, USEPA Method 8260); semi-volatile organic

Ecosystems Strategies, Inc.*Environmental Services and Solutions*Site Management Plan
SF01123.40Page 3 of 3
October 2007

compounds (SVOCs, USEPA Method 8270); metals (USEPA Methods 6010 and 7471); pesticides (USEPA Method 8081); and polychlorinated biphenyls (PCBs, USEPA Method 8082). All analyses must be performed by an ELAP certified laboratory. A valid ELAP certification number must be provided with all laboratory data. Source history, field observations, and initial analytical results may warrant additional analyses.

Soils intended for importation to the Site cannot otherwise be defined as a solid waste in accordance with 6 NYCRR Part 360-1.2(a).

6.0 Annual Inspection of Cover System

The integrity of the barrier cover system will be assessed annually. Additional assessments will be conducted at any time it is suspected that the cover has been degraded due to regular use, maintenance activities, natural events, or other causes. Each assessment will include, at a minimum: an inspection for surface erosion and other surface irregularities; an assessment of the continuity of vegetative cover; and, a review of activities conducted throughout the year that may have impacted the integrity of the cover. A log will be maintained documenting inspection dates, observations, and any comments pertaining to impacts or potential impacts to the cover. Inspections will be performed by a professional engineer.

7.0 Documentation of Site Groundwater Integrity

Site groundwater quality has been documented both prior to and following the remediation of soils impacted by petroleum and chlorinated solvents. Existing data (through July 2007) indicate no significant impacts to on-site groundwater quality or to a private supply well located immediately downgradient of the Site (all contaminant concentrations are consistently below applicable guidance levels).

7.1 Additional Groundwater Sampling

Future groundwater testing will be conducted annually (next sampling event in July 2008) according to the sampling protocols in the RAWP. If laboratory data continue to document the absence of any significant contaminant concentrations, with the concurrence of the NYSDEC and NYSDOH the sampling may be altered or discontinued.

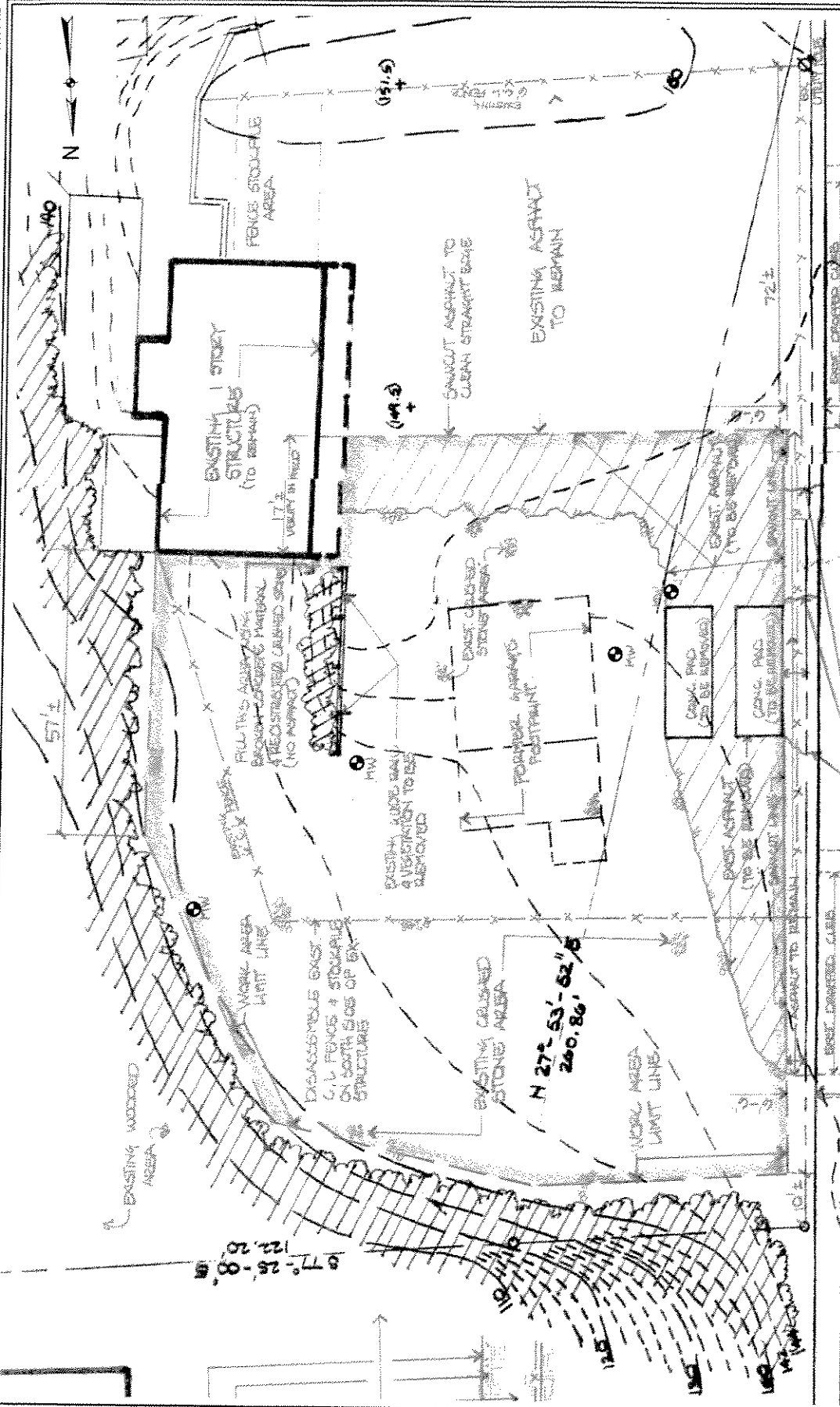
7.2 Closure of Monitoring Wells

All on-site wells will be properly closed following written confirmation from NYSDEC that no additional sampling events are required. Wells will be closed by filling the well casing/borehole with clean sand, to a point three feet below the top of the bedrock, and filling the remaining upper portions with concrete slurry. The well casing will be terminated approximately one foot below the finished grade surface. The protective barrier cover soils in the vicinity of the former wells will be restored to proper condition following well closure.

8.0 Reports

Documentation of all fieldwork events conducted according to this SMP will be provided to the Owner, NYSDEC, and NYSDOH. Deliverables will include the following documents:

- Annual Inspection Report signed by the qualified environmental professional who completed the inspection;
- Certification Report(s) summarizing any Site activities that disturb the cover soils and documenting all restoration activities; and,
- Final Groundwater Monitoring Report documenting all groundwater sampling events and water quality data, and closure of existing wells (interim reports will be provided as necessary).



All feature locations are approximate. This map is intended as a schematic to be used in conjunction with the associated report, and it should not be relied upon as a survey for planning or other activities.

Figure 2 - Relevant Site Details for Site Management Plan

Former Sakmann Property
 U.S. Route 9W
 Town of Highlands
 Orange County, New York

Legend:

extent of soil cover

● monitoring well location

ESI File: SF01123.46

October 2007

Attachment

APPENDIX K

Well Closure Documentation



Ecosystems Strategies, Inc.

24 Davis Avenue, Poughkeepsie, NY 12603

phone 845.452.1658 | fax 845.485.7083 | ecosystemsstrategies.com

March 2, 2009

John Rashak
NYSDEC
Division of Environmental Remediation, Region 3
21 South Putt Corners Road
New Paltz, NY 12561-1620

via EMAIL: jjrashak@gw.dec.state.ny.us

Re: Groundwater Well Decommissioning for the Sakmann Site
located at U.S. Route 9W, Town of Highlands, Orange County, New York
Voluntary Cleanup Program #: V-00083-3
ESI File: SF01123.60

Dear Mr. Rashak:

This Groundwater Well Decommissioning Letter Report (Letter Report) summarizes fieldwork performed by Ecosystems Strategies, Inc. (ESI) on the above-referenced property. ESI personnel oversaw the decommissioning of groundwater monitoring well MW-3D (see the Attached map) at the Site. This work was completed according to the New York State Department of Environmental Conservation (NYSDEC) approved Groundwater Monitoring Well Decommissioning Work Plan, submitted to the NYSDEC by ESI in January 2009.

Groundwater Well Closure

The well was decommissioned on February 26, 2009 by personnel from Hydro Tech Environmental Corp. utilizing the following procedure:

- The well was opened, and the depth of the well was measured to determine if any silt or debris had plugged the well. The well was found to be clear to 85 feet (the approximate depth of the well).
- The grout was mixed in a 5-gallon bucket.
- The grout mixture was placed into the well, from the bottom to the top of the well.
- A ferrous metal marker was embedded in the top of the grout to indicate the location of the former monitoring well.

J. Rashak
March 2, 2009
ESI File: SF01123.60
Page 2 of 2

Groundwater monitoring well MW-3D, located at the Sakmann Site, has been decommissioned per the requirement of the NYSDEC approved Well Decommission Procedure.

Please review this document and call me at (845) 452-1658 should you have any questions or comments.

Sincerely,

ECOSYSTEMS STRATEGIES, INC.

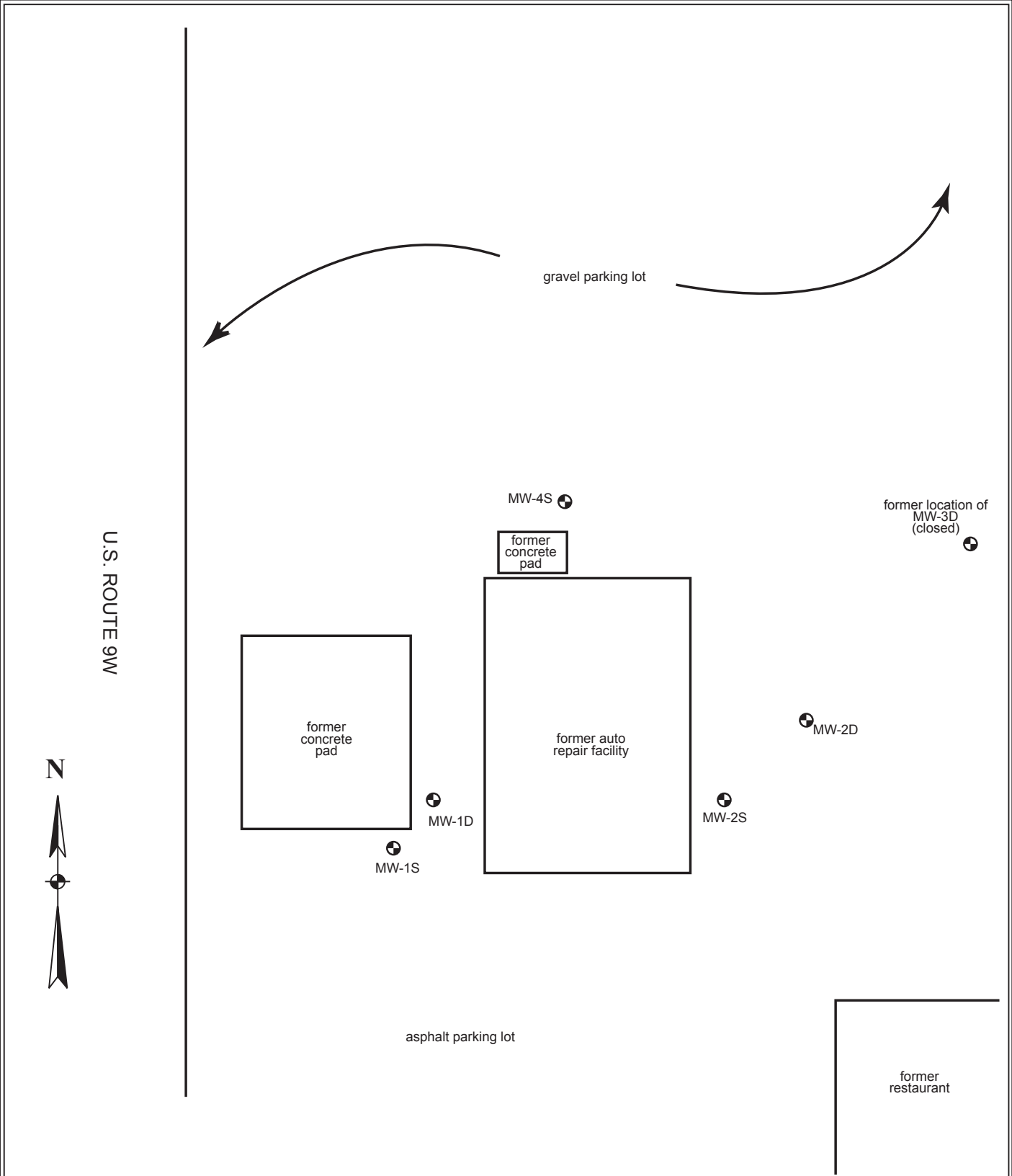


Paul H. Ciminello
President


PHC:BB:ndc

Attachment: Monitoring Well Location Map

cc: Margery Groten, Scenic Hudson Land Trust, Inc.
Kristin Kulow – NYS Department of Health
File



All feature locations are approximate.
 Map based on field measurements. All elevations are relative to an arbitrary benchmark of 100 feet.

<p>Monitoring Well Location Map Former Sakmann Property U.S. Route 9W Town of Highlands Orange County, New York</p>	<p>Legend:  monitoring well location MW-1S</p>	<p>ESI File: SF01123.60</p>
		<p>March 2009</p>
		<p>Not to Scale</p>
		<p>Attachment</p>