SITE MANAGEMENT PLAN

Former Drive & Park, Inc. Site
Brownfield Cleanup Program #C314111
28 IBM Road
Town of Poughkeepsie
Dutchess County, New York

Prepared for:
Avis Rent A Car System, Inc.

Prepared by:
AMEC Geomatrix, Inc.

Revisions to Final Approved Site Management Plan:

Revision #	Submitted Date	Summary of Revision	DEC Approval Date

December 28, 2010

Project 0093280000

December 28, 2010
Project 0093280000

Jamie L. Verrigni
Environmental Engineer
New York State Department of Environmental Conservation
Division of Environmental Remediation
Remedial Bureau C, Section A
625 Broadway, 11th Floor
Albany, NY 12233-7014

Subject: Site Management Plan
Former Drive & Park, Inc. Site
Brownfield Cleanup Program #C314111
28 IBM Road
Town of Poughkeepsie
Dutchess County, New York

Dear Ms. Verrigni:

Please find enclosed the final *Site Management Plan*, dated December 28, 2010, for the Former Drive & Park, Inc. Site in Poughkeepsie, New York. This report was prepared by AMEC Geomatrix, Inc. on behalf of Avis Rent A Car System, Inc.

A draft *Site Management Plan* (SMP) was submitted to the New York State Department of Environmental Conservation (NYSDEC) on July 22, 2010. The NYSDEC provided comments on the draft SMP in a letter dated August 20, 2010 and in a telephone conversation with Mike Ryan and Jamie Verrigni of the NYSDEC on September 2, 2010. Based on these comments, a revised draft SMP was submitted to the NYSDEC on October 14, 2010. The NYSDEC provided comments on the October 14, 2010 revised draft SMP in a letter dated November 9, 2010 and in a telephone conversation with Jamie Verrigni and James Cadiloro of the NYSDEC on November 16, 2010. A third draft SMP addressing these comments was submitted to the NYSDEC on December 8, 2010.

The NYSDEC approved the December 28, 2010 SMP for final certification in an email from Jamie Verrigni dated December 15, 2010. The enclosed certified SMP, dated December 28, 2010, contains the executed Environmental Easement as Appendix B.

Please contact either of the undersigned if you have any questions.

Sincerely yours,
AMEC GEOMATRIX, INC.

David Averill
Project Hydrogeologist

Edward P. Conti, CEG, CHG
Principal Geologist

DA/EPC/jd \\Oad-fs1\doc_safe\9000s\9328\4000 REGULATORY\SMP Final - Dec10\Text\Cover Letter.docx

Enclosure

cc: Rose Pelino, Director Environmental Affairs, Avis Rent A Car System, Inc.
Jon Brooks, Esq., Phillips Nizer
Michael J Ryan, PE, New York State, Department of Environmental Conservation
Anthony Peretta, New York State Department of Health

AMEC Geomatrix, Inc.
90B John Muir Drive, Suite 104
Amherst, New York 14228-1148
Tel (716) 565-0624
Fax (716) 565-0625
www.amecgeomatrixinc.com

SITE MANAGEMENT PLAN
Former Drive & Park, Inc. Site
Brownfield Cleanup Program #C314111
28 IBM Road
Town of Poughkeepsie,
Dutchess County, New York

December 28, 2010
Project 0093280000

I, Kelly R. McIntosh certify that I am currently a Qualified Environmental Professional as defined in 6 NYCRR Part 375 and that this Site Management Plan was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the DER Technical Guidance for Site Investigation and Remediation (DER-10).

Kelly R. McIntosh, Ph.D., P.E.
Principal Engineer

TABLE OF CONTENTS

Page

1.0 INTRODUCTION AND DESCRIPTION OF REMEDIAL PROGRAM....1
1.1 Introduction....1
1.1.1 General....1
1.1.2 Purpose....1
1.1.3 Revisions....2
1.2 Site Background....2
1.2.1 Site Location and Description....2
1.2.2 Site History....3
1.2.3 Geologic Conditions....4
1.3 SUMMARY OF REMEDIAL INVESTIGATION FINDINGS....4
1.4 Summary Of Remedial Actions....9
1.4.1 Removal of Contaminated Materials....10
1.4.2 Site-Related Treatment Systems....10
1.4.3 Contamination Remaining....10
2.0 ENGINEERING AND INSTITUTIONAL CONTROL PLAN....13
2.1 Introduction....13
2.1.1 General....13
2.1.2 Purpose....14
2.2 Engineering Controls....14
2.2.1 Engineering Control Systems....14
2.2.1.1 Site Cover System....14
2.2.1.2 Monitored Natural Attenuation....14
2.2.2 Criteria for Completion of Remediation/Termination of Remedial Systems....14
2.2.2.1 Site Cover System....15
2.2.2.2 Monitored Natural Attenuation....15
2.3 Institutional Controls....15
2.3.1 Excavation Work Plan....16
2.3.2 Soil Vapor Intrusion Evaluation....17
2.4 Inspections and Notifications....17
2.4.1 Inspections....17
2.4.2 Notifications....18
2.5 Contingency Plan....18
2.5.1 Emergency Telephone Numbers....19
2.5.2 Map and Directions to Nearest Health Facility....19
2.5.3 Response Procedures....21
3.0 MONITORING PLAN....21
3.1 Introduction....21
3.1.1 General....21
3.1.2 Purpose and Schedule....21
3.2 Site Cover System Monitoring....22
3.3 Media Monitoring Program....22
3.3.1 Groundwater Monitoring....22
3.3.1.1 Sampling Protocol....23
3.3.1.2 Monitoring Well Repairs, Replacement and Decommissioning....24
3.4 Site-Wide Inspection....24
3.5 Monitoring Quality Assurance/Quality Control....25
3.6 Monitoring Reporting Requirements....25

TABLE OF CONTENTS
(continued)

4.0 OPERATION AND MAINTENANCE PLAN 26

5.0 INSPECTIONS, REPORTING AND CERTIFICATIONS 27
- 5.1 Site Inspections 27
  - 5.1.1 Inspection Frequency 27
  - 5.1.2 Inspection Forms, Sampling Data, and Maintenance Reports 27
  - 5.1.3 Evaluation of Records and Reporting 27
- 5.2 Certification of Engineering and Institutional Controls 27
- 5.3 Periodic Review Report 28
- 5.4 Corrective Measures Plan 29

6.0 REFERENCES 29

TABLES

Table 2.5.1a Emergency Contact Numbers
Table 2.5.1b Contact Numbers
Table 3.1.2 Monitoring/Inspection Schedule
Table 3.4 Schedule of Monitoring/Inspection Reports

Table 1 Summary of Confirmation Soil Sample Analytical Results
Table 2 Summary of On-site Confirmation Soil Sample Analytical Results Exceeding Soil Cleanup Objectives
Table 3 Summary of On-site Soil Analytical Results for Pesticides and PCBs
Table 4 Summary of Wetland Sediment Analytical Results
Table 5 Post-Excavation Groundwater Analytical Results and Groundwater Quality Standards
Table 6 Well Construction Details

FIGURES

Figure 1 Site Location Map
Figure 2 Site Plan
Figure 3 Cross Section A-A'
Figure 4 Cross Section B-B'
Figure 5 Potentiometric Surface Map
Figure 6 Approximate Aerial Distribution of Petroleum Compounds in Soil Prior to Remedial Action Implementation
Figure 7 On-site Excavation Confirmation Soil Samples Below Soil Cleanup Objectives
Figure 8 On-site Excavation Confirmation Soil Samples Above Soil Cleanup Objectives
Figure 9 Off-site Excavation Confirmation Soil Samples Below Soil Cleanup Objectives
Figure 10 Off-site Excavation Confirmation Soil Samples Above Soil Cleanup Objectives
Figure 11 Approximate Aerial Distribution of Petroleum Compounds in Groundwater Prior to Remedial Action Implementation
Figure 12 Approximate Aerial Distribution of Petroleum Compounds in Groundwater After Remedial Action Implementation
Figure 13 Remaining Contamination in Soil on Site
Figure 14 Remaining Contamination in Groundwater on Site
Figure 15 Site Cover System

TABLE OF CONTENTS
(continued)

APPENDICES

Appendix A Excavation Work Plan
Appendix B Environmental Easement
Appendix C Metes and Bounds
Appendix D Health and Safety Plan
Appendix E Community Air Monitoring Plan
Appendix F Quality Assurance Project Plan
Appendix G Monitoring Well Boring and Construction Logs
Appendix H Well Sampling Record
Appendix I Site Inspection Form

SITE MANAGEMENT PLAN
Former Drive & Park, Inc. Site
Brownfield Cleanup Program #C314111
28 IBM Road
Town of Poughkeepsie
Dutchess County, New York

1.0 INTRODUCTION AND DESCRIPTION OF REMEDIAL PROGRAM

1.1 INTRODUCTION

This document is required as an element of the remedial program at the Former Drive & Park, Inc. Site (hereinafter referred to as the "site") under the New York State (NYS) Brownfield Cleanup Program administered by the New York State Department of Environmental Conservation (NYSDEC). The site was remediated in accordance with Brownfield Cleanup Agreement (BCA) Index # W3-1011-04-07, Site # C314111, which was executed on July 6, 2005.

1.1.1 General

Avis Rent A Car System, Inc. (Avis) entered into a BCA with the NYSDEC to remediate a 2.7- acre property located at 28 IBM Road (the site, or property) in Poughkeepsie, New York (Figure 1). This BCA required the Remedial Party, Avis, to investigate and remediate contaminated media on site and off site. A figure showing the site location and boundaries of this 2.7-acre site is provided in Figure 2. The boundaries of the site are more fully described in the metes and bounds site description that is part of the Environmental Easement.

After completion of the remedial work described in the Remedial Action Work Plan, some contamination above unrestricted use soil cleanup objectives was left in the subsurface at this site, which is hereafter referred to as 'remaining contamination.' This Site Management Plan (SMP) was prepared to manage remaining contamination at the site until the Environmental Easement is extinguished in accordance with ECL Article 71, Title 36. All reports associated with the site can be viewed by contacting the NYSDEC or its successor agency managing environmental issues in New York State.

This SMP was prepared by AMEC Geomatrix, Inc. (AMEC), on behalf of Avis, in accordance with the requirements in NYSDEC *DER-10 Technical Guidance for Site Investigation and Remediation*, dated May, 2010, and the guidelines provided by NYSDEC. This SMP addresses the means for implementing the Institutional Controls (ICs) and Engineering Controls (ECs) that are required by the Environmental Easement for the site.

1.1.2 Purpose

The site contains contamination left after completion of the remedial action. An Engineering Control has been incorporated into the site remedy to control exposure to remaining contamination during the use of the site to ensure protection of public health and the

environment. An Environmental Easement granted to the NYSDEC, and recorded with the Dutchess County Clerk, will require compliance with this SMP and all ECs and ICs placed on the site. The ICs place restrictions on site use, and mandate maintenance, monitoring and reporting measures for all ECs and ICs. This SMP specifies the methods necessary to ensure compliance with all ECs and ICs required by the Environmental Easement for contamination that remains at the site. This plan has been approved by the NYSDEC, and compliance with this plan is required by the grantor of the Environmental Easement and the grantor's successors and assigns. This SMP may only be revised with the approval of the NYSDEC.

This SMP provides a detailed description of all procedures required to manage remaining contamination at the site after completion of the Remedial Action, including: (1) implementation and management of all Engineering and Institutional Controls; (2) media monitoring; (3) maintenance of containment systems; (4) performance of periodic inspections, certification of results, and submittal of Periodic Review Reports; and (5) defining criteria for termination of monitoring system operations.

To address these needs, this SMP includes three plans: (1) an Engineering and Institutional Control Plan for implementation and management of ECs/ICs (Section 2.0); (2) a Monitoring Plan for implementation of site monitoring (Section 3.0); and (3) an Excavation Work Plan (Appendix A) for subsurface work at the site that may encounter remaining contamination.

This plan also includes a description of Periodic Review Reports for the periodic submittal of data, information, recommendations, and certifications to NYSDEC.

It is important to note the following:

- This SMP details the site-specific implementation procedures that are required by the Environmental Easement. Failure to properly implement the SMP is a violation of the Environmental Easement, which is grounds for revocation of the Certificate of Completion (COC);
- Failure to comply with this SMP is also a violation of Environmental Conservation Law, 6NYCRR Part 375 and the BCA (Index # W3-1011-04-07, Site # C314111) for the site, and thereby subject to applicable penalties.

1.1.3 Revisions

Revisions to this plan will be proposed in writing to the NYSDEC's project manager. In accordance with the Environmental Easement for the site (Appendix B), the NYSDEC will provide a notice of any approved changes to the SMP, and append these notices to the SMP that is retained in its files.

1.2 SITE BACKGROUND

1.2.1 Site Location and Description

The site is located in the Town of Poughkeepsie, County of Dutchess, New York and is identified as Block 6060-4 and Lot 903139 on the Poughkeepsie Tax Map. The site is an approximately 2.7-acre area bounded by IBM Road to the north, commercial and residential

property and a wetland to the south, commercial and residential properties to the east, and Barnegat Road to the west (see Figures 1 and 2). The boundaries of the site are more fully described in Appendix C – Metes and Bounds.

1.2.2 Site History

A Gulf gasoline service station was located at the north end of the site from approximately 1953 to 1973, at the intersection of IBM Road and Barnegat Road (Geomatrix, 2004b). Soil and groundwater investigations in the area of the former Gulf service station have not indicated soil and/or groundwater contamination resulting from the former Gulf service station.

The site was used by Drive & Park, Inc. from approximately 1965 until it was sold to Avis in 1991. Drive & Park, Inc. operated two steel USTs of unknown size from approximately 1965 to 1986, when the tanks were removed and a release of gasoline was reported to the NYSDEC by Drive & Park, Inc. The NYSDEC issued spill number 86-05706. In 1987, two 5,000-gallon USTs were installed in place of and at the same location as those removed in 1986.

At the time of the release, the site was owned by Broad Act Corporation and used as a car rental facility by Drive & Park, Inc. Avis purchased the property in 1991, five years after the leaking UST system was removed. The two USTs installed in 1987 were removed by Avis in 1998 (see below).

Avis installed groundwater monitoring wells in 1992 and collected water samples for analysis from the wells in 1992 and 1997. Analytical data for groundwater samples collected from the monitoring wells indicated that the release had extended onto the adjacent property to the south.

In 1998, the two USTs that were installed in 1987 were removed. The 1998 removal of the two USTs was witnessed by the NYSDEC, and it was determined that there was no evidence of a release from these gasoline USTs installed in 1987, although existing soil contamination from the USTs removed in 1986 was observed. After removal of these USTs, the NYSDEC closed spill number 86-05706, although Avis was not informed of the case closure. Avis continued to monitor the site. The NYSDEC subsequently reopened the case, as discussed below.

In March 2003, Avis collected groundwater samples from eight existing monitoring wells on the site and from three monitoring wells on the adjacent property. Analytical results in groundwater were similar to previous sampling events conducted in 1992 and 1997. However, floating free product (gasoline) was found in one monitoring well near the former USTs. Floating free product, other than a sheen, had not previously been reported at the site.

Avis conducted high-vacuum extraction at the site from mid-April 2003 until September 2003 to recover floating free product from the impacted monitoring well. In September 2003, extraction was discontinued when measurable floating free product was no longer observed. The monitoring well was monitored at least semi-annually between September 2003 and September 2005.

Upon discovery of the floating free product, Avis met with representatives from the NYSDEC in September 2003 to discuss the status of the site. NYSDEC concurred with Avis that the contamination was related to the 1986 release, and therefore, re-opened spill number 86-05706. Avis conducted a soil boring investigation in November 2003, and no areas of recoverable floating free product were located. Avis collected discrete-depth groundwater samples on the adjacent property to the south to evaluate the extent of impacted groundwater. No floating free product was observed; however, one location contained dissolved petroleum constituents. Dissolved petroleum constituents were not found to extend below the building on the adjacent property. The results of the investigation were presented to the NYSDEC in the *November 2003 Soil and Groundwater Investigation Report*, dated April 2004 (Geomatrix, 2004a).

Avis applied for entry to the Brownfield Cleanup Program in April 2004 and was accepted; a Brownfield Site Cleanup Agreement was executed in July 2005.

1.2.3 Geologic Conditions

The geology of the site and of the adjacent property to the south consists of silty sand overlying an intermittent peat layer and an intermittent gravel layer, with an underlying layer of fine-grained silt and clay. Geologic sections are shown in Figures 3 and 4. A portion of the site has been backfilled with a combination of ¾-inch crushed stone, Item 4 aggregate base, and stone sand, and a portion of the adjacent property to the south has been backfilled with a combination of approved excavated soils, general fill, Item 4 aggregate base, stone sand, and topsoil.

The shallow groundwater flow direction has generally ranged from southwest to south at the site and from southeast to southwest on the adjacent property to the south. An interpreted groundwater flow figure for February 17, 2010 is shown in Figure 5. Regional shallow groundwater flow is expected to follow topography and flow to the south and southwest. Depths to groundwater at the site range from approximately 3 to 10 feet below ground surface (bgs). National Environmental Technology Corporation (NETC) performed slug tests in wells MW-1 through MW-13 and analyzed the data using the Bouwer and Rice slug test method to estimate hydraulic conductivity (K) in fully or partially penetrating wells under unconfined aquifer conditions. NETC's values ranged from 9.62 x 10-6 feet per minute (ft/min) to 1.2 x 10-3 ft/min (NETC, 1992).

1.3 SUMMARY OF REMEDIAL INVESTIGATION FINDINGS

A Remedial Investigation (RI) was performed to characterize the nature and extent of contamination at the site. The results of the RI are described in detail in the following reports:

- *Preliminary Hydrologic Assessment Report*, National Environmental Technologies Corporation, February 28, 1991;
- *Final Phase II Hydrogeological Investigation*, National Environmental Technologies Corporation, October 15, 1992;
- *Groundwater and Soil Sampling Results and Interim Remediation*, September 9, 2003;

- *November 2003 Soil and Groundwater Investigation Report*, Geomatrix Consultants, Inc., April 2004;
- *Interim Remedial Measure Work Plan*, Geomatrix Consultants, Inc., MFG, Inc., November 2005;
- *Remedial Investigation and Interim Remedial Measure Implementation Report*, Geomatrix Consultants, Inc., April 2007;
- *Supplement to Remedial Investigation and Interim Remedial Measure Implementation Report- Soil Vapor Intrusion Investigation Report*, Geomatrix Consultants, Inc., June 2007;
- *Resampling of Excavation Confirmation Soil Sampling Locations*, AMEC Geomatrix, February 2010; and
- *Supplemental Remedial Investigation Report*, AMEC Geomatrix, Inc., October 2010.

The RI determined that impacted soil and groundwater was present as the result of a gasoline release from a UST removed from the site in 1986. Free product was found in one monitoring well in the area of the former USTs, and impacted soil and groundwater extended onto the adjacent property to the south. Interim remedial measures consisted of the removal of free product from the surface of the water table in 2003, the excavation of approximately 23,900 tons of impacted soil from the site and from the adjacent property in 2005 and 2006, the extraction of 622,452 gallons of impacted groundwater from the interim remedial investigation in 2005 and 2006, and the placement of oxygen release compound in backfill materials in 2006.

Below is a summary of site conditions when the remedial investigation was performed in 2005, and 2006, and when the supplemental remedial investigation was performed in 2009:

Soil

Soil conditions at the site and on the neighboring property to the south prior to the interim remedial excavation are described in detail in the *Interim Remedial Measure Work Plan* (Geomatrix, 2005), the *Remedial Investigation and Interim Remedial Measure Implementation Report* (Geomatrix, 2007a), and the *Supplemental Remedial Investigation Report*, (AMEC, 2010b). Figure 6 illustrates the approximate aerial distribution of benzene, toluene, ethylbenzene, total xylenes and MTBE present in soil at the site and on the neighboring property to the south prior to the interim remedial excavation in 2005 and 2006. Figures 7 and 8 illustrate on-site soil conditions after the interim remedial excavation, and Figures 9 and 10 illustrate off-site soil conditions after the interim remedial excavation.

Soils in the area of the former Gulf service station at the north end of the site were analyzed for volatile organic compounds (VOCs), gasoline range organics (GROs) and diesel range organics (DROs). No VOCs, GROs or DROs were detected at or above laboratory reporting limits in the soil samples collected in the area of the former Gulf service station.

Soils in the area of the former Drive & Park, Inc. UST system were found to be impacted by petroleum hydrocarbons. Soil borings and membrane interface probes defined the area of residual product in soil to extend from the area of the former UST system to the south, onto the adjacent property to the south, as shown on Figure 2.

Benzene concentrations in soil at the site before the interim remedial excavation were up to 50.2 mg/kg, above the soil cleanup objectives (SCOs) for protection of groundwater (0.06 mg/kg), residential use (2.9 mg/kg), restricted residential use (4.8 mg/kg), and commercial use (44 mg/kg), but below the SCOs for protection of ecological resources (70 mg/kg) and industrial use (89 mg/kg). Toluene concentrations in soil at the site were up to 348 mg/kg, above the SCOs for protection of groundwater (0.7 mg/kg), protection of ecological resources (36 mg/kg), residential use (100 mg/kg), and restricted residential use (100 mg/kg), but below the SCOs for commercial use (500 mg/kg), and industrial use (1,000 mg/kg). Ethylbenzene concentrations in soil at the site were up to 128 mg/kg, above the SCOs for protection of groundwater (1 mg/kg), residential use (30 mg/kg), and restricted residential use (41 mg/kg), but below the SCOs for commercial use (390 mg/kg) and industrial use (780 mg/kg) (an ethylbenzene SCO has not been developed for protection of ecological resources). Total xylene concentrations in soil at the site were up to 372 mg/kg, above the SCOs for protection of groundwater (1.6 mg/kg), protection of ecological resources (0.26 mg/kg), residential use (100 mg/kg), and restricted residential use (100 mg/kg), but below the SCOs for commercial use (500 mg/kg) and industrial use (1,000 mg/kg).

Benzene concentrations in soil at the adjacent property to the south before the interim remedial excavation were up to 11.4 mg/kg, above the SCOs for protection of groundwater, residential use and restricted residential use, but below the SCOs for commercial use, industrial use and protection of ecological resources. Toluene concentrations in soil at the adjacent property to the south were up to 221 mg/kg, above the SCOs for protection of groundwater, protection of ecological resources, residential use and restricted residential use, but below the SCOs for commercial use and industrial use. Ethylbenzene concentrations in soil at the adjacent property to the south were up to 76.1 mg/kg, above the SCOs for protection of groundwater, residential use, and restricted residential use, but below the SCOs for commercial use and industrial use. Total xylene concentrations in soil at the adjacent property to the south were up to 524 mg/kg, above the SCOs for protection of groundwater, protection of ecological resources, residential use, restricted residential use and commercial use, but below the SCO for industrial use.

Soil sampling during and after excavation activities indicated that the remedial activities removed all but trace amounts of residual contamination from soil. Of the 55 soil samples collected from the sidewalls and floor of the on-site and off-site excavations before backfilling, only 10 locations (4 on-site and 6 off-site) had concentrations exceeding SCOs for benzene, toluene, ethylbenzene and/or total xylenes (Figures 8 and 10). The on-site areas that exceeded the SCO for benzene for protection of groundwater were resampled in 2009 (AMEC, 2010a). The off-site areas were not resampled.

When the on-site soil samples containing benzene above the SCO for protection of groundwater were resampled in 2009, one location at the floor of the former excavation, 14 feet below ground surface, contained a benzene concentration exceeding the SCO for protection of groundwater (Table 2). The benzene concentration in that sample was 0.092 mg/kg, above the SCO for protection of groundwater but below the SCOs for protection of ecological resources, residential use, restricted residential use, commercial use, and industrial use. Ethylbenzene and total xylenes were detected in that sample at 0.019 mg/kg and 0.037 mg/kg, respectively, below all SCOs for those compounds. Toluene was not detected at or above the laboratory reporting limit of 0.0042 mg/kg. Other than the one sample containing benzene above the SCO for protection of groundwater, petroleum hydrocarbons were not detected in any of the other on-site confirmation soil samples at concentrations exceeding any of the SCOs.

Shallow soil samples were collected at the site and analyzed for polychlorinated biphenyls (PCBs) and pesticides in August 2009 (AMEC, 2010b). Six soil samples were collected from approximately two feet bgs (Table 3). The locations of the soil borings from which the samples were collected (SB-1 through SB-6) are shown in Figure 2. No PCBs or pesticides were detected above the unrestricted use cleanup objectives.

In August 2009, shallow sediment samples were collected in the wetland area along the east side of the former excavation area on the adjacent property to the south (AMEC, 2010b). The results of the wetland sediment samples are presented in Table 4 and their locations are shown on Figure 2. Seven locations were sampled and petroleum hydrocarbons were detected at only one location. Benzene, toluene, ethylbenzene and xylenes were detected above laboratory reporting limits at location WS-1, near monitoring well MW-12. Petroleum hydrocarbons were not detected at or above laboratory reporting limits in sample WS-1-0.3, collected at a depth of 0.3 feet bgs. In sample WS-1-0.8, collected at a depth of 0.8 feet bgs, benzene was detected at 0.011 mg/kg, and total xylenes were detected at 0.036 mg/kg. Ethylbenzene and toluene were not detected at or above laboratory reporting limits in sample WS-1-0.8. In sample WS-1-1.8, collected at a depth of 1.8 feet bgs, benzene was detected at 2.3 mg/kg, toluene was detected at 27 mg/kg, ethylbenzene was detected at 170 mg/kg, and total xylenes were detected at 800 mg/kg. The concentrations of benzene detected in samples WS-1-0.8 and WS-1-1.8 exceeded the sediment criteria for human health bioaccumulation (AMEC, 2001b). The concentrations of benzene, toluene, ethylbenzene and total xylenes detected in sample WS-1-1.8 exceeded the sediment criteria for benthic aquatic life acute toxicity and/or benthic aquatic life chronic toxicity.

Groundwater

Groundwater conditions at the site and on the neighboring property to the south prior to the interim remedial excavation are described in the *Interim Remedial Measure Work Plan* (Geomatrix, 2005) and the *Remedial Investigation and Interim Remedial Measure Implementation Report* (Geomatrix, 2007a). Figure 11 illustrates the approximate aerial

distribution of petroleum hydrocarbons in groundwater at the site and on the neighboring property to the south prior to the interim remedial excavation.

Before the interim remedial activities were conducted, free product was present in one monitoring well (MW-2) near the former Drive & Park, Inc. USTs, and impacted groundwater extended approximately 250 feet to the south of the USTs, approximately 120 feet onto the neighboring property to the south. Fuel oxygenates present in groundwater samples collected at the site and from the adjacent property to the south were determined to be from an off-site source(s) and were not targeted during remediation (Geomatrix, 2007a).

Groundwater sampling conducted in September 2005, several months before the start of the interim remedial excavation, indicated benzene concentrations at the site were up to 3,340 micrograms per liter (µg/L), above the water quality standard of 1 µg/L. Toluene concentrations at the site were up to 9,010 µg/L, above the water quality standard of 5 µg/L. Ethylbenzene concentrations at the site were up to 3,610 µg/L, above the water quality standard of 5 µg/L. Total xylene concentrations at the site were up to 19,200 µg/L, above the water quality objective of 5 µg/L. The highest concentrations of contaminants were located in on-site wells, but impacted groundwater extended onto the neighboring property.

Groundwater sampling conducted after completion of the interim remedial measure indicates that two site monitoring wells, well MW-1 immediately upgradient of the excavation area and well MW-203 near the center of the excavation area, and well MW-12 on the neighboring property to the south contain concentrations of petroleum hydrocarbons (benzene and total xylenes) exceeding water quality standards. Groundwater sampling was conducted quarterly for a year and a half after completion of the interim remedial investigation and has been conducted every 5 quarters since then. Groundwater data are summarized in Table 5, and groundwater data from February 2010 are shown on Figure 12.

Stream Sediment

In August 2009, AMEC evaluated the unnamed stream in the east portion of the wetland for a sheen in the sediment or on the surface water. The sediment at the banks, sides, and bottom of the stream was probed using a hand auger at five transects: one just below the upstream culvert, one just above the downstream culvert, and three east and southeast of the interim remedial excavation area (Figure 2). No hydrocarbon sheen was detected in the sediment or on the surface water. During the probing study, three sediment samples were collected and analyzed for benzene, toluene, ethylbenzene and xylenes to confirm that a blocky sheen observed was not hydrocarbon related. No petroleum hydrocarbons were detected in the sediment samples.

Soil Vapor Intrusion

Soil vapor samples were collected between the area of impacted groundwater and the building on the adjacent property before and after the interim remedial excavation (Geomatrix, 2007a).

Subslab soil vapor samples and indoor air samples were also collected at the building on the neighboring property to the south (Geomatrix, 2007b) after the interim remedial excavation. These investigations indicated that vapor intrusion of chemicals from the subsurface to indoor air was not occurring at levels requiring further action.

Underground Storage Tanks

Four 2,000-gallon USTs associated with the former Gulf service station were abandoned in place in the north portion of the site prior to 1990. The area of these USTs was investigated with soil borings and monitoring wells and no evidence of a release from the USTs was detected (Geomatrix, 2005).

As discussed above, two USTs operated by Drive & Park, Inc. of unknown size were removed from the site in 1986 and replaced with two 5,000-gallon gasoline USTs in 1987. The USTs operated by Drive & Park, Inc. that were removed in 1986 have been identified as the source of the release at the site (Geomatrix, 2005). The USTs installed in 1987 were removed by Avis in 1998 (Section 1.2.2).

The locations of the former USTs at the site are shown on Figure 2.

1.4 SUMMARY OF REMEDIAL ACTIONS

The site was remediated in accordance with the NYSDEC-approved Interim Remedial Action Work Plan dated November, 2005.

The following is a summary of the Remedial Actions performed at the site:

1. Removal of floating free product from the surface of the water table in the area of the former Drive & Park, Inc. USTs using high vacuum extraction;
2. Excavation of approximately 23,900 tons of soil exceeding unrestricted use SCOs listed in Table 1, to depths ranging from approximately 8 to 15 feet below ground surface;
3. Construction and maintenance of a site cover system consisting of at least three feet of clean soil or an impermeable surface to prevent human exposure to remaining contaminated soil at the site;
4. Extraction and treatment of approximately 622,452 gallons of groundwater during excavation activities;
5. Placement of oxygen release compound in backfill material to enhance biodegradation of any remaining petroleum hydrocarbons;
6. Restoration of the site and neighboring property with clean backfill, landscaping and asphalt to pre-excavation conditions;
7. Execution and recording of an Environmental Easement to restrict land use and prevent future exposure to any contamination remaining at the site; and
8. Development and implementation of a Site Management Plan for long term management of remaining contamination as required by the Environmental Easement, which includes plans for: (1) Institutional and Engineering Controls, (2) monitoring, and (3) reporting.

Remedial activities were completed from April to September 2003 (free product removal), and December 2005 through June 2006 (excavation, groundwater extraction, ORC placement, construction of the soil and asphalt components of the site cover system, and restoration).

1.4.1 Removal of Contaminated Materials

During a September 27, 2005 meeting, the NYSDEC and Avis agreed that Avis would implement an interim remedial measure consisting of source removal through excavation of petroleum-impacted soils at the site and at the adjacent property to the south using conventional earthmoving equipment. This interim remedial measure, including excavation and restoration, was conducted from December 2005 through June 2006. During the excavation, which extended below the water table to depths of 8 to 15 feet bgs, approximately 23,900 tons of soil was removed for off-site disposal. The excavation was extended laterally and vertically to remove petroleum hydrocarbons present in soil in excess of the NYSDEC Technical and Administrative Guidance Memorandum (TAGM) 4046 recommended soil cleanup objectives which are presented in TAGM 4046 Table 1 – Volatile Organic Contaminants (NYSDEC, 1994). Oxygen release compound, a proprietary material provided by Regenesis, Inc., was added to the backfill material in the on-site and off-site excavations to enhance the biodegradation of petroleum hydrocarbons remaining in groundwater. Excavation and confirmation sampling activities are described in detail in the *Remedial Investigation and Interim Remedial Measure Implementation Report* (Geomatrix, 2007a). A list of the soil cleanup objectives (SCOs) for the primary contaminants of concern (COCs) and applicable land use is provided in Table 2. A figure showing the area where excavation was performed is included as Figure 2, and the locations of confirmation soil samples are shown in Figures 7, 8, 9 and 10.

1.4.2 Site-Related Treatment Systems

No long-term treatment systems were installed as part of the site remedy.

1.4.3 Contamination Remaining

Soil containing concentrations of benzene above the unrestricted use SCO remained on the site in one area at the bottom of the former excavation, and groundwater containing COCs above groundwater quality standards is present in two monitoring wells on the site. Table 2 and Figure 13 summarize the results of the single soil sample remaining at the site after completion of remedial action that exceeded the Track 1 (unrestricted use) SCO for benzene. Figure 14 summarizes the most recent groundwater data for on-site monitoring wells that have concentrations of petroleum hydrocarbons that exceed Track 1 groundwater quality objectives.

Soil that exceeded unrestricted use SCOs remained at six confirmation soil sample locations from the off-site excavation, as follows: on the floor (three samples), on the east sidewall (2 samples) and at the northwest corner (one sample). Groundwater exceeding water quality standards is present in one off-site monitoring well. Sediment with exceedances of benthic aquatic life sediment criteria remains at one location in the wetland, near monitoring well MW-12. Table 1 and Figure 10 summarize the results of the confirmation soil samples on the

adjacent property to the south after completion of the remedial action that exceeded Track 1 (unrestricted use) SCOs. Figure 12 summarizes recent groundwater data for MW-12. Table 4 summarizes the results of the wetland samples, and the wetland sampling locations are shown in Figure 2.

Figures 7 and 9 summarize the results of confirmation soil samples collected on the site and on the adjacent property to the south that meet the SCOs for unrestricted use. Table 5 summarizes the chemical analysis results for groundwater samples collected since completion of the interim remedial measure excavation. Figure 12 summarizes the most recent groundwater data and includes the two on-site monitoring wells and one off-site well that have concentrations of petroleum hydrocarbons above groundwater quality standards.

A natural gas utility line crosses the area of potentially impacted soil and groundwater on the site (Figures 13 and 14).

Soil at one location at the bottom of the former excavation at the site contained benzene at a concentration of 0.092 milligrams per kilogram (mg/kg), exceeding the unrestricted use soil cleanup objective of 0.060 mg/kg (the SCO for groundwater protection). No other petroleum hydrocarbons exceeded their respective unrestricted use SCOs. The concentration of benzene detected is below the SCOs for residential use (2.9 mg/kg), restricted residential use (4.8 mg/kg), commercial use (44 mg/kg), industrial use (89 mg/kg) and protection of ecological resources (70 mg/kg). The concentration of benzene detected is higher than the soil cleanup objective for protection of groundwater (0.06 mg/kg).

On the adjacent property to the south, six confirmation soil samples exceeded SCOs. Off-site sidewall sample SW-E21-10.0-123005, collected at a depth of approximately 10 feet bgs, contained toluene at a concentration of 15 mg/kg, above the SCO for protection of groundwater but below the SCOs for residential use, restricted residential use, commercial use, industrial use and protection of ecological resources. Ethylbenzene was detected in the sample at a concentration of 7.8 mg/kg, above the SCO for protection of groundwater but below the SCOs for residential use, restricted residential use, commercial use, and industrial use (there is no SCO developed for protection of ecological resources for ethylbenzene). Total xylenes were detected in the sample at 50 mg/kg, above the SCOs for protection of groundwater and protection of ecological resources but below the SCOs for residential use, restricted residential use, commercial use, and industrial use. Benzene was not detected at or above the laboratory reporting limit of 1.1 mg/kg; however, the laboratory reporting limit was above the SCO for protection of groundwater. The laboratory reporting limit was below the SCOs for residential use, restricted residential use, commercial use, industrial use and protection of ecological resources.

Off-site sidewall sample SW-E05-5.0-122805, collected at a depth of approximately 5 feet bgs, contained benzene at 0.11 mg/kg, above the SCO for protection of groundwater but below the SCOs for residential use, restricted residential use, commercial use, industrial use and

protection of ecological resources. Sample SW-E05-5.0-122805 did not contain toluene, ethylbenzene or total xylenes at concentrations exceeding the SCOs for unrestricted use.

Off-site floor sample FL-E26-12.0-010606, collected at a depth of approximately 12 feet bgs, contained benzene at a concentration of 1.6 mg/kg, above the SCO for protection of groundwater but below the SCOs for residential use, restricted residential use, commercial use, industrial use, and protection of ecological resources. Sample FL-E26-12.0-010606 did not contain toluene, ethylbenzene or total xylenes at concentrations exceeding the SCOs for unrestricted use.

Off-site floor sample FL-E28-14.0-011706, collected at a depth of approximately 14 feet bgs, contained benzene at a concentration of 0.53 mg/kg, above the SCO for protection of groundwater but below the SCOs for residential use, restricted residential use, commercial use, industrial use, and protection of ecological resources. This sample also contained total xylenes at a concentration of 0.512 mg/kg, above the SCO for protection of ecological resources but below the SCOs for residential use, restricted residential use, commercial use, industrial use, and protection of groundwater. Sample FL-E28-14.0-011706 did not contain toluene or ethylbenzene at concentrations exceeding the SCOs for unrestricted use.

Off-site floor sample FL-E29-14.0-011906, collected at a depth of approximately 14 feet bgs, contained benzene at 4.8 mg/kg, above the SCOs for protection of groundwater and for residential use, but at or below the SCOs for restricted residential use, commercial use, industrial use and protection of ecological resources. Sample FL-E29-14.0-011906 did not contain toluene, ethylbenzene or total xylenes at concentrations above the SCOs for unrestricted use. Sample FL-E29-14.0-011906 also contained 1,2-dichloroethane at 0.16 mg/kg, above the SCO for protection of groundwater (0.02 mg/kg) but below the SCOs for residential use (2.3 mg/kg), restricted residential use (3.1 mg/kg), commercial use (30 mg/kg), industrial use (60 mg/kg) and protection of ecological resources (10 mg/kg).

Off-site sidewall sample SW-E-06-10.0-122805, collected at the northwest corner of the off-site excavation at a depth of approximately 10 feet bgs, contained total xylenes at a concentration of 4.37 mg/kg, above the SCOs for protection of ecological resources and protection of groundwater, but below the SCOs for residential use, restricted residential use, commercial use, and industrial use. The laboratory reporting limit for benzene in the sample was 0.32 mg/kg, above the SCO for protection of groundwater, but below the SCOs for residential use, restricted residential use, commercial use, industrial use and protection of ecological resources. Sample SW-E-06-10.0-122805 did not contain toluene or ethylbenzene at concentrations above the unrestricted use SCOs.

A very limited area of buried sediment within the designated wetland contains petroleum hydrocarbons above aquatic life sediment criteria. Benzene, toluene, ethylbenzene and xylenes were detected at location WS-1, near monitoring well MW-12. Benzene, toluene, ethylbenzene, and total xylenes were not detected at or above laboratory reporting limits in sample WS-1-0.3,

collected at a depth of 0.3 feet bgs. In sample WS-1-0.8, collected at a depth of 0.8 feet bgs, benzene was detected at 0.011 mg/kg and total xylenes were detected at 0.036 mg/kg. Ethylbenzene and toluene were not detected at or above laboratory reporting limits in sample WS-1-0.8. In sample WS-1-1.8, collected at a depth of 1.8 feet bgs, benzene was detected at 2.3 mg/kg, toluene was detected at 27 mg/kg, ethylbenzene was detected at 170 mg/kg, and total xylenes were detected at 800 mg/kg. The concentrations of benzene, toluene, ethylbenzene and total xylenes detected at sample location WS-1-1.8 exceeded sediment criteria for benthic aquatic life chronic toxicity and benthic aquatic life acute toxicity. Benzene, toluene, ethylbenzene, and total xylenes were not detected at the other wetland shallow sediment sampling locations.

Petroleum hydrocarbons above unrestricted use SCOs remaining on the floor of the on-site and off-site portions of the interim remedial measure excavation occur in silt with fine sand beneath the material used to backfill the excavation. The impacted soil is at a depth of approximately 12 to 14 feet below ground surface, immediately beneath the ¾-inch stone backfill. Petroleum hydrocarbons above unrestricted use SCOs remaining at the northwest corner of the off-site portion of the excavation occur at a depth of approximately ten feet below ground surface, in the native silty sand adjacent to the backfilled excavation. Petroleum hydrocarbons above unrestricted use SCOs remaining at the east side of the off-site portion of the excavation occur at a depth of approximately five to ten feet bgs, in the native silty sand adjacent to the backfilled excavation. Petroleum hydrocarbons above aquatic life criteria remaining in the wetland occur at a depth of approximately one foot below ground surface, in the native silty sand beneath the surface organic layer.

Figures 6 and 7 summarize the results of all soil sample locations remaining at the site after completion of Remedial Action that meet the SCOs for unrestricted use of the site.

2.0 ENGINEERING AND INSTITUTIONAL CONTROL PLAN

2.1 INTRODUCTION

2.1.1 General

Since remaining contaminated soil exists beneath the site at concentrations exceeding soil cleanup objectives for protection of groundwater but lower than concentrations for protection of public health (residential, restricted residential, commercial and industrial) and protection of ecological resources, and since contaminated groundwater exists on- and off-site at concentrations above water quality objectives, Engineering Controls and Institutional Controls (EC/ICs) are required to protect human health and the environment. This Engineering and Institutional Control Plan describes the procedures for the implementation and management of all EC/ICs at the site. The EC/IC plan is one component of the SMP and is subject to revision by NYSDEC.

2.1.2 Purpose

This plan provides:

- A description of all EC/ICs on the site;
- The basic implementation and intended role of each EC/IC;
- A description of the key components of the ICs set forth in the Environmental Easement;
- A description of the features to be evaluated during each required inspection and periodic review;
- A description of plans and procedures to be followed for implementation of EC/ICs, such as the implementation of the Excavation Work Plan for the proper handling of remaining contamination that may be disturbed during maintenance or redevelopment work on the site; and
- Any other provisions necessary to identify or establish methods for implementing the EC/ICs required by the site remedy, as determined by the NYSDEC.

2.2 ENGINEERING CONTROLS

2.2.1 Engineering Control Systems

2.2.1.1 Site Cover System

Exposure to remaining contamination in soil/fill at the site is prevented by a site cover system placed over the site. It should be noted that concentrations of contaminants in soil do not exceed SCOs for residential, restricted residential, commercial, or industrial use, or for the protection of ecological resources; the concentration of benzene in only one soil sample exceeds the soil cleanup objective for protection of groundwater. This site cover system is comprised of a minimum of three feet of clean soil in the area of the interim remedial investigation, a concrete slab beneath the building, and asphalt pavement in the parking area. The types of cover used in the site cover system are shown on Figure 15. The Excavation Work Plan included in Appendix A outlines the procedures required to be implemented in the event the site cover system is breached, penetrated or temporarily removed and any underlying remaining contamination is disturbed. Procedures for the inspection and maintenance of this site cover system are provided in the Monitoring Plan included in Section 3 of this SMP.

2.2.1.2 Monitored Natural Attenuation

Groundwater quality will be monitored at selected existing on-site and off-site monitoring wells to evaluate the natural attenuation of residual benzene, toluene, ethylbenzene and total xylenes. Procedures for monitoring are included in the Monitoring Plan (Section 3 of this SMP). The Monitoring Plan also addresses severe condition inspections in the event that a severe condition, which may affect controls at the site, occurs.

2.2.2 Criteria for Completion of Remediation/Termination of Remedial Systems

Generally, remedial processes are considered completed when effectiveness monitoring indicates that the remedy has achieved the remedial action objectives identified by the decision

document. The framework for determining when remedial processes are complete is provided in Section 6.4 of NYSDEC DER-10.

2.2.2.1 Site Cover System

The site cover system is a permanent control and the quality and integrity of this system will be inspected at defined, regular intervals in perpetuity.

2.2.2.2 Monitored Natural Attenuation

Groundwater monitoring activities to assess natural attenuation will continue, as determined by the NYSDEC, until residual groundwater concentrations are found to be consistently below NYSDEC standards or have become asymptotic at an acceptable level over an extended period. Monitoring will continue until permission to discontinue is granted in writing by the NYSDEC. If groundwater contaminant levels become asymptotic at a level that is not acceptable to the NYSDEC, additional source removal, treatment and/or control measures will be evaluated.

2.3 INSTITUTIONAL CONTROLS

A series of Institutional Controls is required by the Decision Document to: (1) implement, maintain and monitor Engineering Control systems; (2) prevent future exposure to remaining contamination by controlling disturbances of the subsurface contamination; and (3) limit the use and development of the site to commercial and/or industrial uses only. Adherence to these Institutional Controls on the site is required by the Environmental Easement. The Institutional Controls that will be implemented under this Site Management Plan are:

- Compliance with the Environmental Easement and this SMP by the Grantor and the Grantor's successors and assigns;
- All Engineering Controls must be operated and maintained as specified in this SMP;
- All Engineering Controls on the Controlled Property (i.e., the site) must be inspected at a frequency and in a manner defined in the SMP;
- Groundwater and other environmental or public health monitoring must be performed as defined in this SMP; and
- Data and information pertinent to site management of the Controlled Property must be reported at the frequency and in a manner defined in this SMP.

Institutional Controls identified in the Environmental Easement may not be discontinued without an amendment to or extinguishment of the Environmental Easement.

The site also has a series of Institutional Controls in the form of site restrictions. Adherence to these Institutional Controls is required by the Environmental Easement. Site restrictions that apply to the Controlled Property are:

- The property may only be used for commercial/industrial use provided that the long-term Engineering and Institutional Controls included in this SMP are employed;

- All future activities on the property that will disturb remaining contaminated material must be conducted in accordance with this SMP;
- The use of the groundwater underlying the property is prohibited without treatment rendering it safe for the intended use;
- The property may not be used for a higher level of use such as unrestricted use or restricted residential use without additional investigation, and possibly remediation, and amendment of the Environmental Easement, as approved by the NYSDEC;
- Vegetable gardens and farming on the property are prohibited; and
- The site owner or remedial party will submit to NYSDEC a written statement that certifies, under penalty of perjury, that: (1) controls employed at the Controlled Property are unchanged from the previous certification or that any changes to the controls were approved by the NYSDEC; and, (2) nothing has occurred that impairs the ability of the controls to protect public health and the environment or that constitute a violation or failure to comply with the SMP. NYSDEC retains the right to access such Controlled Property at any time in order to evaluate the continued maintenance of any and all controls. This certification shall be submitted annually, or an alternate period of time that NYSDEC may allow and will be made by an expert that the NYSDEC finds acceptable.

2.3.1 Excavation Work Plan

The site has been remediated for commercial use. Any future intrusive work at the site that will penetrate the site cover system and encounter or disturb the remaining on-site contamination, including any modifications or repairs to the existing cover system, will be performed in compliance with the Excavation Work Plan (EWP) that is attached as Appendix A to this SMP. Any work conducted pursuant to the EWP must also be conducted in accordance with the procedures defined in a Health and Safety Plan (HASP) and Community Air Monitoring Plan (CAMP) prepared for the site. A sample HASP is attached as Appendix D to this SMP that is in current compliance with DER-10, 29 CFR 1910, 29 CFR 1926, and all other applicable Federal, State and local regulations. Based on future changes to State and Federal health and safety requirements, and specific methods employed by future contractors, the HASP and CAMP (Appendix E) will be updated and re-submitted with the notification provided in Section A-1 of the EWP, as needed. For any intrusive construction work performed in compliance with the EWP, HASP, and CAMP, a summary of the work will be included in the periodic inspection and certification reports described in Section 5.

The site owner and parties performing this work are responsible for the safe performance of all intrusive work, the structural integrity of excavations, proper disposal of water removed from excavations, control of runoff from open excavations into remaining contamination, and for structures that may be affected by excavations (such as building foundations and bridge

footings). The site owner will ensure that site development activities will not interfere with, or otherwise impair or compromise, the Engineering Controls described in this SMP.

2.3.2 Soil Vapor Intrusion Evaluation

Prior to the construction of any enclosed structures located over areas that contain remaining contamination (Figures 13 and 14), which therefore have the potential for soil vapor intrusion (SVI), an SVI evaluation will be performed to evaluate whether any mitigation measures are necessary to eliminate potential exposure to vapors in the proposed structure. Alternatively, an SVI mitigation system may be installed as an element of the building foundation without first conducting an investigation. This mitigation system will include a vapor barrier and passive sub-slab depressurization system that is capable of being converted to an active system.

Prior to conducting an SVI investigation or installing a mitigation system, a work plan will be developed and submitted to the NYSDEC and NYSDOH for approval. This work plan will be developed in accordance with the most recent NYSDOH *Guidance for Evaluating Vapor Intrusion in the State of New York.* Measures to be employed to mitigate potential vapor intrusion will be evaluated, selected, designed, installed, and maintained based on the SVI evaluation, the NYSDOH guidance, and construction details of the proposed structure.

If sampling is performed, preliminary (unvalidated) SVI sampling data will be forwarded to the NYSDEC and NYSDOH for initial review and interpretation. Upon validation, the final data will be transmitted to the agencies, along with a recommendation for follow-up action, such as mitigation.

SVI sampling results, evaluations, and follow-up actions will also be summarized in the subsequent Periodic Review Report.

2.4 INSPECTIONS AND NOTIFICATIONS

2.4.1 Inspections

Inspections of all remedial components installed at the site will be conducted at the frequency specified in the SMP Monitoring Plan schedule. A comprehensive site-wide inspection will be conducted every five quarters, regardless of the frequency of the Periodic Review Report. The inspections will determine and document the following:

- Whether Engineering Controls continue to perform as designed;
- If these controls continue to be protective of human health and the environment;
- Compliance with requirements of this SMP and the Environmental Easement;
- Achievement of remedial performance criteria;
- Sampling and analysis of appropriate media during monitoring events;
- If site records are complete and up to date; and
- Changes, or needed changes, to the remedial or monitoring system.

Inspections will be conducted in accordance with the procedures set forth in the Monitoring Plan of this SMP (Section 3). The reporting requirements are outlined in the Inspections, Reporting and Certifications section of this plan (Section 5).

If an emergency, such as a natural disaster or an unforeseen failure of any of the ECs, occurs, an inspection of the site will be conducted within 5 days of the event to verify the effectiveness of the EC/ICs implemented at the site by a qualified environmental professional as determined by NYSDEC.

2.4.2 Notifications

Notifications will be submitted by the property owner to the NYSDEC as needed for the following reasons:

- 60-day advance notice of any proposed changes in site use as required under the terms of the Brownfield Cleanup Agreement (BCA) 6NYCRR Part 375, and/or Environmental Conservation Law.
- 7-day advance notice of any proposed ground-intrusive activities in the area of potentially impacted soil pursuant to the Excavation Work Plan.
- Notice within 48-hours of any damage or defect to the building foundation structures that reduces or has the potential to reduce the effectiveness of other Engineering Controls and likewise any action to be taken to mitigate the damage or defect.
- Verbal notice by noon of the following day of any emergency, such as a fire, flood, or earthquake that reduces or has the potential to reduce the effectiveness of Engineering Controls in place at the site, with written confirmation within 7 days that includes a summary of actions taken, or to be taken, and the potential impact to the environment and the public.
- Follow-up status reports on actions taken to respond to any emergency event requiring ongoing responsive action shall be submitted to the NYSDEC within 45 days and shall describe and document actions taken to restore the effectiveness of the ECs.

Any change in the ownership of the site or the responsibility for implementing this SMP will include the following notifications:

- At least 60 days prior to the change, the NYSDEC will be notified in writing of the proposed change. This will include a certification that the prospective purchaser has been provided with copies of the Brownfield Cleanup Agreement (BCA) and all approved work plans and reports, including this SMP.
- Within 15 days after the transfer of all or part of the site, the new owner's name, contact representative, and contact information will be confirmed in writing.

Changes in the ownership, structure and/or name of Avis do not constitute a change in ownership of the site.

2.5 CONTINGENCY PLAN

Emergencies may include injury to personnel, fire or explosion, environmental release, or serious weather conditions. Emergency contact information is provided below.

2.5.1 Emergency Telephone Numbers

In the event of any environmentally related situation or unplanned occurrence requiring assistance the Owner or Owner's representative(s) should contact the appropriate party from the contact list below. For emergencies, appropriate emergency response personnel should be contacted. Prompt contact should also be made to Rose Pelino of Avis Rent A Car System, Inc. These emergency contact lists must be maintained in an easily accessible location at the site.

Table 2.5.1a: Emergency Contact Numbers

Medical, Fire, and Police:	911
One Call Center:	(800) 272-4480 (3 day notice required for utility markout)
Poison Control Center:	(800) 222-1222
National Spill Response Center:	(800) 424-8802
NYSDEC Spills Hotline	(800) 457-7362

Table 2.5.1b: Contact Numbers

Rose Pelino, Avis Budget	(973) 496-3447
Ed Conti, AMEC Earth & Environmental, Inc.	(510) 663-4140

* Note: Contact numbers subject to change and should be updated as necessary

2.5.2 Map and Directions to Nearest Health Facility

Site Location: 28 IBM Road, Poughkeepsie, New York

Nearest Hospital Name: Vassar Brothers Medical Center

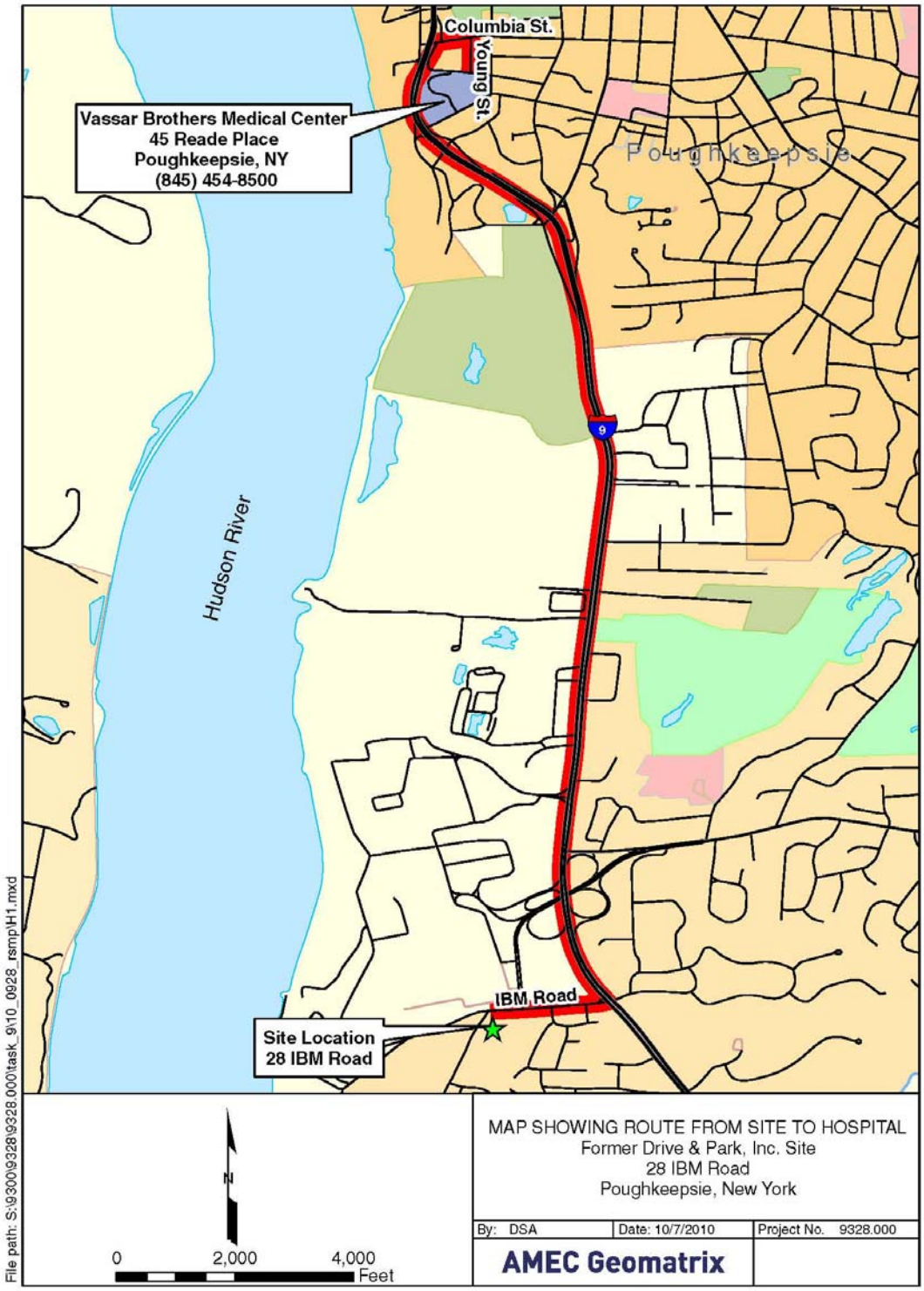
Hospital Location: 45 Reade Pl., Poughkeepsie, New York

Hospital Telephone: (845) 454-8500

Directions to the Hospital:
1. Start out going EAST on IBM Road toward Spackenkill Road
2. Turn LEFT onto US-9 North.
3. Take the Columbia Street ramp toward RINALDI BOULEVARD.
4. Turn RIGHT onto COLUMBIA STREET
5. Turn RIGHT onto YOUNG STREET
6. Turn RIGHT onto READE PLACE.
7. End at Vassar Brothers Medical Center.

Total Distance: Approximately 4 miles
Total Estimated Time: Approximately 10 minutes

Map Showing Route from the site to the Hospital:



2.5.3 Response Procedures

As appropriate, the fire department and other emergency response groups will be notified immediately by telephone of the emergency. The emergency telephone number list is found at the beginning of this Contingency Plan (Table 2.5.1a). The list will also be posted prominently at the site and made readily available to all personnel at all times.

If potentially impacted soil is spilled during excavation activities, it should be promptly containerized or stockpiled on plastic and covered with plastic pending removal for proper disposal. If potentially impacted groundwater is spilled during excavation activities, absorbent booms and/or pads should be used as needed to prevent the spilled water from flowing into stormwater catch basins. Spilled groundwater should be redirected to the excavation or containerized for proper off-site disposal.

3.0 MONITORING PLAN

3.1 INTRODUCTION

3.1.1 General

The Monitoring Plan describes the measures for evaluating (1) the performance and effectiveness of the remedy to reduce or mitigate contamination on site and off site, (2) the site cover system, and (3) all affected site media identified below. There are no mechanical Engineering Controls in use at the site. This Monitoring Plan may only be revised with the approval of NYSDEC.

3.1.2 Purpose and Schedule

This Monitoring Plan describes the methods to be used for the following:

- Sampling and analysis of all appropriate media (i.e., groundwater, soil);
- Assessing compliance with applicable NYSDEC standards, criteria and guidance, particularly ambient groundwater standards and Part 375 SCOs for soil;
- Assessing achievement of the remedial performance criteria;
- Evaluating site information periodically to confirm that the remedy continues to be effective in protecting public health and the environment; and
- Preparing the necessary reports for the various monitoring activities.

To adequately address these issues, this Monitoring Plan provides information on:

- Sampling locations, protocol, and frequency;
- Information on all designed monitoring systems (e.g., well logs);
- Analytical sampling program requirements;
- Reporting requirements;
- Quality Assurance/Quality Control (QA/QC) requirements;
- Inspection and maintenance requirements for monitoring wells;

- Monitoring well decommissioning procedures; and
- Inspection and periodic certification.

Monitoring of the performance of the remedy and the overall reduction in contamination on site and off site will be conducted every five calendar quarters for the first five years (four sampling events). The frequency thereafter will be determined with approval by the NYSDEC. Trends in contaminant levels in groundwater in the affected areas will be evaluated to determine if the remedy continues to be effective in achieving remedial goals. The monitoring program is summarized in Table 3.1.2 and outlined in detail in Sections 3.2 and 3.3 below.

Table 3.1.2: Monitoring/Inspection Schedule

Monitoring Program	Frequency*	Matrix	Analysis
Groundwater monitoring program	Every 5 calendar quarters	Groundwater in 3 on-site wells (MW-1, MW-201 and MW-203) and 2 off-site wells (MW-12 and MW-110) Water level measurements in all site-related wells	Benzene, toluene, ethylbenzene and total xylenes Depth to water
Cover System Monitoring	Every 5 calendar quarters	Inspect cover system	

* The frequency of events will be conducted as specified until otherwise approved by NYSDEC and NYSDOH

3.2 SITE COVER SYSTEM MONITORING

The site cover will be evaluated during site monitoring. Any damage or construction or utility work creating a potential exposure to impacted soil or groundwater will be noted.

3.3 MEDIA MONITORING PROGRAM

3.3.1 Groundwater Monitoring

Groundwater monitoring will be performed on a periodic basis to assess the performance of the remedy. Groundwater samples will be collected from selected wells every five calendar quarters to allow for evaluation of seasonal differences. All sampling and analyses will be performed in accordance with the requirements of the Quality Assurance Project Plan ("QAPP") prepared for the site (Appendix F).

The network of monitoring wells has been installed to monitor both upgradient and downgradient groundwater conditions. Currently, there are ten on-site wells (MW-1, MW-6, MW-7, MW-8, MW-9, MW-103, MW-104, MW-201, MW-202 and MW-203) and 5 off-site wells

(MW-10 on the adjacent property to the east and MW-12, MW-13, MW-110 and MW-111 on the adjacent property to the south). As proposed in AMEC's November 23, 2010 letter to the NYSDEC entitled *Modifications to Groundwater Monitoring Program*, and as approved by the NYSDEC in a letter to David Averill of AMEC dated December 6, 2010, wells MW-6, MW-8, MW-9, MW-10, MW-13 and MW-111 will be abandoned in accordance with NYSDEC Policy CP-43 "Groundwater Monitoring Well Decommissioning Policy." After abandonment of these wells the monitoring well network will consist of seven on-site wells (MW-1, MW-7, MW-103, MW-104, MW-201, MSW-202, and MW-203) and two off-site wells (MW-12 and MW-110). The locations of these wells are shown on Figure 5.

Groundwater monitoring will be performed every five calendar quarters. During each monitoring event, the depth to water will be measured in, and groundwater will be collected from, three on-site wells (MW-1, MW-201 and MW-203), and two off-site wells (MW-12 and MW-110). Groundwater samples will be analyzed for benzene, toluene, ethylbenzene and total xylenes. Additionally, the depth to water in each remaining on-site well (MW-1, MW-7, MW-103, MW-104, MW-201, MW-202 and MW-203) and off-site well (MW-12 and MW-110) will be measured using an electronic water level indicator. The depth to water data will be used with surveyed well elevations to create a potentiometric surface map for each monitoring event.

Table 5 shows laboratory analytical results for groundwater sampling conducted after completion of the interim remedial excavation. Table 6 shows a summary of the well construction details for all current and historic monitoring wells associated with the site. Each of the wells used in the groundwater monitoring program was constructed with the screened portion of the well across the surface of the water table. The wells are between 7 and 20 feet deep. Soil boring and monitoring well construction logs are included in Appendix G. Logs for wells MW-6, MW-7, and MW-8 are not available.

The sampling frequency may be modified with the approval NYSDEC. The SMP will be modified to reflect changes in sampling plans approved by NYSDEC.

Deliverables for the groundwater monitoring program are specified below.

3.3.1.1 Sampling Protocol

All monitoring well sampling activities will be recorded on a well sampling record similar to that presented in Appendix H. Other observations (e.g., well integrity) will be noted on the well sampling record. The well sampling record form will serve as the inspection form for the groundwater monitoring well network.

Depth-to-water measurements will be made at each on-site and off-site well prior to starting well purging and sampling. Water level measurements will be taken at each well from the top of the PVC casing.

Monitoring wells to be sampled will be purged using low-flow methods with a pump and dedicated tubing. During purging, purge water will be inspected visually and field parameters

(temperature, pH, and conductivity) will be measured using a calibrated water quality meter. Groundwater samples will be collected in sample containers with appropriate preservative. The groundwater samples will be labeled and stored temporarily in chilled ice chests for transport under chain-of-custody procedures to a New York State Department of Health-certified analytical laboratory.

Equipment decontamination water and monitoring well purge water generated during sampling will be contained in appropriately labeled and sealed steel drums for off-site disposal in accordance with applicable regulations.

Groundwater samples collected from the five monitoring wells will be analyzed for benzene, toluene, ethylbenzene, and total xylenes using United States Environmental Protection Agency (U.S. EPA) Method 8260B.

3.3.1.2 Monitoring Well Repairs, Replacement and Decommissioning

If biofouling or silt accumulation occurs in the on-site and/or off-site monitoring wells that are sampled, the wells will be physically agitated/surged and redeveloped. Additionally, monitoring wells will be properly decommissioned and replaced if an event renders the wells unusable.

Repairs and/or replacement of wells in the monitoring well network will be performed based on assessments of structural integrity and overall performance.

The NYSDEC will be notified prior to any repair or decommissioning of monitoring wells for the purpose of replacement, and the repair or decommissioning and replacement process will be documented in the subsequent periodic report. Well decommissioning without replacement will be done only with the prior approval of NYSDEC. Well abandonment will be performed in accordance with NYSDEC's "Groundwater Monitoring Well Decommissioning Policy." Monitoring wells that are decommissioned because they have been rendered unusable will be reinstalled in the nearest available location, unless otherwise approved by the NYSDEC.

3.4 SITE-WIDE INSPECTION

Site-wide inspections will be performed every five calendar quarters. If severe weather conditions potentially affect Engineering Controls or monitoring devices, site personnel will conduct additional site inspections associated with the severe weather conditions. During the inspections, an inspection form will be completed (Appendix I). The form will compile sufficient information to assess the following:

- Compliance with all ICs, including site usage;
- General site conditions at the time of the inspection;
- The site management activities being conducted including, where appropriate, confirmation sampling and a health and safety procedures;
- The condition and continued effectiveness of ECs; and
- That site records are up to date.

3.5 MONITORING QUALITY ASSURANCE/QUALITY CONTROL

All sampling and analyses will be performed in accordance with the requirements of the Quality Assurance Project Plan (QAPP) prepared for the site (Appendix F). Main components of the QAPP include:

- QA/QC Objectives for data measurement;
- Sampling Program:
  - Sample containers will be properly prepared by the laboratory, and appropriate preservative will be added (if applicable) by the analytical laboratory prior to their use. Containers with preservative will be tagged as such.
  - Sample holding times will be in accordance with the NYSDEC Analytical Services Protocols (ASP) requirements.
  - Field QC samples (e.g., trip blanks, coded field duplicates, and matrix spike/matrix spike duplicates) will be collected as necessary.
- Sample Tracking and Custody;
- Calibration Procedures:
  - All field analytical equipment will be calibrated immediately prior to each day's use. Calibration procedures will conform to manufacturer's standard instructions.
  - The laboratory will follow all calibration procedures and schedules as specified in U.S. EPA SW-846 and subsequent updates that apply to the instruments used for the analytical methods.
- Analytical Procedures;
- Preparation of a Data Usability Summary Report (DUSR), which will present the results of data validation, including a summary assessment of laboratory data packages and sample preservation and chain-of-custody procedures, and a summary assessment of precision, accuracy, representativeness, comparability, and completeness for each analytical method;
- Internal QC;
- QA Performance and System Audits;
- Preventative Maintenance Procedures and Schedules; and
- Corrective Action Measures.

3.6 MONITORING REPORTING REQUIREMENTS

Copies of the site inspection form will be kept on file at the site. All forms, and other relevant reporting formats used during the monitoring/inspection events, will be (1) subject to approval by NYSDEC and (2) submitted at the time of the Periodic Review Report, as specified in the Reporting Plan of this SMP.

All monitoring results will be reported to NYSDEC on a periodic basis in the Periodic Review Report. A groundwater monitoring report will also be prepared subsequent to each sampling event. The groundwater monitoringreport will include, at a minimum:

- Date of event;
- Personnel conducting sampling;
- Description of the activities performed;
- Type of samples collected (e.g., groundwater);
- Copies of all field forms completed (e.g., well sampling records, chain-of-custody documentation, etc.);
- Sampling results in comparison to appropriate standards/criteria;
- A figure illustrating sample type and sampling locations;
- Copies of all laboratory data sheets and the required laboratory data deliverables for all points sampled (to be submitted electronically in the NYSDEC-identified format);
- Any observations, conclusions, or recommendations; and
- A determination as to whether groundwater conditions have changed since the last reporting event.

Data will be reported in hard copy or digital format as determined by NYSDEC. A summary of the monitoring program deliverables is provided in Table 3.4 below.

Table 3.4: Schedule of Monitoring/Inspection Reports

Task	Reporting Frequency*
Periodic Review Report with Site Inspection Forms	Every Three years
Cover System Inspection	Every 5 calendar quarters
Groundwater Monitoring	Every 5 calendar quarters

*The frequency of events will be conducted as specified until otherwise approved by NYSDEC

4.0 OPERATION AND MAINTENANCE PLAN

The site remedy does not rely on any mechanical systems, such as sub-slab depressurization systems or air sparge/ soil vapor extraction systems to protect public health and the environment. Therefore, the operation and maintenance of such components is not included in this SMP.

Information on non-mechanical Engineering Controls (i.e. the site cover system) is provided in Section 2 - Engineering and Institutional Control Plan.

5.0 INSPECTIONS, REPORTING AND CERTIFICATIONS

5.1 SITE INSPECTIONS

5.1.1 Inspection Frequency

All inspections will be conducted at the frequency specified in the schedules provided in Section 3, Monitoring Plan, of this SMP. At a minimum, a site-wide inspection will be conducted every five calendar quarters or after a severe event that may damage the site cover system.

5.1.2 Inspection Forms, Sampling Data, and Maintenance Reports

All applicable inspection forms and other records, including all media sampling data and site-wide inspection forms, generated for the site during the reporting period will be provided in electronic format in the Periodic Review Report. All inspections and monitoring events will be recorded on the appropriate forms for their respective system which are contained in Appendices H and I (Well Sampling Record, Site Inspection Form). Additionally, a general site wide inspection form will be completed during the site-wide inspection (see Appendix I). These forms are subject to NYSDEC revision.

5.1.3 Evaluation of Records and Reporting

The results of the inspection and site monitoring data will be evaluated as part of the EC/IC certification to confirm the following:

- EC/ICs are in place, are performing properly, and remain effective;
- The Monitoring Plan is being implemented; and
- The site remedy continues to be protective of public health and the environment and is performing as designed in the RAWP and FER.

5.2 CERTIFICATION OF ENGINEERING AND INSTITUTIONAL CONTROLS

After the last inspection of the reporting period, a qualified environmental professional (QEP) will prepare the following certification:

For each Institutional or Engineering Control identified for the site, I certify that all of the following statements are true:

- The inspection of the site to confirm the effectiveness of the Institutional and Engineering Controls required by the remedial program was performed under my direction;
- The Institutional Control and/or Engineering Control employed at this site is unchanged from the date the control was put in place, or last approved by the Department;
- Nothing has occurred that would impair the ability of the control to protect the public health and environment;
- Nothing has occurred that would constitute a violation or failure to comply with the Site Management Plan for this control;
- Access to the site will continue to be provided to the Department to evaluate the remedy, including access to evaluate the continued maintenance of this control;

- If a financial assurance mechanism is required under the oversight document for the site, the mechanism remains valid and sufficient for the intended purpose under the document;
- Use of the site is compliant with the Environmental Easement;
- The Engineering Control systems are performing as designed and are effective;
- To the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program;
- The information presented in this report is accurate and complete; and
- I certify that all information and statements in this certification form are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law. I, [name], of [business address], am certifying as [Owner or Owner's Designated Site Representative] for the site.
- No new information has come to my attention, including groundwater monitoring data from wells located at the site boundary, if any, to indicate that the assumptions made in the qualitative exposure assessment of off-site contamination are no longer valid.

The signed certification will be included in the Periodic Review Report described below.

Every five years the following certification will be added:

- The assumptions made in the qualitative exposure assessment remain valid.

The signed certification will be included in the Periodic Review Report described below.

5.3 PERIODIC REVIEW REPORT

A Periodic Review Report will be submitted to the Department every third year, beginning eighteen months after the Certificate of Completion is issued. In the event that the site is subdivided into separate parcels with different ownership, a single Periodic Review Report will be prepared that addresses the site described in Appendix C (Metes and Bounds). The report will be prepared in accordance with NYSDEC DER-10 and submitted within 45 days of the end of each certification period. Media sampling results will also be incorporated into the Periodic Review Report. The report will include:

- Identification, assessment and certification of all ECs/ICs required by the remedy for the site;
- Results of the required site inspections and severe condition inspections, if applicable;
- All applicable inspection forms and other records generated for the site during the reporting period in electronic format;
- A summary of any discharge monitoring data and/or information generated during the reporting period with comments and conclusions;
- Data summary tables and graphical representations of contaminants of concern by media (groundwater), which include a listing of all compounds analyzed, along with the applicable standards, with all exceedances highlighted. These will include a presentation of past data as part of an evaluation of contaminant concentration trends;

- Results of all analyses, copies of all laboratory data sheets, and the required laboratory data deliverables for all samples collected during the reporting period will be submitted electronically in a NYSDEC-approved format; and
- A site evaluation, which includes the following:
    - The compliance of the remedy with the requirements of the site-specific RAWP, ROD or Decision Document;
    - Any new conclusions or observations regarding site contamination based on inspections or data generated by the Monitoring Plan for the media being monitored;
    - Recommendations regarding any necessary changes to the remedy and/or Monitoring Plan; and
    - The overall performance and effectiveness of the remedy.

The Periodic Review Report will be submitted, in hard-copy format, to the NYSDEC Central Office and Regional Office in which the site is located, and in electronic format to the NYSDEC Central Office and Regional Office, and the NYSDOH Bureau of Environmental Exposure Investigation.

5.4 CORRECTIVE MEASURES PLAN

If any component of the remedy is found to have failed, or if the periodic certification cannot be provided due to the failure of an Institutional or Engineering Control, a corrective measures plan will be submitted to the NYSDEC for approval. This plan will explain the failure and provide the details and schedule for performing work necessary to correct the failure. Unless an emergency condition exists, no work will be performed pursuant to the corrective measures plan until it is approved by the NYSDEC.

6.0 REFERENCES

AMEC Geomatrix *(AMEC*), 2010a, Resampling of Excavation Confirmation Soil Sampling Locations, February.

AMEC 2010b, Supplemental Remedial Investigation Report, October 22.

Geomatrix, 2004a, November 2003 Soil and Groundwater Investigation Report, April.

Geomatrix, 2004b, Brownfield Cleanup Program Application, April.

Geomatrix, 2005, Interim Remedial Measure Work Plan, November.

Geomatrix, 2007a, Remedial Investigation and Interim Remedial Measure Implementation Report, April.

Geomatrix, 2007b, Supplement to Remedial Investigation and Interim Remedial Measure Implementation Report- Soil Vapor Intrusion Investigation Report, June.

NETC, 1992, Final Phase II Hydrogeological Investigation, Avis Rent A Car System, Inc., Poughkeepsie, New York Facility, October 15.

New York State Department of Environmental Conservation (NYSDEC), 1994, Determination of Soil Cleanup Objectives and Cleanup Levels (TAGM 4046), January 24.

NYSDEC, 1999, 6 NYCRR Part 703: Surface Water and Groundwater Quality Standards and Effluent Limitations, August 4.

NYSDEC, 2006, 6 NYCRR Part 375, Subpart 375-6: Remedial Program Soil Cleanup Objectives, December 14.

NYSDEC, 2010, DER-10 Technical Guidance for Site Investigation and Remediation, May.

TABLES

TABLE 1

SUMMARY OF CONFIRMATION SOIL SAMPLE ANALYTICAL RESULTS[1]

Former Drive & Park, Inc., Site
28 IBM Road
Poughkeepsie, New York

All results in milligrams per kilogram of soil (mg/kg)

Sample Type and Identification	Sample Location	Date Collected	Collection Depth (bgs)	Benzene	Toluene	Ethyl benzene	m,p-Xylenes	o-Xylene	Total Xylenes	TPHg	TPHd	MTBE	TBA	TAME	Other
NYSDEC TAGM 4046 Objectives[2,3] in mg/kg:				**0.08**	**1.5**	**5.5**	**NA**	**NA**	**1.2**	**NA**	**NA**	**0.12**	**NA**	**NA**	**Acetone 0.2 2-butanone 0.3 Methylene chloride 0.1 1,2-Dichloroethane 0.1**
NYSDEC Unrestricted Use Cleanup Objectives[4] in mg/kg:				**0.06**	**0.7**	**1**	**NA**	**NA**	**0.26**	**NA**	**NA**	**0.93**	**NA**	**NA**	**Acetone 0.05 2-butanone NA Methylene chloride 0.05 1,2-Dichloroethane 0.01**
Sidewall Samples															
SW-G02-7.0-122605	Off Site sidewall, W Boundary	12/26/2005	7.0 feet	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<12	<12	<0.03	<0.61	<0.061	**Methylene chloride 0.034**
SW-G05-7.5-122605	Off-site sidewall, W Boundary	12/26/2005	7.5 feet	<0.042	<0.042	<0.042	<0.042	<0.042	<0.042	<11	<11	<0.042	<0.84	<0.084	
SW-G07-3.0-122605	Off-site sidewall, SE corner	12/26/2005	3.0 feet	<0.039	<0.039	<0.039	<0.039	<0.039	<0.039	<13	<13	<0.039	<0.79	<0.079	
SW-G09-5.0-122605	Off-site sidewall, SE corner	12/26/2005	5.0 feet	<0.053	<0.053	<0.053	**0.084**	<0.053	**0.084**	<14	<14	<0.053	<1.1	<0.11	
SW-E01-6.0-122705	Off-site sidewall, S boundary	12/27/2005	6.0 feet	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<13	<13	<0.007	<0.13	<0.013	
SW-E02-5.0-122705	Off-site sidewall, SW corner	12/27/2005	5.0 feet	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<13	<13	<0.006	<0.13	<013	
SW-E03-5.0-122705	Off-site sidewall, E boundary	12/27/2005	5.0 feet	<0.007	<0.007	**0.014**	**0.026**	<0.007	**0.026**	<13	<13	<0.007	<0.13	<013	
SW-E04-5.0-122705	Off-site sidewall, E boundary	12/28/2005	5.0 feet	**0.016**	<0.006	<0.006	<0.006	<0.006	<0.006	<12	<12	<0.006	<0.12	0.012	
SW-E05-5.0-122805	Off-site sidewall, E boundary	12/28/2005	5.0 feet	**0.11**	<0.006	**0.033**	**0.16**	<0.006	**0.16**	<13	<13	<0.006	<0.13	<0.013	
SW-E06-10.0-122805	Off-site sidewall, NW Corner	12/28/2005	10.0 feet	<0.32	<0.32	**0.71**	**3.5**	**0.87**	**4.37**	<13	<13	<0.32	<6.4	<0.64	
SW-E14-11.0-123005	Off-site sidewall, NW corner (S facing sidewall)	12/30/2005	11.0 feet	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<12 UJ	<12 UJ	<0.006	<0.12	<0.012	**Methylene chloride 0.007**
SW-E20-8.0-123005	Off-site sidewall, E boundary	12/30/2005	8.0 feet	**0.045**	<0.006	<0.006	**0.017**	<0.006	**0.017**	<11 UJ	<11 UJ	<0.006	<0.11	<0.011	
SW-E21-10.0-123005	Off-site sidewall, NE Corner, adjacent to wetlands	12/30/2005	10.0 feet	<1.1	**15**	**7.8**	**37**	**13**	**50**	<13 UJ	<13 UJ	<1.1	<22	<2.2	
SW-E23-11.0-010206	Off-site sidewall, NW corner	1/2/2006	11.0 feet	**0.038 J**	<0.006	**0.054 J**	**0.09 J**	<0.006	**0.09 J**	<12 UJ	<12 UJ	**0.024 J**	<0.12	<0.021	
SW-E24-11.0-010206	Off-site sidewall, NW corner	1/2/2006	11.0 feet	**0.021 J**	<0.006	<0.006	<0.006	<0.006	<0.006	<12 UJ	<12 UJ	**0.022 J**	**0.13 J**	<0.012	
SW-E30-3.0-012006	Off-site sidewall	1/20/2006	3.0 feet	<0.007	<0.007	<0.007	**0.056**	<0.007	**0.056**	<14	<14	<0.007	<0.14	<0.014	
SW-E38-8.0-020206	On-site sidewall	2/2/2006	8.0 feet	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<13	<13	**0.013 J**	<0.13	<0.013	**Methylene chloride 0.016U Acetone 0.013UJ**
SW-E39-8.0-020206	On-site sidewall	2/2/2006	8.0 feet	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<13	<13	<0.007	<0.13	<0.013	**Methylene chloride 0.013J**
SW-ON-1-7.0-022406	On-site sidewall	2/24/2006	7.0 feet	<0.006 UJ	<0.006 UJ	<0.006 UJ	<0.006 UJ	<0.006 UJ	<0.006 UJ	<13	<13	<0.006 UJ	<0.13 UJ	<0.013 UJ	**Acetone 0.018J**
SW-ON-2-7.5-022406	On-site sidewall	2/24/2006	7.5 feet	**0.021**	<0.006	<0.006	**0.012**	<0.006	**0.012**	<12	<12	<0.006 UJ	<0.12	<0.012	**Acetone 0.015**
SW-ON-3-7.0-030206	On-Site sidewall, SW area	3/2/2006	7.0 feet	**0.09 J**	**0.11**	**0.098 J**	**0.44 J**	**0.17 J**	**0.61 J**	<13	<13	<0.006	<0.13	<0.013	**Acetone 0.150J**

TABLE 1

SUMMARY OF CONFIRMATION SOIL SAMPLE ANALYTICAL RESULTS[1]

Former Drive & Park, Inc., Site
28 IBM Road
Poughkeepsie, New York

All results in milligrams per kilogram of soil (mg/kg)

Sample Type and Identification	Sample Location	Date Collected	Collection Depth (bgs)	Benzene	Toluene	Ethyl benzene	m,p-Xylenes	o-Xylene	Total Xylenes	TPHg	TPHd	MTBE	TBA	TAME	Other
NYSDEC TAGM 4046 Objectives[2,3] in mg/kg:				**0.08**	**1.5**	**5.5**	**NA**	**NA**	**1.2**	**NA**	**NA**	**0.12**	**NA**	**NA**	**Acetone 0.2 2-butanone 0.3 Methylene chloride 0.1 1,2-Dichloroethane 0.1**
NYSDEC Unrestricted Use Cleanup Objectives[4] in mg/kg:				**0.06**	**0.7**	**1**	**NA**	**NA**	**0.26**	**NA**	**NA**	**0.93**	**NA**	**NA**	**Acetone 0.05 2-butanone NA Methylene chloride 0.05 1,2-Dichloroethane 0.01**
SW-ON-4-7.0-030206	On-site sidewall, SW area	3/2/2006	7.0 feet	**0.03 J**	**0.007**	**0.015 J**	**0.066 J**	**0.024 J**	**0.09 J**	<11	<11	**0.007**	<0.11	<0.011	**Acetone 0.013J**
SW-ON-6-7.0-030706	On-site sidewall, NW area	3/7/2006	7.0 feet	**0.011 J**	<0.006	**0.016**	**0.054**	**0.012**	**0.066**	<12	<12	<0.006	<0.12	<0.012	**Acetone 0.022**
SW-ON-8-7.0-030906	On-site sidewall, NE corner	3/9/2006	7.0 feet	<0.006	<0.006	<0.006 UJ	**0.011 J**	<0.006 UJ	**0.011 J**	<11	<11	**0.008**	<0.11	<0.011 UJ	**Acetone 0.016**
SW-ON-9-8.0-032106	On-site sidewall, N boundary	3/21/2006	8.0 feet	**0.25**	**0.041**	**0.26 J**	**0.42**	**0.031**	**0.451**	<13	<13	<0.013	<0.26	<0.026	**Acetone 0.039J Methylene chloride 0.024**
TP-1-032306	On-site test pit	2/23/2006	7.0 feet	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<11	<11	<0.005	<0.11	<0.011	
TP-2-032306	On-site test pit	2/23/2006	7.0 feet	<0.005	<0.005	<0.005	<0.005	**0.008**	**0.008**	<11	<11	<0.005	<0.11	<0.011	**Acetone 0.016J**
TP-3-032306	On-site test pit	2/23/2006	7.0 feet	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<11	<11	<0.006	<0.11	<0.011	
Floor Samples															
FL-E10-12.0-122905	Off-site floor, NW area	12/29/2005	12.0 feet	<0.006 UJ	<0.006 UJ	<0.006 UJ	<0.006 UJ	<0.006 UJ	<0.006 UJ	<12 UJ	<12 UJ	<0.006 UJ	<0.12 UJ	<0.012 UJ	**Acetone 0.012**
FL-E15-8.0-123005	Off-site floor, S-Central area	12/30/2005	8.0 feet	<0.006	<0.006	**0.009**	**0.037**	<0.006	**0.037**	<0.013 UJ	<0.013 UJ	<0.006	<0.13	<0.013	**Methylene chloride 0.009**
FL-E16-8.0-123005	Off-site floor, S-Central area	12/30/2005	8.0 feet	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<14 UJ	<14 UJ	<0.007	<0.14	<0.014	**Methylene chloride 0.010**
FL-E17-8.0-123005	Off-site floor, S-Central area	12/30/2005	8.0 feet	<0.007	<0.007	**0.027**	**0.160**	**0.018**	**0.178**	<13 UJ	<13 UJ	<0.007	<0.13	<0.013	**Methylene chloride 0.008**
FL-E19-8.0-123005	Off-site floor, S-Central area	12/30/2005	8.0 feet	**0.011**	<0.006	**0.048**	**0.2**	**0.023**	**0.223**	<12 UJ	<12 UJ	<0.006	<0.12	<0.012	**Acetone 0.014**
FL-E22-12.0-010206	Off-site floor, NE corner	1/2/2006	12.0 feet	<0.006	**0.008 J**	<0.006	**0.022 J**	**0.008 J**	**0.03 J**	<12 UJ	<12 UJ	<0.006	<0.12	<0.012	**Methylene chloride 0.008J**
FL-E26-12.0.010606	Off-site floor, N-Central	1/6/2006	12.0 feet	**1.6**	**0.086**	<0.062	<0.062	<0.062	<0.062	<12	<12	<0.062	<1.2	<0.12	
FL-E27-14.0-011706	Off-site floor	1/17/2006	14.0 feet	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<12	<12	<0.006	<0.12	<0.012	**Methylene chloride 0.012**
FL-E28-14.0-011706	Off-site floor	1/17/2006	14.0 feet	**0.53 J**	**0.06**	**0.400**	**0.5**	**0.012**	**0.512**	<12	<12	**0.036 J**	<0.25	<0.025	**Acetone 0.047J Methylene chloride 0.029**
FL-E29-14.0-011906	Off-site floor	1/19/2006	14.0 feet	**4.8 J**	<0.130	<0.130	<0.130	<0.130	<0.130	<13	<13	<0.130	<2.6	<0.26	**Methylene chloride 0.19 1, 2-Dichloroethane 0.16**
FL-E30-14.0-011906	Off-site floor	1/19/2006	14.0 feet	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<12	<12	<0.006	<0.12	<0.012	
FL-E35-15.0-012606	Off-site floor	1/26/2006	15.0 feet	<0.006 UJ	<0.006 UJ	<0.006 UJ	<0.006 UJ	<0.006 UJ	<0.006 UJ	<13 UJ	<13 UJ	<0.006 UJ	**1.5 J**	<0.013 UJ	**Acetone 0.053J**
FL-E36-15.0-020106	On-site floor	2/1/2006	15.0 feet	<0.013	<0.013	<0.013	<0.013	<0.013	<0.013	<13	<13	**0.24 J J**	<0.25	<0.025	
FL-E37-15.0-020206	On-site floor	2/2/2006	15.0 feet	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<12	<12	**0.150 J**	<0.12	<0.012	**Methylene chloride 0.007UJ**

TABLE 1

SUMMARY OF CONFIRMATION SOIL SAMPLE ANALYTICAL RESULTS[1]

Former Drive & Park, Inc., Site
28 IBM Road
Poughkeepsie, New York

All results in milligrams per kilogram of soil (mg/kg)

Sample Type and Identification	Sample Location	Date Collected	Collection Depth (bgs)	Benzene	Toluene	Ethyl benzene	m,p-Xylenes	o-Xylene	Total Xylenes	TPHg	TPHd	MTBE	TBA	TAME	Other
NYSDEC TAGM 4046 Objectives[2,3] in mg/kg:				**0.08**	**1.5**	**5.5**	**NA**	**NA**	**1.2**	**NA**	**NA**	**0.12**	**NA**	**NA**	**Acetone 0.2 2-butanone 0.3 Methylene chloride 0.1 1,2-Dichloroethane 0.1**
NYSDEC Unrestricted Use Cleanup Objectives[4] in mg/kg:				**0.06**	**0.7**	**1**	**NA**	**NA**	**0.26**	**NA**	**NA**	**0.93**	**NA**	**NA**	**Acetone 0.05 2-butanone NA Methylene chloride 0.05 1,2-Dichloroethane 0.01**
FL-E40-15.0-020206	On-site floor	2/2/2006	15.0 feet	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<12	<12 UJ	<0.006	<0.12	<0.012	
FL-E41-15.0-020206	On-site floor	2/2/2006	15.0 feet	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<12	<12 UJ	<0.006	<0.12	<0.012	
FL-ON-1-13.0-021506	On-site floor	2/15/2006	13.0 feet	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<11	<11	<0.006	<0.11	<0.011	
FL-ON-2-13.0-021606	On-site floor	2/16/2006	13.0 feet	<0.006	<0.006	<0.006	**0.008**	**0.006**	**0.014**	<11	<11	<0.006	<0.11	<0.011	
FL-ON-3-13.0-021606	On-site floor	2/16/2006	13.0 feet	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<11	<11	<0.005	<0.11	<0.011	
FL-ON-4-13.0-022406	On-site floor	2/24/2006	13.0 feet	<0.006 R	<0.006 R	<0.006 R	<0.006 R	<0.006 R	<0.006 R	<12	<12	<0.006 R	<0.12 R	<0.012 R	**Acetone 0.014R**
FL-ON-5-13.0-022406	On-site floor	2/24/2006	13.0 feet	<0.006 UJ	<0.006 UJ	<0.006 UJ	**0.016 J**	**0.01 J**	**0.026 J**	<12	<12	<0.006 UJ	<0.12 UJ	<0.012 UJ	**Acetone 0.025J**
FL-ON-6-13-022706	On-site floor, buried drum area	2/27/2006	13.0 feet	<0.006 UJ	<0.006 UJ	<0.006 UJ	**0.007 J**	<0.006 UJ	**0.007 J**	<12	<12	<0.006 UJ	**0.12 J**	<0.012 UJ	**Acetone 0.03J**
FL-ON-8-13.0-030106	On-site floor, SW area	3/1/2006	13.0 feet	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<13	<13	**0.014**	<0.13	<0.013	
FL-ON-9-13.0-030106	On-site floor, SW area	3/1/2006	13.0 feet	**0.38**	<0.031	<0.031	<0.031	<0.031	<0.031	<12	<12	**0.15**	<0.62	<0.062	**Methylene chloride 0.14J**
FL-ON-10-13.0-030706	On-site floor, central area	3/7/2006	13.0 feet	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<12	<12	<0.006	<0.12	<0.012	**Acetone 0.017**
FL-ON-11-13.0-030806	On-site floor, NW area	3/8/2006	13.0 feet	**0.061 J**	<0.006 UJ	<0.006 UJ	<0.006 UJ	<0.006 UJ	<0.006 UJ	<12	<12	**0.046 J**	<0.12 UJ	<0.012 UJ	**Acetone 0.016J**
FL-ON-12-13.0-030906	On-site floor, N boundary	3/9/2008	13.0 feet	<0.006	<0.006	<0.006 UJ	<0.006 UJ	<0.006 UJ	<0.006 UJ	<11	<11	<0.006	<0.11	<0.011 UJ	
Trench Samples[5]															
TR-1-011706	Utility trench	1/17/2006	2.0 feet	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<11	<11	<0.006	<0.11	<0.011	
TR-2-011706	Utility trench	1/17/2006	2.0 feet	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<11	<11	<0.006	<0.11	<0.011	**Acetone 0.016**
TR-3-011706	Utility trench	1/17/2006	2.0 feet	<0.006	<0.006	<0.006	**0.024**	**0.009**	**0.033**	<11	<11	<0.006	<0.11	<0.011	
TR-4-011706	Utility trench	1/17/2006	2.0 feet	<0.005	<0.005	<0.005	**0.014**	<0.005	**0.014**	<11	<11	<0.005	<0.11	<0.011	

TABLE 1

SUMMARY OF CONFIRMATION SOIL SAMPLE ANALYTICAL RESULTS[1]

Former Drive & Park, Inc., Site
28 IBM Road
Poughkeepsie, New York

All results in milligrams per kilogram of soil (mg/kg)

Sample Type and Identification	Sample Location	Date Collected	Collection Depth (bgs)	Benzene	Toluene	Ethyl benzene	m,p-Xylenes	o-Xylene	Total Xylenes	TPHg	TPHd	MTBE	TBA	TAME	Other
NYSDEC TAGM 4046 Objectives[2,3] in mg/kg:				**0.08**	**1.5**	**5.5**	**NA**	**NA**	**1.2**	**NA**	**NA**	**0.12**	**NA**	**NA**	**Acetone 0.2 2-butanone 0.3 Methylene chloride 0.1 1,2-Dichloroethane 0.1**
NYSDEC Unrestricted Use Cleanup Objectives[4] in mg/kg:				**0.06**	**0.7**	**1**	**NA**	**NA**	**0.26**	**NA**	**NA**	**0.93**	**NA**	**NA**	**Acetone 0.05 2-butanone NA Methylene chloride 0.05 1,2-Dichloroethane 0.01**
August 2009 Samples[6]															
SB-3-14.0	Location of sample FL-ON-11-13.0-030806	8/5/2009	14.0 feet	**0.092**	<0.0042	**0.019**	NM	NM	**0.037**	NM	NM	**0.055**	NM	NM	
SB-4-13.5	Location of sample FL-ON-9-13.0-030106	8/5/2009	13.5 feet	<0.0044	<0.0044	<0.0044	NM	NM	<0.0088	NM	NM	**0.039**	NM	NM	
SB-7-7.0	Location of sample SW-ON-3-7.0-030206	8/5/2009	7.0 feet	<0.0049	<0.0049	<0.0049	NM	NM	<0.0097	NM	NM	<0.0049	NM	NM	
SB-8-8.0	Location of sample SW-ON-9-8.0-32106	8/5/2009	8.0 feet	<0.0047	<0.0047	<0.0047	NM	NM	<0.0094	NM	NM	<0.0047	NM	NM	

Notes

1. Volatile Organic compounds, including oxygenates, analyzed by EPA Method 8260B. TPHg and TPHd analyzed by modified EPA Method 8015M.
2. NYSDEC, 1994, *Determination of Soil Cleanup Objectives and Cleanup Levels (TAGM 4046)*, January 24.
3. Guidance value for MTBE provided in the December 20, 2000 NYSDEC Memorandum *Determination of Soil Cleanup Levels Attachment: Recommended Soil Cleanup Objectives for Gasoline Contaminated Soils.*
4. NYSDEC, 2006, *6 NYCRR Part 375, Subpart 375-6: Remedial Program Soil Cleanup Objectives*, December 14.
5. Trench samples are not confirmation samples, but do provide analytical information on in-place soil.
6. Samples collected at location and depth on-site confirmation samples (FL-ON-11-13.0-030806, FL-ON-9-13.0-030106, SW-ON-3-7.0-030206, and SW-ON-9-8.0-32106) that exceeded soil cleanup objective for benzene in 2006.

Abbreviations

"BOLD" = Detected concentration.

"UNDERLINED" = Detected concentration above 6 NYCRR Subpart 375-6 remedial program soil cleanup objectives for unrestricted use.

< = Not detected at or above the reporting limit shown.

bgs = below ground surface.

Fuel Oxygenates = methyl tertiary-butyl ether (MTBE), tertiary-butyl alcohol (TBA), di-isopropyl ether (DIPE), tertiary-amyl methyl ether (TAME).

J = The analyte was positively identified; the associated numerical value is the estimated concentration of the analyte in the sample.

NA = Not Available.

NM = Sample not analyzed for compound.
R = Result were rejected because of laboratory quality assurance/quality control issues.
SW = sidewall sample; TR = utility trench sample; TP = test pit sample; FL = floor sample
TPHd = total petroleum hydrocarbons quantified as diesel.
TPHg = total petroleum hydrocarbons quantified as gasoline.
UJ = The analyte was not detected at or above the laboratory reporting limit shown. The reporting limit is estimated.

TABLE 2

SUMMARY OF ON-SITE CONFIRMATION SOIL SAMPLE ANALYTICAL RESULTS EXCEEDING SOIL CLEANUP OBJECTIVES

Former Drive & Park, Inc. Site
28 IBM Road
Poughkeepsie, New York

Concentrations in milligrams per kilogram (mg/kg)

Sample ID	Sample Date	Sample Depth (feet bgs)	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE
SB-3-14.0	8/5/2009	14	**0.092**	< 0.0042	0.019	0.037	0.055
Subpart 375-6 Remedial Program Soil Cleanup Objectives	Protection of Public Health	Residential	2.9	100	30	100	62
		Restricted Residential	4.8	100	41	100	100
		Commercial	44	500	390	500	500
		Industrial	89	1,000	780	1,000	1,000
	Protection of Ecological Resources		70	36	NA	0.26	NA
	Protection of Groundwater		0.06	0.7	1	1.6	0.93
	Unrestricted Use Soil Cleanup Objectives		0.06	0.7	1	0.26	0.93

Notes

1. Sample SB-3-14.0 is from soil boring SB-3 and is at the approximate location and depth of on-site floor sample FL-ON-11-13.0-030806.
2. Samples SW-E-05-5.0-122805, SW-E-06-10.0-122805 and SW-E21-10.0-123005 were collected from the sidewall of the off-site portion of the remedial excavation.
3. Samples FL-E26-12.0-010606, FL-E28-14.0-011706 and FL-E29-14.0-011906 were collected from the floor of the off-site portion of the remedial excavation.
4. All samples analyzed using EPA Method 8260B.

Abbreviations

< = not detected at or above the laboratory reporting limit shown.
bgs = below ground surface.
"BOLD UNDERLINE" = detected concentration or reporting limit exceeds unrestricted use cleanup objective
MTBE = methyl tertiary butyl ether.
NA = Protection of ecological resources soil cleanup objectives not developed.
J = The analyte was positively identified; the associated numerical value is the estimated concentration of the analyte in the sample.

TABLE 3

SUMMARY OF ON-SITE SOIL ANALYTICAL RESULTS FOR PESTICIDES AND PCBs [1]

Former Drive & Park, Inc. Site
28 IBM Road
Poughkeepsie, New York

Concentrations in milligrams per kilogram (mg/kg)

Boring ID	Sample ID	Sample Date	Sample Depth (feet bgs)	4-4'-DDD	4-4'-DDT	PCBs
SB-1	SB-1-2.1	8/5/2009	2.1	< 0.0089	< 0.0089	< 0.018
SB-2	SB-2-2.3	8/5/2009	2.3	< 0.0019	< 0.0019	< 0.018
SB-3	SB-3-2.5	8/5/2009	2.5	< 0.0017	< 0.0017	< 0.017
SB-4	SB-4-2.5	8/5/2009	2.5	< 0.0017	< 0.0017	< 0.017
SB-5	SB-5-2.4	8/5/2009	2.4	< 0019	< 0019	< 0.019
SB-6	SB-6-2.3	8/5/2009	2.3	**0.0023**	**0.003**	< 0.019
Subpart 375-6 Remedial Program Soil Cleanup Objectives	Protection of Public Health	Residential		0.0026	1.7	1
		Restricted Residential		13	7.9	1
		Commercial		92	47	1
		Industrial		180	94	25
	Protection of Ecological Resources			0.0033	0.0033	1
	Protection of Groundwater			14	136	3.2

Notes

1. All samples analyzed for pesticides by EPA Methods 8081A and 8270, and for PCBs by EPA Method 8082.

Abbreviations

< = not detected at or above the laboratory reporting limit shown.
bgs = below ground surface.
"**BOLD**" = Detected concentration.
PCBs = polychlorinated biphenyls.

TABLE 4

SUMMARY OF WETLAND SEDIMENT ANALYTICAL RESULTS[1]

Former Drive & Park, Inc. Site
28 IBM Road
Poughkeepsie, New York

Concentrations in milligrams per kilogram (mg/kg)

Sample Location	Sample ID	Sample Date	Sample Depth (feet bgs)	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE
WS-1	WS-1-0.3	8/4/2009	0.3	< 0.0068	< 0.0068	< 0.0068	< 0.014	< 0.0068
	WS-1-0.8	8/4/2009	0.8	**0.011**	< 0.005	< 0.005	**0.036**	< 0.0050
	WS-1-1.8	8/4/2009	1.8	**2.3**	**27**	**170**	**800**	< 0.097
WS-2	WS-2-0.3	8/6/2009	0.3	<0.012	<0.012	<0.012	< 0.025	< 0.012
	WS-2-0.8	8/6/2009	0.8	<0.0053	<0.0053	<0.0053	< 0.011	< 0.0053
	WS-2-1.8	8/6/2009	1.8	<0.0047	<0.0047	<0.0047	< 0.0093	< 0.0047
WS-3	WS-3-0.3	8/6/2009	0.3	< 0.0082	< 0.0082	< 0.0082	< 0.016	< 0.0082
	WS-3-0.8	8/6/2009	0.8	< 0.0049	< 0.0049	< 0.0049	< 0.0098	< 0.0049
	WS-3-1.8	8/6/2009	1.8	<0.0047	<0.0047	<0.0047	< 0.0095	< 0.0047
WS-4	WS-4-0.3	8/6/2009	0.3	< 0.0067	< 0.0067	< 0.0067	< 0.013	< 0.0067
	WS-4-0.8	8/6/2009	0.8	< 0.0053	< 0.0053	< 0.0053	< 0.011	< 0.0053
	WS-4-1.8	8/6/2009	1.8	< 0.0047	< 0.0047	< 0.0047	< 0.0095	< 0.0047
WS-5	WS-5-0.3	8/5/2009	0.3	< 0.018	< 0.018	< 0.018	< 0.035	< 0.018
	WS-5-0.8	8/5/2009	0.8	< 0.0049	< 0.0049	< 0.0049	< 0.0098	< 0.0049
	WS-5-1.8	8/5/2009	1.8	< 0.0053	< 0.0053	< 0.0053	< 0.011	< 0.0053
WS-6	WS-6-1.5	8/6/2009	1.5	< 0.0048	< 0.0048	< 0.0048	< 0.0096	< 0.0048
WS-7	WS-7-1.5	8/6/2009	1.5	< 0.0052	< 0.0052	< 0.0052	< 0.010	< 0.0052
Site-specific Sediment Criteria [2]	Human Health Bioaccumulation	0.2% OC	0.0012	NA	NA	NA	NA
		12% OC	0.072	NA	NA	NA	NA
	Benthic Aquatic Life Acute Toxicity	0.2% OC	0.206	0.47	0.424	1.666	NA
		12% OC	12.306	28.2	25.44	99.96	NA
	Benthic Aquatic Life Chronic Toxicity	0.2% OC	0.056	0.098	0.048	0.184	NA
		12% OC	3.36	5.88	2.88	11.04	NA

Notes

1. All samples analyzed for BTEX and MTBE by EPA Method 8260B.
2. Site-specific criteria calculated by multiplying the NYSDEC sediment criteria by the end points of the range of organic carbon (0.2% or 12%) cited in NYSDEC's document *Technical Guidance for Screening Contaminated Sediments* , January, 1999.

Abbreviations

< = not detected at or above the laboratory reporting limit shown
bgs = below ground surface
"**BOLD**" = Detected concentration.
"BOLD UNDERLINED" = Detected concentration exceeds sediment criteria.
BTEX = benzene, toluene, ethylbenzene and xylenes
MTBE = Methyl tertiary butyl ether
OC = Organic carbon

TABLE 5

POST-EXCAVATION GROUNDWATER ANALYTICAL RESULTS AND GROUNDWATER QUALITY STANDARDS[1]

Former Drive & Park, Inc. Site
28 IBM Road
Poughkeepsie, New York

Concentrations in micrograms per liter (ug/L)

Well ID	Sample ID	Sample Date	Benzene	Toluene	Ethylbenzene	Total Xylenes	Methyl tert-Butyl Ether	Di-isopropyl ether	Ethyl tertiary-butyl ether	Tertiary butyl alcohol	Tertiary-amyl methyl ether
NYSDEC Groundwater Quality Standards[2,3]			1	5	5	5	10	NA	NA	NA	NA
MW-1	MW-1-062106	06/21/06	**10.9**	**8.6 J**	163	**676**	**28.7 J**	<1.0	<1.0	<25.0	<1.0
	MW-1-092206	09/22/06	**8**	3.1	**92.3**	**374**	**25.7 J**	<1.0	<1.0	<25.0	<1.0
	MW-1-121506	12/15/06	**7.7**	1.5	**25.7**	**204**	**25.7**	<1.0	<1.0	<25.0	<1.0
	MW-1-022207	02/22/07	**6.8**	<1.0	2.3	**60.3**	**18.6**	<1.0	<1.0	<25.0	<1.0
	MW-1-060707	06/07/07	**4.6**	2.4	**79.7**	**804**	9 J	<1.0	<1.0	<25.0	<1.0
	MW-1-092707	09/27/07	**7.6**	<1.0	**15.2**	**43.5**	**22.8**	<1.0	<1.0	<25.0	<1.0
	MW-1-102108	10/21/08	**4 J**	0.5 J	**68 J**	**130 J**	**14**	--	--	<20	<1
	MW-1-021810	02/18/10	<1.0	<1.0	**14**	**43**	9.9 J	--	--	<20	<1.0
MW-7	MW-7-062106	06/21/06	<1.0	<1.0 UJ	<1.0	<3.0	**473**	<1.0	<1.0	**107**	**2.82**
	MW-7-092106	09/21/06	<1.0	<1.0	<1.0	<3.0	**257**	<1.0	<1.0	**105**	<1.0
	MW-7-121406	12/14/06	<1.0	<1.0	<1.0	<3.0	**290**	<1.0	<1.0	**135**	**1.43 J**
	MW-7-022207	02/22/07	<1.0	<1.0	<1.0	<3.0	**243**	<1.0	<1.0	**56.9**	**1.54**
	MW-7-060707	06/07/07	<1.0	<1.0	<1.0	<3.0	**194 J**	<1.0	<1.0	**46.2**	<1.0
	MW-7-092707	09/27/07	<1.0	<1.0	<1.0	<3.0	**93.3**	<1.0	<1.0	**47.2**	<1.0
	MW-7-102208	10/22/08	<1	<1	<1	<2	**69.0**	--	--	**67**	<1
	MW-7-021810	02/18/10	<1.0	<1.0	<1.0	<2.0	**74 J**	--	--	**72**	<1.0
MW-8	MW-8-121406	12/14/06	<1.0	<1.0	<1.0	<3.0	**19.5**	<1.0	<1.0	<25.0	<1.0
	MW-8-022107	02/21/07	<1.0	<1.0	<1.0	<3.0	**24.8**	<1.0	<1.0	<25.0	<1.0
	MW-8-060607	06/06/07	<1.0	<1.0	<1.0	<3.0	**19.7 J**	<1.0	<1.0	<25.0	<1.0
	MW-8-092707	09/27/07	<1.0	<1.0	<1.0	<3.0	**50.0**	<1.0	<1.0	<25.0	<1.0

TABLE 5

POST-EXCAVATION GROUNDWATER ANALYTICAL RESULTS AND GROUNDWATER QUALITY STANDARDS[1]

Former Drive & Park, Inc. Site
28 IBM Road
Poughkeepsie, New York

Concentrations in micrograms per liter (ug/L)

MW-12	MW-12-062106 / DUP[4]	06/21/06	**313 / 310**	**166 J / 85.8 J**	**43.2 / 35.8**	**1010 / 825**	**14.5 J / 15 J**	<1.0 / <1.0	<1.0 / <1.0	**47.1 / 47.6**	<1.0 / <1.0
	MW-12-092106 / DUP[5]	09/21/06	**300 / 333**	**229 / 265**	**556 / 618**	**1820 / 2070**	**8.1 J / 7.2 J**	<1.0 / <1.0	<1.0 / <1.0	<25.0 / <25.0	<1.0 / <1.0
	MW-12-121406 / DUP[4]	12/14/06	**109 / 119**	**11.8 / 12.4**	**208 / 235**	**312 / 252**	**18.8 / 20.2**	<1.0 / <1.0	<1.0 / <1.0	**63.6 / 81.3**	<1.0 / <1.0
	MW-12-022207 / DUP[4]	02/22/07	**122 J / 220 J**	**31.8 / 29.3**	**339 J / 493 J**	**708 J / 1130 J**	**9.7 / 9.7**	<1.0 / <1.0	<1.0 / <1.0	<25.0 / <25.0	<1.0 / <1.0
	MW-12-060707 / DUP[4]	06/07/07	**171 / 184**	**33.3 / 35.3**	**496 / 509**	**846 / 845**	**2.8 J / 3.2 J**	<1.0 / <1.0	<1.0 / <1.0	<25.0 / <25.0	<1.0 / <1.0
	MW-12-027707 / DUP[4]	09/27/07	**210 / 337**	**99.9 / 94.0**	**701 / 963**	**762 / 1570**	**4.7 / 4.5**	<1.0 / <1.0	<1.0 / <1.0	<25.0 / <25.0	<1.0 / <1.0
	MW-12-102108 / DUP[5]	10/21/08	**31 J**	**14 J**	**148 J**	**238 J**	**4 J**	--	--	<100	<5
	MW-12-021810 / DUP[4]	02/18/10	**6.8 / 6.4**	**2.6 / 2.9**	**9.8 / 10**	**19 / 19**	**2.1 J / 1.8 J**	--	--	<20	<1.0
MW-103	MW-103-062106	06/21/06	<1.0	<1.0 UJ	<1.0	<3.0	**65.2**	<1.0	<1.0	<25.0	**1.28**
	MW-103-092106	09/21/06	<1.0	<1.0	<1.0	<3.0	**31.7 J**	<1.0	<1.0	<25.0	<1.0
	MW-103-121406	12/14/06	<1.0	<1.0	<1.0	<3.0	**90.2**	<1.0	<1.0	**41.5**	**1.04 J**
	MW-103-022207	02/22/07	<1.0	<1.0	<1.0	<3.0	**37.4**	<1.0	<1.0	<25.0	<1.0
	MW-103-060707	06/07/07	<1.0	<1.0	<1.0	<3.0	**28.6 J**	<1.0	<1.0	<25.0	<1.0
	MW-103-092707	09/27/07	<1.0	<1.0	<1.0	<3.0	**30.7**	<1.0	<1.0	<25.0	<1.0
MW-104	MW-104-062106	06/21/06	<1.0	<1.0 UJ	<1.0	<3.0	**7.5**	<1.0	<1.0	<25.0	<1.0
	MW-104-092106	09/21/06	<1.0	<1.0	<1.0	<3.0	**19.2 J**	<1.0	<1.0	<25.0	<1.0
	MW-104-121506	12/15/06	<1.0	<1.0	<1.0	<3.0	**2.6**	<1.0	<1.0	<25.0	<1.0
	MW-104-022207	02/23/07	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<1.0	<25.0	<1.0
	MW-104-060707	06/07/07	<1.0	<1.0	<1.0	<3.0	**1.3 J**	<1.0	<1.0	<25.0	<1.0
	MW-104-092707	09/27/07	<1.0	<1.0	<1.0	<3.0	**32.8**	<1.0	<1.0	**25.9**	<1.0
MW-110	MW-110-062106	06/21/06	<1.0	<1.0 UJ	<1.0	<3.0	<1.0	<1.0	<1.0	<25.0	<1.0
	MW-110-092106	09/21/06	<1.0	<1.0	<1.0	<3.0	<1.0 UJ	<1.0	<1.0	<25.0	<1.0
	MW-110-121406	12/14/06	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<1.0	**37.3**	<1.0
	MW-110-022207	02/22/07	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<1.0	<25.0	<1.0
	MW-110-060707	06/07/07	<1.0	<1.0	<1.0	<3.0	<1.0 UJ	<1.0	<1.0	<25.0	<1.0
	MW-110-092707	09/27/07	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<1.0	<25.0	<1.0
	MW-110-102108	10/21/08	<1	<1	<1	<2	<1	--	--	<20	<1
	MW-110-021810	02/18/10	<1.0	<1.0	<1.0	<2.0	<1.0	--	--	<20	<1.0
MW-111	MW-111-062106	06/21/06	<1.0	<1.0 UJ	<1.0	<3.0	**2.8**	<1.0	<1.0	<25.0	<1.0
	MW-111-092106	09/21/06	<1.0	<1.0	<1.0	<3.0	**1.7 J**	<1.0	<1.0	<25.0	<1.0
	MW-111-121406	12/14/06	<1.0	<1.0	<1.0	<3.0	**1.7**	<1.0	<1.0	<25.0	<1.0
	MW-111-022207	02/22/07	<1.0	<1.0	<1.0	<3.0	**2.0**	<1.0	<1.0	<25.0	<1.0
	MW-111-060707	06/07/07	<1.0	<1.0	<1.0	<3.0	**1.5 J**	<1.0	<1.0	<25.0	<1.0
	MW-111-092707	09/27/07	<1.0	<1.0	<1.0	<3.0	**23.2 J**	<1.0	<1.0	<25.0	<1.0

TABLE 5

POST-EXCAVATION GROUNDWATER ANALYTICAL RESULTS AND GROUNDWATER QUALITY STANDARDS[1]

Former Drive & Park, Inc. Site
28 IBM Road
Poughkeepsie, New York

Concentrations in micrograms per liter (ug/L)

MW-201	MW-201-062106	06/21/06	**8.7**	<1.0 UJ	<1.0	<3.0	**25.1**	<1.0	<1.0	<25.0	<1.0
	MW-201-092106	09/21/06	<1.0	<1.0	<1.0	<3.0	**4.5 J**	<1.0	<1.0	<25.0	<1.0
	MW-201-121406	12/14/06	<1.0	<1.0	<1.0	<3.0	**8.2**	<1.0	<1.0	**105**	<1.0
	MW-201-022307	02/23/07	<1.0	<1.0	<1.0	<3.0	**4.7**	<1.0	<1.0	<25.0	<1.0
	MW-201-060607	06/06/07	<1.0	<1.0	<1.0	<3.0	**2.7 J**	<1.0	<1.0	<25.0	<1.0
	MW-201-092607	09/26/07	<1.0	<1.0	<1.0	<3.0	**6.2**	<1.0	<1.0	<25.0	<1.0
	MW-201-102108	10/21/08	<1	<1	<1	<2	**15**	--	--	<20	<1
	MW-201-021810	02/18/10	<1.0	<1.0	<1.0	<2.0	**8.2 J**	--	--	<20	<1.0
MW-202	MW-202-062106	06/21/06	**1.5**	<1.0 UJ	<1.0	<3.0	**2.2**	<1.0	<1.0	<25.0	<1.0
	MW-202-092106	09/21/06	<1.0	<1.0	<1.0	<3.0	<1.0 UJ	<1.0	<1.0	<25.0	<1.0
	MW-202-121406	12/14/06	<1.0	<1.0	<1.0	<3.0	**1.5**	<1.0	<1.0	<25.0	<1.0
	MW-202-022207	02/22/07	<1.0	<1.0	<1.0	<3.0	**1.6**	<1.0	<1.0	<25.0	<1.0
	MW-202-060607	06/06/07	<1.0	<1.0	<1.0	<3.0	<1.0 UJ	<1.0	<1.0	<25.0	<1.0
	MW-202-092607	09/26/07	**1.1**	<1.0	<1.0	<3.0	<1.0	<1.0	<1.0	<25.0	<1.0
MW-203	MW-203-062106	06/21/06	**3.1**	<1.0 UJ	<1.0	**9.6**	**13.2**	<1.0	<1.0	<25.0	<1.0
	MW-203-092106	09/21/06	**73.9**	<1.0	<1.0	<3.0	**6.5 J**	<1.0	<1.0	<25.0	<1.0
	MW-203-121406	12/14/06	**88.4**	<1.0	**5.0**	**9.4**	**6.1**	<1.0	<1.0	<25.0	<1.0
	MW-203-022207	02/22/07	**94.8**	<1.0	**14**	**18.2**	**5.9**	<1.0	<1.0	<25.0	<1.0
	MW-203-060707	06/07/07	**46.8**	**2.4**	**16.4**	**12.4**	**3.8 J**	<1.0	<1.0	<25.0	<1.0
	MW-203-092707	09/27/07	**60.5**	**1.4**	**65.2**	<3.0	**5.5**	<1.0	<1.0	<25.0	<1.0
	MW-203-102108	10/21/08	**97 J**	<3	**2 J**	**3 J**	**5**	--	--	<50	<3
	MW-203-021810	02/18/10	**27**	<1.0	<1.0	<2.0	**3.3 J**	--	--	<20	<1.0

Notes

1. All samples analyzed using EPA Method 8260B.
2. NYSDEC groundwater quality standards for benzene, toluene, ethylbenzene, and total xylenes from NYSDEC, 1999, 6 NYCRR Part 703: Surface Water and Groundwater Quality Standards and Effluent Limitations, August 4.
3. NYSDEC water quality guidance value for methyl tert-butyl ether from NYSDEC, 1999, Draft Addendum to the Division of Water Technical and Operational Guidance Series (TOGS) No. 1.1.1, Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations.
4. Duplicate results provided in format "sample / duplicate."
5. Results provided are from the duplicate sample with the highest detected concentrations.

Abbreviations

"BOLD" = Detected concentration.
"BOLD UNDERLINED" = Detected concentration exceeds water quality standard.
< = Not detected at or above the laboratory reporting limit shown.
-- = Sample not analyzed for compound.
J = The analyte was positively identified; the associated numerical value is the estimated concentration of the analyte in the sample.
NA = Not Available.
UJ = The analyte was not detected at or above the laboratory reporting limit shown. The reporting limit is estimated.

TABLE 6

WELL CONSTRUCTION DETAILS[1]

Former Drive & Park, Inc. Site
28 IBM Road
Poughkeepsie, New York

Well Identification	Date Installed	Elevation of Measuring Point[2] (feet NAVD88)	Depth of Well (feet bgs)	Diameter of Well	Screen Length (feet)	Screened Interval (feet bgs)	Filter Pack Interval (feet bgs)		Reference
							Depth to Top of Filter Pack	Depth to Base of Filter Pack	
DP-1[6]	prior to 1988	90.19	9.91[3]	4	NA	NA - NA	NA	NA	NETC, 1991
DP-2[6]	prior to 1988	90.19	5.88[3]	4	NA	NA - NA	NA	NA	NETC, 1991
DP-3[6]	prior to 1988	90.41	5.68[3]	4	NA	NA - NA	NA	NA	NETC, 1991
DP-4[4]	prior to 1988	NA	NA	4	NA	NA - NA	NA	NA	NETC, 1991
MW-1	01/17/91	91.56	19.5	4	15	4 - 19	3	19.5	NETC, 1991
MW-2[6]	01/17/91	90.62	18.5	4	15	3 - 18	2	18.5	NETC, 1991
MW-3[6]	01/17/91	90.61	18.5	4	15	3 - 18	2	18.5	NETC, 1991
MW-4[6]	01/17/91	88.65	18.5	4	15	3 - 18	2	18.5	NETC, 1991
MW-5[5]	1991/1992	87.37	NA	4	NA	NA - NA	NA	NA	NA
MW-6	1991/1992	90.83	19.31[3]	4	NA	NA - NA	NA	NA	NA
MW-7	1991/1992	91.48	19.42[3]	4	NA	NA - NA	NA	NA	NA
MW-8	1991/1992	91.66	19.48[3]	4	NA	NA - NA	NA	NA	NA
MW-9	1991/1992	87.31	18.41[3]	4	NA	NA - NA	NA	NA	NA
MW-10	08/12/92	87.31	18	4	15	2 - 17	1.5	18	NETC, 1992
MW-11[6]	08/11/92	84.29	12	4	10	1.5 - 11.5	1	12	NETC, 1992
MW-12	08/11/92	84.91	12	4	10	1.5 - 11.5	1	12	NETC, 1992
MW-13	08/11/92	83.11	12	4	10	1.5 - 11.5	1	12	NETC, 1992
MW-101[6]	11/20/03	89.22	14	2	10	4 - 14	3	14	Geomatrix, 2004
MW-102[6]	11/20/03	87.29	12	2	10	2 - 12	2	12	Geomatrix, 2004
MW-103	11/20/03	91.13	14	2	10	4 - 14	3	14	Geomatrix, 2004
MW-104	11/19/03	90.5	14	2	10	2 - 12	1.5	12	Geomatrix, 2004
MW-110	07/06/05	87.51	10.5	0.75	5	5.5 - 10.5	4	10.5	Geomatrix, 2006b
MW-111	07/06/05	81.32	7	0.75	5	2 - 7	1.5	7	Geomatrix, 2006b
MW-201	06/13/06	87.64	13.5	2	10	3 - 13	3	14	Geomatrix, 2006b
MW-202	06/13/06	86.53	12.5	2	10	2 - 12	2	12.5	Geomatrix, 2006b
MW-203	06/13/06	90.06	14.5	2	10	4 - 14	3	14.5	Geomatrix, 2006b

TABLE 6

WELL CONSTRUCTION DETAILS[1]

Former Drive & Park, Inc. Site
28 IBM Road
Poughkeepsie, New York

Notes:

1. Wells DP-1 through DP-4 were installed by a consultant of Drive & Park, Inc. Installation details are unavailable. Wells MW-1 through MW-13 were installed by NETC. Boring logs for wells MW-1 through MW-4 and MW-10 through MW-13 indicate these wells were constructed of four-inch-diameter, Schedule 40 polyvinyl chloride (PVC) well casing and 0.020-inch slotted PVC screen, with a filter pack consisting of Morie No. 1 well gravel. Wells MW-101 through MW-104, MW-110, MW-111, and MW-201 through MW-203 were installed by Geomatrix. Wells MW-101 through MW-104 were constructed of two-inch-diameter, Schedule 40 PVC well casing and 0.010-inch slotted PVC screen, with a filter pack consisting of #00N sand. Wells MW-110 and MW-111 were constructed of 0.75-inch-diameter, Schedule 40 PVC well casing and 0.010-inch slotted PVC screen , with a pre-packed filter pack consisting of 20/40 filter sand. Wells MW-201 through MW-203 were constructed of two-inch-diameter, Schedule 40 PVC well casing and 0.010-inch slotted PVC screen, with a filter pack consisting of #2 sand.

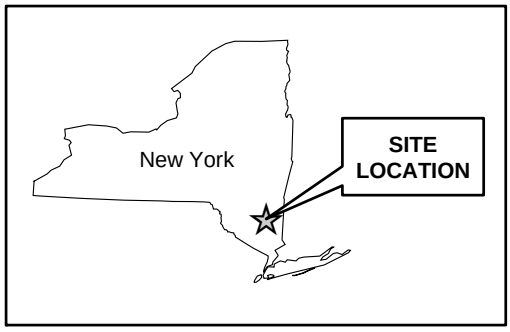
   Wells MW-2, MW-3, MW-4, MW-6, DP-1, DP-2, DP-3, and MW-101 were destroyed during on-site and off-site excavation activities in December 2005 and January 2006. Well MW-102 was damaged beyond repair during excavation activities and was destroyed on June 13, 2006 by removing the PVC casing, drilling out the filter pack and bentonite seal, then grouting the borehole from total depth to ground surface.
2. Measuring point elevation is the surveyed elevation of a reference mark at the top of each well casing. Measuring point elevations were surveyed on September 15, 1992, September 29, 2005, and August 27, 2006 by Morris and Associates of Poughkeepsie, New York. Prior to 2006, measurements provided from a relative datum. Current datum is 7.73 feet below the assumed datum used in previous reports for most wells.
3. Depth of well measured November 24, 2003; construction details unavailable.
4. This monitoring well was installed by Drive & Park, Inc.'s consultant in or prior to 1988 and could not be located by NETC in 1991 (NETC, 1991).
5. Well destroyed November 20, 2003.
6. Well destroyed during IRM implementation (excavation) in 2005-2006.

Abbreviations

feet bgs = feet below ground surface.
NA = information not available.

FIGURES

Basemap from U.S.G.S. Poughkeepsie, New York (1982)
7.5' topographic quadrangle.



N

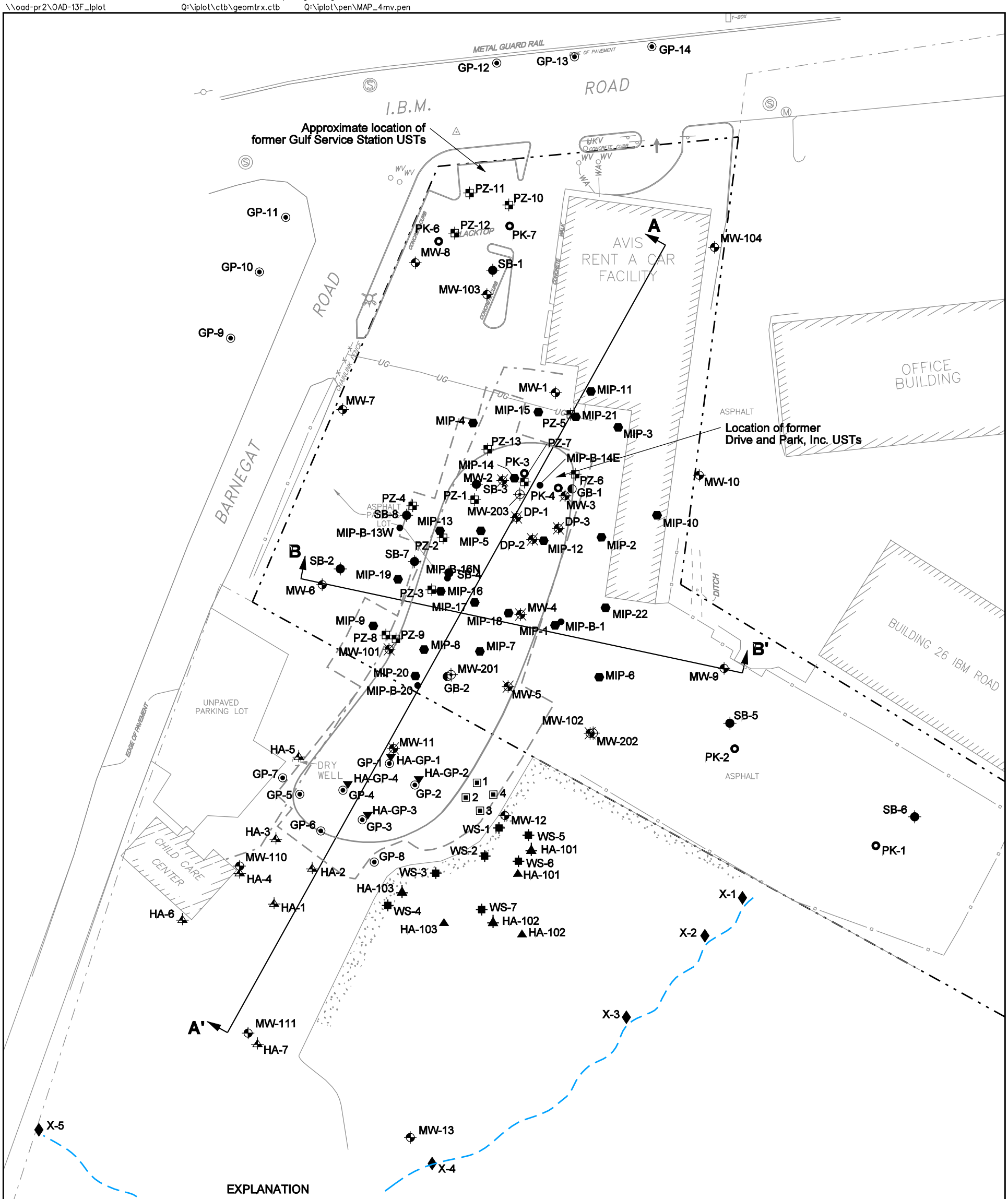
0 2,000 4,000 Feet

SITE LOCATION MAP
Former Drive & Park, Inc. Site
28 IBM Road
Poughkeepsie, New York

By: YH	Date: 7/10/2008	Project No. 9328.000
AMEC Geomatrix		Figure 1

S:\9300\9328\9328.000\task_20\08_0318_rawp_fig_01.mxd

irene.skolnik S:\9300\9328\9328.000\task_9\10_0520_smp_fig_02.dgn
\\oad-pr2\OAD-13F_lplot Q:\iplot\ctb\geomtrx.ctb Q:\iplot\pen\MAP_4mv.pen

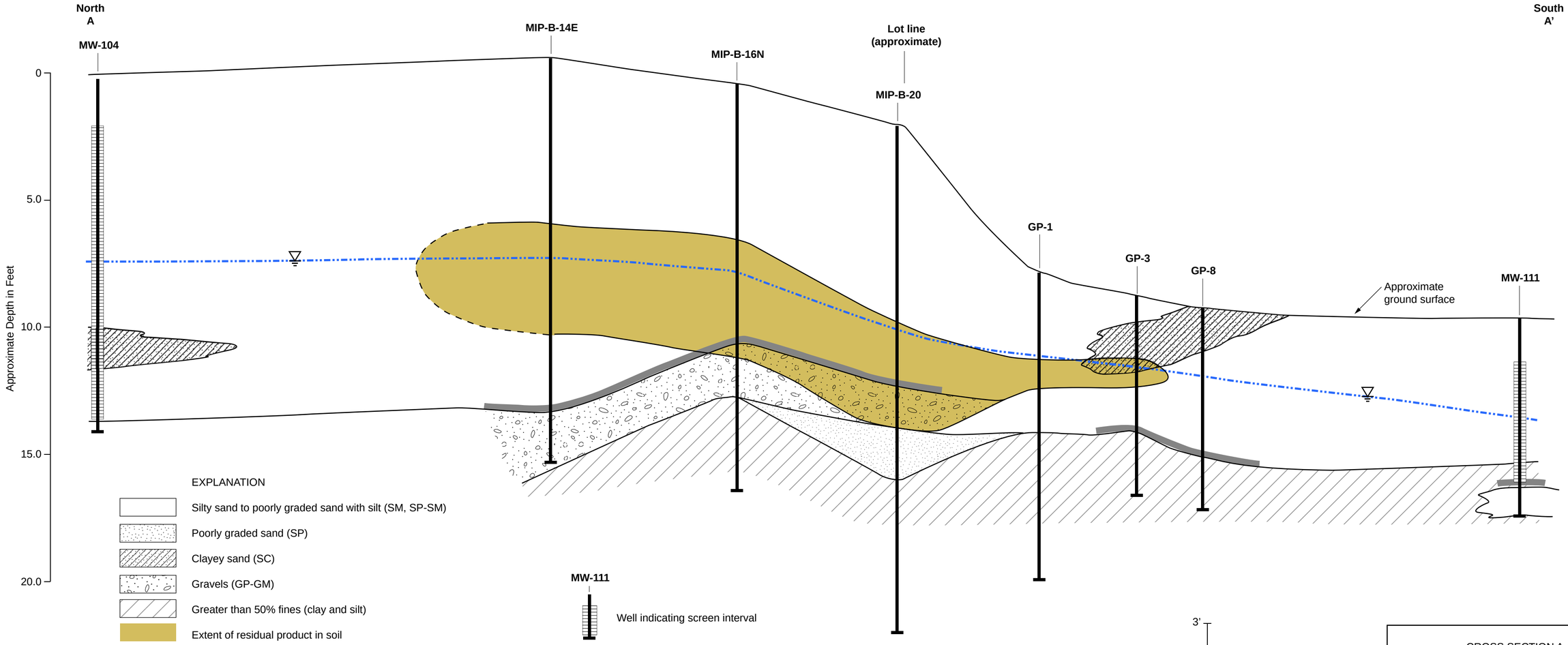


EXPLANATION

- Site boundary
- Subsurface natural gas service
- Former potential conduit (abandoned 2" steel line)
- Cross section location (Figures 3, 4)
- Former extent of residual product in soil
- Area of excavation
- Approximate soil boring/temporary piezometer location (November 2003)
- Approximate surface soil sample location (April 2003)
- Approximate grab groundwater location (November 2003)
- Approximate hollow stem auger soil sample location (December 1990)
- Monitoring well location
- Monitoring well location (installed June 2006 following IRM excavation)
- Approximate hand augered soil sample location (September 2005)
- Approximate grab groundwater location (July 2005)
- Approximate soil boring (July 2005)
- Approximate membrane interface probe/electrical conductivity boring location (June - July 2005)
- Approximate geoprobe boring location (July 2005 and July 2006)
- Destroyed monitoring well location
- Approximate geotechnical boring location (October 2005)
- Approximate wetland sediment sample location (August 2009)
- Approximate stream sediment sample location (August 2009)
- Approximate soil boring location (August 2009)

SITE PLAN
Former Drive & Park, Inc. Site
28 IBM Road
Poughkeepsie, New York

By: DA	Date: 11/9/2010	Project No. 9328.000
AMEC Geomatrix		Figure 2

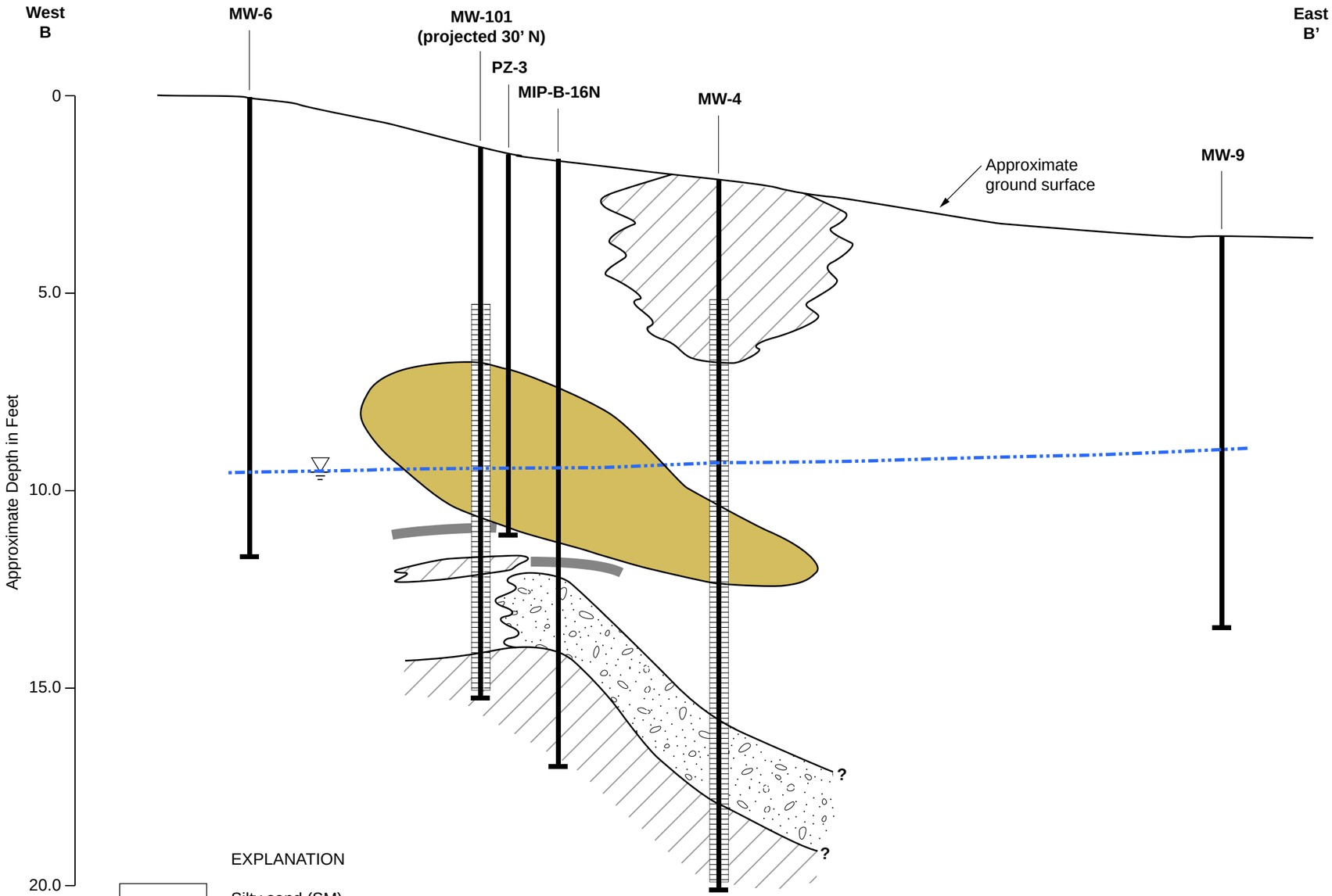


Note:
1. The continuity of geologic units shown between borings has been inferred.
2. Cross section location shown on Figure 2.

CROSS SECTION A-A'
Former Drive & Park, Inc. Site
28 IBM Road
Poughkeepsie, New York

By: YTH	Date: 05/20/2010	Project No. 9328.000
AMEC Geomatrix	Figure 3	

S:\93000\9328\9328.000\task - 9\10_0520_smp_fig_03.ai



EXPLANATION

- Silty sand (SM)
- Gravels (GM, GP-GM)
- Greater than 50% fines (ML, CL/ML)
- Extent of residual product in soil
- Peat
- Depth to groundwater table inferred based on water level measurements 9/7/05 at monitoring wells MW-4, MW-6, MW-9, and MW-101

MW-4

Well indicating screen interval

MIP-B-16N

Temporary boring
(except MW-6 and MW-9, in which screened interval not available)

3’
0
30’

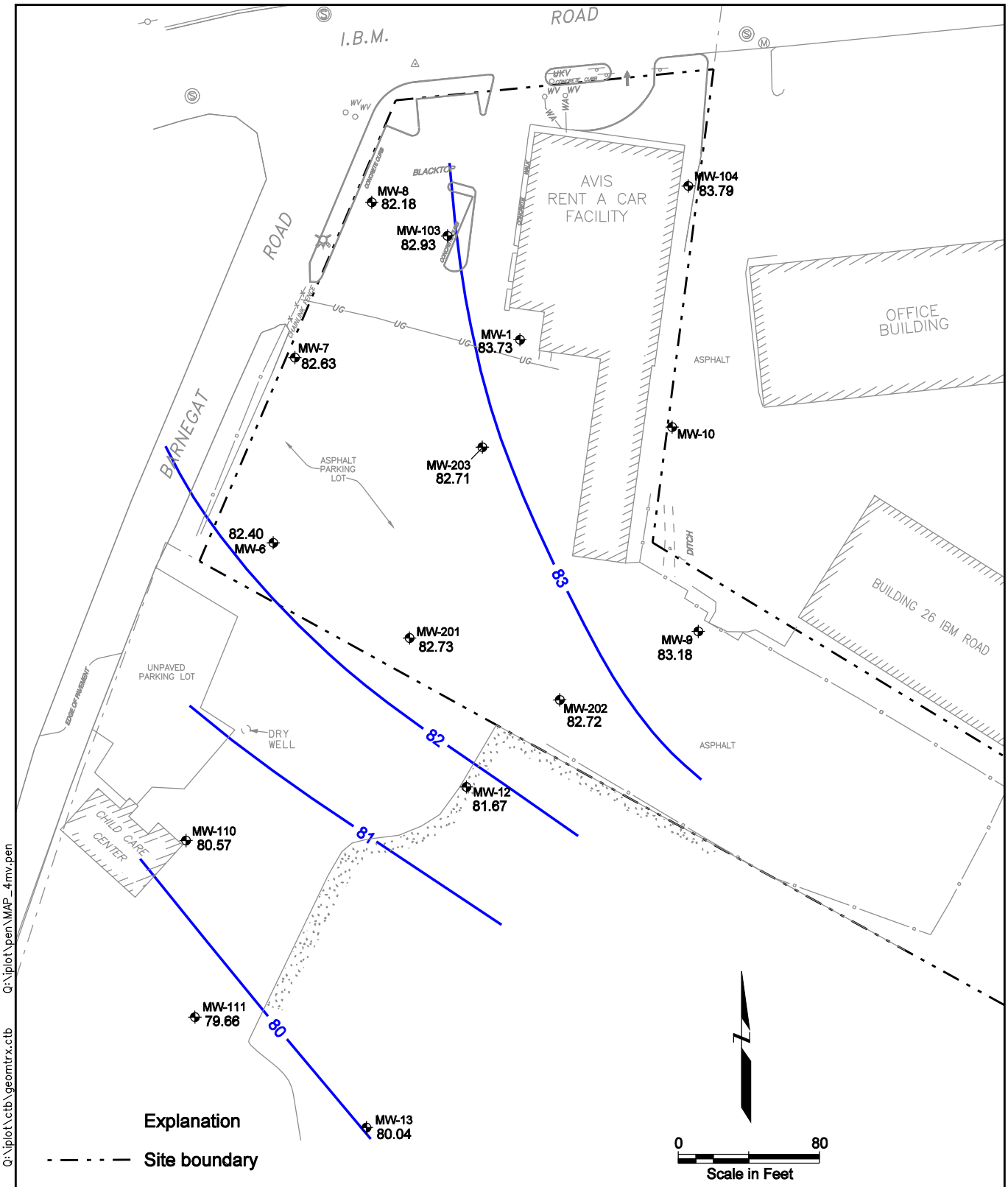
Notes:

1. Well completion and lithologic logs unavailable for MW-6 and MW-9. Data for this figure derived from Figure 9A of NETC’s “Final Phase II Hydrogeological Investigation,” October 15, 1992.
2. The continuity of geologic units shown between borings has been inferred.
3. Cross section location shown on Figure 2.

CROSS SECTION B-B’
Former Drive & Park, Inc. Site
28 IBM Road
Poughkeepsie, New York

By: YTH	Date: 05/20/2010	Project No. 9328.000
AMEC Geomatrix		Figure 4

S:\9300\9328\9328.000\task_9\10_0520_smpl_fig_04.ai



Notes:

1. Elevations of wells from Morris & Associates.
2. Well MW-10 under standing water. Depth to water not measured.

POTENTIOMETRIC SURFACE MAP
February 17, 2010
Former Drive & Park, Inc. Site
28 IBM Road
Poughkeepsie, New York

By: DA	Date: 12/7/2010	Project No. 9328.000
AMEC Geomatrix		Figure 5

irene.skolnik
\\oad-pr2\OAD-13F_iplot
S:\9300\9328\9328.000\task_9\10_0520_smp_fig_05.dgn
Q:\iplot\ctb\geomtrx.ctb
Q:\iplot\pen\MAP_4mv.pen

PK-3	7.5-9.5'
B	17.0
T	225.0
E	76.0
X	368.0
TPHg	410.0

PK-6	6-8'
BTEX	ND
TPHg	ND

PZ-12	7-8'
BTEX	ND
MTBE	ND
GRO	ND
DRO	ND

PZ-11	6-7'
BTEX	ND
MTBE	ND
GRO	ND
DRO	ND

PZ-10	6-7'
BTEX	ND
MTBE	ND
GRO	ND
DRO	ND

PK-7	6-8'
BTEX	ND
TPHg	ND

MW-103	6-7'
BTEX	ND
MTBE	ND
GRO	ND
DRO	ND

PZ-13	2-4'
B	0.0563
T	0.0634
E	0.973
X	5.03
MTBE	ND

MW-104	0-2'	4-5'
BTEX	ND	ND
MTBE	ND	ND

PZ-1	2-4'
B	0.857
T	1.43
E	1.48
X	4.55
MTBE	0.0704

PZ-5	2-4'
BTEX	ND
MTBE	ND

PZ-4	2-4'
BTE	ND
X	0.16
MTBE	0.0539

PZ-7	2-4'
B	2.67
T	12.6
E	5.92
X	34.3
MTBE	0.243

MIP-B-13W	6-6.5'	8-8.5'
B	0.775	0.316
T	0.669	ND
E	0.335	ND
X	1.76	ND
MTBE	0.12	ND

PZ-6	4-6'
B	0.0983
T	0.865
E	1.19
X	5.44
MTBE	ND

MIP-B-16N	6-6.3'	9.5-10'	12.5-13'
B	50.2	10.9	0.362
T	348	0.316	0.0882
E	128	ND	0.3
X	672	ND	1.26
MTBE	ND	0.268	ND

MIP-B-14E	5.5-6'	8.5-9'	13.5-14'
B	2.36	1.13	ND
T	12.1	3.03	ND
E	49.1	18.7	ND
X	397	82.8	ND
MTBE	ND	ND	ND

PZ-3	2-4'	4-6'
B	1.41	12.6
T	2.57	86.8
E	1.53	55.1
X	8.15	325
MTBE	0.0545	0.106

PK-4	7-9'
B	3.1
T	3.9
E	5.1
X	50.0
TPHg	500.0

PZ-8	2-4'	4-6'
BT	ND	ND
E	0.0592	0.0775
X	0.162	0.342
MTBE	ND	ND

MW-102	0-2'
BTEX	ND
MTBE	ND

PZ-9	2-4'	4-6'
B	0.232	ND
T	0.938	ND
E	3.78	0.156
X	24	0.816
MTBE	ND	ND

PK-2	4-6'
BTEX	ND
MTBE	ND

MW-11	0-3'	2-2.5'
B	ND	ND
T	ND	14
E	ND	14
X	ND	130
MTBE	NA	NA

PK-1	4-6'
BTEX	ND
MTBE	ND

HA-GP-1	3.5'
B	11.4J
T	221
E	76.1
X	524
MTBE	ND

MIP-B-20	6-6.5'	9-9.5'	10.5-11'	12.5-13'	14.5-15'	16.5-17'
B	18.2	2.84	1.6	2.04	0.0951J	NDJ
T	395	3.24	0.129	0.465	0.589J	NDJ
E	206	1.95	0.32	0.55	0.25J	NDJ
X	1,170	8.67	0.357	1.37	1.39J	NDJ
MTBE	ND	ND	0.092	0.0929	2.99J	0.0759J

HA-GP-4	2.5'
B	2.69J
T	7.16
E	47.7
X	238
MTBE	ND

1	Surface
BTEX	ND

4	Surface
B	0.119
T	ND
E	ND
X	0.437

HA-GP-2	2'
B	3.08J
T	74.4
E	53.8
X	463
MTBE	ND

3	Surface
BTEX	ND

MW-12	0-0.25'	0.5-1'
B	ND	4.9
T	ND	97
E	ND	37
X	ND	220
MTBE	NA	NA

2	Surface
BTEX	ND

HA-GP-3	2.8'
B	0.234J
T	ND
E	0.167
X	0.174
MTBE	16.5J

MW-13	0-0.25'	0.5-1'
B	ND	ND
T	ND	0.002
E	ND	0.0008
X	0.0034	0.004
MTBE	NA	NA

EXPLANATION

- Approximate hollow stem auger soil sample location (Dec. 1990)
- Approximate hand augered soil sample location (Sept. 2005)
- Approximate grab groundwater location (July 2005)
- Approximate soil boring location (July 2005)
- Approximate membrane interface probe/electrical conductivity boring location (June - July 2005)
- Approximate geoprobe boring location (July 2005 and July 2006)
- Approximate grab groundwater location (November 2003)
- Monitoring well location
- Destroyed monitoring well location
- Approximate soil boring/temporary piezometer location (November 2003)
- Approximate surface soil sample location (April 2003)
- Subsurface natural gas service
- Site boundary
- Former potential conduit (abandoned 2" steel line)

Boring number

PZ-1	2-4'
B	0.857
T	1.43
E	1.48
X	4.55
MTBE	0.0704

Approximate sample depth (feet below ground surface)

Constituents (results in milligrams per kilogram)

MTBE = methyl tertiary butyl ether
BTEX = benzene, toluene, ethylbenzene, and xylenes
GRO = gasoline range organics
DRO = diesel range organics
TPHg = total petroleum hydrocarbons as gasoline
J = results considered an estimate
ND = contituents not detected above laboratory quantitation limit
NA = not analyzed

0 80
Scale in Feet

APPROXIMATE AERIAL DISTRIBUTION OF PETROLEUM COMPOUNDS IN SOIL PRIOR TO REMEDIAL ACTION IMPLEMENTATION
Former Drive & Park, Inc. Site
28 IBM Road
Poughkeepsie, New York

By: DA | Date: 12/2/2010 | Project No. 9328.000

AMEC Geomatrix | Figure 6

steve.wessels S:\9300\9328\9328.000\task_9\10_0928_rsmp_fig_06.dgn
\\oad-pr2\OAD-3E_iplot Q:\iplot\ctb\geomtrx.ctb Q:\iplot\pen\MAP_4mv.pen

TP-1	2/23/2006
Benzene	<0.005
Toluene	<0.005
Ethylbenzene	<0.005
Total Xylenes	<0.005

TP-3	2/23/2006
Benzene	<0.006
Toluene	<0.006
Ethylbenzene	<0.006
Total Xylenes	<0.006

TP-2	2/23/2006
Benzene	<0.005
Toluene	<0.005
Ethylbenzene	<0.005
Total Xylenes	0.008

FL-ON-12	3/9/2006
Benzene	<0.006
Toluene	<0.006
Ethylbenzene	<0.006 UJ
Total Xylenes	<0.006 UJ

SW-ON-8	3/9/2006
Benzene	<0.006
Toluene	<0.006
Ethylbenzene	<0.006 UJ
Total Xylenes	0.011 J

SW-ON-6	3/7/2006
Benzene	0.011 J
Toluene	<0.006
Ethylbenzene	0.016
Total Xylenes	0.066

SB-8	8/5/2009
Benzene	< 0.0047
Toluene	< 0.0047
Ethylbenzene	< 0.0047
Total Xylenes	< 0.0094

FL-ON-10	3/7/2006
Benzene	<0.006
Toluene	<0.006
Ethylbenzene	<0.006
Total Xylenes	<0.006

SB-7	8/5/2009
Benzene	< 0.0049
Toluene	< 0.0049
Ethylbenzene	< 0.0049
Total Xylenes	< 0.0097

SW-ON-4	3/2/2006
Benzene	0.03 J
Toluene	0.007 J
Ethylbenzene	0.015 J
Total Xylenes	0.09 J

SW-E38	2/2/2006
Benzene	<0.006
Toluene	<0.006
Ethylbenzene	<0.006
Total Xylenes	<0.006

FL-E40	2/2/2006
Benzene	<0.006
Toluene	<0.006
Ethylbenzene	<0.006
Total Xylenes	<0.006

FL-E36	2/1/2006
Benzene	<0.013
Toluene	<0.013
Ethylbenzene	<0.013
Total Xylenes	<0.013

FL-ON-8	3/1/2006
Benzene	<0.006
Toluene	<0.006
Ethylbenzene	<0.006
Total Xylenes	<0.006

FL-E37	2/2/2006
Benzene	<0.006
Toluene	<0.006
Ethylbenzene	<0.006
Total Xylenes	<0.006

FL-E41	2/2/2006
Benzene	<0.006
Toluene	<0.006
Ethylbenzene	<0.006
Total Xylenes	<0.006

SW-E39	2/2/2006
Benzene	<0.007
Toluene	<0.007
Ethylbenzene	<0.007
Total Xylenes	<0.007

FL-ON-1	2/15/2006
Benzene	<0.006
Toluene	<0.006
Ethylbenzene	<0.006
Total Xylenes	<0.006

FL-ON-2	2/16/2006
Benzene	<0.006
Toluene	<0.006
Ethylbenzene	<0.006
Total Xylenes	0.014

FL-ON-3	2/16/2006
Benzene	<0.005
Toluene	<0.005
Ethylbenzene	<0.005
Total Xylenes	<0.005

SB-4	8/5/2009
Benzene	< 0.0044
Toluene	< 0.0044
Ethylbenzene	< 0.0044
Total Xylenes	< 0.0088

FL-ON-5	2/24/2006
Benzene	<0.006 UJ
Toluene	<0.006 UJ
Ethylbenzene	<0.006 UJ
Total Xylenes	0.026 UJ

SW-ON-2	2/24/2006
Benzene	0.021
Toluene	<0.006
Ethylbenzene	<0.006
Total Xylenes	0.012

SW-ON-1	2/24/2006
Benzene	<0.006 UJ
Toluene	<0.006 UJ
Ethylbenzene	<0.006 UJ
Total Xylenes	<0.006 UJ

FL-ON-6	2/27/2006
Benzene	<0.006 UJ
Toluene	<0.006 UJ
Ethylbenzene	<0.006 UJ
Total Xylenes	0.007 J

SB-4	8/5/2009
Benzene	< 0.0044
Toluene	< 0.0044
Ethylbenzene	< 0.0044
Total Xylenes	< 0.0088

TP-3-032306
TP-1-032306
TP-2-032306
SW-ON-8-7.0-030906
FL-ON-12-13.0-030906
SW-ON-6-7.0-030706
SB-8-8.0
FL-ON-1-13.0-021506
FL-ON-2-13.0-021606
FL-ON-10-13.0-030706
FL-ON-3-13.0-021606
SW-ON-3-7.0-030206
SB-7-7.0
FL-ON-9-13.0-030106
SB-4-13.5
FL-ON-5-13.0-022406
SW-ON-2-7.5-022406
SW-ON-4-7.0-030206
FL-ON-8-13.0-030106
SW-E38-8.0-020206
FL-E40-15.0-020206
FL-ON-6-13.0-022706
SW-ON-1-7.0-022406
FL-E36-15.0-020106
FL-E37-15.0-020206
FL-E41-15.0-020206
SW-E39-8.0-020206

Rerouted underground gas line
CHAINLINK FENCE
BARNEGAT ROAD
DITCH
UG

EXPLANATION

- Site boundary
- UG — Subsurface natural gas service
- Final extent of on-site excavation
- Sidewall confirmation sample location (approximate)
- Floor confirmation sample location (approximate)
- Sidewall confirmation sample resampling location, August 2009 (approximate)
- Floor confirmation sample resampling location, August 2009 (approximate)

Sample I.D. → SB-4
Sample date → 8/5/2009
Constituents (results in milligrams per kilogram):
Benzene < 0.0044
Toluene < 0.0044
Ethylbenzene < 0.0044
Total Xylenes < 0.0088

J = Result considered an estimate
UJ = Laboratory reporting limit considered an estimate
< = Analyte not detected at or above laboratory reporting limit indicated

N

0 30
Scale in Feet

ON-SITE EXCAVATION
CONFIRMATION SOIL SAMPLES BELOW
SOIL CLEANUP OBJECTIVES
Former Drive & Park, Inc. Site
28 IBM Road
Poughkeepsie, New York

By: KLU | Date: 11/23/2010 | Project No. 9328.000

AMEC Geomatrix | Figure 7

steve.wessels S:\9300\9328\9328.000\task_2i\0_0805_fer_rev1_fig_07.dgn
\\oad-pr2\OAD-3E_iplot Q:\iplot\ctb\geomtrx.ctb Q:\iplot\pen\MAP_4mv.pen

Rerouted underground gas line

UG

CHAINLINK FENCE

BARNEGAT ROAD

Asphalt Parking Lot

DITCH

TP-3-032306
TP-1-032306
TP-2-032306
SW-ON-8-7.0-030906
FL-ON-12-13.0-030906
FL-ON-1-13.0-021506
SW-ON-6-7.0-030706
FL-ON-11-13.0-030806
SB-3
FL-ON-2-13.0-021606
SW-ON-9-8.0-032106
SB-8
FL-ON-10-13.0-030706
FL-ON-3-13.0-021606
SW-ON-3-7.0-030206
SB-7
FL-ON-9-13.0-030106
SB-4
FL-ON-5-13.0-022406
SW-ON-4-7.0-030206
SW-ON-2-7.5-022406
FL-ON-8-13.0-030106
SW-E38-8.0-020206
FL-E40-15.0-020206
FL-ON-4-13.0-022406
FL-ON-6-13.0-022706
SW-ON-1-7.0-022406
FL-E36-15.0-020106
FL-E37-15.0-020206
FL-E41-15.0-020206
SW-E39-8.0-020206

SW-ON-9	3/21/06
Benzene	0.25 mg/kg
Total Xylenes	0.451 mg/kg

FL-ON-11	3/08/06
Benzene	0.061 mg/kg

SW-ON-3	3/02/06
Benzene	0.09 mg/kg
Total Xylenes	0.61 mg/kg

FL-ON-9	3/01/06
Benzene	0.38 mg/kg

EXPLANATION

- Site boundary
- UG — Subsurface natural gas service
- Final extent of on-site excavation
- Sidewall confirmation sample location (approximate)
- Floor confirmation sample location (approximate)
- Sidewall confirmation sample resampling location, August 2009 (approximate)
- Floor confirmation sample resampling location, August 2009 (approximate)

mg/kg = milligram per kilogram

Sample ID
Sample date
Constituent in mg/kg

FL-ON-11	3/08/06
Benzene	0.061 mg/kg

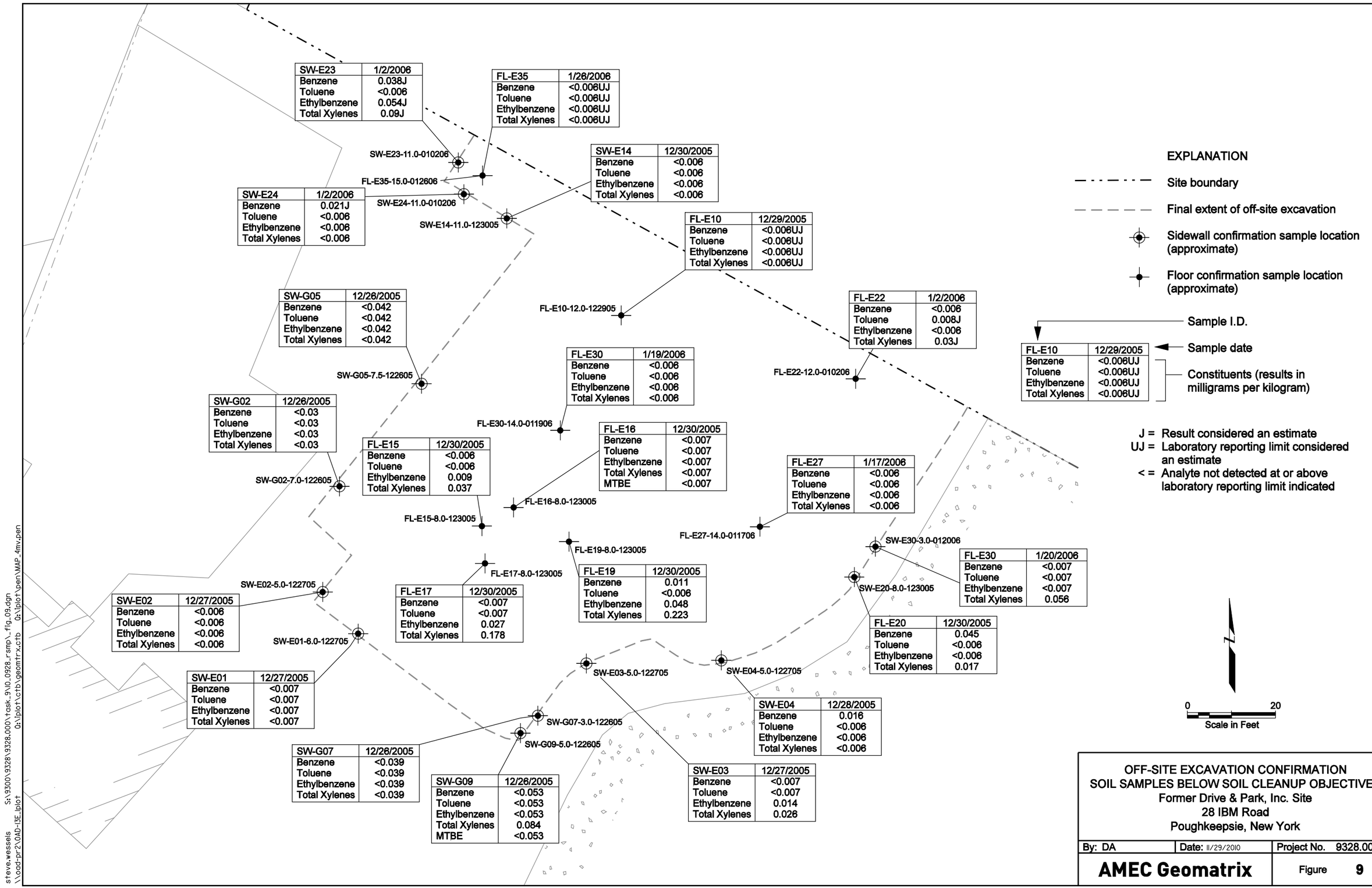
N

0 30
Scale in Feet

ON-SITE EXCAVATION
CONFIRMATION SOIL SAMPLES
ABOVE SOIL CLEANUP OBJECTIVES
Former Drive & Park, Inc. Site
28 IBM Road
Poughkeepsie, New York

By: DA	Date: 11/29/2010	Project No. 9328.000
AMEC Geomatrix		Figure 8

steve.wessels S:\9300\9328\9328.000\task_9\10_0928_rsmp_fig_08.dgn
\\oak-pr2\OAD-I3E.iplot Q:\iplot\ctb\geomfrx.ctb Q:\iplot\pen\MAP_4mv.pen



OFF-SITE EXCAVATION CONFIRMATION
SOIL SAMPLES BELOW SOIL CLEANUP OBJECTIVES
Former Drive & Park, Inc. Site
28 IBM Road
Poughkeepsie, New York

By: DA	Date: 11/29/2010	Project No. 9328.000
AMEC Geomatrix		Figure 9

steve.wessels S:\9300\9328\9328.000\task_9\10_0928_rsmp_fig_09.dgn
\\oad-pr2\OAD-13E_iplot Q:\iplot\ctb\geomtrx.ctb Q:\iplot\pen\MAP_4mv.pen

EXPLANATION

Site boundary

Final extent of off-site excavation

Sidewall confirmation sample location (approximate)

Floor confirmation sample location (approximate)

mg/kg = milligrams per kilogram
< = not detected at or above the laboratory reporting limit shown; reporting limit exceeds soil cleanup objective

Sample I.D.	
FL-E26	1/6/2005 ← Sample date
Benzene	1.6 mg/kg ← Constituent

Unpaved Parking Lot

Child Care Center

SW-E06	12/28/2005
Benzene	<0.32 mg/kg
Total Xylenes	4.37 mg/kg

SW-E21	12/30/2005
Benzene	<1.1 mg/kg
Toluene	15 mg/kg
Ethylbenzene	7.8 mg/kg
Total Xylenes	50 mg/kg

FL-E26	1/6/2005
Benzene	1.6 mg/kg

FL-E29	1/19/2006
Benzene	4.8 mg/kg

FL-E28	1/17/2006
Benzene	0.53 mg/kg
Total Xylenes	0.512 mg/kg

SW-E05	12/28/2005
Benzene	0.11 mg/kg

SW-E23-11.0-010206
FL-E35-15.0-012606
SW-E24-11.0-010206
SW-E14-11.0-123005
SW-E06-10.0-122805
FL-E10-12.0-122905
SW-G05-7.5-122605
FL-E26-12.0-010606
FL-E22-12.0-010206
FL-E30-14.0-011906
FL-E29-14.0-011906
SW-E21-10.0-123005
SW-G02-7.0-122605
FL-E28-14.0-011706
FL-E16-8.0-123005
FL-E15-8.0-123005
FL-E27-14.0-011706
SW-E30-3.0-012006
FL-E19-8.0-123005
SW-E20-8.0-123005
FL-E17-8.0-123005
SW-E02-5.0-122705
SW-E05-5.0-122805
SW-E01-6.0-122705
SW-E03-5.0-122705
SW-E04-5.0-122705
SW-G07-3.0-122605
SW-G09-5.0-122605

Federally Designated Wetland

N

0 20
Scale in Feet

OFF-SITE EXCAVATION CONFIRMATION
SOIL SAMPLES ABOVE SOIL CLEANUP OBJECTIVES
Former Drive & Park, Inc. Site
28 IBM Road
Poughkeepsie, New York

By: DA	Date: 11/29/2010	Project No. 9328.000
AMEC Geomatrix		Figure 10

steve.wessels S:\9300\9328\9328.0000\task_9\10_0928_rsmp_fig_10.dgn
\\oad-pr2\OAD-I3E_plot Q:\plot\ctb\geomtrx.ctb Q:\plot\pen\MAP_4mv.pen

MW-8	11/03	9/05
Benzene	<1.0	<1.0
Toluene	<1.0	<1.0
Ethylbenzene	<1.0	<1.0
Xylenes	<1.0	<3.0

GP-12 (7/06)	7.5'-11'	11'-14'	14.5'-18'
Benzene	<1.0	<1.0	<1.0
Toluene	<1.0	<1.0	<1.0
Ethylbenzene	<1.0	<1.0	<1.0
Xylenes	<3.0	<3.0	<3.0

GP-13 (7/06)	7'-10.5'	11'-14'	15'-18'
Benzene	<1.0	<1.0	<1.0
Toluene	<1.0	<1.0	<1.0
Ethylbenzene	<1.0	<1.0	<1.0
Xylenes	<3.0	<3.0	<3.0

GP-14 (7/06)	7'-10.5'	11'-14'	15'-18'
Benzene	<1.0	<1.0	<1.0
Toluene	<1.0	<1.0	<1.0
Ethylbenzene	<1.0	<1.0	<1.0
Xylenes	<3.0	<3.0	<3.0

GP-10 (7/06)	10.5'-14'	15'-18'
Benzene	<1.0	<1.0
Toluene	<1.0	<1.0
Ethylbenzene	<1.0	<1.0
Xylenes	<3.0	<3.0

GP-11 (7/06)	11'-14'
Benzene	<1.0
Toluene	<1.0
Ethylbenzene	<1.0
Xylenes	<3.0

GP-9 (7/06)	10.5'-14'
Benzene	<1.0
Toluene	<1.0
Ethylbenzene	<1.0
Xylenes	<3.0

MW-7	11/03	9/05
Benzene	<1.0	<1.0
Toluene	<1.0	<1.0
Ethylbenzene	<1.0	<1.0
Xylenes	<1.0	<3.0

MW-6	11/03	9/05
Benzene	<1.0	22.9
Toluene	<1.0	0.2J
Ethylbenzene	<1.0	0.7J
Xylenes	<1.0	<3.0

MW-2	11/03
Benzene	433
Toluene	5820
Ethylbenzene	2650
Xylenes	12600

MW-101	11/03	9/05
Benzene	1,630	3,340
Toluene	4,520	9,010
Ethylbenzene	1,830	3,610
Xylenes	10,800	19,200

MW-11	11/03	9/05
Benzene	1,180	2,190
Toluene	14,600	586
Ethylbenzene	2,830	1,860
Xylenes	15,800	3,450

HA-5	11/03
Benzene	<1.0
Toluene	<1.0
Ethylbenzene	<1.0
Xylenes	<2.0

HA-3	11/03
Benzene	<1.0
Toluene	<1.0
Ethylbenzene	<1.0
Xylenes	<2.0

MW-110	7/05	9/05
Benzene	<1.0	<1.0
Toluene	<1.0	<1.0
Ethylbenzene	<1.0	<1.0
Xylenes	<3.0	<3.0

HA-6	11/03
Benzene	<1.0
Toluene	<1.0
Ethylbenzene	<1.0
Xylenes	<2.0

HA-4	11/03
Benzene	<1.0
Toluene	<1.0
Ethylbenzene	<1.0
Xylenes	<2.0

MW-111	7/05	9/05
Benzene	<1.0	<1.0
Toluene	<1.0	<1.0
Ethylbenzene	<1.0	<1.0
Xylenes	<3	<3.0

HA-7	11/03
Benzene	<1.0
Toluene	<1.0
Ethylbenzene	<1.0
Xylenes	<2.0

HA-1	11/03
Benzene	<1.0
Toluene	<1.0
Ethylbenzene	<1.0
Xylenes	<2.0

MW-13	11/03	9/05
Benzene	<1.0	<1.0
Toluene	<1.0	<1.0
Ethylbenzene	<1.0	<1.0
Xylenes	<1.0	<3.0

HA-2	11/03
Benzene	<100
Toluene	112
Ethylbenzene	630
Xylenes	2890

MW-103	11/03
Benzene	<1.0
Toluene	<1.0
Ethylbenzene	<1.0
Xylenes	<1.0

MW-104	11/03
Benzene	<1.0
Toluene	<1.0
Ethylbenzene	<1.0
Xylenes	<2.0

MW-1	11/03	9/05
Benzene	50.5	22.1
Toluene	4.71	1.6
Ethylbenzene	81.8	11.2
Xylenes	902	38.1

MW-3	11/03
Benzene	328
Toluene	83.9
Ethylbenzene	186
Xylenes	962

MW-10	11/03	9/05
Benzene	<1.0	<1.0
Toluene	<1.0	<1.0
Ethylbenzene	<1.0	<1.0
Xylenes	<1.0	<3.0

MW-4	11/03
Benzene	1150
Toluene	1160
Ethylbenzene	517
Xylenes	2880

MW-9	11/03	9/05
Benzene	<1.0	<1.0
Toluene	<1.0	<1.0
Ethylbenzene	<1.0	<1.0
Xylenes	<1.0	<3.0

MW-12	11/03	9/05
Benzene	861	410
Toluene	189	49.4
Ethylbenzene	976	231
Xylenes	2,970	924

MW-102	11/03	9/05
Benzene	<1.0	0.4J
Toluene	<1.0	<1.0
Ethylbenzene	<1.0	<1.0
Xylenes	0.32J	<3.0

HA-101	7/05
Benzene	<1.0
Toluene	<1.0
Ethylbenzene	<1.0
Xylenes	<3.0

HA-102	7/05
Benzene	<1.0
Toluene	<1.0
Ethylbenzene	<1.0
Xylenes	<3.0

HA-103	7/05
Benzene	<1.0
Toluene	<1.0
Ethylbenzene	<1.0
Xylenes	<3.0

EXPLANATION

- Approximate hand augered soil sample location (Sept. 2005)
- Approximate grab groundwater location (July 2005)
- Approximate soil boring location (July 2005)
- Approximate membrane interface probe/electrical conductivity boring location (June - July 2005)
- Approximate geoprobe boring location (July 2005 and July 2006)
- Approximate grab groundwater location (November 2003)
- Monitoring well location
- Destroyed monitoring well location
- Approximate soil boring/temporary piezometer location (November 2003)
- Approximate surface soil sample location (April 2003)
- Subsurface natural gas service
- Site boundary
- Former potential conduit (abandoned 2" steel line)

MW-2	11/03
Benzene	433
Toluene	5820
Ethylbenzene	2650
Xylenes	12600

Boring number/Well I.D.
Date of sampling
Constituents (results in micrograms per liter)

J = Result considered an estimate
< = Analyte not detected at or above laboratory reporting limit indicated

GP-11 (7/06)	11'-14'
Benzene	<1.0
Toluene	<1.0
Ethylbenzene	<1.0
Xylenes	<3.0

Grab groundwater boring and sample date
Grab groundwater sample depth
Constituents (results in micrograms per liter)

N

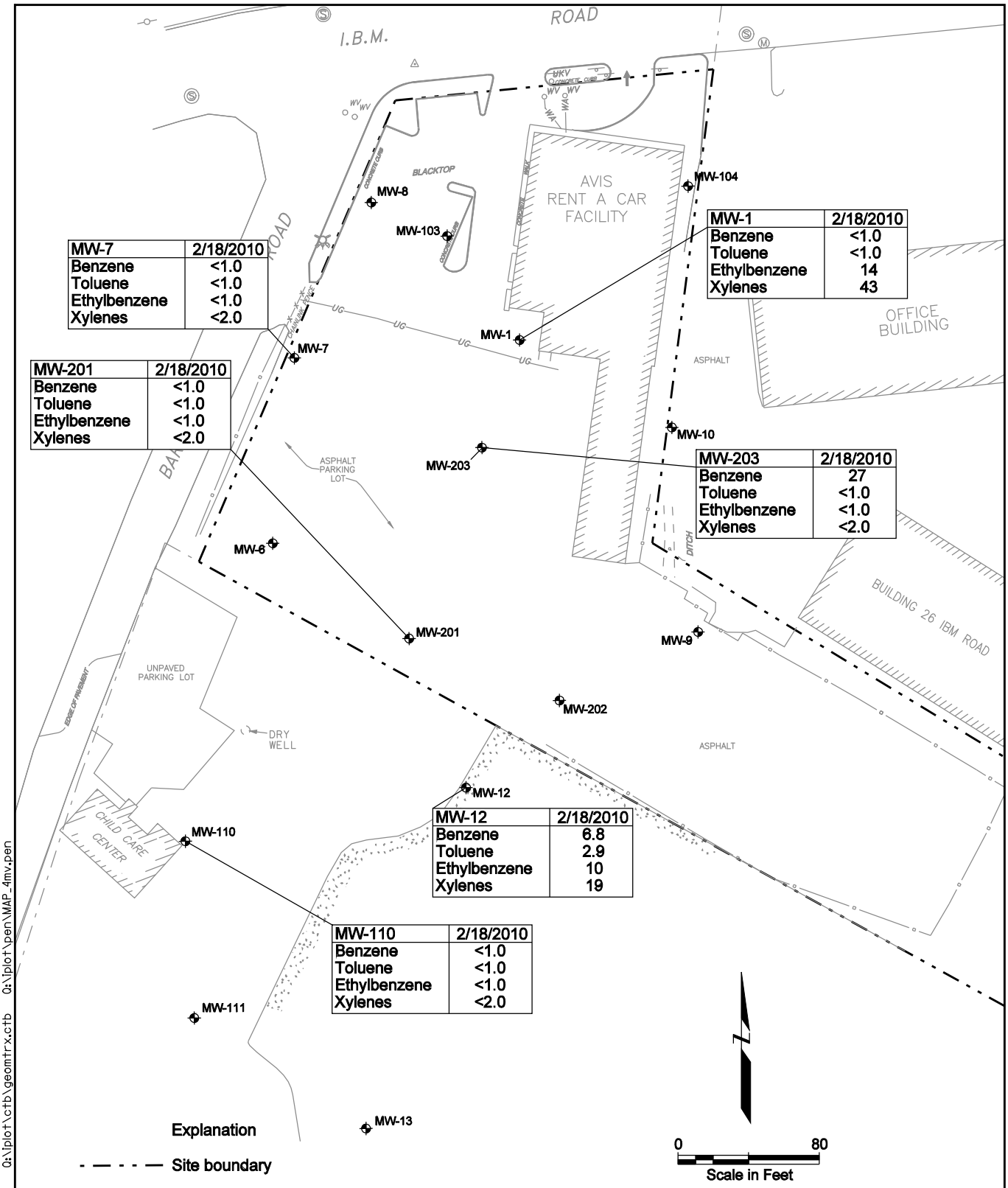
0 80
Scale in Feet

APPROXIMATE AERIAL DISTRIBUTION OF PETROLEUM COMPOUNDS IN GROUNDWATER PRIOR TO REMEDIAL ACTION IMPLEMENTATION
Former Drive & Park, Inc. Site
28 IBM Road
Poughkeepsie, New York

By: YTH | Date: 11/23/2010 | Project No. 9328.000

AMEC Geomatrix | Figure 11

steve.wessels S:\9300\9328\9328.000\task_2\N0_0805_fer_revl_fig_ll.dgn
\\vad-pr2\0AD-I3E.iplot Q:\iplot\ctb\geomfrx.ctb Q:\iplot\pen\MAP_4mv.pen

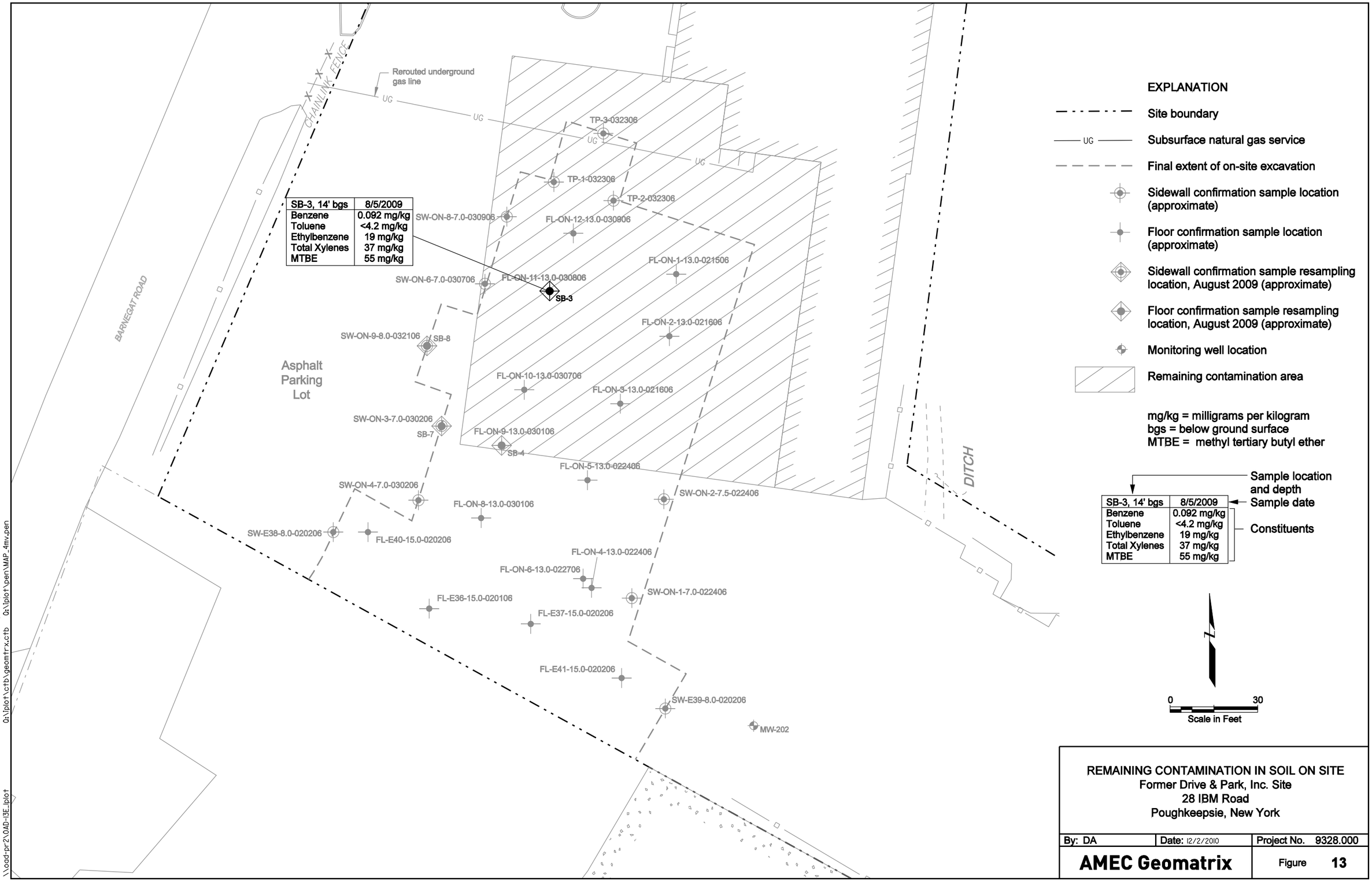


APPROXIMATE AERIAL DISTRIBUTION OF PETROLEUM COMPOUNDS IN GROUNDWATER AFTER REMEDIAL ACTION IMPLEMENTATION

Former Drive & Park, Inc. Site
28 IBM Road
Poughkeepsie, New York

By: DA	Date: 11/23/2010	Project No. 9328.000
AMEC Geomatrix		Figure 12

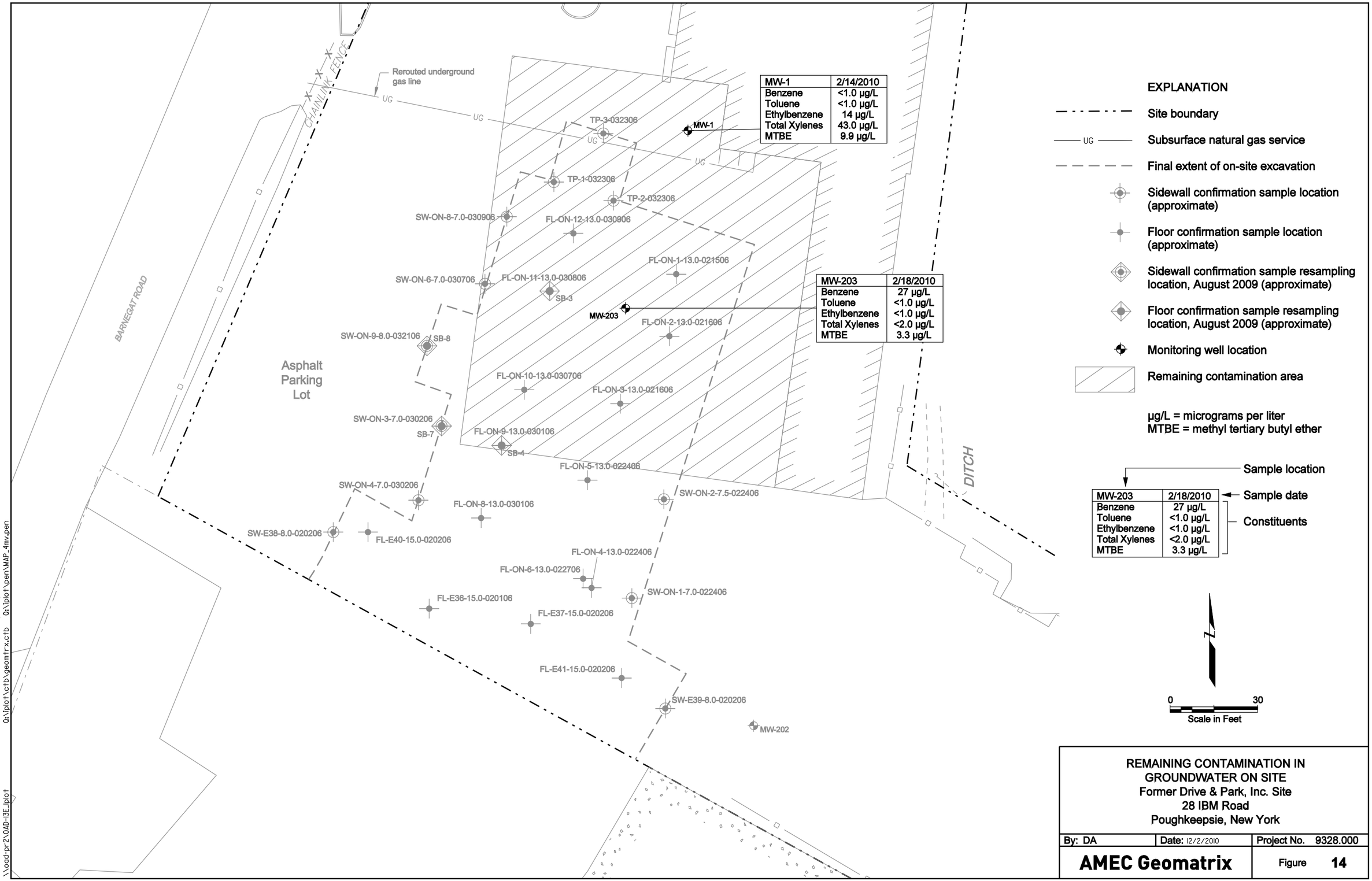
steve.wessels S:\9300\9328\9328.000\task_2\N0_0805_fer_revl_fig_l2.dgn Q:\lplot\pen\MAP_4mv.pen
\\oad-pr2\OAD-I3E_lplot Q:\lplot\ctb\geomtrx.ctb



REMAINING CONTAMINATION IN SOIL ON SITE
Former Drive & Park, Inc. Site
28 IBM Road
Poughkeepsie, New York

By: DA	Date: 12/2/2010	Project No. 9328.000
AMEC Geomatrix		Figure 13

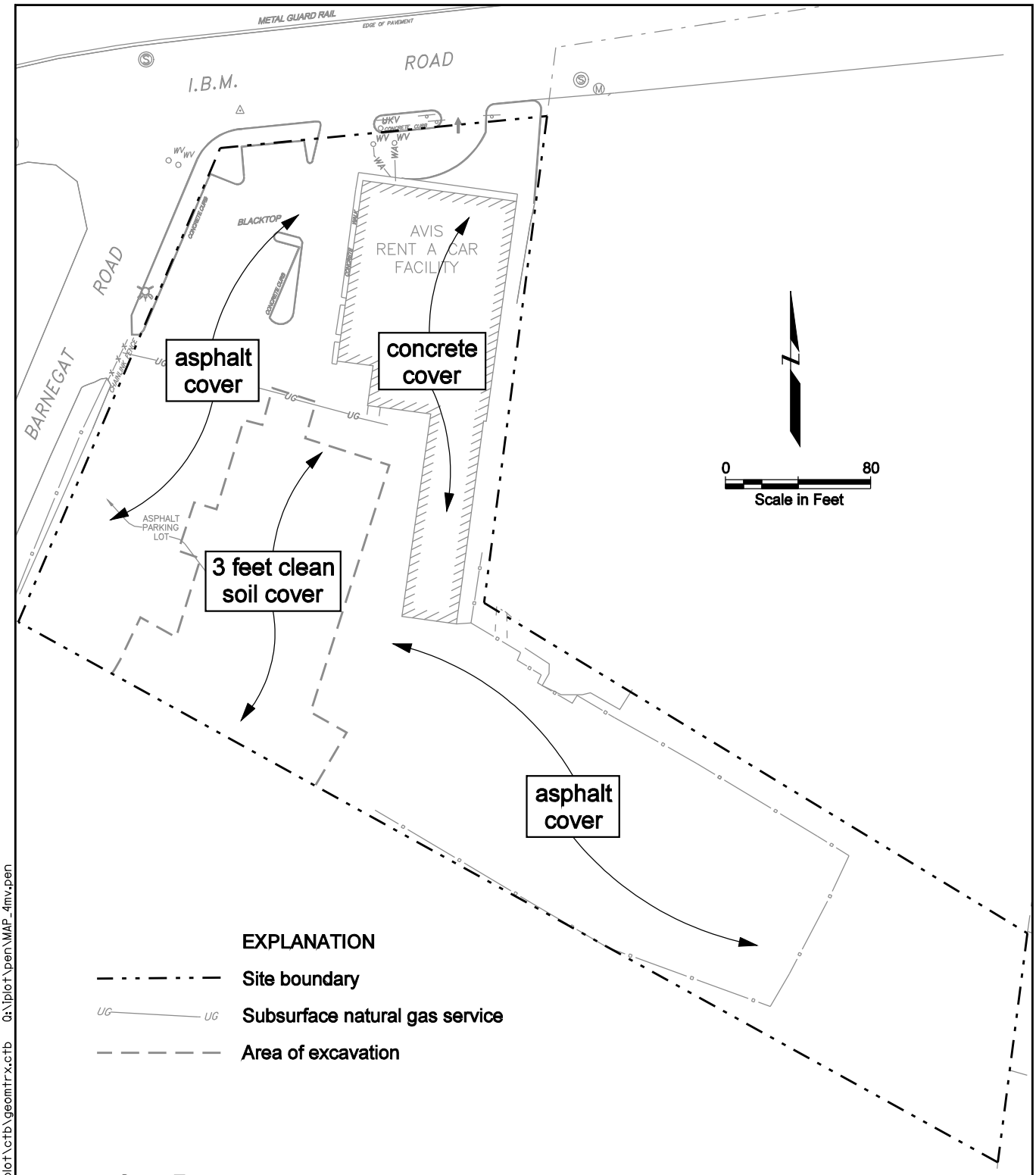
steve.wessels S:\9300\9328\9328.000\task_9\10_0928_rsmp_fig_13.dgn
\\oad-pr2\OAD-13E.iplot Q:\plot\ctb\geomtrx.ctb Q:\plot\pen\MAP_4mv.pen



REMAINING CONTAMINATION IN GROUNDWATER ON SITE
Former Drive & Park, Inc. Site
28 IBM Road
Poughkeepsie, New York

By: DA	Date: 12/2/2010	Project No. 9328.000
AMEC Geomatrix		Figure **14**

steve.wessels S:\9300\9328\9328.000\task_9\10_0928_rsmp_fig_14.dgn
\\oad-pr2\OAD-IBE_iplot Q:\iplot\ctb\geomtrx.ctb Q:\iplot\pen\MAP_4mv.pen



EXPLANATION

- Site boundary
- UG — UG Subsurface natural gas service
- Area of excavation

Cover Type:

3 feet soil cover in area of excavation

Asphalt cover in parking areas

Concrete cover below building

SITE COVER SYSTEM
Former Drive & Park, Inc. Site
28 IBM Road
Poughkeepsie, New York

By: DA	Date: 11/29/2010	Project No. 9328.000
AMEC Geomatrix		Figure 15

steve.wessels S:\9300\9328\9328.000\task_9\10_0928_rsmp_fig_15.dgn
\\oad-pr2\OAD-I3E_lplot Q:\lplot\ctb\geomtrx.ctb Q:\lplot\pen\MAP_4mv.pen

APPENDIX A

Excavation Work Plan

APPENDIX A
EXCAVATION WORK PLAN
Former Drive & Park, Inc. Site
Brownfield Cleanup Program #C314111
28 IBM Road
Town of Poughkeepsie
Dutchess County, New York

A-1 NOTIFICATION

At least 15 days prior to the start of any activity that is anticipated to encounter remaining contamination, the site owner or their representative will notify the Department. Currently, this notification will be made to:

Jamie Verrigni
NYSDEC
Division of Environmental Remediation
625 Broadway
Albany, New York 12233-7014

and also to:

Regional Hazardous Waste Remediation Engineer
NYSDEC Region 3 Office
21 South Putt Corners Road
New Paltz, New York 12561-1696

This notification will include:

- A detailed description of the work to be performed, including the location and areal extent, plans for site re-grading, intrusive elements or utilities to be installed below the soil cover, estimated volumes of contaminated soil to be excavated and any work that may impact an engineering control,
- A summary of environmental conditions anticipated in the work areas, including the nature and concentration levels of contaminants of concern, potential presence of grossly contaminated media, and plans for any pre-construction sampling,
- A schedule for the work, detailing the start and completion of all intrusive work,
- A summary of the applicable components of this Excavation Work Plan,
- A statement that the work will be performed in compliance with this Excavation Work Plan and 29 CFR 1910.120,
- A copy of the contractor's health and safety plan, in electronic format, if it differs from the HASP provided in Appendix D of this document,
- Identification of disposal facilities for potential waste streams, and
- Identification of sources of any anticipated backfill, along with all required chemical testing results.

A-2 SOIL SCREENING METHODS

Visual, olfactory and photoionization detector or other appropriate instrument screening will be performed by a qualified environmental professional or person under their supervision during all remedial and development excavations into known or potentially contaminated material (remaining contamination). Soil screening will be performed regardless of when the invasive work is done and will include all excavation and invasive work performed during development, such as excavations for foundations and utility work, after issuance of the COC.

Soils will be analyzed as described in the Quality Assurance Project Plan (QAPP) included as Appendix F. Soils will be segregated based on previous environmental data and screening results into material that requires off-site disposal, material that requires testing, material that can be returned to the subsurface, and material that can be used as cover soil.

A-3 STOCKPILE METHODS

Soils excavated from the potentially impacted area will be stockpiled on and covered with 6-mil plastic sheeting, if the soils will not be removed from the site or placed back in the excavation immediately. Soil stockpiles will be continuously encircled with a berm and/or silt fence. Hay bales will be used as needed near catch basins, surface waters and other discharge points.

Stockpiles will be kept covered when not in use with appropriately anchored tarps. Stockpiles will be routinely inspected and damaged tarp covers will be promptly replaced.

Stockpiles will be inspected at a minimum once each week and after every storm event. Results of inspections will be recorded and maintained at the site and available for inspection by the New York State Department of Environmental Conservation (NYSDEC).

A-4 MATERIALS EXCAVATION AND LOAD OUT

A qualified environmental professional or person under their supervision will oversee all invasive work and the excavation and load-out of all excavated material.

The owner of the property and its contractors are solely responsible for safe execution of all invasive and other work performed under this Plan.

The presence of utilities and easements on the site will be investigated by the qualified environmental professional. It will be determined whether a risk or impediment to the planned work under this SMP is posed by utilities or easements on the site.

Loaded vehicles leaving the site will be appropriately lined, tarped, securely covered, manifested, and placarded in accordance with appropriate Federal, State, local, and NYSDOT requirements (and all other applicable transportation requirements).

A truck wash will be operated on-site as needed if contaminated soil is encountered and transported from the site. The qualified environmental professional will be responsible for ensuring that all outbound trucks will be washed at the truck wash before leaving the site until the activities performed under this section are complete.

Locations where vehicles enter or exit the site shall be inspected daily for evidence of off-site soil tracking.

The qualified environmental professional will be responsible for ensuring that all egress points for truck and equipment transport from the site are clean of dirt and other materials derived from the site during intrusive excavation activities. Cleaning of the adjacent streets will be performed as needed to maintain a clean condition with respect to site-derived materials.

A-5 MATERIALS TRANSPORT OFF-SITE

All transport of contaminated materials will be performed by licensed haulers in accordance with appropriate local, State, and Federal regulations, including 6 NYCRR Part 364. Haulers will be appropriately licensed and trucks properly placarded.

Contaminated material transported by trucks exiting the site will be secured with tight-fitting covers. Loose-fitting canvas-type truck covers will be prohibited. If loads contain wet material capable of producing free liquid, truck liners will be used.

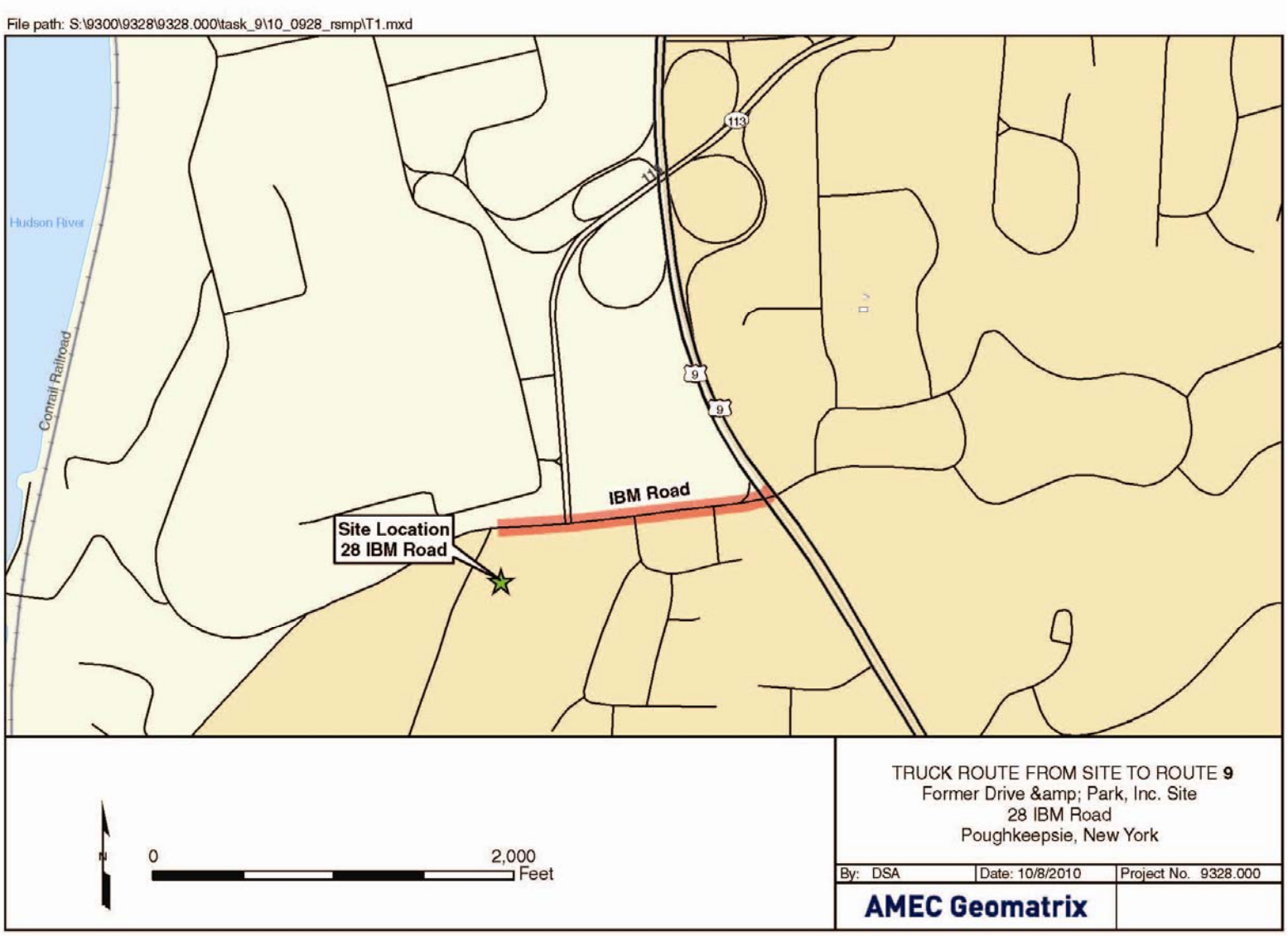
All trucks containing contaminated material will be washed as needed prior to leaving the site. Truck wash waters will be collected and disposed of off-site in an appropriate manner.

The truck transport route to Route 9 is shown on the accompanying map and is as follows: Exit the site directly to IBM Road (not on to Barnegat Road), turn right and travel directly to Route 9. Turn right or left onto Route 9, depending upon the location of the receiving facility. The selected route to the disposal facility will take into account: (a) limiting transport through residential areas and past sensitive sites; (b) use of city mapped truck routes; (c) minimizing off-site queuing of trucks entering the facility; (d) limiting total distance to major highways; (e) promoting safety in access to highways; and (f) overall safety in transport.

Trucks will be prohibited from stopping and idling in the neighborhood outside the project site.

Egress points for truck and equipment transport from the site will be kept clean of dirt and other materials during site remediation and development.

Queuing of trucks will be performed on-site in order to minimize off-site disturbance. Off-site queuing will be minimized.


File path: S:\9300\9328\9328.000\task_9\10_0928_rsmp\T1.mxd
Hudson River
Conrail Railroad
113
9
IBM Road
Site Location
28 IBM Road
N
0
2,000
Feet
TRUCK ROUTE FROM SITE TO ROUTE 9
Former Drive & Park, Inc. Site
28 IBM Road
Poughkeepsie, New York
By: DSA
Date: 10/8/2010
Project No. 9328.000
AMEC Geomatrix

A-6 MATERIALS DISPOSAL OFF-SITE

All soil/fill/solid waste excavated and removed from the site under this Excavation Work Plan will be treated as contaminated and regulated material and will be transported and disposed in accordance with all local, State (including 6NYCRR Part 360) and Federal regulations. If disposal of soil/fill from this site is proposed for unregulated off-site disposal (i.e. clean soil removed for development purposes), a formal request with an associated plan will be made to the NYSDEC. Unregulated off-site management of materials from this site will not occur without formal NYSDEC approval.

Off-site disposal locations for excavated soils will be identified in the pre-excavation notification. This will include estimated quantities and a breakdown by class of disposal facility if appropriate, i.e. hazardous waste disposal facility, solid waste landfill, petroleum treatment facility, construction/demolition recycling facility, etc. Actual disposal quantities and associated documentation will be reported to the NYSDEC in the Periodic Review Report. This documentation will include: waste profiles, test results, facility acceptance letters, manifests, bills of lading and facility receipts.

Non-hazardous historic fill and contaminated soils taken off-site will be handled, at minimum, as a Municipal Solid Waste per 6NYCRR Part 360-1.2. Material that does not meet Track 1 unrestricted SCOs is prohibited from being taken to a New York State recycling facility (6NYCRR Part 360-16 Registration Facility).

A-7 MATERIALS REUSE ON-SITE

Soils may be reused at the site if sampling demonstrates compliance with commercial use SCOs as listed in the table in Appendix 5 of *DER-10 Technical Guidance for Site Investigation and Remediation* (NYSDEC, 2010). On-site soils to be reused at the site will be analyzed for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), inorganics, and polychlorinated biphenyls (PCBs) and pesticides at the frequency indicated in table A-7, below. Chemical criteria for on-site reuse of material have been approved by NYSDEC and are listed in Attachment 1.

Table A-7
Recommended Number of Soil Samples for
Soils Imported to or Reused at Site

Soil Quantity (Cubic Yards)	VOCs (Discrete samples)	SVOCs, Inorganics, PCBs/Pesticides (Composite Samples)
0 - 50	1	1
50 - 100	2	1
100 – 200	3	1

Table A-7 Recommended Number of Soil Samples for Soils Imported to or Reused at Site		
Soil Quantity (Cubic Yards)	VOCs (Discrete samples)	SVOCs, Inorganics, PCBs/Pesticides (Composite Samples)
200 - 300	4	1
300 - 400	4	2
400 - 500	5	2
500 - 800	6	2
800 - 1000	7	2
> 1000	Add an additional 2 VOC and 1 composite for each additional 1000 cubic yards	

Note: three to five discrete samples from different locations in the soil being reused will comprise a composite sample for analysis.

Soils stockpiled for reuse at the site will be placed on plastic and covered securely with plastic pending reuse. The qualified environmental professional will ensure that procedures defined for materials reuse in this SMP are followed and that unacceptable material does not remain on-site. Contaminated on-site material, including historic fill and contaminated soil, that is acceptable for re-use on-site will be placed below the demarcation layer or impervious surface, and will not be reused within a cover soil layer, within landscaping berms, or as backfill for subsurface utility lines.

Any demolition material proposed for reuse on-site will be sampled for asbestos and the results will be reported to the NYSDEC for acceptance. Concrete crushing or processing on-site will not be performed without prior NYSDEC approval. Organic matter (wood, roots, stumps, etc.) or other solid waste derived from clearing and grubbing of the site will not be reused on-site.

A-8 FLUIDS MANAGEMENT

All liquids to be removed from the site, including excavation dewatering and groundwater monitoring well purge and development waters, will be handled, transported and disposed in accordance with applicable local, State, and Federal regulations. Discharge of water generated during large-scale construction activities to surface waters (i.e. a local pond, stream or river) will be performed under a SPDES permit, or water may be containerized for off-site disposal or discharged under permit to the municipal waste water system after meeting the analytical and other requirements of the receiving facility.

A-9 COVER SYSTEM RESTORATION

After the completion of soil removal and any other invasive activities the cover system will be restored in a manner that complies with the RAWP. The demarcation layer, consisting of orange snow fencing material or equivalent material will be replaced to provide a visual reference to the top of the 'Remaining Contamination Zone', the zone that requires adherence to special conditions for disturbance of remaining contaminated soils defined in this Site Management Plan. If the type of cover system changes from that which exists prior to the excavation (i.e., a soil cover is replaced by asphalt), this will constitute a modification of the cover element of the remedy and the upper surface of the remaining contamination. A figure showing the modified surface will be included in the subsequent Periodic Review Report and in any updates to the Site Management Plan.

A-10 BACKFILL FROM OFF-SITE SOURCES

All materials proposed for import onto the site will be approved by the qualified environmental professional and will be in compliance with provisions in this SMP prior to receipt at the site.

Material from industrial sites, spill sites, or other environmental remediation sites or potentially contaminated sites will not be imported to the site.

All imported soils will meet the backfill and cover soil quality standards established in 6NYCRR 375-6.7(d). Based on evaluation of the land use, protection of groundwater and protection of ecological resources criteria, the resulting soil quality must meet the standards for commercial use and for protection of ecological resources listed in Attachment 1. Soils that meet 'exempt' fill requirements under 6 NYCRR Part 360, but do not meet backfill or cover soil objectives for this site, will not be imported onto the site without prior approval by NYSDEC. Solid waste will not be imported onto the site.

If off-site fill material is from a virgin source, one composite sample and one discrete sample will be collected for analysis. If the material is not from a virgin source, composite and discrete samples will be collected for analysis as indicated in Table A-7 above. The source of the off-site fill must be documented by the supplier, including the location and a brief history of the site from where the fill was obtained.

Samples of off-site backfill will be analyzed for the following parameters:

- Herbicides by United States Environmental Protection Agency (U.S. EPA) Method 8151A,
- Pesticides and polychlorinated biphenyls by U.S. EPA Methods 8010A/8082,
- Volatile organic compounds by U.S. EPA Method 8260,
- Semi-volatile organic compounds by U.S. EPA Method 8270,
- Arsenic, barium, beryllium, cadmium, copper, cyanide, lead, manganese, nickel, selenium, thallium, vanadium, and zinc by U.S. EPA Method 6010B,
- Total mercury by U.S. EPA Method 7471,

- Total chromium, hexavalent chromium and trivalent chromium by U.S. EPA Method 7196A.

Imported soils that exceed any SCOs for commercial use or for protection of ecological resources (Attachment 1) will not be used at the site.

Trucks entering the site with imported soils will be securely covered with tight fitting covers. Imported soils will be stockpiled separately from excavated materials and covered to prevent dust releases.

A-11 STORMWATER POLLUTION PREVENTION

For projects greater than one acre, a storm water pollution prevention plan consistent with the New York State Guidelines for Urban Erosion and Sediment Control will be prepared. For smaller projects, barriers and hay bale checks will be installed as necessary and inspected once a week and after every storm event. Results of inspections will be recorded and maintained at the site and available for inspection by NYSDEC. All necessary repairs shall be made immediately.

Accumulated sediments will be removed as required to keep the barrier and hay bale checks functional.

All undercutting or erosion of the silt fence toe anchor shall be repaired immediately with appropriate backfill materials.

Manufacturer's recommendations will be followed for replacing silt fencing damaged due to weathering.

Erosion and sediment control measures identified in the SMP shall be observed to ensure that they are operating correctly. Where discharge locations or points are accessible, they shall be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to receiving waters

Silt fencing or hay bales will be installed around the entire perimeter of the construction area for projects greater than one acre.

A-12 CONTINGENCY PLAN

If underground tanks or other previously unidentified contaminant sources are found during post-remedial subsurface excavations or development related construction, excavation activities will be suspended until sufficient equipment is mobilized to address the condition.

Sampling will be performed on product, sediment and surrounding soils, etc. as necessary to determine the nature of the material and proper disposal method. Chemical analysis will be performed for a full list of analytes (target analyte list [TAL] metals; target compound list [TCL] volatiles and semi-volatiles, TCL pesticides and PCBs), unless the site history and previous sampling results provide a sufficient justification to limit the list of analytes. In this case, a reduced list of analytes will be proposed to the NYSDEC for approval prior to sampling.

Identification of unknown or unexpected contaminated media by screening during invasive site work will be promptly communicated by phone to NYSDEC's Project Manager. Reportable quantities of petroleum product will also be reported to the NYSDEC spills hotline. These findings will be also included in the periodic reports prepared pursuant to Section 5 of the SMP.

A-13 ODOR CONTROL PLAN

This odor control plan is capable of controlling emissions of nuisance odors off-site. Specific odor control methods to be used on a routine basis will include limiting excavation size, covering stockpiles with plastic and using staff to monitor odors on- and off-site. If nuisance odors are identified at the site boundary, or if odor complaints are received, work will be halted and the source of odors will be identified and corrected. Work will not resume until all nuisance odors have been abated. NYSDEC and NYSDOH will be notified of all odor events and of any other complaints about the project. Implementation of all odor controls, including the halt of work, is the responsibility of the property owner's QEP, and any measures that are implemented will be discussed in the Periodic Review Report.

All necessary means will be employed to prevent on- and off-site nuisances. At a minimum, these measures will include: (a) limiting the area of open excavations and size of soil stockpiles; (b) shrouding open excavations with tarps and other covers; and (c) using foams to cover exposed odorous soils if needed. If odors develop and cannot be otherwise controlled, additional means to eliminate odor nuisances will include: (d) direct load-out of soils to trucks for off-site disposal; (e) use of chemical odorants in spray or misting systems; and, (f) use of staff to monitor odors in surrounding neighborhoods.

If nuisance odors develop during intrusive work that cannot be corrected, or where the control of nuisance odors cannot otherwise be achieved due to on-site conditions or close proximity to sensitive receptors, odor control will be achieved by sheltering the excavation and handling areas in a temporary containment structure equipped with appropriate air venting/filtering systems.

A-14 COMMUNITY AIR MONITORING PLAN

This Community Air Monitoring Plan (CAMP) provides real-time monitoring for volatile organic compounds (VOCs) in the designated work area during intrusive activities to provide a measure of protection for the downwind community from potential airborne contaminant releases. The action levels specified herein require increased monitoring, corrective actions to abate emissions, and/or work shutdown.

Investigations at the site have determined that the contaminants of concern are limited to petroleum hydrocarbons, specifically benzene, toluene, ethylbenzene and total xylenes. Real-time air monitoring for VOCs will be performed if warranted by the scope of work and known contaminants present. If performed the real-time air monitoring will consist of the elements described below.

Upwind VOC concentrations will be measured at the start of each workday and periodically thereafter to establish background conditions. All monitoring will be performed using a photoionization detector calibrated at least once per day.

VOCs will be monitored in the immediate work area on a continuous basis. If the ambient air concentration of total organic vapors within the work area exceeds 5 parts per million (ppm) above background for a 15-minute average, work activities will be temporarily halted and monitoring continued. Work activities will resume, with continued monitoring, when total organic vapor levels decrease to at or below 5 ppm over background.

Should total organic vapor levels in the work area persist at levels in excess of 5 ppm over background, the source of vapors will be identified, corrective actions will be taken to abate emissions, and monitoring continued until total organic vapor levels decrease to at or below 5 ppm over background. Work activities will resume, with continued monitoring, when total organic vapor levels decrease to at or below 5 ppm over background.

All readings will be recorded and be available for NYSDEC and New York State Department of Health personnel to review. Exceedances of action levels will be reported to the NYSDEC and NYSDOH Project Managers.

A-15 DUST CONTROL PLAN

A dust control plan that addresses dust management during invasive on-site work will include, at a minimum, the items listed below:

- Dust suppression will be achieved through the use of water applied with a hose or a dedicated on-site water truck for road wetting, as necessary. Water will be applied directly onto off-road areas including excavations and stockpiles as necessary to control dust.
- Gravel will be used on roadways to provide a clean and dust free road surface.
- Clearing and grubbing of larger areas will be done in stages to limit the area of exposed, unvegetated soils vulnerable to dust production.
- On-site roads will be limited in total area to minimize the area required for water truck sprinkling.
- Sweepers will be used to remove soil from the ground surface as necessary.

ATTACHMENT 1

Allowable Constituent Levels for Imported or Reused Soil

(Appendix 5 from *DER-10 Technical Guidance for Site Investigation and Remediation (NYSDEC, 2010)*

Appendix 5
Allowable Constituent Levels for Imported Fill or Soil
Subdivision 5.4(e)

Source: This table is derived from soil cleanup objective (SCO) tables in 6 NYCRR 375. Table 375-6.8(a) is the source for unrestricted use and Table 375-6.8(b) is the source for restricted use.

Note: For constituents not included in this table, refer to the contaminant for supplemental soil cleanup objectives (SSCOs) in the Commissioner Policy on *Soil Cleanup Guidance*. If an SSCO is not provided for a constituent, contact the DER PM to determine a site-specific level.

Constituent	Unrestricted Use	Residential Use	Restricted Residential Use	Commercial or Industrial Use	If Ecological Resources are Present
Metals					
Arsenic	13	16	16	16	13
Barium	350	350	400	400	433
Beryllium	7.2	14	47	47	10
Cadmium	2.5	2.5	4.3	7.5	4
Chromium, Hexavalent[1]	1 [3]	19	19	19	1 [3]
Chromium, Trivalent[1]	30	36	180	1500	41
Copper	50	270	270	270	50
Cyanide	27	27	27	27	NS
Lead	63	400	400	450	63
Manganese	1600	2000	2000	2000	1600
Mercury (total)	0.18	0.73	0.73	0.73	0.18
Nickel	30	130	130	130	30
Selenium	3.9	4	4	4	3.9
Silver	2	8.3	8.3	8.3	2
Zinc	109	2200	2480	2480	109
PCBs/Pesticides					
2,4,5-TP Acid (Silvex)	3.8	3.8	3.8	3.8	NS
4,4'-DDE	0.0033 [3]	1.8	8.9	17	0.0033 [3]
4,4'-DDT	0.0033 [3]	1.7	7.9	47	0.0033 [3]
4,4'-DDD	0.0033 [3]	2.6	13	14	0.0033 [3]
Aldrin	0.005	0.019	0.097	0.19	0.14
Alpha-BHC	0.02	0.02	0.02	0.02	0.04 [4]
Beta-BHC	0.036	0.072	0.09	0.09	0.6
Chlordane (alpha)	0.094	0.91	2.9	2.9	1.3
Delta-BHC	0.04	0.25	0.25	0.25	0.04 [4]
Dibenzofuran	7	14	59	210	NS
Dieldrin	0.005	0.039	0.1	0.1	0.006
Endosulfan I	2.4[2]	4.8	24	102	NS
Endosulfan II	2.4[2]	4.8	24	102	NS
Endosulfan sulfate	2.4[2]	4.8	24	200	NS
Endrin	0.014	0.06	0.06	0.06	0.014
Heptachlor	0.042	0.38	0.38	0.38	0.14
Lindane	0.1	0.1	0.1	0.1	6
Polychlorinated biphenyls	0.1	1	1	1	1

Constituent	Unrestricted Use	Residential Use	Restricted Residential Use	Commercial or Industrial Use	If Ecological Resources are Present
Semi-volatile Organic Compounds					
Acenaphthene	20	98	98	98	20
Acenaphthylene	100	100	100	107	NS
Anthracene	100	100	100	500	NS
Benzo(a)anthracene	1	1	1	1	NS
Benzo(a)pyrene	1	1	1	1	2.6
Benzo(b)fluoranthene	1	1	1	1.7	NS
Benzo(g,h,i)perylene	100	100	100	500	NS
Benzo(k)fluoranthene	0.8	1	1.7	1.7	NS
Chrysene	1	1	1	1	NS
Dibenz(a,h)anthracene	0.33 [3]	0.33 [3]	0.33 [3]	0.56	NS
Fluoranthene	100	100	100	500	NS
Fluorene	30	100	100	386	30
Indeno(1,2,3-cd)pyrene	0.5	0.5	0.5	5.6	NS
m-Cresol(s)	0.33 [3]	0.33 [3]	0.33 [3]	0.33 [3]	NS
Naphthalene	12	12	12	12	NS
o-Cresol(s)	0.33 [3]	0.33 [3]	0.33 [3]	0.33 [3]	NS
p-Cresol(s)	0.33	0.33	0.33	0.33	NS
Pentachlorophenol	0.8 [3]	0.8 [3]	0.8 [3]	0.8 [3]	0.8 [3]
Phenanthrene	100	100	100	500	NS
Phenol	0.33 [3]	0.33 [3]	0.33 [3]	0.33 [3]	30
Pyrene	100	100	100	500	NS
Volatile Organic Compounds					
1,1,1-Trichloroethane	0.68	0.68	0.68	0.68	NS
1,1-Dichloroethane	0.27	0.27	0.27	0.27	NS
1,1-Dichloroethene	0.33	0.33	0.33	0.33	NS
1,2-Dichlorobenzene	1.1	1.1	1.1	1.1	NS
1,2-Dichloroethane	0.02	0.02	0.02	0.02	10
1,2-Dichloroethene(cis)	0.25	0.25	0.25	0.25	NS
1,2-Dichloroethene(trans)	0.19	0.19	0.19	0.19	NS
1,3-Dichlorobenzene	2.4	2.4	2.4	2.4	NS
1,4-Dichlorobenzene	1.8	1.8	1.8	1.8	20
1,4-Dioxane	0.1 [3]	0.1 [3]	0.1 [3]	0.1 [3]	0.1
Acetone	0.05	0.05	0.05	0.05	2.2
Benzene	0.06	0.06	0.06	0.06	70
Butylbenzene	12	12	12	12	NS
Carbon tetrachloride	0.76	0.76	0.76	0.76	NS
Chlorobenzene	1.1	1.1	1.1	1.1	40
Chloroform	0.37	0.37	0.37	0.37	12
Ethylbenzene	1	1	1	1	NS
Hexachlorobenzene	0.33 [3]	0.33 [3]	1.2	3.2	NS
Methyl ethyl ketone	0.12	0.12	0.12	0.12	100
Methyl tert-butyl ether	0.93	0.93	0.93	0.93	NS
Methylene chloride	0.05	0.05	0.05	0.05	12

Volatile Organic Compounds (continued)					
Propylbenzene-n	3.9	3.9	3.9	3.9	NS
Sec-Butylbenzene	11	11	11	11	NS
Tert-Butylbenzene	5.9	5.9	5.9	5.9	NS
Tetrachloroethene	1.3	1.3	1.3	1.3	2
Toluene	0.7	0.7	0.7	0.7	36
Trichloroethene	0.47	0.47	0.47	0.47	2
Trimethylbenzene-1,2,4	3.6	3.6	3.6	3.6	NS
Trimethylbenzene-1,3,5	8.4	8.4	8.4	8.4	NS
Vinyl chloride	0.02	0.02	0.02	0.02	NS
Xylene (mixed)	0.26	1.6	1.6	1.6	0.26

All concentrations are in parts per million (ppm)
NS = Not Specified

Footnotes:
[1] The SCO for Hexavalent or Trivalent Chromium is considered to be met if the analysis for the total species of this contaminant is below the specific SCO for Hexavalent Chromium.
[2] The SCO is the sum of endosulfan I, endosulfan II and endosulfan sulfate.
[3] For constituents where the calculated SCO was lower than the contract required quantitation limit (CRQL), the CRQL is used as the Track 1 SCO value.
[4] This SCO is derived from data on mixed isomers of BHC.

APPENDIX B

Environmental Easement

ENVIRONMENTAL EASEMENT GRANTED PURSUANT TO ARTICLE 71, TITLE 36 OF THE NEW YORK STATE ENVIRONMENTAL CONSERVATION LAW

THIS INDENTURE made this 23rd day of December, 2010 between Owner(s) Avis Rent A Car System, LLC, having an office at 6 Sylvan Way, Parsippany, New Jersey, 07054 (the "Grantor"), and The People of the State of New York (the "Grantee."), acting through their Commissioner of the Department of Environmental Conservation (the "Commissioner", or "NYSDEC" or "Department" as the context requires) with its headquarters located at 625 Broadway, Albany, New York 12233,

WHEREAS, the Legislature of the State of New York has declared that it is in the public interest to encourage the remediation of abandoned and likely contaminated properties ("sites") that threaten the health and vitality of the communities they burden while at the same time ensuring the protection of public health and the environment; and

WHEREAS, the Legislature of the State of New York has declared that it is in the public interest to establish within the Department a statutory environmental remediation program that includes the use of Environmental Easements as an enforceable means of ensuring the performance of operation, maintenance, and/or monitoring requirements and the restriction of future uses of the land, when an environmental remediation project leaves residual contamination at levels that have been determined to be safe for a specific use, but not all uses, or which includes engineered structures that must be maintained or protected against damage to perform properly and be effective, or which requires groundwater use or soil management restrictions; and

WHEREAS, the Legislature of the State of New York has declared that Environmental Easement shall mean an interest in real property, created under and subject to the provisions of Article 71, Title 36 of the New York State Environmental Conservation Law ("ECL") which contains a use restriction and/or a prohibition on the use of land in a manner inconsistent with engineering controls which are intended to ensure the long term effectiveness of a site remedial program or eliminate potential exposure pathways to hazardous waste or petroleum; and

WHEREAS, Grantor, is the owner of real property located at the address of 28 IBM Road in the Town of Poughkeepsie, County of Dutchess and State of New York, known and designated on the tax map of the County Clerk of Dutchess as tax map parcel numbers: District 4869 Section 6060 Block 04 Lot(s) 903139 being the same as that property conveyed to Grantor by deed dated October 16, 1991 and recorded October 28, 1991 in the Dutchess County Clerk's Office in Liber 1902 at page 192, comprising approximately 2.70 ± acres, and hereinafter more fully described in the Land Title Survey dated May 18, 2010 and revised November 5, 2010 and November 24 , 2010 prepared by Morris Associates Engineering Consultants-Land Surveyors, which will be attached to the Site Management Plan. The property description and survey (the "Controlled Property") is set forth in and attached hereto as Schedule A; and

WHEREAS, the Department accepts this Environmental Easement in order to ensure the protection of human health and the environment and to achieve the requirements for remediation established for the Controlled Property until such time as this Environmental Easement is extinguished pursuant to ECL Article 71, Title 36; and

NOW THEREFORE, in consideration of the mutual covenants contained herein and the terms and conditions of BCA Index Number: W3-1011-04-07, Grantor conveys to Grantee a permanent Environmental Easement pursuant to ECL Article 71, Title 36 in, on, over, under, and upon the Controlled Property as more fully described herein (AEnvironmental Easement@)

1. Purposes. Grantor and Grantee acknowledge that the Purposes of this Environmental Easement are: to convey to Grantee real property rights and interests that will run with the land in perpetuity in order to provide an effective and enforceable means of encouraging the reuse and redevelopment of this Controlled Property at a level that has been determined to be safe for a specific use while ensuring the performance of operation, maintenance, and/or monitoring requirements; and to ensure the restriction of future uses of the land that are inconsistent with the above-stated purpose.

2. Institutional and Engineering Controls. The controls and requirements listed in the Department approved Site Management Plan ("SMP") including any and all Department approved amendments to the SMP are incorporated into and made part of this Environmental Easement. These controls and requirements apply to the use of the Controlled Property, run with the land, are binding on the Grantor and the Grantor=s successors and assigns, and are enforceable in law or equity against any owner of the Controlled Property, any lessees and any person using the Controlled Property.

A. (1) The Controlled Property may be used for:

Commercial as described in 6 NYCRR Part 375-1.8(g)(2)(iii) and Industrial as described in 6 NYCRR Part 375-1.8(g)(2)(iv)

(2) All Engineering Controls must be operated and maintained as specified in the Site Management Plan (SMP);

(3) All Engineering Controls must be inspected at a frequency and in a manner defined in the SMP.

(4) Groundwater and other environmental or public health monitoring must be performed as defined in the SMP;

(5) Data and information pertinent to Site Management of the Controlled Property must be reported at the frequency and in a manner defined in the SMP;

(6) All future activities on the property that will disturb remaining contaminated material must be conducted in accordance with the SMP;

(7) Monitoring to assess the performance and effectiveness of the remedy must be performed as defined in the SMP.

(8) Operation, maintenance, monitoring, inspection, and reporting of any mechanical or physical components of the remedy shall be performed as defined in the SMP.

(9) Access to the site must be provided to agents, employees or other representatives of the State of New York with reasonable prior notice to the property owner to assure compliance with the restrictions identified by this Environmental Easement.

B. The Controlled Property shall not be used for Residential or Restricted Residential purposes, and the above-stated engineering controls may not be discontinued without an amendment or extinguishment of this Environmental Easement.

C. The SMP describes obligations that the Grantor assumes on behalf of Grantor, its successors and assigns. The Grantor=s assumption of the obligations contained in the SMP which may include sampling, monitoring, and/or operating a treatment system, and providing certified reports to the NYSDEC, is and remains a fundamental element of the Department=s determination that the Controlled Property is safe for a specific use, but not all uses. The SMP may be modified in accordance with the Department's statutory and regulatory authority. The Grantor and all successors and assigns, assume the burden of complying with the SMP and obtaining an up-to-date version of the SMP from:

Regional Remediation Engineer
NYSDEC – Region 3
Division of Environmental Remediation
21 South Putt Corners Road
New Paltz, NY 12561-1620,
Phone: (845) 256 -3031

or

Site Control Section
Division of Environmental Remediation
NYSDEC
625 Broadway
Albany, New York 12233
Phone: (518) 402-9553

D. Grantor must provide all persons who acquire any interest in the Controlled Property a true and complete copy of the SMP that the Department approves for the Controlled Property and all Department-approved amendments to that SMP.

E. Grantor covenants and agrees that until such time as the Environmental Easement is extinguished in accordance with the requirements of ECL Article 71, Title 36 of the ECL, the property deed and all subsequent instruments of conveyance relating to the Controlled Property shall state in at least fifteen-point bold-faced type:

This property is subject to an Environmental Easement held by the New York State Department of Environmental Conservation pursuant to Title 36 of Article 71 of the Environmental Conservation Law.

F. Grantor covenants and agrees that this Environmental Easement shall be incorporated in full or by reference in any leases, licenses, or other instruments granting a right to use the Controlled Property.

G. Grantor covenants and agrees that it shall annually, or such time as NYSDEC may allow, submit to NYSDEC a written statement by an expert the NYSDEC may find acceptable certifying under penalty of perjury, in such form and manner as the Department may require, that:

(1) the inspection of the site to confirm the effectiveness of the institutional and engineering controls required by the remedial program was performed under the direction of the individual set forth at 6 NYCRR Part 375-1.8(h)(3).

(2) the institutional controls and/or engineering controls employed at such site:

(i) are in-place;

(ii) are unchanged from the previous certification, or that any identified changes to the controls employed were approved b the NYSDEC and that all controls are in the Department-approved format; and

(iii) that nothing has occurred that would impair the ability of such control to protect the public health and environment;

(3) the owner will continue to allow access to such real property to evaluate the continued maintenance of such controls;

(4) nothing has occurred that would constitute a violation or failure to comply with any site management plan for such controls;

(5 the report and all attachments were prepared under the direction of, and reviewed by, the party making the certification;

(6) to the best of his/her knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted engineering practices; and

(7) the information presented is accurate and complete.

3. Right to Enter and Inspect. Grantee, its agents, employees, or other representatives of the State may enter and inspect the Controlled Property in a reasonable manner and at reasonable times to assure compliance with the above-stated restrictions.

4. Reserved Grantor=s Rights. Grantor reserves for itself, its assigns, representatives, and successors in interest with respect to the Property, all rights as fee owner of the Property, including:

A. Use of the Controlled Property for all purposes not inconsistent with, or limited by the terms of this Environmental Easement;

B. The right to give, sell, assign, or otherwise transfer part or all of the underlying fee interest to the Controlled Property, subject and subordinate to this Environmental Easement;

5. Enforcement

A. This Environmental Easement is enforceable in law or equity in perpetuity by Grantor, Grantee, or any affected local government, as defined in ECL Section 71-3603, against the owner of the Property, any lessees, and any person using the land. Enforcement shall not be defeated because of any subsequent adverse possession, laches, estoppel, or waiver. It is not a

defense in any action to enforce this Environmental Easement that: it is not appurtenant to an interest in real property; it is not of a character that has been recognized traditionally at common law; it imposes a negative burden; it imposes affirmative obligations upon the owner of any interest in the burdened property; the benefit does not touch or concern real property; there is no privity of estate or of contract; or it imposes an unreasonable restraint on alienation.

B. If any person violates this Environmental Easement, the Grantee may revoke the Certificate of Completion with respect to the Controlled Property.

C. Grantee shall notify Grantor of a breach or suspected breach of any of the terms of this Environmental Easement. Such notice shall set forth how Grantor can cure such breach or suspected breach and give Grantor a reasonable amount of time from the date of receipt of notice in which to cure. At the expiration of such period of time to cure, or any extensions granted by Grantee, the Grantee shall notify Grantor of any failure to adequately cure the breach or suspected breach, and Grantee may take any other appropriate action reasonably necessary to remedy any breach of this Environmental Easement, including the commencement of any proceedings in accordance with applicable law.

D. The failure of Grantee to enforce any of the terms contained herein shall not be deemed a waiver of any such term nor bar any enforcement rights.

6. Notice. Whenever notice to the Grantee (other than the annual certification) or approval from the Grantee is required, the Party providing such notice or seeking such approval shall identify the Controlled Property by referencing the following information:

County, NYSDEC Site Number, NYSDEC Brownfield Cleanup Agreement, State Assistance Contract or Order Number, and the County tax map number or the Liber and Page or computerized system identification number.

Parties shall address correspondence to:

Site Number: C 314111
Office of General Counsel
NYSDEC
625 Broadway
Albany New York 12233-5500

With a copy to:

Site Control Section
Division of Environmental Remediation
NYSDEC
625 Broadway
Albany, NY 12233

All notices and correspondence shall be delivered by hand, by registered mail or by Certified mail and return receipt requested. The Parties may provide for other means of receiving and communicating notices and responses to requests for approval.

7. Recordation. Grantor shall record this instrument, within thirty (30) days of execution of this instrument by the Commissioner or her/his authorized representative in the office of the recording officer for the county or counties where the Property is situated in the manner prescribed by Article 9 of the Real Property Law.

8. Amendment. Any amendment to this Environmental Easement may only be executed by the Commissioner of the New York State Department of Environmental Conservation or the Commissioner's Designee, and filed with the office of the recording officer for the county or counties where the Property is situated in the manner prescribed by Article 9 of the Real Property Law.

9. Extinguishment. This Environmental Easement may be extinguished only by a release by the Commissioner of the New York State Department of Environmental Conservation, or the Commissioner's Designee, and filed with the office of the recording officer for the county or counties where the Property is situated in the manner prescribed by Article 9 of the Real Property Law.

10. Joint Obligation. If there are two or more parties identified as Grantor herein, the obligations imposed by this instrument upon them shall be joint and several.

IN WITNESS WHEREOF, Grantor has caused this instrument to be signed in its name.

GRANTOR: AVIS RENT A CAR SYSTEM, LLC.

By: _____

Robert Bouta, Senior Vice President
For Properties & Facilities for Avis Budget Car Rental LLC,
an authorized representative of Avis Rent A Car System, LLC

Title:_____ Date: 11/8/10

Grantor=s Acknowledgment

STATE OF NEW ~~YORK~~ Jersey)
) ss:
COUNTY OF Morris)

On the 8th day of November, in the year 20 10, before me, the undersigned, personally appeared Robert Bouta, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name is (are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their signature(s) on the instrument, the individual(s), or the person upon behalf of which the individual(s) acted, executed the instrument.

_____
Notary Public - State of New York

CYNTIA M. HERMES
NOTARY PUBLIC
STATE OF NEW JERSEY
NO. 2284899
MY COMM. EXP. 4-23-12

THIS ENVIRONMENTAL EASEMENT IS HEREBY ACCEPTED BY THE PEOPLE OF THE STATE OF NEW YORK, Acting By and Through the Department of Environmental Conservation as Designee of the Commissioner,

By: _____
Dale A. Desnoyers, Director
Division of Remediation

Grantee=s Acknowledgment

STATE OF NEW YORK)
) ss:
COUNTY OF Albany)

On the 23rd day of December in the year 2010, before me, the undersigned, personally appeared Dale Desnoyers, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name is (are) subscribed to the within instrument and acknowledged to me that he/she/ executed the same in his/her/ capacity as Designee of the Commissioner of the State of New York Department of Environmental Conservation, and that by his/her/ 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

David J. Chiusano
Notary Public, State of New York
No. 01CH5032146
Qualified in Schenectady County
Commission Expires August 22, 2014

SCHEDULE "A"
ENVIRONMENTAL EASEMENT PROPERTY DESCRIPTION

28 IBM Road
Poughkeepsie, NY
District: 4869 Section: 6060 Block 04 Lot(s) 903139

All that certain parcel of land situate in the Town of Poughkeepsie, County of Dutchess, State of New York and being more particularly bounded and described as follows:

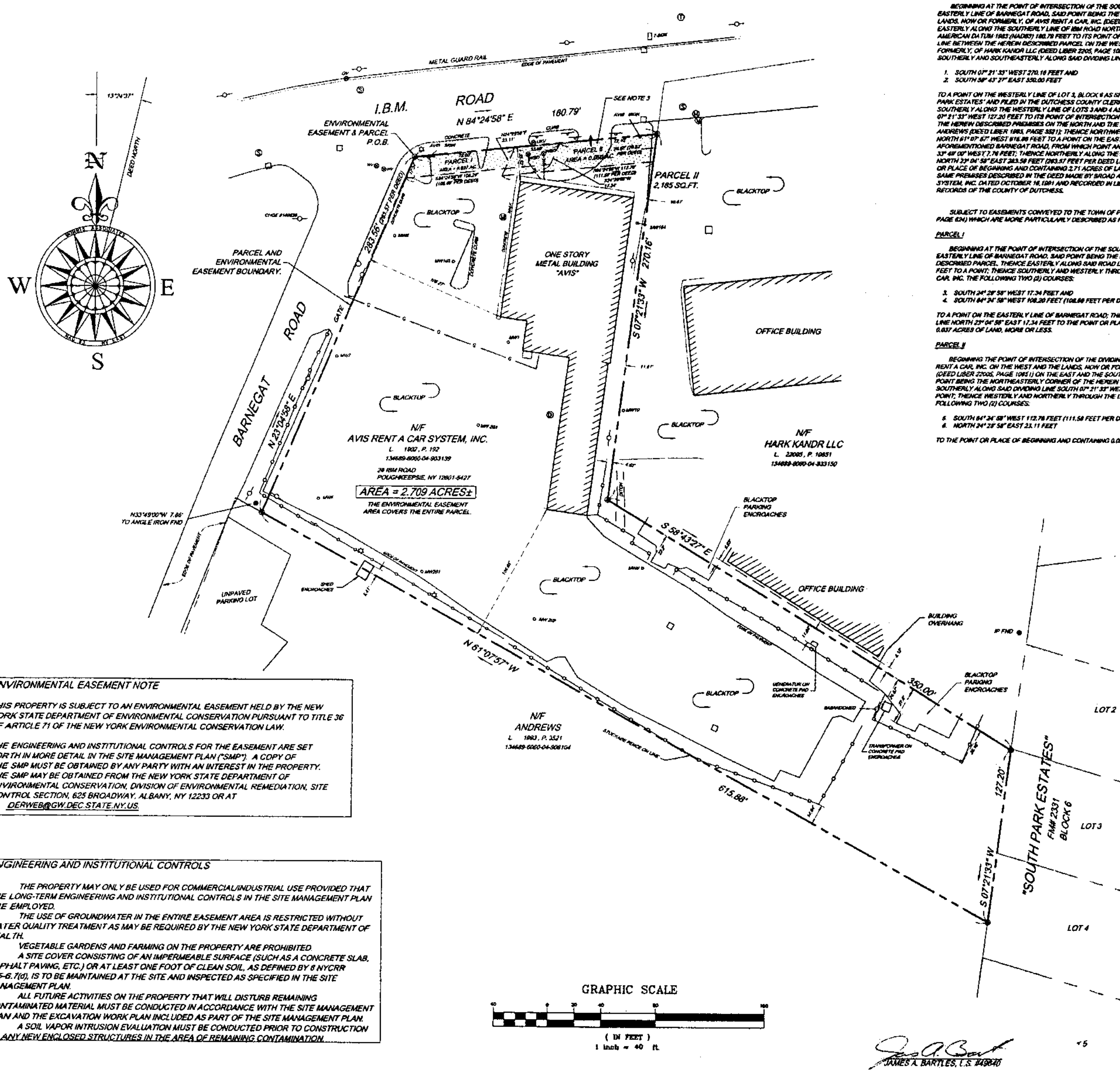
Beginning at the point of intersection of the Southerly line of IBM Road and the Easterly line of Barnegat Road, said point being the Northwesterly corner of the lands, now or formerly, of Avis Rent A Car, Inc. (Deed Liber 1902, Page 192); thence Easterly along the Southerly Line of IBM Road North° 84° 24' 58" East as per North American Datum 1983 (NAD83) 180.79 feet to its point of intersection with the dividing line between the herein described parcel on the West and the lands, now or formerly, of Hark Kandr LLC (Deed Liber 2205, Page 10851) on the East; thence Southerly and Southeasterly along said dividing line the following two (2) courses:

1. South 07° 21' 33" West 270.16 feet and
2. South 58° 43' 27" East 350.00 feet

to a point on the Westerly line of Lot 3, Block 6 as shown on a map entitled "South Park Estates" and filed in the Dutchess County Clerk's office as Map No. 2331; thence Southerly along the Westerly line of Lots 3 and 4 as shown on Map No. 2331 South 07° 21' 33" West 127.20 feet to its point of intersection with the dividing line between the herein described premises on the North and the lands, now or formerly, of Andrews (Deed Liber 1993, page 3521); thence Northwesterly along said dividing line North 61° 07' 57" West 615.88 feet to a point on the Easterly line of the aforementioned Barnegat Road, from which point an angle iron found bears North 33° 49' 00" West 7.76 feet; thence Northerly along the Easterly line of Barnegat Road North 23° 04' 58" East 283.56 feet (283.57 per deed Liber 1902, page 192) to the point or place of beginning and containing 2.71 acres of land, more or less.

Being the same premises described in the Deed made by Broad Act Corp. to Avis Rent a Car System Inc. dated October 16, 1991 and Recorded in Liber 1902 Page 192 of the Land Records of the County of Dutchess.

SURVEY



LEGEND

- UTILITY POLE
- HYDRANT
- CATCH BASIN
- LIGHT POLE
- SOIL BORING
- MONITORING WELL
- OVERHEAD UTILITIES
- UNDERGROUND ELECTRIC
- UNDERGROUND GAS LINE
- WATER LINE
- WATER VALVE
- GAS VALVE
- UNKNOWN VALVE
- TELEPHONE MANHOLE
- DRAINAGE MANHOLE
- SANITARY MANHOLE
- UNKNOWN MANHOLE
- SIGN
- TELEPHONE BOX
- CHAINLINK FENCE
- STOCKADE FENCE

THE ENVIRONMENTAL EASEMENT DESCRIPTION IS THE SAME AS THE PARCEL DESCRIPTION.

PARCEL DESCRIPTION AND ENVIRONMENTAL EASEMENT DESCRIPTION

ALL THAT CERTAIN PARCEL OF LAND SITUATE IN THE TOWN OF POUGHKEEPSIE, COUNTY OF DUTCHESS AND STATE OF NEW YORK AND IS MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE POINT OF INTERSECTION OF THE SOUTHERLY LINE OF IBM ROAD AND THE EASTERLY LINE OF BARNEGAT ROAD, SAID POINT BEING THE NORTHWESTERLY CORNER OF THE LANDS, NOW OR FORMERLY, OF AVIS RENT A CAR, INC. (DEED LIBER 1802, PAGE 192); THENCE EASTERLY ALONG THE SOUTHERLY LINE OF IBM ROAD NORTH 84° 24' 58" EAST AS PER NORTH AMERICAN DATUM 1983 (NAD83) 180.79 FEET TO ITS POINT OF INTERSECTION WITH THE DIVIDING LINE BETWEEN THE HEREIN DESCRIBED PARCEL ON THE WEST AND THE LANDS, NOW OR FORMERLY, OF HARK KANDR LLC (DEED LIBER 2205, PAGE 10851) ON THE EAST; THENCE SOUTHERLY AND SOUTHEASTERLY ALONG SAID DIVIDING LINE THE FOLLOWING TWO (2) COURSES:

1. SOUTH 07° 21' 33" WEST 270.16 FEET AND
2. SOUTH 58° 43' 27" EAST 350.00 FEET

TO A POINT ON THE WESTERLY LINE OF LOT 3, BLOCK 6 AS SHOWN ON A MAP ENTITLED "SOUTH PARK ESTATES" AND FILED IN THE DUTCHESS COUNTY CLERK'S OFFICE AS MAP NO. 2331; THENCE SOUTHERLY ALONG THE WESTERLY LINE OF LOTS 3 AND 4 AS SHOWN ON MAP NO. 2331 SOUTH 07° 21' 33" WEST 127.20 FEET TO ITS POINT OF INTERSECTION WITH THE DIVIDING LINE BETWEEN THE HEREIN DESCRIBED PREMISES ON THE NORTH AND THE LANDS, NOW OR FORMERLY, OF ANDREWS (DEED LIBER 1983, PAGE 3521); THENCE NORTHWESTERLY ALONG SAID DIVIDING LINE NORTH 61° 07' 57" WEST 615.88 FEET TO A POINT ON THE EASTERLY LINE OF THE AFOREMENTIONED BARNEGAT ROAD, FROM WHICH POINT AN ANGLE IRON FOUND BEARS NORTH 33° 49' 00" WEST 7.76 FEET; THENCE NORTHERLY ALONG THE EASTERLY LINE OF BARNEGAT ROAD NORTH 23° 04' 58" EAST 283.56 FEET (283.57 FEET PER DEED LIBER 1802, PAGE 192) TO THE POINT OR PLACE OF BEGINNING AND CONTAINING 2.71 ACRES OF LAND, MORE OR LESS. BEING THE SAME PREMISES DESCRIBED IN THE DEED MADE BY BROAD ACT CORP. TO AVIS RENT A CAR SYSTEM, INC. DATED OCTOBER 16, 1981 AND RECORDED IN LIBER 1802, PAGE 192 OF THE LAND RECORDS OF THE COUNTY OF DUTCHESS.

SUBJECT TO EASEMENTS CONVEYED TO THE TOWN OF POUGHKEEPSIE (DEED LIBER 1432, PAGE 624) WHICH ARE MORE PARTICULARLY DESCRIBED AS FOLLOWS:

PARCEL I

BEGINNING AT THE POINT OF INTERSECTION OF THE SOUTHERLY LINE OF I.B.M. ROAD AND THE EASTERLY LINE OF BARNEGAT ROAD, SAID POINT BEING THE NORTHWEST CORNER OF THE HEREIN DESCRIBED PARCEL. THENCE EASTERLY ALONG SAID ROAD LINE NORTH 84° 24' 58" EAST 108.60 FEET TO A POINT; THENCE SOUTHERLY AND WESTERLY THROUGH THE LANDS OF AVIS RENT A CAR, INC. THE FOLLOWING TWO (2) COURSES:

3. SOUTH 24° 28' 58" WEST 17.34 FEET AND
4. SOUTH 84° 24' 58" WEST 108.20 FEET (108.60 FEET PER DEED)

TO A POINT ON THE EASTERLY LINE OF BARNEGAT ROAD; THENCE NORTHERLY ALONG SAID ROAD LINE NORTH 23° 04' 58" EAST 17.34 FEET TO THE POINT OR PLACE OF BEGINNING AND CONTAINING 0.037 ACRES OF LAND, MORE OR LESS.

PARCEL II

BEGINNING THE POINT OF INTERSECTION OF THE DIVIDING LINE BETWEEN THE LANDS OF AVIS RENT A CAR, INC. ON THE WEST AND THE LANDS, NOW OR FORMERLY, OF HARK KANDR LLC (DEED LIBER 22005, PAGE 10851) ON THE EAST AND THE SOUTHERLY LINE OF I.B.M. ROAD, SAID POINT BEING THE NORTHEASTERLY CORNER OF THE HEREIN DESCRIBED PARCEL; THENCE SOUTHERLY ALONG SAID DIVIDING LINE SOUTH 07° 21' 33" WEST 20.52 FEET (20.82 PER DEED) TO A POINT; THENCE WESTERLY AND NORTHERLY THROUGH THE LANDS OF AVIS RENT A CAR, INC. THE FOLLOWING TWO (2) COURSES:

5. SOUTH 84° 24' 58" WEST 112.78 FEET (111.58 FEET PER DEED) AND
6. NORTH 24° 28' 58" EAST 23.11 FEET

TO THE POINT OR PLACE OF BEGINNING AND CONTAINING 0.050 ACRES OF LAND, MORE OR LESS.

NOTES:

1. MONITORING WELLS TAKEN FROM PREVIOUS SURVEY PREPARED BY MORRIS ASSOCIATES AND DATED SEPTEMBER 1, 2006.
2. SUBJECT TO AN EASMENT TO NEW YORK TELEPHONE COMPANY AND CENTRAL HUDSON GAS & ELECTRIC CO. AS PER LIBER 471, PAGE 124. THE EASEMENT IS UNPLOTTABLE.
3. PARCELS I & II ARE EASEMENTS CONVEYED TO THE TOWN OF POUGHKEEPSIE PER DEED LIBER 1432, PAGE 624. PARCEL I IS PLOTTABLE BASED ON IDENTIFIABLE DEED CALLS. PARCEL II IS ONLY DEFINED AS BEGINNING ON THE SOUTHERLY LINE OF IBM ROAD. ITS PLACEMENT HEREON IS ADJUDGED TO KEEP PARCEL II ENTIRELY WITHIN THE LANDS OF AVIS RENT A CAR SYSTEM, INC. CAUSING AN OVERLAP OF PARCEL I.

ENVIRONMENTAL EASEMENT NOTE

THIS PROPERTY IS SUBJECT TO AN ENVIRONMENTAL EASEMENT HELD BY THE NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION PURSUANT TO TITLE 36 OF ARTICLE 71 OF THE NEW YORK ENVIRONMENTAL CONSERVATION LAW.

THE ENGINEERING AND INSTITUTIONAL CONTROLS FOR THE EASEMENT ARE SET FORTH IN MORE DETAIL IN THE SITE MANAGEMENT PLAN ("SMP"). A COPY OF THE SMP MUST BE OBTAINED BY ANY PARTY WITH AN INTEREST IN THE PROPERTY. THE SMP MAY BE OBTAINED FROM THE NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION, DIVISION OF ENVIRONMENTAL REMEDIATION, SITE CONTROL SECTION, 625 BROADWAY, ALBANY, NY 12233 OR AT DERWEB@GW.DEC.STATE.NY.US.

ENGINEERING AND INSTITUTIONAL CONTROLS

- THE PROPERTY MAY ONLY BE USED FOR COMMERCIAL/INDUSTRIAL USE PROVIDED THAT THE LONG-TERM ENGINEERING AND INSTITUTIONAL CONTROLS IN THE SITE MANAGEMENT PLAN ARE EMPLOYED.
- THE USE OF GROUNDWATER IN THE ENTIRE EASEMENT AREA IS RESTRICTED WITHOUT WATER QUALITY TREATMENT AS MAY BE REQUIRED BY THE NEW YORK STATE DEPARTMENT OF HEALTH.
- VEGETABLE GARDENS AND FARMING ON THE PROPERTY ARE PROHIBITED.
- A SITE COVER CONSISTING OF AN IMPERMEABLE SURFACE (SUCH AS A CONCRETE SLAB, ASPHALT PAVING, ETC.) OR AT LEAST ONE FOOT OF CLEAN SOIL, AS DEFINED BY 6 NYCRR 375-6.7(d), IS TO BE MAINTAINED AT THE SITE AND INSPECTED AS SPECIFIED IN THE SITE MANAGEMENT PLAN.
- ALL FUTURE ACTIVITIES ON THE PROPERTY THAT WILL DISTURB REMAINING CONTAMINATED MATERIAL MUST BE CONDUCTED IN ACCORDANCE WITH THE SITE MANAGEMENT PLAN AND THE EXCAVATION WORK PLAN INCLUDED AS PART OF THE SITE MANAGEMENT PLAN.
- A SOIL VAPOR INTRUSION EVALUATION MUST BE CONDUCTED PRIOR TO CONSTRUCTION OF ANY NEW ENCLOSED STRUCTURES IN THE AREA OF REMAINING CONTAMINATION.

JAMES A. BARTLES, L.S. #49840

CERTIFIED TO:

NEW YORK STATE - DEPARTMENT OF ENVIRONMENTAL CONSERVATION

UNAUTHORIZED ALTERATION OR ADDITION TO A SURVEY MAP BEARING A LICENSED LAND SURVEYOR'S SEAL IS A VIOLATION OF SECTION 7209, SUBDIVISION 2, OF THE NEW YORK STATE EDUCATION LAW.

ONLY COPIES FROM THE ORIGINAL OF THIS SURVEY MAP MARKED WITH AN ORIGINAL OF THE LAND SURVEYOR'S INKED SEAL OR HIS EMBOSSED SEAL SHALL BE CONSIDERED TO BE VALID TRUE COPIES.

IT IS HEREBY CERTIFIED THAT THIS SURVEY WAS PREPARED IN ACCORDANCE WITH THE EXISTING CODE OF PRACTICE FOR LAND SURVEYOR'S ADOPTED BY THE NEW YORK STATE ASSOCIATION OF PROFESSIONAL LAND SURVEYOR'S.

CERTIFICATIONS INDICATED HEREON SIGNIFY THAT THIS SURVEY WAS PREPARED IN ACCORDANCE WITH THE EXISTING CODE OF PRACTICE FOR LAND SURVEYS ADOPTED BY THE NEW YORK STATE ASSOCIATION OF PROFESSIONAL LAND SURVEYORS. SAID CERTIFICATIONS SHALL RUN ONLY TO THE PERSON FOR WHOM THE SURVEY IS PREPARED, AND ON HIS BEHALF TO THE TITLE COMPANY, LENDING INSTITUTION AND GOVERNMENTAL AGENCY LISTED HEREON, AND TO THE ASSIGNEES OF THE LENDING INSTITUTION. CERTIFICATIONS ARE NOT TRANSFERABLE TO ADDITIONAL INSTITUTIONS OR SUBSEQUENT OWNERS.

SURVEYED AS PER MAPS AND DEEDS OF RECORD AND AS IN INDICATED POSSESSION ON OR BEFORE MAY 14, 2010.

REV. No.	DESCRIPTION	DATE	BY
6	AMENDED NOTES, GENERAL REVISIONS	11/24/10	JJV
5	ADDED NOTES	11/05/10	JJV
4	NYSDEC CHANGES	10/21/10	JAB
3	MONITORING WELL DESIGNATIONS	7/9/10	BJ
2	GENERAL REVISIONS	06/18/10	BJ
1	GENERAL REVISIONS	06/09/10	BJ

IT IS A VIOLATION OF NEW YORK STATE EDUCATION LAW FOR ANY PERSON TO ALTER THESE PLANS, SPECIFICATIONS OR REPORTS IN ANY WAY, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED LAND SURVEYOR.

AVIS RENTAL FACILITY
28 IBM ROAD

TOWN OF POUGHKEEPSIE DUTCHESS COUNTY, NY

BOUNDARY SURVEY

STATE OF NEW YORK · JAMES A. BARTLES · LICENSED LAND SURVEYOR · No. 049840

MORRIS ASSOCIATES
ENGINEERING CONSULTANTS-LAND SURVEYORS
9 Elks Lane, Poughkeepsie, New York 12601 TEL:845-454-3411

DATE	SCALE		PROJECT No.	DRAWING No.
5/18/10	1" = 40'	DESIGNED BY: JAB DRAWN BY: JV, JAB CHECKED BY: JAB	205184.02	1 of 1

APPENDIX C

Metes and Bounds

PROPERTY DESCRIPTION

28 IBM Road
Poughkeepsie, NY
District: 4869 Section: 6060 Block 04 Lot(s) 903139

All that piece or parcel of land situate in the Town of Poughkeepsie, County of Dutchess, State of New York and being more particularly bounded and described as follows:

Beginning at the point of intersection of the Southerly line of IBM Road and the Easterly line of Barnegat Road, said point being the Northwesterly corner of the lands, now or formerly, of Avis Rent A Car, Inc. (Deed Liber 1902, Page 192); thence Easterly along the Southerly Line of IBM Road North° 84° 24’ 58” East as per North American Datum 1983 (NAD83) 180.79 feet to its point of intersection with the dividing line between the herein described parcel on the West and the lands, now or formerly, of Hark Kandr LLC (Deed Liber 2205, Page 10851) on the East; thence Southerly and Southeasterly along said dividing line the following two (2) courses:

1. South 07° 21' 33" West 270.16 feet and
2. South 58° 43' 27” East 350.00 feet

to a point on the Westerly line of Lot 3, Block 6 as shown on a map entitled “South Park Estates” and filed in the Dutchess County Clerk's office as Map No. 2331; thence Southerly along the Westerly line of Lots 3 and 4 as shown on Map No. 2331 South 07° 21’ 33” West 127.20 feet to its point of intersection with the dividing line between the herein described premises on the North and the lands, now or formerly, of Andrews (Deed Liber 1993, page 3521); thence Northwesterly along said dividing line North 61° 07’ 57” West 615.88 feet to a point on the Easterly line of the aforementioned Barnegat Road, from which point an angle iron found bears North 33° 49’ 00” West 7.76 feet; thence Northerly along the Easterly line of Barnegat Road North 23° 04’ 58” East 283.56 feet (283.57 per deed Liber 1902, page 192) to the point or place of beginning and containing 2.71 acres of land, more or less.

Being the same premises described in the Deed made by Broad Act Corp. to Avis Rent a Car System Inc. dated October 16, 1991 and Recorded in Liber 1902 Page 192 of the Land Records of the County of Dutchess.

APPENDIX D

Health and Safety Plan

HEALTH AND SAFETY PLAN

Former Drive & Park, Inc. Site
Brownfield Cleanup Program #C314111
28 IBM Road
Town of Poughkeepsie
Dutchess County, New York

Prepared for:
Avis Rent A Car System, Inc.

Prepared by:
AMEC Geomatrix, Inc.

December 28, 2010

Project 0093280000

TABLE OF CONTENTS

1.0 INTRODUCTION 1

2.0 GENERAL REQUIREMENTS AND SCOPE OF HASP 1
- 2.1 GENERAL HEALTH AND SAFETY PROGRAM REQUIREMENTS 1
- 2.2 HASP SCOPE, LIMITATIONS AND MODIFICATIONS 1

3.0 SITE BACKGROUND AND CURRENT CONDITIONS 2

4.0 ACTIVITIES COVERED BY HASP 3

5.0 HAZARD ASSESSMENT 3
- 5.1 PETROLEUM HYDROCARBONS IN SOIL AND GROUNDWATER 3

6.0 ORGANIZATIONAL RESPONSIBILITIES 3
- 6.1 HEALTH AND SAFETY MANAGER 3
- 6.2 OWNER EMPLOYEES 4
- 6.3 CONTRACTOR'S PROJECT MANAGER 4
- 6.5 CONTRACTOR'S ON-SITE WORKERS 4

7.0 WORKER TRAINING REQUIREMENTS 5

8.0 RESPIRATORY PROTECTION PROGRAM AND MEDICAL SURVEILLANCE 5

9.0 PERSONAL PROTECTIVE EQUIPMENT 5

10.0 AIR SAMPLING AND AIR MONITORING 5

11.0 SITE CONTROL 5
- 11.1 WORK ZONES 5
- 11.2 TRAFFIC CONTROL AND TRANSPORTATION 6
- 11.3 PERSONNEL DECONTAMINATION PROCEDURES 6
- 11.4 SANITATION AND ILLUMINATION 6

12.0 UNANTICIPATED SUBSURFACE CONDITIONS 7

13.0 ON-SITE EMERGENCY RESPONSE 7
- 13.1 ACCIDENTAL MEDICAL EMERGENCIES 7
- 13.2 ACCIDENTAL RELEASE OF HAZARDOUS MATERIALS OR WASTES 7
- 13.3 TRAFFIC-RELATED EMERGENCIES 7
- 13.4 GENERAL EMERGENCIES 8
- 13.5 EMERGENCY CONTACTS 8

14.0 RECORD KEEPING 8

15.0 REFERENCES 8

FIGURES

Figure 1 Site Location Map
Figure 2 Hospital Location Map

ATTACHMENTS

Attachment A Chemical Information Sheets

HEALTH AND SAFETY PLAN

Former Drive & Park, Inc. Site
Brownfield Cleanup Program #C314111
28 IBM Road
Town of Poughkeepsie
Dutchess County, New York

1.0 INTRODUCTION

This Health & Safety Plan (HASP) was prepared by AMEC Geomatrix, Inc. (AMEC) on behalf of Avis Rent A Car System, Inc. (Avis) for the Former Drive & Park, Inc. Site at 28 IBM Road in Poughkeepsie, New York (the site) (Figure 1).

This HASP presents health and safety requirements related to petroleum hydrocarbons found in subsurface soil and groundwater due to a release reported in 1986 in the vicinity of two underground storage tanks that were used from approximately 1965 to 1986. The requirements presented herein are to be generally followed by contractors conducting soil excavation and associated sampling activities at the site in accordance with the Excavation Work Plan included as Appendix A of the SMP.

2.0 GENERAL REQUIREMENTS AND SCOPE OF HASP

This section contains information about general health and safety program requirements and describes the scope and limitations of this HASP and the basis for modifying this HASP.

2.1 GENERAL HEALTH AND SAFETY PROGRAM REQUIREMENTS

The contractor shall be responsible for the health and safety conditions related to their work at the site. All applicable federal, state, and local regulations and codes relating to health and safety shall be adhered to by the contractor, including OSHA regulations specified in the Code of Federal Regulations (CFR), Title 29 Section 1910.120, *Hazardous Waste Operations and Emergency Response Standards*.

2.2 HASP SCOPE, LIMITATIONS AND MODIFICATIONS

This HASP was developed exclusively to address chemical hazards posed by petroleum hydrocarbons including benzene, toluene, ethylbenzene, xylenes in soil and groundwater that may be encountered during soil excavation and associated sampling activities in the areas of remaining contamination. Contractors are responsible for following the requirements of this HASP at a minimum, and for supplementing it with their own policies and procedures covering aspects of their work on site as needed. Contractors are solely responsible for the health and safety of their employees and subcontractors and are required to independently develop their own project-specific health and safety plan. Contractors may use this HASP as a basis for developing their own HASP. Contractors are responsible for complying with all applicable federal, state, and local regulations.

This HASP does not address health and safety issues related to any other hazards or activities at the site, including those listed below. The contractor will prepare a HASP that addresses other physical, chemical, and biological hazards associated with the proposed work, as needed. Activities that may be addressed in the contractor HASP include but are not limited to the following:

- exposure to chemicals other than benzene, toluene, ethylbenzene, and xylenes in subsurface soil and/or groundwater, if applicable
- trenching and shoring hazards
- hazards posed by subsurface and overhead utilities
- confined space entry
- hazards posed by use of equipment (e.g., backhoes, ladders, power tools)
- traffic hazards
- earthquake hazards
- biological hazards
- weather-related hazards (e.g., heat and cold stress, sun exposure)
- noise hazards
- other general hazards (e.g., trip/fall hazards)

This HASP was developed based on site data that were available at the time it was prepared and applicable regulations. It may be necessary to modify this HASP from time to time for any of several reasons, including:

- change in understanding of environmental conditions;
- intrusive activity that is not addressed by this HASP;
- new chemical toxicity information for benzene, toluene, ethylbenzene and/or xylenes; or
- new legal requirements.

Statements herein regarding compliance with this HASP are intended to refer to this HASP as appropriately modified, if necessary, for the work to be conducted.

3.0 SITE BACKGROUND AND CURRENT CONDITIONS

The site is the former Drive & Park, Inc. facility located in the Town of Poughkeepsie, Dutchess County, New York, and is currently owned by Avis. The site background is described in detail in Section 1.2 of the SMP.

4.0 ACTIVITIES COVERED BY HASP

This HASP is to be followed by parties involved in intrusive activities covered by the Excavation Work Plan, and has been developed to address hazards that may be associated with impacted soil and groundwater that may be encountered during intrusive activities, including soil excavation and associated sampling activities.

5.0 HAZARD ASSESSMENT

The constituents of concern (COCs) in the soil and groundwater at the site are benzene, toluene, ethylbenzene and xylenes. Direct contact with soil, as well as airborne dust, may occur during excavation or sampling, and direct contact with groundwater may occur during sampling or excavation dewatering activities. Inhalation of vapors and airborne dust may also occur during excavation and sampling activities. Section 9.0 of this HASP describes personal protective equipment that could be utilized at this site. Air monitoring methods, action levels, and mitigation measures designed to protect personnel from excessive exposure to dust in air and exposure to vapors during excavation activities are discussed in the Community Air Monitoring Plan (CAMP) referred to as Appendix E in the SMP.

5.1 PETROLEUM HYDROCARBONS IN SOIL AND GROUNDWATER

Benzene, toluene, ethylbenzene and xylenes have been detected in soil and in groundwater. These compounds are considered part of a larger class of organic compounds that readily volatilize in the atmosphere, known as volatile organic compounds (VOCs). The primary routes of exposure to these compounds for workers at the site are dermal absorption through direct soil or groundwater contact, and inhalation of vapors and dust present in air.

The most common symptoms of chronic overexposure to VOCs include headache, nausea, dizziness, drowsiness, fatigue, and irritation of the eyes, nose, throat, and skin. Chemical information sheets for VOCs that may be encountered at the site during excavation and associated sampling activities are included in Attachment A of this HASP.

6.0 ORGANIZATIONAL RESPONSIBILITIES

The personnel described below should oversee compliance with the requirements of this HASP.

6.1 HEALTH AND SAFETY MANAGER

The Health and Safety Manager must meet the training requirements set forth in Section 7.0. The Health and Safety manager will typically be the contractor's Project Manager or another properly trained contractor employee. The Health and Safety Manager shall:

- Be familiar with the requirements of this HASP and the site CAMP.
- Inform workers and contractors of HASP and CAMP requirements.
- Coordinate and monitor all tasks related to excavation activities at the site and oversee contractor/worker compliance with the HASP and CAMP.

- Verify that workers exposed to subsurface soils and groundwater at the site have the required training.
- Conduct/oversee on-site airborne COC monitoring as required by the site CAMP.
- Maintain communications with the Owner.

6.2 OWNER EMPLOYEES

Employees of Avis who may potentially encounter or be exposed to contaminated soil or groundwater at the site must be made aware of the potential risk and must receive site-specific training. These employees shall comply with the requirements of this HASP.

6.3 CONTRACTOR'S PROJECT MANAGER

The contractor's Project Manager may also serve as the health and safety manager for the project and is responsible for the following:

- Overseeing the contractor's health and safety programs, including the requirements of this HASP and the contractor's HASP.
- Ensuring the contractor's health and safety programs are adequate and that they and the requirements of this HASP are implemented during on-site work.
- Serving as the primary point of contact for the Owner and Health and Safety Manager.
- Ensuring contractor employees have the required training for working on site.
- Advising other contractor employees on project-related health and safety issues.
- Overseeing or conducting personnel air sampling/monitoring as required by this HASP and the site CAMP.
- Determining personal protective equipment needs, if any, beyond the minimum outlined in this HASP and the site CAMP.
- Implementing and enforcing health and safety programs and procedures.
- Conducting regular site inspections.
- Conducting site-specific health and safety orientation training and periodic "tailgate" safety meetings.
- Coordinating emergency response activities.
- Restricting unauthorized visitors from work areas.

6.5 CONTRACTOR'S ON-SITE WORKERS

The contractor's workers at the site are responsible for:

- Complying with contractor health and safety programs and procedures and the requirements of this HASP, the contractor's HASP, the site CAMP, and the Excavation Work Plan.
- Wearing personal protective equipment as required/directed by the HSO.

7.0 WORKER TRAINING REQUIREMENTS

Site employees, contractors, and other workers conducting subsurface work at the site where they may be exposed to VOC-affected soil and VOC-affected groundwater must have completed a training course and refresher courses that comply with requirements of the Hazardous Waste Operations and Emergency Response (HAZWOPER) regulation (OSHA regulations specified in 29 CFR 1910.120). In addition, all workers who may be exposed to VOC-affected soil and VOC-affected groundwater at the site must receive site-specific training that includes the following: information on the VOC hazards, use of personal protective equipment, decontamination procedures, proper work practices to minimize risks, and other requirements of this HASP, the site CAMP, and the Excavation Work Plan.

8.0 RESPIRATORY PROTECTION PROGRAM AND MEDICAL SURVEILLANCE

On-site workers who have received HAZWOPER training and who may be required to wear respiratory protection shall participate in their company's respiratory protection program.

9.0 PERSONAL PROTECTIVE EQUIPMENT

On-site workers who will be in contact with VOC-affected soil and groundwater shall use the following personal protective equipment, as needed:

- Rubber work boots that can be washed;
- Disposable gloves (nitrile or vinyl);
- Coveralls;
- Hardhat; and
- Safety glasses.

10.0 AIR SAMPLING AND AIR MONITORING

The site CAMP (Appendix E of the Site Management Plan) describes air sampling and air monitoring that should be performed if workers will encounter VOC-affected soil and groundwater.

11.0 SITE CONTROL

This section discusses delineation of work areas, dust suppression measures, decontamination procedures, sanitary facilities, and illumination.

11.1 WORK ZONES

Boundaries of the work areas where subsurface soil is being disturbed will be delineated as necessary using cones, barricades, and/or caution tape in order to prevent public access. Where work is extensive or if excavated areas will be left unattended overnight, the contractor shall secure the area to prevent public access (e.g., install trench plates or temporary fencing).

When earthwork activities occur, dust control measures shall be implemented to minimize dust generation. Typical dust minimization techniques can include but are not limited to the following:

- Sprinkle water to maintain soil moisture as needed during work activity;
- For trucks hauling affected soil within the site, cover the soil or maintain sufficient freeboard to minimize dust generation;
- Pave, apply water as needed, or apply soil stabilizers (non-toxic) on all unpaved roadways, parking areas, or staging areas;
- Sweep all paved access roads, parking areas and staging areas as needed;
- Sweep streets if visible soil material is carried onto adjacent public streets;
- Restrict non-essential traffic to compacted roadways and paved portions of the site;
- Limit vehicle speeds on unpaved portions of the site;
- Minimize drop heights while loading transportation vehicles; and
- Cover exposed impacted soil or stockpiles and secure with temporary fencing or other means.

No eating, drinking, or tobacco use is permitted inside the work area when active earthwork activities are occurring.

11.2 TRAFFIC CONTROL AND TRANSPORTATION

The contractor is responsible for implementing traffic control measures as required to minimize the risk of traffic-related accidents at the site.

11.3 PERSONNEL DECONTAMINATION PROCEDURES

Contractors engaged in significant soil-disturbing activities shall provide an area for personnel decontamination adjacent to the work area as necessary. This area shall include boot-washing and hand-washing facilities, toilet facilities, and receptacles for used protective clothing.

Decontamination procedures for on-site workers wearing personal protective equipment are as follows:

- Wash boots and gloves.
- Remove protective coveralls and gloves and place in plastic bags for disposal.
- Remove respirators, clean and dry as needed, and place in sealed plastic bags with individual identification.
- Wash hands and face with soap and water before eating, drinking, using tobacco, or leaving the work area.

11.4 SANITATION AND ILLUMINATION

If toilet and hand-washing facilities are not available in the immediate vicinity of the job site, temporary facilities shall be provided at the job site at the start of work.

If it is necessary to work at night or in low-light conditions, portable lights shall be used to provide sufficient illumination for working safely.

12.0 UNANTICIPATED SUBSURFACE CONDITIONS

Whenever unanticipated conditions are encountered (e.g., subsurface features, visibly stained or odorous soil), work will stop in that area, the work area will be secured, and the situation evaluated before any further action is taken.

13.0 ON-SITE EMERGENCY RESPONSE

In the event of an accident or emergency condition, the procedures specified below shall be followed.

13.1 ACCIDENTAL MEDICAL EMERGENCIES

In the event of a medical emergency, the following procedures should be used.

1. Remove injured or exposed person(s) from immediate danger if possible.
2. Evacuate other on-site personnel to a safe place until it is safe for work to resume.
3. If a serious injury or life-threatening condition exists, call
   - 911—Paramedics, fire department, police
   - (845) 454-8500—Hospital emergency room (see Figure 2 for a hospital location map)
   - Clearly describe location, injury, and conditions to dispatcher/hospital. Designate a person to direct emergency response vehicles to the injured person(s).
4. Provide first aid if trained and as necessary.
5. Immediately notify the Owner and Health and Safety Manager.
6. Immediately implement steps to prevent recurrence of the accident.

13.2 ACCIDENTAL RELEASE OF HAZARDOUS MATERIALS OR WASTES

1. Evacuate all on-site personnel to a safe place in an upwind direction until the Health and Safety Manager determines that it is safe for work to resume.
2. Contain spill, if it is possible and it can be done safely.
3. Initiate cleanup.

13.3 TRAFFIC-RELATED EMERGENCIES

In the event of a traffic-related emergency, the local police/fire department shall be notified by calling **911.** On-site personnel are then to follow the applicable emergency-response procedures listed above (e.g., medical emergency in the event of a personal injury).

13.4 GENERAL EMERGENCIES

In the case of general emergencies (e.g., fire, earthquake, explosion, or other hazard), work shall be halted and the local police/fire department shall be notified by calling **911**. All on-site personnel will be immediately evacuated to a safe place.

13.5 EMERGENCY CONTACTS

General emergency: **911**

Non-emergency contacts:

Rose Pelino, Avis Rent A Car System, Inc.: 973/496-3447
Health and Safety Manager: To Be Determined

14.0 RECORD KEEPING

Contractors performing subsurface work at the site in accordance with the Excavation Work Plan shall provide the following records to the Health and Safety Manager, as necessary:

- Copies of their Health and Safety Plan and Standard Operating Procedures;
- Training documentation for on-site employees;
- Medical clearance forms for on-site employees;
- Daily log of personnel and visitors present at the worksite;
- Sign-in sheets for safety tailgate meetings;
- Air monitoring records; and
- Accident and injury reports.

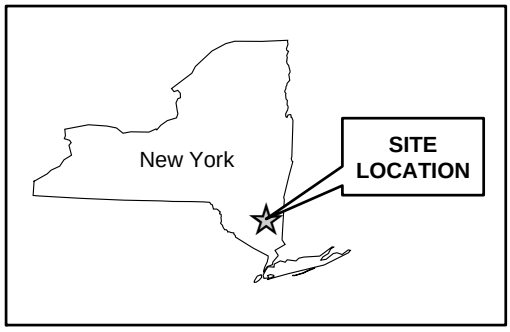
15.0 REFERENCES

Code Federal Regulations (CFR), Title 29 Section 1910.120, *Hazardous Waste Operations and Emergency Response Standards.*

AMEC Geomatrix (AMEC), 2010, *Site Management Plan*, December

FIGURES

Basemap from U.S.G.S. Poughkeepsie, New York (1982)
7.5' topographic quadrangle.



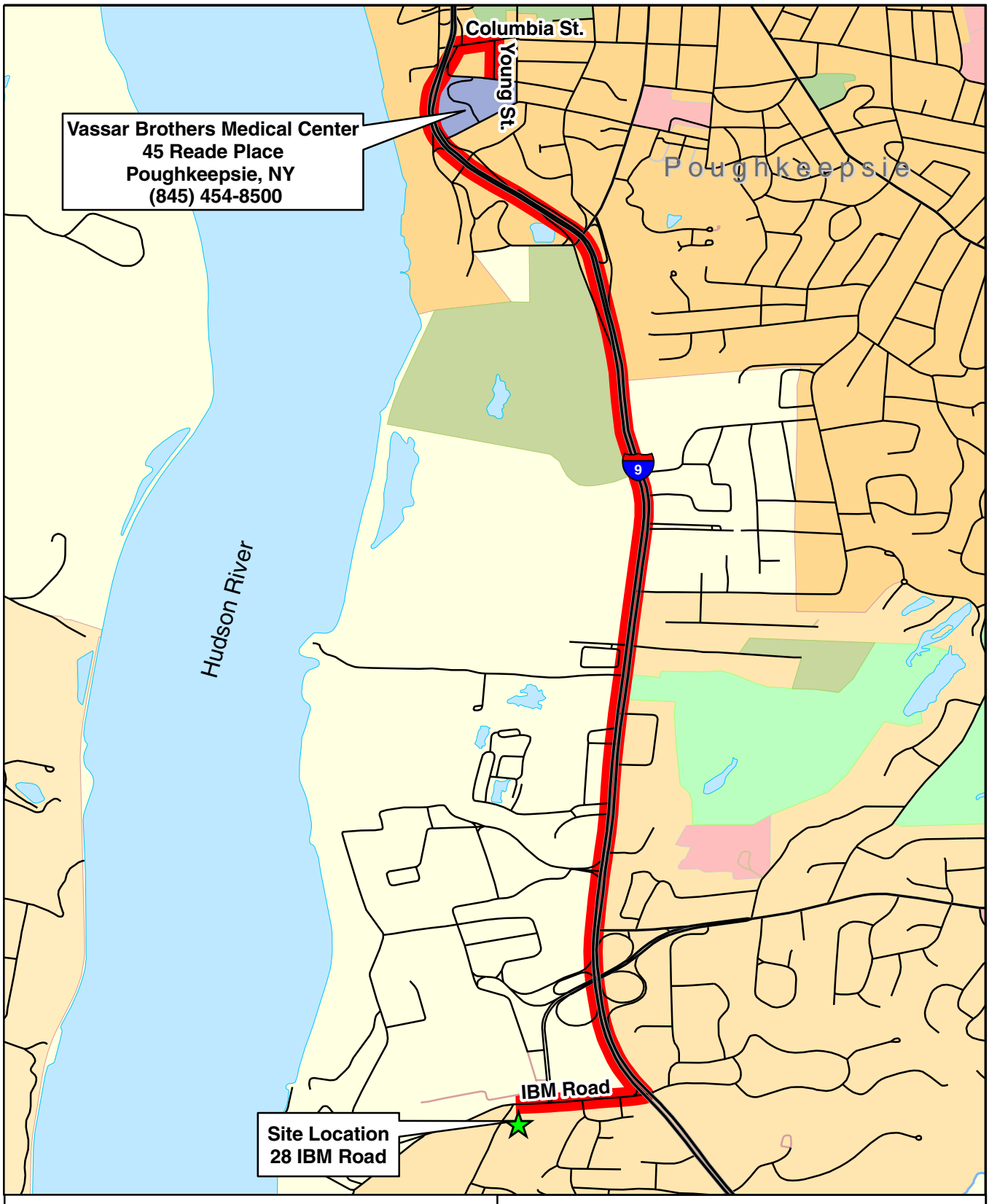
N

0 2,000 4,000 Feet

SITE LOCATION MAP
Former Drive & Park, Inc. Site
28 IBM Road
Poughkeepsie, New York

By: YH	Date: 7/10/2008	Project No. 9328.000
AMEC Geomatrix		Figure 1

S:\9300\9328\9328.000\task_20\08_0318_rawp_fig_01.mxd



File path: S:\9300\9328\9328.000\task_9\10_0928_rsmp_fig_02_H1.mxd

N

0 2,000 4,000 Feet

MAP SHOWING ROUTE FROM SITE TO HOSPITAL
Former Drive & Park, Inc. Site
28 IBM Road
Poughkeepsie, New York

By: DSA	Date: 10/12/2010	Project No. 9328.000
AMEC Geomatrix		Figure 2

ATTACHMENT A

Chemical Information Sheets

MATERIAL SAFETY DATA SHEET

BENZENE (AMOCO/TOTAL)

MSDS No. 11697000 ANSI/ENGLISH

1.0 CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: BENZENE (AMOCO/TOTAL)

MANUFACTURER/SUPPLIER:

Amoco Oil Company
200 East Randolph Drive
Chicago, Illinois 60601 U.S.A.

EMERGENCY HEALTH INFORMATION:
1 (800) 447-8735

EMERGENCY SPILL INFORMATION:
1 (800) 424-9300 CHEMTREC (USA)

OTHER PRODUCT SAFETY INFORMATION:
(312) 856-3907

2.0 COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS#	Range % by Wt.
Benzene	71-43-2	99.80
Toluene	108-88-3	0.20

(See Section 8.0, "Exposure Controls/Personal Protection", for exposure guidelines)

3.0 HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: Danger! Extremely flammable. Causes eye and skin irritation. Inhalation causes headaches, dizziness, drowsiness, and nausea, and may lead to unconsciousness. Harmful or fatal if liquid is aspirated into lungs. Danger! Contains Benzene. Cancer hazard. Can cause blood disorders. Harmful when absorbed through the skin.

POTENTIAL HEALTH EFFECTS:

EYE CONTACT: Causes mild eye irritation.

SKIN CONTACT: Causes mild skin irritation. Causes skin irritation on prolonged or repeated contact. Harmful when absorbed through the skin.

INHALATION: Cancer hazard. Can cause blood disorders. Inhalation causes headaches, dizziness, drowsiness, and nausea, and may lead to unconsciousness. See "Toxicological Information" section (Section 11.0).

INGESTION: Harmful or fatal if liquid is aspirated into lungs. See "Toxicological Information" section (Section 11.0).

HMIS CODE: (Health:2) (Flammability:3) (Reactivity:0)

NFPA CODE: (Health:2) (Flammability:3) (Reactivity:0)

4.0 FIRST AID MEASURES

EYE: Flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation persists.

SKIN: Wash exposed skin with soap and water. Remove contaminated clothing, including shoes, and thoroughly clean and dry before reuse. Get medical attention if irritation develops.

INHALATION: If adverse effects occur, remove to uncontaminated area. Give artificial respiration if not breathing. Get immediate medical attention.

INGESTION: If swallowed, drink plenty of water, do NOT induce vomiting. Get immediate medical attention.

5.0 FIRE FIGHTING MEASURES

FLASHPOINT: 12°F(-11°C)

UEL: 8.0%

LEL: 1.5%

AUTOIGNITION TEMPERATURE: 928°F (498°C)

FLAMMABILITY CLASSIFICATION: Extremely Flammable Liquid.

EXTINGUISHING MEDIA: Agents approved for Class B hazards (e.g., dry chemical, carbon dioxide, foam, steam) or water fog.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Extremely flammable liquid. Vapor may explode

if ignited in enclosed area.

FIRE-FIGHTING EQUIPMENT: Firefighters should wear full bunker gear, including a positive pressure self-contained breathing apparatus.

PRECAUTIONS: Keep away from sources of ignition (e.g., heat and open flames). Keep container closed. Use with adequate ventilation.

HAZARDOUS COMBUSTION PRODUCTS: Incomplete burning can produce carbon monoxide and/or carbon dioxide and other harmful products.

6.0 ACCIDENTAL RELEASE MEASURES

Remove or shut off all sources of ignition. Remove mechanically or contain on an absorbent material such as dry sand or earth. Increase ventilation if possible. Wear respirator and spray with water to disperse vapors. Keep out of sewers and waterways.

7.0 HANDLING AND STORAGE

HANDLING: Use with adequate ventilation. Do not breathe vapors. Keep away from ignition sources (e.g., heat, sparks, or open flames). Ground and bond containers when transferring materials. Wash thoroughly after handling. After this container has been emptied, it may contain flammable vapors; observe all warnings and precautions listed for this product.

STORAGE: Store in flammable liquids storage area. Store away from heat, ignition sources, and open flame in accordance with applicable regulations. Keep container closed. Outside storage is recommended.

8.0 EXPOSURE CONTROLS / PERSONAL PROTECTION

EYE: Do not get in eyes. Wear eye protection.

SKIN: Do not get on skin or clothing. Wear protective clothing and gloves.

INHALATION: Do not breathe mist or vapor. If heated and ventilation is inadequate, use supplied-air respirator approved by NIOSH/MSHA.

ENGINEERING CONTROLS: Control airborne concentrations below the exposure guidelines.

EXPOSURE GUIDELINES:

Component	CAS#	Exposure Limits

Benzene	71-43-2	OSHA PEL: 1 ppm OSHA STEL: 5 ppm ACGIH TLV-TWA: 10 ppm
Toluene	108-88-3	OSHA PEL: 100 ppm (1989); 200 ppm (1971) OSHA STEL: 150 ppm (1989); Not established. (1971) OSHA Ceiling: 300 ppm (1971) ACGIH TLV-TWA: 50 ppm (skin)

9.0 CHEMICAL AND PHYSICAL PROPERTIES

APPEARANCE AND ODOR: Liquid. Colorless. Sweet odor.

pH: Not determined.

VAPOR PRESSURE: 74.6 mm Hg at 20 °C

VAPOR DENSITY: Not determined.

BOILING POINT: 176°F(80°C)

MELTING POINT: 42°F(6°C)

SOLUBILITY IN WATER: Slight, 0.1 to 1.0%.

SPECIFIC GRAVITY (WATER=1): 0.88

10.0 STABILITY AND REACTIVITY

STABILITY: Stable.

CONDITIONS TO AVOID: Keep away from ignition sources (e.g. heat, sparks, and open flames).

MATERIALS TO AVOID: Avoid chlorine, fluorine, and other strong oxidizers.

HAZARDOUS DECOMPOSITION: None identified.

HAZARDOUS POLYMERIZATION: Will not occur.

11.0 TOXICOLOGICAL INFORMATION

ACUTE TOXICITY DATA:

EYE IRRITATION: Testing not conducted. See Other Toxicity Data.

SKIN IRRITATION: Testing not conducted. See Other Toxicity Data.

DERMAL LD50: Testing not conducted. See Other Toxicity Data.

ORAL LD50: 3.8 g/kg (rat).

INHALATION LC50: 10000 ppm (rat)

OTHER TOXICITY DATA: Acute toxicity of benzene results primarily from depression of the central nervous system (CNS). Inhalation of concentrations over 50 ppm can produce headache, lassitude, weariness, dizziness, drowsiness, or excitation. Exposure to very high levels can result in unconsciousness and death.

Long-term overexposure to benzene has been associated with certain types of leukemia in humans. In addition, the International Agency for Research on Cancer (IARC) and OSHA consider benzene to be a human carcinogen. Chronic exposures to benzene at levels of 100 ppm and below have been reported to cause adverse blood effects including anemia. Benzene exposure can occur by inhalation and absorption through the skin.

Inhalation and forced feeding studies of benzene in laboratory animals have produced a carcinogenic response in a variety of organs, including possibly leukemia, other adverse effects on the blood, chromosomal changes and some effects on the immune system. Exposure to benzene at levels up to 300 ppm did not produce birth defects in animal studies; however, exposure to the higher dosage levels (greater than 100 ppm) resulted in a reduction of body weight of the rat pups (fetotoxicity). Changes in the testes have been observed in mice exposed to benzene at 300 ppm, but reproductive performance was not altered in rats exposed to benzene at the same level.

Aspiration of this product into the lungs can cause chemical pneumonia and can be fatal. Aspiration into the lungs can occur while vomiting after ingestion of this product. Do not siphon by mouth.

12.0 ECOLOGICAL INFORMATION

Ecological testing has not been conducted on this product.

13.0 DISPOSAL INFORMATION

Disposal must be in accordance with applicable federal, state, or local regulations. Enclosed-controlled incineration is recommended unless directed otherwise by applicable ordinances. Residues and spilled material are hazardous waste due to ignitability.

14.0 TRANSPORTATION INFORMATION

U.S. DEPT OF TRANSPORTATION

Shipping Name	Benzene
Hazard Class	3
Identification Number	UN1114
Packing Group	II
RQ	RQ

INTERNATIONAL INFORMATION:

Sea (IMO/IMDG)

Shipping Name Not determined.

Air (ICAO/IATA)

Shipping Name Not determined.

European Road/Rail (ADR/RID)

Shipping Name Not determined.

Canadian Transportation of Dangerous Goods

Shipping Name Not determined.

15.0 REGULATORY INFORMATION

CERCLA SECTIONS 102a/103 HAZARDOUS SUBSTANCES (40 CFR Part 302.4): This product is reportable under 40 CFR Part 302.4 because it contains the following substance(s):

Component/CAS Number	Weight %	Component Reportable Quantity (RQ)
Benzene 71-43-2	99.80	10 lbs.

SARA TITLE III SECTION 302 EXTREMELY HAZARDOUS SUBSTANCES (40 CFR Part 355): This product is not regulated under Section 302 of SARA and 40 CFR Part 355.

SARA TITLE III SECTIONS 311/312 HAZARDOUS CATEGORIZATION (40 CFR Part 370): This product is defined as hazardous by OSHA under 29 CFR Part 1910.1200(d).

SARA TITLE III SECTION 313 (40 CFR Part 372): This product contains the following substance (s), which is on the Toxic Chemicals List in 40 CFR Part 372:

Component/CAS Number	Weight Percent
Benzene 71-43-2	99.80

U.S. INVENTORY (TSCA): Listed on inventory.

OSHA HAZARD COMMUNICATION STANDARD: Flammable liquid. Carcinogen. Irritant. CNS Effects. Target organ effects.

EC INVENTORY (EINECS/ELINCS): In compliance.

JAPAN INVENTORY (MITI): Not determined.

AUSTRALIA INVENTORY (AICS): Not determined.

KOREA INVENTORY (ECL): Not determined.

CANADA INVENTORY (DSL): Not determined.

PHILIPPINE INVENTORY (PICCS): Not determined.

16.0 OTHER INFORMATION

Prepared by:

Environment, Health and Safety Department

Issued: November 14, 1995

This material Safety Data Sheet conforms to the requirements of ANSI Z400.1.

This material safety data sheet and the information it contains is offered to you in good faith as accurate. We have reviewed any information contained in this data sheet which we received from sources outside our company. We believe that information to be correct but cannot guarantee its accuracy or completeness. Health and safety precautions in this data sheet may not be adequate for all individuals and/or situations. It is the user's obligation to evaluate and use this product safely and to comply with all applicable laws and regulations. No statement made in this data sheet shall be construed as a permission or recommendation for the use of any product in a manner that might infringe existing patents. No warranty is made, either express or implied.

MATERIAL SAFETY DATA SHEET

TOLUENE (AMOCO/TOTAL)

MSDS No. 11699000 ANSI/ENGLISH

1.0 CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: TOLUENE (AMOCO/TOTAL)

MANUFACTURER/SUPPLIER:

Amoco Chemical Company
200 East Randolph Drive
Chicago, Illinois 60601 U.S.A.

EMERGENCY HEALTH INFORMATION:
1 (800) 447-8735

EMERGENCY SPILL INFORMATION:
1 (800) 424-9300 CHEMTREC (USA)

OTHER PRODUCT SAFETY INFORMATION:
(312) 856-3907

2.0 COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS#	Range % by Wt.
Toluene	108-88-3	80
C9 Isoparaffins		9
C8 Isoparaffins		5
Benzene	71-43-2	2
Xylenes		2
Ethylbenzene	100-41-4	2

(See Section 8.0, "Exposure Controls/Personal Protection", for exposure guidelines)

3.0 HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: Warning! Flammable. Causes eye irritation. Prolonged or repeated contact can defat the skin and lead to irritation and/or dermatitis. Inhalation causes headaches, dizziness,

drowsiness, nausea, and respiratory irritation. If swallowed, causes headaches, dizziness, drowsiness and nausea, and may lead to unconsciousness. Harmful or fatal if liquid is aspirated into lungs. Danger! Contains Benzene. Cancer hazard. Can cause blood disorders. Harmful when absorbed through the skin.

POTENTIAL HEALTH EFFECTS:

EYE CONTACT: Causes mild eye irritation.

SKIN CONTACT: Prolonged or repeated contact can defat the skin and lead to irritation and/or dermatitis. Harmful when absorbed through the skin. Cancer hazard. Can cause blood disorders.

INHALATION: Inhalation causes headaches, dizziness, drowsiness, nausea, and respiratory irritation. See "Toxicological Information" section (Section 11.0).

INGESTION: If swallowed, causes headaches, dizziness, drowsiness and nausea, and may lead to unconsciousness. Harmful or fatal if liquid is aspirated into lungs.

HMIS CODE: (Health:2) (Flammability:3) (Reactivity:0)

NFPA CODE: (Health:2) (Flammability:3) (Reactivity:0)

4.0 FIRST AID MEASURES

EYE: Immediately flush eyes with plenty of water for at least 15 minutes. Then get immediate medical attention.

SKIN: Wash exposed skin with soap and water. Remove contaminated clothing and thoroughly clean and dry before reuse.

INHALATION: If adverse effects occur, remove to uncontaminated area. Give artificial respiration if not breathing. Get immediate medical attention.

INGESTION: If swallowed, drink plenty of water, do NOT induce vomiting. Get immediate medical attention.

5.0 FIRE FIGHTING MEASURES

FLASHPOINT: 40°F(4°C)

UEL: 6.8%

LEL: 1.3%

AUTOIGNITION TEMPERATURE: 997°F (536°C)

FLAMMABILITY CLASSIFICATION: Flammable Liquid.

EXTINGUISHING MEDIA: Agents approved for Class B hazards (e.g., dry chemical, carbon dioxide, foam, steam) or water fog.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Flammable liquid. Vapor may explode if ignited in enclosed area.

FIRE-FIGHTING EQUIPMENT: Firefighters should wear full bunker gear, including a positive pressure self-contained breathing apparatus.

PRECAUTIONS: Keep away from sources of ignition (e.g., heat and open flames). Use with adequate ventilation. Keep container closed.

HAZARDOUS COMBUSTION PRODUCTS: Incomplete burning can produce carbon monoxide and/or carbon dioxide and other harmful products.

6.0 ACCIDENTAL RELEASE MEASURES

Remove or shut off all sources of ignition. Remove mechanically or contain on an absorbent material such as dry sand or earth. Keep out of sewers and waterways.

7.0 HANDLING AND STORAGE

HANDLING: Do not breathe vapors. Do not get in eyes. Do not get on skin or clothing.

STORAGE: Store in flammable liquids storage area. Store away from heat, ignition sources, and open flame in accordance with applicable regulations. Keep container closed.

8.0 EXPOSURE CONTROLS / PERSONAL PROTECTION

EYE: Do not get in eyes. Wear chemical goggles.

SKIN: Avoid skin contact. Wear protective clothing and gloves.

INHALATION: Do not breathe mist or vapor. Use with adequate ventilation. If ventilation is inadequate, use NIOSH certified respirator that will protect against organic vapor and dust/mist.

ENGINEERING CONTROLS: Control airborne concentrations below the exposure guidelines.

EXPOSURE GUIDELINES:

Component	CAS#	Exposure Limits
Toluene	108-88-3	OSHA PEL: 100 ppm (1989); 200 ppm (1971) OSHA STEL: 150 ppm (1989); Not established. (1971) OSHA Ceiling: 300 ppm (1971) ACGIH TLV-TWA: 50 ppm (skin)
C9 Isoparaffins		No exposure limit established
C8 Isoparaffins		No exposure limit established
Benzene	71-43-2	OSHA PEL: 1 ppm OSHA STEL: 5 ppm ACGIH TLV-TWA: 10 ppm
Xylenes		No exposure limit established
Ethylbenzene	100-41-4	OSHA PEL: 100 ppm (1989)(1971) OSHA STEL: 125 ppm(1989); Not established. (1971) ACGIH TLV-TWA: 100 ppm ACGIH TLV-STEL: 125 ppm

9.0 CHEMICAL AND PHYSICAL PROPERTIES

APPEARANCE AND ODOR: Liquid. Clear. Colorless. Aromatic odor.

pH: Not determined.

VAPOR PRESSURE: 26 mm Hg at 25 °C

VAPOR DENSITY: 3.2

BOILING POINT: 231°F(111°C)

MELTING POINT: Not determined.

SOLUBILITY IN WATER: Negligible, below 0.1%.

SPECIFIC GRAVITY (WATER=1): 0.87

EVAPORATION RATE:

10.0 STABILITY AND REACTIVITY

STABILITY: Burning can be started easily.

CONDITIONS TO AVOID: Keep away from ignition sources (e.g. heat, sparks, and open flames).

MATERIALS TO AVOID: None identified.

HAZARDOUS DECOMPOSITION: Burning can produce carbon monoxide and/or carbon dioxide and other harmful products.

HAZARDOUS POLYMERIZATION: Will not occur.

11.0 TOXICOLOGICAL INFORMATION

ACUTE TOXICITY DATA:

EYE IRRITATION: Testing not conducted. See Other Toxicity Data.

SKIN IRRITATION: Testing not conducted. See Other Toxicity Data.

DERMAL LD50: Testing not conducted. See Other Toxicity Data.

ORAL LD50: Testing not conducted. See Other Toxicity Data.

INHALATION LC50: Testing not conducted. See Other Toxicity Data.

OTHER TOXICITY DATA: Specific toxicity tests have not been conducted on this product. Our hazard evaluation is based on information from similar products, the ingredients, technical literature, and/or professional experience.

This stream contains benzene, toluene, xylene and ethylbenzene.

Toluene: Toluene is readily absorbed via inhalation, ingestion, and somewhat through skin contact. In the liquid form, it causes mild skin irritation with a single exposure (PDIS: 4.8/8.0) and dermatitis following repeated exposures. Toluene also produces mild eye irritation (Draise score at 1.0 hour 13.7/110.0) which includes reversible corneal opacity and iritis. It is not a dermal sensitizer. Inhalation in humans has caused mild respiratory irritation (200 ppm), mild eye irritation (400 ppm), and lassitude and slight nausea (600 ppm). Drowsiness occurs at 800 ppm. Very high concentrations may result in paresthesia, dizziness, disturbances of vision, nausea, narcosis, and collapse. It does not induce the hematopoietic effects seen with benzene exposure. Rat oral LD50: 5000 mg/kg; rat inhalation LC50: 4000 ppm (4 hours).

Acute toxicity of benzene results primarily from depression of the central nervous system (CNS). Inhalation of concentrations over 50 ppm can produce headache, lassitude, weariness, dizziness, drowsiness, or excitation. Exposure to very high levels can result in unconsciousness and death.

Long-term overexposure to benzene has been associated with certain types of leukemia in humans. In addition, the International Agency for Research on Cancer (IARC) and OSHA consider benzene to be a human carcinogen. Chronic exposures to benzene at levels of 100 ppm and below have been reported to cause adverse blood effects including anemia. Benzene exposure can occur by inhalation and absorption through the skin.

Inhalation and forced feeding studies of benzene in laboratory animals have produced a carcinogenic

response in a variety of organs, including possibly leukemia, other adverse effect

International Chemical Safety Cards

ETHYLBENZENE

ICSC: 0268

ETHYLBENZENE
Ethylbenzol
Phenylethane
EB
$C_8H_{10}/C_6H_5-C_2H_5$
Molecular mass: 106.2

CAS # 100-41-4
RTECS # DA0700000
ICSC # 0268
UN # 1175
EC # 601-023-00-4

TYPES OF HAZARD/ EXPOSURE	ACUTE HAZARDS/ SYMPTOMS	PREVENTION	FIRST AID/ FIRE FIGHTING
FIRE	Highly flammable.	NO open flames, NO sparks, and NO smoking.	Powder, AFFF, foam, carbon dioxide.
EXPLOSION	Vapour/air mixtures are explosive.	Closed system, ventilation, explosion-proof electrical equipment and lighting. Do NOT use compressed air for filling, discharging, or handling.	In case of fire: keep drums, etc., cool by spraying with water.
EXPOSURE		PREVENT GENERATION OF MISTS!	
• **INHALATION**	Cough. Dizziness. Drowsiness. Headache.	Ventilation, local exhaust, or breathing protection.	Fresh air, rest. Refer for medical attention.
• **SKIN**	Dry skin. Redness.	Protective gloves.	Remove contaminated clothes. Rinse and then wash skin with water and soap.
• **EYES**	Redness. Pain. Blurred vision.	Face shield or eye protection in combination with breathing protection.	First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take to a doctor.
• **INGESTION**	(further see Inhalation).	Do not eat, drink, or smoke during work.	Rinse mouth. Give a slurry of activated charcoal in water to drink. Refer for medical attention.

SPILLAGE DISPOSAL	STORAGE	PACKAGING & LABELLING
Ventilation. Collect leaking liquid in covered containers. Absorb remaining liquid in sand or inert absorbent and remove to safe place. Do NOT wash away into sewer (extra personal protection: A filter respirator for	Fireproof. Separated from strong oxidants.	F symbol Xn symbol R: 11-20 S: (2-)16-24/25-29 UN Hazard Class: 3

organic vapour).		UN Packing Group: II

SEE IMPORTANT INFORMATION ON BACK

ICSC: 0268

International Chemical Safety Cards

ETHYLBENZENE

ICSC: 0268

IMPORTANT DATA

PHYSICAL STATE; APPEARANCE:
COLOURLESS LIQUID , WITH AROMATIC ODOUR.

PHYSICAL DANGERS:
The vapour mixes well with air, explosive mixtures are easily formed.

CHEMICAL DANGERS:
Reacts with strong oxidants. Attacks plastic and rubber.

OCCUPATIONAL EXPOSURE LIMITS (OELs):
TLV (as TWA): 100 ppm; 434 mg/m^3; as STEL: 125 ppm; 543 mg/m^3 (ACGIH 1994-1995).
MAK: 100 ppm; 440 mg/m^3 (1994).

ROUTES OF EXPOSURE:
The substance can be absorbed into the body by inhalation of its vapour, through the skin and by ingestion.

INHALATION RISK:
A harmful contamination of the air will be reached rather slowly on evaporation of this substance at 20°C.

EFFECTS OF SHORT-TERM EXPOSURE:
The substance irritates the eyes, the skin and the respiratory tract. Swallowing the liquid may cause aspiration into the lungs with the risk of chemical pneumonitis. The substance may cause effects on the central nervous system. Exposure far above OEL could cause lowering of consciousness.

EFFECTS OF LONG-TERM OR REPEATED EXPOSURE:
Repeated or prolonged contact with skin may cause dermatitis.

PHYSICAL PROPERTIES

Boiling point: 136°C
Melting point: -95°C
Relative density (water = 1): 0.9
Solubility in water, g/100 ml at 20°C: 0.015
Vapour pressure, kPa at 20°C: 0.9
Relative vapour density (air = 1): 3.7
Relative density of the vapour/air-mixture at 20°C (air = 1): 1.02
Flash point: 18°C c.c.
Auto-ignition temperature: 432°C
Explosive limits, vol% in air: 1.0-6.7
Octanol/water partition coefficient as log Pow: 3.2

ENVIRONMENTAL DATA

The substance is harmful to aquatic organisms.

NOTES

The odour warning when the exposure limit value is exceeded is insufficient.

Transport Emergency Card: TEC (R)-522
NFPA Code: H2; F3; R0

ADDITIONAL INFORMATION

ICSC: 0268 **ETHYLBENZENE**

IMPORTANT LEGAL NOTICE:	Neither the CEC or the IPCS nor any person acting on behalf of the CEC or the IPCS is responsible for the use which might be made of this information. This card contains the collective views of the IPCS Peer Review Committee and may not reflect in all cases all the detailed requirements included in national legislation on the subject. The user should verify compliance of the cards with the relevant legislation in the country of use.

MSDS Number: **X2000** * * * * * *Effective Date:* ***04/01/03*** * * * * * *Supercedes:* ***03/15/02***

MSDS Material Safety Data Sheet

From: Mallinckrodt Baker, Inc.
222 Red School Lane
Phillipsburg, NJ 08865

Mallinckrodt CHEMICALS J.T.Baker

24 Hour Emergency Telephone: 908-859-2151
CHEMTREC: 1-800-424-9300

National Response in Canada
CANUTEC: 613-996-6666

Outside U.S. and Canada
Chemtrec: 703-527-3887

NOTE: CHEMTREC, CANUTEC and National Response Center emergency numbers to be used only in the event of chemical emergencies involving a spill, leak, fire, exposure or accident involving chemicals.

All non-emergency questions should be directed to Customer Service (1-800-582-2537) for assistance.

XYLENES

1. Product Identification

Synonyms: Dimethyl benzene, xylol, methyltoluene
CAS No.: 1330-20-7
Molecular Weight: 106.17
Chemical Formula: C6H4(CH3)2
Product Codes:
J.T. Baker: 5377, 5810, 5813, 9483, 9489, 9490, 9493, 9494, 9499, 9516, X516
Mallinckrodt: 8664, 8668, 8671, 8672, 8685, 8802, V052

2. Composition/Information on Ingredients

Ingredient	CAS No	Percent	Hazardous
m-Xylene	108-38-3	40 - 65%	Yes
o-Xylene	95-47-6	15 - 20%	Yes
p-Xylene	106-42-3	< 20%	Yes
Ethyl Benzene	100-41-4	15 - 25%	Yes

3. Hazards Identification

Emergency Overview

DANGER! HARMFUL OR FATAL IF SWALLOWED. VAPOR HARMFUL. AFFECTS CENTRAL NERVOUS SYSTEM. CAUSES SEVERE EYE IRRITATION. CAUSES IRRITATION TO SKIN AND RESPIRATORY TRACT. MAY BE HARMFUL IF ABSORBED THROUGH SKIN. CHRONIC EXPOSURE CAN CAUSE ADVERSE LIVER, KIDNEY, AND BLOOD EFFECTS. FLAMMABLE LIQUID AND VAPOR.

SAF-T-DATA(tm) Ratings (Provided here for your convenience)

Health Rating: 2 - Moderate (Life)
Flammability Rating: 2 - Moderate
Reactivity Rating: 1 - Slight
Contact Rating: 3 - Severe
Lab Protective Equip: GOGGLES; LAB COAT; VENT HOOD; PROPER GLOVES; CLASS B EXTINGUISHER
Storage Color Code: Red (Flammable)

Potential Health Effects

Inhalation:
Inhalation of vapors may be irritating to the nose and throat. Inhalation of high concentrations may result in nausea, vomiting, headache, ringing in the ears, and severe breathing difficulties which may be delayed in onset. Substernal pain, cough, and hoarseness are also reported. High vapor concentrations are anesthetic and central nervous system depressants.

Ingestion:
Ingestion causes burning sensation in mouth and stomach, nausea, vomiting and salivation. Minute amounts aspirated into the lungs can produce a severe hemorrhagic pneumonitis with severe pulmonary injury or death.

Skin Contact:
Skin contact results in loss of natural oils and often results in a characteristic dermatitis. May be absorbed through the skin.

Eye Contact:
Vapors cause eye irritation. Splashes cause severe irritation, possible corneal burns and eye damage.

Chronic Exposure:
Chronic inhalation can cause headache, loss of appetite, nervousness and pale skin. Repeated or prolonged skin contact may cause a skin rash. Repeated exposure of the eyes to high concentrations of vapor may cause reversible eye damage. Repeated exposure can damage bone marrow, causing low blood cell count. May damage the liver and kidneys.

Aggravation of Pre-existing Conditions:
Persons with pre-existing skin disorders or eye problems, or impaired liver, kidney, blood, or respiratory function may be more susceptible to the effects of the substance.

4. First Aid Measures

Inhalation:
Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician immediately.
Ingestion:
Aspiration hazard. If swallowed, vomiting may occur spontaneously, but DO NOT INDUCE. If vomiting occurs, keep head below hips to prevent aspiration into lungs. Never give anything by mouth to an unconscious person. Call a physician immediately.
Skin Contact:
Immediately flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention. Wash clothing before reuse. Thoroughly clean shoes before reuse.
Eye Contact:
Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.

---

5. Fire Fighting Measures

Fire:
Flash point: 29C (84F) CC
Autoignition temperature: 464C (867F)
Flammable limits in air % by volume:
lel: 1.0; uel: 7.0
Explosion:
Above flash point, vapor-air mixtures are explosive within flammable limits noted above. Contact with strong oxidizers may cause fire. Sealed containers may rupture when heated. Sensitive to static discharge.
Fire Extinguishing Media:
Dry chemical, foam or carbon dioxide. Water spray may be used to keep fire exposed containers cool, dilute spills to nonflammable mixtures, protect personnel attempting to stop leak and disperse vapors.
Special Information:
In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode. Vapors can flow along surfaces to distant ignition source and flash back.

---

6. Accidental Release Measures

Ventilate area of leak or spill. Remove all sources of ignition. Wear appropriate personal protective equipment as specified in Section 8. Isolate hazard area. Keep unnecessary and unprotected personnel from entering. Contain and recover liquid when possible. Use non-sparking tools and equipment. Collect liquid in an appropriate container or absorb with an inert material (e. g., vermiculite, dry sand, earth), and place in a chemical waste container. Do not use combustible materials, such as saw dust. Do not flush to sewer! If a leak or spill

has not ignited, use water spray to disperse the vapors, to protect personnel attempting to stop leak, and to flush spills away from exposures. US Regulations (CERCLA) require reporting spills and releases to soil, water and air in excess of reportable quantities. The toll free number for the US Coast Guard National Response Center is (800) 424-8802.

J. T. Baker SOLUSORB® solvent adsorbent is recommended for spills of this product.

---

7. Handling and Storage

Protect against physical damage. Store in a cool, dry well-ventilated location, away from any area where the fire hazard may be acute. Outside or detached storage is preferred. Separate from incompatibles. Containers should be bonded and grounded for transfers to avoid static sparks. Storage and use areas should be No Smoking areas. Use non-sparking type tools and equipment, including explosion proof ventilation. Containers of this material may be hazardous when empty since they retain product residues (vapors, liquid); observe all warnings and precautions listed for the product. Do Not attempt to clean empty containers since residue is difficult to remove. Do not pressurize, cut, weld, braze, solder, drill, grind or expose such containers to heat, sparks, flame, static electricity or other sources of ignition: they may explode and cause injury or death.

---

8. Exposure Controls/Personal Protection

Airborne Exposure Limits:
-OSHA Permissible Exposure Limit (PEL):
100 ppm (TWA) xylene
100 ppm (TWA) ethylbenzene
-ACGIH Threshold Limit Value (TLV):
xylene: 100 ppm (TWA) 150 ppm (STEL), A4 - Not classifiable as a human carcinogen.
ethyl benzene: 100 ppm (TWA) 125 ppm (STEL), A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans.
Ventilation System:
A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limits. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, *Industrial Ventilation, A Manual of Recommended Practices*, most recent edition, for details. Use explosion-proof equipment.
Personal Respirators (NIOSH Approved):
If the exposure limit is exceeded and engineering controls are not feasible, a half-face organic vapor respirator may be worn for up to ten times the exposure limit, or the maximum use concentration specified by the appropriate regulatory agency or respirator supplier, whichever is lowest. A full-face piece organic vapor respirator may be worn up to 50 times the exposure limit, or the maximum use concentration specified by the appropriate regulatory agency or respirator supplier, whichever is lowest. For emergencies or instances where the exposure levels are not known, use a full-face piece positive-pressure, air-

supplied respirator. WARNING: Air-purifying respirators do not protect workers in oxygen-deficient atmospheres. Where respirators are required, you must have a written program covering the basic requirements in the OSHA respirator standard. These include training, fit testing, medical approval, cleaning, maintenance, cartridge change schedules, etc. See 29CFR1910.134 for details.

Skin Protection:

Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

Eye Protection:

Use chemical safety goggles and/or a full face shield where splashing is possible. Maintain eye wash fountain and quick-drench facilities in work area.

---

9. Physical and Chemical Properties

The following physical data is for xylene.

Appearance:

Clear, colorless liquid.

Odor:

Characteristic odor.

Solubility:

Insoluble in water.

Specific Gravity:

0.86 @ 20C/4C

pH:

Not applicable.

% Volatiles by volume @ 21C (70F):

100

Boiling Point:

137 - 140C (279 - 284F)

Melting Point:

-25C (-13F)

Vapor Density (Air=1):

3.7

Vapor Pressure (mm Hg):

8 @ 20C (68F)

Evaporation Rate (BuAc=1):

0.7

---

10. Stability and Reactivity

Stability:

Stable under ordinary conditions of use and storage.

Hazardous Decomposition Products:

Involvement in a fire causes formation of carbon monoxide and unidentified organic components.

Hazardous Polymerization:

Will not occur.
Incompatibilities:
Strong oxidizing agents and strong acids.
Conditions to Avoid:
Heat, flames, ignition sources and incompatibles.

---

11. Toxicological Information

Toxicological Data:
Xylene: oral rat LD50: 4300 mg/kg; inhalation rat LC50: 5000 ppm/4H; skin rabbit LD50: > 1700 mg/kg; Irritation eye rabbit: 87 mg mild (Std. Draize); irritation skin rabbit 500 mg/24 moderate (Std. Draize); investigated as a tumorigen, mutagen, reproductive effector. Ethyl benzene: oral rat LD50: 3500 mg/kg; skin rabbit LD50: 17800 uL/kg; investigated as a tumorigen, mutagen, reproductive effector.
Reproductive Toxicity:
May cause teratogenic effects.

--------\Cancer Lists\----------

Ingredient	---NTP Carcinogen--- Known	Anticipated	IARC Category
m-Xylene (108-38-3)	No	No	3
o-Xylene (95-47-6)	No	No	3
p-Xylene (106-42-3)	No	No	3
Ethyl Benzene (100-41-4)	No	No	2B

---

12. Ecological Information

Environmental Fate:
Following data for xylene: When released into the soil, this material may evaporate to a moderate extent. When released into the soil, this material is expected to leach into groundwater. When released into the soil, this material may biodegrade to a moderate extent. When released into water, this material may evaporate to a moderate extent. When released into water, this material may biodegrade to a moderate extent. When released into the air, this material may be moderately degraded by reaction with photochemically produced hydroxyl radicals. When released into the air, this material is expected to have a half-life of less than 1 day. This material is not expected to significantly bioaccumulate. (mixed xylenes: octanol / water partition coefficient 3.1 - 3.2; bioconcentration factor = 1.3, eels)
Environmental Toxicity:
For xylene: This material is expected to be slightly toxic to aquatic life. The LC50/96-hour values for fish are between 10 and 100 mg/l.

---

13. Disposal Considerations

Whatever cannot be saved for recovery or recycling should be handled as hazardous waste and sent to a RCRA approved incinerator or disposed in a RCRA approved waste facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

---

14. Transport Information

Domestic (Land, D.O.T.)

Proper Shipping Name: RQ, XYLENES
Hazard Class: 3
UN/NA: UN1307
Packing Group: III
Information reported for product/size: 398LB

International (Water, I.M.O.)

Proper Shipping Name: XYLENES
Hazard Class: 3
UN/NA: UN1307
Packing Group: III
Information reported for product/size: 398LB

---

15. Regulatory Information

--------\Chemical Inventory Status - Part 1\---------------------------------

Ingredient	TSCA	EC	Japan	Australia
m-Xylene (108-38-3)	Yes	Yes	Yes	Yes
o-Xylene (95-47-6)	Yes	Yes	Yes	Yes
p-Xylene (106-42-3)	Yes	Yes	Yes	Yes
Ethyl Benzene (100-41-4)	Yes	Yes	Yes	Yes

--------\Chemical Inventory Status - Part 2\---------------------------------

		--Canada--		
Ingredient	Korea	DSL	NDSL	Phil.
m-Xylene (108-38-3)	Yes	Yes	No	Yes
o-Xylene (95-47-6)	Yes	Yes	No	Yes
p-Xylene (106-42-3)	Yes	Yes	No	Yes
Ethyl Benzene (100-41-4)	Yes	Yes	No	Yes

--------\Federal, State & International Regulations - Part 1\----------------

	-SARA 302-		------SARA 313------	
Ingredient	RQ	TPQ	List	Chemical Catg.
m-Xylene (108-38-3)	No	No	Yes	No

o-Xylene (95-47-6)	No	No	Yes	No
p-Xylene (106-42-3)	No	No	Yes	No
Ethyl Benzene (100-41-4)	No	No	Yes	No

\--------\Federal, State & International Regulations - Part 2\----------

Ingredient	CERCLA	-RCRA- 261.33	-TSCA- 8(d)
m-Xylene (108-38-3)	1000	No	No
o-Xylene (95-47-6)	1000	No	No
p-Xylene (106-42-3)	100	No	Yes
Ethyl Benzene (100-41-4)	1000	No	No

Chemical Weapons Convention: No TSCA 12(b): No CDTA: No
SARA 311/312: Acute: Yes Chronic: Yes Fire: Yes Pressure: No
Reactivity: No (Mixture / Liquid)

Australian Hazchem Code: 3[Y]
Poison Schedule: None allocated.
WHMIS:
This MSDS has been prepared according to the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

---

16. Other Information

NFPA Ratings: Health: **2** Flammability: **3** Reactivity: **0**
Label Hazard Warning:
DANGER! HARMFUL OR FATAL IF SWALLOWED. VAPOR HARMFUL. AFFECTS CENTRAL NERVOUS SYSTEM. CAUSES SEVERE EYE IRRITATION. CAUSES IRRITATION TO SKIN AND RESPIRATORY TRACT. MAY BE HARMFUL IF ABSORBED THROUGH SKIN. CHRONIC EXPOSURE CAN CAUSE ADVERSE LIVER, KIDNEY, AND BLOOD EFFECTS. FLAMMABLE LIQUID AND VAPOR.
Label Precautions:
Keep away from heat, sparks and flame.
Avoid contact with eyes, skin and clothing.
Keep container closed.
Use only with adequate ventilation.
Avoid breathing vapor.
Wash thoroughly after handling.
Label First Aid:
Aspiration hazard. If swallowed, vomiting may occur spontaneously, but DO NOT INDUCE. If vomiting occurs, keep head below hips to prevent aspiration into lungs. Never give anything by mouth to an unconscious person. Call a physician immediately. If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. In case of contact, immediately flush eyes or skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. In all cases get medical attention immediately.
Product Use:

Laboratory Reagent.
Revision Information:
MSDS Section(s) changed since last revision of document include: 8.
Disclaimer:
****

Mallinckrodt Baker, Inc. provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose. MALLINCKRODT BAKER, INC. MAKES NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION ANY WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE WITH RESPECT TO THE INFORMATION SET FORTH HEREIN OR THE PRODUCT TO WHICH THE INFORMATION REFERS. ACCORDINGLY, MALLINCKRODT BAKER, INC. WILL NOT BE RESPONSIBLE FOR DAMAGES RESULTING FROM USE OF OR RELIANCE UPON THIS INFORMATION.
****

Prepared by: Environmental Health & Safety
Phone Number: (314) 654-1600 (U.S.A.)

APPENDIX E

Community Air Monitoring Plan

APPENDIX E
COMMUNITY AIR MONITORING PLAN

Former Drive & Park, Inc. Site
Brownfield Cleanup Program #C314111
28 IBM Road
Town of Poughkeepsie
Dutchess County, New York

This Community Air Monitoring Plan (CAMP) provides real-time monitoring for volatile organic compounds (VOCs) in the designated work area during intrusive activities to provide a measure of protection for the downwind community from potential airborne contaminant releases. The action levels specified herein require increased monitoring, corrective actions to abate emissions, and/or work shutdown.

Investigations at the site have determined that the contaminants of concern are limited to petroleum hydrocarbons, specifically benzene, toluene, ethylbenzene and total xylenes. Real-time air monitoring for VOCs will be performed if warranted by the scope of work and known contamination present. If performed, the real-time air monitoring will consist of the elements described below.

Upwind VOC concentrations will be measured at the start of each workday and periodically thereafter to establish background conditions. All monitoring will be performed using a photoionization detector calibrated at least once per day.

VOCs will be monitored in the immediate work area on a continuous basis. If the ambient air concentration of total organic vapors within the work area exceeds 5 parts per million (ppm) above background for a 15-minute average, work activities will be temporarily halted and monitoring continued. Work activities will resume, with continued monitoring, when total organic vapor levels decrease below 5 ppm over background.

Should total organic vapor levels in the work area persist at levels in excess of 5 ppm over background, the source of vapors will be identified, corrective actions will be taken to abate emissions, and monitoring continued until total organic vapor levels decrease below 5 ppm over background. Work activities will resume, with continued monitoring, when total organic vapor levels decrease below 5 ppm over background.

All readings will be recorded and be available for New York State Department of Environmental Conservation and New York State Department of Health personnel to review. Exceedances of action levels will be reported to the NYSDEC and NYSDOH Project Managers.

APPENDIX F

Quality Assurance Project Plan

QUALITY ASSURANCE PROJECT PLAN

Former Drive & Park, Inc. Site
Brownfield Cleanup Program #C314111
28 IBM Road
Town of Poughkeepsie
Dutchess County, New York

Prepared for:
Avis Rent A Car System, Inc.

Prepared by:
AMEC Geomatrix, Inc.,

December 28, 2010

Project 0093280000

TABLE OF CONTENTS

Page

1.0 INTRODUCTION 1

2.0 SAMPLING OBJECTIVES 1

3.0 SAMPLE MEDIA, LOCATIONS, ANALYTICAL SUITES, AND FREQUENCY 2
- 3.1 EXCAVATION CONFIRMATION SOIL SAMPLING 2
- 3.2 WASTE CHARACTERIZATION SAMPLING 2
- 3.3 BACKFILL SAMPLING 2
- 3.4 GROUNDWATER SAMPLING 3
- 3.5 ANALYTICAL LABORATORY 3

4.0 FIELD SAMPLING PROCEDURES 3
- 4.1 EXCAVATION CONFIRMATION SOIL SAMPLING 3
- 4.2 WASTE CHARACTERIZATION SAMPLING 3
- 4.3 BACKFILL SAMPLING 3
- 4.4 GROUNDWATER SAMPLING 3

5.0 SAMPLE HANDLING 4
- 5.1 FIELD SAMPLE HANDLING 4
- 5.2 SAMPLE CUSTODY DOCUMENTATION 4
- 5.3 SAMPLE SHIPMENT 4

6.0 DATA QUALITY REVIEW 4

QUALITY ASSURANCE PROJECT PLAN
Former Drive & Park, Inc. Site
Brownfield Cleanup Program #C314111
28 IBM Road
Town of Poughkeepsie
Dutchess County, New York

1.0 INTRODUCTION

AMEC Geomatrix, Inc. (AMEC) has developed this Quality Assurance Project Plan (QAPP) for the Former Drive & Park, Inc. site (site) at 28 IBM Road in Poughkeepsie, New York to describe in detail the field sampling and quality assurance/quality control methods to be used during the groundwater sampling and soil management tasks described in the Site Management Plan for the site. This QAPP is included as Appendix F of the Site Management Plan.

The tasks covered by this QAPP are soil sampling to be conducted during intrusive site work which may encounter potentially impacted soils, waste characterization sampling, backfill sampling, and groundwater monitoring.

This QAPP was prepared in accordance with the New York State Department of Environmental Conservation's (NYSDEC's) May 2010 *DER-10 Technical Guidance for Site Investigation and Remediation* (DER-10) and provides guidelines and procedures to be followed by field personnel. The remainder of this QAPP is organized as follows:

- Sampling Objectives (Section 2);
- Sample Media, Locations, Analytical Suites, and Frequency (Section 3);
- Field Sampling Procedures (Section 4);
- Sample Handling (Section 5); and
- Data Quality Review (Section 6).

2.0 SAMPLING OBJECTIVES

The sampling program is designed to meet the data quality objectives set forth in DER-10. The analytical parameters selected for each sample, as described in Section 3, are intended to meet the following objectives:

- Analyze soil samples collected during intrusive activities which will encounter potentially impacted soil for likely contaminants of concern given the known history and current use of the property (i.e., for benzene, toluene, ethylbenzene and total xylenes);
- Analyze excavated soil for parameters required by the selected disposal facility;
- Analyze imported backfill and excavated soil to be reused on-site for parameters required to evaluate its suitability for use as backfill that meets the criteria

specified in the Excavation Work Plan (EWP) included in the Site Management Plan; and

- Analyze groundwater samples to monitor performance of the remedy.

Sample media, locations and analytical suites and associated quality assurance/quality control (QA/QC) procedures are discussed in Section 3 of this QAPP. Sampling procedures and associated QA/QC procedures are discussed in Section 4. A discussion of the data quality objectives for the work and the data quality review process to be used for laboratory data verification is provided in Section 6.

3.0 SAMPLE MEDIA, LOCATIONS, ANALYTICAL SUITES, AND FREQUENCY

The media to be sampled may include soil and groundwater. Sampling locations, analytical suites, and frequency vary by the media to be sampled, as discussed below.

3.1 EXCAVATION CONFIRMATION SOIL SAMPLING

The bottom of any excavation that will encounter potentially impacted material will be sampled at a frequency of one sample per 900 square feet of bottom area, in accordance with the guidance provided in NYSDEC DER-10, for excavations 20 to 300 feet in perimeter. Samples will be analyzed for benzene, toluene, ethylbenzene and total xylenes. Areas that appear more heavily impacted, if any, will be given sampling preference.

Post excavation sidewall samples will be collected at a frequency of one sample per 30 linear feet and analyzed for benzene, toluene, ethylbenzene and total xylenes. Areas that appear more heavily impacted, if any, will be given sampling preference.

Matrix spike/matrix spike duplicate (MS/MSD) samples will be collected at a frequency of one MS/MSD sample per 20 samples collected.

3.2 WASTE CHARACTERIZATION SAMPLING

Samples of soil generated by excavation activities and wastewater generated by excavation dewatering and monitoring well purging will be collected for waste characterization as specified in the EWP and as required by the selected disposal facility. The samples will be analyzed as required by the selected disposal facility.

3.3 BACKFILL SAMPLING

When excavation and removal of potentially impacted soil is complete, the excavation will be backfilled and compacted with imported, clean fill meeting the criteria described in the EWP, or with soil excavated during the intrusive work, if that material is deemed suitable for reuse in accordance with the procedures described in the EWP. The backfill material will be free of extraneous debris or solid waste.

3.4 GROUNDWATER SAMPLING

Groundwater monitoring will be performed as described in the Site Management Plan to evaluate the effectiveness of the remedy in reducing concentrations of benzene, toluene, ethylbenzene and total xylenes in the groundwater. In accordance with the Site Management Plan, periodic monitoring will take place in existing on-site wells MW-1, MW-201 and MW-203, and off-site wells MW-12 and MW-110.

Groundwater samples will be analyzed for benzene, toluene, ethylbenzene and total xylenes using U.S. EPA Method 8260B. QA/QC samples, including field duplicates and matrix spike/matrix spike duplicate (MS/MSD), will be collected at a frequency of one per 20 samples. Trip blanks will be submitted at a frequency of one per sample delivery group (i.e., one per cooler containing samples) or one per 20 samples, whichever is greater.

3.5 ANALYTICAL LABORATORY

Laboratory analyses will be performed by a New York State Department of Health (NYSDOH) Environmental Laboratory Accreditation Program (ELAP) -certified laboratory in accordance with the NYSDEC Analytical Services Protocol (ASP) using U.S. EPA SW-846 Methods.

4.0 FIELD SAMPLING PROCEDURES

This section provides a discussion of the field procedures to be used for sampling of soil and groundwater.

4.1 EXCAVATION CONFIRMATION SOIL SAMPLING

Post-excavation soil samples will be collected as grab samples using pre-cleaned sampling tools (i.e., trowels, spatulas, etc.). Samples may be collected from the excavator bucket. Areas that appear more heavily impacted, if any, will be given sampling preference.

4.2 WASTE CHARACTERIZATION SAMPLING

Waste characterization samples will be collected and analyzed as specified by the EWP and the selected disposal facility. Soil samples will be collected using pre-cleaned sampling tools. Waste water samples will typically be collected using pre-cleaned or new, disposable bailers or by dipping the sample containers into the water to be sampled.

4.3 BACKFILL SAMPLING

Samples of imported backfill and excavated soil to be reused on-site will be collected as specified in the EWP. Samples will be collected using pre-cleaned sampling tools that will vary depending on the nature of the source of the fill.

4.4 GROUNDWATER SAMPLING

Prior to sample collection, the depth to water will be measured in the monitoring wells using a pre-cleaned electronic well sounder or other measurement device. The wells will then be purged using low-flow techniques. The purging and sampling equipment will generally consist of a

peristaltic pump (or similar) and new or dedicated tubing. Water quality parameter readings, including temperature, pH, and conductivity, will be collected using the flow-through cell to prevent sample contact with atmospheric air. Samples will be collected through the new or dedicated tubing that bypasses the flow-through cell. Non-disposable sampling equipment, including submersible pumps (if necessary) and electronic well sounders, will be decontaminated before and after use in each well by washing in Alconox® detergent (or similar) and water then double rinsing in distilled water.

Well sampling activities will be recorded on a well sampling record. Other observations, including well integrity, will be noted on the well sampling record. The well sampling record will serve as the inspection form for the groundwater monitoring well network.

5.0 SAMPLE HANDLING

Procedures for sample preservation, packaging and shipping are discussed below.

5.1 FIELD SAMPLE HANDLING

A discussion of the proposed number and types of samples to be collected, as well as the analyses to be performed, can be found in the EWP and Section 3.0 of this QAPP. All samples will be collected and preserved in accordance with *Test Methods for Evaluating Solid Waste* (U.S. EPA SW-846) and NYSDEC requirements for the type of analysis required. Samples will be collected in laboratory-provided containers and placed in iced coolers for shipment to an ELAP-certified analytical laboratory.

5.2 SAMPLE CUSTODY DOCUMENTATION

Sample custody will be maintained from the point of sampling through receipt by the analytical laboratory. All samples being shipped for analysis will be accompanied by a properly completed chain-of-custody record. When transferring the possession of samples, individuals relinquishing and receiving will sign, date, and note the time on the record. This record documents transfer of custody of samples from the sampler to another person and/or to/from a secure storage area and/or to the shipper, and/or to the laboratory. Samples will be packaged for shipment and dispatched to the appropriate laboratory for analysis with a separate, signed custody record enclosed in each sample box or cooler.

5.3 SAMPLE SHIPMENT

Sample packaging and shipping procedures are based upon U.S. EPA specifications, as well as U.S. Department of Transportation (DOT) regulations. The procedures vary depending on sample analytes, expected concentrations, and matrix. Samples will be preserved appropriately from the time of sample collection.

6.0 DATA QUALITY REVIEW

Data validation is the process of reviewing data and accepting, qualifying, or rejecting data on the basis of criteria using established U.S. EPA guidelines. Laboratory data generated during

field investigations will be reported by the laboratory in accordance with their internal QA/QC procedures. The data will then be subjected to a limited data verification performed according to the data quality review procedures discussed below.

The data quality objectives are to determine the quality of soil at the perimeter of excavations conducted under the EWP, to evaluate the effectiveness of the remedy in reducing contaminant concentrations in groundwater, to determine the suitability of backfill material, and to evaluate chemical characteristics of waste for off-site disposal.

The data verification approach will consist of a systematic review of the analytical results, quality control methods, and quality control results. Best professional judgment in any area not specifically addressed by U.S. EPA guidelines will be utilized as necessary.

The data quality review will include a data completeness check of each data package, a transcription check of sample results, and a review of all laboratory reporting forms. Specifically, the review will include:

- Review of data package completeness;
- Review of the required reporting summary forms to determine if the QC requirements were met and to determine the effect of failed QC requirements on the precision, accuracy, and sensitivity of the data;
- Application of standard data quality qualifiers to the data.

In addition, each data quality review will include a review of the following QA/QC parameters:

- Sample holding times;
- Field and laboratory blank results;
- Matrix spikes/matrix spike duplicates;
- Analyte quantitation limits and method detection limits; and
- Duplicate relative percent differences (RPDs).

The results of the data quality review and corrective actions implemented will be recorded on a QA/QC worksheet. The data reviewer will initial and date the QA/QC worksheet. The QA/QC worksheet will be attached to the final analytical laboratory report that is retained in the project files.

Laboratory data for groundwater samples collected from monitoring wells and for excavation confirmation soil samples will be reported in NYSDEC ASP Category B deliverables.

APPENDIX G

Monitoring Well Boring and Construction Logs

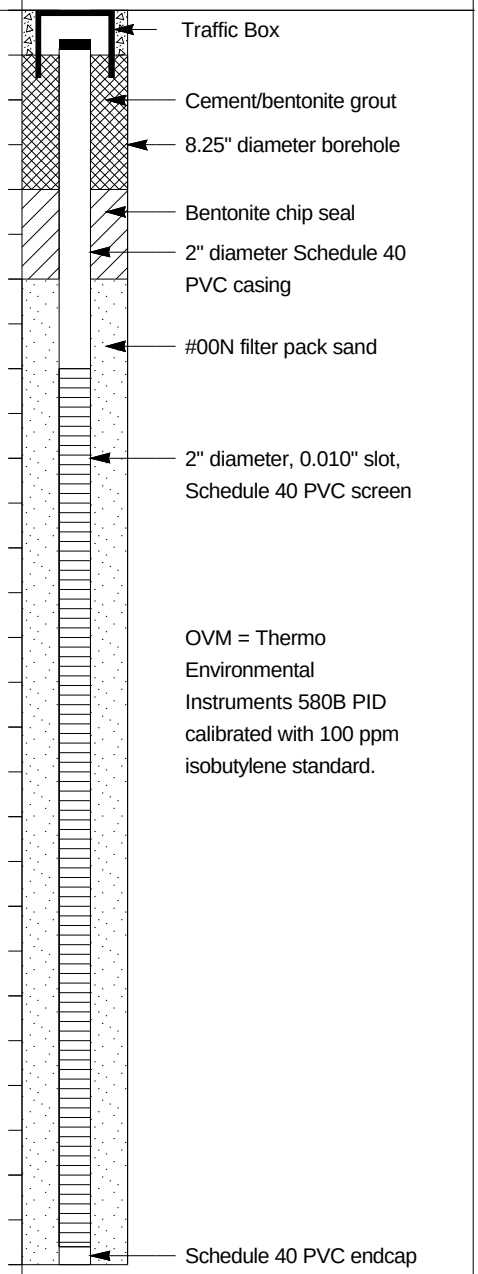
PROJECT:	Boring/Well Log Explanation			
BORING LOCATION:	ELEVATION AND DATUM:			
DRILLING CONTRACTOR:	DATE STARTED:	DATE FINISHED:		
DRILLING METHOD:	TOTAL DEPTH (ft.):	MEASURING POINT:		
DRILLING EQUIPMENT:	DEPTH TO WATER	FIRST	COMPL.	24 HRS.
SAMPLING METHOD:	LOGGED BY:			
HAMMER WEIGHT: DROP:	RESPONSIBLE PROFESSIONAL:	REG. NO.		

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ Foot	OVM READING (ppm)	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter. Surface Elevation:	REMARKS
1–15	SB-1-14.0				**Notes:** 1. Soil described using visual-manual procedures of American Society of Testing and Materials (ASTM) Standard D 2488 for guidance; a Standard based on the Unified Soil Classification System. 2. Soil color described according to Munsell Color Chart. 3. Dashed lines separating soil strata represent inferred boundaries between sampled intervals that may be abrupt or gradual transitions. 4. Solid lines represent approximate boundaries observed within sample intervals. 5. OVM = organic vapor meter, reading in volumetric parts per million (ppm). 6. Odor, if noted is subjective and not necessarily indicative of specific compounds or concentrations. 7. NA = not applicable. 8. ND = no data. Interval of recovered soil collected with a continuous core sampler. Interval of recovered soil collected with split-spoon drive sampler. Interval of no recovery. Sample collected for chemical analysis and sample identification.	

KEYFORM (REV. 7/99)

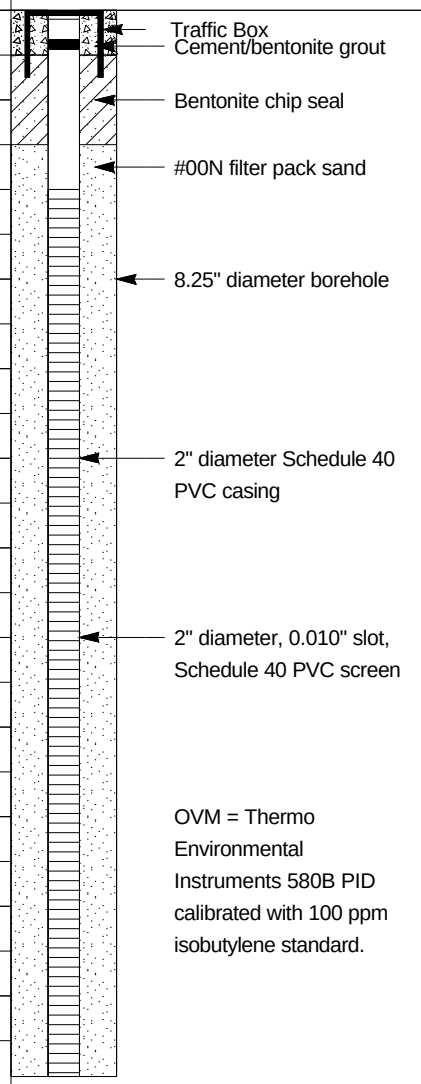
PROJECT: AVIS POUGHKEEPSIE Poughkeepsie, New York	**Log of Well No. MW-103**
BORING LOCATION: 35' NNE and 40' WNW of garage corner	TOP OF CASING ELEVATION AND DATUM: Not surveyed; datum is ground surface
DRILLING CONTRACTOR: Martin Geo-Environmental, LLC	DATE STARTED: 11/20/03 / DATE FINISHED: 11/20/03
DRILLING METHOD: Hollow-stem auger	TOTAL DEPTH (ft.): 14.0 / SCREEN INTERVAL (ft.): 4-14
DRILLING EQUIPMENT: Mobile B-61	DEPTH TO WATER (ft.): FIRST / COMPL. / CASING: 2" Sch. 40 PVC
SAMPLING METHOD: SPT stainless steel split spoon drive sampler [2' x 2"]	LOGGED BY: M. Cummings
HAMMER WEIGHT: 140 lbs / DROP: 30 in.	RESPONSIBLE PROFESSIONAL: NA / REG. NO. NA

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ Foot	OVM Reading	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter.
					Surface Elevation: Not surveyed
0					ASPHALTIC CONCRETE
1					SILTY SAND (SM): dark olive brown (2.5Y 3/3), moist, 80% fine sand, 20% nonplastic fines
2			9	0	
3					
4			5	0	
5	MW-103-5.0		8	<1	reddish brown (2.5YR 4/4)
6					
7					wet
8			10	0	
9			7	0	
10					
11			2	0	
12					
13			18	0	PEAT
14					SILTY SAND with GRAVEL (SM): reddish brown (2.5Y 4/4), wet, 70% fine sand, 15% nonplastic fines, 15% fine gravel
15					Bottom of boring at 14.0 feet



PROJECT: AVIS POUGHKEEPSIE Poughkeepsie, New York	**Log of Well No. MW-104**
BORING LOCATION: 10' ESE and 15' SSW of NE building corner	TOP OF CASING ELEVATION AND DATUM: Not surveyed; datum is ground surface
DRILLING CONTRACTOR: Martin Geo-Environmental, LLC	DATE STARTED: 11/20/03 / DATE FINISHED: 11/20/03
DRILLING METHOD: Hollow-stem auger	TOTAL DEPTH (ft.): 14.0 / SCREEN INTERVAL (ft.): 2-14
DRILLING EQUIPMENT: Mobile B-61	DEPTH TO WATER (ft.): FIRST / COMPL. / CASING: 2" Sch. 40 PVC
SAMPLING METHOD: SPT stainless steel split spoon drive sampler [2' x 2"]	LOGGED BY: M. Cummings
HAMMER WEIGHT: 140 lbs / DROP: 30 in.	RESPONSIBLE PROFESSIONAL: NA / REG. NO. NA

DEPTH (feet)	SAMPLES Sample No.	SAMPLES Sample	SAMPLES Blows/ Foot	OVM Reading	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter.
					Surface Elevation: Not surveyed
0					POORLY GRADED SAND with SILT and GRAVEL (SP-SM): light olive brown (2.5Y 5/6), moist, 75% fine sand, 15% fine angular gravel, 10% nonplastic fines [FILL]
4	MW-104-4.5		10	0	
5					wet
6			6	0	
6					POORLY GRADED SAND with SILT (SP-SM): light olive brown (2.5Y 5/6), wet, 90% fine sand, 10% nonplastic fines [NATIVE]
7			5	<1	
9			8	0	
10					CLAYEY SAND (SC): gray (10Y 5/), wet, 80% fine sand, 20% medium plasticity fines
11			6	0	
12					POORLY GRADED SAND with SILT (SP-SM): dark gray (5GY 4/), wet, 90% fine sand, 10% nonplastic fines
14					PEAT Bottom of boring at 14.0 feet
15					

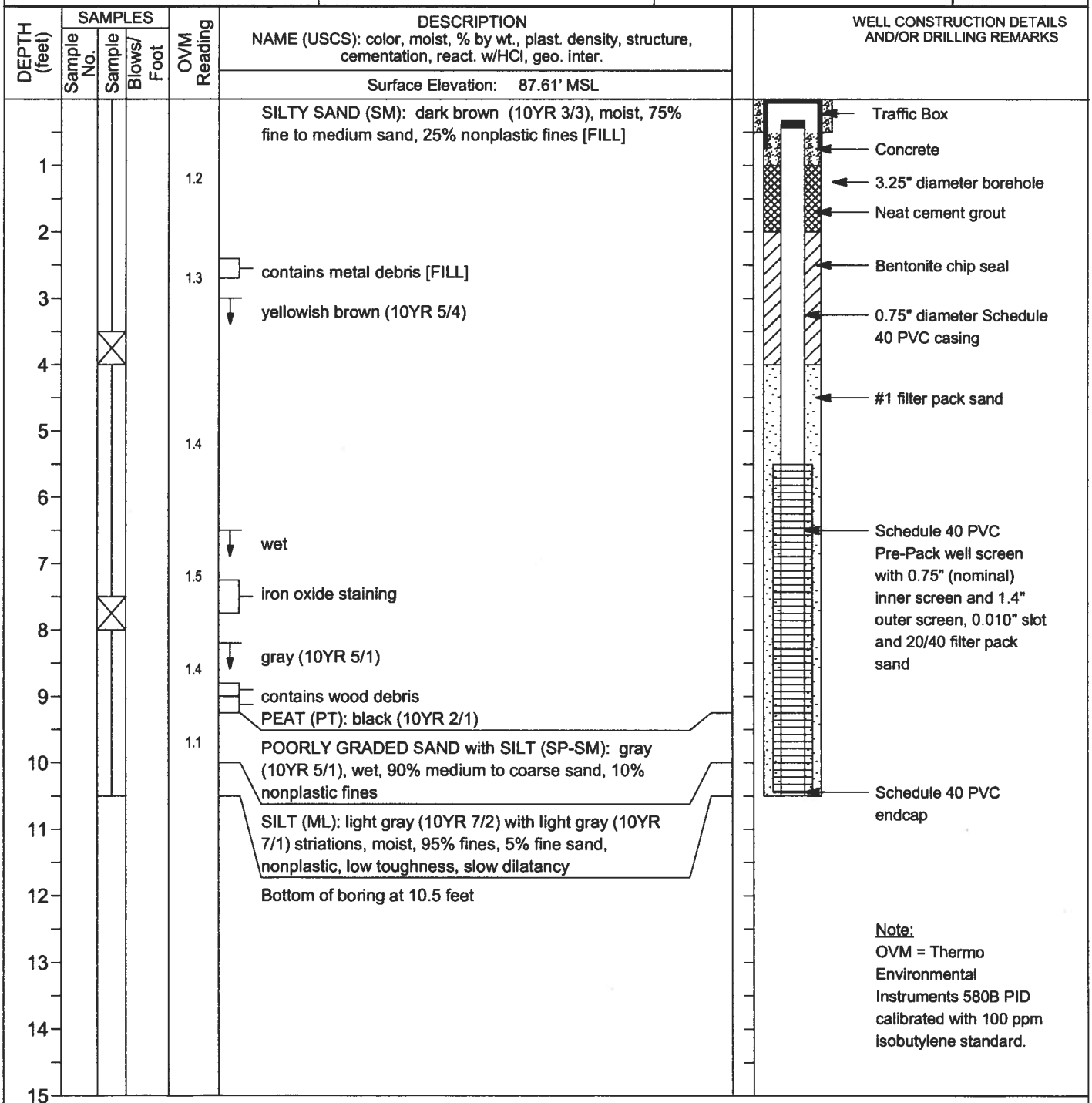


WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS

OVM = Thermo Environmental Instruments 580B PID calibrated with 100 ppm isobutylene standard.

OAKWELLV_PPACKTOC(5/03)

PROJECT: FORMER DRIVE & PARK, INC. SITE Poughkeepsie, New York	**Log of Well No. MW-110**
BORING LOCATION: 144 Barnegat Road	TOP OF CASING ELEVATION AND DATUM: 87.51' MSL
DRILLING CONTRACTOR: Zebra Environmental, Inc.	DATE STARTED: 7/6/05 / DATE FINISHED: 7/6/05
DRILLING METHOD: Direct push	TOTAL DEPTH (ft.): 10.5 / SCREEN INTERVAL (ft.): 5.5-10.5
DRILLING EQUIPMENT: Geoprobe 5400	DEPTH TO WATER (ft.): FIRST 6.5, COMPL. NA / CASING: 2" Sch. 40 PVC
SAMPLING METHOD: Geoprobe macro-core sampler [4' x 1.5"]	LOGGED BY: D. Averill
HAMMER WEIGHT: NA / DROP: NA	RESPONSIBLE PROFESSIONAL: / REG. NO.



Note:
OVM = Thermo Environmental Instruments 580B PID calibrated with 100 ppm isobutylene standard.

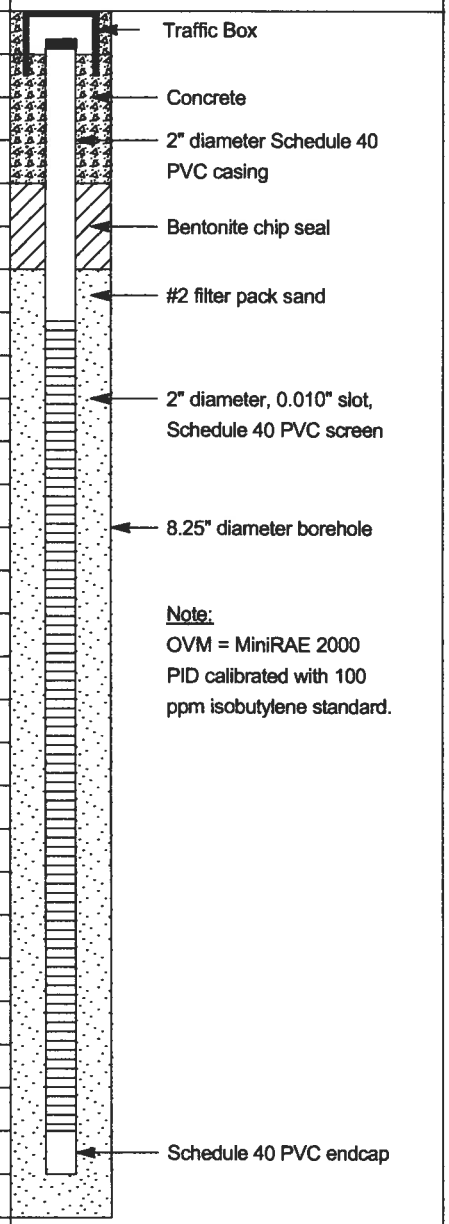
PROJECT: FORMER DRIVE & PARK, INC. SITE Poughkeepsie, New York	**Log of Well No. MW-111**
BORING LOCATION: 144 Barnegat Road	TOP OF CASING ELEVATION AND DATUM: 81.32' MSL
DRILLING CONTRACTOR: Zebra Environmental, Inc.	DATE STARTED: 7/6/05 / DATE FINISHED: 7/6/05
DRILLING METHOD: Direct push	TOTAL DEPTH (ft.): 8.0 / SCREEN INTERVAL (ft.): 2.0-7.0
DRILLING EQUIPMENT: Geoprobe 5400	DEPTH TO WATER (ft.): FIRST 3.1, COMPL. NA / CASING: 2" Sch. 40 PVC
SAMPLING METHOD: Geoprobe macro-core sampler [4' x 1.5"]	LOGGED BY: D. Averill
HAMMER WEIGHT: NA / DROP: NA	RESPONSIBLE PROFESSIONAL: / REG. NO.

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ Foot	OVM Reading	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter.	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
					Surface Elevation: 81.42' MSL	
1				1.3	SILTY SAND (SM): brown (10YR 4/3), moist, 75% fine to medium sand, 25% nonplastic fines, contains rootlets	Traffic Box 3.25" diameter borehole Bentonite chip seal
2				2	SILTY SAND with GRAVEL (SM): dark grayish brown (10YR 4/2) mottled with dark yellowish brown (10YR 4/6), moist, 70% fine to coarse sand, 15% fine gravel, 15% nonplastic fines	#1 filter pack sand 0.75" diameter Schedule 40 PVC casing
3					gray (10YR 5/1), wet,	
4					POORLY GRADED SAND with SILT (SP-SM): dark bluish gray (5B 3/1), wet, 90% fine to medium sand, 10% nonplastic fines	Schedule 40 PVC Pre-Pack well screen with 0.75" (nominal) inner screen and 1.4" outer screen, 0.010" slot and 20/40 filter pack sand
5				1.7		
6					SILT with SAND (ML): dark gray (10YR 4/1), moist, 80% fines, 20% fine sand, low plasticity, slow dilatancy, low toughness, soft	
7				1.1	PEAT [PT]	Schedule 40 PVC endcap
8					POORLY GRADED SAND with SILT (SP-SM): dark bluish gray (5B 3/1), wet, 90% fine to medium sand, 10% nonplastic fines	Native material
9					Bottom of boring at 8.0 feet	
10						
11						
12						
13						
14						
15						

Note:
OVM = Thermo Environmental Instruments 580B PID calibrated with 100 ppm isobutylene standard.

PROJECT: FORMER DRIVE & PARK, INC. SITE Poughkeepsie, New York	**Log of Well No. MW-201**
BORING LOCATION: 92' S, 103' W of SW garage corner	TOP OF CASING ELEVATION AND DATUM: 87.64' MSL (NAVD 88)
DRILLING CONTRACTOR: Martin Geo-Environmental, LLC	DATE STARTED: 6/13/06 / DATE FINISHED: 6/13/06
DRILLING METHOD: Hollow-stem auger	TOTAL DEPTH (ft.): 14.0 / SCREEN INTERVAL (ft.): 3.6-13.0
DRILLING EQUIPMENT: Mobile B-61	DEPTH TO WATER (ft.): FIRST 4.8, COMPL. 5.0 / CASING: 2" Sch. 40 PVC
SAMPLING METHOD: Split-spoon drive sampler [24" x 2"]	LOGGED BY: D. Averill
HAMMER WEIGHT: 140 lbs / DROP: 30 in.	RESPONSIBLE PROFESSIONAL: NA / REG. NO. NA

DEPTH (feet)	SAMPLES Sample No.	SAMPLES Sample	SAMPLES Blows/ Foot	OVM Reading	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter. Surface Elevation: 88.0' MSL
0					ASPHALTIC CONCRETE
1					POORLY GRADED GRAVEL with SAND (GP): grayish brown (10YR 5/2), moist, 80% fine to coarse gravel, 15% fine to medium sand, 5% fines [FILL]
2			15	0	
			10		
3			8		
			7		
4			23	0	
			12		
5			13		wet
			11		
6			10	0	POORLY GRADED GRAVEL (GP): grayish brown (10YR 5/2), wet, 90% fine to coarse gravel, 10% fine to medium sand, trace fines [FILL]
			15		
7			21		
			21		
8			20		
			32	0	POORLY GRADED GRAVEL with SAND (GP): grayish brown (10YR 5/2), wet, 75% fine to coarse gravel, 25% fine to coarse sand [FILL]
9			30		
			30		
10			15		POORLY GRADED GRAVEL (GP): grayish brown (10YR 5/2), wet, 90% fine to coarse gravel, 10% fine to coarse sand, trace fines [FILL]
			25	0	
11			18		
			11		
12			6		SILT (ML): dark gray (10YR 4/1), wet, 90% fines, 10% fine sand, nonplastic, firm
			6	0	
13			7		
			8		
14					Bottom of boring at 14.0 feet
15					

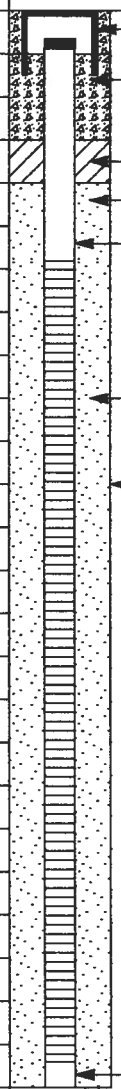


OAKWELLV_TOC(REV. 9/00)

PROJECT: FORMER DRIVE & PARK, INC. SITE Poughkeepsie, New York	**Log of Well No. MW-202**
BORING LOCATION: 82' S, 4' E of SW garage corner	TOP OF CASING ELEVATION AND DATUM: 86.53' MSL (NAVD 88)
DRILLING CONTRACTOR: Martin Geo-Environmental, LLC	DATE STARTED: 6/13/06 / DATE FINISHED: 6/13/06
DRILLING METHOD: Hollow-stem auger	TOTAL DEPTH (ft.): 12.5 / SCREEN INTERVAL (ft.): 2.9-12.2
DRILLING EQUIPMENT: Mobile B-61	DEPTH TO WATER (ft.): FIRST 3.5, COMPL. NA / CASING: 2" Sch. 40 PVC
SAMPLING METHOD: Split-spoon drive sampler [24" x 2"]	LOGGED BY: D. Averill
HAMMER WEIGHT: 140 lbs / DROP: 30 in.	RESPONSIBLE PROFESSIONAL: NA / REG. NO. NA

DEPTH (feet)	SAMPLES Sample No.	SAMPLES Sample	SAMPLES Blows/ Foot	OVM Reading	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter. Surface Elevation: 86.92' MSL
0					ASPHALTIC CONCRETE
1					POORLY GRADED GRAVEL with SAND (GP): grayish brown (10YR 5/2), moist, 80% fine to coarse gravel, 15% fine to medium sand, 5% fines [FILL]
2			4	0	SILTY SAND (SM): grayish brown (10YR 5/2), moist, 80% fine to medium sand, 15% nonplastic fined, 5% fine gravel
3			4		
			2		
			2		wet, 70% fine sand, 30% nonplastic fines
4			2		
			2	0	
5			2		
			2		
6			4		
			3		
			2	0	light brownish gray (10YR 6/2)
7			3		
			3		
8			2		gray (10YR 5/1)
			1	0	
9			2		
			2		PEAT (PT)
10			2		
			7	0	SILT (ML): gray (10YR 5/1), moist, 90% fines, 10% fine sand, nonplastic, firm, contains trace rootlets
11			12		
			7		
12					
13					Bottom of boring at 12.5 feet
14					
15					

WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS



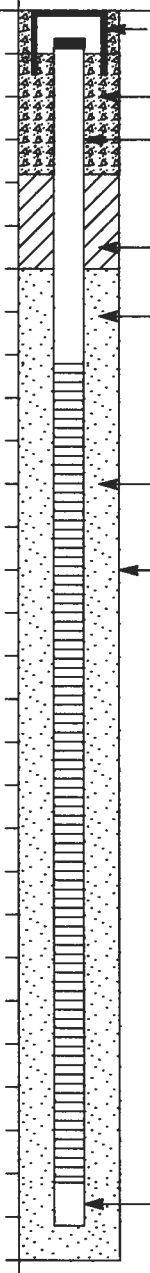
Note:
OVM = MiniRAE 2000 PID calibrated with 100 ppm isobutylene standard.

OAKWELLV_TOC(REV. 9/00)

PROJECT: FORMER DRIVE & PARK, INC. SITE Poughkeepsie, New York	**Log of Well No. MW-203**
BORING LOCATION: 53' N, 60' W of SW garage corner	TOP OF CASING ELEVATION AND DATUM: 90.06' MSL (NAVD 88)
DRILLING CONTRACTOR: Martin Geo-Environmental, LLC	DATE STARTED: 6/13/06 / DATE FINISHED: 6/13/06
DRILLING METHOD: Hollow-stem auger	TOTAL DEPTH (ft.): 14.5 / SCREEN INTERVAL (ft.): 4.1-13.6
DRILLING EQUIPMENT: Mobile B-61	DEPTH TO WATER (ft.): FIRST 7.0, COMPL. NA / CASING: 2": Sch. 40 PVC
SAMPLING METHOD: Split-spoon drive sampler [24" x 2"]	LOGGED BY: D. Averill
HAMMER WEIGHT: 140 lbs / DROP: 30 in.	RESPONSIBLE PROFESSIONAL: NA / REG. NO. NA

DEPTH (feet)	SAMPLES Sample No.	SAMPLES Sample	SAMPLES Blows/ Foot	OVM Reading	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter. Surface Elevation: 90.44' MSL
0					ASPHALTIC CONCRETE
1					POORLY GRADED GRAVEL with SAND (GP): grayish brown (10YR 5/2), moist, 70% fine to coarse gravel, 25% fine to coarse sand, 5% fines [FILL]
2			17	129	
3			12		
4			2		
5			23	14.3	
6			12		
7			20		
8			23		
9			17		
10			19	21.6	
11			21		
12			14		wet
13			11		90% fine to coarse gravel
14			7	0	
15			8		
			17		
			11		
			8	0	70% fine to coarse gravel
			14		
			13		
			11		
			5	0	
			8		
			6		geotextile fabric
			10		SILT (ML): dark gray (10YR 4/1), wet, 90% fines, 10% fine sand, nonplastic, firm
					Bottom of boring at 14.5 feet

WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS



Note:
OVM = MiniRAE 2000 PID calibrated with 100 ppm isobutylene standard.

OAKWELLV_TOC(REV. 9/00)

Well Number: MW-1 Drilling Method: Hollow Stem Auger

Date Started: January 17, 1991 Drilling Fluids: N/A

Date Finished: January 17, 1991 Static Water Level: 8.25 Ft Date: 1/31/91

Geologist/Engineer: NETC Observed By: B. Rose

Remarks: Actual Total Well Depth 18.70 Feet Below Grade

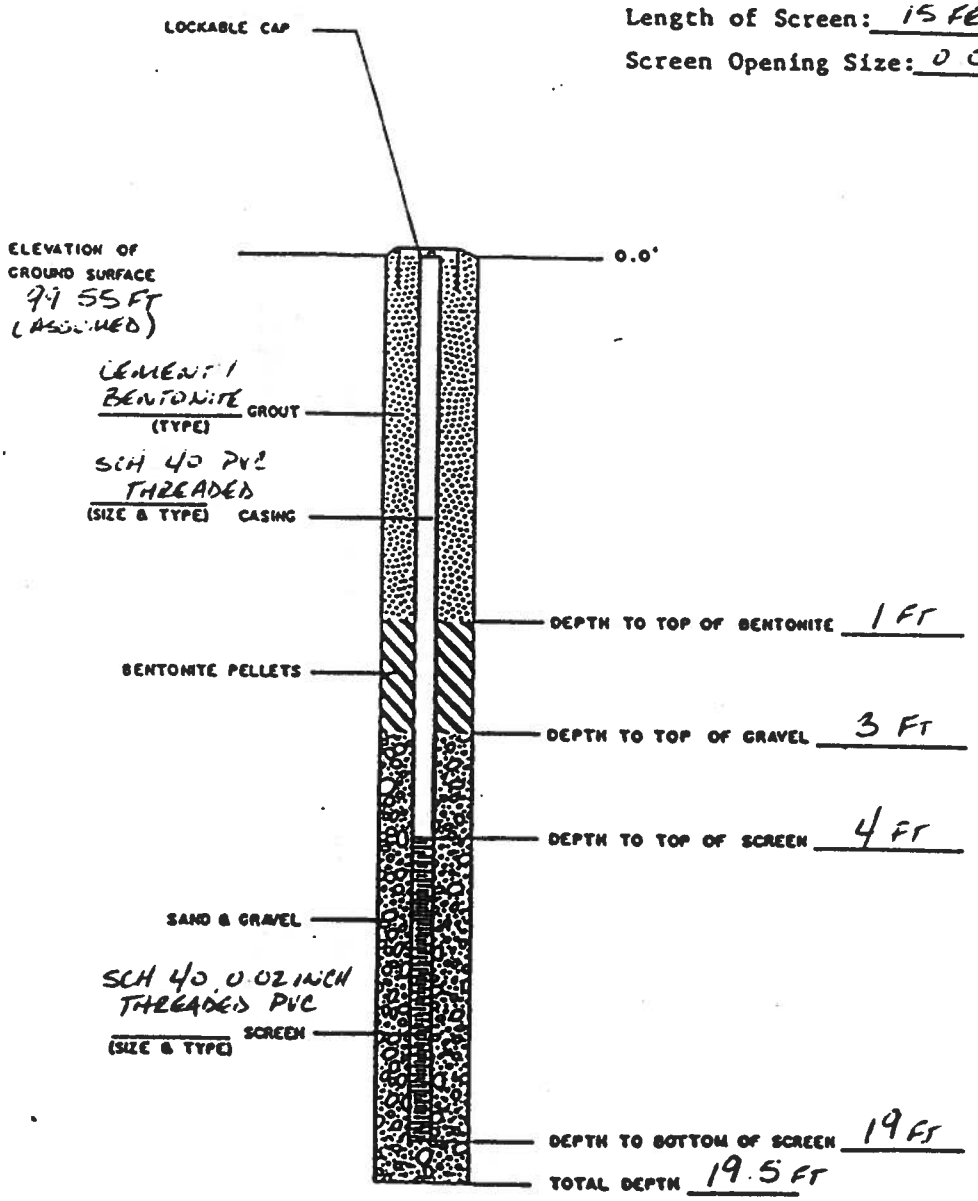
O.D. of Borehole: 8.25 inches

O.D. of Casing: 4 inches

Length of Screen: 15 feet

Screen Opening Size: 0.02 inch

ALL DEPTHS REFERENCED FROM GROUND SURFACE



NETC

National Environmental Technologies Corporation

1010 N. Quebec Street • Allentown, PA 18103

Groundwater & Environmental Consulting Services

RECORD OF BORING NO. MW-1

Client: AVIS RENT A CAR SYSTEM, INC

Project: AVIS POUGHKEEPSIE

Project No.: NE91-100

Elev. (ft.)	Depth (ft.)	Description	Sample No.	Sample Depth (ft.)	Sample Type	Blows per 6"	Recovery (in.)
N/A	0-5	AUGERED TO FIVE FEET BELOW GRADE - ENCOUNTERED 4-6 INCHES OF ASPHALT AND BALLAST UNDERLAIN BY HEAVY RIP RAP, MEDIUM BROWN FINE TO MEDIUM SAND, AND MEDIUM BROWN FINE TO MEDIUM SAND SILT COARSE FRAGMENTS LESS THAN 5% TO 20%	N/A	N/A	N/A	N/A	N/A
N/A	5-7	MEDIUM BROWN SILTY FINE TO MEDIUM SAND COARSE FRAGMENTS 25% SUBANGULAR SILTSTONE AND SAND STONE GRAVEL	N/A	N/A	N/A	2-4-3-5	1/24
N/A	7-9	LIGHT BROWN FINE SAND COARSE FRAGMENTS LESS THAN 5% STRONG GAS ODOR, MOIST	N/A	N/A	N/A	5-5-4-5	5/24
N/A	9-11	MEDIUM TO DARK BROWN VERY FINE SAND TO FINE TO MEDIUM SAND COARSE FRAGMENTS LESS THAN 5% WEAK GAS ODOR	N/A	N/A	N/A	1-3-2-3	10/24
N/A	11-13	LIGHT BROWN TO YELLOW BROWN SILTY FINE SAND COARSE FRAGMENTS LESS THAN 5%	N/A	N/A	N/A	2-1-2-3	10/24
N/A	17-19	BLACK ORGANIC LAYER COARSE FRAGMENTS LESS THAN 5%. UNDERLAIN BY GRAY/BLUE SILT ALMOST PURE 19 FT END OF BORING	N/A	N/A	N/A	2-2-3-2	14/24

Dates Drilled: 1/17/91

Driller: EMPIRE SOIL INVESTIGATIONS

Water Depth: Initial: ~8 FT

N/A Days after Completion: N/A

N/A Days after Completion: N/A

Drilling Method: HOLLOW STEM AUGER

NETC

National Environmental Technologies Corporation

1010 N. Quebec Street • Allentown, PA 18103

Groundwater & Environmental Consulting Services

Well Number: MW-10 Drilling Method: Hollow Stem Auger

Date Started: August 12, 1992 Drilling Fluids: N/A

Date Finished: August 12, 1992 Static Water Level: 4.05 FT Date: 8/20/92

Geologist/Engineer: B. Hoke / NETC Observed By: NETC

Remarks: DEPTHS ARE APPROXIMATE TO THE NEAREST FOOT

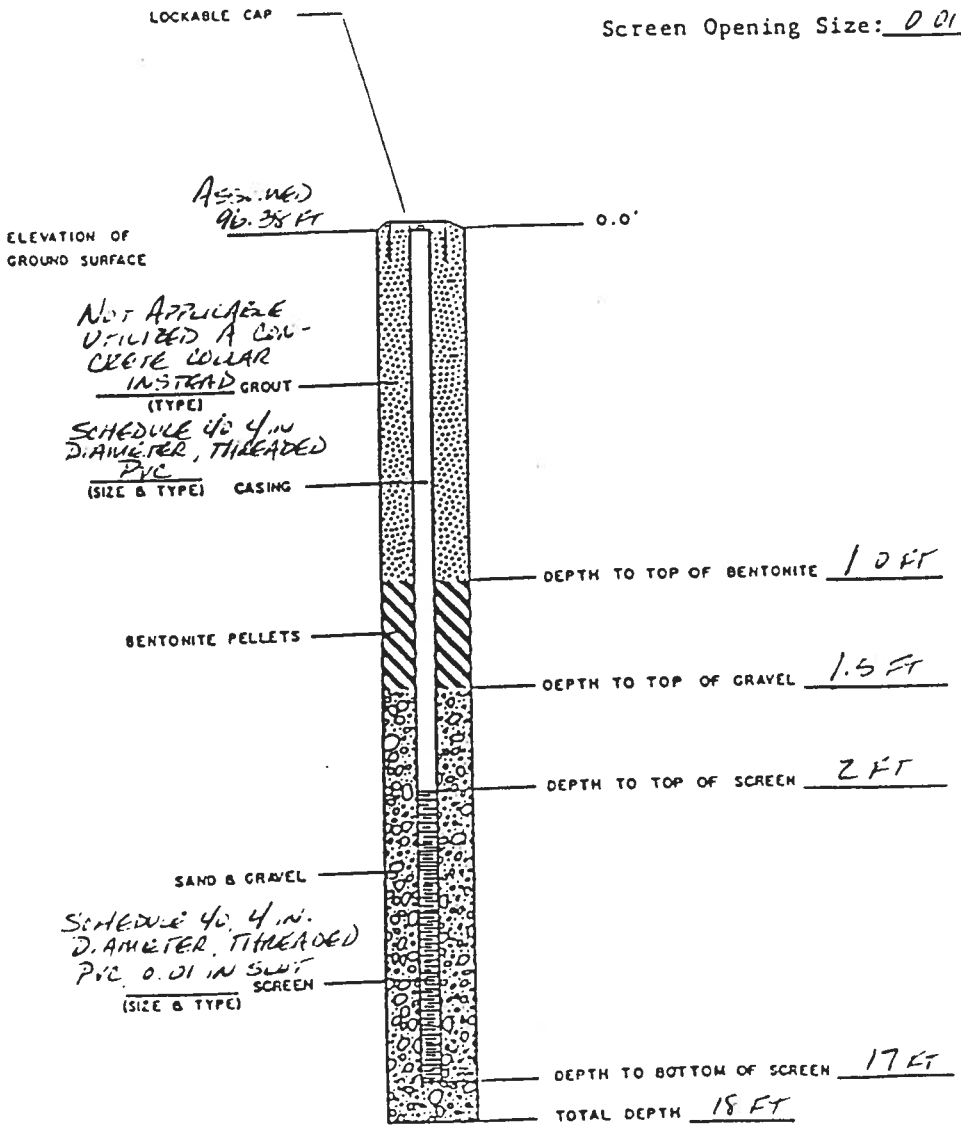
O.D. of Borehole: 11 IN.

O.D. of Casing: 4 IN

Length of Screen: 15 FT

Screen Opening Size: 0.01 FT

ALL DEPTHS REFERENCED FROM GROUND SURFACE



NETC

National Environmental Technologies Corporation

1010 N. Quebec Street • Allentown, PA 18103

Groundwater & Environmental Consulting Services

RECORD OF BORING NO. MW-10

Client: Avis Rent A Car System, Inc

Project: Avis Poughkeepsie

Project No.: NE92-146

Elev. (ft.)	Depth (ft.)	Description	Sample No.	Sample Depth (ft.)	Sample Type	Blows per 6"	Recovery (in.)
N/A	0-5	AUGERED THROUGH 6-8" OF ASPHALT AND BALLAST UNDERLAIN BY A MEDIUM BROWN FINE TO COARSE SAND WITH 10% COARSE FRAGMENTS	N/A	N/A	N/A	N/A	N/A
N/A	5-7	MEDIUM BROWN TO GRAY FINE TO MEDIUM SAND COARSE FRAGMENTS < 5% SATURATED AT BASE HNU BACKGROUND 0.4 PPM READING 0.4 PPM	N/A	N/A	N/A	7-6-7-10	16/24
N/A	7-9	MEDIUM TO DARK GRAY CLAYEY FINE TO MEDIUM SAND, COARSE FRAGMENTS LESS THAN 5% HNU BACKGROUND 0.4 PPM READING 0.4 PPM	N/A	N/A	N/A	9-9-11-10	12/24
N/A	14-16	MEDIUM GRAY CLAYEY SILT, DENSE, COARSE FRAGMENTS < 5% DECAYED ORGANIC MAT (4 INCH THICK) AT 16 FT HNU BACKGROUND 0.4 PPM READING 0.4 PPM	N/A	N/A	N/A	14-16 16-13	16/24
N/A	16-18	GREENISH GRAY CLAYEY FINE TO MEDIUM SAND DENSE, COARSE FRAGMENTS < 0% HNU BACKGROUND 0.4 PPM READING 0.4 PPM END OF BORING	N/A	N/A	N/A	8-13-12-10	12/24

Dates Drilled: August 12, 1992

Driller: EDI

Water Depth: Initial: N/A

N/A Days after Completion: N/A

N/A Days after Completion: N/A

Drilling Method: Hollow Stem Auger

NETC

National Environmental Technologies Corporation

1010 N. Quebec Street • Allentown, PA 18103

Groundwater & Environmental Consulting Services

Well Number: MW-12 Drilling Method: Hollow Stem Auger

Date Started: August 11, 1992 Drilling Fluids: N/A

Date Finished: August 11, 1992 Static Water Level: 4.47 FT Date: 8/26/92

Geologist/Engineer: B. Hoke / NETC Observed By: NETC

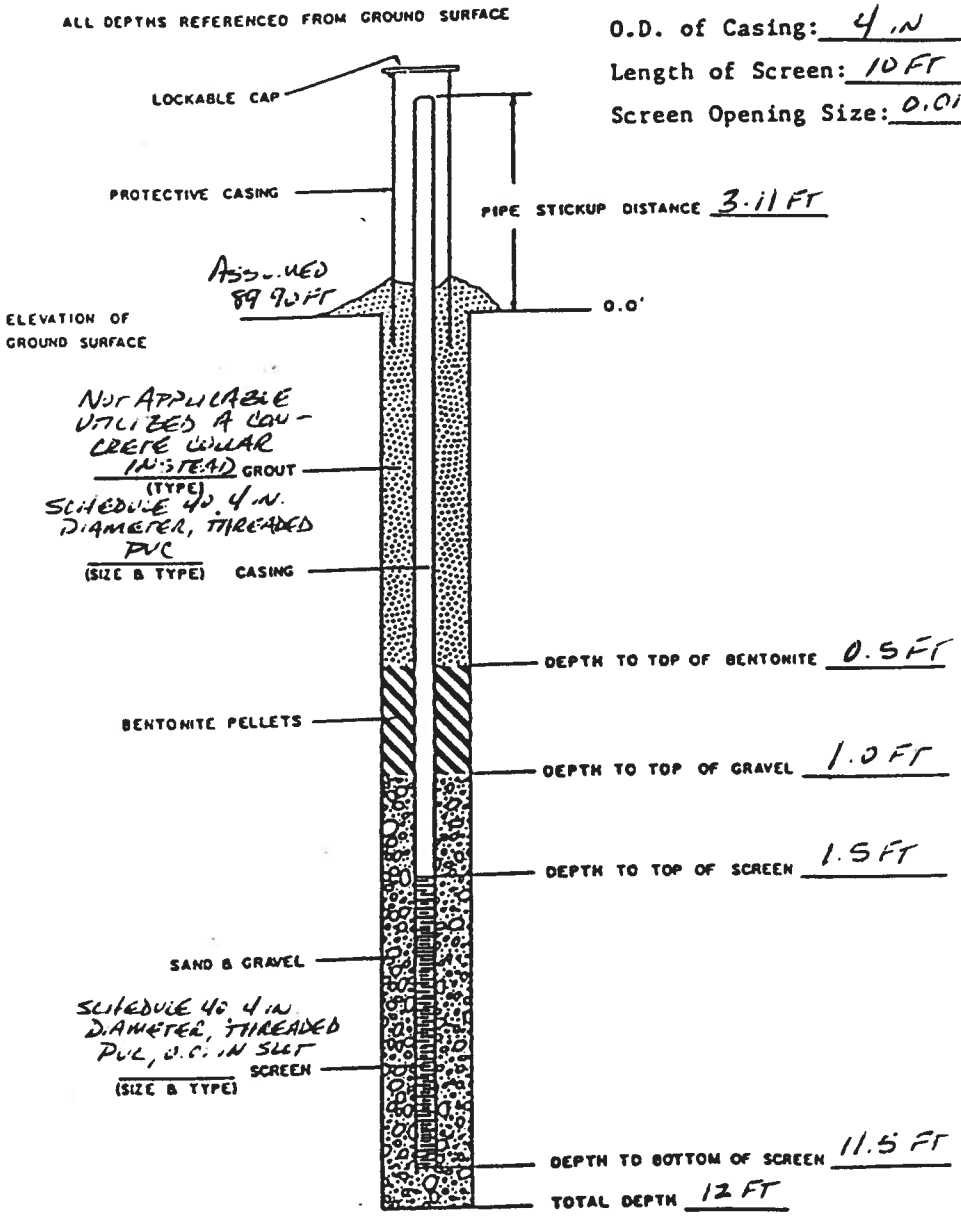
Remarks: DEPTHS ARE APPROXIMATE TO THE NEAREST FOOT

O.D. of Borehole: 11 IN

O.D. of Casing: 4 IN

Length of Screen: 10 FT

Screen Opening Size: 0.01 IN.



NETC

National Environmental Technologies Corporation

1010 N. Quebec Street • Allentown, PA 18103

Groundwater & Environmental Consulting Services

RECORD OF BORING NO. MW-12

Client: AVIS RENT A CAR SYSTEM, INC

Project: AVIS POUGHKEEPSIE

Project No.: NE92-140

Elev. (ft.)	Depth (ft.)	Description	Sample No.	Sample Depth (ft.)	Sample Type	Blows per 6"	Recovery (in.)
N/A	0-2	A SIX INCH DARK BROWN ORGANIC LAYER (ROOT ZONE) UNDERLAIN BY A MEDIUM BROWN FINE SAND, SILT TO SILTY FINE SAND WITH ORANGE BROWN MOTTLES SATURATED AT BASE, ROOTS HNU BACKGROUND 0.4 PPM READING 270 PPM GASOLINE ODOR	N/A	N/A	N/A	1-1-3-5	14/24
N/A	2-4	GRAY SILTY FINE SAND SATURATED, COARSE FRAGMENTS LESS THAN 5% GAS ODOR HNU BACKGROUND 0.4 PPM READING 50.0 PPM	N/A	N/A	N/A	4-4-5-8	12/24
N/A	4-6	GRAY FINE TO MEDIUM SAND COARSE FRAGMENTS LESS THAN 5% GAS ODOR HNU BACKGROUND 0.4 PPM READING 120 PPM	N/A	N/A	N/A	4-4-6-8	14/24
N/A	6-8	GRAY FINE SANDY CLAY COARSE FRAGMENTS LESS THAN 5% NO ODOR HNU BACKGROUND 0.4 PPM READING 0.8 PPM	N/A	N/A	N/A	4-4-5-10	12/24
N/A	8-10	GRAY FINE TO MEDIUM SAND COARSE FRAGMENTS 10% NO ODOR HNU BACKGROUND 0.4 PPM READING 1.0 PPM AUGERED TO 13 FEET END OF BORING	N/A	N/A	N/A	9-12-11-13	8/24

Dates Drilled: August 11, 1992

Driller: EDI

Water Depth: Initial: N/A

N/A Days after Completion: N/A

N/A Days after Completion: N/A

Drilling Method: Hollow Stem Auger

NETC

National Environmental Technologies Corporation

1010 N. Quebec Street • Allentown, PA 18103

Groundwater & Environmental Consulting Services

Well Number: MW-13 Drilling Method: Hollow Stem Auger

Date Started: August 11, 1992 Drilling Fluids: N/A

Date Finished: August 11, 1992 Static Water Level: 4.0 Ft Date: 8/26/92

Geologist/Engineer: B. Huse/NETC Observed By: NETC

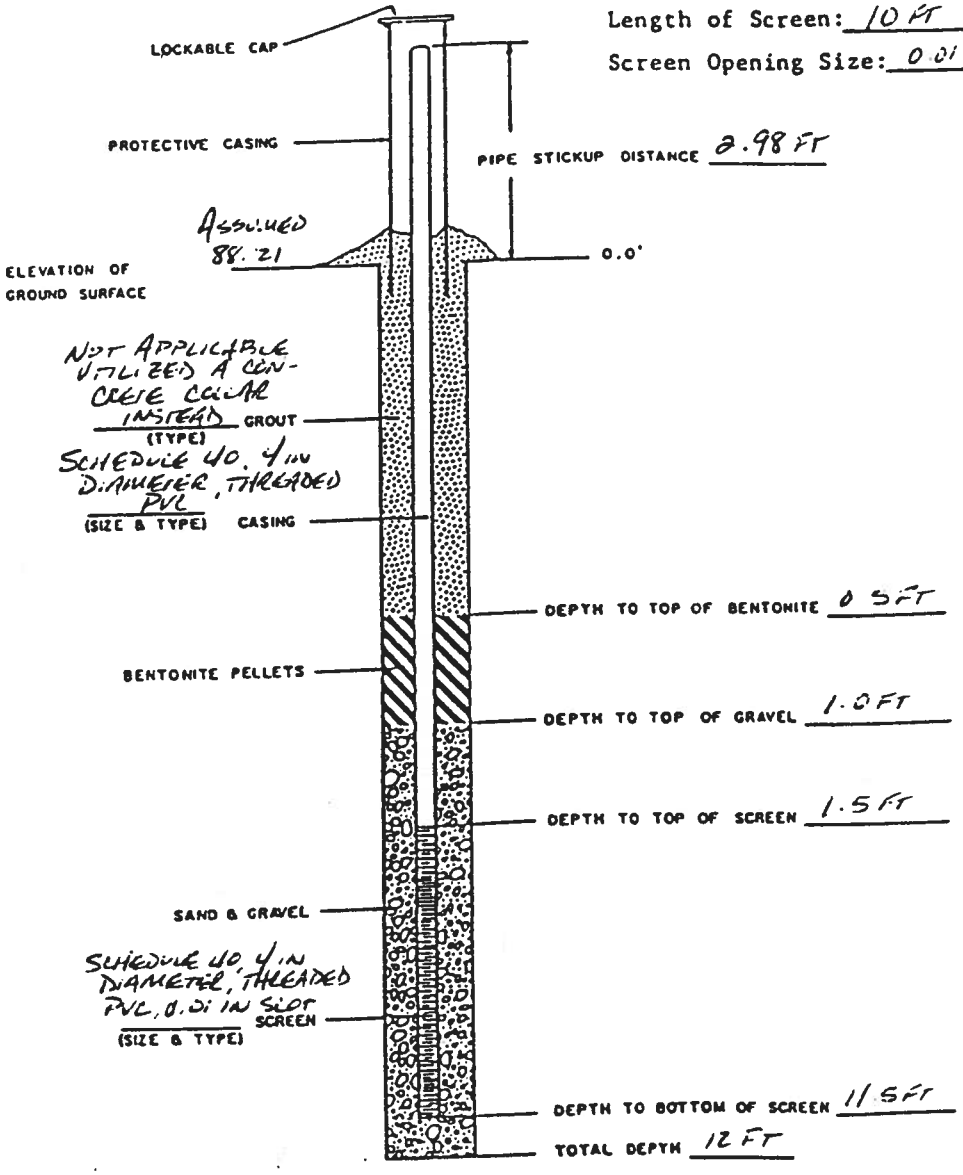
Remarks: DEPTHS ARE APPROXIMATE TO THE NEAREST FT

O.D. of Borehole: 11 IN

O.D. of Casing: 4 IN

Length of Screen: 10 FT

Screen Opening Size: 0.01 IN



NETC

National Environmental Technologies Corporation

1010 N. Quebec Street • Allentown, PA 18103

Groundwater & Environmental Consulting Services

RECORD OF BORING NO. MW-13

Client: AVIS RENT A CAR SYSTEM, INC

Project: AVIS POUGHKEEPSIE

Project No.: NE92-146

Elev. (ft.)	Depth (ft.)	Description	Sample No.	Sample Depth (ft.)	Sample Type	Blows per 6"	Recovery (in.)
N/A	0-2	A SIX INCH DARK BROWN ORGANIC LAYER (ROOT ZONE) UNDERLAIN BY A MEDIUM BROWN FINE SANDY SILT TO SILTY FINE SAND WITH ORANGE BROWN MOTTLES SATURATED AT BASE, ROOTS HNU BACKGROUND 0.5 PPM READING 0.5 PPM	N/A	N/A	N/A	1-1-1-2	18/24
N/A	2-4	MEDIUM BROWN TO GRAY BROWN CLAYEY SAND (FINE TO MEDIUM), PEAT, ROOT ZONE, COARSE FRAGMENTS LESS THAN 5% UNDERLAIN BY A GRAY FINE SAND, COARSE FRAGMENTS LESS THAN 5% HNU BACKGROUND 0.5 PPM READING 0.5 PPM	N/A	N/A	N/A	2-4-4-5	18/24
N/A	5-7	GRAY FINE SAND TO FINE SANDY SILTY CLAY SATURATED COARSE FRAGMENTS < 5% HNU BACKGROUND 0.5 PPM READING 0.5 PPM	N/A	N/A	N/A	1-2-5 &	6/24
N/A	7-12	AUGERED TO 12 FEET END OF BORING	N/A	N/A	N/A	N/A	N/A

Dates Drilled: AUGUST 11, 1992

Driller: EDI

Water Depth: Initial: N/A

N/A Days after Completion: N/A

N/A Days after Completion: N/A

Drilling Method: HOLLOW STEM AUGER

NETC

National Environmental Technologies Corporation

1010 N. Quebec Street • Allentown, PA 18103

Groundwater & Environmental Consulting Services

APPENDIX H

Well Sampling Record

WELL SAMPLING AND/OR DEVELOPMENT RECORD

Well ID: _____ **Initial Depth to Water:** _____

Sample ID: _____ **Duplicate ID:** _____ **Depth to Water after Sampling:** _____

Sample Depth: _____ **Total Depth of Well:** _____

Project and Task No.: _____ **Well Diameter:** _____

Project Name: _____ **1 Casing/Borehole Volume: (Circle one)** _____

Date: _____

Sampled By: _____ **4 Casing/Borehole Volumes: (Circle one)** _____

Method of Purging: _____ **Total Casing/Borehole Volumes Removed:** _____

Method of Sampling: _____

Time	Intake Depth	Rate (gpm)	Cum. Vol. (gal.)	Temp. (°C)	pH (units)	Specific Electrical Conductance (µS/cm)	Dissolved Oxygen (mg/l)	Redox Potential (mV; SSCE)	Remarks (color, turbidity, and sediment)

pH CALIBRATION (choose two)				
Buffer Solution	pH 4.0	pH 7.0	pH 10.0	
Field Temperature °C				
Instrument Reading				

Model or Unit No.:

SPECIFIC ELECTRICAL CONDUCTANCE – CALIBRATION			
KCL Solution (µS/cm=µmhos/cm)	1413 at 25°C	12880 at 25°C	
Field Temperature °C			
Instrument Reading			

Model or Unit No.:

REDOX CALIBRATION		DISSOLVED OXYGEN CALIBRATION	
Standard Solution	468 mV	Salinity %	
Field Temperature °C		Altitude	
Instrument Reading		Instrument Reading	

Notes:

Model or Unit No.: Ag/AgCl Electrode (SSCE)	Model or Unit No.:	**Condition of Well:**

APPENDIX I

Site Inspection Form

Site Inspection Form

Former Drive & Park, Inc. 28 IBM Road Poughkeepsie, NY BCP #C314111	Date: Printed Name of Inspector: Signature:

1. Is the site compliant with all Institutional Controls, including site usage (commercial or industrial) and groundwater restrictions (yes/no)? If no, describe:

2. Provide a general description of site conditions.

3. Provide a general evaluation of the condition of monitoring wells.

4. Is there any damage to the site cover (soil cover, asphalt cover and concrete cover)? If yes, describe.

5. Has any intrusive work been conducted at the site since the last Site Inspection? If so, describe location, depth, and what was done with excavated soil.

6. Identify site management activities being conducted (i.e., groundwater sampling).

7. Is site documentation as required by the Site Management Plan up to date (yes/no)?
If no, describe:

8. Are any changes to the monitoring program recommended? (yes/no)?
If yes, describe: