Groundwater & Environmental Services, Inc.

63 E Main Street, Suite 3
Pawling, New York 12564

T. 866.839.5195

May 31, 2023

Mr. Michael Squire
Division of Environmental Remediation, Remedial Bureau C
New York State Department of Environmental Conservation
625 Broadway
Albany, New York 12233

Re: Site Management Plan, Version 2.0
1-45 Orangetown Shopping Center
Orangeburg, New York
Site #C344066

Dear Mr. Squire:

Enclosed is the *Site Management Plan* (SMP), *Version 2.0* for the above referenced site updated by Groundwater & Environmental Services, Inc. (GES) on behalf of UB Orangeburg, LLC. This document is required as an element of the remedial program at the Orangetown Shopping Center, located in the Town of Orangeburg, County of Rockland, New York under the New York State (NYS) Brownfield Cleanup Program (BCP) administered by the New York State Department of Environmental Conservation (NYSDEC). The SMP has been updated to reflect changes since the last SMP submittal, approved by the NYSDEC and New York State Department of Health (NYSDOH), incorporated within the next annual Periodic Review Report to be prepared by GES. The *SMP Version 2.0* reflects modifications requested by the NYSDEC and NYSDOH in the letter dated May 22, 2023.

If you have any questions or comments regarding this submittal, please contact me at (866) 839-5195, extension 3839.

Sincerely,
Groundwater & Environmental Services, Inc.

Michael DeGloria Digitally signed by Michael DeGloria
Date: 2023.05.31 13:31:21 -04'00'

Michael DeGloria, P.G.
Principal Project Manager

cc: Monica Roth, UB Orangeburg, LLC (mroth@ubproperties.com)
Miyun Sung, UB Orangeburg, LLC (msung@ubproperties.com)
Renata Ockerby, New York State Department of Health (renata.ockerby@health.ny.gov)
Maureen Schuck, New York State Department of Health (maureen.schuck@health.ny.gov)
Hilton Soniker, Esq., JLJ Management (soniker@kamso.com)

Site Management Plan

1-45 Orangeburg (Orangetown) Shopping Center
Rockland County
Orangeburg, New York
NYSDEC Site Number: C344066

Version 2.0

Prepared for:

UB Orangeburg, LLC
321 Railroad Avenue
Greenwich, CT 06830

Prepared by:

Groundwater & Environmental Services, Inc.
63 East Main Street, Suite 3
Pawling, New York 12564
TEL: 866-839-5195
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Revisions to Final Approved Site Management Plan:

Revision No.	Date Submitted	Summary of Revision	NYSDEC Approval Date
1	May 7, 2015	Modification to the Groundwater Sampling and Bio-Augmentation System	May 23, 2015
2	October 3, 2017	Modification to the Groundwater Sampling program, Monitoring Well and SSDS decommissioning	November 15, 2017
3	October 25, 2019	Modification to the Groundwater Sampling, Bio-Augmentation System, and SSDS decommissioning	November 5, 2019
4	May 31, 2023	Updated Format, Modification to the Groundwater Sampling, Bio-Augmentation System, and SSDS decommissioning	

MAY 2023

CERTIFICATION STATEMENT

I GENEVIEVE F. BOCK certify that I am currently a NYS registered professional engineer 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).

_____ P.E.

5/31/2023 DATE

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ROCKLAND COUNTY
Orangeburg, NEW YORK
SITE MANAGEMENT PLAN

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Acronyms

AS	Air Sparging
ASP	Analytical Services Protocol
BAS	Bio-Augmentation System
BCA	Brownfields Cleanup Agreement
BCP	Brownfields Cleanup Program
bgs	Below Ground Surface
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CAMP	Community Air Monitoring Plan
C/D	Construction and Demolition
CFR	Code of Federal Regulation
CLP	Contract Laboratory Protocol
COC	Certificate of Completion
CO2	Carbon Dioxide
CP	Commissioner Policy
DER	Division of Environmental Remediation
DO	Dissolved Oxygen
DNAPL	Dense Non-Aqueous Phase Liquid
DUSR	Data Usability and Summary Report
EC	Engineering Control
ECL	Environmental Conservation Law
EIP	Electronic Interface Probe
ELAP	Environmental Laboratory Approval Program
EPA	Environmental Protection Agency
ERP	Environmental Restoration Program
EWP	Excavation Work Plan
FER	Final Engineering Report
FT	Feet
GES	Groundwater & Environmental Services, Inc.
GHG	Greenhouse Gas
GWE&T	Groundwater Extraction and Treatment
HASP	Health and Safety Plan
HVAC	Heating, Venting, and Air Conditioning
IC	Institutional Control
in wc	Inches of Water Column
IRM	Interim Remedial Measure
JLJ	JLJ Management Company
KLF	Kleinfelder
mg/L	milligrams per liter
MSL	Mean Sea Level
NYCRR	New York Codes, Rules and Regulations
NYS	New York State
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
O&M	Operation and Maintenance
OM&M	Operation, Monitoring, and Maintenance
ORP	Oxidation Reduction Potential
OSHA	Occupational Safety and Health Administration
OU	Operable Unit
PCB	Polychlorinated Biphenyls
PDB	passive diffusion bag
PE	Professional Engineer
PFAS	Per- and Polyfluoroalkyl Substances
PID	Photoionization Detector
PRP	Potential Responsible Party
PRR	Periodic Review Report
PSI	pound per square inch
QA/QC	Quality Assurance / Quality Control
QAPP	Quality Assurance Project Plan
QEP	Qualified Environmental Professional
RAO	Remedial Action Objective
RAWP	Remedial Action Work Plan
RCRA	Resource Conservation and Recovery Act
RI/FS	Remedial Investigation/Feasibility Study
ROD	Record of Decision
RP	Remedial Party
RSO	Remedial Site Optimization
SAC	State Assistance Criteria
SCG	Standard, Criteria, and Guidance
SCO	Soil Cleanup Objective
SMP	Site Management Plan
SOP	Standard Operating Procedure
SOW	Statement of Work
SPDES	State Pollutant Discharge Elimination System
SSD	Sub-slab Depressurization
SVE	Soil Vapor Extraction
SVI	Soil Vapor Intrusion
SVOC	Semi-Volatile Organic Compound
TAL	Target Analyte List
TCL	Target Compound List
TCLP	Toxicity Characteristic Leachate Procedure
TOC	Total Organic Carbon
US	United States
UST	Underground Storage Tank
VCA	Voluntary Cleanup Agreement
VCP	Voluntary Cleanup Program
VOC	Volatile Organic Compound

ES Executive Summary

The following provides a brief summary of the controls implemented for the Site, as well as the inspections, monitoring, maintenance and reporting activities required by this Site Management Plan:

Site Identification: Site #C344066

1-45 Orangeburg (Orangetown) Shopping Center

Orangeburg, New York

Institutional Controls:	1. The property may be used for commercial or industrial use.
	2. The use of groundwater underlying the property is prohibited without necessary water quality treatment as determined by the NYSDOH or the Rockland County Department of Health to render it safe for use as drinking water or for industrial purposes, and the user must first notify and obtain written approval to do so from the Department.
	3. Groundwater and other environmental or public health monitoring must be performed as defined in this SMP.
	4. Data and information pertinent to site management must be reported at the frequency and in a manner as defined in this SMP.
	5. All future activities that will disturb remaining contaminated material must be conducted in accordance with this SMP.
	6. Monitoring to assess the performance and effectiveness of the remedy must be performed as defined in this SMP.
	7. Operation, maintenance, monitoring, inspection, and reporting of any mechanical or physical component of the remedy shall be performed as defined in this SMP.

Institutional Controls:	8. 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 the Environmental Easement.	
	9. The potential for vapor intrusion must be evaluated for any buildings developed in the area within the IC boundaries noted on **Figure 3**, and any potential impacts that are identified must be monitored or mitigated.	
	10. Vegetable gardens and farming on the site are prohibited.	
	11. An evaluation shall be performed to determine the need for further investigation and remediation should large scale redevelopment occur, if any of the existing structures are demolished, or if the subsurface is otherwise made accessible.	
	12. All ECs must be inspected at a frequency and in a manner defined in the SMP.	
Engineering Controls:	1. Composite cover system provided by Building #2 and the underlying pavement.	
	2. Bio-augmentation system with the ability to provide treatment of impacted subsurface soil and groundwater.	
Inspections:		Frequency
1. Comprehensive site-wide inspection		Annually
2. Non-routine inspections following a natural disaster or an unforeseen failure of any of the ECs		As needed

Monitoring:	Frequency
1. Composite cover system	Annually or during other (more frequent) inspections as time and conditions warrant
2. Bio-augmentation system	Based on annual TOC data collected from MW-5
3. Groundwater Monitoring Wells MW-4, MW-5, and MW-8A	Annually
Maintenance:	Frequency
1. Composite cover system maintenance	As needed
2. Bio-augmentation system maintenance	As needed
Reporting:	Frequency
1. Periodic Review Report	Annually

Further descriptions of the above requirements are provided in detail in the latter sections of this Site Management Plan.

1 INTRODUCTION

1.1 General

This Site Management Plan (SMP) is a required element of the remedial program for the 1-45 Orangeburg (Orangetown) Shopping Center located in Orangeburg, New York (hereinafter referred to as the "Site"). See **Figures 1** and **2**. The Site is currently in the New York State (NYS) Brownfield Cleanup Program (BCP), Site No. C344066, which is administered by New York State Department of Environmental Conservation (NYSDEC or Department).

JLJ Management Company (hereinafter referred to as the "JLJ") entered into a Brownfields Cleanup Agreement (BCA) in January 2007 with the NYSDEC to remediate the site. A figure showing the site location and boundaries of this site is provided in **Figures 1** and **2**. The boundaries of the site are more fully described in the metes and bounds site description that is part of the Environmental Easement provided in **Appendix A**.

After completion of the remedial work, some contamination was left at this site, which is hereafter referred to as "remaining contamination". Institutional Controls and Engineering Controls (ICs and ECs) have been incorporated into the site remedy to control exposure to remaining contamination to ensure protection of public health and the environment. An Environmental Easement granted to the NYSDEC, and recorded with the Rockland County Clerk, requires compliance with this SMP and all ECs and ICs placed on the site.

This SMP was prepared to manage remaining contamination at the site until the Environmental Easement is extinguished in accordance with ECL Article 71, Title 36. 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.

It is important to note that:

- 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, 6 NYCRR Part 375 and the BCA (Index # A3-0563-0906; Site # C344066) for the site, and thereby subject to applicable penalties.

All reports associated with the site can be viewed by contacting the NYSDEC or its successor agency managing environmental issues in New York State. A list of contacts for persons involved with the site is provided in **Appendix B** of this SMP.

This SMP was prepared by Groundwater & Environmental Services, Inc. (GES), on behalf of UB Orangeburg, LLC, in accordance with the requirements of the NYSDEC's DER-10 ("Technical Guidance for Site Investigation and Remediation"), dated May 2010, and the guidelines provided

by the NYSDEC. This SMP addresses the means for implementing the ICs and/or ECs that are required by the Environmental Easement for the site.

1.2 Revisions

Revisions to this plan will be proposed in writing to the NYSDEC's project manager. The NYSDEC can also make changes to the SMP or request revisions from the remedial party. Revisions will be necessary upon, but not limited to, the following occurring: a change in media monitoring requirements, upgrades to or shutdown of a remedial system, post-remedial removal of contaminated sediment or soil, or other significant change to the site conditions. In accordance with the Environmental Easement for the site, the NYSDEC project manager will provide a notice of any approved changes to the SMP, and append these notices to the SMP that is retained in its files.

1.3 Notifications

Notifications will be submitted by the property owner to the NYSDEC, as needed, in accordance with NYSDEC's DER – 10 for the following reasons:

1. 60-day advance notice of any proposed changes in site use that are required under the terms of the BCA, 6 NYCRR Part 375 and/or Environmental Conservation Law.
2. 7-day advance notice of any field activity associated with the remedial program.
3. 15-day advance notice of any proposed ground-intrusive activity pursuant to the Excavation Work Plan. If the ground-intrusive activity qualifies as a change of use as defined in 6 NYCRR Part 375, the above mentioned 60-day advance notice is also required.
4. Notice within 48 hours of any damage or defect to the foundation, structures or EC that reduces or has the potential to reduce the effectiveness of an EC, and likewise, any action to be taken to mitigate the damage or defect.
5. Notice within 48 hours of any non-routine maintenance activities.
6. 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 ECs 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.
7. Follow-up status reports on actions taken to respond to any emergency event requiring ongoing responsive action submitted to the NYSDEC within 45 days describing and documenting 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:

8. 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/Remedial Party has been provided with a copy of the BCA, and all approved work plans and reports, including this SMP.

9. 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 to the NYSDEC.

Table 1 below includes contact information for the above notifications. The information on this table will be updated as necessary to provide accurate contact information. A full listing of site-related contact information is provided in **Appendix B.**

Table 1: Notifications

Name	**Contact Information**	**Required Notification****
Michael Squire, NYSDEC Project Manager	518-402-9662 michael.squire@dec.ny.gov	All Notifications
Amen Omorogbe, NYSDEC Project Manager's Supervisor	518-402-9662 amen.omorogbe@dec.ny.gov	All Notifications
Daniel Bendell, NYSDEC RHWRE	845-256-3151 daniel.bendell@dec.ny.gov	Notifications 1 and 8
Kelly Lewandowski, NYSDEC Site Control	518-402-9569 kelly.lewandowsk@dec.ny.gov	Notifications 1 and 8
Renata Ockerby, New York State Department of Health (NYSDOH) Project Manager	518-402-7860 renata.ockerby@health.ny.gov	Notifications 4, 6, and 7

* Note: Notifications are subject to change and will be updated as necessary.

** Note: Numbers in this column reference the numbered bullets in the notification list in this section

2 SUMMARY OF PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS

2.1 Site Location and Description

The site is located in Orangeburg, Rockland County, New York and is identified as Section 74.10 Block 1 and Lot 67 on the Town of Orangetown, Rockland County, New York Tax Map (see **Appendix C**). The site is an approximately 1.2-acre portion of the approximately 11-acre parcel area and is bounded by Orangeburg Road followed by Town offices to the north, Highview Avenue followed by residential dwellings to the south, Oak Street followed by residential dwellings to the east, and Dutch Hill Road followed by commercial and office properties to the west (see **Figure 3** – Site Layout Map). The boundaries of the site are more fully described in **Appendix A** -Environmental Easement.

The owner(s) of the site parcel(s) at the time of issuance of this SMP is/are:

UB Orangeburg, LLC
321 Railroad Avenue
Greenwich, CT 06830

2.2 Physical Setting

2.2.1 Land Use

The Site consists of the following: five (5) retail buildings and parking lot area. The Site is zoned commercial as a “community shopping district” on the Town of Orangetown Adopted Zoning Map (2018) and is currently utilized for commercial uses. Site occupants within the Environmental Easement area (see **Figure 3**) include retail businesses and restaurants (Stella Luna Pizza, Tip Top Stationary, Gorgeous K Salon, Hikaru Sushi Restaurant, The Academy of Martial Arts, Tobacco House, TZ Liquors, Verizon, and New China House).

The properties adjoining the Site and, in the neighborhood surrounding the Site primarily include commercial and residential properties. The properties immediately south of the Site include commercial and residential properties; the properties immediately north of the Site include commercial and residential properties; the properties immediately east of the Site include commercial and residential properties; and the properties to the west of the Site include commercial properties.

2.2.2 Geology

A *Remedial Investigation* (RI) Report presenting the findings of the RI was submitted to the NYSDEC and NYSDOH by Kleinfelder (KLF) in August 2008 and approved by the NYSDEC in August 2008. The following is derived from the RI Report (KLF 2008a):

According to Construction Plan Drawings obtained from Town of Orangeburg Building Department (reviewed in September 2004), prior to the construction of the shopping center the topography of the site was somewhat different. In particular, the contour of the eastern-most

portion of the property was lower than the current grade. Construction of the shopping center required an increase in the elevation to provide an improved, more level finished grade suitable for the planned buildings and to provide appropriate drainage. Thus, in the area behind Buildings #2 and #3, 5-10 feet of fill was placed to achieve the higher elevation, with the greatest amount of fill along the current end of pavement.

According to topography shown in Figure 1 (RI Report, KLF 2008a), the general topographic relief around the site is generally dipping to the east and south with a significant slope of 5-7%. Upon visual inspection, the site is a sloping parcel, with the topography of this block as follows:

- Along Orangeburg Road, the topography slopes downward from about 207-feet (ft) above mean sea level (msl) at the corner with Dutch Hill Road to about 160 ft msl at the corner with Oak Street.
- Similarly, the property slopes gently southward along Dutch Hill Road (from about 207-192 ft msl ending at the corner with Highview Avenue).
- Running diagonally then from northeast to southeast (at the corner of Oak St. and Highview Avenue) the property slopes from 207 to 130 ft msl, a drop of 77 ft.

The different soils at the site are components of the general soil map unit: Wethersfield-Cheshire-Urban Land. This soil unit is described by the NRCS (1990) as very deep soils that are well-drained formed in reddish acid glacial till derived mainly from reddish Triassic sandstone shale and conglomerate on smooth ridges of upland till, with a low to moderate slope (0-25%), and comprising areas of urban land (i.e., areas of impervious structures). According to the Rockland County soil survey (NRCS 1990, Map Sheet #24), the subject property contains the following Soil Map Units: Ux: Urban Land, WeB: Wethersfield Gravelly Silt Loam, and WuC: Wethersfield-Urban Land Complex.

Based on review of the NYS Geologic Map (NYSGS 1970), the Subject Property occurs in an area underlain by the lower Brunswick Formation of the Triassic-aged lowland Newark Group, generally consisting of reddish-brown shaley mudstone, with alternating layers of red-brown sandstone/arkose. The Brunswick formation presents a fractured bed dipping gradually westward at about 9º, with ridges and valleys running approximately north to south. This bedrock has a significant bedding of glacial till above it (NYSGS 1989 and Kummel 1990). The Subject Property is located on the steeper eastern side of one ridge, which serves as part of the dividing line between the Hackensack River and Hudson River watersheds in this area.

A geologic cross section is shown in **Figures 4** through **6**. Site specific boring logs are provided in **Appendix D**.

2.2.3 Hydrogeology

Depth to groundwater below the perched water table has been encountered at approximately 30-40 feet below ground surface (bgs). Depth measurements from well pairs (MW-8A/B) and triplets (MW-9A/B/C) indicate a vertical downward flow gradient on Site. An interpolation of the groundwater interface well groundwater elevations indicated a groundwater flow direction to the southeast.

A groundwater contour map from April 2022 is shown in **Figure 7**. Groundwater elevation data is provided in **Table 9** (Groundwater Gauging Table). Groundwater monitoring well construction is detailed on boring logs for monitoring wells which are provided in **Appendix D**.

2.3 Investigation and Remedial History

The following narrative provides a remedial history timeline and a brief summary of the available project records to document key investigative and remedial milestones for the site. Full titles for each of the reports referenced below are provided in Section 8.0 - References.

JLJ retained KLF to investigate the Site between 2007 and 2008 as described in the final RI report (KLF 2008a) and subsequent investigations discussed in the RI Addendum Report (KLF 2011f). Based upon the RI and RI Addendum findings, KLF concluded that the chlorinated solvent plume in groundwater along the eastern boundary of the site and soils containing residual contamination around the southeastern segment of the foundation of Building #2 and under the former Sparkle Cleaners requires remedial action. These investigations are summarized below.

From July through December 2007, KLF completed remedial investigation activities (KLF 2008a), which included:

- Installation of seven soil borings, which were completed as monitoring wells (MW-8A/-B, MW-9A/-B/-C, MW-11A/- B, MW-12A/-B/-C, MW-13, MW14, and MW-15) between September 25 and October 5, 2007. See Appendix B of the RI Report for the boring and well logs.
- Installation of three piezometers (PZ-4, PZ-5, and PZ-6) on October 2, 2007, slightly north of MW-5 to approximately 12 feet bgs using a hand Geoprobe. Screened intervals were placed at 12 to 7 feet bgs, 7 to 5 feet bgs, and 5 to 3 feet bgs, respectively.
- The first round of groundwater sampling was conducted prior to intrusive work in September 2007; these data guided the selection of boring/well locations for the RI. The second round involved the sampling of both previously existing and newly installed wells in October 2007. Each well was gauged for depth to water, depth to bottom, and for the presence of Dense Non-Aqueous Phase Liquid (DNAPL) using an electronic interface probe (EIP). Groundwater depth measurements collected during this investigation indicated groundwater flows in an easterly direction.
- A soil vapor intrusion assessment to evaluate the potential for soil vapor intrusion as an exposure pathway was conducted on July 12, 2007 and November 27 to December 6, 2007 at three general locations. These include the shops in Buildings #1 and #2 at Orangetown Shopping Center (on-site); the vacant tenant space in Orangetown Shopping Center (Building #3) south of Building #2 (on-site); and abutting off-site properties along Highview Avenue and Oak Street (off-site). Soil vapor, indoor air, and ambient outdoor air samples were collected from each building or building space. Soil, groundwater and on-site soil vapor samples collected during this investigation indicated the presence of chlorinated solvents. Chlorinated volatile organic compounds (VOCs) were detected in off-site ambient indoor and outdoor air samples; however, these detections do not

correlate with corresponding off-site soil vapor samples which indicate low to non-detectable concentrations of chlorinated VOCs.

Generally, the RI determined that that the chlorinated solvent (or VOC) plume in groundwater along the eastern boundary of the property, behind Building #2 and #3, constituted a situation requiring some action to:

- Remedy the source around the sewer line is shallow soil.
- Prevent creation of additional groundwater contamination.
- Prevent further migration and spread of groundwater contamination.
- Restore subsurface conditions to the extent possible.
- Prevent contact with or inhalation of volatiles from contaminated groundwater and monitor indoor air quality.

KLF completed additional remedial investigation activities (KLF 2011f), which included:

- Completion of well repairs to MW-7, MW-8, and MW-12D on May 22, 2008.
- Five (5) rounds of groundwater sampling and one well gauging event have occurred between November 2008 and August 2010. Groundwater samples have indicated the presence of chlorinated solvents. Concentrations of chlorinated solvents are highest along the eastern side of Building #2 proximate to the former Sparkle Cleaners. Analytical results of the ground water sampling events are summarized in Table 1a of the referenced report.
- Advancement of three soil borings (B-1, B-2, and B-3) to assess subsurface soil below Sparkle Cleaners was completed in February 2009. Analytical data indicated the presence of low concentrations of chlorinated solvents. The concentrations of some detected analytes in samples B-2 and B-3 were greater than the Protection of Groundwater standards. Analytical result of the sub-slab samples are summarized in Table 3 of the referenced report.
- Completion of several soil vapor assessments between February and October 2009. Soil vapor samples indicated the presence of vapor phase chlorinated solvents. Concentrations of chlorinated solvents were highest along the eastern side of Building #2 proximate to Sparkle Cleaners. Analytical results of the soil vapor and air assessment samples are summarized in Table 4 of the referenced report.
- Collection of eight surface soil samples (SS-1 through SS-8) along the wooded slope located east of the paved area to the rear of Building #2 in April 2010. These soil samples were collected at the request of the NYSDEC to evaluate the potential for exposure to Site-related chemicals. Metals, VOCs, and pesticides were either below laboratory reporting limits or below applicable regulatory criteria. Semi-volatile organic compounds (SVOCs) were detected in some soil samples at concentrations above the NYSDEC Restricted-Residential Use Soil Cleanup Objective and/or NYSDEC Restricted-Commercial Use Soil Cleanup Objective. Analytical results of the surface soil samples are summarized in Table 2 of the referenced report.

The RI Addendum (KLF 2011f) clarified that surface soils of the unpaved, sloping and heavily vegetated area of property between Building #2 and the residences on the west side of Oak Street did not contain concentrations of metals, pesticides, polychlorinated biphenyls (PCBs) or VOCs. It also concluded after further vapor testing that vapor intrusion remained a potential exposure pathway for Building #2.

Remediation at the Site began following the NYSDEC-approved set of interim remedial measures (IRMs) as described in the IRMWP (dated June 2008, revised August 2008, and approved November 4, 2008). The following outlines the IRMs and other remedial actions:

- Soil removal, completed as the first IRM during the first quarter of 2009, accomplished a focused soil excavation to treat the source area (see KLF 2011c).
- Two “mechanical” ECs:
    - Development and implementation of a vapor intrusion mitigation plan (specifically, a sub-slab depressurization systems [SSD systems]) at the former dry cleaner store (Sparkle Cleaners) and surrounding tenant spaces was accomplished as an IRM (between February 2010 and April 2011, see KLF 2011d).
- A third composite “soil” cover EC provided by Building #2 and macadam pavement behind the building to prevent direct contact with remaining soil and groundwater contamination.
- Execution and recording of an EE to restrict land use and prevent future exposure to contamination remaining at the Site (JLJ 2011, see Appendices A & B).
- Development and implementation of a SMP for long-term management of remaining contamination as required by the EE, which includes plans for: (1) the ICs and the ECs, (2) monitoring of the Site, EC systems and media, (3) operation and maintenance of the systems and components, and (4) regular reporting.

Source removal was completed in January 2009 (KLF 2011c). The excavation area was located around the faulty sewer pipe behind the Sparkle Cleaners shop in Building #2. The total depth of the excavation ranged from 3 to 4 feet and was limited by Building #2 to the west, and gas and sewer lines to the south and east, respectively. Three additional test pits were excavated to the south and east of the natural gas line to evaluate the lateral extent of residual impact observed in the southeastern corner of the excavation. During excavation, a perched water table was encountered which required dewatering. Water recovered from the excavation was pumped into a fractionation tank for temporary storage.

Fifty-two tons of soil was removed from the source area. Approximately 12.9 tons of soil was classified as hazardous waste and transported to Michigan Disposal Waste Treatment Plant. Approximately 39.53 tons of soil was classified as non- hazardous waste and transported to ESMI in New York. Additionally, 1,790 gallons of water was recovered from the excavation and transported as non-hazardous waste to Bridgeport United Recycling. The excavation area was backfilled with virgin crushed stone.

Although excavation of the source area was successful, some soil contamination remained in place underneath Building #2. Further excavation was limited by the building and presence of

active subsurface utilities (i.e., natural gas line); therefore, the bio-augmentation system was installed to treat the remaining soil and groundwater contamination and SSD systems were installed to mitigation potential vapor intrusion from remaining contamination in the southern portion of Building #2.

SSD systems were installed in the Sparkle Cleaners (currently a Verizon store), the Deli Spot (currently TZ Liquors), and New China House (KLF 2011d, see Figure 2) tenant spaced of Building #2. The SSD system configuration in Building #2 is included as **Figure 8**. The SSD systems were configured to create a negative pressure (relative to the indoor environment) within the area beneath the concrete floor slabs of the businesses within the southern portion of Building #2 thereby minimizing the potential for migration of contaminant vapor into the indoor air (KLF 2009).

The SSD systems were installed between February and May 2010, and were activated in May 2010. The systems as originally designed did not achieve the performance standard, and they were subsequently modified.

Additional SSD system performance testing was completed in June 2010 and a modified plan was prepared (KLF 2010b) and approved by NYSDEC in August 2010. KLF implemented the modifications between August and September 2010. KLF re-started the systems with additional blowers in place on September 29, 2010, and verified operation with another performance (vacuum response) test.

Late in 2010, KLF observed that ongoing heating, venting, and air conditioning (HVAC) issues in the building potentially affected the SSD system performance. These issues were the result of foundation leaking and back draft issues associated with furnaces and other fans. These issues were resolved in early 2011. KLF re-inspected the facility in March 2011 to verify resolution of the issues. In late March, KLF filled various foundation and wall cracks in an effort to increase vacuum under the slab. In late April 2011, three vapor-monitoring points were replaced in the New China Restaurant and another system check performed. This test verified that the system achieved measured vacuum greater than 0.0025 inches of water column (in wc) across the slab in the three tenant spaces. SSD system performances is summarized in Tables 2 through 4 of CCR #2 (KLF 2011d).

The SSD systems operated until the NYSDEC granted approval for permanent shutdown of the systems on July 29, 2015. The NYSDEC requested three (3) rounds of follow-up SVI sampling after the SSD systems were shut-down in March 2016. Following the completion of multiple soil vapor intrusion investigations (SVIs), the NYSDEC and NYSDOH approved a request to decommission the SSD systems at the former Deli Spot and the former Sparkle Cleaners in January 2017 and decommission the SSD system at the New China House in August 2019. In a letter dated June 2022, the NYSDEC wrote that additional SVI sampling is not warranted and that inhalation exposures are no longer a concern. Additionally, in the June 2022 letter, the NYSDEC wrote that the source had been adequately remediated and the idled SSD systems could be permanently shut-down and decommissioned.

The former Deli Spot SSD system was decommissioned in May 2017 and the New China House and former Sparkle Cleaners SSD systems were decommissioned in August 2022. SSD system

decommissioning activities included the removal of the system fans and associated extraction points, piping, and monitoring points.

2.4 Remedial Action Objectives

The Remedial Action Objectives (RAOs) for the Site as listed in the Decision Document (Final Engineering Report, KLF 2011h) dated December 2011 are as follows:

Groundwater

RAOs for Public Health Protection

- Prevent ingestion of groundwater with contaminant levels exceeding drinking water standards.
- Prevent contact with, or inhalation of, volatiles from contaminated groundwater.

RAOs for Environmental Protection

- Restore ground water aquifer to pre-disposal/pre-release conditions, to the extent practicable.
- Remove the source of ground or surface water contamination.

Soil

RAOs for Public Health Protection

- Prevent ingestion/direct contact with contaminated soil.
- Prevent inhalation of or exposure from contaminants volatilizing from contaminants in soil.

RAOs for Environmental Protection

- Prevent migration of contaminants that would result in groundwater or surface water contamination.

Soil Vapor

RAOs for Public Health Protection

- Mitigate impacts to public health resulting from existing, or the potential for, soil vapor intrusion into buildings at a site.

2.5 Remaining Contamination

A *Final Engineering Report* (FER) was submitted to the NYSDEC and NYSDOH by KLF in December 2011. The contamination that remained at the site following remedial activities being completed is summarized in the FER (KLF 2011h).

2.5.1 Soil

The remedial excavation conducted in January 2009 removed impacted soils from the source area to the extent possible due to limitations by the building and presence of active utilities (i.e., natural gas line) in the subsurface. Excavation endpoint sampling results summarized in Table 4 of the Construction Completion Report #1 (CCR-1) by KLF in June 2011 (KLF 2011c) identifies some detectable chlorinated VOCs above groundwater protection soil cleanup objectives (SCOs) at select sampling locations within the excavation and/or test pits. None of the sample locations included in Table 4 of the CCR-1 (KLF 2011c) exceeded restricted commercial use SCOs.

Appendix E contains historic tables and figures from CCR-1 that summarizes the results of all soil samples collected that exceed the Unrestricted Use SCOs and the restricted commercial Use SCOs at the site after completion of remedial action.

2.5.2 Sediment

Not applicable.

2.5.3 Groundwater

As part of the remedial action, bio stimulant injection events were completed in 2010 and 2011 as summarized in the Construction Completion Report #3 (CCR-3) by KLF in August 2011 (KLF 2011e). Between a 10 and 25 percent solution of molasses (bio stimulant) was gravity fed into the injection system, which consisted of five (5) injection points (IP-1 through IP-4 and MW-3), between multiple injection events in 2010 and 2011. Approximately 950 gallons of solution was injected into the subsurface at the site.

A post injection/post remediation groundwater sampling event was completed on June 21, 2011 including monitoring wells MW-2, MW-3, MW-4, MW-5, MW-8A, and MW-8B as shown in Table 1 of CCR-3 (KLF 2011e). Laboratory results indicated samples collected from monitoring wells MW-2, MW-3, MW-4, MW-5, MW-8A, and MW-8B contained concentrations of VOCs, anions, and/or total metals detected above NYSDEC Standard, Criteria, and Guidance (SCG) values.

Appendix F contains historic tables from CCR-3 that summarize the results of all samples of groundwater that exceed the SCGs after completion of the remedial action.

2.5.4 Surface Water

Not applicable.

2.5.5 Soil Vapor

Soil vapor and ambient air sampling was conducted as part of the RI in July, November, and December 2007 (KLF 2008a) but soil vapor samples were not completed following the remedial action as part of the FER.

3 INSTITUTIONAL AND ENGINEERING CONTROL PLAN

3.1 General

Since remaining contamination exists at the site, Institutional Controls (ICs) and Engineering Controls (ECs) are required to protect human health and the environment. This IC/EC Plan describes the procedures for the implementation and management of all IC/ECs at the site. The IC/EC Plan is one component of the SMP and is subject to revision by the NYSDEC project manager.

This plan provides:

- A description of all IC/ECs on the site;
- The basic implementation and intended role of each IC/EC;
- A description of the key components of the ICs set forth in the Environmental Easement;
- A description of the controls to be evaluated during each required inspection and periodic review;
- A description of plans and procedures to be followed for implementation of IC/ECs, such as the implementation of the Excavation Work Plan (EWP) (as provided in **Appendix G**) 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 IC/ECs required by the site remedy, as determined by the NYSDEC project manager.

3.2 Institutional Controls

A series of ICs is required by the Remedial Action Work Plan (RAWP) to: (1) implement, maintain and monitor Engineering Control systems; (2) prevent future exposure to remaining contamination; and, (3) limit the use and development of the site to commercial or industrial uses only. Adherence to these ICs on the site is required by the Environmental Easement and will be implemented under this SMP. ICs identified in the Environmental Easement may not be discontinued without an amendment to or extinguishment of the Environmental Easement. The IC boundaries are shown on **Figure 3**. These ICs are:

- The property may be used for: commercial or industrial use;
- All ECs must be operated and maintained as specified in this SMP;
- All ECs must be inspected at a frequency and in a manner defined in the SMP;
- The use of groundwater underlying the property is prohibited without necessary water quality treatment as determined by the NYSDOH or the Rockland County Department of Health to render it safe for use as drinking water or for industrial purposes, and the user must first notify and obtain written approval to do so from the Department;

- Groundwater and other environmental or public health monitoring must be performed as defined in this SMP;
- Data and information pertinent to site management must be reported at the frequency and in a manner as defined in this SMP;
- All future activities that will disturb remaining contaminated material must be conducted in accordance with this SMP;
- Monitoring to assess the performance and effectiveness of the remedy must be performed as defined in this SMP;
- Operation, maintenance, monitoring, inspection, and reporting of any mechanical or physical component of the remedy shall be performed as defined in this SMP;
- 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 the Environmental Easement;
- The potential for vapor intrusion must be evaluated for any buildings developed in the area within the IC boundaries noted on **Figure 3**, and any potential impacts that are identified must be monitored or mitigated;
- Vegetable gardens and farming on the site are prohibited; and
- An evaluation shall be performed to determine the need for further investigation and remediation should large scale redevelopment occur, if any of the existing structures are demolished, or if the subsurface is otherwise made accessible.

3.3 Engineering Controls

3.3.1 Cover (or Cap)

Exposure to remaining contamination at the site is prevented by a cover system placed over the site. This cover system is comprised of a minimum of one foot of lean soil, as defined by 6 NYCRR 375-6.7(d) for commercial use, placed over a demarcation layer, with the upper six inches of the soil of sufficient quality to maintain a vegetation layer. **Figure 3** presents the location of the cover system and applicable demarcation layers. The Excavation Work Plan (EWP) provided in **Appendix G** outlines the procedures required to be implemented in the event the cover system is breached, penetrated or temporarily removed. Procedures for the inspection of this cover are provided in the Monitoring and Sampling Plan included in Section 4.0 of 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) prepared for the site and provided in **Appendix H**. Any disturbance of the site's cover system must be overseen by a qualified environmental professional as defined in 6 NYCRR Part 375, a Professional Engineer (PE) who is licensed and registered in New York State, or a qualified person who directly reports to a PE who is licensed and registered in New York State.

3.3.2 Bio-augmentation system

Because of the presence of residual contaminated soil and groundwater under Building #2, a bio-augmentation treatment system was designed (**Figure 9**). This treatment promotes in-situ microbial degradation of contaminants in saturated soil and groundwater. The addition of a bio-stimulant (molasses) to subsurface soil and groundwater act as an electron donor that stimulates metabolic reduction of chlorinated VOCs to ethene via microorganisms that have been detected at the site, as have bacteria of the genus Dehalococcoides (in MW-5 and MW-6) and Dehalobacter (in MW-5) (KLF 2008a, see Figure 3 for sampling locations).

Bio-augmentation injection points and manifold piping were installed after the source removal excavation between February and April 2010 and May 2012. The system includes the following components as shown on **Figures 9** and **10**:

- Four individual injection points each with flow control valve and stub ups for connection to the batch injection tank.
- One monitoring well (MW-3) converted for injection with conveyance piping, control valve, and stub up for connection to the batch injection tank.
- A north-south trending injection gallery located along the eastern edge of the macadam pavement behind Building #2 (see **Figure 9**), and made-up of nine injection wells/ points (IP-1 through IP-9).
- Three lateral injection points installed below the floor slab within the former Sparkle Cleaners (see **Figure 10**).

Baseline and post-injection sampling (from a network of monitoring wells), monitoring, and laboratory analysis provide the means to monitor treatment effectiveness. The first round of injections was completed in May, July, and November 2010 followed by monitoring events. The first round of treatment indicated bio-augmentation was enhancing biodegradation and de-chlorination of the residual contaminants. The results also suggest that additional injections of electron donor solution would further enhance treatment. After discussions with NYSDEC, KLF proposed a revised injection approach, which was approved (KLF 2011b).

KLF interpreted the results of the second treatment round as confirmation that the approach would deliver effective remediation. De-chlorination occurred upon achieving appropriate geochemical conditions, as demonstrated to date (KLF 2011f). For this treatment to be ultimately effective, three modifications were required:

- Increase Spatial Distribution of Bio-stimulant – the then current injection influence on geochemistry was too localized around the proximity of injection. Additional injection points were required to achieve greater distribution and better treatment efficacy. The additional injection points were installed by GES in May 2012.
- Manage pH – although it is generally acceptable across the monitoring network, pH drop occurs at locations with elevated total organic carbon (TOC). The resulting need for a buffering agent to the injection solution was periodically required to mitigate this condition.

- Injection Flexibility – injection frequency and bio-stimulant volume and concentration needed to be flexible based on observed geochemical conditions. This required monitoring of conditions and subsequent adjustment of bio-stimulant injection.

Procedures for operating and maintaining the bio-augmentation system are documented in the Operation and Maintenance Plan (Section 5.0 of this SMP). The bio-augmentation system Operation, Maintenance, and Monitroing Plan for the site dated 2019 is **Appendix I** - Operations and Maintenance Manual. **Figure 3** shows the location of the ECs for the site.

3.3.3 Criteria for Completion of Remediation/Termination of Remedial System

Generally, remedial processes are considered completed when 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. Unless waived by the NYSDEC, confirmation samples of applicable environmental media are required before terminating any remedial actions at the site. Confirmation samples require Category B deliverables and a Data Usability Summary Report (DUSR).

As discussed below, the NYSDEC may approve termination of a groundwater monitoring program. When a remedial party receives this approval, the remedial party will decommission all site-related monitoring, injection and recovery wells as per the NYSDEC CP-43 policy.

The remedial party will also conduct any needed site restoration activities, such as asphalt patching and decommissioning treatment system equipment. In addition, the remedial party will conduct any necessary restoration of vegetation coverage, trees and wetlands, and will comply with NYSDEC and United States Army Corps of Engineers regulations and guidance. Also, the remedial party will ensure that no ongoing erosion is occurring on the site.

3.3.3.1 Cover (or Cap)

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

3.3.3.2 Bio-augmentation system

The active bio-augmentation treatment system will not be discontinued unless prior written approval is granted by the NYSDEC. Bio-augmentation treatment of groundwater 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. 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.

Conditions that warrant discontinuing the bio-augmentation treatment system include contaminant concentrations in groundwater that: (1) reach levels that are consistently below groundwater quality standards, (2) have become asymptotic to a low level over an extended period of time as accepted by the NYSDEC, or (3) the NYSDEC has determined that the

bio-augmentation treatment system has reached the limit of its effectiveness. This assessment will be based in part on post-remediation contaminant levels in groundwater collected from monitoring wells located throughout the Site. Systems will remain in place and operational until permission to discontinue their use is granted in writing by the NYSDEC.

A request to modify the bio-augmentation application plan was included in the July 2014 Periodic Review Report. Approval by the NYSDEC to reduce the bio-augmentation application to the monitoring well MW 5 area was received by GES on August 25, 2014. The NYSDEC also approved the reduction of monitoring the bio-augmentation system on an annual basis rather than quarterly in August 2019.

4 MONITORING AND SAMPLING PLAN

4.1 General

This Monitoring and Sampling Plan describes the measures for evaluating the overall performance and effectiveness of the remedy. This Monitoring and Sampling Plan may only be revised with the approval of the NYSDEC project manager. Details regarding the sampling procedures, data quality usability objectives, analytical methods, etc. for all samples collected as part of site management for the site are detailed below.

This Monitoring and Sampling Plan describes the methods to be used for:

- Sampling and analysis of all appropriate media (e.g., groundwater, indoor air, soil vapor, soils);
- Assessing compliance with applicable NYSDEC standards, criteria and guidance (SCGs), particularly groundwater standards and Part 375 SCOs for soil; and
- Evaluating site information periodically to confirm that the remedy continues to be effective in protecting public health and the environment;

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

- Sampling locations, protocol and frequency;
- Information on all designed monitoring systems;
- Analytical sampling program requirements;
- Inspection and maintenance requirements for monitoring wells;
- Monitoring well decommissioning procedures; and
- Annual inspection and periodic certification.

Reporting requirements are provided in Section 7.0 of this SMP.

4.2 Site-wide Inspection

Site-wide inspections will be performed at a minimum of once per year. These periodic inspections must be conducted when the ground surface is visible (i.e. no snow cover). Site-wide inspections will be performed by a qualified environmental professional as defined in 6 NYCRR Part 375, a PE who is licensed and registered in New York State, or a qualified person who directly reports to a PE who is licensed and registered in New York State. Modification to the frequency or duration of the inspections will require approval from the NYSDEC project manager. Site-wide inspections will also be performed after all severe weather conditions that may affect ECs or monitoring devices. During these inspections, an inspection form will be completed as provided in **Appendix J** – Site Management Forms. The form will compile sufficient information to assess the following:

- Compliance with all ICs, including site usage;

- An evaluation of the condition and continued effectiveness of ECs;
- General site conditions at the time of the inspection;
- Whether stormwater management systems, such as basins and outfalls, are working as designed;
- The site management activities being conducted including, where appropriate, confirmation sampling and a health and safety inspection; and
- Confirm that site records are up to date.

Inspections of all remedial components installed at the site will be conducted. A comprehensive site-wide inspection will be conducted and documented according to the SMP schedule, regardless of the frequency of the Periodic Review Report. The inspections will determine and document the following:

- Whether ECs 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; and
- If site records are complete and up to date.

Reporting requirements are outlined in Section 7.0 of this plan.

Inspections will also be performed in the event of an emergency. If an emergency, such as a natural disaster or an unforeseen failure of any of the ECs occurs that reduces or has the potential to reduce the effectiveness of ECs in place at the site, verbal notice to the NYSDEC project manager must be given by noon of the following day. In addition, an inspection of the site will be conducted within 5 days of the event to verify the effectiveness of the IC/ECs implemented at the site by a qualified environmental professional, as defined in 6 NYCCR Part 375. Written confirmation must be provided to the NYSDEC project manager within 7 days of the event that includes a summary of actions taken, or to be taken, and the potential impact to the environment and the public.

4.3 Treatment System Monitoring and Sampling

4.3.1 Remediation System Monitoring

Monitoring of the bio-augmentation system will be performed on a routine basis, as identified in **Table 2** Remedial System Monitoring Requirements and Schedule (see below). The monitoring of remedial systems must be conducted by a qualified environmental professional as defined in 6 NYCRR Part 375, a PE who is licensed and registered in New York State, or a qualified person who directly reports to a PE who is licensed and registered in New York State. Modification to the frequency or sampling requirements will require approval from the NYSDEC project manager. A visual inspection of the complete system will be conducted during each monitoring event. Unscheduled inspections and/or sampling may take place when a suspected failure of the

bio-augmentation system has been reported or an emergency occurs that is deemed likely to affect the operation of the system. Bio-augmentation system components to be monitored include, but are not limited to, the components included in **Table 2** below.

Table 2 – Remedial System Monitoring Requirements and Schedule

Remedial System Component	Monitoring Parameter	Operating Range	Monitoring Schedule
Monitoring Well MW-5	pH	6-8 S.U.	Annual
	TOC	50-500 milligrams per liter (mg/L)	Annual

A complete list of components to be inspected is provided in the Inspection Checklist, provided in **Appendix J** - Site Management Forms. If any equipment readings are not within their specified operation range, any equipment is observed to be malfunctioning or the system is not performing within specifications; maintenance and repair, as per the Operation and Maintenance Plan, is required immediately.

4.3.2 Remedial System Sampling

Not applicable/Not available.

4.4 Post-Remediation Media Monitoring and Sampling

Samples shall be collected from the monitoring wells MW-4, MW-5, and MW-8A on an annual basis to assess the performance of the remediation. Sampling locations, required analytical parameters and schedule are provided in **Table 3** – Post Remediation Sampling Requirements and Schedule below. Modification to the frequency or sampling requirements will require approval from the NYSDEC project manager.

Table 3 – Post Remediation Sampling Requirements and Schedule

Sampling Location	Analytical Parameters	Schedule
	VOCs (EPA Method 8260)	
Monitoring Well MW-4	X	Annually
Monitoring Well MW-5	X	Annually
Monitoring Well MW-8A	X	Annually

4.4.1 Soil Sampling

Not applicable/Not available.

4.4.2 Sediment Sampling

Not applicable/Not available.

4.4.3 Groundwater Sampling

Groundwater monitoring will be performed annually to assess the performance of the remedy. Modification to the frequency or sampling requirements will require approval from the NYSDEC project manager.

The network of monitoring wells has been installed to monitor upgradient, on-site and downgradient groundwater conditions at the site. However, historic changes to the site groundwater monitoring plan approved by the NYSDEC resulted in sampling of only three (3) monitoring wells onsite at this time.

Table 4 summarizes the wells identification number, as well as the purpose, location, depths, diameter and screened intervals of the wells. As part of the groundwater monitoring, three (3) on-site wells are sampled to evaluate the effectiveness of the remedial system. The remedial party will measure depth to the water table for each monitoring well in the network before sampling.

Table 4 – Monitoring Well Construction Details

Monitoring Well ID	Well Location	Well Diameter (inches)	Well Construction Details			
			Length of Casing	Length of Screen	Top of Screen (feet bgs)	Bottom of Screen (feet bgs)
MW-4	On-site	2	34	10	34	44
MW-5	On-site	2	34	10	34	44
MW-8A	On-site	1	33	10	33	43

Monitoring well construction logs are included in **Appendix D** of this document. A Site Map is included as **Figure 2** showing the location of monitoring wells within the monitoring well network.

All monitoring well sampling activities will be recorded in a field book and a groundwater-sampling log presented in **Appendix J**. Other observations (e.g., well integrity, etc.) will be noted on the well sampling log. The well sampling log will serve as the inspection form for the groundwater monitoring well network.

Monitoring wells will be gauged for depth to water and the presence of DNAPL using an EIP. Selected monitoring wells will be sampled by purging up to three (3) well volumes from each well using disposable Teflon lined polyethylene bailers. Sample collection will be via bailers following completion of the purge. Purge water will be stored on-site in 55-gallon drums and transported for non-hazardous waste disposal at an off-site waste disposal facility.

During sampling, various parameters will be collected which include: pH, temperature, specific conductivity, dissolved oxygen (DO), oxidation reduction potential (ORP), and turbidity. Groundwater samples will be submitted for laboratory analysis of VOC including ethene by Environmental Protection Agency (EPA) method 8260D and method RSK-175. Additionally, groundwater samples are collected for the following: total metals analysis of iron and general chemistry analysis of Ferric/Ferrous Iron, Nitrate/Nitrite, Sulfate, and TOC. **Table 5** below summarizes the groundwater chemistry and analytical parameters each monitoring wells is sampled for on an annual basis. **Table 6** below summarizes the site-specific contaminants of concern that are analyzed by the laboratory and the minimum required reporting limits for each contaminant of concern and the NYSDEC SCG that must be met for each.

Table 5 – Monitoring Well Sampling Parameters

Sampling Location		Monitoring Well MW-4	Monitoring Well MW-5	Monitoring Well MW-8A
GW Chemistry	**pH**	X	X	X
	Temperature	X	X	X
	Specific Conductivity	X	X	X
	DO	X	X	X
	ORP	X	X	X
	Turbidity	X	X	X
Analytical Parameters	**VOCs by Method SW846 8260D and Method RSK-175 (Ethene)**	X	X	X
	Metals Analysis by Method SW846 6010D (Iron)	X	X	X
	General Chemistry by Method EPA 300/SW846 9056 (Sulfate)	X	X	X
	General Chemistry by Method SM3500FE B-11 (Ferric/Ferrous Iron)	X	X	X
	General Chemistry by Method EPA 353.2/LACHAT, Method EPA 353.2/SM4500NO2B, and Method SM4500NO2 B-11 (Nitrate, Nitrate + Nitrite, Nitrite)	X	X	X
	General Chemistry by Method SM5310 B-11 (TOC)	X	X	X
Schedule		Annually	Annually	Annually

Table 6 – Site Specific Constituent of Concern Reporting Requirements

Site Specific COCs	Minimum Report Limits	NYSDEC SCGs (µg/L)
Tetrachloroethene	1.0	5
Trichloroethene	1.0	5
Cis-1,2-Dichloroethene	1.0	5
Trans-1,2-Dichloroethene	1.0	5
1,1-Dichloroethene	1.0	5
Vinyl Chloride	1.0	2
Ethene	0.31	Not Applicable

On August 25, 2014 the NYSDEC approved termination of analyses for metals, pesticides and semi-volatile organic compounds (SVOCs). On August 4, 2017 the NYSDEC approved the termination of annual analyses for PCBs. On August 19, 2019, the NYSDEC approved collecting groundwater samples and parameter reading on an annual basis.

If biofouling or silt accumulation occurs in the on-site and/or off-site monitoring wells, 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 project manager will be notified prior to any repair or decommissioning of any monitoring well for the purpose of replacement, and the repair or decommissioning and replacement process will be documented in the subsequent Periodic Review Report. Well decommissioning without replacement will be done only with the prior approval of the NYSDEC project manager. Well abandonment will be performed in accordance with NYSDEC's guidance entitled "CP-43: Groundwater Monitoring Well Decommissioning Procedures." Monitoring wells that are decommissioned because they have been rendered unusable will be replaced in kind in the nearest available location, unless otherwise approved by the NYSDEC project manager.

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

Deliverables for the groundwater monitoring program are specified in Section 7.0 – Reporting Requirements.

4.4.4 Surface Water Sampling

Not applicable.

4.4.5 Soil Vapor Sampling

Not applicable.

4.4.6 Soil Vapor Intrusion Sampling

Not applicable.

4.4.7 Monitoring and Sampling Protocol

All sampling activities will be recorded in a field book and associated sampling log as provided in **Appendix J** - Site Management Forms. Other observations (e.g., groundwater monitoring well integrity) will be noted on the sampling log. The sampling log will serve as the inspection form for the monitoring network.

5 OPERATION AND MAINTENANCE PLAN

5.1 General

This Operation and Maintenance Plan provides a brief description of the measures necessary to operate, monitor and maintain the mechanical components of the remedy selected for the site. This Operation and Maintenance Plan:

- Includes the procedures necessary to allow individuals unfamiliar with the site to operate and maintain the bio-augmentation system;
- Will be updated periodically to reflect changes in site conditions or the manner in which the bio-augmentation systems are operated and maintained.

Further detail regarding the Operation and Maintenance of the bio-augmentation system is provided in **Appendix I** - Operation and Maintenance Manual. A copy of this Operation and Maintenance Manual, along with the complete SMP, is to be maintained at the site. This Operation and Maintenance Plan is not to be used as a stand-alone document, but as a component document of this SMP.

5.2 Remedial System (or other Engineering Control) Performance Criteria

The purpose of the bio-augmentation treatment system is to facilitate in-situ biodegradation of VOCs in groundwater and saturated soils. It has several components as shown on **Figure 9**.

- Four individual injection points each with flow control valve and stub up for connection to the batch injection tank.
- MW-3 converted for injection with conveyance piping, control valve, and stub up for connection to the batch injection tank.
- A north-south trending injection gallery located along the eastern edge of the macadam pavement behind Building #2 (see **Figure 3**), and made-up of nine injection wells/points.
- Three lateral injection points installed below the floor slab within the former Sparkle Cleaners (see **Figure 10**).

The performance of the bio-augmentation system is based on groundwater contaminant levels. Successful performance of the bio-augmentation system would be illustrated by contaminant concentrations in groundwater that are consistently below groundwater quality standards or have become asymptotic to a low level over an extended period of time. The detailed bio-augmentation treatment system Operation and Maintenance Manual is provided in **Appendix I**.

5.3 Operation and Maintenance of Bio-Augmentation System

The following sections provide a description of the operations and maintenance of the bio-augmentation system. Cut-sheets and as-built drawings for the bio-augmentation system are provided in **Appendix I** - Operations and Maintenance Manual.

5.3.1 System Start-Up and Testing

The bio-augmentation system (BAS) will only be used while GES personnel are on-site. Prior to an injection of molasses, buffered molasses, or buffer solution with the bio-augmentation system the following will be completed:

- Visual inspection of injection point wellheads, injection point stub-ups, flow control valves, conveyance piping, and batch injection tank.
- Ensure all hose connections are secure.
- Prime pump prior to injection.

Injections will be conducted as described in the Interim Remedial Measure (IRM) work plan, the RAWP or in accordance to a NYSDEC approved schedule. The procedure includes mixing of a solution within a portable batch tank and low-pressure injection [less than 10 pounds per square inch (PSI)] into the target injection points. Decision thresholds to determine if start-up of the bio-augmentation system is required and solution mixes are described below by geochemical goal:

- TOC: TOC results from the annual groundwater monitoring event will be evaluated based on the targeted TOC range (as described above). If the TOC results are below the target TOC range, an injection of 10% molasses solution may be conducted in injection points proximate to the monitoring well with low TOC.
- pH and TOC: If pH and TOC results from any groundwater monitoring event are below target TOC and pH ranges (as described above) an injection of sodium bicarbonate buffered 10% molasses solution may be conducted in injection points proximate to the monitoring well with low TOC and pH. The buffer strength will be calculated based on 50% of the required buffer (based on groundwater titration) for the theoretical water volume within the area of influence of the well or wells into which injection is being conducted. The theoretical water volume will be calculated based aquifer thickness at the injection location, 10-foot radius of influence, and 15% aquifer porosity. pH and TOC results will be evaluated on an annual basis to determine if an injection is required.
- If pH results from any groundwater monitoring event are below the target pH range (as described above) and TOC is within the target range an injection of a sodium bicarbonate solution may be conducted to correct pH. The buffer strength will be calculated based on 50% of the required buffer (based on groundwater titration) for the theoretical water volume within the area of influence of the well or wells into which injection is being conducted. The theoretical water volume will be calculated based aquifer thickness at the injection location, 10-foot radius of influence, and 15% aquifer porosity.

Following injection of solution into the aquifer, the BAS monitoring network will be sampled within two weeks following the injection procedure set forth above with the following exceptions.

- Laboratory analysis will be conducted only for TOC.
- If the injection event was of only sodium bi-carbonate the no laboratory analysis will be conducted.

Based on the results of the sampling in comparison to the geochemical goals established, either additional injection will be conducted or the BAS performance will be reevaluated based on the next routine annual sampling event.

The system testing described above will be conducted if, in the course of the bio-augmentation system lifetime, the system goes down or significant changes are made to the system and the system must be restarted.

5.3.2 Routine System Operation and Maintenance

On an annual basis, the following operation, maintenance, and monitoring (OM&M) of the bio-augmentation system will be completed:

- Gauging of BAS monitoring network wells.
- Ground water sampling with field parameter collection.
- pH adjustment titration for each monitoring point with field measured pH outside of the target range.
- Visual inspection of piping stub ups and monitoring network well road boxes and well pads, injection well road boxes and well pads.

A copy of an Operations and Maintenance Manual specific to the remedial systems should be provided in **Appendix I**, which will provide further detail on the above.

5.3.3 Non-Routine Operation and Maintenance

Non-routine operation and maintenance will be performed as a follow-up to deficiencies noted during the OM&M visits. If repairs cannot be readily made in the field, GES (or its subcontractors) will identify options to remedy the issue. If it appears that significant BAS modifications are required, NYSDEC will be notified prior to the commencement of any modification work.

Table 7 provides a summary and schedule of routine maintenance.

Table 7: Routine Maintenance Schedule

Routine Maintenance	Schedule
Gauging of BAS monitoring well network	Annually
Groundwater sampling with field parameter collection	Annually
pH adjustment titration	As needed based on field measured pH readings
Visual inspection	Annually
Injection event	As needed based on geochemical targets and groundwater concentrations, or as required by NYSDEC.

5.3.4 System Monitoring Devices and Alarms

Not applicable.

5.3.5 Fire Safety

Not applicable.

6 PERIODIC ASSESSMENTS/EVALUATIONS

6.1 Climate Change Vulnerability Assessment

Increases in both the severity and frequency of storms/weather events, an increase in sea level elevations along with accompanying flooding impacts, shifting precipitation patterns and wide temperature fluctuation, resulting from global climactic change and instability, have the potential to significantly impact the performance, effectiveness and protectiveness of a given site and associated remedial systems. Vulnerability assessments provide information so that the site and associated remedial systems are prepared for the impacts of the increasing frequency and intensity of severe storms/weather events and associated flooding.

At this time the site is not subject to any potential vulnerabilities, and therefore, a vulnerability assessment has not been performed.

- Flood Plain: The site is not located in a flood plain, low-lying, or low-groundwater recharge area.
- Site Drainage and Storm Water Management: Site drainage does not appear to be an issue and an adequate storm water management system appears to be in place.
- Erosion: Evidence of erosion or areas of the site that may be susceptible to erosion are not present at the site.
- High Wind: The site is not susceptible to damage from wind or falling objects created by high wind.
- Electricity: Power loss would not impact any site equipment or operations at the site since the they are not present.
- Spill/Contaminant Release: The site is not susceptible to a spill or other contaminant release. No material that has the potential to spill is stored on the site.

6.2 Green Remediation Evaluation

NYSDEC's DER-31 Green Remediation requires that green remediation concepts and techniques be considered during all stages of the remedial program including site management, with the goal of improving the sustainability of the cleanup and summarizing the net environmental benefit of any implemented green technology. This section of the SMP provides a summary of any green remediation evaluations to be completed for the site during site management, and as reported in the Periodic Review Report (PRR).

Due to the nature of the current conditions at the Site and the site management requirements, the opportunities for incorporating green remediation evaluations are limited but may include the following:

- Waste Generation: Three (3) monitoring wells are sampled on an annual basis and purge water and miscellaneous waste (bailers, string, etc.) are generated from monitoring well sampling activities. An opportunity to reduce purge water waste generated on an annual

basis is to utilize passive diffusion bag (PDB) as a method of no purge sampling. However, utilizing PDBs would not reduce the amount of miscellaneous waste generated since the PDBs need to be removed and discarded after each use.

- Energy usage: Not available.
- Emissions: Not available.
- Water usage: Not available.
- Land and/or ecosystems: Not available.

6.2.1 Timing of Green Remediation Evaluations

For major remedial system components, green remediation evaluations and corresponding modifications will be undertaken as part of a formal Remedial System Optimization (RSO), or at any time that the NYSDEC project manager feels appropriate, e.g. during significant maintenance events or in conjunction with storm recovery activities.

Modifications resulting from green remediation evaluations will be routinely implemented and scheduled to occur during planned/routine operation and maintenance activities. Reporting of these modifications will be presented in the PRR.

6.2.2 Remedial System

Remedial systems will be operated properly considering the current site conditions to conserve materials and resources to the greatest extent possible. Consideration will be given to operating rates and use of reagents and consumables. Spent materials will be sent for recycling, as appropriate.

6.2.3 Building Operations

Structures including buildings and sheds will be operated and maintained to provide for the most efficient operation of the remedy, while minimizing energy, waste generation and water consumption.

6.2.4 Frequency of System Checks, Sampling, and Other Periodic Activities

Transportation to and from the Site, use of consumables in relation to visiting the Site in order to conduct system checks and/or collect samples, and shipping samples to a laboratory for analyses have direct and/or inherent energy costs. The schedule and/or means of these periodic activities have been prepared so that these tasks can be accomplished in a manner that does not impact remedy protectiveness but reduces expenditure of energy or resources.

- Reduced sampling frequencies: Sampling frequency has been reduced to annual visits.
- Reduced site visits and system checks: Site visits have been reduced to two (2) planned site visits per year to complete groundwater sampling activities, waste removal, and site inspection to verify condition of EC/ICs. Additionally, any GES technicians are equipped

with resources to complete maintenance and troubleshooting tasks the same day as site visits, if needed and possible, to reduce additional visits.

- Installation of remote sensing/operations and telemetry: Not applicable.
- Coordination/consolidation of activities to maximize foreman/labor time: As described above, site visits are coordinated so that multiple activities can be completed each site visit rather than requiring an individual site visit for each activity.
- Use of mass transit for site visits, where available: Not applicable.

6.2.5 Metrics and Reporting

Not available.

6.3 Remedial System Optimization

A Remedial Site Optimization (RSO) study will be conducted any time that the NYSDEC project manager or the remedial party requests in writing that an in-depth evaluation of the remedy is needed. An RSO may be appropriate if any of the following occur:

- The remedial actions have not met or are not expected to meet Remedial Action Objectives (RAOs) in the time frame estimated in the Decision Document;
- The management and operation of the remedial system is exceeding the estimated costs;
- The remedial system is not performing as expected or as designed;
- Previously unidentified source material may be suspected;
- Plume shift has potentially occurred;
- Site conditions change due to development, change of use, change in groundwater use, etc.;
- There is an anticipated transfer of the site management to another remedial party or agency; and
- A new and applicable remedial technology becomes available.

An RSO will provide a critique of a site's conceptual model, give a summary of past performance, document current cleanup practices, summarize progress made toward the site's cleanup goals, gather additional performance or media specific data and information and provide recommendations for improvements to enhance the ability of the present system to reach RAOs or to provide a basis for changing the remedial strategy.

The RSO study will focus on overall site cleanup strategy, process optimization and management with the intent of identifying impediments to cleanup and improvements to site operations to increase efficiency, cost effectiveness and remedial time frames. Green remediation technology and principals are to be considered when performing the RSO.

An RSO has not been conducted for this site at this time due to the current status of the remedy (bio-augmentation system with injections only conducted on an as needed basis).

7 REPORTING REQUIREMENTS

7.1 Site Management Reports

All site management inspection, maintenance and monitoring events will be recorded on the appropriate site management forms provided in **Appendix J**. These forms are subject to NYSDEC revision. All site management inspection, maintenance, and monitoring events will be conducted by a qualified environmental professional as defined in 6 NYCRR Part 375, a PE who is licensed and registered in New York State, or a qualified person who directly reports to a PE who is licensed and registered in New York State.

All applicable inspection forms and other records, including media sampling data and system maintenance reports, generated for the site during the reporting period will be provided in electronic format to the NYSDEC in accordance with the requirements of **Table 8** and summarized in the Periodic Review Report.

Table 8: Schedule of Interim Monitoring/Inspection Reports

Task/Report	Reporting Frequency
Non-Routine Letter	Within the month following a non-routine inspection or site visit
Periodic Review Report	Annually, or as otherwise determined by the NYSDEC

* The frequency of events will be conducted as specified until otherwise approved by the NYSDEC project manager.

All interim monitoring/inspections reports will include, at a minimum:

- Date of event or reporting period;
- Name, company, and position of person(s) conducting monitoring/inspection activities;
- Description of the activities performed;
- Where appropriate, color photographs or sketches showing the approximate location of any problems or incidents noted (included either on the checklist/form or on an attached sheet);
- Type of samples collected (e.g., sub-slab vapor, indoor air, outdoor air);
- Copies of all field forms completed (e.g., well sampling logs, chain-of-custody documentation);
- 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 required for all points sampled (to be submitted electronically in the NYSDEC-identified format);
- Any observations, conclusions, or recommendations; and

- A determination as to whether contaminant conditions have changed since the last reporting event.

Routine maintenance event reporting forms will include, at a minimum:

- Date of event;
- Name, company, and position of person(s) conducting maintenance activities;
- Description of maintenance activities performed;
- Any modifications to the system;
- Where appropriate, color photographs or sketches showing the approximate location of any problems or incidents noted (included either on the checklist/form or on an attached sheet); and
- Other documentation such as copies of invoices for maintenance work, receipts for replacement equipment, etc., (attached to the checklist/form).

Non-routine maintenance event reporting forms will include, at a minimum:

- Date of event;
- Name, company, and position of person(s) conducting non-routine maintenance/repair activities;
- Description of non-routine activities performed;
- Where appropriate, color photographs or sketches showing the approximate location of any problems or incidents (included either on the form or on an attached sheet); and
- Other documentation such as copies of invoices for repair work, receipts for replacement equipment, etc. (attached to the checklist/form).

Data will be reported in digital format as determined by the NYSDEC. Currently, data is to be supplied electronically and submitted to the NYSDEC EQuISTM database in accordance with the requirements found at this link http://www.dec.ny.gov/chemical/62440.html.

7.2 Periodic Review Report

A PRR will be submitted to the NYSDEC project manager beginning sixteen (16) months after the COC is issued. After submittal of the initial Periodic Review Report, the next PRR shall be submitted annually to the NYSDEC project manager or at another frequency as may be required by the NYSDEC project manager. 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 A** -Environmental Easement. The report will be prepared in accordance with NYSDEC's DER-10 and submitted within 30 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 annual site inspections, fire inspections and severe condition inspections, if applicable.
- All applicable site management forms and other records generated for the site during the reporting period in the NYSDEC-approved electronic format, if not previously submitted.
- Identification of any wastes generated during the reporting period, along with waste characterization data, manifests, and disposal documentation.
- 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, soil vapor, etc.), which include a listing of all compounds analyzed, along with the applicable standards, with all exceedances highlighted. These tables and figures will include a presentation of past data as part of an evaluation of contaminant concentration trends, including but not limited to:
    - Trend monitoring graphs that present groundwater contaminant levels from before the start of the remedy implementation to the most current sampling data;
    - Trend monitoring graphs depicting system influent analytical data on a per event and cumulative basis;
    - O&M data summary tables;
    - A current plume map for sites with remaining groundwater contamination; and
    - A groundwater elevation contour map for each gauging event.
- 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 in digital format as determined by the NYSDEC. Currently, data is supplied electronically and submitted to the NYSDEC EQuISTM database in accordance with the requirements found at this link: http://www.dec.ny.gov/chemical/62440.html.
- A site evaluation, which includes the following:
    - The compliance of the remedy with the requirements of the site-specific RAWP, Record of Decision (ROD), or Decision Document;
    - The operation and the effectiveness of all treatment units, etc., including identification of any needed repairs or modifications;
    - Any new conclusions or observations regarding site contamination based on inspections or data generated by the Monitoring and Sampling Plan for the media being monitored;
    - Recommendations regarding any necessary changes to the remedy and/or Monitoring and Sampling Plan;

- An evaluation of trends in contaminant levels in the affected media to determine if the remedy continues to be effective in achieving remedial goals as specified by the RAWP, ROD, or Decision Document; and
- The overall performance and effectiveness of the remedy.

- A performance summary for all treatment systems at the site during the calendar year, including information such as:
  - The number of days the system operated for the reporting period;
  - The average, high, and low flows per day;
  - The contaminant mass removed and the cost per pound of mass removed during the certification period and during the life of the treatment system;
  - A description of breakdowns and/or repairs along with an explanation for any significant downtime;
  - A description of the resolution of performance problems;
  - Alarm conditions;
  - Trends in equipment failure;
  - A summary of the performance, effluent and/or effectiveness monitoring; and
  - Comments, conclusions, and recommendations based on data evaluation. Recommendations must address how receptors would be impacted. Recommendations can include:
    - Proposals to address efficiency and costs such as: instituting remote operation, system changes to decrease maintenance costs and downtime, and system changes to decrease energy use; and
    - Proposals to modify or shut down a treatment system due to remediation completion, system performance or changed conditions. System shutdowns are addressed in Section 6.4 of DER-10.

7.2.1 Certification of Institutional and Engineering Controls

Following the last inspection of the reporting period, a Professional Engineer licensed to practice and registered in New York will prepare, and include in the Periodic Review Report, the following certification as per the requirements of NYSDEC DER-10:

"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 any 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 and generally accepted engineering practices; and*
- *The information presented in this report is accurate and complete.*

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 Owner's Designated Site Representative for the site."

"I certify that the New York State Education Department has granted a Certificate of Authorization to provide Professional Engineering services to the firm that prepared this Periodic Review Report."

At the end of each certifying period, as determined by the NYSDEC project manager, the following certification will be provided to the NYSDEC project manager:

"For each institutional identified for the site, I certify that all of the following statements are true:

- *The institutional 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 any 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 information presented in this report is accurate and complete.*

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'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; and*
- *The assumptions made in the qualitative exposure assessment remain valid.*

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

The Periodic Review Report will be submitted, in electronic format, to the NYSDEC project manager and the NYSDOH project manager. The Periodic Review Report may also need to be submitted in hard-copy format if requested by the NYSDEC project manager.

7.3 Corrective Measures Work 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 or failure to conduct site management activities, a Corrective Measures Work Plan will be submitted to the NYSDEC project manager 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 Work Plan until it has been approved by the NYSDEC project manager.

7.4 Remedial Site Optimization Report

If an RSO is to be performed (see Section 6.3), upon completion of an RSO, an RSO report must be submitted to the NYSDEC project manager for approval. RSO report will document the research/ investigation and data gathering that was conducted, evaluate the results and facts obtained, present a revised conceptual site model and present recommendations. RSO recommendations are to be implemented upon approval from the NYSDEC. Additional work plans, design documents, HASPs etc., may still be required to implement the recommendations, based upon the actions that need to be taken. A final engineering report and update to the SMP may also be required.

The RSO report will be submitted, in electronic format, to the NYSDEC project manager and the NYSDOH project manager.

8 REFERENCES

6 NYCRR Part 375, Environmental Remediation Programs. December 14, 2006.

NYSDEC DER-10 – "Technical Guidance for Site Investigation and Remediation".

NYSDEC, 1998. Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations Division of Water Technical and Operational Guidance Series (TOGS) 1.1.1. June 1998 (April 2000 addendum).

KLF, 2007a, Remedial Investigation Work Plan, Orangeburg (Orangetown) Shopping Center, 1-45 Orangetown Shopping Center, Orangeburg, New York, dated July 2007

KLF, 2008a, Remedial Investigation Report, Orangeburg (Orangetown) Shopping Center, 1-45 Orangetown Shopping Center, Orangeburg, New York, dated May 2008, revised August 2008

KLF, 2008b, Interim Remedial Measures Work Plan, Orangeburg (Orangetown) Shopping Center, 1-45 Orangetown Shopping Center, Orangeburg, New York, dated June 2008, revised August 2008

KLF, 2009, Design Letter Report – Sub-SlabDepressurization System, Orangetown Shopping Center, 1-45 Orangetown Shopping Center, Orangeburg, New York, 10962, dated September 2009

KLF, 2010a, Bio-stimulation Injection System Letter, Orangetown Shopping Center, 1-45 Orangetown Shopping Center, Orangeburg, New York, 10962, dated January 29, 2010

KLF, 2010b, Sub-Slab Depressurization System Design Revision Letter, Orangetown Shopping Center, 1-45 Orangetown Shopping Center, Orangeburg, New York, 10962, dated July 2010

KLF, 2011a, Bio-stimulation Injection System Revision Letter, Orangetown Shopping Center, 1-45 Orangetown Shopping Center, Orangeburg, New York, 10962, dated April 1, 2011

KLF, 2011b, Revised Underground Inject ion Plan Letter, Orangetown Shopping Center, 1-45 Orangetown Shopping Center, Orangeburg, New York, 10962, dated April 26, 2011

KLF, 2011c, Construction Completion Report #1 Source Removal, Orangetown Shopping Center, 1-45 Orangetown Shopping Center, Orangeburg, New York, 10962, dated June 2011

KLF, 2011d, Construction Completion Report #2 Sub-Slab Depressurization System, Orangetown Shopping Center, 1-45 Orangetown Shopping Center, Orangeburg, New York, 10962, dated August 2011

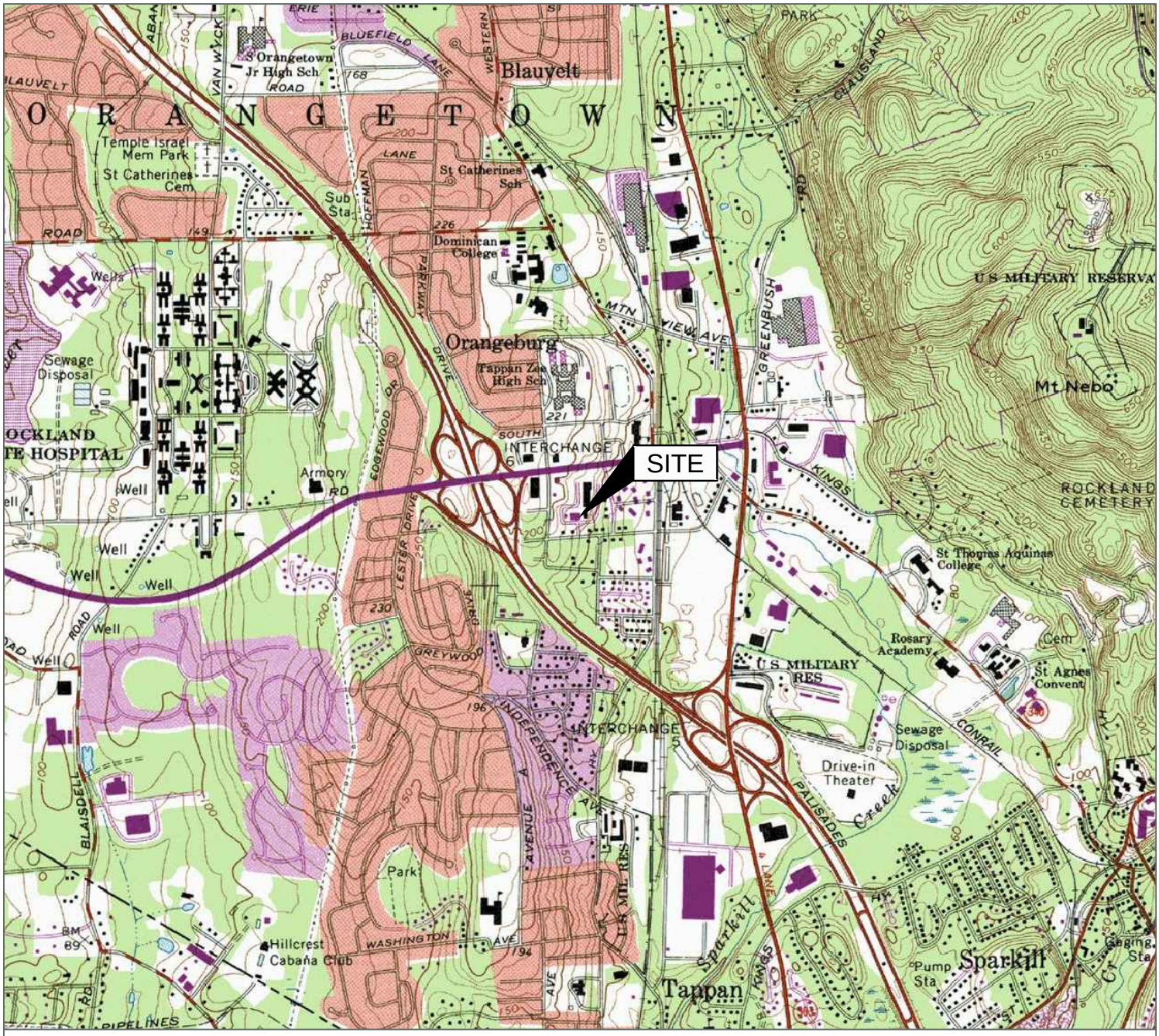
KLF, 2011e, Construction Completion Report #3 Sub-Slab Depressurization System, Orangetown Shopping Center, 1-45 Orangetown Shopping Center, Orangeburg, New York, 10962, dated August 2011

KLF, 2011f, Remedial Investigation Addendum Report, Orangetown Shopping Center, 1-45 Orangetown Shopping Center, Orangeburg, New York, 10962, dated July 2011

KLF, 2011g, Site Management Plan, Final and Appendices, Orangetown Shopping Center, 1-45 Orangetown Shopping Center, Orangeburg, New York, 10962, dated December 2011

KLF, 2011h, Final Engineering Report, Final, Orangetown Shopping Center, 1-45 Orangetown Shopping Center, Orangeburg, New York, 10962, dated December 2011

Figures



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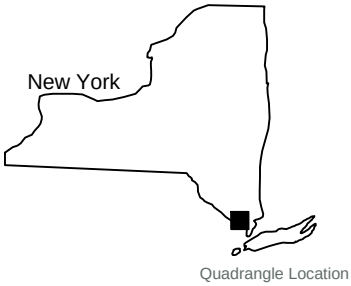

Quadrangle Location

Site Location Map

UB Orangeburg, LLC
1-45 Orangetown Shopping Center
Orangeburg, New York

Drawn
W.G.S.
Designed

Approved

Date
1-23-18
Figure
1

N

Scale In Feet
0 200

GES
Groundwater & Environmental Services, Inc.

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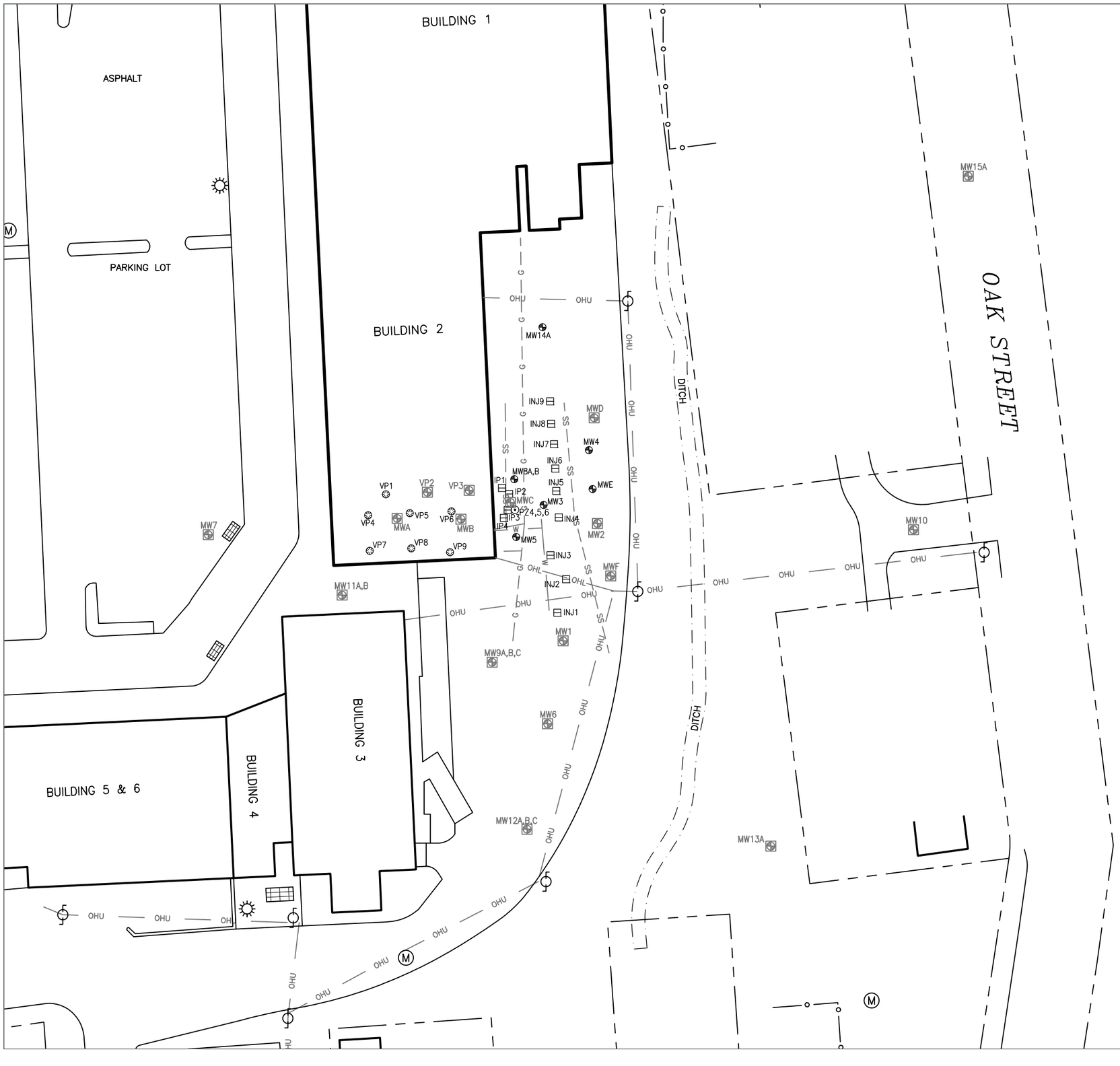

LEGEND

- PROPERTY BOUNDARY
- CHAIN LINK FENCE
- CATCH BASIN
- UTILITY MANHOLE
- UTILITY POLE
- LIGHT POLE
- FIRE HYDRANT
- MONITORING WELL
- INJECTION WELL
- DESTROYED MONITORING WELL
- PIEZOMETER
- SOIL VAPOR EXTRACTION WELL
- SS — UNDERGROUND SANITARY SEWER LINE
- OHU — OVERHEAD UTILITIES

Site Map

UB Orangeburg, LLC
1-45 Orangetown Shopping Center
Orangeburg, New York

Drawn
W.G.S.
Designed

Approved

Date
3/6/23
Figure
2

Scale In Feet
0 50

Groundwater & Environmental Services, Inc.

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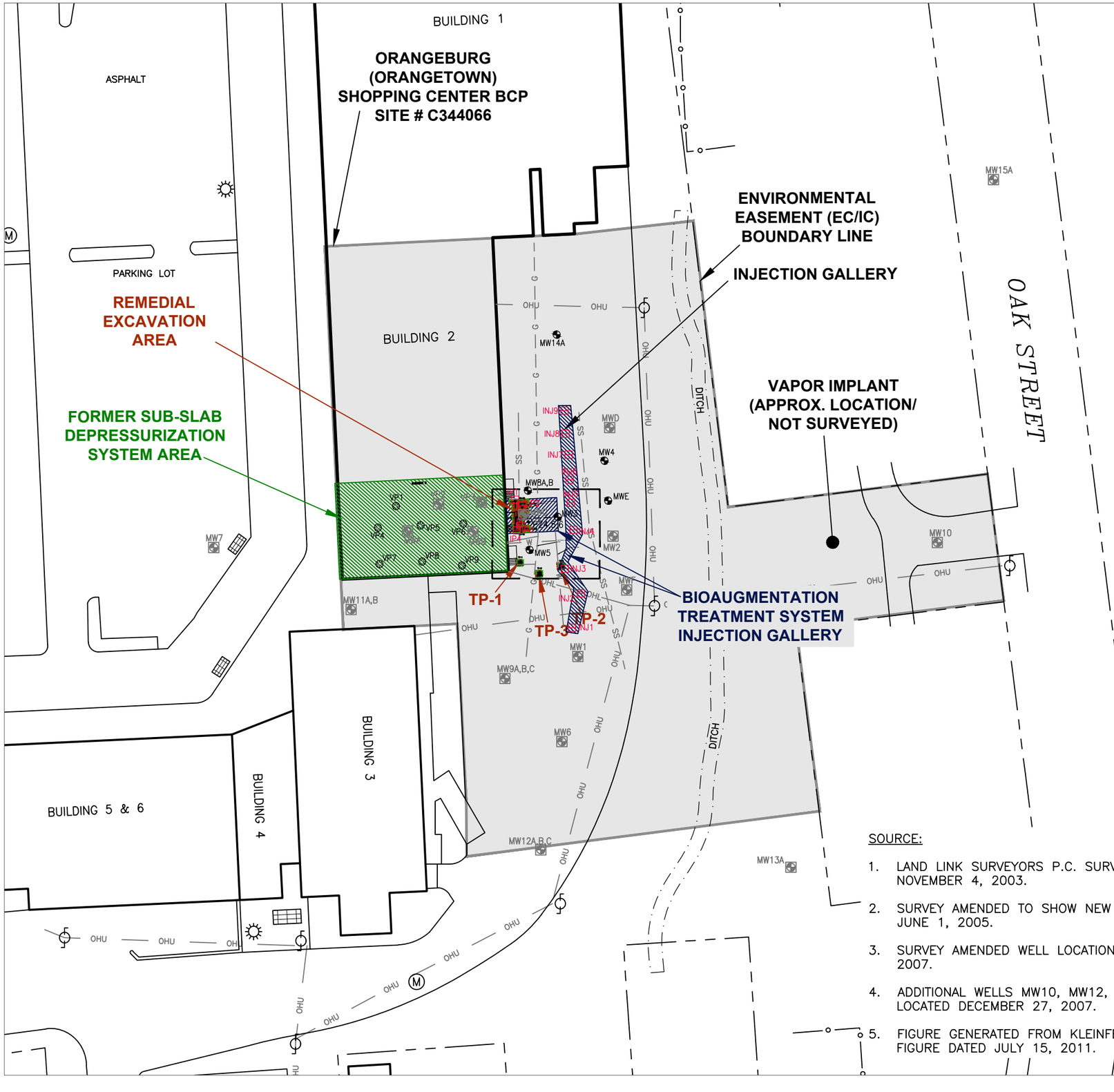

LEGEND

- PROPERTY BOUNDARY
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- UTILITY MANHOLE
- UTILITY POLE
- LIGHT POLE
- FIRE HYDRANT
- MONITORING WELL
- INJECTION WELL
- DESTROYED MONITORING WELL
- PIEZOMETER
- SOIL VAPOR EXTRACTION WELL
- SS — UNDERGROUND SANITARY SEWER LINE
- OHU — OVERHEAD UTILITIES

NOTES:

1. THE PREMISES SHOWN HEREON DESIGNATED AS LOT 1 ON A CERTAIN MAP ENTITLED " SUBDIVISION OF PROPERTY ORANGETOWN CENTER" AS FILED IN THE ROCKLAND COUNTY CLERK'S OFFICE ON FEBRUARY 26, 1990 AS MAP No. 6427 IN Book 111 Page 59 AND ARE DESCRIBED IN DEED RECORDED REEL 404, PAGE 2555.
2. THE DIMENSIONS SHOWN HEREON, FROM THE STRUCTURES TO THE PROPERTY LINE ARE NOT INTENDED TO BE USED FOR THE ERECTION OF FENCES, STRUCTURES OR ANY OTHER IMPROVEMENT.
3. ENCROACHMENTS BELOW GRADE AND/OR SUBSURFACE FEATURES, IF ANY, NOT LOCATED OR SHOWN HEREON.

SOURCE:

1. LAND LINK SURVEYORS P.C. SURVEY MAP DATED NOVEMBER 4, 2003.
2. SURVEY AMENDED TO SHOW NEW CERTIFICATION JUNE 1, 2005.
3. SURVEY AMENDED WELL LOCATION DECEMBER 19, 2007.
4. ADDITIONAL WELLS MW10, MW12, AND MW13 LOCATED DECEMBER 27, 2007.
5. FIGURE GENERATED FROM KLEINFELDER ENGINEERING FIGURE DATED JULY 15, 2011.

Site Layout

UB Orangeburg, LLC
1-45 Orangetown Shopping Center
Orangeburg, New York

Drawn T.P.
Designed
Approved
Date 05/23/23
Figure 3

Scale In Feet
0 50

GES
Groundwater & Environmental Services, Inc.

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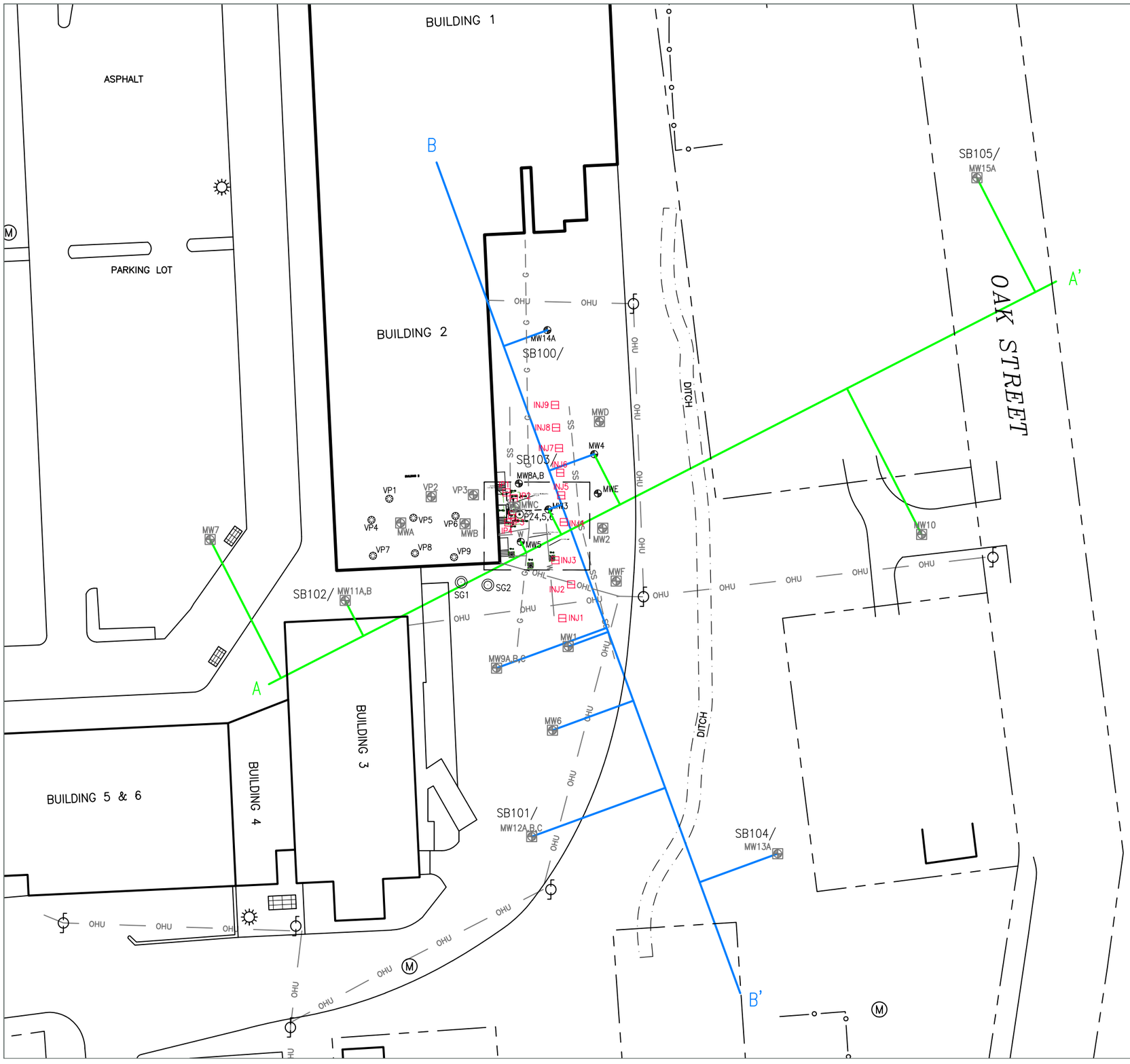

LEGEND

- PROPERTY BOUNDARY
- CHAIN LINK FENCE
- CATCH BASIN
- UTILITY MANHOLE
- UTILITY POLE
- LIGHT POLE
- FIRE HYDRANT
- MONITORING WELL
- INJECTION WELL
- DESTROYED MONITORING WELL
- PIEZOMETER
- SOIL VAPOR EXTRACTION WELL
- UNDERGROUND SANITARY SEWER LINE
- OVERHEAD UTILITIES
- SOIL BORING

Cross-Section Location Map

UB Orangeburg, LLC
1-45 Orangetown Shopping Center
Orangeburg, New York

Drawn W.G.S.
Designed
Approved

Date 3/6/23
Figure 4

Scale In Feet
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Groundwater & Environmental Services, Inc.

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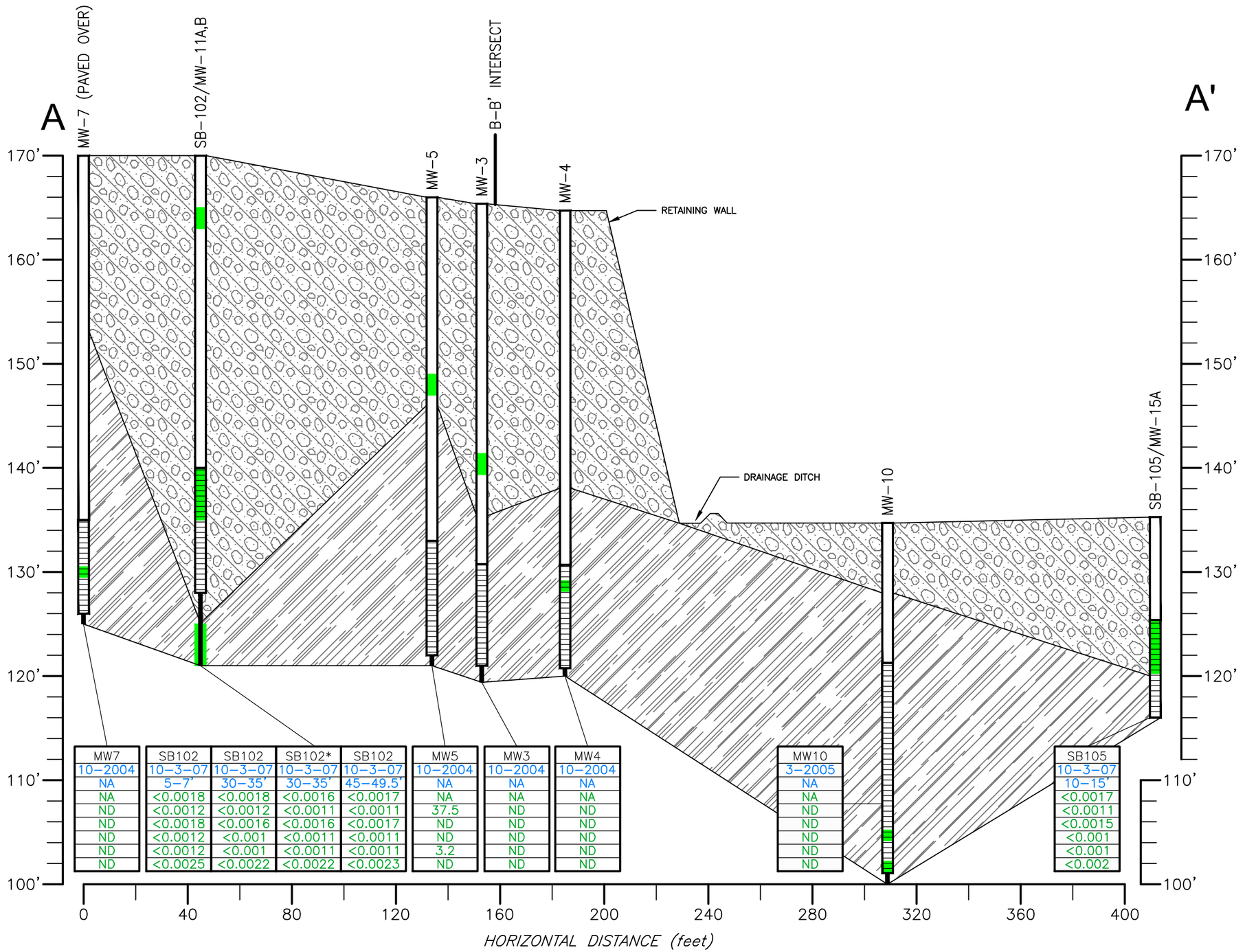


LEGEND

- RISER
- SCREENED INTERVAL
- BORE HOLE
- GENERALLY FINE TO MEDIUM SAND, WITH SILT, COARSE SAND & FIRM GRAVEL, INTERMEITTENT LOCAL FINING OR COARSENING WITHIN SEQUENCE
- WEATHERED ROCK
- SOIL SAMPLE LOCATION

SB100	SAMPLE IDENTIFICATION
9-27-07	SAMPLE DATE
25-30'	SAMPLE DEPTH (feet)
<0.0014	DCA CONCENTRATION (mg/kg)
<0.0009	cDCE CONCENTRATION (mg/kg)
<0.0014	tDCE CONCENTRATION (mg/kg)
<0.0009	PCE CONCENTRATION (mg/kg)
<0.0009	TCE CONCENTRATION (mg/kg)
<0.0018	VC CONCENTRATION (mg/kg)
mg/kg	MILLIGRAMS PER KILOGRAM
DCA	1,1-DICHLOROETHANE
cDCE	cis-1,2-DICHLOROETHENE
tDCE	trans-1,2-DICHLOROETHENE
PCE	TETRACHLOROETHENE
TCE	TRICHLOROETHENE
VC	VINYL CHLORIDE
ND	NOT DETECTED
NA	NOT ANALYZED FOR CONSTITUENTS
<#	WHERE AN ANALYTE IS NOT DETECTED, A METHOD DETECTION LIMIT IS GIVEN
*	REPRESENTS DUPLICATE SAMPLE

Cross-Section A-A'

UB Orangeburg, LLC
1-45 Orangetown Shopping Center
Orangeburg, New York

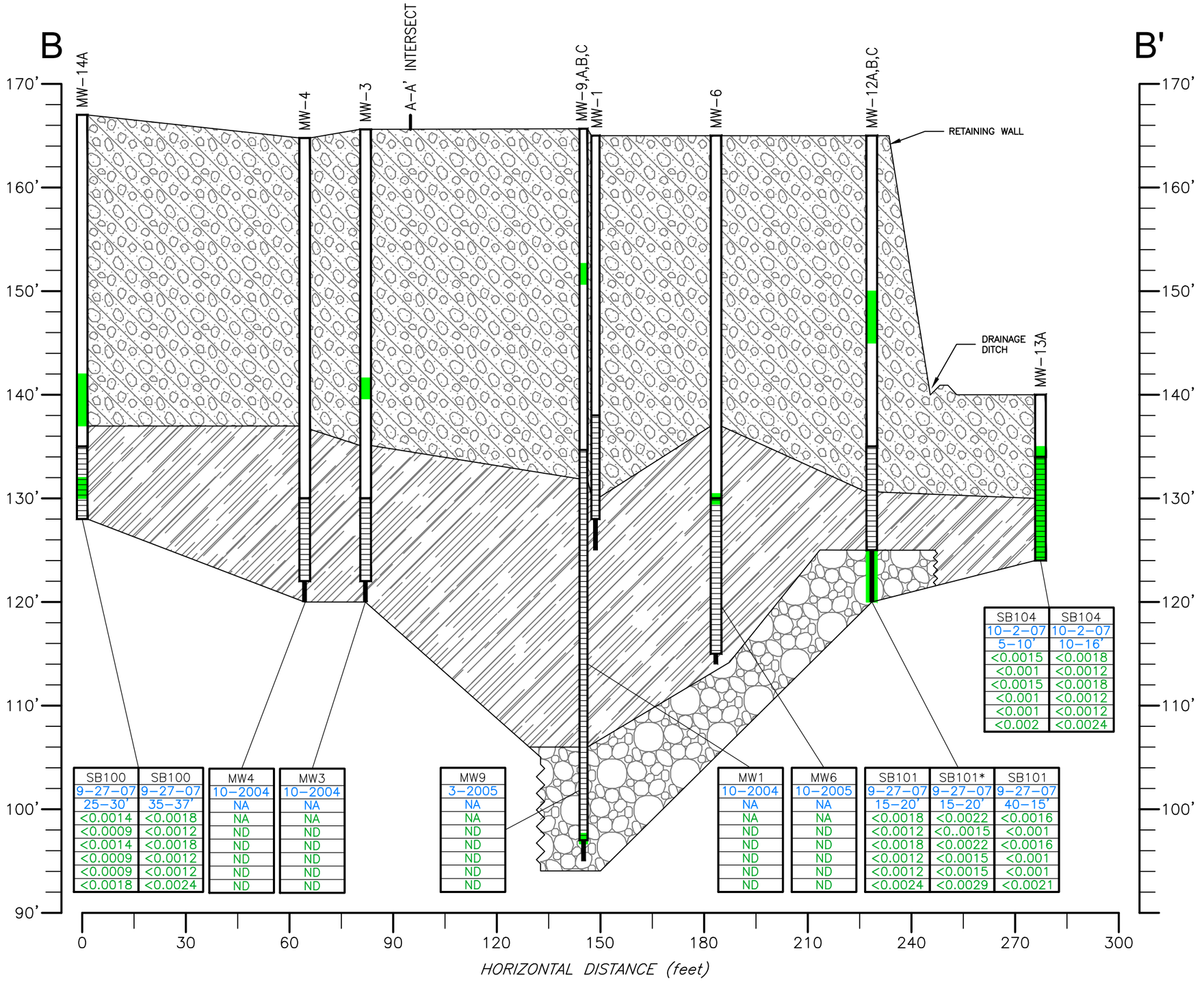
Drawn W.G.S.
Designed
Approved

Date 3/6/23
Figure 5

Scale as Shown

Groundwater & Environmental Services, Inc.

M:\Graphics\1100-Patterson-LHV\Misc\Urstadt Biddle Properties\Orangeburg\Orangeburg XS-AB.dwg, A-A', WShea



LEGEND

- RISER
- SCREENED INTERVAL
- BORE HOLE
- GENERALLY FINE TO MEDIUM SAND, WITH SILT, COARSE SAND & FIRM GRAVEL, INTERMEITTENT LOCAL FINING OR COARSENING WITHIN SEQUENCE
- WEATHERED ROCK
- BEDROCK
- SOIL SAMPLE LOCATION

SB100	SAMPLE IDENTIFICATION
9-27-07	SAMPLE DATE
25-30'	SAMPLE DEPTH (feet)
<0.0014	DCA CONCENTRATION (mg/kg)
<0.0009	cDCE CONCENTRATION (mg/kg)
<0.0014	tDCE CONCENTRATION (mg/kg)
<0.0009	PCE CONCENTRATION (mg/kg)
<0.0009	TCE CONCENTRATION (mg/kg)
<0.0018	VC CONCENTRATION (mg/kg)

mg/kg	MILLIGRAMS PER KILOGRAM
DCA	1,1-DICHLOROETHANE
cDCE	cis-1,2-DICHLOROETHENE
tDCE	trans-1,2-DICHLOROETHENE
PCE	TETRACHLOROETHENE
TCE	TRICHLOROETHENE
VC	VINYL CHLORIDE
ND	NOT DETECTED
NA	NOT ANALYZED FOR CONSTITUENTS
<#	WHERE AN ANALYTE IS NOT DETECTED, A METHOD DETECTION LIMIT IS GIVEN
*	REPRESENTS DUPLICATE SAMPLE

Cross-Section B-B'

UB Orangeburg, LLC
1-45 Orangetown Shopping Center
Orangeburg, New York

Drawn W.G.S.
Designed
Approved

Date 3/6/23
Figure 6

Scale as Shown

Groundwater & Environmental Services, Inc.

M:\Graphics\1100-Patterson-LHV\Misc\Urstadt Biddle Properties\Orangeburg\Orangeburg XS-AB.dwg, B-B', WShea

BUILDING 2

MW14A
133.99
NS

MW8A
132.66
ND(<1.0)
1.5
ND(<1.0)
ND(<1.0)
ND(<1.0)
ND(<1.0)
ND(<0.31)

MW5
133.77
ND(<1.0)
3.8
191
3.9
ND(<1.0)
22.9
8.55

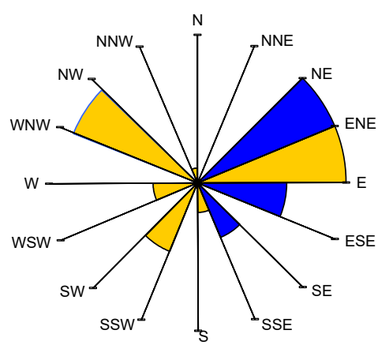
MW4
134.28
ND(<1.0)
ND(<1.0)
9.2
ND(<1.0)
ND(<1.0)
ND(<1.0)
ND(<0.31)

MWE
133.46
ND(<1.0)
ND(<1.0)
3.8
ND(<1.0)
ND(<1.0)
ND(<1.0)
ND(<0.31)

MW3
133.66
NS

MW14A
INJ9
MWD
INJ8
INJ7
MW4
INJ6
MW8A,B
IP1
IP2
INJ5
MWE
134.00
MWC
MW3
PZ4,5,6
IP3
INJ4
IP4
MW2
133.00
133.50
MW5
VP1
VP2
VP3
VP4
MWA
VP5
VP6
MWB
VP7
VP8
VP9
GROUNDWATER FLOW DIRECTION
DITCH
INJ3
MWF
INJ2
MW11A,B
MW9A,B,C
MW6
BUILDING 2

HISTORICAL GROUNDWATER FLOW DIRECTION FREQUENCY



2013–2022 (25 READINGS)

LEGEND

- PROPERTY BOUNDARY
- CHAIN LINK FENCE
- CATCH BASIN
- UTILITY MANHOLE
- UTILITY POLE
- LIGHT POLE
- FIRE HYDRANT
- MONITORING WELL
- INJECTION WELL
- DESTROYED MONITORING WELL
- PIEZOMETER
- SOIL VAPOR EXTRACTION WELL

MW5	WELL IDENTIFICATION
133.77	GROUNDWATER ELEVATION (feet)
ND(<1.0)	TETRACHLOROETHENE CONCENTRATION (ug/L)
3.8	TRICHLOROETHENE CONCENTRATION (ug/L)
191	CIS–1,2–DICHLOROETHENE CONCENTRATION (ug/L)
3.9	TRANS–1,2–DICHLOROETHENE CONCENTRATION (ug/L)
ND(<1.0)	1,1–DICHLOROETHENE CONCENTRATION (ug/L)
22.9	VINYL CHLORIDE CONCENTRATION (ug/L)
8.55	ETHENE CONCENTRATION (ug/L)

- ug/L — MICROGRAMS PER LITER
- ND — NOT DETECTED
- <# — WHERE AN ANALYTE IS NOT DETECTED, A METHOD DETECTION LIMIT IS GIVEN
- NS — NOT SAMPLED
- – — NOT AVAILABLE
- GROUNDWATER CONTOUR (feet)

NOTE:

VALUE SHADED PURPLE EXCEEDS NYSDEC TOGS 1.1.1 GWQS.

Groundwater Monitoring Map
April 18, 2022

UB Orangeburg, LLC
1-45 Orangetown Shopping Center
Orangeburg, New York

Drawn W.G.S.
Designed
Approved
Date 7/1/22
Figure 7

Scale In Feet
0 20

Groundwater & Environmental Services, Inc.

M:\Graphics\11100-Patterson-LHV\Misc\Urstadt Biddle Properties\Orangeburg\Orangeburg SM.dwg, B20 sm-st, WShea

SOURCE:

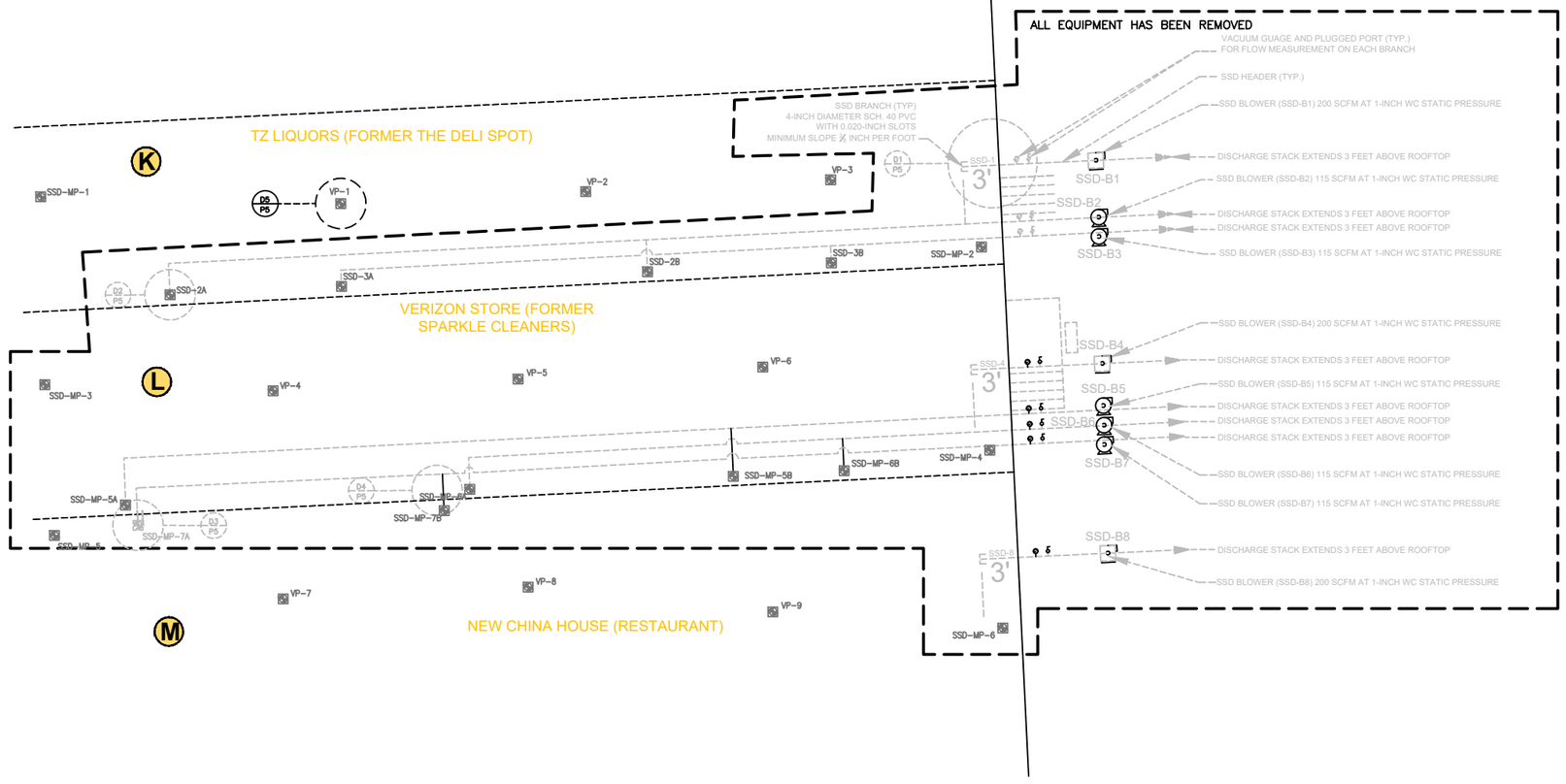
1. LAND LINK SURVEYORS P.C. SURVEY MAP DATED NOVEMBER 4, 2003.
2. SURVEY AMENDED TO SHOW NEW CERTIFICATION JUNE 1, 2005.
3. SURVEY AMENDED WELL LOCATION DECEMBER 19, 2007.
4. ADDITIONAL WELLS MW10, MW12, AND MW13 LOCATED DECEMBER 27, 2007.
5. FIGURE GENERATED FROM KLEINFELDER ENGINEERING FIGURE DATED JULY 15, 2011.

LEGEND

- SSD-MP-6 — SUB-SLAB MONITORING PORT
- SUB-SLAB VAPOR EXTRACTION WELL
- D1 / P5 — DETAIL NUMBER / PLATE NUMBER
- SSD BLOWER (115 SCFM)
- SSD BLOWER (200 SCFM)
- VACUUM GAUGE
- PLUGGED PORT
- ABANDONED/DESTROYED WELL

COMMERCIAL STORE ID TABLE (BUILDING #2)

- (K) TZ LIQUORS (FORMER THE DELI SPOT)
- (L) VERIZON STORE (FORMER SPARKLE CLEANERS)
- (M) NEW CHINA HOUSE



Former Sub-Slab Depressurization Configuration

UB Orangeburg, LLC
1-45 Orangetown Shopping Center
Orangeburg, New York

Drawn: T.P.
Designed:
Approved:
Date: 05/29/23
Figure: 8

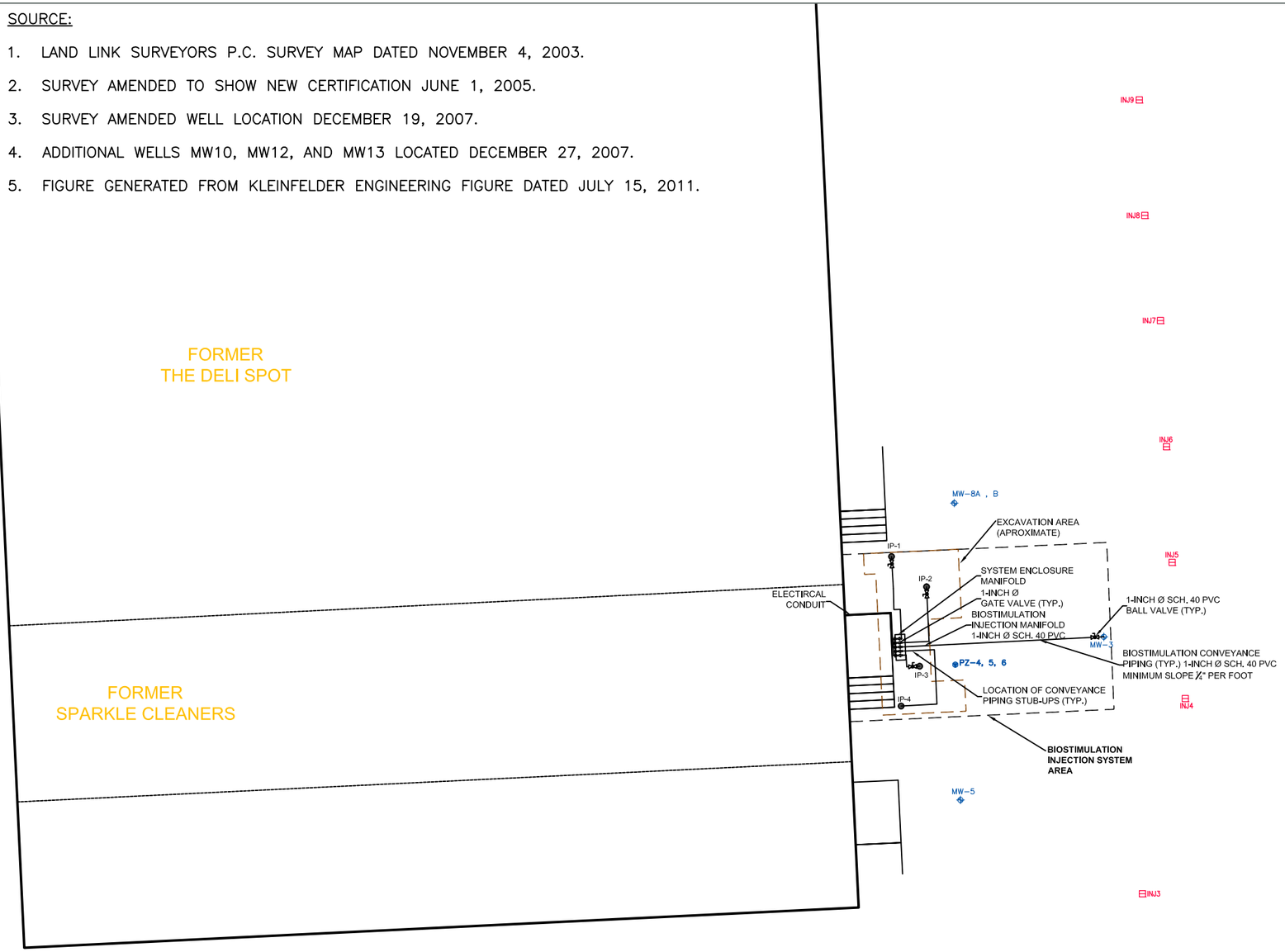
Not to Scale

Groundwater & Environmental Services, Inc.

M:\Graphics\1100-Patterson-LHVMisc\Urstadt Biddle Properties\Orangeburg\Engineering\Orangeburg (KLF-details).dwg, B-config

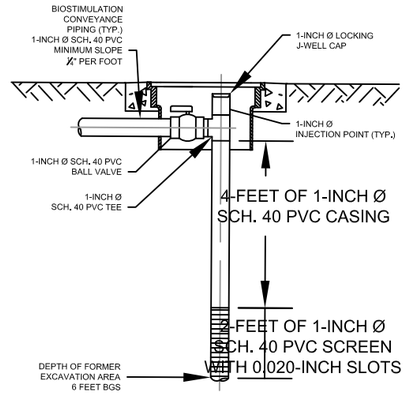
SOURCE:

1. LAND LINK SURVEYORS P.C. SURVEY MAP DATED NOVEMBER 4, 2003.
2. SURVEY AMENDED TO SHOW NEW CERTIFICATION JUNE 1, 2005.
3. SURVEY AMENDED WELL LOCATION DECEMBER 19, 2007.
4. ADDITIONAL WELLS MW10, MW12, AND MW13 LOCATED DECEMBER 27, 2007.
5. FIGURE GENERATED FROM KLEINFELDER ENGINEERING FIGURE DATED JULY 15, 2011.

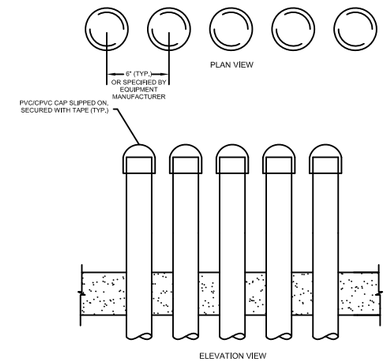


LEGEND

- BIOSTIMULATION INJECTION POINT
- MONITORING WELLS
- PIEZOMETER
- INJECTION WELL



BIOSTIMULATION INJECTION WELL DETAIL



STUB-UP WELL DETAIL

Bioaugmentation Injection Well Detail

UB Orangeburg, LLC
1-45 Orangetown Shopping Center
Orangeburg, New York

Drawn W.G.S.
Designed
Approved
Date 10/22/19
Figure 9

Scale In Feet
0 2

Groundwater & Environmental Services, Inc.

M:\Graphics\11100-Patterson-LHV\Misc\Urstadt Biddle Properties\Orangeburg\Engineering\Orangeburg (KLF-details).dwg, B-well config, WSHEA

BUILDING 2

VP1
VP2
VP3
INJ12
IP1
IP2
INJ11
STAIRS
IP3
VP4
VP5
VP6
INJ10
MWA
MWB
STAIRS
VP7
VP8
VP9

LEGEND

- PROPOSED MONITORING WELL
- SOIL VAPOR EXTRACTION WELL
- INLECTION WELL
- 10' LATERAL INJECTION PIPE

Monitoring Well and Lateral Well Configuration Map

UB Orangeburg, LLC
1-45 Orangetown Shopping Center
Orangeburg, New York

Drawn
W.G.S.
Designed

Approved

Date
10/22/19
Figure
10

N

Scale In Feet
0 10

GES
Groundwater & Environmental Services, Inc.

M:\Graphics\11100-Patterson-LHV\Misc\Urstadt Biddle Properties\Orangeburg\Orangeburg SM.dwg, B10 well config, WSHEA

Tables

Table 9
GROUNDWATER ELEVATION DATA

Orangetown Shopping Center
NYSDEC Site # C344066

Monitoring Well	Date	Top of Casing (ft)	Depth to Water (ft)	GW Elevation (ft)	Photoionizing Detector Reading (ppm)
MW-3	3/22/2012	166.67	38.37	128.30	0.9
	6/28/2012	166.67	41.68	124.99	0.3
	8/13/2012	166.67	-	-	0
	8/31/2012	166.67	43.20	123.47	0
	10/1/2012	166.67	42.55	124.12	0
	11/19/2012	166.67	42.47	124.20	0
	1/14/2013	166.67	42.85	123.82	0
	2/28/2013	166.67	42.40	124.27	0
	3/26/2013	166.67	39.30	127.37	0
	4/23/2013	166.67	40.00	126.67	0
	6/25/2013	166.67	36.63	130.04	-
	12/11/2013	166.67	42.39	124.28	-
	1/15/2014	166.67	42.27	124.40	-
	3/5/2014	166.67	38.76	127.91	0
	4/10/2014	166.67	38.76	127.91	0
	5/19/2014	166.67	34.95	131.72	0
	6/18/2014	166.67	35.58	131.09	0
	7/24/2014	166.67	39.60	127.07	0
	10/10/2014	166.67	DRY	-	0
	3/27/2015	166.67	34.02	132.65	0
	5/11/2015	166.67	40.10	126.57	0
	8/17/2015	166.67	42.50	124.17	0
	11/11/2015	166.67	36.14	130.53	0
	3/7/2016	166.67	41.40	125.27	0
	6/23/2016	166.67	42.50	124.17	0
	9/7/2016	166.67	42.07	124.60	0
	11/18/2016	166.67	42.61	124.06	0
	3/3/2017	166.67	40.92	125.75	0
	6/22/2017	166.67	35.79	130.88	0.2
	12/5/2017	166.67	41.17	125.50	0
	3/26/2018	166.67	38.24	128.43	0
	9/19/2018	166.67	33.45	133.22	0
	12/19/2018	166.67	32.99	133.68	0
	3/12/2019	166.67	29.62	137.05	0
	5/13/2019	166.67	29.43	137.24	0
	3/10/2020	166.67	37.69	128.98	0
	4/30/2021	166.67	34.85	131.82	0
	4/18/2022	166.67	33.01	133.66	0
MW-4	3/21/2012	165.88	37.50	128.38	4.0
	6/28/2012	165.88	42.15	123.73	0.8
	8/13/2012	165.88	43.75	122.13	0
	8/31/2012	165.88	44.55	121.33	0
	10/1/2012	165.88	46.20	119.68	0
	11/19/2012	165.88	45.60	120.28	0
	1/14/2013	165.88	44.30	121.58	0
	2/28/2013	165.88	42.12	123.76	0

Table 9
GROUNDWATER ELEVATION DATA

Orangetown Shopping Center
NYSDEC Site # C344066

Monitoring Well	Date	Top of Casing (ft)	Depth to Water (ft)	GW Elevation (ft)	Photoionizing Detector Reading (ppm)
MW-4 (cont.)	3/26/2013	165.88	38.85	127.03	0
	4/23/2013	165.88	39.65	126.23	20.0
	6/25/2013	165.88	35.85	130.03	-
	12/11/2013	165.88	46.05	119.83	-
	1/15/2014	165.88	45.41	120.47	-
	3/5/2014	165.88	43.31	122.57	0
	4/10/2014	165.88	38.21	127.67	0
	5/19/2014	165.88	34.18	131.70	0
	6/18/2014	165.88	34.52	131.36	0
	7/23/2014	165.88	37.45	128.43	0
	10/10/2014	165.88	44.53	121.35	0
	1/26/2015	165.88	42.90	122.98	0
	3/27/2015	165.88	38.82	127.06	0
	5/11/2015	165.88	37.76	128.12	0
	8/17/2015	165.88	44.30	121.58	0
	11/11/2015	165.88	45.58	120.30	0
	3/7/2016	165.88	41.30	124.58	0
	6/23/2016	165.88	43.81	122.07	0
	9/7/2016	165.88	46.77	119.11	0
	11/18/2016	165.88	46.44	119.44	0
	3/3/2017	165.88	40.48	125.40	0
	6/22/2017	165.88	35.16	130.72	0.1
	9/7/2017	165.88	43.74	122.14	0
	12/5/2017	165.88	45.80	120.08	0
	3/26/2018	165.88	37.40	128.48	0
	6/7/2018	165.88	36.15	129.73	0
	9/19/2018	165.88	39.00	126.88	0
	12/19/2018	165.88	32.42	133.46	0
	3/12/2019	165.88	28.47	137.41	0
	5/13/2019	165.88	28.21	137.67	0
	3/10/2020	165.88	36.87	129.01	0
	4/30/2021	165.88	34.01	131.87	0
	4/18/2022	165.88	31.60	134.28	0
MW-5	3/21/2012	166.70	39.70	127.00	22.6
	6/28/2012	166.70	40.31	126.39	0.6
	8/13/2012	166.70	40.27	126.43	0.7
	8/31/2012	166.70	40.30	126.40	0
	10/1/2012	166.70	40.40	126.30	1.0
	11/19/2012	166.70	40.42	126.28	0
	1/14/2013	166.70	40.25	126.45	0
	2/28/2013	166.70	40.35	126.35	1.7
	3/26/2013	166.70	39.85	126.85	6.9
	4/23/2013	166.70	40.27	126.43	0
	6/25/2013	166.70	37.11	129.59	-
	12/11/2013	166.70	40.65	126.05	-
	1/15/2014	166.70	37.22	129.48	-
	3/5/2014	166.70	40.11	126.59	0
	4/10/2014	166.70	39.41	127.29	0
	5/19/2014	166.70	34.98	131.72	0

Table 9
GROUNDWATER ELEVATION DATA

Orangetown Shopping Center
NYSDEC Site # C344066

Monitoring Well	Date	Top of Casing (ft)	Depth to Water (ft)	GW Elevation (ft)	Photoionizing Detector Reading (ppm)
MW-5 (cont.)	6/18/2014	166.70	35.42	131.28	0
	7/23/2014	166.70	38.44	128.26	0
	10/10/2014	166.70	40.55	126.15	0
	1/26/2015	166.70	39.01	127.69	0
	3/27/2015	166.70	34.77	131.93	0
	5/11/2015	166.70	38.76	127.94	0
	8/17/2015	166.70	41.32	125.38	0
	11/11/2015	166.70	40.81	125.89	0
	3/7/2016	166.70	40.60	126.10	0
	6/23/2016	166.70	41.26	125.44	0
	9/7/2016	166.70	41.16	125.54	0
	11/18/2016	166.70	41.26	125.44	0
	3/3/2017	166.70	40.75	125.95	0
	6/22/2017	166.70	35.65	131.05	0
	9/7/2017	166.70	40.95	125.75	0
	12/5/2017	166.70	41.10	125.60	0
	3/26/2018	166.70	38.64	128.06	0
	6/7/2018	166.70	37.26	129.44	0
	9/19/2018	166.70	35.91	130.79	0
	12/19/2018	166.70	33.70	133.00	0
	3/12/2019	166.70	29.85	136.85	0
	5/13/2019	166.70	29.70	137.00	0
	3/10/2020	166.70	38.08	128.62	0
	4/30/2021	166.70	35.15	131.55	0
	4/18/2022	166.70	32.93	133.77	0
MW-6	3/22/2012	166.14	36.85	129.29	0
	6/28/2012	166.14	41.41	124.73	0
	8/13/2012	166.14	41.11	125.03	0
	11/19/2012	166.14	47.15	118.99	0
	3/26/2013	166.14	39.65	126.49	0
	6/25/2013	166.14	36.61	129.53	-
	12/11/2013	166.14	49.83	116.31	-
	3/5/2014	166.14	41.53	124.61	0
	5/19/2014	166.14	34.71	131.43	0
	7/23/2014	166.14	36.50	129.64	0
	3/27/2015	166.14	39.22	126.92	0
MW-7	3/21/2012	171.49	39.30	132.19	0
	6/29/2012	171.49	42.18	129.31	0
	8/13/2012	171.49	46.97	124.52	0
	11/19/2012	171.49	47.80	123.69	0
	3/26/2013	171.49	44.98	126.51	0
	4/23/2013	171.49	42.73	128.76	-
	6/25/2013	171.49	38.30	133.19	-
	12/11/2013	171.49	47.27	124.22	-
	3/5/2014	171.49	46.16	125.33	0
	5/19/2014	171.49	37.32	134.17	0
	7/23/2014	171.49	39.74	131.75	0
	3/27/2015	171.49	44.72	126.77	0

Table 9
GROUNDWATER ELEVATION DATA

Orangetown Shopping Center
NYSDEC Site # C344066

Monitoring Well	Date	Top of Casing (ft)	Depth to Water (ft)	GW Elevation (ft)	Photoionizing Detector Reading (ppm)
MW-8A	3/21/2012	166.15	41.90	124.25	38.0
	6/28/2012	166.15	42.00	124.15	43.5
	8/13/2012	166.15	DRY	-	34.6
	8/31/2012	166.15	41.80	124.35	24.0
	10/1/2012	166.15	42.10	124.05	12.2
	11/19/2012	166.15	42.40	123.75	39.4
	1/14/2013	166.15	42.95	123.13	0
	2/28/2013	166.15	42.60	123.55	37.6
	3/26/2013	166.15	-	-	0.1
	4/23/2013	166.15	42.05	124.10	35.5
	6/25/2013	166.15	39.95	126.20	-
	12/11/2013	166.15	41.80	124.35	-
	1/15/2014	166.15	42.68	123.47	-
	3/5/2014	166.15	42.63	123.52	0
	4/10/2014	166.15	39.67	126.48	0
	5/19/2014	166.15	42.83	123.32	0
	6/18/2014	166.15	37.12	129.03	0
	7/23/2014	166.15	42.05	124.10	0
	10/10/2014	166.15	DRY	-	0
	3/27/2015	166.15	40.31	125.84	0
	5/11/2015	166.15	42.08	124.07	0
	8/17/2015	166.15	42.30	123.85	0
	11/11/2015	166.15	41.82	124.33	0
	3/7/2016	166.15	41.80	124.35	0
	6/23/2016	166.15	41.91	124.24	0
	9/7/2016	166.15	41.90	124.25	0
	11/18/2016	166.15	41.80	124.35	0
	3/3/2017	166.15	41.72	124.43	0
	6/22/2017	166.15	36.69	129.46	0
	12/5/2017	166.15	41.45	124.70	0
	3/26/2018	166.15	38.91	127.24	0
	9/19/2018	166.15	40.40	125.75	0
	12/19/2018	166.15	33.94	132.21	0
	3/12/2019	166.15	30.30	135.85	0
	5/13/2019	166.15	29.64	136.51	0
	3/10/2020	166.15	38.31	127.84	0
	4/30/2021	166.15	35.56	130.59	0
	4/18/2022	166.15	33.49	132.66	0
MW-8B	3/21/2012	166.08	39.13	126.95	14.6
	6/28/2012	166.08	42.55	123.53	5.1
	8/13/2012	166.08	45.30	120.78	0.7
	8/31/2012	166.08	46.40	119.68	0
	10/1/2012	166.08	49.40	116.68	0.1
	11/19/2012	166.08	48.45	117.63	0
	1/14/2013	166.08	47.07	119.01	0
	2/28/2013	166.08	44.00	122.08	0
	3/26/2013	166.08	40.32	125.76	4.6
	4/23/2013	166.08	40.08	126.00	30.2
	6/25/2013	166.08	37.20	128.88	-

Table 9
GROUNDWATER ELEVATION DATA

Orangetown Shopping Center
NYSDEC Site # C344066

Monitoring Well	Date	Top of Casing (ft)	Depth to Water (ft)	GW Elevation (ft)	Photoionizing Detector Reading (ppm)
MW-8B (cont.)	12/11/2013	166.08	49.63	116.45	-
	1/15/2014	166.08	49.63	116.45	-
	3/5/2014	166.08	45.07	121.01	0
	4/10/2014	166.08	39.69	126.39	0
	5/19/2014	166.08	35.55	130.53	0
	6/18/2014	166.08	36.05	130.03	0
	7/23/2014	166.08	38.95	127.13	0
	10/10/2014	166.08	47.21	118.87	0
	3/27/2015	166.08	40.21	125.87	0
	5/11/2015	166.08	39.15	126.93	0
	8/17/2015	166.08	45.32	120.76	0
	11/11/2015	166.08	41.56	124.52	0
	3/7/2016	166.08	42.85	123.23	0
	6/23/2016	166.08	45.85	120.23	0
	9/7/2016	166.08	DRY	-	0
	11/18/2016	166.08	DRY	-	0
	3/3/2017	166.08	42.11	123.97	0
	6/22/2017	166.08	36.56	129.52	0
MW-10	3/21/2012	137.86	9.37	128.49	0
	6/29/2012	137.86	12.58	125.28	0
	8/13/2012	137.86		122.48	0
	11/19/2012	137.86	18.00	119.86	0
	3/26/2013	137.86	9.90	127.96	0
	6/25/2013	137.86	8.05	129.81	-
	12/11/2013	137.86	19.71	118.15	-
	3/5/2014	137.86	9.33	128.53	0
	4/10/2014	137.86	9.33	128.53	0
	5/19/2014	137.86	5.75	132.11	0
	7/23/2014	137.86	9.87	127.99	0
	10/10/2014	137.86	18.12	119.74	0
	3/27/2015	137.86	9.55	128.31	0
	5/11/2015	137.86	9.92	127.94	0
	8/17/2015	137.86	15.80	122.06	0
	11/11/2015	137.86	21.47	116.39	0
	3/7/2016	137.86	12.46	125.40	0
	6/23/2016	137.86	16.04	121.82	0
	9/7/2016	137.86	20.19	117.67	0
	11/18/2016	137.86	23.55	114.31	0
	3/3/2017	137.86	11.55	126.31	0
	6/22/2017	137.86	8.47	129.39	0
MW-E	12/5/2017	165.03	-	-	-
	3/26/2018	165.03	-	-	-
	9/19/2018	165.03	32.37	132.66	0
	12/19/2018	165.03	31.61	133.42	0
	3/12/2019	165.03	28.04	136.99	0
	5/13/2019	165.03	28.02	137.01	0
	3/10/2020	165.03	32.70	132.33	0

Table 9
GROUNDWATER ELEVATION DATA

Orangetown Shopping Center
NYSDEC Site # C344066

Monitoring Well	Date	Top of Casing (ft)	Depth to Water (ft)	GW Elevation (ft)	Photoionizing Detector Reading (ppm)
MW-E (cont.)	4/30/2021	165.03	32.65	132.38	0
	4/18/2022	165.03	31.57	133.46	0
MW-14A	12/5/2017	166.49	33.68	132.81	0
	3/26/2018	166.49	34.61	131.88	0
	9/19/2018	166.49	41.25	125.24	0
	12/19/2018	166.49	32.93	133.56	0
	3/12/2019	166.49	-	-	0
	5/13/2019	167.49	27.64	139.85	0
	3/10/2020	167.49	37.91	129.58	0
	4/30/2021	167.49	36.27	131.22	0
	4/18/2022	167.49	33.50	133.99	0

Notes:

DRY = No water in well to gauge
\- = Not available or measured
ft = feet
ppm = parts per million
GW = groundwater
NSD = No Survey Data

Appendix A – Environmental Easement

4631

ALTA / ACSM LAND TITLE SURVEY

OF PROPERTY SITUATE IN THE TOWN OF ORANGETOWN ROCKLAND COUNTY NEW YORK

ENVIRONMENTAL EASEMENT DESCRIPTION DEC BCP SITE # C344066

PREPARED FOR

JLJ MANAGEMENT COMPANY

SURVEYED: NOVEMBER 4 2003

SURVEY AMENDED TO SHOW NEW CERTIFICATION JUNE 1, 2005
SURVEY AMENDED WELL LOCATION DEC.19,2007
ADDTIONAL WELLS MW-7, MW10, MW12, MW13 LOCATED DEC. 27,2007
REVISED TO SHOW MW-11 DATA JAN.3,2008
SURVEY UPDATED APRIL 14,2011

SURVEYORS NOTES:

- THE DIMENSIONS SHOWN HEREON, FROM THE STRUCTURES TO THE PROPERTY LINE ARE NOT INTENDED TO BE USED FOR THE ERECTION OF FENCES, STRUCTURES OR ANY OTHER IMPROVEMENT.
- 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 LAWS.
- ENCROACHMENTS BELOW GRADE AND/OR SUBSURFACE FEATURES, IF ANY, NOT LOCATED OR SHOWN HEREON.
- ONLY COPIES FROM THE ORIGINAL OF THIS SURVEY MARKED WITH AN ORIGINAL OF THE LAND SURVEYOR'S SEAL SHALL BE CONSIDERED TO BE TRUE VALID COPIES.
- CERTIFICATIONS INDICATED HEREON SIGNIFY THAT THIS MAP WAS PREPARED FROM AN ACTUAL FIELD SURVEY CONDUCTED ON THE DATE SHOWN AND THAT SAID SURVEY WAS PERFORMED IN ACCORDANCE WITH THE EXISTING " CODE OF PRACTICE FOR LAND SURVEYS " ADOPTED BY THE NEW YORK STATE ASSOCIATION OF PROFESSIONAL LAND SURVEYORS. THIS CERTIFICATION SHALL RUN ONLY TO THE PARTY FOR WHOM THIS SURVEY WAS PREPARED AND ON THEIR BEHALF TO THE TITLE COMPANY AND LENDING INSTITUTION LISTED HEREON. THIS CERTIFICATION SHALL NOT BE TRANSFERABLE.
-

SURVEYOR'S CERTIFICATION

DATED AS OF : APRIL 27,2011

TO: People of the State of New York acting through its Commissioner of the Department of Environmental Conservation
Common Wealth Land Title Insurance Company
JLJ Management Co., a New York Partnership
Class Abstract Services Inc. Title No. CLC 40799RO (only)

THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE "MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/ACSM LAND TITLE SURVEYS" JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS AND INCLUDE NO ITEMS OF TABLE "A" THEREOF. THE FIELD WORK WAS COMPLETED ON NOVEMBER 4,2003 LAST UPDATED APRIL 14,2011
DATE OF MAP or PLAT APRIL 27,2011

SYMBOLS

HYDRANT
UTILITY POLE
ELECTRIC COVER
MANHOLE COVER (unknown)
TELEPHONE MANHOLE COVER
CATCH BASIN
LIGHT POLE
SEWER MANHOLE
C.L.F CHAIN LINK FENCE
C.H.W. CONCRETE HEAD WALL
C.M.P. CORRUGATED METAL PIPE
O.H.W. OVERHEAD WIRES
R.C.P. REINFORCED CONCRETE PIPE
S.M.H.W. STONE MASONRY HEAD WALL
Monitoring Well
Pizometer
ENVIRONMENTAL EASEMENT AREA
PROPERTY LINE

ENGINEERING CONTROLS

SUB SLAB DEPRESSURIZATION SYSTEM AREA
BIOSTIMULATION INJECTION AREA
ENVIRONMENTAL EASEMENT AREA
REMEDIAL EXCAVATION AREA

PROPERTY INFORMATION

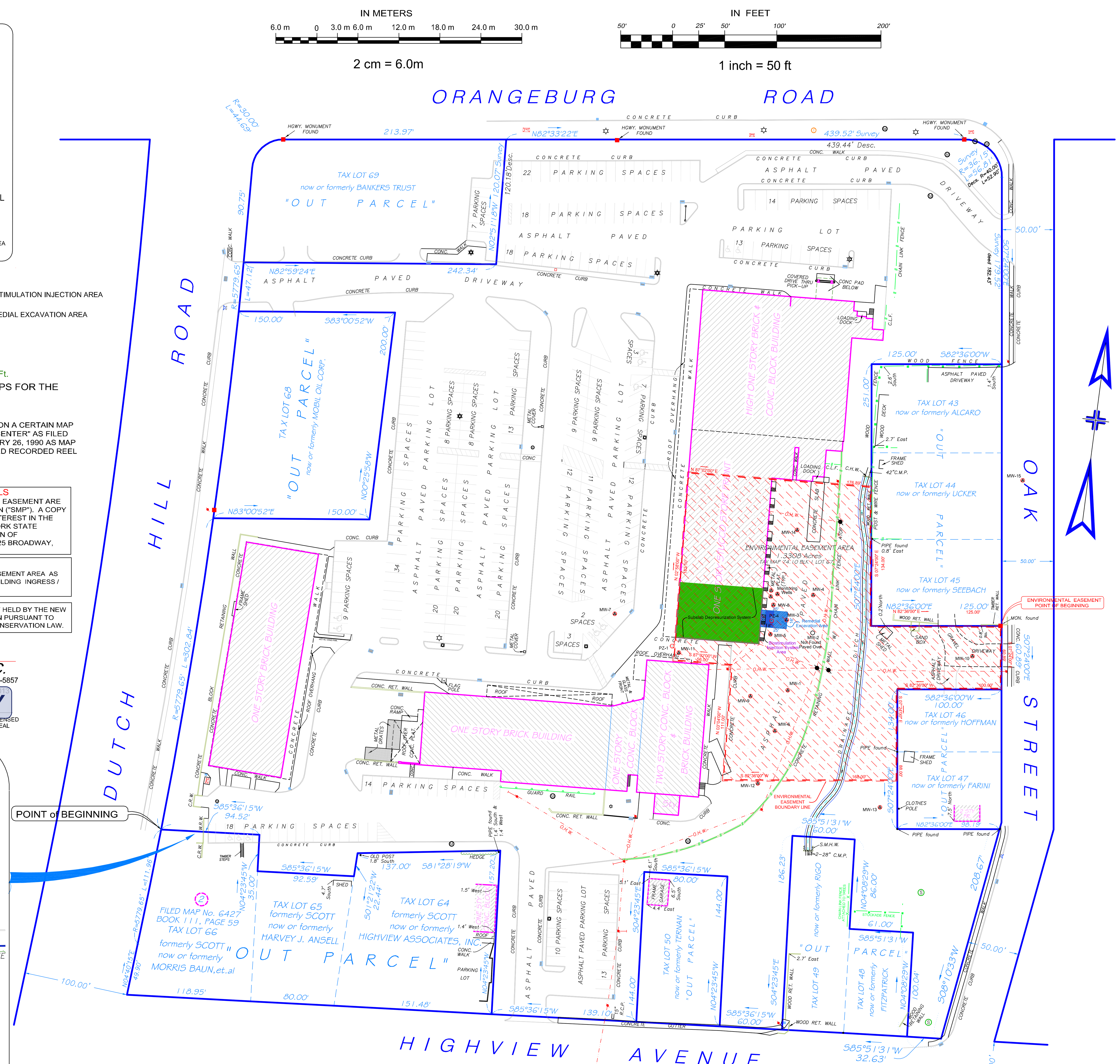
PREMISES ARE KNOWN AS :
NO. 1 -45 ORANGETOWN SHOPPING CENTER
PROPERTY AREA : 10.5864 ACRES = 461,143 Sq. Ft.

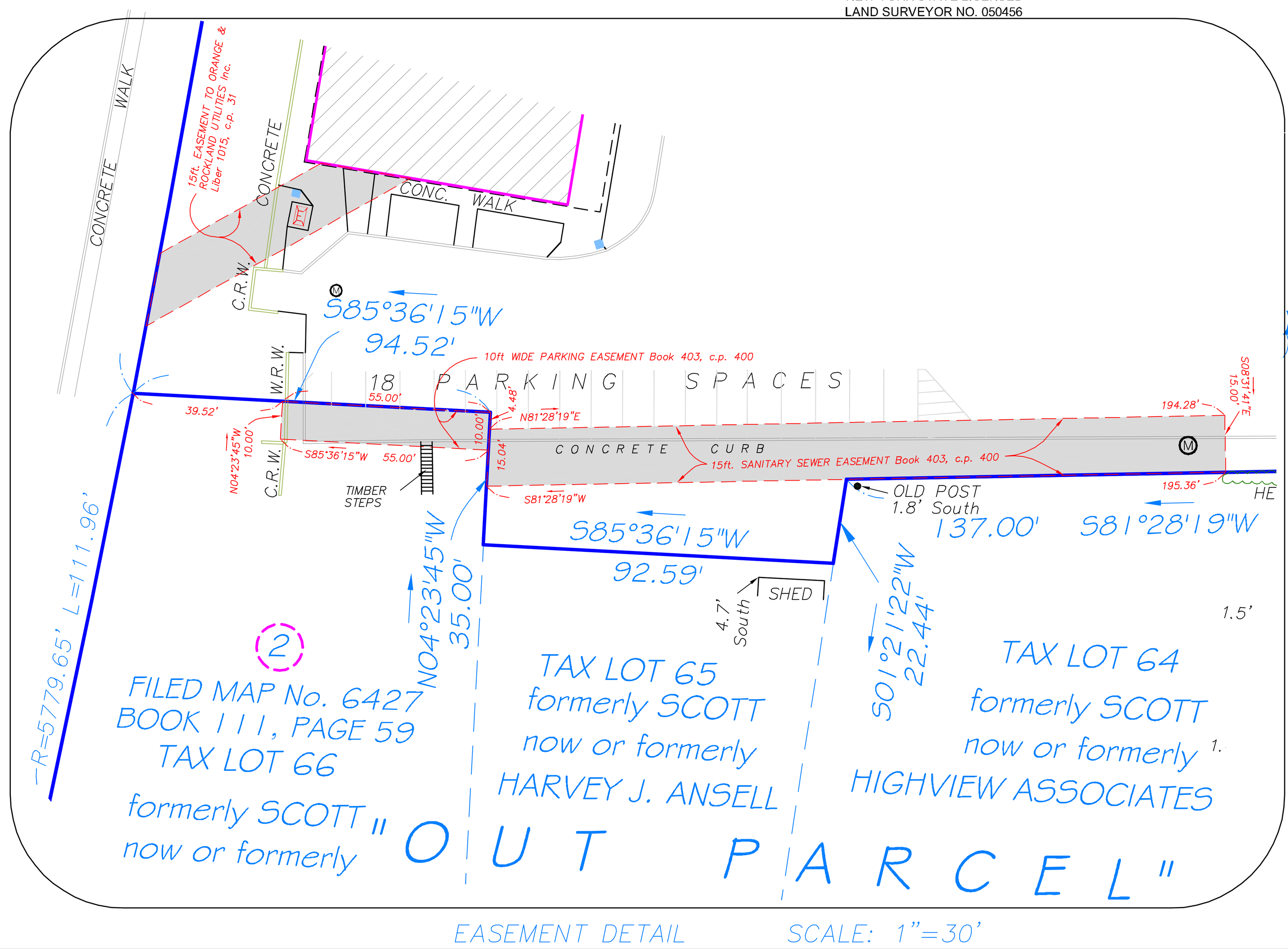
- PREMISES ARE DESIGNATED ON THE TAX MAPS FOR THE
TOWN of ORANGETOWN:
SECTION 74.10; BLOCK 1; LOT 67
- THE PREMISES SHOWN HEREON DESIGNATED AS LOT 1 ON A CERTAIN MAP ENTITLED " SUBDIVISION OF PROPERTY ORANGETOWN CENTER" AS FILED IN THE ROCKLAND COUNTY CLERK'S OFFICE ON FEBRUARY 26, 1990 AS MAP No. 6427 IN Book 111 Page 59 AND ARE DESCRIBED IN DEED RECORDED REEL 404, PAGE 2555.

ENGINEERING CONTROL NOTES:

- THE ENGINEERING AND INSTITUTIONAL CONTROLS
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.
- ENVIRONMENTAL EASEMENT AREA ACCESS
THE DEC OR THEIR AGENT MAY ACCESS THE ENVIRONMENTAL EASEMENT AREA AS SHOWN HEREON THROUGH ANY EXISTING STREET ACCESS OR BUILDING INGRESS / EGRESS ACCESS POINT.
- 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.

Link Land Surveyors P.C.
21 Clark Place Suite 1B Phone 845-628-5857
Mahopac N.Y. 10541 Fax 845-621-0013
INFORMATION ONLY
JOSEPH R. LINK
NEW YORK STATE LICENSED LAND SURVEYOR NO. 050456
NEW YORK STATE LICENSED LAND SURVEYOR SEAL





NO.	DATE	DESCRIPTION	BY
1.	8-12-11	DEC COMMENTS	JRL

Title Report Easement

SCHEDULE "B" ITEM 8 Title No. CLC 40799RO

b.) SEWER EASEMENT IN LIBER LIBER 201 PAGE 609	Does not affect the property,
c.) EASEMENT FOR INGRESS and EGRESS LIBER 886 PAGE 218	Can not be plotted
d.) ELECTRIC EASEMENT IN LIBER 1015 PAGE 31	Shown on Survey
e.) ELECTRIC EASEMENT IN LIBER 615 PAGE 425 / LIBER 621 PAGE 291	Does Not Affect the Property
f.) SEWER EASEMENT LIBER 657 PAGE 530 and 709 PAGE 200.	Can not be plotted

PROPERTY DESCRIPTION

ALL THAT CERTAIN PLOT, PIECE OR PARCEL OF LAND, SITUATE, LYING AND BEING AT ORANGEBURG, IN THE TOWN OF ORANGETOWN, COUNTY OF ROCKLAND AND STATE OF NEW YORK, BEING MORE FULLY BOUNDED AND DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT IN THE EASTERLY LINE OF DUTCH HILL ROAD (100 FEET WIDE) SAID POINT BEING DISTANT, NORTH 04 DEGREES 40 MINUTES 15 SECONDS EAST, 49.90 FEET AND ALSO ALONG A CURVE TO THE LEFT, HAVING A RADIUS OF 5779.65 FEET, A DISTANCE OF 111.96 FEET, AS MEASURED ALONG THE EASTERLY LINE OF DUTCH HILL ROAD FROM THE INTERSECTION OF THE SAME WITH THE NORTHERLY LINE OF HIGHVIEW AVENUE (50 FEET WIDE) AND RUNS FROM SAID POINT OF BEGINNING:

1) ALONG A CURVE TO THE LEFT, HAVING A RADIUS OF 5779.65 FEET FOR A DISTANCE OF 302.84 FEET ALONG THE EASTERLY LINE OF DUTCH HILL ROAD, THENCE ALONG THE LANDS NOW OR FORMERLY OF MOBIL OIL CORP. ON THE THREE (3) FOLLOWING COURSES AND DISTANCES:

2) NORTH 83 DEGREES 00 MINUTES 52 SECONDS EAST, 150.00 FEET;

3) NORTH 00 DEGREES 25 MINUTES 58 SECONDS WEST, 200.00 FEET;

4) SOUTH 83 DEGREES 00 MINUTES 52 SECONDS WEST, 150.00 FEET;

5) ALONG A CURVE TO THE LEFT, HAVING A RADIUS OF 5779.65 FEET FOR A DISTANCE OF 47.12 FEET ALONG THE EASTERLY LINE OF DUTCH HILL ROAD, THENCE ALONG THE LANDS NOW OR FORMERLY OF BANKERS TRUST ON THE TWO (2) FOLLOWING COURSES AND DISTANCES:

6) NORTH 82 DEGREES 59 MINUTES 24 SECONDS EAST, 242.34 FEET;

7) NORTH 02 DEGREES 51 MINUTES 18 SECONDS WEST, 120.07 FEET;

8) NORTH 82 DEGREES 33 MINUTES 22 SECONDS EAST, 439.52 (ACTUAL) (439.44 FEET, DEED) ALONG THE SOUTHERLY LINE OF ORANGEBURG ROAD;

9) ALONG A CURVE TO THE RIGHT HAVING A RADIUS OF 36.15 (ACTUAL) (40.00 FEET, DEED) FOR A DISTANCE OF 56.81 FEET (ACTUAL) (52.90 FEET, DEED) TO THE WESTERLY LINE OF OAK STREET (50 FEET WIDE);

10) SOUTH 07 DEGREES 24 MINUTES 00 SECONDS EAST, 179.52 (ACTUAL) (182.43 FEET, DEED) ALONG THE WESTERLY LINE OF OAK STREET (50 FEET WIDE);

11) SOUTH 82 DEGREES 36 MINUTES 00 SECONDS WEST, 125.00 FEET ALONG THE LANDS NOW OR FORMERLY OF ALCARO;

12) SOUTH 07 DEGREES 24 MINUTES 00 SECONDS EAST, 251.00 FEET, PARTLY STILL ALONG THE LANDS OF SAID ALCARO, PARTLY ALONG THE LANDS NOW OR FORMERLY UCKER AND PARTLY ALONG THE LANDS NOW OR FORMERLY OF SEEBACH;

13) NORTH 82 DEGREES 36 MINUTES 00 SECONDS EAST, 125.00 FEET STILL ALONG THE LANDS EAST OF THE SAID SEEBACH;

14) SOUTH 07 DEGREES 24 MINUTES 00 SECONDS EAST, 60.89 FEET ALONG THE WESTERLY LINE OF OAK STREET (50 FEET WIDE);

15) SOUTH 82 DEGREES 36 MINUTES 00 SECONDS WEST, 100.00 FEET ALONG THE LANDS NOW OR FORMERLY OF HOFFMAN;

16) SOUTH 07 DEGREES 24 MINUTES 00 SECONDS EAST, 134.00 FEET, PARTLY STILL ALONG THE LANDS OF SAID HOFFMAN AND PARTLY ALONG THE LANDS NOW OR FORMERLY OF PERINI;

17) NORTH 82 DEGREES 36 MINUTES 00 SECONDS EAST, 98.19 FEET STILL ALONG THE LANDS OF THE SAID PERINI;

18) SOUTH 08 DEGREES 10 MINUTES 33 SECONDS WEST, 208.67 FEET ALONG THE WESTERLY LINE OF OAK STREET (50 FEET WIDE);

19) SOUTH 85 DEGREES 51 MINUTES 31 SECONDS WEST, 32.63 FEET ALONG THE NORTHERLY LINE OF HIGHVIEW AVENUE (50 FEET WIDE), THENCE ALONG THE LANDS NOW OR FORMERLY OF FITZPATRICK ON THE TWO (2) FOLLOWING COURSES AND DISTANCES:

20) NORTH 04 DEGREES 08 MINUTES 29 SECONDS WEST, 100.04 FEET;

21) SOUTH 85 DEGREES 51 MINUTES 31 SECONDS WEST, 61.00 FEET, THENCE ALONG THE LANDS NOW OR FORMERLY OF EIGO ON THE THREE (3) FOLLOWING COURSES AND DISTANCES:

22) NORTH 04 DEGREES 08 MINUTES 29 SECONDS WEST, 86.00 FEET;

23) SOUTH 85 DEGREE 51 MINUTES 31 SECONDS WEST, 60.00 FEET;

24) SOUTH 04 DEGREES 23 MINUTES 45 SECONDS EAST, 186.23 FEET;

25) SOUTH 85 DEGREES 36 MINUTES 15 SECONDS WEST, 60.00 FEET ALONG THE NORTHERLY LINE OF HIGHVIEW AVENUE (50 FEET WIDE), THENCE ALONG THE LANDS NOW OR FORMERLY OF TERNAN ON THE THREE (3) FOLLOWING COURSES AND DISTANCES:

26) NORTH 04 DEGREES 23 MINUTES 45 SECONDS WEST, 144.00 FEET;

27) SOUTH 85 DEGREES 36 MINUTES 15 SECONDS WEST, 80.00 FEET;

28) SOUTH 04 DEGREES 23 MINUTES 45 SECONDS EAST, 144.00 FEET;

29) SOUTH 85 DEGREES 36 MINUTES 15 SECONDS WEST, 139.10 FEET ALONG THE NORTHERLY LINE OF HIGHVIEW AVENUE (50 FEET WIDE), THENCE ALONG THE LANDS NOW OR FORMERLY OF SCOTT ON THE FOUR (4) FOLLOWING COURSES AND DISTANCES:

30) NORTH 04 DEGREES 23 MINUTES 45 SECONDS WEST, 157.20 FEET;

31) SOUTH 81 DEGREES 28 MINUTES 19 SECONDS WEST, 137.00 FEET;

32) SOUTH 01 DEGREE 21 MINUTES 22 SECONDS WEST, 22.44 FEET;

33) SOUTH 85 DEGREES 36 MINUTES 15 SECONDS WEST, 92.59 FEET, THENCE ALONG LOT NO. 2 AND THROUGH THE LANDS OF B.B.H. & L HOLDING CORP. ON THE TWO (2) COURSES AND DISTANCES

34) NORTH 04 DEGREES 23 MINUTES 45 SECONDS WEST, 35.00 FEET;

35) SOUTH 85 DEGREES 36 MINUTES 15 SECONDS WEST, 94.52 FEET TO THE POINT OR PLACE OF BEGINNING.

TOGETHER WITH AN EASEMENT FOR PARKING ON THE MINUTES DESCRIBED PARCEL;

BEGINNING AT A POINT ON THE NORTHERLY LINE OF LOT NO. 2, AS SET FORTH ON MAP NO. 6427 BOOK 111 PAGE 59 FILED FEBRUARY 26, 1990, SAID POINT BEING DISTANT, NORTH 85 DEGREES 36 MINUTES 15 SECONDS EAST 39.52 FEET, AS MEASURED ALONG THE NORTHERLY LINE OF LOT NO. 2 FROM THE WESTERLY END OF THE COURSE RECITED AS (3) ABOVE AND RUNS FROM SAID POINT OF BEGINNING.

1) NORTH 85 DEGREES 36 MINUTES 15 SECONDS EAST FOR A DISTANCE OF 55.00 FEET ALONG THE NORTHERLY LINE OF LOT NO. 2; THENCE

2) SOUTH 4 DEGREES 23 MINUTES 45 SECONDS EAST FOR A DISTANCE OF 10.00 FEET ALONG THE EASTERLY LINE OF LOT NO. 2;

THENCE THROUGH LOT NO. 2 AND THE TWO (2) FOLLOWING COURSES AND DISTANCES:
3) SOUTH 85 DEGREES 36 MINUTES 15 SECONDS WEST FOR A DISTANCE OF 55.00 FEET; THENCE

4) NORTH 4 DEGREES 23 MINUTES 45 SECONDS FOR A DISTANCE OF 10.00 FEET TO THE POINT OR PLACE OF BEGINNING.

ENVIRONMENTAL EASEMENT AREA

ALL THAT CERTAIN PLOT, PIECE OR PARCEL OF LAND, WITH IMPROVEMENTS THEREON ERECTED, SITUATED AND LYING AND BEING IN THE TOWN OF ORANGETOWN, COUNTY OF ROCKLAND AND STATE OF NEW YORK. BEING A PORTION OF OF THE PROPERTY NOW OR FORMERLY JLJ Management Co., a New York Partnership AS RECORDED IN REEL 404, PAGE 2555. AND BEING A PORTION OF LOT 1 ON A CERTAIN MAP ENTITLED " SUBDIVISION OF PROPERTY ORANGETOWN CENTER" AS FILED IN THE ROCKLAND COUNTY CLERK'S OFFICE ON FEBRUARY 26, 1990 AS MAP No. 6427 IN Book 111 Page 59.

BBEGINNING AT A POINT ON THE WESTERLY SIDE OF OAK STREET WHERE THE SAME IS INTERSECTED BY THE DIVISION LINE BETWEEN LAND NOW OR FORMERLY JLJ MANAGEMENT ON THE SOUTH AND LAND NOW OR FORMERLY SEEBACH ON THE NORTH, SAID POINT ALSO BEING 430.52 FEET SOUTHERLY FROM THE SOUTHERLY END OF A CURVE HAVING A RADIUS OF 36.15 LENGTH OF 56.81 FEET CONNECTING THE SOUTHERLY SIDE OF ORANGEBURG ROAD AND THE WESTERLY SIDE OF OAK STREET.

THENCE RUNNING ALONG THE WESTERLY SIDE OF OAK STREET SOUTH 7°24'00" EAST 60.89 FEET TO THE DIVISION LINE BETWEEN JLJ MANAGEMENT AND LAND NOW OR FORMERLY HOFFMAN;

THENCE ALONG SAID DIVISION LINE SOUTH 82° 36'00" WEST 100.00 FEET;
THENCE CONTINUING ALONG SAID DIVISION LINE AND ALONG THE DIVISION LINE BETWEEN JLJ MANAGEMENT AND LAND NOW OR FORMERLY FARINI SOUTH 7°24'00" EAST 88.00 FEET.

THENCE RUNNING THROUGH LANDS OF JLJ MANAGEMENT THE FOLLOWING FIVE (5) COURSES AND DISTANCES;
1. SOUTH 82°36'00" WEST 168.00 FEET;
2. NORTH 3°04'00" WEST 111.00 FEET;
3. SOUTH 87°02'00" WEST 56.00 FEET;
4. NORTH 2°58'00" WEST 182.10 FEET;
5. NORTH 87°02'00" EAST 176.89 FEET TO THE WESTERLY SIDE OF LAND NOW OR FORMERLY UCKER

THENCE RUNNING ALONG LAND OF UCKER AND CONTINUING ALONG LAND OF SEEBACH
SOUTH 7°24'00" WEST 134.00 FEET AND NORTH 82°36'00: EAST 125.00 FEET TO THE POINT AND PLACE OF BEGINNING.
Containing 1.3308 acres / 57,970 Sq. Ft.

THE ABOVE DESCRIBED ENVIRONMENTAL EASEMENT AREA CONSISTS OF THE NYSDEC BROWNFIELD CLEANUP PROGRAM SITE AS INDICATED BELOW
BCP SITE # C 344066 - THIS IS SUBJECT TO THE BROWNFIELD CLEANUP AGREEMENT (BCA) BETWEEN JLJ Management Co., a New York Partnership AND THE NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION AND COMPRISES A PORTION OF THE PROPERTY OF TAX ID OF MAP 74.10 * BLOCK 1 * LOT 67

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

THIS INDENTURE made this 16th day of September, 20 11, between Owner(s) JLJ Management Co., a New York Partnership, having an office at 197 Trenor Drive, New Rochelle, County of Rockland, State of New York (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 1-45 Orangetown Shopping Center in the Town of Orangetown, County of Rockland and State of New York, known and designated on the tax map of the County Clerk of Rockland as tax map parcel numbers: Section 74.10 Block 1 Lot 67, being the same as that property conveyed to Grantor by deed dated April 4, 1990 recorded in the Rockland County Clerk's Office in Book 0404 at Page 2555, the Environmental Easement area of which comprising approximately 1.3308 ± acres, and hereinafter more fully described in the Land Title Survey dated April 27, 2011 prepared by Joseph R. Link of Link Land Surveyors P.C., 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 Brownfield Cleanup Agreement Number: A3-0563-0906, 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 ("Environmental 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:

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 344066
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: JLJ Management Co., a New York Partnership

DAFO Realty Corp., its General Partner

By: Hilton Sonker

Print Name: Hilton Sonker

Title: President Date: 9/2/11

ODAF Realty Corp., its General Partner

By: Hilton Sonker

Print Name: Hilton Sonker

Title: President Date: 9/2/11

Grantor's Acknowledgment

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

On the 2nd day of September, in the year 20 11, before me, the undersigned, personally appeared Hilton Soniker, 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.

Jerome Kamerman
Notary Public - State of New York

JEROME KAMERMAN
Notary Public, State of New York
No. 02KA7146175
Qualified in Westchester County
Certificate Filed in New York County
Commission Expires October 31, 2015

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

On the 2nd day of September, in the year 20 11, before me, the undersigned, personally appeared Hilton Soniker, 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.

Jerome Kamerman
Notary Public - State of New York

JEROME KAMERMAN
Notary Public, State of New York
No. 02KA7146175
Qualified in Westchester County
Certificate Filed in New York County
Commission Expires October 31, 2015

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 Environmental Remediation

Grantee's Acknowledgment

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

On the 16th day of September, in the year 2011, 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

1-45 ORANGETOWN SHOPPING CENTER
ORANGETOWN, COUNTY OF ROCKLAND, NY
SECTION: 74.10 BLOCK: 1 LOT: 67

ALL THAT CERTAIN PLOT, PIECE OR PARCEL OF LAND, WITH IMPROVEMENTS THEREON ERECTED, SITUATED AND LYING AND BEING IN THE TOWN OF ORANGETOWN, COUNTY OF ROCKLAND AND STATE OF NEW YORK.

BEGINNING AT A POINT ON THE WESTERLY SIDE OF OAK STREET WHERE THE SAME IS INTERSECTED BY THE DIVISION LINE BETWEEN LAND NOW OR FORMERLY JLJ MANAGEMENT ON THE SOUTH AND LAND NOW OR FORMERLY SEEBACH ON THE NORTH, SAID POINT ALSO BEING 430.52 FEET SOUTHERLY FROM THE SOUTHERLY END OF A CURVE HAVING A RADIUS OF 36.15 LENGTH OF 56.81 FEET CONNECTING THE SOUTHERLY SIDE OF ORANGEBURG ROAD AND THE WESTERLY SIDE OF OAK STREET.

THENCE RUNNING ALONG THE WESTERLY SIDE OF OAK STREET SOUTH 7°24'00" EAST 60.89 FEET TO THE DIVISION LINE BETWEEN JLJ MANAGEMENT AND LAND NOW OR FORMERLY HOFFMAN;

THENCE ALONG SAID DIVISION LINE SOUTH 82° 36'00" WEST 100.00 FEET;
THENCE CONTINUING ALONG SAID DIVISION LINE AND ALONG THE DIVISION LINE BETWEEN JLJ MANAGEMENT AND LAND NOW OR FORMERLY FARINI SOUTH 7°24"00" EAST 88.00 FEET.

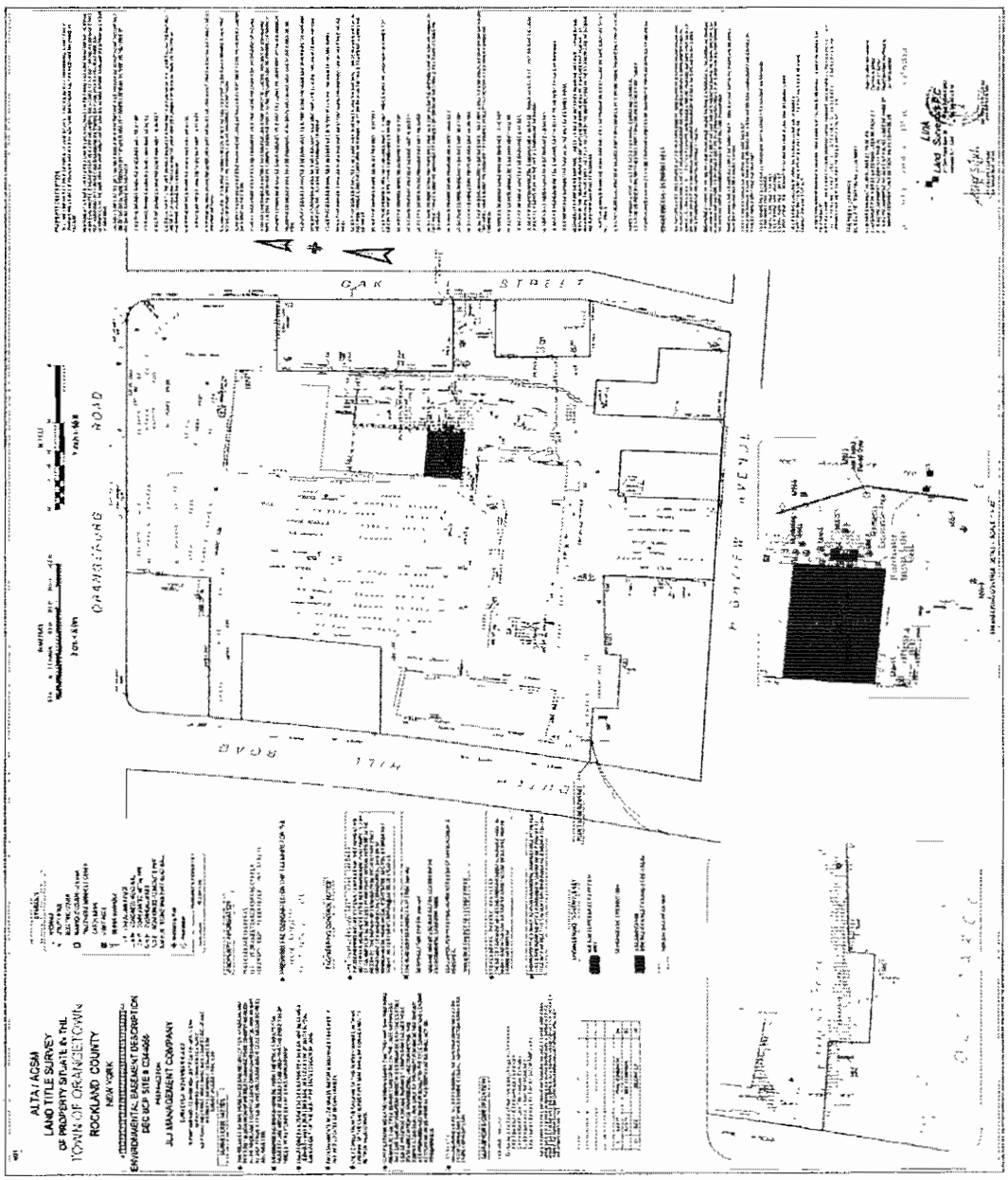
THENCE RUNNING THROUGH LANDS OF JLJ MANAGEMENT THE FOLLOWING FIVE (5) COURSES AND DISTANCES;

1. SOUTH 82° 36' 00" WEST 168.00 FEET;
2. NORTH 3° 04' 00" WEST 111.00 FEET;
3. SOUTH 87° 02' 00" WEST 56.00 FEET;
4. NORTH 2° 58' 00" WEST 182.10 FEET;
5. NORTH 87° 02' 00" EAST 176.89 FEET TO THE WESTERLY SIDE OF LAND NOW OR FORMERLY UCKER

THENCE RUNNING ALONG LAND OF UCKER AND CONTINUING ALONG LAND OF SEEBACH SOUTH 7° 24" 00" WEST 134.00 FEET AND NORTH 82° 36" 00": EAST 125.00 FEET TO THE POINT AND PLACE OF BEGINNING.

CONTAINING 1.3308 ACRES / 57,970 SQ. FT.

SURVEY

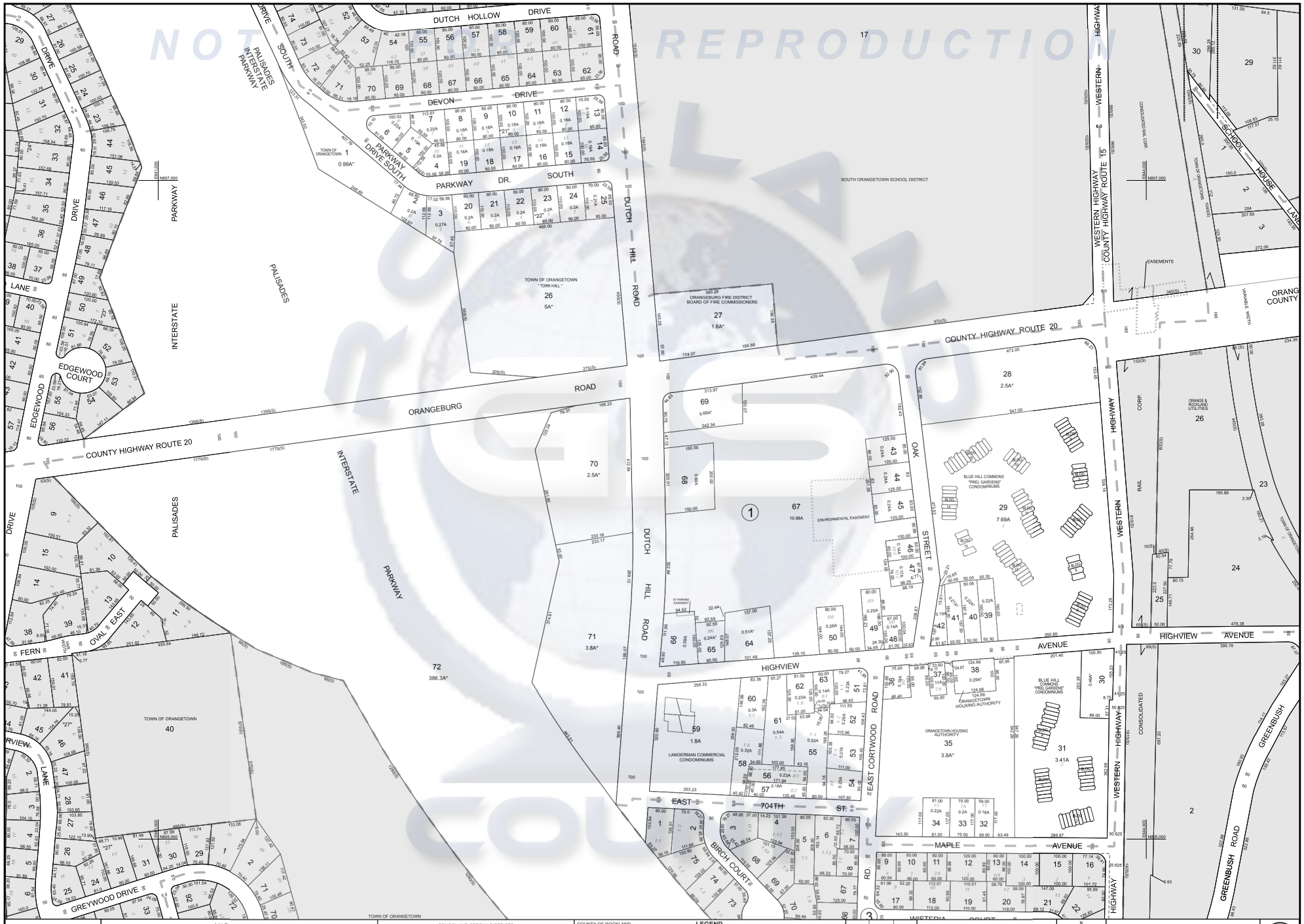

ALTA / ACSM
LAND TITLE SURVEY
OF PROPERTY SITUATE IN THE
TOWN OF ORANGETOWN
ROCKLAND COUNTY
NEW YORK
ENVIRONMENTAL EASEMENT DESCRIPTION
DEC BCP SITE # C344066
PREPARED FOR:
JLJ MANAGEMENT COMPANY
OAK STREET
ROAD
ROAD
AVENUE

Appendix B – List of Contacts

APPENDIX B – LIST OF SITE CONTACTS

Name	Phone/Email Address
Monica Roth, Urstadt Biddle Properties Inc. Assistant Vice President/Environmental Manager	203-863-8203 mroth@ubproperties.com
Michael DeGloria, PG, GES Principal Project Manager	866-839-5195 ext. 3839 mdegloria@gesonline.com
Genevieve Bock, PE, GES Regional Engineering Manager	800-360-9405 ext. 4302 gbock@gesonline.com
Jessica Thomas, GES Project Remediation Specialist	800-360-9405 ext. 4328 jthomas@gesonline.com
Richard Brown, GES Regional Field Technician Manager	866-839-5195 ext. 3836 rbrown@gesonline.com
Michael Squire, NYSDEC Project Manager	518-402-9662 michael.squire@dec.ny.gov
Amen Omorogbe, NYSDEC Project Manager's Supervisor	518-402-9662 amen.omorogbe@dec.ny.gov
Kelly Lewandowski, NYSDEC Site Control	518-402-9569 kelly.lewandowsk@dec.ny.gov
Renata Ockerby, NYSDOH Project Manager	518-402-7860 renata.ockerby@health.ny.gov

Appendix C – Tax Map



SEWALL
JAMES W. SEWALL COMPANY / Since 1880

Digital Map Converted from Intergraph to AutoCAD Sept. 1995
Digital Map Converted from NAD 27 to NAD 83 Sept. 1999
Digital Map Converted from AutoCad to ESRI GDB Oct. 2004

MAP REVISIONS

DATE	MADE BY	REVISIONS	DATE	MADE BY	REVISIONS

SCHOOL AND SPECIAL DISTRICTS

SCHOOL: SO ORNGTN CSD 392401
SCHOOL: PEARL RIV UFSD 392408
FIRE: ORNGBRG FD#12
WATER: BLAUV WT001
LIBRARY: ORNGBRG LB003
AMB: SO ORNGTN AMB01

COUNTY OF ROCKLAND

AMBULANCE DIST.
FIRE DIST.
SEWER DIST.
WATER DIST.
SCHOOL DIST.
REFUSE DIST.
LIBRARY DIST.
LIGHTING DIST.

LEGEND

PROPERTY / R.O.W.
ROAD ROW
UNSPECIFIED RR ROW
BLOCK LIMIT LINE
GAS/PIPELINE
SEWER EASEMENT
WATER COURSE
EASEMENT LINE
HISTORIC SUBDIV. LINE
DENOTES COMMON OWNERSHIP
COUNTY LINE
STATE LINE
TOWN LINE
VILLAGE LINE
TAX MAP PARCEL NO.
COORD. VALUES
TAX MAP BLOCK NUMBER
REPEATED DIMENSION/ACRE
DEED ACREAGE
CALCULATED ACREAGE
DEED DIMENSION
SCALED DIMENSION
ADD. REFERENCE DIMS.
HISTORIC SUBDIV. LOT NO.

74.05	74.06	74.07
74.09		74.11
74.13	74.14	74.15

REVISED THROUGH
FEBRUARY 28, 2019

This map was prepared for TAX PURPOSES only and is not to be reproduced or used for surveying or conveyancing.

TAX MAP
TOWN OF ORANGETOWN
ROCKLAND COUNTY, NEW YORK

74.10

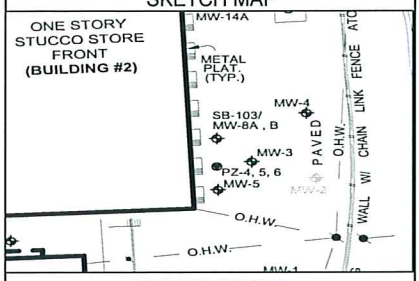
Appendix D – Boring Logs

KLEINFELDER
EXPECT MORE®
99 Lamberton Road, Suite 201, Windsor, Connecticut 06095 ♦ Phone: (860) 683-4200 ♦ Fax: (860) 683-4206

Well Log
MW-8 A, B

Project:	69972	**Casing Elevation:**	166.08' (B); 166.15' (A)
Client:	JLJ Management	**Total Depth:**	Deep 52'; Shallow 43'
Location:	1-45 Orangetown Road, Orangeburg, NY	**Water Level:**	~34'
Well ID:	MW-8 A, B	**Drilling Co.:**	Boart Longyear (BL)
Screen Length:	Deep 2'; Shallow 10'	**Driller:**	Ben
Diameter:	1"	**Method:**	Sonic Drilling
Type:	PVC	**Start Date:**	September 24, 2007
Slot Size:	0.030	**End Date:**	September 28, 2007
Casing Length:	Deep 50'; Shallow 33'	**Notes:**	
Diameter:	1"		
Type:	Schedule 40 PVC	**Logged by:** SC	**Checked by:** SC

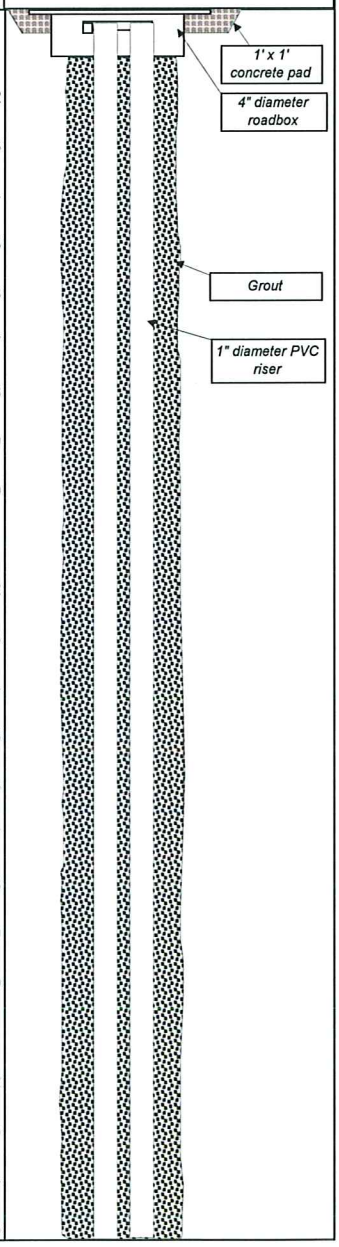
SKETCH MAP



NOT TO SCALE

Depth (ft.)	Sample ID	Depth Interval (feet)	PID Headspace (ppm)	Blows / 6"	Penetration / Recovery	Sample Interval	Soil/Geologic Description (modified Burmeister)
1–5		0-5	<1.0	--	--		Vacuum excavated 5YR 3/4, Dark reddish brown, moist, MEDIUM and FINE SAND, little coarse sand, trace fine gravel, trace coarse gravel
6–9	MC-1	5-9	11.5	--	48/48		10YR 3/1, Very dark gray, damp, SILT and FINE SAND, little coarse sand, trace fine gravel
10	MC-2	9-10	<1.0	--	12/12		7.5YR 4/6, Strong brown, wet, SILT and FINE SAND, little coarse gravel, trace fine gravel
11–15	MC-3	10-14.5	8.5	--	54/54		5YR 4/4, Reddish brown, damp, FINE SAND, some medium sand, little coarse sand, little fine gravel
16–20	MC-4	15-20	107.9	--	60/60		5YR 4/3, Reddish brown, damp, MEDIUM and FINE SAND, little coarse sand, trace fine gravel
21–23	MC-5	20-24	29.4	--	48/48		5YR 4/4, Reddish brown, moist, MEDIUM and FINE SAND, little fine gravel, little coarse gravel
24–25	MC-6	24-25	17.1	--	12/12		2.5YR 4/4, Reddish brown, dry to moist, MEDIUM SAND and COARSE GRAVEL, some coarse sand, little cobble, trace clay

Well Diagram



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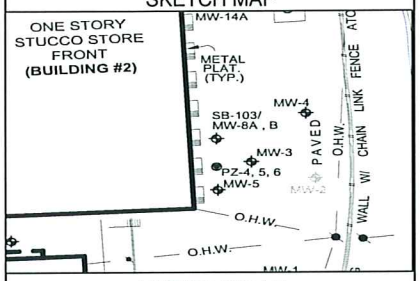
Well Log
MW-8 A, B

Project:	69972	**Casing Elevation:**	166.08' (B); 166.15' (A)
Client:	JLJ Management	**Total Depth:**	Deep 52'; Shallow 43'
Location:	1-45 Orangetown Road, Orangeburg, NY	**Water Level:**	~34'
Well ID:	MW-8 A, B	**Drilling Co.:**	Boart Longyear (BL)
Screen Length:	Deep 2'; Shallow 10'	**Driller:**	Ben
Diameter:	1"	**Method:**	Sonic Drilling
Type:	PVC	**Start Date:**	September 24, 2007
Slot Size:	0.030	**End Date:**	September 28, 2007
Casing Length:	Deep 50'; Shallow 33'	**Notes:**	
Diameter:	1"		
Type:	Schedule 40 PVC	**Logged by:** SC	**Checked by:** SC

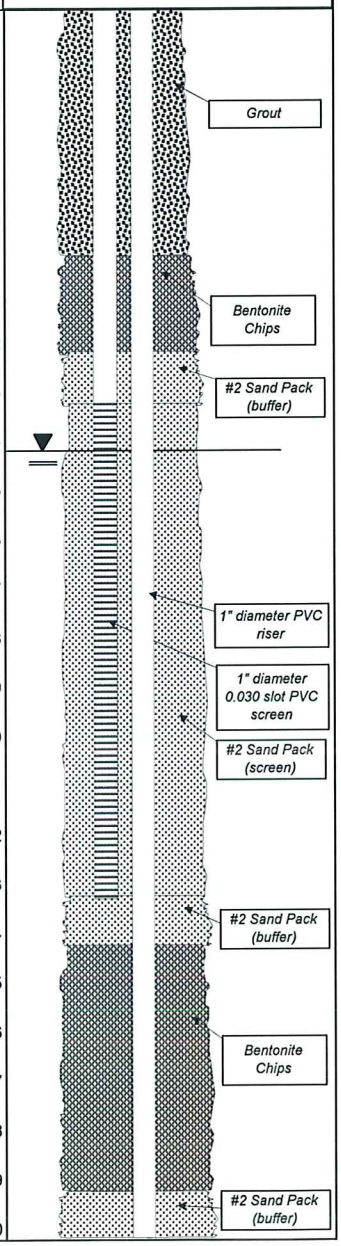
SKETCH MAP



NOT TO SCALE

Depth (ft.)	Sample ID	Depth Interval (feet)	PID Headspace (ppm)	Blows / 6"	Penetration / Recovery	Sample Interval	Soil/Geologic Description (modified Burmeister)
26–30	MC-7	25-30	16.5	--	60/60		2.5YR 4/4, Reddish brown, dry to moist, COARSE and FINE GRAVEL, some medium sand, some coarse sand, trace clay
31–35	MC-8	30-35	11.6	--	60/60		2.5YR 3/3, Dark reddish brown, moist to wet, COBBLE and FINE SAND, some coarse sand, some fine gravel trace clay
36–40	MC-9	35-40	9.3	--	60/60		2.5YR 5/4, Dark reddish brown, moist, COBBLE and MEDIUM SAND, some fine gravel, little coarse sand
41–45	MC-10	40-45	NR	--	60/45		2.5YR 3/6, Dark red, wet to saturated, COBBLE, some fine sand, little coarse gravel
46–50	MC-11	45-50	<1.0	--	60/60		2.5YR 3/6, Dark red, wet, COBBLE, weathered bedrock, trace medium sand

Well Diagram



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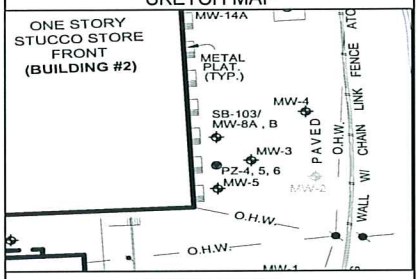
Well Log
MW-8 A, B

Project:	69972	**Casing Elevation:**	166.08' (B); 166.15' (A)
Client:	JLJ Management	**Total Depth:**	Deep 52'; Shallow 43'
Location:	1-45 Orangetown Road, Orangeburg, NY	**Water Level:**	~34'
Well ID:	MW-8 A, B	**Drilling Co.:**	Boart Longyear (BL)
Screen Length:	Deep 2'; Shallow 10'	**Driller:**	Ben
Diameter:	1"	**Method:**	Sonic Drilling
Type:	PVC	**Start Date:**	September 24, 2007
Slot Size:	0.030	**End Date:**	September 28, 2007
Casing Length:	Deep 50'; Shallow 33'	**Notes:**	
Diameter:	1"		
Type:	Schedule 40 PVC	**Logged by:** SC	**Checked by:** SC

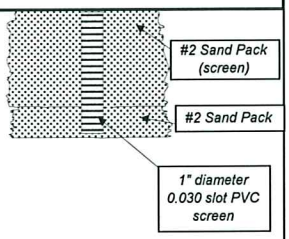
SKETCH MAP



NOT TO SCALE

Depth (ft.)	Sample ID	Depth Interval (feet)	PID Headspace (ppm)	Blows / 6"	Penetration / Recovery	Sample Interval	Soil/Geologic Description (modified Burmeister)
51	MC-12	50-52	<1.0	--	24/24		2.5YR 3/6, Dark red, wet to saturated, COBBLE, some fine sand, little coarse gravel
52							End of boring @ 52.5' bgs

Well Diagram

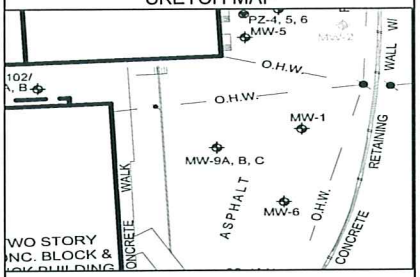


KLEINFELDER
EXPECT MORE®
99 Lamberton Road, Suite 201, Windsor, Connecticut 06095 ♦ Phone: (860) 683-4200 ♦ Fax: (860) 683-4206

Well Log
MW-9 A, B, C

Project:	69972	**Casing Elevation:**	165.68' (A, B, C)
Client:	JLJ Management	**Total Depth:**	Deep 72'; Mid 57'; Shallow 41'
Location:	1-45 Orangetown Road, Orangeburg, NY	**Water Level:**	~34'
Well ID:	MW-9 A, B, C	**Drilling Co.:**	Boart Longyear (BL)
Screen Length:	Deep 2'; Mid 2'; Shallow 10'	**Driller:**	Ben
Diameter:	1"	**Method:**	Sonic Drilling
Type:	PVC	**Start Date:**	September 25, 2007
Slot Size:	0.030	**End Date:**	September 25, 2007
Casing Length:	Deep 70'; Mid 55'; Shallow 31'	**Notes:**	
Diameter:	1"		
Type:	Schedule 40 PVC	**Logged by:** SC	**Checked by:** SC

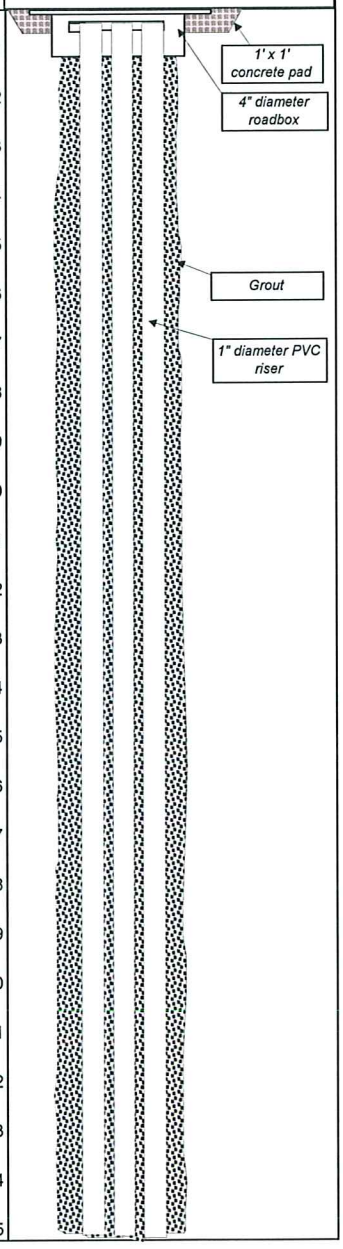
SKETCH MAP



NOT TO SCALE

Depth (ft.)	Sample ID	Depth Interval (feet)	PID Headspace (ppm)	Blows / 6"	Penetration / Recovery	Sample Interval	Soil/Geologic Description (modified Burmeister)	Depth (ft.)
1								1
2								2
3								3
4								4
5							Core down to 72' bgs	5
6								6
7								7
8								8
9								9
10								10
11								11
12								12
13								13
14								14
15								15
16								16
17								17
18								18
19								19
20								20
21								21
22								22
23								23
24								24
25								25

Well Diagram



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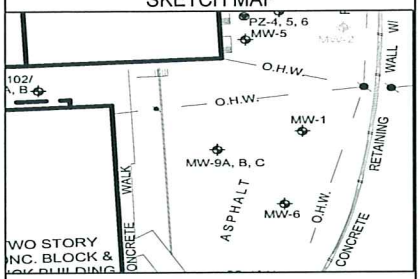
Well Log
MW-9 A, B, C

Project:	69972	**Casing Elevation:**	165.68' (A, B, C)
Client:	JLJ Management	**Total Depth:**	Deep 72'; Mid 57'; Shallow 41'
Location:	1-45 Orangetown Road, Orangeburg, NY	**Water Level:**	~34'
Well ID:	MW-9 A, B, C	**Drilling Co.:**	Boart Longyear (BL)
Screen Length:	Deep 2'; Mid 2'; Shallow 10'	**Driller:**	Ben
Diameter:	1"	**Method:**	Sonic Drilling
Type:	PVC	**Start Date:**	September 25, 2007
Slot Size:	0.030	**End Date:**	September 25, 2007
Casing Length:	Deep 70'; Mid 55'; Shallow 31'	**Notes:**	
Diameter:	1"		
Type:	Schedule 40 PVC	**Logged by:** SC	**Checked by:** SC

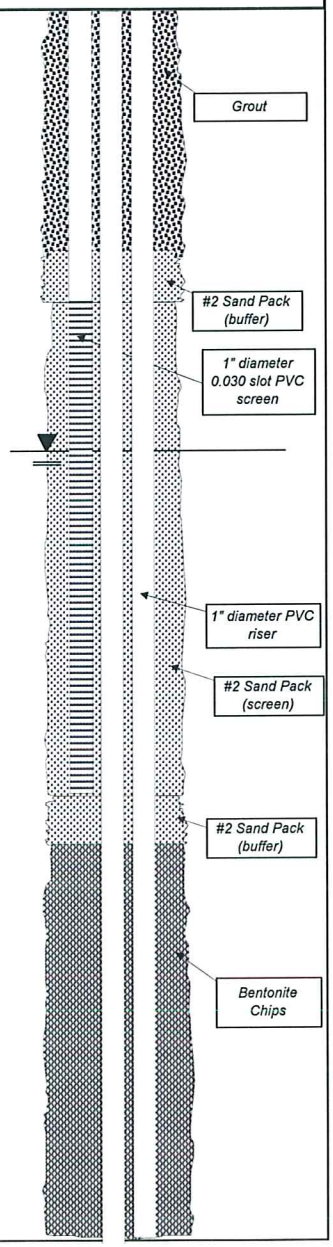
SKETCH MAP



NOT TO SCALE

Depth (ft.)	Sample ID	Depth Interval (feet)	PID Headspace (ppm)	Blows / 6"	Penetration / Recovery	Sample Interval	Soil/Geologic Description (modified Burmeister)	Depth (ft.)
26								26
27								27
28								28
29								29
30								30
31								31
32							Continuing to core down to 72' bgs	32
33								33
34								34
35								35
36								36
37								37
38								38
39								39
40								40
41								41
42								42
43								43
44								44
45								45
46								46
47								47
48								48
49								49
50								50

Well Diagram



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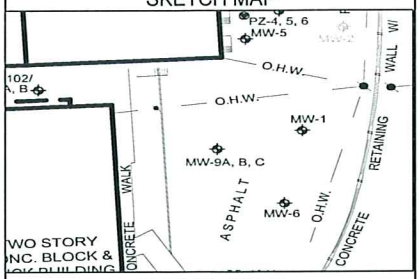
Well Log
MW-9 A, B, C

Project:	69972	**Casing Elevation:**	165.68' (A, B, C)
Client:	JLJ Management	**Total Depth:**	Deep 72'; Mid 57'; Shallow 41'
Location:	1-45 Orangetown Road, Orangeburg, NY	**Water Level:**	~34'
Well ID:	MW-9 A, B, C	**Drilling Co.:**	Boart Longyear (BL)
Screen Length:	Deep 2'; Mid 2'; Shallow 10'	**Driller:**	Ben
Diameter:	1"	**Method:**	Sonic Drilling
Type:	PVC	**Start Date:**	September 25, 2007
Slot Size:	0.030	**End Date:**	September 25, 2007
Casing Length:	Deep 70'; Mid 55'; Shallow 31'	**Notes:**	
Diameter:	1"		
Type:	Schedule 40 PVC	**Logged by:** SC	**Checked by:** SC

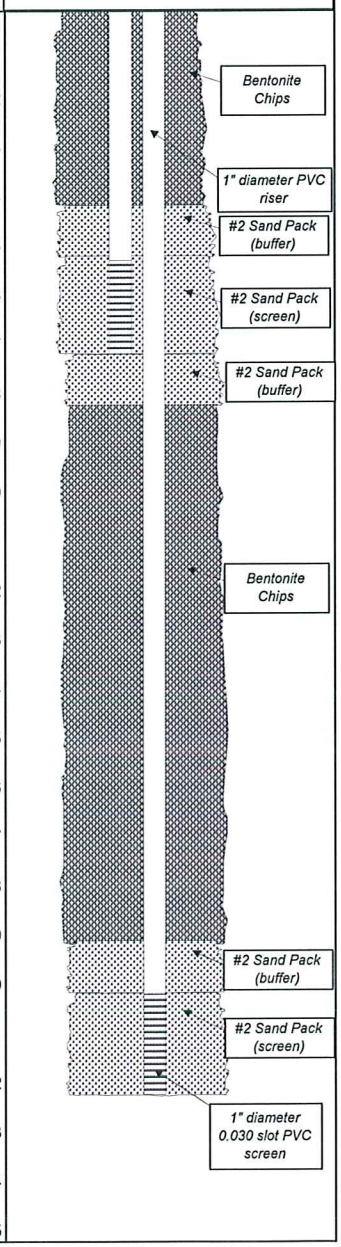
SKETCH MAP



NOT TO SCALE

Depth (ft.)	Sample ID	Depth Interval (feet)	PID Headspace (ppm)	Blows / 6"	Penetration / Recovery	Sample Interval	Soil/Geologic Description (modified Burmeister)	Depth (ft.)
51								51
52								52
53								53
54								54
55								55
56								56
57								57
58							Continuing to core down to 72' bgs	58
59								59
60								60
61								61
62								62
63								63
64								64
65								65
66								66
67								67
68								68
69								69
70								70
71								71
72								72
73							End of boring @ 72' bgs	73
74								74
75								75

Well Diagram



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Well Log
MW-11 A, B

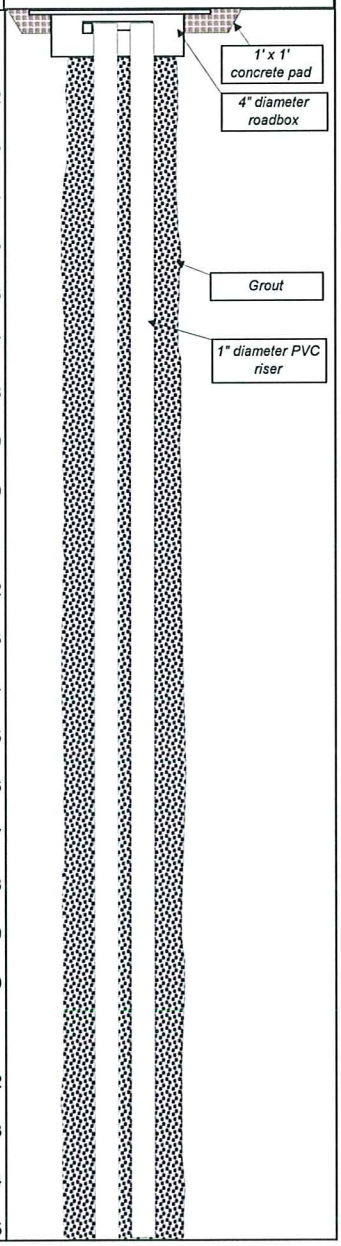
Project:	69972	**Casing Elevation:**	170.07' (A); 170.23' (B)
Client:	JLJ Management	**Total Depth:**	Deep 48.5'; Shallow 41'
Location:	1-45 Orangetown Road, Orangeburg, NY	**Water Level:**	~40'
Well ID:	MW-11 A, B	**Drilling Co.:**	Boart Longyear (BL)
Screen Length:	Deep 2'; Shallow 10'	**Driller:**	Ben
Diameter:	1"	**Method:**	Sonic Drilling
Type:	PVC	**Start Date:**	September 24, 2007
Slot Size:	0.030	**End Date:**	October 4, 2007
Casing Length:	Deep 47.5'; Shallow 31'	**Notes:**	
Diameter:	1"		
Type:	Schedule 40 PVC	**Logged by:** SC	**Checked by:** SC

SKETCH MAP

NOT TO SCALE

Depth (ft.)	Sample ID	Depth Interval (feet)	PID Headspace (ppm)	Blows / 6"	Penetration / Recovery	Sample Interval	Soil/Geologic Description (modified Burmeister)
1–5		0-5	NR	--	--		Vacuum excavated 7.5YR 2.5/3, Very dark brown, damp, MEDIUM and FINE SAND, little coarse gravel, trace fine gravel
6–7	MC-1	5-7	31.2	--	24/24		10YR 3/2, Very dark grayish brown, damp, FINE SAND, some medium sand, little coarse sand, little fine gravel
8–10	MC-2	7-10	18.3	--	36/36		5YR 3/4, Dark reddish brown, damp, MEDIUM SAND, some fine sand, little fine gravel, little coarse sand
11–15	MC-3	10-15	11.3	--	60/60		2.5Y 4/3, Reddish brown, wet, MEDIUM and FINE SAND, some coarse sand, little fine gravel, trace silt
16–18	MC-4	15-18	14.3	--	36/36		5YR 3/4, Dark reddish brown, damp, MEDIUM SAND, some fine sand, some coarse sand, little fine gravel, little coarse gravel
19–20	MC-5	18-20	16.0	--	24/24		7.5YR 3/3, Dark brown, damp to wet, FINE SAND and COARSE GRAVEL, some cobbles, little fineg gravel, trace silt
21–25	MC-6	20-25	27.2	--	60/60		5YR 3/3, Dark reddish brown, moist to damp, COARSE SAND, some medium sand, some cobbles, little fine gravel

Well Diagram



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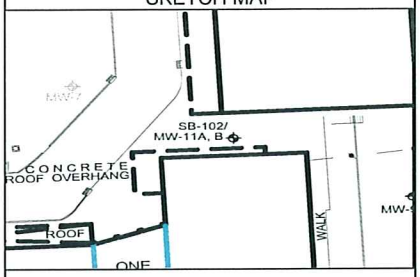
Well Log
MW-11 A, B

Project:	69972	**Casing Elevation:**	170.07' (A); 170.23' (B)
Client:	JLJ Management	**Total Depth:**	Deep 48.5'; Shallow 41'
Location:	1-45 Orangetown Road, Orangeburg, NY	**Water Level:**	~40'
Well ID:	MW-11 A, B	**Drilling Co.:**	Boart Longyear (BL)
Screen Length:	Deep 2'; Shallow 10'	**Driller:**	Ben
Diameter:	1"	**Method:**	Sonic Drilling
Type:	PVC	**Start Date:**	September 24, 2007
Slot Size:	0.030	**End Date:**	October 4, 2007
Casing Length:	Deep 47.5'; Shallow 31'	**Notes:**	
Diameter:	1"		
Type:	Schedule 40 PVC	**Logged by:** SC	**Checked by:** SC

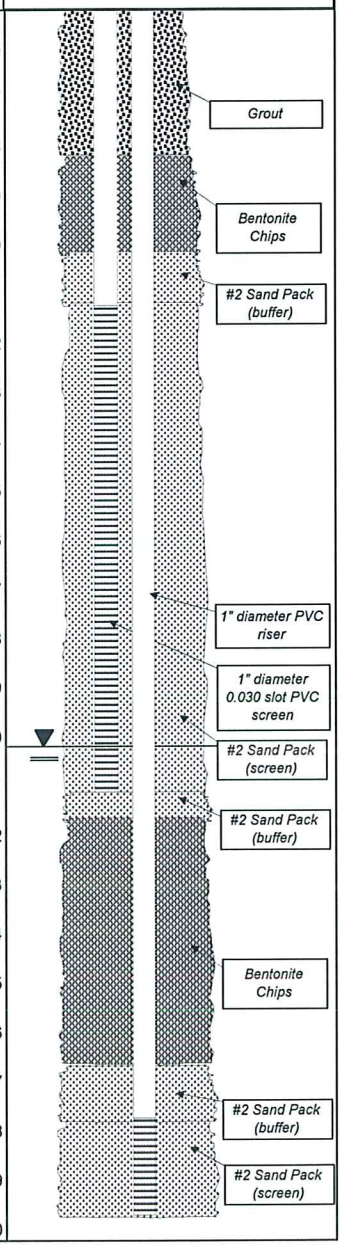
SKETCH MAP



NOT TO SCALE

Depth (ft.)	Sample ID	Depth Interval (feet)	PID Headspace (ppm)	Blows / 6"	Penetration / Recovery	Sample Interval	Soil/Geologic Description (modified Burmeister)
26–30	MC-7	25-30	14.9	--	60/60		5YR 4/2, Dark reddish gray, moist, MEDIUM and COARSE SAND, some fine gravel, little coarse gravel
31–35	MC-8	30-35	37.8	--	60/60		7.5YR 4/3, Reddish brown, damp, MEDIUM and COARSE SAND, some fine gravel, little fine sand
36–37	MC-9	35-37	73.9	--	24/24		7.5YR 4/4, Brown, damp, MEDIUM and FINE SAND, some fine gravel, trace silt
38–40	MC-10	37-40	26.4	--	36/36		2.5YR 3/6, Dark red, damp, FINE SAND, some silt, little fine gravel
41–45	MC-11	40-45	17.8	--	60/60		7.5YR 3/2, Dark brown, wet, FINE and MEDIUM SAND, some silt, little fine gravel, little coarse sand
46–49	MC-12	45-49.5	19.4	--	NR		5YR 4/6, Yellowish red, moist to damp, MEDIUM SAND and COBBLES, some weathered rock, little fine sand
50							End of boring @ 49.5' bgs

Well Diagram



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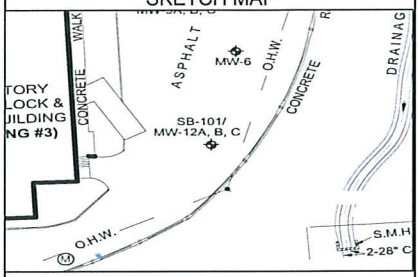
Well Log
MW-12 A, B, C

Project:	69972	**Casing Elevation:**	165.1' (A); 165.0' (B, C)
Client:	JLJ Management	**Total Depth:**	Deep 46'; Mid 40'; Shallow 16'
Location:	1-45 Orangetown Road, Orangeburg, NY	**Water Level:**	~34'
Well ID:	MW-12 A, B, C	**Drilling Co.:**	Boart Longyear (BL)
Screen Length:	Deep 2'; Mid 10'; Shallow 5'	**Driller:**	Ben
Diameter:	1"	**Method:**	Sonic Drilling
Type:	PVC	**Start Date:**	September 24, 2007
Slot Size:	0.030	**End Date:**	September 28, 2007
Casing Length:	Deep 44'; Mid 30'; Shallow 11'	**Notes:**	
Diameter:	1"		
Type:	Schedule 40 PVC	**Logged by:** SC	**Checked by:** SC

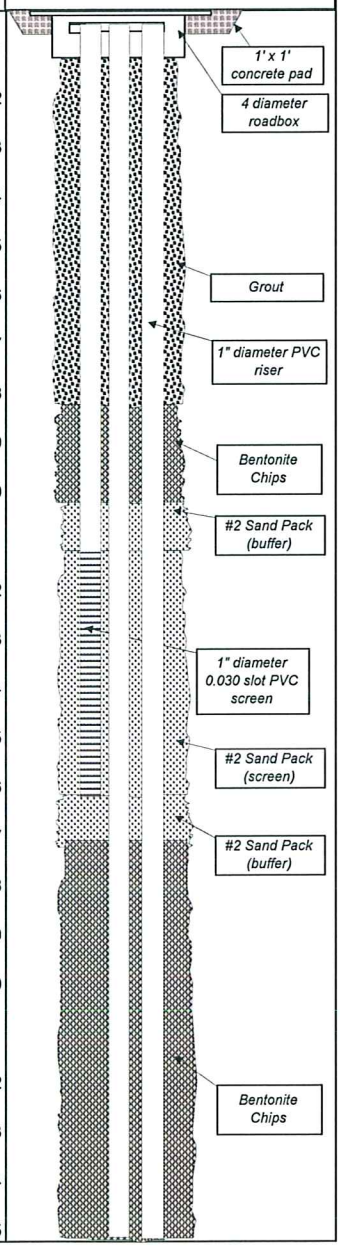
SKETCH MAP



NOT TO SCALE

Depth (ft.)	Sample ID	Depth Interval (feet)	PID Headspace (ppm)	Blows / 6"	Penetration / Recovery	Sample Interval	Soil/Geologic Description (modified Burmeister)
1–5		0-5	<1.0	--	--		Vacuum excavated 5Y 2.5/2, Dark reddish brown, damp to moist, FINE SAND, some silt, some medium sand, little coarse sand, trace fine gravel
6–10	MC-1	5-10	<1.0	--	60/60		7.5YR 3/3, Dark brown, wet, FINE SAND, some silt, some medium sand, little coarse sand, little fine gravel
11–15	MC-2	10-15	<1.0	--	60/60		7.5YR 4/4, Brown, damp, FINE SAND and SILT, little coarse sand, trace fine gravel
16		15-18	17.6	--	--		Top 36": 7.5YR 3/1, Very dark gray, damp to wet, FINE SAND and SILT, little coarse sand, little fine gravel
17–18	MC-3	15-20	--	--	60/60		
19–20		18-20	3.2	--	--		Bottom 24": 7.5YR 4/6, Strong brown, moist to dry, MEDIUM SAND, some coarse sand, little fine gravel, little fine sand
21–25	MC-4	20-25	<1.0	--	60/60		5YR 3/4, Dark reddish brown, moist to damp, MEDIUM and COARSE SAND, some fine sand, little fine gravel

Well Diagram



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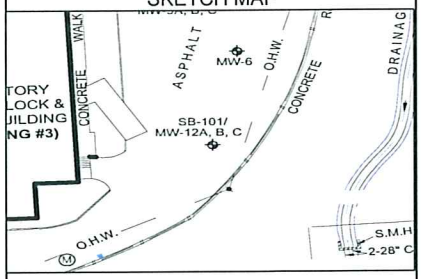
Well Log
MW-12 A, B, C

Project:	69972	**Casing Elevation:**	165.1' (A); 165.0' (B, C)
Client:	JLJ Management	**Total Depth:**	Deep 46'; Mid 40'; Shallow 16'
Location:	1-45 Orangetown Road, Orangeburg, NY	**Water Level:**	~34'
Well ID:	MW-12 A, B, C	**Drilling Co.:**	Boart Longyear (BL)
Screen Length:	Deep 2'; Mid 10'; Shallow 5'	**Driller:**	Ben
Diameter:	1"	**Method:**	Sonic Drilling
Type:	PVC	**Start Date:**	September 24, 2007
Slot Size:	0.030	**End Date:**	September 28, 2007
Casing Length:	Deep 44'; Mid 30'; Shallow 11'	**Notes:**	
Diameter:	1"		
Type:	Schedule 40 PVC	**Logged by:** SC	**Checked by:** SC

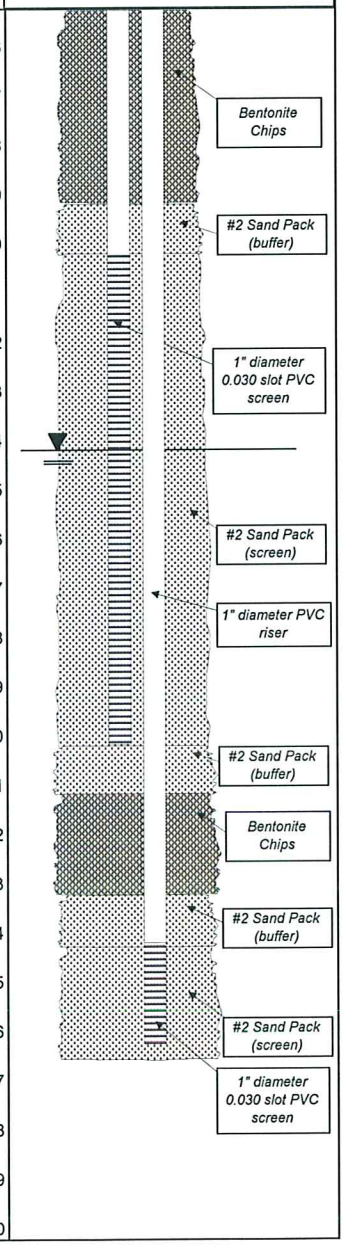
SKETCH MAP



NOT TO SCALE

Depth (ft.)	Sample ID	Depth Interval (feet)	PID Headspace (ppm)	Blows / 6"	Penetration / Recovery	Sample Interval	Soil/Geologic Description (modified Burmeister)
26–30	MC-5	25-30	<1.0	--	60/60		5YR 3/3, Dark reddish brown, moist to damp, MEDIUM SAND, some coarse sand, little fine gravel, little fine sand
31–35	MC-6	30-35	<1.0	--	60/60		2.5YR 3/6, Dark red, moist, MEDIUM and COARSE SAND, some fine gravel, trace silt Weathered rock @ 33-35 bgs
36–40	MC-7	35-40	21.3	--	60/60		10R 3/6, Dark red, moist to damp, COARSE and MEDIUM SAND, some fine gravel, little cobble, trace silt, trace fine sand
41–45	MC-8	40-45	NR	--	60/60		COMPETENT BEDROCK and COBBLE, little medium sand
46							Advanced macrocore to 46' bgs
47–50							End of boring @ 46' bgs - set well

Well Diagram



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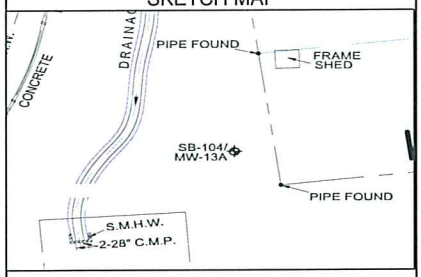
Well Log
SB-104/MW-13

Project:	69972	**Casing Elevation:**	140.1'
Client:	JLJ Management	**Total Depth:**	16'
Location:	1-45 Orangetown Road, Orangeburg, NY	**Water Level:**	~10'
Well ID:	MW-13	**Drilling Co.:**	Boart Longyear (BL)
Screen Length:	8'	**Driller:**	Ben
Diameter:	1"	**Method:**	Sonic Drilling
Type:	PVC	**Start Date:**	September 25, 2007
Slot Size:	0.030"	**End Date:**	September 28, 2007
Casing Length:	8'	**Notes:**	
Diameter:	1"		
Type:	Schedule 40 PVC	**Logged by:** SC	**Checked by:** SC

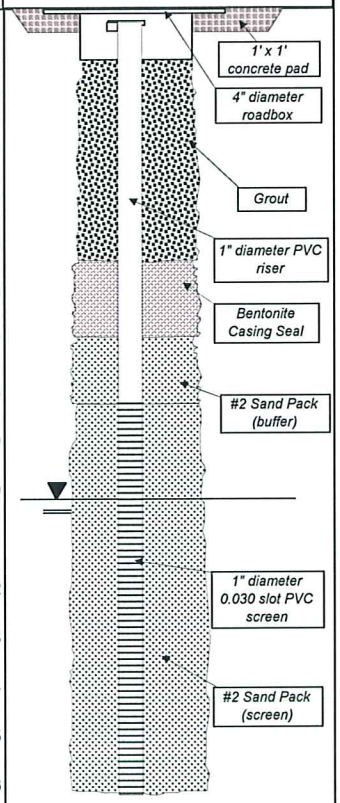
SKETCH MAP



NOT TO SCALE

Depth (ft.)	Sample ID	Depth Interval (feet)	PID Headspace (ppm)	Blows / 6"	Penetration / Recovery	Sample Interval	Soil/Geologic Description (modified Burmeister)
1–5		0-5	<1.0	--	--		Vacuum excavated 5YR 4/6, Yellowish red, dry, FINE SAND, some medium sand, trace coarse sand
6–10	MC-1	5-10	36.2	--	60/60		5YR 5/4, Reddish brown, dry, FINE and MEDIUM SAND, little fine gravel, little coarse sand
11–16	MC-2	10-16	39.2	--	72/72		5YR 3/4, Dark reddish brown, moist to wet, FINE SAND, some silt, some weathered rock, little coarse sand
17–25							End of boring @ 16' bgs

Well Diagram



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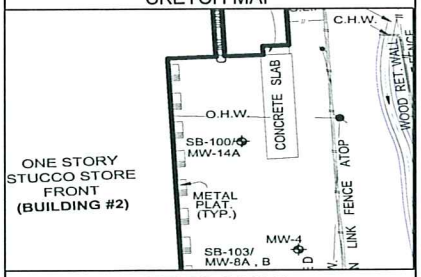
Well Log
SB-100/MW-14

Project:	69972	**Casing Elevation:**	166.49'
Client:	JLJ Management	**Total Depth:**	37.5'
Location:	1-45 Orangetown Road, Orangeburg, NY	**Water Level:**	~30'
Well ID:	MW-14	**Drilling Co.:**	Boart Longyear (BL)
Screen Length:	6'	**Driller:**	Ben
Diameter:	1"	**Method:**	Sonic Drilling
Type:	PVC	**Start Date:**	September 27, 2007
Slot Size:	0.030"	**End Date:**	September 27, 2007
Casing Length:	31.5'	**Notes:**	
Diameter:	1"		
Type:	Schedule 40 PVC	**Logged by:** SC	**Checked by:** SC

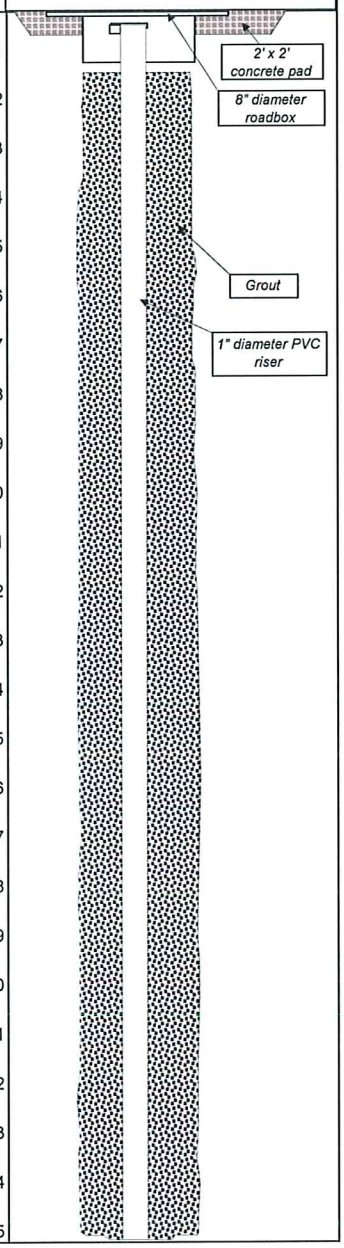
SKETCH MAP



NOT TO SCALE

Depth (ft.)	Sample ID	Depth Interval (feet)	PID Headspace (ppm)	Blows / 6"	Penetration / Recovery	Sample Interval	Soil/Geologic Description (modified Burmeister)
1–5		0-5	--	--	--		Vacuum excavated
6–10	MC-1	5-10	<1.0	--	60/60		5YR 3/4, Dark reddish brown, moist, MEDIUM and FINE SAND, little coarse sand, trace fine gravel
11–15	MC-2	10-15	6.7	--	60/60		5YR 3/4, Dark reddish brown, moist, MEDIUM SAND, some fine sand, little coarse sand, little fine gravel
16–20	MC-3	15-20	12.5	--	60/60		5YR 3/4, Dark reddish brown, moist, MEDIUM SAND, some coarse sand, some fine sand, little fine gravel
21–25	MC-4	20-25	<1.0	--	60/60		7.5YR 4/6, Strong brown, moist, MEDIUM SAND, some fine sand, some coarse sand, little fine gravel

Well Diagram



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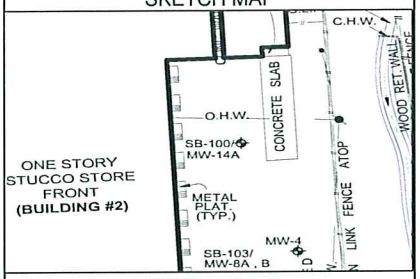
Well Log
SB-100/MW-14

Project:	69972	**Casing Elevation:**	166.49'
Client:	JLJ Management	**Total Depth:**	37.5'
Location:	1-45 Orangetown Road, Orangeburg, NY	**Water Level:**	~30'
Well ID:	MW-14	**Drilling Co.:**	Boart Longyear (BL)
Screen Length:	6'	**Driller:**	Ben
Diameter:	1"	**Method:**	Sonic Drilling
Type:	PVC	**Start Date:**	September 27, 2007
Slot Size:	0.030"	**End Date:**	September 27, 2007
Casing Length:	31.5'	**Notes:**	
Diameter:	1"		
Type:	Schedule 40 PVC	**Logged by:** SC	**Checked by:** SC

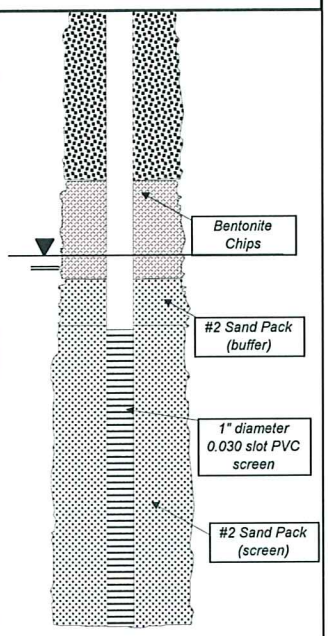
SKETCH MAP



NOT TO SCALE

Depth (ft.)	Sample ID	Depth Interval (feet)	PID Headspace (ppm)	Blows / 6"	Penetration / Recovery	Sample Interval	Soil/Geologic Description (modified Burmeister)
26–30	MC-5	25-30	47.3	--	60/60		MEDIUM SAND and FINE GRAVEL, some coarse sand, little fine sand
31–35	MC-6	30-35	16.9	--	60/60		2.5YR 2.5/4, Dark reddish brown, moist to wet, WEATHERED ROCK, some medium sand, little coarse sand
36–37	MC-7	35-37.5	21.4	--	30/30		2.5YR 4/6, Red, moist, WEATHERED ROCK, some cobbles, little medium sand
38							End of boring @ 37.5' bgs

Well Diagram



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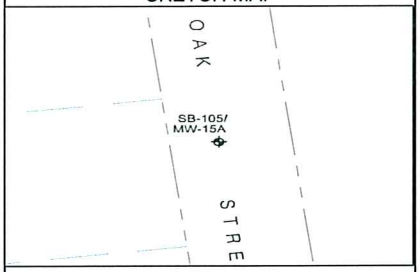
Well Log
SB-105/MW-15

Project:	69972	**Casing Elevation:**	135.39'
Client:	JLJ Management	**Total Depth:**	19.5'
Location:	1-45 Orangetown Road, Orangeburg, NY	**Water Level:**	~10'
Well ID:	MW-15	**Drilling Co.:**	Boart Longyear (BL)
Screen Length:	10'	**Driller:**	Ben
Diameter:	1"	**Method:**	Sonic Drilling
Type:	PVC	**Start Date:**	October 2, 2007
Slot Size:	0.030"	**End Date:**	October 3, 2007
Casing Length:	9.5'	**Notes:**	
Diameter:	1"		
Type:	Schedule 40 PVC	**Logged by:** SC	**Checked by:** SC

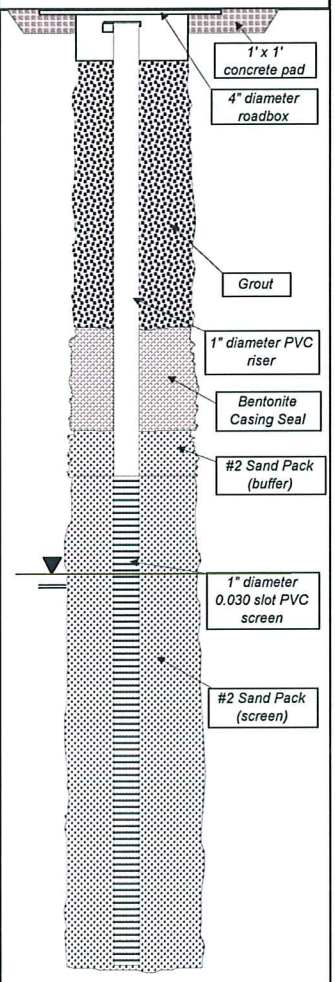
SKETCH MAP



NOT TO SCALE

Depth (ft.)	Sample ID	Depth Interval (feet)	PID Headspace (ppm)	Blows / 6"	Penetration / Recovery	Sample Interval	Soil/Geologic Description (modified Burmeister)
1–5		0-5	<1.0	--	--		Vacuum excavated 10YR 3/2, Dark brown, damp to wet, MEDIUM SAND, some coarse sand, little fine gravel, little fine sand
6–10	MC-1	5-10	8.7	--	60/60		2.5YR 3/4, Dark reddish brown, damp, MEDIUM SAND, some coarse sand, little fine gravel, trace fine sand
11–15	MC-2	10-15	14.8	--	60/60		2.5YR 3/3, Dark reddish brown, damp to wet, MEDIUM SAND and FINE GRAVEL, some coarse sand
16–19	MC-3	15-19	17.2	--	48/48		2.5YR 3/2, Dusky red, moist to dry, WEATHERED ROCK, some medium sand, some fine gravel
							Augered down to 19.5' bgs - set well
20–25							End of boring @ 19.5' bgs

Well Diagram



Boring Log: ***TMW-1***

Project: Orangeburg Shopping Center ***Surface Elevation (feet AMSL*):*** --

Project No.: 131022-1 ***TOC Elevation (feet AMSL*):*** --

Location: Orangeburg, NY ***Total Depth (feet):*** 17

Completion Date: 03/17/2004 ***Borehole Diameter (inches):*** 8.25

Sample Data					Subsurface Profile		
Depth	Sample Interval	PID/OVM (ppm)	Blow Count	% Recovery	Lithology	Description	Well Construction
0						Ground Surface	
						Asphalt	
2						*Clayey Silt (ml)* Reddish brown (5YR 4/3), some coarse gravel, brick and coal fragments; soft/stiff; slightly plastic; dry; *fill* (description from MW-1). • Black cinders in 5 to 7-foot spoon	
4							
6	1	0.0	4 2 2 2	35			
8						*Sandy Clay (cl)* Brown (7.5YR 4/2), fine-grained; soft; plastic; moist/wet; *fill.*	
10	2	0.0	1 1 1 1	45			
12							
14						*Silt (ml)* Reddish brown (5YR 4/3), trace clay, fine-grained sand, and angular gravel; soft/stiff; non-plastic; dry/moist; *till.*	
16	3	0.0	10 12 18 14	95		*Silty Sand (sm)* Strong brown (7.5YR 4/6), fine to very fine-grained, some poorly sorted zones, trace rounded fine gravel; dense; dry/moist; *till.*	
18							
20							

Geologist(s): Erin Huntley

Subcontractor: Parratt-Wolff, Inc.

Driller/ Operator: Jim Lansing

Method: **HSA** ☑ **ID(inches):** 4.25

Geoprobe ☐ **Rotosonic** ☐

** AMSL= Above mean sea level*

Boring Log: *TMW-2*

Project: Orangeburg Shopping Center *Surface Elevation (feet AMSL*):* --

Project No.: 131022-1 *TOC Elevation (feet AMSL*):* --

Location: Orangeburg, NY *Total Depth (feet):* 9

Completion Date: 03/17/2004 *Borehole Diameter (inches):* 8.25

Sample Data					Subsurface Profile		
Depth	Sample Interval	PID/OVM (ppm)	Blow Count	% Recovery	Lithology	Description	Well Construction
0						Ground Surface	
						Asphalt	
2						*Silt (ml)* Reddish brown (5YR 4/3), trace clay and gravel; very stiff; non-plastic; dry/moist; *till.*	
4							
6	1	0.0	13 23 23 27	100			
8	2	0.0	13 50 50-0.3	100		*Sandy Clay (cl)* Strong brown (7.5YR 4/6), fine-grained, trace gravel; soft; plastic; moist/wet; *till.*	
						Silt (ml) Strong brown (7.5YR 4/6), trace angular gravel; very stiff; non-plastic; dry; *till.*	
10							
12							
14							
16							
18							
20							

Geologist(s): Erin Huntley

Subcontractor: Parratt-Wolff, Inc.

Driller/ Operator: Jim Lansing

Method: **HSA** ☑ **ID(inches):** 4.25

Geoprobe ☐ **Rotosonic** ☐

** AMSL= Above mean sea level*

Boring Log: *MW-1*

Project: Orangeburg Shopping Center *Surface Elevation (feet AMSL*):* --

Project No.: 131022-1 *TOC Elevation (feet AMSL*):* --

Location: Orangeburg, NY *Total Depth (feet):* 40

Completion Date: 03/18/2004 *Borehole Diameter (inches):* 8.25

Sample Data					Subsurface Profile		
Depth	Sample Interval	PID/OVM (ppm)	Blow Count	% Recovery	Lithology	Description	Well Construction
0						Ground Surface	
						Asphalt	
2						*Clayey Silt (ml)* Reddish brown (5YR 4/3), some coarse gravel, brick and coal fragments; soft/stiff; slightly plastic; dry; *fill.* • dry/moist at 10 to 12 feet	
4							
6	1	0.0	12 12 14 14	40			
8							
10	2	0.0	8 9 12 18	75			
12							
14						*Silt (ml)* Reddish brown (5YR 4/3), trace clay, fine-grained sand, medium to fine-grained gravel; stiff; non to slightly plastic; dry; *till.*	
16	3	0.0	8 23 28 18	75			
18							
20							

Geologist(s): Erin Huntley

Subcontractor: Parratt-Wolff, Inc.

Driller/ Operator: Jim Lansing

Method: **HSA** ☑ **ID(inches):** 4.25

Geoprobe ☐ **Rotosonic** ☐

** AMSL= Above mean sea level*

Boring Log: *MW-1*

Project: Orangeburg Shopping Center *Surface Elevation (feet AMSL*):* --

Project No.: 131022-1 *TOC Elevation (feet AMSL*):* --

Location: Orangeburg, NY *Total Depth (feet):* 40

Completion Date: 03/18/2004 *Borehole Diameter (inches):* 8.25

Depth	Sample Interval	PID/OVM (ppm)	Blow Count	% Recovery	Lithology	Description	Well Construction
22	4	0.0	18 22 22 25	100			
24						*Clayey Silt (ml)* Reddish brown (5YR 4/3), trace medium to fine-grained gravel; stiff; slightly plastic; moist; *till.*	
26	5	0.0	15 15 10 12	95			
28							
30	6	0.0	14 12 14 20	90			
32							
34						*Clayey Silt (ml)* Reddish brown (5YR 4/3), trace fine-grained sand; soft; plastic; wet; *till.*	
36	7	0.0	80 50-0.3	100		*Silt/Sand (ml)* Red; very stiff; friable; dry; *residual (weathered sandstone or siltstone).* • spoon hammered 40 to 40.2 feet (50/0.2), no recovery	
38							
40							

Geologist(s): Erin Huntley

Subcontractor: Parratt-Wolff, Inc.

Driller/ Operator: Jim Lansing

Method: **HSA** ☑ **ID(inches):** 4.25

Geoprobe ☐ **Rotosonic** ☐

** AMSL= Above mean sea level*

GEOLOGIC SERVICES CORPORATION

484 Temple Hill Road, Suite 100, New Windsor, NY 12553

Phone: (845) 561-9890 Fax: (845) 561-9857

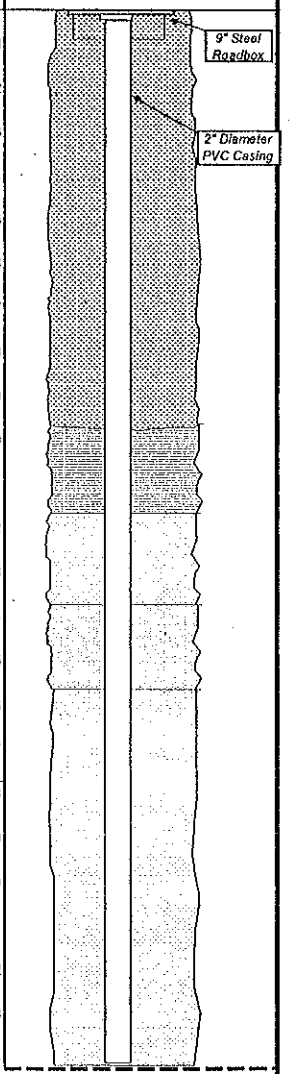
Well Log
MW-3

Project:	0410794	**Casing Elevation:**	NA
Client:	RemVer	**Total Depth:**	46 ft bgs
Location:	Orangetown Plaza	**Water Level:**	37.55 ft bgs
Well ID:	MW-3	**Drilling Co.:**	ADT
Borehole Diameter:	6"	**Driller:**	Mike
PVC Type:	2"	**Method:**	Hollow Stem/Air Rotary
Slot Size:	0.010	**Start Date:**	10-19-04
Casing Length:	35'	**End Date:**	10-20-04
Diameter:	2"	**Notes:** * Denotes sample submitted for laboratory analysis	
		Log by: CB	**Checked by:** EC

Geologic Services Corporation

Depth (ft.)	Sample Interval (feet)	PCE/TCE Headspace (ppm)	DCE Headspace (ppm)	PID Headspace (ppm)	Blows / 6"	Recovery / Penetration (inches)	Description
1-4	0'-5'	0.0	0.0	0.0	Hand Clear	NA	Medium brown medium to fine SAND, little Silt and Cobbles, moist
5-9	5'-10'	0.0	0.0	0.0	Auger	NA	Same as above
10-11	10'-12'	0.0	0.0	0.0	8,8,14,25	6/24	Grayish brown CLAY with Silt, little subangular Gravel, fractured Sandstone in tip, moist
12-13	12'-14'	0.0	0.0	0.0	18,18,20,22	20/24	Reddish brown medium to fine SAND with Silt, little subangular Gravel, moist
14-15	14'-16'	0.0	0.0	0.8	3,9,6,11	24/24	Medium reddish brown fine SAND with Silt, little gravel, moist
16-17	16'-18'	0.0	0.0	1.3	15,28,30,31	20/24	Medium reddish brown medium to fine SAND with Silt, some fractured Sandstone, little subangular Gravel, dry
18-19	18'-20'	0.0	0.0	0.0	10,26,30,29	4/24	Reddish brown medium to fine SAND with Silt, little subangular Gravel, some fractured Sandstone in tip, dry
20-21	20'-22'	0.9	10	3.6	7,11,16,21	12/24	Reddish brown medium to fine SAND, little subangular Gravel, dry
22-23	22'-24'	3.0	10	5.7	22,24,19,21	16/24	Medium to light reddish brown medium SAND with Silt, little subangular gravel, moist
24							

Well Diagram



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GEOLOGIC SERVICES CORPORATION

484 Temple Hill Road, Suite 100, New Windsor, NY 12553

Phone: (845) 561-9890 Fax: (845) 561-9857

Well Log
MW-3

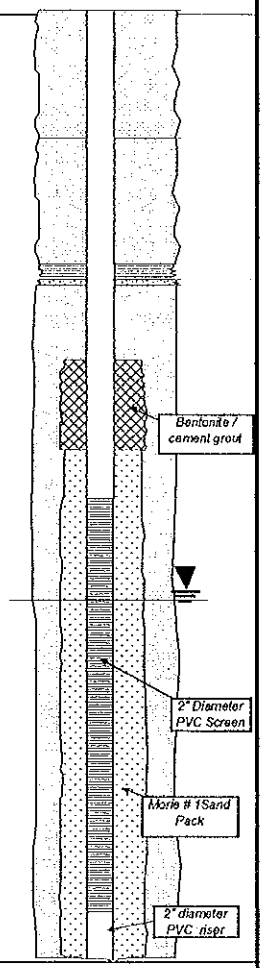
Project:	0410794	**Casing Elevation:**	NA
Client:	RemVer	**Total Depth:**	46 ft bgs
Location:	Orangetown Plaza	**Water Level:**	37.55 ft bgs
Well ID:	MW-3	**Drilling Co.:**	ADT
Borehole		**Driller:**	Mike
Diameter:	6"	**Method:**	Hollow Stem/Air Rotary
PVC Type:	2"	**Start Date:**	10-19-04
Slot Size:	0.010	**End Date:**	10-20-04
Casing Length:	35'	**Notes:** * Denotes sample submitted for	
Diameter:	2"	laboratory analysis	
		Log by: CB	**Checked by:** EC

Geologic Services Corporation

Depth (ft.)	Sample Interval (feet)	PCE/TCE Headspace (ppm)	DCE Headspace (ppm)	PID Headspace (ppm)	Blows / 6"	Recovery / Penetration (inches)	Description
24–25	* 24'-26'	3.6	5	12.0	10,16,13,12	16/24	Medium reddish brown medium SAND with Silt, little subangular gravel, moist
26–27	26'-28'	3.9	7.5	1.8	10,10,9,8	10/24	(6") Medium reddish brown medium SAND with Silt (4") Reddish brown medium to fine SAND with Silt, fractured Sandstone in tip, dry
28–30	28'-30'	2.3	7.5	5.6	5,17,28,50,3	16/21	Reddish brown medium to fine SAND, little subangular grvel, some pebbles, dry 4" medium brown CLAY with Silt , moist 1" fractured Sandstone in tip, dry
31–46	30'-46'	0.0	0.0	0.0	NA	NA	Boring completed utilizing air rotary technique to 46' bgs Medium reddish brown fine SAND with Silt with intermittent layers of Sandstone, dry

End of boring at 46 ft bgs

Well Diagram



Notes:

NA - Not Available

ft bgs - feet below ground surface

Water Level

GEOLOGIC SERVICES CORPORATION

484 Temple Hill Road, Suite 100, New Windsor, NY 12553
Phone: (845) 561-9890 Fax: (845) 561-9857

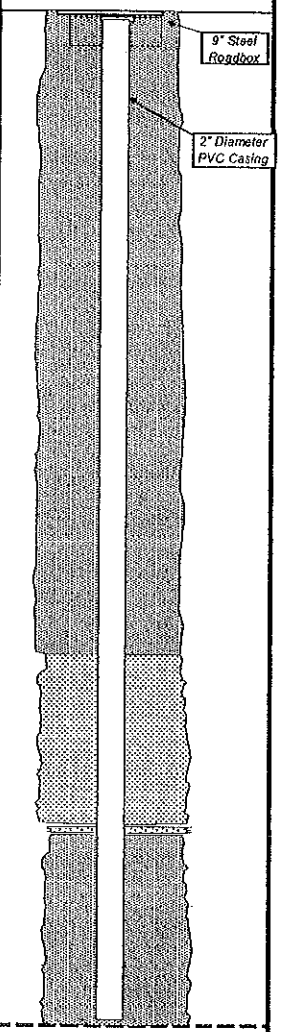
Well Log
MW-4

Project:	0410794	Casing Elevation:	NA
Client:	RemVer	Total Depth:	45 ft bgs
Location:	Orangetown Plaza	Water Level:	36.75 ft bgs
Well ID:	MW-4	Drilling Co.:	ADT
Borehole Diameter:	6"	Driller:	Mike
		Method:	Hollow Stem/Air Rotary
PVC Type:	2"	Start Date:	10-20-04
Slot Size:	0.010	End Date:	10-20-04
Casing Length:	34'	Notes: * Denotes sample submitted for laboratory analysis	
Diameter:	2"		
		Log by: CB	Checked by: EC

Geologic Services Corporation

Depth (ft.)	Sample Interval (feet)	PCE/TCE Headspace (ppm)	DCE Headspace (ppm)	PID Headspace (ppm)	Blows / 6"	Recovery / Penetration (inches)	Description
1-4	0'-5'	0.0	0.0	0.0	Hand Clear	NA	Medium brown medium to fine SAND, with Silt and subangular gravel
5-9	5'-10'	0.0	0.0	0.0	Auger	NA	Medium brown medium to fine SAND, with Silt and subangular gravel
10-14	10'-15'	0.0	0.0	0.0	Auger	NA	Medium brown medium to fine SAND, with Silt and subangular gravel
15-16	15'-17'	0.0	0.0	0.0	20,25,17,16	12/24	Medium reddish brown medium SAND with Silt, some subangular gravel, tightly packed, moist
17-18	17'-19'	0.0	0.0	0.0	8,17,21,19	20/24	Medium reddish brown medium SAND with Silt, some subangular gravel, tightly packed,crushed sandstone in tip
19-20	19'-21'	0.0	0.0	0.0	14,23,25,32	20/24	Medium reddish brown medium to fine SAND with Sill, little subangular gravel, tightly packed moist
21-23	21'-23'	0.0	0.0	0.0	29,37,38,39	20/24	Same as above

Well Diagram



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GEOLOGIC SERVICES CORPORATION

484 Temple Hill Road, Suite 100, New Windsor, NY 12553

Phone: (845) 561-9890 Fax: (845) 561-9857

Well Log
MW-4

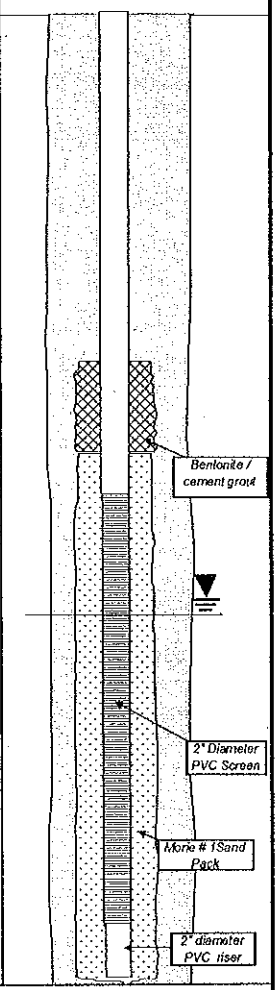
Project:	0410794	**Casing Elevation:**	NA
Client:	RemVer	**Total Depth:**	46 ft bgs
Location:	Orangetown Plaza	**Water Level:**	36.75 ft bgs
Well ID:	MW-4	**Drilling Co.:**	ADT
Borehole		**Driller:**	Mike
Diameter:	6"	**Method:**	Hollow Stem/Air Rotary
PVC Type:	2"	**Start Date:**	10-20-04
Slot Size:	0.010	**End Date:**	10-20-04
Casing Length:	34'	**Notes:** * Denotes sample submitted for	
Diameter:	2"	laboratory analysis	
		Log by: CB	**Checked by:** EC

Geologic Services Corporation

Depth (ft.)	Sample Interval (feet)	PCE/TCE Headspace (ppm)	DCE Headspace (ppm)	PID Headspace (ppm)	Blows / 6"	Recovery / Penetration (inches)	Description
23-24	23'-25'	0.0	0.0	0.0	11,15,26,29	20/24	Reddish brown medium to fine SAND with Silt, little subangular gravel,moist, tightly packed
25-26	25'-27'	0.0	0.0	0.0	60,38,22,25	0	No recovery
27-45	27'-45'	0.0	0.0.	0.0	Air Rotary	NA	Boring completed utilizing air rotary technique to 45' bgs Reddish brown medium to fine SAND with Silt and intermittent layers of Sandstone
	*MW-4 (36')						

End of boring at 45 ft bgs

Well Diagram



Notes:
NA - Not Available

ft bgs - feet below ground surface

Water Level

GEOLOGIC SERVICES CORPORATION

484 Temple Hill Road, Suite 100, New Windsor, NY 12553

Phone: (845) 561-9890 Fax: (845) 561-9857

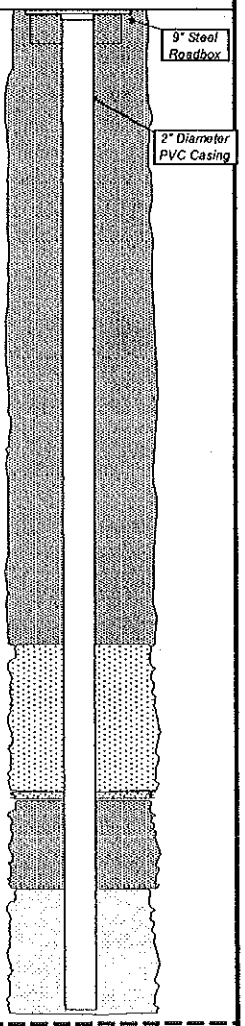
Well Log
MW-5

Project:	0410794	**Casing Elevation:**	NA
Client:	RemVer	**Total Depth:**	45' ft bgs
Location:	Orangetown Plaza	**Water Level:**	39.75 ft bgs
Well ID:	MW-5	**Drilling Co.:**	ADT
Borehole Diameter:	6"	**Driller:**	Mike
PVC Type:	2"	**Method:**	Hollow Stem/Air Rotary
Slot Size:	0.010	**Start Date:**	10-21-04
Casing Length:	34'	**End Date:**	10-22-04
Diameter:	2"	**Notes:** * Denotes sample submitted for laboratory analysis	
		Log by: CB	**Checked by:** EC

Geologic Services Corporation

Depth (ft.)	Sample Interval (feet)	PCE/TCE Headspace (ppm)	DCE Headspace (ppm)	PID Headspace (ppm)	Blows / 6"	Recovery / Penetration (inches)	Description
1-4	0'-5'	0.0	0.0	0.0	Hand Clear	NA	Medium reddish brown medium to fine SAND, with Silt and subangular gravel, moist
5-9	5'-10'	0.0	0.0	0.0	Auger	NA	Same as above
10-14	10'-15'	3.0	2.5	0.0	Auger	NA	Same as above
15-16	15'-17'	15.0	20	3.1	28,16,17	12/24	Reddish brown medium SAND with Silt and some subangular gravel, tightly packed, moist
17-18	*17'-19'	22.5	75.0	5.6	20,30,33,36	16/24	Same as above with crushed Sandstone in tip
19-20	19'-21'	12.0	25	0.0	50/4	3/4	Medium reddish brown fine SAND with Silt, crushed Sandstone in tip
21-23	21'-45'	0.0	0.0	0.0	Air Rotary	NA	Boring completed utilizing air rotary technique to 45' bgs Reddish brown medium to fine SAND with Silt and intermittent layers of Sandstone

Well Diagram



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GEOLOGIC SERVICES CORPORATION

484 Temple Hill Road, Suite 100, New Windsor, NY 12553
Phone: (845) 561-9890 Fax: (845) 561-9857

Well Log
MW-5

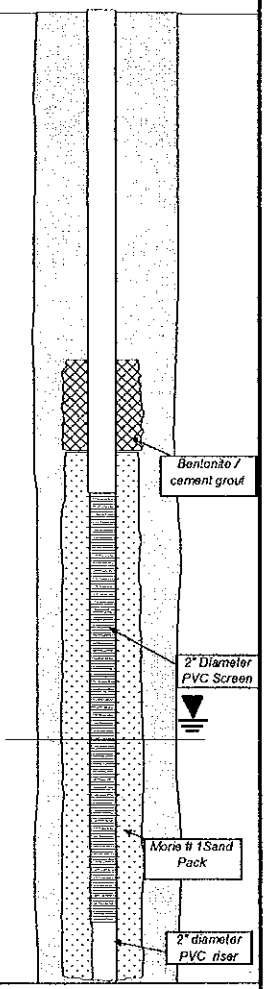
Project:	0410794	Casing Elevation:	NA
Client:	RemVer	Total Depth:	45 ft bgs
Location:	Orangetown Plaza	Water Level:	39.75 ft bgs
Well ID:	MW-5	Drilling Co.:	ADT
Borehole		Driller:	Mike
Diameter:	6"	Method:	Hollow Stem/Air Rotary
PVC Type:	2"	Start Date:	10-21-04
Slot Size:	0.010	End Date:	10-22-04
Casing Length:	34'	Notes: * Denotes sample submitted for laboratory analysis	
Diameter:	2"		
		Log by: CB	Checked by: EC

Geologic Services Corporation

Depth (ft.)	Sample Interval (feet)	PCE/TCE Headspace (ppm)	DCE Headspace (ppm)	PID Headspace (ppm)	Blows / 6"	Recovery / Penetration (inches)	Description
23							
24	21'-45'	0.0	0.0	0.0	Air Rotary	NA	Reddish brown medium to fine SAND with Silt and intermittent layers of Sandstone
25							
26							
27							
28							
29							
30							
31							
32							
33							
34							
35							
36							
37							
38							
39							
40							
41							
42							
43							
44							
45							

End of boring at 45 ft bgs

Well Diagram



Notes:
NA - Not Available

ft bgs - feet below ground surface

Water Level

GEOLOGIC SERVICES CORPORATION

484 Temple Hill Road, Suite 100, New Windsor, NY 12553

Phone: (845) 561-9890 Fax: (845) 561-9857

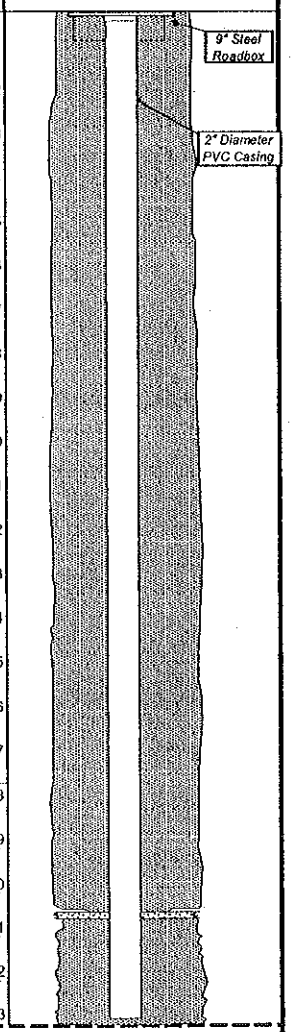
Well Log
MW-6

Project:	0410794	**Casing Elevation:**	NA
Client:	RemVer	**Total Depth:**	51 ft bgs
Location:	Orangetown Plaza	**Water Level:**	38.25 ft bgs
Well ID:	MW-6	**Drilling Co.:**	ADT
Borehole Diameter:	6"	**Driller:**	Mike
PVC Type:	2"	**Method:**	Hollow Stem/Air Rotary
Slot Size:	0.010	**Start Date:**	10-21-04
Casing Length:	35'	**End Date:**	10-22-04
Diameter:	2"	**Notes:** * Denotes sample submitted for laboratory analysis	
		Log by: CB	**Checked by:** EC

Geologic Services Corporation

Depth (ft.)	Sample Interval (feet)	PCE/TCE Headspace (ppm)	DCE Headspace (ppm)	PID Headspace (ppm)	Blows / 6"	Recovery / Penetration (inches)	Description
1-4	0'-5'	0.0	0.0	0.0	Hand Clear	NA	Medium reddish brown medium to fine SAND, with Silt and subangular gravel, moist
5-9	5'-10'	0.0	0.0	0.0	Auger	NA	Same as above
10-14	10'-15'	0.0	0.0	0.0	Auger	NA	Same as above
15-16	15'-17'	0.0	0.0	0.0	13,4,5,25	12/24	Mottled reddish brown medium to fine SAND with Silt and some subangular gravel, tightly packed, moist
17-18	17'-19'	0.0	0.0	0.0	25,24,18,17	18/24	Reddish brown medium to fine SAND with Silt
19-20	19'-21'	0.0	0.0	0.0	5,10,21,40	20/24	Medium reddish brown medium to fine SAND with Silt, little subangular gravel, dry, crushed Sandstone in tip.
21-23	21'-23'	0.0	0.0	0.0	32,24,25,23	18/24	Same as above

Well Diagram



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GEOLOGIC SERVICES CORPORATION

484 Temple Hill Road, Suite 100, New Windsor, NY 12553

Phone: (845) 561-9890 Fax: (845) 561-9857

Well Log
MW-6

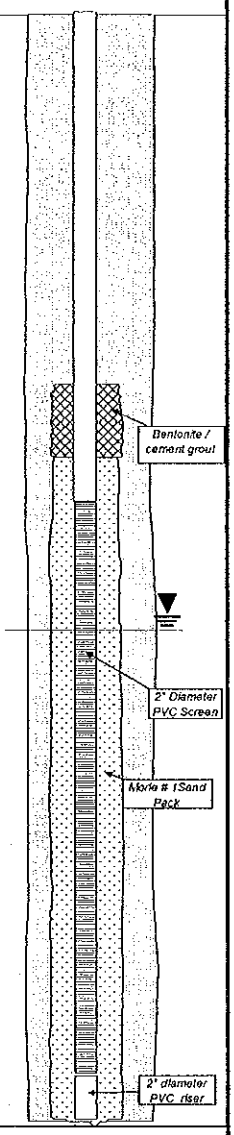
Project:	0410794	Casing Elevation:	NA
Client:	RemVer	Total Depth:	51 ft bgs
Location:	Orangetown Plaza	Water Level:	38.25 ft bgs
Well ID:	MW-6	Drilling Co.:	ADT
Borehole		Driller:	Mike
Diameter:	6"	Method:	Hollow Stem/Air Rotary
PVC Type:	2"	Start Date:	10-21-04
Slot Size:	0.010	End Date:	10-21-04
Casing Length:	35'	Notes: * Denotes sample submitted for	
Diameter:	2"	laboratory analysis	
		Log by: CB	Checked by: EC

Geologic Services Corporation

Depth (ft.)	Sample Interval (feet)	PCE/TCE Headspace (ppm)	DCE Headspace (ppm)	PID Headspace (ppm)	Blows / 6"	Recovery / Penetration (inches)	Description
23							
24	23'-25'	0.0	0.0	0.0	10,13,19,31	20/24	Medium reddish brown medium to fine SAND with Silt, little subangular gravel, tightly packed, moist
25							
26	25'-27'	0.0	0.0	0.0	20,27,33,35	22/24	Same as above
27							
28	27'-29'	0.0	0.0	0.0	22,22,19,23	20/24	Same as above with crushed rock in tip
29	29'-51'	0.0	0.0	0.0	Air Rotary	NA	Boring completed utilizing air rotary technique to 51' bgs
30							
31							Reddish brown medium to fine SAND with Silt and intermittent layers of Sandstone
32							
33							
34	* MW-6 (34')						
35							
36							
37							
38							
39							
40							
41							
42							
43							
44							
45							
46							
47							
48							
49							
50							
51							

End boring at 51 ft bgs

Well Diagram



Notes:

NA - Not Available

ft bgs - feet below ground surface

Water Level

GEOLOGIC SERVICES CORPORATION

484 Temple Hill Road, Suite 100, New Windsor, NY 12553

Phone: (845) 561-9890 Fax: (845) 561-9857

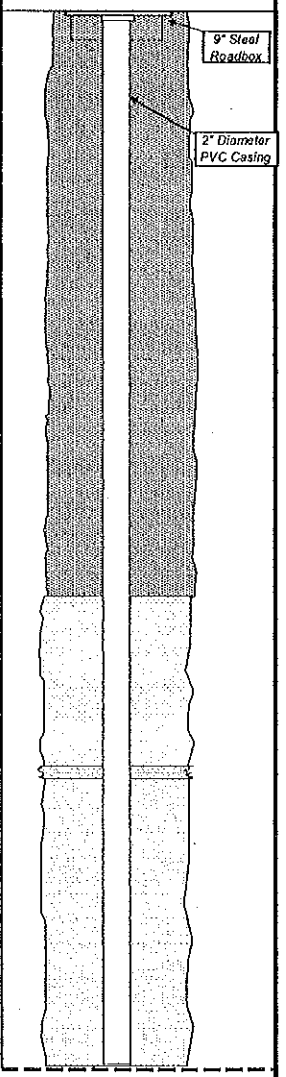
Well Log
MW-7

Project:		**Casing Elevation:**	NA
Client:	RemVer	**Total Depth:**	45 ft bgs
Location:	Orangetown Plaza	**Water Level:**	41.63 ft bgs
Well ID:	MW-7	**Drilling Co.:**	ADT
Borehole Diameter:	6"	**Driller:**	Mike
		Method:	Hollow Stem/Air Rotary
PVC Type:	2"	**Start Date:**	10-22-04
Slot Size:	0.010	**End Date:**	10-22-04
Casing Length:	35'	**Notes:** * Denotes sample submitted for laboratory analysis	
Diameter:	2"		
		Log by: CB	**Checked by:** EC

Geologic Services Corporation

Depth (ft.)	Sample Interval (feet)	PCE/TCE Headspace (ppm)	DCE Headspace (ppm)	PID Headspace (ppm)	Blows / 6"	Recovery / Penetration (inches)	Description
1-4	0'-5'	0.0	0.0	0.0	Hand Clear	NA	Medium brown medium to fine SAND, with Silt and Pebbles, moist
5-9	5'-10'	0.0	0.0	0.0	Auger	NA	Same as above
10-11	10'-12'	0.0	0.0	0.0	10,28,15,18	7/24	Medium reddish brown medium to fine SAND with Silt, some subangular gravel, moist
12-13	12'-14'	0.0	0.0	0.0	16,24,29,28	24/24	Same as above, tightly packed
14-15	14'-16'	0.0	0.0	0.0	5,12,13,21	20/24	Medium reddish brown medium SAND with Silt, little subangular gravel, tightly packed, mottled light brown SAND in tip
16-17	16'-18'	0.0	0.0	1.3	25,26,30,31	24/24	(12") Reddish brown medium SAND with Silt (2") Medium light brown, medium SAND with Silt (10") Medium reddish brown medium SAND with Silt, clayey silt in tip
18-19	18'-20'	0.0	0.0	0.0	11,28,27,47	24/24	Reddish brown medium to fine SAND with Silt, little subangular Gravel, some fractured Sandstone throughout, dry
20-21	20'-22'	0.0	0.0	0.0	50/4	0/4	No recovery
22-24	22'-45'	0.0	0.0	0.0	Air Rotary	NA	Boring completed utilizing air rotary technique to 45' bgs

Well Diagram



Continued on following sheet

GEOLOGIC SERVICES CORPORATION

484 Temple Hill Road, Suite 100, New Windsor, NY 12553

Phone: (845) 561-9890 Fax: (845) 561-9857

Well Log
MW-7

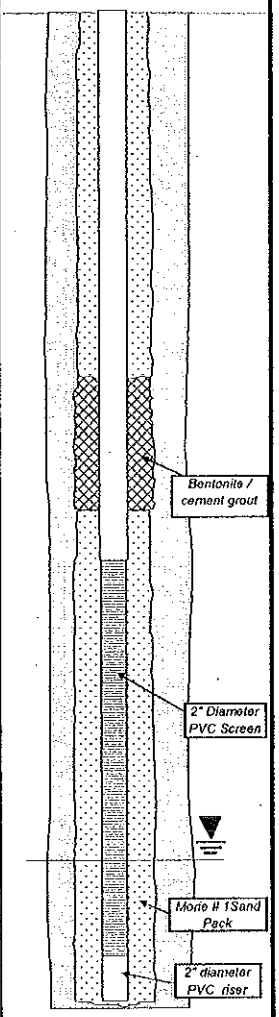
Project:		**Casing Elevation:**	NA
Client:	RemVer	**Total Depth:**	45 ft bgs
Location:	Orangetown Plaza	**Water Level:**	41.63 ft bgs
Well ID:	MW-7	**Drilling Co.:**	ADT
Borehole		**Driller:**	Mike
Diameter:	6"	**Method:**	Hollow Stem/Air Rotary
PVC Type:	2"	**Start Date:**	10-22-04
Slot Size:	0.010	**End Date:**	10-22-04
Casing Length:	35'	**Notes:** * Denotes sample submitted for	
Diameter:	2"	laboratory analysis	
		Log by: CB	**Checked by:** EC

Geologic Services Corporation

Depth (ft.)	Sample Interval (feet)	PCE/TCE Headspace (ppm)	DCE Headspace (ppm)	PID Headspace (ppm)	Blows / 6"	Recovery / Penetration (inches)	Description	Depth (ft.)
23	23'-45'	0.0	0.0	0.0	Air Rotary	NA	Boring completed utilizing air rotary technique to 45' bgs	23
24							Reddish brown medium to fine SAND with Silt and intermittent layers of Sandstone	24
25								25
26								26
27								27
28								28
29								29
30								30
31								31
32								32
33								33
34								34
35								35
36								36
37								37
38								38
39								39
40	* MW-7 (40')							40
41								41
42								42
43								43
44								44
45								45

End boring at 45 ft bgs

Well Diagram



Notes:
NA - Not Available

ft bgs - feet below ground surface

Water Level

GEOLOGIC SERVICES CORPORATION

484 Temple Hill Road, Suite 100, New Windsor, NY 12553

Phone: (845) 561-9890 Fax: (845) 561-9857

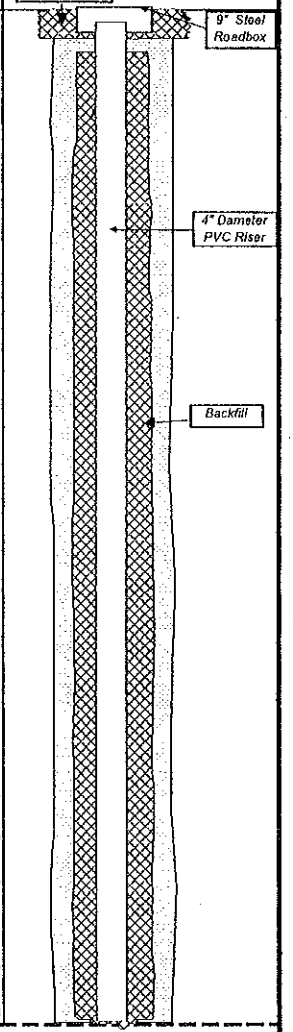
Well Log
MW-8

Project:	0410794CA	**Casing Elevation:**	166.84'
Client:	RemVer	**Total Depth:**	70.5'
Location:	Orangeburg Shopping Center	**Water Level:**	36'
Well ID:	MW-8	**Drilling Co.:**	Glacier Drilling
Screen Length:	40'	**Driller:**	Terry
Diameter:	4"	**Method:**	Hollow Stem/Air Rotary
PVC Type:	Schedule 40	**Start Date:**	2/22/05
Slot Size:	0.010	**End Date:**	2/23/05
Casing Length:	28.5	**Notes:** * Denotes sample submitted for	
Diameter:	4"	laboratory analysis	
		Log by: JA	**Checked by:** BW

Geologic Services Corporation

Depth (ft.)	Sample ID	Sample Interval (feet)	PID Headspace (ppm)	Blows / 6"	Recovery / Penetration (inches)	Description
1		0'-5'	0.0	Air Knife	Air Knife	Light brown, Fine SAND and SILT, some m-c Sand, little coarse Gravel, fine Cobbles, trace Clay, no odor, wet
2						
3						
4						
5						
6		5'-7'	0.0	11-7-7-5	0"	
7						
8		7'-9'	28.5	5-2-2-2	4"	Same as above (0'-5')
9						
10		9'-11'	15.3	2-9-9-9	3"	Same as above (0'-5')
11						
12		11'-13'	20.0	6-14-21-14	13"	Light brown, reddish, Fine SAND, some Silt, little medium to coarse Sand, trace coarse Gravel, no odor, moist
13						
14		13'-15'	0.0	14-13-24-26	2"	Rock
15						
16		15'-17'	9.8	2-7-13-13	18"	Light brown/red Fine SAND, little medium to coarse Sand, trace fine Gravel, no odor, moist
17						
18		17'-19'	12.7	8-17-22-30	16"	Light brown/red Fine SAND, trace meidum to course Sand, homogenous, no odor, moist
19						
20		19'-21'	1.8	6-8-8-13	16"	Same as above (17'-19')
21						
22		21'-23'	11.3	16-27-80/5"	12"	(21'-21.5') Some medium to coarse Sand layers Reddish brown Medium SAND, little fine Sand, trace fine Gravel and Silt, no odor, moist
23						

Well Diagram



Continued on following sheet

GEOLOGIC SERVICES CORPORATION

484 Temple Hill Road, Suite 100, New Windsor, NY 12553
Phone: (845) 561-9890 Fax: (845) 561-9857

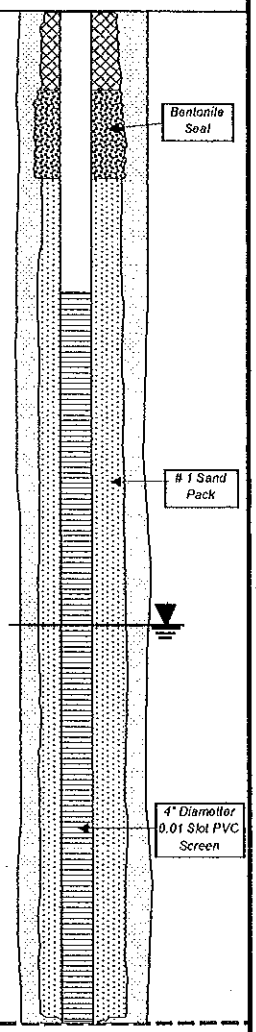
Well Log
MW-8

Project:	0410794CA	**Casing Elevation:**	166.84'
Client:	RemVer	**Total Depth:**	70.5'
Location:	Orangeburg Shopping Center	**Water Level:**	36'
Well ID:	MW-8	**Drilling Co.:**	Glacier Drilling
Screen Length:	40'	**Driller:**	Terry
Diameter:	4"	**Method:**	Hollow Stem/Air Rotary
PVC Type:	Schedule 40	**Start Date:**	2/22/05
Slot Size:	0.010	**End Date:**	2/23/05
Casing Length:	28.5	**Notes:** * Denotes sample submitted for	
Diameter:	4"	laboratory analysis	
		Log by: JA	**Checked by:** BW

Geologic Services Corporation

Depth (ft.)	Sample ID	Sample Interval (feet)	PID Headspace (ppm)	Blows / 6"	Recovery / Penetration (inches)	Description
30		30'	25.0	Air Rotary	Air Rotary	Light brown, reddish, Fine SAND, some medium Sand, trace fine Gravel and Silt, no odor, moist
35	*MW-8 (35')	35'	85.1	Air Rotary	Air Rotary	Light brown/red SILT, some fine to medium Sand and Clay, trace fine Gravel, no odor, moist
40		40'	0.0	Air Rotary	Air Rotary	Red brown Fine to Medium SAND, crushed rock

Well Diagram



Continued on following sheet

GEOLOGIC SERVICES CORPORATION
484 Temple Hill Road, Suite 100, New Windsor, NY 12553
Phone: (845) 561-9890 Fax: (845) 561-9857

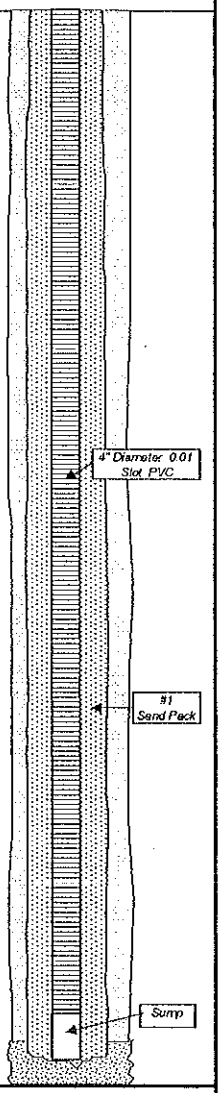
Well Log
MW-8

Project:	0410794CA	**Casing Elevation:**	166.84'
Client:	RemVer	**Total Depth:**	70.5'
Location:	Orangeburg Shopping Center	**Water Level:**	36'
Well ID:	MW-8	**Drilling Co.:**	Glacier Drilling
Screen Length:	40'	**Driller:**	Terry
Diameter:	4"	**Method:**	Hollow Stem/Air Rotary
PVC Type:	Schedule 40	**Start Date:**	2/22/05
Slot Size:	0.010	**End Date:**	2/23/05
Casing Length:	28.5	**Notes:** * Denotes sample submitted for	
Diameter:	4"	laboratory analysis	
		Log by: JA	**Checked by:** BW

Geologic Services Corporation

Depth (ft.)	Sample ID	Sample Interval (feet)	PID Headspace (ppm)	Blows / 6"	Recovery / Penetration (inches)	Description
45		45'	0.0	Air Rotary	Air Rotary	Same as above (40'), wet
50		50'	0.0	Air Rotary	Air Rotary	Same as above (40')
55	MW-8 (55')	55'	0.0	Air Rotary	Air Rotary	Same as above (40')

Well Diagram



Encountered competent rock at approximately 70' BGS

Notes:
BGS Below Ground Surface
NA Not Applicable
Water Table Elevation

GEOLOGIC SERVICES CORPORATION

484 Temple Hill Road, Suite 100, New Windsor, NY 12553
Phone: (845) 561-9890 Fax: (845) 561-9857

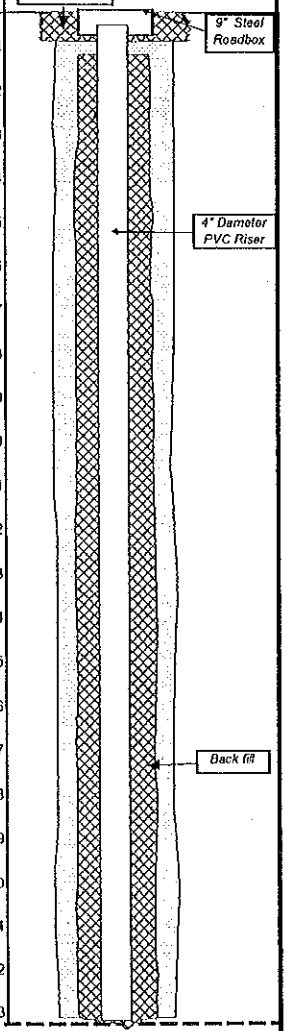
Well Log
MW-9

Project:	0410794CA	**Casing Elevation:**	166.94'
Client:	RemVer	**Total Depth:**	72.5'
Location:	Orangeburg Shopping Center	**Water Level:**	36'
Well ID:	MW-9	**Drilling Co.:**	Glacier Drilling
Screen Length:	40'	**Driller:**	Terry
Diameter:	4"	**Method:**	Hollow Stem/Air Rotary
PVC Type:	Schedule 40	**Start Date:**	2/24/05
Slot Size:	0.010	**End Date:**	2/25/05
Casing Length:	31.5'	**Notes:** * Denotes sample submitted for	
Diameter:	4"	laboratory analysis	
		Log by: JA	**Checked by:** BW

Geologic Services Corporation

Depth (ft.)	Sample ID	Sample Interval (feet)	PID Headspace (ppm)	Blows / 6"	Recovery / Penetration (inches)	Description
1		0'-5'	3.0	Air Knife	Air Knife	Light brown SILT, some fine Sand, little Clay, coarse Sand and fine Gravel, no odor, damp
2						
3						
4						
5						
6		5'-7'	3.5	3-3-6-6	14"	Dark brown Fine SAND and SILT, little medium to coarse Sand, trace Clay, black @ 6'-6.5', no odor, moist
7						
8		7'-9'	2.6	7-11-13-15	6"	Dark brown/black Fine SAND and SILT, some medium Sand, trace Clay, no odor, moist
9						
10		9'-11'	2.0	9-7-7-12	24"	Dark brown SILT, little fine Sand, trace Clay, homogenous, no odor, moist
11						
12		11'-13'	2.6	12-23-34-61	14"	Red brown SILT, some fine Sand and coarse Gravel, little Cobbles, no odor, moist
13						
14	*MW-9 (13'-15')	13'-15'	76.6	3-13-13-15	20"	Light brown/red SILT and Fine SAND, little medium Sand, trace coarse Gravel, no odor, moist
15						
16		15'-17'	75.1	24-10-10-13	16"	Red brown SILT, some fine Sand, trace fine to coarse Gravel, no odor, moist Rock at 15'
17						
18		17'-19'	31.1	28-24-24-22	18"	Red/brown Fine SAND and SILT, some medium Sand, trade fine to coarse Gravel and Clay, no odor, moist (17'-17.5') Layer of coarse Sand
19						
20		19'-21'	20.3	10-30-21-24	20"	Red brown Fine to Medium SAND, some Silt, little coarse Gravel, no odor, moist
21						Rock at 19.5' and 21.5'
22		21'-23'	6.9	31-17-20-21	18"	Same as above (19'-21')
23						

Well Diagram



Continued on following sheet

GEOLOGIC SERVICES CORPORATION

484 Temple Hill Road, Suite 100, New Windsor, NY 12553

Phone: (845) 561-9890 Fax: (845) 561-9857

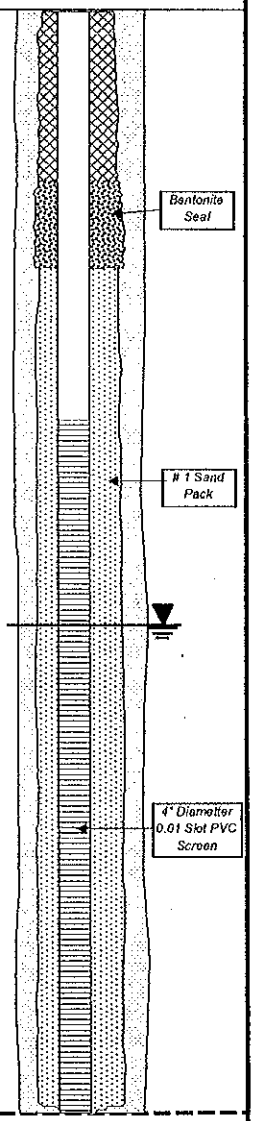
Well Log
MW-9

Project:	0410794CA	**Casing Elevation:**	166.94'
Client:	RemVer	**Total Depth:**	72.5'
Location:	Orangeburg Shopping Center	**Water Level:**	36'
Well ID:	MW-9	**Drilling Co.:**	Glacier Drilling
Screen Length:	40'	**Driller:**	Terry
Diameter:	4"	**Method:**	Hollow Stem/Air Rotary
PVC Type:	Schedule 40	**Start Date:**	2/24/05
Slot Size:	0.010	**End Date:**	2/25/05
Casing Length:	31.5'	**Notes:** * Denotes sample submitted for	
Diameter:	4"	laboratory analysis	
		Log by: JA	**Checked by:** BW

Geologic Services Corporation

Depth (ft.)	Sample ID	Sample Interval (feet)	PID Headspace (ppm)	Blows / 6"	Recovery / Penetration (inches)	Description
23		23'-25'	5.1	2-5-15-31	18"	Red brown Fine SAND, some Silt and medium Sand, little fine Gravel, no odor, moist
25		25'-27'	6.3	13-25-31-20	23"	Red brown SILT and Fine SAND, little coarse Gravel, no odor, moist/wet
27		27'-29'	9.7	22-33-38-51	16"	Same as above (25'-27')
29		29'-31'	36.4	14-15-14-18	21"	Same as above (25'-27'), Color-red
31		31'-33'	4.2	19-53-60/4	13"	Red Fine SAND and SILT, trace Clay and medium Sand, no odor, moist Rock at 32'
35		35'	18.5	Air Rotary	Air Rotary	Red SILT, some fine Sand, crushed rock, no odor, dry
45		45'	11.8	Air Rotary	Air Rotary	Same as above (35')

Well Diagram



Continued on following sheet

GEOLOGIC SERVICES CORPORATION
484 Temple Hill Road, Suite 100, New Windsor, NY 12553
Phone: (845) 561-9890 Fax: (845) 561-9857

Well Log
MW-9

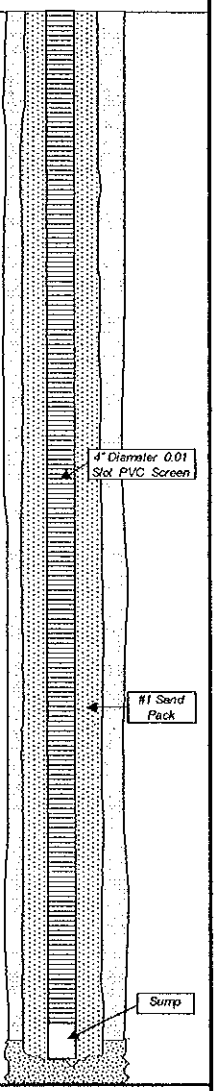
Project:	0410794CA	**Casing Elevation:**	166.94'
Client:	RemVer	**Total Depth:**	72.5'
Location:	Orangeburg Shopping Center	**Water Level:**	36'
Well ID:	MW-9	**Drilling Co.:**	Glacier Drilling
Screen Length:	40'	**Driller:**	Terry
Diameter:	4"	**Method:**	Hollow Stem/Air Rotary
PVC Type:	Schedule 40	**Start Date:**	2/24/05
Slot Size:	0.010	**End Date:**	2/25/05
Casing Length:	31.5'	**Notes:** * Denotes sample submitted for	
Diameter:	4"	laboratory analysis	
		Log by: JA **Checked by:** BW	

Geologic Services Corporation

Depth (ft.)	Sample ID	Sample Interval (feet)	PID Headspace (ppm)	Blows / 6"	Recovery / Penetration (inches)	Description
55		55'	7.3	Air Rotary	Air Rotary	Same as above (35')
65		65'	4.1	Air Rotary	Air Rotary	Same as above (35'), wet
68	*MW-9 (66')					

Encountered competent rock at approximately 72.5' BGS

Well Diagram



Notes:
BGS Below Ground Surface
NA Not Applicable
Water Table Elevation

GEOLOGIC SERVICES CORPORATION
484 Temple Hill Road, Suite 100, New Windsor, NY 12553
Phone: (845) 561-9690 Fax: (845) 561-9851

Well Log
MW-10

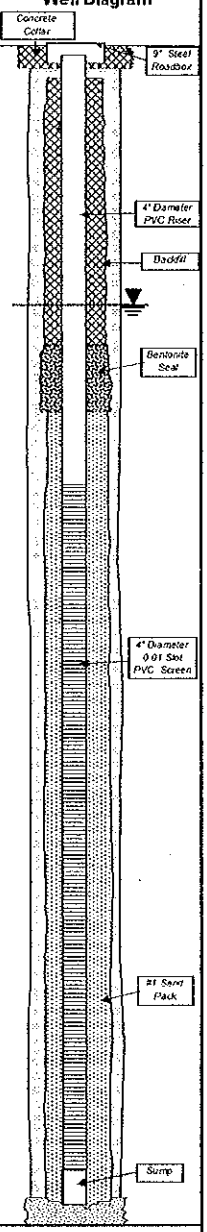
Project:	0410784CA	Casing Elevation:	137.17'
Client:	RemVer	Total Depth:	34.5'
Location:	Orangeburg Shopping Center	Water Level:	7'
Well ID:	MW-10	Drilling Co.:	Glacier Drilling
Screen Length:	20'	Driller:	Terry
Diameter:	4"	Method:	Hollow Stem/Air Rotary
PVC Type:	Schedule 40	Start Date:	2/28/05
Slot Size:	0.010	End Date:	2/28/05
Casing Length:	13'	Notes: * Denotes sample submitted for	
Diameter:	4"	laboratory analysis	
		Log by: JA	Checked by: BW

Geologic Services Corporation

Depth (ft.)	Sample ID	Sample Interval (feet)	PID Headspace (ppm)	Blows / 6"	Recovery / Penetration (inches)	Description
1		0'-5'	0.9	Air Knife	Air Knife	Red brown Medium to Coarse SAND, some Silt, little fine Gravel, no odor, damp
5		5'-7'	0.0	4-6-11-17	14"	Same as above (0'-5')
7		7'-9'	0.3	22-14-30-25	24"	Red brown Fine SAND, some Silt, trace medium to coarse Sand, no odor, light, damp
9		9'-11'	1.0	47-64-100/3	24"	Same as above (7'-9')
20		20'	31.4	Air Rotary	Air Rotary	Red brown Fine SAND, some Silt, trace coarse Sand and fine Gravel, no odor,moist
30	*MW-10 (30')	30'	873	Air Rotary	Air Rotary	Same as above (20')
33	*MW-10 (33')					

Encountered competent rock at approximately 34.5' BGS

Well Diagram



Notes:
BGS Below Ground Surface
NA Not Applicable
Water Table Elevation

Soil Boring/Temporary Monitoring Well

Groundwater & Environmental Services, Inc.

ID NO. **SB-1**

Project: **Orangetoan Shopping Center** | Client: **Urstadt Biddle Properties, Inc.** | Regulatory Case #: **N/A**

Address: **1-45 Orangetown Shopping Center** | GES Job #: **1102242-12-282** | Regulatory Case Mgr: **N/A**

County: **Roackland** | GES Project Mgr: **Michael DeGloria** | Permit #: **11-030**

Logged By: **Tim Maus** | Date Drilled: **1/11/2012** | Split Spoon/Acetate Sleeve Diameter: **2 in.**

Drilling Company: **Lonshore Environmenatl, Inc.** | Completion Date: **1/11/2012** | Split Spoon/Acetate Sleeve Length: **60 in.**

Drill Operator: **Matthew Schneck** | Drilling Method: **Direct Push (Geoprobe)** | Soil Classification System: **USCS/Burmister**

Drill Rig Type: **Geoprobe 6100DT** | Sampling Method: **Acetate Sleeve** | Field Screening: **PID 10.6 eV Lamp (ppm)**

Lattitude: **N/A** | Longitude: **N/A** | Top of Bentonite Seal: **N/A**

Surface Elevation: **N/A** | Borehole Diameter: **2.25 in.** | Type of Seal: **N/A**

Total Depth: **32 fbg** | Well Diameter: **1 in.** | Top of Sand: **N/A**

Refusal Depth: **32 fbg** | Riser Length: **22 ft** | Sand Type: **N/A**

Initial Depth to Water: **N/A** | Screen Slot Size: **Slot #10** | Well Material Type: **Schedule 40 PVC**

Static Depth to Water: **N/A** | Screen Length: **10 ft** | Top of Grout: **N/A**

Depth (feet)	Sample Interval (feet)	Recovery (inches)	Field Screen (ppm) 0 10	Blow Counts 1 120	Geologic Description	Comments	Well Completion Detail
0			0.1	Geoprobe, no blow counts collected	Asphalt: Asphalt and road base	Hand cleared to 8 fbg as per GES protocol	
5			0.4		SC: Red brown fine sand, some silt, little fine gravel, non to slightly plastic, moist, soft, glass fragments, scrap metal, asphalt fragments; fill material.		
			6.8		SC: Red brown fine sand, some silt, little fine gravel, non to slightly plastic, moist, soft		
10			1.5				
			2.1		SC: Red brown fine sand with clay, little fine gravel, slightly plastic, dry, stiff		Riser
			3.8				
15			5.9				Grout
			0.9		ML: Light brown clay, some fine to medium sand, plastic, moist, stiff		
			0.3				
20			0.3		SC: Red brown fine to medium sand with clay, slightly plastic, dry, stiff		
			0.2				
			0.5				
25			0.3				Screen
			0.2		SC: Red brown fine to medium sand with clay, sub-angular gravel, plastic, moist, stiff	Boring grouted as per RCDOH protocol	
30			5.6				
			6.7				

Proportions Used:

Trace = <5%
Few = 5-10%
Little = 10-20%
Some = 20-30%
Adjective = 30-40%
And = >40%

Notes:

NA = not available; fbg. = feet below grade
in. = inches; ft.= feet; ppm.= parts per million
Soil Lithologies based on field observations only.
General Text here, site specific
General Text II, details

Blow Count Pentration Resistance:

Consistency (M&C)		Density (G&S)	
<2 =	Very Soft	0-4 =	Very Loose
2-4 =	Soft	4-10 =	Loose
4-8 =	Medium	10-30 =	Medium
8-15 =	Stiff	30-50 =	Dense
15-30 =	Very Stiff	>50 =	Very Dense
>30 =	Hard		

Symbols:

Apparent Water Level
Lab Sample Location

Soil Boring

Groundwater & Environmental Services, Inc.

ID NO. **SB-3**

Project: **Orangetoan Shopping Center** Client: **Urstadt Biddle Properties, Inc.** Regulatory Case #: **N/A**

Address: **1-45 Orangetown Shopping Center** GES Job #: **1102242-12-282** Regulatory Case Mgr: **N/A**

County: **Roackland** GES Project Mgr: **Michael DeGloria** Permit #: **11-030**

Logged By: **Tim Maus** Date Drilled: **1/11/2012** Split Spoon/Acetate Sleeve Diameter: **N/A**

Drilling Company: **Lonshore Environmenatl, Inc.** Completion Date: **1-11-2012** Split Spoon/Acetate Sleeve Length: **N/A**

Drill Operator: **Matthew Schneck** Drilling Method: **Vactron & Air Lance** Soil Classification System: **USCS/Burmister**

Drill Rig Type: **N/A** Sampling Method: **Hand Auger** Field Screening: **PID 10.6 eV Lamp (ppm)**

Lattitude: **N/A** Longitude: **N/A** Top of Bentonite Seal: **N/A**

Surface Elevation: **N/A** Borehole Diameter: **3 in.** Type of Seal: **N/A**

Total Depth: **5 fbg** Well Diameter: **N/A** Top of Sand: **N/A**

Refusal Depth: **N/A** Riser Length: **N/A** Sand Type: **N/A**

Initial Depth to Water: **N/A** Screen Slot Size: **N/A** Well Material Type: **N/A**

Static Depth to Water: **N/A** Screen Length: **N/A** Top of Grout: **N/A**

Depth (feet)	Sample Interval (feet)	Recovery (inches)	Field Screen (ppm) 0 10	Blow Counts 1 120	Geologic Description	Comments	Well Completion Detail
0					SC: Red brown fine sand, some silt and clay, fine gravel, non to slightly plastic, moist, dense		
			0.0	Hand cleared, no blow counts collected			
			0.0				
5			0.0				

Proportions Used:
Trace = <5%
Few = 5-10%
Little = 10-20%
Some = 20-30%
Adjective = 30-40%
And = >40%

Notes:
NA = not available; fbg. = feet below grade
in. = inches; ft.= feet; ppm.= parts per million
Soil Lithologies based on field observations only.
General Text here, site specific
General Text II, details

Blow Count Pentration Resistance:

Consistency (M&C)		Density (G&S)	
<2 =	Very Soft	0-4 =	Very Loose
2-4 =	Soft	4-10 =	Loose
4-8 =	Medium	10-30 =	Medium
8-15 =	Stiff	30-50 =	Dense
15-30 =	Very Stiff	>50 =	Very Dense
>30 =	Hard		

Symbols:
Apparent Water Level
Lab Sample Location

Soil Boring/Temporary Monitoring Well

Groundwater & Environmental Services, Inc.

ID NO. **SB-4**

Project: **Orangetoan Shopping Center** | Client: **Urstadt Biddle Properties, Inc.** | Regulatory Case #: **N/A**

Address: **1-45 Orangetown Shopping Center** | GES Job #: **1102242-12-282** | Regulatory Case Mgr: **N/A**

County: **Roackland** | GES Project Mgr: **Michael DeGloria** | Permit #: **11-030**

Logged By: **Tim Maus**
Drilling Company: **Lonshore Environmenatl, Inc.**
Drill Operator: **Matthew Schneck**
Drill Rig Type: **Geoprobe 6100DT**

Date Drilled: **1/11/2012 & 1/12/2012**
Completion Date: **1/12/2012**
Drilling Method: **Direct Push (Geoprobe)**
Sampling Method: **Acetate Sleeve**

Split Spoon/Acetate Sleeve Diameter: **2 in.**
Split Spoon/Acetate Sleeve Length: **60 in.**
Soil Classification System: **USCS/Burmister**
Field Screening: **PID 10.6 eV Lamp (ppm)**

Lattitude: **N/A**
Surface Elevation: **N/A**
Total Depth: **19 fbg**
Refusal Depth: **19 fbg**
Initial Depth to Water: **N/A**
Static Depth to Water: **N/A**

Longitude: **N/A**
Borehole Diameter: **2.25 in.**
Well Diameter: **1 in.**
Riser Length: **9 ft**
Screen Slot Size: **Slot #10**
Screen Length: **10 ft**

Top of Bentonite Seal: **N/A**
Type of Seal: **N/A**
Top of Sand: **N/A**
Sand Type: **N/A**
Well Material Type: **Schedule 40 PVC**
Top of Grout: **N/A**

Depth (feet)	Sample Interval (feet)	Recovery (inches)	Field Screen (ppm) 0 10	Blow Counts 1 120	Geologic Description	Comments	Well Completion Detail
0			3.9		Asphalt: Asphalt and road base	Hand cleared to 5 fbg as per GES protocol	Riser
			1.2		SC: Red brown fine sand, some silt and clay, non to slightly plastic, moist, dense		
5			0.1		SC: Red brown fine sand, clay, non to slightly plastic, moist, dense		
			0.4				Grout
10			0.2		ML: Light brown clay, fine to medium grained sand, fine gravel, slightly plastic, less moist, stiff		
			1.0				
			0.7				Screen
15			0.6		SC: Red brown fine sand, clay, non to slightly plastic, moist, dense, fractured sandstone	Boring grouted as per RCDOH protocol	
			0.0 0.1	Geoporbe, no blow counts collected			

Proportions Used:
Trace = <5%
Few = 5-10%
Little = 10-20%
Some = 20-30%
Adjective = 30-40%
And = >40%

Notes:
185 AMSL
in. = inches; ft.= feet; ppm.= parts per million
Soil Lithologies based on field observations only.
General Text here, site specific
General Text II, details

Blow Count Pentration Resistance:

Consistency (M&C)		Density (G&S)	
<2 =	Very Soft	0-4 =	Very Loose
2-4 =	Soft	4-10 =	Loose
4-8 =	Medium	10-30 =	Medium
8-15 =	Stiff	30-50 =	Dense
15-30 =	Very Stiff	>50 =	Very Dense
>30 =	Hard		

Symbols:
Apparent Water Level
Lab Sample Location

Soil Boring/Temporary Monitoring Well

Groundwater & Environmental Services, Inc.

ID NO. **SB-5**

Project: **Orangetoan Shopping Center** Client: **Urstadt Biddle Properties, Inc.** Regulatory Case #: **N/A**

Address: **1-45 Orangetown Shopping Center** GES Job #: **1102242-12-282** Regulatory Case Mgr: **N/A**

County: **Roackland** GES Project Mgr: **Michael DeGloria** Permit #: **11-030**

Logged By: **Tim Maus** Date Drilled: **1/11/2012 & 1/12/2012** Split Spoon/Acetate Sleeve Diameter: **2 in.**

Drilling Company: **Lonshore Environmenatl, Inc.** Completion Date: **1/12/2012** Split Spoon/Acetate Sleeve Length: **60 in.**

Drill Operator: **Matthew Schneck** Drilling Method: **Direct Push (Geoprobe)** Soil Classification System: **USCS/Burmister**

Drill Rig Type: **Geoprobe 6100DT** Sampling Method: **Acetate Sleeve** Field Screening: **PID 10.6 eV Lamp (ppm)**

Lattitude: **N/A** Longitude: **N/A** Top of Bentonite Seal: **N/A**

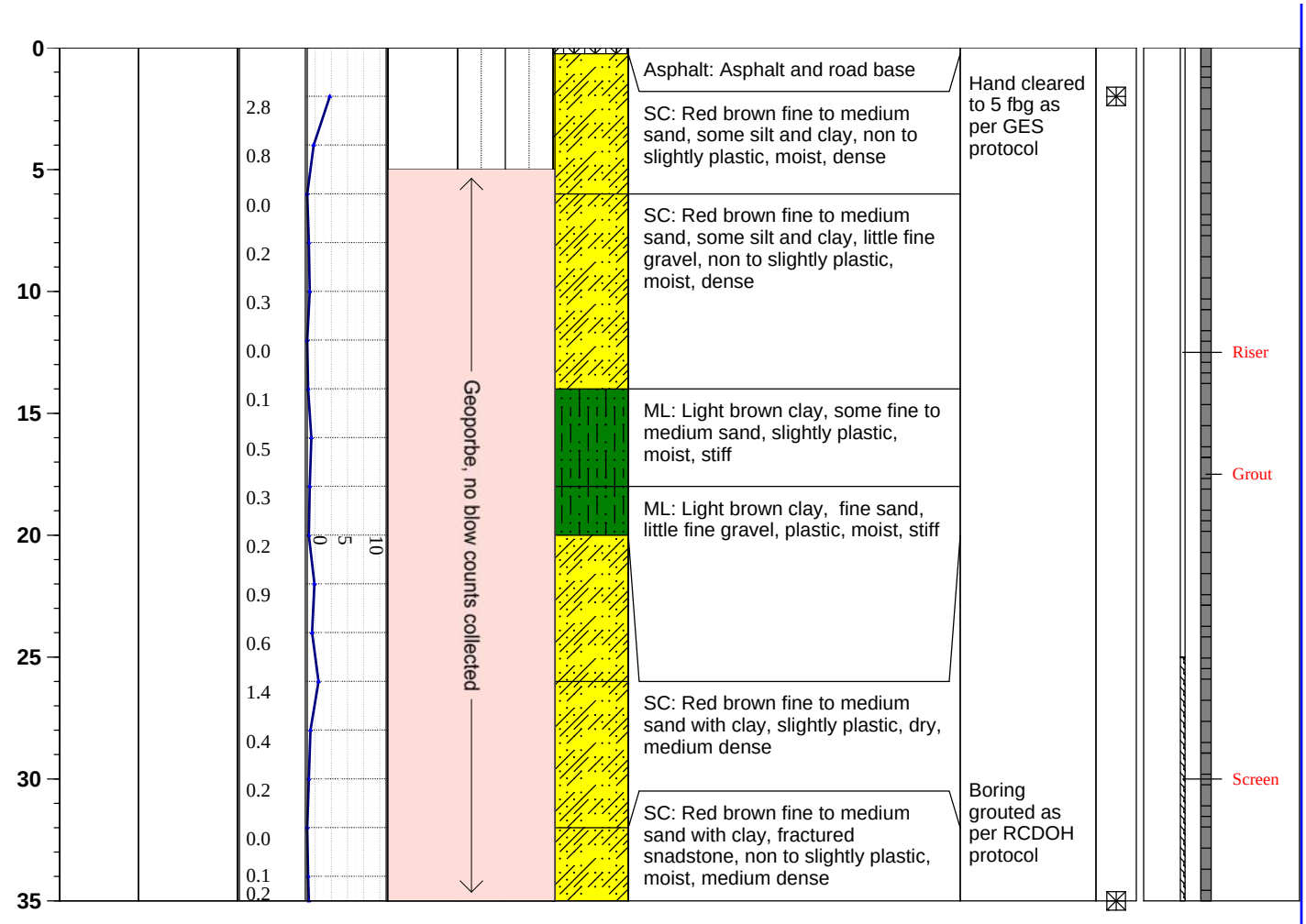
Surface Elevation: **N/A** Borehole Diameter: **2.25 in.** Type of Seal: **N/A**

Total Depth: **35 fbg** Well Diameter: **1 in.** Top of Sand: **N/A**

Refusal Depth: **35 fbg** Riser Length: **25 ft** Sand Type: **N/A**

Initial Depth to Water: **N/A** Screen Slot Size: **Slot #10** Well Material Type: **Schedule 40 PVC**

Static Depth to Water: **N/A** Screen Length: **10 ft** Top of Grout: **N/A**



Proportions Used:

Trace = <5%
Few = 5-10%
Little = 10-20%
Some = 20-30%
Adjective = 30-40%
And = >40%

Notes:

NA = not available; fbg. = feet below grade
in. = inches; ft.= feet; ppm.= parts per million
Soil Lithologies based on field observations only.
General Text here, site specific
General Text II, details

Blow Count Pentration Resistance:

Consistency (M&C)		Density (G&S)	
<2 =	Very Soft	0-4 =	Very Loose
2-4 =	Soft	4-10 =	Loose
4-8 =	Medium	10-30 =	Medium
8-15 =	Stiff	30-50 =	Dense
15-30 =	Very Stiff	>50 =	Very Dense
>30 =	Hard		

Symbols:

Apparent Water Level

Lab Sample Location

Nested Injection Well

Groundwater & Environmental Services, Inc.

ID NO. **INJ-1 (S/D)**

Project: **Orangetown Shopping Center** | Client: **UB Orangeburg, LLC** | Regulatory Case #: **C344066**

Address: **1-45 Orangetown Shopping Center** | GES Job #: **1102323-05-201** | Regulatory Case Mgr: **Jamie Verrigni**

County: **Rockland** | GES Project Mgr: **Michael DeGloria** | Permit #: **RE-12-014**

Logged By: **Michael Nahmias** | Date Drilled: **4/30/2012**

Drilling Company: **Aquifer Drilling & Testing, Inc.** | Completion Date: **5/1/2012**

Drill Operator: **Chris Stratton** | Drilling Method: **Sonic** | Soil Classification System: **Limited Classification**

Drill Rig Type: **17-C Roto Sonic** | Sampling Method: **No Soil Sampling** | Field Screening: **PID 11.7 eV Lamp (ppm)**

Total Depths: **25 ft & 45 ft** | Borehole Diameters: **7 in. & 5 in. (see comments)** | Top of Bentonite Seal: **3 fbg**

Refusal Depth: **N/A** | Well Diameters: **2 in.** | Type of Seal: **Bentonite**

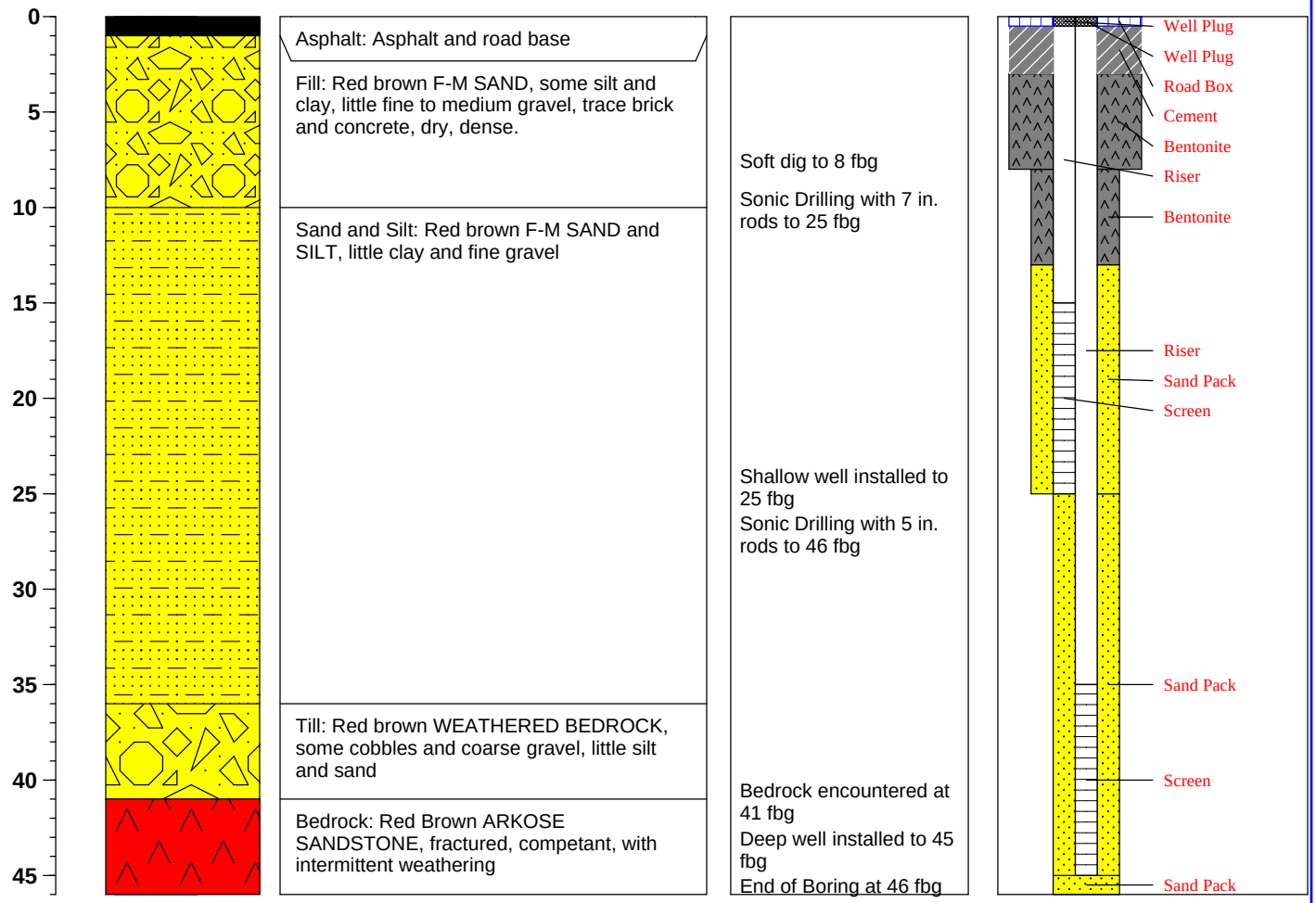
Initial Depth to Water: **N/A** | Riser Lengths: **15 ft & 35 ft** | Top of Sand: **13 fbg**

Static Depth to Water: **N/A** | Screen Slot Size: **Slot #40** | Sand Type: **#1 Sand**

Screen Length: **10 ft** | Well Material Type: **Schedule 40 PVC**

Top of Grout: **1 fbg**

Depth (feet)	Geologic Description	Comments	Well Completion Detail
0 – 5	Asphalt: Asphalt and road base	Soft dig to 8 fbg	Well Plug; Well Plug; Road Box; Cement
5 – 10	Fill: Red brown F-M SAND, some silt and clay, little fine to medium gravel, trace brick and concrete, dry, dense.	Sonic Drilling with 7 in. rods to 25 fbg	Bentonite; Riser
10 – 15	Sand and Silt: Red brown F-M SAND and SILT, little clay and fine gravel		Bentonite
15 – 20			Riser; Sand Pack; Screen
20 – 25		Shallow well installed to 25 fbg; Sonic Drilling with 5 in. rods to 46 fbg	
25 – 30			
30 – 35			Sand Pack
35 – 40	Till: Red brown WEATHERED BEDROCK, some cobbles and coarse gravel, little silt and sand		
40 – 45	Bedrock: Red Brown ARKOSE SANDSTONE, fractured, competant, with intermittent weathering	Bedrock encountered at 41 fbg; Deep well installed to 45 fbg; End of Boring at 46 fbg	Screen; Sand Pack



Proportions Used:

Trace = <5%
Few = 5-10%
Little = 10-20%
Some = 20-30%
Adjective = 30-40%
And = >40%

Notes:

NA = not available; fbg. = feet below grade

in. = inches; ft.= feet; ppm.= parts per million

Soil Lithology not observed. Bedrock depth observed.

Limited screening with PID as soils were saturated due to drilling process

Nested Injection Well

Groundwater & Environmental Services, Inc.

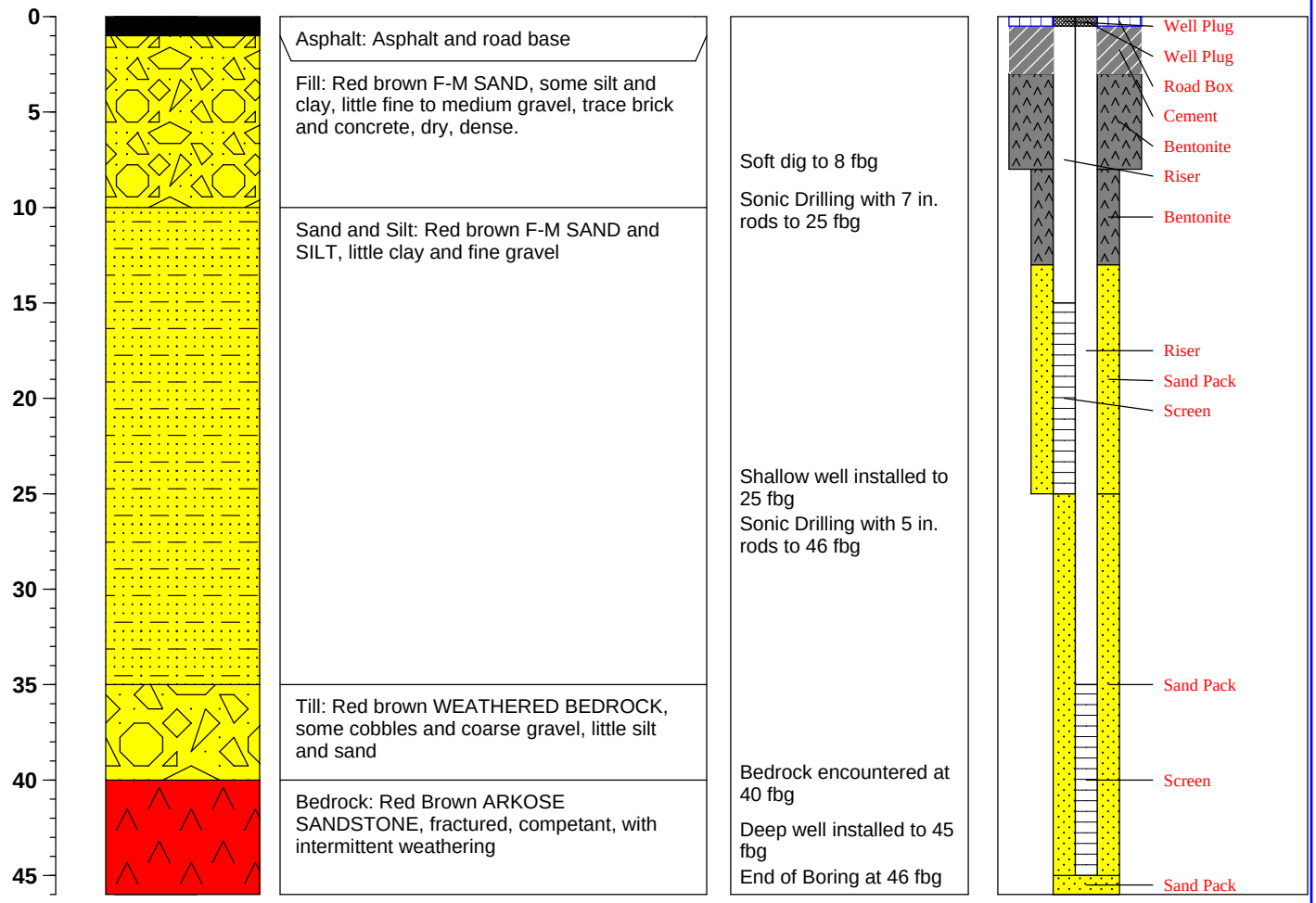
ID NO. **INJ-2 (S/D)**

Project: **Orangetown Shopping Center**	Client: **UB Orangeburg, LLC**	Regulatory Case #: **C344066**
Address: **1-45 Orangetown Shopping Center**	GES Job #: **1102323-05-201**	Regulatory Case Mgr: **Jamie Verrigni**
County: **Rockland**	GES Project Mgr: **Michael DeGloria**	Permit #: **RE-12-014**

Logged By: **Michael Nahmias**	Date Drilled: **5/7/2012**	
Drilling Company: **Aquifer Drilling & Testing, Inc.**	Completion Date: **5/7/2012**	
Drill Operator: **Chris Stratton**	Drilling Method: **Sonic**	Soil Classification System: **Limited Classification**
Drill Rig Type: **17-C Roto Sonic**	Sampling Method: **No Soil Sampling**	Field Screening: **PID 11.7 eV Lamp (ppm)**

	Borehole Diameters: **7 in. & 5 in. (see comments)**	Top of Bentonite Seal: **3 fbg**
Total Depths: **25 ft & 45 ft**	Well Diameters: **2 in.**	Type of Seal: **Bentonite**
Refusal Depth: **N/A**	Riser Lengths: **15 ft & 35 ft**	Top of Sand: **13 fbg**
Initial Depth to Water: **N/A**	Screen Slot Size: **Slot #40**	Sand Type: **#1 Sand**
Static Depth to Water: **N/A**	Screen Length: **10 ft**	Well Material Type: **Schedule 40 PVC**
		Top of Grout: **1 fbg**

Depth (feet)	Geologic Description	Comments	Well Completion Detail



Proportions Used:

Trace = <5%
Few = 5-10%
Little = 10-20%
Some = 20-30%
Adjective = 30-40%
And = >40%

Notes:

NA = not available; fbg. = feet below grade

in. = inches; ft.= feet; ppm.= parts per million

Soil Lithology not observed. Bedrock depth observed.

Limited screening with PID as soils were saturated due to drilling process

Nested Injection Well

Groundwater & Environmental Services, Inc.

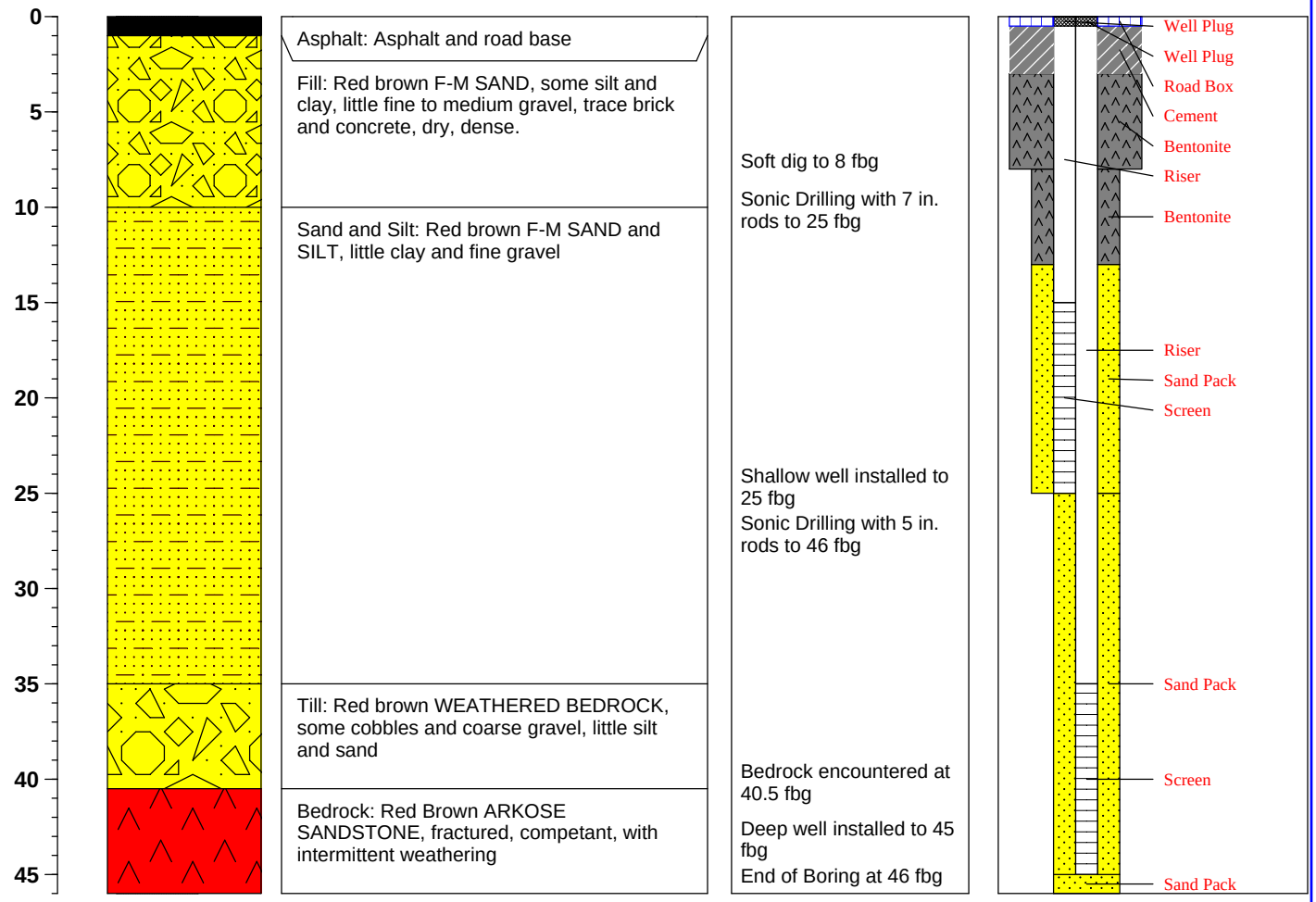
ID NO. **INJ-3 (S/D)**

Project: **Orangetown Shopping Center**	Client: **UB Orangeburg, LLC**	Regulatory Case #: **C344066**
Address: **1-45 Orangetown Shopping Center**	GES Job #: **1102323-05-201**	Regulatory Case Mgr: **Jamie Verrigni**
County: **Rockland**	GES Project Mgr: **Michael DeGloria**	Permit #: **RE-12-014**

Logged By: **Michael Nahmias**	Date Drilled: **5/7/2012**	
Drilling Company: **Aquifer Drilling & Testing, Inc.**	Completion Date: **5/7/2012**	
Drill Operator: **Chris Stratton**	Drilling Method: **Sonic**	Soil Classification System: **Limited Classification**
Drill Rig Type: **17-C Roto Sonic**	Sampling Method: **No Soil Sampling**	Field Screening: **PID 11.7 eV Lamp (ppm)**

	Borehole Diameters: **7 in. & 5 in. (see comments)**	Top of Bentonite Seal: **3 fbg**
Total Depths: **25 ft & 45 ft**	Well Diameters: **2 in.**	Type of Seal: **Bentonite**
Refusal Depth: **N/A**	Riser Lengths: **15 ft & 35 ft**	Top of Sand: **13 fbg**
Initial Depth to Water: **N/A**	Screen Slot Size: **Slot #40**	Sand Type: **#1 Sand**
Static Depth to Water: **N/A**	Screen Length: **10 ft**	Well Material Type: **Schedule 40 PVC**
		Top of Grout: **1 fbg**

Depth (feet)	Geologic Description	Comments	Well Completion Detail



Proportions Used:

Trace = <5%
Few = 5-10%
Little = 10-20%
Some = 20-30%
Adjective = 30-40%
And = >40%

Notes:

NA = not available; fbg. = feet below grade

in. = inches; ft.= feet; ppm.= parts per million

Soil Lithology not observed. Bedrock depth observed.

Limited screening with PID as soils were saturated due to drilling process

Nested Injection Well

Groundwater & Environmental Services, Inc.

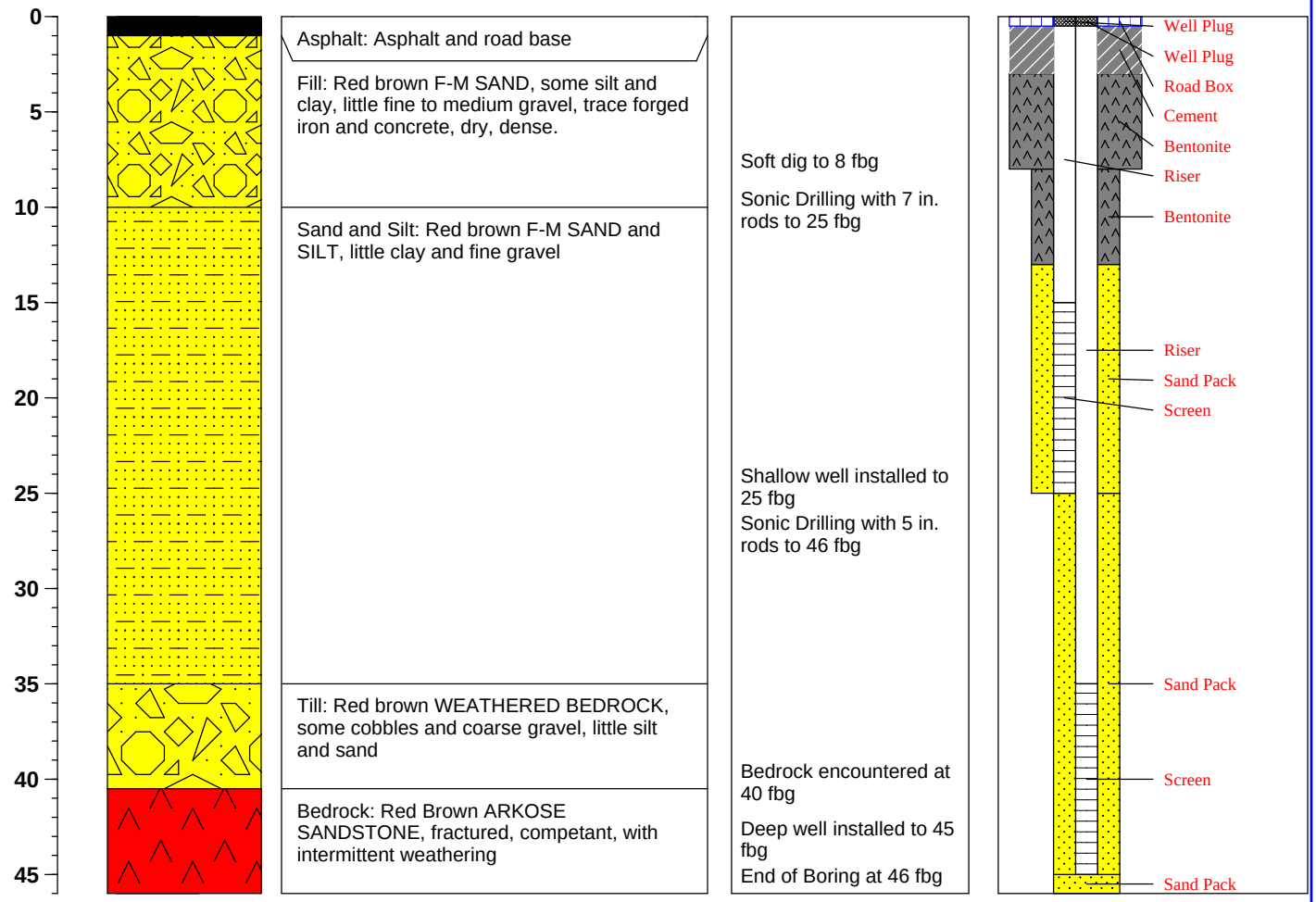
ID NO. **INJ-4 (S/D)**

Project: **Orangetown Shopping Center**	Client: **UB Orangeburg, LLC**	Regulatory Case #: **C344066**
Address: **1-45 Orangetown Shopping Center**	GES Job #: **1102323-05-201**	Regulatory Case Mgr: **Jamie Verrigni**
County: **Rockland**	GES Project Mgr: **Michael DeGloria**	Permit #: **RE-12-014**

Logged By: **Michael Nahmias**	Date Drilled: **5/2/2012**	
Drilling Company: **Aquifer Drilling & Testing, Inc.**	Completion Date: **5/2/2012**	
Drill Operator: **Chris Stratton**	Drilling Method: **Sonic**	Soil Classification System: **Limited Classification**
Drill Rig Type: **17-C Roto Sonic**	Sampling Method: **No Soil Sampling**	Field Screening: **PID 11.7 eV Lamp (ppm)**

	Borehole Diameters: **7 in. & 5 in. (see comments)**	Top of Bentonite Seal: **3 fbg**
Total Depths: **25 ft & 45 ft**	Well Diameters: **2 in.**	Type of Seal: **Bentonite**
Refusal Depth: **N/A**	Riser Lengths: **15 ft & 35 ft**	Top of Sand: **13 fbg**
Initial Depth to Water: **N/A**	Screen Slot Size: **Slot #40**	Sand Type: **#1 Sand**
Static Depth to Water: **N/A**	Screen Length: **10 ft**	Well Material Type: **Schedule 40 PVC**
		Top of Grout: **1 fbg**

Depth (feet)	Geologic Description	Comments	Well Completion Detail



Proportions Used:

Trace = <5%
Few = 5-10%
Little = 10-20%
Some = 20-30%
Adjective = 30-40%
And = >40%

Notes:

NA = not available; fbg. = feet below grade

in. = inches; ft.= feet; ppm.= parts per million

Soil Lithology not observed. Bedrock depth observed.

Limited screening with PID as soils were saturated due to drilling process

Nested Injection Well

Groundwater & Environmental Services, Inc.

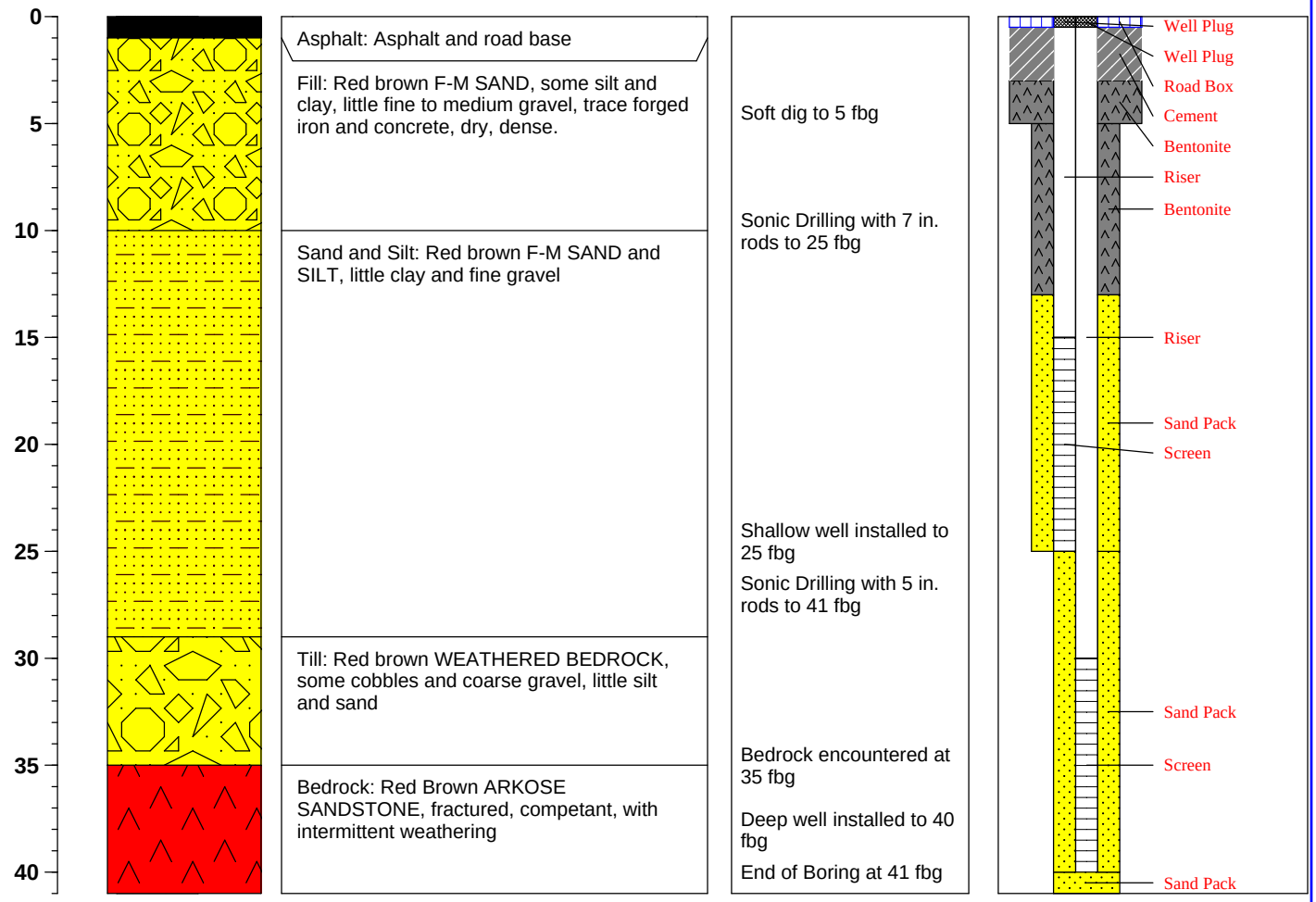
ID NO. **INJ-5 (S/D)**

Project: **Orangetown Shopping Center**	Client: **UB Orangeburg, LLC**	Regulatory Case #: **C344066**
Address: **1-45 Orangetown Shopping Center**	GES Job #: **1102323-05-201**	Regulatory Case Mgr: **Jamie Verrigni**
County: **Rockland**	GES Project Mgr: **Michael DeGloria**	Permit #: **RE-12-014**

Logged By: **Michael Nahmias**	Date Drilled: **5/3/2012**	
Drilling Company: **Aquifer Drilling & Testing, Inc.**	Completion Date: **5/4/2012**	
Drill Operator: **Chris Stratton**	Drilling Method: **Sonic**	Soil Classification System: **Limited Classification**
Drill Rig Type: **17-C Roto Sonic**	Sampling Method: **No Soil Sampling**	Field Screening: **PID 11.7 eV Lamp (ppm)**

	Borehole Diameters: **7 in. & 5 in. (see comments)**	Top of Bentonite Seal: **3 fbg**
Total Depths: **25 ft & 40 ft**	Well Diameters: **2 in.**	Type of Seal: **Bentonite**
Refusal Depth: **N/A**	Riser Lengths: **15 ft & 30 ft**	Top of Sand: **13 fbg**
Initial Depth to Water: **N/A**	Screen Slot Size: **Slot #40**	Sand Type: **#1 Sand**
Static Depth to Water: **N/A**	Screen Length: **10 ft**	Well Material Type: **Schedule 40 PVC**
		Top of Grout: **1 fbg**

Depth (feet)	Geologic Description	Comments	Well Completion Detail



Proportions Used:

Trace = <5%
Few = 5-10%
Little = 10-20%
Some = 20-30%
Adjective = 30-40%
And = >40%

Notes:

NA = not available; fbg. = feet below grade

in. = inches; ft.= feet; ppm.= parts per million

Soil Lithology not observed. Bedrock depth observed.

Limited screening with PID as soils were saturated due to drilling process

Nested Injection Well

Groundwater & Environmental Services, Inc.

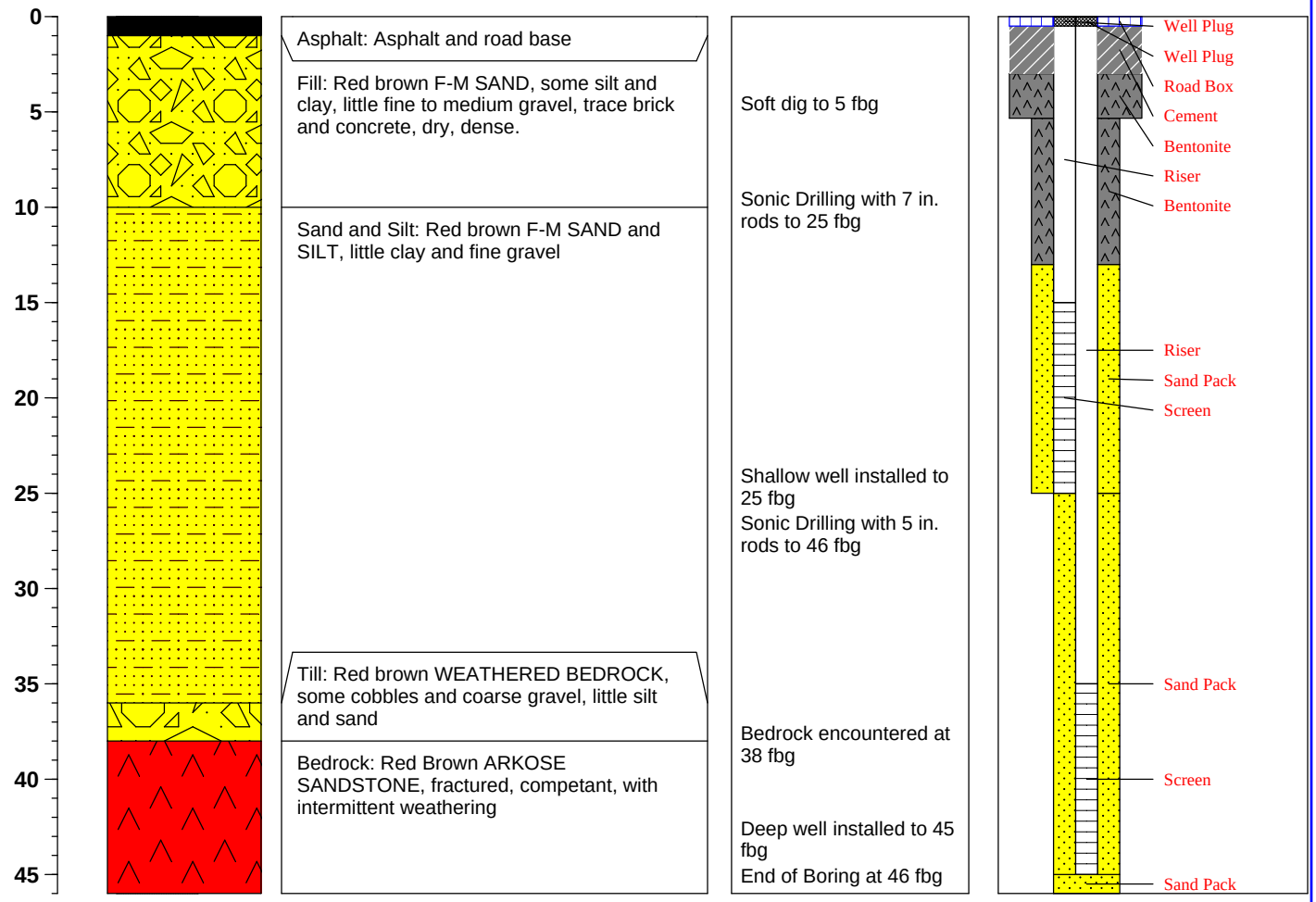
ID NO. **INJ-6 (S/D)**

Project: **Orangetown Shopping Center**	Client: **UB Orangeburg, LLC**	Regulatory Case #: **C344066**
Address: **1-45 Orangetown Shopping Center**	GES Job #: **1102323-05-201**	Regulatory Case Mgr: **Jamie Verrigni**
County: **Rockland**	GES Project Mgr: **Michael DeGloria**	Permit #: **RE-12-014**

Logged By: **Michael Nahmias**	Date Drilled: **5/8/2012**	
Drilling Company: **Aquifer Drilling & Testing, Inc.**	Completion Date: **5/8/2012**	
Drill Operator: **Chris Stratton**	Drilling Method: **Sonic**	Soil Classification System: **Limited Classification**
Drill Rig Type: **17-C Roto Sonic**	Sampling Method: **No Soil Sampling**	Field Screening: **PID 11.7 eV Lamp (ppm)**

	Borehole Diameters: **7 in. & 5 in. (see comments)**	Top of Bentonite Seal: **3 fbg**
Total Depths: **25 ft & 45 ft**	Well Diameters: **2 in.**	Type of Seal: **Bentonite**
Refusal Depth: **N/A**	Riser Lengths: **15 ft & 35 ft**	Top of Sand: **13 fbg**
Initial Depth to Water: **N/A**	Screen Slot Size: **Slot #40**	Sand Type: **#1 Sand**
Static Depth to Water: **N/A**	Screen Length: **10 ft**	Well Material Type: **Schedule 40 PVC**
		Top of Grout: **1 fbg**

Depth (feet)	Geologic Description	Comments	Well Completion Detail



Proportions Used:

Trace = <5%
Few = 5-10%
Little = 10-20%
Some = 20-30%
Adjective = 30-40%
And = >40%

Notes:

NA = not available; fbg. = feet below grade

in. = inches; ft.= feet; ppm.= parts per million

Soil Lithology not observed. Bedrock depth observed.

Limited screening with PID as soils were saturated due to drilling process

Nested Injection Well

Groundwater & Environmental Services, Inc.

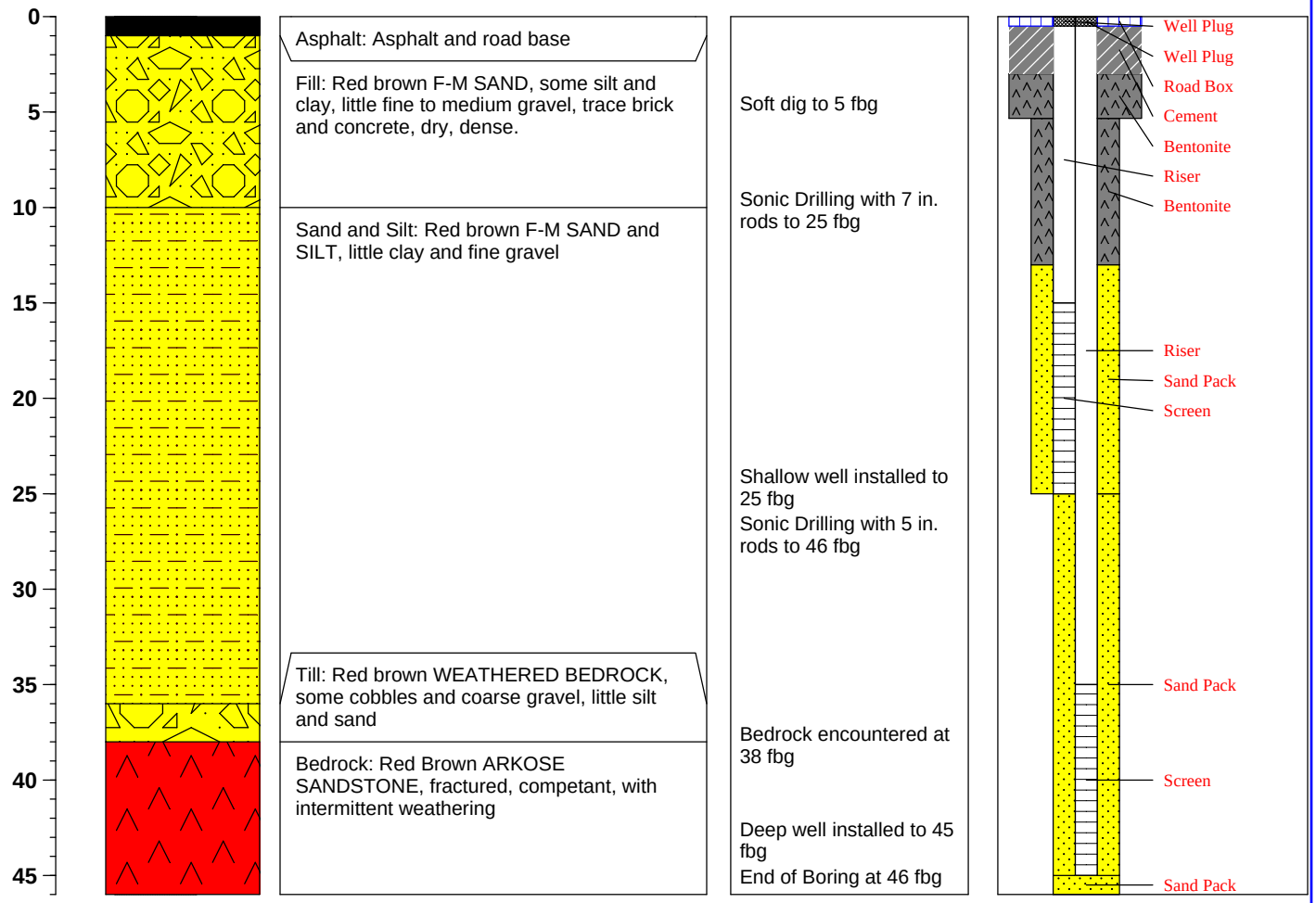
ID NO. **INJ-7 (S/D)**

Project: **Orangetown Shopping Center**	Client: **UB Orangeburg, LLC**	Regulatory Case #: **C344066**
Address: **1-45 Orangetown Shopping Center**	GES Job #: **1102323-05-201**	Regulatory Case Mgr: **Jamie Verrigni**
County: **Rockland**	GES Project Mgr: **Michael DeGloria**	Permit #: **RE-12-014**

Logged By: **Michael Nahmias**	Date Drilled: **5/9/2012**	
Drilling Company: **Aquifer Drilling & Testing, Inc.**	Completion Date: **5/9/2012**	
Drill Operator: **Chris Stratton**	Drilling Method: **Sonic**	Soil Classification System: **Limited Classification**
Drill Rig Type: **17-C Roto Sonic**	Sampling Method: **No Soil Sampling**	Field Screening: **PID 11.7 eV Lamp (ppm)**

	Borehole Diameters: **7 in. & 5 in. (see comments)**	Top of Bentonite Seal: **3 fbg**
Total Depths: **25 ft & 45 ft**	Well Diameters: **2 in.**	Type of Seal: **Bentonite**
Refusal Depth: **N/A**	Riser Lengths: **15 ft & 35 ft**	Top of Sand: **13 fbg**
Initial Depth to Water: **N/A**	Screen Slot Size: **Slot #40**	Sand Type: **#1 Sand**
Static Depth to Water: **N/A**	Screen Length: **10 ft**	Well Material Type: **Schedule 40 PVC**
		Top of Grout: **1 fbg**

Depth (feet)	Geologic Description	Comments	Well Completion Detail



Proportions Used:

Trace = <5%
Few = 5-10%
Little = 10-20%
Some = 20-30%
Adjective = 30-40%
And = >40%

Notes:

NA = not available; fbg. = feet below grade

in. = inches; ft.= feet; ppm.= parts per million

Soil Lithology not observed. Bedrock depth observed.

Limited screening with PID as soils were saturated due to drilling process

Nested Injection Well

Groundwater & Environmental Services, Inc.

ID NO. **INJ-8 (S/D)**

Project: **Orangetown Shopping Center** | Client: **UB Orangeburg, LLC** | Regulatory Case #: **C344066**

Address: **1-45 Orangetown Shopping Center** | GES Job #: **1102323-05-201** | Regulatory Case Mgr: **Jamie Verrigni**

County: **Rockland** | GES Project Mgr: **Michael DeGloria** | Permit #: **RE-12-014**

Logged By: **Michael Nahmias** | Date Drilled: **4/30/2012**

Drilling Company: **Aquifer Drilling & Testing, Inc.** | Completion Date: **4/30/2012**

Drill Operator: **Chris Stratton** | Drilling Method: **Sonic** | Soil Classification System: **Limited Classification**

Drill Rig Type: **17-C Roto Sonic** | Sampling Method: **No Soil Sampling** | Field Screening: **PID 11.7 eV Lamp (ppm)**

Total Depths: **25 ft & 45 ft** | Borehole Diameters: **7 in. & 5 in. (see comments)** | Top of Bentonite Seal: **3 fbg**

Refusal Depth: **N/A** | Well Diameters: **2 in.** | Type of Seal: **Bentonite**

Initial Depth to Water: **N/A** | Riser Lengths: **15 ft & 35 ft** | Top of Sand: **13 fbg**

Static Depth to Water: **N/A** | Screen Slot Size: **Slot #40** | Sand Type: **#1 Sand**

Screen Length: **10 ft** | Well Material Type: **Schedule 40 PVC**

Top of Grout: **1 fbg**

Depth (feet)	Geologic Description	Comments	Well Completion Detail
0 – 5	Asphalt: Asphalt and road base	Soft dig to 8 fbg	Well Plug; Well Plug; Road Box; Cement; Bentonite; Riser
5 – 10	Fill: Red brown F-M SAND, some silt and clay, little fine to medium gravel, trace brick and concrete, dry, dense.	Sonic Drilling with 7 in. rods to 25 fbg	Bentonite
10 – 15	Sand and Silt: Red brown F-M SAND and SILT, little clay and fine gravel		
15 – 20			Riser; Sand Pack; Screen
20 – 25		Shallow well installed to 25 fbg; Sonic Drilling with 5 in. rods to 46 fbg	
25 – 30			
30 – 35	Till: Red brown WEATHERED BEDROCK, some cobbles and coarse gravel, little silt and sand		Sand Pack
35 – 40	Bedrock: Red Brown ARKOSE SANDSTONE, fractured, competant, with intermittent weathering	Bedrock encountered at 39 fbg	Screen
40 – 45		Deep well installed to 45 fbg; End of Boring at 46 fbg	Sand Pack

Proportions Used:

Trace = <5%
Few = 5-10%
Little = 10-20%
Some = 20-30%
Adjective = 30-40%
And = >40%

Notes:

NA = not available; fbg. = feet below grade

in. = inches; ft.= feet; ppm.= parts per million

Soil Lithology not observed. Bedrock depth observed.

Limited screening with PID as soils were saturated due to drilling process

Nested Injection Well

Groundwater & Environmental Services, Inc.

ID NO. **INJ-9 (S/D)**

Project: **Orangetown Shopping Center** | Client: **UB Orangeburg, LLC** | Regulatory Case #: **C344066**

Address: **1-45 Orangetown Shopping Center** | GES Job #: **1102323-05-201** | Regulatory Case Mgr: **Jamie Verrigni**

County: **Rockland** | GES Project Mgr: **Michael DeGloria** | Permit #: **RE-12-014**

Logged By: **Michael Nahmias** | Date Drilled: **4/27/2012**

Drilling Company: **Aquifer Drilling & Testing, Inc.** | Completion Date: **4/27/2012**

Drill Operator: **Chris Stratton** | Drilling Method: **Sonic** | Soil Classification System: **Limited Classification**

Drill Rig Type: **17-C Roto Sonic** | Sampling Method: **No Soil Sampling** | Field Screening: **PID 11.7 eV Lamp (ppm)**

Total Depths: **25 ft & 45 ft** | Borehole Diameters: **7 in. & 5 in. (see comments)** | Top of Bentonite Seal: **3 fbg**

Refusal Depth: **N/A** | Well Diameters: **2 in.** | Type of Seal: **Bentonite**

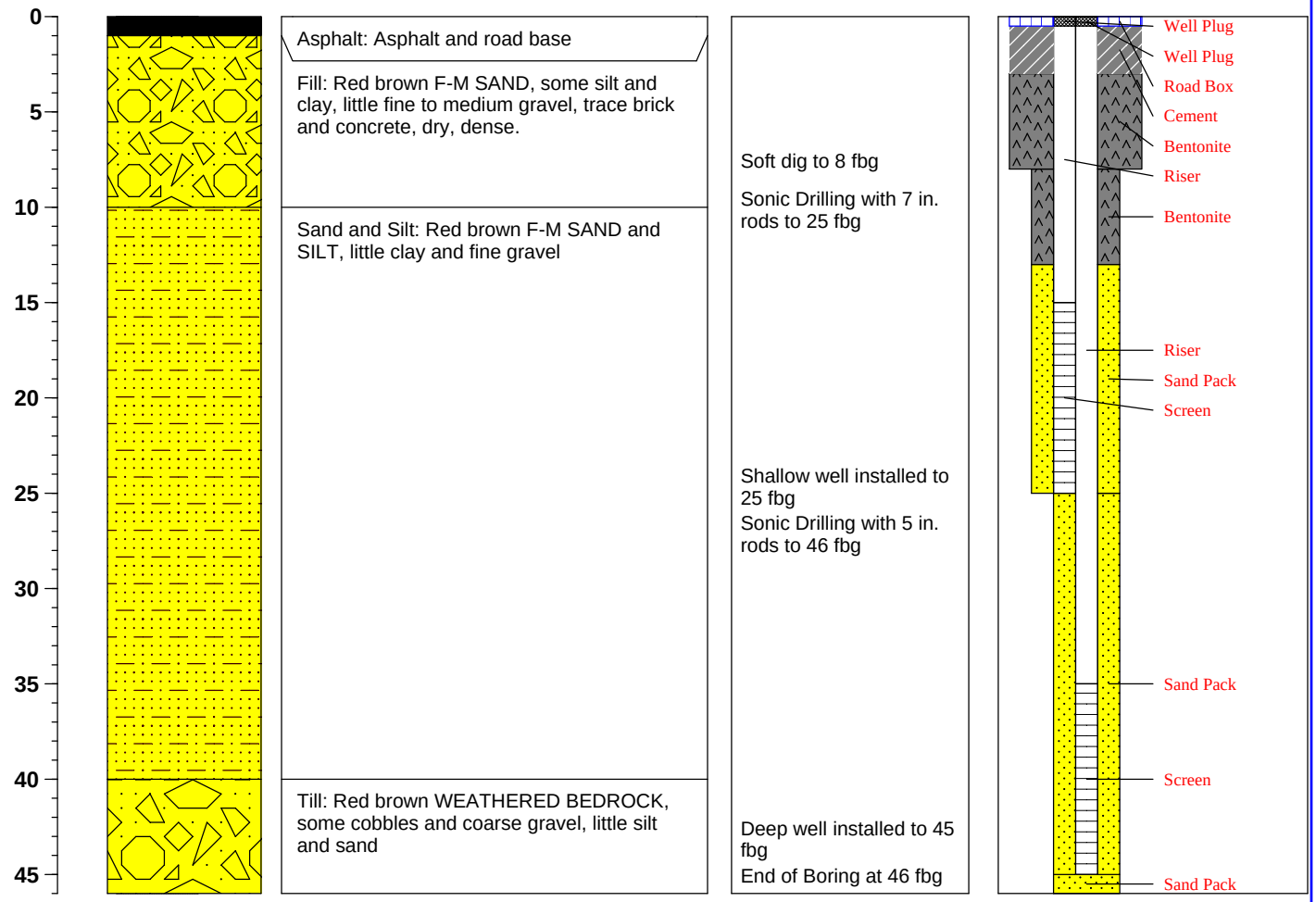
Initial Depth to Water: **N/A** | Riser Lengths: **15 ft & 35 ft** | Top of Sand: **13 fbg**

Static Depth to Water: **N/A** | Screen Slot Size: **Slot #40** | Sand Type: **#1 Sand**

Screen Length: **10 ft** | Well Material Type: **Schedule 40 PVC**

Top of Grout: **1 fbg**

Depth (feet)	Geologic Description	Comments	Well Completion Detail
0 – 3	Asphalt: Asphalt and road base	Soft dig to 8 fbg	Well Plug; Road Box; Cement
3 – 13	Fill: Red brown F-M SAND, some silt and clay, little fine to medium gravel, trace brick and concrete, dry, dense.	Sonic Drilling with 7 in. rods to 25 fbg	Well Plug; Bentonite; Riser
13 – 40	Sand and Silt: Red brown F-M SAND and SILT, little clay and fine gravel	Shallow well installed to 25 fbg; Sonic Drilling with 5 in. rods to 46 fbg	Bentonite; Riser; Sand Pack; Screen; Sand Pack
40 – 46	Till: Red brown WEATHERED BEDROCK, some cobbles and coarse gravel, little silt and sand	Deep well installed to 45 fbg; End of Boring at 46 fbg	Screen; Sand Pack



Proportions Used:

Trace = <5%
Few = 5-10%
Little = 10-20%
Some = 20-30%
Adjective = 30-40%
And = >40%

Notes:

NA = not available; fbg. = feet below grade

in. = inches; ft.= feet; ppm.= parts per million

Soil Lithology not observed. Bedrock depth observed.

Limited screening with PID as soils were saturated due to drilling process

Monitoring Well

Groundwater & Environmental Services, Inc.

ID NO. **MW-C**

Project: **Orangetown Shopping Center** | Client: **UB Orangeburg, LLC** | Regulatory Case #: **C344066**

Address: **1-45 Orangetown Shopping Center** | GES Job #: **1102323-05-201** | Regulatory Case Mgr: **Jamie Verrigni**

County: **Rockland** | GES Project Mgr: **Michael DeGloria** | Permit #: **RE-12-014**

Logged By: **Michael Nahmias** | Date Drilled: **5/15/2012**

Drilling Company: **Aquifer Drilling & Testing, Inc.** | Completion Date: **5/15/2012**

Drill Operator: **Bernie Cruz** | Drilling Method: **Vacuum Extraction** | Soil Classification System: **Limited Classification**

Drill Rig Type: **HHX Prodigy Vacuum Truck** | Sampling Method: **No Soil Sampling** | Field Screening: **PID 11.7 eV Lamp (ppm)**

Top of Casing: **167.18 ft AMSL** | Borehole Diameter: **12 in.** | Top of Bentonite Seal: **0.5 fbg**

Total Depth: **9 ft 9 in** | Well Diameter: **2 in.** | Type of Seal: **Bentonite**

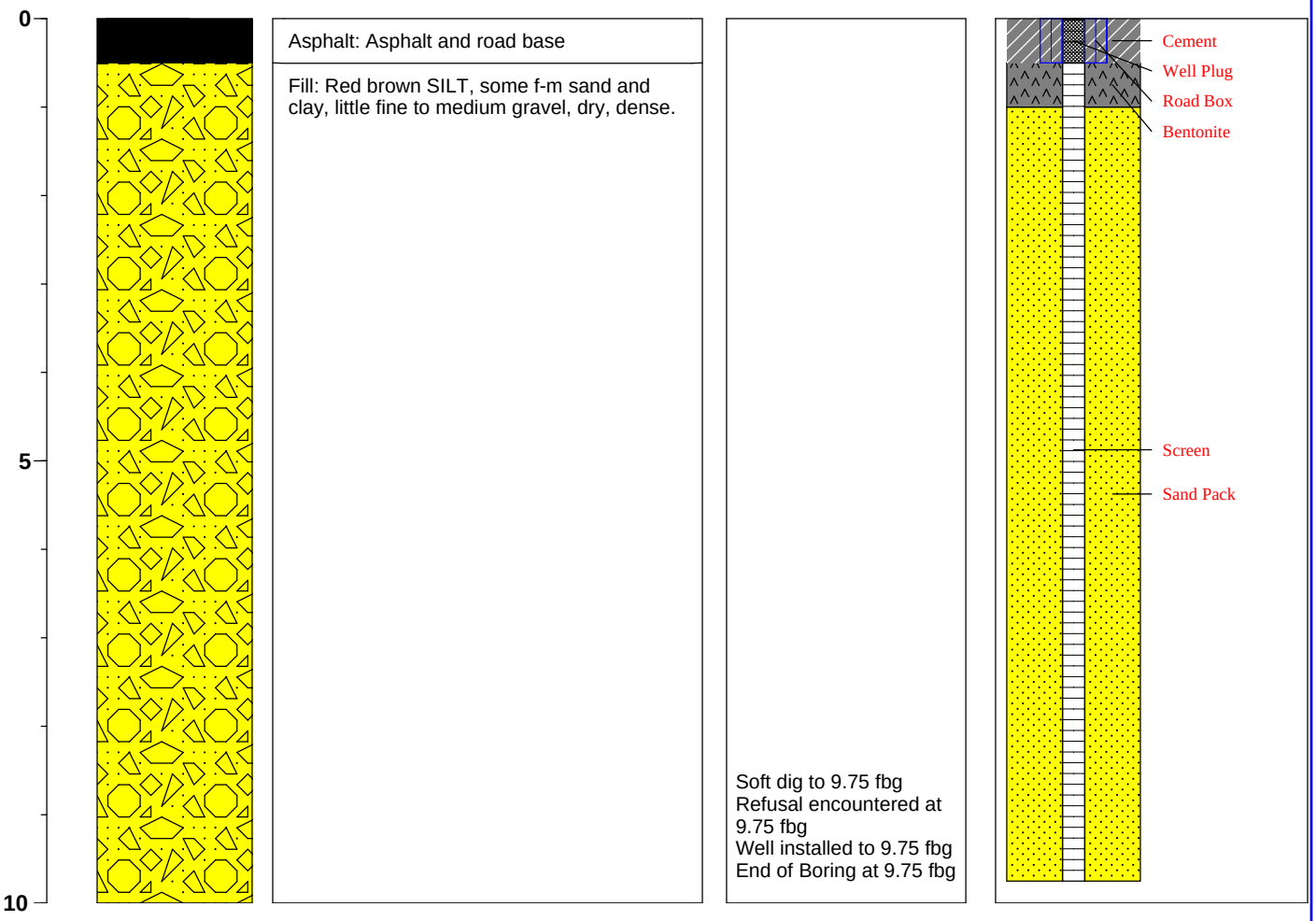
Refusal Depth: **9 ft 9 in** | Riser Length: **N/A** | Top of Sand: **1 fbg**

Initial Depth to Water: **N/A** | Screen Slot Size: **Slot #40** | Sand Type: **#1 Sand**

Static Depth to Water: **N/A** | Screen Length: **9 ft 9 in** | Well Material Type: **Schedule 40 PVC**

Top of Grout:

Depth (feet)	Geologic Description	Comments	Well Completion Detail



Proportions Used:

Trace = <5%
Few = 5-10%
Little = 10-20%
Some = 20-30%
Adjective = 30-40%
And = >40%

Notes:

NA = not available; fbg. = feet below grade

in. = inches; ft.= feet; ppm.= parts per million

PID not used to screen soils due to rainy conditions.

Monitoring Well

Groundwater & Environmental Services, Inc.

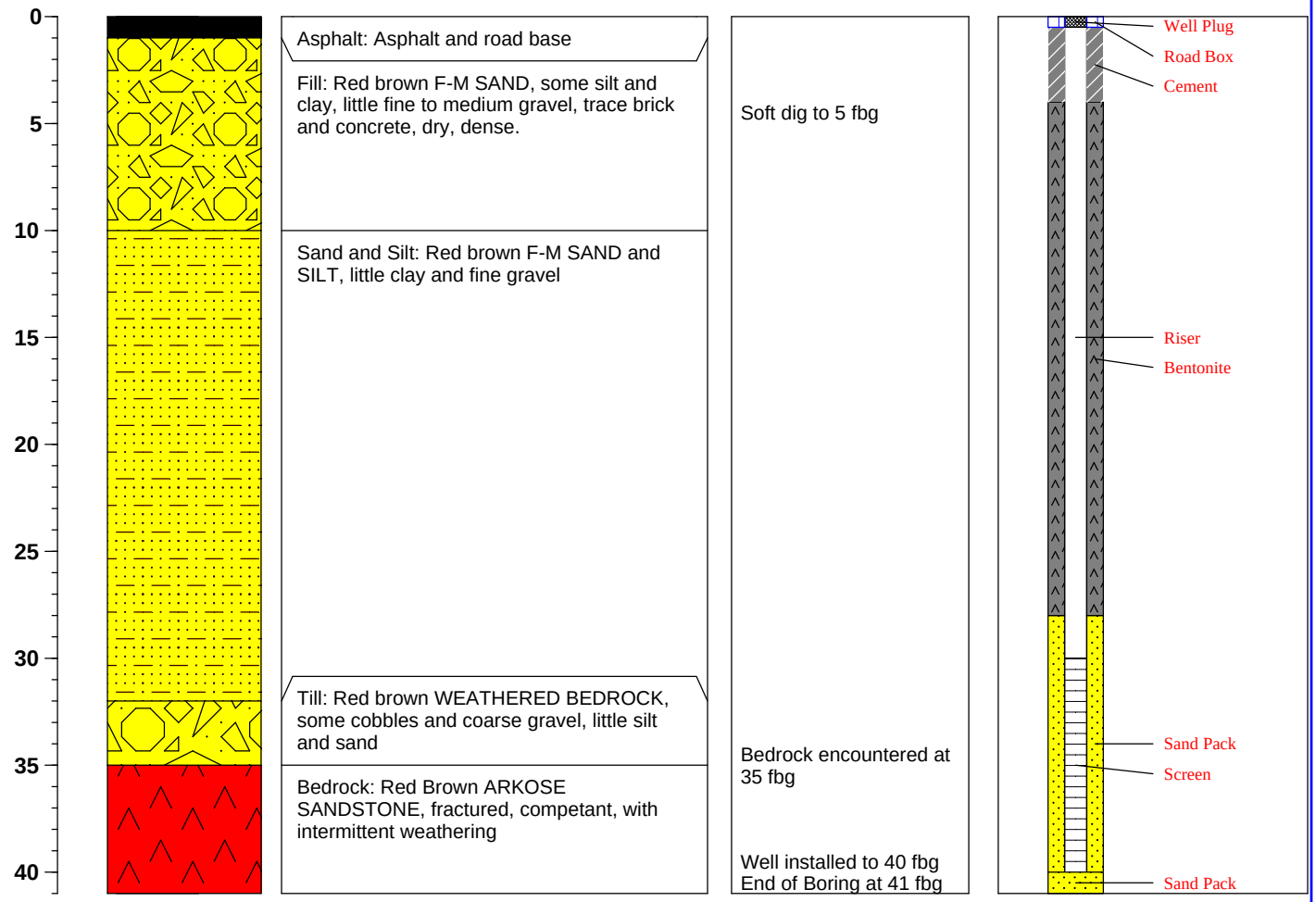
ID NO. **MW-D**

Project: **Orangetown Shopping Center**	Client: **UB Orangeburg, LLC**	Regulatory Case #: **C344066**
Address: **1-45 Orangetown Shopping Center**	GES Job #: **1102323-05-201**	Regulatory Case Mgr: **Jamie Verrigni**
County: **Rockland**	GES Project Mgr: **Michael DeGloria**	Permit #: **RE-12-014**

Logged By: **Michael Nahmias**	Date Drilled: **5/3/201**	
Drilling Company: **Aquifer Drilling & Testing, Inc.**	Completion Date: **5/3/2012**	
Drill Operator: **Chris Stratton**	Drilling Method: **Sonic**	Soil Classification System: **Limited Classification**
Drill Rig Type: **17-C Roto Sonic**	Sampling Method: **No Soil Sampling**	Field Screening: **PID 11.7 eV Lamp (ppm)**

Top of Casing: **165.57 ft AMSL**	Borehole Diameter: **5 in.**	Top of Bentonite Seal: **4 fbg**
Total Depth: **40 ft**	Well Diameter: **2 in.**	Type of Seal: **Bentonite**
Refusal Depth: **N/A**	Riser Length: **30 ft**	Top of Sand: **28 fbg**
Initial Depth to Water: **N/A**	Screen Slot Size: **Slot #40**	Sand Type: **#1 Sand**
Static Depth to Water: **N/A**	Screen Length: **10 ft**	Well Material Type: **Schedule 40 PVC**
		Top of Grout: **1 fbg**

Depth (feet)	Geologic Description	Comments	Well Completion Detail



Proportions Used:

Trace = <5%
Few = 5-10%
Little = 10-20%
Some = 20-30%
Adjective = 30-40%
And = >40%

Notes:

NA = not available; fbg. = feet below grade

in. = inches; ft.= feet; ppm.= parts per million

Soil Lithology not observed. Bedrock depth observed.

Limited screening with PID as soils were saturated due to drilling process

Monitoring Well

Groundwater & Environmental Services, Inc.

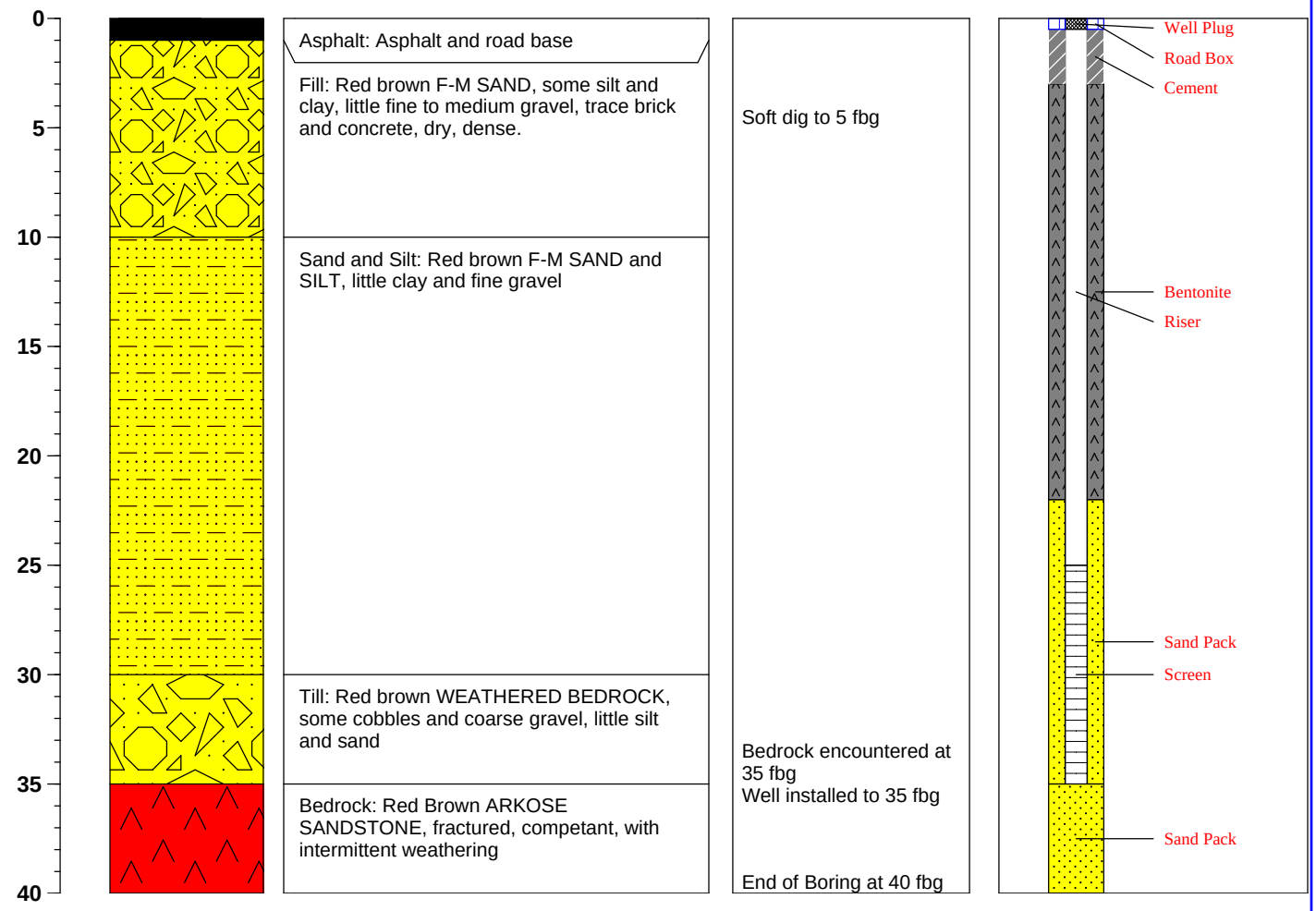
ID NO. **MW-E**

Project: **Orangetown Shopping Center**	Client: **UB Orangeburg LLC**	Regulatory Case #: **C344066**
Address: **1-45 Orangetown Shopping Center**	GES Job #: **1102323-05-201**	Regulatory Case Mgr: **Jamie Verrigni**
County: **Rockland**	GES Project Mgr: **Michael DeGloria**	Permit #: **RE-12-014**

Logged By: **Michael Nahmias**	Date Drilled: **5/2/2012**	
Drilling Company: **Aquifer Drilling & Testing, Inc.**	Completion Date: **5/2/2012**	
Drill Operator: **Chris Stratton**	Drilling Method: **Sonic**	Soil Classification System: **Limited Classification**
Drill Rig Type: **17-C Roto Sonic**	Sampling Method: **No Soil Sampling**	Field Screening: **PID 11.7 eV Lamp (ppm)**

Top of Casing: **165.03 AMSL**	Borehole Diameter: **5 in.**	Top of Bentonite Seal: **3 fbg**
Total Depth: **35 ft**	Well Diameter: **2 in.**	Type of Seal: **Bentonite**
Refusal Depth: **N/A**	Riser Length: **25 ft**	Top of Sand: **22 fbg**
Initial Depth to Water: **N/A**	Screen Slot Size: **Slot #40**	Sand Type: **#1 Sand**
Static Depth to Water: **N/A**	Screen Length: **10 ft**	Well Material Type: **Schedule 40 PVC**
		Top of Grout: **1 fbg**

Depth (feet)	Geologic Description	Comments	Well Completion Detail



Proportions Used:

Trace = <5%
Few = 5-10%
Little = 10-20%
Some = 20-30%
Adjective = 30-40%
And = >40%

Notes:

NA = not available; fbg. = feet below grade

in. = inches; ft.= feet; ppm.= parts per million

Soil Lithology not observed. Bedrock depth observed.

Limited screening with PID as soils were saturated due to drilling process

Monitoring Well

Groundwater & Environmental Services, Inc.

ID NO. **MW-F**

Project: **Orangetown Shopping Center** | Client: **UB Orangeburg, LLC** | Regulatory Case #: **C344066**

Address: **1-45 Orangetown Shopping Center** | GES Job #: **1102323-05-201** | Regulatory Case Mgr: **Jamie Verrigni**

County: **Rockland** | GES Project Mgr: **Michael DeGloria** | Permit #: **RE-12-014**

Logged By: **Michael Nahmias** | Date Drilled: **5/2/2012**

Drilling Company: **Aquifer Drilling & Testing, Inc.** | Completion Date: **5/3/2012**

Drill Operator: **Chris Stratton** | Drilling Method: **Sonic** | Soil Classification System: **Limited Classification**

Drill Rig Type: **17-C Roto Sonic** | Sampling Method: **No Soil Sampling** | Field Screening: **PID 11.7 eV Lamp (ppm)**

Top of Casing: **165.79 ft AMSL** | Borehole Diameter: **5 in.** | Top of Bentonite Seal: **3 fbg**

Total Depth: **35 ft** | Well Diameter: **2 in.** | Type of Seal: **Bentonite**

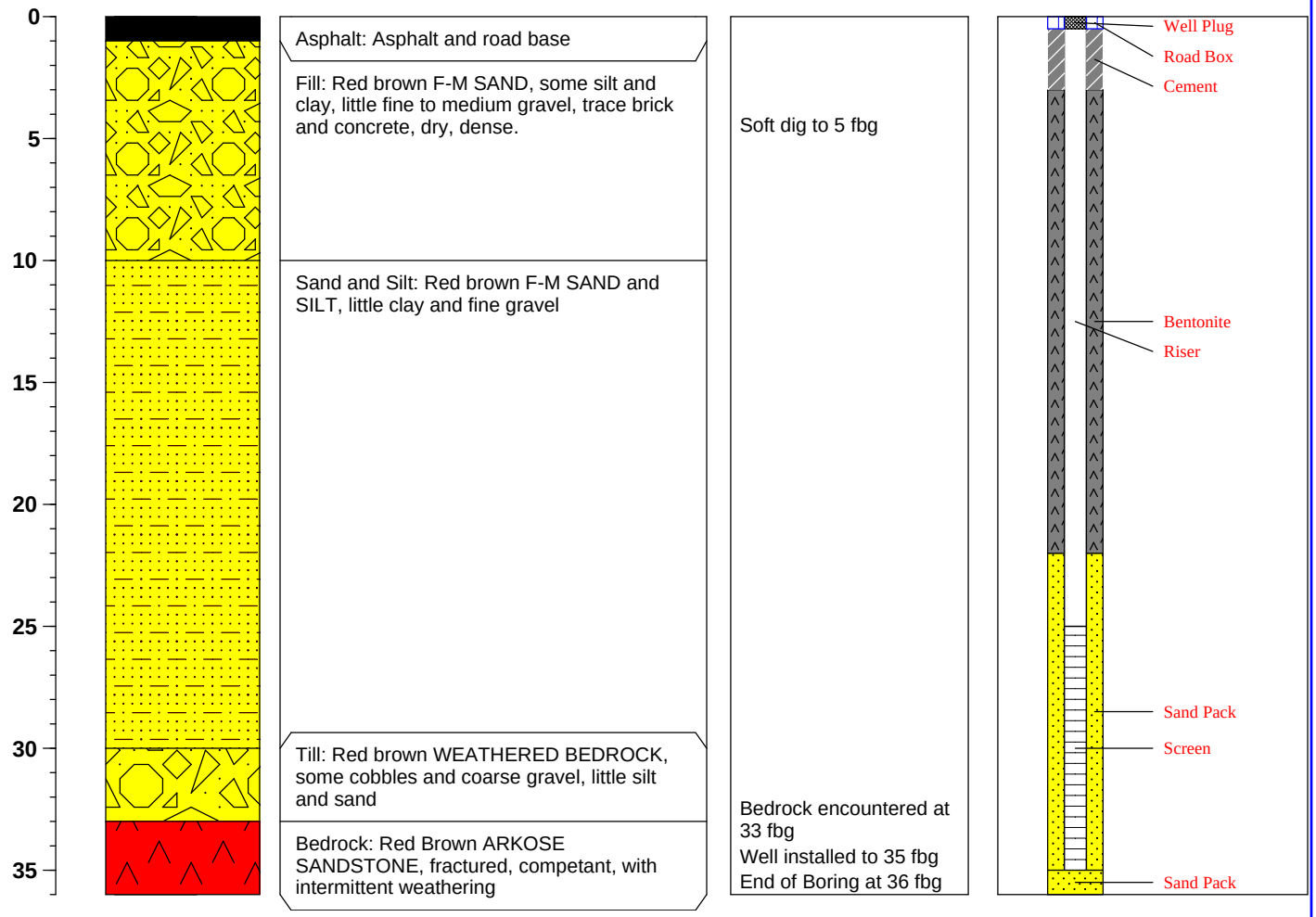
Refusal Depth: **N/A** | Riser Length: **25 ft** | Top of Sand: **22 fbg**

Initial Depth to Water: **N/A** | Screen Slot Size: **Slot #40** | Sand Type: **#1 Sand**

Static Depth to Water: **N/A** | Screen Length: **10 ft** | Well Material Type: **Schedule 40 PVC**

Top of Grout: **1 fbg**

Depth (feet)	Geologic Description	Comments	Well Completion Detail



Proportions Used:

Trace = <5%
Few = 5-10%
Little = 10-20%
Some = 20-30%
Adjective = 30-40%
And = >40%

Notes:

NA = not available; fbg. = feet below grade

in. = inches; ft.= feet; ppm.= parts per million

Soil Lithology not observed. Bedrock depth observed.

Limited screening with PID as soils were saturated due to drilling process

Appendix E – Soil SCOs

Table 1
Summary of Soil Samples Which Exceed the SCOs
Orangetown Shopping Center - Brownfield Site #C344066
Orangeburg, New York

Location	NYSDEC Restricted Use Soil Cleanup Objectives Table 375-6.89(b)			West Sidewall	South Sidewall	Bottom, north section	East Sidewall, south section
Sample ID				EX001W(4)-EX-1W(4)	EX001S(4)-EX-1S(4)	EX001BN(4)-EX-1BN(4)	EX001ES(4)-EX-1ES(4)
SAMPLING DATE	Protection of Public Health	Protection of Groundwater		14-Jan-09	14-Jan-09	14-Jan-09	14-Jan-09
LAB SAMPLE ID				L0900616-01	L0900616-04	L0900616-05	L0900616-06
ANALYTE	Commercial		Units	Qual	Qual	Qual	Qual
Volatile Organics by EPA 8260B/5035-Low							
1,1,1,2-Tetrachloroethane	NE	NE	mg/kg	-	-	-	-
1,1,1-Trichloroethane	500	0.68	mg/kg	-	-	-	-
1,1,2,2-Tetrachloroethane	NE	NE	mg/kg	-	-	-	-
1,1,2-Trichloroethane	NE	NE	mg/kg	-	-	-	-
1,1-Dichloroethane	240	0.27	mg/kg	-	-	-	-
1,1-Dichloroethene	500	0.33	mg/kg	-	-	-	-
1,1-Dichloropropene	NE	NE	mg/kg	-	-	-	-
1,2,3-Trichlorobenzene	NE	NE	mg/kg	-	-	-	-
1,2,3-Trichloropropane	NE	NE	mg/kg	-	-	-	-
1,2,4,5-Tetramethylbenzene	NE	NE	mg/kg	-	-	-	-
1,2,4-Trichlorobenzene	NE	NE	mg/kg	-	-	-	-
1,2,4-Trimethylbenzene	190	3.6	mg/kg	-	-	-	-
1,2-Dibromo-3-chloropropane	NE	NE	mg/kg	-	-	-	-
1,2-Dibromoethane	NE	NE	mg/kg	-	-	-	-
1,2-Dichlorobenzene	500	1.1	mg/kg	-	-	-	-
1,2-Dichloroethane	NE	0.02	mg/kg	-	-	-	-
1,2-Dichloropropane	NE	NE	mg/kg	-	-	-	-
1,3,5-Trimethylbenzene	190	NE	mg/kg	-	-	-	-
1,3-Dichlorobenzene	280	2.4	mg/kg	-	-	-	-
1,3-Dichloropropane	NE	NE	mg/kg	-	-	-	-
1,4-Dichlorobenzene	130	1.8	mg/kg	-	-	-	-
1,4-Diethylbenzene	NE	NE	mg/kg	-	-	-	-
2,2-Dichloropropane	NE	NE	mg/kg	-	-	-	-
2-Butanone	500	0.12	mg/kg	-	-	-	-
2-Hexanone	NE	NE	mg/kg	-	-	-	-
4-Ethyltoluene	NE	NE	mg/kg	-	-	-	-
4-Methyl-2-pentanone	NE	NE	mg/kg	-	-	-	-
Acetone	500	0.05	mg/kg	-	-	-	-
Acrylonitrile	NE	NE	mg/kg	-	-	-	-
Benzene	44	0.06	mg/kg	-	-	-	-
Bromobenzene	NE	NE	mg/kg	-	-	-	-
Bromochloromethane	NE	NE	mg/kg	-	-	-	-
Bromodichloromethane	NE	NE	mg/kg	-	-	-	-
Bromoform	NE	NE	mg/kg	-	-	-	-
Bromomethane	NE	NE	mg/kg	-	-	-	-
Carbon disulfide	NE	NE	mg/kg	-	-	-	-
Carbon tetrachloride	22	0.76	mg/kg	-	-	-	-
Chlorobenzene	500	1.1	mg/kg	-	-	-	-
Chloroethane	NE	NE	mg/kg	-	-	-	-
Chloroform	350	0.37	mg/kg	-	-	-	-
Chloromethane	NE	NE	mg/kg	-	-	-	-
cis-1,2-Dichloroethene	500	0.25	mg/kg	-	-	-	-
cis-1,3-Dichloropropene	NE	NE	mg/kg	-	-	-	-
Dibromochloromethane	NE	NE	mg/kg	-	-	-	-
Dibromomethane	NE	NE	mg/kg	-	-	-	-
Dichlorodifluoromethane	NE	NE	mg/kg	-	-	-	-
Ethylbenzene	390	1	mg/kg	-	-	-	-
Hexachlorobutadiene	NE	NE	mg/kg	-	-	-	-
Isopropylbenzene	NE	NE	mg/kg	-	-	-	-
Methyl tert butyl ether	500	NE	mg/kg	-	-	-	-
Methylene chloride	500	0.05	mg/kg	-	-	-	-
n-Butylbenzene	NE	NE	mg/kg	-	-	-	-
n-Propylbenzene	500	3.9	mg/kg	-	-	-	-
Naphthalene	500	12	mg/kg	-	-	-	-
o-Chlorotoluene	NE	NE	mg/kg	-	-	-	-
o-Xylene	500	NE	mg/kg	-	-	-	-
p-Chlorotoluene	NE	NE	mg/kg	-	-	-	-
p-Isopropyltoluene	NE	NE	mg/kg	-	-	-	-
p/m-Xylene	500	NE	mg/kg	-	-	-	-
sec-Butylbenzene	500	11	mg/kg	-	-	-	-
Styrene	NE	NE	mg/kg	-	-	-	-
tert-Butylbenzene	500	5.9	mg/kg	-	-	-	-
Tetrachloroethene	150	1.3	mg/kg	-	-	-	-
Toluene	500	0.7	mg/kg	-	-	-	-
trans-1,2-Dichloroethene	500	0.19	mg/kg	-	-	-	-
trans-1,3-Dichloropropene	NE	NE	mg/kg	-	-	-	-
Trichloroethene	200	0.47	mg/kg	-	-	-	-
Trichlorofluoromethane	NE	NE	mg/kg	-	-	-	-
Vinyl acetate	NE	NE	mg/kg	-	-	-	-
Vinyl chloride	13	0.02	mg/kg	-	-	-	-

Table 1
Summary of Soil Samples Which Exceed the SCOs
Orangetown Shopping Center - Brownfield Site #C344066
Orangeburg, New York

Location	NYSDEC Restricted Use Soil Cleanup Objectives Table 375-6.89(b)			West Sidewall		South Sidewall		Bottom, north section		East Sidewall, south section	
Sample ID				EX001W(4)-EX-1W(4)		EX001S(4)-EX-1S(4)		EX001BN(4)-EX-1BN(4)		EX001ES(4)-EX-1ES(4)	
SAMPLING DATE	Protection of Public Health	Protection of Groundwater		14-Jan-09		14-Jan-09		14-Jan-09		14-Jan-09	
LAB SAMPLE ID				L0900616-01		L0900616-04		L0900616-05		L0900616-06	
ANALYTE	Commercial		Units		Qual		Qual		Qual		Qual
Volatile Organics by EPA 8260B/5035-Soil Analysis											
1,1,1,2-Tetrachloroethane	NE	NE	mg/kg	0.23	U	1.2	U	0.062	U	0.057	U
1,1,1-Trichloroethane	500	0.68	mg/kg	0.23	U	1.2	U	0.062	U	0.057	U
1,1,2,2-Tetrachloroethane	NE	NE	mg/kg	0.23	U	1.2	U	0.062	U	0.057	U
1,1,2-Trichloroethane	NE	NE	mg/kg	0.34	U	1.8	U	0.094	U	0.085	U
1,1-Dichloroethane	240	0.27	mg/kg	0.34	U	1.8	U	0.094	U	0.085	U
1,1-Dichloroethene	500	0.33	mg/kg	0.23	U	1.2	U	0.062	U	0.057	U
1,1-Dichloropropene	NE	NE	mg/kg	1.1	U	6	U	0.31	U	0.28	U
1,2,3-Trichlorobenzene	NE	NE	mg/kg	1.1	U	6	U	0.31	U	0.28	U
1,2,3-Trichloropropane	NE	NE	mg/kg	2.3	U	12	U	0.62	U	0.57	U
1,2,4,5-Tetramethylbenzene	NE	NE	mg/kg	0.92	U	4.8	U	0.25	U	0.23	U
1,2,4-Trichlorobenzene	NE	NE	mg/kg	1.1	U	6	U	0.31	U	0.28	U
1,2,4-Trimethylbenzene	190	3.6	mg/kg	1.1	U	6	U	0.31	U	0.28	U
1,2-Dibromo-3-chloropropane	NE	NE	mg/kg	1.1	U	6	U	0.31	U	0.28	U
1,2-Dibromoethane	NE	NE	mg/kg	0.92	U	4.8	U	0.25	U	0.23	U
1,2-Dichlorobenzene	500	1.1	mg/kg	1.1	U	6	U	0.31	U	0.28	U
1,2-Dichloroethane	NE	NE	mg/kg	0.23	U	1.2	U	0.062	U	0.057	U
1,2-Dichloropropane	NE	NE	mg/kg	0.8	U	4.2	U	0.22	U	0.2	U
1,3,5-Trimethylbenzene	190	8.4	mg/kg	1.1	U	6	U	0.31	U	0.28	U
1,3-Dichlorobenzene	280	2.4	mg/kg	1.1	U	6	U	0.31	U	0.28	U
1,3-Dichloropropane	NE	NE	mg/kg	1.1	U	6	U	0.31	U	0.28	U
1,4-Dichlorobenzene	130	1.8	mg/kg	1.1	U	6	U	0.31	U	0.28	U
1,4-Diethylbenzene	NE	NE	mg/kg	0.92	U	4.8	U	0.25	U	0.23	U
2,2-Dichloropropane	NE	NE	mg/kg	1.1	U	6	U	0.31	U	0.28	U
2-Butanone	500	0.12	mg/kg	2.3	U	12	U	0.62	U	0.57	U
2-Hexanone	NE	NE	mg/kg	2.3	U	12	U	0.62	U	0.57	U
4-Ethyltoluene	NE	NE	mg/kg	0.92	U	4.8	U	0.25	U	0.23	U
4-Methyl-2-pentanone	NE	NE	mg/kg	2.3	U	12	U	0.62	U	0.57	U
Acetone	500	0.05	mg/kg	2.3	U	12	U	0.62	U	0.57	U
Acrylonitrile	NE	NE	mg/kg	2.3	U	12	U	0.62	U	0.57	U
Benzene	44	0.06	mg/kg	0.23	U	1.2	U	0.062	U	0.057	U
Bromobenzene	NE	NE	mg/kg	1.1	U	6	U	0.31	U	0.28	U
Bromochloromethane	NE	NE	mg/kg	1.1	U	6	U	0.31	U	0.28	U
Bromodichloromethane	NE	NE	mg/kg	0.23	U	1.2	U	0.062	U	0.057	U
Bromoform	NE	NE	mg/kg	0.92	U	4.8	U	0.25	U	0.23	U
Bromomethane	NE	NE	mg/kg	0.46	U	2.4	U	0.12	U	0.11	U
Carbon disulfide	NE	NE	mg/kg	2.3	U	12	U	0.62	U	0.57	U
Carbon tetrachloride	22	0.76	mg/kg	0.23	U	1.2	U	0.062	U	0.057	U
Chlorobenzene	500	1.1	mg/kg	0.23	U	1.2	U	0.062	U	0.057	U
Chloroethane	NE	NE	mg/kg	0.46	U	2.4	U	0.12	U	0.11	U
Chloroform	350	0.37	mg/kg	0.34	U	1.8	U	0.094	U	0.085	U
Chloromethane	NE	NE	mg/kg	1.1	U	6	U	0.31	U	0.28	U
cis-1,2-Dichloroethene	500	0.25	mg/kg								
cis-1,2-Dichloroethene	500	0.25	mg/kg	**1.1**		**140**		0.11		**3.2**	
cis-1,3-Dichloropropene	NE	NE	mg/kg	0.23	U	1.2	U	0.062	U	0.057	U
Dibromochloromethane	NE	NE	mg/kg	0.23	U	1.2	U	0.062	U	0.057	U
Dibromomethane	NE	NE	mg/kg	2.3	U	12	U	0.62	U	0.57	U
Dichlorodifluoromethane	NE	NE	mg/kg	2.3	U	12	U	0.62	U	0.57	U
Ethylbenzene	390	1	mg/kg	0.23	U	1.2	U	0.062	U	0.057	U
Hexachlorobutadiene	NE	NE	mg/kg	1.1	U	6	U	0.31	U	0.28	U
Isopropylbenzene	NE	NE	mg/kg	0.23	U	1.2	U	0.062	U	0.057	U
Methyl tert butyl ether	500	0.93	mg/kg	0.46	U	2.4	U	0.12	U	0.11	U
Methylene chloride	500	0.05	mg/kg	2.3	U	12	U	0.62	U	0.57	U
n-Butylbenzene	NE	NE	mg/kg	0.23	U	1.2	U	0.062	U	0.057	U
n-Propylbenzene	500	3.9	mg/kg	0.23	U	1.2	U	0.062	U	0.057	U
Naphthalene	500	12	mg/kg	1.1	U	6	U	0.31	U	0.28	U
o-Chlorotoluene	NE	NE	mg/kg	1.1	U	6	U	0.31	U	0.28	U
o-Xylene	500	1.6	mg/kg	0.46	U	2.4	U	0.12	U	0.11	U
p-Chlorotoluene	NE	NE	mg/kg	1.1	U	6	U	0.31	U	0.28	U
p-Isopropyltoluene	NE	NE	mg/kg	0.23	U	1.2	U	0.062	U	0.057	U
p/m-Xylene	500	1.6	mg/kg	0.46	U	2.4	U	0.12	U	0.11	U
sec-Butylbenzene	500	11	mg/kg	0.23	U	1.2	U	0.062	U	0.057	U
Styrene	NE	NE	mg/kg	0.46	U	2.4	U	0.12	U	0.11	U
tert-Butylbenzene	500	5.9	mg/kg	1.1	U	6	U	0.31	U	0.28	U
Tetrachloroethene	150	1.3	mg/kg	**16**		**3.2**		0.093		0.13	
Toluene	500	0.7	mg/kg	0.34	U	1.8	U	0.094	U	0.085	U
trans-1,2-Dichloroethene	500	0.19	mg/kg								
trans-1,2-Dichloroethene	500	0.19	mg/kg	0.34	U	**2.3**		**0.24**		0.13	
trans-1,3-Dichloropropene	NE	NE	mg/kg	0.23	U	1.2	U	0.062	U	0.057	U
Trichloroethene	200	0.47	mg/kg								
Trichloroethene	200	0.47	mg/kg	**1.2**		**4**		0.062	U	0.057	U
Trichlorofluoromethane	NE	NE	mg/kg	1.1	U	6	U	0.31	U	0.28	U
Vinyl acetate	NE	NE	mg/kg	2.3	U	12	U	0.62	U	0.57	U
Vinyl chloride	13	0.02	mg/kg								
Vinyl chloride	13	0.02	mg/kg	**0.46**	**U**	**25**		0.12	**U**	**0.98**	

Table 1
Summary of Soil Samples Which Exceed the SCOs
Orangetown Shopping Center - Brownfield Site #C344066
Orangeburg, New York

Location	NYSDEC Restricted Use Soil Cleanup Objectives Table 375-6.89(b)			West Sidewall	South Sidewall	Bottom, north section	East Sidewall, south section
Sample ID				EX001W(4)-EX-1W(4)	EX001S(4)-EX-1S(4)	EX001BN(4)-EX-1BN(4)	EX001ES(4)-EX-1ES(4)
SAMPLING DATE	Protection of Public Health	Protection of Groundwater		14-Jan-09	14-Jan-09	14-Jan-09	14-Jan-09
LAB SAMPLE ID				L0900616-01	L0900616-04	L0900616-05	L0900616-06
ANALYTE	Commercial		Units	Qual	Qual	Qual	Qual
Semi-Volatile Organics by GC/MS							
1,2,4,5-Tetrachlorobenzene	NS	NS	mg/kg	-	-	-	-
1,2,4-Trichlorobenzene	NS	NS	mg/kg	-	-	-	-
1,2-Dichlorobenzene	NS	NS	mg/kg	-	-	-	-
1,3-Dichlorobenzene	NS	NS	mg/kg	-	-	-	-
1,4-Dichlorobenzene	NS	NS	mg/kg	-	-	-	-
2,4,5-Trichlorophenol	NS	NS	mg/kg	-	-	-	-
2,4,6-Trichlorophenol	NS	NS	mg/kg	-	-	-	-
2,4-Dichlorophenol	NS	NS	mg/kg	-	-	-	-
2,4-Dimethylphenol	NS	NS	mg/kg	-	-	-	-
2,4-Dinitrophenol	NS	NS	mg/kg	-	-	-	-
2,4-Dinitrotoluene	NS	NS	mg/kg	-	-	-	-
2,6-Dinitrotoluene	NS	NS	mg/kg	-	-	-	-
2-Chloronaphthalene	NS	NS	mg/kg	-	-	-	-
2-Chlorophenol	NS	NS	mg/kg	-	-	-	-
2-Methylnaphthalene	NS	NS	mg/kg	-	-	-	-
2-Methylphenol	500	0.33	mg/kg	-	-	-	-
2-Nitroaniline	NS	NS	mg/kg	-	-	-	-
2-Nitrophenol	NS	NS	mg/kg	-	-	-	-
3,3'-Dichlorobenzidine	NS	NS	mg/kg	-	-	-	-
3-Methylphenol/4-Methylpheno	NS	NS	mg/kg	-	-	-	-
3-Nitroaniline	NS	NS	mg/kg	-	-	-	-
4,6-Dinitro-o-cresol	NS	NS	mg/kg	-	-	-	-
4-Bromophenyl phenyl ether	NS	NS	mg/kg	-	-	-	-
4-Chloroaniline	NS	NS	mg/kg	-	-	-	-
4-Chlorophenyl phenyl ether	NS	NS	mg/kg	-	-	-	-
4-Nitroaniline	NS	NS	mg/kg	-	-	-	-
4-Nitrophenol	NS	NS	mg/kg	-	-	-	-
Acenaphthene	500	98	mg/kg	-	-	-	-
Acenaphthylene	500	107	mg/kg	-	-	-	-
Acetophenone	NS	NS	mg/kg	-	-	-	-
Anthracene	500	1000	mg/kg	-	-	-	-
Benzo(a)anthracene	5.6	1	mg/kg	-	-	-	-
Benzo(a)pyrene	1	22	mg/kg	-	-	-	-
Benzo(b)fluoranthene	5.6	1.7	mg/kg	-	-	-	-
Benzo(ghi)perylene	500	1000	mg/kg	-	-	-	-
Benzo(k)fluoranthene	56	1.7	mg/kg	-	-	-	-
Benzoic Acid	NS	NS	mg/kg	-	-	-	-
Benzyl Alcohol	NS	NS	mg/kg	-	-	-	-
Biphenyl	NS	NS	mg/kg	-	-	-	-
Bis(2-chloroethoxy)methane	NS	NS	mg/kg	-	-	-	-
Bis(2-chloroethyl)ether	NS	NS	mg/kg	-	-	-	-
Bis(2-chloroisopropyl)ether	NS	NS	mg/kg	-	-	-	-
Bis(2-Ethylhexyl)phthalate	NS	NS	mg/kg	-	-	-	-
Butyl benzyl phthalate	NS	NS	mg/kg	-	-	-	-
Carbazole	NS	NS	mg/kg	-	-	-	-
Chrysene	56	1	mg/kg	-	-	-	-
Di-n-butylphthalate	NS	NS	mg/kg	-	-	-	-
Di-n-octylphthalate	NS	NS	mg/kg	-	-	-	-
Dibenzo(a,h)anthracene	0.56	1000	mg/kg	-	-	-	-
Dibenzofuran	NS	NS	mg/kg	-	-	-	-
Diethyl phthalate	NS	NS	mg/kg	-	-	-	-
Dimethyl phthalate	NS	NS	mg/kg	-	-	-	-
Fluoranthene	500	1000	mg/kg	-	-	-	-
Fluoranthene	500	1000	mg/kg	-	-	-	-
Fluorene	500	386	mg/kg	-	-	-	-
Hexachlorobenzene	NS	NS	mg/kg	-	-	-	-
Hexachlorobutadiene	NS	NS	mg/kg	-	-	-	-
Hexachlorocyclopentadiene	NS	NS	mg/kg	-	-	-	-
Hexachloroethane	NS	NS	mg/kg	-	-	-	-
Indeno(1,2,3-cd)Pyrene	5.6	8.2	mg/kg	-	-	-	-
Isophorone	NS	NS	mg/kg	-	-	-	-
n-Nitrosodi-n-propylamine	NS	NS	mg/kg	-	-	-	-
Naphthalene	500	12	mg/kg	-	-	-	-
Nitrobenzene	NS	NS	mg/kg	-	-	-	-
NitrosoDiPhenylAmine(NDPA)/	NS	NS	mg/kg	-	-	-	-
P-Chloro-M-Cresol	NS	NS	mg/kg	-	-	-	-
Pentachlorophenol	6.7	0.8	mg/kg	-	-	-	-
Phenanthrene	500	1000	mg/kg	-	-	-	-
Phenol	500	0.33	mg/kg	-	-	-	-
Pyrene	500	1000	mg/kg	-	-	-	-
Pyrene	500	1000	mg/kg	-	-	-	-

Table 1
Summary of Soil Samples Which Exceed the SCOs
Orangetown Shopping Center - Brownfield Site #C344066
Orangeburg, New York

Location	NYSDEC Restricted Use Soil Cleanup Objectives Table 375-6.89(b)			West Sidewall		South Sidewall		Bottom, north section		East Sidewall, south section	
Sample ID				EX001W(4)-EX-1W(4)		EX001S(4)-EX-1S(4)		EX001BN(4)-EX-1BN(4)		EX001ES(4)-EX-1ES(4)	
SAMPLING DATE	Protection of Public Health	Protection of Groundwater		14-Jan-09		14-Jan-09		14-Jan-09		14-Jan-09	
LAB SAMPLE ID				L0900616-01		L0900616-04		L0900616-05		L0900616-06	
ANALYTE	Commercial		Units		Qual		Qual		Qual		Qual
Semi-Volatile Organics by GC/MS - SIM											
2-Chloronaphthalene	NS	NS	mg/kg	-		-		-		-	
2-Methylnaphthalene	NS	NS	mg/kg	-		-		-		-	
2-Methylnaphthalene	NS	NS	mg/kg	-		-		-		-	
Acenaphthene	500	98	mg/kg	-		-		-		-	
Acenaphthene	500	98	mg/kg	-		-		-		-	
Acenaphthylene	500	107	mg/kg	-		-		-		-	
Anthracene	500	1000	mg/kg	-		-		-		-	
Anthracene	500	1000	mg/kg	-		-		-		-	
Benzo(a)anthracene	5.6	1	mg/kg	-		-		-		-	
Benzo(a)anthracene	5.6	1	mg/kg	-		-		-		-	
Benzo(a)pyrene	1	22	mg/kg	-		-		-		-	
Benzo(a)pyrene	1	22	mg/kg	-		-		-		-	
Benzo(b)fluoranthene	5.6	1.7	mg/kg	-		-		-		-	
Benzo(b)fluoranthene	5.6	1.7	mg/kg	-		-		-		-	
Benzo(ghi)perylene	500	1000	mg/kg	-		-		-		-	
Benzo(ghi)perylene	500	1000	mg/kg	-		-		-		-	
Benzo(k)fluoranthene	56	1.7	mg/kg	-		-		-		-	
Benzo(k)fluoranthene	56	1.7	mg/kg	-		-		-		-	
Benzo(k)fluoranthene	56	1.7	mg/kg	-		-		-		-	
Chrysene	56	1	mg/kg	-		-		-		-	
Chrysene	56	1	mg/kg	-		-		-		-	
Dibenzo(a,h)anthracene	0.56	1000	mg/kg	-		-		-		-	
Dibenzo(a,h)anthracene	0.56	1000	mg/kg	-		-		-		-	
Fluoranthene	500	1000	mg/kg	-		-		-		-	
Fluoranthene	500	1000	mg/kg	-		-		-		-	
Fluorene	500	386	mg/kg	-		-		-		-	
Fluorene	500	386	mg/kg	-		-		-		-	
Hexachlorobenzene	NS	NS	mg/kg	-		-		-		-	
Hexachlorobutadiene	NS	NS	mg/kg	-		-		-		-	
Hexachloroethane	NS	NS	mg/kg	-		-		-		-	
Indeno(1,2,3-cd)Pyrene	5.6	8.2	mg/kg	-		-		-		-	
Indeno(1,2,3-cd)Pyrene	5.6	8.2	mg/kg	-		-		-		-	
Naphthalene	500	12	mg/kg	-		-		-		-	
Naphthalene	500	12	mg/kg	-		-		-		-	
Pentachlorophenol	6.7	0.8	mg/kg	-		-		-		-	
Phenanthrene	500	1000	mg/kg	-		-		-		-	
Phenanthrene	500	1000	mg/kg	-		-		-		-	
Pyrene	500	1000	mg/kg	-		-		-		-	
Pyrene	500	1000	mg/kg	-		-		-		-	
Organochlorine Pesticides by EPA 8081A											
4,4'-DDD	92	14	mg/kg	0.00388	U	-		0.00417	U	-	
4,4'-DDE	62	17	mg/kg	0.00388	U	-		0.00562		-	
4,4'-DDT	47	136	mg/kg	0.00388	U	-		0.00417	U	-	
Aldrin	0.68	0.19	mg/kg	0.00388	U	-		0.00417	U	-	
Alpha-BHC	3.4	0.02	mg/kg	0.00388	U	-		0.00417	U	-	
Beta-BHC	3	0.09	mg/kg	0.00388	U	-		0.00417	U	-	
Chlordane	24	2.9	mg/kg	0.0388	U	-		0.0417	U	-	
Delta-BHC	500	0.25	mg/kg	0.00388	U	-		0.00417	U	-	
Dieldrin	1.4	0.1	mg/kg	0.00388	U	-		0.00417	U	-	
Endosulfan I	200	102	mg/kg	0.00388	U	-		0.00417	U	-	
Endosulfan II	200	102	mg/kg	0.00388	U	-		0.00417	U	-	
Endosulfan sulfate	200	1,000	mg/kg	0.00388	U	-		0.00417	U	-	
Endrin	89	0.06	mg/kg	0.00388	U	-		0.00417	U	-	
Endrin ketone	NE	NE	mg/kg	0.00388	U	-		0.00417	U	-	
Heptachlor	15	0.38	mg/kg	0.00388	U	-		0.00417	U	-	
Heptachlor epoxide	NE	NE	mg/kg	0.00388	U	-		0.00417	U	-	
Lindane	9.2	0.1	mg/kg	0.00388	U	-		0.00417	U	-	
Methoxychlor	NE	NE	mg/kg	0.0155	U	-		0.0167	U	-	
trans-Chlordane	NE	NE	mg/kg	0.00388	U	-		0.00417	U	-	
Total Metals & Other Analytes											
Iron, Total	NE	NE	mg/kg	13000		12000		13000		15000	
Solids, Total	NE	NE	%	86		83		80		88	
pH	NE	NE	SU	7.4		7.5		6.8		6.8	
Total Organic Carbon (Rep1)	NE	NE	%	0.18		0.53		0.59		0.83	
Total Organic Carbon (Rep2)	NE	NE	%	0.22		0.71		0.72		0.75	
COD	NE	NE	mg/kg	12000		19000		28000		14000	

NOTES:
U = Not detected at or above the reported limit; tabulated value is the reported limit.
NE = Not Established
mg/kg = milligrams per kilogram
Yellow highlight = result above NYSDEC Restricted Use SCOs
BOLD TEXT = result above NYSDEC Groundwater Protection SCOs
NA = Not Available

Table 1
Summary of Soil Samples Which Exceed the SCOs
Orangetown Shopping Center - Brownfield Site #C344066
Orangeburg, New York

Location	NYSDEC Restricted Use Soil Cleanup Objectives Table 375-6.89(b)			Bottom, south section		Bottom, north section		Sparkle Cleaners		Sparkle Cleaners		Sparkle Cleaners	
Sample ID				EX001BS(4)-EX-1BS(4)		DUPLICATE		B1, 10-12		B2, 10-12		B3, 10-12	
SAMPLING DATE	Protection of Public Health	Protection of Groundwater		14-Jan-09		14-Jan-09		24-Feb-09		24-Feb-09		25-Feb-09	
LAB SAMPLE ID				L0900616-07		L0900616-10		L0902559-01		L0902559-02		L0902559-03	
ANALYTE	Commercial		Units		Qual		Qual		Qual		Qual		Qual
Volatile Organics by EPA 8260B/5035-Low													
1,1,1,2-Tetrachloroethane	NE	NE	mg/kg	-		-		0.00083	U	-		-	
1,1,1-Trichloroethane	500	0.68	mg/kg	-		-		0.00083	U	-		-	
1,1,2,2-Tetrachloroethane	NE	NE	mg/kg	-		-		0.00083	U	-		-	
1,1,2-Trichloroethane	NE	NE	mg/kg	-		-		0.0012	U	-		-	
1,1-Dichloroethane	240	0.27	mg/kg	-		-		0.0012	U	-		-	
1,1-Dichloroethene	500	0.33	mg/kg	-		-		0.00083	U	-		-	
1,1-Dichloropropene	NE	NE	mg/kg	-		-		0.0042	U	-		-	
1,2,3-Trichlorobenzene	NE	NE	mg/kg	-		-		0.0042	U	-		-	
1,2,3-Trichloropropane	NE	NE	mg/kg	-		-		0.0083	U	-		-	
1,2,4,5-Tetramethylbenzene	NE	NE	mg/kg	-		-		0.0033	U	-		-	
1,2,4-Trichlorobenzene	NE	NE	mg/kg	-		-		0.0042	U	-		-	
1,2,4-Trimethylbenzene	190	3.6	mg/kg	-		-		0.0042	U	-		-	
1,2-Dibromo-3-chloropropane	NE	NE	mg/kg	-		-		0.0042	U	-		-	
1,2-Dibromoethane	NE	NE	mg/kg	-		-		0.0033	U	-		-	
1,2-Dichlorobenzene	500	1.1	mg/kg	-		-		0.0042	U	-		-	
1,2-Dichloroethane	NE	0.02	mg/kg	-		-		0.00083	U	-		-	
1,2-Dichloropropane	NE	NE	mg/kg	-		-		0.0029	U	-		-	
1,3,5-Trimethylbenzene	190	NE	mg/kg	-		-		0.0042	U	-		-	
1,3-Dichlorobenzene	280	2.4	mg/kg	-		-		0.0042	U	-		-	
1,3-Dichloropropane	NE	NE	mg/kg	-		-		0.0042	U	-		-	
1,4-Dichlorobenzene	130	1.8	mg/kg	-		-		0.0042	U	-		-	
1,4-Diethylbenzene	NE	NE	mg/kg	-		-		0.0033	U	-		-	
2,2-Dichloropropane	NE	NE	mg/kg	-		-		0.0042	U	-		-	
2-Butanone	500	0.12	mg/kg	-		-		0.0083	U	-		-	
2-Hexanone	NE	NE	mg/kg	-		-		0.0083	U	-		-	
4-Ethyltoluene	NE	NE	mg/kg	-		-		0.0033	U	-		-	
4-Methyl-2-pentanone	NE	NE	mg/kg	-		-		0.0083	U	-		-	
Acetone	500	0.05	mg/kg	-		-		0.018		-		-	
Acrylonitrile	NE	NE	mg/kg	-		-		0.0083	U	-		-	
Benzene	44	0.06	mg/kg	-		-		0.00083	U	-		-	
Bromobenzene	NE	NE	mg/kg	-		-		0.0042	U	-		-	
Bromochloromethane	NE	NE	mg/kg	-		-		0.0042	U	-		-	
Bromodichloromethane	NE	NE	mg/kg	-		-		0.00083	U	-		-	
Bromoform	NE	NE	mg/kg	-		-		0.0033	U	-		-	
Bromomethane	NE	NE	mg/kg	-		-		0.0017	U	-		-	
Carbon disulfide	NE	NE	mg/kg	-		-		0.0083	U	-		-	
Carbon tetrachloride	22	0.76	mg/kg	-		-		0.00083	U	-		-	
Chlorobenzene	500	1.1	mg/kg	-		-		0.00083	U	-		-	
Chloroethane	NE	NE	mg/kg	-		-		0.0017	U	-		-	
Chloroform	350	0.37	mg/kg	-		-		0.0012	U	-		-	
Chloromethane	NE	NE	mg/kg	-		-		0.0042	U	-		-	
cis-1,2-Dichloroethene	500	0.25	mg/kg	-		-		0.036		-		-	
cis-1,3-Dichloropropene	NE	NE	mg/kg	-		-		0.00083	U	-		-	
Dibromochloromethane	NE	NE	mg/kg	-		-		0.00083	U	-		-	
Dibromomethane	NE	NE	mg/kg	-		-		0.0083	U	-		-	
Dichlorodifluoromethane	NE	NE	mg/kg	-		-		0.0083	U	-		-	
Ethylbenzene	390	1	mg/kg	-		-		0.00083	U	-		-	
Hexachlorobutadiene	NE	NE	mg/kg	-		-		0.0042	U	-		-	
Isopropylbenzene	NE	NE	mg/kg	-		-		0.00083	U	-		-	
Methyl tert butyl ether	500	NE	mg/kg	-		-		0.0017	U	-		-	
Methylene chloride	500	0.05	mg/kg	-		-		0.0083	U	-		-	
n-Butylbenzene	NE	NE	mg/kg	-		-		0.00083	U	-		-	
n-Propylbenzene	500	3.9	mg/kg	-		-		0.00083	U	-		-	
Naphthalene	500	12	mg/kg	-		-		0.0042	U	-		-	
o-Chlorotoluene	NE	NE	mg/kg	-		-		0.0042	U	-		-	
o-Xylene	500	NE	mg/kg	-		-		0.0017	U	-		-	
p-Chlorotoluene	NE	NE	mg/kg	-		-		0.0042	U	-		-	
p-Isopropyltoluene	NE	NE	mg/kg	-		-		0.00083	U	-		-	
p/m-Xylene	500	NE	mg/kg	-		-		0.0017	U	-		-	
sec-Butylbenzene	500	11	mg/kg	-		-		0.00083	U	-		-	
Styrene	NE	NE	mg/kg	-		-		0.0017	U	-		-	
tert-Butylbenzene	500	5.9	mg/kg	-		-		0.0042	U	-		-	
Tetrachloroethene	150	1.3	mg/kg	-		-		0.001		-		-	
Toluene	500	0.7	mg/kg	-		-		0.0012	U	-		-	
trans-1,2-Dichloroethene	500	0.19	mg/kg	-		-		0.0012	U	-		-	
trans-1,3-Dichloropropene	NE	NE	mg/kg	-		-		0.00083	U	-		-	
Trichloroethene	200	0.47	mg/kg	-		-		0.00083	U	-		-	
Trichlorofluoromethane	NE	NE	mg/kg	-		-		0.0042	U	-		-	
Vinyl acetate	NE	NE	mg/kg	-		-		0.0083	U	-		-	
Vinyl chloride	13	0.02	mg/kg	-		-		0.0017	U	-		-	

Table 1
Summary of Soil Samples Which Exceed the SCOs
Orangetown Shopping Center - Brownfield Site #C344066
Orangeburg, New York

Location	NYSDEC Restricted Use Soil Cleanup Objectives Table 375-6.89(b)			Bottom, south section		Bottom, north section		Sparkle Cleaners		Sparkle Cleaners		Sparkle Cleaners	
Sample ID				EX001BS(4)-EX-1BS(4)		DUPLICATE		B1, 10-12		B2, 10-12		B3, 10-12	
SAMPLING DATE	Protection of Public Health	Protection of Groundwater		14-Jan-09		14-Jan-09		24-Feb-09		24-Feb-09		25-Feb-09	
LAB SAMPLE ID				L0900616-07		L0900616-10		L0902559-01		L0902559-02		L0902559-03	
ANALYTE	Commercial		Units		Qual		Qual		Qual		Qual		Qual
Volatile Organics by EPA 8260B/5035-Soil Analysis													
1,1,1,2-Tetrachloroethane	NE	NE	mg/kg	0.059	U	0.062	U	0.1	U	0.69	U	0.29	U
1,1,1-Trichloroethane	500	0.68	mg/kg	0.059	U	0.062	U	0.1	U	0.69	U	0.29	U
1,1,2,2-Tetrachloroethane	NE	NE	mg/kg	0.059	U	0.062	U	0.1	U	0.69	U	0.29	U
1,1,2-Trichloroethane	NE	NE	mg/kg	0.089	U	0.094	U	0.15	U	1	U	0.44	U
1,1-Dichloroethane	240	0.27	mg/kg	0.089	U	0.094	U	0.15	U	1	U	0.44	U
1,1-Dichloroethene	500	0.33	mg/kg	0.059	U	0.062	U	0.1	U	0.69	U	0.29	U
1,1-Dichloropropene	NE	NE	mg/kg	0.3	U	0.31	U	0.52	U	3.4	U	1.5	U
1,2,3-Trichlorobenzene	NE	NE	mg/kg	0.3	U	0.31	U	0.52	U	3.4	U	1.5	U
1,2,3-Trichloropropane	NE	NE	mg/kg	0.59	U	0.62	U	1	U	6.9	U	2.9	U
1,2,4,5-Tetramethylbenzene	NE	NE	mg/kg	0.24	U	0.25	U	0.41	U	2.7	U	1.2	U
1,2,4-Trichlorobenzene	NE	NE	mg/kg	0.3	U	0.31	U	0.52	U	3.4	U	1.5	U
1,2,4-Trimethylbenzene	190	3.6	mg/kg	0.3	U	0.31	U	0.52	U	3.4	U	1.5	U
1,2-Dibromo-3-chloropropane	NE	NE	mg/kg	0.3	U	0.31	U	0.52	U	3.4	U	1.5	U
1,2-Dibromoethane	NE	NE	mg/kg	0.24	U	0.25	U	0.41	U	2.7	U	1.2	U
1,2-Dichlorobenzene	500	1.1	mg/kg	0.3	U	0.31	U	0.52	U	3.4	U	1.5	U
1,2-Dichloroethane	NE	NE	mg/kg	0.059	U	0.062	U	0.1	U	0.69	U	0.29	U
1,2-Dichloropropane	NE	NE	mg/kg	0.21	U	0.22	U	0.36	U	2.4	U	1	U
1,3,5-Trimethylbenzene	190	8.4	mg/kg	0.3	U	0.31	U	0.52	U	3.4	U	1.5	U
1,3-Dichlorobenzene	280	2.4	mg/kg	0.3	U	0.31	U	0.52	U	3.4	U	1.5	U
1,3-Dichloropropane	NE	NE	mg/kg	0.3	U	0.31	U	0.52	U	3.4	U	1.5	U
1,4-Dichlorobenzene	130	1.8	mg/kg	0.3	U	0.31	U	0.52	U	3.4	U	1.5	U
1,4-Diethylbenzene	NE	NE	mg/kg	0.24	U	0.25	U	0.41	U	2.7	U	1.2	U
2,2-Dichloropropane	NE	NE	mg/kg	0.3	U	0.31	U	0.52	U	3.4	U	1.5	U
2-Butanone	500	0.12	mg/kg	0.59	U	0.62	U	1	U	6.9	U	2.9	U
2-Hexanone	NE	NE	mg/kg	0.59	U	0.62	U	1	U	6.9	U	2.9	U
4-Ethyltoluene	NE	NE	mg/kg	0.24	U	0.25	U	0.41	U	2.7	U	1.2	U
4-Methyl-2-pentanone	NE	NE	mg/kg	0.59	U	0.62	U	1	U	6.9	U	2.9	U
Acetone	500	0.05	mg/kg	0.59	U	0.62	U	1	U	6.9	U	2.9	U
Acrylonitrile	NE	NE	mg/kg	0.59	U	0.62	U	1	U	6.9	U	2.9	U
Benzene	44	0.06	mg/kg	0.059	U	0.062	U	0.1	U	0.69	U	0.29	U
Bromobenzene	NE	NE	mg/kg	0.3	U	0.31	U	0.52	U	3.4	U	1.5	U
Bromochloromethane	NE	NE	mg/kg	0.3	U	0.31	U	0.52	U	3.4	U	1.5	U
Bromodichloromethane	NE	NE	mg/kg	0.059	U	0.062	U	0.1	U	0.69	U	0.29	U
Bromoform	NE	NE	mg/kg	0.24	U	0.25	U	0.41	U	2.7	U	1.2	U
Bromomethane	NE	NE	mg/kg	0.12	U	0.12	U	0.21	U	1.4	U	0.59	U
Carbon disulfide	NE	NE	mg/kg	0.59	U	0.62	U	1	U	6.9	U	2.9	U
Carbon tetrachloride	22	0.76	mg/kg	0.059	U	0.062	U	0.1	U	0.69	U	0.29	U
Chlorobenzene	500	1.1	mg/kg	0.059	U	0.062	U	0.1	U	0.69	U	0.29	U
Chloroethane	NE	NE	mg/kg	0.12	U	0.12	U	0.21	U	1.4	U	0.59	U
Chloroform	350	0.37	mg/kg	0.089	U	0.094	U	0.15	U	1	U	0.44	U
Chloromethane	NE	NE	mg/kg	0.3	U	0.31	U	0.52	U	3.4	U	1.5	U
cis-1,2-Dichloroethene	500	0.25	mg/kg							**83**			
cis-1,2-Dichloroethene	500	0.25	mg/kg	**1.3**		0.12		**0.34**		**72**		**1**	
cis-1,3-Dichloropropene	NE	NE	mg/kg	0.059	U	0.062	U	0.1	U	0.69	U	0.29	U
Dibromochloromethane	NE	NE	mg/kg	0.059	U	0.062	U	0.1	U	0.69	U	0.29	U
Dibromomethane	NE	NE	mg/kg	0.59	U	0.62	U	1	U	6.9	U	2.9	U
Dichlorodifluoromethane	NE	NE	mg/kg	0.59	U	0.62	U	1	U	6.9	U	2.9	U
Ethylbenzene	390	1	mg/kg	0.059	U	0.062	U	0.1	U	0.69	U	0.29	U
Hexachlorobutadiene	NE	NE	mg/kg	0.3	U	0.31	U	0.52	U	3.4	U	1.5	U
Isopropylbenzene	NE	NE	mg/kg	0.059	U	0.062	U	0.1	U	0.69	U	0.29	U
Methyl tert butyl ether	500	0.93	mg/kg	0.12	U	0.12	U	0.21	U	1.4	U	0.59	U
Methylene chloride	500	0.05	mg/kg	0.59	U	0.62	U	1	U	6.9	U	2.9	U
n-Butylbenzene	NE	NE	mg/kg	0.059	U	0.062	U	0.1	U	0.69	U	0.29	U
n-Propylbenzene	500	3.9	mg/kg	0.059	U	0.062	U	0.1	U	0.69	U	0.29	U
Naphthalene	500	12	mg/kg	0.3	U	0.31	U	0.52	U	3.4	U	1.5	U
o-Chlorotoluene	NE	NE	mg/kg	0.3	U	0.31	U	0.52	U	3.4	U	1.5	U
o-Xylene	500	1.6	mg/kg	0.12	U	0.12	U	0.21	U	1.4	U	0.59	U
p-Chlorotoluene	NE	NE	mg/kg	0.3	U	0.31	U	0.52	U	3.4	U	1.5	U
p-Isopropyltoluene	NE	NE	mg/kg	0.059	U	0.062	U	0.1	U	0.69	U	0.29	U
p/m-Xylene	500	1.6	mg/kg	0.12	U	0.12	U	0.21	U	1.4	U	0.59	U
sec-Butylbenzene	500	11	mg/kg	0.059	U	0.062	U	0.1	U	0.69	U	0.29	U
Styrene	NE	NE	mg/kg	0.12	U	0.12	U	0.21	U	1.4	U	0.59	U
tert-Butylbenzene	500	5.9	mg/kg	0.3	U	0.31	U	0.52	U	3.4	U	1.5	U
Tetrachloroethene	150	1.3	mg/kg	0.44		0.49		0.1	U	0.69	U	**24**	
Toluene	500	0.7	mg/kg	0.089	U	0.094	U	0.15	U	1	U	0.44	U
trans-1,2-Dichloroethene	500	0.19	mg/kg							**2.2**			
trans-1,2-Dichloroethene	500	0.19	mg/kg	0.16		**0.26**		0.15	U	**1.8**		0.44	U
trans-1,3-Dichloropropene	NE	NE	mg/kg	0.059	U	0.062	U	0.1	U	0.69	U	0.29	U
Trichloroethene	200	0.47	mg/kg							**4.2**			
Trichloroethene	200	0.47	mg/kg	0.068		0.062	U	0.1	U	**3.7**		**3.6**	
Trichlorofluoromethane	NE	NE	mg/kg	0.3	U	0.31	U	0.52	U	3.4	U	1.5	U
Vinyl acetate	NE	NE	mg/kg	0.59	U	0.62	U	1	U	6.9	U	2.9	U
Vinyl chloride	13	0.02	mg/kg							**1.6**			
Vinyl chloride	13	0.02	mg/kg	**3.4**		0.12	U	0.21	U	1.4	U	0.59	U

Table 1
Summary of Soil Samples Which Exceed the SCOs
Orangetown Shopping Center - Brownfield Site #C344066
Orangeburg, New York

Location	NYSDEC Restricted Use Soil Cleanup Objectives Table 375-6.89(b)			Bottom, south section		Bottom, north section		Sparkle Cleaners		Sparkle Cleaners		Sparkle Cleaners	
Sample ID				EX001BS(4)-EX-1BS(4)		DUPLICATE		B1, 10-12		B2, 10-12		B3, 10-12	
SAMPLING DATE	Protection of Public Health	Protection of Groundwater		14-Jan-09		14-Jan-09		24-Feb-09		24-Feb-09		25-Feb-09	
LAB SAMPLE ID				L0900616-07		L0900616-10		L0902559-01		L0902559-02		L0902559-03	
ANALYTE	Commercial		Units		Qual		Qual		Qual		Qual		Qual
Semi-Volatile Organics by GC/MS													
1,2,4,5-Tetrachlorobenzene	NS	NS	mg/kg	-		-		1.5	U	1.5	U	1.5	U
1,2,4-Trichlorobenzene	NS	NS	mg/kg	-		-		0.37	U	0.38	U	0.38	U
1,2-Dichlorobenzene	NS	NS	mg/kg	-		-		0.37	U	0.38	U	0.38	U
1,3-Dichlorobenzene	NS	NS	mg/kg	-		-		0.37	U	0.38	U	0.38	U
1,4-Dichlorobenzene	NS	NS	mg/kg	-		-		0.37	U	0.38	U	0.38	U
2,4,5-Trichlorophenol	NS	NS	mg/kg	-		-		0.37	U	0.38	U	0.38	U
2,4,6-Trichlorophenol	NS	NS	mg/kg	-		-		0.37	U	0.38	U	0.38	U
2,4-Dichlorophenol	NS	NS	mg/kg	-		-		0.73	U	0.76	U	0.77	U
2,4-Dimethylphenol	NS	NS	mg/kg	-		-		0.37	U	0.38	U	0.38	U
2,4-Dinitrophenol	NS	NS	mg/kg	-		-		1.5	U	1.5	U	1.5	U
2,4-Dinitrotoluene	NS	NS	mg/kg	-		-		0.37	U	0.38	U	0.38	U
2,6-Dinitrotoluene	NS	NS	mg/kg	-		-		0.37	U	0.38	U	0.38	U
2-Chloronaphthalene	NS	NS	mg/kg	-		-		0.44	U	0.45	U	0.46	U
2-Chlorophenol	NS	NS	mg/kg	-		-		0.44	U	0.45	U	0.46	U
2-Methylnaphthalene	NS	NS	mg/kg	-		-		0.37	U	0.38	U	0.38	U
2-Methylphenol	500	0.33	mg/kg	-		-		0.44	U	0.45	U	0.46	U
2-Nitroaniline	NS	NS	mg/kg	-		-		0.37	U	0.38	U	0.38	U
2-Nitrophenol	NS	NS	mg/kg	-		-		1.5	U	1.5	U	1.5	U
3,3'-Dichlorobenzidine	NS	NS	mg/kg	-		-		0.73	U	0.76	U	0.77	U
3-Methylphenol/4-Methylpheno	NS	NS	mg/kg	-		-		0.44	U	0.45	U	0.46	U
3-Nitroaniline	NS	NS	mg/kg	-		-		0.37	U	0.38	U	0.38	U
4,6-Dinitro-o-cresol	NS	NS	mg/kg	-		-		1.5	U	1.5	U	1.5	U
4-Bromophenyl phenyl ether	NS	NS	mg/kg	-		-		0.37	U	0.38	U	0.38	U
4-Chloroaniline	NS	NS	mg/kg	-		-		0.37	U	0.38	U	0.38	U
4-Chlorophenyl phenyl ether	NS	NS	mg/kg	-		-		0.37	U	0.38	U	0.38	U
4-Nitroaniline	NS	NS	mg/kg	-		-		0.51	U	0.53	U	0.54	U
4-Nitrophenol	NS	NS	mg/kg	-		-		0.73	U	0.76	U	0.77	U
Acenaphthene	500	98	mg/kg	-		-		0.37	U	0.38	U	0.38	U
Acenaphthylene	500	107	mg/kg	-		-		0.37	U	0.38	U	0.38	U
Acetophenone	NS	NS	mg/kg	-		-		1.5	U	1.5	U	1.5	U
Anthracene	500	1000	mg/kg	-		-		0.37	U	0.38	U	0.38	U
Benzo(a)anthracene	5.6	1	mg/kg	-		-		0.37	U	0.58		0.38	U
Benzo(a)pyrene	1	22	mg/kg	-		-		0.37	U	0.53		0.38	U
Benzo(b)fluoranthene	5.6	1.7	mg/kg	-		-		0.37	U	0.7		0.38	U
Benzo(ghi)perylene	500	1000	mg/kg	-		-		0.37	U	0.38	U	0.38	U
Benzo(k)fluoranthene	56	1.7	mg/kg	-		-		0.37	U	0.38	U	0.38	U
Benzoic Acid	NS	NS	mg/kg	-		-		3.7	U	3.8	U	3.8	U
Benzyl Alcohol	NS	NS	mg/kg	-		-		0.73	U	0.76	U	0.77	U
Biphenyl	NS	NS	mg/kg	-		-		0.37	U	0.38	U	0.38	U
Bis(2-chloroethoxy)methane	NS	NS	mg/kg	-		-		0.37	U	0.38	U	0.38	U
Bis(2-chloroethyl)ether	NS	NS	mg/kg	-		-		0.37	U	0.38	U	0.38	U
Bis(2-chloroisopropyl)ether	NS	NS	mg/kg	-		-		0.37	U	0.38	U	0.38	U
Bis(2-Ethylhexyl)phthalate	NS	NS	mg/kg	-		-		0.73	U	0.76	U	0.77	U
Butyl benzyl phthalate	NS	NS	mg/kg	-		-		0.37	U	0.38	U	0.38	U
Carbazole	NS	NS	mg/kg	-		-		0.37	U	0.38	U	0.38	U
Chrysene	56	1	mg/kg	-		-		0.37	U	0.63		0.38	U
Di-n-butylphthalate	NS	NS	mg/kg	-		-		0.37	U	0.38	U	0.38	U
Di-n-octylphthalate	NS	NS	mg/kg	-		-		0.37	U	0.38	U	0.38	U
Dibenzo(a,h)anthracene	0.56	1000	mg/kg	-		-		0.37	U	0.38	U	0.38	U
Dibenzofuran	NS	NS	mg/kg	-		-		0.37	U	0.38	U	0.38	U
Diethyl phthalate	NS	NS	mg/kg	-		-		0.37	U	0.38	U	0.38	U
Dimethyl phthalate	NS	NS	mg/kg	-		-		0.37	U	0.38	U	0.38	U
Fluoranthene	500	1000	mg/kg	-		-				0.38	U		
Fluoranthene	500	1000	mg/kg	-		-		0.37	U	1.3		0.38	U
Fluorene	500	386	mg/kg	-		-		0.37	U	0.38	U	0.38	U
Hexachlorobenzene	NS	NS	mg/kg	-		-		0.37	U	0.38	U	0.38	U
Hexachlorobutadiene	NS	NS	mg/kg	-		-		0.73	U	0.76	U	0.77	U
Hexachlorocyclopentadiene	NS	NS	mg/kg	-		-		0.73	U	0.76	U	0.77	U
Hexachloroethane	NS	NS	mg/kg	-		-		0.37	U	0.38	U	0.38	U
Indeno(1,2,3-cd)Pyrene	5.6	8.2	mg/kg	-		-		0.37	U	0.38	U	0.38	U
Isophorone	NS	NS	mg/kg	-		-		0.37	U	0.38	U	0.38	U
n-Nitrosodi-n-propylamine	NS	NS	mg/kg	-		-		0.37	U	0.38	U	0.38	U
Naphthalene	500	12	mg/kg	-		-		0.37	U	0.38	U	0.38	U
Nitrobenzene	NS	NS	mg/kg	-		-		0.37	U	0.38	U	0.38	U
NitrosoDiPhenylAmine(NDPA)/	NS	NS	mg/kg	-		-		1.1	U	1.1	U	1.1	U
P-Chloro-M-Cresol	NS	NS	mg/kg	-		-		0.37	U	0.38	U	0.38	U
Pentachlorophenol	6.7	0.8	mg/kg	-		-		1.5	U	1.5	U	1.5	U
Phenanthrene	500	1000	mg/kg	-		-		0.37	U	0.93		0.38	U
Phenol	500	0.33	mg/kg	-		-		0.51	U	0.53	U	0.54	U
Pyrene	500	1000	mg/kg	-		-				0.38	U		
Pyrene	500	1000	mg/kg	-		-		0.37	U	0.96		0.38	U

Table 1
Summary of Soil Samples Which Exceed the SCOs
Orangetown Shopping Center - Brownfield Site #C344066
Orangeburg, New York

Location	NYSDEC Restricted Use Soil Cleanup Objectives Table 375-6.89(b)			Bottom, south section		Bottom, north section		Sparkle Cleaners		Sparkle Cleaners		Sparkle Cleaners	
Sample ID				EX001BS(4)-EX-1BS(4)		DUPLICATE		B1, 10-12		B2, 10-12		B3, 10-12	
SAMPLING DATE	Protection of Public Health	Protection of Groundwater		14-Jan-09		14-Jan-09		24-Feb-09		24-Feb-09		25-Feb-09	
LAB SAMPLE ID				L0900616-07		L0900616-10		L0902559-01		L0902559-02		L0902559-03	
ANALYTE	Commercial		Units		Qual		Qual		Qual		Qual		Qual
Semi-Volatile Organics by GC/MS - SIM													
2-Chloronaphthalene	NS	NS	mg/kg	-		-		0.015	U	0.015	U	0.015	U
2-Methylnaphthalene	NS	NS	mg/kg	-		-				0.037			
2-Methylnaphthalene	NS	NS	mg/kg	-		-		0.015	U	0.015	U	0.015	U
Acenaphthene	500	98	mg/kg	-		-				0.15			
Acenaphthene	500	98	mg/kg	-		-		0.015	U	0.015	U	0.015	U
Acenaphthylene	500	107	mg/kg	-		-		0.015	U	0.015	U	0.015	U
Anthracene	500	1000	mg/kg	-		-				0.21			
Anthracene	500	1000	mg/kg	-		-		0.015	U	0.015	U	0.015	U
Benzo(a)anthracene	5.6	1	mg/kg	-		-				0.52			
Benzo(a)anthracene	5.6	1	mg/kg	-		-		0.015	U	0.031		0.015	U
Benzo(a)pyrene	1	22	mg/kg	-		-				0.47			
Benzo(a)pyrene	1	22	mg/kg	-		-		0.015	U	0.032		0.015	U
Benzo(b)fluoranthene	5.6	1.7	mg/kg	-		-				0.61			
Benzo(b)fluoranthene	5.6	1.7	mg/kg	-		-		0.015	U	0.046		0.015	U
Benzo(ghi)perylene	500	1000	mg/kg	-		-				0.22			
Benzo(ghi)perylene	500	1000	mg/kg	-		-		0.015	U	0.021		0.015	U
Benzo(k)fluoranthene	56	1.7	mg/kg	-		-				0.22			
Benzo(k)fluoranthene	56	1.7	mg/kg	-		-		0.015	U	0.017		0.015	U
Chrysene	56	1	mg/kg	-		-				0.55			
Chrysene	56	1	mg/kg	-		-		0.015	U	0.028		0.015	U
Dibenzo(a,h)anthracene	0.56	1000	mg/kg	-		-				0.071			
Dibenzo(a,h)anthracene	0.56	1000	mg/kg	-		-		0.015	U	0.015	U	0.015	U
Fluoranthene	500	1000	mg/kg	-		-				0.98			
Fluoranthene	500	1000	mg/kg	-		-		0.015	U	0.062		0.015	U
Fluorene	500	386	mg/kg	-		-				0.097			
Fluorene	500	386	mg/kg	-		-		0.015	U	0.015	U	0.015	U
Hexachlorobenzene	NS	NS	mg/kg	-		-		0.059	U	0.061	U	0.061	U
Hexachlorobutadiene	NS	NS	mg/kg	-		-		0.037	U	0.038	U	0.038	U
Hexachloroethane	NS	NS	mg/kg	-		-		0.059	U	0.061	U	0.061	U
Indeno(1,2,3-cd)Pyrene	5.6	8.2	mg/kg	-		-				0.23			
Indeno(1,2,3-cd)Pyrene	5.6	8.2	mg/kg	-		-		0.015	U	0.02		0.015	U
Naphthalene	500	12	mg/kg	-		-				0.064			
Naphthalene	500	12	mg/kg	-		-		0.015	U	0.021		0.015	U
Pentachlorophenol	6.7	0.8	mg/kg	-		-		0.059	U	0.061	U	0.061	U
Phenanthrene	500	1000	mg/kg	-		-				0.75			
Phenanthrene	500	1000	mg/kg	-		-		0.015	U	0.048		0.015	U
Pyrene	500	1000	mg/kg	-		-				0.8			
Pyrene	500	1000	mg/kg	-		-		0.015	U	0.053		0.015	U
Organochlorine Pesticides by EPA 8081A													
4,4'-DDD	92	14	mg/kg	-		-		-		0.00379	U	-	
4,4'-DDE	62	17	mg/kg	-		-		-		0.00379	U	-	
4,4'-DDT	47	136	mg/kg	-		-		-		0.00379	U	-	
Aldrin	0.68	0.19	mg/kg	-		-		-		0.00379	U	-	
Alpha-BHC	3.4	0.02	mg/kg	-		-		-		0.00379	U	-	
Beta-BHC	3	0.09	mg/kg	-		-		-		0.00379	U	-	
Chlordane	24	2.9	mg/kg	-		-		-		0.0379	U	-	
Delta-BHC	500	0.25	mg/kg	-		-		-		0.00379	U	-	
Dieldrin	1.4	0.1	mg/kg	-		-		-		0.00379	U	-	
Endosulfan I	200	102	mg/kg	-		-		-		0.00379	U	-	
Endosulfan II	200	102	mg/kg	-		-		-		0.00379	U	-	
Endosulfan sulfate	200	1,000	mg/kg	-		-		-		0.00379	U	-	
Endrin	89	0.06	mg/kg	-		-		-		0.00379	U	-	
Endrin ketone	NE	NE	mg/kg	-		-		-		0.00379	U	-	
Heptachlor	15	0.38	mg/kg	-		-		-		0.00379	U	-	
Heptachlor epoxide	NE	NE	mg/kg	-		-		-		0.00379	U	-	
Lindane	9.2	0.1	mg/kg	-		-		-		0.00379	U	-	
Methoxychlor	NE	NE	mg/kg	-		-		-		0.0152	U	-	
trans-Chlordane	NE	NE	mg/kg	-		-		-		0.00379	U	-	
Total Metals & Other Analytes													
Iron, Total	NE	NE	mg/kg	14000		-		-		-		-	
Solids, Total	NE	NE	%	85		80		91		88		87	
pH	NE	NE	SU	6.5		-		-		-		-	
Total Organic Carbon (Rep1)	NE	NE	%	0.59		-		-		-		-	
Total Organic Carbon (Rep2)	NE	NE	%	0.49		-		-		-		-	
COD	NE	NE	mg/kg	17000		-		-		-		-	

NOTES:
U = Not detected at or above the reported limit; tabulated value is the reported limit.
NE = Not Established
mg/kg = milligrams per kilogram
Yellow highlight = result above NYSDEC Restricted Use SCOs
BOLD TEXT = result above NYSDEC Groundwater Protection SCOs
NA = Not Available

Table 2
Summary of Soil Samples Which Meet the SCOs
Orangetown Shopping Center - Brownfield Site #C344066
Orangeburg, New York

Location	NYSDEC Restricted Use Soil Cleanup Objectives Table 375-6.89(b)			North Sidewall		East Sidewall, north section	
Sample ID				EX001N(4)-EX-1N(4)		EX001EN(4)-EX-1EN(4)	
SAMPLING DATE	Protection of Public Health	Protection of Groundwater		14-Jan-09		14-Jan-09	
LAB SAMPLE ID				L0900616-02		L0900616-03	
ANALYTE	Commercial		Units		Qual		Qual
Volatile Organics by EPA 8260B/5035-Low							
1,1,1,2-Tetrachloroethane	NE	NE	mg/kg	0.0011	U	0.0012	U
1,1,1-Trichloroethane	500	0.68	mg/kg	0.0011	U	0.0012	U
1,1,2,2-Tetrachloroethane	NE	NE	mg/kg	0.0011	U	0.0012	U
1,1,2-Trichloroethane	NE	NE	mg/kg	0.0016	U	0.0018	U
1,1-Dichloroethane	240	0.27	mg/kg	0.0016	U	0.0018	U
1,1-Dichloroethene	500	0.33	mg/kg	0.0011	U	0.0012	U
1,1-Dichloropropene	NE	NE	mg/kg	0.0055	U	0.006	U
1,2,3-Trichlorobenzene	NE	NE	mg/kg	0.0055	U	0.006	U
1,2,3-Trichloropropane	NE	NE	mg/kg	0.011	U	0.012	U
1,2,4,5-Tetramethylbenzene	NE	NE	mg/kg	0.0044	U	0.0048	U
1,2,4-Trichlorobenzene	NE	NE	mg/kg	0.0055	U	0.006	U
1,2,4-Trimethylbenzene	190	3.6	mg/kg	0.0055	U	0.006	U
1,2-Dibromo-3-chloropropane	NE	NE	mg/kg	0.0055	U	0.006	U
1,2-Dibromoethane	NE	NE	mg/kg	0.0044	U	0.0048	U
1,2-Dichlorobenzene	500	1.1	mg/kg	0.0055	U	0.006	U
1,2-Dichloroethane	NE	0.02	mg/kg	0.0011	U	0.0012	U
1,2-Dichloropropane	NE	NE	mg/kg	0.0039	U	0.0042	U
1,3,5-Trimethylbenzene	190	NE	mg/kg	0.0055	U	0.006	U
1,3-Dichlorobenzene	280	2.4	mg/kg	0.0055	U	0.006	U
1,3-Dichloropropane	NE	NE	mg/kg	0.0055	U	0.006	U
1,4-Dichlorobenzene	130	1.8	mg/kg	0.0055	U	0.006	U
1,4-Diethylbenzene	NE	NE	mg/kg	0.0044	U	0.0048	U
2,2-Dichloropropane	NE	NE	mg/kg	0.0055	U	0.006	U
2-Butanone	500	0.12	mg/kg	0.011	U	0.012	U
2-Hexanone	NE	NE	mg/kg	0.011	U	0.012	U
4-Ethyltoluene	NE	NE	mg/kg	0.0044	U	0.0048	U
4-Methyl-2-pentanone	NE	NE	mg/kg	0.011	U	0.012	U
Acetone	500	0.05	mg/kg	0.041		0.028	
Acrylonitrile	NE	NE	mg/kg	0.011	U	0.012	U
Benzene	44	0.06	mg/kg	0.0013		0.0012	U
Bromobenzene	NE	NE	mg/kg	0.0055	U	0.006	U
Bromochloromethane	NE	NE	mg/kg	0.0055	U	0.006	U
Bromodichloromethane	NE	NE	mg/kg	0.0011	U	0.0012	U
Bromoform	NE	NE	mg/kg	0.0044	U	0.0048	U
Bromomethane	NE	NE	mg/kg	0.0022	U	0.0024	U
Carbon disulfide	NE	NE	mg/kg	0.011	U	0.012	U
Carbon tetrachloride	22	0.76	mg/kg	0.0011	U	0.0012	U
Chlorobenzene	500	1.1	mg/kg	0.0011	U	0.0012	U
Chloroethane	NE	NE	mg/kg	0.0022	U	0.0024	U
Chloroform	350	0.37	mg/kg	0.0016	U	0.0018	U
Chloromethane	NE	NE	mg/kg	0.0055	U	0.006	U
cis-1,2-Dichloroethene	500	0.25	mg/kg	0.0054		0.037	
cis-1,3-Dichloropropene	NE	NE	mg/kg	0.0011	U	0.0012	U
Dibromochloromethane	NE	NE	mg/kg	0.0011	U	0.0012	U
Dibromomethane	NE	NE	mg/kg	0.011	U	0.012	U
Dichlorodifluoromethane	NE	NE	mg/kg	0.011	U	0.012	U
Ethylbenzene	390	1	mg/kg	0.0011	U	0.0012	U
Hexachlorobutadiene	NE	NE	mg/kg	0.0055	U	0.006	U
Isopropylbenzene	NE	NE	mg/kg	0.0011	U	0.0012	U
Methyl tert butyl ether	500	NE	mg/kg	0.0022	U	0.0024	U
Methylene chloride	500	0.05	mg/kg	0.011	U	0.012	U
n-Butylbenzene	NE	NE	mg/kg	0.0011	U	0.0012	U
n-Propylbenzene	500	3.9	mg/kg	0.0011	U	0.0012	U
Naphthalene	500	12	mg/kg	0.0055	U	0.006	U
o-Chlorotoluene	NE	NE	mg/kg	0.0055	U	0.006	U
o-Xylene	500	NE	mg/kg	0.0022	U	0.0024	U
p-Chlorotoluene	NE	NE	mg/kg	0.0055	U	0.006	U
p-Isopropyltoluene	NE	NE	mg/kg	0.0011	U	0.0012	U
p/m-Xylene	500	NE	mg/kg	0.0022	U	0.0024	U
sec-Butylbenzene	500	11	mg/kg	0.0011	U	0.0012	U
Styrene	NE	NE	mg/kg	0.0022	U	0.0024	U
tert-Butylbenzene	500	5.9	mg/kg	0.0055	U	0.006	U
Tetrachloroethene	150	1.3	mg/kg	0.0023		0.1	
Toluene	500	0.7	mg/kg	0.0016	U	0.0018	U
trans-1,2-Dichloroethene	500	0.19	mg/kg	0.0016	U	0.0018	U
trans-1,3-Dichloropropene	NE	NE	mg/kg	0.0011	U	0.0012	U
Trichloroethene	200	0.47	mg/kg	0.0011	U	0.0063	
Trichlorofluoromethane	NE	NE	mg/kg	0.0055	U	0.006	U
Vinyl acetate	NE	NE	mg/kg	0.011	U	0.012	U
Vinyl chloride	13	0.02	mg/kg	0.01		0.015	

Table 2
Summary of Soil Samples Which Meet the SCOs
Orangetown Shopping Center - Brownfield Site #C344066
Orangeburg, New York

Location	NYSDEC Restricted Use Soil Cleanup Objectives Table 375-6.89(b)			North Sidewall		East Sidewall, north section	
Sample ID				EX001N(4)-EX-1N(4)		EX001EN(4)-EX-1EN(4)	
SAMPLING DATE	Protection of Public Health	Protection of Groundwater		14-Jan-09		14-Jan-09	
LAB SAMPLE ID				L0900616-02		L0900616-03	
ANALYTE	Commercial		Units		Qual		Qual
Volatile Organics by EPA 8260B/5035-Soil Analysis							
1,1,1,2-Tetrachloroethane	NE	NE	mg/kg	-		-	
1,1,1-Trichloroethane	500	0.68	mg/kg	-		-	
1,1,2,2-Tetrachloroethane	NE	NE	mg/kg	-		-	
1,1,2-Trichloroethane	NE	NE	mg/kg	-		-	
1,1-Dichloroethane	240	0.27	mg/kg	-		-	
1,1-Dichloroethene	500	0.33	mg/kg	-		-	
1,1-Dichloropropene	NE	NE	mg/kg	-		-	
1,2,3-Trichlorobenzene	NE	NE	mg/kg	-		-	
1,2,3-Trichloropropane	NE	NE	mg/kg	-		-	
1,2,4,5-Tetramethylbenzene	NE	NE	mg/kg	-		-	
1,2,4-Trichlorobenzene	NE	NE	mg/kg	-		-	
1,2,4-Trimethylbenzene	190	3.6	mg/kg	-		-	
1,2-Dibromo-3-chloropropane	NE	NE	mg/kg	-		-	
1,2-Dibromoethane	NE	NE	mg/kg	-		-	
1,2-Dichlorobenzene	500	1.1	mg/kg	-		-	
1,2-Dichloroethane	NE	NE	mg/kg	-		-	
1,2-Dichloropropane	NE	NE	mg/kg	-		-	
1,3,5-Trimethylbenzene	190	8.4	mg/kg	-		-	
1,3-Dichlorobenzene	280	2.4	mg/kg	-		-	
1,3-Dichloropropane	NE	NE	mg/kg	-		-	
1,4-Dichlorobenzene	130	1.8	mg/kg	-		-	
1,4-Diethylbenzene	NE	NE	mg/kg	-		-	
2,2-Dichloropropane	NE	NE	mg/kg	-		-	
2-Butanone	500	0.12	mg/kg	-		-	
2-Hexanone	NE	NE	mg/kg	-		-	
4-Ethyltoluene	NE	NE	mg/kg	-		-	
4-Methyl-2-pentanone	NE	NE	mg/kg	-		-	
Acetone	500	0.05	mg/kg	-		-	
Acrylonitrile	NE	NE	mg/kg	-		-	
Benzene	44	0.06	mg/kg	-		-	
Bromobenzene	NE	NE	mg/kg	-		-	
Bromochloromethane	NE	NE	mg/kg	-		-	
Bromodichloromethane	NE	NE	mg/kg	-		-	
Bromoform	NE	NE	mg/kg	-		-	
Bromomethane	NE	NE	mg/kg	-		-	
Carbon disulfide	NE	NE	mg/kg	-		-	
Carbon tetrachloride	22	0.76	mg/kg	-		-	
Chlorobenzene	500	1.1	mg/kg	-		-	
Chloroethane	NE	NE	mg/kg	-		-	
Chloroform	350	0.37	mg/kg	-		-	
Chloromethane	NE	NE	mg/kg	-		-	
cis-1,2-Dichloroethene	500	0.25	mg/kg	-		-	
cis-1,3-Dichloropropene	NE	NE	mg/kg	-		-	
Dibromochloromethane	NE	NE	mg/kg	-		-	
Dibromomethane	NE	NE	mg/kg	-		-	
Dichlorodifluoromethane	NE	NE	mg/kg	-		-	
Ethylbenzene	390	1	mg/kg	-		-	
Hexachlorobutadiene	NE	NE	mg/kg	-		-	
Isopropylbenzene	NE	NE	mg/kg	-		-	
Methyl tert butyl ether	500	0.93	mg/kg	-		-	
Methylene chloride	500	0.05	mg/kg	-		-	
n-Butylbenzene	NE	NE	mg/kg	-		-	
n-Propylbenzene	500	3.9	mg/kg	-		-	
Naphthalene	500	12	mg/kg	-		-	
o-Chlorotoluene	NE	NE	mg/kg	-		-	
o-Xylene	500	1.6	mg/kg	-		-	
p-Chlorotoluene	NE	NE	mg/kg	-		-	
p-Isopropyltoluene	NE	NE	mg/kg	-		-	
p/m-Xylene	500	1.6	mg/kg	-		-	
sec-Butylbenzene	500	11	mg/kg	-		-	
Styrene	NE	NE	mg/kg	-		-	
tert-Butylbenzene	500	5.9	mg/kg	-		-	
Tetrachloroethene	150	1.3	mg/kg	-		-	
Toluene	500	0.7	mg/kg	-		-	
trans-1,2-Dichloroethene	500	0.19	mg/kg	-		-	
trans-1,3-Dichloropropene	NE	NE	mg/kg	-		-	
Trichloroethene	200	0.47	mg/kg	-		-	
Trichlorofluoromethane	NE	NE	mg/kg	-		-	
Vinyl acetate	NE	NE	mg/kg	-		-	
Vinyl chloride	13	0.02	mg/kg	-		-	

Table 2
Summary of Soil Samples Which Meet the SCOs
Orangetown Shopping Center - Brownfield Site #C344066
Orangeburg, New York

Location	NYSDEC Restricted Use Soil Cleanup Objectives Table 375-6.89(b)			North Sidewall		East Sidewall, north section	
Sample ID				EX001N(4)-EX-1N(4)		EX001EN(4)-EX-1EN(4)	
SAMPLING DATE	Protection of Public Health	Protection of Groundwater		14-Jan-09		14-Jan-09	
LAB SAMPLE ID				L0900616-02		L0900616-03	
ANALYTE	Commercial		Units		Qual		Qual
Semi-Volatile Organics by GC/MS - SIM							
2-Chloronaphthalene	NS	NS	mg/kg	-		-	
2-Methylnaphthalene	NS	NS	mg/kg	-		-	
Acenaphthene	500	98	mg/kg	-		-	
Acenaphthylene	500	107	mg/kg	-		-	
Anthracene	500	1000	mg/kg	-		-	
Benzo(a)anthracene	5.6	1	mg/kg	-		-	
Benzo(a)pyrene	1	22	mg/kg	-		-	
Benzo(b)fluoranthene	5.6	1.7	mg/kg	-		-	
Benzo(ghi)perylene	500	1000	mg/kg	-		-	
Benzo(k)fluoranthene	56	1.7	mg/kg	-		-	
Chrysene	56	1	mg/kg	-		-	
Dibenzo(a,h)anthracene	0.56	1000	mg/kg	-		-	
Fluoranthene	500	1000	mg/kg	-		-	
Fluorene	500	386	mg/kg	-		-	
Hexachlorobenzene	NS	NS	mg/kg	-		-	
Hexachlorobutadiene	NS	NS	mg/kg	-		-	
Hexachloroethane	NS	NS	mg/kg	-		-	
Indeno(1,2,3-cd)Pyrene	5.6	8.2	mg/kg	-		-	
Naphthalene	500	12	mg/kg	-		-	
Pentachlorophenol	6.7	0.8	mg/kg	-		-	
Phenanthrene	500	1000	mg/kg	-		-	
Pyrene	500	1000	mg/kg			-	
Organochlorine Pesticides by EPA 8081A							
4,4'-DDD	92	14	mg/kg	-		-	
4,4'-DDE	62	17	mg/kg	-		-	
4,4'-DDT	47	136	mg/kg	-		-	
Aldrin	0.68	0.19	mg/kg	-		-	
Alpha-BHC	3.4	0.02	mg/kg	-		-	
Beta-BHC	3	0.09	mg/kg	-		-	
Chlordane	24	2.9	mg/kg	-		-	
Delta-BHC	500	0.25	mg/kg	-		-	
Dieldrin	1.4	0.1	mg/kg	-		-	
Endosulfan I	200	102	mg/kg	-		-	
Endosulfan II	200	102	mg/kg	-		-	
Endosulfan sulfate	200	1,000	mg/kg	-		-	
Endrin	89	0.06	mg/kg	-		-	
Endrin ketone	NE	NE	mg/kg	-		-	
Heptachlor	15	0.38	mg/kg	-		-	
Heptachlor epoxide	NE	NE	mg/kg	-		-	
Lindane	9.2	0.1	mg/kg	-		-	
Methoxychlor	NE	NE	mg/kg	-		-	
trans-Chlordane	NE	NE	mg/kg	-		-	
Total Metals & Other Analytes							
Iron, Total	NE	NE	mg/kg	14000		12000	
Solids, Total	NE	NE	%	87		84	
pH	NE	NE	SU	7.3		7.2	
Total Organic Carbon (Rep1)	NE	NE	%	0.29		0.65	
Total Organic Carbon (Rep2)	NE	NE	%	0.37		0.66	
COD	NE	NE	mg/kg	11000		15000	

NOTES:
NE = Not Established
mg/kg = milligrams per kilogram
Yellow highlight = result above NYSDEC Restricted Use SCOs
BOLD TEXT = result above NYSDEC Groundwater Protection SCOs
NA = Not Available
U = Not detected at or above the reported limit; tabulated value is the reported limit.

Table 2
Summary of Soil Samples Which Meet the SCOs
Orangetown Shopping Center - Brownfield Site #C344066
Orangeburg, New York

Location	NYSDEC Restricted Use Soil Cleanup Objectives Table 375-6.89(b)			Test Pit 2		Test Pit 3	
Sample ID				TP002(3)-TP-2(3)		TP003(3)-TP-3(3)	
SAMPLING DATE	Protection of Public Health	Protection of Groundwater		14-Jan-09		14-Jan-09	
LAB SAMPLE ID				L0900616-08		L0900616-09	
ANALYTE	Commercial		Units		Qual		Qual
Volatile Organics by EPA 8260B/5035-Low							
1,1,1,2-Tetrachloroethane	NE	NE	mg/kg	0.0012	U	0.0012	U
1,1,1-Trichloroethane	500	0.68	mg/kg	0.0012	U	0.0012	U
1,1,2,2-Tetrachloroethane	NE	NE	mg/kg	0.0012	U	0.0012	U
1,1,2-Trichloroethane	NE	NE	mg/kg	0.0017	U	0.0018	U
1,1-Dichloroethane	240	0.27	mg/kg	0.0017	U	0.0018	U
1,1-Dichloroethene	500	0.33	mg/kg	0.0012	U	0.0012	U
1,1-Dichloropropene	NE	NE	mg/kg	0.0058	U	0.0059	U
1,2,3-Trichlorobenzene	NE	NE	mg/kg	0.0058	U	0.0059	U
1,2,3-Trichloropropane	NE	NE	mg/kg	0.012	U	0.012	U
1,2,4,5-Tetramethylbenzene	NE	NE	mg/kg	0.0046	U	0.0047	U
1,2,4-Trichlorobenzene	NE	NE	mg/kg	0.0058	U	0.0059	U
1,2,4-Trimethylbenzene	190	3.6	mg/kg	0.0058	U	0.0059	U
1,2-Dibromo-3-chloropropane	NE	NE	mg/kg	0.0058	U	0.0059	U
1,2-Dibromoethane	NE	NE	mg/kg	0.0046	U	0.0047	U
1,2-Dichlorobenzene	500	1.1	mg/kg	0.0058	U	0.0059	U
1,2-Dichloroethane	NE	0.02	mg/kg	0.0012	U	0.0012	U
1,2-Dichloropropane	NE	NE	mg/kg	0.004	U	0.0041	U
1,3,5-Trimethylbenzene	190	NE	mg/kg	0.0058	U	0.0059	U
1,3-Dichlorobenzene	280	2.4	mg/kg	0.0058	U	0.0059	U
1,3-Dichloropropane	NE	NE	mg/kg	0.0058	U	0.0059	U
1,4-Dichlorobenzene	130	1.8	mg/kg	0.0058	U	0.0059	U
1,4-Diethylbenzene	NE	NE	mg/kg	0.0046	U	0.0047	U
2,2-Dichloropropane	NE	NE	mg/kg	0.0058	U	0.0059	U
2-Butanone	500	0.12	mg/kg	0.012	U	0.012	U
2-Hexanone	NE	NE	mg/kg	0.012	U	0.012	U
4-Ethyltoluene	NE	NE	mg/kg	0.0046	U	0.0047	U
4-Methyl-2-pentanone	NE	NE	mg/kg	0.012	U	0.012	U
Acetone	500	0.05	mg/kg	0.041		0.037	
Acrylonitrile	NE	NE	mg/kg	0.012	U	0.012	U
Benzene	44	0.06	mg/kg	0.002		0.002	
Bromobenzene	NE	NE	mg/kg	0.0058	U	0.0059	U
Bromochloromethane	NE	NE	mg/kg	0.0058	U	0.0059	U
Bromodichloromethane	NE	NE	mg/kg	0.0012	U	0.0012	U
Bromoform	NE	NE	mg/kg	0.0046	U	0.0047	U
Bromomethane	NE	NE	mg/kg	0.0023	U	0.0024	U
Carbon disulfide	NE	NE	mg/kg	0.012	U	0.012	U
Carbon tetrachloride	22	0.76	mg/kg	0.0012	U	0.0012	U
Chlorobenzene	500	1.1	mg/kg	0.0012	U	0.0012	U
Chloroethane	NE	NE	mg/kg	0.0023	U	0.0024	U
Chloroform	350	0.37	mg/kg	0.0017	U	0.0018	U
Chloromethane	NE	NE	mg/kg	0.0058	U	0.0059	U
cis-1,2-Dichloroethene	500	0.25	mg/kg	0.0025		0.0012	U
cis-1,3-Dichloropropene	NE	NE	mg/kg	0.0012	U	0.0012	U
Dibromochloromethane	NE	NE	mg/kg	0.0012	U	0.0012	U
Dibromomethane	NE	NE	mg/kg	0.012	U	0.012	U
Dichlorodifluoromethane	NE	NE	mg/kg	0.012	U	0.012	U
Ethylbenzene	390	1	mg/kg	0.0012	U	0.0012	U
Hexachlorobutadiene	NE	NE	mg/kg	0.0058	U	0.0059	U
Isopropylbenzene	NE	NE	mg/kg	0.0012	U	0.0012	U
Methyl tert butyl ether	500	NE	mg/kg	0.0023	U	0.0024	U
Methylene chloride	500	0.05	mg/kg	0.012	U	0.012	U
n-Butylbenzene	NE	NE	mg/kg	0.0012	U	0.0012	U
n-Propylbenzene	500	3.9	mg/kg	0.0012	U	0.0012	U
Naphthalene	500	12	mg/kg	0.0058	U	0.0059	U
o-Chlorotoluene	NE	NE	mg/kg	0.0058	U	0.0059	U
o-Xylene	500	NE	mg/kg	0.0023	U	0.0024	U
p-Chlorotoluene	NE	NE	mg/kg	0.0058	U	0.0059	U
p-Isopropyltoluene	NE	NE	mg/kg	0.0012	U	0.0012	U
p/m-Xylene	500	NE	mg/kg	0.0023	U	0.0024	U
sec-Butylbenzene	500	11	mg/kg	0.0012	U	0.0012	U
Styrene	NE	NE	mg/kg	0.0023	U	0.0024	U
tert-Butylbenzene	500	5.9	mg/kg	0.0058	U	0.0059	U
Tetrachloroethene	150	1.3	mg/kg	0.0012	U	0.0012	U
Toluene	500	0.7	mg/kg	0.0017	U	0.0018	U
trans-1,2-Dichloroethene	500	0.19	mg/kg	0.0017	U	0.0018	U
trans-1,3-Dichloropropene	NE	NE	mg/kg	0.0012	U	0.0012	U
Trichloroethene	200	0.47	mg/kg	0.0012	U	0.0012	U
Trichlorofluoromethane	NE	NE	mg/kg	0.0058	U	0.0059	U
Vinyl acetate	NE	NE	mg/kg	0.012	U	0.012	U
Vinyl chloride	13	0.02	mg/kg	0.0023	U	0.0024	U

Table 2
Summary of Soil Samples Which Meet the SCOs
Orangetown Shopping Center - Brownfield Site #C344066
Orangeburg, New York

Location	NYSDEC Restricted Use Soil Cleanup Objectives Table 375-6.89(b)			Test Pit 2	Test Pit 3
Sample ID				TP002(3)-TP-2(3)	TP003(3)-TP-3(3)
SAMPLING DATE	Protection of Public Health	Protection of Groundwater		14-Jan-09	14-Jan-09
LAB SAMPLE ID				L0900616-08	L0900616-09
ANALYTE	Commercial		Units	Qual	Qual
Volatile Organics by EPA 8260B/5035-Soil Analysis					
1,1,1,2-Tetrachloroethane	NE	NE	mg/kg	-	-
1,1,1-Trichloroethane	500	0.68	mg/kg	-	-
1,1,2,2-Tetrachloroethane	NE	NE	mg/kg	-	-
1,1,2-Trichloroethane	NE	NE	mg/kg	-	-
1,1-Dichloroethane	240	0.27	mg/kg	-	-
1,1-Dichloroethene	500	0.33	mg/kg	-	-
1,1-Dichloropropene	NE	NE	mg/kg	-	-
1,2,3-Trichlorobenzene	NE	NE	mg/kg	-	-
1,2,3-Trichloropropane	NE	NE	mg/kg	-	-
1,2,4,5-Tetramethylbenzene	NE	NE	mg/kg	-	-
1,2,4-Trichlorobenzene	NE	NE	mg/kg	-	-
1,2,4-Trimethylbenzene	190	3.6	mg/kg	-	-
1,2-Dibromo-3-chloropropane	NE	NE	mg/kg	-	-
1,2-Dibromoethane	NE	NE	mg/kg	-	-
1,2-Dichlorobenzene	500	1.1	mg/kg	-	-
1,2-Dichloroethane	NE	NE	mg/kg	-	-
1,2-Dichloropropane	NE	NE	mg/kg	-	-
1,3,5-Trimethylbenzene	190	8.4	mg/kg	-	-
1,3-Dichlorobenzene	280	2.4	mg/kg	-	-
1,3-Dichloropropane	NE	NE	mg/kg	-	-
1,4-Dichlorobenzene	130	1.8	mg/kg	-	-
1,4-Diethylbenzene	NE	NE	mg/kg	-	-
2,2-Dichloropropane	NE	NE	mg/kg	-	-
2-Butanone	500	0.12	mg/kg	-	-
2-Hexanone	NE	NE	mg/kg	-	-
4-Ethyltoluene	NE	NE	mg/kg	-	-
4-Methyl-2-pentanone	NE	NE	mg/kg	-	-
Acetone	500	0.05	mg/kg	-	-
Acrylonitrile	NE	NE	mg/kg	-	-
Benzene	44	0.06	mg/kg	-	-
Bromobenzene	NE	NE	mg/kg	-	-
Bromochloromethane	NE	NE	mg/kg	-	-
Bromodichloromethane	NE	NE	mg/kg	-	-
Bromoform	NE	NE	mg/kg	-	-
Bromomethane	NE	NE	mg/kg	-	-
Carbon disulfide	NE	NE	mg/kg	-	-
Carbon tetrachloride	22	0.76	mg/kg	-	-
Chlorobenzene	500	1.1	mg/kg	-	-
Chloroethane	NE	NE	mg/kg	-	-
Chloroform	350	0.37	mg/kg	-	-
Chloromethane	NE	NE	mg/kg	-	-
cis-1,2-Dichloroethene	500	0.25	mg/kg	-	-
cis-1,3-Dichloropropene	NE	NE	mg/kg	-	-
Dibromochloromethane	NE	NE	mg/kg	-	-
Dibromomethane	NE	NE	mg/kg	-	-
Dichlorodifluoromethane	NE	NE	mg/kg	-	-
Ethylbenzene	390	1	mg/kg	-	-
Hexachlorobutadiene	NE	NE	mg/kg	-	-
Isopropylbenzene	NE	NE	mg/kg	-	-
Methyl tert butyl ether	500	0.93	mg/kg	-	-
Methylene chloride	500	0.05	mg/kg	-	-
n-Butylbenzene	NE	NE	mg/kg	-	-
n-Propylbenzene	500	3.9	mg/kg	-	-
Naphthalene	500	12	mg/kg	-	-
o-Chlorotoluene	NE	NE	mg/kg	-	-
o-Xylene	500	1.6	mg/kg	-	-
p-Chlorotoluene	NE	NE	mg/kg	-	-
p-Isopropyltoluene	NE	NE	mg/kg	-	-
p/m-Xylene	500	1.6	mg/kg	-	-
sec-Butylbenzene	500	11	mg/kg	-	-
Styrene	NE	NE	mg/kg	-	-
tert-Butylbenzene	500	5.9	mg/kg	-	-
Tetrachloroethene	150	1.3	mg/kg	-	-
Toluene	500	0.7	mg/kg	-	-
trans-1,2-Dichloroethene	500	0.19	mg/kg	-	-
trans-1,3-Dichloropropene	NE	NE	mg/kg	-	-
Trichloroethene	200	0.47	mg/kg	-	-
Trichlorofluoromethane	NE	NE	mg/kg	-	-
Vinyl acetate	NE	NE	mg/kg	-	-
Vinyl chloride	13	0.02	mg/kg	-	-

Table 2
Summary of Soil Samples Which Meet the SCOs
Orangetown Shopping Center - Brownfield Site #C344066
Orangeburg, New York

Location	NYSDEC Restricted Use Soil Cleanup Objectives Table 375-6.89(b)			Test Pit 2		Test Pit 3	
Sample ID				TP002(3)-TP-2(3)		TP003(3)-TP-3(3)	
SAMPLING DATE	Protection of Public Health	Protection of Groundwater		14-Jan-09		14-Jan-09	
LAB SAMPLE ID				L0900616-08		L0900616-09	
ANALYTE	Commercial		Units		Qual		Qual
Semi-Volatile Organics by GC/MS - SIM							
2-Chloronaphthalene	NS	NS	mg/kg	-		-	
2-Methylnaphthalene	NS	NS	mg/kg	-		-	
Acenaphthene	500	98	mg/kg	-		-	
Acenaphthylene	500	107	mg/kg	-		-	
Anthracene	500	1000	mg/kg	-		-	
Benzo(a)anthracene	5.6	1	mg/kg	-		-	
Benzo(a)pyrene	1	22	mg/kg	-		-	
Benzo(b)fluoranthene	5.6	1.7	mg/kg	-		-	
Benzo(ghi)perylene	500	1000	mg/kg	-		-	
Benzo(k)fluoranthene	56	1.7	mg/kg	-		-	
Chrysene	56	1	mg/kg	-		-	
Dibenzo(a,h)anthracene	0.56	1000	mg/kg	-		-	
Fluoranthene	500	1000	mg/kg	-		-	
Fluorene	500	386	mg/kg	-		-	
Hexachlorobenzene	NS	NS	mg/kg	-		-	
Hexachlorobutadiene	NS	NS	mg/kg	-		-	
Hexachloroethane	NS	NS	mg/kg	-		-	
Indeno(1,2,3-cd)Pyrene	5.6	8.2	mg/kg	-		-	
Naphthalene	500	12	mg/kg	-		-	
Pentachlorophenol	6.7	0.8	mg/kg	-		-	
Phenanthrene	500	1000	mg/kg	-		-	
Pyrene	500	1000	mg/kg	-		-	
Organochlorine Pesticides by EPA 8081A							
4,4'-DDD	92	14	mg/kg	-		-	
4,4'-DDE	62	17	mg/kg	-		-	
4,4'-DDT	47	136	mg/kg	-		-	
Aldrin	0.68	0.19	mg/kg	-		-	
Alpha-BHC	3.4	0.02	mg/kg	-		-	
Beta-BHC	3	0.09	mg/kg	-		-	
Chlordane	24	2.9	mg/kg	-		-	
Delta-BHC	500	0.25	mg/kg	-		-	
Dieldrin	1.4	0.1	mg/kg	-		-	
Endosulfan I	200	102	mg/kg	-		-	
Endosulfan II	200	102	mg/kg	-		-	
Endosulfan sulfate	200	1,000	mg/kg	-		-	
Endrin	89	0.06	mg/kg	-		-	
Endrin ketone	NE	NE	mg/kg	-		-	
Heptachlor	15	0.38	mg/kg	-		-	
Heptachlor epoxide	NE	NE	mg/kg	-		-	
Lindane	9.2	0.1	mg/kg	-		-	
Methoxychlor	NE	NE	mg/kg	-		-	
trans-Chlordane	NE	NE	mg/kg	-		-	
Total Metals & Other Analytes							
Iron, Total	NE	NE	mg/kg	-		-	
Solids, Total	NE	NE	%	85		85	
pH	NE	NE	SU	-		-	
Total Organic Carbon (Rep1)	NE	NE	%	-		-	
Total Organic Carbon (Rep2)	NE	NE	%	-		-	
COD	NE	NE	mg/kg	-		-	

NOTES:
NE = Not Established
mg/kg = milligrams per kilogram
Yellow highlight = result above NYSDEC Restricted Use SCOs
BOLD TEXT = result above NYSDEC Groundwater Protection SCOs
NA = Not Available
U = Not detected at or above the reported limit; tabulated value is the reported limit.

Table 4
Excavation Endpoint Sampling Results
Orangetown Shopping Center - Brownfield Site #C344066
Orangeburg, New York

Location	NYSDEC Restricted Use Soil Cleanup Objectives Table 375-6.89(b)			West Sidewall		North Sidewall		East Sidewall, north section	
Sample ID				EX001W(4)-EX-1W(4)		EX001N(4)-EX-1N(4)		EX001EN(4)-EX-1EN(4)	
SAMPLING DATE	Protection of Public Health	Protection of Groundwater		14-Jan-09		14-Jan-09		14-Jan-09	
LAB SAMPLE ID				L0900616-01		L0900616-02		L0900616-03	
ANALYTE	Commercial		Units		Qual		Qual		Qual
Volatile Organics by EPA 8260B/5035-Low									
1,1,1,2-Tetrachloroethane	NE	NE	mg/kg	-		0.0011	U	0.0012	U
1,1,1-Trichloroethane	500	0.68	mg/kg	-		0.0011	U	0.0012	U
1,1,2,2-Tetrachloroethane	NE	NE	mg/kg	-		0.0011	U	0.0012	U
1,1,2-Trichloroethane	NE	NE	mg/kg	-		0.0016	U	0.0018	U
1,1-Dichloroethane	240	0.27	mg/kg	-		0.0016	U	0.0018	U
1,1-Dichloroethene	500	0.33	mg/kg	-		0.0011	U	0.0012	U
1,1-Dichloropropene	NE	NE	mg/kg	-		0.0055	U	0.006	U
1,2,3-Trichlorobenzene	NE	NE	mg/kg	-		0.0055	U	0.006	U
1,2,3-Trichloropropane	NE	NE	mg/kg	-		0.011	U	0.012	U
1,2,4,5-Tetramethylbenzene	NE	NE	mg/kg	-		0.0044	U	0.0048	U
1,2,4-Trichlorobenzene	NE	NE	mg/kg	-		0.0055	U	0.006	U
1,2,4-Trimethylbenzene	190	3.6	mg/kg	-		0.0055	U	0.006	U
1,2-Dibromo-3-chloropropane	NE	NE	mg/kg	-		0.0055	U	0.006	U
1,2-Dibromoethane	NE	NE	mg/kg	-		0.0044	U	0.0048	U
1,2-Dichlorobenzene	500	1.1	mg/kg	-		0.0055	U	0.006	U
1,2-Dichloroethane	NE	0.02	mg/kg	-		0.0011	U	0.0012	U
1,2-Dichloropropane	NE	NE	mg/kg	-		0.0039	U	0.0042	U
1,3,5-Trimethylbenzene	190	NE	mg/kg	-		0.0055	U	0.006	U
1,3-Dichlorobenzene	280	2.4	mg/kg	-		0.0055	U	0.006	U
1,3-Dichloropropane	NE	NE	mg/kg	-		0.0055	U	0.006	U
1,4-Dichlorobenzene	130	1.8	mg/kg	-		0.0055	U	0.006	U
1,4-Diethylbenzene	NE	NE	mg/kg	-		0.0044	U	0.0048	U
2,2-Dichloropropane	NE	NE	mg/kg	-		0.0055	U	0.006	U
2-Butanone	500	0.12	mg/kg	-		0.011	U	0.012	U
2-Hexanone	NE	NE	mg/kg	-		0.011	U	0.012	U
4-Ethyltoluene	NE	NE	mg/kg	-		0.0044	U	0.0048	U
4-Methyl-2-pentanone	NE	NE	mg/kg	-		0.011	U	0.012	U
Acetone	500	0.05	mg/kg	-		0.041		0.028	
Acrylonitrile	NE	NE	mg/kg	-		0.011	U	0.012	U
Benzene	44	0.06	mg/kg	-		0.0013		0.0012	U
Bromobenzene	NE	NE	mg/kg	-		0.0055	U	0.006	U
Bromochloromethane	NE	NE	mg/kg	-		0.0055	U	0.006	U
Bromodichloromethane	NE	NE	mg/kg	-		0.0011	U	0.0012	U
Bromoform	NE	NE	mg/kg	-		0.0044	U	0.0048	U
Bromomethane	NE	NE	mg/kg	-		0.0022	U	0.0024	U
Carbon disulfide	NE	NE	mg/kg	-		0.011	U	0.012	U
Carbon tetrachloride	22	0.76	mg/kg	-		0.0011	U	0.0012	U
Chlorobenzene	500	1.1	mg/kg	-		0.0011	U	0.0012	U
Chloroethane	NE	NE	mg/kg	-		0.0022	U	0.0024	U
Chloroform	350	0.37	mg/kg	-		0.0016	U	0.0018	U
Chloromethane	NE	NE	mg/kg	-		0.0055	U	0.006	U
cis-1,2-Dichloroethene	500	0.25	mg/kg	-		0.0054		0.037	
cis-1,3-Dichloropropene	NE	NE	mg/kg	-		0.0011	U	0.0012	U
Dibromochloromethane	NE	NE	mg/kg	-		0.0011	U	0.0012	U
Dibromomethane	NE	NE	mg/kg	-		0.011	U	0.012	U
Dichlorodifluoromethane	NE	NE	mg/kg	-		0.011	U	0.012	U
Ethylbenzene	390	1	mg/kg	-		0.0011	U	0.0012	U
Hexachlorobutadiene	NE	NE	mg/kg	-		0.0055	U	0.006	U
Isopropylbenzene	NE	NE	mg/kg	-		0.0011	U	0.0012	U
Methyl tert butyl ether	500	NE	mg/kg	-		0.0022	U	0.0024	U
Methylene chloride	500	0.05	mg/kg	-		0.011	U	0.012	U
n-Butylbenzene	NE	NE	mg/kg	-		0.0011	U	0.0012	U
n-Propylbenzene	500	3.9	mg/kg	-		0.0011	U	0.0012	U
Naphthalene	500	12	mg/kg	-		0.0055	U	0.006	U
o-Chlorotoluene	NE	NE	mg/kg	-		0.0055	U	0.006	U
o-Xylene	500	NE	mg/kg	-		0.0022	U	0.0024	U
p-Chlorotoluene	NE	NE	mg/kg	-		0.0055	U	0.006	U
p-Isopropyltoluene	NE	NE	mg/kg	-		0.0011	U	0.0012	U
p/m-Xylene	500	NE	mg/kg	-		0.0022	U	0.0024	U
sec-Butylbenzene	500	11	mg/kg	-		0.0011	U	0.0012	U
Styrene	NE	NE	mg/kg	-		0.0022	U	0.0024	U
tert-Butylbenzene	500	5.9	mg/kg	-		0.0055	U	0.006	U
Tetrachloroethene	150	1.3	mg/kg	-		0.0023		0.1	
Toluene	500	0.7	mg/kg	-		0.0016	U	0.0018	U
trans-1,2-Dichloroethene	500	0.19	mg/kg	-		0.0016	U	0.0018	U
trans-1,3-Dichloropropene	NE	NE	mg/kg	-		0.0011	U	0.0012	U
Trichloroethene	200	0.47	mg/kg	-		0.0011	U	0.0063	
Trichlorofluoromethane	NE	NE	mg/kg	-		0.0055	U	0.006	U
Vinyl acetate	NE	NE	mg/kg	-		0.011	U	0.012	U
Vinyl chloride	13	0.02	mg/kg	-		0.01		0.015	

Table 4
Excavation Endpoint Sampling Results
Orangetown Shopping Center - Brownfield Site #C344066
Orangeburg, New York

Location	NYSDEC Restricted Use Soil Cleanup Objectives Table 375-6.89(b)			West Sidewall		North Sidewall		East Sidewall, north section	
Sample ID				EX001W(4)-EX-1W(4)		EX001N(4)-EX-1N(4)		EX001EN(4)-EX-1EN(4)	
SAMPLING DATE	Protection of Public Health	Protection of Groundwater		14-Jan-09		14-Jan-09		14-Jan-09	
LAB SAMPLE ID				L0900616-01		L0900616-02		L0900616-03	
ANALYTE	Commercial		Units		Qual		Qual		Qual
Volatile Organics by EPA 8260B/5035-Soil Analysis									
1,1,1,2-Tetrachloroethane	NE	NE	mg/kg	0.23	U	-		-	
1,1,1-Trichloroethane	500	0.68	mg/kg	0.23	U	-		-	
1,1,2,2-Tetrachloroethane	NE	NE	mg/kg	0.23	U	-		-	
1,1,2-Trichloroethane	NE	NE	mg/kg	0.34	U	-		-	
1,1-Dichloroethane	240	0.27	mg/kg	0.34	U	-		-	
1,1-Dichloroethene	500	0.33	mg/kg	0.23	U	-		-	
1,1-Dichloropropene	NE	NE	mg/kg	1.1	U	-		-	
1,2,3-Trichlorobenzene	NE	NE	mg/kg	1.1	U	-		-	
1,2,3-Trichloropropane	NE	NE	mg/kg	2.3	U	-		-	
1,2,4,5-Tetramethylbenzene	NE	NE	mg/kg	0.92	U	-		-	
1,2,4-Trichlorobenzene	NE	NE	mg/kg	1.1	U	-		-	
1,2,4-Trimethylbenzene	190	3.6	mg/kg	1.1	U	-		-	
1,2-Dibromo-3-chloropropane	NE	NE	mg/kg	1.1	U	-		-	
1,2-Dibromoethane	NE	NE	mg/kg	0.92	U	-		-	
1,2-Dichlorobenzene	500	1.1	mg/kg	1.1	U	-		-	
1,2-Dichloroethane	NE	NE	mg/kg	0.23	U	-		-	
1,2-Dichloropropane	NE	NE	mg/kg	0.8	U	-		-	
1,3,5-Trimethylbenzene	190	8.4	mg/kg	1.1	U	-		-	
1,3-Dichlorobenzene	280	2.4	mg/kg	1.1	U	-		-	
1,3-Dichloropropane	NE	NE	mg/kg	1.1	U	-		-	
1,4-Dichlorobenzene	130	1.8	mg/kg	1.1	U	-		-	
1,4-Diethylbenzene	NE	NE	mg/kg	0.92	U	-		-	
2,2-Dichloropropane	NE	NE	mg/kg	1.1	U	-		-	
2-Butanone	500	0.12	mg/kg	2.3	U	-		-	
2-Hexanone	NE	NE	mg/kg	2.3	U	-		-	
4-Ethyltoluene	NE	NE	mg/kg	0.92	U	-		-	
4-Methyl-2-pentanone	NE	NE	mg/kg	2.3	U	-		-	
Acetone	500	0.05	mg/kg	2.3	U	-		-	
Acrylonitrile	NE	NE	mg/kg	2.3	U	-		-	
Benzene	44	0.06	mg/kg	0.23	U	-		-	
Bromobenzene	NE	NE	mg/kg	1.1	U	-		-	
Bromochloromethane	NE	NE	mg/kg	1.1	U	-		-	
Bromodichloromethane	NE	NE	mg/kg	0.23	U	-		-	
Bromoform	NE	NE	mg/kg	0.92	U	-		-	
Bromomethane	NE	NE	mg/kg	0.46	U	-		-	
Carbon disulfide	NE	NE	mg/kg	2.3	U	-		-	
Carbon tetrachloride	22	0.76	mg/kg	0.23	U	-		-	
Chlorobenzene	500	1.1	mg/kg	0.23	U	-		-	
Chloroethane	NE	NE	mg/kg	0.46	U	-		-	
Chloroform	350	0.37	mg/kg	0.34	U	-		-	
Chloromethane	NE	NE	mg/kg	1.1	U	-		-	
cis-1,2-Dichloroethene	500	0.25	mg/kg	**1.1**		-		-	
cis-1,3-Dichloropropene	NE	NE	mg/kg	0.23	U	-		-	
Dibromochloromethane	NE	NE	mg/kg	0.23	U	-		-	
Dibromomethane	NE	NE	mg/kg	2.3	U	-		-	
Dichlorodifluoromethane	NE	NE	mg/kg	2.3	U	-		-	
Ethylbenzene	390	1	mg/kg	0.23	U	-		-	
Hexachlorobutadiene	NE	NE	mg/kg	1.1	U	-		-	
Isopropylbenzene	NE	NE	mg/kg	0.23	U	-		-	
Methyl tert butyl ether	500	0.93	mg/kg	0.46	U	-		-	
Methylene chloride	500	0.05	mg/kg	2.3	U	-		-	
n-Butylbenzene	NE	NE	mg/kg	0.23	U	-		-	
n-Propylbenzene	500	3.9	mg/kg	0.23	U	-		-	
Naphthalene	500	12	mg/kg	1.1	U	-		-	
o-Chlorotoluene	NE	NE	mg/kg	1.1	U	-		-	
o-Xylene	500	1.6	mg/kg	0.46	U	-		-	
p-Chlorotoluene	NE	NE	mg/kg	1.1	U	-		-	
p-Isopropyltoluene	NE	NE	mg/kg	0.23	U	-		-	
p/m-Xylene	500	1.6	mg/kg	0.46	U	-		-	
sec-Butylbenzene	500	11	mg/kg	0.23	U	-		-	
Styrene	NE	NE	mg/kg	0.46	U	-		-	
tert-Butylbenzene	500	5.9	mg/kg	1.1	U	-		-	
Tetrachloroethene	150	1.3	mg/kg	**16**		-		-	
Toluene	500	0.7	mg/kg	0.34	U	-		-	
trans-1,2-Dichloroethene	500	0.19	mg/kg	0.34	U	-		-	
trans-1,3-Dichloropropene	NE	NE	mg/kg	0.23	U	-		-	
Trichloroethene	200	0.47	mg/kg	**1.2**		-		-	
Trichlorofluoromethane	NE	NE	mg/kg	1.1	U	-		-	
Vinyl acetate	NE	NE	mg/kg	2.3	U	-		-	
Vinyl chloride	13	0.02	mg/kg	**0.46**	**U**	-		-	

Table 4
Excavation Endpoint Sampling Results
Orangetown Shopping Center - Brownfield Site #C344066
Orangeburg, New York

Location	NYSDEC Restricted Use Soil Cleanup Objectives Table 375-6.89(b)			West Sidewall		North Sidewall		East Sidewall, north section	
Sample ID				EX001W(4)-EX-1W(4)		EX001N(4)-EX-1N(4)		EX001EN(4)-EX-1EN(4)	
SAMPLING DATE	Protection of Public Health	Protection of Groundwater		14-Jan-09		14-Jan-09		14-Jan-09	
LAB SAMPLE ID				L0900616-01		L0900616-02		L0900616-03	
ANALYTE	Commercial		Units		Qual		Qual		Qual
Organochlorine Pesticides by EPA 8081A									
4,4'-DDD	92	14	mg/kg	0.00388	U	-		-	
4,4'-DDE	62	17	mg/kg	0.00388	U	-		-	
4,4'-DDT	47	136	mg/kg	0.00388	U	-		-	
Aldrin	0.68	0.19	mg/kg	0.00388	U	-		-	
Alpha-BHC	3.4	0.02	mg/kg	0.00388	U	-		-	
Beta-BHC	3	0.09	mg/kg	0.00388	U	-		-	
Chlordane	24	2.9	mg/kg	0.0388	U	-		-	
Delta-BHC	500	0.25	mg/kg	0.00388	U	-		-	
Dieldrin	1.4	0.1	mg/kg	0.00388	U	-		-	
Endosulfan I	200	102	mg/kg	0.00388	U	-		-	
Endosulfan II	200	102	mg/kg	0.00388	U	-		-	
Endosulfan sulfate	200	1,000	mg/kg	0.00388	U	-		-	
Endrin	89	0.06	mg/kg	0.00388	U	-		-	
Endrin ketone	NE	NE	mg/kg	0.00388	U	-		-	
Heptachlor	15	0.38	mg/kg	0.00388	U	-		-	
Heptachlor epoxide	NE	NE	mg/kg	0.00388	U	-		-	
Lindane	9.2	0.1	mg/kg	0.00388	U	-		-	
Methoxychlor	NE	NE	mg/kg	0.0155	U	-		-	
trans-Chlordane	NE	NE	mg/kg	0.00388	U	-		-	
Total Metals & Other Analytes									
Iron, Total	NE	NE	mg/kg	13000		14000		12000	
Solids, Total	NE	NE	%	86		87		84	
pH	NE	NE	SU	7.4		7.3		7.2	
Total Organic Carbon (Rep1)	NE	NE	%	0.18		0.29		0.65	
Total Organic Carbon (Rep2)	NE	NE	%	0.22		0.37		0.66	
COD	NE	NE	mg/kg	12000		11000		15000	

NOTES:
U = Not detected at or above the reported limit; tabulated value is the reported limit.
NE = Not Established NA = Not Available
mg/kg = milligrams per kilogram
Yellow highlight = result above NYSDEC Restricted Use SCOs
BOLD TEXT = result above NYSDEC Groundwater Protection SCOs

Table 4
Excavation Endpoint Sampling Results
Orangetown Shopping Center - Brownfield Site #C344066
Orangeburg, New York

Location	NYSDEC Restricted Use Soil Cleanup Objectives Table 375-6.89(b)			South Sidewall	Bottom, north section	East Sidewall, south section
Sample ID				EX001S(4)-EX-1S(4)	EX001BN(4)-EX-1BN(4)	EX001ES(4)-EX-1ES(4)
SAMPLING DATE	Protection of Public Health	Protection of Groundwater		14-Jan-09	14-Jan-09	14-Jan-09
LAB SAMPLE ID				L0900616-04	L0900616-05	L0900616-06
ANALYTE	Commercial		Units	Qual	Qual	Qual
Volatile Organics by EPA 8260B/5035-Low						
1,1,1,2-Tetrachloroethane	NE	NE	mg/kg	-	-	-
1,1,1-Trichloroethane	500	0.68	mg/kg	-	-	-
1,1,2,2-Tetrachloroethane	NE	NE	mg/kg	-	-	-
1,1,2-Trichloroethane	NE	NE	mg/kg	-	-	-
1,1-Dichloroethane	240	0.27	mg/kg	-	-	-
1,1-Dichloroethene	500	0.33	mg/kg	-	-	-
1,1-Dichloropropene	NE	NE	mg/kg	-	-	-
1,2,3-Trichlorobenzene	NE	NE	mg/kg	-	-	-
1,2,3-Trichloropropane	NE	NE	mg/kg	-	-	-
1,2,4,5-Tetramethylbenzene	NE	NE	mg/kg	-	-	-
1,2,4-Trichlorobenzene	NE	NE	mg/kg	-	-	-
1,2,4-Trimethylbenzene	190	3.6	mg/kg	-	-	-
1,2-Dibromo-3-chloropropane	NE	NE	mg/kg	-	-	-
1,2-Dibromoethane	NE	NE	mg/kg	-	-	-
1,2-Dichlorobenzene	500	1.1	mg/kg	-	-	-
1,2-Dichloroethane	NE	0.02	mg/kg	-	-	-
1,2-Dichloropropane	NE	NE	mg/kg	-	-	-
1,3,5-Trimethylbenzene	190	NE	mg/kg	-	-	-
1,3-Dichlorobenzene	280	2.4	mg/kg	-	-	-
1,3-Dichloropropane	NE	NE	mg/kg	-	-	-
1,4-Dichlorobenzene	130	1.8	mg/kg	-	-	-
1,4-Diethylbenzene	NE	NE	mg/kg	-	-	-
2,2-Dichloropropane	NE	NE	mg/kg	-	-	-
2-Butanone	500	0.12	mg/kg	-	-	-
2-Hexanone	NE	NE	mg/kg	-	-	-
4-Ethyltoluene	NE	NE	mg/kg	-	-	-
4-Methyl-2-pentanone	NE	NE	mg/kg	-	-	-
Acetone	500	0.05	mg/kg	-	-	-
Acrylonitrile	NE	NE	mg/kg	-	-	-
Benzene	44	0.06	mg/kg	-	-	-
Bromobenzene	NE	NE	mg/kg	-	-	-
Bromochloromethane	NE	NE	mg/kg	-	-	-
Bromodichloromethane	NE	NE	mg/kg	-	-	-
Bromoform	NE	NE	mg/kg	-	-	-
Bromomethane	NE	NE	mg/kg	-	-	-
Carbon disulfide	NE	NE	mg/kg	-	-	-
Carbon tetrachloride	22	0.76	mg/kg	-	-	-
Chlorobenzene	500	1.1	mg/kg	-	-	-
Chloroethane	NE	NE	mg/kg	-	-	-
Chloroform	350	0.37	mg/kg	-	-	-
Chloromethane	NE	NE	mg/kg	-	-	-
cis-1,2-Dichloroethene	500	0.25	mg/kg	-	-	-
cis-1,3-Dichloropropene	NE	NE	mg/kg	-	-	-
Dibromochloromethane	NE	NE	mg/kg	-	-	-
Dibromomethane	NE	NE	mg/kg	-	-	-
Dichlorodifluoromethane	NE	NE	mg/kg	-	-	-
Ethylbenzene	390	1	mg/kg	-	-	-
Hexachlorobutadiene	NE	NE	mg/kg	-	-	-
Isopropylbenzene	NE	NE	mg/kg	-	-	-
Methyl tert butyl ether	500	NE	mg/kg	-	-	-
Methylene chloride	500	0.05	mg/kg	-	-	-
n-Butylbenzene	NE	NE	mg/kg	-	-	-
n-Propylbenzene	500	3.9	mg/kg	-	-	-
Naphthalene	500	12	mg/kg	-	-	-
o-Chlorotoluene	NE	NE	mg/kg	-	-	-
o-Xylene	500	NE	mg/kg	-	-	-
p-Chlorotoluene	NE	NE	mg/kg	-	-	-
p-Isopropyltoluene	NE	NE	mg/kg	-	-	-
p/m-Xylene	500	NE	mg/kg	-	-	-
sec-Butylbenzene	500	11	mg/kg	-	-	-
Styrene	NE	NE	mg/kg	-	-	-
tert-Butylbenzene	500	5.9	mg/kg	-	-	-
Tetrachloroethene	150	1.3	mg/kg	-	-	-
Toluene	500	0.7	mg/kg	-	-	-
trans-1,2-Dichloroethene	500	0.19	mg/kg	-	-	-
trans-1,3-Dichloropropene	NE	NE	mg/kg	-	-	-
Trichloroethene	200	0.47	mg/kg	-	-	-
Trichlorofluoromethane	NE	NE	mg/kg	-	-	-
Vinyl acetate	NE	NE	mg/kg	-	-	-
Vinyl chloride	13	0.02	mg/kg	-	-	-

Table 4
Excavation Endpoint Sampling Results
Orangetown Shopping Center - Brownfield Site #C344066
Orangeburg, New York

Location	NYSDEC Restricted Use Soil Cleanup Objectives Table 375-6.89(b)			South Sidewall		Bottom, north section		East Sidewall, south section	
Sample ID				EX001S(4)-EX-1S(4)		EX001BN(4)-EX-1BN(4)		EX001ES(4)-EX-1ES(4)	
SAMPLING DATE	Protection of Public Health	Protection of Groundwater		14-Jan-09		14-Jan-09		14-Jan-09	
LAB SAMPLE ID				L0900616-04		L0900616-05		L0900616-06	
ANALYTE	Commercial		Units		Qual		Qual		Qual
Volatile Organics by EPA 8260B/5035-Soil Analysis									
1,1,1,2-Tetrachloroethane	NE	NE	mg/kg	1.2	U	0.062	U	0.057	U
1,1,1-Trichloroethane	500	0.68	mg/kg	1.2	U	0.062	U	0.057	U
1,1,2,2-Tetrachloroethane	NE	NE	mg/kg	1.2	U	0.062	U	0.057	U
1,1,2-Trichloroethane	NE	NE	mg/kg	1.8	U	0.094	U	0.085	U
1,1-Dichloroethane	240	0.27	mg/kg	1.8	U	0.094	U	0.085	U
1,1-Dichloroethene	500	0.33	mg/kg	1.2	U	0.062	U	0.057	U
1,1-Dichloropropene	NE	NE	mg/kg	6	U	0.31	U	0.28	U
1,2,3-Trichlorobenzene	NE	NE	mg/kg	6	U	0.31	U	0.28	U
1,2,3-Trichloropropane	NE	NE	mg/kg	12	U	0.62	U	0.57	U
1,2,4,5-Tetramethylbenzene	NE	NE	mg/kg	4.8	U	0.25	U	0.23	U
1,2,4-Trichlorobenzene	NE	NE	mg/kg	6	U	0.31	U	0.28	U
1,2,4-Trimethylbenzene	190	3.6	mg/kg	6	U	0.31	U	0.28	U
1,2-Dibromo-3-chloropropane	NE	NE	mg/kg	6	U	0.31	U	0.28	U
1,2-Dibromoethane	NE	NE	mg/kg	4.8	U	0.25	U	0.23	U
1,2-Dichlorobenzene	500	1.1	mg/kg	6	U	0.31	U	0.28	U
1,2-Dichloroethane	NE	NE	mg/kg	1.2	U	0.062	U	0.057	U
1,2-Dichloropropane	NE	NE	mg/kg	4.2	U	0.22	U	0.2	U
1,3,5-Trimethylbenzene	190	8.4	mg/kg	6	U	0.31	U	0.28	U
1,3-Dichlorobenzene	280	2.4	mg/kg	6	U	0.31	U	0.28	U
1,3-Dichloropropane	NE	NE	mg/kg	6	U	0.31	U	0.28	U
1,4-Dichlorobenzene	130	1.8	mg/kg	6	U	0.31	U	0.28	U
1,4-Diethylbenzene	NE	NE	mg/kg	4.8	U	0.25	U	0.23	U
2,2-Dichloropropane	NE	NE	mg/kg	6	U	0.31	U	0.28	U
2-Butanone	500	0.12	mg/kg	12	U	0.62	U	0.57	U
2-Hexanone	NE	NE	mg/kg	12	U	0.62	U	0.57	U
4-Ethyltoluene	NE	NE	mg/kg	4.8	U	0.25	U	0.23	U
4-Methyl-2-pentanone	NE	NE	mg/kg	12	U	0.62	U	0.57	U
Acetone	500	0.05	mg/kg	12	U	0.62	U	0.57	U
Acrylonitrile	NE	NE	mg/kg	12	U	0.62	U	0.57	U
Benzene	44	0.06	mg/kg	1.2	U	0.062	U	0.057	U
Bromobenzene	NE	NE	mg/kg	6	U	0.31	U	0.28	U
Bromochloromethane	NE	NE	mg/kg	6	U	0.31	U	0.28	U
Bromodichloromethane	NE	NE	mg/kg	1.2	U	0.062	U	0.057	U
Bromoform	NE	NE	mg/kg	4.8	U	0.25	U	0.23	U
Bromomethane	NE	NE	mg/kg	2.4	U	0.12	U	0.11	U
Carbon disulfide	NE	NE	mg/kg	12	U	0.62	U	0.57	U
Carbon tetrachloride	22	0.76	mg/kg	1.2	U	0.062	U	0.057	U
Chlorobenzene	500	1.1	mg/kg	1.2	U	0.062	U	0.057	U
Chloroethane	NE	NE	mg/kg	2.4	U	0.12	U	0.11	U
Chloroform	350	0.37	mg/kg	1.8	U	0.094	U	0.085	U
Chloromethane	NE	NE	mg/kg	6	U	0.31	U	0.28	U
cis-1,2-Dichloroethene	500	0.25	mg/kg	**140**		0.11		**3.2**	
cis-1,3-Dichloropropene	NE	NE	mg/kg	1.2	U	0.062	U	0.057	U
Dibromochloromethane	NE	NE	mg/kg	1.2	U	0.062	U	0.057	U
Dibromomethane	NE	NE	mg/kg	12	U	0.62	U	0.57	U
Dichlorodifluoromethane	NE	NE	mg/kg	12	U	0.62	U	0.57	U
Ethylbenzene	390	1	mg/kg	1.2	U	0.062	U	0.057	U
Hexachlorobutadiene	NE	NE	mg/kg	6	U	0.31	U	0.28	U
Isopropylbenzene	NE	NE	mg/kg	1.2	U	0.062	U	0.057	U
Methyl tert butyl ether	500	0.93	mg/kg	2.4	U	0.12	U	0.11	U
Methylene chloride	500	0.05	mg/kg	12	U	0.62	U	0.57	U
n-Butylbenzene	NE	NE	mg/kg	1.2	U	0.062	U	0.057	U
n-Propylbenzene	500	3.9	mg/kg	1.2	U	0.062	U	0.057	U
Naphthalene	500	12	mg/kg	6	U	0.31	U	0.28	U
o-Chlorotoluene	NE	NE	mg/kg	6	U	0.31	U	0.28	U
o-Xylene	500	1.6	mg/kg	2.4	U	0.12	U	0.11	U
p-Chlorotoluene	NE	NE	mg/kg	6	U	0.31	U	0.28	U
p-Isopropyltoluene	NE	NE	mg/kg	1.2	U	0.062	U	0.057	U
p/m-Xylene	500	1.6	mg/kg	2.4	U	0.12	U	0.11	U
sec-Butylbenzene	500	11	mg/kg	1.2	U	0.062	U	0.057	U
Styrene	NE	NE	mg/kg	2.4	U	0.12	U	0.11	U
tert-Butylbenzene	500	5.9	mg/kg	6	U	0.31	U	0.28	U
Tetrachloroethene	150	1.3	mg/kg	**3.2**		0.093		0.13	
Toluene	500	0.7	mg/kg	1.8	U	0.094	U	0.085	U
trans-1,2-Dichloroethene	500	0.19	mg/kg	**2.3**		**0.24**		0.13	
trans-1,3-Dichloropropene	NE	NE	mg/kg	1.2	U	0.062	U	0.057	U
Trichloroethene	200	0.47	mg/kg	**4**		0.062	U	0.057	U
Trichlorofluoromethane	NE	NE	mg/kg	6	U	0.31	U	0.28	U
Vinyl acetate	NE	NE	mg/kg	12	U	0.62	U	0.57	U
Vinyl chloride	13	0.02	mg/kg	**25**		0.12	**U**	**0.98**	

Table 4
Excavation Endpoint Sampling Results
Orangetown Shopping Center - Brownfield Site #C344066
Orangeburg, New York

Location	NYSDEC Restricted Use Soil Cleanup Objectives Table 375-6.89(b)			South Sidewall		Bottom, north section		East Sidewall, south section	
Sample ID				EX001S(4)-EX-1S(4)		EX001BN(4)-EX-1BN(4)		EX001ES(4)-EX-1ES(4)	
SAMPLING DATE	Protection of Public Health	Protection of Groundwater		14-Jan-09		14-Jan-09		14-Jan-09	
LAB SAMPLE ID				L0900616-04		L0900616-05		L0900616-06	
ANALYTE	Commercial		Units		Qual		Qual		Qual
Organochlorine Pesticides by EPA 8081A									
4,4'-DDD	92	14	mg/kg	-		0.00417	U	-	
4,4'-DDE	62	17	mg/kg	-		0.00562		-	
4,4'-DDT	47	136	mg/kg	-		0.00417	U	-	
Aldrin	0.68	0.19	mg/kg	-		0.00417	U	-	
Alpha-BHC	3.4	0.02	mg/kg	-		0.00417	U	-	
Beta-BHC	3	0.09	mg/kg	-		0.00417	U	-	
Chlordane	24	2.9	mg/kg	-		0.0417	U	-	
Delta-BHC	500	0.25	mg/kg	-		0.00417	U	-	
Dieldrin	1.4	0.1	mg/kg	-		0.00417	U	-	
Endosulfan I	200	102	mg/kg	-		0.00417	U	-	
Endosulfan II	200	102	mg/kg	-		0.00417	U	-	
Endosulfan sulfate	200	1,000	mg/kg	-		0.00417	U	-	
Endrin	89	0.06	mg/kg	-		0.00417	U	-	
Endrin ketone	NE	NE	mg/kg	-		0.00417	U	-	
Heptachlor	15	0.38	mg/kg	-		0.00417	U	-	
Heptachlor epoxide	NE	NE	mg/kg	-		0.00417	U	-	
Lindane	9.2	0.1	mg/kg	-		0.00417	U	-	
Methoxychlor	NE	NE	mg/kg	-		0.0167	U	-	
trans-Chlordane	NE	NE	mg/kg	-		0.00417	U	-	
Total Metals & Other Analytes									
Iron, Total	NE	NE	mg/kg	12000		13000		15000	
Solids, Total	NE	NE	%	83		80		88	
pH	NE	NE	SU	7.5		6.8		6.8	
Total Organic Carbon (Rep1)	NE	NE	%	0.53		0.59		0.83	
Total Organic Carbon (Rep2)	NE	NE	%	0.71		0.72		0.75	
COD	NE	NE	mg/kg	19000		28000		14000	

NOTES:
U = Not detected at or above the reported limit; tabulated value is the reported limit.
NE = Not Established NA = Not Available
mg/kg = milligrams per kilogram
Yellow highlight = result above NYSDEC Restricted Use SCOs
BOLD TEXT = result above NYSDEC Groundwater Protection SCOs

Table 4
Excavation Endpoint Sampling Results
Orangetown Shopping Center - Brownfield Site #C344066
Orangeburg, New York

Location	NYSDEC Restricted Use Soil Cleanup Objectives Table 375-6.89(b)			Bottom, south section		Test Pit 2		Test Pit 3		Bottom, north section	
Sample ID				EX001BS(4)-EX-1BS(4)		TP002(3)-TP-2(3)		TP003(3)-TP-3(3)		DUPLICATE	
SAMPLING DATE	Protection of Public Health	Protection of Groundwater		14-Jan-09		14-Jan-09		14-Jan-09		14-Jan-09	
LAB SAMPLE ID				L0900616-07		L0900616-08		L0900616-09		L0900616-10	
ANALYTE	Commercial		Units		Qual		Qual		Qual		Qual
Volatile Organics by EPA 8260B/5035-Low											
1,1,1,2-Tetrachloroethane	NE	NE	mg/kg	-		0.0012	U	0.0012	U	-	
1,1,1-Trichloroethane	500	0.68	mg/kg	-		0.0012	U	0.0012	U	-	
1,1,2,2-Tetrachloroethane	NE	NE	mg/kg	-		0.0012	U	0.0012	U	-	
1,1,2-Trichloroethane	NE	NE	mg/kg	-		0.0017	U	0.0018	U	-	
1,1-Dichloroethane	240	0.27	mg/kg	-		0.0017	U	0.0018	U	-	
1,1-Dichloroethene	500	0.33	mg/kg	-		0.0012	U	0.0012	U	-	
1,1-Dichloropropene	NE	NE	mg/kg	-		0.0058	U	0.0059	U	-	
1,2,3-Trichlorobenzene	NE	NE	mg/kg	-		0.0058	U	0.0059	U	-	
1,2,3-Trichloropropane	NE	NE	mg/kg	-		0.012	U	0.012	U	-	
1,2,4,5-Tetramethylbenzene	NE	NE	mg/kg	-		0.0046	U	0.0047	U	-	
1,2,4-Trichlorobenzene	NE	NE	mg/kg	-		0.0058	U	0.0059	U	-	
1,2,4-Trimethylbenzene	190	3.6	mg/kg	-		0.0058	U	0.0059	U	-	
1,2-Dibromo-3-chloropropane	NE	NE	mg/kg	-		0.0058	U	0.0059	U	-	
1,2-Dibromoethane	NE	NE	mg/kg	-		0.0046	U	0.0047	U	-	
1,2-Dichlorobenzene	500	1.1	mg/kg	-		0.0058	U	0.0059	U	-	
1,2-Dichloroethane	NE	0.02	mg/kg	-		0.0012	U	0.0012	U	-	
1,2-Dichloropropane	NE	NE	mg/kg	-		0.004	U	0.0041	U	-	
1,3,5-Trimethylbenzene	190	NE	mg/kg	-		0.0058	U	0.0059	U	-	
1,3-Dichlorobenzene	280	2.4	mg/kg	-		0.0058	U	0.0059	U	-	
1,3-Dichloropropane	NE	NE	mg/kg	-		0.0058	U	0.0059	U	-	
1,4-Dichlorobenzene	130	1.8	mg/kg	-		0.0058	U	0.0059	U	-	
1,4-Diethylbenzene	NE	NE	mg/kg	-		0.0046	U	0.0047	U	-	
2,2-Dichloropropane	NE	NE	mg/kg	-		0.0058	U	0.0059	U	-	
2-Butanone	500	0.12	mg/kg	-		0.012	U	0.012	U	-	
2-Hexanone	NE	NE	mg/kg	-		0.012	U	0.012	U	-	
4-Ethyltoluene	NE	NE	mg/kg	-		0.0046	U	0.0047	U	-	
4-Methyl-2-pentanone	NE	NE	mg/kg	-		0.012	U	0.012	U	-	
Acetone	500	0.05	mg/kg	-		0.041		0.037		-	
Acrylonitrile	NE	NE	mg/kg	-		0.012	U	0.012	U	-	
Benzene	44	0.06	mg/kg	-		0.002		0.002		-	
Bromobenzene	NE	NE	mg/kg	-		0.0058	U	0.0059	U	-	
Bromochloromethane	NE	NE	mg/kg	-		0.0058	U	0.0059	U	-	
Bromodichloromethane	NE	NE	mg/kg	-		0.0012	U	0.0012	U	-	
Bromoform	NE	NE	mg/kg	-		0.0046	U	0.0047	U	-	
Bromomethane	NE	NE	mg/kg	-		0.0023	U	0.0024	U	-	
Carbon disulfide	NE	NE	mg/kg	-		0.012	U	0.012	U	-	
Carbon tetrachloride	22	0.76	mg/kg	-		0.0012	U	0.0012	U	-	
Chlorobenzene	500	1.1	mg/kg	-		0.0012	U	0.0012	U	-	
Chloroethane	NE	NE	mg/kg	-		0.0023	U	0.0024	U	-	
Chloroform	350	0.37	mg/kg	-		0.0017	U	0.0018	U	-	
Chloromethane	NE	NE	mg/kg	-		0.0058	U	0.0059	U	-	
cis-1,2-Dichloroethene	500	0.25	mg/kg	-		0.0025		0.0012	U	-	
cis-1,3-Dichloropropene	NE	NE	mg/kg	-		0.0012	U	0.0012	U	-	
Dibromochloromethane	NE	NE	mg/kg	-		0.0012	U	0.0012	U	-	
Dibromomethane	NE	NE	mg/kg	-		0.012	U	0.012	U	-	
Dichlorodifluoromethane	NE	NE	mg/kg	-		0.012	U	0.012	U	-	
Ethylbenzene	390	1	mg/kg	-		0.0012	U	0.0012	U	-	
Hexachlorobutadiene	NE	NE	mg/kg	-		0.0058	U	0.0059	U	-	
Isopropylbenzene	NE	NE	mg/kg	-		0.0012	U	0.0012	U	-	
Methyl tert butyl ether	500	NE	mg/kg	-		0.0023	U	0.0024	U	-	
Methylene chloride	500	0.05	mg/kg	-		0.012	U	0.012	U	-	
n-Butylbenzene	NE	NE	mg/kg	-		0.0012	U	0.0012	U	-	
n-Propylbenzene	500	3.9	mg/kg	-		0.0012	U	0.0012	U	-	
Naphthalene	500	12	mg/kg	-		0.0058	U	0.0059	U	-	
o-Chlorotoluene	NE	NE	mg/kg	-		0.0058	U	0.0059	U	-	
o-Xylene	500	NE	mg/kg	-		0.0023	U	0.0024	U	-	
p-Chlorotoluene	NE	NE	mg/kg	-		0.0058	U	0.0059	U	-	
p-Isopropyltoluene	NE	NE	mg/kg	-		0.0012	U	0.0012	U	-	
p/m-Xylene	500	NE	mg/kg	-		0.0023	U	0.0024	U	-	
sec-Butylbenzene	500	11	mg/kg	-		0.0012	U	0.0012	U	-	
Styrene	NE	NE	mg/kg	-		0.0023	U	0.0024	U	-	
tert-Butylbenzene	500	5.9	mg/kg	-		0.0058	U	0.0059	U	-	
Tetrachloroethene	150	1.3	mg/kg	-		0.0012	U	0.0012	U	-	
Toluene	500	0.7	mg/kg	-		0.0017	U	0.0018	U	-	
trans-1,2-Dichloroethene	500	0.19	mg/kg	-		0.0017	U	0.0018	U	-	
trans-1,3-Dichloropropene	NE	NE	mg/kg	-		0.0012	U	0.0012	U	-	
Trichloroethene	200	0.47	mg/kg	-		0.0012	U	0.0012	U	-	
Trichlorofluoromethane	NE	NE	mg/kg	-		0.0058	U	0.0059	U	-	
Vinyl acetate	NE	NE	mg/kg	-		0.012	U	0.012	U	-	
Vinyl chloride	13	0.02	mg/kg	-		0.0023	U	0.0024	U	-	

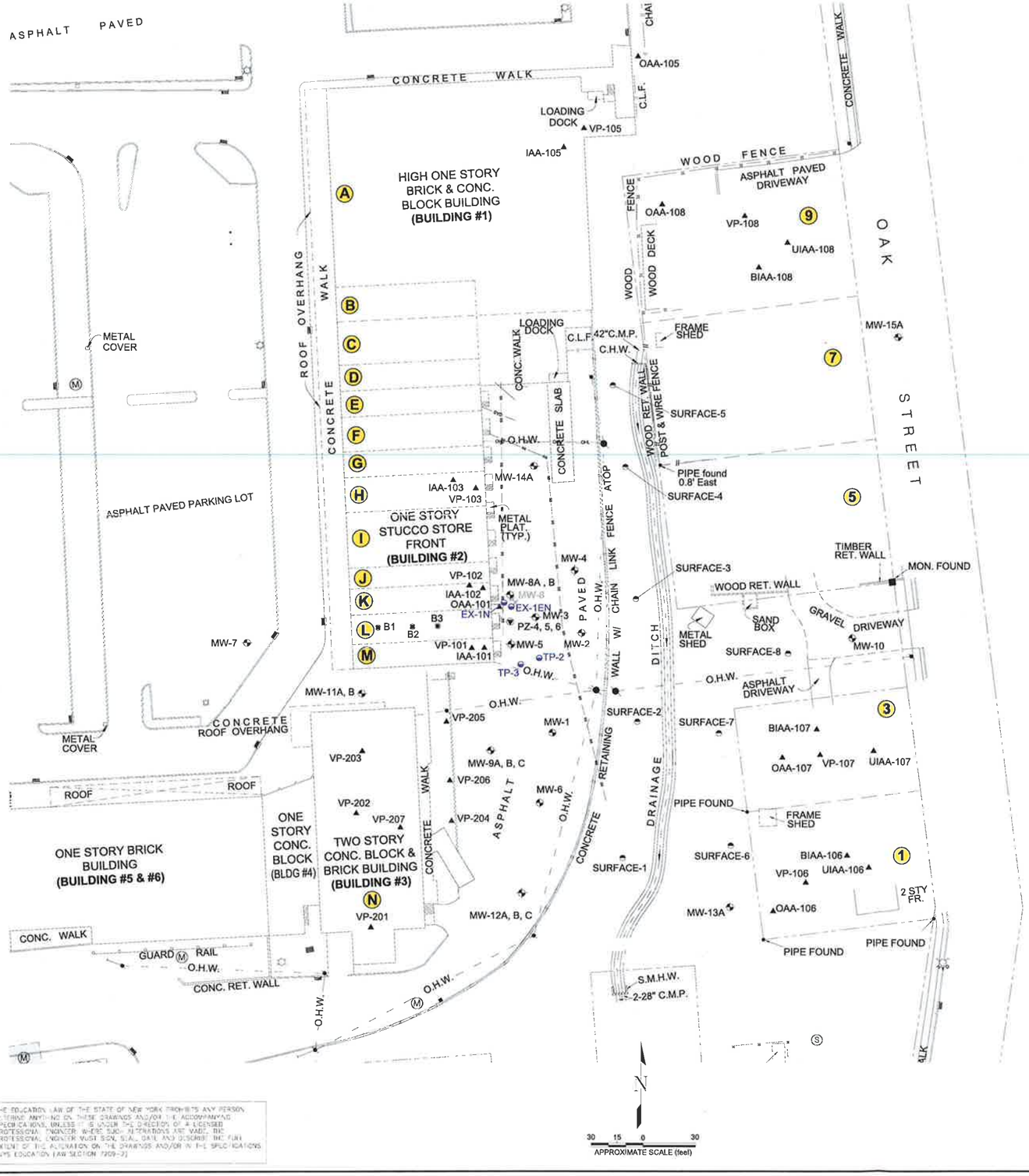
Table 4
Excavation Endpoint Sampling Results
Orangetown Shopping Center - Brownfield Site #C344066
Orangeburg, New York

Location	NYSDEC Restricted Use Soil Cleanup Objectives Table 375-6.89(b)			Bottom, south section		Test Pit 2		Test Pit 3		Bottom, north section	
Sample ID				EX001BS(4)-EX-1BS(4)		TP002(3)-TP-2(3)		TP003(3)-TP-3(3)		DUPLICATE	
SAMPLING DATE	Protection of Public Health	Protection of Groundwater		14-Jan-09		14-Jan-09		14-Jan-09		14-Jan-09	
LAB SAMPLE ID				L0900616-07		L0900616-08		L0900616-09		L0900616-10	
ANALYTE	Commercial		Units		Qual		Qual		Qual		Qual
Volatile Organics by EPA 8260B/5035-Soil Analysis											
1,1,1,2-Tetrachloroethane	NE	NE	mg/kg	0.059	U	-		-		0.062	U
1,1,1-Trichloroethane	500	0.68	mg/kg	0.059	U	-		-		0.062	U
1,1,2,2-Tetrachloroethane	NE	NE	mg/kg	0.059	U	-		-		0.062	U
1,1,2-Trichloroethane	NE	NE	mg/kg	0.089	U	-		-		0.094	U
1,1-Dichloroethane	240	0.27	mg/kg	0.089	U	-		-		0.094	U
1,1-Dichloroethene	500	0.33	mg/kg	0.059	U	-		-		0.062	U
1,1-Dichloropropene	NE	NE	mg/kg	0.3	U	-		-		0.31	U
1,2,3-Trichlorobenzene	NE	NE	mg/kg	0.3	U	-		-		0.31	U
1,2,3-Trichloropropane	NE	NE	mg/kg	0.59	U	-		-		0.62	U
1,2,4,5-Tetramethylbenzene	NE	NE	mg/kg	0.24	U	-		-		0.25	U
1,2,4-Trichlorobenzene	NE	NE	mg/kg	0.3	U	-		-		0.31	U
1,2,4-Trimethylbenzene	190	3.6	mg/kg	0.3	U	-		-		0.31	U
1,2-Dibromo-3-chloropropane	NE	NE	mg/kg	0.3	U	-		-		0.31	U
1,2-Dibromoethane	NE	NE	mg/kg	0.24	U	-		-		0.25	U
1,2-Dichlorobenzene	500	1.1	mg/kg	0.3	U	-		-		0.31	U
1,2-Dichloroethane	NE	NE	mg/kg	0.059	U	-		-		0.062	U
1,2-Dichloropropane	NE	NE	mg/kg	0.21	U	-		-		0.22	U
1,3,5-Trimethylbenzene	190	8.4	mg/kg	0.3	U	-		-		0.31	U
1,3-Dichlorobenzene	280	2.4	mg/kg	0.3	U	-		-		0.31	U
1,3-Dichloropropane	NE	NE	mg/kg	0.3	U	-		-		0.31	U
1,4-Dichlorobenzene	130	1.8	mg/kg	0.3	U	-		-		0.31	U
1,4-Diethylbenzene	NE	NE	mg/kg	0.24	U	-		-		0.25	U
2,2-Dichloropropane	NE	NE	mg/kg	0.3	U	-		-		0.31	U
2-Butanone	500	0.12	mg/kg	0.59	U	-		-		0.62	U
2-Hexanone	NE	NE	mg/kg	0.59	U	-		-		0.62	U
4-Ethyltoluene	NE	NE	mg/kg	0.24	U	-		-		0.25	U
4-Methyl-2-pentanone	NE	NE	mg/kg	0.59	U	-		-		0.62	U
Acetone	500	0.05	mg/kg	0.59	U	-		-		0.62	U
Acrylonitrile	NE	NE	mg/kg	0.59	U	-		-		0.62	U
Benzene	44	0.06	mg/kg	0.059	U	-		-		0.062	U
Bromobenzene	NE	NE	mg/kg	0.3	U	-		-		0.31	U
Bromochloromethane	NE	NE	mg/kg	0.3	U	-		-		0.31	U
Bromodichloromethane	NE	NE	mg/kg	0.059	U	-		-		0.062	U
Bromoform	NE	NE	mg/kg	0.24	U	-		-		0.25	U
Bromomethane	NE	NE	mg/kg	0.12	U	-		-		0.12	U
Carbon disulfide	NE	NE	mg/kg	0.59	U	-		-		0.62	U
Carbon tetrachloride	22	0.76	mg/kg	0.059	U	-		-		0.062	U
Chlorobenzene	500	1.1	mg/kg	0.059	U	-		-		0.062	U
Chloroethane	NE	NE	mg/kg	0.12	U	-		-		0.12	U
Chloroform	350	0.37	mg/kg	0.089	U	-		-		0.094	U
Chloromethane	NE	NE	mg/kg	0.3	U	-		-		0.31	U
cis-1,2-Dichloroethene	500	0.25	mg/kg	**1.3**		-		-		0.12	
cis-1,3-Dichloropropene	NE	NE	mg/kg	0.059	U	-		-		0.062	U
Dibromochloromethane	NE	NE	mg/kg	0.059	U	-		-		0.062	U
Dibromomethane	NE	NE	mg/kg	0.59	U	-		-		0.62	U
Dichlorodifluoromethane	NE	NE	mg/kg	0.59	U	-		-		0.62	U
Ethylbenzene	390	1	mg/kg	0.059	U	-		-		0.062	U
Hexachlorobutadiene	NE	NE	mg/kg	0.3	U	-		-		0.31	U
Isopropylbenzene	NE	NE	mg/kg	0.059	U	-		-		0.062	U
Methyl tert butyl ether	500	0.93	mg/kg	0.12	U	-		-		0.12	U
Methylene chloride	500	0.05	mg/kg	0.59	U	-		-		0.62	U
n-Butylbenzene	NE	NE	mg/kg	0.059	U	-		-		0.062	U
n-Propylbenzene	500	3.9	mg/kg	0.059	U	-		-		0.062	U
Naphthalene	500	12	mg/kg	0.3	U	-		-		0.31	U
o-Chlorotoluene	NE	NE	mg/kg	0.3	U	-		-		0.31	U
o-Xylene	500	1.6	mg/kg	0.12	U	-		-		0.12	U
p-Chlorotoluene	NE	NE	mg/kg	0.3	U	-		-		0.31	U
p-Isopropyltoluene	NE	NE	mg/kg	0.059	U	-		-		0.062	U
p/m-Xylene	500	1.6	mg/kg	0.12	U	-		-		0.12	U
sec-Butylbenzene	500	11	mg/kg	0.059	U	-		-		0.062	U
Styrene	NE	NE	mg/kg	0.12	U	-		-		0.12	U
tert-Butylbenzene	500	5.9	mg/kg	0.3	U	-		-		0.31	U
Tetrachloroethene	150	1.3	mg/kg	0.44		-		-		0.49	
Toluene	500	0.7	mg/kg	0.089	U	-		-		0.094	U
trans-1,2-Dichloroethene	500	0.19	mg/kg	0.16		-		-		**0.26**	
trans-1,3-Dichloropropene	NE	NE	mg/kg	0.059	U	-		-		0.062	U
Trichloroethene	200	0.47	mg/kg	0.068		-		-		0.062	U
Trichlorofluoromethane	NE	NE	mg/kg	0.3	U	-		-		0.31	U
Vinyl acetate	NE	NE	mg/kg	0.59	U	-		-		0.62	U
Vinyl chloride	13	0.02	mg/kg	**3.4**		-		-		0.12	U

Table 4
Excavation Endpoint Sampling Results
Orangetown Shopping Center - Brownfield Site #C344066
Orangeburg, New York

Location	NYSDEC Restricted Use Soil Cleanup Objectives Table 375-6.89(b)			Bottom, south section		Test Pit 2		Test Pit 3		Bottom, north section	
Sample ID				EX001BS(4)-EX-1BS(4)		TP002(3)-TP-2(3)		TP003(3)-TP-3(3)		DUPLICATE	
SAMPLING DATE	Protection of Public Health	Protection of Groundwater		14-Jan-09		14-Jan-09		14-Jan-09		14-Jan-09	
LAB SAMPLE ID				L0900616-07		L0900616-08		L0900616-09		L0900616-10	
ANALYTE	Commercial		Units		Qual		Qual		Qual		Qual
Organochlorine Pesticides by EPA 8081A											
4,4'-DDD	92	14	mg/kg	-		-		-		-	
4,4'-DDE	62	17	mg/kg	-		-		-		-	
4,4'-DDT	47	136	mg/kg	-		-		-		-	
Aldrin	0.68	0.19	mg/kg	-		-		-		-	
Alpha-BHC	3.4	0.02	mg/kg	-		-		-		-	
Beta-BHC	3	0.09	mg/kg	-		-		-		-	
Chlordane	24	2.9	mg/kg	-		-		-		-	
Delta-BHC	500	0.25	mg/kg	-		-		-		-	
Dieldrin	1.4	0.1	mg/kg	-		-		-		-	
Endosulfan I	200	102	mg/kg	-		-		-		-	
Endosulfan II	200	102	mg/kg	-		-		-		-	
Endosulfan sulfate	200	1,000	mg/kg	-		-		-		-	
Endrin	89	0.06	mg/kg	-		-		-		-	
Endrin ketone	NE	NE	mg/kg	-		-		-		-	
Heptachlor	15	0.38	mg/kg	-		-		-		-	
Heptachlor epoxide	NE	NE	mg/kg	-		-		-		-	
Lindane	9.2	0.1	mg/kg	-		-		-		-	
Methoxychlor	NE	NE	mg/kg	-		-		-		-	
trans-Chlordane	NE	NE	mg/kg	-		-		-		-	
Total Metals & Other Analytes											
Iron, Total	NE	NE	mg/kg	14000		-		-		-	
Solids, Total	NE	NE	%	85		85		85		80	
pH	NE	NE	SU	6.5		-		-		-	
Total Organic Carbon (Rep1)	NE	NE	%	0.59		-		-		-	
Total Organic Carbon (Rep2)	NE	NE	%	0.49		-		-		-	
COD	NE	NE	mg/kg	17000		-		-		-	

NOTES:
U = Not detected at or above the reported limit; tabulated value is the reported limit.
NE = Not Established NA = Not Available
mg/kg = milligrams per kilogram
Yellow highlight = result above NYSDEC Restricted Use SCOs
BOLD TEXT = result above NYSDEC Groundwater Protection SCOs



LEGEND

	PROPERTY BOUNDARY
	HYDRANT
	UTILITY POLE
	ELECTRIC COVER
M	MANHOLE COVER (UNKNOWN)
T	TELEPHONE MANHOLE COVER
	CATCH BASIN
	LIGHT POLE
S	SEWER MANHOLE
C.L.F	C.L.F CHAIN LINK FENCE
C.H.W.	C.H.W. CONCRETE HEAD WALL
C.M.P	C.M.P. CORRUGATED METAL PIPE
O.H.W.	O.H.W. OVERHEAD WIRES
R.C.P.	R.C.P. REINFORCED CONCRETE PIPE
S.M.H.W.	S.M.H.W. STONE MASONRY HEAD WALL
	MONITORING WELL
	MONITORING WELL (PAVED OVER OR ABANDONED)
	PIEZOMETER
	VAPOR POINT/AMBIENT AIR SAMPLE
	SUB-SLAB SOIL SAMPLE
	SURFACE SOIL SAMPLE
	EXCAVATION SOIL SAMPLE (MEETS SCOs)
SCOs	SOIL CLEANUP OBJECTIVE
#	STREET ADDRESS NUMBER

COMMERCIAL STORE ID TABLE (BUILDING #2)

A	CVS PHARMACY
B	ORANGE FARM MARKET
C	RAINBOW LAUNDROMAT
D	MAGIE TOUCH NAILS
E	STELLA LUNA
F	TIP TOP SHOPPER
G	ALL STATE INSURANCE
H	HIKARO SUSHI
I	KARATE
J	JIU JITSU
K	THE DELI SPOT
L	SPARKLE CLEANERS
M	NEW CHINA HOUSE
N	DUNKIN DONUTS & DISCOUNT STORE

SOURCE:

1. LAND LINK SURVEYORS P.C. SURVEY MAP DATED NOVEMBER 4, 2003.
2. SURVEY AMENDED TO SHOW NEW CERTIFICATION JUNE 1, 2005.
3. SURVEY AMENDED WELL LOCATION DECEMBER 19, 2007.
4. ADDITIONAL WELLS MW10, MW12, AND MW13 LOCATED DECEMBER 27, 2007

NOTES:

1. THE PREMISES SHOWN HEREON DESIGNATED AS LOT 1 ON A CERTAIN MAP ENTITLED " SUBDIVISION OF PROPERTY ORANGETOWN CENTER" AS FILED IN THE ROCKLAND COUNTY CLERK'S OFFICE ON FEBRUARY 26, 1990 AS MAP No. 6427 IN Book 111 Page 59 AND ARE DESCRIBED IN DEED RECORDED REEL 404, PAGE 2555.
2. THE DIMENSIONS SHOWN HEREON, FROM THE STRUCTURES TO THE PROPERTY LINE ARE NOT INTENDED TO BE USED FOR THE ERECTION OF FENCES, STRUCTURES OR ANY OTHER IMPROVEMENT.
3. ENCROACHMENTS BELOW GRADE AND/OR SUBSURFACE FEATURES, IF ANY, NOT LOCATED OR SHOWN HEREON.
4. GROUNDWATER GAUGED AND SAMPLED ON APRIL 29, 2010.
5. MONITORING WELL MW-12A NOT INCLUDED IN GROUNDWATER CONTOURING DUE TO ANOMALOUS DATA.

STATE OF NEW YORK
JUSTIN R. MOSER
LICENSED PROFESSIONAL ENGINEER
NO. 077926

NO	REVISION	BY	DATE

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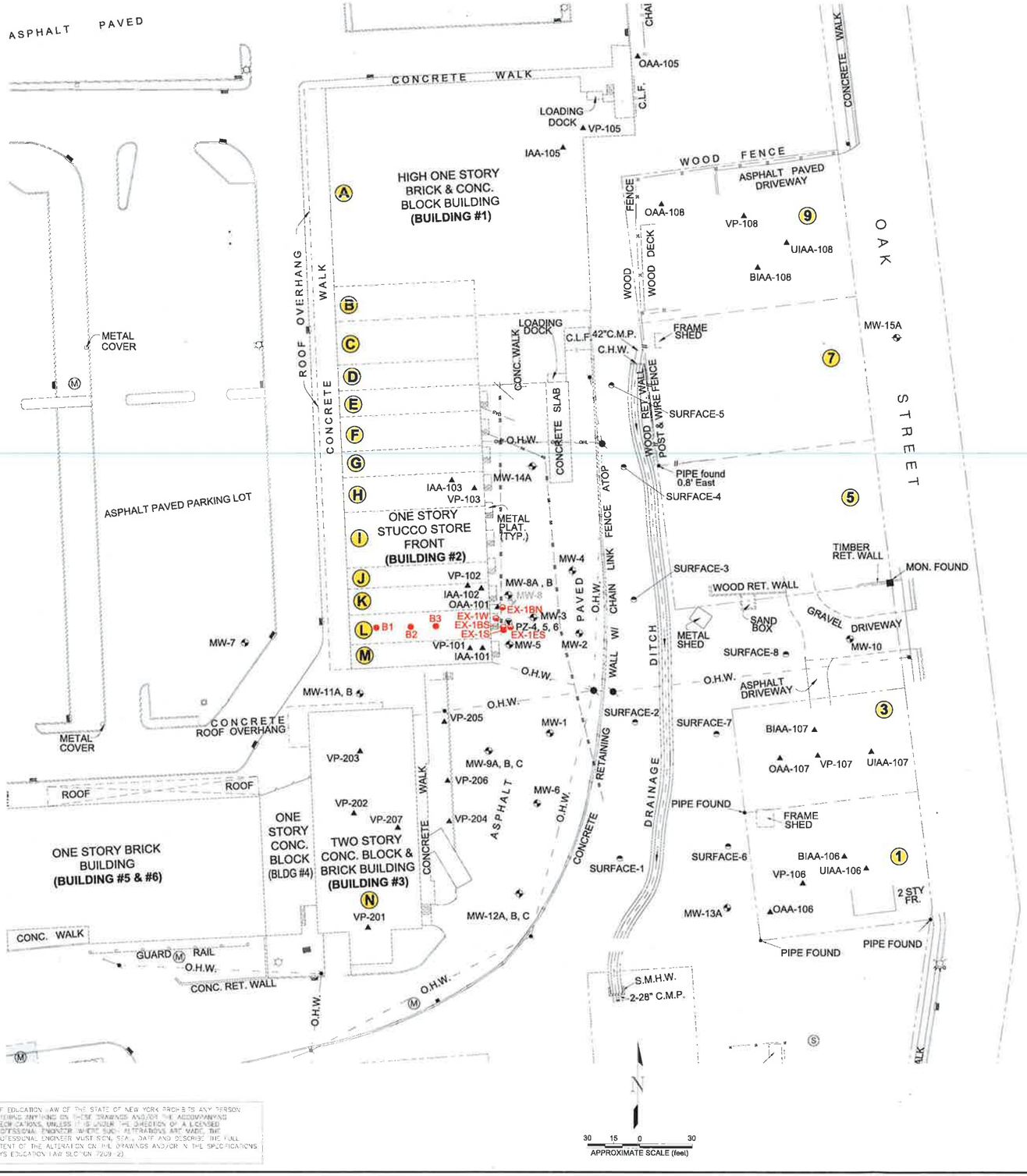
PROJ. NO. 69972 | ACAD FILE: 69972ERNOV11.dwg | CHECKED BY: CTH | DESIGNED BY: KAT

SITE PLAN WITH SOIL SAMPLES THAT MEET THE SCOs

ORANGETOWN SHOPPING CENTER
1-45 ORANGEBURG ROAD
ORANGEBURG, NEW YORK

FOR REDUCED PLANS ORIGINAL IN INCHES
0 0.5 1.0 1.5 2.0

DATE: 1/28/11
SCALE: AS SHOWN
PLATE: 11



LEGEND

	PROPERTY BOUNDARY
	HYDRANT
	UTILITY POLE
	ELECTRIC COVER
	MANHOLE COVER (UNKNOWN)
	TELEPHONE MANHOLE COVER
	CATCH BASIN
	LIGHT POLE
	SEWER MANHOLE
C.L.F	C.L.F CHAIN LINK FENCE
C.H.W.	C.H.W. CONCRETE HEAD WALL
C.M.P	C.M.P. CORRUGATED METAL PIPE
O.H.W.	O.H.W. OVERHEAD WIRES
R.C.P.	R.C.P. REINFORCED CONCRETE PIPE
S.M.H.W.	S.M.H.W. STONE MASONRY HEAD WALL
	MONITORING WELL
	MONITORING WELL (PAVED OVER OR ABANDONED)
	PIEZOMETER
	VAPOR POINT/AMBIENT AIR SAMPLE
	SUB-SLAB SOIL SAMPLE
	SURFACE SOIL SAMPLE
	SUB-SLAB SOIL SAMPLE (EXCEEDS SCOs)
	EXCAVATION SOIL SAMPLE (EXCEEDS SCOs)
SCOs	SOIL CLEANUP OBJECTIVE
#	STREET ADDRESS NUMBER

COMMERCIAL STORE ID TABLE (BUILDING #2)

A	CVS PHARMACY
B	ORANGE FARM MARKET
C	RAINBOW LAUNDROMAT
D	MAGIE TOUCH NAILS
E	STELLA LUNA
F	TIP TOP SHOPPER
G	ALL STATE INSURANCE
H	HIKARO SUSHI
I	KARATE
J	JIU JITSU
K	THE DELI SPOT
L	SPARKLE CLEANERS
M	NEW CHINA HOUSE
N	DUNKIN DONUTS & DISCOUNT STORE

SOURCE:

1. LAND LINK SURVEYORS P.C. SURVEY MAP DATED NOVEMBER 4, 2003.
2. SURVEY AMENDED TO SHOW NEW CERTIFICATION JUNE 1, 2005.
3. SURVEY AMENDED WELL LOCATION DECEMBER 19, 2007.
4. ADDITIONAL WELLS MW10, MW12, AND MW13 LOCATED DECEMBER 27, 2007

NOTES:

1. THE PREMISES SHOWN HEREON DESIGNATED AS LOT 1 ON A CERTAIN MAP ENTITLED " SUBDIVISION OF PROPERTY ORANGETOWN CENTER" AS FILED IN THE ROCKLAND COUNTY CLERK'S OFFICE ON FEBRUARY 26, 1990 AS MAP No. 6427 IN Book 111 Page 59 AND ARE DESCRIBED IN DEED RECORDED REEL 404, PAGE 2555.
2. THE DIMENSIONS SHOWN HEREON, FROM THE STRUCTURES TO THE PROPERTY LINE ARE NOT INTENDED TO BE USED FOR THE ERECTION OF FENCES, STRUCTURES OR ANY OTHER IMPROVEMENT.
3. ENCROACHMENTS BELOW GRADE AND/OR SUBSURFACE FEATURES, IF ANY, NOT LOCATED OR SHOWN HEREON.
4. GROUNDWATER GAUGED AND SAMPLED ON APRIL 29, 2010.
5. MONITORING WELL MW-12A NOT INCLUDED IN GROUNDWATER CONTOURING DUE TO ANOMALOUS DATA.

STATE OF NEW YORK
JUSTIN R. MOSES
NO. 077926
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CAD FILE: 68672SFERNOV11.dwg
DRAWN BY: CJH
CHECKED BY: KAF
DESIGNED BY:

SITE PLAN WITH SOIL SAMPLES THAT EXCEED THE SCOs

ORANGETOWN SHOPPING CENTER
1-45 ORANGEBURG ROAD
ORANGEBURG, NEW YORK

FOR REDUCED PLANS ORIGINAL SCALE
0 0.5 1.0 1.5 2.0

THE DRAWINGS AND ALL INFORMATION CONTAINED HEREIN ARE THE PROPERTY OF KLEINFELDER ENGINEERING, P.C. AND IS NOT TO BE USED IN WHOLE OR PART WITHOUT THE CLEAR, WRITTEN CONSENT

DATE: 11/28/11
SCALE: AS SHOWN
PLATE: 10

Appendix F – Groundwater SCGs

Table 1
Groundwater Analytical Data
Orangetown Shopping Center - Brownfield Site #C344066
Orangeburg, New York

LOCATION	NYSDEC TOGS SGC	Guidance Value	MW-1			MW-1			MW-2			MW-2			MW-2			Duplicate MW-2			MW-2			MW-2			MW-2			MW-2		
Matrix			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater		
SAMPLING DATE			11/25/2008			4/30/2010			4/29/2010			6/16/2010			8/9/2010			8/9/2010			4/20/2011			5/16/2011			5/31/2011			6/22/2011		
Units			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l		
PARAMETER			Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL
Dissolved Organic Carbon			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Iron, Ferrous			NA		NA	NA		NA	NA		NA	640	J	500	2600	J	500	2500	J	500	500	UJ	500	960	J	500	740	J	500	210	J	500
Primary Constituents of Concern VOCs by GC/MS (8260B)																																
1,1-Dichloroethene	5		ND		0.5	2.5	U	2.5	50	U	50	25	U	25	20	U	20	25	U	25	10	U	10	12	U	12	12	U	12	12	U	12
cis-1,2-Dichloroethene	5		NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	**980**		10	**1200**		12	**1200**		12	NA		NA
cis-1,2-Dichloroethene	5		**100**		0.5	**210**		2.5	**2000**		50	**1000**		25	**1,900**		20	**2000**		25	NA		NA	NA		NA	NA		NA	**620**		12
Tetrachloroethene	5		ND		0.5	2.5	U	2.5	50	U	50	25	U	25	20	U	20	25	U	25	10	U	10	12	U	12	12	U	12	12	U	12
trans-1,2-Dichloroethene	5		NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	15	U	15	19	U	19	19	U	19	19	U	19
trans-1,2-Dichloroethene	5		0.96		0.75	3.8	U	3.8	75	U	75	38	U	38	30	U	30	38	U	38	NA		NA	NA		NA	NA		NA	NA		NA
Trichloroethene	5		0.87		0.5	2.9		2.5	50	U	50	25	U	25	20	U	20	25	U	25	**12**		10	**11**	J	12	**13**		12	**10**	J	12
Vinyl chloride	2		**99**		1	**65**		5	100	U	100	50	U	50	40	U	40	50	U	50	**29**		20	**32**		25	**29**		25	**43**		25
Other VOCs by GC/MS (8260B)																																
1,1,1,2-Tetrachloroethane	5		ND		0.5	2.5	U	2.5	50	U	50	25	U	25	20	U	20	25	U	25	10	U	10	12	U	12	12	U	12	12	U	12
1,1,1-Trichloroethane	5		ND		0.5	2.5	U	2.5	50	U	50	25	U	25	20	U	20	25	U	25	10	U	10	12	U	12	12	U	12	12	U	12
1,1,2,2-Tetrachloroethane	5		ND		0.5	2.5	U	2.5	50	U	50	25	U	25	20	U	20	25	U	25	10	U	10	12	U	12	12	U	12	12	U	12
1,1,2-Trichloroethane	1		ND		0.75	3.8	U	3.8	75	U	75	38	U	38	30	U	30	38	U	38	15	U	15	19	U	19	19	U	19	19	U	19
1,1-Dichloroethane	5		ND		0.75	3.8	U	3.8	75	U	75	38	U	38	30	U	30	38	U	38	15	U	15	19	U	19	19	U	19	19	U	19
1,1-Dichloropropene	5		ND		2.5	12	U	12	250	U	250	120	U	120	100	U	100	120	U	120	50	U	10	62	U	62	62	U	62	62	U	62
1,2,3-Trichlorobenzene	5		ND		2.5	12	U	12	250	U	250	120	U	120	100	U	100	120	U	120	50	UJ	50	62	U	62	8.5	J	62	62	U	62
1,2,3-Trichloropropane	0.04		ND		5	25	U	25	500	U	500	250	U	250	200	U	200	250	U	250	100	U	50	120	U	120	120	U	120	120	U	120
1,2,4,5-Tetramethylbenzene			ND		2	10	U	10	200	U	200	100	U	100	80	U	89	100	U	100	40	U	100	50	U	50	50	U	50	50	U	50
1,2,4-Trichlorobenzene	5		ND		2.5	12	U	12	250	U	250	120	U	120	100	U	100	120	U	120	50	UJ	40	62	U	62	62	U	62	62	U	62
1,2,4-Trimethylbenzene	5		ND		2.5	12	U	12	250	U	250	120	U	120	100	U	100	120	U	120	50	U	50	62	U	62	62	U	62	62	U	62
1,2-Dibromo-3-chloropropane	0.04		ND		2.5	12	U	12	250	U	250	120	U	120	100	U	100	120	U	120	50	U	50	62	U	62	62	U	62	62	U	62
1,2-Dibromoethane	5		ND		2	10	U	10	200	U	200	100	U	100	80	U	80	100	U	100	40	U	50	50	U	50	50	U	50	50	U	50
1,2-Dichlorobenzene	3		ND		2.5	12	U	12	250	U	250	120	U	120	100	U	100	120	U	120	50	U	40	62	U	62	62	U	62	62	U	62
1,2-Dichloroethane	0.6		ND		0.5	4.8		2.5	50	U	50	25	U	25	20	U	20	25	U	25	10	U	50	12	U	12	12	U	12	12	U	12
1,2-Dichloropropane	1		ND		1.8	8.8	U	8.8	180	U	180	88	U	88	70	U	70	88	U	88	35	U	10	44	U	44	44	U	44	44	U	44
1,3,5-Trimethylbenzene	5		ND		2.5	12	U	12	250	U	250	120	U	120	100	U	100	120	U	120	50	U	35	62	U	62	62	U	62	62	U	62
1,3-Dichlorobenzene	3		ND		2.5	12	U	12	250	U	250	120	U	120	100	U	100	120	U	120	50	U	50	62	U	62	62	U	62	62	U	62
1,3-Dichloropropane	5		ND		2.5	12	U	12	250	U	250	120	U	120	100	U	100	120	U	120	50	U	50	62	U	62	62	U	62	62	U	62
1,4-Dichlorobenzene	3		ND		2.5	12	U	12	250	U	250	120	U	120	100	U	100	120	U	120	50	U	50	62	U	62	62	U	62	62	U	62
1,4-Dichlorobutane			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	50	U	50	NA		NA
1,4-Diethylbenzene			ND		2	10	U	10	200	U	200	100	U	100	80	U	80	100	U	100	40	U	40	50	U	50	62	U	62	50	U	50
2,2-Dichloropropane	5		ND		2.5	12	U	12	250	U	250	120	U	120	100	U	100	120	U	120	50	U	50	62	U	62	120	U	120	62	U	62
2-Butanone	50		NA		NA	25	U	25	500	U	500	250	U	250	200	U	200	250	U	250	100	U	100	120	U	120	NA		NA	120	U	120
2-Butanone	50		ND		5	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	120	U	120	NA		NA
2-Hexanone	50		ND		5	25	U	25	500	U	500	250	U	250	200	U	200	250	U	250	100	U	100	120	U	120	120	U	120	120	U	120
4-Ethyltoluene			ND		2	10	U	10	200	U	200	100	U	100	80	U	80	100	U	100	40	U	40	50	U	50	50	U	50	50	U	50
4-Methyl-2-pentanone			ND		5	25	U	25	500	U	500	250	U	250	200	U	200	250	U	250	100	U	100	120	U	120	120	U	120	120	U	120
Acetone	50		17		5	25	U	25	500	U	500	250	U	250	200	U	200	250	U	250	100	U	100	120	U	120	120	U	120	120	U	120
Acrolein	5		NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA

Table 1
Groundwater Analytical Data
Orangetown Shopping Center - Brownfield Site #C344066
Orangeburg, New York

LOCATION	NYSDEC TOGS SGC	Guidance Value	MW-1			MW-1			MW-2			MW-2			MW-2			Duplicate MW-2			MW-2			MW-2			MW-2			MW-2		
Matrix			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater		
SAMPLING DATE			11/25/2008			4/30/2010			4/29/2010			6/16/2010			8/9/2010			8/9/2010			4/20/2011			5/16/2011			5/31/2011			6/22/2011		
Units			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l		
PARAMETER			Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL
Acrylonitrile	5		ND		5	25	U	25	500	U	500	250	U	250	200	U	200	250	U	250	100	U	100	120	U	120	120	U	120	120	U	120
Benzene	1		ND		0.5	2.5	U	2.5	50	U	50	25	U	25	20	U	20	25	U	25	10	U	10	12	U	12	12	U	12	12	U	12
Bromobenzene	5		ND		2.5	12	U	12	250	U	250	120	U	120	100	U	100	120	U	120	50	U	50	62	U	62	62	U	62	62	U	62
Bromochloromethane	5		ND		2.5	12	U	12	250	U	250	120	U	120	100	U	100	120	U	120	50	U	50	62	U	62	62	U	62	62	U	62
Bromodichloromethane	50		ND		0.5	2.5	U	2.5	50	U	50	25	U	25	20	U	20	25	U	25	10	U	10	12	U	12	12	U	12	12	U	12
Bromoform	50		ND		2	10	U	10	200	U	200	100	U	100	80	U	80	100	U	100	40	U	40	50	U	50	50	U	50	50	U	50
Bromomethane	5		ND		1	5	U	5	100	U	100	50	U	50	40	U	40	50	U	50	20	U	20	25	U	25	25	U	25	25	UJ	25
Carbon disulfide			ND		5	25	U	25	500	U	500	250	U	250	200	U	200	250	U	250	100	U	100	120	U	120	120	U	120	120	U	120
Carbon tetrachloride	5		ND		0.5	2.5	U	2.5	50	U	50	25	U	25	20	U	20	25	U	25	10	U	10	12	U	12	12	U	12	12	U	12
Chlorobenzene	5		ND		0.5	2.5	U	2.5	50	U	50	25	U	25	20	U	20	25	U	25	10	U	10	12	U	12	12	U	12	12	U	12
Chloroethane	5		ND		1	5	U	5	100	U	100	50	U	50	40	U	40	50	U	50	20	U	20	25	U	25	25	U	25	25	U	25
Chloroform	7		ND		0.75	3.8	U	3.8	75	U	75	38	U	38	30	U	30	38	U	38	15	U	15	19	U	19	19	U	19	19	U	19
Chloromethane	5		ND		2.5	12	U	12	250	U	250	120	U	120	100	U	100	120	U	120	50	U	50	62	UJ	62	62	U	62	62	U	62
cis-1,3-Dichloropropene	0.4		ND		0.5	2.5	U	2.5	50	U	50	25	U	25	20	U	20	25	U	25	10	U	10	12	U	12	12	U	12	12	U	12
Dibromochloromethane	50		ND		0.5	2.5	U	2.5	50	U	50	25	U	25	20	U	20	25	U	25	10	U	10	12	U	12	12	U	12	12	U	12
Dibromomethane	5		ND		5	25	U	25	500	U	500	250	U	250	200	U	200	250	U	250	100	U	100	120	U	120	120	U	120	120	U	120
Dichlorodifluoromethane	5		ND		5	25	U	25	500	U	500	250	U	250	200	U	200	250	U	250	100	U	100	120	U	120	120	U	120	120	U	120
Ethyl ether			NA		NA	12	U	12	250	U	250	120	U	120	100	U	100	120	U	120	50	U	50	62	U	62	62	U	62	62	U	62
Ethyl methacrylate			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Ethylbenzene	5		ND		0.5	2.5	U	2.5	50	U	50	25	U	25	20	U	20	25	U	25	10	U	10	12	U	12	12	U	12	12	U	12
Hexachlorobutadiene	0.5		ND		0.6	3	U	3	60	U	60	30	U	30	24	U	24	30	U	30	12	U	12	15	U	15	15	U	15	15	U	15
Iodomethane	5		NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Isopropylbenzene	5		ND		0.5	2.5	U	2.5	50	U	50	25	U	25	20	U	20	25	U	25	10	U	10	12	U	12	12	U	12	12	U	12
Methyl tert butyl ether			ND		1	5	U	5	100	U	100	50	U	50	40	U	40	50	U	50	20	U	20	25	UJ	25	25	U	25	25	U	25
Methylene chloride	5		ND		5	25	U	25	500	U	500	250	U	250	200	U	200	250	U	250	100	U	100	120	U	120	120	U	120	120	U	120
n-Butylbenzene	5		ND		0.5	2.5	U	2.5	50	U	50	25	U	25	20	U	20	25	U	25	10	U	10	12	U	12	12	U	12	12	U	12
n-Propylbenzene	5		ND		0.5	2.5	U	2.5	50	U	50	25	U	25	20	U	20	25	U	25	10	U	10	12	U	12	12	U	12	12	U	12
Naphthalene	10		ND		2.5	12	U	12	250	U	250	120	U	120	100	U	100	120	U	120	50	U	50	62	U	62	11	J	11	62	U	62
o-Chlorotoluene	5		ND		2.5	12	U	12	250	U	20	120	U	120	100	U	100	120	U	120	50	U	50	62	U	62	62	U	62	62	U	62
o-Xylene			ND		1	5	U	5	100	U	100	50	U	50	40	U	40	50	U	50	20	U	20	25	U	25	25	U	25	25	U	25
p-Chlorotoluene	5		ND		2.5	12	U	12	250	U	250	120	U	120	100	U	100	120	U	120	50	U	50	62	U	62	62	U	62	62	U	62
p-Isopropyltoluene	5		ND		0.5	2.5	U	2.5	50	U	50	25	U	25	20	U	20	25	U	25	10	U	10	12	U	12	12	U	12	12	U	12
p/m-Xylene			ND		1	5	U	5	100	U	100	50	U	50	40	U	40	50	U	50	20	U	20	25	U	25	25	U	25	25	U	25
sec-Butylbenzene	5		ND		0.5	2.5	U	2.5	50	U	50	25	U	25	20	U	20	25	U	25	10	U	10	12	U	12	12	U	12	12	U	12
Styrene	5		ND		1	5	U	5	100	U	100	50	U	50	40	U	400	50	U	50	20	U	20	25	U	25	25	U	25	25	U	25
tert-Butylbenzene	5		ND		2.5	12	U	12	250	U	250	120	U	120	100	U	100	120	U	120	50	U	50	62	U	62	62	U	62	62	U	62
Tetrahydrofuran	50		NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Toluene	5		ND		0.75	3.8	U	3.8	75	U	75	38	U	38	30	U	30	38	U	38	15	U	15	19	U	19	19	U	19	19	U	19
trans-1,3-Dichloropropene	0.4		ND		0.5	2.5	U	2.5	50	U	50	25	U	25	20	U	20	25	U	25	10	U	10	12	U	12	12	U	12	12	U	12
trans-1,4-Dichloro-2-butene	5		NA		NA	12	U	12	250	U	250	120	U	120	100	U	100	120	U	120	50	U	50	62	U	62	62	U	62	62	U	62
Trichlorofluoromethane	5		ND		2.5	12	U	12	250	U	250	120	U	120	100	U	100	120	U	120	50	U	50	62	U	62	62	U	62	62	U	62
Vinyl acetate			ND		5	25	U	25	500	U	500	250	U	250	200	U	200	250	U	250	100	U	100	120	U	120	120	U	120	120	UJ	120

Table 1
Groundwater Analytical Data
Orangetown Shopping Center - Brownfield Site #C344066
Orangeburg, New York

LOCATION	NYSDEC TOGS SGC	Guidance Value	MW-1			MW-1			MW-2			MW-2			MW-2			Duplicate MW-2			MW-2			MW-2			MW-2			MW-2		
Matrix			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater		
SAMPLING DATE			11/25/2008			4/30/2010			4/29/2010			6/16/2010			8/9/2010			8/9/2010			4/20/2011			5/16/2011			5/31/2011			6/22/2011		
Units			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l		
PARAMETER			Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL
Dissolved Gases by GC																																
Ethane			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Ethene			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	3.07	J	0.5	3.8		0.5	3.96		0.5	9.91		0.5
Methane			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Carbon Dioxide			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Anions by Ion Chromatography																																
Chloride	250,000		NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Sulfate	250,000		NA		NA	NA		NA	38000		10000	35,000		10000	28000		100	28000		10000	31000		10000	32000		10000	34000		10000	27000		10000
Nitrogen, Ammonia	2,000		NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Nitrogen, Nitrate/Nitrite	10,000		NA		NA	NA		NA	310		100	100	U	100	320		100	100	U	100	810	U	100	360		100	420		100	420		100
Phosphorus, Orthophosphate			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Sulfide	50		NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Sulfite	200		NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Dissolved Organic Carbon			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Total Organic Carbon			NA		NA	NA		NA	3800	U	1000	26000		2000	3800		1000	3800		1000	2600		1000	3800	U	1000	3000		1000	2800	U	1000
Iron, Ferrous			NA		NA	NA		NA	NA		NA	640	J	500	2600	J	500	2500	J	500	500	UJ	500	960	J	500	740	J	500	210	J	500
Hardness			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Ferric Iron			NA		NA	NA		NA	NA		NA	1400	J	500	4700	J	500	4600	J	500	500	UJ	500	500	UJ	500	500	UJ	500	580		500
Total Metals																																
Antimony, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Arsenic, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Barium, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Beryllium, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Cadmium, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Chromium, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Copper, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Iron, Total	300		NA		NA	NA		NA	**1600**		50	**2000**		50	**7300**		50	**7100**		50	280		50	**1200**		50	**980**		50	**580**		50
Lead, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Manganese, Total			NA		NA	NA		NA	14400		10	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Mercury, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Nickel, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Selenium, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Silver, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Thallium, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Zinc, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA

Source: Alpha Analytical Lab Reports: L0713529, L0716004, L0716078, L0817489, L1006386, L1009164, L1012239, L1020006, L1105478, L1106875, L1107639, L1109071, andL1109210
ug/l = micrograms per liter Q = Laboratory Qualifier RL = Laboratory Reported Limit
NA = not analyzed ND = Not Detected at or above the Laboratory Reported Limit
Bold = detected above NYSDEC TOGS SCG
Note: See DUSRs in Appendix J or associated previously published reports for details regarding valiation and usability.

Table 1
Groundwater Analytical Data
Orangetown Shopping Center - Brownfield Site #C344066
Orangeburg, New York

LOCATION	NYSDEC TOGS SGC	Guidance Value	MW-3			MW-3			MW-3			MW-3			MW-3			MW-3			MW-3			MW-4			MW-4			MW-4			MW-4		
Matrix			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater		
SAMPLING DATE			9/14/2007			11/24/2008			4/29/2010			4/21/2011			5/16/2011			5/31/2011			6/21/2011			9/14/2007			11/24/2008			4/30/2010			6/16/2010		
Units			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l		
PARAMETER			Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL
Dissolved Organic Carbon			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Iron, Ferrous			NA		NA	NA		NA	NA		NA	7000		5000	52000		12000	12000	J	2500	140000	J	50000	NA		NA	NA		NA	NA		NA	1400	J	500
Primary Constituents of Concern VOCs by GC/MS (8																																			
1,1-Dichloroethene	5		ND		100	ND		100	12	U	12	12	U	12	5	U	5	12	U	12	10	U	10	ND		0.5	ND		10	2.5	U	2.5	10	U	10
cis-1,2-Dichloroethene	5		NA		NA	NA		NA	NA		NA	**1200**		12	**340**		5	**120**		10	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
cis-1,2-Dichloroethene	5		**11,000**		100	**6400**		100	**7900**		120	NA		NA	NA		NA	NA		NA	**200**		10	**>100**		0.5	**710**		10	160		2.5	**840**		10
Tetrachloroethene	5		ND		100	ND		100	12	U	12	12	U	12	5	U	5	12	U	12	10	U	10	ND		0.5	ND		10	2.5	U	2.5	10	U	10
trans-1,2-Dichloroethene	5		NA		NA	NA		NA	NA		NA	19	U	19	7.5	U	7.5	19	U	19	15	U	15	NA		NA	NA		NA	NA		NA	NA		NA
trans-1,2-Dichloroethene	5		ND		150	ND		150	19	U	19	NA		NA	NA		NA	NA		NA	NA		NA	2.9		0.75	ND		15	3.8	U	3.8	15	U	15
Trichloroethene	5		ND		100	ND		100	**210**		12	**12**	U	12	5	U	5	**10**	U	10	4.1	J	10	**17**		0.5	**14**		10	**5.1**		2.5	10	U	10
Vinyl chloride	2		ND		200	**1800**		200	**60**		25	**450**		25	**130**		10	**51**		20	**22**		20	**21**		1.0	**70**		20	5	U	5	20	U	20
Other VOCs by GC/MS (8260B)																																			
1,1,1,2-Tetrachloroethane	5		ND		100	ND		100	12	U	12	12	U	12	5	U	5	10	U	10	10	U	10	ND		0.5	ND		10	2.5	U	2.5	10	U	10
1,1,1-Trichloroethane	5		ND		100	ND		100	12	U	12	12	U	12	5	U	5	10	U	10	10	U	10	ND		0.5	ND		10	2.5	U	2.5	10	U	10
1,1,2,2-Tetrachloroethane	5		ND		100	ND		100	12	U	12	12	U	12	5	U	5	10	U	10	10	U	10	ND		0.5	ND		10	2.5	U	2.5	10	U	10
1,1,2-Trichloroethane	1		ND		150	ND		150	19	U	19	19	U	19	7.5	U	7.5	15	U	15	15	U	15	ND		0.75	ND		15	3.8	U	3.8	15	U	15
1,1-Dichloroethane	5		ND		150	ND		150	19	U	19	19	U	19	7.5	U	7.5	15	U	15	15	U	15	ND		0.75	ND		15	3.8	U	3.8	15	U	15
1,1-Dichloropropene	5		ND		500	ND		500	62	U	62	62	U	62	25	U	25	50	U	50	50	U	50	ND		2.5	ND		50	12	U	12	50	U	50
1,2,3-Trichlorobenzene	5		ND		500	ND		500	62	U	62	62	UJ	62	25	U	25	50	U	50	50	U	50	ND		2.5	ND		50	12	U	12	50	U	50
1,2,3-Trichloropropane	0.04		ND		1,000	ND		1000	120	U	120	120	U	120	50	U	50	100	U	100	100	U	100	ND		5	ND		100	25	U	25	100	U	100
1,2,4,5-Tetramethylbenzene			NA		NA	ND		400	50	U	50	50	U	50	20	U	20	40	U	40	40	U	40	NA		NA	ND		40	10	U	10	40	U	40
1,2,4-Trichlorobenzene	5		ND		500	ND		500	62	U	62	62	UJ	62	25	U	25	50	U	50	50	U	50	ND		2.5	ND		50	12	U	12	50	U	50
1,2,4-Trimethylbenzene	5		ND		500	ND		500	62	U	62	62	U	62	25	U	25	50	U	50	50	U	50	ND		2.5	ND		50	12	U	12	50	U	50
1,2-Dibromo-3-chloropropane	0.04		ND		500	ND		500	62	U	62	62	U	62	25	U	25	50	U	50	50	U	50	ND		2.5	ND		50	12	U	12	50	U	50
1,2-Dibromoethane	5		ND		400	ND		400	50	U	50	50	U	50	20	U	20	40	U	40	40	U	40	ND		2	ND		40	10	U	10	40	U	40
1,2-Dichlorobenzene	3		ND		500	ND		500	62	U	62	62	U	62	25	U	25	50	U	50	50	U	50	ND		2.5	ND		50	12	U	12	50	U	50
1,2-Dichloroethane	0.6		ND		100	ND		100	12	U	12	12	U	12	5	U	5	10	U	10	10	U	10	ND		0.5	ND		10	2.5	U	2.5	10	U	10
1,2-Dichloropropane	1		ND		350	ND		350	44	U	44	44	U	44	18	U	18	35	U	35	35	U	35	ND		1.8	ND		35	8.8	U	8.8	35	U	35
1,3,5-Trimethylbenzene	5		ND		500	ND		500	62	U	62	62	U	62	25	U	25	50	U	50	50	U	50	ND		2.5	ND		50	12	U	12	50	U	50
1,3-Dichlorobenzene	3		ND		500	ND		500	62	U	62	62	U	62	25	U	25	50	U	50	50	U	50	ND		2.5	ND		50	12	U	12	50	U	50
1,3-Dichloropropane	5		ND		500	ND		500	62	U	62	62	U	62	25	U	25	50	U	50	50	U	50	ND		2.5	ND		50	12	U	12	50	U	50
1,4-Dichlorobenzene	3		ND		500	ND		500	62	U	62	62	U	62	25	U	25	50	U	50	50	U	50	ND		2.5	ND		50	12	U	12	50	U	50
1,4-Dichlorobutane			ND		1,000	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	ND		5	NA		NA	NA		NA	NA		NA
1,4-Diethylbenzene			NA		NA	ND		400	50	U	50	50	U	50	20	U	20	40	U	40	40	U	40	NA		NA	ND		40	10	U	10	40	U	40
2,2-Dichloropropane	5		ND		500	ND		500	62	U	62	62	U	62	25	U	25	50	U	50	50	U	50	ND		2.5	ND		50	12	U	12	50	U	50
2-Butanone	50		NA		NA	NA		NA	**640**		120	**1100**		120	**990**		50	**640**		100	100	U	100	NA		NA	NA		NA	25	U	25	100	U	100
2-Butanone	50		ND		1,000	ND		1000	NA		NA	NA	U	NA	NA		NA	NA		NA	NA		NA	ND		5	ND		100	NA		NA	NA		NA
2-Hexanone	50		ND		1,000	ND		1000	120	U	120	120	U	120	**56**		50	100	U	100	100	U	100	ND		5	ND		100	25	U	25	100	U	100
4-Ethyltoluene			NA		NA	ND		400	50	U	50	50	U	50	20	U	20	40	U	40	40	U	40	NA		NA	ND		40	10	U	10	40	U	40
4-Methyl-2-pentanone			ND		1,000	ND		1000	120	U	120	120	U	120	50	U	50	100	U	100	100	U	100	ND		5	ND		100	25	U	25	100	U	100
Acetone	50		ND		1,000	ND		1000	120	U	120	**140**		120	**220**		50	**170**		100	**86**	J	100	6.2		5	ND		100	25	U	25	100	U	100
Acrolein	5		ND		2,500	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	ND		12	NA		NA	NA		NA	NA		NA

Table 1
Groundwater Analytical Data
Orangetown Shopping Center - Brownfield Site #C344066
Orangeburg, New York

LOCATION	NYSDEC TOGS SGC	Guidance Value	MW-3			MW-3			MW-3			MW-3			MW-3			MW-3			MW-3			MW-4			MW-4			MW-4			MW-4		
Matrix			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater		
SAMPLING DATE			9/14/2007			11/24/2008			4/29/2010			4/21/2011			5/16/2011			5/31/2011			6/21/2011			9/14/2007			11/24/2008			4/30/2010			6/16/2010		
Units			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l		
PARAMETER			Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL
Acrylonitrile	5		ND		1,000	ND		1000	120	U	120	120	U	120	50	U	50	100	U	100	100	U	100	ND		5	ND		100	25	U	25	100	U	100
Benzene	1		ND		100	ND		100	12	U	12	12	U	12	5	U	5	10	U	10	10	U	10	ND		0.5	ND		10	2.5	U	2.5	10	U	10
Bromobenzene	5		ND		500	ND		500	62	U	62	62	U	62	25	U	25	50	U	50	50	U	50	ND		2.5	ND		50	12	U	12	50	U	50
Bromochloromethane	5		ND		500	ND		500	62	U	62	62	U	62	25	U	25	50	U	50	50	U	50	ND		2.5	ND		50	12	U	12	50	U	50
Bromodichloromethane	50		ND		100	ND		100	12	U	12	12	U	12	5	U	5	10	U	10	10	U	10	ND		0.5	ND		10	2.5	U	2.5	10	U	10
Bromoform	50		ND		400	ND		400	50	U	50	50	U	50	20	U	20	40	U	40	40	U	40	ND		2	ND		40	10	U	10	40	U	40
Bromomethane	5		ND		200	ND		200	25	U	25	25	U	25	10	U	10	20	U	20	20	UJ	20	ND		1	ND		20	5	U	5	20	U	20
Carbon disulfide			ND		1,000	ND		1000	120	U	120	120	U	120	50	U	50	100	U	100	100	U	100	ND		5	ND		100	25	U	25	100	U	100
Carbon tetrachloride	5		ND		100	ND		100	12	U	12	12	U	12	5	U	5	10	U	10	10	U	10	ND		0.5	ND		10	2.5	U	2.5	10	U	10
Chlorobenzene	5		ND		100	ND		100	12	U	12	12	U	12	5	U	5	10	U	10	10	U	10	ND		0.5	ND		10	2.5	U	2.5	10	U	10
Chloroethane	5		ND		200	ND		200	25	U	25	25	U	25	10	U	10	20	U	20	20	U	20	ND		1	ND		20	5	U	5	20	U	20
Chloroform	7		ND		150	ND		150	19	U	19	19	U	19	7.5	U	7.5	15	U	15	17		15	ND		0.75	ND		15	3.8	U	3.8	15	U	15
Chloromethane	5		ND		500	ND		500	62	U	62	62	U	62	25	U	25	50	U	50	50	U	50	ND		2.5	ND		50	12	U	12	50	U	50
cis-1,3-Dichloropropene	0.4		ND		100	ND		100	12	U	12	12	U	12	5	U	5	10	U	10	10	U	10	ND		0.5	ND		10	2.5	U	2.5	10	U	10
Dibromochloromethane	50		ND		100	ND		100	12	U	12	12	U	12	5	U	5	10	U	10	10	U	10	ND		0.5	ND		10	2.5	U	2.5	10	U	10
Dibromomethane	5		ND		1,000	ND		1000	120	U	120	120	U	120	50	U	50	100	U	100	100	U	100	ND		5	ND		100	25	U	25	100	U	100
Dichlorodifluoromethane	5		ND		1,000	ND		1000	120	U	120	120	U	120	50	U	50	100	U	100	100	U	100	ND		5	ND		100	25	U	25	100	U	100
Ethyl ether			ND		500	NA		NA	62	U	62	62	U	62	25	U	25	50	U	50	50	U	50	ND		2.5	NA		NA	12	U	12	50	U	50
Ethyl methacrylate			ND		1,000	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	ND		5	NA		NA	NA		NA	NA		NA
Ethylbenzene	5		ND		100	ND		100	12	U	12	12	U	12	5	U	5	10	U	10	10	U	10	ND		0.5	ND		10	2.5	U	2.5	10	U	10
Hexachlorobutadiene	0.5		ND		120	ND		120	15	U	15	15	U	15	6	U	6	12	U	12	12	U	12	ND		0.6	ND		12	3	U	3	12	U	12
Iodomethane	5		ND		1,000	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	ND		5	NA		NA	NA		NA	NA		NA
Isopropylbenzene	5		ND		100	ND		100	12	U	12	12	U	12	5	U	5	10	U	10	10	U	10	ND		0.5	ND		10	2.5	U	2.5	10	U	10
Methyl tert butyl ether			ND		200	ND		200	25	U	25	25	U	25	10	UJ	10	20	U	20	20	U	20	ND		1	ND		20	5	U	5	20	U	20
Methylene chloride	5		ND		1,000	ND		1000	120	U	120	120	U	120	50	U	5	100	U	100	100	U	100	ND		5	ND		100	25	U	25	100	U	100
n-Butylbenzene	5		ND		100	ND		100	12	U	12	12	U	12	5	U	5	10	U	10	10	U	10	ND		0.5	ND		10	2.5	U	2.5	10	U	10
n-Propylbenzene	5		ND		100	ND		100	12	U	12	12	U	12	5	U	5	10	U	10	10	U	10	ND		0.5	ND		10	2.5	U	2.5	10	U	10
Naphthalene	10		ND		500	ND		500	62	U	62	62	U	62	25	U	25	50	U	50	50	U	50	ND		2.5	ND		50	12	U	12	50	U	50
o-Chlorotoluene	5		ND		500	ND		500	62	U	62	62	U	62	25	U	25	50	U	50	50	U	50	ND		2.5	ND		50	12	U	12	50	U	50
o-Xylene			ND		200	ND		200	25	U	25	25	U	25	10	U	10	20	U	20	20	U	20	ND		1	ND		20	5	U	5	20	U	20
p-Chlorotoluene	5		ND		500	ND		500	62	U	62	62	U	62	25	U	25	50	U	50	50	U	50	ND		2.5	ND		50	12	U	12	50	U	50
p-Isopropyltoluene	5		ND		100	ND		100	12	U	12	12	U	12	5	U	5	10	U	10	10	U	10	ND		0.5	ND		10	2.5	U	2.5	10	U	10
p/m-Xylene			ND		200	ND		200	25	U	25	25	U	25	10	U	10	20	U	20	20	U	20	ND		1	ND		20	5	U	5	20	U	20
sec-Butylbenzene	5		ND		100	ND		100	12	U	12	12	U	12	5	U	5	10	U	10	10	U	10	ND		0.5	ND		10	2.5	U	2.5	10	U	10
Styrene	5		ND		200	ND		200	25	U	25	25	U	25	10	U	10	20	U	20	20	U	20	ND		1	ND		20	5	U	5	20	U	20
tert-Butylbenzene	5		ND		500	ND		500	62	U	62	62	U	62	25	U	25	50	U	50	50	U	50	ND		2.5	ND		50	12	U	12	50	U	50
Tetrahydrofuran	50		ND		2,000	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	ND		10	NA		NA	NA		NA	NA		NA
Toluene	5		ND		150	ND		150	19	U	19	19	U	19	7.5	U	7.5	15	U	15	15	U	15	ND		0.75	ND		15	3.8	U	3.8	15	U	15
trans-1,3-Dichloropropene	0.4		ND		100	ND		100	12	U	12	12	U	12	5	U	5	10	U	10	10	U	10	ND		0.5	ND		10	2.5	U	2.5	10	U	10
trans-1,4-Dichloro-2-butene	5		ND		500	NA		NA	62	U	62	62	U	62	25	U	25	50	U	50	50	U	50	ND		2.5	NA		NA	12	U	12	50	U	50
Trichlorofluoromethane	5		ND		500	ND		500	62	U	62	62	U	62	25	U	25	50	U	50	50	U	50	ND		2.5	ND		50	12	U	12	50	U	50
Vinyl acetate			ND		1,000	ND		1000	120	U	120	120	U	120	50	U	50	100	U	100	100	U	100	ND		5	ND		100	25	U	25	100	U	100

Table 1
Groundwater Analytical Data
Orangetown Shopping Center - Brownfield Site #C344066
Orangeburg, New York

LOCATION	NYSDEC TOGS SGC	Guidance Value	MW-3			MW-3			MW-3			MW-3			MW-3			MW-3			MW-3			MW-4			MW-4			MW-4			MW-4		
Matrix			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater		
SAMPLING DATE			9/14/2007			11/24/2008			4/29/2010			4/21/2011			5/16/2011			5/31/2011			6/21/2011			9/14/2007			11/24/2008			4/30/2010			6/16/2010		
Units			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l		
PARAMETER			Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL
Dissolved Gases by GC																																			
Ethane			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Ethene			NA		NA	NA		NA	NA		NA	122		0.5	31.2		0.5	18.9		0.5	5.76		0.5	NA		NA	NA		NA	NA		NA	NA		NA
Methane			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Carbon Dioxide			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Anions by Ion Chromatography																																			
Chloride	250,000		NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Sulfate	250,000		NA		NA	NA		NA	20000		10000	50000	U	50000	33000	J	100000	50000	U	50000	**490000**	J	620000	NA		NA	NA		NA	32000		10000	46000		20000
Nitrogen, Ammonia	2,000		NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Nitrogen, Nitrate/Nitrite	10,000		NA		NA	NA		NA	430		100	210	U	100	500	J	1000	6900		500	5000	U	5000	NA		NA	NA		NA	2500		100	600		100
Phosphorus, Orthophosphate			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Sulfide	50		NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Sulfite	200		NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Dissolved Organic Carbon			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Total Organic Carbon			NA		NA	NA		NA	3600	U	1000	530000		32000	1400000		260000	380000		32000	21000000		1600000	NA		NA	NA		NA	2200	U	1000	98000		10000
Iron, Ferrous			NA		NA	NA		NA	NA		NA	7000		5000	52000		12000	12000	J	2500	140000	J	50000	NA		NA	NA		NA	NA		NA	1400	J	500
Hardness			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Ferric Iron			NA		NA	NA		NA	NA		NA	17000		5000	12000	U	12000	7000	J	2500	50000	UJ	50000	NA		NA	NA		NA	NA		NA	500	UJ	500
Total Metals																																			
Antimony, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	ND		50	NA		NA	NA		NA
Arsenic, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	ND		5	NA		NA	NA		NA
Barium, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	397		10	NA		NA	NA		NA
Beryllium, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	ND		5	NA		NA	NA		NA
Cadmium, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	ND		5	NA		NA	NA		NA
Chromium, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	ND		10	NA		NA	NA		NA
Copper, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	ND		10	NA		NA	NA		NA
Iron, Total	300		NA		NA	NA		NA	80		50	**24000**		50	**49000**		50	**19000**		100	**130000**		**5000**	NA		NA	NA		NA	50	U	50	**1800**		50
Lead, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	ND		10	NA		NA	NA		NA
Manganese, Total			NA		NA	NA		NA	2950		10	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	21		10	NA		NA
Mercury, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	ND		0.2	NA		NA	NA		NA
Nickel, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	ND		25	NA		NA	NA		NA
Selenium, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	ND		10	NA		NA	NA		NA
Silver, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	ND		7	NA		NA	NA		NA
Thallium, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	ND		20	NA		NA	NA		NA
Zinc, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	ND		50	NA		NA	NA		NA

Source: Alpha Analytical Lab Reports: L0713529, L0716004, L0716078, L0817489, L1006386, L1009164, L1012239, L1020006, L1105478, L1106875, L1107639, L1109071, andL1109210
ug/l = micrograms per liter Q = Laboratory Qualifier RL = Laboratory Reported Limit
NA = not analyzed ND = Not Detected at or above the Laboratory Reported Limit
Bold = detected above NYSDEC TOGS SCG
Note: See DUSRs in Appendix J or associated previously published reports for details regarding valiation and usability.

Table 1
Groundwater Analytical Data
Orangetown Shopping Center - Brownfield Site #C344066
Orangeburg, New York

LOCATION	NYSDEC TOGS SGC	Guidance Value	Duplicate MW-4			MW-4			MW-4			Duplicate MW-4			MW-4			MW-4			Duplicate MW-4			MW-4			Duplicate MW-4			MW-5			MW-5			MW-5		
Matrix			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater		
SAMPLING DATE			6/16/2010			8/9/2010			4/20/2011			4/20/2011			5/16/2011			5/31/2011			5/31/2011			6/22/2011			6/22/2011			10/23/2007			10/24/2007			10/25/2007		
Units			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l		
PARAMETER			Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL
Dissolved Organic Carbon			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Iron, Ferrous			1400	J	500	500	UJ	500	500	UJ	500	500	UJ	500	500	UJ	500	500	UJ	500	500	UJ	500	500	UJ	500	500	UJ	500	NA		NA	NA		NA	NA		NA
Primary Constituents of Concern VOCs by GC/MS (8																																						
1,1-Dichloroethene	5		10	U	10	10	U	10	2	U	2	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	10	U	10	ND		50	NA		NA	NA		NA
cis-1,2-Dichloroethene	5		NA		NA	NA		NA	**190**		2	**180**		2.5	**170**		2.5	**220**		2.5	**220**		2.5	**650**		10	NA		NA	NA		NA	NA		NA	NA		NA
cis-1,2-Dichloroethene	5		**680**		10	**1400**		10	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	**580**	E	2.5	**680**		10	**>10,000**		50	NA		NA	NA		NA
Tetrachloroethene	5		10	U	10	10	U	10	2	U	2	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	10	U	10	ND		50	NA		NA	NA		NA
trans-1,2-Dichloroethene	5		NA		NA	NA		NA	3	U	3	3.8	U	3.8	3.8	U	3.8	3.8	U	3.8	3.8	U	3.8	3.8	U	3.8	15	U	15	NA		NA	NA		NA	NA		NA
trans-1,2-Dichloroethene	5		15	U	15	15	U	15	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	**380**		75	NA		NA	NA		NA
Trichloroethene	5		10	U	10	10	U	10	**5.8**		2	**5.3**		2.5	3.5		2.5	**6.8**		2.5	**6.5**		2.5	**6.5**		2.5	**7.9**	J	10	**340**		50	NA		NA	NA		NA
Vinyl chloride	2		20	U	20	**23**		20	4	U	4	5	U	5	1.8	J	5	5	U	5	5	U	5	**96**		5	**110**		20	**380**		100	NA		NA	NA		NA
Other VOCs by GC/MS (8260B)																																						
1,1,1,2-Tetrachloroethane	5		10	U	10	10	U	10	2	U	2	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	10	U	10	50		50	NA		NA	NA		NA
1,1,1-Trichloroethane	5		10	U	10	10	U	10	2	U	2	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	10	U	10	50		50	NA		NA	NA		NA
1,1,2,2-Tetrachloroethane	5		10	U	10	10	U	10	2	U	2	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	10	U	10	50		50	NA		NA	NA		NA
1,1,2-Trichloroethane	1		15	U	15	15	U	15	3	U	3	3.8	U	3.8	3.8	U	3.8	3.8	U	3.8	3.8	U	3.8	3.8	U	3.8	15	U	15	75		75	NA		NA	NA		NA
1,1-Dichloroethane	5		15	U	15	15	U	15	3	U	3	3.8	U	3.8	3.8	U	3.8	3.8	U	3.8	3.8	U	3.8	3.8	U	3.8	15	U	15	75		75	NA		NA	NA		NA
1,1-Dichloropropene	5		50	U	50	50	U	50	10	U	10	12	U	12	12	U	12	12	U	12	12	U	12	12	U	12	50	U	50	250		250	NA		NA	NA		NA
1,2,3-Trichlorobenzene	5		50	U	50	50	U	50	10	UJ	10	12	UJ	12	12	U	12	12	U	12	12	U	12	12	U	12	50	U	50	250		250	NA		NA	NA		NA
1,2,3-Trichloropropane	0.04		100	U	100	100	U	100	20	U	20	25	U	25	25	U	25	25	U	25	25	U	25	25	U	25	100	U	100	500		500	NA		NA	NA		NA
1,2,4,5-Tetramethylbenzene			40	U	40	40	U	40	8	U	8	10	U	10	10	U	10	10	U	10	10	U	10	10	U	10	40	U	40	NA		NA	NA		NA	NA		NA
1,2,4-Trichlorobenzene	5		50	U	50	50	U	50	10	UJ	10	12	UJ	12	12	U	12	12	U	12	12	U	12	12	U	12	50	U	50	250		250	NA		NA	NA		NA
1,2,4-Trimethylbenzene	5		50	U	50	50	U	50	10	U	10	12	U	12	12	U	12	12	U	12	12	U	12	12	U	12	50	U	50	250		250	NA		NA	NA		NA
1,2-Dibromo-3-chloropropane	0.04		50	U	50	50	U	50	10	U	10	12	U	12	12	U	12	12	U	12	12	U	12	12	U	12	50	U	50	250		250	NA		NA	NA		NA
1,2-Dibromoethane	5		40	U	40	40	U	40	8	U	8	10	U	10	10	U	10	10	U	10	10	U	10	10	U	10	40	U	40	200		200	NA		NA	NA		NA
1,2-Dichlorobenzene	3		50	U	50	50	U	50	10	U	10	12	U	12	12	U	12	12	U	12	12	U	12	12	U	12	50	U	50	250		250	NA		NA	NA		NA
1,2-Dichloroethane	0.6		10	U	10	10	U	10	2	U	2	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	10	U	10	50		50	NA		NA	NA		NA
1,2-Dichloropropane	1		35	U	35	35	U	35	7	U	7	8.8	U	8.8	8.8	U	8.8	8.8	U	8.8	8.8	U	8.8	8.8	U	8.8	35	U	35	180		180	NA		NA	NA		NA
1,3,5-Trimethylbenzene	5		50	U	50	50	U	50	10	U	10	12	U	12	12	U	12	12	U	12	12	U	12	12	U	12	50	U	50	250		250	NA		NA	NA		NA
1,3-Dichlorobenzene	3		50	U	50	50	U	50	10	U	10	12	U	12	12	U	12	12	U	12	12	U	12	12	U	12	50	U	50	250		250	NA		NA	NA		NA
1,3-Dichloropropane	5		50	U	50	50	U	50	10	U	10	12	U	12	12	U	12	12	U	12	12	U	12	12	U	12	50	U	50	250		250	NA		NA	NA		NA
1,4-Dichlorobenzene	3		50	U	50	50	U	50	10	U	10	12	U	12	12	U	12	12	U	12	12	U	12	12	U	12	50	U	50	250		250	NA		NA	NA		NA
1,4-Dichlorobutane			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	500		500	NA		NA	NA		NA
1,4-Diethylbenzene			40	U	40	40	U	40	8	U	8	10	U	10	10	U	10	10	U	10	10	U	10	10	U	10	40	U	40	NA		NA	NA		NA	NA		NA
2,2-Dichloropropane	5		50	U	50	50	U	50	10	U	10	12	U	12	12	U	12	12	U	12	12	U	12	12	U	12	50	U	50	ND		250	NA		NA	NA		NA
2-Butanone	50		100	U	100	100	U	100	20	U	20	25	U	25	25	U	25	25	U	25	25	U	25	25	U	25	100	U	100	NA		NA	NA		NA	NA		NA
2-Butanone	50		NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	ND		500	NA		NA	NA		NA
2-Hexanone	50		100	U	100	100	U	100	20	U	20	25	U	25	25	U	25	25	U	25	25	U	25	25	U	25	100	U	100	ND		500	NA		NA	NA		NA
4-Ethyltoluene			40	U	40	40	U	40	8	U	8	10	U	10	10	U	10	10	U	10	10	U	10	10	U	10	40	U	40	NA		NA	NA		NA	NA		NA
4-Methyl-2-pentanone			100	U	100	100	U	100	20	U	20	25	U	25	25	U	25	25	U	25	25	U	25	25	U	25	100	U	100	ND		500	NA		NA	NA		NA
Acetone	50		100	U	100	100	U	100	20	U	20	25	U	25	25	U	25	25	U	25	25	U	25	25	U	25	100	U	100	ND		500	NA		NA	NA		NA
Acrolein	5		NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA

Table 1
Groundwater Analytical Data
Orangetown Shopping Center - Brownfield Site #C344066
Orangeburg, New York

LOCATION	NYSDEC TOGS SGC	Guidance Value	Duplicate MW-4			MW-4			MW-4			Duplicate MW-4			MW-4			MW-4			Duplicate MW-4			MW-4			MW-4			MW-5			MW-5			MW-5		
Matrix			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater		
SAMPLING DATE			6/16/2010			8/9/2010			4/20/2011			4/20/2011			5/16/2011			5/31/2011			5/31/2011			6/22/2011			6/22/2011			10/23/2007			10/24/2007			10/25/2007		
Units			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l		
PARAMETER			Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL
Acrylonitrile	5		100	U	100	100	U	100	20	U	20	25	U	25	25	U	25	25	U	25	25	U	25	25	U	25	100	U	100	ND		500	NA		NA	NA		NA
Benzene	1		10	U	10	10	U	10	2	U	2	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	10	U	10	ND		50	NA		NA	NA		NA
Bromobenzene	5		50	U	50	50	U	50	10	U	10	12	U	12	12	U	12	12	U	12	12	U	12	12	U	12	50	U	50	ND		250	NA		NA	NA		NA
Bromochloromethane	5		50	U	50	50	U	50	10	U	10	12	U	12	12	U	12	12	U	12	12	U	12	12	U	12	50	U	50	ND		250	NA		NA	NA		NA
Bromodichloromethane	50		10	U	10	10	U	10	2	U	2	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	10	U	10	ND		50	NA		NA	NA		NA
Bromoform	50		40	U	40	40	U	40	8	U	8	10	U	10	10	U	10	10	U	10	10	U	10	10	U	10	40	U	40	ND		200	NA		NA	NA		NA
Bromomethane	5		20	U	20	20	U	20	4	U	4	5	U	5	5	U	5	5	U	5	5	U	5	5	UJ	5	20	UJ	20	ND		100	NA		NA	NA		NA
Carbon disulfide			100	U	100	100	U	100	20	U	20	25	U	25	25	U	25	25	U	25	25	U	25	25	U	25	100	U	100	ND		500	NA		NA	NA		NA
Carbon tetrachloride	5		10	U	10	10	U	10	2	U	2	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	10	U	10	ND		50	NA		NA	NA		NA
Chlorobenzene	5		10	U	10	10	U	10	2	U	2	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	10	U	10	ND		50	NA		NA	NA		NA
Chloroethane	5		20	U	20	20	U	20	4	U	4	5	U	5	5	U	5	5	U	5	5	U	5	5	U	5	20	U	20	ND		100	NA		NA	NA		NA
Chloroform	7		15	U	15	15	U	15	3	U	3	3.8	U	3.8	3.8	U	3.8	3.8	U	3.8	3.8	U	3.8	3.8	U	3.8	15	U	15	ND		75	NA		NA	NA		NA
Chloromethane	5		50	U	50	50	U	50	10	U	10	12	U	12	12	U	12	12	U	12	12	U	12	12	U	12	50	U	50	ND		250	NA		NA	NA		NA
cis-1,3-Dichloropropene	0.4		10	U	10	10	U	10	2	U	2	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	10	U	10	ND		50	NA		NA	NA		NA
Dibromochloromethane	50		10	U	10	10	U	10	2	U	2	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	10	U	10	ND		50	NA		NA	NA		NA
Dibromomethane	5		100	U	100	100	U	100	20	U	20	25	U	25	25	U	25	25	U	25	25	U	25	25	U	25	100	U	100	ND		500	NA		NA	NA		NA
Dichlorodifluoromethane	5		100	U	100	100	U	100	20	U	20	25	U	25	25	U	25	25	U	25	25	U	25	25	U	25	100	U	100	ND		500	NA		NA	NA		NA
Ethyl ether			50	U	50	50	U	50	10	U	10	12	U	12	12	U	12	12	U	12	12	U	12	12	U	12	50	U	50	ND		250	NA		NA	NA		NA
Ethyl methacrylate			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	ND		500	NA		NA	NA		NA
Ethylbenzene	5		10	U	10	10	U	10	2	U	2	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	10	U	10	ND		50	NA		NA	NA		NA
Hexachlorobutadiene	0.5		12	U	12	12	U	12	2.4	U	2.4	3	U	3	3	U	3	3	U	3	3	U	3	3	U	3	12	U	12	ND		60	NA		NA	NA		NA
Iodomethane	5		NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Isopropylbenzene	5		10	U	10	10	U	10	2	U	2	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	10	U	10	ND		50	NA		NA	NA		NA
Methyl tert butyl ether			20	U	20	20	U	20	4	U	4	5	U	5	5	UJ	5	5	U	5	5	U	5	5	U	5	20	U	20	ND		100	NA		NA	NA		NA
Methylene chloride	5		100	U	100	100	U	100	20	U	20	25	U	25	25	U	25	25	U	25	25	U	25	25	U	25	100	U	100	ND		500	NA		NA	NA		NA
n-Butylbenzene	5		10	U	10	10	U	10	2	U	2	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	10	U	10	ND		50	NA		NA	NA		NA
n-Propylbenzene	5		10	U	10	10	U	10	2	U	2	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	10	U	10	ND		50	NA		NA	NA		NA
Naphthalene	10		50	U	50	50	U	50	10	U	10	12	U	12	12	U	12	2.3	J	2.3	12	U	12	12	U	12	50	U	50	ND		250	NA		NA	NA		NA
o-Chlorotoluene	5		50	U	50	50	U	50	10	U	10	12	U	12	12	U	12	12	U	12	12	U	12	12	U	12	50	U	50	ND		250	NA		NA	NA		NA
o-Xylene			20	U	20	20	U	20	4	U	4	5	U	5	5	U	5	5	U	5	5	U	5	5	U	5	20	U	20	ND		100	NA		NA	NA		NA
p-Chlorotoluene	5		50	U	50	50	U	50	10	U	10	12	U	12	12	U	12	12	U	12	12	U	12	12	U	12	50	U	50	ND		250	NA		NA	NA		NA
p-Isopropyltoluene	5		10	U	10	10	U	10	2	U	2	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	10	U	10	ND		50	NA		NA	NA		NA
p/m-Xylene			20	U	20	20	U	20	4	U	4	5	U	5	5	U	5	5	U	5	5	U	5	5	U	5	20	U	20	ND		100	NA		NA	NA		NA
sec-Butylbenzene	5		10	U	10	10	U	10	2	U	2	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	10	U	10	ND		50	NA		NA	NA		NA
Styrene	5		20	U	20	20	U	20	4	U	4	5	U	5	5	U	5	5	U	5	5	U	5	5	U	5	20	U	20	ND		100	NA		NA	NA		NA
tert-Butylbenzene	5		50	U	50	50	U	50	10	U	10	12	U	12	12	U	12	12	U	12	12	U	121	12	U	12	50	U	50	ND		250	NA		NA	NA		NA
Tetrahydrofuran	50		NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	ND		1,000	NA		NA	NA		NA
Toluene	5		15	U	15	15	U	15	3	U	3	3.8	U	3.8	3.8	U	3.8	3.8	U	3.8	3.8	U	3.8	3.8	U	3.8	15	U	15	ND		75	NA		NA	NA		NA
trans-1,3-Dichloropropene	0.4		10	U	10	10	U	10	2	U	2	2.5	U	2.5	2.5	U	2.5	2.5	U	25	2.5	U	2.5	2.5	U	2.5	10	U	10	ND		50	NA		NA	NA		NA
trans-1,4-Dichloro-2-butene	5		50	U	50	50	U	50	10	U	10	12	U	12	12	U	12	12	U	12	12	U	12	12	U	12	50	U	50	ND		250	NA		NA	NA		NA
Trichlorofluoromethane	5		50	U	50	50	U	50	10	U	10	12	U	12	12	U	12	12	U	12	12	U	12	12	U	12	50	U	50	ND		250	NA		NA	NA		NA
Vinyl acetate			100	U	100	100	U	100	20	U	20	25	U	25	25	U	25	25	U	25	25	U	25	25	UJ	25	100	UJ	100	ND		500	NA		NA	NA		NA

Table 1
Groundwater Analytical Data
Orangetown Shopping Center - Brownfield Site #C344066
Orangeburg, New York

LOCATION	NYSDEC TOGS SGC	Guidance Value	Duplicate MW-4			MW-4			MW-4			Duplicate MW-4			MW-4			MW-4			Duplicate MW-4			MW-4			Duplicate MW-4			MW-5			MW-5			MW-5		
Matrix			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater		
SAMPLING DATE			6/16/2010			8/9/2010			4/20/2011			4/20/2011			5/16/2011			5/31/2011			5/31/2011			6/22/2011			6/22/2011			10/23/2007			10/24/2007			10/25/2007		
Units			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l		
PARAMETER			Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL
Dissolved Gases by GC																																					
Ethane			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	46.7		0.5
Ethene			NA		NA	NA		NA	0.5	U	0.5	0.5	U	0.5	0.721		0.5	0.5	U	0.5	0.5	U	0.5	15.9		0.5	15.4		0.5	NA		NA	NA		NA	10.3		0.5
Methane			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	788		0.3
Carbon Dioxide			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	35,000		600
Anions by Ion Chromatography																																					
Chloride	250,000		NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Sulfate	250,000		41000		20000	10000	U	10000	31000		10000	31000		10000	32000		10000	30000		10000	32000		10000	26000		10000	27000		10000	NA		NA	NA		NA	NA		NA
Nitrogen, Ammonia	2,000		NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Nitrogen, Nitrate/Nitrite	10,000		640		100	100	U	100	2900		100	2800		100	1900		100	2000		100	2200		100	1500		100	1300		100	NA		NA	NA		NA	ND		100
Phosphorus, Orthophosphate			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Sulfide	50		NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	ND		100
Sulfite	200		NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Dissolved Organic Carbon			NA		NA	NA		NA	NA		NA	NA		NA	NA		AN	NA		AN	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	6,700		2,000
Total Organic Carbon			97000		10000	58000		4000	2000		1000	1900		500	2100		1000	2000	U	1000	2000	U	1000	3200	U	1000	3400	U	1000	NA		NA	NA		NA	NA		NA
Iron, Ferrous			1400	J	500	500	UJ	500	500	UJ	500	500	UJ	500	500	U	500	500	UJ	500	500	UJ	500	500	UJ	500	500	UJ	500	NA		NA	500	U	500	NA		NA
Hardness			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	540,000		660	NA		NA
Ferric Iron			500	UJ	500	1800	UJ	500	500	UJ	500	500	UJ	500	500	U	500	500	UJ	500	500	UJ	500	500	UJ	500	500	UJ	500	NA		NA	10,000		500	NA		NA
Total Metals																																					
Antimony, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Arsenic, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Barium, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Beryllium, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Cadmium, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Chromium, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Copper, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Iron, Total	300		**1700**		50	**1800**		50	50	U	50	50	U	50	60		50	100	U	100	100	U	100	90	U	50	100	U	50	NA		NA	**10,000**		50	NA		NA
Lead, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Manganese, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Mercury, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Nickel, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Selenium, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Silver, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Thallium, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Zinc, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA

Source: Alpha Analytical Lab Reports: L0713529, L0716004, L0716078, L0817489, L1006386, L1009164, L1012239, L1020006, L1105478, L1106875, L1107639, L1109071, andL1109210
ug/l = micrograms per liter Q = Laboratory Qualifier RL = Laboratory Reported Limit
NA = not analyzed ND = Not Detected at or above the Laboratory Reported Limit
Bold = detected above NYSDEC TOGS SCG
Note: See DUSRs in Appendix J or associated previously published reports for details regarding valiation and usability.

Table 1
Groundwater Analytical Data
Orangetown Shopping Center - Brownfield Site #C344066
Orangeburg, New York

LOCATION	NYSDEC TOGS SGC	Guidance Value	MW-5			MW-5			Duplicate MW-5			MW-5			MW-5			MW-5			MW-5			MW-5			MW-5			MW-5		
Matrix			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater		
SAMPLING DATE			11/24/2008			4/29/2010			4/29/2010			6/16/2010			8/9/2010			12/14/2010			4/20/2011			5/16/2011			5/31/2011			6/21/2011		
Units			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l		
PARAMETER			Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL
Dissolved Organic Carbon			3100		1000	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Iron, Ferrous			ND		500	NA		NA	NA		NA	500	UJ	500	870	J	500	500	U	500	1300	J	500	1800	UJ	500	1100	J	500	420	J	500
Primary Constituents of Concern VOCs by GC/MS (8																																
1,1-Dichloroethene	5		250	U	250	250	U	250	200	U	200	120	U	1200	120	U	120	120	U	120	120	U	120	120	U	120	10	U	10	20	U	20
cis-1,2-Dichloroethene	5		NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	**6200**		120	**6600**		120	**1300**		10	**8600**		200
cis-1,2-Dichloroethene	5		**15000**		250	**13000**		2500	**13000**		200	**14000**		120	**12,000**		120	**7,200**		120	NA		NA	NA		NA	NA		NA	**11000**	E	20
Tetrachloroethene	5		250	U	250	250	U	250	200	U	200	120	U	120	120	U	120	120	U	120	120	U	120	120	U	120	10	U	10	20	U	20
trans-1,2-Dichloroethene	5		NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	190	U	190	190	U	190	15	U	15	**37**		30
trans-1,2-Dichloroethene	5		380	U	380	380	U	380	300	U	300	190	U	190	190	U	190	190	U	190	NA		NA	NA		NA	NA		NA	NA		NA
Trichloroethene	5		**320**		250	250	U	250	200	U	200	120	U	120	120	U	120	120	U	120	120	U	120	120	U	120	10	U	10	**16**	J	20
Vinyl chloride	2		**520**		500	500	U	500	400	U	400	250	U	250	250	U	250	**1800**		250	**1200**		250	**2200**		250	**280**		20	**1800**		40
Other VOCs by GC/MS (8260B)																																
1,1,1,2-Tetrachloroethane	5		250		250	250	U	250	200	U	200	120	U	120	120	U	120	120	U	120	120	U	120	120	U	120	10	U	10	20	U	20
1,1,1-Trichloroethane	5		250		250	250	U	250	200	U	200	120	U	120	120	U	120	120	U	120	120	U	120	120	U	120	10	U	10	20	U	20
1,1,2,2-Tetrachloroethane	5		250		250	250	U	250	200	U	200	120	U	120	120	U	120	120	U	120	120	U	120	120	U	120	10	U	10	20	U	20
1,1,2-Trichloroethane	1		380		380	380	U	380	300	U	300	190	U	190	190	U	190	190	U	190	190	U	190	190	U	190	15	U	15	30	U	30
1,1-Dichloroethane	5		380		380	380	U	380	300	U	300	190	U	190	190	U	190	190	U	190	190	U	190	190	U	190	15	U	15	30	U	30
1,1-Dichloropropene	5		1200		1200	1200	U	1200	1000	U	1000	620	U	620	620	U	620	620	U	620	620	U	620	620	U	620	50	U	50	100	U	100
1,2,3-Trichlorobenzene	5		1200		1200	1200	U	1200	1000	U	1000	620	U	620	620	U	620	620	U	620	620	UJ	620	620	U	620	50	U	50	100	U	100
1,2,3-Trichloropropane	0.04		2500		2500	2500	U	2500	2000	U	2000	1200	U	1,200	1200	U	1,200	1,200	U	1,200	1200	U	1200	1200	U	1200	100	U	100	200	U	200
1,2,4,5-Tetramethylbenzene			1000		1000	1000	U	1000	800	U	800	500	U	500	500	U	500	500	U	500	500	U	500	500	U	500	40	U	40	80	U	80
1,2,4-Trichlorobenzene	5		1200		1200	1200	U	1200	1000	U	1000	620	U	620	620	U	620	620	U	620	620	U	620	620	U	620	50	U	50	100	U	100
1,2,4-Trimethylbenzene	5		1200		1200	1200	U	1200	1000	U	1000	620	U	620	620	U	620	620	U	620	620	U	620	620	U	620	50	U	50	100	U	100
1,2-Dibromo-3-chloropropane	0.04		1200		1200	1200	U	1200	1000	U	1000	620	U	620	620	U	620	620	U	620	620	U	620	620	U	620	50	U	50	100	U	100
1,2-Dibromoethane	5		1000		1000	1000	U	1000	800	U	800	500	U	500	500	U	500	500	U	500	500	U	500	500	U	500	40	U	40	80	U	80
1,2-Dichlorobenzene	3		1200		1200	1200	U	1200	1000	U	1000	620	U	620	620	U	620	620	U	620	620	U	620	620	U	620	50	U	50	100	U	100
1,2-Dichloroethane	0.6		250		250	250	U	250	200	U	200	120	U	120	120	U	120	120	U	120	120	U	120	120	U	120	10	U	10	20	U	20
1,2-Dichloropropane	1		880		880	880	U	880	700	U	700	440	U	440	440	U	440	440	U	440	440	U	440	440	U	440	35	U	35	70	U	70
1,3,5-Trimethylbenzene	5		1200		1200	1200	U	1200	1000	U	1000	620	U	620	620	U	620	620	U	620	620	U	620	620	U	620	50	U	50	100	U	100
1,3-Dichlorobenzene	3		1200		1200	1200	U	1200	1000	U	1000	620	U	620	620	U	620	620	U	620	620	U	620	620	U	620	50	U	50	100	U	100
1,3-Dichloropropane	5		1200		1200	1200	U	1200	1000	U	1000	620	U	620	620	U	620	620	U	620	620	U	620	620	U	620	50	U	50	100	U	100
1,4-Dichlorobenzene	3		1200		1200	1200	U	1200	1000	U	1000	620	U	620	620	U	620	620	U	620	620	U	620	620	U	620	50	U	50	100	U	100
1,4-Dichlorobutane			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
1,4-Diethylbenzene			1000		1000	1000	U	1000	800	U	800	500	U	500	500	U	500	500	U	500	500	U	500	500	U	500	40	U	40	80	U	80
2,2-Dichloropropane	5		1200		1200	1200	U	1200	1000	U	1000	620	U	620	620	U	620	620	U	620	620	U	620	620	U	620	50	U	50	100	U	100
2-Butanone	50		NA		NA	2500	U	2500	2000	U	2000	1200	U	1,200	1200	U	1200	1200	U	1200	1200	U	1200	1200	U	1200	100	U	100	200	U	200
2-Butanone	50		2500		2500	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
2-Hexanone	50		2500		2500	2500	U	2500	2000	U	2000	1200	U	1,200	1200	U	1200	1200	U	1200	1200	U	1200	1200	U	1200	100	U	100	200	U	200
4-Ethyltoluene			1000		1000	1000	U	1000	800	U	800	500	U	500	500	U	500	500	U	500	500	U	500	500	U	500	40	U	40	80	U	80
4-Methyl-2-pentanone			2500		2500	2500	U	2500	2000	U	2000	1200	U	1,200	1200	U	1200	1200	U	1200	1200	U	1200	1200	U	1200	100	U	100	200	U	200
Acetone	50		2500		2500	2500	U	2500	2000	U	2000	1200	U	1,200	1200	U	1200	1200	U	1200	1200	U	1200	1200	U	1200	100	U	100	200	U	200
Acrolein	5		NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA

Table 1
Groundwater Analytical Data
Orangetown Shopping Center - Brownfield Site #C344066
Orangeburg, New York

LOCATION	NYSDEC TOGS SGC	Guidance Value	MW-5			MW-5			Duplicate MW-5			MW-5			MW-5			MW-5			MW-5			MW-5			MW-5			MW-5		
Matrix			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater		
SAMPLING DATE			11/24/2008			4/29/2010			4/29/2010			6/16/2010			8/9/2010			12/14/2010			4/20/2011			5/16/2011			5/31/2011			6/21/2011		
Units			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l		
PARAMETER			Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL
Acrylonitrile	5		2500		2500	2500	U	2500	2000	U	2000	1200	U	1,200	1200	U	1200	1200	U	1200	1200	U	1200	1200	UJ	1200	100	U	100	200	U	200
Benzene	1		250		250	250	U	250	200	U	200	120	U	120	120	U	120	120	U	120	120	U	120	120	U	120	10	U	10	20	U	20
Bromobenzene	5		1200		1200	1200	U	1200	1000	U	1000	620	U	620	620	U	620	620	U	620	620	U	620	620	U	620	50	U	50	100	U	100
Bromochloromethane	5		1200		1200	1200	U	1200	1000	U	1000	620	U	620	620	U	620	620	U	620	620	U	620	620	U	620	50	U	50	100	U	100
Bromodichloromethane	50		250		250	250	U	250	200	U	200	120	U	120	120	U	120	120	U	120	120	U	120	120	U	120	10	U	10	20	U	20
Bromoform	50		1000		1000	1000	U	1000	800	U	800	500	U	500	500	U	500	500	U	500	500	U	500	500	U	500	40	U	40	80	U	80
Bromomethane	5		500		500	500	U	500	400	U	400	250	U	250	250	U	250	250	U	250	250	U	250	250	U	250	20	U	20	40	U	40
Carbon disulfide			2500		2500	2500	U	2500	2000	U	2000	1200	U	1,200	1200	U	1200	1200	U	1200	1200	U	1200	1200	U	1200	100	U	100	200	U	200
Carbon tetrachloride	5		250		250	250	U	250	200	U	200	120	U	120	120	U	120	120	U	120	120	U	120	120	U	120	10	U	10	20	U	20
Chlorobenzene	5		250		250	250	U	250	200	U	200	120	U	120	120	U	120	120	U	120	120	U	120	120	U	120	10	U	10	20	U	20
Chloroethane	5		500		500	500	U	500	400	U	400	250	U	250	250	U	250	250	U	250	250	U	250	250	UJ	250	20	U	20	40	U	40
Chloroform	7		380		380	380	U	380	300	U	300	190	U	190	190	U	190	190	U	190	190	U	190	190	U	190	15	U	15	30	U	30
Chloromethane	5		1200		1200	1200	U	1200	1000	U	1000	620	U	620	620	U	620	620	U	620	620	U	620	620	U	620	50	U	50	100	U	100
cis-1,3-Dichloropropene	0.4		250		250	250	U	250	200	U	200	120	U	120	120	U	120	120	U	120	120	U	120	120	U	120	10	U	10	20	U	20
Dibromochloromethane	50		250		250	250	U	250	200	U	200	120	U	120	120	U	120	120	U	120	120	U	120	120	U	120	10	U	10	20	U	20
Dibromomethane	5		2500		2500	2500	U	2500	2000	U	2000	1200	U	1200	1200	U	1200	1200	U	1200	1200	U	1200	1200	U	1200	100	U	100	200	U	200
Dichlorodifluoromethane	5		2500		2500	2500	U	2500	2000	U	2000	1200	U	1200	1200	U	1200	1200	U	1200	1200	U	1200	1200	U	1200	100	U	100	200	U	200
Ethyl ether			NA		NA	1200	U	1200	1000	U	1000	620	U	620	620	U	620	620	U	620	620	U	620	620	U	620	50	U	50	100	U	100
Ethyl methacrylate			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA				NA		NA	NA		NA	NA		NA	NA		NA
Ethylbenzene	5		250		250	250	U	250	200	U	200	120	U	120	120	U	120	120	U	120	120	U	120	120	U	120	10	U	10	20	U	20
Hexachlorobutadiene	0.5		300		300	300	U	300	240	U	240	150	U	150	150	U	150	150	U	150	150	U	150	150	U	150	12	U	12	24	U	24
Iodomethane	5		NA		NA	NA		NA	NA		NA	NA		NA	NA		NA				NA	U	NA	NA		NA	NA		NA	NA		NA
Isopropylbenzene	5		250		250	250	U	250	200	U	200	120	U	120	120	U	120	120	U	120	150	U	150	120	U	120	10	U	10	20	U	20
Methyl tert butyl ether			500		500	500	U	500	400	U	400	250	U	250	250	U	250	250	U	250	120	U	120	250	UJ	250	20	U	20	40	U	40
Methylene chloride	5		2500		2500	2500	U	2500	2000	U	2000	1200	U	1200	1200	U	1200	1200	U	1200	250	U	250	1200	U	1200	100	U	100	200	U	200
n-Butylbenzene	5		250		250	250	U	250	200	U	200	120	U	120	120	U	120	120	U	120	1200	U	1200	120	U	120	10	U	10	20	U	20
n-Propylbenzene	5		250		250	250	U	250	200	U	200	120	U	120	120	U	120	120	U	120	120	U	120	120	U	120	10	U	10	20	U	20
Naphthalene	10		1200		1200	1200	U	1200	1000	U	1000	620	U	620	620	U	620	620	U	620	120	U	120	620	U	620	50	U	50	100	U	100
o-Chlorotoluene	5		1200		1200	1200	U	1200	1000	U	1000	620	U	620	620	U	620	620	U	620	620	U	620	620	U	620	50	U	50	100	U	100
o-Xylene			500		500	500	U	500	400	U	400	250	U	250	250	U	250	250	U	250	620	U	620	250	U	250	20	U	20	40	U	40
p-Chlorotoluene	5		1200		1200	1200	U	1200	1000	U	1000	620	U	620	620	U	620	620	U	620	250	U	250	620	U	620	50	U	50	100	U	100
p-Isopropyltoluene	5		250		250	250	U	250	200	U	200	120	U	120	120	U	120	120	U	120	620	U	620	120	U	120	10	U	10	20	U	20
p/m-Xylene			500		500	500	U	500	400	U	400	250	U	250	250	U	250	250	U	250	120	U	120	250	U	250	20	U	20	40	U	40
sec-Butylbenzene	5		250		250	250	U	250	200	U	200	120	U	120	120	U	120	120	U	120	250	U	250	120	U	120	10	U	10	20	U	20
Styrene	5		500		500	500	U	500	400	U	400	250	U	250	250	U	250	250	U	250	120	U	120	250	U	250	20	U	20	40	U	40
tert-Butylbenzene	5		1200		1200	1200	U	1200	1000	U	1000	620	U	620	620	U	620	620	U	620	250	U	250	620	U	620	50	U	50	100	U	100
Tetrahydrofuran	50		NA		NA	NA		NA	NA		NA	NA		NA	NA		NA				620	U	620	NA		NA	NA		NA	NA		NA
Toluene	5		380		380	380	U	380	300	U	300	190	U	190	190	U	190	190	U	190	190	U	190	190	U	190	15	U	15	30	U	30
trans-1,3-Dichloropropene	0.4		250		250	250	U	250	200	U	200	120	U	120	120	U	120	120	U	120	120	U	120	120	U	120	10	U	10	20	U	20
trans-1,4-Dichloro-2-butene	5		NA		NA	1200	U	1200	1000	U	1000	620	U	620	620	U	620	620	U	620	620	U	620	620	U	620	50	U	50	100	U	100
Trichlorofluoromethane	5		1200		1200	1200	U	1200	1000	U	1000	620	U	620	620	U	620	620	U	620	620	U	620	620	U	620	50	U	50	100	U	100
Vinyl acetate			2500		2500	2500	U	2500	2000	U	2000	1200	U	1200	1200	U	1200	1200	U	1200	1200	U	1200	1200	U	1200	100	U	100	200	U	200

Table 1
Groundwater Analytical Data
Orangetown Shopping Center - Brownfield Site #C344066
Orangeburg, New York

LOCATION	NYSDEC TOGS SGC	Guidance Value	MW-5			MW-5			Duplicate MW-5			MW-5			MW-5			MW-5			MW-5			MW-5			MW-5			MW-5		
Matrix			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater		
SAMPLING DATE			11/24/2008			4/29/2010			4/29/2010			6/16/2010			8/9/2010			12/14/2010			4/20/2011			5/16/2011			5/31/2011			6/21/2011		
Units			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l		
PARAMETER			Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL
Dissolved Gases by GC																																
Ethane			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Ethene			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	537		1	278		0.5	439	E	0.5	333		1
Methane			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Carbon Dioxide			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Anions by Ion Chromatography																																
Chloride	250,000		NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Sulfate	250,000		NA		NA	11000		10000	12000		10000	14000		10000	10000	U	10000	10000	U	10000	10000	U	10000	10000	U	10000	4400	U	10000	8400		10000
Nitrogen, Ammonia	2,000		NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Nitrogen, Nitrate/Nitrite	10,000		NA		NA	370	J	100	3800	J	100	200		100	100		100	250		100	150	U	100	100	U	100	260		100	5700		100
Phosphorus, Orthophosphate			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Sulfide	50		NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Sulfite	200		NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Dissolved Organic Carbon			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Total Organic Carbon			NA		NA	4300	U	1000	4200	U	1000	3000	U	3000	5700		1000	24000		2000	6600		1000	7900	U	1000	5700	U	1000	5500		1000
Iron, Ferrous			NA		NA	NA		NA	NA		NA	500	UJ	500	870	J	500	500	U	500	1300	J	500	1800	J	500	1100	J	500	420	J	500
Hardness			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Ferric Iron			NA		NA	NA		NA	NA		NA	600	J	500	500	UJ	500	3100		500	500	UJ	500	500	UJ	500	500	J	500	1600	J	500
Total Metals																																
Antimony, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Arsenic, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Barium, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Beryllium, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Cadmium, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Chromium, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Copper, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Iron, Total	300		**21000**		50	**1800**		50	**2000**		50	**600**		50	**930**		50	**3100**		50	**1700**		50	**1900**		50	**1600**		50	**1600**		50
Lead, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Manganese, Total			NA		NA	1390		10	1520		10	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Mercury, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Nickel, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Selenium, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Silver, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Thallium, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Zinc, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA

Source: Alpha Analytical Lab Reports: L0713529, L0716004, L0716078, L0817489, L1006386, L1009164, L1012239, L1020006, L1105478, L1106875, L1107639, L1109071, andL1109210
ug/l = micrograms per liter Q = Laboratory Qualifier RL = Laboratory Reported Limit
NA = not analyzed ND = Not Detected at or above the Laboratory Reported Limit
Bold = detected above NYSDEC TOGS SCG
Note: See DUSRs in Appendix J or associated previously published reports for details regarding valiation and usability.

Table 1
Groundwater Analytical Data
Orangetown Shopping Center - Brownfield Site #C344066
Orangeburg, New York

LOCATION	NYSDEC TOGS SGC	Guidance Value	MW-6			Duplicate MW-6			MW-6			MW-6			MW-6			MW-8A			MW-8A			MW-8A			MW-8A			MW-8A			Duplicate MW-8A		
Matrix			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater		
SAMPLING DATE			9/14/2007			9/14/2007			10/24/2007			11/24/2008			4/30/2010			10/24/2007			11/24/2008			4/29/2010			6/16/2010			12/14/2010			12/14/2010		
Units			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l		
PARAMETER			Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL
Dissolved Organic Carbon			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	3400		1000	NA		NA	NA		NA	NA		NA	NA		NA
Iron, Ferrous			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	500	UJ	500	500	U	500	500	U	500
Primary Constituents of Concern VOCs by GC/MS (8																																			
1,1-Dichloroethene	5		ND		0.5	ND		0.5	NA		NA	ND		0.5	0.5	U	0.5	ND		12	ND		25	25	U	25	5	U	5	20	U	20	0.5	U	0.5
cis-1,2-Dichloroethene	5		NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	**2,900**		50
cis-1,2-Dichloroethene	5		**24**		0.5	**36**		0.5	NA		NA	**45**		0.5	**75**		0.5	**1,800**		12	**2100**		25	**1000**		25	**1300**		20	**2,500**		20	**2,300**	E	0.5
Tetrachloroethene	5		ND		0.5	ND		0.5	NA		NA	ND		0.5	0.5	U	0.5	ND		12	ND		25	25	U	25	5	U	5	20	U	20	1.7		0.5
trans-1,2-Dichloroethene	5		NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	75	U	75
trans-1,2-Dichloroethene	5		ND		0.75	ND		0.75	NA		NA	ND		0.75	0.75	U	0.75	ND		19	ND		38	38	U	38	7.5	U	7.5	30	U	30	**120**	E	0.75
Trichloroethene	5		ND		0.5	ND		0.5	NA		NA	0.93		0.5	1.5		0.5	**58**		12	**62**		25	**39**		25	**41**		5	**54**		20	**73**		0.5
Vinyl chloride	2		**7.5**		1.0	**12**		1.0	NA		NA	**22**		1	**6.1**		1	ND		25	ND		50	**50**	U	50	**12**		10	40	U	40	**30**		1
Other VOCs by GC/MS (8260B)																																			
1,1,1,2-Tetrachloroethane	5		ND		0.5	ND		0.5	NA		NA	ND		0.5	0.5	U	0.5	ND		12	ND		25	25	U	25	5	U	5	20	U	20	0.5	U	0.5
1,1,1-Trichloroethane	5		ND		0.5	ND		0.5	NA		NA	ND		0.5	0.5	U	0.5	ND		12	ND		25	25	U	25	5	U	5	20	U	20	0.5	U	0.5
1,1,2,2-Tetrachloroethane	5		ND		0.5	ND		0.5	NA		NA	ND		0.5	0.5	U	0.5	ND		12	ND		25	25	U	25	5	U	5	20	U	20	0.5	U	0.5
1,1,2-Trichloroethane	1		ND		0.75	ND		0.75	NA		NA	ND		0.75	0.75	U	0.75	ND		19	ND		38	38	U	38	7.5	U	7.5	30	U	30	0.75	U	0.75
1,1-Dichloroethane	5		ND		0.75	ND		0.75	NA		NA	ND		0.75	0.75	U	0.75	ND		19	ND		38	38	U	38	7.5	U	7.5	30	U	30	0.75	U	0.75
1,1-Dichloropropene	5		ND		2.5	ND		2.5	NA		NA	ND		2.5	2.5	U	2.5	ND		62	ND		120	120	U	120	25	U	25	100	U	100	2.5	U	2.5
1,2,3-Trichlorobenzene	5		ND		2.5	ND		2.5	NA		NA	ND		2.5	2.5	U	2.5	ND		62	ND		120	120	U	120	25	U	25	100	U	100	2.5	U	2.5
1,2,3-Trichloropropane	0.04		ND		5	ND		5	NA		NA	ND		5	5	U	5	ND		120	ND		250	250	U	250	50	U	50	200	U	200	5	U	5
1,2,4,5-Tetramethylbenzene			NA		NA	NA		NA	NA		NA	ND		2	2	U	2	NA		NA	ND		100	100	U	100	20	U	20	80	U	80	2	U	2
1,2,4-Trichlorobenzene	5		ND		2.5	ND		2.5	NA		NA	ND		2.5	2.5	U	2.5	ND		62	ND		120	120	U	120	25	U	25	100	U	100	2.5	U	2.5
1,2,4-Trimethylbenzene	5		ND		2.5	ND		2.5	NA		NA	ND		2.5	2.5	U	2.5	ND		62	ND		120	120	U	120	25	U	25	100	U	100	2.5	U	2.5
1,2-Dibromo-3-chloropropane	0.04		ND		2.5	ND		2.5	NA		NA	ND		2.5	2.5	U	2.5	ND		62	ND		120	120	U	120	25	U	25	100	U	100	2.5	U	2.5
1,2-Dibromoethane	5		ND		2	ND		2	NA		NA	ND		2	2	U	2	ND		50	ND		100	100	U	100	20	U	20	80	U	80	2	U	2
1,2-Dichlorobenzene	3		ND		2.5	ND		2.5	NA		NA	ND		2.5	2.5	U	2.5	ND		62	ND		120	120	U	120	25	U	25	100	U	100	2.5	U	2.5
1,2-Dichloroethane	0.6		ND		0.5	ND		0.5	NA		NA	ND		0.5	0.5	U	0.5	ND		12	ND		25	25	U	25	5	U	5	20	U	20	0.5	U	0.5
1,2-Dichloropropane	1		ND		1.8	ND		1.8	NA		NA	ND		1.8	1.8	U	1.8	ND		44	ND		88	88	U	88	18	U	18	70	U	70	1.8	U	1.8
1,3,5-Trimethylbenzene	5		ND		2.5	ND		2.5	NA		NA	ND		2.5	2.5	U	2.5	ND		62	ND		120	120	U	120	25	U	25	100	U	100	2.5	U	2.5
1,3-Dichlorobenzene	3		ND		2.5	ND		2.5	NA		NA	ND		2.5	2.5	U	2.5	ND		62	ND		120	120	U	120	25	U	25	100	U	100	2.5	U	2.5
1,3-Dichloropropane	5		ND		2.5	ND		2.5	NA		NA	ND		2.5	2.5	U	2.5	ND		62	ND		120	120	U	120	25	U	25	100	U	100	2.5	U	2.5
1,4-Dichlorobenzene	3		ND		2.5	ND		2.5	NA		NA	ND		2.5	2.5	U	2.5	ND		62	ND		120	120	U	120	25	U	25	100	U	100	2.5	U	2.5
1,4-Dichlorobutane			ND		5	ND		5	NA		NA	NA		NA	2	U	NA	ND		120	NA		NA	NA		NA	NA		NA						
1,4-Diethylbenzene			NA		NA	NA		NA	NA		NA	ND		2	NA		NA	NA		NA	ND		100	100	U	100	20	U	20	80	U	80	2	U	2
2,2-Dichloropropane	5		ND		2.5	ND		2.5	NA		NA	ND		2.5	2.5	U	2.5	ND		62	ND		120	120	U	120	25	U	25	100	U	100	2.5	U	2.5
2-Butanone	50		NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	250	U	250	50	U	50	200	U	200	5	U	5
2-Butanone	50		ND		5	ND		5	NA		NA	ND		5	NA		NA	ND		120	ND		250	NA		NA	NA		NA						
2-Hexanone	50		ND		5	ND		5	NA		NA	ND		5	5	U	5	ND		120	ND		250	250	U	250	50	U	50	200	U	200	5	U	5
4-Ethyltoluene			NA		NA	NA		NA	NA		NA	ND		2	2	U	2	NA		NA	ND		100	100	U	100	20	U	20	80	U	80	2	U	2
4-Methyl-2-pentanone			ND		5	ND		5	NA		NA	ND		5	5	U	5	ND		120	ND		250	250	U	250	50	U	50	200	U	200	5	U	5
Acetone	50		6.4		5	ND		5	NA		NA	15		5	19		5	ND		120	ND		250	250	U	250	50	U	50	200	U	200	5	U	5
Acrolein	5		ND		12	ND		12	NA		NA	NA		NA	NA	U	NA	NA		NA	NA		NA	NA		NA	NA		NA						

Table 1
Groundwater Analytical Data
Orangetown Shopping Center - Brownfield Site #C344066
Orangeburg, New York

LOCATION	NYSDEC TOGS SGC	Guidance Value	MW-6			Duplicate MW-6			MW-6			MW-6			MW-6			MW-8A			MW-8A			MW-8A			MW-8A			MW-8A			Duplicate MW-8A		
Matrix			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater		
SAMPLING DATE			9/14/2007			9/14/2007			10/24/2007			11/24/2008			4/30/2010			10/24/2007			11/24/2008			4/29/2010			6/16/2010			12/14/2010			12/14/2010		
Units			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l		
PARAMETER			Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL
Acrylonitrile	5		ND		5	ND		5	NA		NA	ND		5	5	U	5	ND		120	ND		250	250	U	250	50	U	50	200	U	200	5	U	5
Benzene	1		ND		0.5	ND		0.5	NA		NA	ND		0.5	0.5	U	0.5	ND		12	ND		25	25	U	25	5	U	5	20	U	20	0.5	U	0.5
Bromobenzene	5		ND		2.5	ND		2.5	NA		NA	ND		2.5	2.5	U	2.5	ND		62	ND		120	120	U	120	25	U	25	100	U	100	2.5	U	2.5
Bromochloromethane	5		ND		2.5	ND		2.5	NA		NA	ND		2.5	2.5	U	0.5	ND		62	ND		120	120	U	120	25	U	25	100	U	100	2.5	U	2.5
Bromodichloromethane	50		ND		0.5	ND		0.5	NA		NA	ND		0.5	0.5	U	2	ND		12	ND		25	25	U	25	5	U	5	20	U	20	0.5	U	0.5
Bromoform	50		ND		2	ND		2	NA		NA	ND		2	2	U	2	ND		50	ND		100	100	U	100	20	U	20	80	U	80	2	U	2
Bromomethane	5		ND		1	ND		1	NA		NA	ND		1	1	U	1	ND		25	ND		50	50	U	50	10	U	10	40	U	40	1	U	1
Carbon disulfide			ND		5	ND		5	NA		NA	ND		5	5	U	5	ND		120	ND		250	250	U	250	50	U	50	200	U	200	5	U	5
Carbon tetrachloride	5		ND		0.5	ND		0.5	NA		NA	ND		0.5	0.5	U	0.5	ND		12	ND		25	25	U	25	5	U	5	20	U	20	0.5	U	0.5
Chlorobenzene	5		ND		0.5	ND		0.5	NA		NA	ND		0.5	0.5	U	0.5	ND		12	ND		25	25	U	25	5	U	5	20	U	20	0.5	U	0.5
Chloroethane	5		ND		1	ND		1	NA		NA	ND		1	1	U	1	ND		25	ND		50	50	U	50	10	U	10	40	U	40	1	U	1
Chloroform	7		ND		0.75	ND		0.75	NA		NA	ND		0.75	0.75	U	0.75	ND		19	ND		38	38	U	38	7.5	U	7.5	30	U	30	0.75	U	0.75
Chloromethane	5		ND		2.5	ND		2.5	NA		NA	ND		2.5	2.5	U	2.5	ND		62	ND		120	120	U	120	25	U	25	100	U	100	2.5	U	2.5
cis-1,3-Dichloropropene	0.4		ND		0.5	ND		0.5	NA		NA	ND		0.5	0.5	U	0.5	ND		12	ND		25	25	U	25	5	U	5	20	U	20	0.5	U	0.5
Dibromochloromethane	50		ND		0.5	ND		0.5	NA		NA	ND		0.5	0.5	U	0.5	ND		12	ND		25	25	U	25	5	U	5	20	U	20	0.5	U	0.5
Dibromomethane	5		ND		5	ND		5	NA		NA	ND		5	5	U	5	ND		120	ND		250	250	U	250	50	U	50	200	U	200	5	U	5
Dichlorodifluoromethane	5		ND		5	ND		5	NA		NA	ND		5	5	U	5	ND		120	ND		250	250	U	250	50	U	50	200	U	200	5	U	5
Ethyl ether			ND		2.5	ND		2.5	NA		NA	NA		NA	2.5	U	2.5	ND		62	NA		NA	120	U	120	25	U	25	100	U	100	2.5	U	2.5
Ethyl methacrylate			ND		5	ND		5	NA		NA	NA		NA	NA		NA	ND		120	NA		NA	NA		NA	NA		NA						
Ethylbenzene	5		ND		0.5	ND		0.5	NA		NA	ND		0.5	0.5	U	0.5	ND		12	ND		25	25	U	25	5	U	5	20	U	20	0.5	U	0.5
Hexachlorobutadiene	0.5		ND		0.6	ND		0.6	NA		NA	ND		0.6	0.6	U	0.6	ND		15	ND		30	30	U	30	6	U	6	24	U	24	0.6	U	0.6
Iodomethane	5		ND		5	ND		5	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA						
Isopropylbenzene	5		ND		0.5	ND		0.5	NA		NA	ND		0.5	0.5	U	0.5	ND		12	ND		25	25	U	25	5	U	5	20	U	20	0.5	U	0.5
Methyl tert butyl ether			ND		1	ND		1	NA		NA	ND		1	1	U	1	ND		25	ND		50	50	U	50	10	U	10	40	U	40	1	U	1
Methylene chloride	5		ND		5	ND		5	NA		NA	ND		5	5	U	5	ND		120	ND		250	250	U	250	50	U	50	200	U	200	5	U	5
n-Butylbenzene	5		ND		0.5	ND		0.5	NA		NA	ND		0.5	0.5	U	0.5	ND		12	ND		25	25	U	25	5	U	5	20	U	20	0.5	U	0.5
n-Propylbenzene	5		ND		0.5	ND		0.5	NA		NA	ND		0.5	0.5	U	0.5	ND		12	ND		25	25	U	25	5	U	5	20	U	20	0.5	U	0.5
Naphthalene	10		ND		2.5	ND		2.5	NA		NA	ND		2.5	2.5	U	2.5	ND		62	ND		120	120	U	120	25	U	25	100	U	100	2.5	U	2.5
o-Chlorotoluene	5		ND		2.5	ND		2.5	NA		NA	ND		2.5	2.5	U	2.5	ND		62	ND		120	120	U	120	25	U	25	100	U	100	2.5	U	2.5
o-Xylene			ND		1	ND		1	NA		NA	ND		1	1	U	1	ND		25	ND		50	50	U	50	10	U	10	40	U	40	1	U	1
p-Chlorotoluene	5		ND		2.5	ND		2.5	NA		NA	ND		2.5	2.5	U	2.5	ND		62	ND		120	120	U	120	25	U	25	100	U	100	2.5	U	2.5
p-Isopropyltoluene	5		ND		0.5	ND		0.5	NA		NA	ND		0.5	0.5	U	0.5	ND		12	ND		25	25	U	25	5	U	5	20	U	20	0.5	U	0.5
p/m-Xylene			ND		1	ND		1	NA		NA	ND		1	1	U	1	ND		25	ND		50	50	U	50	10	U	10	40	U	40	1	U	1
sec-Butylbenzene	5		ND		0.5	ND		0.5	NA		NA	ND		0.5	0.5	U	0.5	ND		12	ND		25	25	U	25	5	U	5	20	U	20	0.5	U	0.5
Styrene	5		ND		1	ND		1	NA		NA	ND		1	1	U	1	ND		25	ND		50	50	U	50	10	U	10	40	U	40	1	U	1
tert-Butylbenzene	5		ND		2.5	ND		2.5	NA		NA	ND		2.5	2.5	U	2.5	ND		62	ND		120	120	U	120	25	U	25	100	U	100	2.5	U	2.5
Tetrahydrofuran	50		ND		10	ND		10	NA		NA	NA		NA	NA		NA	ND		250	NA		NA	NA		NA	NA		NA						
Toluene	5		ND		0.75	ND		0.75	NA		NA	ND		0.75	0.75	U	0.75	ND		19	ND		38	38	U	38	7.5	U	7.5	30	U	30	0.75	U	0.75
trans-1,3-Dichloropropene	0.4		ND		0.5	ND		0.5	NA		NA	ND		0.5	0.5	U	0.5	ND		12	ND		25	25	U	25	5	U	5	20	U	20	0.5	U	0.5
trans-1,4-Dichloro-2-butene	5		ND		2.5	ND		2.5	NA		NA	NA		NA	2.5	U	2.5	ND		62	NA		NA	120	U	120	25	U	25	100	U	100	2.5	U	2.5
Trichlorofluoromethane	5		ND		2.5	ND		2.5	NA		NA	ND		2.5	2.5	U	2.5	ND		62	ND		120	120	U	120	25	U	25	100	U	100	2.5	U	2.5
Vinyl acetate			ND		5	ND		5	NA		NA	ND		5	5	U	5	ND		120	ND		250	250	U	250	50	U	50	200	U	200	5	U	5

Table 1
Groundwater Analytical Data
Orangetown Shopping Center - Brownfield Site #C344066
Orangeburg, New York

LOCATION	NYSDEC TOGS SGC	Guidance Value	MW-6			Duplicate MW-6			MW-6			MW-6			MW-6			MW-8A			MW-8A			MW-8A			MW-8A			MW-8A			MW-8A			Duplicate MW-8A		
Matrix			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater		
SAMPLING DATE			9/14/2007			9/14/2007			10/24/2007			11/24/2008			4/30/2010			10/24/2007			11/24/2008			4/29/2010			6/16/2010			12/14/2010			12/14/2010				
Units			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l				
PARAMETER			Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL			
Dissolved Gases by GC																																						
Ethane			NA		NA	NA		NA	5.08		0.5	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA			
Ethene			NA		NA	NA		NA	ND		0.5	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA			
Methane			NA		NA	NA		NA	486		0.3	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA			
Carbon Dioxide			NA		NA	NA		NA	100,000		2,760	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA			
Anions by Ion Chromatography																																						
Chloride	250,000		NA		NA	NA		NA	61,000		1,000	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA			
Sulfate	250,000		NA		NA	NA		NA	14,000		1,000	NA		NA	NA		NA	NA		NA	NA		NA	31000		10000	34000		10000	11000		10000	19000		10000			
Nitrogen, Ammonia	2,000		NA		NA	NA		NA	ND		150	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA			
Nitrogen, Nitrate/Nitrite	10,000		NA		NA	NA		NA	270		100	NA		NA	NA		NA	NA		NA	NA		NA	1900		100	860		100	130		100	610		100			
Phosphorus, Orthophosphate			NA		NA	NA		NA	ND		5	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA			
Sulfide	50		NA		NA	NA		NA	ND		100	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA			
Sulfite	200		NA		NA	NA		NA	ND		500	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA			
Dissolved Organic Carbon			NA		NA	NA		NA	11,000		4,000	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA			
Total Organic Carbon			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	1400	U	500	2000	U	2000	4400		2000	2500		2000			
Iron, Ferrous			NA		NA	NA		NA	ND		500	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	500	UJ	500	500	U	500	500	U	500			
Hardness			NA		NA	NA		NA	330,000		660	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA			
Ferric Iron			NA		NA	NA		NA	18,000		500	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	500	UJ	500	49000		500	42000		500			
Total Metals																																						
Antimony, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA			
Arsenic, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA			
Barium, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA			
Beryllium, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA			
Cadmium, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA			
Chromium, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA			
Copper, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA			
Iron, Total	300		NA		NA	NA		NA	**18,000**		50	NA		NA	NA		NA	NA		NA	NA		NA	100		50	50	U	50	**49000**		50	**42000**		50			
Lead, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA			
Manganese, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	10	U	10	NA		NA	NA		NA	NA		NA			
Mercury, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA			
Nickel, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA			
Selenium, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA			
Silver, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA			
Thallium, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA			
Zinc, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA			

Source: Alpha Analytical Lab Reports: L0713529, L0716004, L0716078, L0817489, L1006386, L1009164, L1012239, L1020006, L1105478, L1106875, L1107639, L1109071, andL1109210
ug/l = micrograms per l Q = Laboratory Qualifier RL = Laboratory Reported Limit
NA = not analyzed ND = Not Detected at or above the Laboratory Reported Limit
Bold = detected above NYSDEC TOGS SCG
Note: See DUSRs in Appendix J or associated previously published reports for details regarding valiation and usability.

Table 1
Groundwater Analytical Data
Orangetown Shopping Center - Brownfield Site #C344066
Orangeburg, New York

LOCATION	NYSDEC TOGS SGC	Guidance Value	MW-8A			MW-8A			Duplicate MW-8A			MW-8A			MW-8A			MW-8B			Duplicate MW-8B			MW-8B			MW-8B			MW-8B			MW-8B		
Matrix			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater		
SAMPLING DATE			4/20/2011			5/16/2011			5/16/2011			5/31/2011			6/21/2011			10/24/2007			10/25/2007			11/24/2008			4/29/2010			6/16/2010			8/9/2010			12/14/2010		
Units			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l		
PARAMETER			Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL
Dissolved Organic Carbon			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	1600		1000	NA		NA	NA		NA	NA		NA	NA	
Iron, Ferrous			500	U	500	500	U	500	500	UJ	500	500	UJ	500	500	UJ	500	NA		NA	NA		NA	ND		500	NA		NA	500	UJ	500	500	UJ	500	500	U	500
Primary Constituents of Concern VOCs by GC/MS (8																																					
1,1-Dichloroethene	5		10	U	10	12	U	12	12	U	12	12	U	12	12	U	12	ND		12	ND		0.5	ND		50	100	U	100	2.5	U	2.5	5	U	5	25	U	25
cis-1,2-Dichloroethene	5		**910**		10	**970**		12	**920**		12	**910**		12	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA	
cis-1,2-Dichloroethene	5		NA		NA	NA		NA	NA		NA	NA		NA	**1800**		12	**2,100**		12	**>100**		0.5	ND		3200	**5200**		100	**380**		3	**1800**		50	**3,600**		25
Tetrachloroethene	5		10	U	10	12	U	12	12	U	12	12	U	12	12	U	12	ND		12	0.86		0.5	ND		50	100	U	100	2.5	U	2.5	5	U	5	25	U	25
trans-1,2-Dichloroethene	5		15	U	15	19	U	19	19	U	19	19	U	19	19	U	19	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA	
trans-1,2-Dichloroethene	5		NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	ND		19	**43**		0.75	ND		75	150	U	150	3.8	U	3.8	7.5	U	7.5	38	U	38
Trichloroethene	5		**34**		10	**38**		12	**40**		12	**42**		12	**64**		12	**34**		12	**28**		0.5	ND		73	**110**		100	3.8		2.5	**59**		5	**60**		25
Vinyl chloride	2		20	U	20	25	U	25	25	U	25	25	U	25	**9.1**	J	25	ND		25	ND		1.0	ND		100	200	U	200	5	U	5	10	U	10	50	U	50
Other VOCs by GC/MS (8260B)																																					
1,1,1,2-Tetrachloroethane	5		10	U	10	12	U	12	12	U	12	12	U	12	12	U	12	ND		12	ND		0.5	ND		50	100	U	100	2.5	U	2.5	5	U	5	25	U	25
1,1,1-Trichloroethane	5		10	U	10	12	U	12	12	U	12	12	U	12	12	U	12	ND		12	ND		0.5	ND		50	100	U	100	2.5	U	2.5	5	U	5	25	U	25
1,1,2,2-Tetrachloroethane	5		10	U	10	12	U	12	12	U	12	12	U	12	12	U	12	ND		12	ND		0.5	ND		50	100	U	100	2.5	U	2.5	5	U	5	25	U	25
1,1,2-Trichloroethane	1		15	U	15	19	U	19	19	U	19	19	U	19	19	U	19	ND		19	ND		0.75	ND		75	150	U	150	3.8	U	3.8	7.5	U	7.5	38	U	38
1,1-Dichloroethane	5		15	U	15	19	U	19	19	U	19	19	U	19	19	U	19	ND		19	ND		0.75	ND		75	150	U	150	3.8	U	3.8	7.5	U	7.5	38	U	38
1,1-Dichloropropene	5		50	U	50	62	U	62	62	U	62	62	U	62	62	U	62	ND		62	ND		2.5	ND		250	500	U	500	12	U	12	25	U	25	120	U	120
1,2,3-Trichlorobenzene	5		50	UJ	50	62	U	62	62	U	62	62	U	62	62	U	62	ND		62	ND		2.5	ND		250	500	U	500	12	U	12	25	U	25	120	U	120
1,2,3-Trichloropropane	0.04		100	U	100	120	U	120	120	U	120	120	U	120	120	U	120	ND		120	ND		5	ND		500	1000	U	1000	25	U	25	50	U	50	250	U	250
1,2,4,5-Tetramethylbenzene			40	U	40	50	U	50	50	U	50	50	U	50	50	U	50	NA		NA	NA		NA	ND		200	400	U	400	10	U	10	20	U	20	100	U	100
1,2,4-Trichlorobenzene	5		50	UJ	50	62	U	62	62	U	62	62	U	62	62	U	62	ND		62	ND		2.5	ND		250	500	U	500	12	U	12	25	U	25	120	U	120
1,2,4-Trimethylbenzene	5		50	U	50	62	U	62	62	U	62	62	U	62	62	U	62	ND		62	ND		2.5	ND		250	500	U	500	12	U	12	25	U	25	120	U	120
1,2-Dibromo-3-chloropropane	0.04		50	U	50	62	U	62	62	U	62	62	U	62	62	U	62	ND		62	ND		2.5	ND		250	500	U	500	12	U	12	25	U	25	120	U	120
1,2-Dibromoethane	5		40	U	40	50	U	50	50	U	50	50	U	50	50	U	50	ND		50	ND		2	ND		200	400	U	400	10	U	10	20	U	20	100	U	100
1,2-Dichlorobenzene	3		50	U	50	62	U	62	62	U	62	62	U	62	62	U	62	ND		62	ND		2.5	ND		250	500	U	500	12	U	12	25	U	25	120	U	120
1,2-Dichloroethane	0.6		10	U	10	12	U	12	12	U	12	12	U	12	12	U	12	ND		12	ND		0.5	ND		50	100	U	500	2.5	U	2.5	5	U	5	25	U	25
1,2-Dichloropropane	1		35	U	35	44	U	44	44	U	44	44	U	44	44	U	44	ND		44	ND		1.8	ND		180	350	U	350	8.8	U	8.8	18	U	18	88	U	88
1,3,5-Trimethylbenzene	5		50	U	50	62	U	62	62	U	62	62	U	62	62	U	62	ND		62	ND		2.5	ND		250	500	U	500	12	U	12	25	U	25	120	U	120
1,3-Dichlorobenzene	3		50	U	50	62	U	62	62	U	62	62	U	62	62	U	62	ND		62	ND		2.5	ND		250	500	U	500	12	U	12	25	U	25	120	U	120
1,3-Dichloropropane	5		50	U	50	62	U	62	62	U	62	62	U	62	62	U	62	ND		62	ND		2.5	ND		250	500	U	500	12	U	12	25	U	25	120	U	120
1,4-Dichlorobenzene	3		50	U	50	62	U	62	62	U	62	62	U	62	62	U	62	ND		62	ND		2.5	ND		250	500	U	500	12	U	12	25	U	25	120	U	120
1,4-Dichlorobutane			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	ND		120	ND		5	NA		NA	NA		NA	NA		NA	NA		NA	NA	
1,4-Diethylbenzene			40	U	40	50	U	50	50	U	50	50	U	50	50	U	50	NA		NA	NA		NA	ND		200	400	U	400	10	U	10	20	U	20	100	U	100
2,2-Dichloropropane	5		50	U	50	62	U	62	62	U	62	62	U	62	62	U	62	ND		62	ND		2.5	ND		250	500	U	500	12	U	12	25	U	25	120	U	120
2-Butanone	50		100	U	100	120	U	120	120	U	120	120	U	120	120	U	120	NA		NA	NA		NA	NA		NA	1000	U	1000	25	U	25	50	U	50	250	U	250
2-Butanone	50		NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	ND		120	ND		5	ND		500	NA		NA	NA		NA	NA		NA	NA	
2-Hexanone	50		100	U	100	120	U	120	120	U	120	120	U	120	120	U	120	ND		120	ND		5	ND		500	1000	U	1000	25	U	25	50	U	50	250	U	250
4-Ethyltoluene			40	U	40	50	U	50	50	U	50	50	U	50	50	U	50	NA		NA	NA		NA	ND		200	400	U	400	10	U	10	20	U	20	100	U	100
4-Methyl-2-pentanone			100	U	100	120	U	120	120	U	120	120	U	120	120	U	120	ND		120	ND		5	ND		500	1000	U	1000	25	U	25	50	U	50	250	U	250
Acetone	50		100	U	100	120	U	120	120	U	120	120	U	120	120	U	120	ND		120	ND		5	ND		500	1000	U	1000	25	U	25	50	U	50	250	U	250
Acrolein	5		NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA	

Table 1
Groundwater Analytical Data
Orangetown Shopping Center - Brownfield Site #C344066
Orangeburg, New York

LOCATION	NYSDEC TOGS SGC	Guidance Value	MW-8A			MW-8A			Duplicate MW-8A			MW-8A			MW-8A			MW-8B			Duplicate MW-8B			MW-8B			MW-8B			MW-8B			MW-8B			MW-8B		
Matrix			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater		
SAMPLING DATE			4/20/2011			5/16/2011			5/16/2011			5/31/2011			6/21/2011			10/24/2007			10/25/2007			11/24/2008			4/29/2010			6/16/2010			8/9/2010			12/14/2010		
Units			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l		
PARAMETER			Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL
Acrylonitrile	5		100	U	100	120	U	120	120	U	120	120	U	120	120	U	120	ND		120	ND		5	ND		500	1000	U	1000	25	U	25	50	U	50	250	U	250
Benzene	1		10	U	10	12	U	12	12	U	12	12	U	12	12	U	12	ND		12	ND		0.5	ND		50	100	U	100	2.5	U	2.5	5	U	5	25	U	25
Bromobenzene	5		50	U	50	62	U	62	62	U	62	62	U	62	62	U	62	ND		62	ND		2.5	ND		250	500	U	500	12	U	12	25	U	25	120	U	120
Bromochloromethane	5		50	U	50	62	U	62	62	U	62	62	U	62	62	U	62	ND		62	ND		2.5	ND		250	500	U	500	12	U	12	25	U	25	120	U	120
Bromodichloromethane	50		10	U	10	12	U	12	12	U	12	12	U	12	12	U	12	ND		12	ND		0.5	ND		50	100	U	100	2.5	U	2.5	5	U	5	25	U	25
Bromoform	50		40	U	40	50	U	50	50	U	50	50	U	50	50	U	50	ND		50	ND		2	ND		200	400	U	400	10	U	10	20	U	20	100	U	100
Bromomethane	5		20	U	20	25	U	25	25	U	25	25	U	25	25	UJ	25	ND		25	ND		1	ND		100	200	U	200	5	U	5	10	U	10	50	U	50
Carbon disulfide			100	U	100	120	U	120	120	U	120	120	U	120	120	U	120	ND		120	ND		5	ND		500	1000	U	1000	25	U	25	50	U	50	250	U	250
Carbon tetrachloride	5		10	U	10	12	U	12	12	U	12	12	U	12	12	U	12	ND		12	ND		0.5	ND		50	100	U	100	2.5	U	25	5	U	5	25	U	25
Chlorobenzene	5		10	U	10	12	U	12	12	U	12	12	U	12	12	U	12	ND		12	ND		0.5	ND		50	100	U	100	2.5	U	25	5	U	5	25	U	25
Chloroethane	5		20	U	20	25	U	25	25	UJ	25	25	U	25	25	U	25	ND		25	ND		1	ND		100	200	U	200	5	U	5	10	U	10	50	U	50
Chloroform	7		15	U	15	19	U	19	19	U	19	19	U	19	19	U	19	ND		19	2.2		0.75	ND		75	150	U	150	3.8	U	3.8	7.5	U	7.5	38	U	38
Chloromethane	5		50	U	50	62	U	62	62	U	62	62	U	62	62	U	62	ND		62	ND		2.5	ND		250	500	U	500	12	U	12	25	U	25	120	U	120
cis-1,3-Dichloropropene	0.4		10	U	10	12	U	12	12	U	12	12	U	12	12	U	12	ND		12	ND		0.5	ND		50	100	U	500	2.5	U	2.5	5	U	5	25	U	25
Dibromochloromethane	50		10	U	10	12	U	12	12	U	12	12	U	12	12	U	12	ND		12	ND		0.5	ND		50	100	U	500	2.5	U	2.5	5	U	5	25	U	25
Dibromomethane	5		100	U	100	120	U	120	120	U	120	120	U	120	120	U	120	ND		120	ND		5	ND		500	1000	U	1000	25	U	25	50	U	50	250	U	250
Dichlorodifluoromethane	5		100	U	100	120	U	120	120	U	120	120	U	120	120	U	120	ND		120	ND		5	ND		500	1000	U	1000	25	U	25	50	U	50	250	U	250
Ethyl ether			50	U	50	62	U	62	62	U	62	62	U	62	62	U	62	ND		62	ND		2.5	NA		NA	500	U	500	12	U	12	25	U	25	120	U	120
Ethyl methacrylate			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	ND		120	ND		5	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Ethylbenzene	5		10	U	10	12	U	12	12	U	12	12	U	12	12	U	12	ND		12	ND		0.5	ND		50	100	U	100	2.5	U	2.5	5	U	5	25	U	25
Hexachlorobutadiene	0.5		12	U	12	15	U	15	15	U	15	15	U	15	15	U	15	ND		15	ND		0.6	ND		60	120	U	120	3	U	3	6	U	6	30	U	30
Iodomethane	5		NA	U	NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		A
Isopropylbenzene	5		10	U	10	12	U	12	12	U	12	12	U	12	12	U	12	ND		12	ND		0.5	ND		50	100	U	100	2.5	U	2.5	5	U	5	25	U	25
Methyl tert butyl ether			20	U	20	25	UJ	25	25	UJ	25	25	U	25	25	U	25	ND		25	ND		1	ND		100	200	U	200	5	U	5	10	U	10	50	U	50
Methylene chloride	5		100	U	100	120	U	120	120	U	120	120	U	120	120	U	120	ND		120	ND		5	ND		500	1000	U	1000	**25**	U	25	50	U	50	250	U	250
n-Butylbenzene	5		10	U	10	12	U	12	12	U	12	12	U	12	12	U	12	ND		12	ND		0.5	ND		50	100	U	100	2.5	U	2.5	5	U	5	25	U	25
n-Propylbenzene	5		10	U	10	12	U	12	12	U	12	12	U	12	12	U	12	ND		12	ND		0.5	ND		50	100	U	100	2.5	U	2.5	5	U	5	25	U	25
Naphthalene	10		50	U	50	62	U	62	62	U	62	62	U	62	62	U	62	ND		62	ND		2.5	ND		250	500	U	500	**12**	U	12	25	U	25	120	U	120
o-Chlorotoluene	5		50	U	50	62	U	62	62	U	62	62	U	62	62	U	62	ND		62	ND		2.5	ND		250	500	U	500	12	U	12	25	U	25	120	U	120
o-Xylene			20	U	20	25	U	25	25	U	25	25	U	25	25	U	25	ND		25	ND		1	ND		100	200	U	200	5	U	5	10	U	10	50	U	50
p-Chlorotoluene	5		50	U	50	62	U	62	62	U	62	62	U	62	62	U	62	ND		62	ND		2.5	ND		250	500	U	500	12	U	12	25	U	25	120	U	120
p-Isopropyltoluene	5		10	U	10	12	U	12	12	U	12	12	U	12	12	U	12	ND		12	ND		0.5	ND		50	100	U	100	2.5	U	2.5	5	U	5	25	U	25
p/m-Xylene			20	U	20	25	U	25	25	U	25	25	U	25	25	U	25	ND		25	ND		1	ND		100	200	U	200	5	U	5	10	U	10	50	U	50
sec-Butylbenzene	5		10	U	10	12	U	12	12	U	12	12	U	12	12	U	12	ND		12	ND		0.5	ND		50	100	U	100	2.5	U	2.5	5	U	5	25	U	25
Styrene	5		20	U	20	25	U	25	25	U	25	25	U	25	25	U	25	ND		25	ND		1	ND		100	200	U	200	5	U	5	10	U	10	50	U	50
tert-Butylbenzene	5		50	U	50	62	U	62	62	U	62	62	U	62	62	U	62	ND		62	ND		2.5	ND		250	500	U	500	**12**	U	12	25	U	25	120	U	120
Tetrahydrofuran	50		NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	ND		250	ND		10	NA		NA	NA		NA	NA		3.8	NA		NA	NA		NA
Toluene	5		15	U	15	19	U	19	19	U	19	19	U	19	19	U	19	ND		19	ND		0.75	ND		75	150	U	150	3.8	U	3.8	7.5	U	7.5	38	U	38
trans-1,3-Dichloropropene	0.4		10	U	10	12	U	12	12	U	12	12	U	12	12	U	12	ND		12	ND		0.5	ND		50	100	U	100	2.5	U	2.5	5	U	5	25	U	25
trans-1,4-Dichloro-2-butene	5		50	U	50	62	U	62	62	U	62	62	U	62	62	U	62	ND		62	ND		2.5	NA		NA	500	U	500	12	U	12	25	U	2.5	120	U	120
Trichlorofluoromethane	5		50	U	50	62	U	62	62	U	62	62	U	62	62	U	62	ND		62	ND		2.5	ND		250	500	U	500	12	U	12	25	U	25	120	U	120
Vinyl acetate			100	U	100	120	U	120	120	U	120	120	U	120	120	U	120	ND		120	ND		5	ND		500	1000	U	1000	25	U	25	50	U	50	250	U	250

Table 1
Groundwater Analytical Data
Orangetown Shopping Center - Brownfield Site #C344066
Orangeburg, New York

LOCATION	NYSDEC TOGS SGC	Guidance Value	MW-8A			MW-8A			Duplicate MW-8A			MW-8A			MW-8A			MW-8B			Duplicate MW-8B			MW-8B			MW-8B			MW-8B			MW-8B			MW-8B		
Matrix			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater		
SAMPLING DATE			4/20/2011			5/16/2011			5/16/2011			5/31/2011			6/21/2011			10/24/2007			10/25/2007			11/24/2008			4/29/2010			6/16/2010			8/9/2010			12/14/2010		
Units			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l		
PARAMETER			Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL
Dissolved Gases by GC																																				
Ethane			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	2.04		0.5	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA	
Ethene			0.97		0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	1.85		0.5	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA	
Methane			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	3.83		0.3	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA	
Carbon Dioxide			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	69,000		600	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA	
Anions by Ion Chromatography																																				
Chloride	250,000		NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	170,000		2,500	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA	
Sulfate	250,000		22000		10000	24000		10000	25000		10000	26000		10000	25000		10000	37,000		1,000	NA		NA	NA		NA	33000		10000	35000		10000	34000		10000	19000		10000
Nitrogen, Ammonia	2,000		NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	ND		150	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA	
Nitrogen, Nitrate/Nitrite	10,000		1500		100	1500		100	1500		100	1500		100	1200		100	ND		100	NA		NA	NA		NA	2200		100	6400		100	1300		100	390		100
Phosphorus, Orthophosphate			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	16		5	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA	
Sulfide	50		NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	ND		100	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA	
Sulfite	200		NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	ND		500	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA	
Dissolved Organic Carbon			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	4,500		2,000	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA	
Total Organic Carbon			2000		1000	1900	U	1000	2000	U	1000	2000	UJ	1000	2000		1000	NA		NA	NA		NA	NA		NA	1100	U	500	1200	U	1200	1300	U	500	4000		2000
Iron, Ferrous			500	UJ	500	500	U	500	500	UJ	500	500	UJ	500	500	UJ	500	ND		500	NA		NA	NA		NA	NA		NA	500	UJ	500	500	UJ	500	500	U	500
Hardness			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	850,000		660	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA	
Ferric Iron			500	UJ	500	500	U	500	500	UJ	500	500	UJ	500	500	UJ	500	87,000		500	NA		NA	NA		NA	NA		NA	500	UJ	500	500	UJ	500	54000		500
Total Metals																																				
Antimony, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA	
Arsenic, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA	
Barium, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA	
Beryllium, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA	
Cadmium, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA	
Chromium, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA	
Copper, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA	
Iron, Total	300		80		50	50		50	60		50	50	U	50	70	J	50	NA		NA	NA		NA	NA	**15000**		50	130		50	60		50	60		50	**54000**		50
Lead, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA	
Manganese, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	99		10	NA		NA	NA		NA	NA	
Mercury, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA	
Nickel, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA	
Selenium, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA	
Silver, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA	
Thallium, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA	
Zinc, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA	

Source: Alpha Analytical Lab Reports: L0713529, L0716004, L0716078, L0817489, L1006386, L1009164, L1012239, L1020006, L1105478, L1106875, L1107639, L1109071, andL1109210
ug/l = micrograms per liter Q = Laboratory Qualifier RL = Laboratory Reported Limit
NA = not analyzed ND = Not Detected at or above the Laboratory Reported Limit
Bold = detected above NYSDEC TOGS SCG
Note: See DUSRs in Appendix J or associated previously published reports for details regarding valiation and usability.

Table 1
Groundwater Analytical Data
Orangetown Shopping Center - Brownfield Site #C344066
Orangeburg, New York

LOCATION	NYSDEC TOGS SGC	Guidance Value	MW-8B			MW-8B			MW-8B			MW-8B			MW-9B			MW-9B			MW-9C			MW-9C			MW-10			MW-10			MW-10			MW-10		
Matrix			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater		
SAMPLING DATE			4/21/2011			5/16/2011			5/31/2011			6/21/2011			10/23/2007			11/24/2008			10/23/2007			11/24/2008			9/14/2007			10/25/2007			11/24/2008			4/30/2010		
Units			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l		
PARAMETER			Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL
Dissolved Organic Carbon			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA	
Iron, Ferrous			500	U	500	60		500	500	UJ	500	500	UJ	500	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA	
Primary Constituents of Concern VOCs by GC/MS (8																																					
1,1-Dichloroethene	5		10	U	10	10	U	10	10	U	10	10	U	10	ND		0.5	ND		0.5	ND		0.5	ND		0.5	ND		0.5	ND		0.5	ND		0.5	0.5	U	0.5
cis-1,2-Dichloroethene	5		**950**		10	**450**		10	**490**		10	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
cis-1,2-Dichloroethene	5		NA		NA	NA		NA	NA		NA	**600**		10	**8.9**		0.5	0.9		0.5	**42**		0.5	**20**		0.5	1.8		0.5	1.4		0.5	2.2		0.5	**47**		0.5
Tetrachloroethene	5		10	U	10	10	U	10	10	U	10	10	U	10	ND		0.5	ND		0.5	ND		0.5	ND		0.5	ND		0.5	ND		0.5	ND		0.5	0.5	U	0.5
trans-1,2-Dichloroethene	5		**15**	U	15	15	U	15	15	U	15	15	U	15	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
trans-1,2-Dichloroethene	5		NA		NA	NA		NA	NA		NA	NA		NA	ND		0.75	ND		0.75	ND		0.75	ND		0.75	ND		0.75	ND		0.75	ND		0.75	0.75	U	0.75
Trichloroethene	5		**16**		10	**7.2**	J	10	**8.4**	J	10	**9.3**	J	10	ND		0.5	ND		0.5	0.69		0.5	ND		0.5	ND		0.5	ND		0.5	ND		0.5	0.95		0.5
Vinyl chloride	2		20	U	20	20	U	20	20	U	20	20	U	20	ND		1	ND		1	ND		1	ND		1	ND		1	ND		1	ND		1	1	U	1
Other VOCs by GC/MS (8260B)																																					
1,1,1,2-Tetrachloroethane	5		10	U	10	10	U	10	10	U	10	10	U	10	ND		0.5	ND		0.5	ND		0.5	ND		0.5	ND		0.5	ND		0.5	ND		0.5	0.5	U	0.5
1,1,1-Trichloroethane	5		10	U	10	10	U	10	10	U	10	10	U	10	ND		0.5	ND		0.5	ND		0.5	ND		0.5	ND		0.5	ND		0.5	ND		0.5	0.5	U	0.5
1,1,2,2-Tetrachloroethane	5		10	U	10	10	U	10	10	U	10	10	U	10	ND		0.5	ND		0.5	ND		0.5	ND		0.5	ND		0.5	ND		0.5	ND		0.5	0.5	U	0.5
1,1,2-Trichloroethane	1		15	U	15	15	U	15	15	U	15	15	U	15	ND		0.75	ND		0.75	ND		0.75	ND		0.75	ND		0.75	ND		0.75	ND		0.75	0.75	U	0.75
1,1-Dichloroethane	5		15	U	15	15	U	15	15	U	15	15	U	15	ND		0.75	ND		0.75	ND		0.75	ND		0.75	ND		0.75	ND		0.75	ND		0.75	0.75	U	0.75
1,1-Dichloropropene	5		50	U	50	50	U	50	50	U	50	50	U	50	ND		2.5	ND		2.5	ND		2.5	ND		2.5	ND		2.5	ND		2.5	ND		2.5	2.5	U	2.5
1,2,3-Trichlorobenzene	5		50	UJ	50	50	U	50	50	U	50	50	U	50	ND		2.5	ND		2.5	ND		2.5	ND		2.5	ND		2.5	ND		2.5	ND		2.5	2.5	U	2.5
1,2,3-Trichloropropane	0.04		100	U	100	100	U	100	100	U	100	100	U	100	ND		5	ND		5	ND		5	ND		5	ND		5	ND		5	ND		5	5	U	5
1,2,4,5-Tetramethylbenzene			40	U	40	40	U	40	40	U	40	40	U	40	NA		NA	ND		2	NA		NA	ND		2	NA		NA	NA		NA	ND		2	2	U	2
1,2,4-Trichlorobenzene	5		50	UJ	50	50	U	50	50	U	50	50	U	50	ND		2.5	ND		2.5	ND		2.5	ND		2.5	ND		2.5	ND		2.5	ND		2.5	2.5	U	2.5
1,2,4-Trimethylbenzene	5		50	U	50	50	U	50	50	U	50	50	U	50	ND		2.5	ND		2.5	ND		2.5	ND		2.5	ND		2.5	ND		2.5	ND		2.5	2.5	U	2.5
1,2-Dibromo-3-chloropropane	0.04		50	U	50	50	U	50	50	U	50	50	U	50	ND		2.5	ND		2.5	ND		2.5	ND		2.5	ND		2.5	ND		2.5	ND		2.5	2.5	U	2.5
1,2-Dibromoethane	5		40	U	40	40	U	40	40	U	40	40	U	40	ND		2	ND		2	ND		2	ND		2	ND		2	ND		2	ND		2	2	U	2
1,2-Dichlorobenzene	3		50	U	50	50	U	50	50	U	50	50	U	50	ND		2.5	ND		2.5	ND		2.5	ND		2.5	ND		2.5	ND		2.5	ND		2.5	2.5	U	2.5
1,2-Dichloroethane	0.6		10	U	10	**7.4**	J	10	10	U	10	10	U	10	ND		0.5	ND		0.5	ND		0.5	ND		0.5	ND		0.5	ND		0.5	ND		0.5	0.5	U	0.5
1,2-Dichloropropane	1		35	U	35	35	U	35	35	U	35	35	U	35	ND		1.8	ND		1.8	ND		1.8	ND		1.8	ND		1.8	ND		1.8	ND		1.8	1.8	U	1.8
1,3,5-Trimethylbenzene	5		50	U	50	50	U	50	50	U	50	50	U	50	ND		2.5	ND		2.5	ND		2.5	ND		2.5	ND		2.5	ND		2.5	ND		2.5	2.5	U	2.5
1,3-Dichlorobenzene	3		50	U	50	50	U	50	50	U	50	50	U	50	ND		2.5	ND		2.5	ND		2.5	ND		2.5	ND		2.5	ND		2.5	ND		2.5	2.5	U	2.5
1,3-Dichloropropane	5		50	U	50	50	U	50	50	U	50	50	U	50	ND		2.5	ND		2.5	ND		2.5	ND		2.5	ND		2.5	ND		2.5	ND		2.5	2.5	U	2.5
1,4-Dichlorobenzene	3		50	U	50	50	U	50	50	U	50	50	U	50	ND		2.5	ND		2.5	ND		2.5	ND		2.5	ND		2.5	ND		2.5	ND		2.5	2.5	U	2.5
1,4-Dichlorobutane			NA		NA	NA		NA	NA		NA	NA		NA	ND		5	NA		NA	ND		5	NA		NA	ND		5	ND		5	NA		NA	NA		NA
1,4-Diethylbenzene			40	U	40	40	U	40	40	U	40	40	U	40	NA		NA	ND		2	NA		NA	ND		2	NA		NA	NA		NA	ND		2	2	U	2
2,2-Dichloropropane	5		50	U	50	50	U	50	50	U	50	50	U	50	ND		2.5	ND		2.5	ND		2.5	ND		2.5	ND		2.5	ND		2.5	ND		2.5	2.5	U	2.5
2-Butanone	50		100	U	100	100	U	100	100	U	100	100	U	100	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	5	U	5
2-Butanone	50		NA		NA	NA		NA	NA		NA	NA		NA	ND		5	ND		5	ND		5	ND		5	ND		5	ND		5	ND		5	NA		NA
2-Hexanone	50		100	U	100	100	U	100	100	U	100	100	U	100	ND		5	ND		5	ND		5	ND		5	ND		5	ND		5	ND		5	5	U	5
4-Ethyltoluene			40	U	40	40	U	40	40	U	40	40	U	40	NA		NA	ND		2	NA		NA	ND		2	NA		NA	NA		NA	ND		2	2	U	2
4-Methyl-2-pentanone			100	U	100	100	U	100	100	U	100	100	U	100	ND		5	ND		5	ND		5	ND		5	ND		5	ND		5	ND		5	5	U	5
Acetone	50		100	U	100	100	U	100	100	U	100	100	U	100	ND		5	11		5	ND		5	ND		5	ND		5	ND		5	ND		5	5	U	5
Acrolein	5		NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	ND		12	NA		NA	NA		NA	NA		NA

Table 1
Groundwater Analytical Data
Orangetown Shopping Center - Brownfield Site #C344066
Orangeburg, New York

LOCATION	NYSDEC TOGS SGC	Guidance Value	MW-8B			MW-8B			MW-8B			MW-8B			MW-9B			MW-9B			MW-9C			MW-9C			MW-10			MW-10			MW-10			MW-10		
Matrix			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater		
SAMPLING DATE			4/21/2011			5/16/2011			5/31/2011			6/21/2011			10/23/2007			11/24/2008			10/23/2007			11/24/2008			9/14/2007			10/25/2007			11/24/2008			4/30/2010		
Units			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l		
PARAMETER			Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL
Acrylonitrile	5		100	U	100	100	U	100	100	U	100	100	U	100	ND		5	ND		5	ND		5	ND		5	ND		5	ND		5	ND		5	5	U	5
Benzene	1		10	U	10	10	U	10	10	U	10	10	U	10	ND		0.5	ND		0.5	ND		0.5	ND		0.5	ND		0.5	ND		0.5	ND		0.5	0.5	U	0.5
Bromobenzene	5		50	U	50	50	U	50	50	U	50	50	U	50	ND		2.5	ND		2.5	ND		2.5	ND		2.5	ND		2.5	ND		2.5	ND		2.5	2.5	U	2.5
Bromochloromethane	5		50	U	50	50	U	50	50	U	50	50	U	50	ND		2.5	ND		2.5	ND		2.5	ND		2.5	ND		2.5	ND		2.5	ND		2.5	2.5	U	2.5
Bromodichloromethane	50		10	U	10	10	U	10	10	U	10	10	U	10	ND		0.5	ND		0.5	ND		0.5	ND		0.5	ND		0.5	ND		0.5	ND		0.5	0.5	U	0.5
Bromoform	50		40	U	40	40	U	40	40	U	40	40	U	40	ND		2	ND		2	ND		2	ND		2	ND		2	ND		2	ND		2	2	U	2
Bromomethane	5		20	U	20	20	U	20	20	U	20	20	UJ	20	ND		1	ND		1	ND		1	ND		1	ND		1	ND		1	ND		1	1	U	1
Carbon disulfide			100	U	100	100	U	100	100	U	100	100	U	100	ND		5	ND		5	ND		5	ND		5	ND		5	ND		5	ND		5	5	U	5
Carbon tetrachloride	5		10	U	10	10	U	10	10	U	10	10	U	10	ND		0.5	ND		0.5	ND		0.5	ND		0.5	ND		0.5	ND		0.5	ND		0.5	0.5	U	0.5
Chlorobenzene	5		10	U	10	10	U	10	10	U	10	10	U	10	ND		0.5	ND		0.5	ND		0.5	ND		0.5	ND		0.5	ND		0.5	ND		0.5	0.5	U	0.5
Chloroethane	5		20	U	20	20	U	20	20	U	20	20	U	20	ND		1	ND		1	ND		1	ND		1	ND		1	ND		1	ND		1	1	U	1
Chloroform	7		15	U	15	15	U	15	15	U	15	15	U	15	ND		0.75	ND		0.75	1.1		0.75	ND		0.75	ND		0.75	ND		0.75	ND		0.75	0.75	U	0.75
Chloromethane	5		50	U	50	50	U	50	50	U	50	50	U	50	ND		2.5	ND		2.5	ND		2.5	ND		2.5	ND		2.5	ND		2.5	ND		2.5	2.5	U	2.5
cis-1,3-Dichloropropene	0.4		10	U	10	10	U	10	10	U	10	10	U	10	ND		0.5	ND		0.5	ND		0.5	ND		0.5	NA		NA	ND		0.5	0.5	U	0.5			
Dibromochloromethane	50		10	U	10	10	U	10	10	U	10	10	U	10	ND		0.5	ND		0.5	ND		0.5	ND		0.5	ND		0.5	ND		0.5	ND		0.5	0.5	U	0.5
Dibromomethane	5		100	U	100	100	U	100	100	U	100	100	U	100	ND		5	ND		5	ND		5	ND		5	ND		5	ND		5	ND		5	5	U	5
Dichlorodifluoromethane	5		100	U	100	100	U	100	100	U	100	100	U	100	ND		5	ND		5	ND		5	ND		5	ND		5	ND		5	ND		5	5	U	5
Ethyl ether			50	U	50	50	U	50	50	U	50	50	U	50	ND		2.5	NA		NA	ND		2.5	NA		NA	ND		2.5	ND		2.5	NA		NA	2.5	U	2.5
Ethyl methacrylate			NA		NA	NA		NA	NA		NA	NA		NA	ND		5	NA		NA	ND		5	NA		NA	ND		5	ND		5	NA		NA	NA		NA
Ethylbenzene	5		10	U	10	10	U	10	10	U	10	10	U	10	ND		0.5	ND		0.5	ND		0.5	ND		0.5	ND		0.5	ND		0.5	ND		0.5	0.5	U	0.5
Hexachlorobutadiene	0.5		12	U	12	12	U	12	12	U	12	12	U	12	ND		0.6	ND		0.6	ND		0.6	ND		0.6	ND		0.6	ND		0.6	ND		0.6	0.6	U	0.6
Iodomethane	5		NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	ND		5	NA		NA	NA		NA	NA		NA
Isopropylbenzene	5		10	U	10	10	U	10	10	U	10	10	U	10	ND		0.5	ND		0.5	ND		0.5	ND		0.5	ND		0.5	ND		0.5	ND		0.5	0.5	U	0.5
Methyl tert butyl ether			20	U	20	20	UJ	20	20	U	20	20	U	20	ND		1	ND		1	ND		1	ND		1	ND		1	ND		1	ND		1	1	U	1
Methylene chloride	5		100	U	100	100	U	100	100	U	100	100	U	100	ND		5	ND		5	ND		5	ND		5	ND		5	ND		5	ND		5	5	U	5
n-Butylbenzene	5		10	U	10	10	U	10	10	U	10	10	U	10	ND		0.5	ND		0.5	ND		0.5	ND		0.5	ND		0.5	ND		0.5	ND		0.5	0.5	U	0.5
n-Propylbenzene	5		10	U	10	10	U	10	10	U	10	10	U	10	ND		0.5	ND		0.5	ND		0.5	ND		0.5	ND		0.5	ND		0.5	ND		0.5	0.5	U	0.5
Naphthalene	10		50	U	50	50	U	50	50	U	50	50	U	50	ND		2.5	ND		2.5	ND		2.5	ND		2.5	ND		2.5	ND		2.5	ND		2.5	2.5	U	2.5
o-Chlorotoluene	5		50	U	50	50	U	50	50	U	50	50	U	50	ND		2.5	ND		2.5	ND		2.5	ND		2.5	ND		2.5	ND		2.5	ND		2.5	2.5	U	2.5
o-Xylene			20	U	20	20	U	20	20	U	20	20	U	20	ND		1	ND		1	ND		1	ND		1	ND		1	ND		1	ND		1	1	U	1
p-Chlorotoluene	5		50	U	50	50	U	50	50	U	50	50	U	50	ND		2.5	ND		2.5	ND		2.5	ND		2.5	ND		2.5	ND		2.5	ND		2.5	2.5	U	2.5
p-Isopropyltoluene	5		10	U	10	10	U	10	10	U	10	10	U	10	ND		0.5	ND		0.5	ND		0.5	ND		0.5	ND		0.5	ND		0.5	ND		0.5	0.5	U	0.5
p/m-Xylene			20	U	20	20	U	20	20	U	20	20	U	20	ND		1	ND		1	ND		1	ND		1	ND		1	ND		1	ND		1	1	U	1
sec-Butylbenzene	5		10	U	10	10	U	10	10	U	10	10	U	10	ND		0.5	ND		0.5	ND		0.5	ND		0.5	ND		0.5	ND		0.5	ND		0.5	0.5	U	0.5
Styrene	5		20	U	20	20	U	20	20	U	20	20	U	20	ND		1	ND		1	ND		1	ND		1	ND		1	ND		1	ND		1	1	U	1
tert-Butylbenzene	5		50	U	50	50	U	50	50	U	50	50	U	50	ND		2.5	ND		2.5	ND		2.5	ND		2.5	ND		2.5	ND		2.5	ND		2.5	2.5	U	2.5
Tetrahydrofuran	50		NA		NA	NA		NA	NA		NA	NA		NA	ND		10	NA		NA	ND		10	NA		NA	ND		10	ND		10	NA		NA	NA		NA
Toluene	5		15	U	15	15	U	15	15	U	15	15	U	15	ND		0.75	ND		0.75	ND		0.75	ND		0.75	ND		0.75	ND		0.75	ND		0.75	0.75	U	0.75
trans-1,3-Dichloropropene	0.4		10	U	10	10	U	10	10	U	10	10	U	10	ND		0.5	ND		0.5	ND		0.5	ND		0.5	ND		0.5	ND		0.5	ND		0.5	0.5	U	0.5
trans-1,4-Dichloro-2-butene	5		50	U	50	50	U	50	50	U	50	50	U	50	ND		2.5	NA		NA	ND		2.5	NA		NA	ND		2.5	ND		2.5	NA		NA	2.5	U	2.5
Trichlorofluoromethane	5		50	U	50	50	U	50	50	U	50	50	U	50	ND		2.5	ND		2.5	ND		2.5	ND		2.5	ND		2.5	ND		2.5	ND		2.5	2.5	U	2.5
Vinyl acetate			100	U	100	100	U	100	100	U	100	100	U	100	ND		5	ND		5	ND		5	ND		5	ND		5	ND		5	ND		5	5	U	5

Table 1
Groundwater Analytical Data
Orangetown Shopping Center - Brownfield Site #C344066
Orangeburg, New York

LOCATION	NYSDEC TOGS SGC	Guidance Value	MW-8B			MW-8B			MW-8B			MW-8B			MW-9B			MW-9B			MW-9C			MW-9C			MW-10			MW-10			MW-10			MW-10		
Matrix			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater		
SAMPLING DATE			4/21/2011			5/16/2011			5/31/2011			6/21/2011			10/23/2007			11/24/2008			10/23/2007			11/24/2008			9/14/2007			10/25/2007			11/24/2008			4/30/2010		
Units			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l		
PARAMETER			Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL
Dissolved Gases by GC																																					
Ethane			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Ethene			0.5	U	0.5	0.5	U	0.5	0.323	J	0.5	0.414	J	0.5	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Methane			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Carbon Dioxide			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Anions by Ion Chromatography																																					
Chloride	250,000		NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Sulfate	250,000		30000		10000	30000		10000	31000		10000	30000		10000	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Nitrogen, Ammonia	2,000		NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Nitrogen, Nitrate/Nitrite	10,000		1900	U	100	2100		100	5000		100	2000		100	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Phosphorus, Orthophosphate			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Sulfide	50		NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Sulfite	200		NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Dissolved Organic Carbon			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Total Organic Carbon			2000		1000	1600	U	1000	1600	U	1000	1900		1000	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Iron, Ferrous			500	U	500	60		500	500	UJ	500	500	UJ	500	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Hardness			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Ferric Iron			500	U	500	500	U	500	500	UJ	500	500	UJ	500	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Total Metals																																					
Antimony, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Arsenic, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Barium, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Beryllium, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Cadmium, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Chromium, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Copper, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Iron, Total	300		50	U	50	100		50	50	U	50	30	J	50	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Lead, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Manganese, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Mercury, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Nickel, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Selenium, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Silver, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Thallium, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Zinc, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA

Source: Alpha Analytical Lab Reports: L0713529, L0716004, L0716078, L0817489, L1006386, L1009164, L1012239, L1020006, L1105478, L1106875, L1107639, L1109071, andL1109210
ug/l = micrograms per liter Q = Laboratory Qualifier RL = Laboratory Reported Limit
NA = not analyzed ND = Not Detected at or above the Laboratory Reported Limit
Bold = detected above NYSDEC TOGS SCG
Note: See DUSRs in Appendix J or associated previously published reports for details regarding valiation and usability.

Table 1
Groundwater Analytical Data
Orangetown Shopping Center - Brownfield Site #C344066
Orangeburg, New York

LOCATION	NYSDEC TOGS SGC	Guidance Value	MW-11B			MW-11B			MW-12C			MW-13A			MW-13A			MW-14A			MW-14A			MW-14A			MW-15A			MW-15A			MW-15A		
Matrix			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater		
SAMPLING DATE			10/24/2007			11/25/2008			11/25/2008			10/24/2007			4/30/2010			10/24/2007			11/24/2008			4/30/2010			10/24/2007			11/24/2008			4/30/2010		
Units			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l		
PARAMETER			Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL
Dissolved Organic Carbon			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Iron, Ferrous			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Primary Constituents of Concern VOCs by GC/MS (8																																			
1,1-Dichloroethene	5		ND		0.5	ND		0.5	ND		0.5	ND		0.5	0.5	U	0.5	ND		0.5	ND		0.5	0.5	U	0.5	ND		0.5	ND		0.5	0.5	U	0.5
cis-1,2-Dichloroethene	5		NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
cis-1,2-Dichloroethene	5		ND		1	ND		0.5	**11**		0.5	ND		1	0.5	U	1	3.7		0.5	1.5		0.5	4.8		0.5	**16**		0.5	**11**		0.5	7		0.5
Tetrachloroethene	5		ND		0.5	ND		0.5	ND		0.5	ND		0.5	0.5	U	0.5	ND		0.5	ND		0.5	0.5	U	0.5	ND		0.5	ND		0.5	0.5	U	0.5
trans-1,2-Dichloroethene	5		NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
trans-1,2-Dichloroethene	5		ND		0.75	ND		0.75	ND		0.75	ND		0.75	0.75	U	0.75	ND		0.75	ND		0.75	0.75	U	0.75	ND		0.75	ND		0.75	0.75	U	0.75
Trichloroethene	5		ND		0.5	ND		0.5	ND		0.5	ND		0.5	0.5	U	0.5	0.68		0.5	0.91		0.5	0.5	U	0.5	ND		0.5	ND		0.5	0.5	U	0.5
Vinyl chloride	2		ND		1	ND		1	ND		1	ND		1	1	U	1	ND		1	ND		1	1	U	1	ND		1	ND		1	1	U	1
Other VOCs by GC/MS (8260B)																																			
1,1,1,2-Tetrachloroethane	5		ND		0.5	ND		0.5	ND		0.5	ND		0.5	0.5	U	0.5	ND		0.5	ND		0.5	0.5	U	0.5	ND		0.5	ND		0.5	0.5	U	0.5
1,1,1-Trichloroethane	5		ND		0.5	ND		0.5	ND		0.5	ND		0.5	0.5	U	0.5	ND		0.5	ND		0.5	0.5	U	0.5	ND		0.5	ND		0.5	0.5	U	0.5
1,1,2,2-Tetrachloroethane	5		ND		0.5	ND		0.5	ND		0.5	ND		0.5	0.5	U	0.5	ND		0.5	ND		0.5	0.5	U	0.5	ND		0.5	ND		0.5	0.5	U	0.5
1,1,2-Trichloroethane	1		ND		0.75	ND		0.75	ND		0.75	ND		0.75	0.75	U	0.75	ND		0.75	ND		0.75	0.75	U	0.75	ND		0.75	ND		0.75	0.75	U	0.75
1,1-Dichloroethane	5		ND		0.75	ND		0.75	ND		0.75	ND		0.75	0.75	U	0.75	ND		0.75	ND		0.75	0.75	U	0.75	ND		0.75	ND		0.75	0.75	U	0.75
1,1-Dichloropropene	5		ND		2.5	ND		2.5	ND		2.5	ND		2.5	2.5	U	2.5	ND		2.5	ND		2.5	2.5	U	2.5	ND		2.5	ND		2.5	2.5	U	2.5
1,2,3-Trichlorobenzene	5		ND		2.5	ND		2.5	ND		2.5	ND		2.5	2.5	U	2.5	ND		2.5	ND		2.5	2.5	U	2.5	ND		2.5	ND		2.5	2.5	U	2.5
1,2,3-Trichloropropane	0.04		ND		5	ND		5	ND		5	ND		5	5	U	5	ND		5	ND		5	5	U	5	ND		5	ND		5	5	U	5
1,2,4,5-Tetramethylbenzene			NA		NA	ND		2	ND		2	NA		NA	2	U	2	NA		NA	ND		2	2	U	2	NA		NA	ND		2	2	U	2
1,2,4-Trichlorobenzene	5		ND		2.5	ND		2.5	ND		2.5	ND		2.5	2.5	U	2.5	ND		2.5	ND		2.5	2.5	U	2.5	ND		2.5	ND		2.5	2.5	U	2.5
1,2,4-Trimethylbenzene	5		ND		2.5	ND		2.5	ND		2.5	ND		2.5	2.5	U	2.5	ND		2.5	ND		2.5	2.5	U	2.5	ND		2.5	ND		2.5	2.5	U	2.5
1,2-Dibromo-3-chloropropane	0.04		ND		2.5	ND		2.5	ND		2.5	ND		2.5	2.5	U	2.5	ND		2.5	ND		2.5	2.5	U	2.5	ND		2.5	ND		2.5	2.5	U	2.5
1,2-Dibromoethane	5		ND		2	ND		2	ND		2	ND		2	2	U	2	ND		2	ND		2	2	U	2	ND		2	ND		2	2	U	2
1,2-Dichlorobenzene	3		ND		2.5	ND		2.5	ND		2.5	ND		2.5	2.5	U	2.5	ND		2.5	ND		2.5	2.5	U	2.5	ND		2.5	ND		2.5	2.5	U	2.5
1,2-Dichloroethane	0.6		ND		0.5	ND		0.5	ND		0.5	ND		0.5	0.5	U	0.5	ND		0.5	ND		0.5	0.5	U	0.5	ND		0.5	ND		0.5	0.5	U	0.5
1,2-Dichloropropane	1		ND		1.8	ND		1.8	ND		1.8	ND		1.8	1.8	U	1.8	ND		1.8	ND		1.8	1.8	U	1.8	ND		1.8	ND		1.8	1.8	U	1.8
1,3,5-Trimethylbenzene	5		ND		2.5	ND		2.5	ND		2.5	ND		2.5	2.5	U	2.5	ND		2.5	ND		2.5	2.5	U	2.5	ND		2.5	ND		2.5	2.5	U	2.5
1,3-Dichlorobenzene	3		ND		2.5	ND		2.5	ND		2.5	ND		2.5	2.5	U	2.5	ND		2.5	ND		2.5	2.5	U	2.5	ND		2.5	ND		2.5	2.5	U	2.5
1,3-Dichloropropane	5		ND		2.5	ND		2.5	ND		2.5	ND		2.5	2.5	U	2.5	ND		2.5	ND		2.5	2.5	U	2.5	ND		2.5	ND		2.5	2.5	U	2.5
1,4-Dichlorobenzene	3		ND		2.5	ND		2.5	ND		2.5	ND		2.5	2.5	U	2.5	ND		2.5	ND		2.5	2.5	U	2.5	ND		2.5	ND		2.5	2.5	U	2.5
1,4-Dichlorobutane			ND		5	NA		NA	NA		NA	ND		5	NA		NA	ND		5	NA		NA	NA		NA	ND		5	NA		NA	NA		NA
1,4-Diethylbenzene			NA		NA	ND		2	ND		2	NA		NA	2	U	2	NA		NA	ND		2	2	U	2	NA		NA	ND		2	2	U	2
2,2-Dichloropropane	5		ND		2.5	ND		2.5	ND		2.5	ND		2.5	2.5	U	2.5	ND		2.5	ND		2.5	2.5	U	2.5	ND		2.5	ND		2.5	2.5	U	2.5
2-Butanone	50		NA		NA	NA		NA	**230**		200	NA		NA	5	U	5	NA		NA	NA		NA	5	U	5	NA		NA	NA		NA	5	U	5
2-Butanone	50		ND		5	ND		5	**>100**		5	ND		5	NA		NA	ND		5	ND		5	NA		NA	ND		5	ND		5	NA		NA
2-Hexanone	50		ND		5	ND		5	ND		5	ND		5	5	U	5	ND		5	ND		5	5	U	5	ND		5	ND		5	5	U	5
4-Ethyltoluene			NA		NA	ND		2	ND		2	NA		NA	2	U	2	NA		NA	ND		2	2	U	2	NA		NA	ND		2	2	U	2
4-Methyl-2-pentanone			ND		5	ND		5	ND		5	ND		5	5	U	5	ND		5	ND		5	5	U	5	ND		5	ND		5	5	U	5
Acetone	50		**83**		5	ND		5	20		5	41		5	5	U	5	16		5	ND		5	8.2		5	18		5	ND		5	5	U	5
Acrolein	5		NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA

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Groundwater Analytical Data
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Orangeburg, New York

LOCATION	NYSDEC TOGS SGC	Guidance Value	MW-11B			MW-11B			MW-12C			MW-13A			MW-13A			MW-14A			MW-14A			MW-14A			MW-15A			MW-15A			MW-15A		
Matrix			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater		
SAMPLING DATE			10/24/2007			11/25/2008			11/25/2008			10/24/2007			4/30/2010			10/24/2007			11/24/2008			4/30/2010			10/24/2007			11/24/2008			4/30/2010		
Units			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l		
PARAMETER			Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL
Acrylonitrile	5		<5		5	ND		5	ND		5	ND		5	5	U	5	ND		5	ND		5	5	U	5	ND		5	ND		5	5	U	5
Benzene	1		<0.5		0.5	ND		0.5	ND		0.5	ND		0.5	0.5	U	0.5	ND		0.5	ND		0.5	0.5	U	0.5	ND		0.5	ND		0.5	0.5	U	0.5
Bromobenzene	5		<2.5		2.5	ND		2.5	ND		2.5	ND		2.5	2.5	U	2.5	ND		2.5	ND		2.5	2.5	U	2.5	ND		2.5	ND		2.5	2.5	U	2.5
Bromochloromethane	5		<2.5		2.5	ND		2.5	ND		2.5	ND		2.5	2.5	U	2.5	ND		2.5	ND		2.5	2.5	U	2.5	ND		2.5	ND		2.5	2.5	U	2.5
Bromodichloromethane	50		<0.5		0.5	ND		0.5	ND		0.5	ND		0.5	0.5	U	0.5	ND		0.5	ND		0.5	0.5	U	0.5	ND		0.5	ND		0.5	0.5	U	0.5
Bromoform	50		<2		2	ND		2	ND		2	ND		2	2	U	2	ND		2	ND		2	2	U	2	ND		2	ND		2	2	U	2
Bromomethane	5		<1		1	ND		1	ND		1	ND		1	1	U	1	ND		1	ND		1	1	U	1	ND		1	ND		1	1	U	1
Carbon disulfide			<5		5	ND		5	ND		5	ND		5	5	U	5	ND		5	ND		5	5	U	5	ND		5	ND		5	5	U	5
Carbon tetrachloride	5		<0.5		0.5	ND		0.5	ND		0.5	ND		0.5	0.5	U	0.5	ND		0.5	ND		0.5	0.5	U	0.5	ND		0.5	ND		0.5	0.5	U	0.5
Chlorobenzene	5		<0.5		0.5	ND		0.5	ND		0.5	ND		0.5	0.5	U	0.5	ND		0.5	ND		0.5	0.5	U	0.5	ND		0.5	ND		0.5	0.5	U	0.5
Chloroethane	5		<1		1	ND		1	ND		1	ND		1	1	U	1	ND		1	ND		1	1	U	1	ND		1	ND		1	1	U	1
Chloroform	7		12		0.75	ND		0.75	ND		0.75	ND		0.75	0.75	U	0.75	1.3		0.75	ND		0.75	0.75	U	0.75	5.5		0.75	ND		0.75	2.7		0.75
Chloromethane	5		<2.5		2.5	ND		2.5	ND		2.5	ND		2.5	2.5	U	2.5	ND		2.5	ND		2.5	2.5	U	2.5	ND		2.5	ND		2.5	2.5	U	2.5
cis-1,3-Dichloropropene	0.4		<0.5		0.5	ND		0.5	ND		0.5	ND		0.5	0.5	U	0.5	ND		0.5	ND		0.5	0.5	U	0.5	ND		0.5	ND		0.5	0.5	U	0.5
Dibromochloromethane	50		<0.5		0.5	ND		0.5	ND		0.5	ND		0.5	0.5	U	0.5	ND		0.5	ND		0.5	0.5	U	0.5	ND		0.5	ND		0.5	0.5	U	0.5
Dibromomethane	5		5	U	5	ND		5	ND		5	ND		5	5	U	5	ND		5	ND		5	5	U	5	ND		5	ND		5	5	U	5
Dichlorodifluoromethane	5		5	U	5	ND		5	ND		5	ND		5	5	U	5	ND		5	ND		5	5	U	5	ND		5	ND		5	5	U	5
Ethyl ether			2.5	U	2.5	NA		NA	NA		NA	ND		2.5	2.5	U	2.5	ND		2.5	NA		NA	2.5	U	2.5	ND		2.5	NA		NA	2.5	U	2.5
Ethyl methacrylate			5	U	5	NA		NA	NA		NA	ND		5	NA		NA	ND		5	NA		NA	NA		NA	ND		5	NA		NA	NA		NA
Ethylbenzene	5		<0.5		0.5	ND		0.5	ND		0.5	ND		0.5	0.5	U	0.5	ND		0.5	ND		0.5	0.5	U	0.5	ND		0.5	ND		0.5	0.5	U	0.5
Hexachlorobutadiene	0.5		<0.6		0.6	ND		0.6	ND		0.6	ND		0.6	0.6	U	0.6	ND		0.6	ND		0.6	0.6	U	0.6	ND		0.6	ND		0.6	0.6	U	0.6
Iodomethane	5		NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Isopropylbenzene	5		<0.5		0.5	ND		0.5	ND		0.5	ND		0.5	0.5	U	0.5	ND		0.5	ND		0.5	0.5	U	0.5	ND		0.5	ND		0.5	0.5	U	0.5
Methyl tert butyl ether			<1		1	ND		1	ND		1	ND		1	1	U	1	ND		1	ND		1	1	U	1	ND		1	ND		1	1	U	1
Methylene chloride	5		<5		5	ND		5	ND		5	ND		5	5	U	5	5.5		5	ND		5	5	U	5	ND		5	ND		5	5	U	5
n-Butylbenzene	5		<0.5		0.5	ND		0.5	ND		0.5	ND		0.5	0.5	U	0.5	ND		0.5	ND		0.5	0.5	U	0.5	ND		0.5	ND		0.5	0.5	U	0.5
n-Propylbenzene	5		<0.5		0.5	ND		0.5	ND		0.5	ND		0.5	0.5	U	0.5	ND		0.5	ND		0.5	0.5	U	0.5	ND		0.5	ND		0.5	0.5	U	0.5
Naphthalene	10		<2.5		2.5	ND		2.5	ND		2.5	ND		2.5	2.5	U	2.5	ND		2.5	ND		2.5	2.5	U	2.5	ND		2.5	ND		2.5	2.5	U	2.5
o-Chlorotoluene	5		<2.5		2.5	ND		2.5	ND		2.5	ND		2.5	2.5	U	2.5	ND		2.5	ND		2.5	2.5	U	2.5	ND		2.5	ND		2.5	2.5	U	2.5
o-Xylene			<1		1	ND		1	ND		1	ND		1	1	U	1	ND		1	ND		1	1	U	1	ND		1	ND		1	1	U	1
p-Chlorotoluene	5		<2.5		2.5	ND		2.5	ND		2.5	ND		2.5	2.5	U	2.5	ND		2.5	ND		2.5	2.5	U	2.5	ND		2.5	ND		2.5	2.5	U	2.5
p-Isopropyltoluene	5		<0.5		0.5	ND		0.5	ND		0.5	ND		0.5	0.5	U	0.5	ND		0.5	ND		0.5	0.5	U	0.5	ND		0.5	ND		0.5	0.5	U	0.5
p/m-Xylene			<1		1	ND		1	ND		1	ND		1	1	U	1	ND		1	ND		1	1	U	1	ND		1	ND		1	1	U	1
sec-Butylbenzene	5		<0.5		0.5	ND		0.5	ND		0.5	ND		0.5	0.5	U	0.5	ND		0.5	ND		0.5	0.5	U	0.5	ND		0.5	ND		0.5	0.5	U	0.5
Styrene	5		<1		1	ND		1	ND		1	ND		1	1	U	1	ND		1	ND		1	1	U	1	ND		1	ND		1	1	U	1
tert-Butylbenzene	5		<2.5		2.5	ND		2.5	ND		2.5	ND		2.5	2.5	U	2.5	ND		2.5	ND		2.5	2.5	U	2.5	ND		2.5	ND		2.5	2.5	U	2.5
Tetrahydrofuran	50		<10		10	NA		NA	NA		NA	ND		10	NA		NA	ND		10	NA		NA	NA		NA	ND		10	NA		NA	NA		NA
Toluene	5		<0.75		0.75	ND		0.75	ND		0.75	ND		0.75	0.75	U	0.75	ND		0.75	ND		0.75	0.75	U	0.75	ND		0.75	ND		0.75	0.75	U	0.75
trans-1,3-Dichloropropene	0.4		<0.5		0.5	ND		0.5	ND		0.5	ND		0.5	0.5	U	0.5	ND		0.5	ND		0.5	0.5	U	0.5	ND		0.5	ND		0.5	0.5	U	0.5
trans-1,4-Dichloro-2-butene	5		<2.5		2.5	NA		NA	NA		NA	ND		2.5	2.5	U	2.5	ND		2.5	NA		NA	2.5	U	2.5	ND		2.5	NA		NA	2.5	U	2.5
Trichlorofluoromethane	5		<2.5		2.5	ND		2.5	ND		2.5	ND		2.5	2.5	U	2.5	ND		2.5	ND		2.5	2.5	U	2.5	ND		2.5	ND		2.5	2.5	U	2.5
Vinyl acetate			<5		5	ND		5	ND		5	ND		5	5	U	5	ND		5	ND		5	5	U	5	ND		5	ND		5	5	U	5

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LOCATION	NYSDEC TOGS SGC	Guidance Value	MW-11B			MW-11B			MW-12C			MW-13A			MW-13A			MW-14A			MW-14A			MW-14A			MW-15A			MW-15A			MW-15A		
Matrix			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater		
SAMPLING DATE			10/24/2007			11/25/2008			11/25/2008			10/24/2007			4/30/2010			10/24/2007			11/24/2008			4/30/2010			10/24/2007			11/24/2008			4/30/2010		
Units			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l		
PARAMETER			Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL
Dissolved Gases by GC																																		
Ethane			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Ethene			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Methane			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Carbon Dioxide			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Anions by Ion Chromatography																																		
Chloride	250,000		NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Sulfate	250,000		NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Nitrogen, Ammonia	2,000		NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Nitrogen, Nitrate/Nitrite	10,000		NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Phosphorus, Orthophosphate			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Sulfide	50		NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Sulfite	200		NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Dissolved Organic Carbon			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Total Organic Carbon			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Iron, Ferrous			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Hardness			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Ferric Iron			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Total Metals																																		
Antimony, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Arsenic, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Barium, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Beryllium, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Cadmium, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Chromium, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Copper, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Iron, Total	300		NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Lead, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Manganese, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Mercury, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Nickel, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Selenium, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Silver, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Thallium, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Zinc, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA

Source: Alpha Analytical Lab Reports: L0713529, L0716004, L0716078, L0817489, L1006386, L1009164, L1012239, L1020006, L1105478, L1106875, L1107639, L1109071, andL1109210
ug/l = micrograms per liter Q = Laboratory Qualifier RL = Laboratory Reported Limit
NA = not analyzed ND = Not Detected at or above the Laboratory Reported Limit
Bold = detected above NYSDEC TOGS SCG
Note: See DUSRs in Appendix J or associated previously published reports for details regarding valiation and usability.

Table 1
Groundwater Analytical Data
Orangetown Shopping Center - Brownfield Site #C344066
Orangeburg, New York

LOCATION	NYSDEC TOGS SGC	Guidance Value	Field Blank			Field Blank			Field Blank			Field Blank			Field Blank			Field Blank			Field Blank			Field Blank			Equipment Blank			Equipment Blank			Equipment Blank		
Matrix			water			water			water			water			water			water			water			water			water			water			water		
SAMPLING DATE			9/14/2007			11/25/2008			6/16/2010			8/9/2010			12/14/2010			4/21/2011			5/16/2011			5/31/2011			6/22/2011			9/14/2007			10/25/2007			10/25/2007		
Units			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l		
PARAMETER			Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL
Dissolved Organic Carbon			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA	
Iron, Ferrous			NA		NA	NA		NA	500	UJ	500	500	UJ	500	500	U	500	500	U	500	500	U	500	40	J	500	500	UJ	500	NA		NA	NA		NA	NA		NA
Primary Constituents of Concern VOCs by GC/MS (8																																						
1,1-Dichloroethene	5		ND		0.5	ND		0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	ND		0.5	ND		0.5	ND		0.5
cis-1,2-Dichloroethene	5		NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	NA		NA	NA		NA	NA		NA	NA	
cis-1,2-Dichloroethene	5		ND		1	ND		0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	NA		NA	NA		NA	NA		NA	0.5	U	0.5	ND		1	ND		1	ND		1
Tetrachloroethene	5		ND		0.5	ND		0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.53		0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	ND		0.5	ND		0.5	ND		0.5
trans-1,2-Dichloroethene	5		NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	0.75	U	0.75	0.75	U	0.75	0.75	U	0.75	0.75	U	0.75	NA		NA	NA		NA	NA		NA
trans-1,2-Dichloroethene	5		ND		0.75	ND		0.75	0.75	U	0.75	0.75	U	0.75	0.75	U	0.75	NA		NA	NA			NA		NA	NA		NA	ND		0.75	ND		0.75	ND		0.75
Trichloroethene	5		ND		0.5	ND		0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	ND		0.5	ND		0.5	ND		0.5
Vinyl chloride	2		ND		1	ND		1	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1	ND		1	ND		1	ND		1
Other VOCs by GC/MS (8260B)																																						
1,1,1,2-Tetrachloroethane	5		ND		0.5	ND		0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	ND		0.5	ND		0.5	ND		0.5
1,1,1-Trichloroethane	5		ND		0.5	ND		0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	ND		0.5	ND		0.5	ND		0.5
1,1,2,2-Tetrachloroethane	5		ND		0.5	ND		0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	ND		0.5	ND		0.5	ND		0.5
1,1,2-Trichloroethane	1		ND		0.75	ND		0.75	0.75	U	0.75	0.75	U	0.75	0.75	U	0.75	0.75	U	0.75	0.75	U	0.75	0.75	U	0.75	0.75	U	0.75	ND		0.75	ND		0.75	ND		0.75
1,1-Dichloroethane	5		ND		0.75	ND		0.75	0.75	U	0.75	0.75	U	0.75	0.75	U	0.75	0.75	U	0.75	0.75	U	0.75	0.75	U	0.75	0.75	U	0.75	ND		0.75	ND		0.75	ND		0.75
1,1-Dichloropropene	5		ND		2.5	ND		2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	ND		2.5	ND		2.5	ND		2.5
1,2,3-Trichlorobenzene	5		ND		2.5	ND		2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	UJ	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	ND		2.5	ND		2.5	ND		2.5
1,2,3-Trichloropropane	0.04		ND		5	ND		5	5	U	5	5	U	5	5	U	5	5	U	5	5	U	5	5	U	5	5	U	5	ND		5	ND		5	ND		5
1,2,4,5-Tetramethylbenzene			NA		NA	ND		2	2	U	2	2	U	2	2	U	2	2	U	2	2	U	2	2	U	2	2	U	2	NA		NA	NA		NA	NA		NA
1,2,4-Trichlorobenzene	5		ND		2.5	ND		2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	UJ	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	ND		2.5	ND		2.5	ND		2.5
1,2,4-Trimethylbenzene	5		ND		2.5	ND		2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	ND		2.5	ND		2.5	ND		2.5
1,2-Dibromo-3-chloropropane	0.04		ND		2.5	ND		2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	ND		2.5	ND		2.5	ND		2.5
1,2-Dibromoethane	5		ND		2	ND		2	2	U	2	2	U	2	2	U	2	2	U	2	2	U	2	2	U	2	2	U	2	ND		2	ND		2	ND		2
1,2-Dichlorobenzene	3		ND		2.5	ND		2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	ND		2.5	ND		2.5	ND		2.5
1,2-Dichloroethane	0.6		ND		0.5	ND		0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	ND		0.5	ND		0.5	ND		0.5
1,2-Dichloropropane	1		ND		1.8	ND		1.8	1.8	U	1.8	1.8	U	1.8	1.8	U	1.8	1.8	U	1.8	1.8	U	1.8	1.8	U	1.8	1.8	U	1.8	ND		1.8	ND		1.8	ND		1.8
1,3,5-Trimethylbenzene	5		ND		2.5	ND		2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	ND		2.5	ND		2.5	ND		2.5
1,3-Dichlorobenzene	3		ND		2.5	ND		2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	ND		2.5	ND		2.5	ND		2.5
1,3-Dichloropropane	5		ND		2.5	ND		2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	ND		2.5	ND		2.5	ND		2.5
1,4-Dichlorobenzene	3		ND		2.5	ND		2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	ND		2.5	ND		2.5	ND		2.5
1,4-Dichlorobutane			ND		5	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	ND		5	ND		5	ND		5
1,4-Diethylbenzene			NA		NA	ND		2	2	U	2	2	U	2	2	U	2	2	U	2	2	U	2	2	U	2	2	U	2	NA		NA	NA		NA	NA		NA
2,2-Dichloropropane	5		ND		2.5	ND		2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	ND		2.5	ND		2.5	ND		2.5
2-Butanone	50		NA		NA	NA		NA	5	U	5	5	U	5	5	U	5	5	U	5	5	U	5	5	U	5	5	U	5	NA		NA	NA		NA	NA		NA
2-Butanone	50		ND		5	ND		5	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	ND		5	ND		5	ND		5
2-Hexanone	50		ND		5	ND		5	5	U	5	5	U	5	5	U	5	5	U	5	5	U	5	5	U	5	5	U	5	ND		5	ND		5	ND		5
4-Ethyltoluene			NA		NA	ND		2	2	U	2	2	U	2	2	U	2	2	U	2	2	U	2	2	U	2	2	U	2	NA		NA	NA		NA	NA		NA
4-Methyl-2-pentanone			ND		5	ND		5	5	U	5	5	U	5	5	U	5	5	U	5	5	U	5	5	U	5	5	U	5	ND		5	ND		5	ND		5
Acetone	50		ND		5	ND		5	5	U	5	5	U	5	5	U	5	5	U	5	5	U	5	5	U	2	5	U	5	ND		5	ND		5	ND		5
Acrolein	5		NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA	

Table 1
Groundwater Analytical Data
Orangetown Shopping Center - Brownfield Site #C344066
Orangeburg, New York

LOCATION	NYSDEC TOGS SGC	Guidance Value	Field Blank			Field Blank			Field Blank			Field Blank			Field Blank			Field Blank			Field Blank			Field Blank			Equipment Blank			Equipment Blank			Equipment Blank		
Matrix			water			water			water			water			water			water			water			water			water			water			water		
SAMPLING DATE			9/14/2007			11/25/2008			6/16/2010			8/9/2010			12/14/2010			4/21/2011			5/16/2011			5/31/2011			6/22/2011			9/14/2007			10/25/2007			10/25/2007		
Units			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l		
PARAMETER			Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL
Acrylonitrile	5		ND		5	ND		5	5	U	5	5	U	5	5	U	5	5	U	5	5	U	5	5	U	2	5	U	5	ND		5	ND		5	ND		5
Benzene	1		ND		0.5	ND		0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.2	0.5	U	0.5	ND		0.5	ND		0.5	ND		0.5
Bromobenzene	5		ND		2.5	ND		2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	ND		2.5	ND		2.5	ND		2.5
Bromochloromethane	5		ND		2.5	ND		2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	ND		2.5	ND		2.5	ND		2.5
Bromodichloromethane	50		ND		0.5	ND		0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	1.4			0.5	U	0.5	0.5	U	0.5	ND		0.5	ND		0.5	ND		0.5
Bromoform	50		ND		2	ND		2	2	U	2	2	U	2	2	U	2	2	U	2	2	U	2	2	U	2	2	U	2	ND		2	ND		2	ND		2
Bromomethane	5		ND		1	ND		1	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1	1	UJ	1	ND		1	ND		1	ND		1
Carbon disulfide			ND		5	ND		5	5	U	5	5	U	5	5	U	5	5	U	5	5	U	5	5	U	5	5	U	5	ND		5	ND		5	ND		5
Carbon tetrachloride	5		ND		0.5	ND		0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	ND		0.5	ND		0.5	ND		0.5
Chlorobenzene	5		ND		0.5	ND		0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	ND		0.5	ND		0.5	ND		0.5
Chloroethane	5		ND		1	ND		1	1	U	1	1	U	1	1	U	1	1	U	1	1	UJ	1	1	U	1	1	U	1	ND		1	ND		1	ND		1
Chloroform	7		ND		0.75	ND		0.75	0.75	U	0.75	0.75	U	0.75	0.75	U	0.75	0.75	U	0.75	1.5			0.75	U	0.75	0.75	U	0.75	ND		0.75	ND		0.75	ND		0.75
Chloromethane	5		ND		2.5	ND		2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	ND		2.5	ND		2.5	ND		2.5
cis-1,3-Dichloropropene	0.4		ND		0.5	ND		0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	ND		0.5	ND		0.5	ND		0.5
Dibromochloromethane	50		ND		0.5	ND		0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	ND		0.5	ND		0.5	ND		0.5
Dibromomethane	5		ND		5	ND		5	5	U	5	5	U	5	5	U	5	5	U	5	5	U	5	5	U	5	5	U	5	ND		5	ND		5	ND		5
Dichlorodifluoromethane	5		ND		5	ND		5	5	U	5	5	U	5	5	U	5	5	U	5	5	U	5	5	U	5	5	U	5	ND		5	ND		5	ND		5
Ethyl ether			ND		2.5	NA		NA	2.5	U	25	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	ND		2.5	ND		2.5	ND		2.5
Ethyl methacrylate			ND		5	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	ND		5	ND		5	ND		5
Ethylbenzene	5		ND		0.5	ND		0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	ND		0.5	ND		0.5	ND		0.5
Hexachlorobutadiene	0.5		ND		0.6	ND		0.6	0.6	U	0.6	0.6	U	0.6	0.6	U	0.6	0.6	U	0.6	0.6	U	0.6	0.6	U	0.6	0.6	U	0.6	ND		0.6	ND		0.6	ND		0.6
Iodomethane	5		NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Isopropylbenzene	5		ND		0.5	ND		0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	ND		0.5	ND		0.5	ND		0.5
Methyl tert butyl ether			ND		1	ND		1	1	U	1	1	U	1	1	U	1	1	U	1	1	UJ	1	1	U	1	1	U	1	ND		1	ND		1	ND		1
Methylene chloride	5		9.6		0.5	ND		5	5	U	5	5	U	5	5	U	5	5	U	5	5	U	5	5	U	5	5	U	5	8.4		0.5	ND		13	14		5
n-Butylbenzene	5		ND		0.5	ND		0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	ND		0.5	ND		0.5	ND		0.5
n-Propylbenzene	5		ND		0.5	ND		0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	ND		0.5	ND		0.5	ND		0.5
Naphthalene	10		ND		2.5	ND		2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	ND		2.5	ND		2.5	ND		2.5
o-Chlorotoluene	5		ND		2.5	ND		2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	ND		2.5	ND		2.5	ND		2.5
o-Xylene			ND		1	ND		1	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1	ND		1	ND		1	ND		1
p-Chlorotoluene	5		ND		2.5	ND		2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	ND		2.5	ND		2.5	ND		2.5
p-Isopropyltoluene	5		ND		0.5	ND		0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5										
p/m-Xylene			ND		1	ND		1	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1	ND		1	ND		1	ND		1
sec-Butylbenzene	5		ND		0.5	ND		0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	ND		0.5	ND		0.5	ND		0.5
Styrene	5		ND		1	ND		1	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1	ND		1	ND		1	ND		1
tert-Butylbenzene	5		ND		2.5	ND		2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	ND		2.5	ND		2.5	ND		2.5
Tetrahydrofuran	50		ND		10	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	ND		10	ND		10	ND		10
Toluene	5		ND		0.75	ND		0.75	0.75	U	0.75	0.75	U	0.75	0.75	U	0.75	0.75	U	0.75	0.75	U	0.75	0.75	U	0.75	0.39	J	0.75	0.75	U	0.75	ND		0.75	ND		0.75
trans-1,3-Dichloropropene	0.4		ND		0.5	ND		0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	ND		0.5	ND		0.5	ND		0.5
trans-1,4-Dichloro-2-butene	5		ND		2.5	NA		NA	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	ND		2.5	ND		2.5	ND		2.5
Trichlorofluoromethane	5		ND		2.5	ND		2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	ND		2.5	ND		2.5	ND		2.5
Vinyl acetate			ND		5	ND		5	5	U	5	5	U	5	5	U	5	5	U	5	5	U	5	5	U	5	5	UJ	5	ND		5	ND		5	ND		5

Table 1
Groundwater Analytical Data
Orangetown Shopping Center - Brownfield Site #C344066
Orangeburg, New York

LOCATION	NYSDEC TOGS SGC	Guidance Value	Field Blank			Field Blank			Field Blank			Field Blank			Field Blank			Field Blank			Field Blank			Field Blank			Equipment Blank			Equipment Blank			Equipment Blank		
Matrix			water			water			water			water			water			water			water			water			water			water			water		
SAMPLING DATE			9/14/2007			11/25/2008			6/16/2010			8/9/2010			12/14/2010			4/21/2011			5/16/2011			5/31/2011			6/22/2011			9/14/2007			10/25/2007			10/25/2007		
Units			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l		
PARAMETER			Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL
Dissolved Gases by GC																																						
Ethane			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Ethene			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	NA		NA	NA		NA	NA		NA
Methane			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Carbon Dioxide			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Anions by Ion Chromatography																																						
Chloride	250,000		NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Sulfate	250,000		NA		NA	NA		NA	10000	U	10000	10000	U	10000	10000	U	10000	10000	U	10000	1200	J	10000	1600	J	10000	2500	UJ	10000	NA		NA	NA		NA	NA		NA
Nitrogen, Ammonia	2,000		NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Nitrogen, Nitrate/Nitrite	10,000		NA		NA	NA		NA	100	U	100	100	U	100	100	U	100	140		100	100	U	100	30	J	100	100	U	100	NA		NA	NA		NA	NA		NA
Phosphorus, Orthophosphate			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Sulfide	50		NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Sulfite	200		NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Dissolved Organic Carbon			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Total Organic Carbon			NA		NA	NA		NA	NA		NA	500	U	500	500	U	2000	500	U	500	350	J	500	540		500	270	UJ	500	NA		NA	NA		NA	NA		NA
Iron, Ferrous			NA		NA	NA		NA	500	UJ	500	500	UJ	500	500	U	500	500	U	500	500	U	500	40	J	500	500	UJ	500	NA		NA	NA		NA	NA		NA
Hardness			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Ferric Iron			NA		NA	NA		NA	500	UJ	500	500	UJ	500	500	U	500	0	U	0	500	U	500	500	UJ	500	500	UJ	500	NA		NA	NA		NA	NA		NA
Total Metals																																						
Antimony, Total			NA		NA	ND		50	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Arsenic, Total			NA		NA	ND		5	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Barium, Total			NA		NA	ND		10	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Beryllium, Total			NA		NA	ND		5	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Cadmium, Total			NA		NA	ND		5	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Chromium, Total			NA		NA	ND		10	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Copper, Total			NA		NA	ND		10	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Iron, Total	300		NA		NA	NA		NA	50	U	50	50	U	50	50	U	50	50	U	50	50	U	50	50	U	50	50	U	50	NA		NA	NA		NA	NA		NA
Lead, Total			NA		NA	ND		10	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Manganese, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Mercury, Total			NA		NA	ND		0.2	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Nickel, Total			NA		NA	ND		25	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Selenium, Total			NA		NA	ND		10	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Silver, Total			NA		NA	ND		7	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Thallium, Total			NA		NA	ND		20	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Zinc, Total			NA		NA	ND		50	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA

Source: Alpha Analytical Lab Reports: L0713529, L0716004, L0716078, L0817489, L1006386, L1009164, L1012239, L1020006, L1105478, L1106875, L1107639, L1109071, andL1109210
ug/l = micrograms per liter Q = Laboratory Qualifier RL = Laboratory Reported Limit
NA = not analyzed ND = Not Detected at or above the Laboratory Reported Limit
Bold = detected above NYSDEC TOGS SCG
Note: See DUSRs in Appendix J or associated previously published reports for details regarding valiation and usability.

Table 1
Groundwater Analytical Data
Orangetown Shopping Center - Brownfield Site #C344066
Orangeburg, New York

LOCATION	NYSDEC TOGS SGC	Guidance Value	Equipment Blank			Equipment Blank			Equipment Blank			Equipment Blank			Equipment Blank			Equipment Blank			Equipment Blank			Equipment Blank			Equipment Blank			Equipment Blank			Equipment Blank		
Matrix			water			water			water			water			water			water			water			water			water			water			water		
SAMPLING DATE			10/25/2007			11/25/2008			11/25/2008			4/30/2010			6/16/2010			8/9/2010			12/14/2010			4/21/2011			5/16/2011			5/31/2011			6/22/2011		
Units			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l		
PARAMETER			Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL
Dissolved Organic Carbon			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Iron, Ferrous			NA		NA	NA		NA	NA		NA	NA		NA	500	UJ	500	500	UJ	500	500	U	500	500	U	500	500	U	500	500	U	500	500	UJ	500
Primary Constituents of Concern VOCs by GC/MS (8																																			
1,1-Dichloroethene	5		ND		0.5	ND		0.5	ND		0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5
cis-1,2-Dichloroethene	5		NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	0.5	U	0.5	0.5	U	0.5	5		5	NA		NA
cis-1,2-Dichloroethene	5		ND		1	ND		0.5	ND		0.5	0.69		0.5	0.5	U	1	1.6		0.5	0.5	U	0.5	NA		NA	NA		NA	NA		NA	0.5	U	0.5
Tetrachloroethene	5		ND		0.5	ND		0.5	ND		0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5
trans-1,2-Dichloroethene	5		NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	0.75	U	0.75	0.75	U	0.75	0.75	U	0.75	0.75	U	0.75
trans-1,2-Dichloroethene	5		ND		0.75	ND		0.75	ND		0.75	0.75	U	0.75	0.75	U	0.75	0.75	U	0.75	0.75	U	0.75	NA		NA	NA		NA	NA		NA	NA		NA
Trichloroethene	5		ND		0.5	ND		0.5	ND		0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5
Vinyl chloride	2		ND		1	ND		1	ND		1	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
Other VOCs by GC/MS (8260B)																																			
1,1,1,2-Tetrachloroethane	5		ND		0.5	ND		0.5	ND		0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5
1,1,1-Trichloroethane	5		ND		0.5	ND		0.5	ND		0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5
1,1,2,2-Tetrachloroethane	5		ND		0.5	ND		0.5	ND		0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5
1,1,2-Trichloroethane	1		ND		0.75	ND		0.75	ND		0.75	0.75	U	0.75	0.75	U	0.75	0.75	U	0.75	0.75	U	0.75	0.75	U	0.75	0.75	U	0.75	0.75	U	0.75	0.75	U	0.75
1,1-Dichloroethane	5		ND		0.75	ND		0.75	ND		0.75	0.75	U	0.75	0.75	U	0.75	0.75	U	0.75	0.75	U	0.75	0.75	U	0.75	0.75	U	0.75	0.75	U	0.75	0.75	U	0.75
1,1-Dichloropropene	5		ND		2.5	ND		2.5	ND		2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5
1,2,3-Trichlorobenzene	5		ND		2.5	ND		2.5	ND		2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	UJ	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5
1,2,3-Trichloropropane	0.04		ND		5	ND		5	ND		5	5	U	5	5	U	5	5	U	5	5	U	5	5	U	5	5	U	5	5	U	5	5	U	5
1,2,4,5-Tetramethylbenzene			NA		NA	ND		2	ND		2	2	U	2	2	U	2	2	U	2	2	U	2	2	U	2	2	U	2	2	U	2	2	U	2
1,2,4-Trichlorobenzene	5		ND		2.5	ND		2.5	ND		2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	UJ	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5
1,2,4-Trimethylbenzene	5		ND		2.5	ND		2.5	ND		2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5
1,2-Dibromo-3-chloropropane	0.04		ND		2.5	ND		2.5	ND		2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5
1,2-Dibromoethane	5		ND		2	ND		2	ND		2	2	U	2	2	U	2	2	U	2	2	U	2	2	U	2	2	U	2	2	U	2	2	U	2
1,2-Dichlorobenzene	3		ND		2.5	ND		2.5	ND		2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5
1,2-Dichloroethane	0.6		ND		0.5	ND		0.5	ND		0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5
1,2-Dichloropropane	1		ND		1.8	ND		1.8	ND		1.8	1.8	U	1.8	1.8	U	1.8	1.8	U	1.8	1.8	U	1.8	1.8	U	1.8	1.8	U	1.8	1.8	U	1.8	1.8	U	1.8
1,3,5-Trimethylbenzene	5		ND		2.5	ND		2.5	ND		2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5
1,3-Dichlorobenzene	3		ND		2.5	ND		2.5	ND		2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5
1,3-Dichloropropane	5		ND		2.5	ND		2.5	ND		2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5
1,4-Dichlorobenzene	3		ND		2.5	ND		2.5	ND		2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5
1,4-Dichlorobutane			ND		5	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
1,4-Diethylbenzene			NA		NA	ND		2	ND		2	2	U	2	2	U	2	2	U	2	2	U	2	2	U	2	2	U	2	2	U	2	2	U	2
2,2-Dichloropropane	5		ND		2.5	ND		2.5	ND		2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5
2-Butanone	50		NA		NA	NA		NA	NA		NA	5	U	5	5	U	5	5	U	5	5	U	5	5	U	5	5	U	5	5	U	5	5	U	5
2-Butanone	50		ND		5	ND		5	ND		5	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
2-Hexanone	50		ND		5	ND		5	ND		5	5	U	5	5	U	5	5	U	5	5	U	5	5	U	5	5	U	5	5	U	5	5	U	5
4-Ethyltoluene			NA		NA	ND		2	ND		2	2	U	2	2	U	2	2	U	2	2	U	2	2	U	2	2	U	2	2	U	2	2	U	2
4-Methyl-2-pentanone			ND		5	ND		5	ND		5	5	U	5	5	U	5	5	U	5	5	U	5	5	U	5	5	U	5	5	U	5	5	U	5
Acetone	50		ND		5	13		5	13		5	5	U	5	6.1		5	7.8		5	5	U	5	5	U	5	2.2	J	5	5	U	5	1.7	J	5
Acrolein	5		NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA

Table 1
Groundwater Analytical Data
Orangetown Shopping Center - Brownfield Site #C344066
Orangeburg, New York

LOCATION	NYSDEC TOGS SGC	Guidance Value	Equipment Blank			Equipment Blank			Equipment Blank			Equipment Blank			Equipment Blank			Equipment Blank			Equipment Blank			Equipment Blank			Equipment Blank			Equipment Blank			Equipment Blank		
Matrix			water			water			water			water			water			water			water			water			water			water			water		
SAMPLING DATE			10/25/2007			11/25/2008			11/25/2008			4/30/2010			6/16/2010			8/9/2010			12/14/2010			4/21/2011			5/16/2011			5/31/2011			6/22/2011		
Units			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l		
PARAMETER			Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL
Acrylonitrile	5		ND		5	ND		5	ND		5	5	U	5	5	U	5	5	U	5	5	U	5	5	U	5	5	U	5	5	U	5	5	U	5
Benzene	1		ND		0.5	ND		0.5	ND		0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5
Bromobenzene	5		ND		2.5	ND		2.5	ND		2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5
Bromochloromethane	5		ND		2.5	ND		2.5	ND		2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5
Bromodichloromethane	50		ND		0.5	ND		0.5	ND		0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5
Bromoform	50		ND		2	ND		2	ND		2	2	U	2	2	U	2	2	U	2	2	U	2	2	U	2	2	U	2	2	U	2	2	U	2
Bromomethane	5		ND		1	ND		1	ND		1	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1	1	UJ	1
Carbon disulfide			ND		5	ND		5	ND		5	5	U	5	5	U	5	5	U	5	5	U	5	5	U	5	5	U	5	5	U	5	5	U	5
Carbon tetrachloride	5		ND		0.5	ND		0.5	ND		0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5
Chlorobenzene	5		ND		0.5	ND		0.5	ND		0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5
Chloroethane	5		ND		1	ND		1	ND		1	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1	1	UJ	1	1	U	1	1	U	1
Chloroform	7		ND		0.75	ND		0.75	ND		0.75	0.75	U	0.75	0.75	U	0.75	0.75	U	0.75	0.75	U	0.75	0.75	U	0.75	0.75	U	0.75	0.75	U	0.75	0.75	U	0.75
Chloromethane	5		ND		2.5	ND		2.5	ND		2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5
cis-1,3-Dichloropropene	0.4		ND		0.5	ND		0.5	ND		0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5
Dibromochloromethane	50		ND		0.5	ND		0.5	ND		0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5
Dibromomethane	5		ND		5	ND		5	ND		5	5	U	5	5	U	5	5	U	5	5	U	5	5	U	5	5	U	5	5	U	5	5	U	5
Dichlorodifluoromethane	5		ND		5	ND		5	ND		5	5	U	5	5	U	5	5	U	5	5	U	5	5	U	5	5	U	5	5	U	5	5	U	5
Ethyl ether			ND		2.5	NA		NA	NA		NA	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5
Ethyl methacrylate			ND		5	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Ethylbenzene	5		ND		0.5	ND		0.5	ND		0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5
Hexachlorobutadiene	0.5		ND		0.6	ND		0.6	ND		0.6	0.6	U	0.6	0.6	U	0.6	0.6	U	0.6	0.6	U	0.6	0.6	U	0.6	0.6	U	0.6	0.6	U	0.6	0.6	U	0.6
Iodomethane	5		NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Isopropylbenzene	5		ND		0.5	ND		0.5	ND		0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5
Methyl tert butyl ether			ND		1	ND		1	ND		1	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1	1	UJ	1	1	U	1	1	U	1
Methylene chloride	5		13		5	8.4		5	10		5	5	U	5	5	U	5	5	U	5	5	U	5	5	U	5	5	U	5	5	U	5	5	U	5
n-Butylbenzene	5		ND		0.5	ND		0.5	ND		0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5
n-Propylbenzene	5		ND		0.5	ND		0.5	ND		0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5
Naphthalene	10		ND		2.5	ND		2.5	ND		2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5
o-Chlorotoluene	5		ND		2.5	ND		2.5	ND		2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5
o-Xylene			ND		1	ND		1	ND		1	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
p-Chlorotoluene	5		ND		2.5	ND		2.5	ND		2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5
p-Isopropyltoluene	5											0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5
p/m-Xylene			ND		1	ND		1	ND		1	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
sec-Butylbenzene	5		ND		0.5	ND		0.5	ND		0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5
Styrene	5		ND		1	ND		1	ND		1	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
tert-Butylbenzene	5		ND		2.5	ND		2.5	ND		2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5
Tetrahydrofuran	50		ND		10	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Toluene	5		ND		0.75	ND		0.75	ND		0.75	0.75	U	0.75	0.75	U	0.75	0.75	U	0.75	0.75	U	0.75	0.75	U	0.75	0.75	U	0.75	0.31	J	0.75	0.38	J	0.75
trans-1,3-Dichloropropene	0.4		ND		0.5	ND		0.5	ND		0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5
trans-1,4-Dichloro-2-butene	5		ND		2.5	NA		NA	NA		NA	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5
Trichlorofluoromethane	5		ND		2.5	ND		2.5	ND		2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5
Vinyl acetate			ND		5	ND		5	ND		5	5	U	5	5	U	5	5	U	5	5	U	5	5	U	5	5	U	5	5	U	5	5	UJ	5

Table 1
Groundwater Analytical Data
Orangetown Shopping Center - Brownfield Site #C344066
Orangeburg, New York

LOCATION	NYSDEC TOGS SGC	Guidance Value	Equipment Blank			Equipment Blank			Equipment Blank			Equipment Blank			Equipment Blank			Equipment Blank			Equipment Blank			Equipment Blank			Equipment Blank			Equipment Blank			Equipment Blank		
Matrix			water			water			water			water			water			water			water			water			water			water			water		
SAMPLING DATE			10/25/2007			11/25/2008			11/25/2008			4/30/2010			6/16/2010			8/9/2010			12/14/2010			4/21/2011			5/16/2011			5/31/2011			6/22/2011		
Units			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l		
PARAMETER			Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL
Dissolved Gases by GC																																			
Ethane			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Ethene			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5
Methane			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Carbon Dioxide			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Anions by Ion Chromatography																																			
Chloride	250,000		ND		500	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Sulfate	250,000		ND		1,000	NA		NA	NA		NA	10000	U	10000	10000	U	10000	10000	U	10000	10000	U	10000	10000	U	1000	1500	J	10000	10000	U	10000	1500	U	10000
Nitrogen, Ammonia	2,000		ND		75	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Nitrogen, Nitrate/Nitrite	10,000		600		100	NA		NA	NA		NA	100	U	100	100	U	100	100	U	100	100	U	100	400		100	100	U	100	100	U	100	100	U	100
Phosphorus, Orthophosphate			ND		5	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Sulfide	50		ND		100	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Sulfite	200		ND		500	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Dissolved Organic Carbon			1,100		1,000	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Total Organic Carbon			NA		NA	NA		NA	NA		NA	1300		1000	1100		500	560		500	500	U	2000	500	U	500	4900		500	2200		500	1000	U	500
Iron, Ferrous			ND		500	NA		NA	NA		NA	NA		NA	500	UJ	500	500	UJ	500	500	U	500	500	U	500	500	U	500	500	U	500	500	UJ	500
Hardness			ND		660	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Ferric Iron			ND		500	NA		NA	NA		NA	NA		NA	500	UJ	500	500	UJ	500	500	U	500	500	U	500	500	U	500	500	U	500	500	UJ	500
Total Metals																																			
Antimony, Total			NA		NA	NA		NA	ND		50	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Arsenic, Total			NA		NA	NA		NA	ND		5	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Barium, Total			NA		NA	NA		NA	ND		10	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Beryllium, Total			NA		NA	NA		NA	ND		5	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Cadmium, Total			NA		NA	NA		NA	ND		5	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Chromium, Total			NA		NA	NA		NA	ND		10	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Copper, Total			NA		NA	NA		NA	ND		10	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Iron, Total	300		50	U	50	NA		NA	NA		NA	50	U	50	50	U	50	50	U	50	50	U	50	50	U	50	50	U	50	50	U	50	20	J	50
Lead, Total			NA		NA	NA		NA	ND		10	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Manganese, Total			NA		NA	NA		NA	NA		NA	10	U	10	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Mercury, Total			NA		NA	NA		NA	ND		0.2	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Nickel, Total			NA		NA	NA		NA	ND		25	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Selenium, Total			NA		NA	NA		NA	ND		10	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Silver, Total			NA		NA	NA		NA	ND		7	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Thallium, Total			NA		NA	NA		NA	ND		20	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Zinc, Total			NA		NA	NA		NA	ND		50	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA

Source: Alpha Analytical Lab Reports: L0713529, L0716004, L0716078, L0817489, L1006386, L1009164, L1012239, L1020006, L1105478, L1106875, L1107639, L1109071, andL1109210
ug/l = micrograms per liter Q = Laboratory Qualifier RL = Laboratory Reported Limit
NA = not analyzed ND = Not Detected at or above the Laboratory Reported Limit
Bold = detected above NYSDEC TOGS SCG
Note: See DUSRs in Appendix J or associated previously published reports for details regarding valiation and usability.

Table 1
Groundwater Analytical Data
Orangetown Shopping Center - Brownfield Site #C344066
Orangeburg, New York

LOCATION	NYSDEC TOGS SGC	Guidance Value	Trip Blank			Trip Blank			Trip Blank			Trip Blank			Trip Blank			Trip Blank			Trip Blank			Trip Blank			Trip Blank			Trip Blank		
Matrix			water			water			water			water			water			water			water			water			water			water		
SAMPLING DATE			9/14/2007			10/25/2007			4/30/2010			6/16/2010			8/9/2010			8/9/2010			4/20/2011			5/16/2011			5/31/2011			6/21/2011			6/22/2011		
Units			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l		
PARAMETER			Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL
Dissolved Organic Carbon			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Iron, Ferrous			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Primary Constituents of Concern VOCs by GC/MS (8																																			
1,1-Dichloroethene	5		ND		0.5	ND		0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5
cis-1,2-Dichloroethene	5		NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	NA		NA	NA		NA
cis-1,2-Dichloroethene	5		ND		1	ND		1	0.5	U	0.5	0.5	U	1	0.5	U	1	0.5	U	1	NA		NA	NA		NA	NA		NA	0.5	U	0.5	0.5	U	0.5
Tetrachloroethene	5		ND		0.5	ND		0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5
trans-1,2-Dichloroethene	5		NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	0.75	U	0.75	0.75	U	0.75	0.75	U	0.75	0.75	U	0.75	0.75	U	0.75
trans-1,2-Dichloroethene	5		ND		0.75	ND		0.75	0.75	U	0.8	0.75	U	0.75	0.75	U	0.75	0.75	U	0.75	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Trichloroethene	5		ND		0.5	ND		0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5
Vinyl chloride	2		ND		1	ND		1	1	U	1.0	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
Other VOCs by GC/MS (8260B)																																			
1,1,1,2-Tetrachloroethane	5		ND		0.5	ND		0.5	0.5	U	0.45	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5
1,1,1-Trichloroethane	5		ND		0.5	ND		0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5
1,1,2,2-Tetrachloroethane	5		ND		0.5	ND		0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5
1,1,2-Trichloroethane	1		ND		0.75	ND		0.75	0.75	U	0.75	0.75	U	0.75	0.75	U	0.75	0.75	U	0.75	0.75	U	0.75	0.75	U	0.75	0.75	U	0.75	0.75	U	0.75	0.75	U	0.75
1,1-Dichloroethane	5		ND		0.75	ND		0.75	0.75	U	0.75	0.75	U	0.75	0.75	U	0.75	0.75	U	0.75	0.75	U	0.75	0.75	U	0.75	0.75	U	0.75	0.75	U	0.75	0.75	U	0.75
1,1-Dichloropropene	5		ND		2.5	ND		2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5
1,2,3-Trichlorobenzene	5		ND		2.5	ND		2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	UJ	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5
1,2,3-Trichloropropane	0.04		ND		5	ND		5	5	U	5	5	U	5	5	U	5	5	U	5	5	U	5	5	U	5	5	U	5	5	U	5	5	U	5
1,2,4,5-Tetramethylbenzene			NA		NA	NA		NA	2	U	2	2	U	2	2	U	2	2	U	2	2	U	2	2	U	2	2	U	2	2	U	2	2	U	2
1,2,4-Trichlorobenzene	5		ND		2.5	ND		2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	UJ	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5
1,2,4-Trimethylbenzene	5		ND		2.5	ND		2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5
1,2-Dibromo-3-chloropropane	0.04		ND		2.5	ND		2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5
1,2-Dibromoethane	5		ND		2	ND		2	2	U	2	2	U	2	2	U	2	2	U	2	2	U	2	2	U	2	2	U	2	2	U	2	2	U	2
1,2-Dichlorobenzene	3		ND		2.5	ND		2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5
1,2-Dichloroethane	0.6		ND		0.5	ND		0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5
1,2-Dichloropropane	1		ND		1.8	ND		1.8	1.8	U	1.8	1.8	U	1.8	1.8	U	1.8	1.8	U	1.8	1.8	U	1.8	1.8	U	1.8	1.8	U	1.8	1.8	U	1.8	1.8	U	1.8
1,3,5-Trimethylbenzene	5		ND		2.5	ND		2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5
1,3-Dichlorobenzene	3		ND		2.5	ND		2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5
1,3-Dichloropropane	5		ND		2.5	ND		2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5
1,4-Dichlorobenzene	3		ND		2.5	ND		2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5
1,4-Dichlorobutane			ND		5	ND		5	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
1,4-Diethylbenzene			NA		NA	NA		NA	2	U	2	2	U	2	2	U	2	2	U	2	2	U	2	2	U	2	2	U	2	2	U	2	2	U	2
2,2-Dichloropropane	5		ND		2.5	ND		2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5
2-Butanone	50		NA		NA	NA		NA	5	U	5	5	U	5	5	U	5	5	U	5	5	U	5	5	U	5	5	U	5	5	U	5	5	U	5
2-Butanone	50		ND		5	ND		5	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
2-Hexanone	50		ND		5	ND		5	5	U	5	5	U	5	5	U	5	5	U	5	5	U	5	5	U	5	5	U	5	5	U	5	5	U	5
4-Ethyltoluene			NA		NA	NA		NA	2	U	2	2	U	2	2	U	2	2	U	2	2	U	2	2	U	2	2	U	2	2	U	2	2	U	2
4-Methyl-2-pentanone			ND		5	ND		5	5	U	5	5	U	5	5	U	5	5	U	5	5	U	5	5	U	5	5	U	5	5	U	5	5	U	5
Acetone	50		ND		5	ND		5	5	U	5	5	U	5	5	U	5	5	U	5	5	U	5	5	U	5	5	U	5	5	U	5	5	U	5
Acrolein	5		NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA

Table 1
Groundwater Analytical Data
Orangetown Shopping Center - Brownfield Site #C344066
Orangeburg, New York

LOCATION	NYSDEC TOGS SGC	Guidance Value	Trip Blank			Trip Blank			Trip Blank			Trip Blank			Trip Blank			Trip Blank			Trip Blank			Trip Blank			Trip Blank			Trip Blank			Trip Blank		
Matrix			water			water			water			water			water			water			water			water			water			water			water		
SAMPLING DATE			9/14/2007			10/25/2007			4/30/2010			6/16/2010			8/9/2010			8/9/2010			4/20/2011			5/16/2011			5/31/2011			6/21/2011			6/22/2011		
Units			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l		
PARAMETER			Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL
Acrylonitrile	5		ND		5	ND		5	5	U	5	5	U	5	5	U	5	5	U	5	5	U	5	5	U	5	5	U	5	5	U	5	5	U	5
Benzene	1		ND		0.5	ND		0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5
Bromobenzene	5		ND		2.5	ND		2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5
Bromochloromethane	5		ND		2.5	ND		2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5
Bromodichloromethane	50		ND		0.5	ND		0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5
Bromoform	50		ND		2	ND		2	2	U	2	2	U	2	2	U	2	2	U	2	2	U	2	2	U	2	2	U	2	2	U	2	2	U	2
Bromomethane	5		ND		1	ND		1	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1	1	UJ	1	1	UJ	1
Carbon disulfide			ND		5	ND		5	5	U	5	5	U	5	5	U	5	5	U	5	5	U	5	5	U	5	5	U	5	5	U	5	5	U	5
Carbon tetrachloride	5		ND		0.5	ND		0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5
Chlorobenzene	5		ND		0.5	ND		0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5
Chloroethane	5		ND		1	ND		1	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1	1	UJ	1	1	U	1	1	U	1	1	U	1
Chloroform	7		ND		0.75	ND		0.75	0.75	U	0.75	0.75	U	0.75	0.75	U	0.75	0.75	U	0.75	0.75	U	0.75	0.75	U	0.75	0.75	U	0.75	0.75	U	0.75	0.75	U	0.75
Chloromethane	5		ND		2.5	ND		2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5
cis-1,3-Dichloropropene	0.4		ND		0.5	ND		0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5
Dibromochloromethane	50		ND		0.5	ND		0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5
Dibromomethane	5		ND		5	ND		5	5	U	5	5	U	5	5	U	5	5	U	5	5	U	5	5	U	5	5	U	5	5	U	5	5	U	5
Dichlorodifluoromethane	5		ND		5	ND		5	5	U	5	5	U	5	5	U	5	5	U	5	5	U	5	5	U	5	5	U	5	5	U	5	5	U	5
Ethyl ether			ND		2.5	ND		2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5
Ethyl methacrylate			ND		5	ND		5	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Ethylbenzene	5		ND		0.5	ND		0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5
Hexachlorobutadiene	0.5		ND		0.6	ND		0.6	0.6	U	0.6	0.6	U	0.6	0.6	U	0.6	0.6	U	0.6	0.6	U	0.6	0.6	U	0.6	0.6	U	0.6	0.6	U	0.6	0.6	U	0.6
Iodomethane	5		NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Isopropylbenzene	5		ND		0.5	ND		0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5
Methyl tert butyl ether			ND		1	ND		1	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1	1	UJ	1	1	U	1	1	U	1	1	U	1
Methylene chloride	5		ND		5	ND		5	5	U	5	5	U	5	5	U	5	5	U	5	5	U	5	5	U	5	5	U	5	5	U	5	5	U	5
n-Butylbenzene	5		ND		0.5	ND		0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5
n-Propylbenzene	5		ND		0.5	ND		0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5
Naphthalene	10		ND		2.5	ND		2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5
o-Chlorotoluene	5		ND		2.5	ND		2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5
o-Xylene			ND		1	ND		1	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
p-Chlorotoluene	5		ND		2.5	ND		2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5
p-Isopropyltoluene	5		ND		0.5	ND		0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5
p/m-Xylene			ND		1	ND		1	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
sec-Butylbenzene	5		ND		0.5	ND		0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5
Styrene	5		ND		1	ND		1	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
tert-Butylbenzene	5		ND		2.5	ND		2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5
Tetrahydrofuran	50		ND		10	ND		10	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
Toluene	5		ND		0.75	ND		0.75	0.75	U	0.75	0.75	U	0.75	0.75	U	0.75	0.75	U	0.75	0.75	U	0.75	0.75	U	0.75	0.75	U	0.75	0.75	U	0.75	0.75	U	0.75
trans-1,3-Dichloropropene	0.4		ND		0.5	ND		0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5
trans-1,4-Dichloro-2-butene	5		ND		2.5	ND		2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5
Trichlorofluoromethane	5		ND		2.5	ND		2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5	2.5	U	2.5
Vinyl acetate			ND		5	ND		5	5	U	5	5	U	5	5	U	5	5	U	5	5	U	5	5	U	5	5	U	5	5	U	5	5	UJ	5

Table 1
Groundwater Analytical Data
Orangetown Shopping Center - Brownfield Site #C344066
Orangeburg, New York

LOCATION	NYSDEC TOGS SGC	Guidance Value	Trip Blank			Trip Blank			Trip Blank			Trip Blank			Trip Blank			Trip Blank			Trip Blank			Trip Blank			Trip Blank			Trip Blank		
Matrix			water			water			water			water			water			water			water			water			water			water		
SAMPLING DATE			9/14/2007			10/25/2007			4/30/2010			6/16/2010			8/9/2010			8/9/2010			4/20/2011			5/16/2011			5/31/2011			6/21/2011			6/22/2011		
Units			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l			ug/l		
PARAMETER			Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL	Results	Q	RL
Dissolved Gases by GC																																		
Ethane			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA	
Ethene			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	0.5	U	0.5	0.5	U	0.5	0.5	U	0.5	NA		NA	NA		NA
Methane			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA	
Carbon Dioxide			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA	
Anions by Ion Chromatography																																		
Chloride	250,000		NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA	
Sulfate	250,000		NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA	
Nitrogen, Ammonia	2,000		NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA	
Nitrogen, Nitrate/Nitrite	10,000		NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA	
Phosphorus, Orthophosphate			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA	
Sulfide	50		NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA	
Sulfite	200		NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA	
Dissolved Organic Carbon			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA	
Total Organic Carbon			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA	
Iron, Ferrous			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA	
Hardness			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA	
Ferric Iron			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA	
Total Metals																																		
Antimony, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA	
Arsenic, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA	
Barium, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA	
Beryllium, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA	
Cadmium, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA	
Chromium, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA	
Copper, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA	
Iron, Total	300		NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA	
Lead, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA	
Manganese, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA	
Mercury, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA	
Nickel, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA	
Selenium, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA	
Silver, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA	
Thallium, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA	
Zinc, Total			NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA	

Source: Alpha Analytical Lab Reports: L0713529, L0716004, L0716078, L0817489, L1006386, L1009164, L1012239, L1020006, L1105478, L1106875, L1107639, L1109071, andL1109210
ug/l = micrograms per liter Q = Laboratory Qualifier RL = Laboratory Reported Limit
NA = not analyzed ND = Not Detected at or above the Laboratory Reported Limit
Bold = detected above NYSDEC TOGS SCG
Note: See DUSRs in Appendix J or associated previously published reports for details regarding valiation and usability.

Appendix G – Excavation Work Plan

Orangeburg (Orangetown) Shopping Center
ROCKLAND COUNTY, NEW YORK

Excavation Work Plan

NYSDEC Site Number: C344066

Prepared for:
UB Orangeburg, LLC
321 Railroad Avenue
Greenwich, CT 06830

Prepared by:
Groundwater & Environmental Services, Inc.
16 Mount Ebo Road South, Suite 21
Brewster, New York 10509

This Manual Prepared for:

UB Orangeburg, LLC
321 Railroad Avenue
Greenwich, CT 06830

Excavation Work Plan Orangetown Shopping Center
1-45 Orangetown Shopping Center
Orangetown, New York 10962 NYSDEC Index No. A3-0563-0906 NYSDEC Site No. C344066

Table of Contents

NOTE: All cited Tables, Figures (Plates), and Appendices are components parts of the Site Management Plan.

List of Acronyms

Acronym	Definitio
AA	Remedial Alternatives Analysis
AOC	Area of Concern
BCA	Brownfield Cleanup Agreement
BCP	Brownfield Cleanup Program
bgs	below ground surface
CCR	Construction Completion Report
cDCE	cis-1,2-Dichloroethene
COD	Chemical Oxygen Demand
CPP	Community Participation Plan
CSM	Conceptual Site Model
CTR	Connecticut Tank Removal, Inc
DCE	Cis-1,2-Dichloroethene
DER	Division of Environmental Remediation
DNAPL	Dense Non-Aqueous Phase Liquid
DUSR	Data Usability Summary Report
EIP	Electronic Interface Probe
ESA	Environmental Site Assessment
EWP	Excavation Work Plan
FOIA	Freedom of Information Act
Ft	Feet
FWIA	Fish and Wildlife Impact Analysis
HVAC	Heating, Venting, and Air Conditioning
IC/EC	Institutional Controls/Engineering Controls
IP	Injection Point or Injection Well
in wc	Inches of Water Column
IRM	Interim Remedial Measure
IRMWP	Interim Remedial Measures Work Plan
IWP	Investigation Work Plan
JLJ	JLJ Management Co., Inc.
GES	Kleinfelder, Inc.
µg/L	micrograms per liter
µg/m3	micrograms per cubic meter
mg/L	milligrams per liter
MNA	Monitored Natural Attenuation
msl	mean sea level
mV	millivolt
NRCS	Natural Resource Conservation Service
NYS	New York State
NYSDEC	New York State Department of Environmental
NYSDOH	New York State Department of Health
NYSGS	New York State Geological Survey
OM&M	Operation, Monitoring and Maintenance
ORP	Oxidation Reduction Potential

Acronym	Definition
PCE	Tetrachloroethene
PID	Photo Ionization Detector
PVC	polyvinyl chloride
QA/QC	Quality Assurance/Quality Control
OM&M	Operations, Maintenance and Monitoring
RAO	Remedial Action Objective
RI	Remedial Investigation
RAWP	Remedial Action Work Plan
SCG	Standards, Criteria, Guidelines
SCO	Soil Cleanup Objectives
SDG	Sample Data Group
SSD	Sub-Slab Depressurization
SSDS	Sub-Slab Depressurization System
SVOC	Semi-Volatile Organic Compound
TCE	Trichloroethene
TOC	Total Organic Carbon
tDCE	trans-1,2-Dichloroethene
USEPA	United States Environmental Protection Agency
USGS	United States Geological Survey
VC	Vinyl Chloride
VOC	Volatile Organic Compound

1.0 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:

Michael Squire
New York State Department of Environmental Conservation
Division of Environmental Remediation
Remedial Bureau C
625 Broadway – 12th Floor
Albany, New York 12233-7014

NYSDEC
Division of Environmental Remediation
Bureau of Technical Support
625 Broadway
Albany, New York 12233-7020

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 EWP,
- A statement that the work will be performed in compliance with this EWP 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 C of this document,
- Identification of disposal facilities for potential waste streams,
- Identification of sources of any anticipated backfill, along with all required chemical testing results.

2.0 SOIL SCREENING METHODS

Visual, olfactory and instrument-based soil screening will be performed by a qualified environmental professional during all remedial and development excavations into known or potentially contaminated material (remaining contamination). Screening with a photoionization detector (PID) with an 11.7 micro-volt lamp will be used to identify impacted soil. Any sample above 50 parts per million (ppm) will be considered impacted, and will be removed and disposed of off-site. In addition, select buckets of soil will be field screened with a Dexsil chlorinated solvent screening kit. 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 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. Prior to being disposed of, soil identified as impacted will be stockpiled onsite, on top of and covered by 6 millimeter plastic sheeting.

3.0 STOCKPILE METHODS

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 at all times with by 6 millimeter plastic sheeting. 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 in a logbook and maintained at the site and available for inspection by NYSDEC.

4.0 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. 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.

5.0 MATERIALS TRANSPORT OFF-SITE

All transport of 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.

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 will be washed prior to leaving the site. Truck wash waters will be collected and disposed of off-site in an appropriate manner.

Truck transport routes shall be as shown below (see Figures 1 and 2).

Entry to the site shall begin at the corner of Orangeburg Road and Dutch Hill Road. Trucks will proceed south along Dutch Hill Rd. to Highview Ave. and turn south, proceeding until the entry point at the southerly paved ingress-egress point. Upon entry, trucks should proceed around the southeast walls for Buildings, #4 and #3 to the site. Exit from the site shall reverse this course. From the corner of Orangeburg Road and Dutch Hill Road, trucks may proceed by the most appropriate route. All trucks loaded with site materials will exit the vicinity of the site using only these approved truck routes. This is the most appropriate route and takes into account: (a) limiting transport through residential areas and past sensitive sites; (b) use of city mapped truck routes;
(c) prohibiting 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 prohibited.

6.0 MATERIALS DISPOSAL OFF-SITE

All soil/fill/solid waste excavated and removed from the site 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, C/D 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).

7.0 MATERIALS REUSE ON-SITE

Excavated soil may be re-used on site only if it is sampled and tested by the appropriate laboratory methods to demonstrate compliance with Commercial Use SCOs as set-forth in Table 5.4(e)4 Reuse of Soil in the NYSDEC 2010 Technical Guidance for Site Investigation and Remediation document (called DER-10).

Sampling and analysis of these soils will be consistent with the following table extracted from NYSDEC's DER-10 guidance:

Table 5.4(e)10
Recommended Number of Soil Samples for Soil Imported To or Exported From a Site

Contaminant	**VOCs**	**SVOCs, Inorganics & PCBs/Pesticides**	
Soil Quantity (cubic yards)	**Discrete Samples**	**Composite**	**Discrete Samples/Composite**
0-50	1	1	3-5 discrete samples from different locations in the fill being provided will comprise a composite sample for analysis
50-100	2	1	
100-200	3	1	
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 or consult with DER		

Sampling and analysis of soil must follow DER-10 Section 5.4(e)10 and Table 5.4(e)10. Samples will be a combination of discrete and composite samples, handled as follows. Samples to be analyzed for VOCs only must be grab samples. These grab samples are one or more discrete samples taken from the soil (fill), with the number as specified in the volatile column of Table 5.4(e)10 for the soil quantity in question, and analyzed for the VOCs identified in Appendix 5 of DER-10. For semi-VOCs, inorganics and PCBs/pesticides: one or more composite samples are collected from the volume of soil identified in Table 5.4(e)10 for analysis, with each composite from a different location in the fill volume. Each composite is prepared by collecting discrete samples from 3-5 random locations from the volume of soil to be tested and the samples are

mixed. After mixing, a sample of the composite mixture is analyzed for the SVOCs, inorganic and PCBs/pesticide constituents identified in Appendix 5 of DER-10.

Consistent with NYSDEC's DER-10 Section 5.4(f), soil exported from the site to locations other than permitted disposal facilities must have levels of contamination that do not exceed the lower of the groundwater and residential use levels as shown in Appendix 5 of DER-10, absent a beneficial use determination issued by NYSDEC. Sampling and analysis requirements for such soils are the same as discussed above. The NYSDEC project manager based on various factors, including the location of the site receiving the soil, may modify the number of required samples and type of analyses.

Chemical criteria for on-site reuse of material have been approved by NYSDEC and are listed in Table 1. 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.

8.0 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. Dewatering, purge and development fluids will not be recharged back to the land surface or subsurface of the site, but will be managed off-site.

Waste water generated as a result of dewatering activities may need to be transferred to a fractionation tank. If this is required, water from the excavation will be sampled and submitted for waste characterization. Water stored in the fractionation tank will be hauled to an approved treatment facility or discharged to site sewer under an approved permit depending on the volume and characteristics of the water generated.

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.

9.0 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 decision document. 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., asphalt is replaced by soil), 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.

10.0 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.

Solid waste will not be imported onto the site.

Imported soils will meet the backfill and cover soil quality standards established in 6NYCRR 375-6.7(d). These imported soils (fill) must be sampled and analyzed following the protocols described in Section 7.0 above, and which are based on Section 5.4(3)10 of NYSDEC's DER-10 guidance and Table 5.4(3)10 therein. The material should not exceed the allowable constituent levels for imported fill or soil for the use of the site provided in Appendix 5 of the DER-10 guidance.

Based on an evaluation of the land use, protection of groundwater and protection of ecological resources criteria, the resulting soil quality standards are listed in Table 1.

Soils that meet 'exempt' fill requirements under 6NYCRR 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.

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 with 6-millimeter plastic sheeting to prevent dust releases.

11.0 STORMWATER POLLUTION PREVENTION

Barriers and hay bale checks will be installed and inspected once a week and after every storm event. Results of inspections will be recorded in a logbook 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 check 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.

12.0 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 full a full list of analytes (chlorinated VOCs, semi-volatiles, metals, 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 identified 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.

13.0 COMMUNITY AIR MONITORING PLAN

Groundwater and Environmental Services works under the guidance of the NYSDOH Generic CAMP to complete remedial activities at the site. The CAMP requires real-time monitoring for VOCs and particulates at the downwind perimeter of the designated work area when certain activities are in progress at contaminates sites. Continuous monitoring is required for intrusive work (*i.e.*, excavation) and was completed using air monitoring equipment such as a PID. Periodic monitoring is required for non-intrusive activities (ie: soil/groundwater sample collection).

A figure showing the location of air sampling stations based on generally prevailing wind conditions is shown in Figure [x]. These locations will be adjusted on a daily or more frequent basis based on actual wind directions to provide an upwind and at least two downwind monitoring stations. Residential areas are located east and south of the Site; therefore, fixed monitoring stations should be located at the eastern and southern perimeters.

Exceedances of action levels, and corrective measures taken, will be reported to NYSDEC and NYSDOH Project Managers within one business day.

14.0 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 (see below). 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 Remediation Engineer, 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 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.

15.0 DUST CONTROL PLAN

A dust suppression 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 a dedicated on-site water truck for road wetting. The truck will be equipped with a water cannon capable of spraying water directly onto off-road areas including excavations and stockpiles.
- Clearing and grubbing of larger sites will be done in stages to limit the area of exposed, unvegetated soils vulnerable to dust production.
- Gravel will be used on roadways to provide a clean and dust-free road surface.
- On-site roads will be limited in total area to minimize the area required for water truck sprinkling.

16.0 OTHER NUISANCES

A plan for rodent control will be developed and utilized by the contractor prior to and during site clearing and site grubbing, and during all remedial work.

A plan will be developed and utilized by the contractor for all remedial work to ensure compliance with local noise control ordinances.

A plan will be developed with business tenants located within Building #2 prior to any remedial work to minimize disturbance to their business. All tenants will be notified at least 48-hours in advance of all remedial work.

Appendix H – H&S Plan

GROUNDWATER & ENVIRONMENTAL SERVICES, INC.

HEALTH AND SAFETY PLAN

GROUNDWATER & ENVIRONMENTAL SERVICES, INC.

HEALTH AND SAFETY PLAN

Cover Page

Site and Hospital Location (maps imbedded to print with cover)

Emergency Phone Numbers

Project Contact Information

Required Job Loss Analyses (linked to HSSE Library in SharePoint)

Additional Required Material Safety Data Sheets (if not already in Attachment E)

Required Work Permits

Site-Specific Chemical Hazard Monitoring (if not already in Attachment C)

Note to GES Staff – **Content Placeholder Only! This is not the HASP Cover Page!**

Obtain HASP Cover Page from HSSE tab included in the properly completed FWD Template. Refer to additional instructions in HSSE Sheet Tab in Excel.

Contents

Introduction

Approvals

To simplify document review and approval, this Health and Safety Plan has been formatted to consolidate all site-specific information into two locations within the document. The main body of the document has been reviewed and approved by GES HSSE Leadership.

Two site-specific portions are reviewed and approved by the Project Manager prior to mobilization and should be modified for each event as necessary.

The two site-specific portions are the **Cover Page** and **Attachment A**.

- The **Cover Page** contains emergency contact information and initial risk assessment. The **Cover Page** is approved by the Project Manager prior to mobilization.
- **Attachment A** contains the field forms required to be completed during the event. Upon completion, **Attachment A** content is reviewed by the Project Manager for necessary follow-up and improvement activity.

Project Organization and Responsibilities

The GES project team typically consists of a Project Manager, a Field Supervisor, and an HSSE expert

The Project Manager is responsible for evaluating common site risks, communicating the work scope, stewarding field activity in progress, and approving the post-event documentation.

The Field Supervisor is responsible for implementing the scope and document compliance with the instructions, i.e. stewardship, accountability, etc.

The Regional Health Safety, Security and Environment (RHSSE) is responsible to evaluate overall work scope risk, with particular focus on high-risk activity, stewardship of HSSE reporting/incident management, and to provide quality review of HSSE systems and documentation.

Accident / Incident Medical Surveillance

As a follow-up to a work-related injury, all employees are entitled and encouraged to seek medical attention. All accidents and potential exposures must be reported ***immediately*** to the office leadership and / or Regional Health Safety, Security and Environment (RHSSE), who will coordinate with CHSSE to arrange for appropriate medical attention. Depending on the type of incident, it may be critical to perform tests within 24 to 48 hours. *Failure to report an injury or incident immediately will result in disciplinary action.* The *GES Incident/Injury Case Management Procedure* can be found in **Attachment B**.

Events surrounding Near Loss incidents will be recorded in the daily log and documented in accordance with the GES Incident Reporting Procedures.

Hazard Assessment

Job Loss Analyses (JLAs) are required for most site activities. Each JLA must identify and quantify the health and safety hazards associated with each task and site operation, and to evaluate risks to workers. Using this information, appropriate control methods are selected to mitigate or (preferably) eliminate the identified risks. Refer to the **Cover Page** for applicable JLAs.

Typical site Exposure Monitoring Program elements are included in **Attachment C**, which contains action levels for VOC, combustible gas (LEL), oxygen, and radiation. If necessary, additional site-specific exposure monitoring considerations are included on the **Cover Page**.

A daily discussion of site hazards is conducted at the start of each event during the tailgate safety meeting. Please refer to the GES' Tailgate Safety Meeting Checklist in **Attachment D** for specific meeting topics that should be covered.

Safety Data Sheets for the materials typically encountered during GES field events are in **Attachment E.** If additional SDS are required during non-standard activity, they are noted on the **Cover Page.**

Site Security

- Do not permit anyone who is not properly trained and outfitted with the appropriate PPE to enter the Exclusion or Contamination Reduction Zones (this includes GES personnel, clients, etc.)
- Use caution tape or barricade fencing where warranted to keep unauthorized personnel from entering the work area.
- On sites where it is believed that security is an issue, two employees will be used for all field work. The "buddy-system" will be in place and the two employees will be in constant communication and within each other's line of sight. There will be a cellular phone available to call 911 if a violent condition presents itself.
- When acts of violence occur or when an employee(s) feels that they are being placed in a threatening position they must immediately leave the site.
- All potential acts of violence or threats by non-GES personnel must be immediately reported to the Office leadership and / or Project Manager and Regional HSSE. The situation will be discussed to determine future action on the site in question.

If any GES employee notices suspicious persons or activities in a GES office or in the vicinity of a work area, he or she should immediately report the observation to his or her supervisor or Regional Operations Manager.

Fire/Explosion

If a fire is observed in the incipient phase (i.e., when it begins) and if the site personnel witnessing the fire feel secure in attempting to control the fire, the individual can attempt to extinguish the fire by using the onsite fire extinguisher. The fire extinguisher should be

a 10 or 20 pound (lb.) dry chemical, Class A, B, and C extinguisher and is adequate for paper and wood based products (A), flammable and combustible liquids (B), and electrical (C) type fires.

If there is no fire extinguisher available or if site personnel do not feel secure in attempting to extinguish the fire, site personnel shall perform the following.

- Secure the site and shut down equipment, if doing so does not place employees in harm's way.
- Evacuate the area using the nearest safe pathway from the area.
- Proceed to the nearest phone and call 911 and provide the emergency operator all required information. This will activate the emergency response system.

If more than one individual is on the site team, the individual activating the evacuation plan shall verbally communicate to the other site personnel that there is an emergency condition and that they should evacuate from the work area. If contact cannot be made verbally with the other site personnel, any of the following systems can be used as long as the system is audible above background noise. The system can be the site vehicle horn, a whistle, an air horn, or other acceptable device. The system used for initiating an evacuation from the site shall be discussed during the tailgate meeting with the other site personnel prior to beginning the workday. The system that is decided upon shall be documented in the pre-entry meeting notes.

If an explosion or other unsafe condition occurs that the site supervisor had determined will place the other site personnel at risk, then the evacuation system described above should be activated immediately.

GES Work Permits

Work permits will be required for Confined Space Entry, Hot Work and Lockout/Tag out as well as any Federal and client permitted activity. These permits must be completed prior to site work. Permits, if applicable, will be noted on the **Cover Page**, and included in **Attachment A**.

General Site Rules

The following general site rules apply to all personnel while on the site:

- Before daily site operations begin, the daily site safety checklist will be completed, the subcontractor's training documentation will be reviewed, and a pre-entry briefing will be held to review the site's health and safety plan concerns and emergency procedures. Please refer to the GES' Tailgate Safety Meeting Checklist in **Attachment E** for specific meeting topics that should be covered. This meeting will be registered, with attendance and all applicable notes documented using the field forms found in **Attachmment A**.
- Some GES clients require specific HSSE elements including forms, checklists, and activities not included in this document. When client-specific elements are required, they are included in **Attachment F**.

- One site worker will be assigned to keep the daily log for all health and safety-specific site activities, unless otherwise specified.
- All personnel will wear safety-toe boots. Hard hats will be worn when working near heavy equipment (drill rigs, excavating equipment, etc.), when individuals are working with overhead hazards present, when required in the Job Loss Analysis (JLA), or when required by the client or facility.
- Eye protection and high visibility clothing/reflective safety vests will be donned at all times while on site.
- Possession of alcohol or illegal substances on the job site or consumption during hours of site operations is strictly prohibited.
- Food and/or beverages are not permitted within the site's established work zone. Food and/or beverages will be permitted in the Support Zone, if proper decontamination procedures are being followed.
- Smoking, including the use of e-cigarettes, is not permitted on any site. Chewing tobacco, snuff, application of cosmetics and/or lip balm is not permitted in the site's established work zone.
- A change in level of protection will be based on air monitoring equipment readings taken in the breathing zone.
- Field personnel will use air monitoring equipment and not their nose to determine site contamination (i.e., sniffing sampled soils or water in jars, confined spaces, open bore holes or trenches, etc.). Odors detected during the course of standard operating procedures, however, should be noted in the daily log.
- Field personnel should not stand with their head directly over a well when it is being opened.
- First Aid Kit(s) and Fire Extinguisher(s) will be placed in a conspicuous location, within 50 feet of the working area, and the crew will be aware of its location.

Note: *Hot work activities require that a person onsite shall act as a fire watch with a Class A, B, C dry chemical extinguisher within 10 feet of the activity, and all necessary work requirements are satisfied.*

Any revisions to the final Site-Specific Health and Safety Plan must be reviewed by the Project Manager and approved by the RHSSE.

Attachment A

FIELD FORMS

Attachment A – Field Forms

- PRE-ENTRY MEETING NOTES/ATTENDANCE
- SITE SAFETY AND HEALTH PLAN COMPLIANCE AGREEMENT
- GES DAILY SITE SAFETY CHECKLIST

Please refer to Attachment A included in the approved FWD (HSSE Tab) or replace this page with Attachment A included in the approved FWD.

Attachment B

GES PROJECT INJURY CASE MANAGEMENT FLOWCHART

GES PROJECT INJURY CASE MANAGEMENT

If an incident/injury occurs on-site to a GES or a subcontractor employee, the incident/injury must be immediately reported to the GES Onsite Supervisor. If a subcontractor is injured, also notify subcontractor management.

DOES THE INJURY REQUIRE EMERGENCY MEDICAL ATTENTION?

Yes

Response 1

1. *Call 911!!!!*
2. Provide support/first aid to Injured Person (IP) until Emergency Management Services (EMS) arrives
3. GES onsite Supervisor notifies:
   a) VP, HSSE Tom Baylis at 610 587-1124 *(Tom's backup is Basith at 954 304-7043)* AND
   b) GES Project Manager (PM) or GES Regional HSSE Officer/Manager (RHSSE). *(If IP is subcontractor, follow same approach and PM to notify sub management)*
4. GES onsite Supervisor accompanies IP to emergency room (ER). If IP was a lone worker, a member of management meets them at the site or the ER. *(If IP is subcontractor, subcontractor management meets them at ER)*
   a) Ensure that the IP receives the necessary support and medical care with guidance from VP HSSE.
5. GES PM or GES RHSSE notifies GES Regional Operations Manager (ROM)
6. VP, HSSE (or backup) notifies GES Program Manager (PGM), COO, CEO
7. GES PGM or GES PM notifies Client
8. GES RHSSE generates report and initiates incident investigation
9. GES PM and RHSSE will initiate and complete any client required forms

Note: VP, HSSE will notify third party injury support mgmt. company regarding IPs condition and to obtain injury case management support

No

DOES THE INJURY REQUIRE TREATMENT?

No

Response 3

Report incident to GES PM and continue to monitor IP's condition

Yes

CAN THE INJURY BE TREATED WITH ONLY FIRST AID?

No

Response 4

Provide First Aid/ Support and THEN...

1. Provide Notifications per Response 1, item 3
2. At IP's request or per decision of VP, HSSE, IP will be scheduled for an evaluation at a GES contracted Occupational Clinic (OC) *(or subcontractor's chosen OC)*
3. Lead GES person accompanies IP to OC. If IP is alone, a member of management meets them at OC *(or subcontractor management meets them at OC)*
4. GES RHSSEM generates report and initiates incident investigation

Note: VP, HSSE will notify third party injury support mgmt. company regarding IPs condition and to obtain injury case management support

Yes

Response 2

Provide First Aid

GES staff certified in first aid will evaluate IP's condition and provide first aid/support

Then provide notifications per Response 1, item 3

Always Remember

It is extremely important to report incidents immediately to the GES onsite supervisor.

Even if the injury is minor or if there is no initial injury and you feel it is not worth reporting, the incident must be managed and documented. Minor injuries may worsen over time.

Last Update: January, 2019

GES Health, Safety, Security & Environment (HSSE): An unwavering commitment to safeguard people, property, and the environment!

Attachment C

EXPOSURE MONITORING PROGRAM

FOR THE TYPICAL CONTAMINANTS OF CONCERN

Attachment C – Exposure Monitoring Program

Real-Time Monitoring

Photo-ionization Detector (PID): Real-time monitoring for volatile organic compounds (VOCs) will be conducted using a photo-ionization detector (PID). The PID will be used to monitor employee breathing zones during all invasive activities. **Table 1** lists PID action levels and response requirements

Combustible Gas Indicator/Oxygen Level Meter: Real-time monitoring for combustible gases and oxygen levels will be conducted using a Combustible Gas Indicator (CGI)/Oxygen Level Meter. The CGI will test for the presence of combustible gases by continuously monitoring the lower explosive limit (LEL) of organic vapors. The CGI will be used to monitor the LEL prior to, and during, Confined Space (CS) entries and during work near an excavation in contaminated soil. The Oxygen Level Meter will detect an oxygen-deficient or oxygen-enriched atmosphere, and will be used prior to, and during, all CS entry activities. If ionizing radiation is suspected at a site, a Geiger counter will be used to measure exposure under guidance of a Health Physicist. **Table 2** lists CGI, Oxygen Level Meter, and ionizing radiation action levels and response requirements.

Depending on the Contaminants of Concern, other forms of real-time monitoring equipment may be required to quantify chemical hazards and protect workers from exposure. These may include, but are not limited to bio-aerosol monitors, detector tubes, dust monitors, FROG meters, etc.

- **Calibration of Real-Time Monitoring Equipment**: Monitoring and calibration protocols will be performed in accordance with the manufacturer's guidelines. Calibration will be performed, at a minimum, prior to each day's use.
- Calibration logs will be maintained by the field personnel performing the calibrations.

Action Levels

Tables 1 and **2** list the action levels and response requirements for a PID and CGI/Oxygen Level Meter. Changing levels of protection, upgrading respiratory protection, or changing work practices is based on maintaining the upper limit of the action level for approximately **10 minutes** sustained in the breathing zone (i.e., a non-transient reading) or at the discretion of the Site Supervisor. If changes in protection levels are required, the Site Supervisor will, stop the job, notify the Project Manager who will contact Regional Engineering and CHSSE to determine if administrative or engineering controls can be implemented to mitigate or eliminate the hazard.

Table 1 provides action levels that must be complied with when petroleum products such as gasoline are the known site contaminants.

Table 4 provides space to document site-specific action levels, should the site contain other potential site contaminants. Action levels must be determined by consultation with/approval by CHSSE, based on established chemical exposure limits and monitoring instrument response factors.

Table 1 – PID Action Levels (Petroleum)

Meter Response (Breathing Zone)	Action Required
PID response <5 units above background	No respiratory protection required (i.e., Level D)
PID response >5 units above background (Bkgd.) and < 50 units above Bkgd.	Stop work. Investigate the cause of elevated VOC measurements. Contact the Project Manager or office and determine if administrative or engineering controls can be implemented to mitigate or eliminate the elevated readings. If not medically qualified to wear respiratory protection, leave work zone. If the elevated readings cannot be reduced below 5 units above background or eliminated, and if medically qualified, fit tested and trained to wear respiratory protection, then upgrade to Modified Level C, half- face respiratory protection.
PID response >50 units and < 250 units above Bkgd.	Stop work. Investigate the cause of elevated VOC measurements. Contact the Project Manager or office and determine if administrative or engineering controls can be implemented to mitigate or eliminate the elevated readings. If not medically qualified to wear respiratory protection, leave work zone. If the elevated readings cannot be reduced below 5 units above background or eliminated, and if medically qualified, fit tested and trained to wear respiratory protection, then upgrade to Modified Level C, full- face respiratory protection.
PID response > 250 above Bkgd.	Retreat from site [1,2]

[1] If a retreat becomes necessary, CHSSE or Regional Engineering will be consulted in regard to adding mechanical ventilation or possible changes in work practices. Work will not resume until appropriate corrective measures are implemented.

[2] Because direct reading instruments cannot indicate or are not compound specific, concentrations shown on the instruments shall be related to units above background and not parts per million (ppm).

Table 2 CGI/O2/Radiation Level Action Levels

Meter Response	Action
CGI response < 10 % LEL	Continue normal operations.
CGI response > 10 % and <20 % LEL	Eliminate all sources of ignition from the work area; implement continuous monitoring. However if work is being done in a confined space, retreat from work area.[1]
CGI response > 20 % LEL	Discontinue operations; allow to vent; retreat from work
Oxygen level < 19.5%	Retreat from work area. [1]
Oxygen level > 23.5%	Retreat from work area. [1]
3X background to <2 mR/hr.	Radiation above background levels (normally 0.01-0.02 mR/hr.) signifies possible source(s) radiation present. Continue investigation with caution. Perform thorough monitoring. **Consult with a health physicist**.
>2mR/hr.	Potential radiation hazard. Evacuate site. Continue investigation only upon the advice of a health physicist

[1] If a retreat becomes necessary, CHSSE or Regional Engineering will be consulted in regard to adding mechanical ventilation or possible changes in work practices. Work will not resume until appropriate corrective measures are implemented.

Table 3 – Retail Petroleum Materials of Concern

Contaminant	OSHA TWA (ppm)	ACGIH TLV (ppm)	Hazards	Entry Routes	IP
Benzene	1	10	1,2,4,5,6,9	Inh, Abs, Ing, Con	9.24
Xylene	100	100	1,2,3,4,5,6,7,10	Inh, Abs, Ing, Con	8.56
Ethylbenzene	100	100	1,2,3,10	Inhh,, Ing, Con	8.76
Toluene	200	50	1,2,3,4,5,7,10	Inh, Abs, Ing, Con	8.82

TWA = Time Weighted Average in parts per million (ppm)
C = Ceiling
IP = Ionization Potential

1 = irritant to skin
2 = irritant to eyes
3 = irritant to respiratory system
4 = may cause headache
5 = may cause dizziness, lightheadedness
6 = may cause nausea and vomiting
7 = may cause liver and kidney damage
8 = irritant to GI tract
9 = carcinogen/possible carcinogen
10 = may cause damage to CNS

Table 4 – Other (non-petroleum compounds) Contaminants of Concern

Contaminant	OSHA TWA (ppm)	ACGIH TLV (ppm)	Hazards	Entry Routes	Action Levels*

Non-Petroleum contaminants of concern should be included on the Cover Page included in the HSSE Tab in the FWD.

*Action levels must be determined by consultation with/approval by CHSSE, based on established chemical exposure limits and monitoring instrument response factors.

TWA = Time Weighted Average in parts per million (ppm)
C = Ceiling
IP = Ionization Potential

1 = irritant to skin
2 = irritant to eyes
3 = irritant to respiratory system
4 = may cause headache
5 = may cause dizziness, lightheadedness
6 = may cause nausea and vomiting
7 = may cause liver and kidney damage
8 = irritant to GI tract
9 = carcinogen/possible carcinogen
10 = may cause damage to CNS

Note: Consult standard reference manuals for air concentration/toxicity data. Action level depends on PEL/REL/TLV. These Action Levels, if not defined by regulation, is some percent (usually 50%) of the applicable PEL/REL/TLV. That number must also be adjusted to account for instrument response factors.

Attachment D

GES TAILGATE SAFETY MEETING TOPICS

Attachment D – Tailgate Meeting Topics

- **Introductions:**
  - ✓ How is everyone feeling today?
  - ✓ If working with new subcontractors, multiple subcontractors, or personnel that haven't worked together before, have everyone introduce themselves and their role.
  - ✓ Review OSHA, LPS, and client specific credentials.
  - ✓ Review that everyone is responsible for their own safety, and to look out for everyone else on site.

- **Stop Work Reminder For All Present**
  - ✓ ALL on-site personnel have the ***AUTHORITY, OBLIGATION and RESPONSIBILITY*** to stop the job at any time if they observe unsafe acts, situations or conditions!
  - ✓ Please report all Losses, Near Losses, injuries, and any other abnormal situations to the GES Site Supervisor immediately.

- **HASP and Emergency Information**
  - ✓ Hospital location: (We do NOT transport seriously injured personnel). Call 911
  - ✓ First aid kit, eye wash, fire extinguisher, fuel service emergency stop, and HASP locations
  - ✓ Review of First Aid/CPR trained site personnel
  - ✓ Review "emergency stop work" signal, establish safe muster point, smoking and break location(s)
  - ✓ Discuss what type of site activities could trigger a "stop work" alert (injury, fuel delivery, unexpected 3rd party site intrusion, weather, etc.)
  - ✓ Decontamination procedures
  - ✓ Emergency procedures

- **Discuss Scope Of Work For The Day**
  - ✓ What do we expect to accomplish today?
  - ✓ Review the anticipated schedule, but emphasize the need to work safe. Safe operations cannot be replaced by "need for speed"

- **JLA Discussion Regarding The Day's Tasks**
  - ✓ Focus on making every JLA Site Specific
    - If working with subcontractors, empower them with the JLA review of the tasks they will be performing
    - Challenge them as a "job expert" to share experiences
  - ✓ "What conditions and challenges exist on this site today that are not accounted for in our JSAs?"
  - ✓ Review and complete checklists and permits
  - ✓ If necessary, insure appropriate spotters, and establish communications between spotters and equipment operators

- **Equipment/Machinery/PPE Check**
  - ✓ Gas, grease and oil checked
  - ✓ Safety devices checked and in working order
  - ✓ Required and recommended Personal Protective Equipment (PPE) on site and in good condition (per JLA).
  - ✓ Proper signage (Fence, traffic, drums, samples…)

- **LPSA/Hazard Communication**
  - ✓ Ask all site personnel to communicate a LPSA they performed since coming on site (you 1st, and then go around to every individual on site.)
  - ✓ Emphasize that LPSAs and Hazard Recognitions should be performed and shared constantly throughout the day, not just at Tailgate Safety Meetings and "Take 2 at 2 meetings"!
  - ✓ Encourage and empower all site personnel to communicate LPSAs out loud as they are performing them to share experiences and increase site awareness
  - ✓ Reminder - YOU are not only responsible for their own safety, but to look out for everyone else on site.
  - ✓ Finally – Stress the need and benefit of LPSAs. They are the most powerful tool in our toolbox.

Attachment E

COMMON SAFETY DATA SHEETS (SDS)

Attachment E – Common Safety Data Sheets

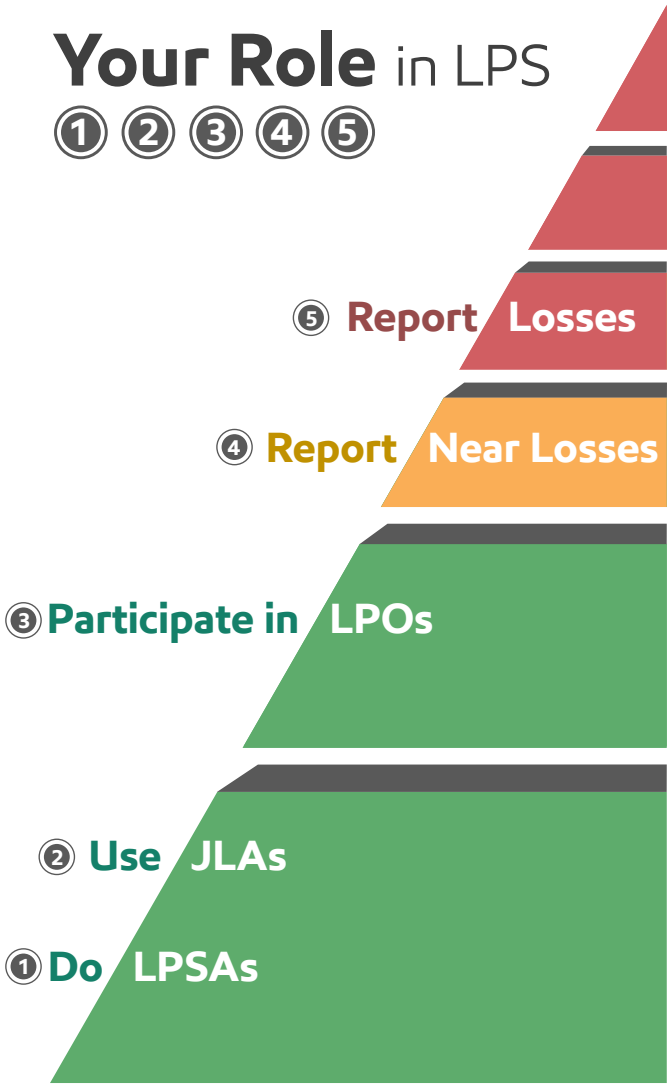
Replace this page with content supplied in SharePoint Library

http://sharepoint.gesonline.com/HSSE/Safety%20Data%20Sheets/Forms/AllItems.aspx

Attachment F

CLIENT AND PROGRAM SPECIFIC DOCUMENTS

Your Role in LPS



My LPS Checklist

Do LPSAs

- O At beginning of the shift, before starting work
- O Before changing tasks during the day
- O For non-routine work activities
- O After a loss or significant near loss
- O When conditions change
- O Off the job, as well as at work

Use JLAs

- O Ask your Supervisor if a JLA exists for the job; JLAs are used in addition to the LPSA tool
- O If a JLA does not exist, use the LPSA tool
- O Review the JLA to ensure you understand critical job steps, potential hazards and actions to mitigate and/or eliminate hazards
- O Follow the JLA while doing the job

Report Losses/Near Losses

- O Understand what Losses and Near Losses are
- O Report Losses and Near Losses to your Supervisor immediately

Participate in LPOs

- O Understand LPO purpose and objective
- O Engage in the process when you are being observed

LPS Basic Training

"The culture of safety starts with **leadership** because leadership drives **behavior** and behavior drives **culture**."

ExxonMobil GREF SSHE

Loss Prevention System (LPS)

A SIMPLE set of tools that work together to focus on behaviors.

After reviewing this brochure, ask your Supervisor to review the LPSA card and a JLA with you in more detail.

Why do you need to know LPS?

LPS focuses on positively influencing behaviors to reduce injuries, environmental and security incidents and property damage.

LPS is part of our daily business at GREF... so that

NOBODY GETS HURT!

Basic concepts of LPS

Everyone is involved.

Provides tools and activities that work together to eliminate loss.

Focuses on reinforcing safe behaviors and eliminating undesirable behaviors.

For more information goto/GREFLPS

LPSA Loss Prevention Self-Assessment

A brief, unwritten risk assessment. The simplest, most important tool you will use.

Purpose: Identify and eliminate potentially unsafe practices and hazards.

The simplest, **most important** tool you will use

Assess the risk!

Analyze how to reduce the risk!

Act to ensure safe operations!

Step 1: ASSESS the risk!

Ask, "What could go wrong, and what is the WORST thing that could happen if something does go wrong?" - use the back of the LPSA card

Step 2: ANALYZE how to reduce the risk!

Ask, "Do I have the training and knowledge to do this job properly and do I have all the proper tools and PPE?"

Step 3: ACT to ensure loss-free operations!

Take necessary action to ensure the job is done properly. Follow the JLA. If you are uncertain whether all hazards have been addressed, stop and get help from a colleague or Supervisor.

Job Loss Analysis (JLA)

A written tool used to record the critical steps of a job task, identify potential risks, and determine the best procedures to follow in order to perform the job properly.

Purpose: To provide a written and approved safe work standard for how to perform a task.

Three main sections:

1. Critical steps of the task
2. Risks associated with each step
3. Actions to prevent/manage risk

JLAs must be reviewed before starting the job and used while doing the job. Incorrect or incomplete information on JLAs should be reported to a Supervisor for correction/ completion.

Loss/Near Loss (LI/NLI)

A Loss is an event that resulted in an unwanted impact on the safety or health of people, or on property, environment, security, etc.

A Near Loss is an event which could have resulted, under slightly different circumstances, in a Loss.

- Report all Losses and Near Losses immediately to your Supervisor

Loss Prevention Observation (LPO)

A scheduled activity to observe how a task is performed as compared to written standards.

Purpose: LPOs are done to identify both positive and undesirable behaviors and conditions.

You may be observed doing a work task. If so, perform the task as normally done. After the observation, the Observee, Observer and Observee's Supervisor hold a feedback session to discuss positive and questionable items. LPOs are not performance reviews.

Appendix I – O&M Manual

UB Orangeburg, LLC

BIO-AUGMENTATION SYSTEM OPERATION, MAINTENANCE, AND MONITORING PLAN

1-45 Orangeburg (Orangetown) Shopping Center
Orangeburg, New York
NYSDEC Site #C344066

10/25/2019

Version 3.0

Bio-Augmentation System Operation, Maintenance, And Monitoring Plan
UB Orangeburg
1-45 Orangeburg (Orangetown) Shopping Center
Orangeburg, New York
NYSDEC Site #C344066

Prepared for:
UB Orangeburg, LLC
321 Railroad Avenue
Greenwich, CT 06830

Prepared by:
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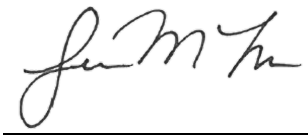
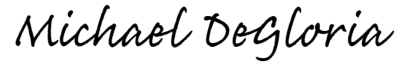
TEL: 866-839-5195
www.gesonline.com

GES Project:
1102664

Date:
October 25, 2019



Jessica M. Thomas
Staff Remediation Specialist



Michael DeGloria, P.G
Principal Project Manager

Table of Contents

Figures

Note: These are provided within the Site Management Plan

Appendices

Note: These are provided within the Site Management Plan

Acronyms

ACCO	ACCO Brands, Inc.
AGV	Air Guideline Value
ASP	Analytical Services Protocol
BAS	Bio-Augmentation System
BCA	Brownfields Cleanup Agreement
BCP	Brownfields Cleanup Program
BGS	Below Ground Surface
CAMP	Community Air Monitoring Plan
CCR	Construction Completion Report
CLP	Contract Laboratory Protocol
COC	Certificate of Completion
CPR	Cardiopulmonary Resuscitation
DCA	Dichloroethane
DCE	Dichloroethene
DER	Division of Environmental Remediation
DO	Dissolved Oxygen
DNAPL	Dense Non-Aqueous Phase Liquid
DUSR	Data Usability and Summary Report
EC	Engineering Control
ECL	Environmental Conservation Law
EE	Environmental Easement
EIP	Electronic Interface Probe
ELAP	Environmental Laboratory Approval Program
EPA	Environmental Protection Agency
EWP	Excavation Work Plan
FER	Final Engineering Report
FT	Feet
GES	Groundwater & Environmental Services, Inc.
GES	GES Engineering of New York P.C.
GWQS	Groundwater Quality Standard
HASP	Health and Safety Plan
HASPA	Health and Safety Plan Addendum
HVAC	Heating, Venting, and Air Conditioning
IC	Institutional Control
IDW	Investigation Derived Waste
IN-WC	Inches of Water Column
IRM	Interim Remedial Measure
IRMWP	Interim Remedial Measure Work Plan
ISCO	In-Situ Chemical Oxidation
JLJ	JLJ Management Company
KLF	Kleinfelder
KMnO4	Potassium Permanganate
MFR	Multi-Family Residential
MIP	Membrane Interface Probe
MSL	Mean Sea Level
NYCRR	New York Codes, Rules and Regulations
NYS	New York State
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
O&M	Operation and Maintenance
OM&M	Operation, Monitoring, and Maintenance
ORP	Oxidation Reduction Potential
OSHA	Occupational Safety and Health Administration
PCB	Polychlorinated Biphenyls
PCE	Tetrachloroethene
PPE	Personal Protective Equipment
PTWP	Pilot Test Work Plan
QA/QC	Quality Assurance / Quality Control
QAPP	Quality Assurance Project Plan
RAWP	Remedial Action Work Plan
RCRA	Resource Conservation and Recovery Act
RDWP	Remedial Design Work Plan
RI	Remedial Investigation
SDS	Safety Data Sheet
SCO	Soil Cleanup Objective
SSDSs	Sub-Slab Depressurization Systems
SMP	Specific Management Plan
SSMP	Site-Specific Management Plan
SV	Soil Vapor
SVE	Soil Vapor Extraction
SVI	Soil Vapor Intrusion
SVOC	Semi-Volatile Organic Compound
TAGM	Technical and Administrative Guidance Memorandum
TCA	Trichloroethane
TCE	Trichloroethene
TCL	Target Compound List
TOC	Total Organic Carbon
US	United States
VC	Vinyl Chloride
VCA	Voluntary Cleanup Agreement
VCP	Voluntary Cleanup Program
VGAC	Vapor-Phase Granular Activated Carbon
VOC	Volatile Organic Compound

1 INTRODUCTION

At the request of UB Orangeburg, LLC, Groundwater and Environmental Services, Inc. (GES) has prepared this Bio-augmentation System Operation, Maintenance and Monitoring Plan (OM&M Plan) for Orangetown Shopping Center located at 1-45 Orangetown Shopping Center in Orangetown, New York (Subject Property). An Interim Remedial Measures Work Plan (IRM) was submitted to New York State Department of Environmental Conservation (NYSDEC) in August 2008 and subsequently approved October 1, 2008. The Bio-augmentation Interim remedial measure system installation and performance is described in Construction Completion Report #3 approved by NYSDEC on August 30, 2011. A Remedial Action Work Plan (RAWP) was submitted to NYSDEC in December 2011. Per the RAWP, an additional injection gallery by way of placement of injection well points to treat impacted groundwater leaving the Site was installed in May 2012. In addition to the injection well points, six additional monitoring wells (MW-A through MW-F) were installed to evaluate the effects of bio-augmentation to the plume. The RAWP presented the design details and a basic OM&M Plan for the proposed Bio-augmentation System (BAS) system modifications to be installed at the Subject Property. The purpose of the existing BAS and modifications proposed in the RAWP was to facilitate in-situ biodegradation of chlorinated volatile organic compounds present in groundwater and saturated soils at the Subject Property in order to achieve the groundwater remedial action objectives. As of September 2017, a number of wells formerly associated with the bio-augmentation system were abandoned (MW-A, MW-B, MW-C, MW-D and MW-F) following approval from the NYSDEC. Additionally, in August 2019 the NYSDEC approved a reduction from quarterly monitoring of the BAS to annual monitoring only.

This OM&M Plan provides additional details regarding the protocols and procedures involved with the operation, maintenance and monitoring of the existing BAS.

1.1 Site Description

The shopping center contained a dry cleaning operation (Sparkle Cleaners), which had a historic release of perchloroethylene (PCE) through a leaking sewer line. Initial indications of potential site impact were discovered in 2004, which led to a site characterization, subsequent notification of NYSDEC in 2005, and application to the New York State BCP in 2006.

JLJ entered into a Brownfield Cleanup Agreement (BCA) with the NYSDEC in January 2007, to investigate and remediate a portion of it property (the Orangetown Shopping Center) located in Hamlet of Orangeburg, Town of Orangetown, County of Rockland, New York (Brownfield Cleanup Program [BCP] Site #C344066). The Orangetown (Orangeburg) Shopping Center BCP site (hereinafter the site) is approximately 1.2-acre in size, and is situated within an 11-acre retail property identified as a portion of Block 1 and Lot 67 on Orangetown Tax Map # 74.10. The boundaries of the retail property include Orangeburg Road to the north, residential homes and Highview Avenue to the south, residential homes and Oak Street to the east, and Dutch Hill Road to the west together with commercial and office properties (see Plate 1). This site is being remediated to commercial use, and will be used for commercial (retail) property for the foreseeable future.

The shopping center has seven distinct building components, including five retail buildings. The surrounding area is a well-developed village/town setting, characterized by general business, commercial, and institutional (public) development. The Town of Orangetown designates this general area as a Commercial (CS) Zone. Refer to Site Locus (Plate 1) and Site Layout (Plate 2).

The interim remedial measure (IRM) remedial excavation conducted in January 2009 removed impacted soils from the known source area, with the exception of some detectable chlorinated VOCs above soil cleanup objectives (SCO) in certain portions of the excavation as discussed in the Source Removal Construction Completion Report (CCR) (KLF 2011a). It also appeared that some impacted soils remained under the building immediately adjacent to the eastern foundation wall (based upon the findings at the western- most extent of the source removal excavation, discussed above). Because contaminated subsurface soils and groundwater remain after completion of the source removal IRM, two additional IRMs were implemented at the site (see IRMWP [KLF 2008b): a sub-slab depressurization system (SSDS) to mitigate the potential for vapor intrusion into the southern portion of Building #2 and a bio-stimulation system designed to promote microbial degradation of the contaminants in the saturated soil and groundwater.

The details regarding previous investigations and remedial activities conducted at the site as well as a description of the site geology and hydrogeology are included in the Remedial Investigation report prepared by Kelinfelder (KLF) in May 2008 and revised in August 2008 (KLF, 2008).

1.2 Roles and Responsibilities

Primary roles have been identified and assigned as follows:

Contact	Title	Company	Phone Number
Michael DeGloria, PG	Principal Project Manager	GES	866-839-5195, extension 3839
Jessica Thomas	Staff Remediation Specialist	GES	800-360-9405, extension 4328
Rich Brown	NE Region Field Technician Manger	GES	866-839-5195, extension 3836
Monica Roth	Assistant Vice President	Urstadt Biddle Properties, Inc.	203-863-8203
Michael Squire	Project Manager	NYSDEC	518-402-9662

Site owner through its environmental consulting contractor (currently GES) is responsible for completing BAS performance monitoring and injection events (both routine and non-routine) and documenting work by completing the OM&M data sheets during each site visit and evaluating BAS monitoring groundwater analytical results. An example OM&M data sheet is included as **Appendix G**.

Additionally, Site Owner through its environmental consulting contractor is responsible to perform the following:

- Scheduling and conducting injection events and injection performance groundwater monitoring events.

- Providing staff training on the OM&M aspects of the project.
- Preparing and submitting annual Periodic Review Reports to the NYSDEC.
- Updating this OM&M manual to reflect changes to the BAS system.

2 BIO-AUGMENTATION SYSTEM DESCRIPTION

The purpose of the BAS at the Site is to facilitate in-situ bio-degradation of chlorinated volatile organic compounds in saturated soils and groundwater. Its various components are described below.

2.1 System Overview

The BAS, installed in 2010, consists of four injection points (IP-1 through 4) and conveyance piping connected to existing groundwater monitoring well MW-3. Stubs ups for injection are located within a locked weather tight box outside the rear door of the former Sparkle Cleaners. The system construction is documented in Construction Completion Report – 3. The system allows for gravity fed or low pressure injection of molasses into injection points IP-1 through 4 and MW-3. Additional injection points were installed in accordance to the RAWP.

The system includes the following components as shown on **Figures 7** and **8**:

- Four individual injection points each with flow control valve and stub ups for connection to the batch injection tank.
- One monitoring well (MW-3) converted for injection with conveyance piping, control valve, and stub up for connection to the batch injection tank.
- A north-south trending injection gallery located along the eastern edge of the macadam pavement behind Building #2 (see **Figure 7)**, and made-up of nine injection wells/ points.
- Three lateral injection points installed below the floor slab within the former Sparkle Cleaners (see **Figure 8**).

The injection area is monitored using site monitoring wells (MW-4 and MW-5).

2.2 Description of BAS Injection Equipment

- One portable 225 gallon polyethylene mix tank with side drain ball valve and top opening used to mix the molasses and potable water to achieve the injection concentration.
- One Rubbermaid™ locked enclosure containing the conveyance piping stub ups at the rear of the former Sparkle Cleaners.
- One 1” hose to connect the mix tank to the injection point stub ups.
- One 12 volt portable utility pump for injection solution mixing and low pressure injection (0-10 PSI).

3 BAS SYSTEM OPERATION AND MAINTENANCE

This OM&M Plan describes the measures necessary to operate, monitor, and maintain the BAS system to be installed at the Subject Property. The specific task objectives are as follows:

- Perform BAS monitoring well network sampling (annually with additional events as needed to optimize BAS performance, see section 4 for monitoring details).
- Perform bio-augmentation injections on an as needed basis to maintain the monitoring network performance criteria as described under section 4 below.
- Record monitoring data to determine optimal system operational parameters and provide documentation for non-routine OM&M reports.

In order to accomplish the objectives described above, a schedule and list of tasks as part of this OM&M Plan and these are presented below.

3.1 Operation and Maintenance Schedule

OM&M visits will be conducted to assess the effectiveness of the BAS based on the following proposed schedule:

- BAS groundwater monitoring well network sampling annually (MW-4 and MW-5).
- Injection frequency based BAS performance targets.

3.2 Routine Operation and Maintenance

System adjustment and maintenance of the BAS will be performed during each site visit in addition to monitoring and recording the following on the OM&M data sheet:

- Security issues, vandalism, system damage, equipment or conveyance malfunction, connection integrity, or environmental effects.
- Gauging of BAS monitoring network wells.
- Ground water sampling with field parameter collection.
- pH adjustment titration for each monitoring point with field measured pH outside of the target range.
- Visual inspection of piping stub ups and BAS monitoring network well road boxes and well pads, injection well road boxes and well pads.

Upon completion of the OM&M inspections, field staff will transfer inspection information (i.e. notes, completed OM&M data sheets and photographs) to the appropriate GES data management personnel. The GES project management team will routinely review the inspection findings to note issues with the BAS. GES will maintain copies of inspection data for use in developing annual reports to be submitted to NYSDEC.

An example OM&M data sheet is included in **Appendix G**. This form will be filled out during each field event and a copy will be returned to the site and placed in the on-site OM&M binder during the next site visit. The duplicated will be stored in the hazard communications box located on the eastern (rear) side of the building and one copy will be maintained in the project file. This OM&M Plan will also be stored in the hazard communications box at the Subject Property for as-needed reference during performance of the OM&M activities.

3.3 Non-Routine Operation and Maintenance

Non-routine operation and maintenance will be performed as a follow-up to deficiencies noted during the OM&M visits. If repairs cannot be readily made in the field, GES (or its subcontractors) will identify options to remedy the issue. If it appears that significant BAS modifications are required, NYSDEC will be notified prior to the commencement of any modification work.

3.4 Tools and Spare Parts

Tools and one set of spare parts required for the OM&M tasks will be stored in the GES office and brought to the Subject Property by the field staff conducting the OM&M inspection. These spare parts will be available in the event that repairs are required during the OM&M inspections.

3.5 Shutdown and Restart

The BAS system will not be equipped with shutdown sensors or a telemetry system. The BAS system will only be operated with GES personnel on Site.

4 BAS SYSTEM MONITORING

Geochemical targets for pH and total organic carbon (TOC) is BAS monitoring network wells are established to inform decision making regarding injection frequency and quantity. The geochemical performance targets are:

- pH between 6 and 8
- TOC between 50 and 500 milligrams per liter (mg/L)

4.1 Zone of Influence and Injection Performance Monitoring

Monitoring of injection performance will be conducted through annual sampling of the BAS monitoring well network. Field parameters collected during sampling will be recorded on sampling data sheets (See **Appendix G**). Groundwater samples collected during the annual monitoring events will be submitted for laboratory analysis of total organic carbon and chlorinated volatile organic compounds. If pH readings collected from any monitoring point are below the pH target a pH titration procedure shall be implemented.

The pH titration procedure is as follows:

1. Collect 3-100 milliliter (ml) aliquots of groundwater from the well.

2. Titrate the groundwater aliquots to a pH of 7 using a 0.1 molar (M) solution of sodium bicarbonate.
3. Record the titration values on the OM&M sheet.

Measurement of pH during titration shall be made by an electronic pH meter calibrated prior to use and end point shall be confirmed by litmus paper. In solution color-metric indicators are not to be used due to the likely dark color of groundwater within the treatment zone.

4.2 Additional Injections and Monitoring

Injections of molasses, buffered molasses, or buffer solution will be conducted on an as needed basis as described below. Following these injections post injection follow-up monitoring will be conducted and the data evaluated to determine the need for additional injections.

Injections will be conducted as described in the IRM work plan, the RAWP or in accordance to a NYSDEC approved schedule. The procedure includes mixing of a solution within a portable batch tank and low pressure injection [less than 10 pounds per square inch (PSI)] into the target injection points. Decision thresholds and solution mixes are described below by geochemical goal.

4.3 TOC

TOC results from the annual groundwater monitoring event will be evaluated based on the targeted TOC range (as described above). If the TOC results are below the target TOC range, an injection of 10% molasses solution may be conducted in injection points proximate to the monitoring well with low TOC.

4.4 pH and TOC

If pH and TOC results from any groundwater monitoring event are below target TOC and pH ranges (as described above) an injection of sodium bicarbonate buffered 10% molasses solution may be conducted in injection points proximate to the monitoring well with low TOC and pH. The buffer strength will be calculated based on 50% of the required buffer (based on groundwater titration) for the theoretical water volume within the area of influence of the well or wells into which injection is being conducted. The theoretical water volume will be calculated based aquifer thickness at the injection location, 10-foot radius of influence, and 15% aquifer porosity. pH and TOC results will be evaluated on an annual basis to determine if an injection is required.

4.5 pH only

If pH results from any groundwater monitoring event are below the target pH range (as described above) and TOC is within the target range an injection of a sodium bicarbonate solution may be conducted to correct pH. The buffer strength will be calculated based on 50% of the required buffer (based on groundwater titration) for the theoretical water volume within the area of influence of the well or wells into which injection is being conducted. The theoretical water volume will be calculated based aquifer thickness at the injection location, 10 foot radius of influence, and 15% aquifer porosity.

4.6 Post Injection Monitoring

Following injection of solution into the aquifer, the BAS monitoring network will be sampled within two weeks following the injection procedure set forth in Section 4.1 above with the following exceptions.

1. Laboratory analysis will be conducted only for TOC.
2. If the injection event was of only sodium bi-carbonate the no laboratory analysis will be conducted.

Based on the results of the sampling in comparison to the geochemical goals established in Section 4.0 above, either additional injection will be conducted or the BAS performance will be reevaluated based on the next routine annual sampling event.

5 Reporting

Performance of the BAS will be evaluated and reported to the NYSDEC subsequent to each event in a summary letter. Each report will contain:

- An evaluation of BAS performance, a summary of the injection activities, and groundwater geochemistry trends over the history of BAS system operation.
- A summary of modifications to the system and recommendations for potential improvements.

6 Contingency Plan

A contingency plan is included in the site HASP. A copy of the HASP will be kept in the hazard communications box. The contingency plan contains the following:

- Emergency contact list with phone numbers.
- Emergency response procedures.
- Evacuation plan, including a map and route to the nearest hospital.

Changes to the contingency plan information (e.g. changed phone numbers or contact personnel) will be updated immediately upon receipt of the new information. The contingency plan will be evaluated on an annual basis to determine if additional changes are required based on changed site conditions (e.g. hospital closures or changes to the evacuation route). Appropriate changes will be made to the contingency plan and the field and office copies will be updated accordingly.

References

KLF, 2007a, Remedial Investigation Work Plan, Orangeburg (Orangetown) Shopping Center, 1-45 Orangetown Shopping Center, Orangeburg, New York, dated July 2007.

KLF, 2008a, Remedial Investigation Report, Orangeburg (Orangetown) Shopping Center, 1-45 Orangetown Shopping Center, Orangeburg, New York, dated May 2008, revised August 2008.

KLF, 2008b, Interim Remedial Measures Work Plan, Orangeburg (Orangetown) Shopping Center, 1-45 Orangetown Shopping Center, Orangeburg, New York, dated June 2008, revised August 2008.

KLF, 2009a, Design Letter Report – Sub-Slab Depressurization System, Orangetown Shopping Center, 1-45 Orangetown Shopping Center, Orangeburg, New York, 10962, dated September 22, 2009.

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KLF, 2010a, Biostimulation Injection System Letter, Orangetown Shopping Center, 1-45 Orangetown Shopping Center, Orangeburg, New York, 10962, dated January 29, 2010.

KLF, 2011a, Biostimulation Injection System Revision Letter, Orangetown Shopping Center, 1-45 Orangetown Shopping Center, Orangeburg, New York, 10962, dated April 1, 2011.

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KLF, 2011c, Construction Completion Report #1 Source Removal, Orangetown Shopping Center, 1-45 Orangetown Shopping Center, Orangeburg, New York, 10962, dated June 2011.

KLF, 2011d, Construction Completion Report #2 Sub-Slab Depressurization System, Orangetown Shopping Center, 1-45 Orangetown Shopping Center, Orangeburg, New York, 10962, dated August 2011.

KLF, 2011e, Remedial Investigation Addendum Report, Orangetown Shopping Center, 1-45 Orangetown Shopping Center, Orangeburg, New York, 10962, dated July 2011.

KLF, 2011f, Construction Completion Report #3 Bio-augmentation Treatment, Orangetown Shopping Center, 1-45 Orangetown Shopping Center, Orangeburg, New York, 10962, dated August 2011.

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JLJ, 2011, Environmental Easement, Orangetown Shopping Center, 1-45 Orangetown Shopping Center, Orangeburg, New York, 10962, dated September 2011.

New York State Department of Environmental Conservation (NYSDEC), 2009a, Comment Letter on the Sub-Slab Depressurization System Design Details, Orangetown Shopping Center, Site ID No. C344066, Town of Orangetown, Rockland County, New York USA, dated October 13, 2009.

NYSDEC, 2009b, Letter Approval of Sub-Slab Depressurization System Design Details, Orangetown Shopping Center, Site ID No. C344066, Town of Orangetown, Rockland County, New York USA, dated November 3, 2009.

NYSDEC, 2010, Letter Approval of Sub-Slab Depressurization System Design Revision Letter, Orangetown Shopping Center, 1-45 Orangetown Shopping Center, Orangeburg, New York, 10962, dated August 9.

Appendix J – Site Management Forms

Site: Orangetown Shopping Center **Tech:**

Address: 1-45 Orangetown Shopping Center **Date:**

Daily Field Log (Gauging Table) Orangeburg, New York **Weather:**

Well ID	PID (outer)	PID (inner)	Depth to Water	Depth to DNAPL	Depth to Bottom (last visit)	Depth to Bottom (measured)	Well Diameter	Well Volume	Comments	Analytical Parameters
MW-3									Gauge only	
MW-4									Gauge & Sample	VOCs, Ethene, electron acceptor analtyes and TOC
MW-5									Gauge & Sample	VOCs, Ethene, electron acceptor analtyes and TOC
MW-8A									Gauge & Sample	VOCs, Ethene, electron acceptor analtyes and TOC
MW-E									Gauge only	
MW-14A									Gauge only	

Groundwater Sampling

(DTB - DTW)*X = _____ (1well volume in gallons) *Remove at least 3 well volumes*

X	0.041	0.163	0.367	0.653
Well Diameter	1"	2"	3"	4"

GROUNDWATER PURGE AND SAMPLING FIELD SHEET

Well ID: **MW-4**

1. PROJECT INFORMATION:

Site: Orangetown Shopping Center **Client:** UB Orangeburg, LLC **Date:** _____

Address: 1-45 Orangetown Shopping Ctr. **Project #:** 1102825 **Sampler:** _____

Orangeburg, New York **NYSDEC Site #:** C344066 **Weather:** _____

2. MONITORING WELL DATA:

Depth to Water: _____ **Depth to Bottom (last round):** _____

Casing Diameter: _____ **Calculated Purge Amount:** _____ *gallons*

Purge Volume Calculation:

(DTB - DTW)*X = _____ (1well volume in gallons)

X	0.041	0.163	0.367	0.653	
Well Diameter	1"	2"	3"	4"	*Remove at least 3 well volumes*

3. PURGE DATA

Purge Method: Dedicated Teflon Bailers **Did well recharge?** *Yes* ☐ *No* ☐

Did well purge dry? *Yes* ☐ *No* ☐ **Depth to Water after purge:** _____

Actual Purge Amount: _____ gallons **Depth to Water after recharge:** _____

Water Quality Meter Model: _____ **Time elapsed for recharge:** _____

Observe water quality parameters following removal of each well volume:

	pH	Temperature	Conductivity	DO	ORP	Turbidity	Comments or Observations
First Volume							
Second Volume							
Third Volume*							

** - Sample water parameters. If well ran dry, record the parameters of any remaining sample water here.*

4. SAMPLE DATA

Sample ID: _____ **Depth to Water at time of Sampling:** _____

Sample Time: _____ **Number of Containers:** _____

Analyses: _____ **Duplicate Sample Collected?** *Yes* ☐ *No* ☐

_____ **MS/MSD Sample Collected?** *Yes* ☐ *No* ☐

Was there enough sample volume to fill all sample jars? *Yes* ☐ *No* ☐ explain: _____

Depth to Bottom of Well (measure after sampling): _____ **Depth to DNAPL:** _____

5. COMMENTS _____

GROUNDWATER PURGE AND SAMPLING FIELD SHEET

Well ID: MW-5

1. PROJECT INFORMATION:

Site: Orangetown Shopping Center **Client:** UB Orangeburg, LLC **Date:** _____

Address: 1-45 Orangetown Shopping Ctr. **Project #:** 1102825 **Sampler:** _____

Orangeburg, New York **NYSDEC Site #:** C344066 **Weather:** _____

2. MONITORING WELL DATA:

Depth to Water: _____ **Depth to Bottom (last round):** _____

Casing Diameter: _____ **Calculated Purge Amount:** _____ *gallons*

Purge Volume Calculation:

(DTB - DTW)*X = _____ (1well volume in gallons)

X	0.041	0.163	0.367	0.653	
Well Diameter	1"	2"	3"	4"	*Remove at least 3 well volumes*

3. PURGE DATA

Purge Method: Dedicated Teflon Bailers **Did well recharge?** *Yes* ☐ *No* ☐

Did well purge dry? *Yes* ☐ *No* ☐ **Depth to Water after purge:** _____

Actual Purge Amount: _____ gallons **Depth to Water after recharge:** _____

Water Quality Meter Model: _____ **Time elapsed for recharge:** _____

Observe water quality parameters following removal of each well volume:

	pH	Temperature	Conductivity	DO	ORP	Turbidity	Comments or Observations
First Volume							
Second Volume							
Third Volume*							

** - Sample water parameters. If well ran dry, record the parameters of any remaining sample water here.*

4. SAMPLE DATA

Sample ID: _____ **Depth to Water at time of Sampling:** _____

Sample Time: _____ **Number of Containers:** _____

Analyses: _____ **Duplicate Sample Collected?** *Yes* ☐ *No* ☐

_____ **MS/MSD Sample Collected?** *Yes* ☐ *No* ☐

Was there enough sample volume to fill all sample jars? *Yes* ☐ *No* ☐ explain: _____

Depth to Bottom of Well (measure after sampling): _____ **Depth to DNAPL:** _____

5. COMMENTS _____

GROUNDWATER PURGE AND SAMPLING FIELD SHEET

Well ID: MW-8A

1. PROJECT INFORMATION:

Site: Orangetown Shopping Center **Client:** UB Orangeburg, LLC **Date:** _____

Address: 1-45 Orangetown Shopping Ctr. **Project #:** 1102825 **Sampler:** _____

Orangeburg, New York **NYSDEC Site #:** C344066 **Weather:** _____

2. MONITORING WELL DATA:

Depth to Water: _____ **Depth to Bottom (last round):** _____

Casing Diameter: _____ **Calculated Purge Amount:** _____ *gallons*

Purge Volume Calculation:

(DTB - DTW)*X = _____ (1well volume in gallons)

X	0.041	0.163	0.367	0.653	
Well Diameter	1"	2"	3"	4"	*Remove at least 3 well volumes*

3. PURGE DATA

Purge Method: Dedicated Teflon Bailers **Did well recharge?** *Yes* ☐ *No* ☐

Did well purge dry? *Yes* ☐ *No* ☐ **Depth to Water after purge:** _____

Actual Purge Amount: _____ gallons **Depth to Water after recharge:** _____

Water Quality Meter Model: _____ **Time elapsed for recharge:** _____

Observe water quality parameters following removal of each well volume:

	pH	Temperature	Conductivity	DO	ORP	Turbidity	Comments or Observations
First Volume							
Second Volume							
Third Volume*							

** - Sample water parameters. If well ran dry, record the parameters of any remaining sample water here.*

4. SAMPLE DATA

Sample ID: _____ **Depth to Water at time of Sampling:** _____

Sample Time: _____ **Number of Containers:** _____

Analyses: _____ **Duplicate Sample Collected?** *Yes* ☐ *No* ☐

_____ **MS/MSD Sample Collected?** *Yes* ☐ *No* ☐

Was there enough sample volume to fill all sample jars? *Yes* ☐ *No* ☐ explain: _____

Depth to Bottom of Well (measure after sampling): _____ **Depth to DNAPL:** _____

5. COMMENTS _____

BAS OPERATION, MAINTENANCE, AND MONITORING DATA SHEET
GROUNDWATER MONITORING EVENT

Site ID:	Orangetown Shopping Center	Date:	
NYSDEC Site #:	C344066	Name:	
Site Address:	1-45 Orangetown Shopping Center Orangeburg, New York		

Injection Well or Monitoring Well Location (ID)	Sampled?	pH within range of 6 to 8? (If pH<6, titrate)	Titration of 100mL groundwater with O.1M Sodium Bicarbonate (NaH_2CO_3) Solution			Notes:
			Titration 1 Volume	Titration 2 Volume	Titration 3 Volume	
MW-5	YES / NO	YES / NO				

Molasses Injection Data Sheet

System ID: Orangeburg Shopping Center
NYSDEC Site ID: C344066
Site Address: 1-45 Orangetown Shopping Center
Orangeburg, New York 10962

Name:
Date:

Location	Injected Solution	Volume (gallons)	Notes

Additional Notes:

BAS OPERATION, MAINTENANCE, AND MONITORING DATA SHEET
ANNUAL INSPECTION

System ID: Orangeburg Shopping Center
NYSDEC Site ID: C344066
Site Address: 1-45 Orangetown Shopping Center
Orangeburg, New York 10962

Name:
Date:

Location	Visual Inspection Completed?		Is Condition Satisfactory?		Secure?		Any Maintenance Required?		Photo Taken?		Notes	
Piping Stub-Ups/Security Cabinet	Y	N	Y	N	Y	N	Y	N	Y	N		
Well pad/Wellhead at IP-1												
Well pad/Wellhead at IP-2												
Well pad/Wellhead at IP-3												
Well pad/Wellhead at IP-4												
Well pad/Wellhead at MW-3												

Notes:

- If condition of any location is not satisfactory a photo must be take.

- If any location requires maintenance the required maintenance shall be noted on this data sheet in the Notes section.

Site Name, Address **Urstadt - Orangetown Shopping Center/Sparkle Cleaners, 1-45 Orangetown Shopping Ctr, Orangeburg, NY**

Inspection Date ____________________

TAKE PHOTOS OF EACH WELL (IF ALLOWED)

Well ID	Observations Upon Arrival																	Note Repairs Made Detailed Explanation of Maintenance Recommended and Performed	Photos of Well Condition	
	Manway Cover Type		Condition		Size (in)	Bolt Condition		Labeled Properly[1]		Well Cap (Gripper) Condition		Well Lock Condition			Well Pad Condition					
	Standpipe	Flush	G	P	Size	G	P	Y	N	G	P	G	P	NL	G	P			Y	N
	Standpipe	Flush	G	P	Size	G	P	Y	N	G	P	G	P	NL	G	P			Y	N
	Standpipe	Flush	G	P	Size	G	P	Y	N	G	P	G	P	NL	G	P			Y	N
	Standpipe	Flush	G	P	Size	G	P	Y	N	G	P	G	P	NL	G	P			Y	N
	Standpipe	Flush	G	P	Size	G	P	Y	N	G	P	G	P	NL	G	P			Y	N
	Standpipe	Flush	G	P	Size	G	P	Y	N	G	P	G	P	NL	G	P			Y	N
	Standpipe	Flush	G	P	Size	G	P	Y	N	G	P	G	P	NL	G	P			Y	N
	Standpipe	Flush	G	P	Size	G	P	Y	N	G	P	G	P	NL	G	P			Y	N
	Standpipe	Flush	G	P	Size	G	P	Y	N	G	P	G	P	NL	G	P			Y	N
	Standpipe	Flush	G	P	Size	G	P	Y	N	G	P	G	P	NL	G	P			Y	N
	Standpipe	Flush	G	P	Size	G	P	Y	N	G	P	G	P	NL	G	P			Y	N
	Standpipe	Flush	G	P	Size	G	P	Y	N	G	P	G	P	NL	G	P			Y	N

Condition of Soil Boring Patches or Abandoned Monitoring Wells:	G	P	N/A		If POOR, identify borings/Well IDs or describe location and note on map. Note if patch is sinking below surrounding surface.	

G = Good (acceptable) **P** = Poor (needs attention) **NL** = No Lock Present

(1) = Monitoring well covers must be painted & labeled in accordance w/applicable regulations.

All environmental wells were in good condition, locked, and secured on my departure (unless otherwise noted above).

Photo Best Practice: Place a white board with the well ID next to the well when photographing it - manhole lid off, unlocked, well open, with plug next to well

____

Print or type Name of Field Personnel

Site Name, Address **Urstadt - Orangetown Shopping Center/Sparkle Cleaners, 1-45 Orangetown Shopping Ctr, Orangeburg, NY**

Inspection Date ____________________

TAKE PHOTOS OF EACH WELL (IF ALLOWED)

Well ID	Observations Upon Arrival																	Note Repairs Made Detailed Explanation of Maintenance Recommended and Performed	Photos of Well Condition	
	Manway Cover Type		Condition		Size (in)	Bolt Condition		Labeled Properly[1]		Well Cap (Gripper) Condition		Well Lock Condition			Well Pad Condition					
	Standpipe	Flush	G	P	Size	G	P	Y	N	G	P	G	P	NL	G	P			Y	N
	Standpipe	Flush	G	P	Size	G	P	Y	N	G	P	G	P	NL	G	P			Y	N
	Standpipe	Flush	G	P	Size	G	P	Y	N	G	P	G	P	NL	G	P			Y	N
	Standpipe	Flush	G	P	Size	G	P	Y	N	G	P	G	P	NL	G	P			Y	N
	Standpipe	Flush	G	P	Size	G	P	Y	N	G	P	G	P	NL	G	P			Y	N
	Standpipe	Flush	G	P	Size	G	P	Y	N	G	P	G	P	NL	G	P			Y	N
	Standpipe	Flush	G	P	Size	G	P	Y	N	G	P	G	P	NL	G	P			Y	N
	Standpipe	Flush	G	P	Size	G	P	Y	N	G	P	G	P	NL	G	P			Y	N
	Standpipe	Flush	G	P	Size	G	P	Y	N	G	P	G	P	NL	G	P			Y	N
	Standpipe	Flush	G	P	Size	G	P	Y	N	G	P	G	P	NL	G	P			Y	N
	Standpipe	Flush	G	P	Size	G	P	Y	N	G	P	G	P	NL	G	P			Y	N
	Standpipe	Flush	G	P	Size	G	P	Y	N	G	P	G	P	NL	G	P			Y	N

Condition of Soil Boring Patches or Abandoned Monitoring Wells:	G	P	N/A		If POOR, identify borings/Well IDs or describe location and note on map. Note if patch is sinking below surrounding surface.	

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Print or type Name of Field Personnel