American Felt & Filter Fabric Company (AFFCO)

NEW WINDSOR, NEW YORK

Site Management Plan

Consent Order Index #W3-0784-04-06
Site #3-36-036

Prepared for:
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361 Walsh Avenue
New Windsor, New York 12553

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Revisions to Final Approved Site Management Plan:

Revision #	Submitted Date	Summary of Revision	DEC Approval Date
1	4/20/2020	Reduction in groundwater monitoring schedule	5/6/2020
2	11/9/2022	Reduction in groundwater monitoring program	12/1/2022

DECEMBER 2022

CERTIFICATIONS

I, Arnold F. Fleming, PE, 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) and that all activities were performed in full accordance with the DER-approved work plan and any DER-approved modifications.



NYS P.E. No.	Date	Signature
	12/20/2022	Arnold F. Fleming

TABLE OF CONTENTS

1.0 Introduction and Description of Remedial Program 5

1.1 Introduction 5

1.1.1 General 5
1.1.2 Purpose 6
1.1.3 Revisions 7

1.2 Site Background 7

1.2.1 Site Location and Description 7
1.2.2 Site History 7
1.2.3 Geologic Conditions 8

1.3 Summary of Remedial Investigation Findings 8

1.3.1 January 1988 8
1.3.2 December 1988 9
1.3.3 September 1994 9
1.3.4 August 1998 9
1.3.5 October 2001 10
1.3.6 October 2009 10
1.3.7 June 2012- June 2013 10

1.4 Summary of Site Remedy 11

1.4.1 Summary of Remedial Actions 11
1.4.2 Removal of Contaminated Materials from the Site 11
1.4.2 Site-Related Treatment Systems 12
1.4.3 Remaining Contamination 12

2.0 Engineering and Institutional Control Plan 14

2.1 Introduction 14

2.1.1 General 14
2.1.2 Purpose 14

2.2 Engineering Controls 15

2.2.1 Engineering Control Systems 15
2.2.2 Criteria for Completion of Remediation/Termination of Remedial Systems 15

2.3 Institutional Controls 16

2.3.1 Excavation Work Plan 17
2.3.2 Soil Vapor Intrusion Evaluation 18

2.4 Inspections and Notifications 18

2.4.1 Inspections 18
2.4.2 Notifications 19

2.5 Contingency Plan 20
2.5.1 Emergency Telephone Numbers 20
2.5.2 Map and Directions to Nearest Health Facility 20
2.5.3 Response Procedures 21
3.0 Site Monitoring Plan 23
3.1 Introduction 23
3.1.1 General 23
3.1.2 Purpose and Schedule 23
3.2 Soil Cover System Monitoring 24
3.3 Media Monitoring Program 25
3.3.1 Groundwater Monitoring 25
3.3.2 Contingency Dissolved Groundwater Remediation 27
3.3.3 SSDS Monitoring and Inspection 27
3.4 Site-Wide Inspection 27
3.5 Monitoring Quality Assurance/Quality Control 28
3.6 Monitoring Reporting Requirements 29
4.0 Operation and Maintenance Plan 31
4.1 Introduction 31
4.2 Engineering Control System Operation and Maintenance 31
4.2.1 Sub-Slab Depressurization System 31
4.3 Engineering Control System Performance Monitoring 32
4.3.1 Protective Soil Cover 32
4.3.2 Sub-Slab Depressurization System 32
4.4 MAINTENANCE AND PERFORMANCE MONITORING REPORTING REQUIREMENTS 33
4.4.1 Routine Maintenance Reports 33
4.4.2 Non-Routine Maintenance Reports 33
5.0 Inspections, Reporting and Certifications 35
5.1 Site Inspections 35
5.1.1 Inspection Frequency 35
5.1.2 Inspection Forms, Sampling Data, and Maintenance Reports 35
5.1.3 Evaluation of Records and Reporting 35
5.2 Certification of Engineering and Institutional Controls 36
5.3 Periodic Review Report 36
5.4 Corrective Measures Plan 37

TABLES

Table 1 Results above TOGS Groundwater Criteria (in text)
Table 2 Emergency Contact Numbers (in text)
Table 3 Other Contact Numbers (in text)
Table 4 Monitoring/Inspection Schedule (in text)
Table 5 Schedule of Monitoring/Inspection Reports (in text)

FIGURES

Figure 1 Site Layout
Figure 2 Site Plan, Remedial Excavation, and Injection Locations
Figure 3 Geologic Cross-section
Figure 4 Groundwater Contour Map
Figure 5A Post-excavation Soil Sampling Locations and Results Summary
Figure 5B Post-treatment Soil Sampling Locations and Results and Results Summary
Figure 6 Route to Hospital (in text)
Figure 7 Post-treatment Groundwater VOC Results above TOGS and Groundwater Contour Map
Figure 8 Piano Felt Building SSDS As-Built

APPENDICES

Appendix A Property Metes & Bounds Description & Environmental Easement
Appendix B Project Reports
Appendix C Excavation Work Plan
Appendix D Health and Safety Plan
Appendix E CAMP Work Plan
Appendix F Monitoring Well Construction Logs
Appendix G Quality Assurance Project Plan
Appendix H Groundwater Monitoring Well Sampling Log Form
Appendix I Site- Inspection Form

SITE MANAGEMENT PLAN

1.0 INTRODUCTION AND DESCRIPTION OF REMEDIAL PROGRAM

1.1 INTRODUCTION

This document is required as an element of the remedial program at the American Felt & Filter Company (AFFCO) property located at 361 Walsh Avenue in New Windsor, Orange County, New York (Site), which is identified by the New York State Department of Environmental Conservation (NYSDEC) as an Inactive Hazardous Waste Site. The Site was remediated in accordance with NYSDEC Consent Order No. W3-0784-04-06. The consent order was executed on November 17, 2004.

1.1.1 General

The Site has been used for felt production for over 100 years. Investigation of the Site was initially undertaken when traces of 1,1,1- trichloroethane (TCA) were measured in water samples collected from a storm water outfall, which discharged to Quassaick Creek. The Site was placed on NYSDEC's List of Inactive Hazardous Waste Sites in 1991 (Site Code 3-36-036), due to the potential threat to the stream that borders the Site, Quassaick Creek. The facility stopped using TCA in 1992 when the production line in the Feutron Building was shut down.

The source of TCA was believed to have been past leaks and spills from a process area and the drum storage area near the Feutron Building. Site conditions were assessed during six sampling programs conducted in January and December 1988, September 1994, August 1998, October 2001, April 2011, and most recently in 2012.

All post-treatment and endpoint samples met the Site soil cleanup standards after completing the remedial work outlined in the Remedial Action Work Plan (RAWP). The Site cleanup standards for soils are the Part 375 Commercial Use Soil Cleanup Objectives (SCO). Nearly all of the post-treatment soils met the more stringent Residential Use SCOs.

This SMP was prepared by Fleming, Lee Shue Environmental Engineering and Geology D.P.C. (FLS), on behalf of AFFCO in accordance with the requirements in NYSDEC DER-10 Technical Guidance for Site Investigation and Remediation, dated May 2010, and the guidelines

provided by NYSDEC. This SMP addresses the means for implementing the Institutional Controls (IC) and Engineering Controls (EC) that are required in the Site Soil Management Area and for the sub-slab depressurization system (SSDS).

1.1.2 Purpose

The Site contains low levels of contamination after completion of the remedial action. A Soil Management area and SSDS area granted to NYSDEC and recorded with the Office of the City Register will require compliance with this SMP and all ECs and ICs placed on the Site. The Environmental Easement, included as Appendix A, includes the Soil Management and SSDS areas.

The ICs place restrictions on Site use, and mandate operation, maintenance, monitoring and reporting measures for all ECs and ICs. This SMP specifies the methods necessary to ensure compliance with all ECs and ICs required by the Environmental Easement for contamination that remains at the Site. This plan has been approved by the NYSDEC, and compliance with this plan is required by the Grantor of the Environmental Easement and the Grantor's successors and assigns. This SMP may only be revised with the approval of the NYSDEC.

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

To address these needs, this SMP includes two plans: (1) an Engineering and Institutional Control Plan for implementation and management of EC/ICs and (2) a Monitoring Plan for implementation of Site Monitoring. This plan also includes a description of PRRs for the periodic submittal of data, information, recommendations, and certifications to NYSDEC.

It is important to note that:

- This SMP details the Site-specific implementation procedures that are required by the Soil Management and SSDS areas. Failure to properly implement the SMP is a violation of the Environmental Easement, which are grounds for revocation of the Release from Liability and Covenant not to Sue.
- Failure to comply with this SMP is also a violation of Environmental Conservation Law, 6 NYCRR Part 375 and the Consent Order for the Site, and thereby subject to applicable penalties.

1.1.3 Revisions

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

1.2 SITE BACKGROUND

1.2.1 Site Location and Description

The Site is an active manufacturing facility located on the north side of Walsh Avenue, west of River Road in New Windsor, New York (Figure 1). The Site lies on the south side of Quassaick Creek, which flows into the Hudson River approximately 0.2 miles east of the Site. The surrounding area has a mixture of land uses, including industrial, commercial and residential. Potable water is supplied by the New Windsor Water Department.

The entire property occupies 23.185 acres, much of it is wooded and undeveloped. The Site operational area occupies approximately nine acres. The nine-acre operational area includes several large buildings, parking, open lawn and wooded areas, and encompasses the Environmental Easement. The Environmental Easement covers 0.5454 acres and is made up of the Soil Management area (0.3845 acres) and a SSDS area (0.1609 acres) (Figure. 2). The Site boundaries are more fully described in the metes and bounds Site description that is part of the Environmental Easement (Appendix A).

1.2.2 Site History

The AFFCO Site manufactures a variety of felt and filter products. The Site has been used for felt production for over 100 years. Prior to 1978, the Site was owned and operated by the GAF Corporation, who manufactured the same products as AFFCO. During both GAF's and AFFCO's ownership, the facility used TCA as a solvent and carrier for zinc resinate which was used to impregnate felt sheets in the Feutron Building. TCA was stored in 55-gallon drums just outside the Feutron Building. Approximately 35 to 40 drums of TCA were generally present onsite during regular operations. Site investigations performed in 1988 found that groundwater and soil in the area near the Feutron Building contained TCA. The source of the contamination is believed to be a historic leakage within the process area and spillage in the drum storage area.

The Site was placed on NYSDEC's List of Inactive Hazardous Waste Sites in 1991, due to the potential threat to Quassaick Creek. The facility stopped using TCA in 1992 when the production line in the Feutron Building was shut down.

1.2.3 Geologic Conditions

Lithology

The lithology within the treatment area consists of fill over alluvium underlain by glacial till. The soils consist of a mixture of fill over native soils. The fill lies from approximately 2 to 8 feet below grade and consists of a mixture of ash, cinders, brick, coal and concrete fragments in a silty sand and sandy silt matrix. This is underlain by grey to black silty sands and sandy silt. Below lies a compact glacial till that begins at approximately 13 to 15 feet below grade. Figure 3 depicts a geologic cross-section.

Hydrogeology

Depth to groundwater fluctuates depending on the season and amount of precipitation but is typically 8 to 10 feet below grade. Shallow groundwater flows northeast towards Quassaick Creek. Figure 4 depicts a groundwater contour map.

1.3 SUMMARY OF REMEDIAL INVESTIGATION FINDINGS

Previous investigation findings are summarized below. Additionally, Appendix B contains copies of previous reports.

1.3.1 January 1988

This initial study involved groundwater and surface water sampling. All of the groundwater monitoring wells sampled had TCA levels above the 1.1.1 Technical and Operation Guidance Series GA Ambient Water Quality Standard (TOGS) of 5 µg/L. Monitoring well S-6, the monitoring well on the western portion of the Site, contained 91 µg/L of TCA. This portion of the Site was apparently used for equipment storage.

Three surface water samples were collected from Quassaick Creek and analyzed for TCA. The surface water collected in the upstream portion of the creek did not contain any TCA, while

the portion of the creek immediately downstream of the drum storage area contained 33 µg/L. The creek sample collected from the downstream east edge of the Site contained 22 µg/L of TCA.

1.3.2 December 1988

A second round of groundwater sampling was conducted to assess whether the TCA levels had changed over time. The TCA concentrations detected during December 1988 were approximately less than half of the levels detected in January 1988. Soil conditions near the Feutron Building were evaluated to determine if there were any impacts from past surface spills. Soil sampling found that a 50-ft. by 50-ft. area north of the Feutron Building had TCA impacts above the NYSDEC Technical and Administrative Guidance Memorandum (TAGM 4046) Recommended Soil Cleanup Objectives (RSCO) of 800 µg/kg. The TAGM criteria were in effect at the time; however, the Part 375 Commercial Use Soil Cleanup Criteria are now in effect.

1.3.3 September 1994

A third round of groundwater monitoring was conducted, after the use of TCA at the Site had ceased, to assess the groundwater conditions and to guide future Site work. TCA concentrations in groundwater in the two wells near the drum storage area, S-8 (shallow) and E-1 (the former production well), which initially measured 1,400 and 2,800 µg/L of TCA, respectively, were found to contain 48 µg/L and 10 µg/L of TCA, respectively.

1.3.4 August 1998

In August 1998, the Site was investigated again to assess site conditions. This program examined soil, soil gas, and groundwater throughout the Site. Soil gas samples were collected and analyzed for organic vapors, an indication of contaminated soils. In areas where concentrations of organic vapors were found to be elevated, soil samples were collected and analyzed for volatile organic compounds (VOC). Groundwater from all monitoring wells was also sampled during this investigation. The soil gas survey found that soil contamination was generally limited to where TCA was stored and used. Groundwater sampling found that TCA above the groundwater standards occurred only in the wells immediately adjacent to the TCA storage and use area.

1.3.5 October 2001

Soil gas in the northwest corner (inside and outside) of the Feutron Building was resampled. Select soil and groundwater samples were also taken from this area. In addition, all of the Site's monitoring wells were sampled. Because there were no records on the construction details of the former production well (E-1), a new bedrock (E-1 New) well was installed adjacent to E-1. Soil samples were collected during the installation of E-1 New and none were found to exceed the RSCO of 800 µg/kg. The soil gas sampling results indicated that seven locations exhibited elevated levels of organic vapors, which prompted soil samples to be obtained from these areas and analyzed for VOCs. Four of the soil samples contained elevated levels of TCA that exceeded the RSCO.

1.3.6 October 2009

Soil gas and indoor air sampling were performed in December 2009. The results of the sampling indicated the presence of elevated concentrations of TCA in the soil gas and indoor air in the Piano Felt Building. As a result, a SSDS was installed beneath the Piano Felt Building in October 2010.

1.3.7 June 2012- June 2013

Baseline soil and groundwater sampling occurred in May 2012 through July 2012. The purpose of this sampling was to establish pre-treatment soil and groundwater conditions prior to remediation. Remediation occurred within this time period and included *in situ* chemical oxidation and excavation at the former Feutron Building.

Excavation endpoint samples and post-treatment samples were collected in August 2012 and March 2013, respectively. The post-treatment and endpoint sample results all met the Site cleanup standards (Commercial Use SCOs), but most of the results met the more stringent Residential Use SCOs. Post-treatment groundwater samples indicated very large reductions in VOCs in groundwater, although a number of VOC compounds were above TOGS criteria. A number of VOCs met the TOGS GA criteria.

1.4 SUMMARY OF SITE REMEDY

1.4.1 Summary of Remedial Actions

1. January 1988 to May 2012 - Soil and groundwater samples collected to characterize contaminant concentrations.
2. SSDS was installed beneath the Piano Felt Building in October 2010.
3. July 2012 - Chemical oxidation via *in situ* injection for VOCs in the saturated zone to till layer in the treatment zone, followed by post-treatment and excavation endpoint sampling to confirm treatment.
4. August to September 2012 - Excavation and *ex situ* treatment of VOCs in unsaturated soil followed by post-treatment sampling to confirm treatment. *ex situ* treatment consisted of placing the excavated soils on plastic sheeting, allowing the soils to remain exposed for some time, and testing to verify they met the SCOs before backfilling the remedial excavation.
5. December 2012 to June 2013 - Backfill of excavation with *ex situ* treatment of soils to grade. Installation of protective cover and institutional control over treatment area.

1.4.2 Removal of Contaminated Materials from the Site

Based on the results of the Remedial Investigation, the following Remedial Action Objectives (RAO) were identified for this Site.

Groundwater

RAOs for Public Health Protection

- Prevent ingestion of groundwater containing contaminant levels exceeding drinking water standards.
- Prevent contact with, or inhalation of, volatiles emanating from contaminated groundwater.
- The remedial action objectives for groundwater are the TOGS ambient water quality standards or asymptotic levels of VOCs in groundwater following acceptable levels of treatment.

RAOs for Environmental Protection

- Restore ground water aquifer, to the extent practicable, to pre-disposal/pre-release conditions.
- Prevent the discharge of contaminants to surface water.

- Prevent further off-site migration of contaminated groundwater.
- Remove the source of groundwater contamination.

Soil

RAOs for Public Health Protection

- Prevent ingestion/direct contact with contaminated soil.
- Prevent inhalation of, or exposure to, contaminants volatilizing from contaminated soil.
- The soil remedial action objectives are the Part 375 Commercial Use SCOs and a 90 percent reduction in contaminant mass as defined by the sum of the VOCs.

RAOs for Environmental Protection

- Prevent migration of contaminants that would result in groundwater contamination. Prevent impacts to biota due to ingestion/direct contact with contaminated soil that would cause toxicity or bioaccumulation through the terrestrial food chain.

Surface Water RAOs

There is no surface water on the Environmental Easement of the site, so the remedial action did not address this medium.

Sediment RAOs

There are no sediment areas on the Environmental Easement of the site, so the remedial action did not address this medium.

Soil Vapor, RAOs for Public Health Protection

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

1.4.2 Site-Related Treatment Systems

The Site has an operating SSDS at the Piano Building. The Piano Building is used only periodically.

1.4.3 Remaining Contamination

All remediated soil is below the Site cleanup criteria, the Part 375 Commercial Use SCOs Figures 5A and 5B depict the post-treatment sampling results. Groundwater above TOGS GA criteria includes the following:

Table 1: Results above TOGS GA Groundwater Criteria

Sample	Parameter	Result, µg/L	TOGS GA, µg/L
EW-1X	Iron	934,000	300
EW-1X	1,1-Dichloroethane	22.9	5
S-8	Iron	5,790	300
S-8	1,1-Dichloroethane	11.8	5
S-8	1,2-Dichloroethane	0.70	0.6
EW-0	Iron	546	300
EW-0	Chloroethane	334	5
EW-0	1,1-Dichloroethane	2,540	5
EW-0	1,2-Dichloroethane	17.5	0.6
EW-0	1,1-Dichloroethene	144	5
EW-0	Toluene	8.0	5
EW-0	1,1,1-Trichloroethane	8,630	5
EW-0	1,1,2-Trichloroethane	2.3	1
EW-0	Vinyl chloride	4.8	2
E1-N	Iron	804	300
E1-N	Chloroethane	73.9	5
E1-N	1,1-Dichloroethane	154	5
E1-N	1,1,1-Trichloroethane	48.4	5
MW-1N	Iron	805	300
MW-1N	Chloroethane	136	5
MW-1N	1,1-Dichloroethane	438	5
MW-1N	1,2-Dichloroethane	5.2	0.6
MW-1N	1,1-Dichloroethene	36.6	5
MW-1N	1,1,1-Trichloroethane	1,560	5
MW-1N	Trichloroethene	6.2	5

2.0 ENGINEERING AND INSTITUTIONAL CONTROL PLAN

2.1 INTRODUCTION

2.1.1 General

After completion of the remedial work described in the Remedial Action Work Plan, some contamination was left in the subsurface at this Site, which is hereafter referred to as "remaining contamination." Since remaining contamination (soil and groundwater) exist beneath the Site, ECs and ICs are required to protect human health and the environment. This Engineering and Institutional Control Plan describes the procedures for the implementation and management of all EC/ICs at the Site. The EC/IC Plan is one component of the SMP and is subject to revision by NYSDEC.

2.1.2 Purpose

This plan provides:

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

2.2 ENGINEERING CONTROLS

2.2.1 Engineering Control Systems

2.2.1.1 Vapor Barrier

Vapor barriers are not applicable to this Site as the soil treatment area remains open with no overlying building.

2.2.1.2 Sub-Slab Depressurization Systems

Sub-slab depressurization systems are not applicable to the soil treatment area as the area is in the open. A SSDS operates in the Piano Felt Building.

2.2.2 Criteria for Completion of Remediation/Termination of Remedial Systems

Generally, remedial processes are considered completed when effectiveness monitoring indicates that the remedy has achieved the remedial action objectives identified by the decision document. The framework for determining when remedial processes are complete is provided in Section 6.6 of NYSDEC DER-10. The applicable Site cleanup criteria are as follows:

- Each soil stockpile of on-Site excavated soil will be sampled for VOCs. Soil containing concentrations of TCA that exceed the NYSDEC Part 375 Regulations - Restricted Use SCOs for Commercial Sites will be disposed off-Site at an approved facility.

  Soil containing TCA concentrations less than the SCOs will be placed back in the remedial excavation. All soils will be handled in accordance with the Soil Management Plan.
- Following the completion of all remedial measures, the excavation will be backfilled with soil that meets NYSDEC Part 375 Regulations-Restricted Use SCOs for Commercial sites and will not exceed the lower of the commercial use or protection of groundwater SCOs.
- The goal of the groundwater remedy is to meet TOGS or asymptotic levels of VOCs in groundwater following acceptable levels of treatment.

2.2.2.1 Sub-Slab Depressurization System

A SSDS operates in the Piano Felt Building. The SSDS will not be discontinued unless prior written approval is granted by the NYSDEC.

2.3 INSTITUTIONAL CONTROLS

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

- Compliance with the Environmental Easement and this SMP by the Grantor and the Grantor's successors and assigns;
- All Engineering Controls must be operated and maintained as specified in this SMP;
- All Engineering Controls on the Site must be inspected at a frequency and in a manner defined in this SMP.
- Groundwater, and other environmental or public health monitoring must be performed as defined in this SMP;
- Data and information pertinent to Site Management of the Controlled Property must be reported at the frequency and in a manner defined in this SMP;
- On-Site environmental monitoring devices, including but not limited to, groundwater monitoring wells, must be protected and replaced as necessary to ensure proper functioning in the manner specified in the SMP;
- Engineering Controls may not be discontinued without an amendment or extinguishment of the Environmental Easement.

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

- The controlled property area may only be used for commercial use provided that the long-term Engineering and Institutional Controls included in this SMP are employed.
- The controlled property area may not be used for a higher level of use, such as unrestricted or restricted residential, use without additional remediation and amendment of the Environmental Easement, as approved by the NYSDEC;
- All future activities on the controlled property area that will disturb remaining contaminated material must be conducted in accordance with this SMP;
- The use of the groundwater underlying the property is prohibited without treatment rendering it safe for intended use;

- The potential for vapor intrusion must be evaluated for any new buildings on Site and any potential impacts that are identified must be monitored or mitigated;
- Vegetable gardens and farming on the property are prohibited;
- The Site owner or remedial party will submit to NYSDEC a written statement that certifies, under penalty of perjury, that: (1) controls employed at the Controlled Property are unchanged from the previous certification or that any changes to the controls were approved by the NYSDEC; and, (2) nothing has occurred that impairs the ability of the controls to protect public health and environment or that constitute a violation or failure to comply with the SMP. NYSDEC retains the right to access such Controlled Property at any time in order to evaluate the continued maintenance of any and all controls. This certification shall be submitted annually, or an alternate period of time that NYSDEC may allow and will be made by an expert that the NYSDEC finds acceptable.

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

2.3.1 Excavation Work Plan

The Site has been remediated for commercial use. Any future intrusive work that will penetrate the surface soils in the soil treatment area, or encounter or disturb the remaining contamination, including any modifications or repairs to the existing cover system will be performed in compliance with the Excavation Work Plan (EWP) that is attached as Appendix C to this SMP. Any work conducted pursuant to the EWP must also be conducted in accordance with the procedures defined in the Health and Safety Plan (HASP) and Community Air Monitoring Plan (CAMP) Work Plan prepared for the Site. The HASP and CAMP Work Plan are attached as Appendix D and Appendix E, respectively.

These documents are in current compliance with DER-10, and 29 CFR 1910, 29 CFR 1926, and all other applicable Federal, State and local regulations. Based on future changes to State and federal health and safety requirements, and specific methods employed by future contractors, the HASP and CAMP will be updated and re-submitted with the notification provided in Section C-1 of the EWP. Any intrusive construction work will be performed in compliance with the EWP, HASP and CAMP, and will be included in the periodic inspection and certification reports submitted under the Site Management Reporting Plan (See Section 5).

The Site owner and associated parties preparing the remedial documents submitted to the State, and parties performing this work, are completely responsible for the safe performance of all intrusive work, the structural integrity of excavations, proper disposal of excavation de-water, control of runoff from open excavations into remaining contamination, and for structures that may

be affected by excavations (such as building foundations and bridge footings). The Site owner will ensure that Site development activities will not interfere with, or otherwise impair or compromise, the engineering controls described in this SMP.

2.3.2 Soil Vapor Intrusion Evaluation

A Soil Vapor Intrusion Evaluation is not needed as the remediated area is in the open without any overtopping building. However, prior to the development of any building on-Site in areas of remaining contamination, a soil vapor intrusion evaluation will be performed to determine if mitigation measures are necessary to eliminate potential exposure to vapors in the proposed structure.

2.4 INSPECTIONS AND NOTIFICATIONS

2.4.1 Inspections

Inspections of all remedial components installed at the Site will be conducted at the frequency specified in the SMP Monitoring Plan schedule. A comprehensive Site-wide inspection will be conducted annually, regardless of the frequency of the PRR. 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;
- Sampling and analysis of appropriate media during monitoring events;
- That prior to development of any buildings on-site in areas of remaining contamination, an SVI evaluation be performed to determine if mitigation measures are necessary to eliminate potential exposure to vapors;
- If Site records are complete and up to date; and
- Changes, or needed changes, to the remedial or monitoring system;

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

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

2.4.2 Notifications

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

- 60-day advance notice of any proposed transfer of ownership.
- At least 60 days advance notice of any proposed change in Site use
- 7-day advance notice of any proposed ground-intrusive activities pursuant to the EWP.
- Notice within 48-hours of any damage or defect to the foundation structures that reduces or has the potential to reduce the effectiveness of other ECs and likewise any action to be taken to mitigate the damage or defect.
- Verbal notice by noon of the following day of any emergency, such as a fire, flood, or earthquake that reduces or has the potential to reduce the effectiveness of 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.
- Follow-up status reports on actions taken to respond to any emergency event requiring ongoing responsive action shall be submitted to the NYSDEC within 45 days and shall describe and document actions taken to restore the effectiveness of the ECs.

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

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

2.5 CONTINGENCY PLAN

Emergencies may include injury to personnel, fire or explosion, environmental release, or serious weather conditions.

2.5.1 Emergency Telephone Numbers

In the event of any environmentally related situation or unplanned occurrence requiring assistance the Owner or Owner's representative(s) should contact the appropriate party from the contact list below. For emergencies, appropriate emergency response personnel should be contacted. Prompt contact should also be made to the Owner's designated Site Representative. These emergency contact lists must be maintained in an easily accessible location at the Site during and after completion of Site development construction.

Table 2: Emergency Contact Numbers

Medical, Fire, and Police	911
One Call Center	(800) 272-4480 (3 day notice required for utility mark out)
Poison Control Center	(800) 222-1222
Pollution Toxic Chemical Oil Spills	(800) 424-8802
NYSDEC Spills Hotline	(800) 457-7362

Table 3: Other Contact Numbers

Linda Miranda, Owner's Designated Site Representative	(845) 561-3560
Arnold Fleming, P.E. Remedial Engineer Steven Panter, CGWP, PG, Project Manager	(212) 675-3225
John Spellman, NYSDEC Project Manager	(518) 402-9686

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

2.5.2 Map and Directions to Nearest Health Facility

Site Location: 361 Walsh Avenue, New Windsor, New York. See route to the hospital below.

Figure 6: Route to Hospital



St Luke's Hospital:
70 Dubois St, Newburgh, NY 12550, US

Directions Distance: **Total Est. Time:** 5 minutes **Total Est. Distance:** 1.59 miles

1: Start out going WEST on WALSH AVE toward PLYMPTON ST. 0.1 miles

2: Turn SLIGHT RIGHT onto QUASSAICK AVE / US-9W. Continue to follow US-9W. 1.0 miles

3: Turn RIGHT onto 1ST ST. 0.3 miles

4: Turn LEFT onto DUBOIS ST. <0.1 miles

5: End at **St Luke's Hospital:**

2.5.3 Response Procedures

As appropriate, the fire department and other emergency response group will be notified immediately by telephone of the emergency. The emergency telephone number list is found at the beginning of this Contingency Plan (Table 2).

If a spill occurs or is observed, the NYSDEC Spill Hotline should be contacted at (800) 457-7362. Evacuation plans will be developed by the building management and distributed to the

building staff as appropriate. Any amendments to this contingency plan will be included in the Periodic Report.

3.0 SITE MONITORING PLAN

3.1 INTRODUCTION

Site monitoring, and reporting, consists of three components:

1. Inspection of the soil covering the treatment area annually. The inspection results will be detailed in the PRR and certified by the engineer.
2. Annual groundwater monitoring and an annual groundwater monitoring report (GWMR) for the monitoring wells identified on Figure 2. Approval to reduce groundwater monitoring frequency from quarterly to semi-annually granted on May 6, 2021. Approval to reduce groundwater monitoring frequency from semi-annually to annually granted on December 1, 2022.
3. Interim or incident reports for unexpected, unplanned events outside of the prescribed monitoring program

3.1.1 General

The Monitoring Plan describes the measures for evaluating the performance and effectiveness of the remedy to reduce or mitigate contamination at the Site, the composite cover system, and all affected Site media identified below. This Monitoring Plan may only be revised with the approval of NYSDEC.

3.1.2 Purpose and Schedule

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

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

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

- Sampling locations, protocol, and frequency;
- Information on all designed monitoring systems (e.g., well logs);

- Analytical sampling program requirements;
- Reporting requirements;
- Quality Assurance/Quality Control (QA/QC) requirements;
- Periodic inspection and certification.

On December 1, 2022, NYSDEC approved the reduction in groundwater monitoring frequency from semi-annual to annual. Trends in contaminant levels in air, soil, and/or groundwater in the affected areas, will be evaluated to determine if the remedy continues to be effective in achieving remedial goals. Monitoring programs are summarized in Table 4 and outlined in detail in Sections 3.2 and 3.3 below.

Table 4: Monitoring/Inspection Schedule

Monitoring Program and Matrix	Frequency	Analysis
Groundwater (groundwater quality)	Annual groundwater monitoring was approved by the Department on December 1, 2022. Wells: EW-1X, EW-0, MW-1	TCL VOCs, total iron, Fe II, sulfide, sulfate, chloride & alkalinity, methane, carbon dioxide
Groundwater (elevations)	Annual groundwater monitoring was approved by the Department on December 1, 2022. All wells above plus monitoring well S-7 and Quassaick Creek measuring point.	Groundwater elevations and flow direction
Soil Cover (soil)	Annually	Visual Inspection
SSDS (soil vapor)	Annually	Inspect pressure gauges, blower

The frequency of events will be conducted as specified until otherwise approved by NYSDEC and NYSDOH.
TCL – Target Compound List; USEPA SW-846 Methods: VOCS, 8260B.

3.2 SOIL COVER SYSTEM MONITORING

The excavation was backfilled to grade with soil meeting the Commercial Use SCOs. In nearly all cases, treated soil for backfilling met the Unrestricted Use or Residential Use SCOs.

A qualified environmental professional or professional engineer will conduct an inspection of the soil cover annually. This inspection will include, at a minimum, visual inspection of the cover to determine if it is intact and free from damage, and the results will be reported in the Periodic Report described in Section 5.1. Any damage to the soil cover will be repaired in kind.

3.3 MEDIA MONITORING PROGRAM

3.3.1 Groundwater Monitoring

Groundwater monitoring will be performed on a periodic basis to assess the performance of the remedy. On May 6, 2020, NYSDEC approved a modified sampling program that consists of semi-annual groundwater sampling of the complete monitoring well network except for the elimination of sampling monitoring well E1-NEW. E1-NEW is outside the treatment area and interval and had non-detect TCA concentrations in all eight of the quarterly sampling events.

As of December 1, 2022, NYSDEC approved a modified sampling program with a reduction in sampling frequency from semi-annual to annual and the removal of monitoring well S-8 from the groundwater monitoring network. S-8 is outside the treatment area and has had TCA concentrations below 5 µg/L since the first quarter of 2020. Figure 2 shows the groundwater monitoring well network. The monitoring wells identified were selected to provide the most representative measure of treatment relative to the main body of contaminant mass and screened interval relative to the treatment interval. Monitoring well construction logs for the monitoring wells are included in Appendix F.

Post-treatment groundwater sampling took place at AFFCO beginning in April 2013. Groundwater results exceeding the NYSDEC Class GA standards (Baseline Post-Remediation Groundwater Quality) are shown on Figure 7. The post-treatment groundwater sampling results are summarized below.

Summary of Groundwater VOCs in Treatment Area, µg/L

VOC	Sample Nos. pre/post	Pre-treat Max. Conc.	Post-treat Max. Conc.	Percent Reduction
Total VOCs	9/2	86,530	11,706	86
TCA	9/2	48,300	8,630	82

112-TCA	9/2	34.5	2.3	93
1,1-DCA	9/2	36,100	2,540	93
Chloroethane	9/2	1,280	334	74

Values rounded

VOCs

Three wells will be sampled annually as part of the groundwater monitoring program as follows:

Monitoring Well	Top of Screen, ft-bg	Bottom of Screen, ft-bg	Location
EW-0	7	14.6	Treatment Area
EW-1X	6	11	Treatment Area
MW-1	6	13	12 ft downgradient of Treatment Area

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

Deliverables for the groundwater monitoring program are specified below.

3.3.1.1 Sampling Protocol

Sampling protocols are described in the project's Quality Assurance Project Plan (QAPP) presented in Appendix G. All monitoring well sampling activities will be recorded in a field book and a groundwater-sampling log presented in Appendix H. 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.

3.3.1.2 Monitoring Well Repairs, Replacement and Decommissioning

If biofouling or silt accumulation occurs in the on-Site and/or off-Site monitoring wells, the wells will be physically agitated/surged and redeveloped. Additionally, monitoring wells will be properly decommissioned and replaced if an event renders the wells unusable. Repairs and/or replacement of wells in the monitoring well network will be performed based on assessments of structural integrity and overall performance.

The NYSDEC will be notified prior to any repair or decommissioning of monitoring wells for the purpose of replacement, and the repair or decommissioning and replacement process will

be documented in an incident report. Well decommissioning without replacement will be done only with the prior approval from NYSDEC. Well abandonment will be performed in accordance with NYSDEC's "Groundwater Monitoring Well Decommissioning Procedures." Monitoring wells that are decommissioned because they have been rendered unusable will be reinstalled in the nearest available location, unless otherwise approved by the NYSDEC.

3.3.2 Contingency Dissolved Groundwater Remediation

Specific contingency measures have not been developed for groundwater conditions at the AFFCO Site. If required, contingency measures will be prepared in consultation with NYSDEC and measures presented to the NYSDEC in a letter work plan for its review and approval prior to implementation.

3.3.3 SSDS Monitoring and Inspection

The SSDS will be monitored and inspected annually by qualified environmental professional or professional engineer. The inspection will check system operation, review operation reports, blower and pressure gauges. Any malfunctions, if any, will be recorded and corrected. The results of the SSDS inspection and monitoring will be included in the PRR. The Piano Felt Building SSDS As-Built is shown on Figure 8.

3.4 SITE-WIDE INSPECTION

Site-wide inspections will be performed annually. Site-wide inspections will also be performed after all severe weather conditions that may affect Engineering Controls or monitoring devices. During these inspections, an inspection form will be completed (Appendix I). The form will compile sufficient information to assess the following:

- Compliance with all ICs, including Site usage;
- An evaluation of the condition and continued effectiveness of ECs;
- General Site conditions at the time of the inspection;
- The Site management activities being conducted including, where appropriate, confirmation sampling and a health and safety inspection;

- Compliance with permits and schedules included in the Operation and Maintenance Plan; and
- Confirm that Site records are up to date (when applicable).

3.5 MONITORING QUALITY ASSURANCE/QUALITY CONTROL

All monitoring program sampling and analyses will be performed in accordance with the requirements of the QAPP prepared for the Site (Appendix G). Main Components of the QAPP include:

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

3.6 MONITORING REPORTING REQUIREMENTS

Inspection records and monitoring activity reports will be kept on file with the Site owner, AFFCO, or its Assigns and Successors. All forms, and other relevant reporting formats used during the monitoring/inspection events, will be (1) subject to approval by NYSDEC and (2) submitted at the time of the PRR, as specified in the Reporting Plan of this SMP.

Monitoring and Reporting includes three elements:

1. The PRR encompasses the annual inspection of the soil cover and all other monitoring and reporting activities to date as in Items (2) and (3)
2. Annual groundwater sampling and GWMR until determined upon consultation with NYSDEC that groundwater monitoring is no longer required for the site.
3. Interim/Incident reports that cover individual, unforeseen incidents reported on an as-needed basis.

All monitoring/inspection results will be reported to NYSDEC on the specified monitoring and reporting basis noted in Table 5. The reports will include, at a minimum:

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

For groundwater, the annual sampling data will be reported in digital format in the form of text and tables and EQUIS electronic data deliverable (EDD) format. A summary of the monitoring program deliverables are summarized in Table 5.

Table 5: Schedule of Monitoring/Inspection Reports

Task	Reporting Frequency
Soil Cover System Inspection (in PRR only)	Annual
Interim/Incident Reports	Whenever an open excavation extends below the soil cover
Groundwater Monitoring (GWMR)	Annual with a groundwater monitoring report
SSDS Inspection	Annual

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

4.0 OPERATION AND MAINTENANCE PLAN

4.1 INTRODUCTION

Information on non-mechanical Engineering Controls (i.e., soil cover system) is provided in Section 3 - Engineering and Institutional Control Plan. A copy of this Operation and Maintenance Plan, along with the complete SMP, will be kept with the Site owner, AFFCO, or its Assigns and Successors. This Operation and Maintenance Plan is not to be used as a stand-alone document, but as a component document of the SMP.

4.2 ENGINEERING CONTROL SYSTEM OPERATION AND MAINTENANCE

4.2.1 Sub-Slab Depressurization System

A SSDS was installed and put into operation October 2010 at the Piano Building. The SSDS provides negative differential pressure beneath the Piano Building exceeding the required -0.02 inches of water column (w.c.). The SSDS consists of a single sub-slab pit connected to a roof top fan via a single PVC riser. A differential pressure gauge installed on the riser at the ground floor level visually indicates adequate performance of the SSDS.

4.2.1.1 Scope

The SSDS provides negative differential pressure beneath the Piano Building exceeding the required -0.02 inches of water column.

4.2.1.2 System Start-Up and Testing

In October 2010, the SSDS was put into operation. The differential pressure gauge installed on the riser provided visually evidence of achieving negative differential pressure. The differential pressure gauge is always visible showing the instantaneous differential pressure generated. No other testing has been performed.

4.2.1.3 System Operation: Routine Operation Procedures

Not applicable, there are no routine operation procedures.

4.2.1.4 System Operation: Routine Equipment Maintenance

Repair broken piping and fittings as necessary.

4.2.1.5 System Operation: Non-Routine Equipment Maintenance

As necessary to ensure proper system function.

4.3 ENGINEERING CONTROL SYSTEM PERFORMANCE MONITORING

4.3.1 Protective Soil Cover

A protective soil cover shall be in place over the Soil Management Area. The entire Soil Management Area will be inspected to ensure adequate cover by soil and/or vegetation and that erosion of the cover has not occurred. The protective cover in the 50-ft. x 50-ft. remedial excavation shall be of soil or gravel such that it is approximately level with the surrounding Soil Management Area grade.

4.3.1.1 Monitoring Schedule

Once every year.

4.3.1.2 Monitoring and Inspection

Inspect integrity and continuity of the soil cover and check for cover loss by erosion.

4.3.1.3 System Monitoring Devices and Alarms

Not applicable.

4.3.2 Sub-Slab Depressurization System

The SSDS is proposed to transition from active operation to passive upon approval of this SMP. The blower fan currently in operation will be deactivated or removed; however, the exhaust stack, riser, and sub-slab pit will remain intact providing a safe conveyance of any remaining sub-slab vapors at the Piano Building. A separate work plan will be prepared to demonstrate that passive operation of the SSDS will address potential exposure via soil vapor intrusion.

4.3.2.1 Monitoring Schedule

Once every year.

4.3.2.2 SSDS Monitoring and Inspection

Inspect piping and fittings. Inspect piping for cracks, clogging, or loose fittings.

4.3.2.3 System Monitoring Devices and Alarms

Not applicable.

4.4 MAINTENANCE AND PERFORMANCE MONITORING REPORTING REQUIREMENTS

All reports, forms, and other relevant information generated will be available upon request to the NYSDEC and submitted as part of the PRR, as specified in the Section 5 of this SMP. These will be kept with the Site owner, AFFCO, or its Assigns and Successors.

4.4.1 Routine Maintenance Reports

Checklists or forms (see Appendix I) will be completed during each routine maintenance event. Checklists/forms will include, but not be limited to the following information:

- Date;
- Name, company, and position of person(s) conducting maintenance activities;
- Maintenance activities conducted;
- Any modifications to the system;
- Roadway and sidewalk condition (i.e., cracks, fissures, or other damage or openings);
- 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).

4.4.2 Non-Routine Maintenance Reports

During each non-routine maintenance event, a form will be completed which will include, but not be limited to, the following information:

- Date;

- Name, company, and position of person(s) conducting non-routine maintenance/repair activities;
- Date and description of crack repair;
- Other repairs or adjustments made to the composite cover system;
- 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).

5.0 INSPECTIONS, REPORTING AND CERTIFICATIONS

5.1 SITE INSPECTIONS

5.1.1 Inspection Frequency

All inspections will be conducted at the frequency specified in the schedules provided in Section 3 Monitoring Plan and Section 4 Operation and Maintenance Plan of this SMP. At a minimum, a Site-wide inspection will be conducted annually. Inspections of remedial components will also be conducted whenever a severe condition has taken place, such as an erosion or flooding event that may affect the ECs.

5.1.2 Inspection Forms, Sampling Data, and Maintenance Reports

All inspections and monitoring events will be recorded on the appropriate forms included in Appendices I and H. Additionally, a general Site-wide inspection form will be completed during the Site inspection (see Appendix I). These forms are subject to NYSDEC revision. Appendix H contains the groundwater sampling log form.

All applicable inspection forms and other records, including all media sampling data and system maintenance reports, generated for the Site during the reporting period will be provided in electronic format in the PRR.

5.1.3 Evaluation of Records and Reporting

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

- EC/ICs are in place, are performing properly, and remain effective;
- The Monitoring Plan is being implemented;
- Operation and maintenance activities are being conducted properly; and, based on the above items,
- The Site remedy continues to be protective of public health and the environment and is performing as designed in the RAWP and FER.

5.2 CERTIFICATION OF ENGINEERING AND INSTITUTIONAL CONTROLS

After the each inspection of the reporting period, a Professional Engineer licensed to practice in New York State will prepare the following certification:

For each institutional or engineering control identified for the Site, I certify that all of the following statements are true:

- The inspection of the Site to confirm the effectiveness of the institutional and engineering controls required by the remedial program was performed under my direction;
- The institutional control and/or engineering control employed at this Site is unchanged from the date the control was put in place, or last approved by the Department;
- Nothing has occurred that would impair the ability of the control to protect the public health and environment;
- Nothing has occurred that would constitute a violation or failure to comply with 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;
- 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, Arnold F. Fleming, PE, of Fleming-Lee Shue, Inc., 158 West 29th Street, 9th Floor, New York, NY 10001, am certifying as Owner's Designated Site Representative for the Site.

  The signed certification will be included in the PRR described below.

5.3 PERIODIC REVIEW REPORT

A PRR will be submitted to the Department annually, beginning eighteen months after the Release from Liability and Covent not to Sue has been issued. In the event that the Site is subdivided into separate parcels with different ownership, a single PRR will be prepared that addresses the Site described in Appendix A (Metes and Bounds). The report will be prepared in

accordance with NYSDEC DER-10 and submitted within 45 days of the end of each certification period. The PRR will include all the elements specified in Section 3.6: annual composite cover inspections, annual groundwater monitoring, and interim reports. 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 and severe condition inspections, if applicable;
- All applicable inspection forms and other records generated for the Site during the reporting period in electronic format;
- Data summary tables and graphical representations of contaminants of concern by media (groundwater), which include a listing of all compounds analyzed, along with the applicable standards, with all exceedances highlighted. These will include a presentation of past data as part of an evaluation of contaminant concentration trends;
- Results of all analyses, copies of all laboratory data sheets, and the required laboratory data deliverables for all samples collected during the reporting period will be submitted electronically in a NYSDEC-approved format;
- A Site evaluation, which includes the following:
    - The compliance of the remedy with the requirements of the Site-specific RAWP;
    - Any new conclusions or observations regarding Site contamination based on inspections or data generated by the Monitoring Plan for the media being monitored;
    - Recommendations regarding any necessary changes to the remedy and/or Monitoring Plan; and
    - The overall performance and effectiveness of the remedy.

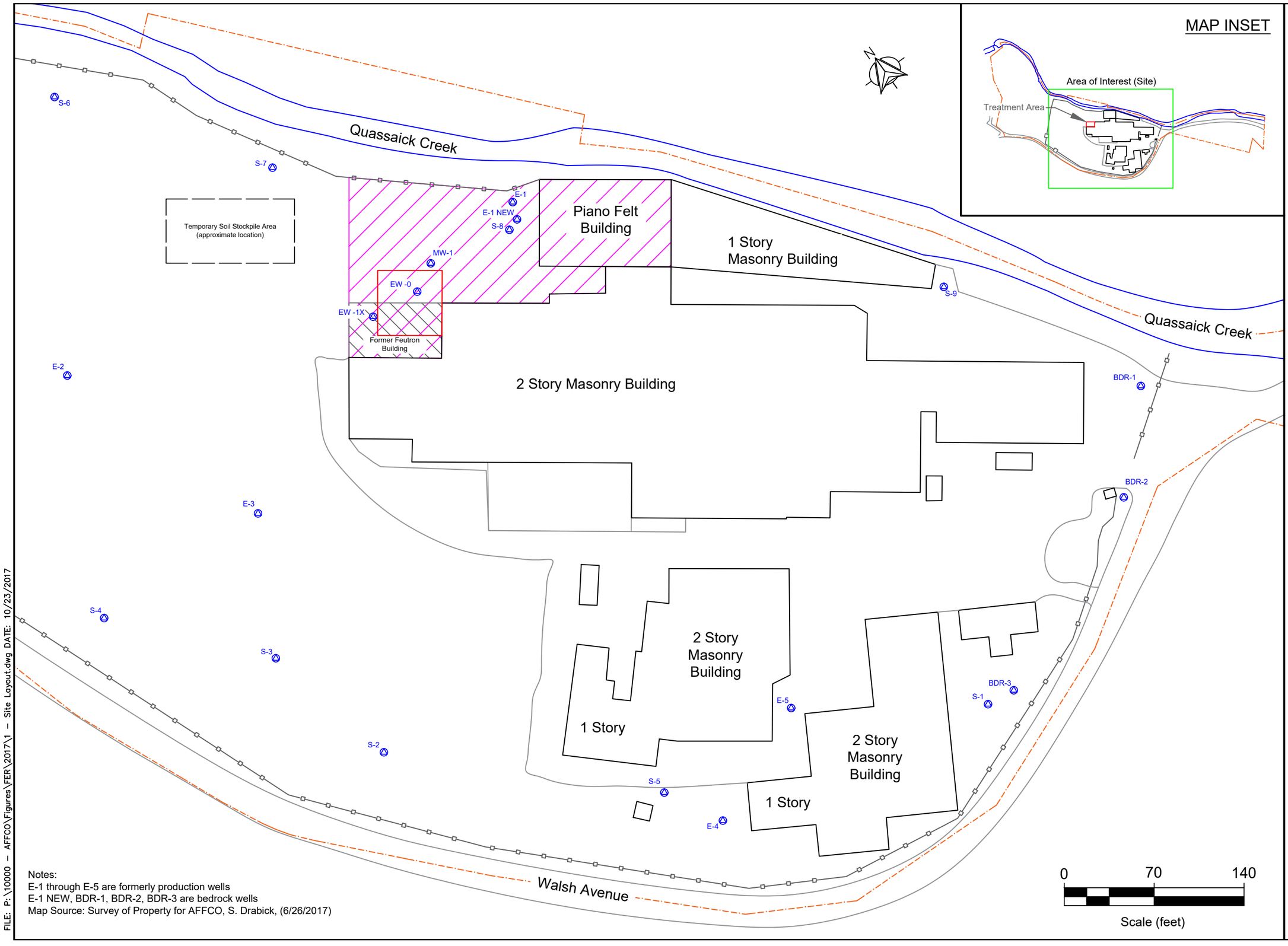
The PRR will be submitted, in hard-copy format, to the NYSDEC Central Office and Regional Office in which the Site is located, and in electronic format to NYSDEC Central Office, Regional Office and the NYSDOH Bureau of Environmental Exposure Investigation.

5.4 CORRECTIVE MEASURES PLAN

If any component of the remedy fails, or if the periodic certification cannot be provided due to the failure of an institutional or engineering control, a corrective measures plan will be submitted to the NYSDEC for approval. This plan will explain the failure and provide the details and schedule for performing work necessary to correct the failure. Unless an emergency condition

exists, no work will be performed pursuant to the corrective measures plan until it is approved by the NYSDEC.

FIGURES



MAP INSET

Notes:
E-1 through E-5 are formerly production wells
E-1 NEW, BDR-1, BDR-2, BDR-3 are bedrock wells
Map Source: Survey of Property for AFFCO, S. Drabick, (6/26/2017)

Fleming Lee Shue

Environmental Management & Consulting

158 West 29th Street
New York, NY 10001

American Felt & Filter Co.
361 Walsh Avenue
New Windsor, NY

Figure 1

Site Layout

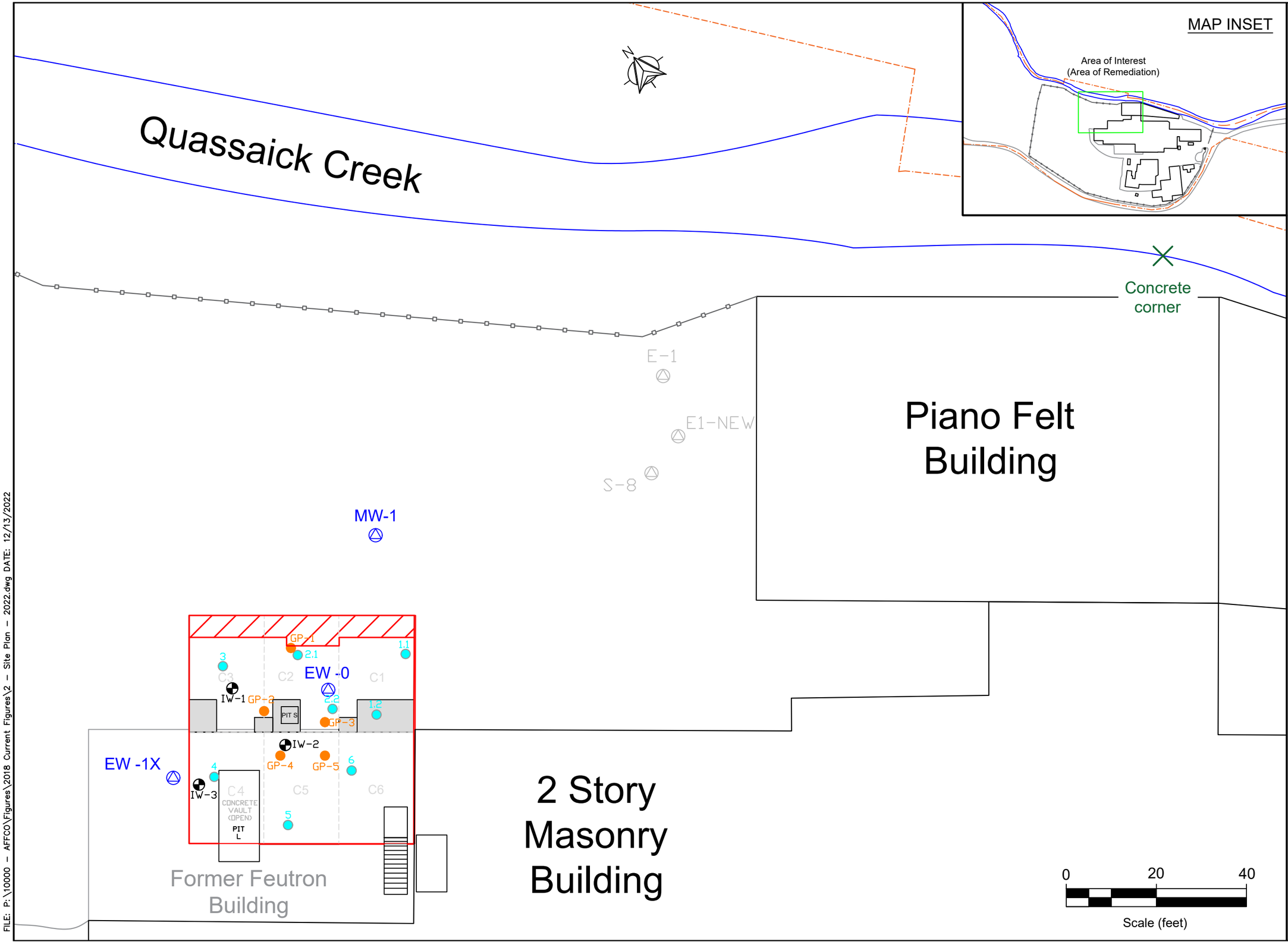
October 2017

Project Number
10000-015

LEGEND

- Environmental Easement Area
- Extent of Building Demolition
- Area of Remedial Excavation
- Property Line
- Retaining Walls / Fence
- Groundwater Monitoring Well

FILE: P:\10000 - AFFCO\Figures\FER\2017\1 - Site Layout.dwg DATE: 10/23/2017



FILE: P:\10000 - AFFCO\Figures\2018 Current Figures\2 - Site Plan - 2022.dwg DATE: 12/13/2022

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American Felt & Filter Co.
361 Walsh Avenue
New Windsor, NY

Figure 2

Site Plan, Remedial Excavation, and Injection Locations

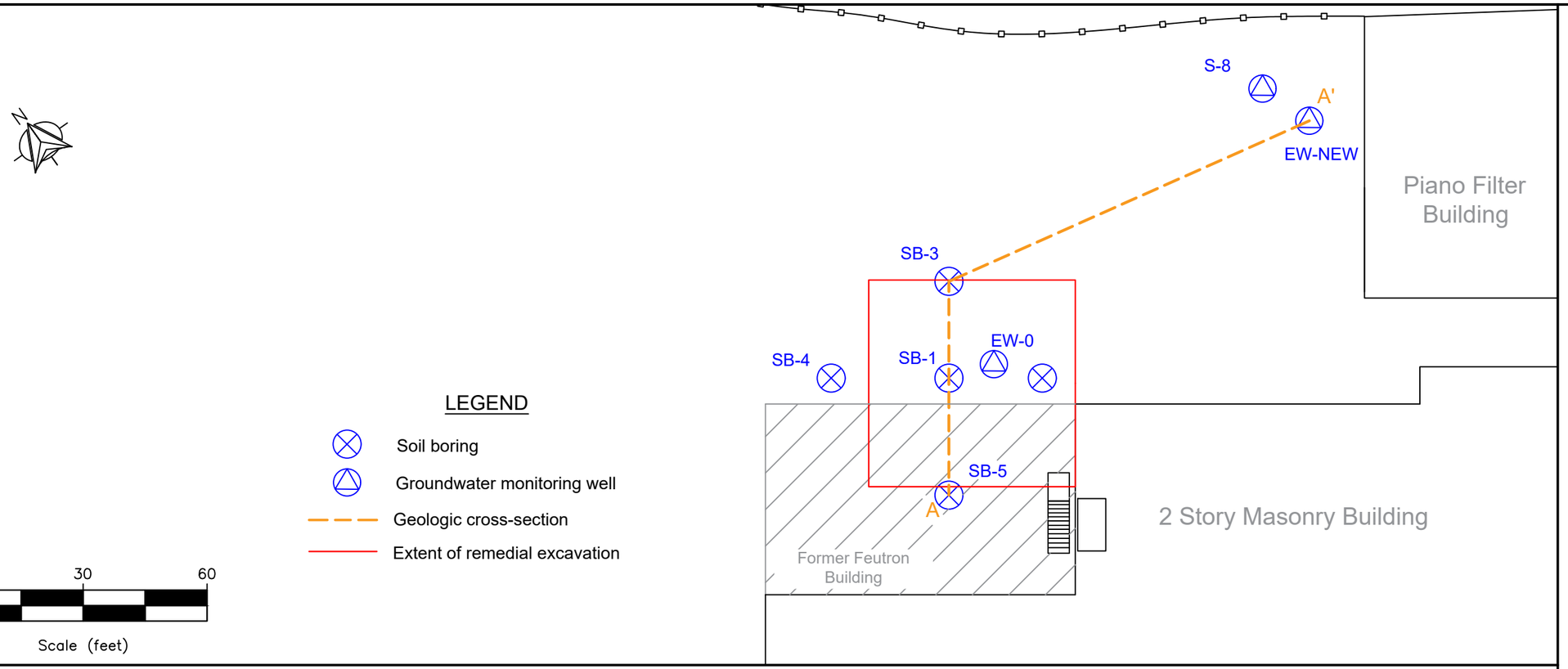
December 2022

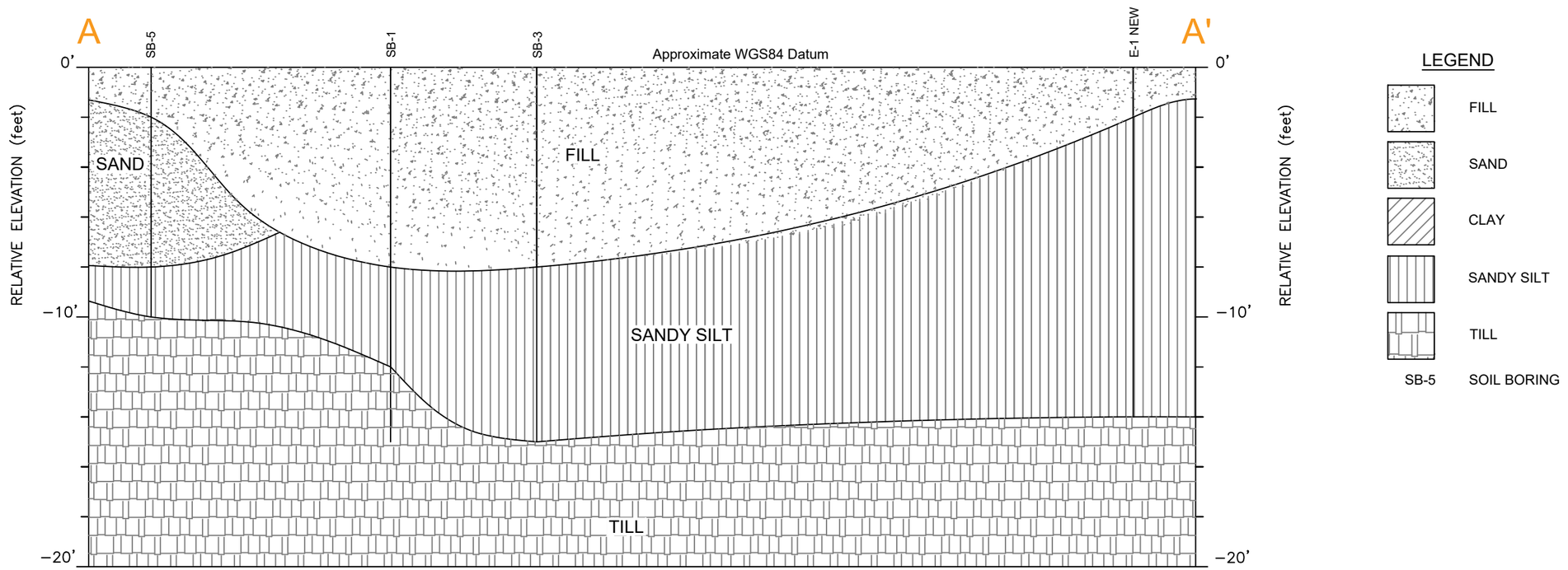
Project Number
10000-015

LEGEND

- Area of remedial excavation (grade to 10 or 11')
- Shallow remedial excavation (grade to 5')
- Injection well (removed)
- Geoprobe injection location
- Groundwater monitoring well
- Groundwater monitoring well (discontinued)
- Pre-treatment soil sample (random)
- C5 Grid cell
- Concete

Notes:
Soil sample and geoprobe injection locations are approximate





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West Windsor, NY

Figure 3

Soil Borings and Geologic Cross-Section

October 2017

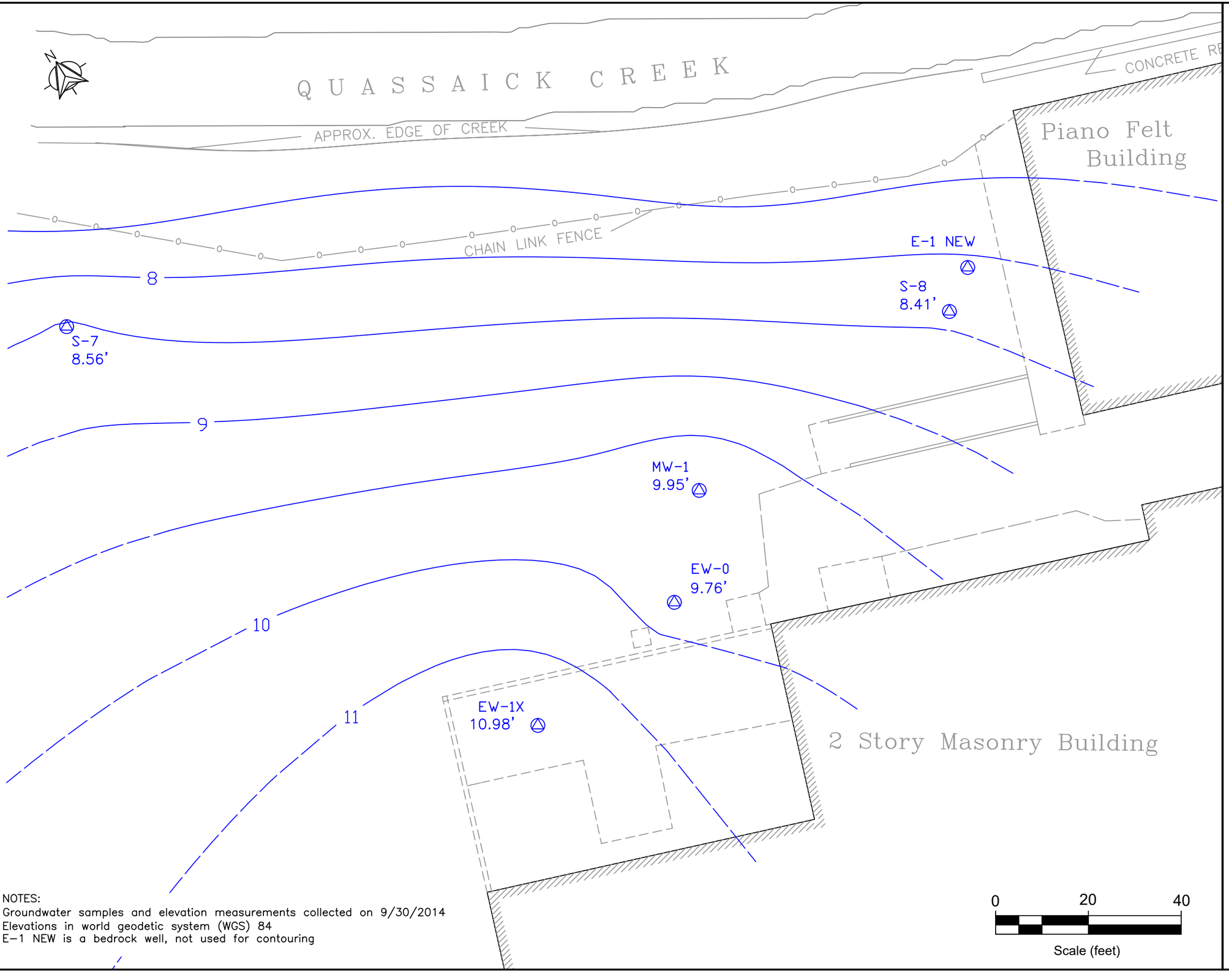
Project Number
10000-015

Cross-Section Scales

0 10 20 40
Horizontal scale (feet)

0 5 10 20
Vertical scale (feet)

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NOTES:
Groundwater samples and elevation measurements collected on 9/30/2014
Elevations in world geodetic system (WGS) 84
E-1 NEW is a bedrock well, not used for contouring

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New York, NY 10001

361 Walsh Avenue
New Windsor, NY

Figure 4

Groundwater Contour Map

October 2017

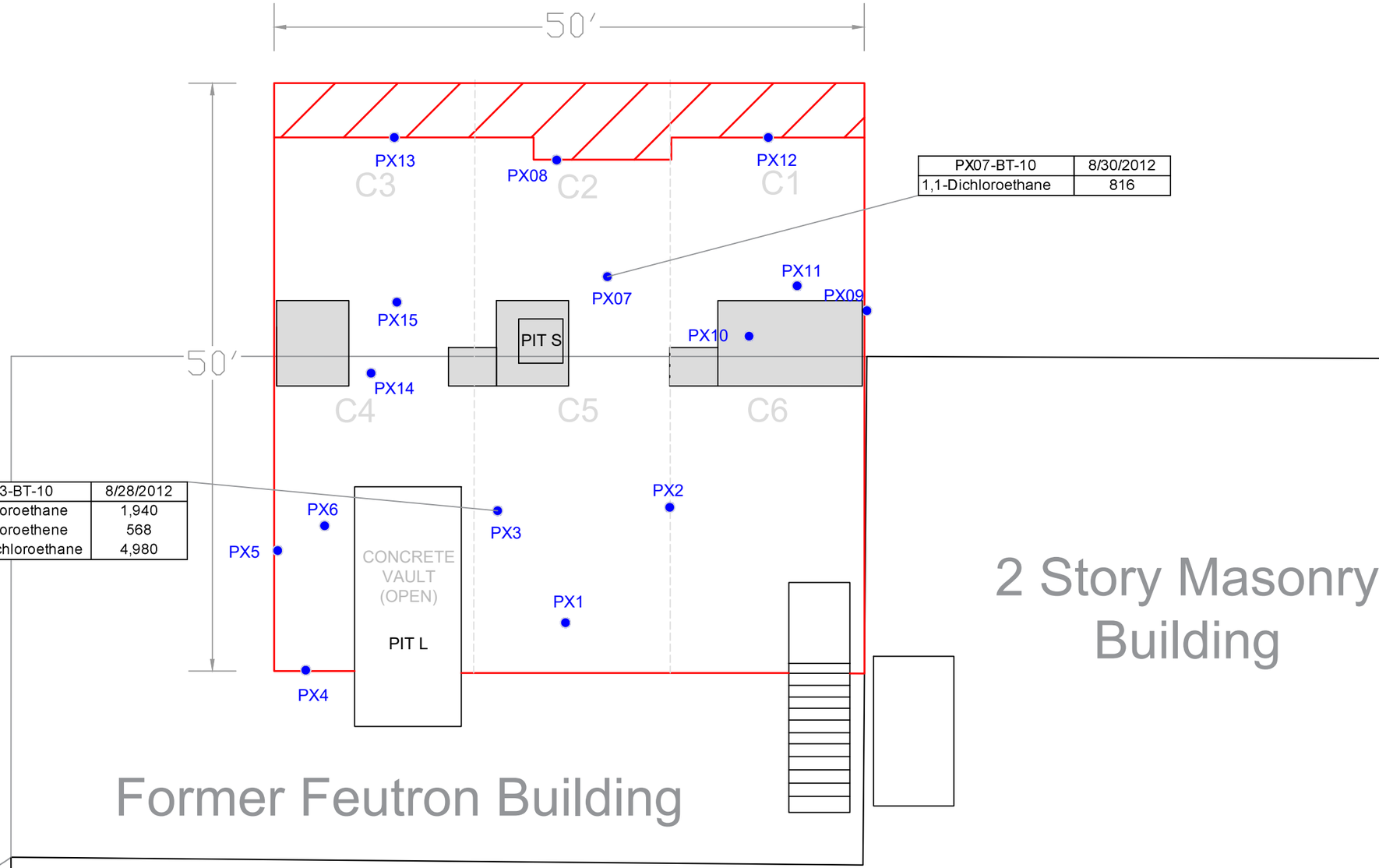
Project Number
10000-015

LEGEND

- Groundwater monitoring well and groundwater elevation (feet)
- 10 — Groundwater elevation contour (dashed where inferred)

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Compound	Unrestricted Use SCO	Residential w/CP-51 SCO	Commercial w/CP-51 SCO
1,1-Dichloroethane	270	19,000	240,000
1,1-Dichloroethene	330	100,000	500,000
1,1,1-Trichloroethane	680	100,000	500,000



Notes:
Results and SCOs in µg/kg, soil sample locations approximate
The soil cleanup objectives (SCO) for the site are the Commerical Use SCOs (6 NYCRR 375-6 12/06). All results met these criteria.
Post-excavation sample results not shown on this figure are all below the Unrestricted Use SCOs (6 NYCRR 375-6 12/06).
Soil stockpile sample results for C55P01, C55P02 and C35P01 were above the Unrestricted Use SCOs for TCA and DCE, but were below the Residential Use SCOs.

Fleming Lee Shue
Environmental Management & Consulting
158 West 29th Street
New York, NY 10001

American Felt & Filter Co.
361 Walsh Avenue
New Windsor, NY

Figure 5A

Post-Excavation Soil Sampling Locations and Results Summary

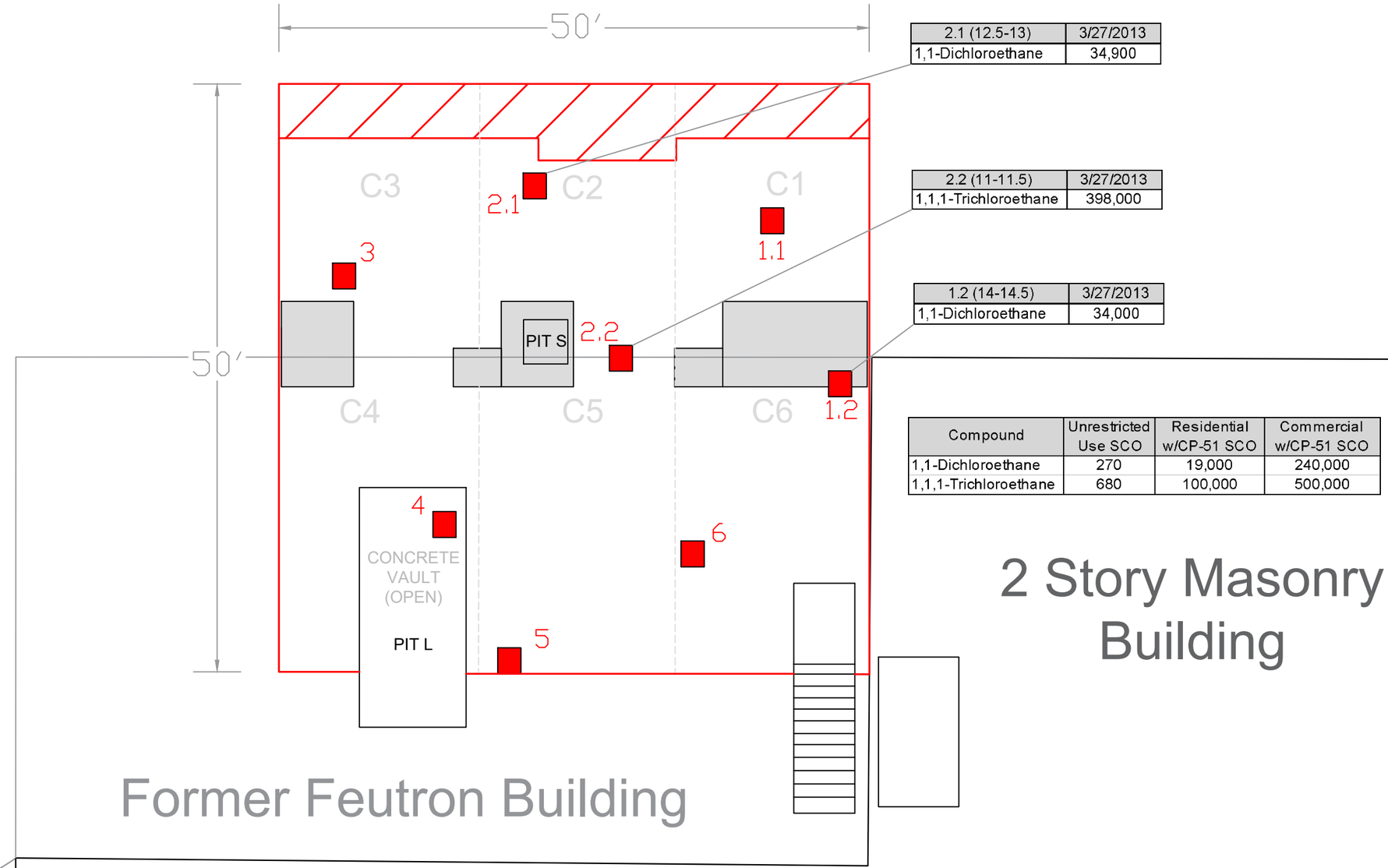
October 2017

Project Number
10000-015

LEGEND

- Area of remedial excavation (grade to 10 or 11')
- Shallow remedial excavation (grade to 5')
- Post-excavation endpoint soil sample (random)
- C5 — Grid cell
- Concete

FILE: P:\10000 - AFFCO\Figures\SMP\2017\05A - Post-Excavation Soil Sampling Results.dwg DATE: 10/25/2017



2.1 (12.5-13)	3/27/2013
1,1-Dichloroethane	34,900

2.2 (11-11.5)	3/27/2013
1,1,1-Trichloroethane	398,000

1.2 (14-14.5)	3/27/2013
1,1-Dichloroethane	34,000

Compound	Unrestricted Use SCO	Residential w/CP-51 SCO	Commercial w/CP-51 SCO
1,1-Dichloroethane	270	19,000	240,000
1,1,1-Trichloroethane	680	100,000	500,000

Notes:
Results and SCOs in µg/kg, soil sample locations approximate
The soil cleanup objectives (SCO) for the Site are the Commercial Use SCOs (6 NYCRR 375-6 12/06). All results met these criteria
Post-excavation sample not shown on this figure are below Unrestricted Use SCOs (6 NYCRR 375-6 12/06)

0 10 20
Scale (feet)

FILE: P:\10000 - AFFCO\Figures\SMP\2017\05B - Post Treatment Soil Sampling Locations.dwg DATE: 10/25/2017

Fleming Lee Shue
Environmental Management & Consulting

158 West 29th Street
New York, NY 10001

American Felt & Filter Co.
361 Walsh Avenue
New Windsor, NY

Figure 5B

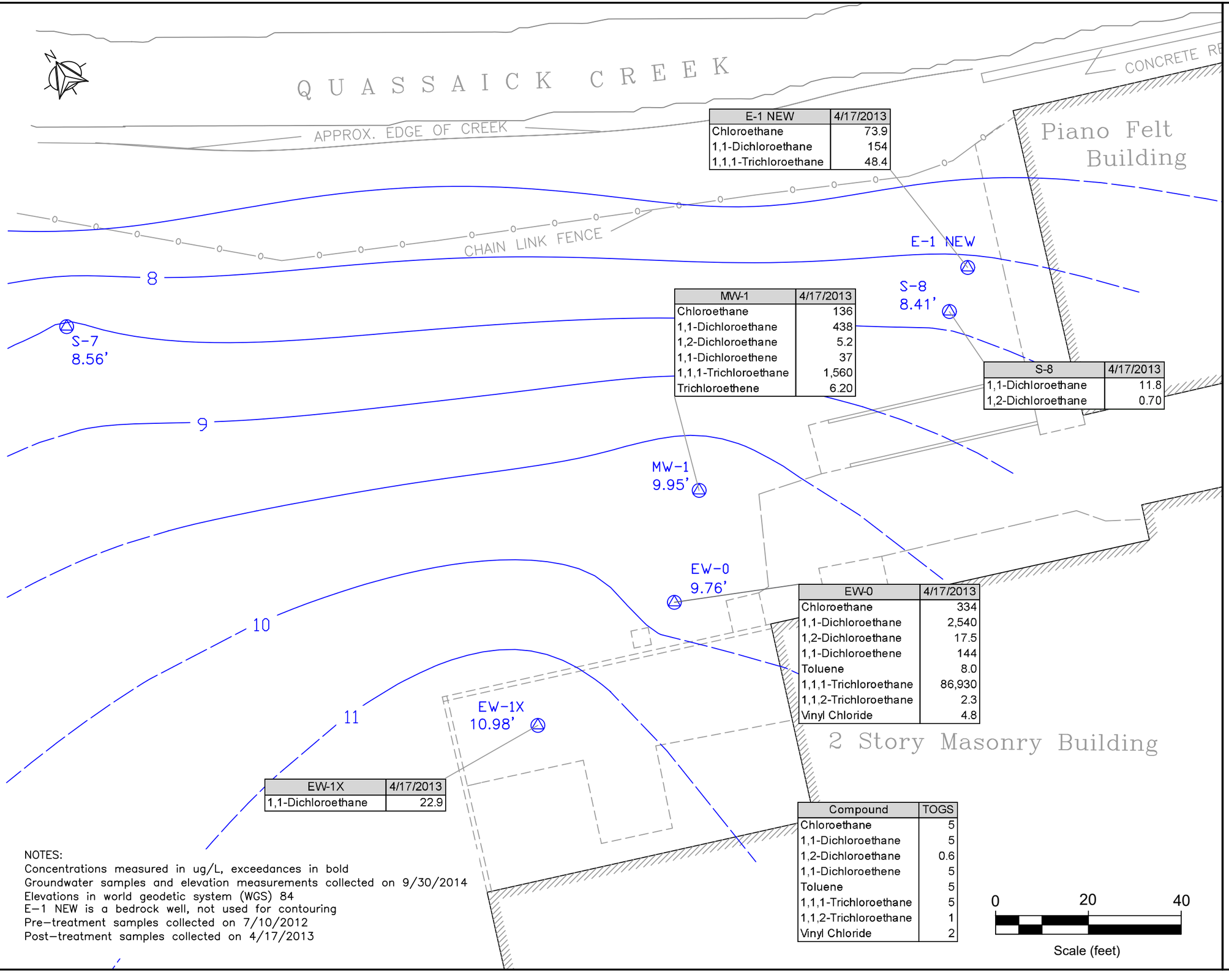
Post-Excavation Soil Sampling Locations and Results Summary

October 2017

Project Number
10000-015

LEGEND

- Area of remedial excavation (grade to 10 or 11')
- Shallow remedial excavation (grade to 5')
- Post-treatment endpoint soil sample (random)
- C5 Grid cell
- Concete



E-1 NEW	4/17/2013
Chloroethane	73.9
1,1-Dichloroethane	154
1,1,1-Trichloroethane	48.4

MW-1	4/17/2013
Chloroethane	136
1,1-Dichloroethane	438
1,2-Dichloroethane	5.2
1,1-Dichloroethene	37
1,1,1-Trichloroethane	1,560
Trichloroethene	6.20

S-8	4/17/2013
1,1-Dichloroethane	11.8
1,2-Dichloroethane	0.70

EW-0	4/17/2013
Chloroethane	334
1,1-Dichloroethane	2,540
1,2-Dichloroethane	17.5
1,1-Dichloroethene	144
Toluene	8.0
1,1,1-Trichloroethane	86,930
1,1,2-Trichloroethane	2.3
Vinyl Chloride	4.8

EW-1X	4/17/2013
1,1-Dichloroethane	22.9

Compound	TOGS
Chloroethane	5
1,1-Dichloroethane	5
1,2-Dichloroethane	0.6
1,1-Dichloroethene	5
Toluene	5
1,1,1-Trichloroethane	5
1,1,2-Trichloroethane	1
Vinyl Chloride	2

NOTES:
Concentrations measured in ug/L, exceedances in bold
Groundwater samples and elevation measurements collected on 9/30/2014
Elevations in world geodetic system (WGS) 84
E-1 NEW is a bedrock well, not used for contouring
Pre-treatment samples collected on 7/10/2012
Post-treatment samples collected on 4/17/2013

0 20 40
Scale (feet)

FILE: P:\10000 - AFFCO\Figures\SMP\2017\07 - Pre and Post Treatment VOCs and Contour.dwg DATE: 10/25/2017

Fleming Lee Shue
Environmental Management & Consulting
158 West 29th Street
New York, NY 10001

361 Walsh Avenue
New Windsor, NY

Figure 7

Pre and Post-Treatment Groundwater VOC Results and Contour Map

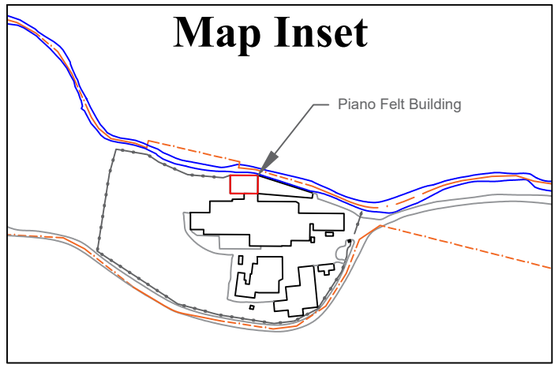
October 2017

Project Number
10000-015

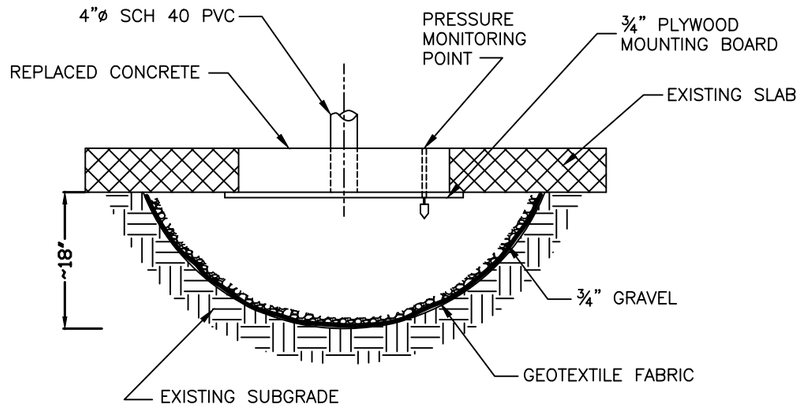
LEGEND

- Groundwater monitoring well and groundwater elevation (feet)
- 10 — Groundwater elevation contour (dashed where inferred)

Map Inset

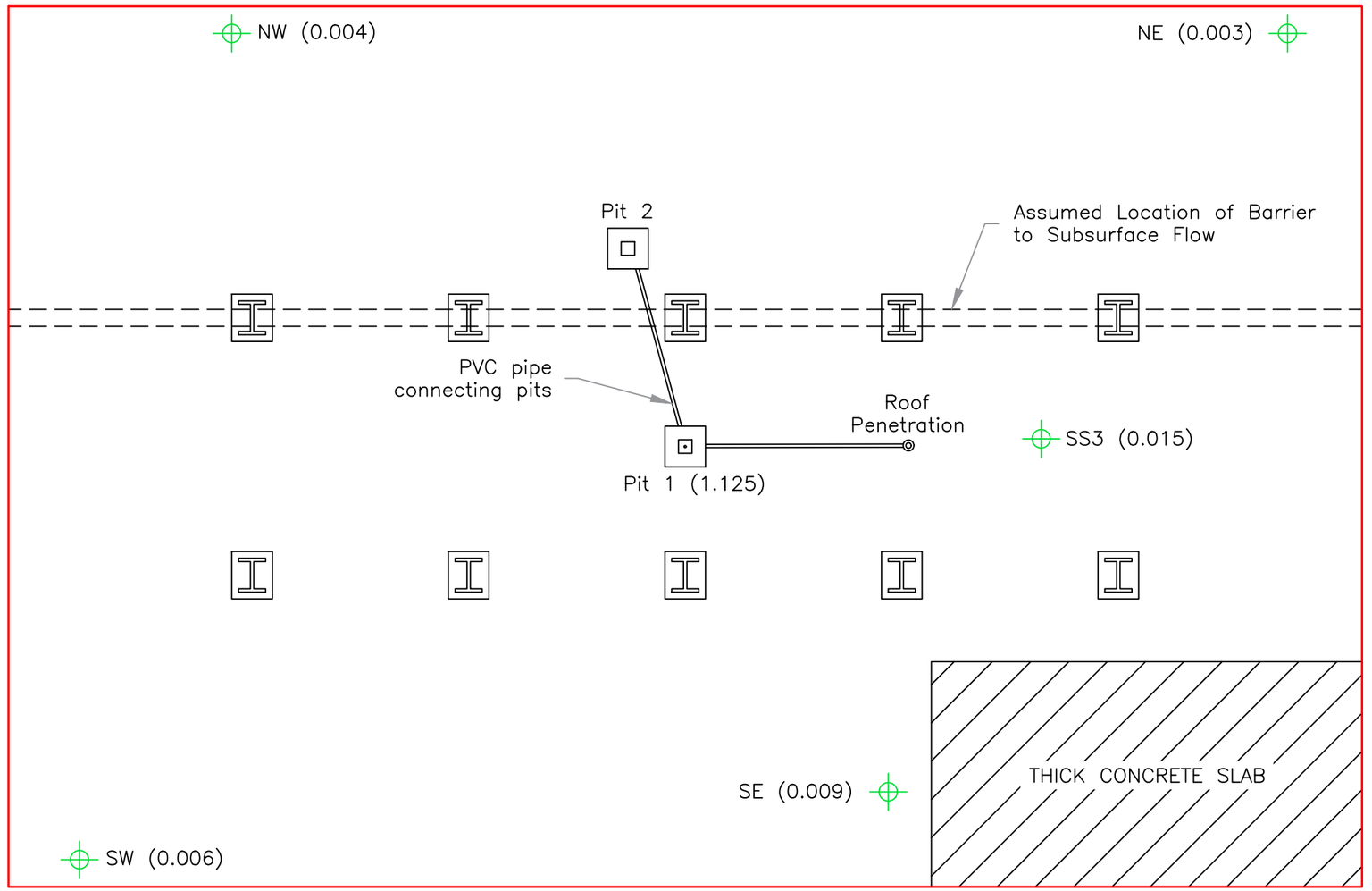


Pit Detail



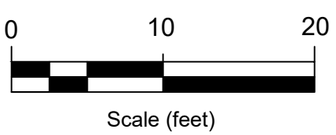
SSDS Plan View





NOTES:

1. Fan was installed on the roof and does not exhaust within 25' of an air intake
2. Labels noting SSDS are placed on pipe and at the exhaust
3. Fan size and number of pits based on similar designs referenced by EPA documents
4. Pit detail is not to scale



FILE: P:\10000 - AFFCO\Figures\SMP\2017\08 - SSDS As-Built.dwg DATE: 10/23/2017

Fleming Lee Shue
Environmental Management & Consulting
158 West 29th Street
New York, NY 10001

American Felt & Filter Co.
361 Walsh Avenue
New Windsor, NY

Figure 8

Piano Felt Building SSDS As-Built

October 2017

Project Number
10000-015

LEGEND

- Piano Felt Building Footprint
- Column
- Pressure Monitoring Point (Vacuum in inches of water column)

APPENDIX A

Property Metes and Bounds & Environmental Easement

ORANGE COUNTY – STATE OF NEW YORK

ANN G. RABBITT, COUNTY CLERK
255 MAIN STREET
GOSHEN, NEW YORK 10924

COUNTY CLERK'S RECORDING PAGE

THIS PAGE IS PART OF THE DOCUMENT – DO NOT DETACH

BOOK/PAGE: 14291 / 601
INSTRUMENT #: 20170066308

Receipt#: 2381301
Clerk: JM
Rec Date: 09/15/2017 12:16:02 PM
Doc Grp: D
Descrip: RT WY
Num Pgs: 10
Rec'd Frm: FIRST AMERICAN TITLE INS CO

Party1: AMERICAN FELT & FILTER CO INC
Party2: NYS DEPT OF ENVIRONMENTAL CONSERVATION
Town: NEW WINDSOR (TN)
9-1-69.2

Recording:	
Recording Fee	70.00
Cultural Ed	14.25
Records Management - Coun	1.00
Records Management - Stat	4.75
TP584	5.00
Sub Total:	95.00
Transfer Tax	
Transfer Tax - State	0.00
Sub Total:	0.00
Total:	95.00

**** NOTICE: THIS IS NOT A BILL ****

***** Transfer Tax *****
Transfer Tax #: 1693
Transfer Tax
Consideration: 0.00

Total: 0.00

Payment Type:
Check ___
Cash ___
Charge ___
No Fee ___

Comment: _____

Ann G. Rabbitt
Orange County Clerk

Record and Return To:

FIRST AMERICAN TITLE INS CO
666 THIRD AVE
5TH FLOOR
NEW YORK, NY 10017

3020-8692960

County: Orange Site No: 336036 Order on Consent Index : W3-0784-04-06

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

THIS INDENTURE made this 23rd day of August, 2017, between Owner(s) American Felt & Filter Company, Inc., having an office at 361 Walsh Avenue, New Windsor, New York 12553, County of Orange, 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

9-1-69.2

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 361 Walsh Avenue in the Town of New Windsor, County of Orange and State of New York, known and designated on the tax map of the County Clerk of Orange as tax map parcel numbers: Section 9 Block 1 Lot 69.2, being a portion of the property conveyed to Grantor by deed dated July 31, 1978 and recorded in the Orange County Clerk's Office in Liber and Page 2106/655. The property subject to this Environmental Easement (the "Controlled Property") comprises approximately 0.545 +/- acres, and is hereinafter more fully described in the Land Title Survey dated April 17, 1998 and last revised June 26, 2017 prepared by Steven P. Drabick, P.L.S., which will be attached to the Site Management Plan. The Controlled Property description 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 public 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 Order on Consent Index Number: W3-0784-04-06, 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) The use of groundwater underlying the property is prohibited without necessary water quality treatment as determined by the NYSDOH or the Orange 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;

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

(6) 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;

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

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

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

(10) 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 as defined in 6NYCRR 375-1.8(g)(2)(i) and (ii), 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, at such time as NYSDEC may require, 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 by 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: 336036
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.

Remainder of Page Intentionally Left Blank

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

American Felt & Filter Company, Inc.:

By: _____

Print Name: Wilson H Tryne

Title: Treasurer Date: 8/8/17

Grantor's Acknowledgment

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

On the 8th day of August, in the year 2017, before me, the undersigned, personally appeared Wilson H. Tryne, 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.

Linda S Miranda
Notary Public - State of New York

LINDA S. MIRANDA
NOTARY PUBLIC-STATE OF NEW YORK
No. 01MI6064154
Qualified in Orange County
My Commission Expires September 17, 2017

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: _____
Robert W. Schick, Director
Division of Environmental Remediation

Grantee's Acknowledgment

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

On the 23rd day of August, in the year 2017, before me, the undersigned, personally appeared Robert W. Schick, 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, 2018

R+R:
First American Title
666 Third Ave, Floor 5
New York, NY 10017

SCHEDULE "A" PROPERTY DESCRIPTION

DESCRIPTION OF SOILS MANAGEMENT AREA & SUB-SLAB DEPRESSURIZATION SYSTEM, AN ENVIRONMENTAL EASEMENT TO THE NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

GRANT OF EASEMENT over, across and through all that certain plot, piece or parcel of land with the building and improvements thereon erected, situate, lying and being in the Town of New Windsor, County of Orange and State of New York bounded and described as follows:

BEGINNING at a point at the northwesterly corner of the 1story masonry building of the most northerly complex of buildings located on lands of American Felt & Filter Company Inc., Liber 5730, Page 201, said point of beginning being located South 65 degrees 16 minutes 40 seconds West for a distance of 42.37 feet from a corner in the northerly bounds of lands of the same at the intersection with the municipal boundary between the City of Newburgh and Town of New Windsor and lands now or formerly of Hudson Shipyard Lp, Liber 12960, Page 1797;

THENCE South 72 degrees 57 minutes 34 seconds East for a distance of 103.33 feet along the face of said masonry building to a point;

THENCE South 17 degrees 21 minutes 13 seconds West for a distance of 68.08 feet through said masonry building to a point at the outside corner of said building;

THENCE North 72 degrees 00 minutes 00 seconds West for a distance of 51.17 feet through said masonry building to a point at the outside corner of said building;

THENCE North 72 degrees 57 minutes 52 seconds West for a distance of 51.79 feet to a point at the outside corner of said building;

THENCE South 17 degrees 02 minutes 08 seconds West for a distance of 29.25 feet to a to a point at the northerly face of a two-story masonry building;

THENCE North 72 degrees 32 minutes 52 seconds West for a distance of 75.55 feet along the northerly face of said building to a point at the corner of said building;

THENCE South 17 degrees 20 minutes 58 seconds West for a distance of 43.06 feet along the westerly face of the two-story masonry building to a point at the corner of said building;

THENCE North 72 degrees 34 minutes 38 seconds West for a distance of 72.17 feet along the northerly face of the two story masonry building to a point at the most northwesterly corner of said building;

THENCE North 17 degrees 02 minutes 17 seconds East for a distance of 140.76 feet through lands of American Felt & Filter Company, Inc. to a point marked by an iron rod set at or near a chain link fence;

THENCE South 67 degrees 51 minutes 22 seconds East for a distance of 123.39 feet through lands of the same and along a chain link fence to a point marked by an iron rod set;

THENCE North 87 degrees 49 minutes 18 seconds East for a distance of 26.52 feet through lands of American Felt & Filter Company, Inc. to the POINT OR PLACE OF BEGINNING.

Together with and subject to covenants, and restrictions of record.

Said area contains 0.5454 acres more or less.

STEVEN P. DRABICK P.L.S., PC
PROFESSIONAL LAND SURVEYOR
PO BOX 539
CORNWALL, N.Y. 12518
(8 4 5) - 5 3 4 - 2 2 0 8

LEGEND

- EDGE OF WATER COURSE
- BOUNDARY LINE
- EASEMENT LINE
- UTILITY POLE
- OVERHEAD UTILITY LINES
- CHAIN LINK FENCE
- WROUGHT IRON FENCE
- GUIDE RAIL
- EDGE OF PAVED TRAVELWAY
- EDGE OF UNPAVED TRAVELWAY
- AREA OF CONCRETE
- STONE RETAINING WALL
- ROOF OVER OPEN AREA
- ENCLOSED STAIRWAY
- FV FIRE VALVE
- MW MONITORING WELL
- MANHOLE
- CATCH BASIN
- CULVERT
- UB UTILITY BOX

DESCRIPTION OF SOILS MANAGEMENT AREA & SUB-SLAB DEPRESSURIZATION SYSTEM, AN ENVIRONMENTAL EASEMENT TO THE NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

GRANT OF EASEMENT over, across and through all that certain plot, piece or parcel of land with the building and improvements thereon erected, situate, lying and being in the Town of New Windsor, County of Orange and State of New York bounded and described as follows:

BEGINNING at a point at the northwesterly corner of the 1story masonry building of the most northerly complex of buildings located on lands of American Felt & Filter Company Inc., Liber 5730, Page 201, said point of beginning being located South 65 degrees 16 minutes 40 seconds West for a distance of 42.37 feet from a corner in the northerly bounds of lands of the same at the intersection with the municipal boundary between the City of Newburgh and Town of New Windsor and lands now or formerly of Hudson Shipyard Lp, Liber 12960, Page 1797;

THENCE South 72 degrees 57 minutes 34 seconds East for a distance of 103.33 feet along the face of said masonry building to a point;

THENCE South 17 degrees 21 minutes 13 seconds West for a distance of 68.08 feet through said masonry building to a point at the outside corner of said building;

THENCE North 72 degrees 00 minutes 00 seconds West for a distance of 51.17 feet through said masonry building to a point at the outside corner of said building;

THENCE North 72 degrees 57 minutes 52 seconds West for a distance of 51.79 feet to a point at the outside corner of said building;

THENCE South 17 degrees 02 minutes 08 seconds West for a distance of 29.25 feet to a to a point at the northerly face of a two-story masonry building;

THENCE North 72 degrees 32 minutes 52 seconds West for a distance of 75.55 feet along the northerly face of said building to a point at the corner of said building;

THENCE South 17 degrees 20 minutes 58 seconds West for a distance of 43.06 feet along the westerly face of the two-story masonry building to a point at the corner of said building;

THENCE North 72 degrees 34 minutes 38 seconds West for a distance of 72.17 feet along the northerly face of the two story masonry building to a point at the most northwesterly corner of said building;

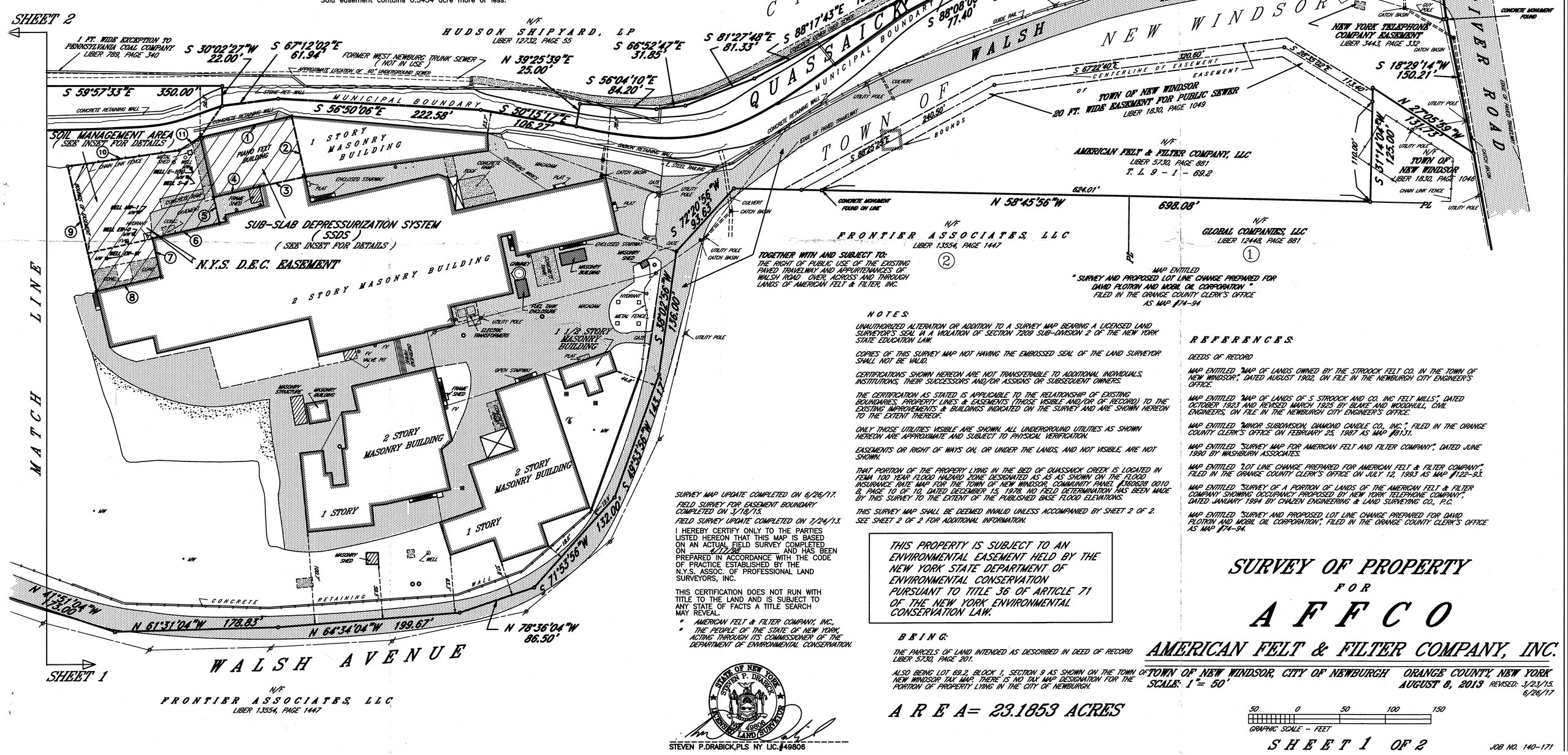
THENCE North 17 degrees 02 minutes 17 seconds East for a distance of 140.76 feet through lands of American Felt & Filter Company, Inc. to a point marked by an iron rod set at or near a chain link fence;

THENCE South 67 degrees 51 minutes 22 seconds East for a distance of 123.39 feet through lands of the same and along a chain link fence to a point marked by an iron rod set;

THENCE North 87 degrees 49 minutes 18 seconds East for a distance of 26.52 feet through lands of American Felt & Filter Company, Inc. to the POINT OR PLACE OF BEGINNING.

Together with and subject to covenants, and restrictions of record.

Said easement contains 0.5454 acre more or less.



MAP ENTITLED "LOT LINE CHANGE PLAN BETWEEN THE LANDS OF DAVID PLOTKIN AND MAREX TERMINALS CORPORATION" DATED AUGUST 17, 2207 BY RICHARD PAUL HANBACK, L.S. FILED IN THE ORANGE COUNTY CLERK'S OFFICE AS MAP #406-08

TOGETHER WITH AND SUBJECT TO: THE RIGHT OF PUBLIC USE OF THE EXISTING PAVED TRAVELWAY AND APPURTENANCES OF WALSH ROAD OVER, ACROSS AND THROUGH LANDS OF AMERICAN FELT & FILTER, INC.

MAP ENTITLED "SURVEY AND PROPOSED LOT LINE CHANGE PREPARED FOR DAVID PLOTKIN AND MOBIL OIL CORPORATION" FILED IN THE ORANGE COUNTY CLERK'S OFFICE AS MAP #74-94

NOTES:

UNAUTHORIZED ALTERATION OR ADDITION TO A SURVEY MAP BEARING A LICENSED LAND SURVEYOR'S SEAL IN A VIOLATION OF SECTION 7209 SUB-DIVISION 2 OF THE NEW YORK STATE EDUCATION LAW.

COPIES OF THIS SURVEY MAP NOT HAVING THE EMBOSSED SEAL OF THE LAND SURVEYOR SHALL NOT BE VALID.

CERTIFICATIONS SHOWN HEREON ARE NOT TRANSFERABLE TO ADDITIONAL INDIVIDUALS, INSTITUTIONS, THEIR SUCCESSORS AND/OR ASSIGNS OR SUBSEQUENT OWNERS.

THE CERTIFICATION AS STATED IS APPLICABLE TO THE RELATIONSHIP OF EXISTING BOUNDARIES, PROPERTY LINES & EASEMENTS (THOSE VISIBLE AND/OR OF RECORD) TO THE EXISTING IMPROVEMENTS & BUILDINGS INDICATED ON THE SURVEY AND ARE SHOWN HEREON TO THE EXTENT THEREOF.

ONLY THOSE UTILITIES VISIBLE ARE SHOWN. ALL UNDERGROUND UTILITIES AS SHOWN HEREON ARE APPROXIMATE AND SUBJECT TO PHYSICAL VERIFICATION.

EASEMENTS OR RIGHT OF WAYS ON, OR UNDER THE LANDS, AND NOT VISIBLE, ARE NOT SHOWN.

THAT PORTION OF THE PROPERTY LYING IN THE BED OF QUASSAICK CREEK IS LOCATED IN FEMA 100 YEAR FLOOD HAZARD ZONE DESIGNATED AS AS SHOWN ON THE FLOOD INSURANCE RATE MAP FOR THE TOWN OF NEW WINDSOR, COMMUNITY PANEL #3605280010 E, PAGE 10 OF 10, DATED DECEMBER 15, 1978. NO FIELD DETERMINATION HAS BEEN MADE BY THIS SURVEY TO THE EXTENT OF THE PUBLISHED BASE FLOOD ELEVATIONS.

THIS SURVEY MAP SHALL BE DEEMED INVALID UNLESS ACCOMPANIED BY SHEET 2 OF 2.
SEE SHEET 2 OF 2 FOR ADDITIONAL INFORMATION.

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.

REFERENCES:

DEEDS OF RECORD

MAP ENTITLED "MAP OF LANDS OWNED BY THE STROOCK FELT CO. IN THE TOWN OF NEW WINDSOR", DATED AUGUST 1902, ON FILE IN THE NEWBURGH CITY ENGINEER'S OFFICE.

MAP ENTITLED "MAP OF LANDS OF S STROOCK AND CO. INC FELT MILLS", DATED OCTOBER 1923 AND REVISED MARCH 1925 BY BLAKE AND WOODHULL, CIVIL ENGINEERS, ON FILE IN THE NEWBURGH CITY ENGINEER'S OFFICE.

MAP ENTITLED "MINOR SUBDIVISION, DIAMOND CANDLE CO., INC.", FILED IN THE ORANGE COUNTY CLERK'S OFFICE ON FEBRUARY 25, 1987 AS MAP #8131.

MAP ENTITLED "SURVEY MAP FOR AMERICAN FELT AND FILTER COMPANY", DATED JUNE 1990 BY WASHBURN ASSOCIATES.

MAP ENTITLED "LOT LINE CHANGE PREPARED FOR AMERICAN FELT & FILTER COMPANY", FILED IN THE ORANGE COUNTY CLERK'S OFFICE ON JULY 12, 1993 AS MAP #122-93.

MAP ENTITLED "SURVEY OF A PORTION OF LANDS OF THE AMERICAN FELT & FILTER COMPANY SHOWING OCCUPANCY PROPOSED BY NEW YORK TELEPHONE COMPANY", DATED JANUARY 1994 BY CHALEN ENGINEERING & LAND SURVEYING CO., P.C.

MAP ENTITLED "SURVEY AND PROPOSED LOT LINE CHANGE PREPARED FOR DAVID PLOTKIN AND MOBIL OIL CORPORATION", FILED IN THE ORANGE COUNTY CLERK'S OFFICE AS MAP #74-94.

SURVEY MAP UPDATE COMPLETED ON 6/26/17.
FIELD SURVEY FOR EASEMENT BOUNDARY COMPLETED ON 3/18/15.
FIELD SURVEY UPDATE COMPLETED ON 7/24/13.

I HEREBY CERTIFY ONLY TO THE PARTIES LISTED HEREON THAT THIS MAP IS BASED ON AN ACTUAL FIELD SURVEY COMPLETED ON 4/12/99 AND HAS BEEN PREPARED IN ACCORDANCE WITH THE CODE OF PRACTICE ESTABLISHED BY THE N.Y.S. ASSOC. OF PROFESSIONAL LAND SURVEYORS, INC.

THIS CERTIFICATION DOES NOT RUN WITH TITLE TO THE LAND AND IS SUBJECT TO ANY STATE OF FACTS A TITLE SEARCH MAY REVEAL.

- AMERICAN FELT & FILTER COMPANY, INC.,
- THE PEOPLE OF THE STATE OF NEW YORK, ACTING THROUGH ITS COMMISSIONER OF THE DEPARTMENT OF ENVIRONMENTAL CONSERVATION.

STATE OF NEW YORK STEVEN P. DRABICK LICENSED LAND SURVEYOR 49806

STEVEN P.DRABICK,PLS NY LIC.#49806

BEING:

THE PARCELS OF LAND INTENDED AS DESCRIBED IN DEED OF RECORD LIBER 5730, PAGE 201.

ALSO BEING LOT 69.2, BLOCK 1, SECTION 9 AS SHOWN ON THE TOWN OF NEW WINDSOR TAX MAP. THERE IS NO TAX MAP DESIGNATION FOR THE PORTION OF PROPERTY LYING IN THE CITY OF NEWBURGH.

A R E A = 23.1853 ACRES

SURVEY OF PROPERTY FOR A F F C O

AMERICAN FELT & FILTER COMPANY, INC.

TOWN OF NEW WINDSOR, CITY OF NEWBURGH ORANGE COUNTY, NEW YORK
SCALE: 1" = 50' AUGUST 8, 2013 REVISED: 3/23/15, 6/26/17

50 0 50 100 150
GRAPHIC SCALE - FEET

SHEET 1 OF 2

JOB NO. 140-171

STEVEN P. DRABICK P.L.S., PC
PROFESSIONAL LAND SURVEYOR
PO BOX 539
CORNWALL, N.Y. 12518
(8 4 5) - 5 3 4 - 2 2 0 8

DESCRIPTION OF SOILS MANAGEMENT AREA & SUB-SLAB DEPRESSURIZATION SYSTEM, AN ENVIRONMENTAL EASEMENT TO THE NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

GRANT OF EASEMENT over, across and through all that certain plot, piece or parcel of land with the building and improvements thereon erected, situate, lying and being in the Town of New Windsor, County of Orange and State of New York bounded and described as follows:

BEGINNING at a point at the northwesterly corner of the 1story masonry building of the most northerly complex of buildings located on lands of American Felt & Filter Company Inc., Liber 5730, Page 201, said point of beginning being located South 65 degrees 16 minutes 40 seconds West for a distance of 42.37 feet from a corner in the northerly bounds of lands of the same at the intersection with the municipal boundary between the City of Newburgh and Town of New Windsor and lands now or formerly of Hudson Shipyard Lp, Liber 12960, Page 1797;

THENCE South 72 degrees 57 minutes 34 seconds East for a distance of 103.33 feet along the face of said masonry building to a point;

THENCE South 17 degrees 21 minutes 13 seconds West for a distance of 68.08 feet through said masonry building to a point at the outside corner of said building;

THENCE North 72 degrees 00 minutes 00 seconds West for a distance of 51.17 feet through said masonry building to a point at the outside corner of said building;

THENCE North 72 degrees 57 minutes 52 seconds West for a distance of 51.79 feet to a point at the outside corner of said building;

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THENCE North 72 degrees 34 minutes 38 seconds West for a distance of 72.17 feet along the northerly face of the two story masonry building to a point at the most northwesterly corner of said building;

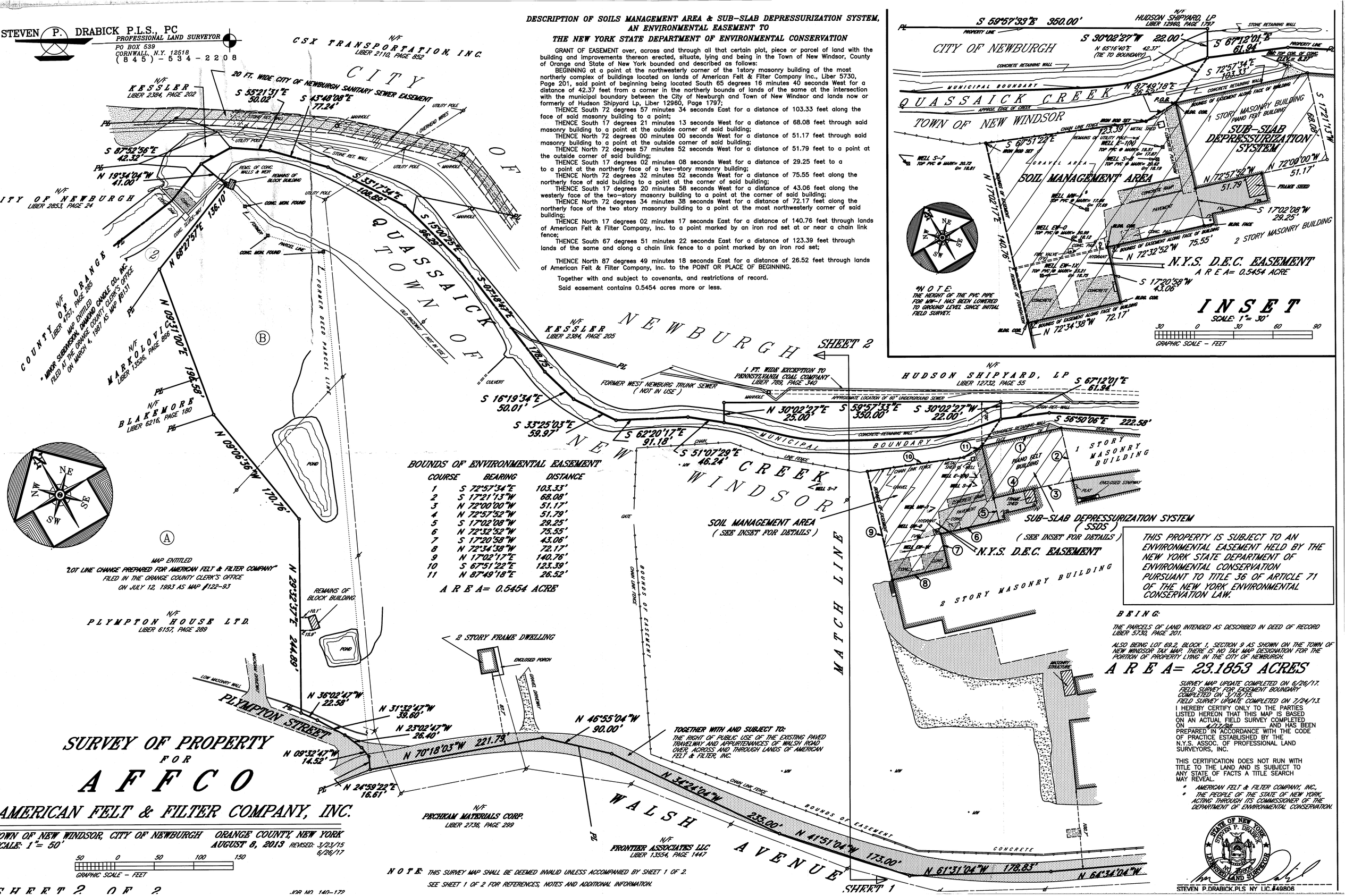
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Together with and subject to covenants, and restrictions of record.

Said easement contains 0.5454 acres more or less.



BOUNDS OF ENVIRONMENTAL EASEMENT

COURSE	BEARING	DISTANCE
1	S 72°57'34"E	103.33'
2	S 17°21'13"W	68.08'
3	N 72°00'00"W	51.17'
4	N 72°57'52"W	51.79'
5	S 17°02'08"W	29.25'
6	N 72°32'52"W	75.55'
7	S 17°20'58"W	43.06'
8	N 72°34'38"W	72.17'
9	N 17°02'17"E	140.76'
10	S 67°51'22"E	123.39'
11	N 87°49'18"E	26.52'

A R E A= 0.5454 ACRE

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.

BEING:

THE PARCELS OF LAND INTENDED AS DESCRIBED IN DEED OF RECORD LIBER 5730, PAGE 201.

ALSO BEING LOT 69.2, BLOCK 1, SECTION 9 AS SHOWN ON THE TOWN OF NEW WINDSOR TAX MAP. THERE IS NO TAX MAP DESIGNATION FOR THE PORTION OF PROPERTY LYING IN THE CITY OF NEWBURGH.

A R E A= 23.1853 ACRES

SURVEY MAP UPDATE COMPLETED ON 6/26/17.
FIELD SURVEY FOR EASEMENT BOUNDARY COMPLETED ON 3/18/15.
FIELD SURVEY UPDATE COMPLETED ON 7/24/13.

I HEREBY CERTIFY ONLY TO THE PARTIES LISTED HEREON THAT THIS MAP IS BASED ON AN ACTUAL FIELD SURVEY COMPLETED ON 4/17/98 AND HAS BEEN PREPARED IN ACCORDANCE WITH THE CODE OF PRACTICE ESTABLISHED BY THE N.Y.S. ASSOC. OF PROFESSIONAL LAND SURVEYORS, INC.

THIS CERTIFICATION DOES NOT RUN WITH TITLE TO THE LAND AND IS SUBJECT TO ANY STATE OF FACTS A TITLE SEARCH MAY REVEAL.

* AMERICAN FELT & FILTER COMPANY, INC.
* THE PEOPLE OF THE STATE OF NEW YORK, ACTING THROUGH ITS COMMISSIONER OF THE DEPARTMENT OF ENVIRONMENTAL CONSERVATION.

STATE OF NEW YORK STEVEN P. DRABICK No. 49806 LICENSED LAND SURVEYOR

STEVEN P.DRABICK,PLS NY LIC.#49806

SURVEY OF PROPERTY FOR A F F C O

AMERICAN FELT & FILTER COMPANY, INC.

TOWN OF NEW WINDSOR, CITY OF NEWBURGH ORANGE COUNTY, NEW YORK
SCALE: 1"= 50' AUGUST 8, 2013 REVISED: 3/23/15 6/26/17

50 0 50 100 150
GRAPHIC SCALE - FEET

NOTE: THIS SURVEY MAP SHALL BE DEEMED INVALID UNLESS ACCOMPANIED BY SHEET 1 OF 2.
SEE SHEET 1 OF 2 FOR REFERENCES, NOTES AND ADDITIONAL INFORMATION.

SHEET 1

SHEET 2 OF 2 JOB NO. 140-172

APPENDIX B

Project Reports (electronic copy)

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Environmental Remediation, Remedial Bureau C
625 Broadway, 11th Floor, Albany, NY 12233-7014
P: (518) 402-9662 I F: (518) 402-9679
www.dec.ny.gov

February 8, 2018

Steven E. Panter, CGWP, PG
Senior Consultant
Fleming-Lee Shue, Inc.
158 W. 29th Street
New York, NY 10001

RE: American Felt and Filter Co. Site, New Windsor, Orange Co.
Site No. 336036
Final Engineering Report

Dear Mr. Panter:

Thank you for your October 25, 2017 transmittal of the "American Felt & Filter Company, New Windsor, New York, Final Engineering Report, October 2017", for the referenced site. The Report was found to be satisfactory and will be approved upon receipt of the engineer's certification. When re-submitting the report please modify the second bullet in Section 5 to include "residential use", thus:

- The controlled property area may not be used for a higher level of use, such as unrestricted, residential or restricted residential use without additional remediation and amendment of the Environmental Easement, as approved by the NYSDEC;

If you have any questions, please contact me at (518) 402-9686.

Sincerely,



John Spellman, P.E.
Project Manager
Division of Environmental Remediation

ec: Wilson Pryne, American Felt & Filter Company

AMERICAN FELT & FILTER COMPANY
NEW WINDSOR, NEW YORK

Final Engineering Report

Consent Order Index # W3-0784-04-06
Site # 3-36-036

Prepared for

American Felt & Filter Company

New Windsor, NY

Prepared by

Arnold F. Fleming, P.E.
158 W. 29th Street, 9th Floor
New York, New York 10001

FEBRUARY 2018

CERTIFICATIONS

I, Arnold F. Fleming, am currently a registered professional engineer licensed by the State of New York, I had primary direct responsibility for implementation of the remedial program activities, and I certify that the Remedial Action Work Plan was implemented and that all construction activities were completed in substantial conformance with the Department-approved Remedial Action Work Plan.

I certify that the data submitted to the Department with this Final Engineering Report demonstrates that the remediation requirements set forth in the Remedial Action Work Plan and in all applicable statutes and regulations have been or will be achieved in accordance with the time frames, if any, established in for the remedy.

I certify that all documents generated in support of this report have been submitted in accordance with the Department's electronic data deliverable and have been accepted by the Department.

I certify that all data generated in support of this report have been submitted in accordance with the Department's electronic submission protocols and have been accepted by the Department.

I certify that all use restrictions, Institutional Controls, Engineering Controls, and/or any operation and maintenance requirements applicable to the site are contained in an environmental easement created and recorded pursuant ECL 71-3605 and that all affected local governments, as defined in ECL 71-3603, have been notified that such easement has been recorded.

I certify that a Site Management Plan has been submitted for the continual and proper operation, maintenance, and monitoring of all Engineering Controls employed at the site, including the proper maintenance of all remaining monitoring wells, and that such plan has been approved by Department.

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, Arnold F. Fleming, 158 West 29th Street, 9th Floor, New York, NY 10001, am certifying as Owner's Designated Site Representative for the site.

050411 — NYS Professional Engineer #

2/8/18 — Date



Signature

TABLE OF CONTENTS

TABLE OF CONTENTS ..... **III**

LIST OF ACRONYMS ..... **VI**

FINAL ENGINEERING REPORT **1**

1.0 BACKGROUND AND SITE DESCRIPTION **3**

2.0 SUMMARY OF SITE REMEDY **4**

2.1 REMEDIAL ACTION OBJECTIVES **4**
- **2.1.1 Groundwater** **4**
- **2.1.2 Soil RAOs** **4**
- **2.1.3 Surface Water RAOs** **5**
- **2.1.4 Sediment RAOs** **5**

2.2 DESCRIPTION OF THE SELECTED REMEDY **5**

3.0 INTERIM REMEDIAL MEASURES, OPERABLE UNITS AND REMEDIAL CONTRACTS **6**

4.0 DESCRIPTION OF REMEDIAL ACTIONS PERFORMED **7**

4.1 GOVERNING DOCUMENTS **7**
- **4.1.1 Site Specific Health & Safety Plan (HASP)** **7**
- **4.1.2 Community Air Monitoring Plan (CAMP)** **7**

4.2 REMEDIAL PROGRAM ELEMENTS **7**
- **4.2.1 Contractors and Consultants** **7**
- **4.2.2 Community Air Monitoring Results** **8**

4.3 REMEDIAL ACTIONS **8**
- **4.3.1 Chemical Oxidation** **8**
- **4.3.2 Excavation** **21**
- **4.3.3 Treatment Effectiveness** **23**
- **4.3.4 Remaining Contamination** **23**
  - **4.3.4.1 Unrestricted Use** **23**
  - **4.3.4.2 Residential Use** **23**
  - **4.3.4.3 Groundwater** **23**

4.3.5 Soil Cover System 27
4.3.6 Sub-Slab Depressurizatio System 27
4.3.7 Deviations from Remedial Action Work Plan 28
4.3.8 Quality Assurance/Quality Control Summary (DUSR) 28

5.0 ENVIRONMENTAL EASEMENT & SOIL MANAGEMENT AREA 29

6.0 SITE MANAGEMENT PLAN 30

FIGURES

Figure 1 Site Location and Layout
Figure 2 Site Plan and Injection Locations
Figure 3 Post-excavation/Post-treatment Soil Sampling Locations and Results Summary
Figure 4 Post-treatment Groundwater VOC Results and Groundwater Contour Map
Figure 5 TCA, DCE & TCE Reductions in Soils after 6 Days of Treatment (in text)
Figure 6 cis-1,2-DCE, 1,1,2-TCA, PCE & Benzene in Soils after 6 Days of Treatment (in text)
Figure 7 Groundwater VOC Treatment Trends in Treatment Area Well EW-0 (in text)
Figure 8 Groundwater Chloroethane Treatment Trends in Treatment Area Well EW-0 (in text)
Figure 9 Groundwater 1,1,2-TCA Treatment Trends in Treatment Area Well EW-0 (in text)
Figure 10 VOCs in Wells Outside Treatment Area (in text)
Figure 11 Piano Felt Building SSDS As-built

TABLES

Table 1 Soil Cleanup Objectives for the Project
Table 2A End-point Post-excavation Soil sample Analytical results, Summary of VOCs
Table 2B End-point Post-treatment Soil sample Analytical results, Summary of VOCs
Table 3 Post-treatment Groundwater Analytical Results, VOCs, Metals, General Chemistry
Table 4 Summary of Groundwater VOCs in treatment Area (in text)
Table 5 Pre-treatment Groundwater Parameters (in text)
Table 6 Post-treatment Groundwater Parameters (in text)
Table 7 Oxidant Volume by Injection Point (in text)
Table 8 Endpoint Soil Sample Results Unrestricted Use SCOs (in text)
Table 9 Post-treatment Groundwater Results (in text)

Table 10 Soil Pile/Soil Cover Samples (in text)

APPENDICES

Appendix A Soil Management Area Metes and Bounds
Appendix B Digital Copy of FER
Appendix C CAMP Certification
Appendix D Raw Analytical Laboratory Data
Appendix E DUSRs for End Point and Post-treatment Samples
Appendix F VeruTEK Report
Appendix G Project Photographic Log

ACRONYMS

Acronym	Definition
AWQS	Ambient Water Quality Standard
BTEX	Benzene, Toluene, Ethylbenzene, Total Xylenes
CAMP	Community Air Monitoring Plan
CPP	Citizen Participation Plan
DUSR	Data Usability Summary Report
EC	Engineering Control
FER	Final Engineering Report
ft.-bg	Feet below Grade
GA	Source of Drinking Water
HASP	Health and Safety Plan
IC	Institutional Control
IFT	Interfacial Tension
m	milli or Meter
NYSDEC	New York State Department of Environmental Conservation
N	Newtons
PAH	Polynuclear Aromatic Hydrocarbons
PRR	Periodic Review Report
QAPP	Quality Assurance Project Plan
RAWP	Remedial Action Work Plan
RI	Remedial Investigation
S-ISCO™	Surfactant-Enhanced In-Situ Chemical Oxidation
SCO	Soil Cleanup Objective
S/MMP	Soil/Materials Management Plan
SSDS	Sub-Slab Depressurization System
SMP	Site Management Plan
SOP	Site Operation Plan
SVOCs	Semi-volatile Organic Compounds
SWPPP	Stormwater Pollution Prevention Plan
TCA	1,1,1-Trichloroethane
TCL	Target Compound List
TOGS	Technical and Operational Guidance Series
UST	Underground Storage Tank
VOCs	Volatile Organic Compounds

FINAL ENGINEERING REPORT

Introduction

On behalf of The American Felt and Filter Company (AFFCO), Arnold F. Fleming, P.E., and Fleming-Lee Shue, Inc. (collectively FLS) have prepared this Final Engineering Report (FER) to document the completion of remedial activities at 361 Walsh Avenue, New Windsor, New York (Site). The remediation was completed in accordance with the approved FLS 2012 Remedial Action Work Plan and was prepared in accordance with the NYSDEC's DER-10 Technical Guidance for Site Investigation and Remediation, May 2010. AFFCO is also under a Consent Order to remedy the property (Index No. W3-0784-04-06). The New York State Department of Environmental Conservation (NYSDEC) placed the Site on its Inactive Hazardous Waste Sites list in 1991 (Site Code 3-36-036) because of the potential threat to the adjacent Quassaick Creek.

The AFFCO property, located in New Windsor, Orange County, New York manufactures a variety of felt and filter products. The Site lies on the south side of Quassaick Creek, which flows into the Hudson River approximately 0.2 miles east of the Site. AFFCO is on industrial zoned land. Beyond the Site, the surrounding area is a mixture of land uses including industrial, commercial, and residential. The entire property occupies 23.185 acres but the Consent Order Environmental Easement Area is 0.5454 acres and includes the remediated soil area and the adjacent Piano Felt Building that houses a sub-slab depressurization system (SSDS). Most of the Site is level. Figure 1 shows the Site and an inset depicts the entire property outline. Appendix A shows the property and Environmental Easement area.

Site investigations completed in 1988 found soil and groundwater near the Feutron Building contained 1,1,1-Trichloroethane (TCA). The source of the contamination was believed to be from historic leakage within the enclosed process area and spillage in the adjacent drum storage area. Subsequent soil and groundwater sampling in September 1994, August 1998, and October 2001 indicated that residual TCA remained in the soil and groundwater in the former drum storage area near the Feutron Building. In response, FLS submitted a Remedial Design/Remedial Action Work Plan (RD/RAWP) in February 2005 to NYSDEC. The RD/RAWP work plan called for a Dual Phase Extraction System to remediate soil and groundwater near and beneath the Feutron Building. The RD/RAWP was approved in September 2005. After the RD/RAWP was approved, the northwestern portion of the Feutron Building was taken out of service and subsequently demolished. This changed conditions such that other more effective remediation alternatives became available, and the Dual Phase Extraction System was never implemented.

In 2008, FLS prepared a revised RAWP to remediate the TCA-impacted soil by excavation and disposal. This RAWP was subsequently approved by NYSDEC in October 2008 but not executed. Ultimately, FLS prepared a revise RAWP in March 2012 that was approved by NYSDEC on April 4, 2012. The 2012 RAWP called for excavation of the top 10 feet of impacted soil near the former Feutron Building and *in situ* chemical oxidation of the contaminant from the water table to the underlying till layer.

The treatment remedy was *in situ* chemical injection using alkaline-activated sodium persulfate, sodium hydroxide, and a plant-based surfactant. Sodium persulfate was the oxidant and was activated by the addition of sodium hydroxide to raise the pH. The plant-based surfactant, VeruSOL®, was added to aid in the dissolution of the non-aqueous phase liquid (NAPL) to make it available for chemical oxidation. In all, 13,200 gallons of oxidant mixture were injected over a 6-day treatment period during July 2012. Comparison of pre-treatment and post-treatment soil contaminant mass estimates indicated that approximately 73 percent of the total volatile organic compound (VOC) mass was destroyed and approximately 76 percent of the TCA mass was destroyed. On a stratum-by-stratum basis, an average of 76 percent of the total VOC mass was degraded and an average of 87 percent of the TCA mass was degraded. Most soils met the Part 375 Residential Use Soil Cleanup objectives (SCO) and all soils met the Site cleanup standard, the Commercial Use Soil Cleanup Objectives. Groundwater exhibited large reductions on VOC concentrations. A number of VOCs met the TOGS GA cleanup goal.

Excavation was conducted by removing soils in each of five grid cells to a depth of approximately 10 feet below grade. The soils were staged on plastic sheeting before being tested and returned to the excavation if found to meet the Commercial Use SCOs. All soil met the SCOs. The Site contains a Soil Management Area that includes the remediated area and groundwater monitoring wells. The Soil Management Area is one component of the Environmental Easement. The second component includes the Piano Felt Building where there is a SSDS.

1.0 BACKGROUND AND SITE DESCRIPTION

The AFFCO Site, located in New Windsor, Orange County, New York (Figure 1), manufactures a variety of felt and filter products. The Site lies on the south side of Quassaick Creek, which flows into the Hudson River approximately 0.2 miles east of the Site. AFFCO is on industrial zoned land. Beyond the Site, the surrounding area is a mixture of land uses including industrial, commercial and residential. The entire property occupies 23.185 acres but the Environmental Easement area is 0.5454 acres.

Prior to 1978, the Site was owned and operated by the GAF Corporation, which manufactured the same products as AFFCO. During both GAF's and AFFCO's ownership, the facility used TCA as a solvent and carrier for zinc resinate, used to impregnate felt sheets in the Feutron Building. The TCA was stored on Site in 55-gallon drums in an enclosed area just outside the Feutron Building. Approximately 35 to 40 drums of TCA were generally present on-Site during regular operations. The facility stopped using TCA in 1992 when the AFFCO shut down the production line.

Site investigations completed in 1988 found soil and groundwater near the Feutron Building contained TCA. The source of the contamination was believed to be from historic leakage within the enclosed process area and spillage in the drum storage area. NYSDEC placed the Site on its Inactive Hazardous Waste Sites list in 1991 (Site Code 3-36-036) because of the potential threat to the adjacent Quassaick Creek. AFFCO is also under a Consent Order to remedy the property (Index No. W3-0784-04-06).

Subsequent soil and groundwater sampling in September 1994, August 1998, and October 2001 indicated that residual TCA remained in the soil and groundwater in the former drum storage area near the Feutron Building. FLS prepared the final RAWP in 2012 to remediate the TCA-impacted soil by excavation and *in situ* chemical treatment. This RAWP was subsequently approved by NYSDEC on April 4, 2012. The 2012 RAWP called for excavation of the top 10 feet of impacted soil near the former Feutron Building and *in situ* chemical oxidation of the contaminant from the water table to the underlying confining layer (glacial till).

The portion covered by a Soil Management Area, SSDS, and the Site boundaries are shown in Appendix A. An electronic copy of this FER with all supporting documentation is included as Appendix B.

2.0 SUMMARY OF SITE REMEDY

Based on the results of the Remedial Investigation, the following Remedial Action Objectives (RAO) were identified for this Site.

2.1 REMEDIAL ACTION OBJECTIVES

2.1.1 Groundwater

RAOs for Public Health Protection

- Prevent ingestion of groundwater containing contaminant levels exceeding drinking water standards.
- Prevent contact with, or inhalation of, volatiles emanating from contaminated groundwater.
- The remedial action objectives for groundwater are the TOGS 1.1.1 GA ambient water quality standards (TOGS) or asymptotic levels of VOCs in groundwater following acceptable levels of treatment.

RAOs for Environmental Protection

- Restore ground water aquifer, to the extent practicable, to pre-disposal/pre-release conditions.
- Prevent the discharge of contaminants to surface water.
- Prevent further off-site migration of contaminated groundwater.
- Remove the source of groundwater contamination.

2.1.2 Soil RAOs

RAOs for Public Health Protection

- Prevent ingestion/direct contact with contaminated soil.
- Prevent inhalation of, or exposure to, contaminants volatilizing from contaminated soil.
- The soil remedial action objectives are the Part 375 Commercial Use SCOs and a 90 percent reduction in contaminant mass as defined by the sum of the VOCs.

RAOs for Environmental Protection

- Prevent migration of contaminants that would result in groundwater contamination.
- Prevent impacts to biota due to ingestion/direct contact with contaminated soil that would cause toxicity or bioaccumulation through the terrestrial food chain.

2.1.3 Surface Water RAOs

There is no surface water on the Soil Management Area, so the remedial action did not address this medium.

2.1.4 Sediment RAOs

There are no sediment areas on Soil Management Area, so the remedial action did not address this medium.

2.1.5 Soil Vapor, RAOs for Public Health Protection

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

2.2 DESCRIPTION OF THE SELECTED REMEDY

The remedy consisted of two parts. Part 1 consisted *in situ* chemical oxidation of soils within the 50-ft. by 50-ft. treatment area from 10 ft.-bg to 15 ft.-bg. Treatment used the RemMetrik® (U.S. Patent No. 8,739,867) methodology that targets the contaminant mass and injects the treatment amendment using subsurface pressure waves. In this instance, the subsurface pressure waves and injection were provided by Wavefront Technology Solutions Inc. Primawave™ methodology. Chemical oxidation was provided by VeruTEK's S-ISCO™ technology using alkaline-activated sodium persulfate and a plant-based surfactant.

Sodium persulfate was the oxidant and was activated by the addition of sodium hydroxide to raise the pH. The plant-based surfactant, VeruSOL®, was added to aid in the dissolution of any NAPL to make it available for chemical oxidation.

Part 2 consisted of excavation of the upper 10 feet of soil within the 50-ft. by 50-ft. treatment area. Excavated soils were placed in a lined containment unit and were subsequently tested and returned to the excavation if the soils met the SCOs.

3.0 INTERIM REMEDIAL MEASURES, OPERABLE UNITS AND REMEDIAL CONTRACTS

A SSDS designed by FLS, was installed at the Piano Felt Building by AFFCO in October 2010. The SSDS was installed to mitigate residual TCA emissions potentially impacting indoor air quality for commercial/industrial land use at this Site and prevent potential migration of subsurface vapors to the nearby area. The system was designed in accordance with the New York State Department of Health (NYSDOH) *Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York* (2006).

A mitigation system was required based on concentrations of TCA in sub-slab vapor and indoor air samples collected in December 2009. The sub-slab vapor sample contained 539 micrograms per cubic meter (ug/m^3) of TCA and the indoor air sample contained 34 ug/m^3 of TCA.

The SSDS consists of centrally located depressurization pits with a pipe connected to a fan inserted into each pit. The soil vapor exhaust is located above the roof. The vacuum field is subsequently measured using pressure monitoring points located at each corner of the building. The performance goal for the system is a minimum of (-0.02) inches of water column (w.c.) in each of the vacuum monitoring points.

The piping from the pit is constructed of polyvinyl chloride (PVC) plastic and sealed into the replaced slab with silicone sealant. All pipe sizes are 4 inches in diameter. The fan is capable of operating at a minimum 375 cubic feet per minute (CFM) at 0 inches of water column (w.c.). See the SSDS Construction Completion Report, submitted May 2011, for more information regarding the system.

4.0 DESCRIPTION OF REMEDIAL ACTIONS PERFORMED

4.1 GOVERNING DOCUMENTS

4.1.1 Remedial Action Work Plan

All remedial work performed under this Remedial Action was in full compliance with the approved RAWP. The RAWP outlined the remedial methods and procedures and the remedial goals to be attained.

4.1.2 Site Specific Health & Safety Plan (HASP)

All remedial work performed under this Remedial Action was in full compliance with governmental requirements, including site and worker safety requirements mandated by Federal OSHA. All work was conducted in accordance with the OSHA-compliant HASP prepared for all remedial and invasive work performed at the Site.

Community Air Monitoring Plan (CAMP)

The purpose of the CAMP is to protect downwind receptors (e.g., residences, businesses, schools, nearby workers, and the public) from potential airborne contaminants released as a direct result of the Remedial Action being performed at the site. A modified CAMP was used because the remediated area is confined to an isolated portion of the Site that is a considerable distance from nearby residences, nearby workers, and the public.

Air monitoring for VOCs occurred during soil excavation. No VOCs were observed above the CAMP action limits. Monitoring for particulates was not done during soil excavation. It was not required under the approved modified CAMP. The area is primarily commercial/industrial and the nearest residence is approximately 500 feet from where soil was excavated and managed. Woodland separates the residence from the work area.

4.2 REMEDIAL PROGRAM ELEMENTS

4.2.1 Contractors and Consultants

- The Remedial Engineer for this project was Arnold F. Fleming, P.E. He is a registered professional engineer licensed by the State of New York.

- VeruTEK, Bloomfield, CT – Remediation Contractor responsible for implementation of the surfactant-enhanced *in-situ* chemical oxidation S-ISCO® Treatment.
- Zebra, Lynbrook, NY – Drilling Contractor responsible for implementing Primawave™, the process used to enhance delivery of chemical amendments at the pore scale level.

4.2.2 Community Air Monitoring Results

VOCs in air were monitored using a photoionization detector (PID) during excavation and soil stockpiling. VOC air monitoring results were all below NYSDEC's CAMP guideline of 5 ppm. AFFCO received no complaints about air nuisance during the remedial work. Appendix C contains the signed certification from the safety manager conducting the CAMP.

4.3 REMEDIAL ACTIONS

Remediation of the AFFCO Site was completed in two stages: 1) *in situ* chemical oxidation of soils and groundwater in the 50-ft. by 50-ft. treatment area, from the water table to 15 feet below grade, atop the till layer, and 2) excavation of soils within the 50-ft. by 50-ft. treatment area from grade to slightly below the water table. Previous investigations found a compact till layer at 15 feet below grade that acted as a barrier to contaminant migration. For this reason remediation was limited to 15 feet below grade in the area of concern (treatment area).

The excavation encompassed the area near the former Feutron Building as shown on Figure 2. Excavation proceeded on a grid-cell-by-grid cell basis. The soil was removed from the impacted area and placed in a lined containment unit for testing and was returned to the respective grid cell after testing indicated that the results met the Part 375 Commercial Use SCOs. Remediation took place between July and September 2012. Figure 3 presents the pre-treatment and post-excavation results. Figure 4 presents the results of pre- and post-treatment groundwater sampling. Table 1 presents the SCOs. Table 2 presents the VOC endpoint sampling results. Appendix D contains the laboratory reports and Appendix E contains the Data Usability Summary Reports (DUSR).

4.3.1 Chemical Oxidation

Stage 1 occurred in July 2013. In preparation for chemical oxidation the treatment area was divided into six grid cells each approximately 17 feet by 25 feet (Figure 2). In May 2012, twenty-four, 6-inch-long pre-treatment soil cores within the treatment interval were collected from eight soil borings located within the six grid cells. Encore soil samples for VOC analysis were collected from the soil cores. A randomly selected X-coordinate and randomly selected Y-coordinate placed the boring within each grid cell. Then, three

randomly selected 6-inch-long depth intervals were sampled in each boring. Grid Cells 1 and 2 had two borings each. The objective was to augment the existing soil data from the 10-ft. to 15-ft. treatment interval so as to have a basis for comparing before and after *in situ* treatment results. In total, the combined soil characterization samples from earlier soil sampling and the randomly collected soil samples collected in May 2012 yielded 31 pre-treatment (baseline) soil samples.

Three injection wells (IW-1, IW-2, and IW-3) were installed in May 2012 for a total of 6 days of chemical treatment (Figure 2). The injection wells were built of 2-inch-diameter Schedule 80 PVC. The screened intervals were as follows:

Injection Well	Top of Screen, ft.-bg	Bottom of Screen, ft.-bg	Screen Length, ft.	Grid Cell
IW-1	9	12.3	3.3	2
IW-2	9	13.1	4.1	2
IW-3	9	12	3	4

In addition, five Geoprobe well points were used to inject chemical in the 13-ft to 14-ft- and 14-ft. to 15-ft.-intervals in Grid Cell 2. The Geoprobe points were required because of the dense till layer. The intent was to install the injection well screens to 15 feet but this was infeasible due to the dense till layer beginning at approximately 13 feet that prevented further penetration while installing the injection wells.

The remedy for AFFCO was *in situ* chemical injection using the RemMetrik® methodology, which used Wavefront's Primawave® technology in this instance, and VeruTEK's Surfactant Enhanced *in situ* Chemical Oxidation (S-ISCO®) process, which used sodium persulfate, sodium hydroxide, and a plant-based surfactant. Sodium persulfate was the oxidant and was activated by the addition of sodium hydroxide to raise the pH. The plant-based surfactant, VeruSOL®, was added to aid in the dissolution of the contaminant to make it available for chemical oxidation. In all, 13,200 gallons of oxidant were injected into the treatment interval on July 11 and 12 and again on July 23, 24, 25, and 26, 2012. The following concentrations formed the oxidant mixture: sodium persulfate, 15 – 50 g/L; sodium hydroxide, 12 – 50 g/L; VeruSOL®, 0 – 15 g/L.

Groundwater was regularly monitored in nearby monitoring and injection wells during injections for pH, sodium persulfate, conductivity, oxidation reduction potential (ORP), dissolved oxygen, and temperature to ensure a proper chemical environment for oxidation and that conditions for *in situ* treatment were optimal.

The remedial excavation, Stage 2, took place in August-September 2012, in the interval between the end of the chemical injections and post-treatment soil sampling. Five bottom endpoint soil samples were collected at the bottom of the excavation, which was from 10 feet to 11 feet below grade, to document soil conditions. These samples were biased toward staining and were collected within the stratum previously treated by *in situ* chemical oxidation.

On March 27, 2013, another set of 24 randomly collected post-treatment Encore

soil samples were gathered from the six grid cells using an entirely new set of random coordinates (Figure 3). In total, the 24 randomly collected post-treatment soil samples and two duplicate samples, plus the five bottom endpoint samples yielded 31 post-treatment soil samples for comparison to pre-treatment conditions.

Chemical Oxidation Results

Post-treatment soil and groundwater sampling took place in March and April 2013. All of the oxidant had been expended prior to post-treatment sampling. Appendix F contains the remediation contractor, VeruTEK, report describing the treatment details.

Soils

The soil treatment goals were the Part 375 Commercial Use Soil Cleanup Objectives and 90 percent reduction in overall contaminant mass, which is defined as the sum of the Target Compound List (TCL) VOCs. The primary contaminants were the chlorinated VOCs. The principal VOC was TCA.

Of the 31 post-treatment soil samples, all but three VOC results met the Residential Use w/CP-51 Soil Cleanup Objectives, which are more stringent than the Commercial Use SCOs. The VOC compounds in the remaining three samples were well below the Commercial Use SCOs. An appreciable number of post-treatment soil samples were below the Unrestricted Use SCOs.

Contaminant reductions were computed by comparing the pre- and post-treatment mean soil concentrations. Since the bulk density and soil volume remain constant, the differences in mean concentrations yield the percent reduction in mass. Contaminant mass reduction is examined on an overall basis, by stratum, and by selected compounds.

The results for total VOCs and TCA concentrations follow a log-normal distribution, which is common in environmental data. For this reason, the pre and post-treatment reductions for total VOCs and TCA were calculated using log-transformed values as this yields more representative estimates of the means and confidence limits about the means.

Total VOCs Reduction

Comparing the 31 pre-treatment and 31 post-treatment samples yields a net total VOC mass reduction of 73 percent. Using arithmetic means the percent reduction is 63 percent.

Total VOCs in Soils – 95% Confidence Limits
Results in µg/kg

Treatment	Sample Nos.	Lower Limit[1]	Geometric Mean	Upper Limit[1]	% Reduction
Pre-treatment	31	1,768	5,058	14,472	--
Post-treatment	31	417	1,372	4, 520	73

[1] Limits about the geometric mean

Total VOCs in Soils
Results in µg/kg

Sample Nos. pre/post	Pre-treat, Arithmetic Mean Conc. µg/kg	Post-treat, Arithmetic Mean Conc. µg/kg	Percent Reduction
31/31	66,365	24,751	63

TCA Reduction

For TCA alone the net contaminant mass reduction measures 75 percent. Using arithmetic means the percent reduction is 67 percent.

TCA in Soils – 95% Confidence Limits
Results in µg/kg

Treatment	Sample Nos.	Lower Limit[1]	Geometric Mean	Upper Limit[1]	% Reduction
Pre-treatment	31	460	1,063	5,588	--
Post-treatment	31	115	406	1,436	75

[1] Limits about the geometric mean

TCA in Soils

Samples Nos. pre/post	Pre-treat, Arithmetic Mean Conc. µg/kg	Post-treat, Arithmetic Mean Conc. µg/kg	Percent Reduction
31/31	55,314	18,460	67

Stratum-by-Stratum Reduction

On a stratum-by-stratum basis the contaminant mass reductions for total VOCs were based on arithmetic means as there is insufficient number of samples in most strata to use the geometric means. The results are as follows:

Total VOCs in Soils Reduction by Stratum

Stratum	Sample Nos. pre/post	Pre-treat, Arithmetic Mean Conc. µg/kg	Post-treat, Arithmetic Mean Conc. µg/kg	Percent Reduction
1 (10 -11')	2/7	119,577	3,205	97
2 (11 – 12')	3/6	436,697	75,143	83
3 (12 – 13')	1/5	50	38,650	*
4 (13 – 14')	15/4	24,156	3,984	84
5 (14 -15')	10/9	14,568	8,803	40

Values rounded. * Too few pre-treatment samples for comparison.

In the four strata where reductions could be measured, the average overall total VOC mass reduction is 76 percent.

On a stratum-by-stratum basis the contaminant mass reductions for TCA, based on arithmetic means, are as follows:

TCA Reduction in Soils by Stratum

Stratum	Sample Nos. pre/post	Pre-treat, Arithmetic Mean Conc. µg/kg	Post-treat, Arithmetic Mean Conc. µg/kg	Percent Reduction
1 (10 -11')	2/7	115,385	2,621	98
2 (11 – 12')	3/6	388,693	66,639	83
3 (12 – 13')	1/5	0.49	26,602	*
4 (13 – 14')	15/4	15,761	2,493	84
5 (14 -15')	10/9	8,283	1,232	85

Values rounded. * Too few pre-treatment samples for comparison.

In the four strata where reductions could be measured, the average overall TCA mass reduction is 87 percent.

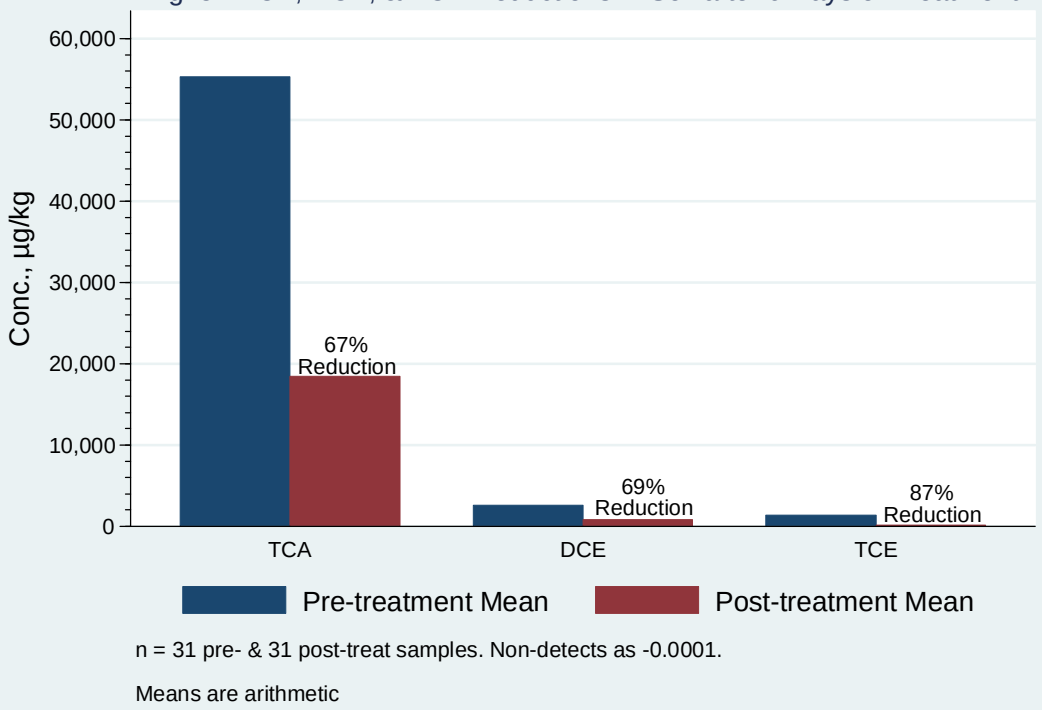
Specific VOC Compound Reductions

Mass reductions for individual VOCs were calculated by comparing the pre-treatment and post-treatment mean concentrations. Numerous values were below detection limits; non-detects were arbitrarily given a value of -0.0001 for calculation purposes. Arithmetic means were used for calculation purposes.

Mass reductions of specific VOCs on an overall basis show reductions ranging from 67 to 98 percent. Two of the more toxic compounds exhibited very high reductions. Benzene and 1,1,2-Trichloroethane (1,1,2-TCA), while having comparatively minor concentrations in soils, showed reductions of 98 and 97 percent, respectively. Figures 5

and 6 show the contaminant mass reductions for a number of compounds (TCA is repeated for the sake of comparison). The specific VOCs were selected on the basis of having the highest concentrations in pre-treatment soils and/or toxicity.

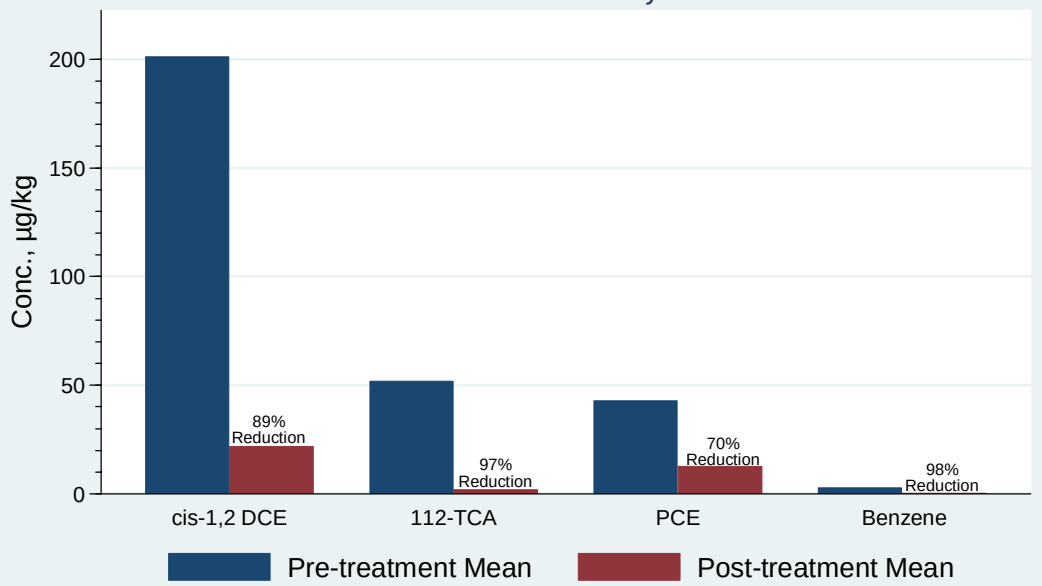
Fig. 5 - TCA, DCE, & TCE Reductions in Soil after 6 Days of Treatment



n = 31 pre- & 31 post-treat samples. Non-detects as -0.0001.

Means are arithmetic

Fig. 6 - cis-1,2 DCE, 112-TCA, PCE, & Benzene Reductions in Soil after 6 Days of Treatment



n = 31 pre- & 31 post-treat samples. Non-detects as -0.0001.

Means are arithmetic

Groundwater

Baseline groundwater samples were collected in five wells: E1-X, EW-0, MW-1, E1-NEW, and S-8 in June-July 2012. Post-treatment groundwater samples were collected in April 2013. Monitoring wells EW-1X and EW-0 were inside or immediately adjacent to the treatment area (EW-1X). Wells S-8, E1-NEW, and MW-1 were outside the treatment area. MW-1 is approximately 12 feet downgradient from the treatment area and S-8 and E1-NEW (E1-(N)) are 55 or more feet downgradient from the treatment area (Figure 4). Tables 3 presents the pre- and post-treatment groundwater sampling results. Monitoring well construction details are as follows:

Monitoring Well	Top of Screen, ft.-bg	Bottom of Screen, ft.-bg	Location
EW-0	7	14.6	Treatment Area
EW-1X	6	11	Immediately Adjacent to Treatment Area
MW-1	6	13	12 ft. downgradient of Treatment Area
S-8	7	12	65 ft. downgradient of Treatment Area
E1-NEW	35	42	56 ft. downgradient of Treatment Area

Treatment Area

Pre-treatment groundwater samples were collected from wells inside the treatment area in June-July 2012 and in earlier site characterization groundwater samples. The July 2012 samples were collected before treatment from injection wells IW-1, IW-2, IW-3, and original monitoring well EW-0. Post-treatment groundwater samples were collected on April 17, 2013, from the two wells installed immediately adjacent to and inside the treatment area, EW-1X and EW-0, following remedial excavation.

EW-1X was a new monitoring well installed immediately adjacent to Grid Cell 4 to add an additional monitoring point close to the treatment area. EW-0 was re-installed in Grid Cell 2 to replace the original EW-0 that was removed during remedial excavation. It was possible to penetrate the till layer with the drill rig at this location.

Groundwater concentrations typically fluctuate, often dramatically, with changing groundwater levels, the seasons, precipitation, and changes in groundwater flow direction throughout the year. This variation can dramatically affect contact between groundwater and contaminant, influence groundwater movement with more or less contaminated strata, affect contaminant migration and retardation through strata of different conductivities, and be influenced by geochemical factors that also occur within different strata. As a result, groundwater VOC concentrations can fluctuate dramatically from one sampling event to another. Under these conditions, the maximum concentrations likely approximate actual groundwater contaminant concentrations. For this reason it is more useful to compare the pre-treatment maximum groundwater concentrations with post-treatment groundwater. Table 3 contains the complete set of groundwater sample results. Table 4 summarizes the results of groundwater sampling.

Groundwater concentrations remain above TOGS for a number of compounds, but reductions in the principal VOCs range from 74 to 93 percent.

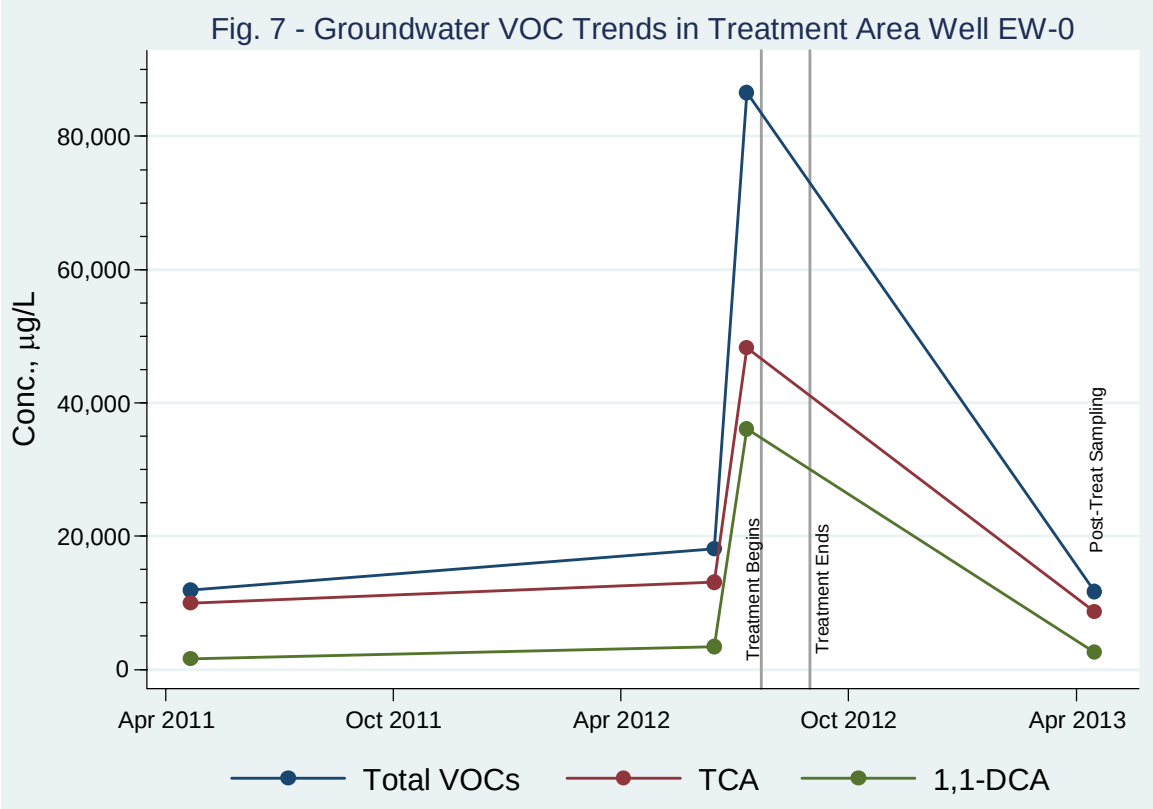
Table 4 - Summary of Groundwater VOCs in Treatment Area

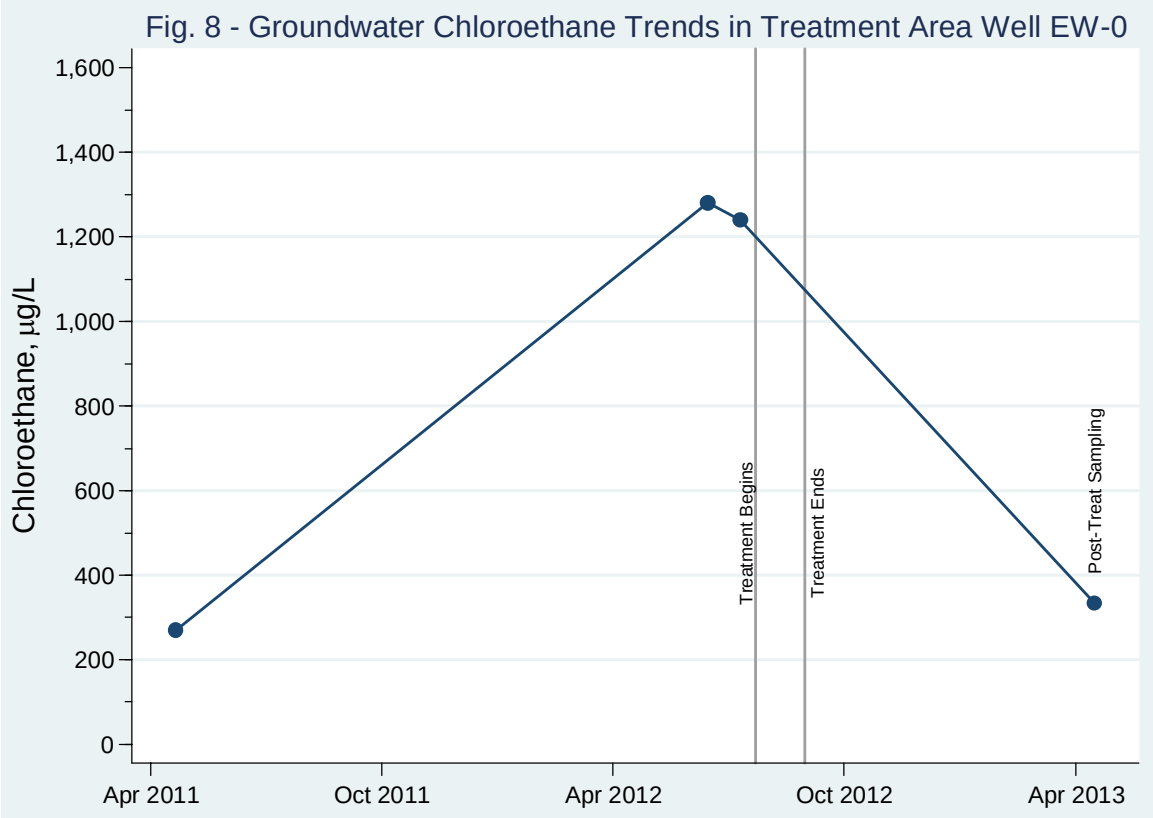
VOC	Sample Nos. pre/post	Pre-treat Max. Conc. µg/L	Post-treat Max. Conc. µg/L	Percent Reduction
Total VOCs	9/2	86,530	11,706	86
TCA	9/2	48,300	8,630	82
112-TCA	9/2	34.5	2.3	93
1,1-DCA	9/2	36,100	2,540	93
Chloroethane	9/2	1,280	334	74

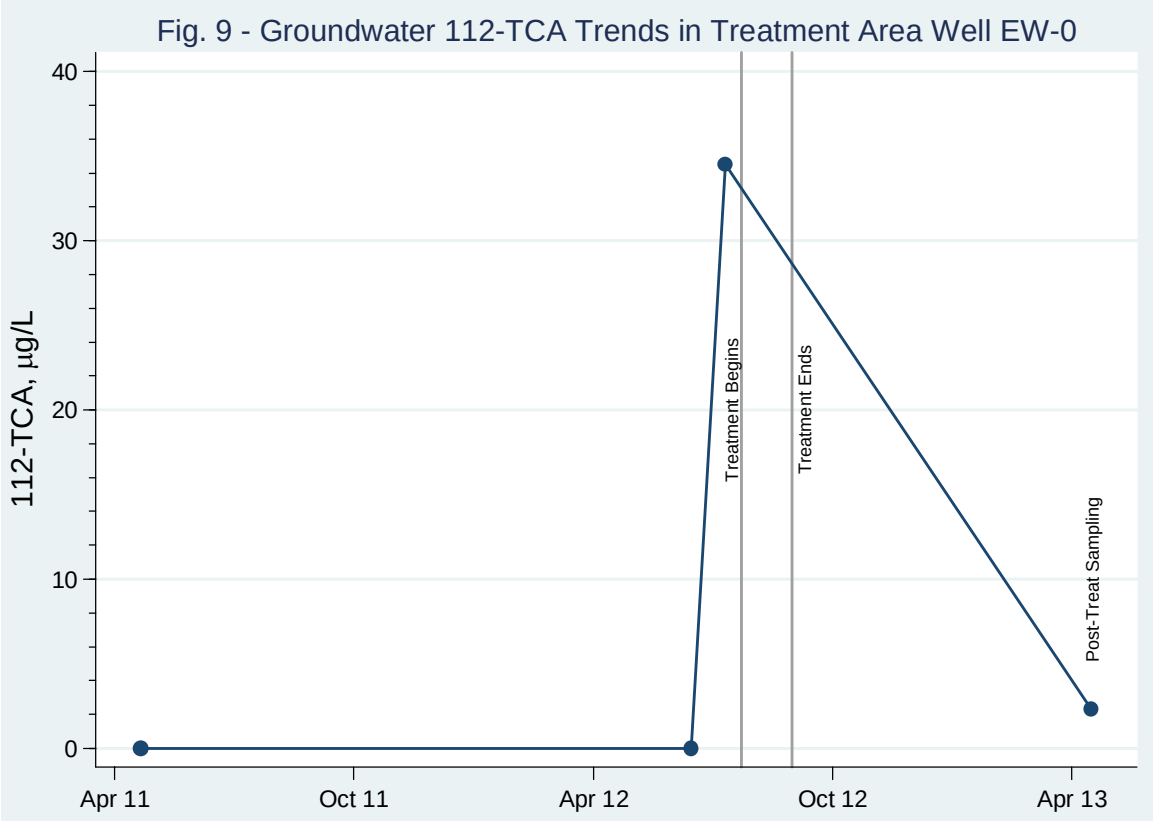
Values rounded.

Of the two wells immediately adjacent to or inside the injection treatment area, EW-1X (EW-1X is within the injection treatment radius but outside the excavation area) and EW-0, the VOC results in EW-1X were all below detection limits except for 1,1-Dichloroethane (DCA), 22.9 µg/L. Accordingly, all but one VOC in this well met the TOGS GA standards in the post-treatment sampling round. In EW-0, 28 of the 36 VOC compounds are below TOGS criteria and/or guidelines and two VOCs are very close to the TOGS criteria.

Figures 7, 8, and 9 depict the trends for the principal VOCs in EW-0. All show large reductions compared to the pre-treatment maximum concentrations. The large VOC reductions in groundwater concentrations are consistent with an appreciable contaminant mass having been eliminated from the Site.


Fig. 7 - Groundwater VOC Trends in Treatment Area Well EW-0
Conc., µg/L
80,000
60,000
40,000
20,000
0
Apr 2011
Oct 2011
Apr 2012
Oct 2012
Apr 2013
Treatment Begins
Treatment Ends
Post-Treat Sampling
Total VOCs
TCA
1,1-DCA


Fig. 8 - Groundwater Chloroethane Trends in Treatment Area Well EW-0
Chloroethane, µg/L
1,600
1,400
1,200
1,000
800
600
400
200
0
Apr 2011
Oct 2011
Apr 2012
Oct 2012
Apr 2013
Treatment Begins
Treatment Ends
Post-Treat Sampling

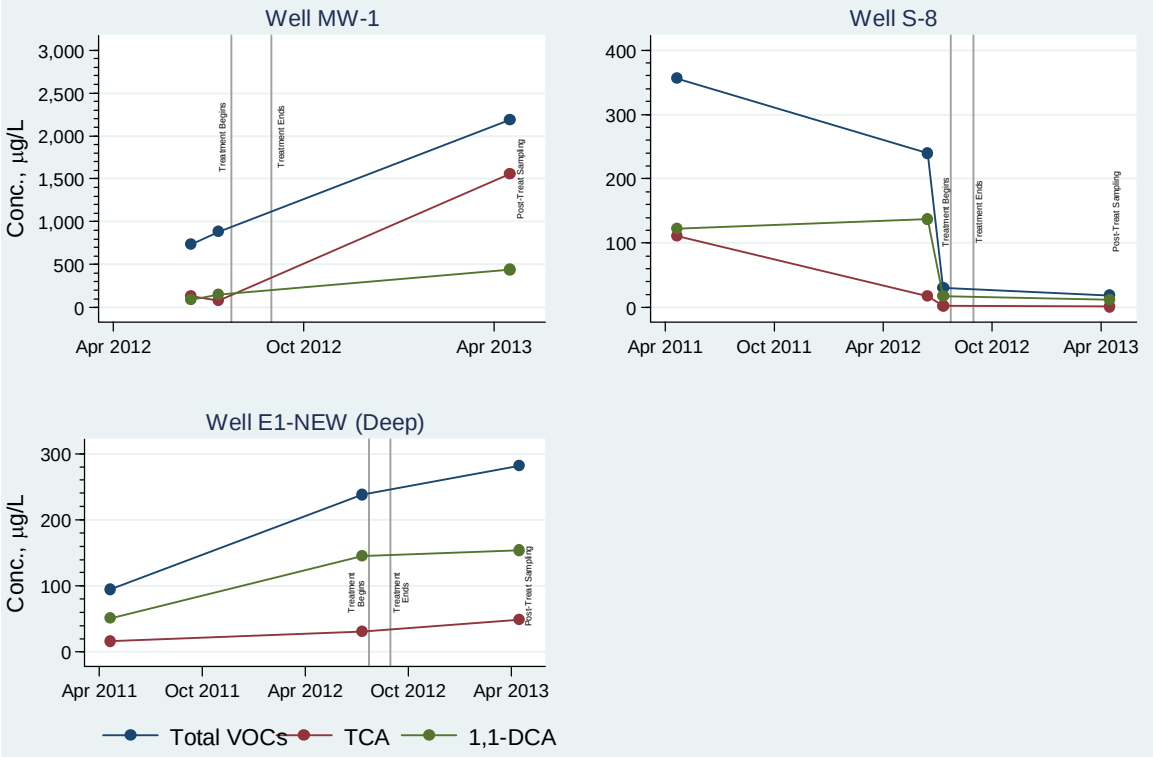


Outside Treatment Area

The three wells outside the treatment area are in the downgradient position. Two of these wells, MW-1 and deep well E1-NEW, showed increases following remediation. It is expected to be a temporary condition.

In contrast, the principal VOCs show a dramatic decrease in S-8 in the post-treatment groundwater samples compared to pre-treatment levels.

Fig 10 - VOCs in Groundwater - Wells Outside Treatment Area



Basic Groundwater Parameters

Table 5 presents the pre-treatment results for basic groundwater parameters. Table 6 presents the post-treatment results. A comparison shows that pH is approximately the same, indicating that groundwater has returned to pre-treatment conditions. Conductivity increased in post-treatment groundwater in response to the oxidant added for *in situ* treatment. Dissolved oxygen remains about the same, but mean ORP is more than two-fold lower than pre-treatment levels. This is most likely the result of residual plant-based surfactant that is being degraded.

Table 5 – Pre-Treatment Groundwater Parameters

Well	pH	Cond. µS/cm	NTU	DO, mg/L	Temp., C	ORP, mV
EW-0	9.88	134	24	0	15.9	-106
IW-1	9.53	90	278	3.03	21.5	-98
IW-2	7.79	813	51	8.25	17	-92
IW-3	9.58	647	0	2.19	21.8	-50
S-8	8.62	593	2.3	0.88	16.6	-202
Mean	9.1	455	71	2.9	18.5	-110

Table 6 – Post-Treatment Groundwater Parameters

Well	pH	Cond. µS/cm	NTU	DO, mg/L	Temp., C	ORP, mV
MW-1	7.56	1,100	0	1.53	13.2	-148
EW-0	8.95	610	0	.65	10.9	-377
EW-1X	8.49	495	459	.62	12.6	-679
E1-NEW	9.08	522	57	.59	15.4	-207
S-8	7.53	356	205	8.42	13.3	59
Mean	8.3	617	144	2.4	13	-270

Sulfate and chloride were monitored both before and after treatment. The mean pre-treatment sulfate concentration measured 21.4 mg/L and the mean post-treatment level 48.8 mg/L. The more than two-fold increase is due to the sodium persulfate added as the oxidant. Some sulfate remains, but will dissipate with time.

The mean pre-treatment chloride concentration measured 108.7 mg/L and the mean post-treatment level 60.9 mg/L. This is a reduction of more than 40 percent. It is most likely due to the decomposition of chlorinated VOCs, the VOCs having been degraded and the chloride having washed through the soil.

Although chloride would be expected to increase in the short-term following destruction of chlorinated VOCs, this reduction suggests that the chloride resulting from oxidation has migrated with groundwater through the treated soil leaving lower concentrations behind. The appreciable reduction in chlorinated contaminant mass is thus being reflected in the lower chloride levels. In the eight months between the end of *in situ* treatment and post-treatment groundwater sampling, groundwater could flush through the more permeable zones in treatment area approximately two-dozen times.

Chemical Oxidation Treatment

The *in situ* treatment included injection of alkaline-activated sodium persulfate along with a surfactant, VeruSOL®, to dissolve NAPL so as to promote

dissolution and optimal oxidation. The oxidant mixture was injected via specially designed injection wells using the RemMetrik® process and Wavefront Technology Solution's Sidewinder tool. The process employs subsurface pressure waves to promote even dispersion of the oxidant mixture into the small pores where most of the NAPL occurs. The treatment goal was 90 percent contaminant mass removal.

It was necessary to complete the *in situ* component before excavation in order for the injection wells to function optimally. The undisturbed overburden provides resistance that allows the subsurface pressure waves to move horizontally without being attenuated by vertical movement, which can occur without sufficient overburden or inadequately compacted overburden.

Prior to *in situ* treatment FLS collected soil samples to estimate contaminant mass and to identify the target zones for optimal injection well placement. The 50-ft. by 50-ft. treatment area was divided into six grid cells. Eight randomly placed soil borings in six grid cells were sampled randomly in 6-inch intervals from the water table to the underlying till layer at approximately 15 feet and sampled for VOCs using Method 8260. In all, 24 randomly selected samples for VOCs were collected using an Encore sampler.

Based on the randomly collected soil samples for VOC analysis, the estimated total contaminant mass measured approximately 79 pounds in the 10 – 15-ft. treatment interval. Approximately 89 percent of the contaminant mass occurred from 10 to 13 feet below grade. Three injection wells were installed where the contamination mass was highest. IW-1 and IW-2 were installed in Grid Cell 2, and IW-3 was installed in Grid Cell 4. All injection wells were installed to approximately 13 ft.-bg. Approximately 90 percent of the contaminant mass occurred in the 10- to 13-ft. interval near IW-2, and during the injections IW-2 was used as the primary injection well to account for the greater level of contaminant mass. To ensure greatest treatment in the 10- to 13-ft. zone, a packer was installed prior to injection to seal off the injection well at 10 feet. The oxidant mixture was also administered through five Geoprobe points from 13 to 14 ft.-bg and 14 to 15 ft.-bg (Figure 2).

Multiple rounds of injections took place between July 10 and July 27, although the total amount of injection time was approximately six days. A total of 13,200 gallons of oxidant mixture was injected. Sodium persulfate was injected at a concentration of 15 to 50 g/L, sodium hydroxide was injected at a concentration of 12 to 50 g/L and VeruSOL® was injected at a concentration of 0 to 15 g/L. Groundwater was monitored daily in the injection wells and nearby monitoring wells to check on the chemical response and distribution of the oxidant. Water in the adjacent stream was also monitored with field instruments and visual inspections during the injection to check for off-Site migration of treatment chemicals. None was found. Favorable chemical conditions were observed in the treatment area (Appendix F, VeruTEK report). Table 7 presents the volume of oxidant solution injected by treatment point.

Table 7 – Oxidant Volume by Injection Point

Injection Point	Injected Volume (gallons)
IW-1	5,310
IW-2	5,320
IW-3	1,570
GP-1	200
GP-2	200
GP-3	200
GP-4	200
GP-5	200
Total	**13,200**

IW- Injection well. GP – Geoprobe injection point.

4.3.2 Excavation

Prior to the start of excavation, the 50-ft. by 50-ft. treatment area, located in the footprint of the northwest portion of the former Feutron Building, was divided into six grid cells. Soil removal in this historic drum storage and felt press area and under the relict floor slab was performed by removing impacted material in Grid Cells 1 through 5. Based on analytical results of pre-excavation soil sampling and the proximity of Grid Cell 6 to the building wall, Grid Cell 6 was not sampled. The layout of the six grid cells is illustrated in Figure 3. Excavation was conducted from August 27, 2012 to September 4, 2012. Appendix G is a photographic log of the excavation and overall remedial effort.

A high density polyethylene (HDPE) soil containment structure (unit) was constructed to contain the excavated soils. The structure had dimensions of approximately 100 feet long and 50 feet wide. The HDPE structure was installed over a bed of clean fine sand to provide protection against puncture by debris or stones beneath the structure.

Excavation was conducted by removing soils in each of the five grid cells to the depth of approximately 11 feet below grade, approximately one (1) foot below the water table. In all, approximately 710 tons of soil were removed from the remedial excavation. The excavated soils were then stockpiled on Site and subsequently passed through a soil screener to remove larger materials that could potentially damage the HDPE containment structure. Once soil passed through the screener, the material was transported via dump truck to the HDPE containment structure. The excavated soils were then sampled in the HDPE containment structure at an interval of no less than one sample per 100 cubic yards. Samples were analyzed for VOCs and compared to the Part 375 Commercial Use SCOs. Soils meeting the SCOs were subsequently backfilled into the separate grid cells. No soil was removed from the Site to a disposal facility and no soil was imported from outside the Site. An additional 1,000 gallons of oxidant mixture was spread across the bottom of the open excavation prior to backfilling.

Soils were scanned for VOCs using a PID with an 11.2 eV bulb. PID screening was conducted either at the excavator bucket, at the soil stockpile in the containment unit, and in the excavation. Any observations regarding soil contamination were logged along with the PID readings.

Post-excavation bottom and sidewall endpoint sampling was conducted upon completion of excavation in each grid cell. Post-excavation sampling was biased towards areas of staining, odors, elevated PID readings, and areas of known contamination. Post excavation samples PX-01 to PX-06 were collected on August 28, 2012. Samples PX-07 and PX-08 were collected on August 30, 2012. Samples PX-09 to PX-15 were collected on September 4, 2012. Figure 3 shows the results of pre-treatment and post-treatment sampling.

Within the excavation were what appeared to be several relict concrete walls and footings that supported the former Feutron Building. One concrete structure was a nominal 20-ft. by 10-ft. vault that once housed manufacturing equipment (Pit L). The concrete vault contained various amounts of rainwater and algae during remediation. No signs of contamination were evident in the vault. A smaller nominal 5-ft. by 5-ft. vault (Pit S) occupied a portion of a larger concrete block and exhibited no signs of contamination. All concrete appeared free of staining or other discernable signs of contamination. The concrete structures were left in place and are shown on Figure 3 for documentation purposes.

4.3.3 Treatment Effectiveness

Post-excavation analytical sample results revealed all VOC concentrations below the NYSDEC Unrestricted Use Criteria with the exception of 1,1-Dichloroethane in sample PX-07 and 1,1-Dichloroethane, 1,1-Dichloroethene and 1,1,1-Trichloroethane in sample PX-3. The post-excavation sample locations and results summary is illustrated in Figure 3.

4.3.4 Remaining Contamination

All post-excavation and post-treatment soil sample results were below the Site cleanup criteria, the Part 375 Commercial Use SCOs.

4.3.4.1 Unrestricted Use

The following post-excavation and post-treatment soil sample results remain above the Unrestricted Use Soil Cleanup Criteria (Table 8):

Table 8 – Endpoint Soil Sample Results Above Unrestricted Use SCOs

Sample ID	Parameter	Result, µg/kg	Unrestricted Use SCO, µg/kg	Commercial Use SCO, µg/kg
PX03-BT-10	1,1-Dichloroethane	1,940	270	240,000
	1,1-Dichloroethene	568	330	500,000
	1,1,1-Trichloroethane	4,980	680	500,000
C5SP02	1,1-Dichloroethene	2,750	330	500,000
	1,1,1-Trichloroethane	29,800	680	500,000
C5SP01	1,1,1-Trichloroethane	2,580	680	500,000
1.1 (12.5-13)	1,1-Dichloroethane	1,080	270	240,000
	1,2-Dichloroethane	232	20	30,000
	1,1-Dichloroethene	1,140	330	500,000
	1,1,1-Trichloroethane	18,700	680	500,000
	Trichloroethene	1,130	470	200,000
1.1 (13.-13.5)	1,1,1-Trichloroethane	2,860	680	500,000
1.2 (11-11.5)	1,1-Dichloroethane	6,220	270	240,000
	1,1,1-Trichloroethane	1,560	680	500,000
1.2 (14-14.5)	1,1-Dichloroethane	34,000	270	240,000
	1,2-Dichloroethane	786	20	30,000
	1,1-Dichloroethene	1,620	330	500,000
	1,1,1-Trichloroethane	4,690	680	500,000
1.2 (13-13.5)	1,1-Dichloroethane	3,950	270	240,000
	1,1,1-Trichloroethane	2,130	680	500,000
2.1 (12.5-13)	2-Butanone (MEK)	893	120	500,000
	1,1-Dichloroethane	34,900	270	240,000
	1,2-Dichloroethane	1,590	20	30,000
	1,1-Dichloroethene	2,150	330	500,000
	cis-1,2-Dichloroethane	374	250	500,000
	trans-1,2-Dichloroethane	294	190	500,000
	Toluene	2,280	700	500,000
	1,1,1-Trichloroethane	42,300	680	500,000
	Trichloroethane	1,180	470	200,000
2.1 (11.5-12)	Acetone	62.4	50	500,000
	1,1-Dichloroethane	11,100	270	240,000
	1,2-Dichloroethane	27.7	20	30,000
2.1 (10-10.5)	1,2-Dichloroethane	20.7	20	30,000
	1,1,1-Trichloroethane	12,600	680	500,000
2.2 (12.5-13)	1,1-Dichloroethane	3,660	270	240,000
	1,2-Dichloroethane	179	20	30,000
	1,1-Dichloroethene	2,310	330	500,000
	1,1,1-Trichloroethane	70,700	680	500,000
2.2 (11-11.5)	1,1-Dichloroethane	6,040	270	240,000
	1,1-Dichloroethene	14,000	330	500,000
	Toluene	1,600	700	500,000
	1,1,1-Trichloroethane	398,000	680	500,000
2.2 (11-11.5)	Trichloroethane	2,040	470	200,000
2.2 (14-14.5)	Acetone	82.2	50	500,000
2.2 (14-14.5)	2-Butanone	129	120	500,000

Table 8 – Endpoint Soil Sample Results Above Unrestricted Use SCOs

Sample ID	Parameter	Result, µg/kg	Unrestricted Use SCO, µg/kg	Commercial Use SCO, µg/kg
	1,1-Dichloroethane	12,100	270	240,000
	1,2-Dichloroethane	34.0	20	30,000
3 (13.5-14)	1,1-Dichloroethane	459	270	240,000
	1,1,1-Trichloroethane	1,500	680	500,000
3 (14.5-15)	1,1-Dichloroethane	5,820	270	240,000
	1,2-Dichloroethane	165	20	30,000
	1,1-Dichloroethene	423	330	500,000
	1,1,1-Trichloroethane	2,320	680	500,000
3 (12.5-13)	1,1-Dichloroethane	410	270	240,000
	1,2-Dichloroethane	134	20	30,000
	1,1-Dichloroethene	659	330	500,000
	1,1,1-Trichloroethane	1,270	680	500,000
4 (11-11.5)	1,1-Dichloroethane	2,000	270	240,000
	1,1-Dichloroethene	1,650	330	500,000
4 (14.5-15)	1,1-Dichloroethane	6,470	270	240,000
5 (13.5-14)	1,1,1-Trichloroethane	3,480	680	500,000
5 (14-14.5)	1,1,1-Trichloroethane	1,220	680	500,000
5 (14.5-15)	1,1,1-Trichloroethane	2,090	680	500,000

PX – Post Excavation sample. SP – Soil Pile/Cover sample. Remaining samples # (. . .) from post-treatment soil borings.

4.3.4.2 Residential Use

The following post-treatment soil sample results remain above the Residential Use soil cleanup criteria. All other samples were below the Residential Use SCOs:

Sample ID	Parameter	Result, µg/kg	Residential Use SCO, µg/kg
1.2 (14-14.5)	1,1-Dichloroethane	34,000	19,000
2.1 (12.5-13)	1,1-Dichloroethane	34,900	19,000
2.2 (11-11.5)	1,1,1-Trichloroethane	398,000	100,000

4.3.4.3 Groundwater

Post-treatment groundwater sampling took place in April 2013. Five groundwater samples were collected for TCL VOC analysis by Method 8260 from wells within and downgradient from the treatment area.

Of the 35 VOCs in the 8260 list, 21 (60 percent) VOC results were below detection limits in all five groundwater samples. Of the 14 detected VOCs, five (14 percent of the total) were all below the TOGS or guidelines. Nine VOCs were above the TOGS AWQS or guidelines: chloroethane, 1,1-dichloroethane, 1,2-dichloroethane, 1,1-dichloroethene, toluene, 1,1,1-trichloroethane, 1,1,2-trichloroethane, trichloroethane, and vinyl chloride. Among these, nine VOCs, four of the compounds were below the TOGS AWQS or guidelines in 75 percent of the samples.

The VOCs with the highest groundwater concentrations were chloroethane (334 µg/L), 1,1-dichloroethane (2,540 µg/L), and 1,1,1-trichloroethane (8,630 µg/L) in monitoring well EW-0. EW-0 and MW-1 (a.k.a. MW-1N) had the highest concentrations of VOCs compared to all other wells, as shown.

Post-treatment Groundwater Results in µg/L

Sample ID	Chloroethane	1,1-Dichloroethane	TCA
S-8	nd	11.8	1.4
E1-N	73.9	154	48.4
EW-1X	nd	22.9	nd
MW-1N	136	438	1,560
EW-0	334	2,540	8,630

nd – non-detect

Table 9 summarizes the post-treatment detected VOC results for all groundwater samples.

Table 9 – Summary of Detected Post-treatment Groundwater Results, All Wells
Results in µg/L

VOC	Min	p25	p50	p75	p95	Max	TOGS*
2-Butanone	-	-	-	-	14.1	14.1	50
Chloroethane	-	-	***73.9***	***136***	***334***	***334***	5
Chloroform	-	-	-	1.2	3.1	3.1	7
1,1-Dichloroethane	***11.8***	***22.9***	***154***	***438***	***2,540***	***2,540***	5
1,2-Dichloroethane	-	-	***0.7***	***5.2***	***17.5***	***17.5***	0.6
1,1-Dichloroethene	-	3.5	5	***36.6***	***144***	***144***	5
cis-1,2-Dichloroethene	-	-	-	0.54	2.8	2.8	3
trans-1,2-Dichloroethene	-	-	-	-	2.2	2.2	5
Tetrachloroethene (PCE)	-	-	-	-	0.6	0.6	5
Toluene	-	-	-	1.6	***8***	***8***	5
1,1,1-Trichloroethane (TCA)	-	1.4	***48.4***	***1,560***	***8,630***	***8,630***	5
1,1,2-Trichloroethane	-	-	-	-	***2.3***	***2.3***	1
Trichloroethene (TCE)	-	-	1.1	4	**6.2**	**6.2**	5
Vinyl chloride	-	-	-	-	***4.8***	***4.8***	2

Min – minimum, p25 – 25th percentile, p50– 50th percentile (median), p75 – 75th percentile, p95 – 95th percentile, Max – maximum. – non-detect. *TOGS or guidance value. Bold & italic exceed TOGS values/guidelines.

4.3.5 Soil Cover System

The excavation was backfilled to grade with soil meeting the Commercial Use SCOs. In nearly all cases, treated soil for backfilling met the Unrestricted Use or Residential Use SCOs. The soil used for the excavation cover was the excavated soil that met the Site SCOs (Section 4.3.2) and subsequently returned to the excavation after testing documented the soil met the cleanup goals. No soil was imported from off-Site. The data for the soil cover samples are the post-treatment soil pile samples. Table 10 lists the soil pile/soil cover samples. Table 2A presents the results.

Table 10 - Soil Pile/Cover Results, µg/kg

C1SP01	C4SP01	C3SP02
C2SP01	C5SP01	C5SP02
C3SP01	C2SP02	Bench01

4.3.6 Sub-slab Depressurization System

There is an existing SSDS operating under the Piano Felt Building (Figure 11). Now that soils containing the source contamination have been treated, AFFCO proposes to convert the SSDS and allow the system to operate in passive mode. A separate work plan will be prepared to demonstrate that passive operation of the SSDS will address potential exposure via soil vapor intrusion.

4.3.7 Deviations from Remedial Action Work Plan

There were no material deviations from the approved work plan. One minor deviation was omission of stream sampling following treatment.

4.3.8 Quality Assurance/Quality Control Summary

All post-excavation and post-treatment soil data were found usable for project decisions. All groundwater results were found usable for project decisions (Appendix E).

5.0 ENVIRONMENTAL EASEMENT, SOIL MANAGEMENT AREA & SSDS

The Site has a series of Institutional Controls in the form of an Environmental Easement that encompasses a portion of the property (0.5454 acres) that includes a Soil Management Area (0.3845 acre) and a SSDS area (0.1619 acre) (Appendix A). Site restrictions that apply to the Environmental Easement Area of the Property are as follows:

- The controlled property area may be used for commercial use provided that the long-term Engineering and Institutional Controls included in the attached Site Management Plan are employed. The controlled property also allows Industrial use as allowed by zoning;
- The controlled property may not be used for a higher level of use, such as unrestricted, residential or restricted residential use without additional remediation and amendment of the Environmental Easement, as approved by the NYSDEC;
- The controlled property area may not be used for a higher level of use, such as unrestricted or restricted residential, use without additional remediation and amendment of the Environmental Easement, as approved by the NYSDEC;
- All future activities on the controlled property area that will disturb remaining contaminated material must be conducted in accordance with the SMP;
- The use of the groundwater underlying the property is prohibited without treatment rendering it safe for intended use;
- The potential for vapor intrusion must be evaluated for any new buildings on Site and any potential impacts that are identified must be monitored or mitigated;
- Vegetable gardens and farming on the property are prohibited;
- Inspection of the soil covering the Soil Management Area annually. The inspection results will be detailed in the Periodic Review Report (PRR) and certified by the engineer. Any damage to the soil cover will be repaired in kind;
- Inspection of the SSDS. The inspection results will be detailed in the PRR and certified by the engineer; and
- The Site owner or remedial party will submit to NYSDEC a written statement that certifies, under penalty of perjury, that: (1) controls employed at the Controlled Property are unchanged from the previous certification or that any changes to the controls were approved by the NYSDEC; and, (2) nothing has occurred that impairs the ability of the controls to protect public health and environment or that constitute a violation or failure to comply with the SMP. NYSDEC retains the right to access such Controlled Property at any time in order to evaluate the continued maintenance of any and all controls. This certification shall be submitted annually, or an alternate period of time that NYSDEC may allow and will be made by an expert that the NYSDEC finds acceptable.

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

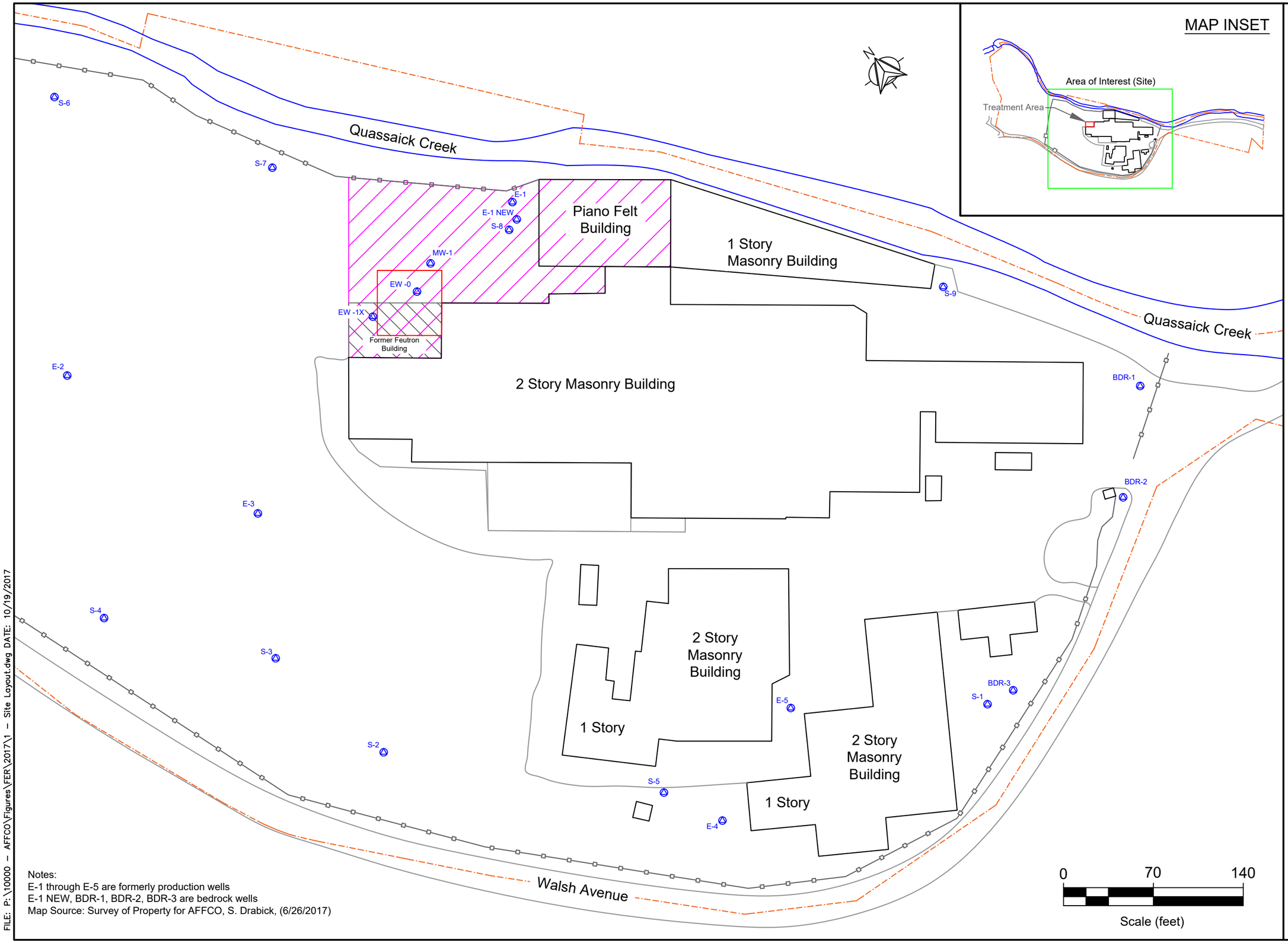
The Environmental Easement was accepted by NYSDEC on August 23, 2017 and filed with Orange County on September 15, 2017.submitted on.

6.0 SITE MANAGEMENT PLAN

A SMP that describes actions subsequent to the remedial action is included as a separate document. The SMP calls for groundwater monitoring, SSDS operation and inspection, and inspection of the Soil Management Area soil cover.

Since contaminated soil and groundwater remain beneath the Site after completion of the remedial action, institutional and engineering controls are required to protect human health and the environment. Long-term management of these controls and residual contamination will be conducted under the SMP approved by the NYSDEC

FIGURES



MAP INSET

Notes:
E-1 through E-5 are formerly production wells
E-1 NEW, BDR-1, BDR-2, BDR-3 are bedrock wells
Map Source: Survey of Property for AFFCO, S. Drabick, (6/26/2017)

Fleming Lee Shue
Environmental Management & Consulting
158 West 29th Street
New York, NY 10001

American Felt & Filter Co.
361 Walsh Avenue
New Windsor, NY

Figure 1

Site Layout

October 2017

Project Number
10000-015

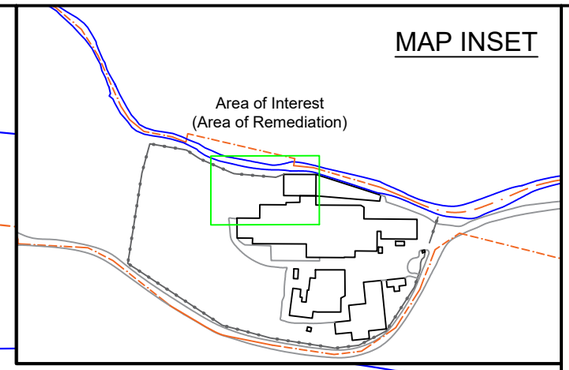
LEGEND

- Environmental Easement Area
- Extent of Building Demolition
- Area of Remedial Excavation
- Property Line
- Retaining Walls / Fence
- Groundwater Monitoring Well

FILE: P:\10000 - AFFCO\Figures\FER\2017\1 - Site Layout.dwg DATE: 10/19/2017

Quassaick Creek

MAP INSET



E-1

E-1 NEW

S-8

Piano Felt Building

MW-1

GP-1

2.1

1.1

3

C3

C2

EW -0

C1

IW-1

GP-2

PIT S

2.2

1.2

GP-3

IW-2

EW -1X

GP-4

GP-5

6

4

IW-3

C4

C5

C6

CONCRETE VAULT (OPEN)

PIT L

5

Former Feutron Building

2 Story Masonry Building

0 20 40

Scale (feet)

Fleming Lee Shue

Environmental Management & Consulting

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New York, NY 10001

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361 Walsh Avenue
New Windsor, NY

Figure 2

Site Plan, Remedial Excavation, and Injection Locations

October 2017

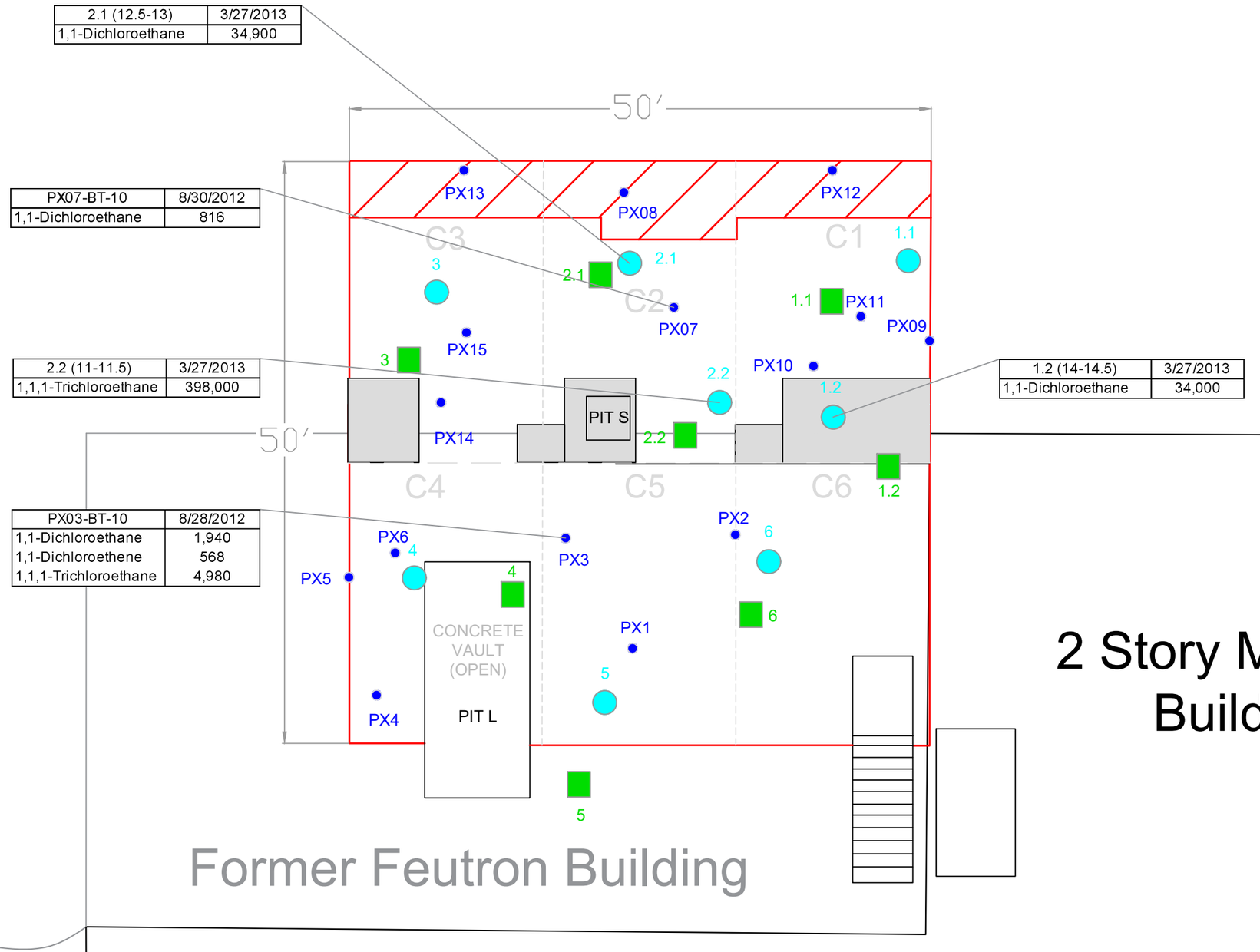
Project Number
10000-015

LEGEND

- Area of remedial excavation (grade to 10 or 11')
- Shallow remedial excavation depth (grade to 5')
- Injection well (removed)
- Geoprobe injection location
- Groundwater monitoring well
- Pre-treatment soil sample (random)
- C5 Gride cell
- Concete

Notes:
Soil sample and geoprobe injection locations are approximate

FILE: P:\10000 - AFFCO\Figures\FER\2017\2 - Site Plan.dwg DATE: 10/18/2017



Compound	Unrestricted Use SCO	Residential w/CP-51 SCO	Commercial w/CP-51 SCO
1,1-Dichloroethane	270	19,000	240,000
1,1-Dichloroethene	330	100,000	500,000
1,1,1-Trichloroethane	680	100,000	500,000

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Figure 3

Post-Excavation/ Post-Treatment Soil Sampling Locations and Results Summary

October 2017

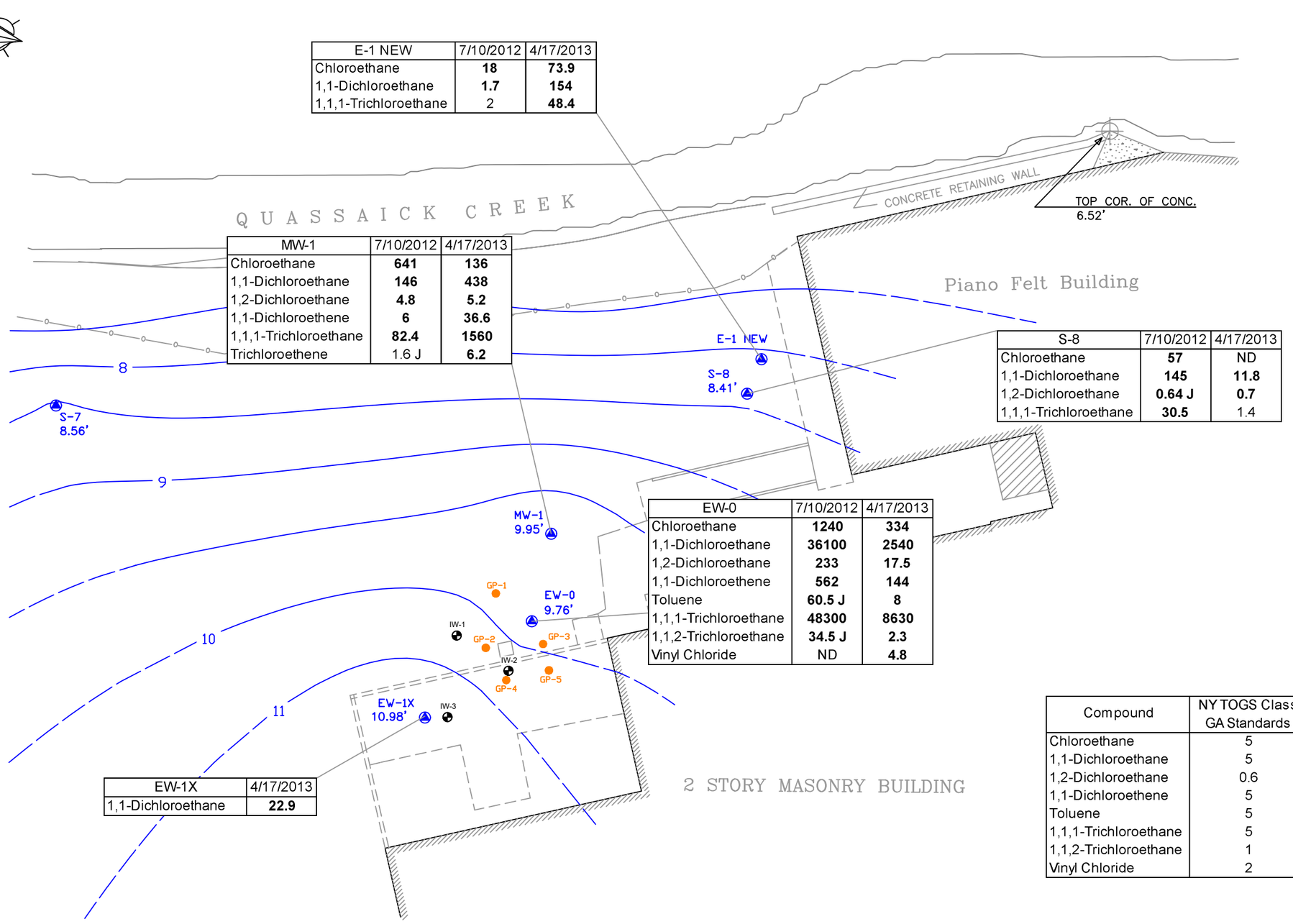
Project Number
10000-015

LEGEND

- Area of remedial excavation (grade to 10 or 11')
- Shallow remedial excavation (grade to 5')
- Pre-treatment soil sample (random)
- Post-*in situ* treatment soil sample (random)
- Post-excavation endpoint soil sample (random)
- C5 Grid cell
- Concete

Notes:
Soil sample and geoprobe injection locations are approximate

FILE: P:\10000 - AFFCO\Figures\FER\2017\3 - Post Treatment Soil Sampling Locations.dwg DATE: 10/18/2017



E-1 NEW	7/10/2012	4/17/2013
Chloroethane	**18**	**73.9**
1,1-Dichloroethane	**1.7**	**154**
1,1,1-Trichloroethane	2	**48.4**

MW-1	7/10/2012	4/17/2013
Chloroethane	**641**	**136**
1,1-Dichloroethane	**146**	**438**
1,2-Dichloroethane	**4.8**	**5.2**
1,1-Dichloroethene	**6**	**36.6**
1,1,1-Trichloroethane	**82.4**	**1560**
Trichloroethene	1.6 J	**6.2**

S-8	7/10/2012	4/17/2013
Chloroethane	**57**	ND
1,1-Dichloroethane	**145**	**11.8**
1,2-Dichloroethane	**0.64 J**	**0.7**
1,1,1-Trichloroethane	**30.5**	1.4

EW-0	7/10/2012	4/17/2013
Chloroethane	**1240**	**334**
1,1-Dichloroethane	**36100**	**2540**
1,2-Dichloroethane	**233**	**17.5**
1,1-Dichloroethene	**562**	**144**
Toluene	**60.5 J**	**8**
1,1,1-Trichloroethane	**48300**	**8630**
1,1,2-Trichloroethane	**34.5 J**	**2.3**
Vinyl Chloride	ND	**4.8**

EW-1X	4/17/2013
1,1-Dichloroethane	**22.9**

Compound	NY TOGS Class GA Standards
Chloroethane	5
1,1-Dichloroethane	5
1,2-Dichloroethane	0.6
1,1-Dichloroethene	5
Toluene	5
1,1,1-Trichloroethane	5
1,1,2-Trichloroethane	1
Vinyl Chloride	2

NOTES:
Concentrations measured in ug/L, exceedances in bold
Groundwater samples and elevation measurements collected on 9/30/2014
Elevations in world geodetic system (WGS) 84
E-1 NEW is a bedrock well, not used for contouring
Pre-treatment samples collected on 7/10/2012
Post-treatment samples collected on 4/17/2013

0 30 160
Scale (feet)

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Figure 4

PRE AND POST-TREATMENT GROUNDWATER VOC RESULTS AND CONTOUR MAP

October 2017

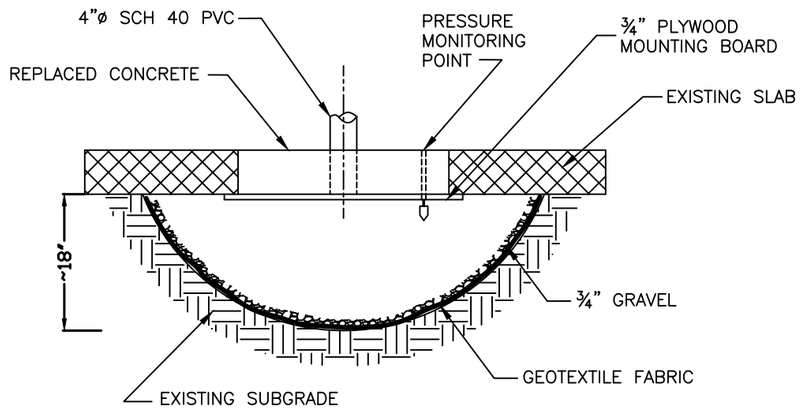
Project Number
10000-015

LEGEND

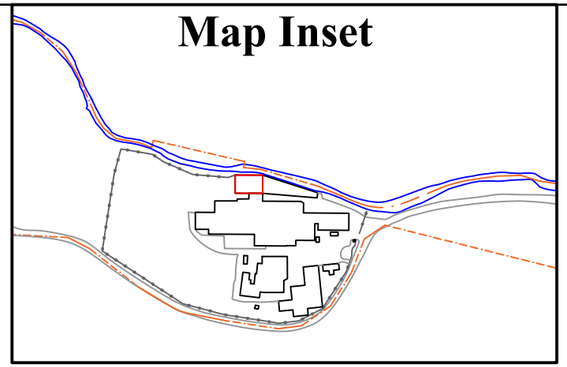
- Groundwater monitoring well and groundwater elevation (feet)
- 10 — Groundwater elevation contour (dashed where inferred)
- Injection well (removed)
- Geoprobe injection location (approximate)

FILE: P:\10000 - AFFCO\Figures\FER\2017\4 - Pre and Post Treatment GW and Contour.dwg DATE: 10/19/2017

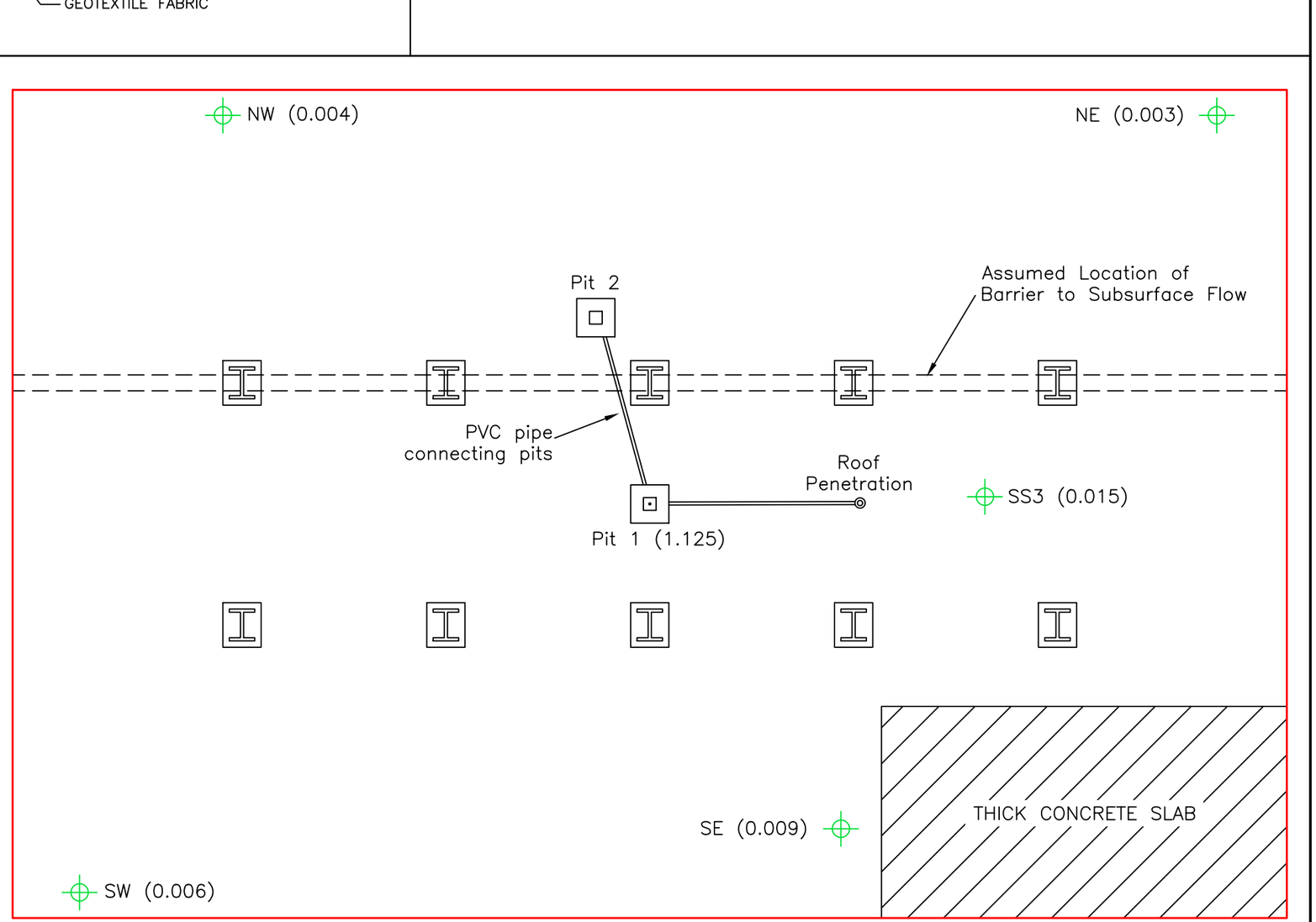
Pit Detail



Map Inset



SSDS Plan View



NOTES:

1. Fan was installed on the roof and does not exhaust within 25' of an air intake
2. Labels noting SSDS are placed on pipe and at the exhaust
3. Fan size and number of pits based on similar designs referenced by EPA documents
4. Pit detail is not to scale

0 10 20

Scale (feet)

FILE: P:\10000 - AFFCO\Figures\FER\2017\11 - SSDS As-Built.dwg DATE: 10/18/2017

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Figure 11

Piano Felt Building SSDS As-Built

October 2017

Project Number
10000-015

LEGEND

- Building Footprint
- Column
- Pressure Monitoring Point (Vacuum in inches of water)

TABLES

Table 1
Commercial Use Soil Cleanup Objectives
AFFCO, 361 Walsh Avenue, New Windsor, NY

Volatiles (SW846 8260C)

Acetone	ug/kg	500000
Benzene	ug/kg	44000
Bromochloromethane	ug/kg	-
Bromodichloromethane	ug/kg	-
Bromoform	ug/kg	-
Bromomethane	ug/kg	-
2-Butanone (MEK)	ug/kg	500000
Carbon disulfide	ug/kg	
Carbon tetrachloride	ug/kg	22000
Chlorobenzene	ug/kg	500000
Chloroethane	ug/kg	
Chloroform	ug/kg	350000
Chloromethane	ug/kg	-
Cyclohexane	ug/kg	-
1,2-Dibromo-3-chloropropane	ug/kg	-
Dibromochloromethane	ug/kg	
1,2-Dibromoethane	ug/kg	-
1,2-Dichlorobenzene	ug/kg	500000
1,3-Dichlorobenzene	ug/kg	280000
1,4-Dichlorobenzene	ug/kg	130000
Dichlorodifluoromethane	ug/kg	-
1,1-Dichloroethane	ug/kg	240000
1,2-Dichloroethane	ug/kg	30000
1,1-Dichloroethene	ug/kg	500000
cis-1,2-Dichloroethene	ug/kg	500000
trans-1,2-Dichloroethene	ug/kg	500000
1,2-Dichloropropane	ug/kg	
cis-1,3-Dichloropropene	ug/kg	-
trans-1,3-Dichloropropene	ug/kg	-
Ethylbenzene	ug/kg	390000
Freon 113	ug/kg	
2-Hexanone	ug/kg	-
Isopropylbenzene	ug/kg	
Methyl Acetate	ug/kg	-
Methylcyclohexane	ug/kg	-
Methyl Tert Butyl Ether	ug/kg	500000
4-Methyl-2-pentanone(MIBK)	ug/kg	
Methylene chloride	ug/kg	500000
Styrene	ug/kg	
1,1,2,2-Tetrachloroethane	ug/kg	
Tetrachloroethene	ug/kg	150000
Toluene	ug/kg	500000
1,2,3-Trichlorobenzene	ug/kg	
1,2,4-Trichlorobenzene	ug/kg	
1,1,1-Trichloroethane	ug/kg	500000
1,1,2-Trichloroethane	ug/kg	-
Trichloroethene	ug/kg	200000
Trichlorofluoromethane	ug/kg	-
Vinyl chloride	ug/kg	13000
m,p-Xylene	ug/kg	500000
o-Xylene	ug/kg	500000
Xylene (total)	ug/kg	500000

Semi-volatiles (SW846 8270D)

2-Chlorophenol	ug/kg	
4-Chloro-3-methyl phenol	ug/kg	-
2,4-Dichlorophenol	ug/kg	
2,4-Dimethylphenol	ug/kg	-
2,4-Dinitrophenol	ug/kg	
4,6-Dinitro-o-cresol	ug/kg	-
2-Methylphenol	ug/kg	500000
3&4-Methylphenol	ug/kg	-
2-Nitrophenol	ug/kg	
4-Nitrophenol	ug/kg	
Pentachlorophenol	ug/kg	6700
Phenol	ug/kg	500000
2,3,4,6-Tetrachlorophenol	ug/kg	-
2,4,5-Trichlorophenol	ug/kg	
2,4,6-Trichlorophenol	ug/kg	
Acenaphthene	ug/kg	500000
Acenaphthylene	ug/kg	500000
Acetophenone	ug/kg	-
Anthracene	ug/kg	500000
Atrazine	ug/kg	-
Benzo(a)anthracene	ug/kg	5600
Benzo(a)pyrene	ug/kg	1000
Benzo(b)fluoranthene	ug/kg	5600
Benzo(g,h,i)perylene	ug/kg	500000
Benzo(k)fluoranthene	ug/kg	56000
4-Bromophenyl phenyl ether	ug/kg	-
Butyl benzyl phthalate	ug/kg	
1,1'-Biphenyl	ug/kg	
Benzaldehyde	ug/kg	-
2-Chloronaphthalene	ug/kg	-
4-Chloroaniline	ug/kg	
Carbazole	ug/kg	-
Caprolactam	ug/kg	-
Chrysene	ug/kg	56000
bis(2-Chloroethoxy)methane	ug/kg	-
bis(2-Chloroethyl)ether	ug/kg	-
bis(2-Chloroisopropyl)ether	ug/kg	-
4-Chlorophenyl phenyl ether	ug/kg	-
2,4-Dinitrotoluene	ug/kg	-
2,6-Dinitrotoluene	ug/kg	
3,3'-Dichlorobenzidine	ug/kg	-
1,4-Dioxane	ug/kg	130000
Dibenzo(a,h)anthracene	ug/kg	560
Dibenzofuran	ug/kg	350000
Di-n-butyl phthalate	ug/kg	
Di-n-octyl phthalate	ug/kg	
Diethyl phthalate	ug/kg	
Dimethyl phthalate	ug/kg	
bis(2-Ethylhexyl)phthalate	ug/kg	
Fluoranthene	ug/kg	500000
Fluorene	ug/kg	500000
Hexachlorobenzene	ug/kg	6000
Hexachlorobutadiene	ug/kg	-
Hexachlorocyclopentadiene	ug/kg	
Hexachloroethane	ug/kg	-
Indeno(1,2,3-cd)pyrene	ug/kg	5600
Isophorone	ug/kg	
2-Methylnaphthalene	ug/kg	
2-Nitroaniline	ug/kg	
3-Nitroaniline	ug/kg	
4-Nitroaniline	ug/kg	-
Naphthalene	ug/kg	500000
Nitrobenzene	ug/kg	69000
N-Nitroso-di-n-propylamine	ug/kg	-
N-Nitrosodiphenylamine	ug/kg	
Phenanthrene	ug/kg	500000
Pyrene	ug/kg	500000
1,2,4,5-Tetrachlorobenzene	ug/kg	-

PCBs and Pesticides (SW846 8081B)

Aldrin	ug/kg	680
alpha-BHC	ug/kg	3400
beta-BHC	ug/kg	3000
delta-BHC	ug/kg	500000
gamma-BHC (Lindane)	ug/kg	9200
alpha-Chlordane	ug/kg	24000
gamma-Chlordane	ug/kg	
Dieldrin	ug/kg	1400
4,4'-DDD	ug/kg	92000
4,4'-DDE	ug/kg	62000
4,4'-DDT	ug/kg	47000
Endrin	ug/kg	89000
Endosulfan sulfate	ug/kg	200000
Endrin aldehyde	ug/kg	-
Endosulfan-I	ug/kg	200000
Endosulfan-II	ug/kg	200000
Heptachlor	ug/kg	15000
Heptachlor epoxide	ug/kg	
Methoxychlor	ug/kg	
Endrin ketone	ug/kg	-
Toxaphene	ug/kg	-

Metals

Aluminum	mg/kg	
Antimony	mg/kg	
Arsenic	mg/kg	16
Barium	mg/kg	400
Beryllium	mg/kg	590
Cadmium	mg/kg	9.3
Calcium	mg/kg	
Chromium	mg/kg	-
Cobalt	mg/kg	
Copper	mg/kg	270
Iron	mg/kg	
Lead	mg/kg	1000
Magnesium	mg/kg	-
Manganese	mg/kg	10000
Mercury	mg/kg	2.8
Nickel	mg/kg	310
Potassium	mg/kg	-
Selenium	mg/kg	1500
Silver	mg/kg	1500
Sodium	mg/kg	-
Thallium	mg/kg	
Vanadium	mg/kg	
Zinc	mg/kg	10000

Notes

The SCOs for unrestricted use were capped at a maximum value of 100 ppm. See Technical Support Document (TSD), section 9.3.

For constituents where the calculated SCO was lower than the contract required quantitation limit (CRQL), the CRQL is used as the Track 1 SCO value.

For constituents where the calculated SCO was lower than the rural soil background concentration, as determined by the Department and Department of Health rural soil survey, the rural soil background concentration is used as the Track 1 SCO value for this use of the site.

Protection of ecological resources SCOs were not developed for contaminants identified in Table 375-6.8(b) with "NS". Where such contaminants appear in Table 375-6.8(a), the applicant may be required by the Department to calculate a protection of ecological resources SCO according to the TSD.

Endosulfan SCO is the sum of endosulfan I, endosulfan II and endosulfan sulfate..

The SCO is the lower of the values for mercury (elemental) or mercury (inorganic salts). See TSD Table 5.6-1.

Table 2A
End-point Post-excavation Soil sample Analytical Results
Summary of Volatile Organic Compounds

Client ID Lab Sample ID Date Sampled	NY Unrestricted Use Soil Cleanup Objectives	NY Commercial Use Soil Cleanup Objectives	BENCH01 JB15155-3 8/30/2012		C1SP01 JB15405-8 9/4/2012		C2SP01 JB15405-11 9/4/2012		C2SP02 JB15405-12 9/4/2012		C3SP01 JB15405-9 9/4/2012		C3SP02 JB15405-10 9/4/2012		C4SP01 JB14890-9 8/28/2012		C5SP01 JB14890-7 8/28/2012		C5SP02 JB14890-8 8/28/2012		PX01-SW-5 JB14890-1 8/28/2012		PX02-SW-5 JB14890-2 8/28/2012		PX03-BT-10 JB14890-3 8/28/2012	
			Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
GC/MS Volatiles (µg/kg)																										
Acetone	500000	500000	<1.9		<2.0		<1.8		<1.8		<2.0		<1.8		<2.3		14.7		13.3		<2.3		5.9	J	20.6	
Benzene	44000	44000	<0.14		<0.14		<0.13		<0.13		<0.14		<0.12		1.0	J	<0.17		<0.15		0.76	J	<0.15		<0.14	
Bromodichloromethane	NS	NS	<0.12		<0.13		<0.11		<0.11		<0.13		<0.11		<0.14		<0.15		<0.13		<0.14		<0.13		<0.12	
Bromoform	NS	NS	<0.17		<0.18		<0.16		<0.16		<0.18		<0.16		<0.20		<0.21		<0.19		<0.21		<0.19		<0.18	
Bromomethane	NS	NS	<0.31		<0.33		<0.29		<0.30		<0.33		<0.29		<0.36		<0.38		<0.34		<0.37		<0.35		<0.32	
2-Butanone (MEK)	500000	500000	<2.7		<2.9		<2.6		<2.6		<2.9		<2.5		<3.2		<3.4		<3.0		<3.3		<3.0		12.9	
Carbon disulfide	NS	NS	<0.13		<0.14		<0.13		<0.13		<0.14		<0.12		<0.16		<0.16		1.2	J	<0.16		<0.15		1.5	J
Carbon tetrachloride	22000	22000	<0.15		<0.16		<0.14		<0.14		<0.16		<0.14		<0.18		<0.19		<0.17		<0.18		<0.17		<0.15	
Chlorobenzene	500000	500000	<0.12		<0.13		<0.12		<0.12		<0.13		<0.11		<0.14		<0.15		<0.14		<0.15		<0.14		<0.13	
Chloroethane	NS	NS	<0.26		<0.27		<0.24		<0.25		<0.27		<0.24		<0.30		<0.32		<0.28		<0.31		<0.29		1.9	J
Chloroform	350000	350000	<0.094		<0.099		<0.088		<0.089		<0.099		<0.087		<0.11		0.73	J	0.79	J	<0.11		<0.11		0.56	J
Chloromethane	NS	NS	<0.21		<0.22		<0.20		<0.20		<0.22		<0.20		<0.25		<0.26		<0.23		<0.25		<0.24		<0.22	
Dibromochloromethane	NS	NS	<0.19		<0.20		<0.18		<0.18		<0.20		<0.17		<0.22		<0.23		<0.21		<0.22		<0.21		<0.19	
1,1-Dichloroethane	240000	240000	1.2	J	7.2		1.0	J	1.9	J	13.0		3.0	J	<0.18		3.1	J	214		<0.19		<0.17		1940	
1,2-Dichloroethane	30000	30000	<0.15		0.65	J	0.78	J	1.7		1.2		0.76	J	<0.18		<0.19		2.9		<0.18		<0.17		13.8	
1,1-Dichloroethene	500000	500000	1.6	J	2.0	J	0.43	J	0.90	J	5.8	J	1.5	J	<0.34		2.5	J	2750		<0.35		<0.33		568	
cis-1,2-Dichloroethene	500000	500000	0.92	J	0.61	J	0.37	J	1.1	J	0.54	J	0.41	J	<0.24		<0.26		1.2	J	<0.25		<0.23		1.5	J
trans-1,2-Dichloroethene	500000	500000	0.61	J	0.50	J	<0.25		0.70	J	0.41	J	0.38	J	<0.32		<0.33		2.2	J	<0.32		<0.30		<0.28	
1,2-Dichloroethene (total)	NS	NS	1.5	J	1.1	J	0.37	J	1.8	J	0.95	J	0.79	J	<0.24		<0.26		3.4	J	<0.25		<0.23		1.5	J
1,2-Dichloropropane	NS	NS	<0.17		<0.18		<0.16		<0.17		<0.19		<0.16		<0.21		<0.22		<0.19		<0.21		<0.20		<0.18	
cis-1,3-Dichloropropene	NS	NS	<0.16		<0.17		<0.15		<0.15		<0.17		<0.15		<0.19		<0.20		<0.17		<0.19		<0.18		<0.16	
trans-1,3-Dichloropropene	NS	NS	<0.18		<0.19		<0.17		<0.17		<0.19		<0.16		<0.21		<0.22		<0.19		<0.21		<0.20		<0.18	
Ethylbenzene	390000	390000	<0.30		<0.32		<0.28		<0.28		<0.32		<0.28		<0.35		<0.37		<0.33		<0.36		<0.34		<0.31	
2-Hexanone	NS	NS	<0.71		<0.75		<0.66		<0.67		<0.75		<0.65		<0.83		<0.87		<0.78		<0.85		<0.79		<0.72	
Methyl Tert Butyl Ether	500000	500000	<0.27		<0.28		<0.25		<0.25		<0.28		<0.25		<0.31		<0.33		<0.29		<0.32		<0.30		<0.27	
4-Methyl-2-pentanone(MIBK)	NS	NS	<0.85		<0.90		<0.80		<0.81		<0.90		<0.79		<1.0		<1.1		<0.94		<1.0		<0.96		<0.87	
Methylene chloride	500000	500000	<1.4		<1.5		<1.4		<1.4		<1.5		<1.3		<1.7		<1.8		<1.6		<1.7		<1.6		<1.5	
Styrene	NS	NS	<0.10		<0.11		<0.098		<0.099		<0.11		<0.096		<0.12		<0.13		<0.11		<0.13		<0.12		<0.11	
1,1,2,2-Tetrachloroethane	NS	NS	<0.15		<0.16		<0.14		<0.14		<0.16		<0.14		<0.18		<0.19		<0.17		<0.18		<0.17		<0.15	
Tetrachloroethene	150000	150000	0.62	J	1.1	J	<0.18		0.33	J	1.6	J	<0.18		<0.23		<0.24		1.1	J	<0.23		<0.22		0.68	J
Toluene	500000	500000	1.1		1.3		<0.11		<0.11		2.8		0.27	J	0.43	J	<0.15		1.2	J	0.33	J	<0.13		17.1	
1,1,1-Trichloroethane	680	500000	47.9		513		51.7		59.9		41900		166		1.6	J	2580		29800		<0.14		6.1	J	4980	
1,1,2-Trichloroethane	NS	NS	1.6	J	3.5	J	1.4	J	2.5	J	5.2	J	0.97	J	<0.23		<0.24		<0.22		<0.24		<0.22		0.64	J
Trichloroethene	200000	200000	0.93	J	5.0	J	1.6	J	6.9		5.7	J	1.9	J	3.6	J	<0.24		1.7	J	<0.24		<0.22		2.2	J
Vinyl chloride	13000	13000	<0.16		<0.17		<0.15		<0.16		<0.17		<0.15		<0.19		<0.20		1.8	J	<0.20		<0.18		9.7	
Xylene (total)	500000	500000	<0.16		<0.17		<0.15		<0.15		<0.17		<0.15		<0.19		<0.20		<0.17		<0.19		<0.18		<0.16	
Total Confident Conc.			57.98		535.96		57.65		77.73		41937.2		175.98		6.63		2601.03		32794.79		1.09		12		7572.58	

Notes:
Exceedances in Unrestricted Use SCOs highlighted in blue
NS - no standard
J - estimated concentration

Table 2A
End-point Post-excavation Soil sample Analytical Results
Summary of Volatile Organic Compounds

Client ID Lab Sample ID Date Sampled	NY Unrestricted Use Soil Cleanup Objectives	NY Commercial Use Soil Cleanup Objectives	PX04-SW-5 JB14890-4 8/28/2012 Result Q	PX05-SW-6 JB14890-5 8/28/2012 Result Q	PX06-BT-10 JB14890-6 8/28/2012 Result Q	PX07BT-10 JB15155-1 8/30/2012 Result Q	PX08SW-7 JB15155-2 8/30/2012 Result Q	PX09SW-3 JB15405-1 9/4/2012 Result Q	PX10SW-5 JB15405-2 9/4/2012 Result Q	PX11BT-10 JB15405-3 9/4/2012 Result Q	PX12SW-7 JB15405-4 9/4/2012 Result Q	PX14SW-6 JB15405-6 9/4/2012 Result Q	PX15BT-10 JB15405-7 9/4/2012 Result Q
GC/MS Volatiles (µg/kg)													
Acetone	500000	500000	<2.3	<2.2	4.0 J	27.5	<2.0	<2.2	<2.2	<2.0	<2.1	<1.9	13.6
Benzene	44000	44000	0.77 J	1.3	0.86 J	<0.15	9.9	2.6	2.7	<0.14	2.6 J	<0.13	<0.15
Bromodichloromethane	NS	NS	<0.14	<0.13	<0.13	<0.13	<0.13	<0.14	<0.14	<0.12	<0.13	<0.12	<0.13
Bromoform	NS	NS	<0.20	<0.19	<0.19	<0.19	<0.18	<0.20	<0.20	<0.18	<0.19	<0.17	<0.19
Bromomethane	NS	NS	<0.36	<0.35	<0.34	<0.35	<0.33	<0.36	<0.36	<0.32	<0.34	<0.30	<0.35
2-Butanone (MEK)	500000	500000	<3.2	<3.1	<3.0	<3.0	<2.9	<3.1	<3.2	<2.8	<3.0	<2.7	<3.1
Carbon disulfide	NS	NS	<0.16	<0.15	<0.14	<0.15	<0.14	<0.15	<0.16	<0.14	<0.15	<0.13	<0.15
Carbon tetrachloride	22000	22000	<0.18	<0.17	<0.16	<0.17	<0.16	<0.17	<0.18	<0.15	<0.17	<0.15	<0.17
Chlorobenzene	500000	500000	<0.14	<0.14	<0.13	<0.14	<0.13	<0.14	<0.14	<0.13	<0.13	<0.12	<0.14
Chloroethane	NS	NS	<0.30	<0.29	<0.28	136	<0.27	<0.30	<0.30	<0.26	<0.28	<0.25	<0.29
Chloroform	350000	350000	<0.11	<0.11	<0.10	0.49 J	<0.10	<0.11	<0.11	<0.096	<0.10	<0.092	1.0 J
Chloromethane	NS	NS	<0.25	<0.24	<0.23	<0.24	<0.22	<0.24	<0.25	<0.22	<0.23	<0.21	<0.24
Dibromochloromethane	NS	NS	<0.22	<0.21	<0.20	<0.21	<0.20	<0.22	<0.22	<0.19	<0.20	<0.18	<0.21
1,1-Dichloroethane	240000	240000	<0.18	<0.18	<0.17	816	1.1 J	<0.18	1.8 J	<0.16	<0.17	0.87 J	8.3
1,2-Dichloroethane	30000	30000	<0.18	<0.17	<0.17	7.4	0.50 J	<0.18	<0.18	<0.16	<0.17	<0.15	0.60 J
1,1-Dichloroethene	500000	500000	1.0 J	<0.33	<0.32	34.5	<0.31	<0.34	<0.34	<0.30	<0.32	0.63 J	4.2 J
cis-1,2-Dichloroethene	500000	500000	<0.24	<0.24	<0.23	10.2	1.1 J	<0.24	<0.24	<0.21	<0.23	2.4 J	0.85 J
trans-1,2-Dichloroethene	500000	500000	<0.32	<0.31	<0.29	3.2 J	0.58 J	<0.31	<0.32	<0.28	<0.30	2.1 J	0.58 J
1,2-Dichloroethene (total)	NS	NS	<0.24	<0.24	<0.23	13.4	1.6 J	<0.24	<0.24	<0.21	<0.23	4.4 J	1.4 J
1,2-Dichloropropane	NS	NS	<0.21	<0.20	<0.19	<0.20	<0.19	<0.20	<0.20	<0.18	<0.19	<0.17	<0.20
cis-1,3-Dichloropropene	NS	NS	<0.19	<0.18	<0.17	<0.18	<0.17	<0.18	<0.18	<0.16	<0.17	<0.15	<0.18
trans-1,3-Dichloropropene	NS	NS	<0.21	<0.20	<0.19	<0.20	<0.19	<0.20	<0.21	<0.18	<0.19	<0.17	<0.20
Ethylbenzene	390000	390000	<0.35	<0.34	<0.33	<0.33	0.73 J	<0.35	<0.35	<0.31	<0.33	<0.29	<0.34
2-Hexanone	NS	NS	<0.83	<0.80	<0.77	<0.79	<0.75	<0.82	<0.83	<0.72	<0.78	<0.69	<0.80
Methyl Tert Butyl Ether	500000	500000	<0.31	<0.30	<0.29	<0.30	<0.28	<0.31	<0.31	<0.27	<0.29	<0.26	<0.30
4-Methyl-2-pentanone(MIBK)	NS	NS	<1.0	<0.96	<0.93	<0.96	<0.91	<0.99	<1.0	<0.87	<0.94	<0.83	<0.96
Methylene chloride	500000	500000	<1.7	<1.6	<1.6	<1.6	<1.5	<1.7	<1.7	<1.5	<1.6	<1.4	<1.6
Styrene	NS	NS	<0.12	<0.12	<0.11	<0.12	<0.11	<0.12	<0.12	<0.11	<0.11	<0.10	<0.12
1,1,2,2-Tetrachloroethane	NS	NS	<0.18	<0.17	<0.16	<0.17	<0.16	<0.17	<0.18	<0.15	<0.16	<0.15	<0.17
Tetrachloroethene	150000	150000	<0.23	<0.22	<0.21	1.6 J	0.44 J	<0.23	0.54 J	<0.20	<0.21	0.59 J	0.79 J
Toluene	500000	500000	0.35 J	0.53 J	<0.13	2.7	4.1	1.1 J	1.3	<0.12	1.1 J	<0.12	0.58 J
1,1,1-Trichloroethane	680	500000	0.49 J	3.2 J	0.52 J	519	38.4	68.5	67.1	10.9	5.1	29.3	149
1,1,2-Trichloroethane	NS	NS	<0.23	<0.22	<0.22	3.8 J	4.6 J	<0.23	<0.23	0.83 J	<0.22	5.9	1.5 J
Trichloroethene	200000	200000	<0.23	4.5 J	<0.22	20.5	2.4 J	2.0 J	1.5 J	2.2 J	2.5	4.0 J	4.7 J
Vinyl chloride	13000	13000	<0.19	<0.18	<0.18	2.0 J	<0.17	<0.19	<0.19	<0.17	<0.18	<0.16	<0.18
Xylene (total)	500000	500000	<0.19	<0.18	<0.17	<0.18	1.7	<0.18	<0.18	<0.16	<0.17	<0.15	<0.18
Total Confident Conc.			2.61	9.53	5.38	1598.29	67.15	74.2	74.94	13.93	11.3	50.19	187.1

Notes:
Exceedances in Unrestricted Use SCOs highlighted in blue
NS - no standard
J - estimated concentration

Table 2B
End-point Post-treatment Soil sample Analytical Results
Summary of Volatile Organic Compounds

Client ID Lab Sample ID Date Sampled	NY Unrestricted Use Soil Cleanup Objectives	NY Commercial Use Soil Cleanup Objectives	1.1 (12.5-13) JB32749-4 3/27/2013 Result Q	1.1 (13-13.5) JB32749-5 3/27/2013 Result Q	1.1 (14.5-15) JB32749-6 3/27/2013 Result Q	1.2 (11-11.5) JB32749-8 3/27/2013 Result Q	1.2 (13-13.5) JB32749-7 3/27/2013 Result Q	1.2 (14-14.5) JB32749-9 3/27/2013 Result Q	2.1 (10-10.5) JB32749-12 3/27/2013 Result Q	2.1 (11.5-12) JB32749-11 3/27/2013 Result Q	2.1 (12.5-13) JB32749-10 3/27/2013 Result Q	2.2 (11-11.5) JB32749-14 3/27/2013 Result Q	2.2 (12.5-13) JB32749-13 3/27/2013 Result Q
GC/MS Volatiles (µg/kg)													
Acetone	500000	500000	<140	10.9 J	<2.2	30.1	27.2	<350	22.6	62.4	<130	<3800	<140
Benzene	44000	44000	<9.9	<0.14	<0.15	<0.17	<0.17	<25	<0.23	0.66 J	<9.1	<270	<10
Bromodichloromethane	NS	NS	<8.7	<0.12	<0.14	<0.15	<0.15	<22	<0.20	<0.17	<8.1	<230	<8.9
Bromoform	NS	NS	<13	<0.17	<0.20	<0.22	<0.21	<31	<0.29	<0.25	<12	<340	<13
Bromomethane	NS	NS	<23	<0.31	<0.36	<0.40	<0.38	<56	<0.52	<0.45	<21	<610	<23
2-Butanone (MEK)	500000	500000	<200	<2.8	<3.1	21.8	29.0	<490	<4.5	47.9	893	<5300	<200
Carbon disulfide	NS	NS	<9.7	1.8 J	2.2 J	1.5 J	1.1 J	<24	1.9 J	3.4 J	48.1 J	<260	<10
Carbon tetrachloride	22000	22000	<11	<0.15	<0.17	<0.19	<0.19	<27	<0.25	<0.22	<10	<300	<11
Chlorobenzene	500000	500000	<9.0	<0.12	<0.14	<0.16	<0.15	<22	<0.21	<0.18	<8.3	<240	<9.2
Chloroethane	NS	NS	<19	25.4	54.7	659 J	480 J	2960	14.5	5230	3530	<510	<19
Chloroform	350000	350000	<6.9	<0.095	<0.11	<0.12	<0.12	<17	5.6 J	<0.14	<6.3	<180	<7.0
Chloromethane	NS	NS	<15	<0.21	<0.24	<0.27	<0.26	<38	<0.35	<0.31	<14	<410	<16
Dibromochloromethane	NS	NS	<14	<0.19	<0.21	<0.24	<0.23	<34	<0.31	<0.27	<13	<370	<14
1,1-Dichloroethane	240000	240000	1080	183	79.4	6220	3950	34000	121	11100	34900	6040 J	3660
1,2-Dichloroethane	30000	30000	232	1.0 J	<0.18	11.9	14.2	786	20.7	27.7	1590	<300	179
1,1-Dichloroethene	500000	500000	1140	32.0	15.3	85.3	41.7	1620	42.7	70.5	2150	14000	2310
cis-1,2-Dichloroethene	500000	500000	83.2 J	<0.21	<0.24	0.63 J	0.77 J	<38	7.9 J	10.1	374 J	<410	31.6 J
trans-1,2-Dichloroethene	500000	500000	101 J	<0.27	1.3 J	<0.35	0.47 J	<49	6.5 J	6.1 J	294 J	<530	<20
1,2-Dichloroethene (total)	NS	NS	184 J	<0.21	1.3 J	0.63 J	1.2 J	<38	14.3	16.1	668	<410	31.6 J
1,2-Dichloropropane	NS	NS	<13	<0.18	<0.20	<0.22	<0.22	<32	<0.29	<0.25	<12	<340	<13
cis-1,3-Dichloropropene	NS	NS	<12	<0.16	<0.18	<0.20	<0.19	<29	<0.26	<0.23	<11	<310	<12
trans-1,3-Dichloropropene	NS	NS	<13	<0.18	<0.20	<0.23	<0.22	<32	<0.29	<0.26	<12	<350	<13
Ethylbenzene	390000	390000	<22	<0.30	<0.34	0.80 J	<0.37	<54	2.0	<0.44	<20	<590	<22
2-Hexanone	NS	NS	<52	<0.72	<0.81	<0.90	<0.87	<130	<1.2	<1.0	<48	<1400	<53
Methyl Tert Butyl Ether	500000	500000	<20	<0.27	<0.31	<0.34	<0.33	<48	<0.45	<0.39	<18	<520	<20
4-Methyl-2-pentanone(MIBK)	NS	NS	<62	<0.86	<0.98	<1.1	<1.1	<150	<1.4	<1.2	<58	<1700	<64
Methylene chloride	500000	500000	<110	4.4 J	2.1 J	5.2 J	2.8 J	<260	6.5 J	4.5 J	<97	<2800	<110
Styrene	NS	NS	<7.6	<0.11	<0.12	<0.13	<0.13	<19	<0.17	<0.15	<7.0	<200	<7.8
1,1,2,2-Tetrachloroethane	NS	NS	<11	<0.15	<0.17	<0.19	<0.18	<27	<0.25	<0.22	<10	<290	<11
Tetrachloroethene	150000	150000	37.9 J	<0.20	<0.22	<0.25	<0.24	<35	2.3 J	2.3 J	288 J	<380	58.5 J
Toluene	500000	500000	109	0.43 J	1.0 J	2.3	5.7	184 J	4.6	5.6	2280	1600 J	284
1,1,1-Trichloroethane	680	500000	18700	2860	144	1560	2130	4690	12600	179	42300	398000	70700
1,1,2-Trichloroethane	NS	NS	<14	<0.20	<0.23	0.57 J	0.84 J	<36	3.0 J	3.0 J	39.1 J	<390	<15
Trichloroethene	200000	200000	1130	0.81 J	0.90 J	1.6 J	0.89 J	<36	32.1	19.5	1180	2040 J	337 J
Vinyl chloride	13000	13000	<12	<0.17	0.77 J	7.9	10.9	<30	<0.27	12.9	<11	<320	<12
Xylene (total)	500000	500000	<12	<0.16	<0.18	0.65 J	<0.19	<29	8.4	<0.23	83.5	<310	<12
Total Confident Conc.			22797.1	3119.74	302.97	8609.88	6696.77	44240	12916.6	16801.66	90617.7	421680	77591.7

Notes:
Exceedances in Unrestricted Use SCOs highlighted in blue
NS - no standard
J - estimated concentration

Table 2B
End-point Post-treatment Soil sample Analytical Results
Summary of Volatile Organic Compounds

Client ID Lab Sample ID Date Sampled	NY Unrestricted Use Soil Cleanup Objectives	NY Commercial Use Soil Cleanup Objectives	2.2 (14-14.5) JB32749-15 3/27/2013 Result Q	3 (12.5-13) JB32749-18 3/27/2013 Result Q	3 (13.5-14) JB32749-16 3/27/2013 Result Q	3 (14.5-15) JB32749-17 3/27/2013 Result Q	4 (10-10.5) JB32749-20 3/27/2013 Result Q	4 (11-11.5) JB32749-19 3/27/2013 Result Q	4 (14.5-15) JB32749-21 3/27/2013 Result Q	5 (13.5-14) JB32749-22 3/27/2013 Result Q	5 (14-14.5) JB32749-23 3/27/2013 Result Q	5 (14.5-15) JB32749-24 3/27/2013 Result Q	6 (11.5-12) JB32749-25 3/27/2013 Result Q	6 (12.5-13) JB32749-26 3/27/2013 Result Q
GC/MS Volatiles (µg/kg)														
Acetone	500000	500000	82.2	<200	<190	<130	13.0 J	10.9	14.6	4.6 J	19.2	37.1	<2.2	4.9 J
Benzene	44000	44000	<0.097	<14	<13	<8.8	<0.23	<0.10	<0.15	<0.14	<0.11	<0.12	<0.16	<0.12
Bromodichloromethane	NS	NS	<0.086	<13	<12	<7.8	<0.20	<0.088	<0.13	<0.12	<0.10	<0.11	<0.14	<0.11
Bromoform	NS	NS	<0.12	<18	<17	<11	<0.29	<0.13	<0.19	<0.18	<0.15	<0.16	<0.20	<0.15
Bromomethane	NS	NS	<0.22	<33	<30	<20	<0.52	<0.23	<0.35	<0.32	<0.26	<0.29	<0.36	<0.28
2-Butanone (MEK)	500000	500000	129	<290	<270	<180	<4.6	<2.0	40.1	<2.8	<2.3	<2.5	<3.1	<2.4
Carbon disulfide	NS	NS	1.9 J	<14	<13	<8.7	1.3 J	1.1 J	<0.15	<0.14	0.65 J	<0.12	<0.15	<0.12
Carbon tetrachloride	22000	22000	<0.11	<16	<15	<9.9	<0.25	<0.11	<0.17	<0.16	<0.13	<0.14	<0.17	<0.14
Chlorobenzene	500000	500000	<0.088	<13	<12	<8.0	<0.21	<0.090	<0.14	<0.13	<0.10	<0.11	<0.14	<0.11
Chloroethane	NS	NS	46.2	94.4 J	143 J	953	<0.43	3.4 J	1190	<0.27	0.91 J	1.3 J	<0.30	<0.23
Chloroform	350000	350000	<0.067	<10	<9.2	<6.1	0.50 J	<0.069	<0.10	<0.097	<0.079	<0.086	<0.11	<0.084
Chloromethane	NS	NS	<0.15	<23	<21	<14	<0.36	<0.16	<0.24	<0.22	<0.18	<0.19	<0.24	<0.19
Dibromochloromethane	NS	NS	<0.13	<20	<18	<12	<0.31	<0.14	<0.21	<0.19	<0.16	<0.17	<0.21	<0.17
1,1-Dichloroethane	240000	240000	12100	410 J	459 J	5820	9.6	2000	6470	15.0	42.9	54.3	<0.18	2.0 J
1,2-Dichloroethane	30000	30000	34.0	134	<15	165	2.3	4.4	<0.17	1.2	<0.13	<0.14	<0.18	2.8
1,1-Dichloroethene	500000	500000	72.4	659	293 J	423	31.4	1650	0.43 J	9.3	21.4	30.8	<0.34	6.1
cis-1,2-Dichloroethene	500000	500000	3.7 J	104 J	<20	44.6 J	1.0 J	2.6 J	<0.23	0.36 J	<0.18	0.33 J	<0.24	1.2 J
trans-1,2-Dichloroethene	500000	500000	0.86 J	108 J	<27	81.2 J	0.67 J	0.43 J	<0.30	<0.28	<0.23	<0.25	<0.31	1.2 J
1,2-Dichloroethene (total)	NS	NS	4.6	212 J	<20	126 J	1.7 J	3.0 J	<0.23	0.36 J	<0.18	0.33 J	<0.24	2.4 J
1,2-Dichloropropane	NS	NS	<0.13	<19	<17	<11	<0.29	<0.13	<0.20	<0.18	<0.15	<0.16	<0.20	<0.16
cis-1,3-Dichloropropene	NS	NS	<0.11	<17	<16	<10	<0.27	<0.12	<0.18	<0.16	<0.13	<0.15	<0.18	<0.14
trans-1,3-Dichloropropene	NS	NS	<0.13	<19	<17	<11	<0.30	<0.13	<0.20	<0.18	<0.15	<0.16	<0.20	<0.16
Ethylbenzene	390000	390000	<0.21	<32	<29	<20	<0.50	<0.22	<0.33	<0.31	<0.25	<0.28	<0.34	<0.27
2-Hexanone	NS	NS	<0.51	<75	<69	<46	<1.2	<0.52	<0.79	<0.73	<0.60	<0.65	<0.81	<0.64
Methyl Tert Butyl Ether	500000	500000	<0.19	<28	<26	<17	<0.45	<0.20	<0.30	<0.28	<0.23	<0.25	<0.31	<0.24
4-Methyl-2-pentanone(MIBK)	NS	NS	<0.61	<91	<84	<56	<1.4	<0.63	<0.95	<0.89	<0.72	<0.79	<0.98	<0.77
Methylene chloride	500000	500000	2.8 J	<150	<140	<94	15.1	4.0 J	12.4	2.7 J	<1.2	1.6 J	2.9 J	4.1 J
Styrene	NS	NS	<0.075	<11	<10	<6.8	<0.18	<0.077	<0.12	<0.11	<0.088	<0.096	<0.12	<0.094
1,1,2,2-Tetrachloroethane	NS	NS	<0.11	<16	<15	<9.8	<0.25	<0.11	<0.17	<0.16	<0.13	<0.14	<0.17	<0.13
Tetrachloroethene	150000	150000	<0.14	<21	<19	<13	0.99 J	<0.14	<0.22	<0.20	<0.17	<0.18	<0.23	<0.18
Toluene	500000	500000	1.4	<13	36.2 J	462	<0.20	<0.088	<0.13	<0.12	<0.10	<0.11	<0.14	<0.11
1,1,1-Trichloroethane	680	500000	617 J	1270	1500	2320	89.0	88.1	3.9 J	3480	1220	2090	2.9 J	41.5
1,1,2-Trichloroethane	NS	NS	1.6 J	<21	<19	<13	<0.33	<0.15	<0.22	0.44 J	<0.17	<0.18	<0.23	<0.18
Trichloroethene	200000	200000	0.39 J	279 J	175 J	55.3 J	3.5 J	0.45 J	<0.22	2.0 J	<0.17	<0.18	<0.23	5.0 J
Vinyl chloride	13000	13000	3.4 J	<17	<16	<11	<0.28	1.8 J	2.4 J	<0.17	1.3 J	1.2 J	<0.19	<0.15
Xylene (total)	500000	500000	<0.11	<17	<16	<10	<0.27	<0.12	<0.18	<0.16	<0.13	<0.15	<0.18	<0.14
Total Confident Conc.			13101.45	3270.4	2606.2	10450.1	170.06	3770.18	7733.83	3515.96	1306.36	2216.96	5.8	71.2

Notes:
Exceedances in Unrestricted Use SCOs highlighted in blue
NS - no standard
J - estimated concentration

Table 2B
End-point Post-treatment Soil sample Analytical Results
Summary of Volatile Organic Compounds

Client ID Lab Sample ID Date Sampled	NY Unrestricted Use Soil Cleanup Objectives	NY Commercial Use Soil Cleanup Objectives	6 (14.5-15) JB32749-27 3/27/2013 Result	Q	FD-1 6(11.5-12) JB32749-28 3/27/2013 Result	Q	FD-2 6(14.5-15) JB32749-29 3/27/2013 Result	Q
GC/MS Volatiles (µg/kg)								
Acetone	500000	500000	<2.0		<1.8		<1.2	
Benzene	44000	44000	<0.14		<0.13		<0.085	
Bromodichloromethane	NS	NS	<0.12		<0.11		<0.075	
Bromoform	NS	NS	<0.18		<0.16		<0.11	
Bromomethane	NS	NS	<0.32		<0.29		<0.20	
2-Butanone (MEK)	500000	500000	<2.8		<2.6		<1.7	
Carbon disulfide	NS	NS	<0.14		<0.13		<0.084	
Carbon tetrachloride	22000	22000	<0.16		<0.14		<0.095	
Chlorobenzene	500000	500000	<0.13		<0.12		<0.078	
Chloroethane	NS	NS	<0.27		<0.24		<0.16	
Chloroform	350000	350000	<0.097		<0.089		<0.059	
Chloromethane	NS	NS	<0.22		<0.20		<0.13	
Dibromochloromethane	NS	NS	<0.19		<0.18		<0.12	
1,1-Dichloroethane	240000	240000	3.5	J	<0.15		0.71	J
1,2-Dichloroethane	30000	30000	<0.16		<0.15		<0.097	
1,1-Dichloroethene	500000	500000	<0.30		<0.28		<0.18	
cis-1,2-Dichloroethene	500000	500000	<0.21		<0.20		<0.13	
trans-1,2-Dichloroethene	500000	500000	<0.28		<0.26		<0.17	
1,2-Dichloroethene (total)	NS	NS	<0.21		<0.20		<0.13	
1,2-Dichloropropane	NS	NS	<0.18		<0.17		<0.11	
cis-1,3-Dichloropropene	NS	NS	<0.16		<0.15		<0.10	
trans-1,3-Dichloropropene	NS	NS	<0.18		<0.17		<0.11	
Ethylbenzene	390000	390000	<0.31		<0.28		<0.19	
2-Hexanone	NS	NS	<0.73		<0.67		<0.45	
Methyl Tert Butyl Ether	500000	500000	<0.28		<0.25		<0.17	
4-Methyl-2-pentanone(MIBK)	NS	NS	<0.88		<0.81		<0.54	
Methylene chloride	500000	500000	<1.5		3.2	J	<0.91	
Styrene	NS	NS	<0.11		<0.099		<0.066	
1,1,2,2-Tetrachloroethane	NS	NS	<0.15		<0.14		<0.095	
Tetrachloroethene	150000	150000	<0.20		<0.18		<0.12	
Toluene	500000	500000	<0.12		<0.11		<0.075	
1,1,1-Trichloroethane	680	500000	0.93	J	3.6	J	3.6	
1,1,2-Trichloroethane	NS	NS	<0.20		<0.19		<0.12	
Trichloroethene	200000	200000	<0.20		0.89	J	<0.12	
Vinyl chloride	13000	13000	<0.17		<0.15		<0.10	
Xylene (total)	500000	500000	<0.16		<0.15		<0.10	
Total Confident Conc.			4.43		7.69		4.31	

Notes:
Exceedances in Unrestricted Use SCOs highlighted in blue
NS - no standard
J - estimated concentration

Table 3

Groundwater Analytical Results

AFFCO, 361 Walsh Avenue, New Windsor, NY

			Pre-Excavation							Post-Excavation						
Client Sample ID:			**EW-0**	**MW-1**	**E-1 NEW**	**IW-3**	**IW-1**	**S-8**	**IW-2**	**EW-1X**	**S-8**	**EW-0**	**E1-NEW**	**MW-1**	**FB041713**	**TRIP BLANK**
Lab Sample ID:			**JB10868-1**	**JB10868-2**	**JB10868-3**	**JB10868-4**	**JB10868-5**	**JB10868-6**	**JB10868-7**	**JB34670-1**	**JB34670-2**	**JB34670-3**	**JB34670-4**	**JB34670-5**	**JB34670-6**	**JB34670-7**
Date Sampled:	**Units**	**NY TOGS Class GA GW Standards**	**7/10/2012**	**7/10/2012**	**7/10/2012**	**7/10/2012**	**7/10/2012**	**7/10/2012**	**7/10/2012**	**4/17/2013**	**4/17/2013**	**4/17/2013**	**4/17/2013**	**4/17/2013**	**4/17/2013**	**4/17/2013**
Matrix:			**Ground Water**	**Ground Water**	**Ground Water**	**Ground Water**	**Ground Water**	**Ground Water**	**Ground Water**	**Ground Water**	**Ground Water**	**Ground Water**	**Ground Water**	**Ground Water**	**Field Blank**	**Trip Blank**
GC/MS Volatiles (SW846 8260B)																
Acetone	ug/l	-	ND (330)	ND (8.2)	ND (3.3)	7980	143 J	ND (3.3)	1600	ND (33)	ND (3.3)	ND (3.3)	ND (3.3)	ND (16)	ND (3.3)	ND (3.3)
Benzene	ug/l	1	ND (24)	ND (0.59)	ND (0.24)	ND (12)	ND (4.7)	ND (0.24)	ND (5.9)	ND (2.4)	ND (0.24)	ND (0.24)	ND (0.24)	ND (1.2)	ND (0.24)	ND (0.24)
Bromodichloromethane	ug/l	-	ND (21)	ND (0.52)	ND (0.21)	ND (10)	ND (4.1)	ND (0.21)	ND (5.2)	ND (2.1)	ND (0.21)	ND (0.21)	ND (0.21)	ND (1.0)	ND (0.21)	ND (0.21)
Bromoform	ug/l	-	ND (21)	ND (0.54)	ND (0.21)	ND (11)	ND (4.3)	ND (0.21)	ND (5.4)	ND (2.1)	ND (0.21)	ND (0.21)	ND (0.21)	ND (1.1)	ND (0.21)	ND (0.21)
Bromomethane	ug/l	5	ND (22)	ND (0.55)	ND (0.22)	ND (11)	ND (4.4)	ND (0.22)	ND (5.5)	ND (2.2)	ND (0.22)	ND (0.22)	ND (0.22)	ND (1.1)	ND (0.22)	ND (0.22)
2-Butanone (MEK)	ug/l	-	ND (240)	ND (5.9)	ND (2.4)	18900	114 J	ND (2.4)	4210	ND (24)	ND (2.4)	14.1	ND (2.4)	ND (12)	ND (2.4)	ND (2.4)
Carbon disulfide	ug/l	60	ND (19)	ND (0.47)	ND (0.19)	ND (9.5)	ND (3.8)	ND (0.19)	ND (4.7)	ND (1.9)	ND (0.19)	ND (0.19)	ND (0.19)	ND (0.95)	ND (0.19)	ND (0.19)
Carbon tetrachloride	ug/l	5	ND (22)	ND (0.54)	ND (0.22)	ND (11)	ND (4.3)	ND (0.22)	ND (5.4)	ND (2.2)	ND (0.22)	ND (0.22)	ND (0.22)	ND (1.1)	ND (0.22)	ND (0.22)
Chlorobenzene	ug/l	5	ND (23)	ND (0.57)	ND (0.23)	ND (11)	ND (4.6)	ND (0.23)	ND (5.7)	ND (2.3)	ND (0.23)	ND (0.23)	ND (0.23)	ND (1.1)	ND (0.23)	ND (0.23)
Chloroethane	ug/l	5	**1240**	**641**	ND (0.26)	**90.3**	**904**	**57**	**80.6**	ND (2.6)	ND (0.26)	**334**	**73.9**	**136**	ND (0.26)	ND (0.26)
Chloroform	ug/l	7	ND (20)	ND (0.51)	ND (0.20)	ND (10)	ND (4.1)	ND (0.20)	ND (5.1)	ND (2.0)	ND (0.20)	1.2	ND (0.20)	3.1 J	ND (0.20)	ND (0.20)
Chloromethane	ug/l	5	ND (21)	ND (0.52)	ND (0.21)	ND (10)	ND (4.1)	ND (0.21)	ND (5.2)	ND (2.1)	ND (0.21)	ND (0.21)	ND (0.21)	ND (1.0)	ND (0.21)	ND (0.21)
Dibromochloromethane	ug/l	-	ND (14)	ND (0.34)	ND (0.14)	ND (6.8)	ND (2.7)	ND (0.14)	ND (3.4)	ND (1.4)	ND (0.14)	ND (0.14)	ND (0.14)	ND (0.68)	ND (0.14)	ND (0.14)
1,1-Dichloroethane	ug/l	5	**36100**	**146**	**18**	**119**	**2540**	**145**	**327**	**22.9**	**11.8**	**2540**	**154**	**438**	ND (0.11)	ND (0.11)
1,2-Dichloroethane	ug/l	0.6	**233**	**4.8**	**1.7**	ND (13)	**60.5**	**0.64 J**	ND (6.5)	ND (2.6)	**0.7 J**	**17.5**	ND (0.26)	**5.2**	ND (0.26)	ND (0.26)
1,1-Dichloroethene	ug/l	5	**562**	**6**	4.5	**22.4 J**	**69.2**	4.1	**28.3**	ND (1.9)	3.5	**144**	5	**36.6**	ND (0.19)	ND (0.19)
cis-1,2-Dichloroethene	ug/l	5	ND (19)	0.73 J	0.78 J	ND (9.4)	**7.3 J**	0.21 J	ND (4.7)	ND (1.9)	0.54 J	2.8	ND (0.19)	ND (0.94)	ND (0.19)	ND (0.19)
trans-1,2-Dichloroethene	ug/l	5	ND (21)	ND (0.53)	0.33 J	ND (11)	ND (4.2)	ND (0.21)	ND (5.3)	ND (2.1)	ND (0.21)	2.2	ND (0.21)	ND (1.1)	ND (0.21)	ND (0.21)
1,2-Dichloroethene (total)	ug/l	-	ND (19)	0.73 J	1.1	ND (9.4)	7.3 J	0.21 J	ND (4.7)	ND (1.9)	0.54 J	5	ND (0.19)	ND (0.94)	ND (0.19)	ND (0.19)
1,2-Dichloropropane	ug/l	1	ND (48)	ND (1.2)	ND (0.48)	ND (24)	ND (9.7)	ND (0.48)	ND (12)	ND (4.8)	ND (0.48)	ND (0.48)	ND (0.48)	ND (2.4)	ND (0.48)	ND (0.48)
cis-1,3-Dichloropropene	ug/l	-	ND (21)	ND (0.52)	ND (0.21)	ND (10)	ND (4.1)	ND (0.21)	ND (5.2)	ND (2.1)	ND (0.21)	ND (0.21)	ND (0.21)	ND (1.0)	ND (0.21)	ND (0.21)
trans-1,3-Dichloropropene	ug/l	-	ND (19)	ND (0.47)	ND (0.19)	ND (9.5)	ND (3.8)	ND (0.19)	ND (4.7)	ND (1.9)	ND (0.19)	ND (0.19)	ND (0.19)	ND (0.95)	ND (0.19)	ND (0.19)
Ethylbenzene	ug/l	5	ND (23)	ND (0.57)	ND (0.23)	ND (11)	ND (4.6)	ND (0.23)	ND (5.7)	ND (2.3)	ND (0.23)	ND (0.23)	ND (0.23)	ND (1.1)	ND (0.23)	ND (0.23)
2-Hexanone	ug/l	-	ND (110)	ND (2.8)	ND (1.1)	ND (57)	ND (23)	ND (1.1)	ND (28)	ND (11)	ND (1.1)	ND (1.1)	ND (1.1)	ND (5.7)	ND (1.1)	ND (1.1)
Methyl Tert Butyl Ether	ug/l	10	ND (16)	ND (0.41)	ND (0.16)	ND (8.2)	ND (3.3)	ND (0.16)	ND (4.1)	ND (1.6)	ND (0.16)	ND (0.16)	ND (0.16)	ND (0.82)	ND (0.16)	ND (0.16)
4-Methyl-2-pentanone(MIBK)	ug/l	-	ND (83)	ND (2.1)	ND (0.83)	ND (41)	ND (17)	ND (0.83)	ND (21)	ND (8.3)	ND (0.83)	ND (0.83)	ND (0.83)	ND (4.1)	ND (0.83)	ND (0.83)
Methylene chloride	ug/l	5	ND (70)	ND (1.8)	ND (0.70)	ND (35)	ND (14)	ND (0.70)	ND (18)	ND (7.0)	ND (0.70)	ND (0.70)	ND (0.70)	ND (3.5)	ND (0.70)	ND (0.70)
Styrene	ug/l	5	ND (21)	ND (0.54)	ND (0.21)	ND (11)	ND (4.3)	ND (0.21)	ND (5.4)	ND (2.1)	ND (0.21)	ND (0.21)	ND (0.21)	ND (1.1)	ND (0.21)	ND (0.21)
1,1,2,2-Tetrachloroethane	ug/l	5	ND (21)	ND (0.54)	ND (0.21)	ND (11)	ND (4.3)	ND (0.21)	ND (5.4)	ND (2.1)	ND (0.21)	ND (0.21)	ND (0.21)	ND (1.1)	ND (0.21)	ND (0.21)
Tetrachloroethene	ug/l	5	ND (28)	ND (0.70)	ND (0.28)	ND (14)	ND (5.6)	ND (0.28)	ND (7.0)	ND (2.8)	ND (0.28)	0.6 J	ND (0.28)	ND (1.4)	ND (0.28)	ND (0.28)
Toluene	ug/l	5	**60.5 J**	ND (0.57)	ND (0.23)	ND (11)	ND (4.5)	ND (0.23)	ND (5.7)	ND (2.3)	ND (0.23)	**8**	ND (0.23)	1.6 J	ND (0.23)	ND (0.23)
1,1,1-Trichloroethane	ug/l	5	**48300**	**82.4**	2	**312**	**1420**	**30.5**	**891**	ND (2.4)	1.4	**8630**	**48.4**	**1560**	ND (0.24)	ND (0.24)
1,1,2-Trichloroethane	ug/l	1	**34.5 J**	ND (0.72)	ND (0.29)	ND (14)	ND (5.7)	ND (0.29)	ND (7.2)	ND (2.9)	ND (0.29)	**2.3**	ND (0.29)	ND (1.4)	ND (0.29)	ND (0.29)
Trichloroethene	ug/l	5	ND (22)	1.6 J	1.7	ND (11)	**8.7 J**	ND (0.22)	ND (5.4)	ND (2.2)	1.1	4	ND (0.22)	**6.2**	ND (0.22)	ND (0.22)
Vinyl chloride	ug/l	2	ND (21)	2 J	0.65 J	ND (10)	ND (4.1)	0.65 J	ND (5.2)	ND (2.1)	ND (0.21)	**4.8**	ND (0.21)	ND (1.0)	ND (0.21)	ND (0.21)
Xylene (total)	ug/l	5	ND (24)	ND (0.60)	ND (0.24)	ND (12)	ND (4.8)	ND (0.24)	ND (6.0)	ND (2.4)	ND (0.24)	ND (0.24)	ND (0.24)	ND (1.2)	ND (0.24)	ND (0.24)
Metals Analysis																
Iron	ug/l	300	-	-	-	-	-	-	-	**934000**	**5790**	**546**	**804**	**805**	**18500**	-
General Chemistry																
Alkalinity, Total as CaCO3	mg/l	-	-	-	-	-	-	-	-	89.2	111	124	260	274	<5.0	-
Chloride	mg/l	250	-	-	-	-	-	-	-	52.6	43.8	114	37.1	57.1	<2.0	-
Sulfate	mg/l	250	-	-	-	-	-	-	-	29.2	17.2	93.8	<10	104	<10	-
Sulfide	mg/l	-	-	-	-	-	-	-	-	-	<2.0	<2.0	<2.0	<2.0	<2.0	-

Notes

Exceedances **bolded** and highlighted in gray

ND - concentration is non-detectable

J - value is estimated

Sample JB10868-3 was originally mislabeled 'E-1 NAW'

Sample JB34670-4 was originally mislabeled 'E-1 N'

Sample JB34670-5 was originally mislabeled 'MW-1N'

APPENDIX A

Environmental Easement, Metes & Bounds Description and Survey Map

ORANGE COUNTY – STATE OF NEW YORK

ANN G. RABBITT, COUNTY CLERK
255 MAIN STREET
GOSHEN, NEW YORK 10924

COUNTY CLERK'S RECORDING PAGE

THIS PAGE IS PART OF THE DOCUMENT – DO NOT DETACH

BOOK/PAGE: 14291 / 601
INSTRUMENT #: 20170066308

Receipt#: 2381301
Clerk: JM
Rec Date: 09/15/2017 12:16:02 PM
Doc Grp: D
Descrip: RT WY
Num Pgs: 10
Rec'd Frm: FIRST AMERICAN TITLE INS CO

Party1: AMERICAN FELT & FILTER CO INC
Party2: NYS DEPT OF ENVIRONMENTAL CONSERVATION
Town: NEW WINDSOR (TN)
9-1-69.2

Recording:	
Recording Fee	70.00
Cultural Ed	14.25
Records Management - Coun	1.00
Records Management - Stat	4.75
TP584	5.00
Sub Total:	95.00
Transfer Tax	
Transfer Tax - State	0.00
Sub Total:	0.00
Total:	95.00

**** NOTICE: THIS IS NOT A BILL ****

***** Transfer Tax *****
Transfer Tax #: 1693
Transfer Tax
Consideration: 0.00

Total: 0.00

Payment Type:
Check ___
Cash ___
Charge ___
No Fee ___

Comment: _____

Ann G. Rabbitt
Orange County Clerk

Record and Return To:

FIRST AMERICAN TITLE INS CO
666 THIRD AVE
5TH FLOOR
NEW YORK, NY 10017

3020-8692960

County: Orange Site No: 336036 Order on Consent Index : W3-0784-04-06

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

THIS INDENTURE made this 23rd day of August, 2017, between Owner(s) American Felt & Filter Company, Inc., having an office at 361 Walsh Avenue, New Windsor, New York 12553, County of Orange, 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

9-1-69.2

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 361 Walsh Avenue in the Town of New Windsor, County of Orange and State of New York, known and designated on the tax map of the County Clerk of Orange as tax map parcel numbers: Section 9 Block 1 Lot 69.2, being a portion of the property conveyed to Grantor by deed dated July 31, 1978 and recorded in the Orange County Clerk's Office in Liber and Page 2106/655. The property subject to this Environmental Easement (the "Controlled Property") comprises approximately 0.545 +/- acres, and is hereinafter more fully described in the Land Title Survey dated April 17, 1998 and last revised June 26, 2017 prepared by Steven P. Drabick, P.L.S., which will be attached to the Site Management Plan. The Controlled Property description 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 public 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 Order on Consent Index Number: W3-0784-04-06, 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) The use of groundwater underlying the property is prohibited without necessary water quality treatment as determined by the NYSDOH or the Orange 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;

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

(6) 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;

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

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

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

(10) 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 as defined in 6NYCRR 375-1.8(g)(2)(i) and (ii), 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, at such time as NYSDEC may require, 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 by 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: 336036
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.

Remainder of Page Intentionally Left Blank

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

American Felt & Filter Company, Inc.:

By: _____

Print Name: Wilson H Tryne

Title: Treasurer Date: 8/8/17

Grantor's Acknowledgment

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

On the 8th day of August, in the year 2017, before me, the undersigned, personally appeared Wilson H. Tryne, 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.

Linda S Miranda
Notary Public - State of New York

LINDA S. MIRANDA
NOTARY PUBLIC-STATE OF NEW YORK
No. 01MI6064154
Qualified in Orange County
My Commission Expires September 17, 2017

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: _____
Robert W. Schick, Director
Division of Environmental Remediation

Grantee's Acknowledgment

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

On the 23rd day of August, in the year 2017, before me, the undersigned, personally appeared Robert W. Schick, 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, 2018

R+R:
First American Title
666 Third Ave, Floor 5
New York, NY 10017

SCHEDULE "A" PROPERTY DESCRIPTION

DESCRIPTION OF SOILS MANAGEMENT AREA & SUB-SLAB DEPRESSURIZATION SYSTEM, AN ENVIRONMENTAL EASEMENT TO THE NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

GRANT OF EASEMENT over, across and through all that certain plot, piece or parcel of land with the building and improvements thereon erected, situate, lying and being in the Town of New Windsor, County of Orange and State of New York bounded and described as follows:

BEGINNING at a point at the northwesterly corner of the 1story masonry building of the most northerly complex of buildings located on lands of American Felt & Filter Company Inc., Liber 5730, Page 201, said point of beginning being located South 65 degrees 16 minutes 40 seconds West for a distance of 42.37 feet from a corner in the northerly bounds of lands of the same at the intersection with the municipal boundary between the City of Newburgh and Town of New Windsor and lands now or formerly of Hudson Shipyard Lp, Liber 12960, Page 1797;

THENCE South 72 degrees 57 minutes 34 seconds East for a distance of 103.33 feet along the face of said masonry building to a point;

THENCE South 17 degrees 21 minutes 13 seconds West for a distance of 68.08 feet through said masonry building to a point at the outside corner of said building;

THENCE North 72 degrees 00 minutes 00 seconds West for a distance of 51.17 feet through said masonry building to a point at the outside corner of said building;

THENCE North 72 degrees 57 minutes 52 seconds West for a distance of 51.79 feet to a point at the outside corner of said building;

THENCE South 17 degrees 02 minutes 08 seconds West for a distance of 29.25 feet to a to a point at the northerly face of a two-story masonry building;

THENCE North 72 degrees 32 minutes 52 seconds West for a distance of 75.55 feet along the northerly face of said building to a point at the corner of said building;

THENCE South 17 degrees 20 minutes 58 seconds West for a distance of 43.06 feet along the westerly face of the two-story masonry building to a point at the corner of said building;

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THENCE North 17 degrees 02 minutes 17 seconds East for a distance of 140.76 feet through lands of American Felt & Filter Company, Inc. to a point marked by an iron rod set at or near a chain link fence;

THENCE South 67 degrees 51 minutes 22 seconds East for a distance of 123.39 feet through lands of the same and along a chain link fence to a point marked by an iron rod set;

THENCE North 87 degrees 49 minutes 18 seconds East for a distance of 26.52 feet through lands of American Felt & Filter Company, Inc. to the POINT OR PLACE OF BEGINNING.

Together with and subject to covenants, and restrictions of record.

Said area contains 0.5454 acres more or less.

ORANGE COUNTY – STATE OF NEW YORK

ANN G. RABBITT, COUNTY CLERK
255 MAIN STREET
GOSHEN, NEW YORK 10924

COUNTY CLERK'S RECORDING PAGE

THIS PAGE IS PART OF THE DOCUMENT – DO NOT DETACH

BOOK/PAGE: 14291 / 601
INSTRUMENT #: 20170066308

Receipt#: 2381301
Clerk: JM
Rec Date: 09/15/2017 12:16:02 PM
Doc Grp: D
Descrip: RT WY
Num Pgs: 10
Rec'd Frm: FIRST AMERICAN TITLE INS CO

Party1: AMERICAN FELT & FILTER CO INC
Party2: NYS DEPT OF ENVIRONMENTAL CONSERVATION
Town: NEW WINDSOR (TN)
9-1-69.2

Recording:	
Recording Fee	70.00
Cultural Ed	14.25
Records Management - Coun	1.00
Records Management - Stat	4.75
TP584	5.00
Sub Total:	95.00
Transfer Tax	
Transfer Tax - State	0.00
Sub Total:	0.00
Total:	95.00

**** NOTICE: THIS IS NOT A BILL ****

***** Transfer Tax *****
Transfer Tax #: 1693
Transfer Tax
Consideration: 0.00

Total: 0.00

Payment Type:
Check ___
Cash ___
Charge ___
No Fee ___

Comment: _____

Ann G. Rabbitt
Orange County Clerk

Record and Return To:

FIRST AMERICAN TITLE INS CO
666 THIRD AVE
5TH FLOOR
NEW YORK, NY 10017

3020-8692960

County: Orange Site No: 336036 Order on Consent Index : W3-0784-04-06

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

THIS INDENTURE made this 23rd day of August, 2017, between Owner(s) American Felt & Filter Company, Inc., having an office at 361 Walsh Avenue, New Windsor, New York 12553, County of Orange, 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

9-1-69.2

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 361 Walsh Avenue in the Town of New Windsor, County of Orange and State of New York, known and designated on the tax map of the County Clerk of Orange as tax map parcel numbers: Section 9 Block 1 Lot 69.2, being a portion of the property conveyed to Grantor by deed dated July 31, 1978 and recorded in the Orange County Clerk's Office in Liber and Page 2106/655. The property subject to this Environmental Easement (the "Controlled Property") comprises approximately 0.545 +/- acres, and is hereinafter more fully described in the Land Title Survey dated April 17, 1998 and last revised June 26, 2017 prepared by Steven P. Drabick, P.L.S., which will be attached to the Site Management Plan. The Controlled Property description 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 public 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 Order on Consent Index Number: W3-0784-04-06, 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) The use of groundwater underlying the property is prohibited without necessary water quality treatment as determined by the NYSDOH or the Orange 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;

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

(6) 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;

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

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

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

(10) 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 as defined in 6NYCRR 375-1.8(g)(2)(i) and (ii), 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, at such time as NYSDEC may require, 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 by 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: 336036
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.

Remainder of Page Intentionally Left Blank

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

American Felt & Filter Company, Inc.:

By: _____

Print Name: Wilson H Tryne

Title: Treasurer Date: 8/8/17

Grantor's Acknowledgment

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

On the 8th day of August, in the year 2017, before me, the undersigned, personally appeared Wilson H. Tryne, 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.

Linda S Miranda
Notary Public - State of New York

LINDA S. MIRANDA
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Qualified in Orange County
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By: _____
Robert W. Schick, Director
Division of Environmental Remediation

Grantee's Acknowledgment

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On the 23rd day of August, in the year 2017, before me, the undersigned, personally appeared Robert W. Schick, 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, 2018

R+R:
First American Title
666 Third Ave, Floor 5
New York, NY 10017

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GRANT OF EASEMENT over, across and through all that certain plot, piece or parcel of land with the building and improvements thereon erected, situate, lying and being in the Town of New Windsor, County of Orange and State of New York bounded and described as follows:

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THENCE South 72 degrees 57 minutes 34 seconds East for a distance of 103.33 feet along the face of said masonry building to a point;

THENCE South 17 degrees 21 minutes 13 seconds West for a distance of 68.08 feet through said masonry building to a point at the outside corner of said building;

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Together with and subject to covenants, and restrictions of record.

Said area contains 0.5454 acres more or less.

STEVEN P. DRABICK P.L.S., PC
PROFESSIONAL LAND SURVEYOR
PO BOX 539
CORNWALL, N.Y. 12518
(8 4 5) - 5 3 4 - 2 2 0 8

LEGEND

- EDGE OF WATER COURSE
- BOUNDARY LINE
- EASEMENT LINE
- UTILITY POLE
- OVERHEAD UTILITY LINES
- CHAIN LINK FENCE
- WROUGHT IRON FENCE
- GUIDE RAIL
- EDGE OF PAVED TRAVELWAY
- EDGE OF UNPAVED TRAVELWAY
- AREA OF CONCRETE
- STONE RETAINING WALL
- ROOF OVER OPEN AREA
- ENCLOSED STAIRWAY
- FV FIRE VALVE
- MW MONITORING WELL
- MANHOLE
- CATCH BASIN
- CULVERT
- UB UTILITY BOX

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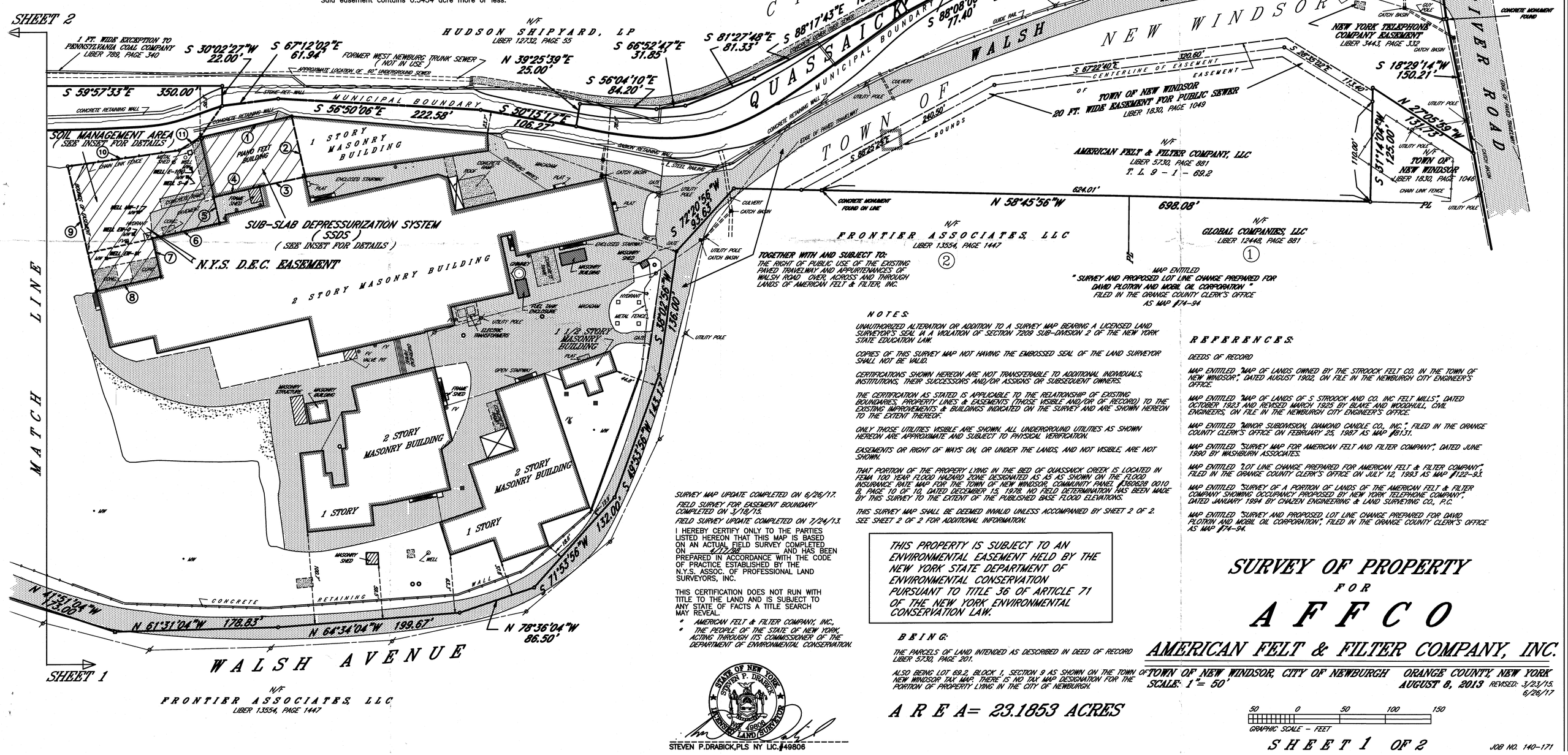
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Together with and subject to covenants, and restrictions of record.

Said easement contains 0.5454 acre more or less.



MAP ENTITLED "LOT LINE CHANGE PLAN BETWEEN THE LANDS OF DAVID PLOTKIN AND MAREX TERMINALS CORPORATION" DATED AUGUST 17, 2207 BY RICHARD PAUL HANBACK, L.S. FILED IN THE ORANGE COUNTY CLERK'S OFFICE AS MAP #406-08

TOGETHER WITH AND SUBJECT TO: THE RIGHT OF PUBLIC USE OF THE EXISTING PAVED TRAVELWAY AND APPURTENANCES OF WALSH ROAD OVER, ACROSS AND THROUGH LANDS OF AMERICAN FELT & FILTER, INC.

MAP ENTITLED "SURVEY AND PROPOSED LOT LINE CHANGE PREPARED FOR DAVID PLOTKIN AND MOBIL OIL CORPORATION" FILED IN THE ORANGE COUNTY CLERK'S OFFICE AS MAP #74-94

NOTES:

UNAUTHORIZED ALTERATION OR ADDITION TO A SURVEY MAP BEARING A LICENSED LAND SURVEYOR'S SEAL IN A VIOLATION OF SECTION 7209 SUB-DIVISION 2 OF THE NEW YORK STATE EDUCATION LAW.

COPIES OF THIS SURVEY MAP NOT HAVING THE EMBOSSED SEAL OF THE LAND SURVEYOR SHALL NOT BE VALID.

CERTIFICATIONS SHOWN HEREON ARE NOT TRANSFERABLE TO ADDITIONAL INDIVIDUALS, INSTITUTIONS, THEIR SUCCESSORS AND/OR ASSIGNS OR SUBSEQUENT OWNERS.

THE CERTIFICATION AS STATED IS APPLICABLE TO THE RELATIONSHIP OF EXISTING BOUNDARIES, PROPERTY LINES & EASEMENTS (THOSE VISIBLE AND/OR OF RECORD) TO THE EXISTING IMPROVEMENTS & BUILDINGS INDICATED ON THE SURVEY AND ARE SHOWN HEREON TO THE EXTENT THEREOF.

ONLY THOSE UTILITIES VISIBLE ARE SHOWN. ALL UNDERGROUND UTILITIES AS SHOWN HEREON ARE APPROXIMATE AND SUBJECT TO PHYSICAL VERIFICATION.

EASEMENTS OR RIGHT OF WAYS ON, OR UNDER THE LANDS, AND NOT VISIBLE, ARE NOT SHOWN.

THAT PORTION OF THE PROPERTY LYING IN THE BED OF QUASSAICK CREEK IS LOCATED IN FEMA 100 YEAR FLOOD HAZARD ZONE DESIGNATED AS AS SHOWN ON THE FLOOD INSURANCE RATE MAP FOR THE TOWN OF NEW WINDSOR, COMMUNITY PANEL #3605280010 E, PAGE 10 OF 10, DATED DECEMBER 15, 1978. NO FIELD DETERMINATION HAS BEEN MADE BY THIS SURVEY TO THE EXTENT OF THE PUBLISHED BASE FLOOD ELEVATIONS.

THIS SURVEY MAP SHALL BE DEEMED INVALID UNLESS ACCOMPANIED BY SHEET 2 OF 2.
SEE SHEET 2 OF 2 FOR ADDITIONAL INFORMATION.

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.

REFERENCES:

DEEDS OF RECORD

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MAP ENTITLED "SURVEY AND PROPOSED LOT LINE CHANGE PREPARED FOR DAVID PLOTKIN AND MOBIL OIL CORPORATION", FILED IN THE ORANGE COUNTY CLERK'S OFFICE AS MAP #74-94.

SURVEY MAP UPDATE COMPLETED ON 6/26/17.
FIELD SURVEY FOR EASEMENT BOUNDARY COMPLETED ON 3/18/15.
FIELD SURVEY UPDATE COMPLETED ON 7/24/13.

I HEREBY CERTIFY ONLY TO THE PARTIES LISTED HEREON THAT THIS MAP IS BASED ON AN ACTUAL FIELD SURVEY COMPLETED ON 4/12/99 AND HAS BEEN PREPARED IN ACCORDANCE WITH THE CODE OF PRACTICE ESTABLISHED BY THE N.Y.S. ASSOC. OF PROFESSIONAL LAND SURVEYORS, INC.

THIS CERTIFICATION DOES NOT RUN WITH TITLE TO THE LAND AND IS SUBJECT TO ANY STATE OF FACTS A TITLE SEARCH MAY REVEAL.

- AMERICAN FELT & FILTER COMPANY, INC.,
- THE PEOPLE OF THE STATE OF NEW YORK, ACTING THROUGH ITS COMMISSIONER OF THE DEPARTMENT OF ENVIRONMENTAL CONSERVATION.

STATE OF NEW YORK STEVEN P. DRABICK LICENSED LAND SURVEYOR 49806

STEVEN P.DRABICK,PLS NY LIC.#49806

BEING:

THE PARCELS OF LAND INTENDED AS DESCRIBED IN DEED OF RECORD LIBER 5730, PAGE 201.

ALSO BEING LOT 69.2, BLOCK 1, SECTION 9 AS SHOWN ON THE TOWN OF NEW WINDSOR TAX MAP. THERE IS NO TAX MAP DESIGNATION FOR THE PORTION OF PROPERTY LYING IN THE CITY OF NEWBURGH.

A R E A = 23.1853 ACRES

SURVEY OF PROPERTY FOR A F F C O

AMERICAN FELT & FILTER COMPANY, INC.

TOWN OF NEW WINDSOR, CITY OF NEWBURGH ORANGE COUNTY, NEW YORK
SCALE: 1" = 50' AUGUST 8, 2013 REVISED: 3/23/15, 6/26/17

50 0 50 100 150
GRAPHIC SCALE - FEET

SHEET 1 OF 2

JOB NO. 140-171

STEVEN P. DRABICK P.L.S., PC
PROFESSIONAL LAND SURVEYOR
PO BOX 539
CORNWALL, N.Y. 12518
(8 4 5) - 5 3 4 - 2 2 0 8

DESCRIPTION OF SOILS MANAGEMENT AREA & SUB-SLAB DEPRESSURIZATION SYSTEM, AN ENVIRONMENTAL EASEMENT TO THE NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

GRANT OF EASEMENT over, across and through all that certain plot, piece or parcel of land with the building and improvements thereon erected, situate, lying and being in the Town of New Windsor, County of Orange and State of New York bounded and described as follows:

BEGINNING at a point at the northwesterly corner of the 1story masonry building of the most northerly complex of buildings located on lands of American Felt & Filter Company Inc., Liber 5730, Page 201, said point of beginning being located South 65 degrees 16 minutes 40 seconds West for a distance of 42.37 feet from a corner in the northerly bounds of lands of the same at the intersection with the municipal boundary between the City of Newburgh and Town of New Windsor and lands now or formerly of Hudson Shipyard Lp, Liber 12960, Page 1797;

THENCE South 72 degrees 57 minutes 34 seconds East for a distance of 103.33 feet along the face of said masonry building to a point;

THENCE South 17 degrees 21 minutes 13 seconds West for a distance of 68.08 feet through said masonry building to a point at the outside corner of said building;

THENCE North 72 degrees 00 minutes 00 seconds West for a distance of 51.17 feet through said masonry building to a point at the outside corner of said building;

THENCE North 72 degrees 57 minutes 52 seconds West for a distance of 51.79 feet to a point at the outside corner of said building;

THENCE South 17 degrees 02 minutes 08 seconds West for a distance of 29.25 feet to a to a point at the northerly face of a two-story masonry building;

THENCE North 72 degrees 32 minutes 52 seconds West for a distance of 75.55 feet along the northerly face of said building to a point at the corner of said building;

THENCE South 17 degrees 20 minutes 58 seconds West for a distance of 43.06 feet along the westerly face of the two-story masonry building to a point at the corner of said building;

THENCE North 72 degrees 34 minutes 38 seconds West for a distance of 72.17 feet along the northerly face of the two story masonry building to a point at the most northwesterly corner of said building;

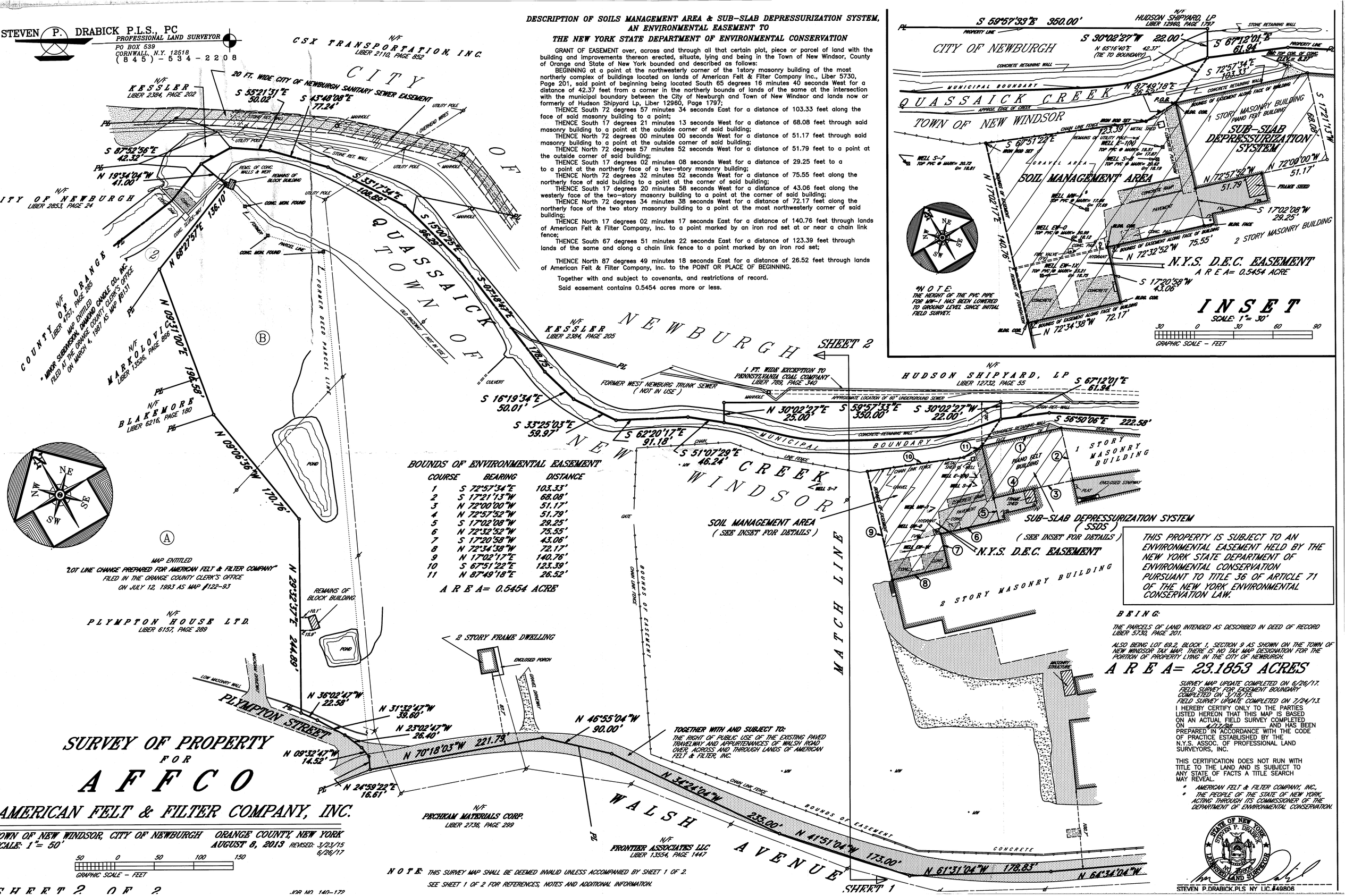
THENCE North 17 degrees 02 minutes 17 seconds East for a distance of 140.76 feet through lands of American Felt & Filter Company, Inc. to a point marked by an iron rod set at or near a chain link fence;

THENCE South 67 degrees 51 minutes 22 seconds East for a distance of 123.39 feet through lands of the same and along a chain link fence to a point marked by an iron rod set;

THENCE North 87 degrees 49 minutes 18 seconds East for a distance of 26.52 feet through lands of American Felt & Filter Company, Inc. to the POINT OR PLACE OF BEGINNING.

Together with and subject to covenants, and restrictions of record.

Said easement contains 0.5454 acres more or less.



BOUNDS OF ENVIRONMENTAL EASEMENT

COURSE	BEARING	DISTANCE
1	S 72°57'34"E	103.33'
2	S 17°21'13"W	68.08'
3	N 72°00'00"W	51.17'
4	N 72°57'52"W	51.79'
5	S 17°02'08"W	29.25'
6	N 72°32'52"W	75.55'
7	S 17°20'58"W	43.06'
8	N 72°34'38"W	72.17'
9	N 17°02'17"E	140.76'
10	S 67°51'22"E	123.39'
11	N 87°49'18"E	26.52'

A R E A= 0.5454 ACRE

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.

BEING:

THE PARCELS OF LAND INTENDED AS DESCRIBED IN DEED OF RECORD LIBER 5730, PAGE 201.

ALSO BEING LOT 69.2, BLOCK 1, SECTION 9 AS SHOWN ON THE TOWN OF NEW WINDSOR TAX MAP. THERE IS NO TAX MAP DESIGNATION FOR THE PORTION OF PROPERTY LYING IN THE CITY OF NEWBURGH.

A R E A= 23.1853 ACRES

SURVEY MAP UPDATE COMPLETED ON 6/26/17.
FIELD SURVEY FOR EASEMENT BOUNDARY COMPLETED ON 3/18/15.
FIELD SURVEY UPDATE COMPLETED ON 7/24/13.

I HEREBY CERTIFY ONLY TO THE PARTIES LISTED HEREON THAT THIS MAP IS BASED ON AN ACTUAL FIELD SURVEY COMPLETED ON 4/17/98 AND HAS BEEN PREPARED IN ACCORDANCE WITH THE CODE OF PRACTICE ESTABLISHED BY THE N.Y.S. ASSOC. OF PROFESSIONAL LAND SURVEYORS, INC.

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* THE PEOPLE OF THE STATE OF NEW YORK, ACTING THROUGH ITS COMMISSIONER OF THE DEPARTMENT OF ENVIRONMENTAL CONSERVATION.

STATE OF NEW YORK STEVEN P. DRABICK No. 49806 LICENSED LAND SURVEYOR

STEVEN P.DRABICK,PLS NY LIC.#49806

SURVEY OF PROPERTY FOR A F F C O

AMERICAN FELT & FILTER COMPANY, INC.

TOWN OF NEW WINDSOR, CITY OF NEWBURGH ORANGE COUNTY, NEW YORK
SCALE: 1"= 50' AUGUST 8, 2013 REVISED: 3/23/15 6/26/17

50 0 50 100 150
GRAPHIC SCALE - FEET

NOTE: THIS SURVEY MAP SHALL BE DEEMED INVALID UNLESS ACCOMPANIED BY SHEET 1 OF 2.
SEE SHEET 1 OF 2 FOR REFERENCES, NOTES AND ADDITIONAL INFORMATION.

SHEET 1

SHEET 2 OF 2 JOB NO. 140-172

STEVEN P. DRABICK P.L.S., PC
PROFESSIONAL LAND SURVEYOR
PO BOX 539
CORNWALL, N.Y. 12518
(8 4 5) - 5 3 4 - 2 2 0 8

LEGEND

- EDGE OF WATER COURSE
- BOUNDARY LINE
- EASEMENT LINE
- UTILITY POLE
- OVERHEAD UTILITY LINES
- CHAIN LINK FENCE
- WROUGHT IRON FENCE
- GUIDE RAIL
- EDGE OF PAVED TRAVELWAY
- EDGE OF UNPAVED TRAVELWAY
- AREA OF CONCRETE
- STONE RETAINING WALL
- ROOF OVER OPEN AREA
- ENCLOSED STAIRWAY
- FV FIRE VALVE
- MW MONITORING WELL
- MANHOLE
- CATCH BASIN
- CULVERT
- UB UTILITY BOX

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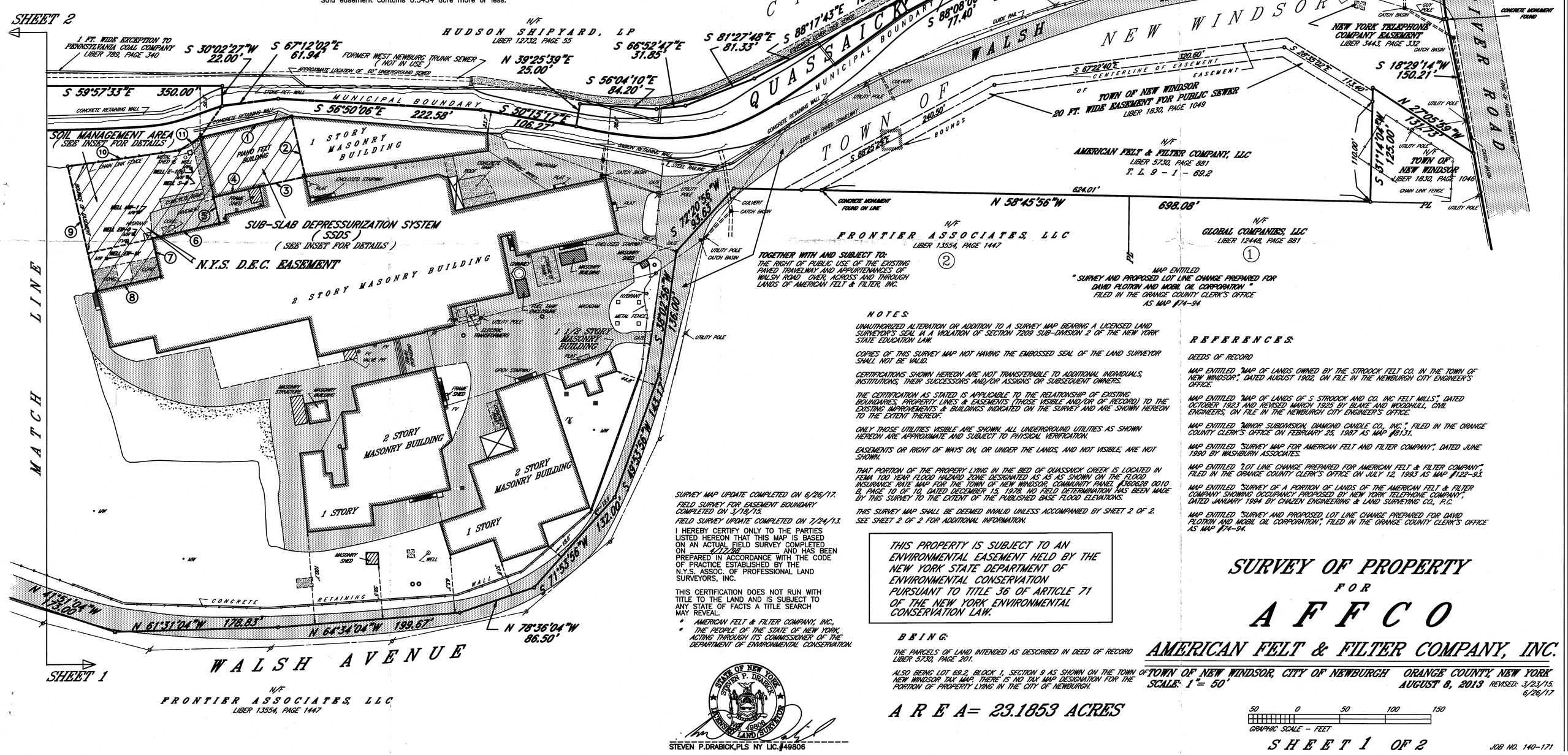
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Together with and subject to covenants, and restrictions of record.

Said easement contains 0.5454 acre more or less.



MAP ENTITLED "LOT LINE CHANGE PLAN BETWEEN THE LANDS OF DAVID PLOTKIN AND MAREX TERMINALS CORPORATION" DATED AUGUST 17, 2207 BY RICHARD PAUL HANBACK, L.S. FILED IN THE ORANGE COUNTY CLERK'S OFFICE AS MAP #406-08

TOGETHER WITH AND SUBJECT TO: THE RIGHT OF PUBLIC USE OF THE EXISTING PAVED TRAVELWAY AND APPURTENANCES OF WALSH ROAD OVER, ACROSS AND THROUGH LANDS OF AMERICAN FELT & FILTER, INC.

MAP ENTITLED "SURVEY AND PROPOSED LOT LINE CHANGE PREPARED FOR DAVID PLOTKIN AND MOBIL OIL CORPORATION" FILED IN THE ORANGE COUNTY CLERK'S OFFICE AS MAP #74-94

NOTES:

UNAUTHORIZED ALTERATION OR ADDITION TO A SURVEY MAP BEARING A LICENSED LAND SURVEYOR'S SEAL IN A VIOLATION OF SECTION 7209 SUB-DIVISION 2 OF THE NEW YORK STATE EDUCATION LAW.

COPIES OF THIS SURVEY MAP NOT HAVING THE EMBOSSED SEAL OF THE LAND SURVEYOR SHALL NOT BE VALID.

CERTIFICATIONS SHOWN HEREON ARE NOT TRANSFERABLE TO ADDITIONAL INDIVIDUALS, INSTITUTIONS, THEIR SUCCESSORS AND/OR ASSIGNS OR SUBSEQUENT OWNERS.

THE CERTIFICATION AS STATED IS APPLICABLE TO THE RELATIONSHIP OF EXISTING BOUNDARIES, PROPERTY LINES & EASEMENTS (THOSE VISIBLE AND/OR OF RECORD) TO THE EXISTING IMPROVEMENTS & BUILDINGS INDICATED ON THE SURVEY AND ARE SHOWN HEREON TO THE EXTENT THEREOF.

ONLY THOSE UTILITIES VISIBLE ARE SHOWN. ALL UNDERGROUND UTILITIES AS SHOWN HEREON ARE APPROXIMATE AND SUBJECT TO PHYSICAL VERIFICATION.

EASEMENTS OR RIGHT OF WAYS ON, OR UNDER THE LANDS, AND NOT VISIBLE, ARE NOT SHOWN.

THAT PORTION OF THE PROPERTY LYING IN THE BED OF QUASSAICK CREEK IS LOCATED IN FEMA 100 YEAR FLOOD HAZARD ZONE DESIGNATED AS AS SHOWN ON THE FLOOD INSURANCE RATE MAP FOR THE TOWN OF NEW WINDSOR, COMMUNITY PANEL #3605280010 E, PAGE 10 OF 10, DATED DECEMBER 15, 1978. NO FIELD DETERMINATION HAS BEEN MADE BY THIS SURVEY TO THE EXTENT OF THE PUBLISHED BASE FLOOD ELEVATIONS.

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SEE SHEET 2 OF 2 FOR ADDITIONAL INFORMATION.

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STATE OF NEW YORK STEVEN P. DRABICK LICENSED LAND SURVEYOR 49806

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SCALE: 1" = 50' AUGUST 8, 2013 REVISED: 3/23/15, 6/26/17

50 0 50 100 150
GRAPHIC SCALE - FEET

SHEET 1 OF 2

JOB NO. 140-171

STEVEN P. DRABICK P.L.S., PC
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PO BOX 539
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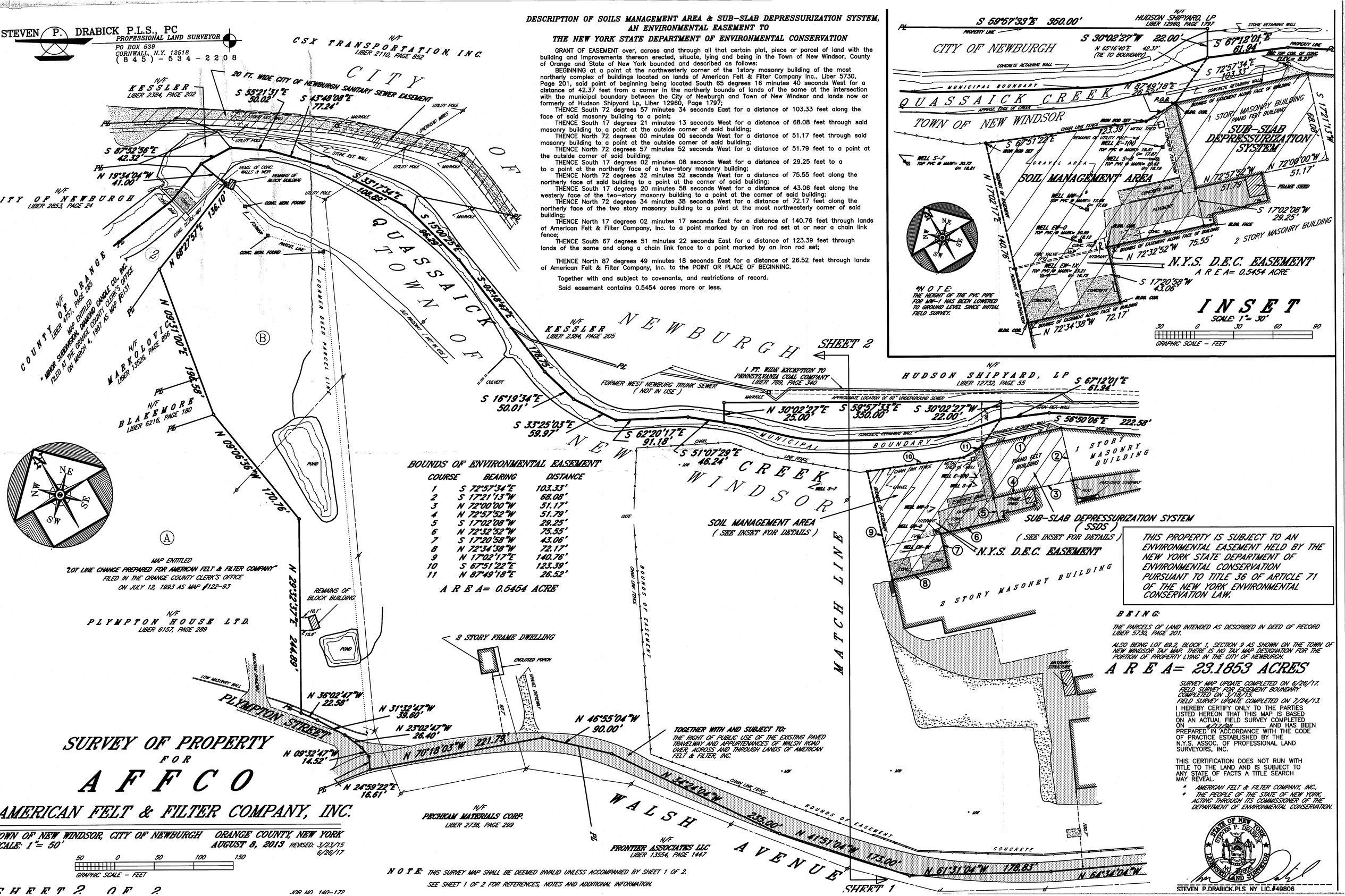
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BOUNDS OF ENVIRONMENTAL EASEMENT

COURSE	BEARING	DISTANCE
1	S 72°57'34"E	103.33'
2	S 17°21'13"W	68.08'
3	N 72°00'00"W	51.17'
4	N 72°57'52"W	51.79'
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6	N 72°32'52"W	75.55'
7	S 17°20'58"W	43.06'
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A R E A= 0.5454 ACRE

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BEING:

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FIELD SURVEY FOR EASEMENT BOUNDARY COMPLETED ON 3/18/15.
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STATE OF NEW YORK STEVEN P. DRABICK No. 49806 LICENSED LAND SURVEYOR

STEVEN P.DRABICK,PLS NY LIC.#49806

SURVEY OF PROPERTY FOR A F F C O

AMERICAN FELT & FILTER COMPANY, INC.

TOWN OF NEW WINDSOR, CITY OF NEWBURGH ORANGE COUNTY, NEW YORK
SCALE: 1"= 50' AUGUST 8, 2013 REVISED: 3/23/15 6/26/17

50 0 50 100 150
GRAPHIC SCALE - FEET

NOTE: THIS SURVEY MAP SHALL BE DEEMED INVALID UNLESS ACCOMPANIED BY SHEET 1 OF 2.
SEE SHEET 1 OF 2 FOR REFERENCES, NOTES AND ADDITIONAL INFORMATION.

SHEET 1

SHEET 2 OF 2 JOB NO. 140-172

ORANGE COUNTY CLERK

ANN G. RABBITT

Receipt

Receipt Date: 09/15/2017 12:16:03 PM
RECEIPT # 2381301

Recording Clerk: JM
Cash Drawer: CASH42
Rec'd Frm: FIRST AMERICAN TITLE INS CO

Instr#: 20170066308 Bk/Pg: 14291/601
DOC: RIGHT OF WAY (R)
DEED STAMP: 1693
OR Party: AMERICAN FELT & FILTER CO INC
EE Party: NYS DEPT OF ENVIRONMENTAL CONSERVATION

Recording Fees	$95.00
Transfer Tax	$0.00
DOCUMENT TOTAL: ---->	$95.00

Misc Fees

Overpayment	$0.50

Receipt Summary

TOTAL RECEIPT: ---->	$95.50
TOTAL RECEIVED: ---->	$95.50
CASH BACK: ---->	$0.00

PAYMENTS
Check # 2314148180 -> $95.50
FIRST AMERICAN TITLE INS CO

First American Title
NATIONAL COMMERCIAL SERVICES

666 Third Ave, Floor 5
New York, NY 10017
TEL 212-551-9421 • *FAX* 714-824-4998
WWW.FIRSTAM.COM

Please
WALK on
Rush

SUBMITTER SUMMARY SHEET

DATE: 9/14

TITLE NUMBER: 3020-8692960

SUBMITTED BY: Mary Lettieri

COUNTY: Orange

~~District:~~ Section: 9 Block: 1 Lot: 69.2

INSTRUMENT TYPE	PARTIES	DIRECT CHECK	TRANSFER TAX	MORTGAGE TAX	REC./ FEE
Easement	American Felt & Filter Company, Inc New York State Department of Environment Conservation				95.50
TOTAL :					95.50

CHECK INFORMATION:

RECORDING FEE/ TAX CHECK NO: **AMOUNT:**

STEVEN P. DRABICK P.L.S., PC
PROFESSIONAL LAND SURVEYOR
PO BOX 539
CORNWALL, N.Y. 12518
(8 4 5) - 5 3 4 - 2 2 0 8

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BEGINNING at a point at the northwesterly corner of a one story masonry building of the most northerly complex of buildings located on lands of American Felt & Filter Company, Inc., Liber 5730, Page 201, said point of beginning being the northeasterly corner of a describe Soils Management Area and being located South 65 degrees 16 minutes 40 seconds West for a distance of 42.37 feet from a corner in the northerly bounds of lands of the same at the intersection with the municipal boundary between the City of Newburgh and the Town of New Windsor and lands now or formerly of Hudson Shipyard LP, Liber 12960, Page 1797;

THENCE South 72 degrees 57 minutes 34 seconds East for a distance of 103.33 feet along the face of said building to a point;
THENCE South 55 degrees 20 minutes 14 seconds East for a distance of 229.78 feet along the same to a point;
THENCE South 48 degrees 19 minutes 11 seconds East for a distance of 181.72 feet through lands of American Felt & Filter Company, Inc. to a point in or near a chain link fence;
THENCE South 35 degrees 57 minutes 07 seconds West for a distance of 224.60 feet along a chain link fence running along the northwesterly side of Walsh Road to a point at the end of a concrete retaining wall;
THENCE South 49 degrees 48 minutes 02 seconds West for a distance of 165.72 feet along said retaining wall and chain link fence running along the northwesterly side of Walsh Road to a point;
THENCE South 79 degrees 07 minutes 37 seconds West for a distance of 97.59 feet along the same to a point;
THENCE North 79 degrees 50 minutes 03 seconds West for a distance of 76.32 feet along the same to a point;
THENCE North 63 degrees 58 minutes 31 seconds West for a distance of 207.60 feet along the same to a point;
THENCE North 58 degrees 07 minutes 45 seconds West for a distance of 158.08 feet along the same to a point;
THENCE North 39 degrees 46 minutes 15 seconds West for a distance of 359.39 feet along said retaining wall, for a portion thereof, and continuing along said chain link fence running along the northerly side of Walsh Road to a point at a chain link fence corner;
THENCE North 25 degrees 57 minutes 04 seconds East for a distance of 290.58 feet through lands of American Felt & Filter Company, Inc. and along a chain link fence to a point;
THENCE North 32 degrees 11 minutes 52 seconds East for a distance of 96.63 feet along the same to a point at a chain link fence corner;
THENCE South 63 degrees 15 minutes 48 seconds East for a distance of 118.72 feet along a chain link fence running along the southwesterly side of Quassaick Creek to a point;
THENCE South 39 degrees 17 minutes 44 seconds East for a distance of 49.88 feet along the same to a point;
THENCE South 49 degrees 37 minutes 45 seconds East for a distance of 119.24 feet along the same to a point;
THENCE South 71 degrees 50 minutes 00 seconds East for a distance of 157.33 feet through lands of American Felt & Filter Company, Inc. to the POINT OR PLACE OF BEGINNING.

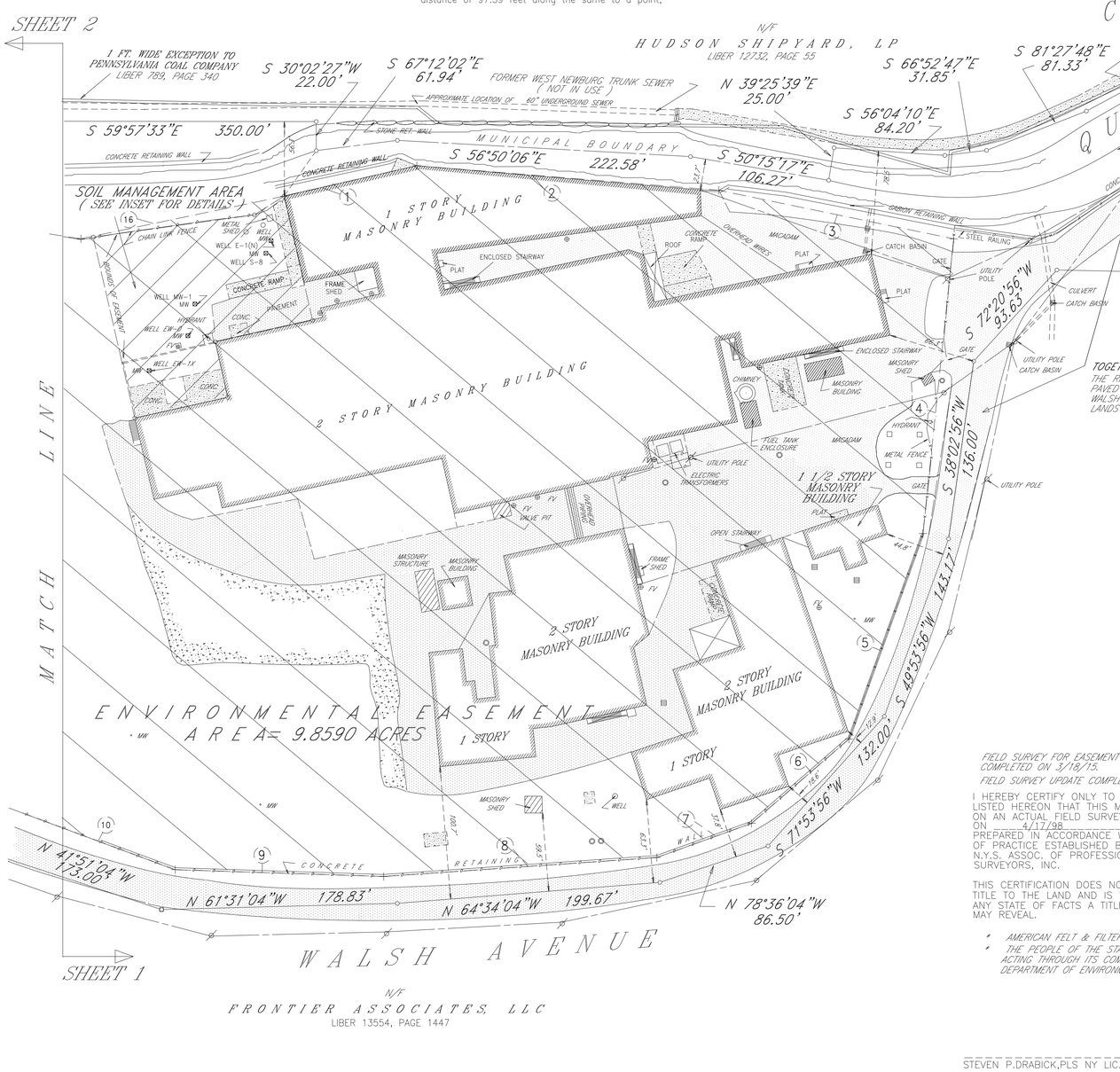
Together with and subject to covenants, easements, and restrictions of record.

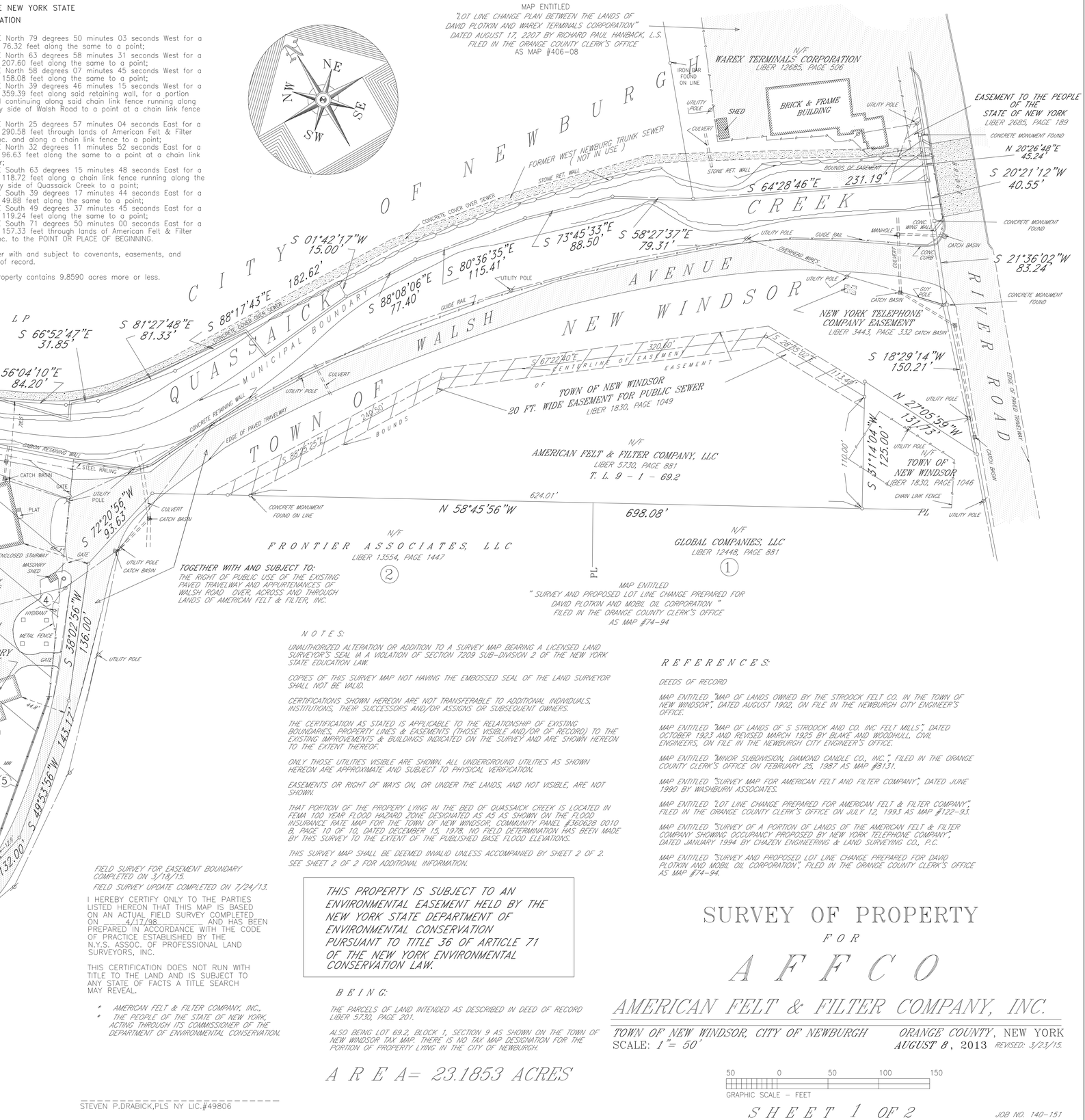
Said property contains 9.8590 acres more or less.

MAP ENTITLED
"LOT LINE CHANGE PLAN BETWEEN THE LANDS OF DAVID PLOTKIN AND WAREX TERMINALS CORPORATION" DATED AUGUST 17, 2207 BY RICHARD PAUL HANBACK, L.S. FILED IN THE ORANGE COUNTY CLERK'S OFFICE AS MAP #406-08

L E G E N D

EDGE OF WATER COURSE
BOUNDARY LINE
SOIL MANAGEMENT LINE
EASEMENT LINE
UTILITY POLE
OVERHEAD UTILITY LINES
CHAIN LINK FENCE
WROUGHT IRON FENCE
GUIDE RAIL
EDGE OF PAVED TRAVELWAY
EDGE OF UNPAVED TRAVELWAY
AREA OF CONCRETE
STONE RETAINING WALL
ROOF OVER OPEN AREA
ENCLOSED STAIRWAY
FIRE VALVE
MONITORING WELL
MANHOLE
CATCH BASIN
CULVERT
UTILITY BOX





TOGETHER WITH AND SUBJECT TO:
THE RIGHT OF PUBLIC USE OF THE EXISTING PAVED TRAVELWAY AND APPURTENANCES OF WALSH ROAD OVER, ACROSS AND THROUGH LANDS OF AMERICAN FELT & FILTER, INC.

MAP ENTITLED
" SURVEY AND PROPOSED LOT LINE CHANGE PREPARED FOR DAVID PLOTKIN AND MOBIL OIL CORPORATION " FILED IN THE ORANGE COUNTY CLERK'S OFFICE AS MAP #74-94

N O T E S:

UNAUTHORIZED ALTERATION OR ADDITION TO A SURVEY MAP BEARING A LICENSED LAND SURVEYOR'S SEAL IA A VIOLATION OF SECTION 7209 SUB-DIVISION 2 OF THE NEW YORK STATE EDUCATION LAW.

COPIES OF THIS SURVEY MAP NOT HAVING THE EMBOSSED SEAL OF THE LAND SURVEYOR SHALL NOT BE VALID.

CERTIFICATIONS SHOWN HEREON ARE NOT TRANSFERABLE TO ADDITIONAL INDIVIDUALS, INSTITUTIONS, THEIR SUCCESSORS AND/OR ASSIGNS OR SUBSEQUENT OWNERS.

THE CERTIFICATION AS STATED IS APPLICABLE TO THE RELATIONSHIP OF EXISTING BOUNDARIES, PROPERTY LINES & EASEMENTS (THOSE VISIBLE AND/OR OF RECORD) TO THE EXISTING IMPROVEMENTS & BUILDINGS INDICATED ON THE SURVEY AND ARE SHOWN HEREON TO THE EXTENT THEREOF.

ONLY THOSE UTILITIES VISIBLE ARE SHOWN. ALL UNDERGROUND UTILITIES AS SHOWN HEREON ARE APPROXIMATE AND SUBJECT TO PHYSICAL VERIFICATION.

EASEMENTS OR RIGHT OF WAYS ON, OR UNDER THE LANDS, AND NOT VISIBLE, ARE NOT SHOWN.

THAT PORTION OF THE PROPERY LYING IN THE BED OF QUASSAICK CREEK IS LOCATED IN FEMA 100 YEAR FLOOD HAZARD ZONE DESIGNATED AS A5 AS SHOWN ON THE FLOOD INSURANCE RATE MAP FOR THE TOWN OF NEW WINDSOR, COMMUNITY PANEL #360628 0010 B, PAGE 10 OF 10, DATED DECEMBER 15, 1978. NO FIELD DETERMINATION HAS BEEN MADE BY THIS SURVEY TO THE EXTENT OF THE PUBLISHED BASE FLOOD ELEVATIONS.

THIS SURVEY MAP SHALL BE DEEMED INVALID UNLESS ACCOMPANIED BY SHEET 2 OF 2.
SEE SHEET 2 OF 2 FOR ADDITIONAL INFORMATION.

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.

R E F E R E N C E S:

DEEDS OF RECORD

MAP ENTITLED "MAP OF LANDS OWNED BY THE STROOCK FELT CO. IN THE TOWN OF NEW WINDSOR", DATED AUGUST 1902, ON FILE IN THE NEWBURGH CITY ENGINEER'S OFFICE.

MAP ENTITLED "MAP OF LANDS OF S STROOCK AND CO. INC FELT MILLS", DATED OCTOBER 1923 AND REVISED MARCH 1925 BY BLAKE AND WOODHULL, CIVIL ENGINEERS, ON FILE IN THE NEWBURGH CITY ENGINEER'S OFFICE.

MAP ENTITLED "MINOR SUBDIVISION, DIAMOND CANDLE CO., INC.", FILED IN THE ORANGE COUNTY CLERK'S OFFICE ON FEBRUARY 25, 1987 AS MAP #8131.

MAP ENTITLED "SURVEY MAP FOR AMERICAN FELT AND FILTER COMPANY", DATED JUNE 1990 BY WASHBURN ASSOCIATES.

MAP ENTITLED "LOT LINE CHANGE PREPARED FOR AMERICAN FELT & FILTER COMPANY", FILED IN THE ORANGE COUNTY CLERK'S OFFICE ON JULY 12, 1993 AS MAP #122-93.

MAP ENTITLED "SURVEY OF A PORTION OF LANDS OF THE AMERICAN FELT & FILTER COMPANY SHOWING OCCUPANCY PROPOSED BY NEW YORK TELEPHONE COMPANY", DATED JANUARY 1994 BY CHAZEN ENGINEERING & LAND SURVEYING CO., P.C.

MAP ENTITLED "SURVEY AND PROPOSED LOT LINE CHANGE PREPARED FOR DAVID PLOTKIN AND MOBIL OIL CORPORATION", FILED IN THE ORANGE COUNTY CLERK'S OFFICE AS MAP #74-94.

FIELD SURVEY FOR EASEMENT BOUNDARY COMPLETED ON 3/18/15.
FIELD SURVEY UPDATE COMPLETED ON 7/24/13.

I HEREBY CERTIFY ONLY TO THE PARTIES LISTED HEREON THAT THIS MAP IS BASED ON AN ACTUAL FIELD SURVEY COMPLETED ON 4/17/98 AND HAS BEEN PREPARED IN ACCORDANCE WITH THE CODE OF PRACTICE ESTABLISHED BY THE N.Y.S. ASSOC. OF PROFESSIONAL LAND SURVEYORS, INC.

THIS CERTIFICATION DOES NOT RUN WITH TITLE TO THE LAND AND IS SUBJECT TO ANY STATE OF FACTS A TITLE SEARCH MAY REVEAL.

- AMERICAN FELT & FILTER COMPANY, INC.,
- THE PEOPLE OF THE STATE OF NEW YORK, ACTING THROUGH ITS COMMISSIONER OF THE DEPARTMENT OF ENVIRONMENTAL CONSERVATION.

STEVEN P.DRABICK,PLS NY LIC.#49806

B E I N G:

THE PARCELS OF LAND INTENDED AS DESCRIBED IN DEED OF RECORD LIBER 5730, PAGE 201.

ALSO BEING LOT 69.2, BLOCK 1, SECTION 9 AS SHOWN ON THE TOWN OF NEW WINDSOR TAX MAP. THERE IS NO TAX MAP DESIGNATION FOR THE PORTION OF PROPERTY LYING IN THE CITY OF NEWBURGH.

A R E A= 23.1853 ACRES

SURVEY OF PROPERTY
FOR
A F F C O
AMERICAN FELT & FILTER COMPANY, INC.

TOWN OF NEW WINDSOR, CITY OF NEWBURGH ORANGE COUNTY, NEW YORK
SCALE: 1"= 50' AUGUST 8, 2013 REVISED: 3/23/15.

50 0 50 100 150
GRAPHIC SCALE - FEET

S H E E T 1 OF 2

JOB NO. 140-151

STEVEN P. DRABICK P.L.S., PC
PROFESSIONAL LAND SURVEYOR
PO BOX 539
CORNWALL, N.Y. 12518
(845) - 534 - 2208

DESCRIPTION OF SOIL MANAGEMENT AREA WITHIN AN ENVIRONMENTAL EASEMENT TO THE NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

A SOIL MANAGEMENT AREA over, across and through all that certain plot, piece or parcel of land with the building and improvements thereon erected, situate, lying and being in the Town of New Windsor, County of Orange and State of New York bounded and described as follows:

BEGINNING at a point at the northwesterly corner of the 1story masonry building of the most northerly complex of buildings located on lands of American Felt & Filter Company Inc., Liber 5730, Page 201, said point of beginning being located South 65 degrees 16 minutes 40 seconds West for a distance of 42.37 feet from a corner in the northerly bounds of lands of the same at the intersection with the municipal boundary between the City of Newburgh and Town of New Windsor and lands now or formerly of Hudson Shipyard Lp, Liber 12960, Page 1797;

THENCE South 17 degrees 02 minutes 08 seconds West for a distance of 96.47 feet along the westerly face of said one story masonry building, for a portion thereof, and continuing to a point at the northerly face of a two-story masonry building;

THENCE North 72 degrees 32 minutes 52 seconds West for a distance of 75.55 feet along the northerly face of said building to a point at the corner of said building;

THENCE South 17 degrees 20 minutes 58 seconds West for a distance of 43.06 feet along the westerly face of the two-story masonry building to a point at the corner of said building;

THENCE North 72 degrees 34 minutes 38 seconds West for a distance of 72.17 feet along the northerly face of the two story masonry building to a point at the most northwesterly corner of said building;

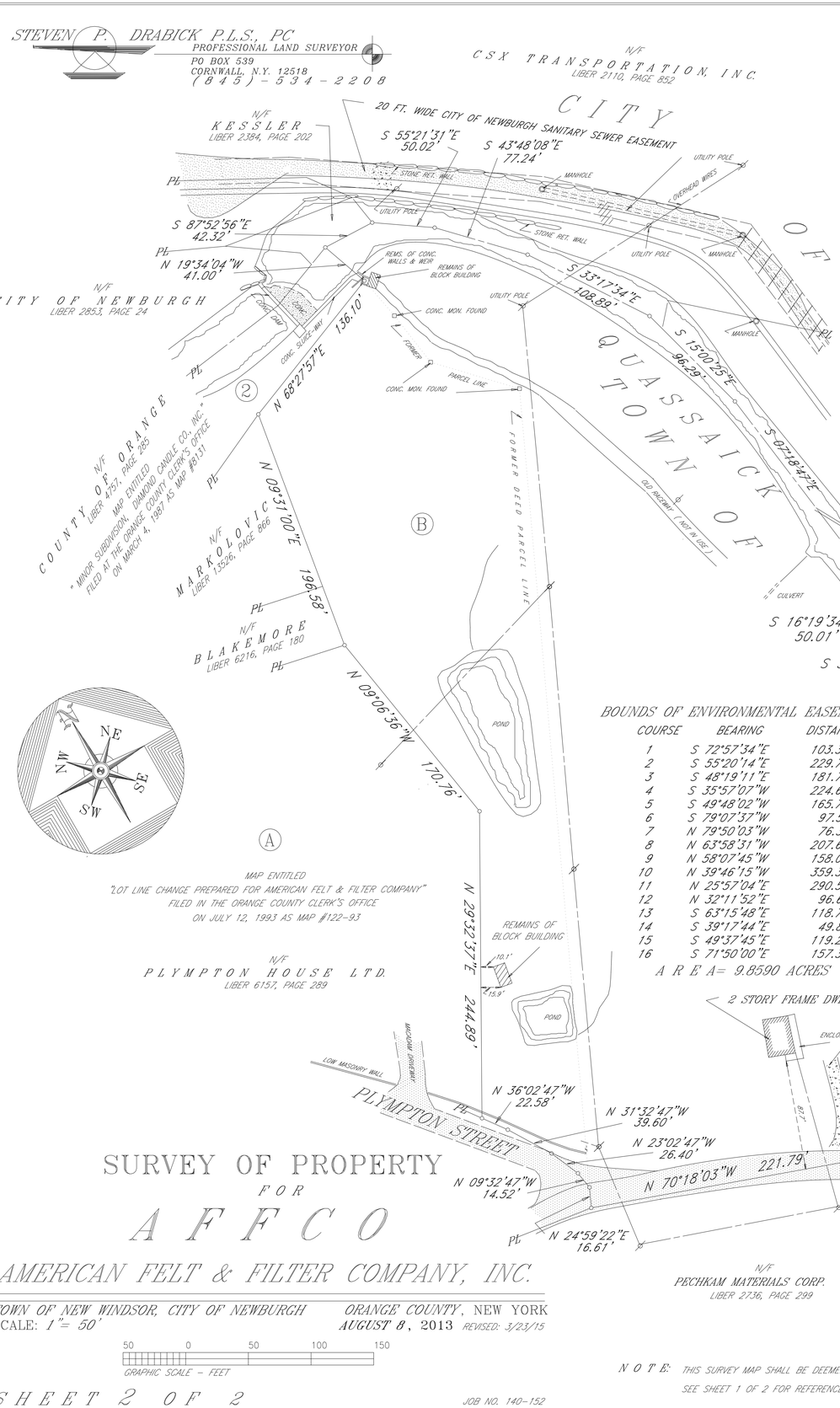
THENCE North 17 degrees 02 minutes 17 seconds East for a distance of 140.76 feet through lands of American Felt & Filter Company, Inc. to a point marked by an iron rod set at or near a chain link fence;

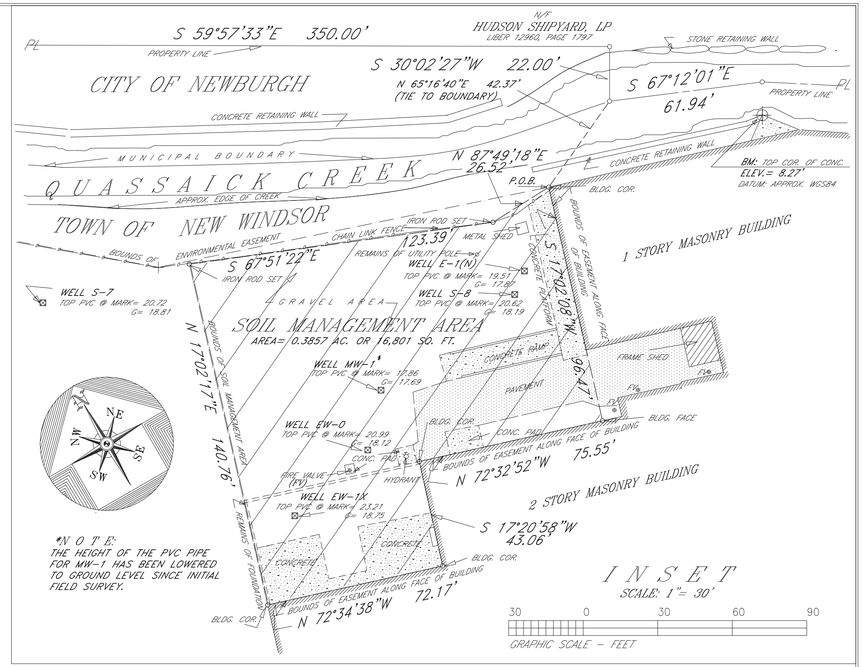
THENCE South 67 degrees 51 minutes 22 seconds East for a distance of 123.39 feet through lands of the same and along a chain link fence to a point marked by an iron rod set;

THENCE North 87 degrees 49 minutes 18 seconds East for a distance of 26.52 feet through lands of American Felt & Filter Company, Inc. to the POINT OR PLACE OF BEGINNING.

Together with and subject to covenants, and restrictions of record.

Said area contains 0.3857 acres more or less.





MAP ENTITLED
"LOT LINE CHANGE PREPARED FOR AMERICAN FELT & FILTER COMPANY"
FILED IN THE ORANGE COUNTY CLERK'S OFFICE
ON JULY 12, 1993 AS MAP #122-93

BOUNDS OF ENVIRONMENTAL EASEMENT

COURSE	BEARING	DISTANCE
1	S 72°57'34"E	103.33'
2	S 55°20'14"E	229.78'
3	S 48°19'11"E	181.72'
4	S 35°57'07"W	224.60'
5	S 49°48'02"W	165.72'
6	S 79°07'37"W	97.59'
7	N 79°50'03"W	76.32'
8	N 63°58'31"W	207.60'
9	N 58°07'45"W	158.08'
10	N 39°46'15"W	359.39'
11	N 25°57'04"E	290.58'
12	N 32°11'52"E	96.63'
13	S 63°15'48"E	118.72'
14	S 39°17'44"E	49.88'
15	S 49°37'45"E	119.24'
16	S 71°50'00"E	157.33'

AREA= 9.8590 ACRES

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.

BEING:
THE PARCELS OF LAND INTENDED AS DESCRIBED IN DEED OF RECORD LIBER 5730, PAGE 201.

ALSO BEING LOT 69.2, BLOCK 1, SECTION 9 AS SHOWN ON THE TOWN OF NEW WINDSOR TAX MAP. THERE IS NO TAX MAP DESIGNATION FOR THE PORTION OF PROPERTY LYING IN THE CITY OF NEWBURGH.

AREA= 23.1853 ACRES

FIELD SURVEY FOR EASEMENT BOUNDARY COMPLETED ON 3/18/15.
FIELD SURVEY UPDATE COMPLETED ON 7/24/13.

I HEREBY CERTIFY ONLY TO THE PARTIES LISTED HEREON THAT THIS MAP IS BASED ON AN ACTUAL FIELD SURVEY COMPLETED ON 5/17/13 AND HAS BEEN PREPARED IN ACCORDANCE WITH THE CODE OF PRACTICE ESTABLISHED BY THE N.Y.S. ASSOC. OF PROFESSIONAL LAND SURVEYORS, INC.

THIS CERTIFICATION DOES NOT RUN WITH TITLE TO THE LAND AND IS SUBJECT TO ANY STATE OF FACTS A TITLE SEARCH MAY REVEAL.

- AMERICAN FELT & FILTER COMPANY, INC.,
- THE PEOPLE OF THE STATE OF NEW YORK, ACTING THROUGH ITS COMMISSIONER OF THE DEPARTMENT OF ENVIRONMENTAL CONSERVATION.

STEVEN P.DRABICK,PLS NY LIC.#49806

SURVEY OF PROPERTY
FOR
AFFCO
AMERICAN FELT & FILTER COMPANY, INC.

TOWN OF NEW WINDSOR, CITY OF NEWBURGH — ORANGE COUNTY, NEW YORK
SCALE: 1" = 50' — AUGUST 8, 2013 REVISED: 3/23/15

NOTE: THIS SURVEY MAP SHALL BE DEEMED INVALID UNLESS ACCOMPANIED BY SHEET 1 OF 2.
SEE SHEET 1 OF 2 FOR REFERENCES, NOTES AND ADDITIONAL INFORMATION.

SHEET 2 OF 2 — JOB NO. 140-152

APPENDIX B

Digital Copy of FER

AMERICAN FELT & FILTER COMPANY
NEW WINDSOR, NEW YORK

Final Engineering Report

Consent Order Index # W3-0784-04-06
Site # 3-36-036

Prepared for

American Felt & Filter Company

New Windsor, NY

Prepared by

Arnold F. Fleming, P.E.
158 W. 29th Street, 9th Floor
New York, New York 10001

FEBRUARY 2018

CERTIFICATIONS

I, Arnold F. Fleming, am currently a registered professional engineer licensed by the State of New York, I had primary direct responsibility for implementation of the remedial program activities, and I certify that the Remedial Action Work Plan was implemented and that all construction activities were completed in substantial conformance with the Department-approved Remedial Action Work Plan.

I certify that the data submitted to the Department with this Final Engineering Report demonstrates that the remediation requirements set forth in the Remedial Action Work Plan and in all applicable statutes and regulations have been or will be achieved in accordance with the time frames, if any, established in for the remedy.

I certify that all documents generated in support of this report have been submitted in accordance with the Department's electronic data deliverable and have been accepted by the Department.

I certify that all data generated in support of this report have been submitted in accordance with the Department's electronic submission protocols and have been accepted by the Department.

I certify that all use restrictions, Institutional Controls, Engineering Controls, and/or any operation and maintenance requirements applicable to the site are contained in an environmental easement created and recorded pursuant ECL 71-3605 and that all affected local governments, as defined in ECL 71-3603, have been notified that such easement has been recorded.

I certify that a Site Management Plan has been submitted for the continual and proper operation, maintenance, and monitoring of all Engineering Controls employed at the site, including the proper maintenance of all remaining monitoring wells, and that such plan has been approved by Department.

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, Arnold F. Fleming, 158 West 29th Street, 9th Floor, New York, NY 10001, am certifying as Owner's Designated Site Representative for the site.

050411 — NYS Professional Engineer #

2/8/18 — Date



Signature

TABLE OF CONTENTS

TABLE OF CONTENTS ..... **III**

LIST OF ACRONYMS ..... **VI**

FINAL ENGINEERING REPORT **1**

1.0 BACKGROUND AND SITE DESCRIPTION **3**

2.0 SUMMARY OF SITE REMEDY **4**

2.1 REMEDIAL ACTION OBJECTIVES **4**
- **2.1.1 Groundwater** **4**
- **2.1.2 Soil RAOs** **4**
- **2.1.3 Surface Water RAOs** **5**
- **2.1.4 Sediment RAOs** **5**

2.2 DESCRIPTION OF THE SELECTED REMEDY **5**

3.0 INTERIM REMEDIAL MEASURES, OPERABLE UNITS AND REMEDIAL CONTRACTS **6**

4.0 DESCRIPTION OF REMEDIAL ACTIONS PERFORMED **7**

4.1 GOVERNING DOCUMENTS **7**
- **4.1.1 Site Specific Health & Safety Plan (HASP)** **7**
- **4.1.2 Community Air Monitoring Plan (CAMP)** **7**

4.2 REMEDIAL PROGRAM ELEMENTS **7**
- **4.2.1 Contractors and Consultants** **7**
- **4.2.2 Community Air Monitoring Results** **8**

4.3 REMEDIAL ACTIONS **8**
- **4.3.1 Chemical Oxidation** **8**
- **4.3.2 Excavation** **21**
- **4.3.3 Treatment Effectiveness** **23**
- **4.3.4 Remaining Contamination** **23**
  - **4.3.4.1 Unrestricted Use** **23**
  - **4.3.4.2 Residential Use** **23**
  - **4.3.4.3 Groundwater** **23**

4.3.5 Soil Cover System 27
4.3.6 Sub-Slab Depressurizatio System 27
4.3.7 Deviations from Remedial Action Work Plan 28
4.3.8 Quality Assurance/Quality Control Summary (DUSR) 28

5.0 ENVIRONMENTAL EASEMENT & SOIL MANAGEMENT AREA 29

6.0 SITE MANAGEMENT PLAN 30

FIGURES

Figure 1 Site Location and Layout
Figure 2 Site Plan and Injection Locations
Figure 3 Post-excavation/Post-treatment Soil Sampling Locations and Results Summary
Figure 4 Post-treatment Groundwater VOC Results and Groundwater Contour Map
Figure 5 TCA, DCE & TCE Reductions in Soils after 6 Days of Treatment (in text)
Figure 6 cis-1,2-DCE, 1,1,2-TCA, PCE & Benzene in Soils after 6 Days of Treatment (in text)
Figure 7 Groundwater VOC Treatment Trends in Treatment Area Well EW-0 (in text)
Figure 8 Groundwater Chloroethane Treatment Trends in Treatment Area Well EW-0 (in text)
Figure 9 Groundwater 1,1,2-TCA Treatment Trends in Treatment Area Well EW-0 (in text)
Figure 10 VOCs in Wells Outside Treatment Area (in text)
Figure 11 Piano Felt Building SSDS As-built

TABLES

Table 1 Soil Cleanup Objectives for the Project
Table 2A End-point Post-excavation Soil sample Analytical results, Summary of VOCs
Table 2B End-point Post-treatment Soil sample Analytical results, Summary of VOCs
Table 3 Post-treatment Groundwater Analytical Results, VOCs, Metals, General Chemistry
Table 4 Summary of Groundwater VOCs in treatment Area (in text)
Table 5 Pre-treatment Groundwater Parameters (in text)
Table 6 Post-treatment Groundwater Parameters (in text)
Table 7 Oxidant Volume by Injection Point (in text)
Table 8 Endpoint Soil Sample Results Unrestricted Use SCOs (in text)
Table 9 Post-treatment Groundwater Results (in text)

Table 10 Soil Pile/Soil Cover Samples (in text)

APPENDICES

Appendix A Soil Management Area Metes and Bounds
Appendix B Digital Copy of FER
Appendix C CAMP Certification
Appendix D Raw Analytical Laboratory Data
Appendix E DUSRs for End Point and Post-treatment Samples
Appendix F VeruTEK Report
Appendix G Project Photographic Log

ACRONYMS

Acronym	Definition
AWQS	Ambient Water Quality Standard
BTEX	Benzene, Toluene, Ethylbenzene, Total Xylenes
CAMP	Community Air Monitoring Plan
CPP	Citizen Participation Plan
DUSR	Data Usability Summary Report
EC	Engineering Control
FER	Final Engineering Report
ft.-bg	Feet below Grade
GA	Source of Drinking Water
HASP	Health and Safety Plan
IC	Institutional Control
IFT	Interfacial Tension
m	milli or Meter
NYSDEC	New York State Department of Environmental Conservation
N	Newtons
PAH	Polynuclear Aromatic Hydrocarbons
PRR	Periodic Review Report
QAPP	Quality Assurance Project Plan
RAWP	Remedial Action Work Plan
RI	Remedial Investigation
S-ISCO™	Surfactant-Enhanced In-Situ Chemical Oxidation
SCO	Soil Cleanup Objective
S/MMP	Soil/Materials Management Plan
SSDS	Sub-Slab Depressurization System
SMP	Site Management Plan
SOP	Site Operation Plan
SVOCs	Semi-volatile Organic Compounds
SWPPP	Stormwater Pollution Prevention Plan
TCA	1,1,1-Trichloroethane
TCL	Target Compound List
TOGS	Technical and Operational Guidance Series
UST	Underground Storage Tank
VOCs	Volatile Organic Compounds

FINAL ENGINEERING REPORT

Introduction

On behalf of The American Felt and Filter Company (AFFCO), Arnold F. Fleming, P.E., and Fleming-Lee Shue, Inc. (collectively FLS) have prepared this Final Engineering Report (FER) to document the completion of remedial activities at 361 Walsh Avenue, New Windsor, New York (Site). The remediation was completed in accordance with the approved FLS 2012 Remedial Action Work Plan and was prepared in accordance with the NYSDEC's DER-10 Technical Guidance for Site Investigation and Remediation, May 2010. AFFCO is also under a Consent Order to remedy the property (Index No. W3-0784-04-06). The New York State Department of Environmental Conservation (NYSDEC) placed the Site on its Inactive Hazardous Waste Sites list in 1991 (Site Code 3-36-036) because of the potential threat to the adjacent Quassaick Creek.

The AFFCO property, located in New Windsor, Orange County, New York manufactures a variety of felt and filter products. The Site lies on the south side of Quassaick Creek, which flows into the Hudson River approximately 0.2 miles east of the Site. AFFCO is on industrial zoned land. Beyond the Site, the surrounding area is a mixture of land uses including industrial, commercial, and residential. The entire property occupies 23.185 acres but the Consent Order Environmental Easement Area is 0.5454 acres and includes the remediated soil area and the adjacent Piano Felt Building that houses a sub-slab depressurization system (SSDS). Most of the Site is level. Figure 1 shows the Site and an inset depicts the entire property outline. Appendix A shows the property and Environmental Easement area.

Site investigations completed in 1988 found soil and groundwater near the Feutron Building contained 1,1,1-Trichloroethane (TCA). The source of the contamination was believed to be from historic leakage within the enclosed process area and spillage in the adjacent drum storage area. Subsequent soil and groundwater sampling in September 1994, August 1998, and October 2001 indicated that residual TCA remained in the soil and groundwater in the former drum storage area near the Feutron Building. In response, FLS submitted a Remedial Design/Remedial Action Work Plan (RD/RAWP) in February 2005 to NYSDEC. The RD/RAWP work plan called for a Dual Phase Extraction System to remediate soil and groundwater near and beneath the Feutron Building. The RD/RAWP was approved in September 2005. After the RD/RAWP was approved, the northwestern portion of the Feutron Building was taken out of service and subsequently demolished. This changed conditions such that other more effective remediation alternatives became available, and the Dual Phase Extraction System was never implemented.

In 2008, FLS prepared a revised RAWP to remediate the TCA-impacted soil by excavation and disposal. This RAWP was subsequently approved by NYSDEC in October 2008 but not executed. Ultimately, FLS prepared a revise RAWP in March 2012 that was approved by NYSDEC on April 4, 2012. The 2012 RAWP called for excavation of the top 10 feet of impacted soil near the former Feutron Building and *in situ* chemical oxidation of the contaminant from the water table to the underlying till layer.

The treatment remedy was *in situ* chemical injection using alkaline-activated sodium persulfate, sodium hydroxide, and a plant-based surfactant. Sodium persulfate was the oxidant and was activated by the addition of sodium hydroxide to raise the pH. The plant-based surfactant, VeruSOL®, was added to aid in the dissolution of the non-aqueous phase liquid (NAPL) to make it available for chemical oxidation. In all, 13,200 gallons of oxidant mixture were injected over a 6-day treatment period during July 2012. Comparison of pre-treatment and post-treatment soil contaminant mass estimates indicated that approximately 73 percent of the total volatile organic compound (VOC) mass was destroyed and approximately 76 percent of the TCA mass was destroyed. On a stratum-by-stratum basis, an average of 76 percent of the total VOC mass was degraded and an average of 87 percent of the TCA mass was degraded. Most soils met the Part 375 Residential Use Soil Cleanup objectives (SCO) and all soils met the Site cleanup standard, the Commercial Use Soil Cleanup Objectives. Groundwater exhibited large reductions on VOC concentrations. A number of VOCs met the TOGS GA cleanup goal.

Excavation was conducted by removing soils in each of five grid cells to a depth of approximately 10 feet below grade. The soils were staged on plastic sheeting before being tested and returned to the excavation if found to meet the Commercial Use SCOs. All soil met the SCOs. The Site contains a Soil Management Area that includes the remediated area and groundwater monitoring wells. The Soil Management Area is one component of the Environmental Easement. The second component includes the Piano Felt Building where there is a SSDS.

1.0 BACKGROUND AND SITE DESCRIPTION

The AFFCO Site, located in New Windsor, Orange County, New York (Figure 1), manufactures a variety of felt and filter products. The Site lies on the south side of Quassaick Creek, which flows into the Hudson River approximately 0.2 miles east of the Site. AFFCO is on industrial zoned land. Beyond the Site, the surrounding area is a mixture of land uses including industrial, commercial and residential. The entire property occupies 23.185 acres but the Environmental Easement area is 0.5454 acres.

Prior to 1978, the Site was owned and operated by the GAF Corporation, which manufactured the same products as AFFCO. During both GAF's and AFFCO's ownership, the facility used TCA as a solvent and carrier for zinc resinate, used to impregnate felt sheets in the Feutron Building. The TCA was stored on Site in 55-gallon drums in an enclosed area just outside the Feutron Building. Approximately 35 to 40 drums of TCA were generally present on-Site during regular operations. The facility stopped using TCA in 1992 when the AFFCO shut down the production line.

Site investigations completed in 1988 found soil and groundwater near the Feutron Building contained TCA. The source of the contamination was believed to be from historic leakage within the enclosed process area and spillage in the drum storage area. NYSDEC placed the Site on its Inactive Hazardous Waste Sites list in 1991 (Site Code 3-36-036) because of the potential threat to the adjacent Quassaick Creek. AFFCO is also under a Consent Order to remedy the property (Index No. W3-0784-04-06).

Subsequent soil and groundwater sampling in September 1994, August 1998, and October 2001 indicated that residual TCA remained in the soil and groundwater in the former drum storage area near the Feutron Building. FLS prepared the final RAWP in 2012 to remediate the TCA-impacted soil by excavation and *in situ* chemical treatment. This RAWP was subsequently approved by NYSDEC on April 4, 2012. The 2012 RAWP called for excavation of the top 10 feet of impacted soil near the former Feutron Building and *in situ* chemical oxidation of the contaminant from the water table to the underlying confining layer (glacial till).

The portion covered by a Soil Management Area, SSDS, and the Site boundaries are shown in Appendix A. An electronic copy of this FER with all supporting documentation is included as Appendix B.

2.0 SUMMARY OF SITE REMEDY

Based on the results of the Remedial Investigation, the following Remedial Action Objectives (RAO) were identified for this Site.

2.1 REMEDIAL ACTION OBJECTIVES

2.1.1 Groundwater

RAOs for Public Health Protection

- Prevent ingestion of groundwater containing contaminant levels exceeding drinking water standards.
- Prevent contact with, or inhalation of, volatiles emanating from contaminated groundwater.
- The remedial action objectives for groundwater are the TOGS 1.1.1 GA ambient water quality standards (TOGS) or asymptotic levels of VOCs in groundwater following acceptable levels of treatment.

RAOs for Environmental Protection

- Restore ground water aquifer, to the extent practicable, to pre-disposal/pre-release conditions.
- Prevent the discharge of contaminants to surface water.
- Prevent further off-site migration of contaminated groundwater.
- Remove the source of groundwater contamination.

2.1.2 Soil RAOs

RAOs for Public Health Protection

- Prevent ingestion/direct contact with contaminated soil.
- Prevent inhalation of, or exposure to, contaminants volatilizing from contaminated soil.
- The soil remedial action objectives are the Part 375 Commercial Use SCOs and a 90 percent reduction in contaminant mass as defined by the sum of the VOCs.

RAOs for Environmental Protection

- Prevent migration of contaminants that would result in groundwater contamination.
- Prevent impacts to biota due to ingestion/direct contact with contaminated soil that would cause toxicity or bioaccumulation through the terrestrial food chain.

2.1.3 Surface Water RAOs

There is no surface water on the Soil Management Area, so the remedial action did not address this medium.

2.1.4 Sediment RAOs

There are no sediment areas on Soil Management Area, so the remedial action did not address this medium.

2.1.5 Soil Vapor, RAOs for Public Health Protection

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

2.2 DESCRIPTION OF THE SELECTED REMEDY

The remedy consisted of two parts. Part 1 consisted *in situ* chemical oxidation of soils within the 50-ft. by 50-ft. treatment area from 10 ft.-bg to 15 ft.-bg. Treatment used the RemMetrik® (U.S. Patent No. 8,739,867) methodology that targets the contaminant mass and injects the treatment amendment using subsurface pressure waves. In this instance, the subsurface pressure waves and injection were provided by Wavefront Technology Solutions Inc. Primawave™ methodology. Chemical oxidation was provided by VeruTEK's S-ISCO™ technology using alkaline-activated sodium persulfate and a plant-based surfactant.

Sodium persulfate was the oxidant and was activated by the addition of sodium hydroxide to raise the pH. The plant-based surfactant, VeruSOL®, was added to aid in the dissolution of any NAPL to make it available for chemical oxidation.

Part 2 consisted of excavation of the upper 10 feet of soil within the 50-ft. by 50-ft. treatment area. Excavated soils were placed in a lined containment unit and were subsequently tested and returned to the excavation if the soils met the SCOs.

3.0 INTERIM REMEDIAL MEASURES, OPERABLE UNITS AND REMEDIAL CONTRACTS

A SSDS designed by FLS, was installed at the Piano Felt Building by AFFCO in October 2010. The SSDS was installed to mitigate residual TCA emissions potentially impacting indoor air quality for commercial/industrial land use at this Site and prevent potential migration of subsurface vapors to the nearby area. The system was designed in accordance with the New York State Department of Health (NYSDOH) *Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York* (2006).

A mitigation system was required based on concentrations of TCA in sub-slab vapor and indoor air samples collected in December 2009. The sub-slab vapor sample contained 539 micrograms per cubic meter (ug/m^3) of TCA and the indoor air sample contained 34 ug/m^3 of TCA.

The SSDS consists of centrally located depressurization pits with a pipe connected to a fan inserted into each pit. The soil vapor exhaust is located above the roof. The vacuum field is subsequently measured using pressure monitoring points located at each corner of the building. The performance goal for the system is a minimum of (-0.02) inches of water column (w.c.) in each of the vacuum monitoring points.

The piping from the pit is constructed of polyvinyl chloride (PVC) plastic and sealed into the replaced slab with silicone sealant. All pipe sizes are 4 inches in diameter. The fan is capable of operating at a minimum 375 cubic feet per minute (CFM) at 0 inches of water column (w.c.). See the SSDS Construction Completion Report, submitted May 2011, for more information regarding the system.

4.0 DESCRIPTION OF REMEDIAL ACTIONS PERFORMED

4.1 GOVERNING DOCUMENTS

4.1.1 Remedial Action Work Plan

All remedial work performed under this Remedial Action was in full compliance with the approved RAWP. The RAWP outlined the remedial methods and procedures and the remedial goals to be attained.

4.1.2 Site Specific Health & Safety Plan (HASP)

All remedial work performed under this Remedial Action was in full compliance with governmental requirements, including site and worker safety requirements mandated by Federal OSHA. All work was conducted in accordance with the OSHA-compliant HASP prepared for all remedial and invasive work performed at the Site.

Community Air Monitoring Plan (CAMP)

The purpose of the CAMP is to protect downwind receptors (e.g., residences, businesses, schools, nearby workers, and the public) from potential airborne contaminants released as a direct result of the Remedial Action being performed at the site. A modified CAMP was used because the remediated area is confined to an isolated portion of the Site that is a considerable distance from nearby residences, nearby workers, and the public.

Air monitoring for VOCs occurred during soil excavation. No VOCs were observed above the CAMP action limits. Monitoring for particulates was not done during soil excavation. It was not required under the approved modified CAMP. The area is primarily commercial/industrial and the nearest residence is approximately 500 feet from where soil was excavated and managed. Woodland separates the residence from the work area.

4.2 REMEDIAL PROGRAM ELEMENTS

4.2.1 Contractors and Consultants

- The Remedial Engineer for this project was Arnold F. Fleming, P.E. He is a registered professional engineer licensed by the State of New York.

- VeruTEK, Bloomfield, CT – Remediation Contractor responsible for implementation of the surfactant-enhanced *in-situ* chemical oxidation S-ISCO® Treatment.
- Zebra, Lynbrook, NY – Drilling Contractor responsible for implementing Primawave™, the process used to enhance delivery of chemical amendments at the pore scale level.

4.2.2 Community Air Monitoring Results

VOCs in air were monitored using a photoionization detector (PID) during excavation and soil stockpiling. VOC air monitoring results were all below NYSDEC's CAMP guideline of 5 ppm. AFFCO received no complaints about air nuisance during the remedial work. Appendix C contains the signed certification from the safety manager conducting the CAMP.

4.3 REMEDIAL ACTIONS

Remediation of the AFFCO Site was completed in two stages: 1) *in situ* chemical oxidation of soils and groundwater in the 50-ft. by 50-ft. treatment area, from the water table to 15 feet below grade, atop the till layer, and 2) excavation of soils within the 50-ft. by 50-ft. treatment area from grade to slightly below the water table. Previous investigations found a compact till layer at 15 feet below grade that acted as a barrier to contaminant migration. For this reason remediation was limited to 15 feet below grade in the area of concern (treatment area).

The excavation encompassed the area near the former Feutron Building as shown on Figure 2. Excavation proceeded on a grid-cell-by-grid cell basis. The soil was removed from the impacted area and placed in a lined containment unit for testing and was returned to the respective grid cell after testing indicated that the results met the Part 375 Commercial Use SCOs. Remediation took place between July and September 2012. Figure 3 presents the pre-treatment and post-excavation results. Figure 4 presents the results of pre- and post-treatment groundwater sampling. Table 1 presents the SCOs. Table 2 presents the VOC endpoint sampling results. Appendix D contains the laboratory reports and Appendix E contains the Data Usability Summary Reports (DUSR).

4.3.1 Chemical Oxidation

Stage 1 occurred in July 2013. In preparation for chemical oxidation the treatment area was divided into six grid cells each approximately 17 feet by 25 feet (Figure 2). In May 2012, twenty-four, 6-inch-long pre-treatment soil cores within the treatment interval were collected from eight soil borings located within the six grid cells. Encore soil samples for VOC analysis were collected from the soil cores. A randomly selected X-coordinate and randomly selected Y-coordinate placed the boring within each grid cell. Then, three

randomly selected 6-inch-long depth intervals were sampled in each boring. Grid Cells 1 and 2 had two borings each. The objective was to augment the existing soil data from the 10-ft. to 15-ft. treatment interval so as to have a basis for comparing before and after *in situ* treatment results. In total, the combined soil characterization samples from earlier soil sampling and the randomly collected soil samples collected in May 2012 yielded 31 pre-treatment (baseline) soil samples.

Three injection wells (IW-1, IW-2, and IW-3) were installed in May 2012 for a total of 6 days of chemical treatment (Figure 2). The injection wells were built of 2-inch-diameter Schedule 80 PVC. The screened intervals were as follows:

Injection Well	Top of Screen, ft.-bg	Bottom of Screen, ft.-bg	Screen Length, ft.	Grid Cell
IW-1	9	12.3	3.3	2
IW-2	9	13.1	4.1	2
IW-3	9	12	3	4

In addition, five Geoprobe well points were used to inject chemical in the 13-ft to 14-ft- and 14-ft. to 15-ft.-intervals in Grid Cell 2. The Geoprobe points were required because of the dense till layer. The intent was to install the injection well screens to 15 feet but this was infeasible due to the dense till layer beginning at approximately 13 feet that prevented further penetration while installing the injection wells.

The remedy for AFFCO was *in situ* chemical injection using the RemMetrik® methodology, which used Wavefront's Primawave® technology in this instance, and VeruTEK's Surfactant Enhanced *in situ* Chemical Oxidation (S-ISCO®) process, which used sodium persulfate, sodium hydroxide, and a plant-based surfactant. Sodium persulfate was the oxidant and was activated by the addition of sodium hydroxide to raise the pH. The plant-based surfactant, VeruSOL®, was added to aid in the dissolution of the contaminant to make it available for chemical oxidation. In all, 13,200 gallons of oxidant were injected into the treatment interval on July 11 and 12 and again on July 23, 24, 25, and 26, 2012. The following concentrations formed the oxidant mixture: sodium persulfate, 15 – 50 g/L; sodium hydroxide, 12 – 50 g/L; VeruSOL®, 0 – 15 g/L.

Groundwater was regularly monitored in nearby monitoring and injection wells during injections for pH, sodium persulfate, conductivity, oxidation reduction potential (ORP), dissolved oxygen, and temperature to ensure a proper chemical environment for oxidation and that conditions for *in situ* treatment were optimal.

The remedial excavation, Stage 2, took place in August-September 2012, in the interval between the end of the chemical injections and post-treatment soil sampling. Five bottom endpoint soil samples were collected at the bottom of the excavation, which was from 10 feet to 11 feet below grade, to document soil conditions. These samples were biased toward staining and were collected within the stratum previously treated by *in situ* chemical oxidation.

On March 27, 2013, another set of 24 randomly collected post-treatment Encore

soil samples were gathered from the six grid cells using an entirely new set of random coordinates (Figure 3). In total, the 24 randomly collected post-treatment soil samples and two duplicate samples, plus the five bottom endpoint samples yielded 31 post-treatment soil samples for comparison to pre-treatment conditions.

Chemical Oxidation Results

Post-treatment soil and groundwater sampling took place in March and April 2013. All of the oxidant had been expended prior to post-treatment sampling. Appendix F contains the remediation contractor, VeruTEK, report describing the treatment details.

Soils

The soil treatment goals were the Part 375 Commercial Use Soil Cleanup Objectives and 90 percent reduction in overall contaminant mass, which is defined as the sum of the Target Compound List (TCL) VOCs. The primary contaminants were the chlorinated VOCs. The principal VOC was TCA.

Of the 31 post-treatment soil samples, all but three VOC results met the Residential Use w/CP-51 Soil Cleanup Objectives, which are more stringent than the Commercial Use SCOs. The VOC compounds in the remaining three samples were well below the Commercial Use SCOs. An appreciable number of post-treatment soil samples were below the Unrestricted Use SCOs.

Contaminant reductions were computed by comparing the pre- and post-treatment mean soil concentrations. Since the bulk density and soil volume remain constant, the differences in mean concentrations yield the percent reduction in mass. Contaminant mass reduction is examined on an overall basis, by stratum, and by selected compounds.

The results for total VOCs and TCA concentrations follow a log-normal distribution, which is common in environmental data. For this reason, the pre and post-treatment reductions for total VOCs and TCA were calculated using log-transformed values as this yields more representative estimates of the means and confidence limits about the means.

Total VOCs Reduction

Comparing the 31 pre-treatment and 31 post-treatment samples yields a net total VOC mass reduction of 73 percent. Using arithmetic means the percent reduction is 63 percent.

Total VOCs in Soils – 95% Confidence Limits
Results in µg/kg

Treatment	Sample Nos.	Lower Limit[1]	Geometric Mean	Upper Limit[1]	% Reduction
Pre-treatment	31	1,768	5,058	14,472	--
Post-treatment	31	417	1,372	4, 520	73

[1] Limits about the geometric mean

Total VOCs in Soils
Results in µg/kg

Sample Nos. pre/post	Pre-treat, Arithmetic Mean Conc. µg/kg	Post-treat, Arithmetic Mean Conc. µg/kg	Percent Reduction
31/31	66,365	24,751	63

TCA Reduction

For TCA alone the net contaminant mass reduction measures 75 percent. Using arithmetic means the percent reduction is 67 percent.

TCA in Soils – 95% Confidence Limits
Results in µg/kg

Treatment	Sample Nos.	Lower Limit[1]	Geometric Mean	Upper Limit[1]	% Reduction
Pre-treatment	31	460	1,063	5,588	--
Post-treatment	31	115	406	1,436	75

[1] Limits about the geometric mean

TCA in Soils

Samples Nos. pre/post	Pre-treat, Arithmetic Mean Conc. µg/kg	Post-treat, Arithmetic Mean Conc. µg/kg	Percent Reduction
31/31	55,314	18,460	67

Stratum-by-Stratum Reduction

On a stratum-by-stratum basis the contaminant mass reductions for total VOCs were based on arithmetic means as there is insufficient number of samples in most strata to use the geometric means. The results are as follows:

Total VOCs in Soils Reduction by Stratum

Stratum	Sample Nos. pre/post	Pre-treat, Arithmetic Mean Conc. µg/kg	Post-treat, Arithmetic Mean Conc. µg/kg	Percent Reduction
1 (10 -11')	2/7	119,577	3,205	97
2 (11 – 12')	3/6	436,697	75,143	83
3 (12 – 13')	1/5	50	38,650	*
4 (13 – 14')	15/4	24,156	3,984	84
5 (14 -15')	10/9	14,568	8,803	40

Values rounded. * Too few pre-treatment samples for comparison.

In the four strata where reductions could be measured, the average overall total VOC mass reduction is 76 percent.

On a stratum-by-stratum basis the contaminant mass reductions for TCA, based on arithmetic means, are as follows:

TCA Reduction in Soils by Stratum

Stratum	Sample Nos. pre/post	Pre-treat, Arithmetic Mean Conc. µg/kg	Post-treat, Arithmetic Mean Conc. µg/kg	Percent Reduction
1 (10 -11')	2/7	115,385	2,621	98
2 (11 – 12')	3/6	388,693	66,639	83
3 (12 – 13')	1/5	0.49	26,602	*
4 (13 – 14')	15/4	15,761	2,493	84
5 (14 -15')	10/9	8,283	1,232	85

Values rounded. * Too few pre-treatment samples for comparison.

In the four strata where reductions could be measured, the average overall TCA mass reduction is 87 percent.

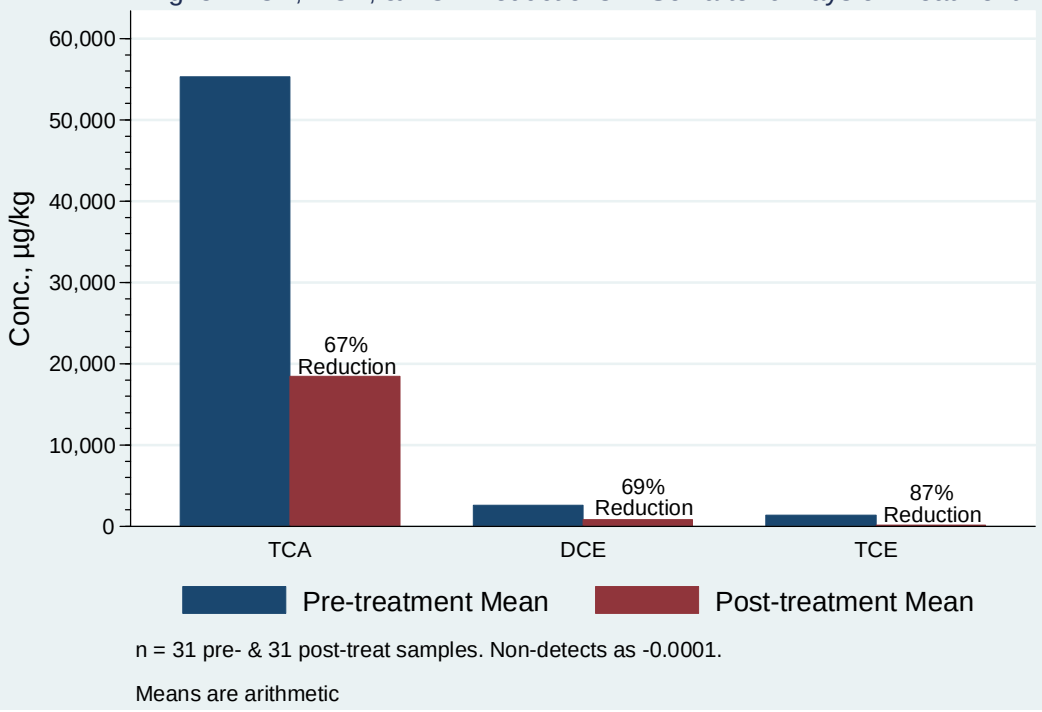
Specific VOC Compound Reductions

Mass reductions for individual VOCs were calculated by comparing the pre-treatment and post-treatment mean concentrations. Numerous values were below detection limits; non-detects were arbitrarily given a value of -0.0001 for calculation purposes. Arithmetic means were used for calculation purposes.

Mass reductions of specific VOCs on an overall basis show reductions ranging from 67 to 98 percent. Two of the more toxic compounds exhibited very high reductions. Benzene and 1,1,2-Trichloroethane (1,1,2-TCA), while having comparatively minor concentrations in soils, showed reductions of 98 and 97 percent, respectively. Figures 5

and 6 show the contaminant mass reductions for a number of compounds (TCA is repeated for the sake of comparison). The specific VOCs were selected on the basis of having the highest concentrations in pre-treatment soils and/or toxicity.

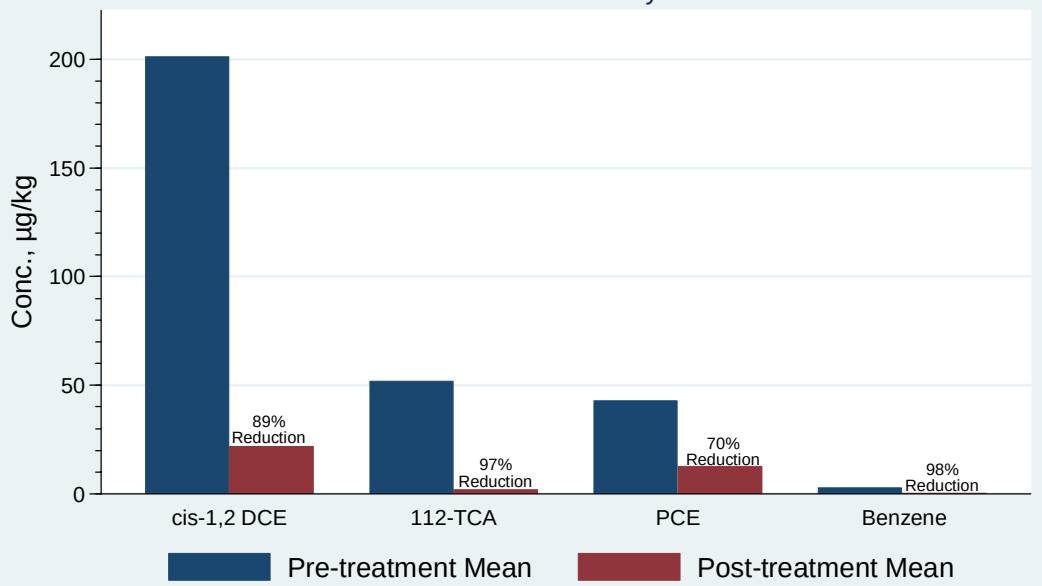
Fig. 5 - TCA, DCE, & TCE Reductions in Soil after 6 Days of Treatment



n = 31 pre- & 31 post-treat samples. Non-detects as -0.0001.

Means are arithmetic

Fig. 6 - cis-1,2 DCE, 112-TCA, PCE, & Benzene Reductions in Soil after 6 Days of Treatment



n = 31 pre- & 31 post-treat samples. Non-detects as -0.0001.

Means are arithmetic

Groundwater

Baseline groundwater samples were collected in five wells: E1-X, EW-0, MW-1, E1-NEW, and S-8 in June-July 2012. Post-treatment groundwater samples were collected in April 2013. Monitoring wells EW-1X and EW-0 were inside or immediately adjacent to the treatment area (EW-1X). Wells S-8, E1-NEW, and MW-1 were outside the treatment area. MW-1 is approximately 12 feet downgradient from the treatment area and S-8 and E1-NEW (E1-(N)) are 55 or more feet downgradient from the treatment area (Figure 4). Tables 3 presents the pre- and post-treatment groundwater sampling results. Monitoring well construction details are as follows:

Monitoring Well	Top of Screen, ft.-bg	Bottom of Screen, ft.-bg	Location
EW-0	7	14.6	Treatment Area
EW-1X	6	11	Immediately Adjacent to Treatment Area
MW-1	6	13	12 ft. downgradient of Treatment Area
S-8	7	12	65 ft. downgradient of Treatment Area
E1-NEW	35	42	56 ft. downgradient of Treatment Area

Treatment Area

Pre-treatment groundwater samples were collected from wells inside the treatment area in June-July 2012 and in earlier site characterization groundwater samples. The July 2012 samples were collected before treatment from injection wells IW-1, IW-2, IW-3, and original monitoring well EW-0. Post-treatment groundwater samples were collected on April 17, 2013, from the two wells installed immediately adjacent to and inside the treatment area, EW-1X and EW-0, following remedial excavation.

EW-1X was a new monitoring well installed immediately adjacent to Grid Cell 4 to add an additional monitoring point close to the treatment area. EW-0 was re-installed in Grid Cell 2 to replace the original EW-0 that was removed during remedial excavation. It was possible to penetrate the till layer with the drill rig at this location.

Groundwater concentrations typically fluctuate, often dramatically, with changing groundwater levels, the seasons, precipitation, and changes in groundwater flow direction throughout the year. This variation can dramatically affect contact between groundwater and contaminant, influence groundwater movement with more or less contaminated strata, affect contaminant migration and retardation through strata of different conductivities, and be influenced by geochemical factors that also occur within different strata. As a result, groundwater VOC concentrations can fluctuate dramatically from one sampling event to another. Under these conditions, the maximum concentrations likely approximate actual groundwater contaminant concentrations. For this reason it is more useful to compare the pre-treatment maximum groundwater concentrations with post-treatment groundwater. Table 3 contains the complete set of groundwater sample results. Table 4 summarizes the results of groundwater sampling.

Groundwater concentrations remain above TOGS for a number of compounds, but reductions in the principal VOCs range from 74 to 93 percent.

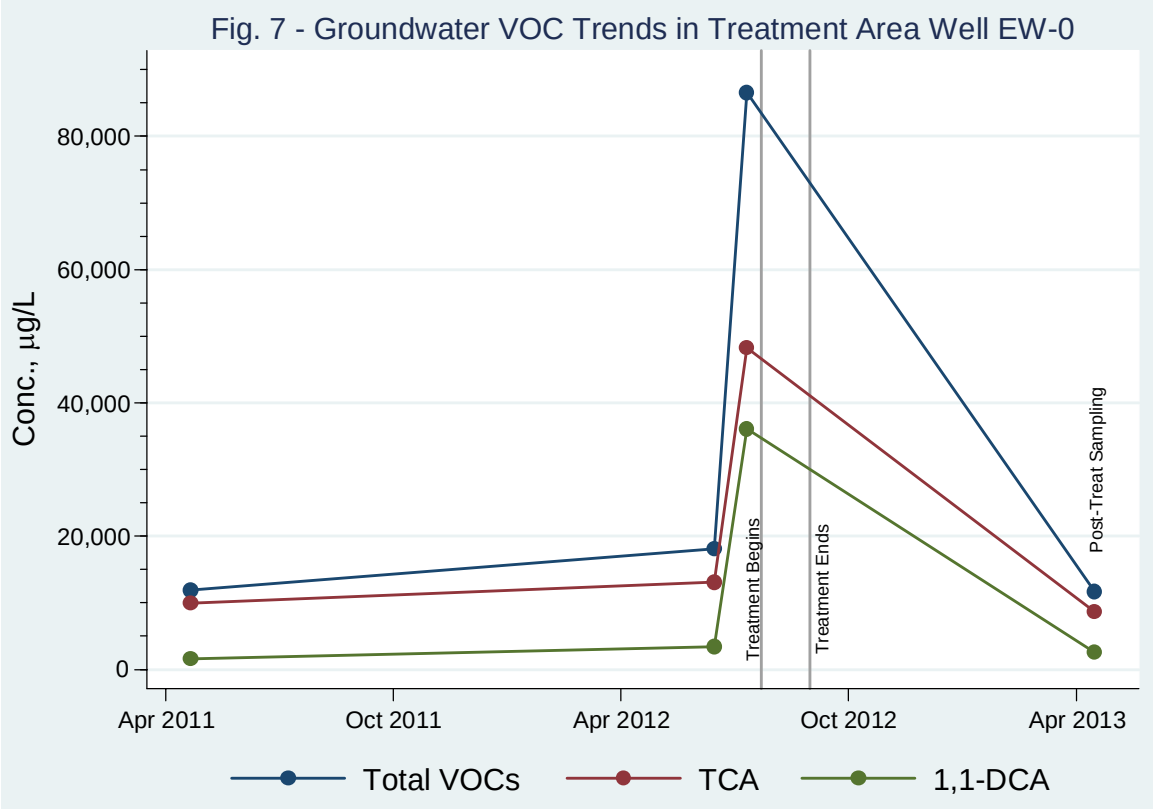
Table 4 - Summary of Groundwater VOCs in Treatment Area

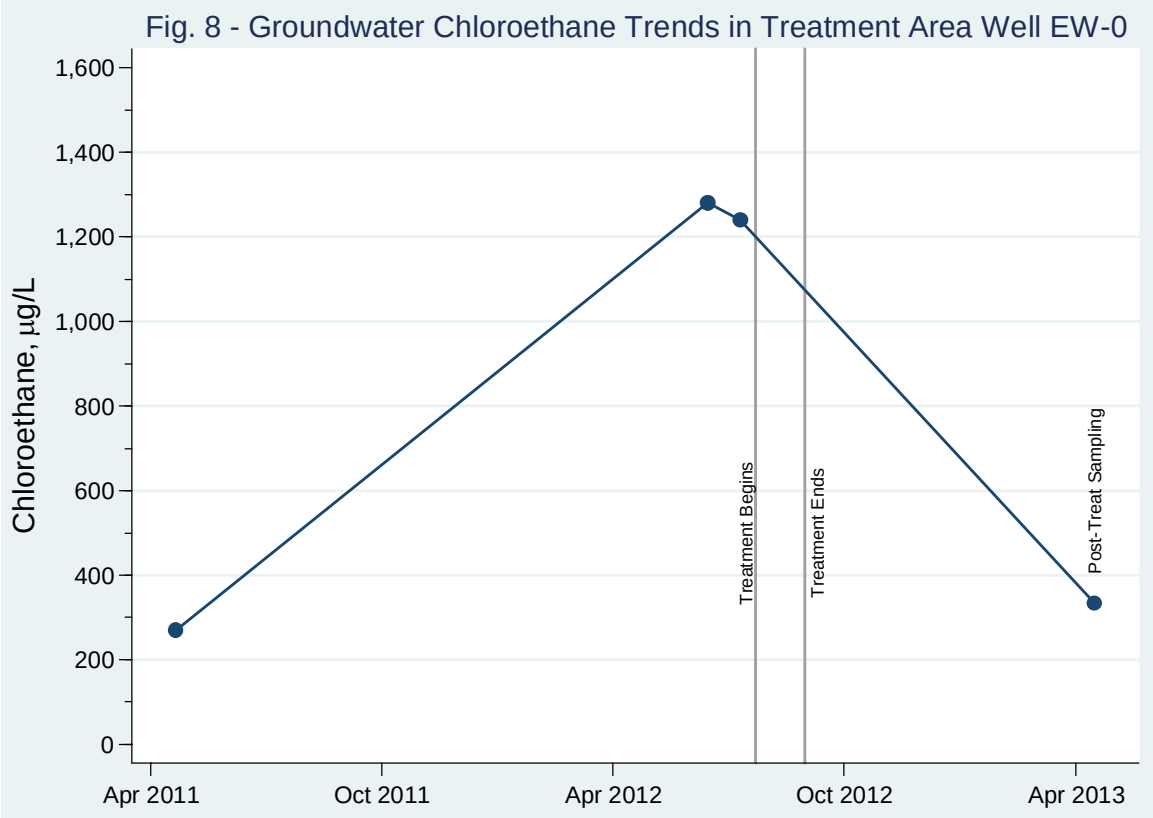
VOC	Sample Nos. pre/post	Pre-treat Max. Conc. µg/L	Post-treat Max. Conc. µg/L	Percent Reduction
Total VOCs	9/2	86,530	11,706	86
TCA	9/2	48,300	8,630	82
112-TCA	9/2	34.5	2.3	93
1,1-DCA	9/2	36,100	2,540	93
Chloroethane	9/2	1,280	334	74

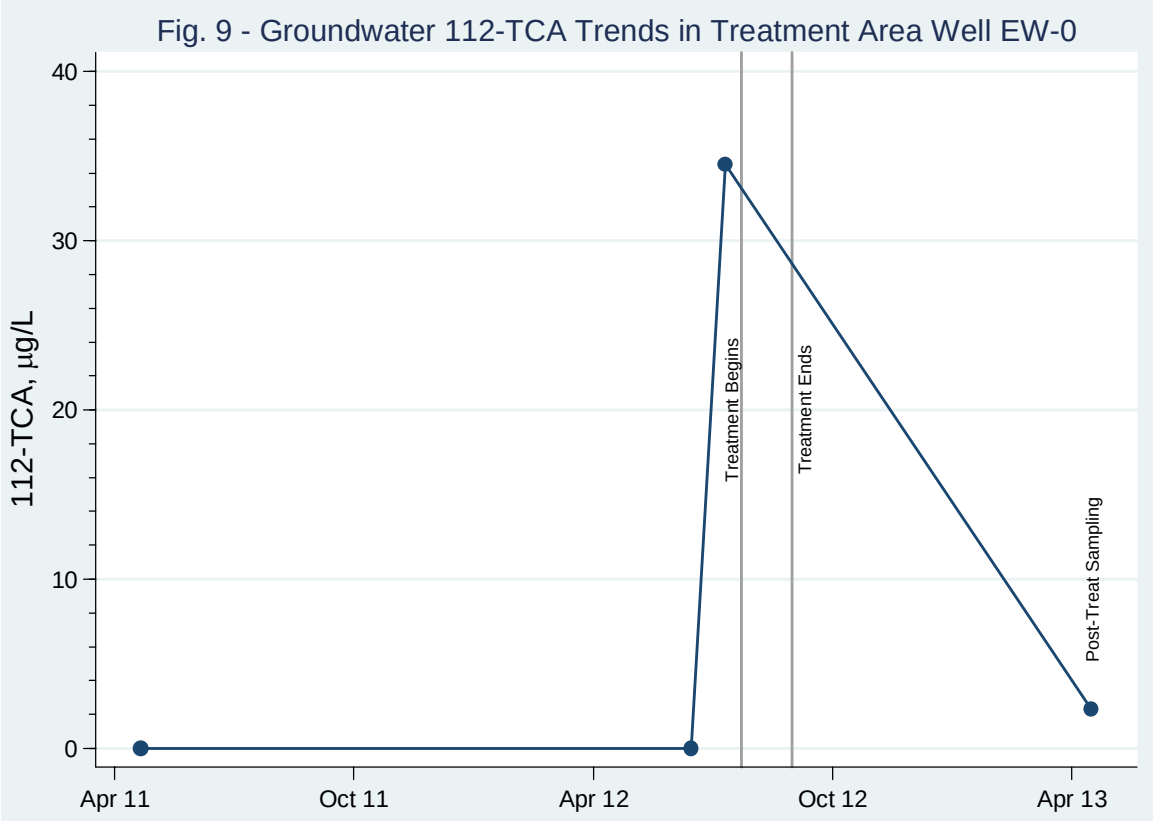
Values rounded.

Of the two wells immediately adjacent to or inside the injection treatment area, EW-1X (EW-1X is within the injection treatment radius but outside the excavation area) and EW-0, the VOC results in EW-1X were all below detection limits except for 1,1-Dichloroethane (DCA), 22.9 µg/L. Accordingly, all but one VOC in this well met the TOGS GA standards in the post-treatment sampling round. In EW-0, 28 of the 36 VOC compounds are below TOGS criteria and/or guidelines and two VOCs are very close to the TOGS criteria.

Figures 7, 8, and 9 depict the trends for the principal VOCs in EW-0. All show large reductions compared to the pre-treatment maximum concentrations. The large VOC reductions in groundwater concentrations are consistent with an appreciable contaminant mass having been eliminated from the Site.


Fig. 7 - Groundwater VOC Trends in Treatment Area Well EW-0
Conc., µg/L
80,000
60,000
40,000
20,000
0
Apr 2011
Oct 2011
Apr 2012
Oct 2012
Apr 2013
Treatment Begins
Treatment Ends
Post-Treat Sampling
Total VOCs
TCA
1,1-DCA


Fig. 8 - Groundwater Chloroethane Trends in Treatment Area Well EW-0
Chloroethane, µg/L
1,600
1,400
1,200
1,000
800
600
400
200
0
Apr 2011
Oct 2011
Apr 2012
Oct 2012
Apr 2013
Treatment Begins
Treatment Ends
Post-Treat Sampling

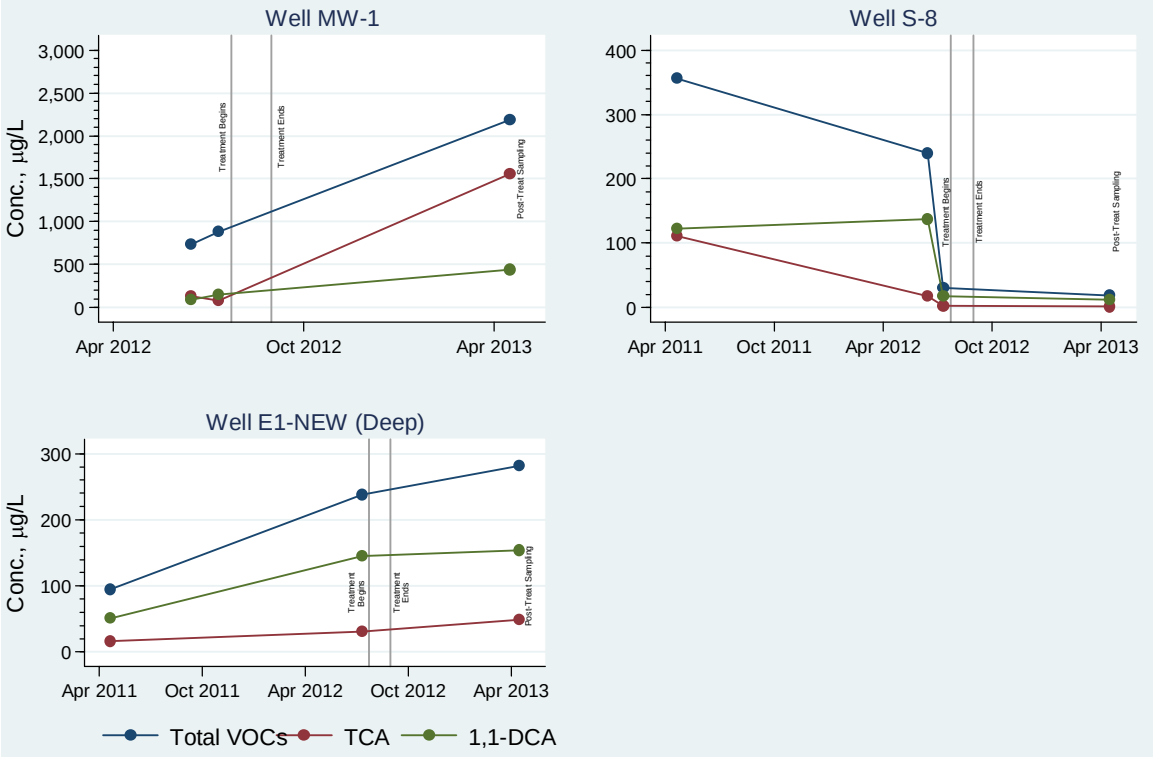


Outside Treatment Area

The three wells outside the treatment area are in the downgradient position. Two of these wells, MW-1 and deep well E1-NEW, showed increases following remediation. It is expected to be a temporary condition.

In contrast, the principal VOCs show a dramatic decrease in S-8 in the post-treatment groundwater samples compared to pre-treatment levels.

Fig 10 - VOCs in Groundwater - Wells Outside Treatment Area



Basic Groundwater Parameters

Table 5 presents the pre-treatment results for basic groundwater parameters. Table 6 presents the post-treatment results. A comparison shows that pH is approximately the same, indicating that groundwater has returned to pre-treatment conditions. Conductivity increased in post-treatment groundwater in response to the oxidant added for *in situ* treatment. Dissolved oxygen remains about the same, but mean ORP is more than two-fold lower than pre-treatment levels. This is most likely the result of residual plant-based surfactant that is being degraded.

Table 5 – Pre-Treatment Groundwater Parameters

Well	pH	Cond. µS/cm	NTU	DO, mg/L	Temp., C	ORP, mV
EW-0	9.88	134	24	0	15.9	-106
IW-1	9.53	90	278	3.03	21.5	-98
IW-2	7.79	813	51	8.25	17	-92
IW-3	9.58	647	0	2.19	21.8	-50
S-8	8.62	593	2.3	0.88	16.6	-202
Mean	9.1	455	71	2.9	18.5	-110

Table 6 – Post-Treatment Groundwater Parameters

Well	pH	Cond. µS/cm	NTU	DO, mg/L	Temp., C	ORP, mV
MW-1	7.56	1,100	0	1.53	13.2	-148
EW-0	8.95	610	0	.65	10.9	-377
EW-1X	8.49	495	459	.62	12.6	-679
E1-NEW	9.08	522	57	.59	15.4	-207
S-8	7.53	356	205	8.42	13.3	59
Mean	8.3	617	144	2.4	13	-270

Sulfate and chloride were monitored both before and after treatment. The mean pre-treatment sulfate concentration measured 21.4 mg/L and the mean post-treatment level 48.8 mg/L. The more than two-fold increase is due to the sodium persulfate added as the oxidant. Some sulfate remains, but will dissipate with time.

The mean pre-treatment chloride concentration measured 108.7 mg/L and the mean post-treatment level 60.9 mg/L. This is a reduction of more than 40 percent. It is most likely due to the decomposition of chlorinated VOCs, the VOCs having been degraded and the chloride having washed through the soil.

Although chloride would be expected to increase in the short-term following destruction of chlorinated VOCs, this reduction suggests that the chloride resulting from oxidation has migrated with groundwater through the treated soil leaving lower concentrations behind. The appreciable reduction in chlorinated contaminant mass is thus being reflected in the lower chloride levels. In the eight months between the end of *in situ* treatment and post-treatment groundwater sampling, groundwater could flush through the more permeable zones in treatment area approximately two-dozen times.

Chemical Oxidation Treatment

The *in situ* treatment included injection of alkaline-activated sodium persulfate along with a surfactant, VeruSOL®, to dissolve NAPL so as to promote

dissolution and optimal oxidation. The oxidant mixture was injected via specially designed injection wells using the RemMetrik® process and Wavefront Technology Solution's Sidewinder tool. The process employs subsurface pressure waves to promote even dispersion of the oxidant mixture into the small pores where most of the NAPL occurs. The treatment goal was 90 percent contaminant mass removal.

It was necessary to complete the *in situ* component before excavation in order for the injection wells to function optimally. The undisturbed overburden provides resistance that allows the subsurface pressure waves to move horizontally without being attenuated by vertical movement, which can occur without sufficient overburden or inadequately compacted overburden.

Prior to *in situ* treatment FLS collected soil samples to estimate contaminant mass and to identify the target zones for optimal injection well placement. The 50-ft. by 50-ft. treatment area was divided into six grid cells. Eight randomly placed soil borings in six grid cells were sampled randomly in 6-inch intervals from the water table to the underlying till layer at approximately 15 feet and sampled for VOCs using Method 8260. In all, 24 randomly selected samples for VOCs were collected using an Encore sampler.

Based on the randomly collected soil samples for VOC analysis, the estimated total contaminant mass measured approximately 79 pounds in the 10 – 15-ft. treatment interval. Approximately 89 percent of the contaminant mass occurred from 10 to 13 feet below grade. Three injection wells were installed where the contamination mass was highest. IW-1 and IW-2 were installed in Grid Cell 2, and IW-3 was installed in Grid Cell 4. All injection wells were installed to approximately 13 ft.-bg. Approximately 90 percent of the contaminant mass occurred in the 10- to 13-ft. interval near IW-2, and during the injections IW-2 was used as the primary injection well to account for the greater level of contaminant mass. To ensure greatest treatment in the 10- to 13-ft. zone, a packer was installed prior to injection to seal off the injection well at 10 feet. The oxidant mixture was also administered through five Geoprobe points from 13 to 14 ft.-bg and 14 to 15 ft.-bg (Figure 2).

Multiple rounds of injections took place between July 10 and July 27, although the total amount of injection time was approximately six days. A total of 13,200 gallons of oxidant mixture was injected. Sodium persulfate was injected at a concentration of 15 to 50 g/L, sodium hydroxide was injected at a concentration of 12 to 50 g/L and VeruSOL® was injected at a concentration of 0 to 15 g/L. Groundwater was monitored daily in the injection wells and nearby monitoring wells to check on the chemical response and distribution of the oxidant. Water in the adjacent stream was also monitored with field instruments and visual inspections during the injection to check for off-Site migration of treatment chemicals. None was found. Favorable chemical conditions were observed in the treatment area (Appendix F, VeruTEK report). Table 7 presents the volume of oxidant solution injected by treatment point.

Table 7 – Oxidant Volume by Injection Point

Injection Point	Injected Volume (gallons)
IW-1	5,310
IW-2	5,320
IW-3	1,570
GP-1	200
GP-2	200
GP-3	200
GP-4	200
GP-5	200
Total	**13,200**

IW- Injection well. GP – Geoprobe injection point.

4.3.2 Excavation

Prior to the start of excavation, the 50-ft. by 50-ft. treatment area, located in the footprint of the northwest portion of the former Feutron Building, was divided into six grid cells. Soil removal in this historic drum storage and felt press area and under the relict floor slab was performed by removing impacted material in Grid Cells 1 through 5. Based on analytical results of pre-excavation soil sampling and the proximity of Grid Cell 6 to the building wall, Grid Cell 6 was not sampled. The layout of the six grid cells is illustrated in Figure 3. Excavation was conducted from August 27, 2012 to September 4, 2012. Appendix G is a photographic log of the excavation and overall remedial effort.

A high density polyethylene (HDPE) soil containment structure (unit) was constructed to contain the excavated soils. The structure had dimensions of approximately 100 feet long and 50 feet wide. The HDPE structure was installed over a bed of clean fine sand to provide protection against puncture by debris or stones beneath the structure.

Excavation was conducted by removing soils in each of the five grid cells to the depth of approximately 11 feet below grade, approximately one (1) foot below the water table. In all, approximately 710 tons of soil were removed from the remedial excavation. The excavated soils were then stockpiled on Site and subsequently passed through a soil screener to remove larger materials that could potentially damage the HDPE containment structure. Once soil passed through the screener, the material was transported via dump truck to the HDPE containment structure. The excavated soils were then sampled in the HDPE containment structure at an interval of no less than one sample per 100 cubic yards. Samples were analyzed for VOCs and compared to the Part 375 Commercial Use SCOs. Soils meeting the SCOs were subsequently backfilled into the separate grid cells. No soil was removed from the Site to a disposal facility and no soil was imported from outside the Site. An additional 1,000 gallons of oxidant mixture was spread across the bottom of the open excavation prior to backfilling.

Soils were scanned for VOCs using a PID with an 11.2 eV bulb. PID screening was conducted either at the excavator bucket, at the soil stockpile in the containment unit, and in the excavation. Any observations regarding soil contamination were logged along with the PID readings.

Post-excavation bottom and sidewall endpoint sampling was conducted upon completion of excavation in each grid cell. Post-excavation sampling was biased towards areas of staining, odors, elevated PID readings, and areas of known contamination. Post excavation samples PX-01 to PX-06 were collected on August 28, 2012. Samples PX-07 and PX-08 were collected on August 30, 2012. Samples PX-09 to PX-15 were collected on September 4, 2012. Figure 3 shows the results of pre-treatment and post-treatment sampling.

Within the excavation were what appeared to be several relict concrete walls and footings that supported the former Feutron Building. One concrete structure was a nominal 20-ft. by 10-ft. vault that once housed manufacturing equipment (Pit L). The concrete vault contained various amounts of rainwater and algae during remediation. No signs of contamination were evident in the vault. A smaller nominal 5-ft. by 5-ft. vault (Pit S) occupied a portion of a larger concrete block and exhibited no signs of contamination. All concrete appeared free of staining or other discernable signs of contamination. The concrete structures were left in place and are shown on Figure 3 for documentation purposes.

4.3.3 Treatment Effectiveness

Post-excavation analytical sample results revealed all VOC concentrations below the NYSDEC Unrestricted Use Criteria with the exception of 1,1-Dichloroethane in sample PX-07 and 1,1-Dichloroethane, 1,1-Dichloroethene and 1,1,1-Trichloroethane in sample PX-3. The post-excavation sample locations and results summary is illustrated in Figure 3.

4.3.4 Remaining Contamination

All post-excavation and post-treatment soil sample results were below the Site cleanup criteria, the Part 375 Commercial Use SCOs.

4.3.4.1 Unrestricted Use

The following post-excavation and post-treatment soil sample results remain above the Unrestricted Use Soil Cleanup Criteria (Table 8):

Table 8 – Endpoint Soil Sample Results Above Unrestricted Use SCOs

Sample ID	Parameter	Result, µg/kg	Unrestricted Use SCO, µg/kg	Commercial Use SCO, µg/kg
PX03-BT-10	1,1-Dichloroethane	1,940	270	240,000
	1,1-Dichloroethene	568	330	500,000
	1,1,1-Trichloroethane	4,980	680	500,000
C5SP02	1,1-Dichloroethene	2,750	330	500,000
	1,1,1-Trichloroethane	29,800	680	500,000
C5SP01	1,1,1-Trichloroethane	2,580	680	500,000
1.1 (12.5-13)	1,1-Dichloroethane	1,080	270	240,000
	1,2-Dichloroethane	232	20	30,000
	1,1-Dichloroethene	1,140	330	500,000
	1,1,1-Trichloroethane	18,700	680	500,000
	Trichloroethene	1,130	470	200,000
1.1 (13.-13.5)	1,1,1-Trichloroethane	2,860	680	500,000
1.2 (11-11.5)	1,1-Dichloroethane	6,220	270	240,000
	1,1,1-Trichloroethane	1,560	680	500,000
1.2 (14-14.5)	1,1-Dichloroethane	34,000	270	240,000
	1,2-Dichloroethane	786	20	30,000
	1,1-Dichloroethene	1,620	330	500,000
	1,1,1-Trichloroethane	4,690	680	500,000
1.2 (13-13.5)	1,1-Dichloroethane	3,950	270	240,000
	1,1,1-Trichloroethane	2,130	680	500,000
2.1 (12.5-13)	2-Butanone (MEK)	893	120	500,000
	1,1-Dichloroethane	34,900	270	240,000
	1,2-Dichloroethane	1,590	20	30,000
	1,1-Dichloroethene	2,150	330	500,000
	cis-1,2-Dichloroethane	374	250	500,000
	trans-1,2-Dichloroethane	294	190	500,000
	Toluene	2,280	700	500,000
	1,1,1-Trichloroethane	42,300	680	500,000
	Trichloroethane	1,180	470	200,000
2.1 (11.5-12)	Acetone	62.4	50	500,000
	1,1-Dichloroethane	11,100	270	240,000
	1,2-Dichloroethane	27.7	20	30,000
2.1 (10-10.5)	1,2-Dichloroethane	20.7	20	30,000
	1,1,1-Trichloroethane	12,600	680	500,000
2.2 (12.5-13)	1,1-Dichloroethane	3,660	270	240,000
	1,2-Dichloroethane	179	20	30,000
	1,1-Dichloroethene	2,310	330	500,000
	1,1,1-Trichloroethane	70,700	680	500,000
2.2 (11-11.5)	1,1-Dichloroethane	6,040	270	240,000
	1,1-Dichloroethene	14,000	330	500,000
	Toluene	1,600	700	500,000
	1,1,1-Trichloroethane	398,000	680	500,000
2.2 (11-11.5)	Trichloroethane	2,040	470	200,000
2.2 (14-14.5)	Acetone	82.2	50	500,000
2.2 (14-14.5)	2-Butanone	129	120	500,000

Table 8 – Endpoint Soil Sample Results Above Unrestricted Use SCOs

Sample ID	Parameter	Result, µg/kg	Unrestricted Use SCO, µg/kg	Commercial Use SCO, µg/kg
	1,1-Dichloroethane	12,100	270	240,000
	1,2-Dichloroethane	34.0	20	30,000
3 (13.5-14)	1,1-Dichloroethane	459	270	240,000
	1,1,1-Trichloroethane	1,500	680	500,000
3 (14.5-15)	1,1-Dichloroethane	5,820	270	240,000
	1,2-Dichloroethane	165	20	30,000
	1,1-Dichloroethene	423	330	500,000
	1,1,1-Trichloroethane	2,320	680	500,000
3 (12.5-13)	1,1-Dichloroethane	410	270	240,000
	1,2-Dichloroethane	134	20	30,000
	1,1-Dichloroethene	659	330	500,000
	1,1,1-Trichloroethane	1,270	680	500,000
4 (11-11.5)	1,1-Dichloroethane	2,000	270	240,000
	1,1-Dichloroethene	1,650	330	500,000
4 (14.5-15)	1,1-Dichloroethane	6,470	270	240,000
5 (13.5-14)	1,1,1-Trichloroethane	3,480	680	500,000
5 (14-14.5)	1,1,1-Trichloroethane	1,220	680	500,000
5 (14.5-15)	1,1,1-Trichloroethane	2,090	680	500,000

PX – Post Excavation sample. SP – Soil Pile/Cover sample. Remaining samples # (. . .) from post-treatment soil borings.

4.3.4.2 Residential Use

The following post-treatment soil sample results remain above the Residential Use soil cleanup criteria. All other samples were below the Residential Use SCOs:

Sample ID	Parameter	Result, µg/kg	Residential Use SCO, µg/kg
1.2 (14-14.5)	1,1-Dichloroethane	34,000	19,000
2.1 (12.5-13)	1,1-Dichloroethane	34,900	19,000
2.2 (11-11.5)	1,1,1-Trichloroethane	398,000	100,000

4.3.4.3 Groundwater

Post-treatment groundwater sampling took place in April 2013. Five groundwater samples were collected for TCL VOC analysis by Method 8260 from wells within and downgradient from the treatment area.

Of the 35 VOCs in the 8260 list, 21 (60 percent) VOC results were below detection limits in all five groundwater samples. Of the 14 detected VOCs, five (14 percent of the total) were all below the TOGS or guidelines. Nine VOCs were above the TOGS AWQS or guidelines: chloroethane, 1,1-dichloroethane, 1,2-dichloroethane, 1,1-dichloroethene, toluene, 1,1,1-trichloroethane, 1,1,2-trichloroethane, trichloroethane, and vinyl chloride. Among these, nine VOCs, four of the compounds were below the TOGS AWQS or guidelines in 75 percent of the samples.

The VOCs with the highest groundwater concentrations were chloroethane (334 µg/L), 1,1-dichloroethane (2,540 µg/L), and 1,1,1-trichloroethane (8,630 µg/L) in monitoring well EW-0. EW-0 and MW-1 (a.k.a. MW-1N) had the highest concentrations of VOCs compared to all other wells, as shown.

Post-treatment Groundwater Results in µg/L

Sample ID	Chloroethane	1,1-Dichloroethane	TCA
S-8	nd	11.8	1.4
E1-N	73.9	154	48.4
EW-1X	nd	22.9	nd
MW-1N	136	438	1,560
EW-0	334	2,540	8,630

nd – non-detect

Table 9 summarizes the post-treatment detected VOC results for all groundwater samples.

Table 9 – Summary of Detected Post-treatment Groundwater Results, All Wells
Results in µg/L

VOC	Min	p25	p50	p75	p95	Max	TOGS*
2-Butanone	-	-	-	-	14.1	14.1	50
Chloroethane	-	-	***73.9***	***136***	***334***	***334***	5
Chloroform	-	-	-	1.2	3.1	3.1	7
1,1-Dichloroethane	***11.8***	***22.9***	***154***	***438***	***2,540***	***2,540***	5
1,2-Dichloroethane	-	-	***0.7***	***5.2***	***17.5***	***17.5***	0.6
1,1-Dichloroethene	-	3.5	5	***36.6***	***144***	***144***	5
cis-1,2-Dichloroethene	-	-	-	0.54	2.8	2.8	3
trans-1,2-Dichloroethene	-	-	-	-	2.2	2.2	5
Tetrachloroethene (PCE)	-	-	-	-	0.6	0.6	5
Toluene	-	-	-	1.6	***8***	***8***	5
1,1,1-Trichloroethane (TCA)	-	1.4	***48.4***	***1,560***	***8,630***	***8,630***	5
1,1,2-Trichloroethane	-	-	-	-	***2.3***	***2.3***	1
Trichloroethene (TCE)	-	-	1.1	4	**6.2**	**6.2**	5
Vinyl chloride	-	-	-	-	***4.8***	***4.8***	2

Min – minimum, p25 – 25th percentile, p50– 50th percentile (median), p75 – 75th percentile, p95 – 95th percentile, Max – maximum. – non-detect. *TOGS or guidance value. Bold & italic exceed TOGS values/guidelines.

4.3.5 Soil Cover System

The excavation was backfilled to grade with soil meeting the Commercial Use SCOs. In nearly all cases, treated soil for backfilling met the Unrestricted Use or Residential Use SCOs. The soil used for the excavation cover was the excavated soil that met the Site SCOs (Section 4.3.2) and subsequently returned to the excavation after testing documented the soil met the cleanup goals. No soil was imported from off-Site. The data for the soil cover samples are the post-treatment soil pile samples. Table 10 lists the soil pile/soil cover samples. Table 2A presents the results.

Table 10 - Soil Pile/Cover Results, µg/kg

C1SP01	C4SP01	C3SP02
C2SP01	C5SP01	C5SP02
C3SP01	C2SP02	Bench01

4.3.6 Sub-slab Depressurization System

There is an existing SSDS operating under the Piano Felt Building (Figure 11). Now that soils containing the source contamination have been treated, AFFCO proposes to convert the SSDS and allow the system to operate in passive mode. A separate work plan will be prepared to demonstrate that passive operation of the SSDS will address potential exposure via soil vapor intrusion.

4.3.7 Deviations from Remedial Action Work Plan

There were no material deviations from the approved work plan. One minor deviation was omission of stream sampling following treatment.

4.3.8 Quality Assurance/Quality Control Summary

All post-excavation and post-treatment soil data were found usable for project decisions. All groundwater results were found usable for project decisions (Appendix E).

5.0 ENVIRONMENTAL EASEMENT, SOIL MANAGEMENT AREA & SSDS

The Site has a series of Institutional Controls in the form of an Environmental Easement that encompasses a portion of the property (0.5454 acres) that includes a Soil Management Area (0.3845 acre) and a SSDS area (0.1619 acre) (Appendix A). Site restrictions that apply to the Environmental Easement Area of the Property are as follows:

- The controlled property area may be used for commercial use provided that the long-term Engineering and Institutional Controls included in the attached Site Management Plan are employed. The controlled property also allows Industrial use as allowed by zoning;
- The controlled property may not be used for a higher level of use, such as unrestricted, residential or restricted residential use without additional remediation and amendment of the Environmental Easement, as approved by the NYSDEC;
- The controlled property area may not be used for a higher level of use, such as unrestricted or restricted residential, use without additional remediation and amendment of the Environmental Easement, as approved by the NYSDEC;
- All future activities on the controlled property area that will disturb remaining contaminated material must be conducted in accordance with the SMP;
- The use of the groundwater underlying the property is prohibited without treatment rendering it safe for intended use;
- The potential for vapor intrusion must be evaluated for any new buildings on Site and any potential impacts that are identified must be monitored or mitigated;
- Vegetable gardens and farming on the property are prohibited;
- Inspection of the soil covering the Soil Management Area annually. The inspection results will be detailed in the Periodic Review Report (PRR) and certified by the engineer. Any damage to the soil cover will be repaired in kind;
- Inspection of the SSDS. The inspection results will be detailed in the PRR and certified by the engineer; and
- The Site owner or remedial party will submit to NYSDEC a written statement that certifies, under penalty of perjury, that: (1) controls employed at the Controlled Property are unchanged from the previous certification or that any changes to the controls were approved by the NYSDEC; and, (2) nothing has occurred that impairs the ability of the controls to protect public health and environment or that constitute a violation or failure to comply with the SMP. NYSDEC retains the right to access such Controlled Property at any time in order to evaluate the continued maintenance of any and all controls. This certification shall be submitted annually, or an alternate period of time that NYSDEC may allow and will be made by an expert that the NYSDEC finds acceptable.

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

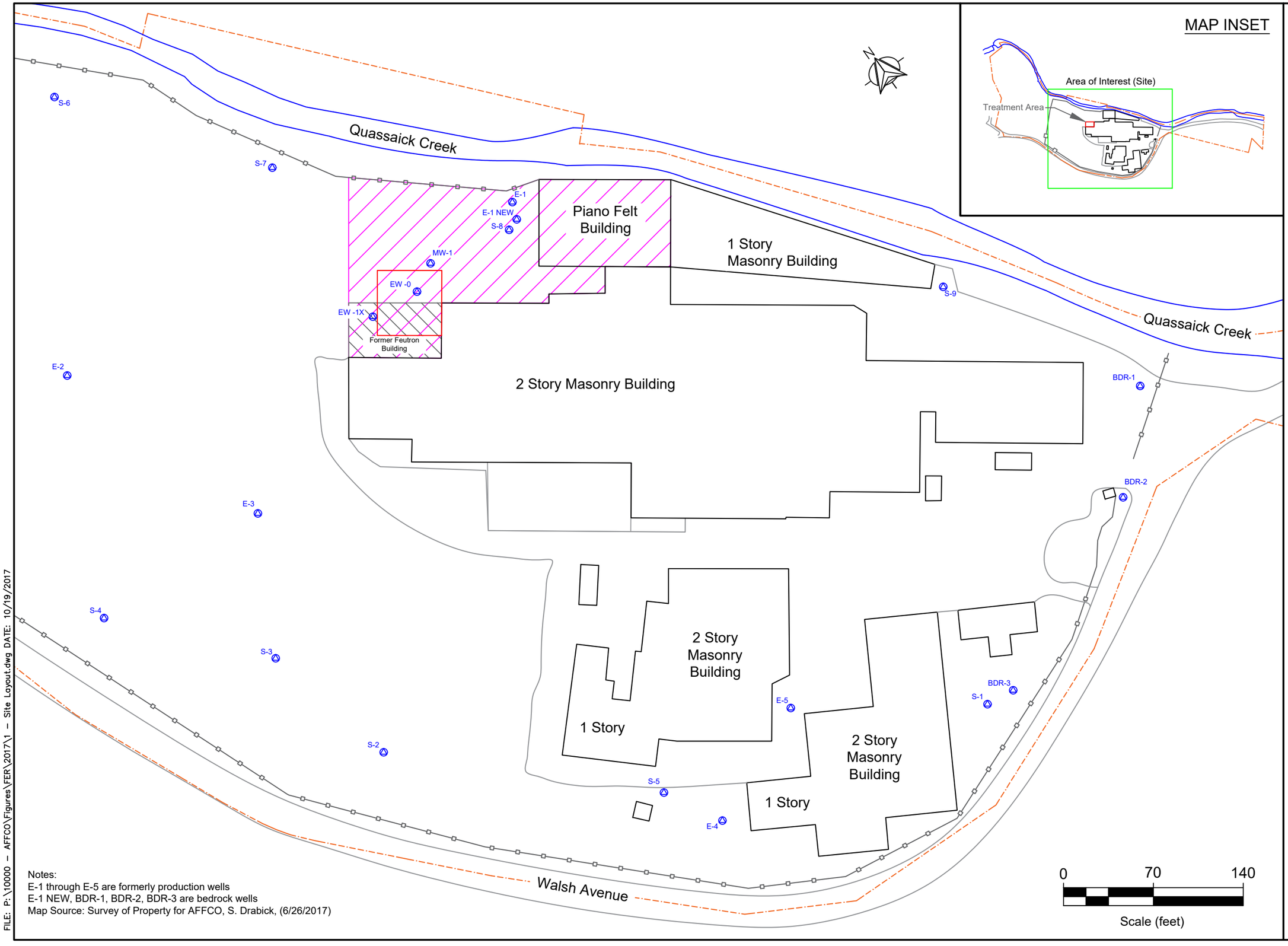
The Environmental Easement was accepted by NYSDEC on August 23, 2017 and filed with Orange County on September 15, 2017.submitted on.

6.0 SITE MANAGEMENT PLAN

A SMP that describes actions subsequent to the remedial action is included as a separate document. The SMP calls for groundwater monitoring, SSDS operation and inspection, and inspection of the Soil Management Area soil cover.

Since contaminated soil and groundwater remain beneath the Site after completion of the remedial action, institutional and engineering controls are required to protect human health and the environment. Long-term management of these controls and residual contamination will be conducted under the SMP approved by the NYSDEC

FIGURES



MAP INSET

Notes:
E-1 through E-5 are formerly production wells
E-1 NEW, BDR-1, BDR-2, BDR-3 are bedrock wells
Map Source: Survey of Property for AFFCO, S. Drabick, (6/26/2017)

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American Felt & Filter Co.
361 Walsh Avenue
New Windsor, NY

Figure 1

Site Layout

October 2017

Project Number
10000-015

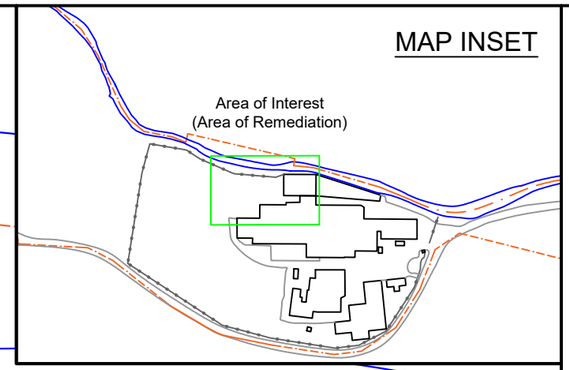
LEGEND

- Environmental Easement Area
- Extent of Building Demolition
- Area of Remedial Excavation
- Property Line
- Retaining Walls / Fence
- Groundwater Monitoring Well

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Quassaick Creek

MAP INSET



E-1

E-1 NEW

S-8

Piano Felt Building

MW-1

GP-1

2.1

1.1

3

C3

C2

EW -0

C1

IW-1

GP-2

PIT S

2.2

1.2

GP-3

IW-2

EW -1X

GP-4

GP-5

6

4

IW-3

C4

C5

C6

CONCRETE VAULT (OPEN)

PIT L

5

Former Feutron Building

2 Story Masonry Building

0 20 40

Scale (feet)

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Environmental Management & Consulting

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New York, NY 10001

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New Windsor, NY

Figure 2

Site Plan, Remedial Excavation, and Injection Locations

October 2017

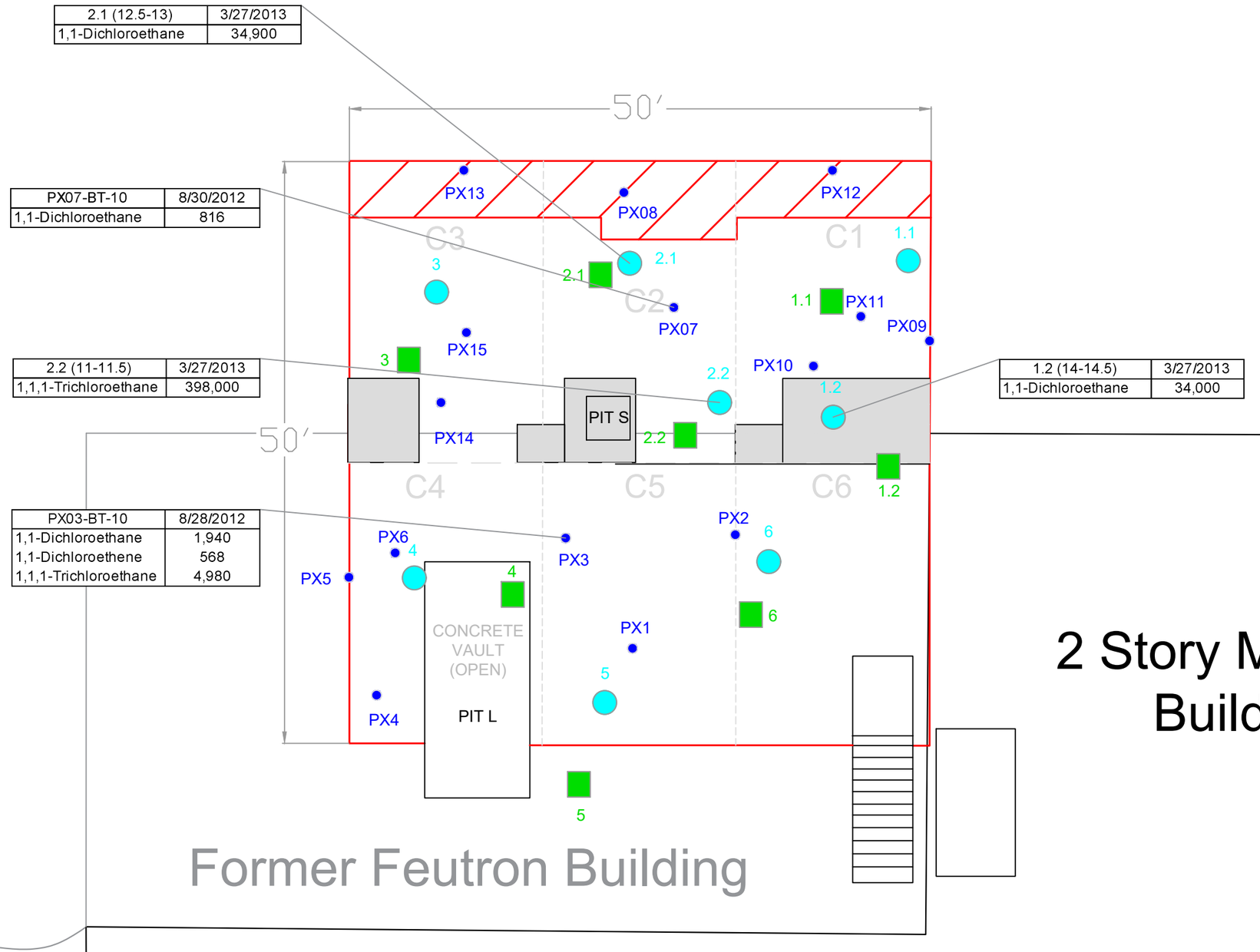
Project Number
10000-015

LEGEND

- Area of remedial excavation (grade to 10 or 11')
- Shallow remedial excavation depth (grade to 5')
- Injection well (removed)
- Geoprobe injection location
- Groundwater monitoring well
- Pre-treatment soil sample (random)
- C5 Gride cell
- Concete

Notes:
Soil sample and geoprobe injection locations are approximate

FILE: P:\10000 - AFFCO\Figures\FER\2017\2 - Site Plan.dwg DATE: 10/18/2017



Compound	Unrestricted Use SCO	Residential w/CP-51 SCO	Commercial w/CP-51 SCO
1,1-Dichloroethane	270	19,000	240,000
1,1-Dichloroethene	330	100,000	500,000
1,1,1-Trichloroethane	680	100,000	500,000

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Figure 3

Post-Excavation/ Post-Treatment Soil Sampling Locations and Results Summary

October 2017

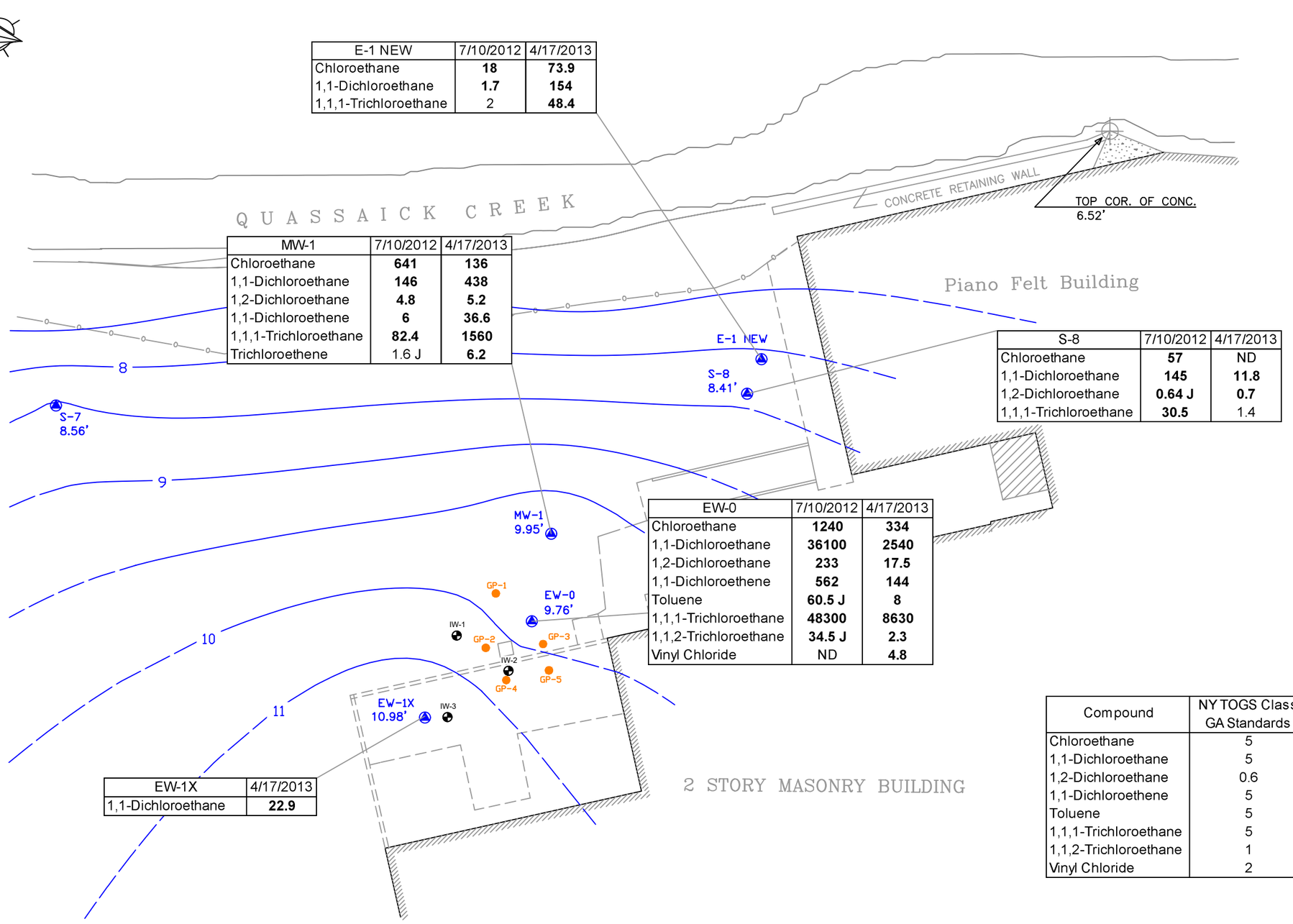
Project Number
10000-015

LEGEND

- Area of remedial excavation (grade to 10 or 11')
- Shallow remedial excavation (grade to 5')
- Pre-treatment soil sample (random)
- Post-*in situ* treatment soil sample (random)
- Post-excavation endpoint soil sample (random)
- C5 Grid cell
- Concete

Notes:
Soil sample and geoprobe injection locations are approximate

FILE: P:\10000 - AFFCO\Figures\FER\2017\3 - Post Treatment Soil Sampling Locations.dwg DATE: 10/18/2017



E-1 NEW	7/10/2012	4/17/2013
Chloroethane	**18**	**73.9**
1,1-Dichloroethane	**1.7**	**154**
1,1,1-Trichloroethane	2	**48.4**

MW-1	7/10/2012	4/17/2013
Chloroethane	**641**	**136**
1,1-Dichloroethane	**146**	**438**
1,2-Dichloroethane	**4.8**	**5.2**
1,1-Dichloroethene	**6**	**36.6**
1,1,1-Trichloroethane	**82.4**	**1560**
Trichloroethene	1.6 J	**6.2**

S-8	7/10/2012	4/17/2013
Chloroethane	**57**	ND
1,1-Dichloroethane	**145**	**11.8**
1,2-Dichloroethane	**0.64 J**	**0.7**
1,1,1-Trichloroethane	**30.5**	1.4

EW-0	7/10/2012	4/17/2013
Chloroethane	**1240**	**334**
1,1-Dichloroethane	**36100**	**2540**
1,2-Dichloroethane	**233**	**17.5**
1,1-Dichloroethene	**562**	**144**
Toluene	**60.5 J**	**8**
1,1,1-Trichloroethane	**48300**	**8630**
1,1,2-Trichloroethane	**34.5 J**	**2.3**
Vinyl Chloride	ND	**4.8**

EW-1X	4/17/2013
1,1-Dichloroethane	**22.9**

Compound	NY TOGS Class GA Standards
Chloroethane	5
1,1-Dichloroethane	5
1,2-Dichloroethane	0.6
1,1-Dichloroethene	5
Toluene	5
1,1,1-Trichloroethane	5
1,1,2-Trichloroethane	1
Vinyl Chloride	2

NOTES:
Concentrations measured in ug/L, exceedances in bold
Groundwater samples and elevation measurements collected on 9/30/2014
Elevations in world geodetic system (WGS) 84
E-1 NEW is a bedrock well, not used for contouring
Pre-treatment samples collected on 7/10/2012
Post-treatment samples collected on 4/17/2013

0 30 160
Scale (feet)

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Figure 4

PRE AND POST-TREATMENT GROUNDWATER VOC RESULTS AND CONTOUR MAP

October 2017

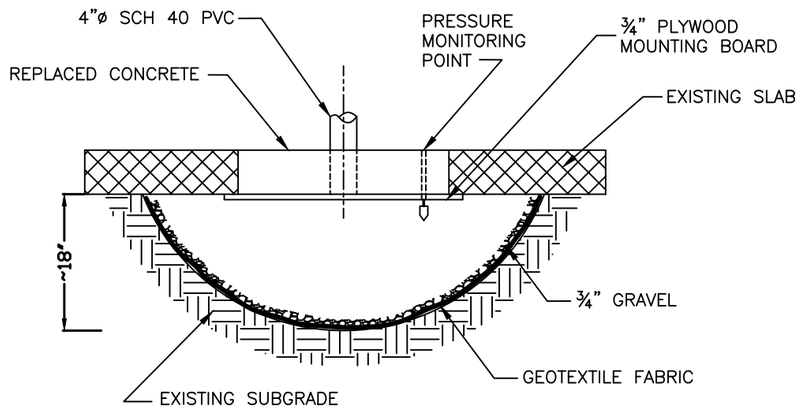
Project Number
10000-015

LEGEND

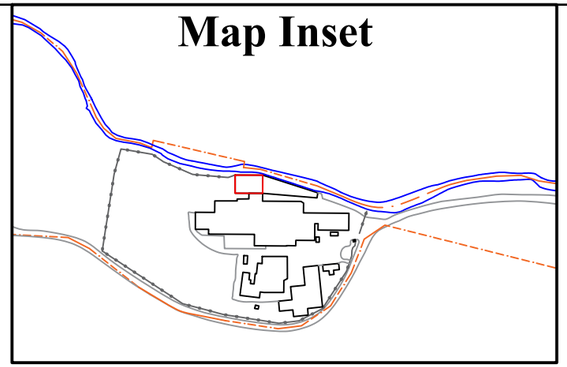
- Groundwater monitoring well and groundwater elevation (feet)
- 10 — Groundwater elevation contour (dashed where inferred)
- Injection well (removed)
- Geoprobe injection location (approximate)

FILE: P:\10000 - AFFCO\Figures\FER\2017\4 - Pre and Post Treatment GW and Contour.dwg DATE: 10/19/2017

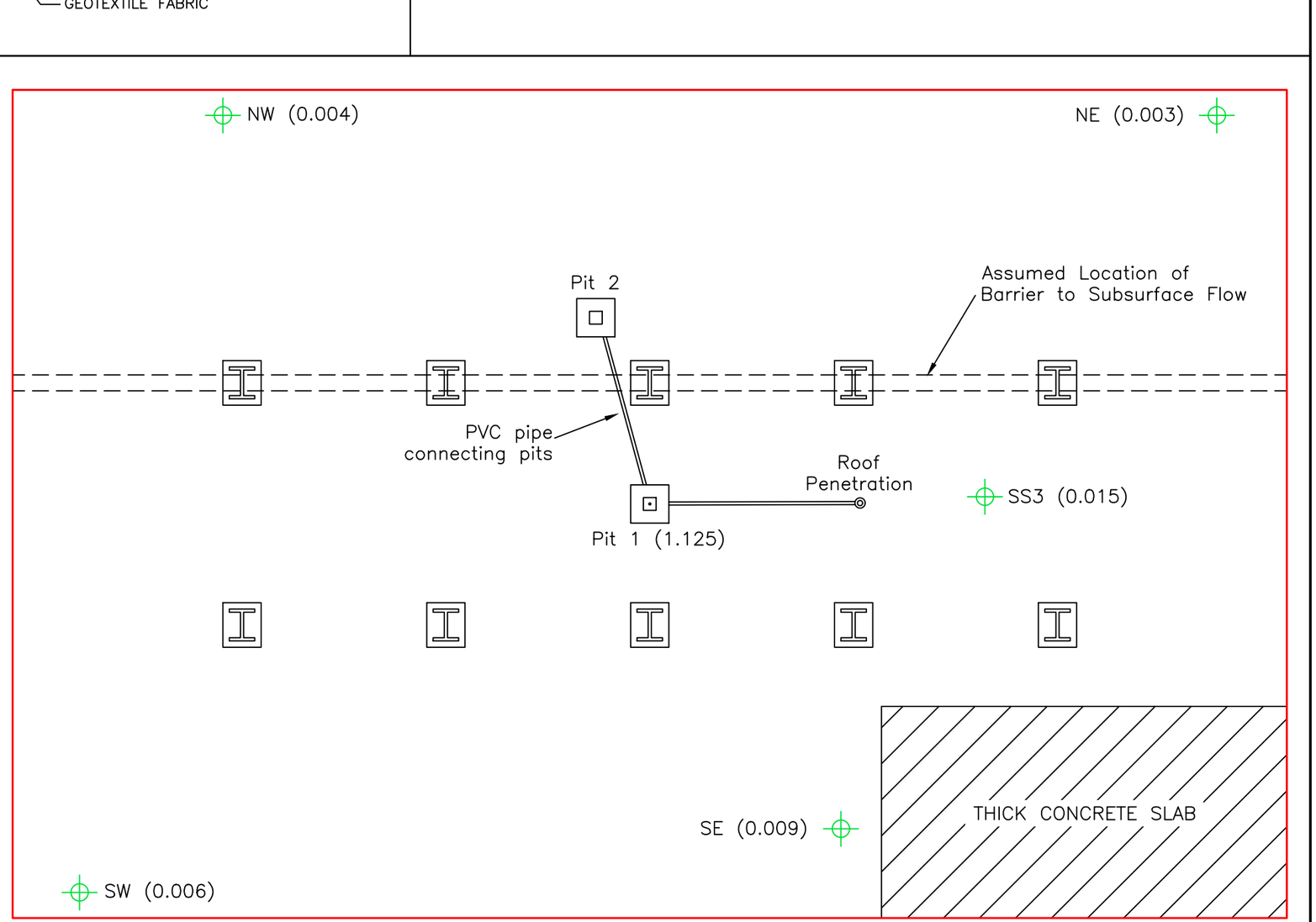
Pit Detail



Map Inset



SSDS Plan View



NOTES:

1. Fan was installed on the roof and does not exhaust within 25' of an air intake
2. Labels noting SSDS are placed on pipe and at the exhaust
3. Fan size and number of pits based on similar designs referenced by EPA documents
4. Pit detail is not to scale

0 10 20

Scale (feet)

FILE: P:\10000 - AFFCO\Figures\FER\2017\11 - SSDS As-Built.dwg DATE: 10/18/2017

Fleming Lee Shue

Environmental Management & Consulting

158 West 29th Street
New York, NY 10001

American Felt & Filter Co.
361 Walsh Avenue
New Windsor, NY

Figure 11

Piano Felt Building SSDS As-Built

October 2017

Project Number
10000-015

LEGEND

- Building Footprint
- Column
- Pressure Monitoring Point (Vacuum in inches of water)

TABLES

Table 1
Commercial Use Soil Cleanup Objectives
AFFCO, 361 Walsh Avenue, New Windsor, NY

Volatiles (SW846 8260C)

Acetone	ug/kg	500000
Benzene	ug/kg	44000
Bromochloromethane	ug/kg	-
Bromodichloromethane	ug/kg	-
Bromoform	ug/kg	-
Bromomethane	ug/kg	-
2-Butanone (MEK)	ug/kg	500000
Carbon disulfide	ug/kg	
Carbon tetrachloride	ug/kg	22000
Chlorobenzene	ug/kg	500000
Chloroethane	ug/kg	
Chloroform	ug/kg	350000
Chloromethane	ug/kg	-
Cyclohexane	ug/kg	-
1,2-Dibromo-3-chloropropane	ug/kg	-
Dibromochloromethane	ug/kg	
1,2-Dibromoethane	ug/kg	-
1,2-Dichlorobenzene	ug/kg	500000
1,3-Dichlorobenzene	ug/kg	280000
1,4-Dichlorobenzene	ug/kg	130000
Dichlorodifluoromethane	ug/kg	-
1,1-Dichloroethane	ug/kg	240000
1,2-Dichloroethane	ug/kg	30000
1,1-Dichloroethene	ug/kg	500000
cis-1,2-Dichloroethene	ug/kg	500000
trans-1,2-Dichloroethene	ug/kg	500000
1,2-Dichloropropane	ug/kg	
cis-1,3-Dichloropropene	ug/kg	-
trans-1,3-Dichloropropene	ug/kg	-
Ethylbenzene	ug/kg	390000
Freon 113	ug/kg	
2-Hexanone	ug/kg	-
Isopropylbenzene	ug/kg	
Methyl Acetate	ug/kg	-
Methylcyclohexane	ug/kg	-
Methyl Tert Butyl Ether	ug/kg	500000
4-Methyl-2-pentanone(MIBK)	ug/kg	
Methylene chloride	ug/kg	500000
Styrene	ug/kg	
1,1,2,2-Tetrachloroethane	ug/kg	
Tetrachloroethene	ug/kg	150000
Toluene	ug/kg	500000
1,2,3-Trichlorobenzene	ug/kg	
1,2,4-Trichlorobenzene	ug/kg	
1,1,1-Trichloroethane	ug/kg	500000
1,1,2-Trichloroethane	ug/kg	-
Trichloroethene	ug/kg	200000
Trichlorofluoromethane	ug/kg	-
Vinyl chloride	ug/kg	13000
m,p-Xylene	ug/kg	500000
o-Xylene	ug/kg	500000
Xylene (total)	ug/kg	500000

Semi-volatiles (SW846 8270D)

2-Chlorophenol	ug/kg	
4-Chloro-3-methyl phenol	ug/kg	-
2,4-Dichlorophenol	ug/kg	
2,4-Dimethylphenol	ug/kg	-
2,4-Dinitrophenol	ug/kg	
4,6-Dinitro-o-cresol	ug/kg	-
2-Methylphenol	ug/kg	500000
3&4-Methylphenol	ug/kg	-
2-Nitrophenol	ug/kg	
4-Nitrophenol	ug/kg	
Pentachlorophenol	ug/kg	6700
Phenol	ug/kg	500000
2,3,4,6-Tetrachlorophenol	ug/kg	-
2,4,5-Trichlorophenol	ug/kg	
2,4,6-Trichlorophenol	ug/kg	
Acenaphthene	ug/kg	500000
Acenaphthylene	ug/kg	500000
Acetophenone	ug/kg	-
Anthracene	ug/kg	500000
Atrazine	ug/kg	-
Benzo(a)anthracene	ug/kg	5600
Benzo(a)pyrene	ug/kg	1000
Benzo(b)fluoranthene	ug/kg	5600
Benzo(g,h,i)perylene	ug/kg	500000
Benzo(k)fluoranthene	ug/kg	56000
4-Bromophenyl phenyl ether	ug/kg	-
Butyl benzyl phthalate	ug/kg	
1,1'-Biphenyl	ug/kg	
Benzaldehyde	ug/kg	-
2-Chloronaphthalene	ug/kg	-
4-Chloroaniline	ug/kg	
Carbazole	ug/kg	-
Caprolactam	ug/kg	-
Chrysene	ug/kg	56000
bis(2-Chloroethoxy)methane	ug/kg	-
bis(2-Chloroethyl)ether	ug/kg	-
bis(2-Chloroisopropyl)ether	ug/kg	-
4-Chlorophenyl phenyl ether	ug/kg	-
2,4-Dinitrotoluene	ug/kg	-
2,6-Dinitrotoluene	ug/kg	
3,3'-Dichlorobenzidine	ug/kg	-
1,4-Dioxane	ug/kg	130000
Dibenzo(a,h)anthracene	ug/kg	560
Dibenzofuran	ug/kg	350000
Di-n-butyl phthalate	ug/kg	
Di-n-octyl phthalate	ug/kg	
Diethyl phthalate	ug/kg	
Dimethyl phthalate	ug/kg	
bis(2-Ethylhexyl)phthalate	ug/kg	
Fluoranthene	ug/kg	500000
Fluorene	ug/kg	500000
Hexachlorobenzene	ug/kg	6000
Hexachlorobutadiene	ug/kg	-
Hexachlorocyclopentadiene	ug/kg	
Hexachloroethane	ug/kg	-
Indeno(1,2,3-cd)pyrene	ug/kg	5600
Isophorone	ug/kg	
2-Methylnaphthalene	ug/kg	
2-Nitroaniline	ug/kg	
3-Nitroaniline	ug/kg	
4-Nitroaniline	ug/kg	-
Naphthalene	ug/kg	500000
Nitrobenzene	ug/kg	69000
N-Nitroso-di-n-propylamine	ug/kg	-
N-Nitrosodiphenylamine	ug/kg	
Phenanthrene	ug/kg	500000
Pyrene	ug/kg	500000
1,2,4,5-Tetrachlorobenzene	ug/kg	-

PCBs and Pesticides (SW846 8081B)

Aldrin	ug/kg	680
alpha-BHC	ug/kg	3400
beta-BHC	ug/kg	3000
delta-BHC	ug/kg	500000
gamma-BHC (Lindane)	ug/kg	9200
alpha-Chlordane	ug/kg	24000
gamma-Chlordane	ug/kg	
Dieldrin	ug/kg	1400
4,4'-DDD	ug/kg	92000
4,4'-DDE	ug/kg	62000
4,4'-DDT	ug/kg	47000
Endrin	ug/kg	89000
Endosulfan sulfate	ug/kg	200000
Endrin aldehyde	ug/kg	-
Endosulfan-I	ug/kg	200000
Endosulfan-II	ug/kg	200000
Heptachlor	ug/kg	15000
Heptachlor epoxide	ug/kg	
Methoxychlor	ug/kg	
Endrin ketone	ug/kg	-
Toxaphene	ug/kg	-

Metals

Aluminum	mg/kg	
Antimony	mg/kg	
Arsenic	mg/kg	16
Barium	mg/kg	400
Beryllium	mg/kg	590
Cadmium	mg/kg	9.3
Calcium	mg/kg	
Chromium	mg/kg	-
Cobalt	mg/kg	
Copper	mg/kg	270
Iron	mg/kg	
Lead	mg/kg	1000
Magnesium	mg/kg	-
Manganese	mg/kg	10000
Mercury	mg/kg	2.8
Nickel	mg/kg	310
Potassium	mg/kg	-
Selenium	mg/kg	1500
Silver	mg/kg	1500
Sodium	mg/kg	-
Thallium	mg/kg	
Vanadium	mg/kg	
Zinc	mg/kg	10000

Notes

The SCOs for unrestricted use were capped at a maximum value of 100 ppm. See Technical Support Document (TSD), section 9.3.

For constituents where the calculated SCO was lower than the contract required quantitation limit (CRQL), the CRQL is used as the Track 1 SCO value.

For constituents where the calculated SCO was lower than the rural soil background concentration, as determined by the Department and Department of Health rural soil survey, the rural soil background concentration is used as the Track 1 SCO value for this use of the site.

Protection of ecological resources SCOs were not developed for contaminants identified in Table 375-6.8(b) with "NS". Where such contaminants appear in Table 375-6.8(a), the applicant may be required by the Department to calculate a protection of ecological resources SCO according to the TSD.

Endosulfan SCO is the sum of endosulfan I, endosulfan II and endosulfan sulfate..

The SCO is the lower of the values for mercury (elemental) or mercury (inorganic salts). See TSD Table 5.6-1.

Table 2A
End-point Post-excavation Soil sample Analytical Results
Summary of Volatile Organic Compounds

Client ID Lab Sample ID Date Sampled	NY Unrestricted Use Soil Cleanup Objectives	NY Commercial Use Soil Cleanup Objectives	BENCH01 JB15155-3 8/30/2012		C1SP01 JB15405-8 9/4/2012		C2SP01 JB15405-11 9/4/2012		C2SP02 JB15405-12 9/4/2012		C3SP01 JB15405-9 9/4/2012		C3SP02 JB15405-10 9/4/2012		C4SP01 JB14890-9 8/28/2012		C5SP01 JB14890-7 8/28/2012		C5SP02 JB14890-8 8/28/2012		PX01-SW-5 JB14890-1 8/28/2012		PX02-SW-5 JB14890-2 8/28/2012		PX03-BT-10 JB14890-3 8/28/2012	
			Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
GC/MS Volatiles (µg/kg)																										
Acetone	500000	500000	<1.9		<2.0		<1.8		<1.8		<2.0		<1.8		<2.3		14.7		13.3		<2.3		5.9	J	20.6	
Benzene	44000	44000	<0.14		<0.14		<0.13		<0.13		<0.14		<0.12		1.0	J	<0.17		<0.15		0.76	J	<0.15		<0.14	
Bromodichloromethane	NS	NS	<0.12		<0.13		<0.11		<0.11		<0.13		<0.11		<0.14		<0.15		<0.13		<0.14		<0.13		<0.12	
Bromoform	NS	NS	<0.17		<0.18		<0.16		<0.16		<0.18		<0.16		<0.20		<0.21		<0.19		<0.21		<0.19		<0.18	
Bromomethane	NS	NS	<0.31		<0.33		<0.29		<0.30		<0.33		<0.29		<0.36		<0.38		<0.34		<0.37		<0.35		<0.32	
2-Butanone (MEK)	500000	500000	<2.7		<2.9		<2.6		<2.6		<2.9		<2.5		<3.2		<3.4		<3.0		<3.3		<3.0		12.9	
Carbon disulfide	NS	NS	<0.13		<0.14		<0.13		<0.13		<0.14		<0.12		<0.16		<0.16		1.2	J	<0.16		<0.15		1.5	J
Carbon tetrachloride	22000	22000	<0.15		<0.16		<0.14		<0.14		<0.16		<0.14		<0.18		<0.19		<0.17		<0.18		<0.17		<0.15	
Chlorobenzene	500000	500000	<0.12		<0.13		<0.12		<0.12		<0.13		<0.11		<0.14		<0.15		<0.14		<0.15		<0.14		<0.13	
Chloroethane	NS	NS	<0.26		<0.27		<0.24		<0.25		<0.27		<0.24		<0.30		<0.32		<0.28		<0.31		<0.29		1.9	J
Chloroform	350000	350000	<0.094		<0.099		<0.088		<0.089		<0.099		<0.087		<0.11		0.73	J	0.79	J	<0.11		<0.11		0.56	J
Chloromethane	NS	NS	<0.21		<0.22		<0.20		<0.20		<0.22		<0.20		<0.25		<0.26		<0.23		<0.25		<0.24		<0.22	
Dibromochloromethane	NS	NS	<0.19		<0.20		<0.18		<0.18		<0.20		<0.17		<0.22		<0.23		<0.21		<0.22		<0.21		<0.19	
1,1-Dichloroethane	240000	240000	1.2	J	7.2		1.0	J	1.9	J	13.0		3.0	J	<0.18		3.1	J	214		<0.19		<0.17		1940	
1,2-Dichloroethane	30000	30000	<0.15		0.65	J	0.78	J	1.7		1.2		0.76	J	<0.18		<0.19		2.9		<0.18		<0.17		13.8	
1,1-Dichloroethene	500000	500000	1.6	J	2.0	J	0.43	J	0.90	J	5.8	J	1.5	J	<0.34		2.5	J	2750		<0.35		<0.33		568	
cis-1,2-Dichloroethene	500000	500000	0.92	J	0.61	J	0.37	J	1.1	J	0.54	J	0.41	J	<0.24		<0.26		1.2	J	<0.25		<0.23		1.5	J
trans-1,2-Dichloroethene	500000	500000	0.61	J	0.50	J	<0.25		0.70	J	0.41	J	0.38	J	<0.32		<0.33		2.2	J	<0.32		<0.30		<0.28	
1,2-Dichloroethene (total)	NS	NS	1.5	J	1.1	J	0.37	J	1.8	J	0.95	J	0.79	J	<0.24		<0.26		3.4	J	<0.25		<0.23		1.5	J
1,2-Dichloropropane	NS	NS	<0.17		<0.18		<0.16		<0.17		<0.19		<0.16		<0.21		<0.22		<0.19		<0.21		<0.20		<0.18	
cis-1,3-Dichloropropene	NS	NS	<0.16		<0.17		<0.15		<0.15		<0.17		<0.15		<0.19		<0.20		<0.17		<0.19		<0.18		<0.16	
trans-1,3-Dichloropropene	NS	NS	<0.18		<0.19		<0.17		<0.17		<0.19		<0.16		<0.21		<0.22		<0.19		<0.21		<0.20		<0.18	
Ethylbenzene	390000	390000	<0.30		<0.32		<0.28		<0.28		<0.32		<0.28		<0.35		<0.37		<0.33		<0.36		<0.34		<0.31	
2-Hexanone	NS	NS	<0.71		<0.75		<0.66		<0.67		<0.75		<0.65		<0.83		<0.87		<0.78		<0.85		<0.79		<0.72	
Methyl Tert Butyl Ether	500000	500000	<0.27		<0.28		<0.25		<0.25		<0.28		<0.25		<0.31		<0.33		<0.29		<0.32		<0.30		<0.27	
4-Methyl-2-pentanone(MIBK)	NS	NS	<0.85		<0.90		<0.80		<0.81		<0.90		<0.79		<1.0		<1.1		<0.94		<1.0		<0.96		<0.87	
Methylene chloride	500000	500000	<1.4		<1.5		<1.4		<1.4		<1.5		<1.3		<1.7		<1.8		<1.6		<1.7		<1.6		<1.5	
Styrene	NS	NS	<0.10		<0.11		<0.098		<0.099		<0.11		<0.096		<0.12		<0.13		<0.11		<0.13		<0.12		<0.11	
1,1,2,2-Tetrachloroethane	NS	NS	<0.15		<0.16		<0.14		<0.14		<0.16		<0.14		<0.18		<0.19		<0.17		<0.18		<0.17		<0.15	
Tetrachloroethene	150000	150000	0.62	J	1.1	J	<0.18		0.33	J	1.6	J	<0.18		<0.23		<0.24		1.1	J	<0.23		<0.22		0.68	J
Toluene	500000	500000	1.1		1.3		<0.11		<0.11		2.8		0.27	J	0.43	J	<0.15		1.2	J	0.33	J	<0.13		17.1	
1,1,1-Trichloroethane	680	500000	47.9		513		51.7		59.9		41900		166		1.6	J	2580		29800		<0.14		6.1	J	4980	
1,1,2-Trichloroethane	NS	NS	1.6	J	3.5	J	1.4	J	2.5	J	5.2	J	0.97	J	<0.23		<0.24		<0.22		<0.24		<0.22		0.64	J
Trichloroethene	200000	200000	0.93	J	5.0	J	1.6	J	6.9		5.7	J	1.9	J	3.6	J	<0.24		1.7	J	<0.24		<0.22		2.2	J
Vinyl chloride	13000	13000	<0.16		<0.17		<0.15		<0.16		<0.17		<0.15		<0.19		<0.20		1.8	J	<0.20		<0.18		9.7	
Xylene (total)	500000	500000	<0.16		<0.17		<0.15		<0.15		<0.17		<0.15		<0.19		<0.20		<0.17		<0.19		<0.18		<0.16	
Total Confident Conc.			57.98		535.96		57.65		77.73		41937.2		175.98		6.63		2601.03		32794.79		1.09		12		7572.58	

Notes:
Exceedances in Unrestricted Use SCOs highlighted in blue
NS - no standard
J - estimated concentration

Table 2A
End-point Post-excavation Soil sample Analytical Results
Summary of Volatile Organic Compounds

Client ID Lab Sample ID Date Sampled	NY Unrestricted Use Soil Cleanup Objectives	NY Commercial Use Soil Cleanup Objectives	PX04-SW-5 JB14890-4 8/28/2012 Result Q	PX05-SW-6 JB14890-5 8/28/2012 Result Q	PX06-BT-10 JB14890-6 8/28/2012 Result Q	PX07BT-10 JB15155-1 8/30/2012 Result Q	PX08SW-7 JB15155-2 8/30/2012 Result Q	PX09SW-3 JB15405-1 9/4/2012 Result Q	PX10SW-5 JB15405-2 9/4/2012 Result Q	PX11BT-10 JB15405-3 9/4/2012 Result Q	PX12SW-7 JB15405-4 9/4/2012 Result Q	PX14SW-6 JB15405-6 9/4/2012 Result Q	PX15BT-10 JB15405-7 9/4/2012 Result Q
GC/MS Volatiles (µg/kg)													
Acetone	500000	500000	<2.3	<2.2	4.0 J	27.5	<2.0	<2.2	<2.2	<2.0	<2.1	<1.9	13.6
Benzene	44000	44000	0.77 J	1.3	0.86 J	<0.15	9.9	2.6	2.7	<0.14	2.6 J	<0.13	<0.15
Bromodichloromethane	NS	NS	<0.14	<0.13	<0.13	<0.13	<0.13	<0.14	<0.14	<0.12	<0.13	<0.12	<0.13
Bromoform	NS	NS	<0.20	<0.19	<0.19	<0.19	<0.18	<0.20	<0.20	<0.18	<0.19	<0.17	<0.19
Bromomethane	NS	NS	<0.36	<0.35	<0.34	<0.35	<0.33	<0.36	<0.36	<0.32	<0.34	<0.30	<0.35
2-Butanone (MEK)	500000	500000	<3.2	<3.1	<3.0	<3.0	<2.9	<3.1	<3.2	<2.8	<3.0	<2.7	<3.1
Carbon disulfide	NS	NS	<0.16	<0.15	<0.14	<0.15	<0.14	<0.15	<0.16	<0.14	<0.15	<0.13	<0.15
Carbon tetrachloride	22000	22000	<0.18	<0.17	<0.16	<0.17	<0.16	<0.17	<0.18	<0.15	<0.17	<0.15	<0.17
Chlorobenzene	500000	500000	<0.14	<0.14	<0.13	<0.14	<0.13	<0.14	<0.14	<0.13	<0.13	<0.12	<0.14
Chloroethane	NS	NS	<0.30	<0.29	<0.28	136	<0.27	<0.30	<0.30	<0.26	<0.28	<0.25	<0.29
Chloroform	350000	350000	<0.11	<0.11	<0.10	0.49 J	<0.10	<0.11	<0.11	<0.096	<0.10	<0.092	1.0 J
Chloromethane	NS	NS	<0.25	<0.24	<0.23	<0.24	<0.22	<0.24	<0.25	<0.22	<0.23	<0.21	<0.24
Dibromochloromethane	NS	NS	<0.22	<0.21	<0.20	<0.21	<0.20	<0.22	<0.22	<0.19	<0.20	<0.18	<0.21
1,1-Dichloroethane	240000	240000	<0.18	<0.18	<0.17	816	1.1 J	<0.18	1.8 J	<0.16	<0.17	0.87 J	8.3
1,2-Dichloroethane	30000	30000	<0.18	<0.17	<0.17	7.4	0.50 J	<0.18	<0.18	<0.16	<0.17	<0.15	0.60 J
1,1-Dichloroethene	500000	500000	1.0 J	<0.33	<0.32	34.5	<0.31	<0.34	<0.34	<0.30	<0.32	0.63 J	4.2 J
cis-1,2-Dichloroethene	500000	500000	<0.24	<0.24	<0.23	10.2	1.1 J	<0.24	<0.24	<0.21	<0.23	2.4 J	0.85 J
trans-1,2-Dichloroethene	500000	500000	<0.32	<0.31	<0.29	3.2 J	0.58 J	<0.31	<0.32	<0.28	<0.30	2.1 J	0.58 J
1,2-Dichloroethene (total)	NS	NS	<0.24	<0.24	<0.23	13.4	1.6 J	<0.24	<0.24	<0.21	<0.23	4.4 J	1.4 J
1,2-Dichloropropane	NS	NS	<0.21	<0.20	<0.19	<0.20	<0.19	<0.20	<0.20	<0.18	<0.19	<0.17	<0.20
cis-1,3-Dichloropropene	NS	NS	<0.19	<0.18	<0.17	<0.18	<0.17	<0.18	<0.18	<0.16	<0.17	<0.15	<0.18
trans-1,3-Dichloropropene	NS	NS	<0.21	<0.20	<0.19	<0.20	<0.19	<0.20	<0.21	<0.18	<0.19	<0.17	<0.20
Ethylbenzene	390000	390000	<0.35	<0.34	<0.33	<0.33	0.73 J	<0.35	<0.35	<0.31	<0.33	<0.29	<0.34
2-Hexanone	NS	NS	<0.83	<0.80	<0.77	<0.79	<0.75	<0.82	<0.83	<0.72	<0.78	<0.69	<0.80
Methyl Tert Butyl Ether	500000	500000	<0.31	<0.30	<0.29	<0.30	<0.28	<0.31	<0.31	<0.27	<0.29	<0.26	<0.30
4-Methyl-2-pentanone(MIBK)	NS	NS	<1.0	<0.96	<0.93	<0.96	<0.91	<0.99	<1.0	<0.87	<0.94	<0.83	<0.96
Methylene chloride	500000	500000	<1.7	<1.6	<1.6	<1.6	<1.5	<1.7	<1.7	<1.5	<1.6	<1.4	<1.6
Styrene	NS	NS	<0.12	<0.12	<0.11	<0.12	<0.11	<0.12	<0.12	<0.11	<0.11	<0.10	<0.12
1,1,2,2-Tetrachloroethane	NS	NS	<0.18	<0.17	<0.16	<0.17	<0.16	<0.17	<0.18	<0.15	<0.16	<0.15	<0.17
Tetrachloroethene	150000	150000	<0.23	<0.22	<0.21	1.6 J	0.44 J	<0.23	0.54 J	<0.20	<0.21	0.59 J	0.79 J
Toluene	500000	500000	0.35 J	0.53 J	<0.13	2.7	4.1	1.1 J	1.3	<0.12	1.1 J	<0.12	0.58 J
1,1,1-Trichloroethane	680	500000	0.49 J	3.2 J	0.52 J	519	38.4	68.5	67.1	10.9	5.1	29.3	149
1,1,2-Trichloroethane	NS	NS	<0.23	<0.22	<0.22	3.8 J	4.6 J	<0.23	<0.23	0.83 J	<0.22	5.9	1.5 J
Trichloroethene	200000	200000	<0.23	4.5 J	<0.22	20.5	2.4 J	2.0 J	1.5 J	2.2 J	2.5	4.0 J	4.7 J
Vinyl chloride	13000	13000	<0.19	<0.18	<0.18	2.0 J	<0.17	<0.19	<0.19	<0.17	<0.18	<0.16	<0.18
Xylene (total)	500000	500000	<0.19	<0.18	<0.17	<0.18	1.7	<0.18	<0.18	<0.16	<0.17	<0.15	<0.18
Total Confident Conc.			2.61	9.53	5.38	1598.29	67.15	74.2	74.94	13.93	11.3	50.19	187.1

Notes:
Exceedances in Unrestricted Use SCOs highlighted in blue
NS - no standard
J - estimated concentration

Table 2B
End-point Post-treatment Soil sample Analytical Results
Summary of Volatile Organic Compounds

Client ID Lab Sample ID Date Sampled	NY Unrestricted Use Soil Cleanup Objectives	NY Commercial Use Soil Cleanup Objectives	1.1 (12.5-13) JB32749-4 3/27/2013 Result Q	1.1 (13-13.5) JB32749-5 3/27/2013 Result Q	1.1 (14.5-15) JB32749-6 3/27/2013 Result Q	1.2 (11-11.5) JB32749-8 3/27/2013 Result Q	1.2 (13-13.5) JB32749-7 3/27/2013 Result Q	1.2 (14-14.5) JB32749-9 3/27/2013 Result Q	2.1 (10-10.5) JB32749-12 3/27/2013 Result Q	2.1 (11.5-12) JB32749-11 3/27/2013 Result Q	2.1 (12.5-13) JB32749-10 3/27/2013 Result Q	2.2 (11-11.5) JB32749-14 3/27/2013 Result Q	2.2 (12.5-13) JB32749-13 3/27/2013 Result Q
GC/MS Volatiles (µg/kg)													
Acetone	500000	500000	<140	10.9 J	<2.2	30.1	27.2	<350	22.6	62.4	<130	<3800	<140
Benzene	44000	44000	<9.9	<0.14	<0.15	<0.17	<0.17	<25	<0.23	0.66 J	<9.1	<270	<10
Bromodichloromethane	NS	NS	<8.7	<0.12	<0.14	<0.15	<0.15	<22	<0.20	<0.17	<8.1	<230	<8.9
Bromoform	NS	NS	<13	<0.17	<0.20	<0.22	<0.21	<31	<0.29	<0.25	<12	<340	<13
Bromomethane	NS	NS	<23	<0.31	<0.36	<0.40	<0.38	<56	<0.52	<0.45	<21	<610	<23
2-Butanone (MEK)	500000	500000	<200	<2.8	<3.1	21.8	29.0	<490	<4.5	47.9	893	<5300	<200
Carbon disulfide	NS	NS	<9.7	1.8 J	2.2 J	1.5 J	1.1 J	<24	1.9 J	3.4 J	48.1 J	<260	<10
Carbon tetrachloride	22000	22000	<11	<0.15	<0.17	<0.19	<0.19	<27	<0.25	<0.22	<10	<300	<11
Chlorobenzene	500000	500000	<9.0	<0.12	<0.14	<0.16	<0.15	<22	<0.21	<0.18	<8.3	<240	<9.2
Chloroethane	NS	NS	<19	25.4	54.7	659 J	480 J	2960	14.5	5230	3530	<510	<19
Chloroform	350000	350000	<6.9	<0.095	<0.11	<0.12	<0.12	<17	5.6 J	<0.14	<6.3	<180	<7.0
Chloromethane	NS	NS	<15	<0.21	<0.24	<0.27	<0.26	<38	<0.35	<0.31	<14	<410	<16
Dibromochloromethane	NS	NS	<14	<0.19	<0.21	<0.24	<0.23	<34	<0.31	<0.27	<13	<370	<14
1,1-Dichloroethane	240000	240000	1080	183	79.4	6220	3950	34000	121	11100	34900	6040 J	3660
1,2-Dichloroethane	30000	30000	232	1.0 J	<0.18	11.9	14.2	786	20.7	27.7	1590	<300	179
1,1-Dichloroethene	500000	500000	1140	32.0	15.3	85.3	41.7	1620	42.7	70.5	2150	14000	2310
cis-1,2-Dichloroethene	500000	500000	83.2 J	<0.21	<0.24	0.63 J	0.77 J	<38	7.9 J	10.1	374 J	<410	31.6 J
trans-1,2-Dichloroethene	500000	500000	101 J	<0.27	1.3 J	<0.35	0.47 J	<49	6.5 J	6.1 J	294 J	<530	<20
1,2-Dichloroethene (total)	NS	NS	184 J	<0.21	1.3 J	0.63 J	1.2 J	<38	14.3	16.1	668	<410	31.6 J
1,2-Dichloropropane	NS	NS	<13	<0.18	<0.20	<0.22	<0.22	<32	<0.29	<0.25	<12	<340	<13
cis-1,3-Dichloropropene	NS	NS	<12	<0.16	<0.18	<0.20	<0.19	<29	<0.26	<0.23	<11	<310	<12
trans-1,3-Dichloropropene	NS	NS	<13	<0.18	<0.20	<0.23	<0.22	<32	<0.29	<0.26	<12	<350	<13
Ethylbenzene	390000	390000	<22	<0.30	<0.34	0.80 J	<0.37	<54	2.0	<0.44	<20	<590	<22
2-Hexanone	NS	NS	<52	<0.72	<0.81	<0.90	<0.87	<130	<1.2	<1.0	<48	<1400	<53
Methyl Tert Butyl Ether	500000	500000	<20	<0.27	<0.31	<0.34	<0.33	<48	<0.45	<0.39	<18	<520	<20
4-Methyl-2-pentanone(MIBK)	NS	NS	<62	<0.86	<0.98	<1.1	<1.1	<150	<1.4	<1.2	<58	<1700	<64
Methylene chloride	500000	500000	<110	4.4 J	2.1 J	5.2 J	2.8 J	<260	6.5 J	4.5 J	<97	<2800	<110
Styrene	NS	NS	<7.6	<0.11	<0.12	<0.13	<0.13	<19	<0.17	<0.15	<7.0	<200	<7.8
1,1,2,2-Tetrachloroethane	NS	NS	<11	<0.15	<0.17	<0.19	<0.18	<27	<0.25	<0.22	<10	<290	<11
Tetrachloroethene	150000	150000	37.9 J	<0.20	<0.22	<0.25	<0.24	<35	2.3 J	2.3 J	288 J	<380	58.5 J
Toluene	500000	500000	109	0.43 J	1.0 J	2.3	5.7	184 J	4.6	5.6	2280	1600 J	284
1,1,1-Trichloroethane	680	500000	18700	2860	144	1560	2130	4690	12600	179	42300	398000	70700
1,1,2-Trichloroethane	NS	NS	<14	<0.20	<0.23	0.57 J	0.84 J	<36	3.0 J	3.0 J	39.1 J	<390	<15
Trichloroethene	200000	200000	1130	0.81 J	0.90 J	1.6 J	0.89 J	<36	32.1	19.5	1180	2040 J	337 J
Vinyl chloride	13000	13000	<12	<0.17	0.77 J	7.9	10.9	<30	<0.27	12.9	<11	<320	<12
Xylene (total)	500000	500000	<12	<0.16	<0.18	0.65 J	<0.19	<29	8.4	<0.23	83.5	<310	<12
Total Confident Conc.			22797.1	3119.74	302.97	8609.88	6696.77	44240	12916.6	16801.66	90617.7	421680	77591.7

Notes:
Exceedances in Unrestricted Use SCOs highlighted in blue
NS - no standard
J - estimated concentration

Table 2B
End-point Post-treatment Soil sample Analytical Results
Summary of Volatile Organic Compounds

Client ID Lab Sample ID Date Sampled	NY Unrestricted Use Soil Cleanup Objectives	NY Commercial Use Soil Cleanup Objectives	2.2 (14-14.5) JB32749-15 3/27/2013 Result Q	3 (12.5-13) JB32749-18 3/27/2013 Result Q	3 (13.5-14) JB32749-16 3/27/2013 Result Q	3 (14.5-15) JB32749-17 3/27/2013 Result Q	4 (10-10.5) JB32749-20 3/27/2013 Result Q	4 (11-11.5) JB32749-19 3/27/2013 Result Q	4 (14.5-15) JB32749-21 3/27/2013 Result Q	5 (13.5-14) JB32749-22 3/27/2013 Result Q	5 (14-14.5) JB32749-23 3/27/2013 Result Q	5 (14.5-15) JB32749-24 3/27/2013 Result Q	6 (11.5-12) JB32749-25 3/27/2013 Result Q	6 (12.5-13) JB32749-26 3/27/2013 Result Q
GC/MS Volatiles (µg/kg)														
Acetone	500000	500000	82.2	<200	<190	<130	13.0 J	10.9	14.6	4.6 J	19.2	37.1	<2.2	4.9 J
Benzene	44000	44000	<0.097	<14	<13	<8.8	<0.23	<0.10	<0.15	<0.14	<0.11	<0.12	<0.16	<0.12
Bromodichloromethane	NS	NS	<0.086	<13	<12	<7.8	<0.20	<0.088	<0.13	<0.12	<0.10	<0.11	<0.14	<0.11
Bromoform	NS	NS	<0.12	<18	<17	<11	<0.29	<0.13	<0.19	<0.18	<0.15	<0.16	<0.20	<0.15
Bromomethane	NS	NS	<0.22	<33	<30	<20	<0.52	<0.23	<0.35	<0.32	<0.26	<0.29	<0.36	<0.28
2-Butanone (MEK)	500000	500000	129	<290	<270	<180	<4.6	<2.0	40.1	<2.8	<2.3	<2.5	<3.1	<2.4
Carbon disulfide	NS	NS	1.9 J	<14	<13	<8.7	1.3 J	1.1 J	<0.15	<0.14	0.65 J	<0.12	<0.15	<0.12
Carbon tetrachloride	22000	22000	<0.11	<16	<15	<9.9	<0.25	<0.11	<0.17	<0.16	<0.13	<0.14	<0.17	<0.14
Chlorobenzene	500000	500000	<0.088	<13	<12	<8.0	<0.21	<0.090	<0.14	<0.13	<0.10	<0.11	<0.14	<0.11
Chloroethane	NS	NS	46.2	94.4 J	143 J	953	<0.43	3.4 J	1190	<0.27	0.91 J	1.3 J	<0.30	<0.23
Chloroform	350000	350000	<0.067	<10	<9.2	<6.1	0.50 J	<0.069	<0.10	<0.097	<0.079	<0.086	<0.11	<0.084
Chloromethane	NS	NS	<0.15	<23	<21	<14	<0.36	<0.16	<0.24	<0.22	<0.18	<0.19	<0.24	<0.19
Dibromochloromethane	NS	NS	<0.13	<20	<18	<12	<0.31	<0.14	<0.21	<0.19	<0.16	<0.17	<0.21	<0.17
1,1-Dichloroethane	240000	240000	12100	410 J	459 J	5820	9.6	2000	6470	15.0	42.9	54.3	<0.18	2.0 J
1,2-Dichloroethane	30000	30000	34.0	134	<15	165	2.3	4.4	<0.17	1.2	<0.13	<0.14	<0.18	2.8
1,1-Dichloroethene	500000	500000	72.4	659	293 J	423	31.4	1650	0.43 J	9.3	21.4	30.8	<0.34	6.1
cis-1,2-Dichloroethene	500000	500000	3.7 J	104 J	<20	44.6 J	1.0 J	2.6 J	<0.23	0.36 J	<0.18	0.33 J	<0.24	1.2 J
trans-1,2-Dichloroethene	500000	500000	0.86 J	108 J	<27	81.2 J	0.67 J	0.43 J	<0.30	<0.28	<0.23	<0.25	<0.31	1.2 J
1,2-Dichloroethene (total)	NS	NS	4.6	212 J	<20	126 J	1.7 J	3.0 J	<0.23	0.36 J	<0.18	0.33 J	<0.24	2.4 J
1,2-Dichloropropane	NS	NS	<0.13	<19	<17	<11	<0.29	<0.13	<0.20	<0.18	<0.15	<0.16	<0.20	<0.16
cis-1,3-Dichloropropene	NS	NS	<0.11	<17	<16	<10	<0.27	<0.12	<0.18	<0.16	<0.13	<0.15	<0.18	<0.14
trans-1,3-Dichloropropene	NS	NS	<0.13	<19	<17	<11	<0.30	<0.13	<0.20	<0.18	<0.15	<0.16	<0.20	<0.16
Ethylbenzene	390000	390000	<0.21	<32	<29	<20	<0.50	<0.22	<0.33	<0.31	<0.25	<0.28	<0.34	<0.27
2-Hexanone	NS	NS	<0.51	<75	<69	<46	<1.2	<0.52	<0.79	<0.73	<0.60	<0.65	<0.81	<0.64
Methyl Tert Butyl Ether	500000	500000	<0.19	<28	<26	<17	<0.45	<0.20	<0.30	<0.28	<0.23	<0.25	<0.31	<0.24
4-Methyl-2-pentanone(MIBK)	NS	NS	<0.61	<91	<84	<56	<1.4	<0.63	<0.95	<0.89	<0.72	<0.79	<0.98	<0.77
Methylene chloride	500000	500000	2.8 J	<150	<140	<94	15.1	4.0 J	12.4	2.7 J	<1.2	1.6 J	2.9 J	4.1 J
Styrene	NS	NS	<0.075	<11	<10	<6.8	<0.18	<0.077	<0.12	<0.11	<0.088	<0.096	<0.12	<0.094
1,1,2,2-Tetrachloroethane	NS	NS	<0.11	<16	<15	<9.8	<0.25	<0.11	<0.17	<0.16	<0.13	<0.14	<0.17	<0.13
Tetrachloroethene	150000	150000	<0.14	<21	<19	<13	0.99 J	<0.14	<0.22	<0.20	<0.17	<0.18	<0.23	<0.18
Toluene	500000	500000	1.4	<13	36.2 J	462	<0.20	<0.088	<0.13	<0.12	<0.10	<0.11	<0.14	<0.11
1,1,1-Trichloroethane	680	500000	617 J	1270	1500	2320	89.0	88.1	3.9 J	3480	1220	2090	2.9 J	41.5
1,1,2-Trichloroethane	NS	NS	1.6 J	<21	<19	<13	<0.33	<0.15	<0.22	0.44 J	<0.17	<0.18	<0.23	<0.18
Trichloroethene	200000	200000	0.39 J	279 J	175 J	55.3 J	3.5 J	0.45 J	<0.22	2.0 J	<0.17	<0.18	<0.23	5.0 J
Vinyl chloride	13000	13000	3.4 J	<17	<16	<11	<0.28	1.8 J	2.4 J	<0.17	1.3 J	1.2 J	<0.19	<0.15
Xylene (total)	500000	500000	<0.11	<17	<16	<10	<0.27	<0.12	<0.18	<0.16	<0.13	<0.15	<0.18	<0.14
Total Confident Conc.			13101.45	3270.4	2606.2	10450.1	170.06	3770.18	7733.83	3515.96	1306.36	2216.96	5.8	71.2

Notes:
Exceedances in Unrestricted Use SCOs highlighted in blue
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Table 2B
End-point Post-treatment Soil sample Analytical Results
Summary of Volatile Organic Compounds

Client ID Lab Sample ID Date Sampled	NY Unrestricted Use Soil Cleanup Objectives	NY Commercial Use Soil Cleanup Objectives	6 (14.5-15) JB32749-27 3/27/2013 Result	Q	FD-1 6(11.5-12) JB32749-28 3/27/2013 Result	Q	FD-2 6(14.5-15) JB32749-29 3/27/2013 Result	Q
GC/MS Volatiles (µg/kg)								
Acetone	500000	500000	<2.0		<1.8		<1.2	
Benzene	44000	44000	<0.14		<0.13		<0.085	
Bromodichloromethane	NS	NS	<0.12		<0.11		<0.075	
Bromoform	NS	NS	<0.18		<0.16		<0.11	
Bromomethane	NS	NS	<0.32		<0.29		<0.20	
2-Butanone (MEK)	500000	500000	<2.8		<2.6		<1.7	
Carbon disulfide	NS	NS	<0.14		<0.13		<0.084	
Carbon tetrachloride	22000	22000	<0.16		<0.14		<0.095	
Chlorobenzene	500000	500000	<0.13		<0.12		<0.078	
Chloroethane	NS	NS	<0.27		<0.24		<0.16	
Chloroform	350000	350000	<0.097		<0.089		<0.059	
Chloromethane	NS	NS	<0.22		<0.20		<0.13	
Dibromochloromethane	NS	NS	<0.19		<0.18		<0.12	
1,1-Dichloroethane	240000	240000	3.5	J	<0.15		0.71	J
1,2-Dichloroethane	30000	30000	<0.16		<0.15		<0.097	
1,1-Dichloroethene	500000	500000	<0.30		<0.28		<0.18	
cis-1,2-Dichloroethene	500000	500000	<0.21		<0.20		<0.13	
trans-1,2-Dichloroethene	500000	500000	<0.28		<0.26		<0.17	
1,2-Dichloroethene (total)	NS	NS	<0.21		<0.20		<0.13	
1,2-Dichloropropane	NS	NS	<0.18		<0.17		<0.11	
cis-1,3-Dichloropropene	NS	NS	<0.16		<0.15		<0.10	
trans-1,3-Dichloropropene	NS	NS	<0.18		<0.17		<0.11	
Ethylbenzene	390000	390000	<0.31		<0.28		<0.19	
2-Hexanone	NS	NS	<0.73		<0.67		<0.45	
Methyl Tert Butyl Ether	500000	500000	<0.28		<0.25		<0.17	
4-Methyl-2-pentanone(MIBK)	NS	NS	<0.88		<0.81		<0.54	
Methylene chloride	500000	500000	<1.5		3.2	J	<0.91	
Styrene	NS	NS	<0.11		<0.099		<0.066	
1,1,2,2-Tetrachloroethane	NS	NS	<0.15		<0.14		<0.095	
Tetrachloroethene	150000	150000	<0.20		<0.18		<0.12	
Toluene	500000	500000	<0.12		<0.11		<0.075	
1,1,1-Trichloroethane	680	500000	0.93	J	3.6	J	3.6	
1,1,2-Trichloroethane	NS	NS	<0.20		<0.19		<0.12	
Trichloroethene	200000	200000	<0.20		0.89	J	<0.12	
Vinyl chloride	13000	13000	<0.17		<0.15		<0.10	
Xylene (total)	500000	500000	<0.16		<0.15		<0.10	
Total Confident Conc.			4.43		7.69		4.31	

Notes:
Exceedances in Unrestricted Use SCOs highlighted in blue
NS - no standard
J - estimated concentration

Table 3

Groundwater Analytical Results

AFFCO, 361 Walsh Avenue, New Windsor, NY

			Pre-Excavation							Post-Excavation						
Client Sample ID:			**EW-0**	**MW-1**	**E-1 NEW**	**IW-3**	**IW-1**	**S-8**	**IW-2**	**EW-1X**	**S-8**	**EW-0**	**E1-NEW**	**MW-1**	**FB041713**	**TRIP BLANK**
Lab Sample ID:			**JB10868-1**	**JB10868-2**	**JB10868-3**	**JB10868-4**	**JB10868-5**	**JB10868-6**	**JB10868-7**	**JB34670-1**	**JB34670-2**	**JB34670-3**	**JB34670-4**	**JB34670-5**	**JB34670-6**	**JB34670-7**
Date Sampled:	**Units**	**NY TOGS Class GA GW Standards**	**7/10/2012**	**7/10/2012**	**7/10/2012**	**7/10/2012**	**7/10/2012**	**7/10/2012**	**7/10/2012**	**4/17/2013**	**4/17/2013**	**4/17/2013**	**4/17/2013**	**4/17/2013**	**4/17/2013**	**4/17/2013**
Matrix:			**Ground Water**	**Ground Water**	**Ground Water**	**Ground Water**	**Ground Water**	**Ground Water**	**Ground Water**	**Ground Water**	**Ground Water**	**Ground Water**	**Ground Water**	**Ground Water**	**Field Blank**	**Trip Blank**
GC/MS Volatiles (SW846 8260B)																
Acetone	ug/l	-	ND (330)	ND (8.2)	ND (3.3)	7980	143 J	ND (3.3)	1600	ND (33)	ND (3.3)	ND (3.3)	ND (3.3)	ND (16)	ND (3.3)	ND (3.3)
Benzene	ug/l	1	ND (24)	ND (0.59)	ND (0.24)	ND (12)	ND (4.7)	ND (0.24)	ND (5.9)	ND (2.4)	ND (0.24)	ND (0.24)	ND (0.24)	ND (1.2)	ND (0.24)	ND (0.24)
Bromodichloromethane	ug/l	-	ND (21)	ND (0.52)	ND (0.21)	ND (10)	ND (4.1)	ND (0.21)	ND (5.2)	ND (2.1)	ND (0.21)	ND (0.21)	ND (0.21)	ND (1.0)	ND (0.21)	ND (0.21)
Bromoform	ug/l	-	ND (21)	ND (0.54)	ND (0.21)	ND (11)	ND (4.3)	ND (0.21)	ND (5.4)	ND (2.1)	ND (0.21)	ND (0.21)	ND (0.21)	ND (1.1)	ND (0.21)	ND (0.21)
Bromomethane	ug/l	5	ND (22)	ND (0.55)	ND (0.22)	ND (11)	ND (4.4)	ND (0.22)	ND (5.5)	ND (2.2)	ND (0.22)	ND (0.22)	ND (0.22)	ND (1.1)	ND (0.22)	ND (0.22)
2-Butanone (MEK)	ug/l	-	ND (240)	ND (5.9)	ND (2.4)	18900	114 J	ND (2.4)	4210	ND (24)	ND (2.4)	14.1	ND (2.4)	ND (12)	ND (2.4)	ND (2.4)
Carbon disulfide	ug/l	60	ND (19)	ND (0.47)	ND (0.19)	ND (9.5)	ND (3.8)	ND (0.19)	ND (4.7)	ND (1.9)	ND (0.19)	ND (0.19)	ND (0.19)	ND (0.95)	ND (0.19)	ND (0.19)
Carbon tetrachloride	ug/l	5	ND (22)	ND (0.54)	ND (0.22)	ND (11)	ND (4.3)	ND (0.22)	ND (5.4)	ND (2.2)	ND (0.22)	ND (0.22)	ND (0.22)	ND (1.1)	ND (0.22)	ND (0.22)
Chlorobenzene	ug/l	5	ND (23)	ND (0.57)	ND (0.23)	ND (11)	ND (4.6)	ND (0.23)	ND (5.7)	ND (2.3)	ND (0.23)	ND (0.23)	ND (0.23)	ND (1.1)	ND (0.23)	ND (0.23)
Chloroethane	ug/l	5	**1240**	**641**	ND (0.26)	**90.3**	**904**	**57**	**80.6**	ND (2.6)	ND (0.26)	**334**	**73.9**	**136**	ND (0.26)	ND (0.26)
Chloroform	ug/l	7	ND (20)	ND (0.51)	ND (0.20)	ND (10)	ND (4.1)	ND (0.20)	ND (5.1)	ND (2.0)	ND (0.20)	1.2	ND (0.20)	3.1 J	ND (0.20)	ND (0.20)
Chloromethane	ug/l	5	ND (21)	ND (0.52)	ND (0.21)	ND (10)	ND (4.1)	ND (0.21)	ND (5.2)	ND (2.1)	ND (0.21)	ND (0.21)	ND (0.21)	ND (1.0)	ND (0.21)	ND (0.21)
Dibromochloromethane	ug/l	-	ND (14)	ND (0.34)	ND (0.14)	ND (6.8)	ND (2.7)	ND (0.14)	ND (3.4)	ND (1.4)	ND (0.14)	ND (0.14)	ND (0.14)	ND (0.68)	ND (0.14)	ND (0.14)
1,1-Dichloroethane	ug/l	5	**36100**	**146**	**18**	**119**	**2540**	**145**	**327**	**22.9**	**11.8**	**2540**	**154**	**438**	ND (0.11)	ND (0.11)
1,2-Dichloroethane	ug/l	0.6	**233**	**4.8**	**1.7**	ND (13)	**60.5**	**0.64 J**	ND (6.5)	ND (2.6)	**0.7 J**	**17.5**	ND (0.26)	**5.2**	ND (0.26)	ND (0.26)
1,1-Dichloroethene	ug/l	5	**562**	**6**	4.5	**22.4 J**	**69.2**	4.1	**28.3**	ND (1.9)	3.5	**144**	5	**36.6**	ND (0.19)	ND (0.19)
cis-1,2-Dichloroethene	ug/l	5	ND (19)	0.73 J	0.78 J	ND (9.4)	**7.3 J**	0.21 J	ND (4.7)	ND (1.9)	0.54 J	2.8	ND (0.19)	ND (0.94)	ND (0.19)	ND (0.19)
trans-1,2-Dichloroethene	ug/l	5	ND (21)	ND (0.53)	0.33 J	ND (11)	ND (4.2)	ND (0.21)	ND (5.3)	ND (2.1)	ND (0.21)	2.2	ND (0.21)	ND (1.1)	ND (0.21)	ND (0.21)
1,2-Dichloroethene (total)	ug/l	-	ND (19)	0.73 J	1.1	ND (9.4)	7.3 J	0.21 J	ND (4.7)	ND (1.9)	0.54 J	5	ND (0.19)	ND (0.94)	ND (0.19)	ND (0.19)
1,2-Dichloropropane	ug/l	1	ND (48)	ND (1.2)	ND (0.48)	ND (24)	ND (9.7)	ND (0.48)	ND (12)	ND (4.8)	ND (0.48)	ND (0.48)	ND (0.48)	ND (2.4)	ND (0.48)	ND (0.48)
cis-1,3-Dichloropropene	ug/l	-	ND (21)	ND (0.52)	ND (0.21)	ND (10)	ND (4.1)	ND (0.21)	ND (5.2)	ND (2.1)	ND (0.21)	ND (0.21)	ND (0.21)	ND (1.0)	ND (0.21)	ND (0.21)
trans-1,3-Dichloropropene	ug/l	-	ND (19)	ND (0.47)	ND (0.19)	ND (9.5)	ND (3.8)	ND (0.19)	ND (4.7)	ND (1.9)	ND (0.19)	ND (0.19)	ND (0.19)	ND (0.95)	ND (0.19)	ND (0.19)
Ethylbenzene	ug/l	5	ND (23)	ND (0.57)	ND (0.23)	ND (11)	ND (4.6)	ND (0.23)	ND (5.7)	ND (2.3)	ND (0.23)	ND (0.23)	ND (0.23)	ND (1.1)	ND (0.23)	ND (0.23)
2-Hexanone	ug/l	-	ND (110)	ND (2.8)	ND (1.1)	ND (57)	ND (23)	ND (1.1)	ND (28)	ND (11)	ND (1.1)	ND (1.1)	ND (1.1)	ND (5.7)	ND (1.1)	ND (1.1)
Methyl Tert Butyl Ether	ug/l	10	ND (16)	ND (0.41)	ND (0.16)	ND (8.2)	ND (3.3)	ND (0.16)	ND (4.1)	ND (1.6)	ND (0.16)	ND (0.16)	ND (0.16)	ND (0.82)	ND (0.16)	ND (0.16)
4-Methyl-2-pentanone(MIBK)	ug/l	-	ND (83)	ND (2.1)	ND (0.83)	ND (41)	ND (17)	ND (0.83)	ND (21)	ND (8.3)	ND (0.83)	ND (0.83)	ND (0.83)	ND (4.1)	ND (0.83)	ND (0.83)
Methylene chloride	ug/l	5	ND (70)	ND (1.8)	ND (0.70)	ND (35)	ND (14)	ND (0.70)	ND (18)	ND (7.0)	ND (0.70)	ND (0.70)	ND (0.70)	ND (3.5)	ND (0.70)	ND (0.70)
Styrene	ug/l	5	ND (21)	ND (0.54)	ND (0.21)	ND (11)	ND (4.3)	ND (0.21)	ND (5.4)	ND (2.1)	ND (0.21)	ND (0.21)	ND (0.21)	ND (1.1)	ND (0.21)	ND (0.21)
1,1,2,2-Tetrachloroethane	ug/l	5	ND (21)	ND (0.54)	ND (0.21)	ND (11)	ND (4.3)	ND (0.21)	ND (5.4)	ND (2.1)	ND (0.21)	ND (0.21)	ND (0.21)	ND (1.1)	ND (0.21)	ND (0.21)
Tetrachloroethene	ug/l	5	ND (28)	ND (0.70)	ND (0.28)	ND (14)	ND (5.6)	ND (0.28)	ND (7.0)	ND (2.8)	ND (0.28)	0.6 J	ND (0.28)	ND (1.4)	ND (0.28)	ND (0.28)
Toluene	ug/l	5	**60.5 J**	ND (0.57)	ND (0.23)	ND (11)	ND (4.5)	ND (0.23)	ND (5.7)	ND (2.3)	ND (0.23)	**8**	ND (0.23)	1.6 J	ND (0.23)	ND (0.23)
1,1,1-Trichloroethane	ug/l	5	**48300**	**82.4**	2	**312**	**1420**	**30.5**	**891**	ND (2.4)	1.4	**8630**	**48.4**	**1560**	ND (0.24)	ND (0.24)
1,1,2-Trichloroethane	ug/l	1	**34.5 J**	ND (0.72)	ND (0.29)	ND (14)	ND (5.7)	ND (0.29)	ND (7.2)	ND (2.9)	ND (0.29)	**2.3**	ND (0.29)	ND (1.4)	ND (0.29)	ND (0.29)
Trichloroethene	ug/l	5	ND (22)	1.6 J	1.7	ND (11)	**8.7 J**	ND (0.22)	ND (5.4)	ND (2.2)	1.1	4	ND (0.22)	**6.2**	ND (0.22)	ND (0.22)
Vinyl chloride	ug/l	2	ND (21)	2 J	0.65 J	ND (10)	ND (4.1)	0.65 J	ND (5.2)	ND (2.1)	ND (0.21)	**4.8**	ND (0.21)	ND (1.0)	ND (0.21)	ND (0.21)
Xylene (total)	ug/l	5	ND (24)	ND (0.60)	ND (0.24)	ND (12)	ND (4.8)	ND (0.24)	ND (6.0)	ND (2.4)	ND (0.24)	ND (0.24)	ND (0.24)	ND (1.2)	ND (0.24)	ND (0.24)
Metals Analysis																
Iron	ug/l	300	-	-	-	-	-	-	-	**934000**	**5790**	**546**	**804**	**805**	**18500**	-
General Chemistry																
Alkalinity, Total as CaCO3	mg/l	-	-	-	-	-	-	-	-	89.2	111	124	260	274	<5.0	-
Chloride	mg/l	250	-	-	-	-	-	-	-	52.6	43.8	114	37.1	57.1	<2.0	-
Sulfate	mg/l	250	-	-	-	-	-	-	-	29.2	17.2	93.8	<10	104	<10	-
Sulfide	mg/l	-	-	-	-	-	-	-	-	-	<2.0	<2.0	<2.0	<2.0	<2.0	-

Notes

Exceedances **bolded** and highlighted in gray

ND - concentration is non-detectable

J - value is estimated

Sample JB10868-3 was originally mislabeled 'E-1 NAW'

Sample JB34670-4 was originally mislabeled 'E-1 N'

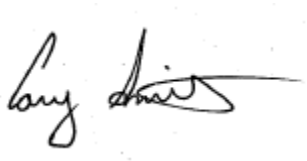
Sample JB34670-5 was originally mislabeled 'MW-1N'

APPENDIX C

Community Air Monitoring Certification

TOPIC: AIR MONITORING CERTIFICATE OF COMPLIANCE

I, Corey Smith certify that air monitoring was executed in accordance with the Site-specific Health and Safety Plan and Community Air Monitoring Plan during the excavation remedial action at American Felt and Filter Company between August and September of 2012. During that time which no sustained volatile organic compound concentrations above action levels were found and no response actions were required during operations.



Corey Smith
Industrial Engineer/ Safety Manager
American Felt and Filter Company
361 Walsh Ave, New Windsor, NY 12553
(845) 561-3560

APPENDIX D

Raw Analytical Laboratory Data

New Jersey ACCUTEST LABORATORIES

05/21/13



Technical Report for

Fleming-Lee Shue, Inc.

AFFCO, 361 Walsh Avenue, New Windsor, NY

10000-003 / PO#FP0099

Accutest Job Number: JB15405

Sampling Dates: 08/28/12 - 09/04/12

Report to:

Fleming-Lee Shue, Inc.

raphael@flemingleeshue.com

ATTN: Raphael Rosenbaum

Total number of pages in report: **70**

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Nancy F. Cole

Nancy Cole
Laboratory Director

Client Service contact: Tammy McCloskey 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, DE, FL, IL, IN, KS, KY, LA, MA, MD, MI, MT, NC, OH VAP (CL0056), PA, RI, SC, TN, VA, WV

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Sections: 1 2 3 4 5

Table of Contents

Section 1: Sample Summary **3**
Section 2: Case Narrative/Conformance Summary **5**
Section 3: Summary of Hits **8**
Section 4: Sample Results **14**
4.1: JB14890-1: PX01-SW-5 15
4.2: JB14890-2: PX02-SW-5 17
4.3: JB14890-3: PX03-BT-10 19
4.4: JB14890-4: PX04-SW-5 21
4.5: JB14890-5: PX05-SW-6 23
4.6: JB14890-6: PX06-BT-10 25
4.7: JB14890-7: C5SP01 27
4.8: JB14890-8: C5SP02 29
4.9: JB14890-9: C4SP01 31
4.10: JB15155-1: PX07BT-10 33
4.11: JB15155-2: PX08SW-7 35
4.12: JB15155-3: BENCH01 37
4.13: JB15405-1: PX09SW-3 39
4.14: JB15405-2: PX10SW-5 41
4.15: JB15405-3: PX11BT-10 43
4.16: JB15405-4: PX12SW-7 45
4.17: JB15405-5: PX13SW-7 47
4.18: JB15405-6: PX14SW-6 49
4.19: JB15405-7: PX15BT-10 51
4.20: JB15405-8: C1SP01 53
4.21: JB15405-9: C3SP01 55
4.22: JB15405-10: C3SP02 57
4.23: JB15405-11: C2SP01 59
4.24: JB15405-12: C2SP02 61
Section 5: Misc. Forms **63**
5.1: Chain of Custody 64

Sample Summary

Fleming-Lee Shue, Inc.

Job No: JB15405

AFFCO, 361 Walsh Avenue, New Windsor, NY
Project No: 10000-003 / PO#FP0099

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
JB14890-1	08/28/12	10:05	GH	08/29/12	SO	Soil	PX01-SW-5
JB14890-2	08/28/12	10:15	GH	08/29/12	SO	Soil	PX02-SW-5
JB14890-3	08/28/12	10:25	GH	08/29/12	SO	Soil	PX03-BT-10
JB14890-4	08/28/12	15:30	GH	08/29/12	SO	Soil	PX04-SW-5
JB14890-5	08/28/12	15:40	GH	08/29/12	SO	Soil	PX05-SW-6
JB14890-6	08/28/12	15:50	GH	08/29/12	SO	Soil	PX06-BT-10
JB14890-7	08/28/12	11:00	GH	08/29/12	SO	Soil	C5SP01
JB14890-8	08/28/12	11:10	GH	08/29/12	SO	Soil	C5SP02
JB14890-9	08/28/12	11:10	GH	08/29/12	SO	Soil	C4SP01
JB15155-1	08/30/12	09:30	GH	08/31/12	SO	Soil	PX07BT-10
JB15155-2	08/30/12	09:40	GH	08/31/12	SO	Soil	PX08SW-7
JB15155-3	08/30/12	10:25	GH	08/31/12	SO	Soil	BENCH01
JB15405-1	09/04/12	16:05	GH	09/05/12	SO	Soil	PX09SW-3

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Sample Summary
(continued)

Fleming-Lee Shue, Inc.

Job No: JB15405

AFFCO, 361 Walsh Avenue, New Windsor, NY
Project No: 10000-003 / PO#FP0099

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
JB15405-2	09/04/12	16:10	GH	09/05/12	SO	Soil	PX10SW-5
JB15405-3	09/04/12	16:15	GH	09/05/12	SO	Soil	PX11BT-10
JB15405-4	09/04/12	16:20	GH	09/05/12	SO	Soil	PX12SW-7
JB15405-5	09/04/12	16:25	GH	09/05/12	SO	Soil	PX13SW-7
JB15405-6	09/04/12	16:30	GH	09/05/12	SO	Soil	PX14SW-6
JB15405-7	09/04/12	16:45	GH	09/05/12	SO	Soil	PX15BT-10
JB15405-8	09/04/12	16:50	GH	09/05/12	SO	Soil	C1SP01
JB15405-9	09/04/12	16:55	GH	09/05/12	SO	Soil	C3SP01
JB15405-10	09/04/12	16:50	GH	09/05/12	SO	Soil	C3SP02
JB15405-11	09/04/12	17:05	GH	09/05/12	SO	Soil	C2SP01
JB15405-12	09/04/12	17:10	GH	09/05/12	SO	Soil	C2SP02

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

CASE NARRATIVE / CONFORMANCE SUMMARY

Client:	Fleming-Lee Shue, Inc.	**Job No**	JB15405
Site:	AFFCO, 361 Walsh Avenue, New Windsor, NY	**Report Date**	12/10/2012 9:13:06 A

Between 08/29/2012 and 09/05/2012, 24 Sample(s), 0 Trip Blank(s) and 0 Field Blank(s) were received at Accutest Laboratories at a temperature of 4 C. Samples were intact and chemically preserved, unless noted below. An Accutest Job Number of JB15405 was assigned to the project. Laboratory sample ID, client sample ID and dates of sample collection are detailed in the report's Results Summary Section.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

Volatiles by GCMS By Method SW846 8260B

Matrix: SO **Batch ID:** V3C4027

- All samples were analyzed within the recommended method holding time.
- Sample(s) JB15405-1MS, JB15405-1MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Matrix Spike Recovery(s) for 1,1,1-Trichloroethane are outside control limits. Outside control limits due to matrix interference.
- Matrix Spike Duplicate Recovery(s) for 1,1,1-Trichloroethane are outside control limits. Probable cause due to matrix interference.

Matrix: SO **Batch ID:** VA6987

- All samples were analyzed within the recommended method holding time.
- Sample(s) JB14720-5MS, JB14720-5MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.

Matrix: SO **Batch ID:** VA6989

- All samples were analyzed within the recommended method holding time.
- Sample(s) JB14890-1MS, JB14890-1MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.

Matrix: SO **Batch ID:** VD8147

- All samples were analyzed within the recommended method holding time.
- Sample(s) JB14606-1MS, JB14606-1MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.

Matrix: SO **Batch ID:** VD8148

- All samples were analyzed within the recommended method holding time.
- Sample(s) JB14890-3MS, JB14890-3MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.

Matrix: SO **Batch ID:** VE8556

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JB14605-2MS, JB14605-2MSD were used as the QC samples indicated.

Matrix: SO **Batch ID:** VE8565

- All samples were analyzed within the recommended method holding time.

Volatiles by GCMS By Method SW846 8260B

Matrix: SO **Batch ID:** VE8565

- All method blanks for this batch meet method specific criteria.
- Sample(s) JB15405-9MS, JB15405-9MSD were used as the QC samples indicated.
- Matrix Spike Recovery(s) for 1,1,1-Trichloroethane are outside control limits. Outside control limits due to high level in sample relative to spike amount.

Matrix: SO **Batch ID:** VV5563

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JB14795-1MS, JB14795-1MSD were used as the QC samples indicated.

Matrix: SO **Batch ID:** VV5565

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JB14784-7MS, JB14785-1ADUP, JB14784-7MS were used as the QC samples indicated.
- Matrix Spike Recovery(s) for Ethylbenzene, Toluene are outside control limits. Outside control limits due to matrix interference.
- RPD(s) for Duplicate for 1,2-Dichloroethene (total), Benzene, Carbon disulfide, Chlorobenzene, cis-1,2-Dichloroethene, Ethylbenzene, Methyl Tert Butyl Ether, Toluene, Xylene (total) are outside control limits for sample JB14785-1ADUP. High RPD due to possible sample analyzed from different vials.

Matrix: SO **Batch ID:** VX5603

- All samples were analyzed within the recommended method holding time.
- Sample(s) JB15405-11MS, JB15405-11MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- RPD(s) for MSD for 1,2-Dichloroethene (total), Bromoform, Carbon disulfide, Carbon tetrachloride, Chlorobenzene, Ethylbenzene, Styrene, Toluene, trans-1,2-Dichloroethene, trans-1,3-Dichloropropene, Trichloroethene, Xylene (total) are outside control limits for sample JB15405-11MSD. Outside control limits due to matrix interference.

Matrix: SO **Batch ID:** VX5604

- All samples were analyzed within the recommended method holding time.
- Sample(s) JB15405-7MS, JB15405-7MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.

Matrix: SO **Batch ID:** VY5399

- All samples were analyzed within the recommended method holding time.
- Sample(s) JB15155-1MS, JB15155-1MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Matrix Spike Recovery(s) for 1,1-Dichloroethene are outside control limits. Outside control limits due to matrix interference.
- Matrix Spike Duplicate Recovery(s) for 1,1-Dichloroethene, Chloroethane are outside control limits. Probable cause due to matrix interference.
- Matrix Spike Recovery(s) for 1,1,1-Trichloroethane, 1,1-Dichloroethane, Chloroethane are outside control limits. Outside control limits due to high level in sample relative to spike amount.

Matrix: SO **Batch ID:** VY5401

- All samples were analyzed within the recommended method holding time.
- Sample(s) JB15155-2MS, JB15155-2MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.

Matrix: SO **Batch ID:** VY5403

- All samples were analyzed within the recommended method holding time.
- Sample(s) JB15405-6MS, JB15405-6MSD were used as the QC samples indicated.

Volatiles by GCMS By Method SW846 8260B

Matrix:	SO	Batch ID:	VY5403

- All method blanks for this batch meet method specific criteria.

Matrix:	SO	Batch ID:	VY5405

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JB15064-26DUP, JB15064-27MS were used as the QC samples indicated.

Wet Chemistry By Method ASTM 4643-00

Matrix:	SO	Batch ID:	GN71436

- The data for ASTM 4643-00 meets quality control requirements.

Wet Chemistry By Method SM18 2540G

Matrix:	SO	Batch ID:	GN71254

- The data for SM18 2540G meets quality control requirements.

Matrix:	SO	Batch ID:	GN71476

- The data for SM18 2540G meets quality control requirements.

Matrix:	SO	Batch ID:	GN71587

- The data for SM18 2540G meets quality control requirements.

Matrix:	SO	Batch ID:	GN71589

- The data for SM18 2540G meets quality control requirements.

Matrix:	SO	Batch ID:	GN71601

- The data for SM18 2540G meets quality control requirements.

Accutest certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting Accutest's Quality System precision, accuracy and completeness objectives except as noted.

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

Accutest Laboratories is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. Data release is authorized by Accutest Laboratories indicated via signature on the report cover

Summary of Hits

Job Number: JB15405
Account: Fleming-Lee Shue, Inc.
Project: AFFCO, 361 Walsh Avenue, New Windsor, NY
Collected: 08/28/12 thru 09/04/12

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
JB14890-1	**PX01-SW-5**					
Benzene		0.76 J	1.4	0.16	ug/kg	SW846 8260B
Toluene		0.33 J	1.4	0.14	ug/kg	SW846 8260B
JB14890-2	**PX02-SW-5**					
Acetone		5.9 J	13	2.2	ug/kg	SW846 8260B
1,1,1-Trichloroethane		6.1 J	6.4	0.14	ug/kg	SW846 8260B
JB14890-3	**PX03-BT-10**					
Acetone		20.6	12	2.0	ug/kg	SW846 8260B
2-Butanone (MEK)		12.9	12	2.8	ug/kg	SW846 8260B
Carbon disulfide		1.5 J	5.8	0.14	ug/kg	SW846 8260B
Chloroethane		1.9 J	5.8	0.26	ug/kg	SW846 8260B
Chloroform		0.56 J	5.8	0.096	ug/kg	SW846 8260B
1,1-Dichloroethane		1940	300	8.1	ug/kg	SW846 8260B
1,2-Dichloroethane		13.8	1.2	0.16	ug/kg	SW846 8260B
1,1-Dichloroethene		568	300	15	ug/kg	SW846 8260B
cis-1,2-Dichloroethene		1.5 J	5.8	0.21	ug/kg	SW846 8260B
1,2-Dichloroethene (total)		1.5 J	5.8	0.21	ug/kg	SW846 8260B
Tetrachloroethene		0.68 J	5.8	0.20	ug/kg	SW846 8260B
Toluene		17.1	1.2	0.12	ug/kg	SW846 8260B
1,1,1-Trichloroethane		4980	300	6.3	ug/kg	SW846 8260B
1,1,2-Trichloroethane		0.64 J	5.8	0.20	ug/kg	SW846 8260B
Trichloroethene		2.2 J	5.8	0.20	ug/kg	SW846 8260B
Vinyl chloride		9.7	5.8	0.17	ug/kg	SW846 8260B
JB14890-4	**PX04-SW-5**					
Benzene		0.77 J	1.3	0.16	ug/kg	SW846 8260B
1,1-Dichloroethene		1.0 J	6.7	0.34	ug/kg	SW846 8260B
Toluene		0.35 J	1.3	0.14	ug/kg	SW846 8260B
1,1,1-Trichloroethane		0.49 J	6.7	0.14	ug/kg	SW846 8260B
JB14890-5	**PX05-SW-6**					
Benzene		1.3	1.3	0.15	ug/kg	SW846 8260B
Toluene		0.53 J	1.3	0.13	ug/kg	SW846 8260B
1,1,1-Trichloroethane		3.2 J	6.4	0.14	ug/kg	SW846 8260B
Trichloroethene		4.5 J	6.4	0.22	ug/kg	SW846 8260B

Summary of Hits

Job Number: JB15405
Account: Fleming-Lee Shue, Inc.
Project: AFFCO, 361 Walsh Avenue, New Windsor, NY
Collected: 08/28/12 thru 09/04/12

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
JB14890-6	**PX06-BT-10**					
Acetone		4.0 J	12	2.1	ug/kg	SW846 8260B
Benzene		0.86 J	1.2	0.15	ug/kg	SW846 8260B
1,1,1-Trichloroethane		0.52 J	6.2	0.13	ug/kg	SW846 8260B
JB14890-7	**C5SP01**					
Acetone		14.7	14	2.4	ug/kg	SW846 8260B
Chloroform		0.73 J	7.0	0.12	ug/kg	SW846 8260B
1,1-Dichloroethane		3.1 J	7.0	0.19	ug/kg	SW846 8260B
1,1-Dichloroethene		2.5 J	7.0	0.36	ug/kg	SW846 8260B
1,1,1-Trichloroethane		2580	370	7.8	ug/kg	SW846 8260B
JB14890-8	**C5SP02**					
Acetone		13.3	13	2.1	ug/kg	SW846 8260B
Carbon disulfide		1.2 J	6.3	0.15	ug/kg	SW846 8260B
Chloroform		0.79 J	6.3	0.10	ug/kg	SW846 8260B
1,1-Dichloroethane		214	6.3	0.17	ug/kg	SW846 8260B
1,2-Dichloroethane		2.9	1.3	0.17	ug/kg	SW846 8260B
1,1-Dichloroethene		2750	310	16	ug/kg	SW846 8260B
cis-1,2-Dichloroethene		1.2 J	6.3	0.23	ug/kg	SW846 8260B
trans-1,2-Dichloroethene		2.2 J	6.3	0.30	ug/kg	SW846 8260B
1,2-Dichloroethene (total)		3.4 J	6.3	0.23	ug/kg	SW846 8260B
Tetrachloroethene		1.1 J	6.3	0.22	ug/kg	SW846 8260B
Toluene		1.2 J	1.3	0.13	ug/kg	SW846 8260B
1,1,1-Trichloroethane		29800	3100	65	ug/kg	SW846 8260B
Trichloroethene		1.7 J	6.3	0.22	ug/kg	SW846 8260B
Vinyl chloride		1.8 J	6.3	0.18	ug/kg	SW846 8260B
JB14890-9	**C4SP01**					
Benzene		1.0 J	1.3	0.16	ug/kg	SW846 8260B
Toluene		0.43 J	1.3	0.14	ug/kg	SW846 8260B
1,1,1-Trichloroethane		1.6 J	6.7	0.14	ug/kg	SW846 8260B
Trichloroethene		3.6 J	6.7	0.23	ug/kg	SW846 8260B
JB15155-1	**PX07BT-10**					
Acetone		27.5	13	2.2	ug/kg	SW846 8260B
Chloroethane		136	27	1.2	ug/kg	SW846 8260B
Chloroform		0.49 J	6.4	0.11	ug/kg	SW846 8260B
1,1-Dichloroethane		816	27	0.74	ug/kg	SW846 8260B
1,2-Dichloroethane		7.4	1.3	0.17	ug/kg	SW846 8260B

Summary of Hits

Job Number: JB15405
Account: Fleming-Lee Shue, Inc.
Project: AFFCO, 361 Walsh Avenue, New Windsor, NY
Collected: 08/28/12 thru 09/04/12

Lab Sample ID / Client Sample ID / Analyte	Result/ Qual	RL	MDL	Units	Method
1,1-Dichloroethene	34.5	6.4	0.33	ug/kg	SW846 8260B
cis-1,2-Dichloroethene	10.2	6.4	0.23	ug/kg	SW846 8260B
trans-1,2-Dichloroethene	3.2 J	6.4	0.30	ug/kg	SW846 8260B
1,2-Dichloroethene (total)	13.4	6.4	0.23	ug/kg	SW846 8260B
Tetrachloroethene	1.6 J	6.4	0.22	ug/kg	SW846 8260B
Toluene	2.7	1.3	0.13	ug/kg	SW846 8260B
1,1,1-Trichloroethane	519	27	0.57	ug/kg	SW846 8260B
1,1,2-Trichloroethane	3.8 J	6.4	0.22	ug/kg	SW846 8260B
Trichloroethene	20.5	6.4	0.22	ug/kg	SW846 8260B
Vinyl chloride	2.0 J	6.4	0.18	ug/kg	SW846 8260B
JB15155-2 PX08SW-7					
Benzene	9.9	1.2	0.14	ug/kg	SW846 8260B
1,1-Dichloroethane	1.1 J	6.0	0.17	ug/kg	SW846 8260B
1,2-Dichloroethane	0.50 J	1.2	0.16	ug/kg	SW846 8260B
cis-1,2-Dichloroethene	1.1 J	6.0	0.22	ug/kg	SW846 8260B
trans-1,2-Dichloroethene	0.58 J	6.0	0.29	ug/kg	SW846 8260B
1,2-Dichloroethene (total)	1.6 J	6.0	0.22	ug/kg	SW846 8260B
Ethylbenzene	0.73 J	1.2	0.32	ug/kg	SW846 8260B
Tetrachloroethene	0.44 J	6.0	0.21	ug/kg	SW846 8260B
Toluene	4.1	1.2	0.13	ug/kg	SW846 8260B
1,1,1-Trichloroethane	38.4	6.0	0.13	ug/kg	SW846 8260B
1,1,2-Trichloroethane	4.6 J	6.0	0.21	ug/kg	SW846 8260B
Trichloroethene	2.4 J	6.0	0.21	ug/kg	SW846 8260B
Xylene (total)	1.7	1.2	0.17	ug/kg	SW846 8260B
JB15155-3 BENCH01					
1,1-Dichloroethane	1.2 J	5.7	0.16	ug/kg	SW846 8260B
1,1-Dichloroethene	1.6 J	5.7	0.29	ug/kg	SW846 8260B
cis-1,2-Dichloroethene	0.92 J	5.7	0.21	ug/kg	SW846 8260B
trans-1,2-Dichloroethene	0.61 J	5.7	0.27	ug/kg	SW846 8260B
1,2-Dichloroethene (total)	1.5 J	5.7	0.21	ug/kg	SW846 8260B
Tetrachloroethene	0.62 J	5.7	0.20	ug/kg	SW846 8260B
Toluene	1.1	1.1	0.12	ug/kg	SW846 8260B
1,1,1-Trichloroethane	47.9	5.7	0.12	ug/kg	SW846 8260B
1,1,2-Trichloroethane	1.6 J	5.7	0.20	ug/kg	SW846 8260B
Trichloroethene	0.93 J	5.7	0.20	ug/kg	SW846 8260B
JB15405-1 PX09SW-3					
Benzene	2.6	1.3	0.16	ug/kg	SW846 8260B
Toluene	1.1 J	1.3	0.14	ug/kg	SW846 8260B
1,1,1-Trichloroethane	68.5	6.6	0.14	ug/kg	SW846 8260B

Summary of Hits

Job Number: JB15405
Account: Fleming-Lee Shue, Inc.
Project: AFFCO, 361 Walsh Avenue, New Windsor, NY
Collected: 08/28/12 thru 09/04/12

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Trichloroethene		2.0 J	6.6	0.23	ug/kg	SW846 8260B
JB15405-2	**PX10SW-5**					
Benzene		2.7	1.3	0.16	ug/kg	SW846 8260B
1,1-Dichloroethane		1.8 J	6.6	0.18	ug/kg	SW846 8260B
Tetrachloroethene		0.54 J	6.6	0.23	ug/kg	SW846 8260B
Toluene		1.3	1.3	0.14	ug/kg	SW846 8260B
1,1,1-Trichloroethane		67.1	6.6	0.14	ug/kg	SW846 8260B
Trichloroethene		1.5 J	6.6	0.23	ug/kg	SW846 8260B
JB15405-3	**PX11BT-10**					
1,1,1-Trichloroethane		10.9	5.8	0.12	ug/kg	SW846 8260B
1,1,2-Trichloroethane		0.83 J	5.8	0.20	ug/kg	SW846 8260B
Trichloroethene		2.2 J	5.8	0.20	ug/kg	SW846 8260B
JB15405-4	**PX12SW-7**					
Benzene		2.6	1.2	0.15	ug/kg	SW846 8260B
Toluene		1.1 J	1.2	0.13	ug/kg	SW846 8260B
1,1,1-Trichloroethane		5.1 J	6.2	0.13	ug/kg	SW846 8260B
Trichloroethene		2.5 J	6.2	0.22	ug/kg	SW846 8260B
JB15405-5	**PX13SW-7**					
Benzene		0.82 J	1.3	0.16	ug/kg	SW846 8260B
Toluene		0.54 J	1.3	0.14	ug/kg	SW846 8260B
1,1,1-Trichloroethane		7.0	6.5	0.14	ug/kg	SW846 8260B
JB15405-6	**PX14SW-6**					
1,1-Dichloroethane		0.87 J	5.5	0.15	ug/kg	SW846 8260B
1,1-Dichloroethene		0.63 J	5.5	0.29	ug/kg	SW846 8260B
cis-1,2-Dichloroethene		2.4 J	5.5	0.20	ug/kg	SW846 8260B
trans-1,2-Dichloroethene		2.1 J	5.5	0.26	ug/kg	SW846 8260B
1,2-Dichloroethene (total)		4.4 J	5.5	0.20	ug/kg	SW846 8260B
Tetrachloroethene		0.59 J	5.5	0.19	ug/kg	SW846 8260B
1,1,1-Trichloroethane		29.3	5.5	0.12	ug/kg	SW846 8260B
1,1,2-Trichloroethane		5.9	5.5	0.19	ug/kg	SW846 8260B
Trichloroethene		4.0 J	5.5	0.19	ug/kg	SW846 8260B
JB15405-7	**PX15BT-10**					
Acetone		13.6	13	2.2	ug/kg	SW846 8260B

Summary of Hits

Job Number: JB15405
Account: Fleming-Lee Shue, Inc.
Project: AFFCO, 361 Walsh Avenue, New Windsor, NY
Collected: 08/28/12 thru 09/04/12

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Chloroform		1.0 J	6.4	0.11	ug/kg	SW846 8260B
1,1-Dichloroethane		8.3	6.4	0.18	ug/kg	SW846 8260B
1,2-Dichloroethane		0.60 J	1.3	0.17	ug/kg	SW846 8260B
1,1-Dichloroethene		4.2 J	6.4	0.33	ug/kg	SW846 8260B
cis-1,2-Dichloroethene		0.85 J	6.4	0.23	ug/kg	SW846 8260B
trans-1,2-Dichloroethene		0.58 J	6.4	0.31	ug/kg	SW846 8260B
1,2-Dichloroethene (total)		1.4 J	6.4	0.23	ug/kg	SW846 8260B
Tetrachloroethene		0.79 J	6.4	0.22	ug/kg	SW846 8260B
Toluene		0.58 J	1.3	0.13	ug/kg	SW846 8260B
1,1,1-Trichloroethane		149	6.4	0.14	ug/kg	SW846 8260B
1,1,2-Trichloroethane		1.5 J	6.4	0.22	ug/kg	SW846 8260B
Trichloroethene		4.7 J	6.4	0.22	ug/kg	SW846 8260B
JB15405-8	**C1SP01**					
1,1-Dichloroethane		7.2	6.0	0.16	ug/kg	SW846 8260B
1,2-Dichloroethane		0.65 J	1.2	0.16	ug/kg	SW846 8260B
1,1-Dichloroethene		2.0 J	6.0	0.31	ug/kg	SW846 8260B
cis-1,2-Dichloroethene		0.61 J	6.0	0.22	ug/kg	SW846 8260B
trans-1,2-Dichloroethene		0.50 J	6.0	0.29	ug/kg	SW846 8260B
1,2-Dichloroethene (total)		1.1 J	6.0	0.22	ug/kg	SW846 8260B
Tetrachloroethene		1.1 J	6.0	0.21	ug/kg	SW846 8260B
Toluene		1.3	1.2	0.13	ug/kg	SW846 8260B
1,1,1-Trichloroethane		513	25	0.52	ug/kg	SW846 8260B
1,1,2-Trichloroethane		3.5 J	6.0	0.21	ug/kg	SW846 8260B
Trichloroethene		5.0 J	6.0	0.21	ug/kg	SW846 8260B
JB15405-9	**C3SP01**					
1,1-Dichloroethane		13.0	6.0	0.16	ug/kg	SW846 8260B
1,2-Dichloroethane		1.2	1.2	0.16	ug/kg	SW846 8260B
1,1-Dichloroethene		5.8 J	6.0	0.31	ug/kg	SW846 8260B
cis-1,2-Dichloroethene		0.54 J	6.0	0.22	ug/kg	SW846 8260B
trans-1,2-Dichloroethene		0.41 J	6.0	0.29	ug/kg	SW846 8260B
1,2-Dichloroethene (total)		0.95 J	6.0	0.22	ug/kg	SW846 8260B
Tetrachloroethene		1.6 J	6.0	0.21	ug/kg	SW846 8260B
Toluene		2.8	1.2	0.13	ug/kg	SW846 8260B
1,1,1-Trichloroethane		41900	3200	67	ug/kg	SW846 8260B
1,1,2-Trichloroethane		5.2 J	6.0	0.21	ug/kg	SW846 8260B
Trichloroethene		5.7 J	6.0	0.21	ug/kg	SW846 8260B
JB15405-10	**C3SP02**					
1,1-Dichloroethane		3.0 J	5.2	0.14	ug/kg	SW846 8260B
1,2-Dichloroethane		0.76 J	1.0	0.14	ug/kg	SW846 8260B

Summary of Hits

Job Number: JB15405
Account: Fleming-Lee Shue, Inc.
Project: AFFCO, 361 Walsh Avenue, New Windsor, NY
Collected: 08/28/12 thru 09/04/12

Lab Sample ID / Client Sample ID / Analyte	Result/ Qual	RL	MDL	Units	Method
1,1-Dichloroethene	1.5 J	5.2	0.27	ug/kg	SW846 8260B
cis-1,2-Dichloroethene	0.41 J	5.2	0.19	ug/kg	SW846 8260B
trans-1,2-Dichloroethene	0.38 J	5.2	0.25	ug/kg	SW846 8260B
1,2-Dichloroethene (total)	0.79 J	5.2	0.19	ug/kg	SW846 8260B
Toluene	0.27 J	1.0	0.11	ug/kg	SW846 8260B
1,1,1-Trichloroethane	166	5.2	0.11	ug/kg	SW846 8260B
1,1,2-Trichloroethane	0.97 J	5.2	0.18	ug/kg	SW846 8260B
Trichloroethene	1.9 J	5.2	0.18	ug/kg	SW846 8260B
JB15405-11 C2SP01					
1,1-Dichloroethane	1.0 J	5.3	0.15	ug/kg	SW846 8260B
1,2-Dichloroethane	0.78 J	1.1	0.14	ug/kg	SW846 8260B
1,1-Dichloroethene	0.43 J	5.3	0.27	ug/kg	SW846 8260B
cis-1,2-Dichloroethene	0.37 J	5.3	0.20	ug/kg	SW846 8260B
1,2-Dichloroethene (total)	0.37 J	5.3	0.20	ug/kg	SW846 8260B
1,1,1-Trichloroethane	51.7	5.3	0.11	ug/kg	SW846 8260B
1,1,2-Trichloroethane	1.4 J	5.3	0.19	ug/kg	SW846 8260B
Trichloroethene	1.6 J	5.3	0.19	ug/kg	SW846 8260B
JB15405-12 C2SP02					
1,1-Dichloroethane	1.9 J	5.4	0.15	ug/kg	SW846 8260B
1,2-Dichloroethane	1.7	1.1	0.15	ug/kg	SW846 8260B
1,1-Dichloroethene	0.90 J	5.4	0.28	ug/kg	SW846 8260B
cis-1,2-Dichloroethene	1.1 J	5.4	0.20	ug/kg	SW846 8260B
trans-1,2-Dichloroethene	0.70 J	5.4	0.26	ug/kg	SW846 8260B
1,2-Dichloroethene (total)	1.8 J	5.4	0.20	ug/kg	SW846 8260B
Tetrachloroethene	0.33 J	5.4	0.19	ug/kg	SW846 8260B
1,1,1-Trichloroethane	59.9	5.4	0.11	ug/kg	SW846 8260B
1,1,2-Trichloroethane	2.5 J	5.4	0.19	ug/kg	SW846 8260B
Trichloroethene	6.9	5.4	0.19	ug/kg	SW846 8260B

New Jersey ACCUTEST LABORATORIES

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	PX01-SW-5		
Lab Sample ID:	JB14890-1	**Date Sampled:**	08/28/12
Matrix:	SO - Soil	**Date Received:**	08/29/12
Method:	SW846 8260B	**Percent Solids:**	81.4
Project:	AFFCO, 361 Walsh Avenue, New Windsor, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	A186356.D	1	08/30/12	CL	n/a	n/a	VA6989
Run #2							

	Initial Weight
Run #1	4.5 g
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	14	2.3	ug/kg	
71-43-2	Benzene	0.76	1.4	0.16	ug/kg	J
75-27-4	Bromodichloromethane	ND	6.8	0.14	ug/kg	
75-25-2	Bromoform	ND	6.8	0.21	ug/kg	
74-83-9	Bromomethane	ND	6.8	0.37	ug/kg	
78-93-3	2-Butanone (MEK)	ND	14	3.3	ug/kg	
75-15-0	Carbon disulfide	ND	6.8	0.16	ug/kg	
56-23-5	Carbon tetrachloride	ND	6.8	0.18	ug/kg	
108-90-7	Chlorobenzene	ND	6.8	0.15	ug/kg	
75-00-3	Chloroethane	ND	6.8	0.31	ug/kg	
67-66-3	Chloroform	ND	6.8	0.11	ug/kg	
74-87-3	Chloromethane	ND	6.8	0.25	ug/kg	
124-48-1	Dibromochloromethane	ND	6.8	0.22	ug/kg	
75-34-3	1,1-Dichloroethane	ND	6.8	0.19	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.4	0.18	ug/kg	
75-35-4	1,1-Dichloroethene	ND	6.8	0.35	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	6.8	0.25	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	6.8	0.32	ug/kg	
540-59-0	1,2-Dichloroethene (total)	ND	6.8	0.25	ug/kg	
78-87-5	1,2-Dichloropropane	ND	6.8	0.21	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	6.8	0.19	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	6.8	0.21	ug/kg	
100-41-4	Ethylbenzene	ND	1.4	0.36	ug/kg	
591-78-6	2-Hexanone	ND	6.8	0.85	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.4	0.32	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	6.8	1.0	ug/kg	
75-09-2	Methylene chloride	ND	6.8	1.7	ug/kg	
100-42-5	Styrene	ND	6.8	0.13	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	6.8	0.18	ug/kg	
127-18-4	Tetrachloroethene	ND	6.8	0.23	ug/kg	
108-88-3	Toluene	0.33	1.4	0.14	ug/kg	J
71-55-6	1,1,1-Trichloroethane	ND	6.8	0.14	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PX01-SW-5		
Lab Sample ID:	JB14890-1	**Date Sampled:**	08/28/12
Matrix:	SO - Soil	**Date Received:**	08/29/12
Method:	SW846 8260B	**Percent Solids:**	81.4
Project:	AFFCO, 361 Walsh Avenue, New Windsor, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-00-5	1,1,2-Trichloroethane	ND	6.8	0.24	ug/kg	
79-01-6	Trichloroethene	ND	6.8	0.24	ug/kg	
75-01-4	Vinyl chloride	ND	6.8	0.20	ug/kg	
1330-20-7	Xylene (total)	ND	1.4	0.19	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		70-130%
17060-07-0	1,2-Dichloroethane-D4	82%		70-122%
2037-26-5	Toluene-D8	113%		81-127%
460-00-4	4-Bromofluorobenzene	99%		66-132%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PX02-SW-5		
Lab Sample ID:	JB14890-2	**Date Sampled:**	08/28/12
Matrix:	SO - Soil	**Date Received:**	08/29/12
Method:	SW846 8260B	**Percent Solids:**	83.5
Project:	AFFCO, 361 Walsh Avenue, New Windsor, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	A186329.D	1	08/29/12	CL	n/a	n/a	VA6987
Run #2							

	Initial Weight
Run #1	4.7 g
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	5.9	13	2.2	ug/kg	J
71-43-2	Benzene	ND	1.3	0.15	ug/kg	
75-27-4	Bromodichloromethane	ND	6.4	0.13	ug/kg	
75-25-2	Bromoform	ND	6.4	0.19	ug/kg	
74-83-9	Bromomethane	ND	6.4	0.35	ug/kg	
78-93-3	2-Butanone (MEK)	ND	13	3.0	ug/kg	
75-15-0	Carbon disulfide	ND	6.4	0.15	ug/kg	
56-23-5	Carbon tetrachloride	ND	6.4	0.17	ug/kg	
108-90-7	Chlorobenzene	ND	6.4	0.14	ug/kg	
75-00-3	Chloroethane	ND	6.4	0.29	ug/kg	
67-66-3	Chloroform	ND	6.4	0.11	ug/kg	
74-87-3	Chloromethane	ND	6.4	0.24	ug/kg	
124-48-1	Dibromochloromethane	ND	6.4	0.21	ug/kg	
75-34-3	1,1-Dichloroethane	ND	6.4	0.17	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.3	0.17	ug/kg	
75-35-4	1,1-Dichloroethene	ND	6.4	0.33	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	6.4	0.23	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	6.4	0.30	ug/kg	
540-59-0	1,2-Dichloroethene (total)	ND	6.4	0.23	ug/kg	
78-87-5	1,2-Dichloropropane	ND	6.4	0.20	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	6.4	0.18	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	6.4	0.20	ug/kg	
100-41-4	Ethylbenzene	ND	1.3	0.34	ug/kg	
591-78-6	2-Hexanone	ND	6.4	0.79	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.3	0.30	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	6.4	0.96	ug/kg	
75-09-2	Methylene chloride	ND	6.4	1.6	ug/kg	
100-42-5	Styrene	ND	6.4	0.12	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	6.4	0.17	ug/kg	
127-18-4	Tetrachloroethene	ND	6.4	0.22	ug/kg	
108-88-3	Toluene	ND	1.3	0.13	ug/kg	
71-55-6	1,1,1-Trichloroethane	6.1	6.4	0.14	ug/kg	J

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PX02-SW-5		
Lab Sample ID:	JB14890-2	**Date Sampled:**	08/28/12
Matrix:	SO - Soil	**Date Received:**	08/29/12
Method:	SW846 8260B	**Percent Solids:**	83.5
Project:	AFFCO, 361 Walsh Avenue, New Windsor, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-00-5	1,1,2-Trichloroethane	ND	6.4	0.22	ug/kg	
79-01-6	Trichloroethene	ND	6.4	0.22	ug/kg	
75-01-4	Vinyl chloride	ND	6.4	0.18	ug/kg	
1330-20-7	Xylene (total)	ND	1.3	0.18	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	97%		70-130%
17060-07-0	1,2-Dichloroethane-D4	82%		70-122%
2037-26-5	Toluene-D8	109%		81-127%
460-00-4	4-Bromofluorobenzene	94%		66-132%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PX03-BT-10		
Lab Sample ID:	JB14890-3	**Date Sampled:**	08/28/12
Matrix:	SO - Soil	**Date Received:**	08/29/12
Method:	SW846 8260B	**Percent Solids:**	91.4
Project:	AFFCO, 361 Walsh Avenue, New Windsor, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	A186330.D	1	08/29/12	CL	n/a	n/a	VA6987
Run #2	D199768.D	1	08/31/12	ET	n/a	n/a	VD8148

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	4.7 g		
Run #2	10.0 g	10.0 ml	100 ul

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	20.6	12	2.0	ug/kg	
71-43-2	Benzene	ND	1.2	0.14	ug/kg	
75-27-4	Bromodichloromethane	ND	5.8	0.12	ug/kg	
75-25-2	Bromoform	ND	5.8	0.18	ug/kg	
74-83-9	Bromomethane	ND	5.8	0.32	ug/kg	
78-93-3	2-Butanone (MEK)	12.9	12	2.8	ug/kg	
75-15-0	Carbon disulfide	1.5	5.8	0.14	ug/kg	J
56-23-5	Carbon tetrachloride	ND	5.8	0.15	ug/kg	
108-90-7	Chlorobenzene	ND	5.8	0.13	ug/kg	
75-00-3	Chloroethane	1.9	5.8	0.26	ug/kg	J
67-66-3	Chloroform	0.56	5.8	0.096	ug/kg	J
74-87-3	Chloromethane	ND	5.8	0.22	ug/kg	
124-48-1	Dibromochloromethane	ND	5.8	0.19	ug/kg	
75-34-3	1,1-Dichloroethane	1940 [a]	300	8.1	ug/kg	
107-06-2	1,2-Dichloroethane	13.8	1.2	0.16	ug/kg	
75-35-4	1,1-Dichloroethene	568 [a]	300	15	ug/kg	
156-59-2	cis-1,2-Dichloroethene	1.5	5.8	0.21	ug/kg	J
156-60-5	trans-1,2-Dichloroethene	ND	5.8	0.28	ug/kg	
540-59-0	1,2-Dichloroethene (total)	1.5	5.8	0.21	ug/kg	J
78-87-5	1,2-Dichloropropane	ND	5.8	0.18	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.8	0.16	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.8	0.18	ug/kg	
100-41-4	Ethylbenzene	ND	1.2	0.31	ug/kg	
591-78-6	2-Hexanone	ND	5.8	0.72	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.2	0.27	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.8	0.87	ug/kg	
75-09-2	Methylene chloride	ND	5.8	1.5	ug/kg	
100-42-5	Styrene	ND	5.8	0.11	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.8	0.15	ug/kg	
127-18-4	Tetrachloroethene	0.68	5.8	0.20	ug/kg	J
108-88-3	Toluene	17.1	1.2	0.12	ug/kg	
71-55-6	1,1,1-Trichloroethane	4980 [a]	300	6.3	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PX03-BT-10		
Lab Sample ID:	JB14890-3	**Date Sampled:**	08/28/12
Matrix:	SO - Soil	**Date Received:**	08/29/12
Method:	SW846 8260B	**Percent Solids:**	91.4
Project:	AFFCO, 361 Walsh Avenue, New Windsor, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-00-5	1,1,2-Trichloroethane	0.64	5.8	0.20	ug/kg	J
79-01-6	Trichloroethene	2.2	5.8	0.20	ug/kg	J
75-01-4	Vinyl chloride	9.7	5.8	0.17	ug/kg	
1330-20-7	Xylene (total)	ND	1.2	0.16	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%	97%	70-130%
17060-07-0	1,2-Dichloroethane-D4	87%	98%	70-122%
2037-26-5	Toluene-D8	108%	101%	81-127%
460-00-4	4-Bromofluorobenzene	100%	91%	66-132%

(a) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PX04-SW-5		
Lab Sample ID:	JB14890-4	**Date Sampled:**	08/28/12
Matrix:	SO - Soil	**Date Received:**	08/29/12
Method:	SW846 8260B	**Percent Solids:**	81.3
Project:	AFFCO, 361 Walsh Avenue, New Windsor, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	V128816.D	1	08/30/12	OTR	n/a	n/a	VV5565
Run #2							

	Initial Weight
Run #1	4.6 g
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	13	2.3	ug/kg	
71-43-2	Benzene	0.77	1.3	0.16	ug/kg	J
75-27-4	Bromodichloromethane	ND	6.7	0.14	ug/kg	
75-25-2	Bromoform	ND	6.7	0.20	ug/kg	
74-83-9	Bromomethane	ND	6.7	0.36	ug/kg	
78-93-3	2-Butanone (MEK)	ND	13	3.2	ug/kg	
75-15-0	Carbon disulfide	ND	6.7	0.16	ug/kg	
56-23-5	Carbon tetrachloride	ND	6.7	0.18	ug/kg	
108-90-7	Chlorobenzene	ND	6.7	0.14	ug/kg	
75-00-3	Chloroethane	ND	6.7	0.30	ug/kg	
67-66-3	Chloroform	ND	6.7	0.11	ug/kg	
74-87-3	Chloromethane	ND	6.7	0.25	ug/kg	
124-48-1	Dibromochloromethane	ND	6.7	0.22	ug/kg	
75-34-3	1,1-Dichloroethane	ND	6.7	0.18	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.3	0.18	ug/kg	
75-35-4	1,1-Dichloroethene	1.0	6.7	0.34	ug/kg	J
156-59-2	cis-1,2-Dichloroethene	ND	6.7	0.24	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	6.7	0.32	ug/kg	
540-59-0	1,2-Dichloroethene (total)	ND	6.7	0.24	ug/kg	
78-87-5	1,2-Dichloropropane	ND	6.7	0.21	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	6.7	0.19	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	6.7	0.21	ug/kg	
100-41-4	Ethylbenzene	ND	1.3	0.35	ug/kg	
591-78-6	2-Hexanone	ND	6.7	0.83	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.3	0.31	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	6.7	1.0	ug/kg	
75-09-2	Methylene chloride	ND	6.7	1.7	ug/kg	
100-42-5	Styrene	ND	6.7	0.12	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	6.7	0.18	ug/kg	
127-18-4	Tetrachloroethene	ND	6.7	0.23	ug/kg	
108-88-3	Toluene	0.35	1.3	0.14	ug/kg	J
71-55-6	1,1,1-Trichloroethane	0.49	6.7	0.14	ug/kg	J

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PX04-SW-5		
Lab Sample ID:	JB14890-4	**Date Sampled:**	08/28/12
Matrix:	SO - Soil	**Date Received:**	08/29/12
Method:	SW846 8260B	**Percent Solids:**	81.3
Project:	AFFCO, 361 Walsh Avenue, New Windsor, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-00-5	1,1,2-Trichloroethane	ND	6.7	0.23	ug/kg	
79-01-6	Trichloroethene	ND	6.7	0.23	ug/kg	
75-01-4	Vinyl chloride	ND	6.7	0.19	ug/kg	
1330-20-7	Xylene (total)	ND	1.3	0.19	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	109%		70-130%
17060-07-0	1,2-Dichloroethane-D4	91%		70-122%
2037-26-5	Toluene-D8	118%		81-127%
460-00-4	4-Bromofluorobenzene	111%		66-132%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PX05-SW-6		
Lab Sample ID:	JB14890-5	**Date Sampled:**	08/28/12
Matrix:	SO - Soil	**Date Received:**	08/29/12
Method:	SW846 8260B	**Percent Solids:**	86.5
Project:	AFFCO, 361 Walsh Avenue, New Windsor, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	V128817.D	1	08/31/12	OTR	n/a	n/a	VV5565
Run #2							

	Initial Weight
Run #1	4.5 g
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	13	2.2	ug/kg	
71-43-2	Benzene	1.3	1.3	0.15	ug/kg	
75-27-4	Bromodichloromethane	ND	6.4	0.13	ug/kg	
75-25-2	Bromoform	ND	6.4	0.19	ug/kg	
74-83-9	Bromomethane	ND	6.4	0.35	ug/kg	
78-93-3	2-Butanone (MEK)	ND	13	3.1	ug/kg	
75-15-0	Carbon disulfide	ND	6.4	0.15	ug/kg	
56-23-5	Carbon tetrachloride	ND	6.4	0.17	ug/kg	
108-90-7	Chlorobenzene	ND	6.4	0.14	ug/kg	
75-00-3	Chloroethane	ND	6.4	0.29	ug/kg	
67-66-3	Chloroform	ND	6.4	0.11	ug/kg	
74-87-3	Chloromethane	ND	6.4	0.24	ug/kg	
124-48-1	Dibromochloromethane	ND	6.4	0.21	ug/kg	
75-34-3	1,1-Dichloroethane	ND	6.4	0.18	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.3	0.17	ug/kg	
75-35-4	1,1-Dichloroethene	ND	6.4	0.33	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	6.4	0.24	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	6.4	0.31	ug/kg	
540-59-0	1,2-Dichloroethene (total)	ND	6.4	0.24	ug/kg	
78-87-5	1,2-Dichloropropane	ND	6.4	0.20	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	6.4	0.18	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	6.4	0.20	ug/kg	
100-41-4	Ethylbenzene	ND	1.3	0.34	ug/kg	
591-78-6	2-Hexanone	ND	6.4	0.80	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.3	0.30	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	6.4	0.96	ug/kg	
75-09-2	Methylene chloride	ND	6.4	1.6	ug/kg	
100-42-5	Styrene	ND	6.4	0.12	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	6.4	0.17	ug/kg	
127-18-4	Tetrachloroethene	ND	6.4	0.22	ug/kg	
108-88-3	Toluene	0.53	1.3	0.13	ug/kg	J
71-55-6	1,1,1-Trichloroethane	3.2	6.4	0.14	ug/kg	J

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PX05-SW-6		
Lab Sample ID:	JB14890-5	**Date Sampled:**	08/28/12
Matrix:	SO - Soil	**Date Received:**	08/29/12
Method:	SW846 8260B	**Percent Solids:**	86.5
Project:	AFFCO, 361 Walsh Avenue, New Windsor, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-00-5	1,1,2-Trichloroethane	ND	6.4	0.22	ug/kg	
79-01-6	Trichloroethene	4.5	6.4	0.22	ug/kg	J
75-01-4	Vinyl chloride	ND	6.4	0.18	ug/kg	
1330-20-7	Xylene (total)	ND	1.3	0.18	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	110%		70-130%
17060-07-0	1,2-Dichloroethane-D4	89%		70-122%
2037-26-5	Toluene-D8	118%		81-127%
460-00-4	4-Bromofluorobenzene	110%		66-132%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PX06-BT-10		
Lab Sample ID:	JB14890-6	**Date Sampled:**	08/28/12
Matrix:	SO - Soil	**Date Received:**	08/29/12
Method:	SW846 8260B	**Percent Solids:**	91.7
Project:	AFFCO, 361 Walsh Avenue, New Windsor, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	V128818.D	1	08/31/12	OTR	n/a	n/a	VV5565
Run #2							

	Initial Weight
Run #1	4.4 g
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	4.0	12	2.1	ug/kg	J
71-43-2	Benzene	0.86	1.2	0.15	ug/kg	J
75-27-4	Bromodichloromethane	ND	6.2	0.13	ug/kg	
75-25-2	Bromoform	ND	6.2	0.19	ug/kg	
74-83-9	Bromomethane	ND	6.2	0.34	ug/kg	
78-93-3	2-Butanone (MEK)	ND	12	3.0	ug/kg	
75-15-0	Carbon disulfide	ND	6.2	0.14	ug/kg	
56-23-5	Carbon tetrachloride	ND	6.2	0.16	ug/kg	
108-90-7	Chlorobenzene	ND	6.2	0.13	ug/kg	
75-00-3	Chloroethane	ND	6.2	0.28	ug/kg	
67-66-3	Chloroform	ND	6.2	0.10	ug/kg	
74-87-3	Chloromethane	ND	6.2	0.23	ug/kg	
124-48-1	Dibromochloromethane	ND	6.2	0.20	ug/kg	
75-34-3	1,1-Dichloroethane	ND	6.2	0.17	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.2	0.17	ug/kg	
75-35-4	1,1-Dichloroethene	ND	6.2	0.32	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	6.2	0.23	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	6.2	0.29	ug/kg	
540-59-0	1,2-Dichloroethene (total)	ND	6.2	0.23	ug/kg	
78-87-5	1,2-Dichloropropane	ND	6.2	0.19	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	6.2	0.17	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	6.2	0.19	ug/kg	
100-41-4	Ethylbenzene	ND	1.2	0.33	ug/kg	
591-78-6	2-Hexanone	ND	6.2	0.77	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.2	0.29	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	6.2	0.93	ug/kg	
75-09-2	Methylene chloride	ND	6.2	1.6	ug/kg	
100-42-5	Styrene	ND	6.2	0.11	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	6.2	0.16	ug/kg	
127-18-4	Tetrachloroethene	ND	6.2	0.21	ug/kg	
108-88-3	Toluene	ND	1.2	0.13	ug/kg	
71-55-6	1,1,1-Trichloroethane	0.52	6.2	0.13	ug/kg	J

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PX06-BT-10		
Lab Sample ID:	JB14890-6	**Date Sampled:**	08/28/12
Matrix:	SO - Soil	**Date Received:**	08/29/12
Method:	SW846 8260B	**Percent Solids:**	91.7
Project:	AFFCO, 361 Walsh Avenue, New Windsor, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-00-5	1,1,2-Trichloroethane	ND	6.2	0.22	ug/kg	
79-01-6	Trichloroethene	ND	6.2	0.22	ug/kg	
75-01-4	Vinyl chloride	ND	6.2	0.18	ug/kg	
1330-20-7	Xylene (total)	ND	1.2	0.17	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	113%		70-130%
17060-07-0	1,2-Dichloroethane-D4	96%		70-122%
2037-26-5	Toluene-D8	119%		81-127%
460-00-4	4-Bromofluorobenzene	110%		66-132%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	C5SP01		
Lab Sample ID:	JB14890-7	**Date Sampled:**	08/28/12
Matrix:	SO - Soil	**Date Received:**	08/29/12
Method:	SW846 8260B	**Percent Solids:**	80.9
Project:	AFFCO, 361 Walsh Avenue, New Windsor, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	V128757.D	1	08/29/12	OTR	n/a	n/a	VV5563
Run #2	D199754.D	1	08/30/12	ET	n/a	n/a	VD8147

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	4.4 g		
Run #2	10.0 g	10.0 ml	100 ul

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	14.7	14	2.4	ug/kg	
71-43-2	Benzene	ND	1.4	0.17	ug/kg	
75-27-4	Bromodichloromethane	ND	7.0	0.15	ug/kg	
75-25-2	Bromoform	ND	7.0	0.21	ug/kg	
74-83-9	Bromomethane	ND	7.0	0.38	ug/kg	
78-93-3	2-Butanone (MEK)	ND	14	3.4	ug/kg	
75-15-0	Carbon disulfide	ND	7.0	0.16	ug/kg	
56-23-5	Carbon tetrachloride	ND	7.0	0.19	ug/kg	
108-90-7	Chlorobenzene	ND	7.0	0.15	ug/kg	
75-00-3	Chloroethane	ND	7.0	0.32	ug/kg	
67-66-3	Chloroform	0.73	7.0	0.12	ug/kg	J
74-87-3	Chloromethane	ND	7.0	0.26	ug/kg	
124-48-1	Dibromochloromethane	ND	7.0	0.23	ug/kg	
75-34-3	1,1-Dichloroethane	3.1	7.0	0.19	ug/kg	J
107-06-2	1,2-Dichloroethane	ND	1.4	0.19	ug/kg	
75-35-4	1,1-Dichloroethene	2.5	7.0	0.36	ug/kg	J
156-59-2	cis-1,2-Dichloroethene	ND	7.0	0.26	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	7.0	0.33	ug/kg	
540-59-0	1,2-Dichloroethene (total)	ND	7.0	0.26	ug/kg	
78-87-5	1,2-Dichloropropane	ND	7.0	0.22	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	7.0	0.20	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	7.0	0.22	ug/kg	
100-41-4	Ethylbenzene	ND	1.4	0.37	ug/kg	
591-78-6	2-Hexanone	ND	7.0	0.87	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.4	0.33	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	7.0	1.1	ug/kg	
75-09-2	Methylene chloride	ND	7.0	1.8	ug/kg	
100-42-5	Styrene	ND	7.0	0.13	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	7.0	0.19	ug/kg	
127-18-4	Tetrachloroethene	ND	7.0	0.24	ug/kg	
108-88-3	Toluene	ND	1.4	0.15	ug/kg	
71-55-6	1,1,1-Trichloroethane	2580 [a]	370	7.8	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	C5SP01		
Lab Sample ID:	JB14890-7	**Date Sampled:**	08/28/12
Matrix:	SO - Soil	**Date Received:**	08/29/12
Method:	SW846 8260B	**Percent Solids:**	80.9
Project:	AFFCO, 361 Walsh Avenue, New Windsor, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-00-5	1,1,2-Trichloroethane	ND	7.0	0.24	ug/kg	
79-01-6	Trichloroethene	ND	7.0	0.24	ug/kg	
75-01-4	Vinyl chloride	ND	7.0	0.20	ug/kg	
1330-20-7	Xylene (total)	ND	1.4	0.20	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%	94%	70-130%
17060-07-0	1,2-Dichloroethane-D4	85%	94%	70-122%
2037-26-5	Toluene-D8	117%	99%	81-127%
460-00-4	4-Bromofluorobenzene	108%	94%	66-132%

(a) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	C5SP02		
Lab Sample ID:	JB14890-8	**Date Sampled:**	08/28/12
Matrix:	SO - Soil	**Date Received:**	08/29/12
Method:	SW846 8260B	**Percent Solids:**	90.8
Project:	AFFCO, 361 Walsh Avenue, New Windsor, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	V128758.D	1	08/29/12	OTR	n/a	n/a	VV5563
Run #2	E194541.D	1	08/30/12	OTR	n/a	n/a	VE8556
Run #3	E194542.D	1	08/30/12	OTR	n/a	n/a	VE8556

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	4.4 g		
Run #2	9.8 g	10.0 ml	100 ul
Run #3	9.8 g	10.0 ml	10.0 ul

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	13.3	13	2.1	ug/kg	
71-43-2	Benzene	ND	1.3	0.15	ug/kg	
75-27-4	Bromodichloromethane	ND	6.3	0.13	ug/kg	
75-25-2	Bromoform	ND	6.3	0.19	ug/kg	
74-83-9	Bromomethane	ND	6.3	0.34	ug/kg	
78-93-3	2-Butanone (MEK)	ND	13	3.0	ug/kg	
75-15-0	Carbon disulfide	1.2	6.3	0.15	ug/kg	J
56-23-5	Carbon tetrachloride	ND	6.3	0.17	ug/kg	
108-90-7	Chlorobenzene	ND	6.3	0.14	ug/kg	
75-00-3	Chloroethane	ND	6.3	0.28	ug/kg	
67-66-3	Chloroform	0.79	6.3	0.10	ug/kg	J
74-87-3	Chloromethane	ND	6.3	0.23	ug/kg	
124-48-1	Dibromochloromethane	ND	6.3	0.21	ug/kg	
75-34-3	1,1-Dichloroethane	214	6.3	0.17	ug/kg	
107-06-2	1,2-Dichloroethane	2.9	1.3	0.17	ug/kg	
75-35-4	1,1-Dichloroethene	2750 [a]	310	16	ug/kg	
156-59-2	cis-1,2-Dichloroethene	1.2	6.3	0.23	ug/kg	J
156-60-5	trans-1,2-Dichloroethene	2.2	6.3	0.30	ug/kg	J
540-59-0	1,2-Dichloroethene (total)	3.4	6.3	0.23	ug/kg	J
78-87-5	1,2-Dichloropropane	ND	6.3	0.19	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	6.3	0.17	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	6.3	0.19	ug/kg	
100-41-4	Ethylbenzene	ND	1.3	0.33	ug/kg	
591-78-6	2-Hexanone	ND	6.3	0.78	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.3	0.29	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	6.3	0.94	ug/kg	
75-09-2	Methylene chloride	ND	6.3	1.6	ug/kg	
100-42-5	Styrene	ND	6.3	0.11	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	6.3	0.17	ug/kg	
127-18-4	Tetrachloroethene	1.1	6.3	0.22	ug/kg	J

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	C5SP02		
Lab Sample ID:	JB14890-8	**Date Sampled:**	08/28/12
Matrix:	SO - Soil	**Date Received:**	08/29/12
Method:	SW846 8260B	**Percent Solids:**	90.8
Project:	AFFCO, 361 Walsh Avenue, New Windsor, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
108-88-3	Toluene	1.2	1.3	0.13	ug/kg	J
71-55-6	1,1,1-Trichloroethane	29800 [b]	3100	65	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	6.3	0.22	ug/kg	
79-01-6	Trichloroethene	1.7	6.3	0.22	ug/kg	J
75-01-4	Vinyl chloride	1.8	6.3	0.18	ug/kg	J
1330-20-7	Xylene (total)	ND	1.3	0.17	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Run# 3	Limits
1868-53-7	Dibromofluoromethane	86%	89%	89%	70-130%
17060-07-0	1,2-Dichloroethane-D4	89%	93%	93%	70-122%
2037-26-5	Toluene-D8	118%	89%	88%	81-127%
460-00-4	4-Bromofluorobenzene	108%	84%	86%	66-132%

(a) Result is from Run# 2
(b) Result is from Run# 3

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	C4SP01		
Lab Sample ID:	JB14890-9	**Date Sampled:**	08/28/12
Matrix:	SO - Soil	**Date Received:**	08/29/12
Method:	SW846 8260B	**Percent Solids:**	89.1
Project:	AFFCO, 361 Walsh Avenue, New Windsor, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	V128796.D	1	08/30/12	OTR	n/a	n/a	VV5565
Run #2							

	Initial Weight
Run #1	4.2 g
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	13	2.3	ug/kg	
71-43-2	Benzene	1.0	1.3	0.16	ug/kg	J
75-27-4	Bromodichloromethane	ND	6.7	0.14	ug/kg	
75-25-2	Bromoform	ND	6.7	0.20	ug/kg	
74-83-9	Bromomethane	ND	6.7	0.36	ug/kg	
78-93-3	2-Butanone (MEK)	ND	13	3.2	ug/kg	
75-15-0	Carbon disulfide	ND	6.7	0.16	ug/kg	
56-23-5	Carbon tetrachloride	ND	6.7	0.18	ug/kg	
108-90-7	Chlorobenzene	ND	6.7	0.14	ug/kg	
75-00-3	Chloroethane	ND	6.7	0.30	ug/kg	
67-66-3	Chloroform	ND	6.7	0.11	ug/kg	
74-87-3	Chloromethane	ND	6.7	0.25	ug/kg	
124-48-1	Dibromochloromethane	ND	6.7	0.22	ug/kg	
75-34-3	1,1-Dichloroethane	ND	6.7	0.18	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.3	0.18	ug/kg	
75-35-4	1,1-Dichloroethene	ND	6.7	0.34	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	6.7	0.24	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	6.7	0.32	ug/kg	
540-59-0	1,2-Dichloroethene (total)	ND	6.7	0.24	ug/kg	
78-87-5	1,2-Dichloropropane	ND	6.7	0.21	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	6.7	0.19	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	6.7	0.21	ug/kg	
100-41-4	Ethylbenzene	ND	1.3	0.35	ug/kg	
591-78-6	2-Hexanone	ND	6.7	0.83	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.3	0.31	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	6.7	1.0	ug/kg	
75-09-2	Methylene chloride	ND	6.7	1.7	ug/kg	
100-42-5	Styrene	ND	6.7	0.12	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	6.7	0.18	ug/kg	
127-18-4	Tetrachloroethene	ND	6.7	0.23	ug/kg	
108-88-3	Toluene	0.43	1.3	0.14	ug/kg	J
71-55-6	1,1,1-Trichloroethane	1.6	6.7	0.14	ug/kg	J

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	C4SP01		
Lab Sample ID:	JB14890-9	**Date Sampled:**	08/28/12
Matrix:	SO - Soil	**Date Received:**	08/29/12
Method:	SW846 8260B	**Percent Solids:**	89.1
Project:	AFFCO, 361 Walsh Avenue, New Windsor, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-00-5	1,1,2-Trichloroethane	ND	6.7	0.23	ug/kg	
79-01-6	Trichloroethene	3.6	6.7	0.23	ug/kg	J
75-01-4	Vinyl chloride	ND	6.7	0.19	ug/kg	
1330-20-7	Xylene (total)	ND	1.3	0.19	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	111%		70-130%
17060-07-0	1,2-Dichloroethane-D4	91%		70-122%
2037-26-5	Toluene-D8	118%		81-127%
460-00-4	4-Bromofluorobenzene	109%		66-132%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PX07BT-10		
Lab Sample ID:	JB15155-1	**Date Sampled:**	08/30/12
Matrix:	SO - Soil	**Date Received:**	08/31/12
Method:	SW846 8260B	**Percent Solids:**	77.0
Project:	AFFCO, 361 Walsh Avenue, New Windsor, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Y125714.D	1	09/01/12	RS	n/a	n/a	VY5399
Run #2	Y125759.D	1	09/04/12	RS	n/a	n/a	VY5401

	Initial Weight
Run #1	5.1 g
Run #2	1.2 g

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	27.5	13	2.2	ug/kg	
71-43-2	Benzene	ND	1.3	0.15	ug/kg	
75-27-4	Bromodichloromethane	ND	6.4	0.13	ug/kg	
75-25-2	Bromoform	ND	6.4	0.19	ug/kg	
74-83-9	Bromomethane	ND	6.4	0.35	ug/kg	
78-93-3	2-Butanone (MEK)	ND	13	3.0	ug/kg	
75-15-0	Carbon disulfide	ND	6.4	0.15	ug/kg	
56-23-5	Carbon tetrachloride	ND	6.4	0.17	ug/kg	
108-90-7	Chlorobenzene	ND	6.4	0.14	ug/kg	
75-00-3	Chloroethane	136 [a]	27	1.2	ug/kg	
67-66-3	Chloroform	0.49	6.4	0.11	ug/kg	J
74-87-3	Chloromethane	ND	6.4	0.24	ug/kg	
124-48-1	Dibromochloromethane	ND	6.4	0.21	ug/kg	
75-34-3	1,1-Dichloroethane	816 [a]	27	0.74	ug/kg	
107-06-2	1,2-Dichloroethane	7.4	1.3	0.17	ug/kg	
75-35-4	1,1-Dichloroethene	34.5	6.4	0.33	ug/kg	
156-59-2	cis-1,2-Dichloroethene	10.2	6.4	0.23	ug/kg	
156-60-5	trans-1,2-Dichloroethene	3.2	6.4	0.30	ug/kg	J
540-59-0	1,2-Dichloroethene (total)	13.4	6.4	0.23	ug/kg	
78-87-5	1,2-Dichloropropane	ND	6.4	0.20	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	6.4	0.18	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	6.4	0.20	ug/kg	
100-41-4	Ethylbenzene	ND	1.3	0.33	ug/kg	
591-78-6	2-Hexanone	ND	6.4	0.79	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.3	0.30	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	6.4	0.96	ug/kg	
75-09-2	Methylene chloride	ND	6.4	1.6	ug/kg	
100-42-5	Styrene	ND	6.4	0.12	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	6.4	0.17	ug/kg	
127-18-4	Tetrachloroethene	1.6	6.4	0.22	ug/kg	J
108-88-3	Toluene	2.7	1.3	0.13	ug/kg	
71-55-6	1,1,1-Trichloroethane	519 [a]	27	0.57	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PX07BT-10		
Lab Sample ID:	JB15155-1	**Date Sampled:**	08/30/12
Matrix:	SO - Soil	**Date Received:**	08/31/12
Method:	SW846 8260B	**Percent Solids:**	77.0
Project:	AFFCO, 361 Walsh Avenue, New Windsor, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-00-5	1,1,2-Trichloroethane	3.8	6.4	0.22	ug/kg	J
79-01-6	Trichloroethene	20.5	6.4	0.22	ug/kg	
75-01-4	Vinyl chloride	2.0	6.4	0.18	ug/kg	J
1330-20-7	Xylene (total)	ND	1.3	0.18	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%	102%	70-130%
17060-07-0	1,2-Dichloroethane-D4	85%	93%	70-122%
2037-26-5	Toluene-D8	106%	108%	81-127%
460-00-4	4-Bromofluorobenzene	94%	97%	66-132%

(a) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PX08SW-7		
Lab Sample ID:	JB15155-2	**Date Sampled:**	08/30/12
Matrix:	SO - Soil	**Date Received:**	08/31/12
Method:	SW846 8260B	**Percent Solids:**	86.3
Project:	AFFCO, 361 Walsh Avenue, New Windsor, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Y125758.D	1	09/04/12	RS	n/a	n/a	VY5401
Run #2							

	Initial Weight
Run #1	4.8 g
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	12	2.0	ug/kg	
71-43-2	Benzene	9.9	1.2	0.14	ug/kg	
75-27-4	Bromodichloromethane	ND	6.0	0.13	ug/kg	
75-25-2	Bromoform	ND	6.0	0.18	ug/kg	
74-83-9	Bromomethane	ND	6.0	0.33	ug/kg	
78-93-3	2-Butanone (MEK)	ND	12	2.9	ug/kg	
75-15-0	Carbon disulfide	ND	6.0	0.14	ug/kg	
56-23-5	Carbon tetrachloride	ND	6.0	0.16	ug/kg	
108-90-7	Chlorobenzene	ND	6.0	0.13	ug/kg	
75-00-3	Chloroethane	ND	6.0	0.27	ug/kg	
67-66-3	Chloroform	ND	6.0	0.10	ug/kg	
74-87-3	Chloromethane	ND	6.0	0.22	ug/kg	
124-48-1	Dibromochloromethane	ND	6.0	0.20	ug/kg	
75-34-3	1,1-Dichloroethane	1.1	6.0	0.17	ug/kg	J
107-06-2	1,2-Dichloroethane	0.50	1.2	0.16	ug/kg	J
75-35-4	1,1-Dichloroethene	ND	6.0	0.31	ug/kg	
156-59-2	cis-1,2-Dichloroethene	1.1	6.0	0.22	ug/kg	J
156-60-5	trans-1,2-Dichloroethene	0.58	6.0	0.29	ug/kg	J
540-59-0	1,2-Dichloroethene (total)	1.6	6.0	0.22	ug/kg	J
78-87-5	1,2-Dichloropropane	ND	6.0	0.19	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	6.0	0.17	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	6.0	0.19	ug/kg	
100-41-4	Ethylbenzene	0.73	1.2	0.32	ug/kg	J
591-78-6	2-Hexanone	ND	6.0	0.75	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.2	0.28	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	6.0	0.91	ug/kg	
75-09-2	Methylene chloride	ND	6.0	1.5	ug/kg	
100-42-5	Styrene	ND	6.0	0.11	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	6.0	0.16	ug/kg	
127-18-4	Tetrachloroethene	0.44	6.0	0.21	ug/kg	J
108-88-3	Toluene	4.1	1.2	0.13	ug/kg	
71-55-6	1,1,1-Trichloroethane	38.4	6.0	0.13	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PX08SW-7		
Lab Sample ID:	JB15155-2	**Date Sampled:**	08/30/12
Matrix:	SO - Soil	**Date Received:**	08/31/12
Method:	SW846 8260B	**Percent Solids:**	86.3
Project:	AFFCO, 361 Walsh Avenue, New Windsor, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-00-5	1,1,2-Trichloroethane	4.6	6.0	0.21	ug/kg	J
79-01-6	Trichloroethene	2.4	6.0	0.21	ug/kg	J
75-01-4	Vinyl chloride	ND	6.0	0.17	ug/kg	
1330-20-7	Xylene (total)	1.7	1.2	0.17	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	106%		70-130%
17060-07-0	1,2-Dichloroethane-D4	97%		70-122%
2037-26-5	Toluene-D8	108%		81-127%
460-00-4	4-Bromofluorobenzene	101%		66-132%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	BENCH01		
Lab Sample ID:	JB15155-3	**Date Sampled:**	08/30/12
Matrix:	SO - Soil	**Date Received:**	08/31/12
Method:	SW846 8260B	**Percent Solids:**	88.1
Project:	AFFCO, 361 Walsh Avenue, New Windsor, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Y125715.D	1	09/01/12	RS	n/a	n/a	VY5399
Run #2							

	Initial Weight
Run #1	5.0 g
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	11	1.9	ug/kg	
71-43-2	Benzene	ND	1.1	0.14	ug/kg	
75-27-4	Bromodichloromethane	ND	5.7	0.12	ug/kg	
75-25-2	Bromoform	ND	5.7	0.17	ug/kg	
74-83-9	Bromomethane	ND	5.7	0.31	ug/kg	
78-93-3	2-Butanone (MEK)	ND	11	2.7	ug/kg	
75-15-0	Carbon disulfide	ND	5.7	0.13	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.7	0.15	ug/kg	
108-90-7	Chlorobenzene	ND	5.7	0.12	ug/kg	
75-00-3	Chloroethane	ND	5.7	0.26	ug/kg	
67-66-3	Chloroform	ND	5.7	0.094	ug/kg	
74-87-3	Chloromethane	ND	5.7	0.21	ug/kg	
124-48-1	Dibromochloromethane	ND	5.7	0.19	ug/kg	
75-34-3	1,1-Dichloroethane	1.2	5.7	0.16	ug/kg	J
107-06-2	1,2-Dichloroethane	ND	1.1	0.15	ug/kg	
75-35-4	1,1-Dichloroethene	1.6	5.7	0.29	ug/kg	J
156-59-2	cis-1,2-Dichloroethene	0.92	5.7	0.21	ug/kg	J
156-60-5	trans-1,2-Dichloroethene	0.61	5.7	0.27	ug/kg	J
540-59-0	1,2-Dichloroethene (total)	1.5	5.7	0.21	ug/kg	J
78-87-5	1,2-Dichloropropane	ND	5.7	0.17	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.7	0.16	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.7	0.18	ug/kg	
100-41-4	Ethylbenzene	ND	1.1	0.30	ug/kg	
591-78-6	2-Hexanone	ND	5.7	0.71	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.1	0.27	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.7	0.85	ug/kg	
75-09-2	Methylene chloride	ND	5.7	1.4	ug/kg	
100-42-5	Styrene	ND	5.7	0.10	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.7	0.15	ug/kg	
127-18-4	Tetrachloroethene	0.62	5.7	0.20	ug/kg	J
108-88-3	Toluene	1.1	1.1	0.12	ug/kg	
71-55-6	1,1,1-Trichloroethane	47.9	5.7	0.12	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	BENCH01		
Lab Sample ID:	JB15155-3	**Date Sampled:**	08/30/12
Matrix:	SO - Soil	**Date Received:**	08/31/12
Method:	SW846 8260B	**Percent Solids:**	88.1
Project:	AFFCO, 361 Walsh Avenue, New Windsor, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-00-5	1,1,2-Trichloroethane	1.6	5.7	0.20	ug/kg	J
79-01-6	Trichloroethene	0.93	5.7	0.20	ug/kg	J
75-01-4	Vinyl chloride	ND	5.7	0.16	ug/kg	
1330-20-7	Xylene (total)	ND	1.1	0.16	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		70-130%
17060-07-0	1,2-Dichloroethane-D4	86%		70-122%
2037-26-5	Toluene-D8	105%		81-127%
460-00-4	4-Bromofluorobenzene	92%		66-132%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PX09SW-3		
Lab Sample ID:	JB15405-1	**Date Sampled:**	09/04/12
Matrix:	SO - Soil	**Date Received:**	09/05/12
Method:	SW846 8260B	**Percent Solids:**	84.5
Project:	AFFCO, 361 Walsh Avenue, New Windsor, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3C90562.D	1	09/06/12	JTP	n/a	n/a	V3C4027
Run #2							

	Initial Weight
Run #1	4.5 g
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	13	2.2	ug/kg	
71-43-2	Benzene	2.6	1.3	0.16	ug/kg	
75-27-4	Bromodichloromethane	ND	6.6	0.14	ug/kg	
75-25-2	Bromoform	ND	6.6	0.20	ug/kg	
74-83-9	Bromomethane	ND	6.6	0.36	ug/kg	
78-93-3	2-Butanone (MEK)	ND	13	3.1	ug/kg	
75-15-0	Carbon disulfide	ND	6.6	0.15	ug/kg	
56-23-5	Carbon tetrachloride	ND	6.6	0.17	ug/kg	
108-90-7	Chlorobenzene	ND	6.6	0.14	ug/kg	
75-00-3	Chloroethane	ND	6.6	0.30	ug/kg	
67-66-3	Chloroform	ND	6.6	0.11	ug/kg	
74-87-3	Chloromethane	ND	6.6	0.24	ug/kg	
124-48-1	Dibromochloromethane	ND	6.6	0.22	ug/kg	
75-34-3	1,1-Dichloroethane	ND	6.6	0.18	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.3	0.18	ug/kg	
75-35-4	1,1-Dichloroethene	ND	6.6	0.34	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	6.6	0.24	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	6.6	0.31	ug/kg	
540-59-0	1,2-Dichloroethene (total)	ND	6.6	0.24	ug/kg	
78-87-5	1,2-Dichloropropane	ND	6.6	0.20	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	6.6	0.18	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	6.6	0.20	ug/kg	
100-41-4	Ethylbenzene	ND	1.3	0.35	ug/kg	
591-78-6	2-Hexanone	ND	6.6	0.82	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.3	0.31	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	6.6	0.99	ug/kg	
75-09-2	Methylene chloride	ND	6.6	1.7	ug/kg	
100-42-5	Styrene	ND	6.6	0.12	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	6.6	0.17	ug/kg	
127-18-4	Tetrachloroethene	ND	6.6	0.23	ug/kg	
108-88-3	Toluene	1.1	1.3	0.14	ug/kg	J
71-55-6	1,1,1-Trichloroethane	68.5	6.6	0.14	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PX09SW-3		
Lab Sample ID:	JB15405-1	**Date Sampled:**	09/04/12
Matrix:	SO - Soil	**Date Received:**	09/05/12
Method:	SW846 8260B	**Percent Solids:**	84.5
Project:	AFFCO, 361 Walsh Avenue, New Windsor, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-00-5	1,1,2-Trichloroethane	ND	6.6	0.23	ug/kg	
79-01-6	Trichloroethene	2.0	6.6	0.23	ug/kg	J
75-01-4	Vinyl chloride	ND	6.6	0.19	ug/kg	
1330-20-7	Xylene (total)	ND	1.3	0.18	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		70-130%
17060-07-0	1,2-Dichloroethane-D4	104%		70-122%
2037-26-5	Toluene-D8	100%		81-127%
460-00-4	4-Bromofluorobenzene	102%		66-132%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PX10SW-5		
Lab Sample ID:	JB15405-2	**Date Sampled:**	09/04/12
Matrix:	SO - Soil	**Date Received:**	09/05/12
Method:	SW846 8260B	**Percent Solids:**	83.6
Project:	AFFCO, 361 Walsh Avenue, New Windsor, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3C90563.D	1	09/06/12	JTP	n/a	n/a	V3C4027
Run #2							

	Initial Weight
Run #1	4.5 g
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	13	2.2	ug/kg	
71-43-2	Benzene	2.7	1.3	0.16	ug/kg	
75-27-4	Bromodichloromethane	ND	6.6	0.14	ug/kg	
75-25-2	Bromoform	ND	6.6	0.20	ug/kg	
74-83-9	Bromomethane	ND	6.6	0.36	ug/kg	
78-93-3	2-Butanone (MEK)	ND	13	3.2	ug/kg	
75-15-0	Carbon disulfide	ND	6.6	0.16	ug/kg	
56-23-5	Carbon tetrachloride	ND	6.6	0.18	ug/kg	
108-90-7	Chlorobenzene	ND	6.6	0.14	ug/kg	
75-00-3	Chloroethane	ND	6.6	0.30	ug/kg	
67-66-3	Chloroform	ND	6.6	0.11	ug/kg	
74-87-3	Chloromethane	ND	6.6	0.25	ug/kg	
124-48-1	Dibromochloromethane	ND	6.6	0.22	ug/kg	
75-34-3	1,1-Dichloroethane	1.8	6.6	0.18	ug/kg	J
107-06-2	1,2-Dichloroethane	ND	1.3	0.18	ug/kg	
75-35-4	1,1-Dichloroethene	ND	6.6	0.34	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	6.6	0.24	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	6.6	0.32	ug/kg	
540-59-0	1,2-Dichloroethene (total)	ND	6.6	0.24	ug/kg	
78-87-5	1,2-Dichloropropane	ND	6.6	0.20	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	6.6	0.18	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	6.6	0.21	ug/kg	
100-41-4	Ethylbenzene	ND	1.3	0.35	ug/kg	
591-78-6	2-Hexanone	ND	6.6	0.83	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.3	0.31	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	6.6	1.0	ug/kg	
75-09-2	Methylene chloride	ND	6.6	1.7	ug/kg	
100-42-5	Styrene	ND	6.6	0.12	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	6.6	0.18	ug/kg	
127-18-4	Tetrachloroethene	0.54	6.6	0.23	ug/kg	J
108-88-3	Toluene	1.3	1.3	0.14	ug/kg	
71-55-6	1,1,1-Trichloroethane	67.1	6.6	0.14	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PX10SW-5		
Lab Sample ID:	JB15405-2	**Date Sampled:**	09/04/12
Matrix:	SO - Soil	**Date Received:**	09/05/12
Method:	SW846 8260B	**Percent Solids:**	83.6
Project:	AFFCO, 361 Walsh Avenue, New Windsor, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-00-5	1,1,2-Trichloroethane	ND	6.6	0.23	ug/kg	
79-01-6	Trichloroethene	1.5	6.6	0.23	ug/kg	J
75-01-4	Vinyl chloride	ND	6.6	0.19	ug/kg	
1330-20-7	Xylene (total)	ND	1.3	0.18	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		70-130%
17060-07-0	1,2-Dichloroethane-D4	103%		70-122%
2037-26-5	Toluene-D8	99%		81-127%
460-00-4	4-Bromofluorobenzene	105%		66-132%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PX11BT-10		
Lab Sample ID:	JB15405-3	**Date Sampled:**	09/04/12
Matrix:	SO - Soil	**Date Received:**	09/05/12
Method:	SW846 8260B	**Percent Solids:**	86.2
Project:	AFFCO, 361 Walsh Avenue, New Windsor, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X129159.D	1	09/05/12	MS	n/a	n/a	VX5603
Run #2							

	Initial Weight
Run #1	5.0 g
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	12	2.0	ug/kg	
71-43-2	Benzene	ND	1.2	0.14	ug/kg	
75-27-4	Bromodichloromethane	ND	5.8	0.12	ug/kg	
75-25-2	Bromoform	ND	5.8	0.18	ug/kg	
74-83-9	Bromomethane	ND	5.8	0.32	ug/kg	
78-93-3	2-Butanone (MEK)	ND	12	2.8	ug/kg	
75-15-0	Carbon disulfide	ND	5.8	0.14	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.8	0.15	ug/kg	
108-90-7	Chlorobenzene	ND	5.8	0.13	ug/kg	
75-00-3	Chloroethane	ND	5.8	0.26	ug/kg	
67-66-3	Chloroform	ND	5.8	0.096	ug/kg	
74-87-3	Chloromethane	ND	5.8	0.22	ug/kg	
124-48-1	Dibromochloromethane	ND	5.8	0.19	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.8	0.16	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.2	0.16	ug/kg	
75-35-4	1,1-Dichloroethene	ND	5.8	0.30	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	5.8	0.21	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	5.8	0.28	ug/kg	
540-59-0	1,2-Dichloroethene (total)	ND	5.8	0.21	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.8	0.18	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.8	0.16	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.8	0.18	ug/kg	
100-41-4	Ethylbenzene	ND	1.2	0.31	ug/kg	
591-78-6	2-Hexanone	ND	5.8	0.72	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.2	0.27	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.8	0.87	ug/kg	
75-09-2	Methylene chloride	ND	5.8	1.5	ug/kg	
100-42-5	Styrene	ND	5.8	0.11	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.8	0.15	ug/kg	
127-18-4	Tetrachloroethene	ND	5.8	0.20	ug/kg	
108-88-3	Toluene	ND	1.2	0.12	ug/kg	
71-55-6	1,1,1-Trichloroethane	10.9	5.8	0.12	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PX11BT-10		
Lab Sample ID:	JB15405-3	**Date Sampled:**	09/04/12
Matrix:	SO - Soil	**Date Received:**	09/05/12
Method:	SW846 8260B	**Percent Solids:**	86.2
Project:	AFFCO, 361 Walsh Avenue, New Windsor, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-00-5	1,1,2-Trichloroethane	0.83	5.8	0.20	ug/kg	J
79-01-6	Trichloroethene	2.2	5.8	0.20	ug/kg	J
75-01-4	Vinyl chloride	ND	5.8	0.17	ug/kg	
1330-20-7	Xylene (total)	ND	1.2	0.16	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	93%		70-130%
17060-07-0	1,2-Dichloroethane-D4	90%		70-122%
2037-26-5	Toluene-D8	108%		81-127%
460-00-4	4-Bromofluorobenzene	98%		66-132%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PX12SW-7		
Lab Sample ID:	JB15405-4	**Date Sampled:**	09/04/12
Matrix:	SO - Soil	**Date Received:**	09/05/12
Method:	SW846 8260B	**Percent Solids:**	89.0
Project:	AFFCO, 361 Walsh Avenue, New Windsor, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3C90564.D	1	09/06/12	JTP	n/a	n/a	V3C4027
Run #2							

	Initial Weight
Run #1	4.5 g
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	12	2.1	ug/kg	
71-43-2	Benzene	2.6	1.2	0.15	ug/kg	
75-27-4	Bromodichloromethane	ND	6.2	0.13	ug/kg	
75-25-2	Bromoform	ND	6.2	0.19	ug/kg	
74-83-9	Bromomethane	ND	6.2	0.34	ug/kg	
78-93-3	2-Butanone (MEK)	ND	12	3.0	ug/kg	
75-15-0	Carbon disulfide	ND	6.2	0.15	ug/kg	
56-23-5	Carbon tetrachloride	ND	6.2	0.17	ug/kg	
108-90-7	Chlorobenzene	ND	6.2	0.13	ug/kg	
75-00-3	Chloroethane	ND	6.2	0.28	ug/kg	
67-66-3	Chloroform	ND	6.2	0.10	ug/kg	
74-87-3	Chloromethane	ND	6.2	0.23	ug/kg	
124-48-1	Dibromochloromethane	ND	6.2	0.20	ug/kg	
75-34-3	1,1-Dichloroethane	ND	6.2	0.17	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.2	0.17	ug/kg	
75-35-4	1,1-Dichloroethene	ND	6.2	0.32	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	6.2	0.23	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	6.2	0.30	ug/kg	
540-59-0	1,2-Dichloroethene (total)	ND	6.2	0.23	ug/kg	
78-87-5	1,2-Dichloropropane	ND	6.2	0.19	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	6.2	0.17	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	6.2	0.19	ug/kg	
100-41-4	Ethylbenzene	ND	1.2	0.33	ug/kg	
591-78-6	2-Hexanone	ND	6.2	0.78	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.2	0.29	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	6.2	0.94	ug/kg	
75-09-2	Methylene chloride	ND	6.2	1.6	ug/kg	
100-42-5	Styrene	ND	6.2	0.11	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	6.2	0.16	ug/kg	
127-18-4	Tetrachloroethene	ND	6.2	0.21	ug/kg	
108-88-3	Toluene	1.1	1.2	0.13	ug/kg	J
71-55-6	1,1,1-Trichloroethane	5.1	6.2	0.13	ug/kg	J

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PX12SW-7		
Lab Sample ID:	JB15405-4	**Date Sampled:**	09/04/12
Matrix:	SO - Soil	**Date Received:**	09/05/12
Method:	SW846 8260B	**Percent Solids:**	89.0
Project:	AFFCO, 361 Walsh Avenue, New Windsor, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-00-5	1,1,2-Trichloroethane	ND	6.2	0.22	ug/kg	
79-01-6	Trichloroethene	2.5	6.2	0.22	ug/kg	J
75-01-4	Vinyl chloride	ND	6.2	0.18	ug/kg	
1330-20-7	Xylene (total)	ND	1.2	0.17	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		70-130%
17060-07-0	1,2-Dichloroethane-D4	108%		70-122%
2037-26-5	Toluene-D8	99%		81-127%
460-00-4	4-Bromofluorobenzene	101%		66-132%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PX13SW-7		
Lab Sample ID:	JB15405-5	**Date Sampled:**	09/04/12
Matrix:	SO - Soil	**Date Received:**	09/05/12
Method:	SW846 8260B	**Percent Solids:**	84.9
Project:	AFFCO, 361 Walsh Avenue, New Windsor, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3C90565.D	1	09/06/12	JTP	n/a	n/a	V3C4027
Run #2							

	Initial Weight
Run #1	4.5 g
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	13	2.2	ug/kg	
71-43-2	Benzene	0.82	1.3	0.16	ug/kg	J
75-27-4	Bromodichloromethane	ND	6.5	0.14	ug/kg	
75-25-2	Bromoform	ND	6.5	0.20	ug/kg	
74-83-9	Bromomethane	ND	6.5	0.36	ug/kg	
78-93-3	2-Butanone (MEK)	ND	13	3.1	ug/kg	
75-15-0	Carbon disulfide	ND	6.5	0.15	ug/kg	
56-23-5	Carbon tetrachloride	ND	6.5	0.17	ug/kg	
108-90-7	Chlorobenzene	ND	6.5	0.14	ug/kg	
75-00-3	Chloroethane	ND	6.5	0.30	ug/kg	
67-66-3	Chloroform	ND	6.5	0.11	ug/kg	
74-87-3	Chloromethane	ND	6.5	0.24	ug/kg	
124-48-1	Dibromochloromethane	ND	6.5	0.21	ug/kg	
75-34-3	1,1-Dichloroethane	ND	6.5	0.18	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.3	0.18	ug/kg	
75-35-4	1,1-Dichloroethene	ND	6.5	0.34	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	6.5	0.24	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	6.5	0.31	ug/kg	
540-59-0	1,2-Dichloroethene (total)	ND	6.5	0.24	ug/kg	
78-87-5	1,2-Dichloropropane	ND	6.5	0.20	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	6.5	0.18	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	6.5	0.20	ug/kg	
100-41-4	Ethylbenzene	ND	1.3	0.34	ug/kg	
591-78-6	2-Hexanone	ND	6.5	0.81	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.3	0.31	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	6.5	0.98	ug/kg	
75-09-2	Methylene chloride	ND	6.5	1.7	ug/kg	
100-42-5	Styrene	ND	6.5	0.12	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	6.5	0.17	ug/kg	
127-18-4	Tetrachloroethene	ND	6.5	0.23	ug/kg	
108-88-3	Toluene	0.54	1.3	0.14	ug/kg	J
71-55-6	1,1,1-Trichloroethane	7.0	6.5	0.14	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PX13SW-7		
Lab Sample ID:	JB15405-5	**Date Sampled:**	09/04/12
Matrix:	SO - Soil	**Date Received:**	09/05/12
Method:	SW846 8260B	**Percent Solids:**	84.9
Project:	AFFCO, 361 Walsh Avenue, New Windsor, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-00-5	1,1,2-Trichloroethane	ND	6.5	0.23	ug/kg	
79-01-6	Trichloroethene	ND	6.5	0.23	ug/kg	
75-01-4	Vinyl chloride	ND	6.5	0.19	ug/kg	
1330-20-7	Xylene (total)	ND	1.3	0.18	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		70-130%
17060-07-0	1,2-Dichloroethane-D4	100%		70-122%
2037-26-5	Toluene-D8	100%		81-127%
460-00-4	4-Bromofluorobenzene	101%		66-132%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PX14SW-6		
Lab Sample ID:	JB15405-6	**Date Sampled:**	09/04/12
Matrix:	SO - Soil	**Date Received:**	09/05/12
Method:	SW846 8260B	**Percent Solids:**	85.0
Project:	AFFCO, 361 Walsh Avenue, New Windsor, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Y125807.D	1	09/05/12	RS	n/a	n/a	VY5403
Run #2							

	Initial Weight
Run #1	5.3 g
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	11	1.9	ug/kg	
71-43-2	Benzene	ND	1.1	0.13	ug/kg	
75-27-4	Bromodichloromethane	ND	5.5	0.12	ug/kg	
75-25-2	Bromoform	ND	5.5	0.17	ug/kg	
74-83-9	Bromomethane	ND	5.5	0.30	ug/kg	
78-93-3	2-Butanone (MEK)	ND	11	2.7	ug/kg	
75-15-0	Carbon disulfide	ND	5.5	0.13	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.5	0.15	ug/kg	
108-90-7	Chlorobenzene	ND	5.5	0.12	ug/kg	
75-00-3	Chloroethane	ND	5.5	0.25	ug/kg	
67-66-3	Chloroform	ND	5.5	0.092	ug/kg	
74-87-3	Chloromethane	ND	5.5	0.21	ug/kg	
124-48-1	Dibromochloromethane	ND	5.5	0.18	ug/kg	
75-34-3	1,1-Dichloroethane	0.87	5.5	0.15	ug/kg	J
107-06-2	1,2-Dichloroethane	ND	1.1	0.15	ug/kg	
75-35-4	1,1-Dichloroethene	0.63	5.5	0.29	ug/kg	J
156-59-2	cis-1,2-Dichloroethene	2.4	5.5	0.20	ug/kg	J
156-60-5	trans-1,2-Dichloroethene	2.1	5.5	0.26	ug/kg	J
540-59-0	1,2-Dichloroethene (total)	4.4	5.5	0.20	ug/kg	J
78-87-5	1,2-Dichloropropane	ND	5.5	0.17	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.5	0.15	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.5	0.17	ug/kg	
100-41-4	Ethylbenzene	ND	1.1	0.29	ug/kg	
591-78-6	2-Hexanone	ND	5.5	0.69	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.1	0.26	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.5	0.83	ug/kg	
75-09-2	Methylene chloride	ND	5.5	1.4	ug/kg	
100-42-5	Styrene	ND	5.5	0.10	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.5	0.15	ug/kg	
127-18-4	Tetrachloroethene	0.59	5.5	0.19	ug/kg	J
108-88-3	Toluene	ND	1.1	0.12	ug/kg	
71-55-6	1,1,1-Trichloroethane	29.3	5.5	0.12	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PX14SW-6		
Lab Sample ID:	JB15405-6	**Date Sampled:**	09/04/12
Matrix:	SO - Soil	**Date Received:**	09/05/12
Method:	SW846 8260B	**Percent Solids:**	85.0
Project:	AFFCO, 361 Walsh Avenue, New Windsor, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-00-5	1,1,2-Trichloroethane	5.9	5.5	0.19	ug/kg	
79-01-6	Trichloroethene	4.0	5.5	0.19	ug/kg	J
75-01-4	Vinyl chloride	ND	5.5	0.16	ug/kg	
1330-20-7	Xylene (total)	ND	1.1	0.15	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		70-130%
17060-07-0	1,2-Dichloroethane-D4	87%		70-122%
2037-26-5	Toluene-D8	106%		81-127%
460-00-4	4-Bromofluorobenzene	96%		66-132%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PX15BT-10		
Lab Sample ID:	JB15405-7	**Date Sampled:**	09/04/12
Matrix:	SO - Soil	**Date Received:**	09/05/12
Method:	SW846 8260B	**Percent Solids:**	83.0
Project:	AFFCO, 361 Walsh Avenue, New Windsor, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X129174.D	1	09/06/12	MS	n/a	n/a	VX5604
Run #2							

	Initial Weight
Run #1	4.7 g
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	13.6	13	2.2	ug/kg	
71-43-2	Benzene	ND	1.3	0.15	ug/kg	
75-27-4	Bromodichloromethane	ND	6.4	0.13	ug/kg	
75-25-2	Bromoform	ND	6.4	0.19	ug/kg	
74-83-9	Bromomethane	ND	6.4	0.35	ug/kg	
78-93-3	2-Butanone (MEK)	ND	13	3.1	ug/kg	
75-15-0	Carbon disulfide	ND	6.4	0.15	ug/kg	
56-23-5	Carbon tetrachloride	ND	6.4	0.17	ug/kg	
108-90-7	Chlorobenzene	ND	6.4	0.14	ug/kg	
75-00-3	Chloroethane	ND	6.4	0.29	ug/kg	
67-66-3	Chloroform	1.0	6.4	0.11	ug/kg	J
74-87-3	Chloromethane	ND	6.4	0.24	ug/kg	
124-48-1	Dibromochloromethane	ND	6.4	0.21	ug/kg	
75-34-3	1,1-Dichloroethane	8.3	6.4	0.18	ug/kg	
107-06-2	1,2-Dichloroethane	0.60	1.3	0.17	ug/kg	J
75-35-4	1,1-Dichloroethene	4.2	6.4	0.33	ug/kg	J
156-59-2	cis-1,2-Dichloroethene	0.85	6.4	0.23	ug/kg	J
156-60-5	trans-1,2-Dichloroethene	0.58	6.4	0.31	ug/kg	J
540-59-0	1,2-Dichloroethene (total)	1.4	6.4	0.23	ug/kg	J
78-87-5	1,2-Dichloropropane	ND	6.4	0.20	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	6.4	0.18	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	6.4	0.20	ug/kg	
100-41-4	Ethylbenzene	ND	1.3	0.34	ug/kg	
591-78-6	2-Hexanone	ND	6.4	0.80	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.3	0.30	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	6.4	0.96	ug/kg	
75-09-2	Methylene chloride	ND	6.4	1.6	ug/kg	
100-42-5	Styrene	ND	6.4	0.12	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	6.4	0.17	ug/kg	
127-18-4	Tetrachloroethene	0.79	6.4	0.22	ug/kg	J
108-88-3	Toluene	0.58	1.3	0.13	ug/kg	J
71-55-6	1,1,1-Trichloroethane	149	6.4	0.14	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PX15BT-10		
Lab Sample ID:	JB15405-7	**Date Sampled:**	09/04/12
Matrix:	SO - Soil	**Date Received:**	09/05/12
Method:	SW846 8260B	**Percent Solids:**	83.0
Project:	AFFCO, 361 Walsh Avenue, New Windsor, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-00-5	1,1,2-Trichloroethane	1.5	6.4	0.22	ug/kg	J
79-01-6	Trichloroethene	4.7	6.4	0.22	ug/kg	J
75-01-4	Vinyl chloride	ND	6.4	0.18	ug/kg	
1330-20-7	Xylene (total)	ND	1.3	0.18	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	91%		70-130%
17060-07-0	1,2-Dichloroethane-D4	84%		70-122%
2037-26-5	Toluene-D8	108%		81-127%
460-00-4	4-Bromofluorobenzene	104%		66-132%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	C1SP01		
Lab Sample ID:	JB15405-8	**Date Sampled:**	09/04/12
Matrix:	SO - Soil	**Date Received:**	09/05/12
Method:	SW846 8260B	**Percent Solids:**	85.0
Project:	AFFCO, 361 Walsh Avenue, New Windsor, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Y125814.D	1	09/05/12	RS	n/a	n/a	VY5403
Run #2	Y125848.D	1	09/06/12	RS	n/a	n/a	VY5405

	Initial Weight
Run #1	4.9 g
Run #2	1.2 g

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	12	2.0	ug/kg	
71-43-2	Benzene	ND	1.2	0.14	ug/kg	
75-27-4	Bromodichloromethane	ND	6.0	0.13	ug/kg	
75-25-2	Bromoform	ND	6.0	0.18	ug/kg	
74-83-9	Bromomethane	ND	6.0	0.33	ug/kg	
78-93-3	2-Butanone (MEK)	ND	12	2.9	ug/kg	
75-15-0	Carbon disulfide	ND	6.0	0.14	ug/kg	
56-23-5	Carbon tetrachloride	ND	6.0	0.16	ug/kg	
108-90-7	Chlorobenzene	ND	6.0	0.13	ug/kg	
75-00-3	Chloroethane	ND	6.0	0.27	ug/kg	
67-66-3	Chloroform	ND	6.0	0.099	ug/kg	
74-87-3	Chloromethane	ND	6.0	0.22	ug/kg	
124-48-1	Dibromochloromethane	ND	6.0	0.20	ug/kg	
75-34-3	1,1-Dichloroethane	7.2	6.0	0.16	ug/kg	
107-06-2	1,2-Dichloroethane	0.65	1.2	0.16	ug/kg	J
75-35-4	1,1-Dichloroethene	2.0	6.0	0.31	ug/kg	J
156-59-2	cis-1,2-Dichloroethene	0.61	6.0	0.22	ug/kg	J
156-60-5	trans-1,2-Dichloroethene	0.50	6.0	0.29	ug/kg	J
540-59-0	1,2-Dichloroethene (total)	1.1	6.0	0.22	ug/kg	J
78-87-5	1,2-Dichloropropane	ND	6.0	0.18	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	6.0	0.17	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	6.0	0.19	ug/kg	
100-41-4	Ethylbenzene	ND	1.2	0.32	ug/kg	
591-78-6	2-Hexanone	ND	6.0	0.75	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.2	0.28	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	6.0	0.90	ug/kg	
75-09-2	Methylene chloride	ND	6.0	1.5	ug/kg	
100-42-5	Styrene	ND	6.0	0.11	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	6.0	0.16	ug/kg	
127-18-4	Tetrachloroethene	1.1	6.0	0.21	ug/kg	J
108-88-3	Toluene	1.3	1.2	0.13	ug/kg	
71-55-6	1,1,1-Trichloroethane	513 [a]	25	0.52	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	C1SP01		
Lab Sample ID:	JB15405-8	**Date Sampled:**	09/04/12
Matrix:	SO - Soil	**Date Received:**	09/05/12
Method:	SW846 8260B	**Percent Solids:**	85.0
Project:	AFFCO, 361 Walsh Avenue, New Windsor, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-00-5	1,1,2-Trichloroethane	3.5	6.0	0.21	ug/kg	J
79-01-6	Trichloroethene	5.0	6.0	0.21	ug/kg	J
75-01-4	Vinyl chloride	ND	6.0	0.17	ug/kg	
1330-20-7	Xylene (total)	ND	1.2	0.17	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%	101%	70-130%
17060-07-0	1,2-Dichloroethane-D4	85%	87%	70-122%
2037-26-5	Toluene-D8	108%	107%	81-127%
460-00-4	4-Bromofluorobenzene	90%	92%	66-132%

(a) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	C3SP01		
Lab Sample ID:	JB15405-9	**Date Sampled:**	09/04/12
Matrix:	SO - Soil	**Date Received:**	09/05/12
Method:	SW846 8260B	**Percent Solids:**	86.6
Project:	AFFCO, 361 Walsh Avenue, New Windsor, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Y125815.D	1	09/05/12	RS	n/a	n/a	VY5403
Run #2	E194755.D	1	09/06/12	OTR	n/a	n/a	VE8565
Run #3	E194753.D	1	09/06/12	OTR	n/a	n/a	VE8565

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	4.8 g		
Run #2	10.4 g	10.0 ml	10.0 ul
Run #3	10.4 g	10.0 ml	100 ul

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	12	2.0	ug/kg	
71-43-2	Benzene	ND	1.2	0.14	ug/kg	
75-27-4	Bromodichloromethane	ND	6.0	0.13	ug/kg	
75-25-2	Bromoform	ND	6.0	0.18	ug/kg	
74-83-9	Bromomethane	ND	6.0	0.33	ug/kg	
78-93-3	2-Butanone (MEK)	ND	12	2.9	ug/kg	
75-15-0	Carbon disulfide	ND	6.0	0.14	ug/kg	
56-23-5	Carbon tetrachloride	ND	6.0	0.16	ug/kg	
108-90-7	Chlorobenzene	ND	6.0	0.13	ug/kg	
75-00-3	Chloroethane	ND	6.0	0.27	ug/kg	
67-66-3	Chloroform	ND	6.0	0.099	ug/kg	
74-87-3	Chloromethane	ND	6.0	0.22	ug/kg	
124-48-1	Dibromochloromethane	ND	6.0	0.20	ug/kg	
75-34-3	1,1-Dichloroethane	13.0	6.0	0.16	ug/kg	
107-06-2	1,2-Dichloroethane	1.2	1.2	0.16	ug/kg	
75-35-4	1,1-Dichloroethene	5.8	6.0	0.31	ug/kg	J
156-59-2	cis-1,2-Dichloroethene	0.54	6.0	0.22	ug/kg	J
156-60-5	trans-1,2-Dichloroethene	0.41	6.0	0.29	ug/kg	J
540-59-0	1,2-Dichloroethene (total)	0.95	6.0	0.22	ug/kg	J
78-87-5	1,2-Dichloropropane	ND	6.0	0.19	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	6.0	0.17	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	6.0	0.19	ug/kg	
100-41-4	Ethylbenzene	ND	1.2	0.32	ug/kg	
591-78-6	2-Hexanone	ND	6.0	0.75	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.2	0.28	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	6.0	0.90	ug/kg	
75-09-2	Methylene chloride	ND	6.0	1.5	ug/kg	
100-42-5	Styrene	ND	6.0	0.11	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	6.0	0.16	ug/kg	
127-18-4	Tetrachloroethene	1.6	6.0	0.21	ug/kg	J

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	C3SP01		
Lab Sample ID:	JB15405-9	**Date Sampled:**	09/04/12
Matrix:	SO - Soil	**Date Received:**	09/05/12
Method:	SW846 8260B	**Percent Solids:**	86.6
Project:	AFFCO, 361 Walsh Avenue, New Windsor, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
108-88-3	Toluene	2.8	1.2	0.13	ug/kg	
71-55-6	1,1,1-Trichloroethane	41900 [a]	3200	67	ug/kg	
79-00-5	1,1,2-Trichloroethane	5.2	6.0	0.21	ug/kg	J
79-01-6	Trichloroethene	5.7	6.0	0.21	ug/kg	J
75-01-4	Vinyl chloride	ND	6.0	0.17	ug/kg	
1330-20-7	Xylene (total)	ND	1.2	0.17	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Run# 3	Limits
1868-53-7	Dibromofluoromethane	97%	90%	89%	70-130%
17060-07-0	1,2-Dichloroethane-D4	84%	97%	97%	70-122%
2037-26-5	Toluene-D8	107%	87%	87%	81-127%
460-00-4	4-Bromofluorobenzene	89%	85%	83%	66-132%

(a) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	C3SP02		
Lab Sample ID:	JB15405-10	**Date Sampled:**	09/04/12
Matrix:	SO - Soil	**Date Received:**	09/05/12
Method:	SW846 8260B	**Percent Solids:**	89.9
Project:	AFFCO, 361 Walsh Avenue, New Windsor, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Y125816.D	1	09/05/12	RS	n/a	n/a	VY5403
Run #2							

	Initial Weight
Run #1	5.3 g
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	1.8	ug/kg	
71-43-2	Benzene	ND	1.0	0.12	ug/kg	
75-27-4	Bromodichloromethane	ND	5.2	0.11	ug/kg	
75-25-2	Bromoform	ND	5.2	0.16	ug/kg	
74-83-9	Bromomethane	ND	5.2	0.29	ug/kg	
78-93-3	2-Butanone (MEK)	ND	10	2.5	ug/kg	
75-15-0	Carbon disulfide	ND	5.2	0.12	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.2	0.14	ug/kg	
108-90-7	Chlorobenzene	ND	5.2	0.11	ug/kg	
75-00-3	Chloroethane	ND	5.2	0.24	ug/kg	
67-66-3	Chloroform	ND	5.2	0.087	ug/kg	
74-87-3	Chloromethane	ND	5.2	0.20	ug/kg	
124-48-1	Dibromochloromethane	ND	5.2	0.17	ug/kg	
75-34-3	1,1-Dichloroethane	3.0	5.2	0.14	ug/kg	J
107-06-2	1,2-Dichloroethane	0.76	1.0	0.14	ug/kg	J
75-35-4	1,1-Dichloroethene	1.5	5.2	0.27	ug/kg	J
156-59-2	cis-1,2-Dichloroethene	0.41	5.2	0.19	ug/kg	J
156-60-5	trans-1,2-Dichloroethene	0.38	5.2	0.25	ug/kg	J
540-59-0	1,2-Dichloroethene (total)	0.79	5.2	0.19	ug/kg	J
78-87-5	1,2-Dichloropropane	ND	5.2	0.16	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.2	0.15	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.2	0.16	ug/kg	
100-41-4	Ethylbenzene	ND	1.0	0.28	ug/kg	
591-78-6	2-Hexanone	ND	5.2	0.65	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.25	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.2	0.79	ug/kg	
75-09-2	Methylene chloride	ND	5.2	1.3	ug/kg	
100-42-5	Styrene	ND	5.2	0.096	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.2	0.14	ug/kg	
127-18-4	Tetrachloroethene	ND	5.2	0.18	ug/kg	
108-88-3	Toluene	0.27	1.0	0.11	ug/kg	J
71-55-6	1,1,1-Trichloroethane	166	5.2	0.11	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	C3SP02		
Lab Sample ID:	JB15405-10	**Date Sampled:**	09/04/12
Matrix:	SO - Soil	**Date Received:**	09/05/12
Method:	SW846 8260B	**Percent Solids:**	89.9
Project:	AFFCO, 361 Walsh Avenue, New Windsor, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-00-5	1,1,2-Trichloroethane	0.97	5.2	0.18	ug/kg	J
79-01-6	Trichloroethene	1.9	5.2	0.18	ug/kg	J
75-01-4	Vinyl chloride	ND	5.2	0.15	ug/kg	
1330-20-7	Xylene (total)	ND	1.0	0.15	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		70-130%
17060-07-0	1,2-Dichloroethane-D4	86%		70-122%
2037-26-5	Toluene-D8	107%		81-127%
460-00-4	4-Bromofluorobenzene	96%		66-132%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	C2SP01		
Lab Sample ID:	JB15405-11	**Date Sampled:**	09/04/12
Matrix:	SO - Soil	**Date Received:**	09/05/12
Method:	SW846 8260B	**Percent Solids:**	90.0
Project:	AFFCO, 361 Walsh Avenue, New Windsor, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X129157.D	1	09/05/12	MS	n/a	n/a	VX5603
Run #2							

	Initial Weight
Run #1	5.2 g
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	11	1.8	ug/kg	
71-43-2	Benzene	ND	1.1	0.13	ug/kg	
75-27-4	Bromodichloromethane	ND	5.3	0.11	ug/kg	
75-25-2	Bromoform	ND	5.3	0.16	ug/kg	
74-83-9	Bromomethane	ND	5.3	0.29	ug/kg	
78-93-3	2-Butanone (MEK)	ND	11	2.6	ug/kg	
75-15-0	Carbon disulfide	ND	5.3	0.13	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.3	0.14	ug/kg	
108-90-7	Chlorobenzene	ND	5.3	0.12	ug/kg	
75-00-3	Chloroethane	ND	5.3	0.24	ug/kg	
67-66-3	Chloroform	ND	5.3	0.088	ug/kg	
74-87-3	Chloromethane	ND	5.3	0.20	ug/kg	
124-48-1	Dibromochloromethane	ND	5.3	0.18	ug/kg	
75-34-3	1,1-Dichloroethane	1.0	5.3	0.15	ug/kg	J
107-06-2	1,2-Dichloroethane	0.78	1.1	0.14	ug/kg	J
75-35-4	1,1-Dichloroethene	0.43	5.3	0.27	ug/kg	J
156-59-2	cis-1,2-Dichloroethene	0.37	5.3	0.20	ug/kg	J
156-60-5	trans-1,2-Dichloroethene	ND	5.3	0.25	ug/kg	
540-59-0	1,2-Dichloroethene (total)	0.37	5.3	0.20	ug/kg	J
78-87-5	1,2-Dichloropropane	ND	5.3	0.16	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.3	0.15	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.3	0.17	ug/kg	
100-41-4	Ethylbenzene	ND	1.1	0.28	ug/kg	
591-78-6	2-Hexanone	ND	5.3	0.66	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.1	0.25	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.3	0.80	ug/kg	
75-09-2	Methylene chloride	ND	5.3	1.4	ug/kg	
100-42-5	Styrene	ND	5.3	0.098	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.3	0.14	ug/kg	
127-18-4	Tetrachloroethene	ND	5.3	0.18	ug/kg	
108-88-3	Toluene	ND	1.1	0.11	ug/kg	
71-55-6	1,1,1-Trichloroethane	51.7	5.3	0.11	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	C2SP01		
Lab Sample ID:	JB15405-11	**Date Sampled:**	09/04/12
Matrix:	SO - Soil	**Date Received:**	09/05/12
Method:	SW846 8260B	**Percent Solids:**	90.0
Project:	AFFCO, 361 Walsh Avenue, New Windsor, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-00-5	1,1,2-Trichloroethane	1.4	5.3	0.19	ug/kg	J
79-01-6	Trichloroethene	1.6	5.3	0.19	ug/kg	J
75-01-4	Vinyl chloride	ND	5.3	0.15	ug/kg	
1330-20-7	Xylene (total)	ND	1.1	0.15	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	92%		70-130%
17060-07-0	1,2-Dichloroethane-D4	89%		70-122%
2037-26-5	Toluene-D8	106%		81-127%
460-00-4	4-Bromofluorobenzene	101%		66-132%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	C2SP02		
Lab Sample ID:	JB15405-12	**Date Sampled:**	09/04/12
Matrix:	SO - Soil	**Date Received:**	09/05/12
Method:	SW846 8260B	**Percent Solids:**	88.9
Project:	AFFCO, 361 Walsh Avenue, New Windsor, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X129158.D	1	09/05/12	MS	n/a	n/a	VX5603
Run #2							

	Initial Weight
Run #1	5.2 g
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	11	1.8	ug/kg	
71-43-2	Benzene	ND	1.1	0.13	ug/kg	
75-27-4	Bromodichloromethane	ND	5.4	0.11	ug/kg	
75-25-2	Bromoform	ND	5.4	0.16	ug/kg	
74-83-9	Bromomethane	ND	5.4	0.30	ug/kg	
78-93-3	2-Butanone (MEK)	ND	11	2.6	ug/kg	
75-15-0	Carbon disulfide	ND	5.4	0.13	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.4	0.14	ug/kg	
108-90-7	Chlorobenzene	ND	5.4	0.12	ug/kg	
75-00-3	Chloroethane	ND	5.4	0.25	ug/kg	
67-66-3	Chloroform	ND	5.4	0.089	ug/kg	
74-87-3	Chloromethane	ND	5.4	0.20	ug/kg	
124-48-1	Dibromochloromethane	ND	5.4	0.18	ug/kg	
75-34-3	1,1-Dichloroethane	1.9	5.4	0.15	ug/kg	J
107-06-2	1,2-Dichloroethane	1.7	1.1	0.15	ug/kg	
75-35-4	1,1-Dichloroethene	0.90	5.4	0.28	ug/kg	J
156-59-2	cis-1,2-Dichloroethene	1.1	5.4	0.20	ug/kg	J
156-60-5	trans-1,2-Dichloroethene	0.70	5.4	0.26	ug/kg	J
540-59-0	1,2-Dichloroethene (total)	1.8	5.4	0.20	ug/kg	J
78-87-5	1,2-Dichloropropane	ND	5.4	0.17	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.4	0.15	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.4	0.17	ug/kg	
100-41-4	Ethylbenzene	ND	1.1	0.28	ug/kg	
591-78-6	2-Hexanone	ND	5.4	0.67	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.1	0.25	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.4	0.81	ug/kg	
75-09-2	Methylene chloride	ND	5.4	1.4	ug/kg	
100-42-5	Styrene	ND	5.4	0.099	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.4	0.14	ug/kg	
127-18-4	Tetrachloroethene	0.33	5.4	0.19	ug/kg	J
108-88-3	Toluene	ND	1.1	0.11	ug/kg	
71-55-6	1,1,1-Trichloroethane	59.9	5.4	0.11	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	C2SP02		
Lab Sample ID:	JB15405-12	**Date Sampled:**	09/04/12
Matrix:	SO - Soil	**Date Received:**	09/05/12
Method:	SW846 8260B	**Percent Solids:**	88.9
Project:	AFFCO, 361 Walsh Avenue, New Windsor, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-00-5	1,1,2-Trichloroethane	2.5	5.4	0.19	ug/kg	J
79-01-6	Trichloroethene	6.9	5.4	0.19	ug/kg	
75-01-4	Vinyl chloride	ND	5.4	0.16	ug/kg	
1330-20-7	Xylene (total)	ND	1.1	0.15	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	92%		70-130%
17060-07-0	1,2-Dichloroethane-D4	86%		70-122%
2037-26-5	Toluene-D8	105%		81-127%
460-00-4	4-Bromofluorobenzene	104%		66-132%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

New Jersey ACCUTEST LABORATORIES

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

ACCUTEST LABORATORIES

SO

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PAGE 1 OF 1

FED-EX Tracking # 8005 2654 2440 | Bottle Order Control #
Accutest Quote # | Accutest Job # JB15405

Client / Reporting Information

Company Name: Fleming-Lee Shue
Street Address: 158 W. 29th St
City: New York State: NY Zip: 10001
Project Contact: K. McGuinness E-mail: Kevin@FlemingLeeShue.com
Phone #: 212-675-3225 Fax #: 3224
Sampler(s) Name(s): Gabriel Horn Phone #: 551-427-7166

Project Information

Project Name: AFFCO
Street: 361 Walsh Ave
City: New Windsor State: NY
Project #: 10000-013
Client Purchase Order #:
Project Manager: K. McGuinness

Billing Information (if different from Report to)

Company Name:
Street Address:
City: State: Zip:
Attention:

Requested Analysis (see TEST CODE sheet)

VOC

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL- Sludge
SED-Sediment
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid
WP - Wipe
FB-Field Blank
EB-Equipment Blank
RB- Rinse Blank
TB-Trip Blank

Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	Number of preserved Bottles: HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	VOC	LAB USE ONLY
1	PX09 SW-3	1	9-4-12	1605	GA	S	2									X	1901
2	PX10 SW-5	2	"	1610	"	S	2									X	0697
3	PX11 BT-10 *	3	"	1615	"	S	2									X	
4	PX12 SW-7	4	"	1620	"	S	2									X	
5	PX13 SW-7	5	"	1625	"	S	2									X	
6	PX14 SW-6	6	"	1630	"	S	2									X	
7	PX15 BT-10 *	7	"	1645	"	S	2									X	
8	C1 SP01	8	"	1650	"	S	2									X	
9	C3 SP01	9	"	1655	"	S	2									X	
10	C3 SP02	10	"	1650	"	S	2									X	
11	C2 SP01	11	"	1705	"	S	2									X	
12	C2 SP02	12	9-4-12	1710	GA	S	2									X	

Turnaround Time (Business days)

- [ ] Std. 15 Business Days
- [ ] Std. 10 Business Days (by Contract only)
- [ ] 10 Day *RUSH*
- [ ] 5 Day *RUSH*
- [ ] 3 Day *EMERGENCY*
- [ ] 2 Day *EMERGENCY*
- [x] 1 Day *EMERGENCY*

Emergency & Rush T/A data available VIA Lablink

Approved By (Accutest PM): / Date:

see comments

Data Deliverable Information

- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] FULLT1 (Level 3+4)
- [ ] NJ Reduced
- [ ] Commercial "C"
- [ ] NYASP Category A
- [ ] NYASP Category B
- [ ] State Forms
- [ ] EDD Format
- [ ] Other

Commercial "A" = Results Only
Commercial "B" = Results + QC Summary
NJ Reduced = Results + QC Summary + Partial Raw data

Comments / Special Instructions

* - run sample #3, #7 on 3 day TAT. All other samples need to be run on 24 hr TAT

Sample Custody must be documented below each time samples change possession, including courier delivery.

	Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1			Fed Ex	Fed Ex	9/5/12 1000	
2						
3						
4						
5						

Custody Seal # N/A [ ] Intact [ ] Not intact | Preserved where applicable [ ] | On Ice [x] | Cooler Temp. 4.0°C

2 A

JB15405: Chain of Custody
Page 1 of 7

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: JB15405 **Client:** **Project:**

Date / Time Received: 9/5/2012 **Delivery Method:** **Airbill #'s:**

Cooler Temps (Initial/Adjusted): #1: (4/4); 0

Cooler Security	Y	or	N		Y	or	N
1. Custody Seals Present:	☑		☐	3. COC Present:	☑		☐
2. Custody Seals Intact:	☑		☐	4. Smpl Dates/Time OK	☑		☐

Cooler Temperature	Y	or	N
1. Temp criteria achieved:	☑		☐
2. Cooler temp verification:	Bar Therm		
3. Cooler media:	Ice (Bag)		
4. No. Coolers:	1		

Quality Control Preservation	Y	or	N	N/A
1. Trip Blank present / cooler:	☐		☐	☑
2. Trip Blank listed on COC:	☐		☐	☑
3. Samples preserved properly:	☑		☐	
4. VOCs headspace free:	☐		☐	☑

Sample Integrity - Documentation	Y	or	N
1. Sample labels present on bottles:	☑		☐
2. Container labeling complete:	☑		☐
3. Sample container label / COC agree:	☑		☐

Sample Integrity - Condition	Y	or	N
1. Sample recvd within HT:	☑		☐
2. All containers accounted for:	☑		☐
3. Condition of sample:	Intact		

Sample Integrity - Instructions	Y	or	N	N/A
1. Analysis requested is clear:	☑		☐	
2. Bottles received for unspecified tests	☐		☑	
3. Sufficient volume recvd for analysis:	☑		☐	
4. Compositing instructions clear:	☐		☐	☑
5. Filtering instructions clear:	☐		☐	☑

Comments

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PAGE 1 OF 1

FED-EX Tracking # 8005 2654 2462 | Bottle Order Control # | Accutest Quote # | Accutest Job # JB14890

Client / Reporting Information

Company Name: Fleming-Lee Shue
Street Address: 158 W. 29th St
City: New York State: NY Zip: 10001
Project Contact: K. McGuinness E-mail: Kevin@Fleminglee shue.com
Phone #: 212-675-3225 / 3224 Fax #:
Sampler(s) Name(s): Gabriel Horn Phone #: 551-427-7166

Project Information

Project Name: AFFCo.
Street: 361 Walsh Ave
City: New Windsor State: NY
Project #: 10000-013
Client Purchase Order #:
Project Manager: K. McGuinness
Attention:

Billing Information (if different from Report to)

Company Name:
Street Address:
City State Zip:

Requested Analysis (see TEST CODE sheet)

VOC

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL - Sludge
SED-Sediment
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid
WP - Wipe
FB-Field Blank
EB-Equipment Blank
RB- Rinse Blank
TB-Trip Blank

Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	Number of preserved Bottles: HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	LAB USE ONLY
1	PX01-SW-5 *		8/28/12	1005	GH	S	2									X 19K1
2	PX02-SW-5 *			1015		S	2									X 19K1
3	PX03-BT-10			1025		S	2									X
4	PX04-SW-5			1530		S	2									X
5	PX05-SW-6			1540		S	2									X
6	PX06-BT-10			1550		S	2									X
7	C5SP01 *			1100		S	2									X
8	C5SP02 *			1110		S	2									X
9	C4SP01 *		8/28/12	1600	GH	S	2									X

Turnaround Time (Business days)

- [ ] Std. 15 Business Days
- [ ] Std. 10 Business Days (by Contract only)
- [ ] 10 Day *RUSH*
- [ ] 5 Day *RUSH*
- [ ] 3 Day *EMERGENCY*
- [ ] 2 Day *EMERGENCY*
- [ ] 1 Day *EMERGENCY*

see comments

Emergency & Rush T/A data available VIA Lablink

Approved By (Accutest PM): / Date:

Data Deliverable Information

- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] FULLT1 (Level 3+4)
- [ ] NJ Reduced
- [ ] Commercial "C"
- [ ] NYASP Category A
- [ ] NYASP Category B
- [ ] State Forms
- [ ] EDD Format
- [ ] Other

Commercial "A" = Results Only
Commercial "B" = Results + QC Summary
NJ Reduced = Results + QC Summary + Partial Raw data

Comments / Special Instructions

* - 24 TAT All other samples (3-6) 3 day TAT

Sample Custody must be documented below each time samples change possession, including courier delivery. 8/29/12

1 Relinquished by Sampler:	Date Time: 8/28/12 1655	Received By: 1 FedX	Relinquished By: 2 FedX	Date Time: 8/29/12 1030	Received By: 2
3 Relinquished by Sampler:	Date Time:	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4
5 Relinquished by:	Date Time:	Received By: 5	Custody Seal # 722 [x] Intact [ ] Not Intact	Preserved where applicable [ ]	On Ice [x] Cooler Temp. 1.8°C

5.1 5

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PAGE 1 OF 1

FED-EX Tracking #	Bottle Order Control #
Accutest Quote #	Accutest Job # JB 15155

Client / Reporting Information

Company Name: Fleming-Lee Shue
Street Address: 158 West 29th St
City: New York State: NY Zip: 10001
Project Contact: K. McGuinness E-mail: Kevin@Fleminglee shue.com
Phone #: 212-675-3225/3224 Fax #:
Sampler(s) Name(s): G. Horn Phone #: 551-427-7164

Project Information

Project Name: AFFCo
Street: 361 Walsh Ave
City: New Windsor State: NY
Project #: 10000-013
Client Purchase Order #:
Project Manager: K. McGuinness
Attention:

Billing Information (if different from Report to)

Company Name:
Street Address:
City State Zip:

Requested Analysis (see TEST CODE sheet)

VOC

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL- Sludge
SED-Sediment
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid
WP - Wipe
FB-Field Blank
EB-Equipment Blank
RB- Rinse Blank
TB-Trip Blank

Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	Number of preserved Bottles: HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	LAB USE ONLY
~~1~~	~~PX07BT-10~~		~~8-30-12~~	~~0830~~	~~GH~~	~~S~~	~~2~~									
~~2~~	~~PX08SW-7~~		~~8-30-12~~	~~1040~~	~~GH~~	~~S~~	~~2~~									
1	PX07BT-10	-1	8-30-12	0930	GH	S	2									19114
2	PX08SW-7 ★	-2	8-30-12	0940	GH	S	2									70132
3	Bench01	-3	8-30-12	1025	GH	S	2									

Turnaround Time (Business days)

- [ ] Std. 15 Business Days
- [ ] Std. 10 Business Days (by Contract only)
- [ ] 10 Day *RUSH*
- [ ] 5 Day *RUSH*
- [x] 3 Day *EMERGENCY* see notes
- [ ] 2 Day *EMERGENCY*
- [ ] 1 Day *EMERGENCY*

Emergency & Rush T/A data available VIA Lablink

Approved By (Accutest PM): / Date:

Data Deliverable Information

- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] FULLT1 (Level 3+4)
- [ ] NJ Reduced
- [ ] Commercial "C"
- [ ] NYASP Category A
- [ ] NYASP Category B
- [ ] State Forms
- [ ] EDD Format
- [ ] Other

Commercial "A" = Results Only
Commercial "B" = Results + QC Summary
NJ Reduced = Results + QC Summary + Partial Raw data

Comments / Special Instructions

Sample #2 (PX08SW-7) run on 24 hr TAT

Sample Custody must be documented below each time samples change possession, including courier delivery.

	Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1		8/30/12 1600	1	2	8/31/12 1030	2
3			3	4		4
5			5			

Custody Seal # [ ] Intact [ ] Not Intact Preserved where applicable [ ] On Ice [x] Cooler Temp. 5.4 °C

NB TM

5.1 5

JB15405

Job Change Order: ~~JB15155~~ 12/6/2012

Requested Date:	12/6/2012	**Received Date:**	8/31/2012
Account Name:	Fleming-Lee Shue, Inc.	**Due Date:**	9/6/2012
Project	AFFCO, 361 Walsh Avenue, New Windsor, NY	**Deliverable:**	COMMB
CSR:	TM	**TAT (Days):**	14

Sample #:
JB15155-all

Change: please move samples from JB15155 to JB15405

Above Changes Per: Steve Panter **Date:** 12/6/2012

To Client: This Change Order is confirmation of the revisions, previously discussed with the Accutest Client Service

JB15405: Chain of Custody
Page 5 of 7

JB15405

Job Change Order: JB14890_12/6/2012

Requested Date:	12/6/2012	**Received Date:**	8/29/2012
Account Name:	Fleming-Lee Shue, Inc.	**Due Date:**	9/4/2012
Project	AFFCO, 361 Walsh Avenue, New Windsor, NY	**Deliverable:**	COMMB
CSR:	TM	**TAT (Days):**	14

Sample #: JB14890-all

Change: please move samples from JB14890 to JB15405

Above Changes Per: Steve Panter **Date:** 12/6/2012

To Client: This Change Order is confirmation of the revisions, previously discussed with the Accutest Client Service

JB15405: Chain of Custody
Page 6 of 7

Job Change Order: JB15405_12/13/2012

Requested Date:	12/13/2012	**Received Date:**	8/29/2012
Account Name:	Fleming-Lee Shue, Inc.	**Due Date:**	9/4/2012
Project	AFFCO, 361 Walsh Avenue, New Windsor, NY	**Deliverable:**	COMMB
CSR:	TM	**TAT (Days):**	14

Sample #: JB15405-all

Change: upgrade to NYASPB

Above Changes Per: Steve Panter **Date:** 12/13/2012

To Client: This Change Order is confirmation of the revisions, previously discussed with the Accutest Client Service

Page 1 of 1

JB15405: Chain of Custody
Page 7 of 7

New Jersey ACCUTEST LABORATORIES

Reissue #1
05/21/13



Technical Report for

Fleming-Lee Shue, Inc.

AFFCO, 361 Walsh Avenue, New Windsor, NY

10000-003 / PO#FP0099

Accutest Job Number: JB34670

Sampling Date: 04/17/13

Report to:

Fleming-Lee Shue, Inc.

raphael@flemingleeshue.com

ATTN: Raphael Rosenbaum

Total number of pages in report: **39**

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Nancy F. Cole

Nancy Cole
Laboratory Director

Client Service contact: Tammy McCloskey 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, DE, FL, IL, IN, KS, KY, LA, MA, MD, MI, MT, NC, OH VAP (CL0056), PA, RI, SC, TN, VA, WV

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ACCUTEST LABORATORIES

May 6, 2013

Mr. Steve Panter
Fleming, Lee, Shue, Inc.
158 West 29th Street
9th Floor
New York, NY 10001

Re: Accutest Job# JB34670

Dear Mr. Panter,

The final report for Accutest job number JB34670 has been edited to reflect corrections to the final report.

Specifically, the Case narrative summary's comment on QC batch V1A5479 has been revised to "All samples except JB34670-1 were analyzed within the recommended method holding time. JB34670-1 was analyzed outside 7 days holding time but results are confirmed on batch V1A5469 which was run within holding time, raw data from the confirmation run is included in this report." The revised report incorporates these revisions.

Please contact me if I can be of further assistance in the matter.

Sincerely,

Tammy McCloskey

Accutest Laboratories

Cc: steve@flemingleeshue.com;kevin@flemingleeshue.com

Sections: 1 2 3 4 5

Table of Contents

-1-

Section 1: Sample Summary **4**
Section 2: Case Narrative/Conformance Summary **5**
Section 3: Summary of Hits **7**
Section 4: Sample Results **9**
4.1: JB34670-1: EW-1X 10
4.2: JB34670-2: S-8 14
4.3: JB34670-3: EW-0 18
4.4: JB34670-4: E1-N 22
4.5: JB34670-5: MW-1N 26
4.6: JB34670-6: FB041713 30
4.7: JB34670-7: TRIP BLANK 34
Section 5: Misc. Forms **36**
5.1: Chain of Custody 37

Sample Summary

Fleming-Lee Shue, Inc.

Job No: JB34670

AFFCO, 361 Walsh Avenue, New Windsor, NY
Project No: 10000-003 / PO#FP0099

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
JB34670-1	04/17/13	09:51	RB	04/18/13	AQ	Ground Water	EW-1X
JB34670-2	04/17/13	12:25	RB	04/18/13	AQ	Ground Water	S-8
JB34670-3	04/17/13	11:10	RB	04/18/13	AQ	Ground Water	EW-0
JB34670-4	04/17/13	13:19	RB	04/18/13	AQ	Ground Water	E1-N
JB34670-5	04/17/13	11:51	RB	04/18/13	AQ	Ground Water	MW-1N
JB34670-6	04/17/13	08:45	RB	04/18/13	AQ	Field Blank Water	FB041713
JB34670-7	04/17/13	13:19	RB	04/18/13	AQ	Trip Blank Water	TRIP BLANK

CASE NARRATIVE / CONFORMANCE SUMMARY

Client:	Fleming-Lee Shue, Inc.	**Job No**	JB34670
Site:	AFFCO, 361 Walsh Avenue, New Windsor, NY	**Report Date**	5/6/2013 9:49:55 AM

On 04/18/2013, 5 Sample(s), 1 Trip Blank(s) and 1 Field Blank(s) were received at Accutest Laboratories at a temperature of 4 C. Samples were intact and chemically preserved, unless noted below. An Accutest Job Number of JB34670 was assigned to the project. Laboratory sample ID, client sample ID and dates of sample collection are detailed in the report's Results Summary Section.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

Volatiles by GCMS By Method SW846 8260B

Matrix: AQ **Batch ID:** V1A5469

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JB33932-1MS, JB33932-1MSD were used as the QC samples indicated.
- JB34670-5: (pH=6)Sample is not acid preservation per method/client criteria. Sample analyzed within 7 days holding time.
- JB34670-5: (pH=6)Sample is not acid preservation per method/client criteria. Sample analyzed within 7 days holding time.
- JB34670-4: (pH=6)Sample is not acid preservation per method/client criteria. Sample analyzed within 7 days holding time.
- JB34670-3: (pH=6)Sample is not acid preservation per method/client criteria. Sample analyzed within 7 days holding time.
- JB34670-6: (pH=6)Sample pH did not satisfy field preservation criteria.

Matrix: AQ **Batch ID:** V1A5471

- The data for SW846 8260B meets quality control requirements.
- JB34670-1: Confirmation run. (pH=6)Sample is not acid preservation per method/client criteria. Sample analyzed within 7 days holding time.

Matrix: AQ **Batch ID:** V1A5479

- All samples except JB34670-1 were analyzed within the recommended method holding time. JB34670-1 was analyzed outside 7 days holding time but results are confirmed on batch V1A5469 which was run within holding time, raw data from the confirmation run is included in this report.
- Sample(s) JB34453-4MS, JB34453-4MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- JB34670-1: (pH=6)Sample pH did not satisfy field preservation criteria. Dilution required due to limited volume per client's request.

Matrix: AQ **Batch ID:** V2A5720

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JB34696-1MS, JB34696-1MSD were used as the QC samples indicated.
- Matrix Spike Recovery(s) for Bromomethane, Chloroethane, Chloromethane, Tetrachloroethene are outside control limits. Outside control limits due to matrix interference.
- Matrix Spike Duplicate Recovery(s) for Bromomethane, Chloroethane, Chloromethane, Tetrachloroethene are outside control limits. Probable cause due to matrix interference.
- JB34670-2: (pH=6)Sample is not acid preservation per method/client criteria. Sample analyzed within 7 days holding time.
- JB34670-3: (pH=6)Sample is not acid preservation per method/client criteria. Sample analyzed within 7 days holding time.

Metals By Method EPA 200.7

Matrix: AQ **Batch ID:** MP71452

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JB34670-4MS, JB34670-4MSD, JB34670-4SDL were used as the QC samples for metals.

Wet Chemistry By Method EPA 300/SW846 9056A

Matrix: AQ **Batch ID:** GP71787

- All samples were prepared within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JB34722-2DUP, JB34722-2MS were used as the QC samples for Chloride, Sulfate, Chloride.

Wet Chemistry By Method SM20 4500S2 F

Matrix: AQ **Batch ID:** GN83727

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JB34670-2MS, JB34670-3DUP were used as the QC samples for Sulfide.
- RPD(s) for Duplicate for Sulfide are outside control limits for sample GN83727-D1. RPD acceptable due to low duplicate and sample concentrations.

Wet Chemistry By Method SM2320 B-11

Matrix: AQ **Batch ID:** GN84023

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JB34670-4DUP were used as the QC samples for Alkalinity, Total as CaCO3.

Accutest certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting Accutest's Quality System precision, accuracy and completeness objectives except as noted.

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

Accutest Laboratories is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. Data release is authorized by Accutest Laboratories indicated via signature on the report cover

Summary of Hits

Job Number: JB34670
Account: Fleming-Lee Shue, Inc.
Project: AFFCO, 361 Walsh Avenue, New Windsor, NY
Collected: 04/17/13

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
JB34670-1	**EW-1X**					
1,1-Dichloroethane [a]		22.9	10	1.1	ug/l	SW846 8260B
Iron		934000	1000		ug/l	EPA 200.7
Alkalinity, Total as CaCO3		89.2	5.0		mg/l	SM2320 B-11
Chloride		52.6	2.0		mg/l	EPA 300/SW846 9056A
Sulfate		29.2	10		mg/l	EPA 300/SW846 9056A
JB34670-2	**S-8**					
1,1-Dichloroethane [b]		11.8	1.0	0.11	ug/l	SW846 8260B
1,2-Dichloroethane [b]		0.70 J	1.0	0.26	ug/l	SW846 8260B
1,1-Dichloroethene [b]		3.5	1.0	0.19	ug/l	SW846 8260B
cis-1,2-Dichloroethene [b]		0.54 J	1.0	0.19	ug/l	SW846 8260B
1,2-Dichloroethene (total) [b]		0.54 J	1.0	0.19	ug/l	SW846 8260B
1,1,1-Trichloroethane [b]		1.4	1.0	0.24	ug/l	SW846 8260B
Trichloroethene [b]		1.1	1.0	0.22	ug/l	SW846 8260B
Iron		5790	100		ug/l	EPA 200.7
Alkalinity, Total as CaCO3		111	5.0		mg/l	SM2320 B-11
Chloride		43.8	2.0		mg/l	EPA 300/SW846 9056A
Sulfate		17.2	10		mg/l	EPA 300/SW846 9056A
JB34670-3	**EW-0**					
2-Butanone (MEK) [b]		14.1	10	2.4	ug/l	SW846 8260B
Chloroethane [b]		334	50	13	ug/l	SW846 8260B
Chloroform [b]		1.2	1.0	0.20	ug/l	SW846 8260B
1,1-Dichloroethane [b]		2540	50	5.3	ug/l	SW846 8260B
1,2-Dichloroethane [b]		17.5	1.0	0.26	ug/l	SW846 8260B
1,1-Dichloroethene [b]		144	1.0	0.19	ug/l	SW846 8260B
cis-1,2-Dichloroethene [b]		2.8	1.0	0.19	ug/l	SW846 8260B
trans-1,2-Dichloroethene [b]		2.2	1.0	0.21	ug/l	SW846 8260B
1,2-Dichloroethene (total) [b]		5.0	1.0	0.19	ug/l	SW846 8260B
Tetrachloroethene [b]		0.60 J	1.0	0.28	ug/l	SW846 8260B
Toluene [b]		8.0	1.0	0.23	ug/l	SW846 8260B
1,1,1-Trichloroethane [b]		8630	50	12	ug/l	SW846 8260B
1,1,2-Trichloroethane [b]		2.3	1.0	0.29	ug/l	SW846 8260B
Trichloroethene [b]		4.0	1.0	0.22	ug/l	SW846 8260B
Vinyl chloride [b]		4.8	1.0	0.21	ug/l	SW846 8260B
Iron		546	100		ug/l	EPA 200.7
Alkalinity, Total as CaCO3		124	5.0		mg/l	SM2320 B-11
Chloride		114	2.0		mg/l	EPA 300/SW846 9056A
Sulfate		93.8	10		mg/l	EPA 300/SW846 9056A

Summary of Hits

Job Number: JB34670
Account: Fleming-Lee Shue, Inc.
Project: AFFCO, 361 Walsh Avenue, New Windsor, NY
Collected: 04/17/13

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
JB34670-4	**E1-N**					
Chloroethane [b]		73.9	1.0	0.26	ug/l	SW846 8260B
1,1-Dichloroethane [b]		154	1.0	0.11	ug/l	SW846 8260B
1,1-Dichloroethene [b]		5.0	1.0	0.19	ug/l	SW846 8260B
1,1,1-Trichloroethane [b]		48.4	1.0	0.24	ug/l	SW846 8260B
Iron		804	100		ug/l	EPA 200.7
Alkalinity, Total as CaCO3		260	5.0		mg/l	SM2320 B-11
Chloride		37.1	2.0		mg/l	EPA 300/SW846 9056A
JB34670-5	**MW-1N**					
Chloroethane [b]		136	5.0	1.3	ug/l	SW846 8260B
Chloroform [b]		3.1 J	5.0	1.0	ug/l	SW846 8260B
1,1-Dichloroethane [b]		438	5.0	0.53	ug/l	SW846 8260B
1,2-Dichloroethane [b]		5.2	5.0	1.3	ug/l	SW846 8260B
1,1-Dichloroethene [b]		36.6	5.0	0.96	ug/l	SW846 8260B
Toluene [b]		1.6 J	5.0	1.1	ug/l	SW846 8260B
1,1,1-Trichloroethane [b]		1560	50	12	ug/l	SW846 8260B
Trichloroethene [b]		6.2	5.0	1.1	ug/l	SW846 8260B
Iron		805	100		ug/l	EPA 200.7
Alkalinity, Total as CaCO3		274	5.0		mg/l	SM2320 B-11
Chloride		57.1	2.0		mg/l	EPA 300/SW846 9056A
Sulfate		104	10		mg/l	EPA 300/SW846 9056A
JB34670-6	**FB041713**					
Iron		18500	100		ug/l	EPA 200.7
JB34670-7	**TRIP BLANK**					

No hits reported in this sample.

(a) (pH = 6)Sample pH did not satisfy field preservation criteria. Dilution required due to limited volume per client's request.
(b) (pH = 6)Sample is not acid preservation per method/client criteria. Sample analyzed within 7 days holding time.

New Jersey ACCUTEST LABORATORIES

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	EW-1X		
Lab Sample ID:	JB34670-1	**Date Sampled:**	04/17/13
Matrix:	AQ - Ground Water	**Date Received:**	04/18/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	AFFCO, 361 Walsh Avenue, New Windsor, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	1A127322.D	10	04/29/13	CC	n/a	n/a	V1A5479
Run #2 [b]	1A127141.D	10	04/24/13	CC	n/a	n/a	V1A5471

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	100	33	ug/l	
71-43-2	Benzene	ND	10	2.4	ug/l	
75-27-4	Bromodichloromethane	ND	10	2.1	ug/l	
75-25-2	Bromoform	ND	40	2.1	ug/l	
74-83-9	Bromomethane	ND	20	2.2	ug/l	
78-93-3	2-Butanone (MEK)	ND	100	24	ug/l	
75-15-0	Carbon disulfide	ND	20	1.9	ug/l	
56-23-5	Carbon tetrachloride	ND	10	2.2	ug/l	
108-90-7	Chlorobenzene	ND	10	2.3	ug/l	
75-00-3	Chloroethane	ND	10	2.6	ug/l	
67-66-3	Chloroform	ND	10	2.0	ug/l	
74-87-3	Chloromethane	ND	10	2.1	ug/l	
124-48-1	Dibromochloromethane	ND	10	1.4	ug/l	
75-34-3	1,1-Dichloroethane	22.9	10	1.1	ug/l	
107-06-2	1,2-Dichloroethane	ND	10	2.6	ug/l	
75-35-4	1,1-Dichloroethene	ND	10	1.9	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	10	1.9	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	10	2.1	ug/l	
540-59-0	1,2-Dichloroethene (total)	ND	10	1.9	ug/l	
78-87-5	1,2-Dichloropropane	ND	10	4.8	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	10	2.1	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	10	1.9	ug/l	
100-41-4	Ethylbenzene	ND	10	2.3	ug/l	
591-78-6	2-Hexanone	ND	50	11	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	10	1.6	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	50	8.3	ug/l	
75-09-2	Methylene chloride	ND	20	7.0	ug/l	
100-42-5	Styrene	ND	50	2.1	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	10	2.1	ug/l	
127-18-4	Tetrachloroethene	ND	10	2.8	ug/l	
108-88-3	Toluene	ND	10	2.3	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	10	2.4	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	EW-1X		
Lab Sample ID:	JB34670-1	**Date Sampled:**	04/17/13
Matrix:	AQ - Ground Water	**Date Received:**	04/18/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	AFFCO, 361 Walsh Avenue, New Windsor, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-00-5	1,1,2-Trichloroethane	ND	10	2.9	ug/l	
79-01-6	Trichloroethene	ND	10	2.2	ug/l	
75-01-4	Vinyl chloride	ND	10	2.1	ug/l	
1330-20-7	Xylene (total)	ND	10	2.4	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	85%	86%	81-121%
17060-07-0	1,2-Dichloroethane-D4	82%	83%	74-127%
2037-26-5	Toluene-D8	90%	90%	80-122%
460-00-4	4-Bromofluorobenzene	89%	88%	78-116%

(a) (pH = 6)Sample pH did not satisfy field preservation criteria. Dilution required due to limited volume per client's request.

(b) The associated QC data can not be retrieved back for processing, so the original analysis reported as confirmation run only. (pH = 6)Sample is not acid preservation per method/client criteria. Sample analyzed within 7 days holding time.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	EW-1X		
Lab Sample ID:	JB34670-1	**Date Sampled:**	04/17/13
Matrix:	AQ - Ground Water	**Date Received:**	04/18/13
		Percent Solids:	n/a
Project:	AFFCO, 361 Walsh Avenue, New Windsor, NY		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Iron	934000	1000	ug/l	1	04/22/13	04/26/13	BL	EPA 200.7 [1]	EPA 200.7 [2]

(1) Instrument QC Batch: MA31059
(2) Prep QC Batch: MP71452

RL = Reporting Limit

Report of Analysis

Client Sample ID:	EW-1X		
Lab Sample ID:	JB34670-1	**Date Sampled:**	04/17/13
Matrix:	AQ - Ground Water	**Date Received:**	04/18/13
		Percent Solids:	n/a
Project:	AFFCO, 361 Walsh Avenue, New Windsor, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Total as CaCO3	89.2	5.0	mg/l	1	04/25/13 17:03	JA	SM2320 B-11
Chloride	52.6	2.0	mg/l	1	04/30/13 11:56	NP	EPA 300/SW846 9056A
Sulfate	29.2	10	mg/l	1	04/30/13 11:56	NP	EPA 300/SW846 9056A

RL = Reporting Limit

Report of Analysis

Client Sample ID:	S-8		
Lab Sample ID:	JB34670-2	**Date Sampled:**	04/17/13
Matrix:	AQ - Ground Water	**Date Received:**	04/18/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	AFFCO, 361 Walsh Avenue, New Windsor, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	2A133950.D	1	04/23/13	CC	n/a	n/a	V2A5720
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	3.3	ug/l	
71-43-2	Benzene	ND	1.0	0.24	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.21	ug/l	
75-25-2	Bromoform	ND	4.0	0.21	ug/l	
74-83-9	Bromomethane	ND	2.0	0.22	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	2.4	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.19	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.22	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.23	ug/l	
75-00-3	Chloroethane	ND	1.0	0.26	ug/l	
67-66-3	Chloroform	ND	1.0	0.20	ug/l	
74-87-3	Chloromethane	ND	1.0	0.21	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.14	ug/l	
75-34-3	1,1-Dichloroethane	11.8	1.0	0.11	ug/l	
107-06-2	1,2-Dichloroethane	0.70	1.0	0.26	ug/l	J
75-35-4	1,1-Dichloroethene	3.5	1.0	0.19	ug/l	
156-59-2	cis-1,2-Dichloroethene	0.54	1.0	0.19	ug/l	J
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.21	ug/l	
540-59-0	1,2-Dichloroethene (total)	0.54	1.0	0.19	ug/l	J
78-87-5	1,2-Dichloropropane	ND	1.0	0.48	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.19	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.23	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.1	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.16	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.83	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.70	ug/l	
100-42-5	Styrene	ND	5.0	0.21	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.21	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.28	ug/l	
108-88-3	Toluene	ND	1.0	0.23	ug/l	
71-55-6	1,1,1-Trichloroethane	1.4	1.0	0.24	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	S-8		
Lab Sample ID:	JB34670-2	**Date Sampled:**	04/17/13
Matrix:	AQ - Ground Water	**Date Received:**	04/18/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	AFFCO, 361 Walsh Avenue, New Windsor, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.29	ug/l	
79-01-6	Trichloroethene	1.1	1.0	0.22	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.21	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.24	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	89%		81-121%
17060-07-0	1,2-Dichloroethane-D4	92%		74-127%
2037-26-5	Toluene-D8	91%		80-122%
460-00-4	4-Bromofluorobenzene	93%		78-116%

(a) (pH = 6)Sample is not acid preservation per method/client criteria. Sample analyzed within 7 days holding time.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	S-8		
Lab Sample ID:	JB34670-2	**Date Sampled:**	04/17/13
Matrix:	AQ - Ground Water	**Date Received:**	04/18/13
		Percent Solids:	n/a
Project:	AFFCO, 361 Walsh Avenue, New Windsor, NY		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Iron	5790	100	ug/l	1	04/22/13	04/25/13	BL	EPA 200.7 [1]	EPA 200.7 [2]

(1) Instrument QC Batch: MA31053
(2) Prep QC Batch: MP71452

RL = Reporting Limit

Report of Analysis

Client Sample ID:	S-8		
Lab Sample ID:	JB34670-2	**Date Sampled:**	04/17/13
Matrix:	AQ - Ground Water	**Date Received:**	04/18/13
		Percent Solids:	n/a
Project:	AFFCO, 361 Walsh Avenue, New Windsor, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Total as CaCO3	111	5.0	mg/l	1	04/25/13 17:03	JA	SM2320 B-11
Chloride	43.8	2.0	mg/l	1	04/30/13 12:20	NP	EPA 300/SW846 9056A
Sulfate	17.2	10	mg/l	1	04/30/13 12:20	NP	EPA 300/SW846 9056A
Sulfide	< 2.0	2.0	mg/l	1	04/20/13	CB	SM20 4500S2 F

RL = Reporting Limit

Report of Analysis

Client Sample ID:	EW-0		
Lab Sample ID:	JB34670-3	**Date Sampled:**	04/17/13
Matrix:	AQ - Ground Water	**Date Received:**	04/18/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	AFFCO, 361 Walsh Avenue, New Windsor, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	2A133951.D	1	04/23/13	CC	n/a	n/a	V2A5720
Run #2 [a]	1A127096.D	50	04/23/13	CC	n/a	n/a	V1A5469

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	3.3	ug/l	
71-43-2	Benzene	ND	1.0	0.24	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.21	ug/l	
75-25-2	Bromoform	ND	4.0	0.21	ug/l	
74-83-9	Bromomethane	ND	2.0	0.22	ug/l	
78-93-3	2-Butanone (MEK)	14.1	10	2.4	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.19	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.22	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.23	ug/l	
75-00-3	Chloroethane	334 [b]	50	13	ug/l	
67-66-3	Chloroform	1.2	1.0	0.20	ug/l	
74-87-3	Chloromethane	ND	1.0	0.21	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.14	ug/l	
75-34-3	1,1-Dichloroethane	2540 [b]	50	5.3	ug/l	
107-06-2	1,2-Dichloroethane	17.5	1.0	0.26	ug/l	
75-35-4	1,1-Dichloroethene	144	1.0	0.19	ug/l	
156-59-2	cis-1,2-Dichloroethene	2.8	1.0	0.19	ug/l	
156-60-5	trans-1,2-Dichloroethene	2.2	1.0	0.21	ug/l	
540-59-0	1,2-Dichloroethene (total)	5.0	1.0	0.19	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.48	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.19	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.23	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.1	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.16	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.83	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.70	ug/l	
100-42-5	Styrene	ND	5.0	0.21	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.21	ug/l	
127-18-4	Tetrachloroethene	0.60	1.0	0.28	ug/l	J
108-88-3	Toluene	8.0	1.0	0.23	ug/l	
71-55-6	1,1,1-Trichloroethane	8630 [b]	50	12	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	EW-0		
Lab Sample ID:	JB34670-3	**Date Sampled:**	04/17/13
Matrix:	AQ - Ground Water	**Date Received:**	04/18/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	AFFCO, 361 Walsh Avenue, New Windsor, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-00-5	1,1,2-Trichloroethane	2.3	1.0	0.29	ug/l	
79-01-6	Trichloroethene	4.0	1.0	0.22	ug/l	
75-01-4	Vinyl chloride	4.8	1.0	0.21	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.24	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	86%	83%	81-121%
17060-07-0	1,2-Dichloroethane-D4	86%	78%	74-127%
2037-26-5	Toluene-D8	95%	93%	80-122%
460-00-4	4-Bromofluorobenzene	93%	90%	78-116%

(a) (pH = 6)Sample is not acid preservation per method/client criteria. Sample analyzed within 7 days holding time.
(b) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	EW-0		
Lab Sample ID:	JB34670-3	**Date Sampled:**	04/17/13
Matrix:	AQ - Ground Water	**Date Received:**	04/18/13
		Percent Solids:	n/a
Project:	AFFCO, 361 Walsh Avenue, New Windsor, NY		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Iron	546	100	ug/l	1	04/22/13	04/25/13	BL	EPA 200.7 [1]	EPA 200.7 [2]

(1) Instrument QC Batch: MA31053
(2) Prep QC Batch: MP71452

RL = Reporting Limit

Report of Analysis

Client Sample ID:	EW-0		
Lab Sample ID:	JB34670-3	**Date Sampled:**	04/17/13
Matrix:	AQ - Ground Water	**Date Received:**	04/18/13
		Percent Solids:	n/a
Project:	AFFCO, 361 Walsh Avenue, New Windsor, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Total as CaCO3	124	5.0	mg/l	1	04/25/13 17:03	JA	SM2320 B-11
Chloride	114	2.0	mg/l	1	04/30/13 12:44	NP	EPA 300/SW846 9056A
Sulfate	93.8	10	mg/l	1	04/30/13 12:44	NP	EPA 300/SW846 9056A
Sulfide	< 2.0	2.0	mg/l	1	04/20/13	CB	SM20 4500S2 F

RL = Reporting Limit

Report of Analysis

Client Sample ID:	E1-N		
Lab Sample ID:	JB34670-4	**Date Sampled:**	04/17/13
Matrix:	AQ - Ground Water	**Date Received:**	04/18/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	AFFCO, 361 Walsh Avenue, New Windsor, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	1A127095.D	1	04/23/13	CC	n/a	n/a	V1A5469
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	3.3	ug/l	
71-43-2	Benzene	ND	1.0	0.24	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.21	ug/l	
75-25-2	Bromoform	ND	4.0	0.21	ug/l	
74-83-9	Bromomethane	ND	2.0	0.22	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	2.4	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.19	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.22	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.23	ug/l	
75-00-3	Chloroethane	73.9	1.0	0.26	ug/l	
67-66-3	Chloroform	ND	1.0	0.20	ug/l	
74-87-3	Chloromethane	ND	1.0	0.21	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.14	ug/l	
75-34-3	1,1-Dichloroethane	154	1.0	0.11	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.26	ug/l	
75-35-4	1,1-Dichloroethene	5.0	1.0	0.19	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.19	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.21	ug/l	
540-59-0	1,2-Dichloroethene (total)	ND	1.0	0.19	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.48	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.19	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.23	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.1	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.16	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.83	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.70	ug/l	
100-42-5	Styrene	ND	5.0	0.21	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.21	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.28	ug/l	
108-88-3	Toluene	ND	1.0	0.23	ug/l	
71-55-6	1,1,1-Trichloroethane	48.4	1.0	0.24	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	E1-N		
Lab Sample ID:	JB34670-4	**Date Sampled:**	04/17/13
Matrix:	AQ - Ground Water	**Date Received:**	04/18/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	AFFCO, 361 Walsh Avenue, New Windsor, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.29	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.22	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.21	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.24	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	85%		81-121%
17060-07-0	1,2-Dichloroethane-D4	81%		74-127%
2037-26-5	Toluene-D8	93%		80-122%
460-00-4	4-Bromofluorobenzene	88%		78-116%

(a) (pH = 6)Sample is not acid preservation per method/client criteria. Sample analyzed within 7 days holding time.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	E1-N		
Lab Sample ID:	JB34670-4	**Date Sampled:**	04/17/13
Matrix:	AQ - Ground Water	**Date Received:**	04/18/13
		Percent Solids:	n/a
Project:	AFFCO, 361 Walsh Avenue, New Windsor, NY		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Iron	804	100	ug/l	1	04/22/13	04/23/13	ND	EPA 200.7 [1]	EPA 200.7 [2]

(1) Instrument QC Batch: MA31028
(2) Prep QC Batch: MP71452

RL = Reporting Limit

Report of Analysis

Client Sample ID:	E1-N		
Lab Sample ID:	JB34670-4	**Date Sampled:**	04/17/13
Matrix:	AQ - Ground Water	**Date Received:**	04/18/13
		Percent Solids:	n/a
Project:	AFFCO, 361 Walsh Avenue, New Windsor, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Total as CaCO3	260	5.0	mg/l	1	04/25/13 17:03	JA	SM2320 B-11
Chloride	37.1	2.0	mg/l	1	04/30/13 13:08	NP	EPA 300/SW846 9056A
Sulfate	< 10	10	mg/l	1	04/30/13 13:08	NP	EPA 300/SW846 9056A
Sulfide	< 2.0	2.0	mg/l	1	04/20/13	CB	SM20 4500S2 F

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-1N		
Lab Sample ID:	JB34670-5	**Date Sampled:**	04/17/13
Matrix:	AQ - Ground Water	**Date Received:**	04/18/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	AFFCO, 361 Walsh Avenue, New Windsor, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	1A127097.D	5	04/23/13	CC	n/a	n/a	V1A5469
Run #2 [a]	1A127098.D	50	04/23/13	CC	n/a	n/a	V1A5469

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	50	16	ug/l	
71-43-2	Benzene	ND	5.0	1.2	ug/l	
75-27-4	Bromodichloromethane	ND	5.0	1.0	ug/l	
75-25-2	Bromoform	ND	20	1.1	ug/l	
74-83-9	Bromomethane	ND	10	1.1	ug/l	
78-93-3	2-Butanone (MEK)	ND	50	12	ug/l	
75-15-0	Carbon disulfide	ND	10	0.95	ug/l	
56-23-5	Carbon tetrachloride	ND	5.0	1.1	ug/l	
108-90-7	Chlorobenzene	ND	5.0	1.1	ug/l	
75-00-3	Chloroethane	136	5.0	1.3	ug/l	
67-66-3	Chloroform	3.1	5.0	1.0	ug/l	J
74-87-3	Chloromethane	ND	5.0	1.0	ug/l	
124-48-1	Dibromochloromethane	ND	5.0	0.68	ug/l	
75-34-3	1,1-Dichloroethane	438	5.0	0.53	ug/l	
107-06-2	1,2-Dichloroethane	5.2	5.0	1.3	ug/l	
75-35-4	1,1-Dichloroethene	36.6	5.0	0.96	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	5.0	0.94	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	5.0	1.1	ug/l	
540-59-0	1,2-Dichloroethene (total)	ND	5.0	0.94	ug/l	
78-87-5	1,2-Dichloropropane	ND	5.0	2.4	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	1.0	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	0.95	ug/l	
100-41-4	Ethylbenzene	ND	5.0	1.1	ug/l	
591-78-6	2-Hexanone	ND	25	5.7	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	0.82	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	25	4.1	ug/l	
75-09-2	Methylene chloride	ND	10	3.5	ug/l	
100-42-5	Styrene	ND	25	1.1	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	1.1	ug/l	
127-18-4	Tetrachloroethene	ND	5.0	1.4	ug/l	
108-88-3	Toluene	1.6	5.0	1.1	ug/l	J
71-55-6	1,1,1-Trichloroethane	1560 [b]	50	12	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-1N		
Lab Sample ID:	JB34670-5	**Date Sampled:**	04/17/13
Matrix:	AQ - Ground Water	**Date Received:**	04/18/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	AFFCO, 361 Walsh Avenue, New Windsor, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-00-5	1,1,2-Trichloroethane	ND	5.0	1.4	ug/l	
79-01-6	Trichloroethene	6.2	5.0	1.1	ug/l	
75-01-4	Vinyl chloride	ND	5.0	1.0	ug/l	
1330-20-7	Xylene (total)	ND	5.0	1.2	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	84%	84%	81-121%
17060-07-0	1,2-Dichloroethane-D4	78%	80%	74-127%
2037-26-5	Toluene-D8	93%	90%	80-122%
460-00-4	4-Bromofluorobenzene	88%	88%	78-116%

(a) (pH = 6)Sample is not acid preservation per method/client criteria. Sample analyzed within 7 days holding time.
(b) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-1N		
Lab Sample ID:	JB34670-5	**Date Sampled:**	04/17/13
Matrix:	AQ - Ground Water	**Date Received:**	04/18/13
		Percent Solids:	n/a
Project:	AFFCO, 361 Walsh Avenue, New Windsor, NY		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Iron	805	100	ug/l	1	04/22/13	04/25/13	BL	EPA 200.7 [1]	EPA 200.7 [2]

(1) Instrument QC Batch: MA31053
(2) Prep QC Batch: MP71452

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-1N		
Lab Sample ID:	JB34670-5	**Date Sampled:**	04/17/13
Matrix:	AQ - Ground Water	**Date Received:**	04/18/13
		Percent Solids:	n/a
Project:	AFFCO, 361 Walsh Avenue, New Windsor, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Total as CaCO3	274	5.0	mg/l	1	04/25/13 17:03	JA	SM2320 B-11
Chloride	57.1	2.0	mg/l	1	04/30/13 13:32	NP	EPA 300/SW846 9056A
Sulfate	104	10	mg/l	1	04/30/13 13:32	NP	EPA 300/SW846 9056A
Sulfide	< 2.0	2.0	mg/l	1	04/20/13	CB	SM20 4500S2 F

RL = Reporting Limit

Report of Analysis

Client Sample ID:	FB041713		
Lab Sample ID:	JB34670-6	**Date Sampled:**	04/17/13
Matrix:	AQ - Field Blank Water	**Date Received:**	04/18/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	AFFCO, 361 Walsh Avenue, New Windsor, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	1A127094.D	1	04/23/13	CC	n/a	n/a	V1A5469
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	3.3	ug/l	
71-43-2	Benzene	ND	1.0	0.24	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.21	ug/l	
75-25-2	Bromoform	ND	4.0	0.21	ug/l	
74-83-9	Bromomethane	ND	2.0	0.22	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	2.4	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.19	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.22	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.23	ug/l	
75-00-3	Chloroethane	ND	1.0	0.26	ug/l	
67-66-3	Chloroform	ND	1.0	0.20	ug/l	
74-87-3	Chloromethane	ND	1.0	0.21	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.14	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.11	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.26	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.19	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.19	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.21	ug/l	
540-59-0	1,2-Dichloroethene (total)	ND	1.0	0.19	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.48	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.19	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.23	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.1	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.16	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.83	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.70	ug/l	
100-42-5	Styrene	ND	5.0	0.21	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.21	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.28	ug/l	
108-88-3	Toluene	ND	1.0	0.23	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.24	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FB041713		
Lab Sample ID:	JB34670-6	**Date Sampled:**	04/17/13
Matrix:	AQ - Field Blank Water	**Date Received:**	04/18/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	AFFCO, 361 Walsh Avenue, New Windsor, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.29	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.22	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.21	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.24	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	83%		81-121%
17060-07-0	1,2-Dichloroethane-D4	79%		74-127%
2037-26-5	Toluene-D8	91%		80-122%
460-00-4	4-Bromofluorobenzene	90%		78-116%

(a) (pH = 6)Sample pH did not satisfy field preservation criteria.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FB041713		
Lab Sample ID:	JB34670-6	**Date Sampled:**	04/17/13
Matrix:	AQ - Field Blank Water	**Date Received:**	04/18/13
		Percent Solids:	n/a
Project:	AFFCO, 361 Walsh Avenue, New Windsor, NY		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Iron	18500	100	ug/l	1	04/22/13	04/25/13	BL	EPA 200.7 [1]	EPA 200.7 [2]

(1) Instrument QC Batch: MA31053
(2) Prep QC Batch: MP71452

RL = Reporting Limit

Report of Analysis

Client Sample ID:	FB041713		
Lab Sample ID:	JB34670-6	**Date Sampled:**	04/17/13
Matrix:	AQ - Field Blank Water	**Date Received:**	04/18/13
		Percent Solids:	n/a
Project:	AFFCO, 361 Walsh Avenue, New Windsor, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Total as CaCO3	< 5.0	5.0	mg/l	1	04/25/13 17:03	JA	SM2320 B-11
Chloride	< 2.0	2.0	mg/l	1	04/30/13 13:55	NP	EPA 300/SW846 9056A
Sulfate	< 10	10	mg/l	1	04/30/13 13:55	NP	EPA 300/SW846 9056A
Sulfide	< 2.0	2.0	mg/l	1	04/20/13	CB	SM20 4500S2 F

RL = Reporting Limit

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	JB34670-7	**Date Sampled:**	04/17/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	04/18/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	AFFCO, 361 Walsh Avenue, New Windsor, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1A127093.D	1	04/23/13	CC	n/a	n/a	V1A5469
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	3.3	ug/l	
71-43-2	Benzene	ND	1.0	0.24	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.21	ug/l	
75-25-2	Bromoform	ND	4.0	0.21	ug/l	
74-83-9	Bromomethane	ND	2.0	0.22	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	2.4	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.19	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.22	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.23	ug/l	
75-00-3	Chloroethane	ND	1.0	0.26	ug/l	
67-66-3	Chloroform	ND	1.0	0.20	ug/l	
74-87-3	Chloromethane	ND	1.0	0.21	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.14	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.11	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.26	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.19	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.19	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.21	ug/l	
540-59-0	1,2-Dichloroethene (total)	ND	1.0	0.19	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.48	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.19	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.23	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.1	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.16	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.83	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.70	ug/l	
100-42-5	Styrene	ND	5.0	0.21	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.21	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.28	ug/l	
108-88-3	Toluene	ND	1.0	0.23	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.24	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	JB34670-7	**Date Sampled:**	04/17/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	04/18/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	AFFCO, 361 Walsh Avenue, New Windsor, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.29	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.22	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.21	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.24	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	83%		81-121%
17060-07-0	1,2-Dichloroethane-D4	78%		74-127%
2037-26-5	Toluene-D8	90%		80-122%
460-00-4	4-Bromofluorobenzene	88%		78-116%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

New Jersey ACCUTEST LABORATORIES

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

CHAIN OF CUSTODY

ACCUTEST LABORATORIES

2235 Route 130, Dayton, NJ 08810
TEL. 732-329-0200 FAX: 732-329-3499/3480
www.accutest.com

PAGE 1 OF 1

FED-EX Tracking #: | Bottle Order Control #:
Accutest Quote #: | Accutest Job #: JB34670

Client / Reporting Information

Company Name: FLEMING-LEE SHUE
Street Address: 158 WEST 27TH STREET
City: NY State: NY Zip: 10001
Project Contact: S. PANTER E-mail:
Phone #: 212-675-3225 Fax #:
Sampler(s) Name(s): S. PANTER / Rahul Bhatia Phone #: (646) 841-3104 / Rasenbaum / Kathryn

Project Information

Project Name: AFFIO
Street: 360 WASH AVE
City: NEW WINDSOR State: NY
Project #: 10000
Client Purchase Order #:
Project Manager: S. PANTER

Billing Information (if different from Report to)

Company Name:
Street Address:
City: State: Zip:
Attention:

Requested Analysis (see TEST CODE sheet)

Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	ALK	CHL, SO4	I=E	S	VO	LAB USE ONLY
1	EW-1X		4/17/13	9:57	RB	GW	6	2	1			5				X	X	X	X	X	
2	E1-N		4/17/13	12:25	RB	GW	8	2	1			5				X	X	X	X	X	
3	EW-D		4/17/13	11:10	RB	GW	8	2	1			5				X	X	X	X	X	
4	S-8		4/17/13	13:19	RB	GW	8	2	1			5				X	X	X	X	X	
5	MW-1N		4/17/13	11:51	RB	GW	8	2	1			5				X	X	X	X	X	
6	FB041713		4/17/13	8:45	RB	FB	8	2	1			5				X	X	X	X	X	
7	TRIP BLANK		4/15/13	600		TB	2	2												X	

A35
G FLR
841

Turnaround Time (Business days)

- [x] Std. 10 Business Days
- [ ] 5 Day RUSH
- [ ] 3 Day EMERGENCY
- [ ] 2 Day EMERGENCY
- [ ] 1 Day EMERGENCY
- [ ] other _____

Emergency & Rush T/A data available VIA Lablink

Approved By (Accutest PM): / Date:

Data Deliverable Information

- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] FULLT1 (Level 3+4)
- [ ] NJ Reduced
- [ ] Commercial "C"
- [ ] NYASP Category A
- [x] NYASP Category B
- [ ] State Forms
- [ ] EDD Format _____
- [ ] Other _____

Commercial "A" = Results Only
Commercial "B" = Results + QC Summary
NJ Reduced = Results + QC Summary + Partial Raw data

Comments / Special Instructions

VOCs are un preserved

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler: 1	Date Time: 4/18/13	Received By: 1	Relinquished By: 2	Date Time: 4/18/13 1255	Received By: 2		
Relinquished by Sampler: 3	Date Time:	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4		
Relinquished by: 5	Date Time:	Received By: 5	Custody Seal # 750	[x] Intact [ ] Not intact	Preserved where applicable	On Ice [ ]	Cooler Temp. 4.0c

2A

DL

JB34670: Chain of Custody
Page 1 of 3

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: JB34670 **Client:** **Project:**

Date / Time Received: 4/18/2013 **Delivery Method:** **Airbill #'s:**

Cooler Temps (Initial/Adjusted): #1: (4/4); 0

Cooler Security	Y	or	N		Y	or	N
1. Custody Seals Present:	☑		☐	3. COC Present:	☑		☐
2. Custody Seals Intact:	☑		☐	4. Smpl Dates/Time OK	☑		☐

Cooler Temperature	Y	or	N
1. Temp criteria achieved:	☑		☐
2. Cooler temp verification:	Bar Therm		
3. Cooler media:	Ice (Bag)		
4. No. Coolers:	1		

Quality Control Preservatio	Y	or	N	N/A
1. Trip Blank present / cooler:	☑		☐	☐
2. Trip Blank listed on COC:	☑		☐	☐
3. Samples preserved properly:	☑		☐	
4. VOCs headspace free:	☑		☐	☐

Sample Integrity - Documentation	Y	or	N
1. Sample labels present on bottles:	☑		☐
2. Container labeling complete:	☑		☐
3. Sample container label / COC agree:	☑		☐

Sample Integrity - Condition	Y	or	N
1. Sample recvd within HT:	☑		☐
2. All containers accounted for:	☑		☐
3. Condition of sample:	Intact		

Sample Integrity - Instructions	Y	or	N	N/A
1. Analysis requested is clear:	☑		☐	
2. Bottles received for unspecified tests	☐		☑	
3. Sufficient volume recvd for analysis:	☑		☐	
4. Compositing instructions clear:	☐		☐	☑
5. Filtering instructions clear:	☐		☐	☑

Comments

Accutest Laboratories
V:732.329.0200
2235 US Highway 130
F: 732.329.3499
Dayton, New Jersey
www/accutest.com

JB34670: Chain of Custody
Page 2 of 3

Job Change Order: JB34670_4_30_2013

Requested Date:	4/30/2013	**Received Date:**	4/18/2013
Account Name:	Fleming-Lee Shue, Inc.	**Due Date:**	5/2/2013
Project	AFFCO, 361 Walsh Avenue, New Windsor, NY	**Deliverable:**	NYASPB
CSR:	tammym	**TAT (Days):**	1

Sample #: JB34670-2 **Change:**
Dept: revise sample ID to S-8

E1-N

Sample #: JB34670-4 **Change:**
Dept: revise sample ID to E1-N

S-8

Above Changes Per: Rahul Bhatia **Date:** 4/30/2013

To Client: This Change Order is confirmation of the revisions, previously discussed with the Accutest Client Service

New Jersey ACCUTEST LABORATORIES

05/21/13



Technical Report for

Fleming-Lee Shue, Inc.

AFFCO, 361 Walsh Avenue, New Windsor, NY

10000-003 / PO#FP0099

Accutest Job Number: JB32749

Sampling Date: 03/27/13

Report to:

Fleming-Lee Shue, Inc.

raphael@flemingleeshue.com

ATTN: Raphael Rosenbaum

Total number of pages in report: **80**

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Nancy F. Cole

Nancy Cole
Laboratory Director

Client Service contact: Tammy McCloskey 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, DE, FL, IL, IN, KS, KY, LA, MA, MD, MI, MT, NC, OH VAP (CL0056), PA, RI, SC, TN, VA, WV

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Sections: 1 2 3 4 5

Table of Contents

-1-

Section 1: Sample Summary 3
Section 2: Case Narrative/Conformance Summary 6
Section 3: Summary of Hits 8
Section 4: Sample Results 16
4.1: JB32749-1: TRIP BLANK 17
4.2: JB32749-2: FIELD BLANK 1 19
4.3: JB32749-3: FIELD BLANK 2 21
4.4: JB32749-4: 1.1 (12.5-13) 23
4.5: JB32749-5: 1.1 (13-13.5) 25
4.6: JB32749-6: 1.1 (14.5-15) 27
4.7: JB32749-7: 1.2 (13-13.5) 29
4.8: JB32749-8: 1.2 (11-11.5) 31
4.9: JB32749-9: 1.2 (14-14.5) 33
4.10: JB32749-10: 2.1 (12.5-13) 35
4.11: JB32749-11: 2.1 (11.5-12) 37
4.12: JB32749-12: 2.1 (10-10.5) 39
4.13: JB32749-13: 2.2 (12.5-13) 41
4.14: JB32749-14: 2.2 (11-11.5) 43
4.15: JB32749-15: 2.2 (14-14.5) 45
4.16: JB32749-16: 3 (13.5-14) 47
4.17: JB32749-17: 3 (14.5-15) 49
4.18: JB32749-18: 3 (12.5-13) 51
4.19: JB32749-19: 4 (11-11.5) 53
4.20: JB32749-20: 4 (10-10.5) 55
4.21: JB32749-21: 4 (14.5-15) 57
4.22: JB32749-22: 5 (13.5-14) 59
4.23: JB32749-23: 5 (14-14.5) 61
4.24: JB32749-24: 5 (14.5-15) 63
4.25: JB32749-25: 6 (11.5-12) 65
4.26: JB32749-26: 6 (12.5-13) 67
4.27: JB32749-27: 6 (14.5-15) 69
4.28: JB32749-28: FD-1 6(11.5-12) 71
4.29: JB32749-29: FD-2 6(14.5-15) 73
Section 5: Misc. Forms 75
5.1: Chain of Custody 76

Sample Summary

Fleming-Lee Shue, Inc.

Job No: JB32749

AFFCO, 361 Walsh Avenue, New Windsor, NY
Project No: 10000-003 / PO#FP0099

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
JB32749-1	03/27/13	17:30	RB	03/29/13	AQ	Trip Blank Soil	TRIP BLANK
JB32749-2	03/27/13	07:30	RB	03/29/13	AQ	Field Blank Soil	FIELD BLANK 1
JB32749-3	03/27/13	08:00	RB	03/29/13	AQ	Field Blank Soil	FIELD BLANK 2
JB32749-4	03/27/13	13:40	RB	03/29/13	SO	Soil	1.1 (12.5-13)
JB32749-5	03/27/13	13:45	RB	03/29/13	SO	Soil	1.1 (13-13.5)
JB32749-6	03/27/13	13:50	RB	03/29/13	SO	Soil	1.1 (14.5-15)
JB32749-7	03/27/13	10:55	RB	03/29/13	SO	Soil	1.2 (13-13.5)
JB32749-8	03/27/13	10:50	RB	03/29/13	SO	Soil	1.2 (11-11.5)
JB32749-9	03/27/13	11:00	RB	03/29/13	SO	Soil	1.2 (14-14.5)
JB32749-10	03/27/13	12:40	RB	03/29/13	SO	Soil	2.1 (12.5-13)
JB32749-11	03/27/13	12:35	RB	03/29/13	SO	Soil	2.1 (11.5-12)
JB32749-12	03/27/13	12:30	RB	03/29/13	SO	Soil	2.1 (10-10.5)
JB32749-13	03/27/13	11:45	RB	03/29/13	SO	Soil	2.2 (12.5-13)

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Sample Summary
(continued)

Fleming-Lee Shue, Inc.

Job No: JB32749

AFFCO, 361 Walsh Avenue, New Windsor, NY
Project No: 10000-003 / PO#FP0099

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
JB32749-14	03/27/13	11:40	RB	03/29/13	SO	Soil	2.2 (11-11.5)
JB32749-15	03/27/13	11:50	RB	03/29/13	SO	Soil	2.2 (14-14.5)
JB32749-16	03/27/13	14:45	RB	03/29/13	SO	Soil	3 (13.5-14)
JB32749-17	03/27/13	14:50	RB	03/29/13	SO	Soil	3 (14.5-15)
JB32749-18	03/27/13	14:35	RB	03/29/13	SO	Soil	3 (12.5-13)
JB32749-19	03/27/13	15:20	RB	03/29/13	SO	Soil	4 (11-11.5)
JB32749-20	03/27/13	15:10	RB	03/29/13	SO	Soil	4 (10-10.5)
JB32749-21	03/27/13	15:30	RB	03/29/13	SO	Soil	4 (14.5-15)
JB32749-22	03/27/13	17:20	RB	03/29/13	SO	Soil	5 (13.5-14)
JB32749-23	03/27/13	17:25	RB	03/29/13	SO	Soil	5 (14-14.5)
JB32749-24	03/27/13	17:30	RB	03/29/13	SO	Soil	5 (14.5-15)
JB32749-25	03/27/13	16:30	RB	03/29/13	SO	Soil	6 (11.5-12)
JB32749-26	03/27/13	16:45	RB	03/29/13	SO	Soil	6 (12.5-13)

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Sample Summary
(continued)

Fleming-Lee Shue, Inc.

Job No: JB32749

AFFCO, 361 Walsh Avenue, New Windsor, NY
Project No: 10000-003 / PO#FP0099

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
JB32749-27	03/27/13	17:00	RB	03/29/13	SO	Soil	6 (14.5-15)
JB32749-28	03/27/13	16:30	RB	03/29/13	SO	Soil	FD-1 6(11.5-12)
JB32749-29	03/27/13	17:00	RB	03/29/13	SO	Soil	FD-2 6(14.5-15)

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

CASE NARRATIVE / CONFORMANCE SUMMARY

Client: Fleming-Lee Shue, Inc. **Job No** JB32749

Site: AFFCO, 361 Walsh Avenue, New Windsor, NY **Report Date** 4/18/2013 10:43:04 A

On 03/29/2013, 26 Sample(s), 1 Trip Blank(s) and 2 Field Blank(s) were received at Accutest Laboratories at a temperature of 12.1 C. Samples were intact and chemically preserved, unless noted below. An Accutest Job Number of JB32749 was assigned to the project. Laboratory sample ID, client sample ID and dates of sample collection are detailed in the report's Results Summary Section. *** Sample was received at 12.1 degrees C. and OK to analysis per Steve Panter .

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

Volatiles by GCMS By Method SW846 8260B

Matrix: LEACHATE **Batch ID:** V2C4870

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- RPD(s) for Duplicate for Chloroform are outside control limits for sample JB32594-2DUP. High RPD due to low concentration of hit
- JB32594-2DUP for Tetrachloroethene: High RPD due to possible sample analyzed from different vials.
- Sample(s) JB32594-1MS, JB32594-2DUP were used as the QC samples indicated.

Matrix: SO **Batch ID:** VC6486

- All samples were analyzed within the recommended method holding time.
- Sample(s) JB32836-1MS, JB32836-2DUP were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.

Matrix: SO **Batch ID:** VC6488

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JB32749-27MS, JB32749-19DUP were used as the QC samples indicated.
- Matrix Spike Recovery(s) for 1,1,2,2-Tetrachloroethane are outside control limits. Outside control limits due to matrix interference.
- RPD(s) for Duplicate for 1,1,1-Trichloroethane, 1,1-Dichloroethane, 1,1-Dichloroethene, 1,2-Dichloroethane, 1,2-Dichloroethene (total), Acetone, Chloroethane, cis-1,2-Dichloroethene, trans-1,2-Dichloroethene, Trichloroethene, Vinyl chloride are outside control limits for sample JB32749-19DUP. High RPD due to possible sample analyzed from different vials.
- JB32749-27MS for 4-Bromofluorobenzene: Outside control limits due to matrix interference.

Matrix: SO **Batch ID:** VC6492

- All samples were analyzed within the recommended method holding time.
- Sample(s) JB32653-1MS, JB32653-1MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- VC6492-BS for 1,1,2,2-Tetrachloroethane: High percent recoveries and no associated positive found in the QC batch.

Matrix: SO **Batch ID:** VE8870

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JB33072-7MS, JB33072-7MSD were used as the QC samples indicated.

Volatiles by GCMS By Method SW846 8260B

Matrix: SO **Batch ID:** VE8871

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JB32576-4MS, JB32576-4MSD were used as the QC samples indicated.
- JB32749-18: Diluted due to high concentration of non-target compound.
- JB32749-16: Diluted due to high concentration of non-target compound.

Matrix: SO **Batch ID:** VE8875

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JB32576-16MS, JB32576-16MSD were used as the QC samples indicated.

Matrix: SO **Batch ID:** VE8876

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JB32749-21MS, JB32749-21MSD were used as the QC samples indicated.

Matrix: SO **Batch ID:** VE8878

- All samples were analyzed within the recommended method holding time.
- Sample(s) JB33550-8MS, JB33550-8MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Matrix Spike Duplicate Recovery(s) for Toluene are outside control limits. Outside control limits due to matrix interference.
- JB32749-17: Diluted due to high concentration of non-target compound.

Wet Chemistry By Method ASTM 4643-00

Matrix: SO **Batch ID:** GN82679

- The data for ASTM 4643-00 meets quality control requirements.

Wet Chemistry By Method SM2540 G-97

Matrix: SO **Batch ID:** GN82673

- The data for SM2540 G-97 meets quality control requirements.

Accutest certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting Accutest's Quality System precision, accuracy and completeness objectives except as noted.

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

Accutest Laboratories is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. Data release is authorized by Accutest Laboratories indicated via signature on the report cover

Summary of Hits

Job Number: JB32749
Account: Fleming-Lee Shue, Inc.
Project: AFFCO, 361 Walsh Avenue, New Windsor, NY
Collected: 03/27/13

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
JB32749-1	**TRIP BLANK**					
Bromoform		0.71 J	4.0	0.21	ug/l	SW846 8260B
Dibromochloromethane		0.35 J	1.0	0.14	ug/l	SW846 8260B
JB32749-2	**FIELD BLANK 1**					
No hits reported in this sample.						
JB32749-3	**FIELD BLANK 2**					
No hits reported in this sample.						
JB32749-4	**1.1 (12.5-13)**					
1,1-Dichloroethane		1080	420	11	ug/kg	SW846 8260B
1,2-Dichloroethane		232	83	11	ug/kg	SW846 8260B
1,1-Dichloroethene		1140	420	21	ug/kg	SW846 8260B
cis-1,2-Dichloroethene		83.2 J	420	15	ug/kg	SW846 8260B
trans-1,2-Dichloroethene		101 J	420	20	ug/kg	SW846 8260B
1,2-Dichloroethene (total)		184 J	420	15	ug/kg	SW846 8260B
Tetrachloroethene		37.9 J	420	14	ug/kg	SW846 8260B
Toluene		109	83	8.7	ug/kg	SW846 8260B
1,1,1-Trichloroethane		18700	4200	88	ug/kg	SW846 8260B
Trichloroethene		1130	420	14	ug/kg	SW846 8260B
JB32749-5	**1.1 (13-13.5)**					
Acetone		10.9 J	12	1.9	ug/kg	SW846 8260B
Carbon disulfide		1.8 J	5.8	0.13	ug/kg	SW846 8260B
Chloroethane		25.4	5.8	0.26	ug/kg	SW846 8260B
1,1-Dichloroethane		183	5.8	0.16	ug/kg	SW846 8260B
1,2-Dichloroethane		1.0 J	1.2	0.16	ug/kg	SW846 8260B
1,1-Dichloroethene		32.0	5.8	0.30	ug/kg	SW846 8260B
Methylene chloride		4.4 J	5.8	1.5	ug/kg	SW846 8260B
Toluene		0.43 J	1.2	0.12	ug/kg	SW846 8260B
1,1,1-Trichloroethane		2860	500	11	ug/kg	SW846 8260B
Trichloroethene		0.81 J	5.8	0.20	ug/kg	SW846 8260B
JB32749-6	**1.1 (14.5-15)**					
Carbon disulfide		2.2 J	6.5	0.15	ug/kg	SW846 8260B
Chloroethane		54.7	6.5	0.30	ug/kg	SW846 8260B
1,1-Dichloroethane		79.4	6.5	0.18	ug/kg	SW846 8260B
1,1-Dichloroethene		15.3	6.5	0.33	ug/kg	SW846 8260B

Summary of Hits

Job Number: JB32749
Account: Fleming-Lee Shue, Inc.
Project: AFFCO, 361 Walsh Avenue, New Windsor, NY
Collected: 03/27/13

Lab Sample ID / Client Sample ID / Analyte	Result/ Qual	RL	MDL	Units	Method
trans-1,2-Dichloroethene	1.3 J	6.5	0.31	ug/kg	SW846 8260B
1,2-Dichloroethene (total)	1.3 J	6.5	0.24	ug/kg	SW846 8260B
Methylene chloride	2.1 J	6.5	1.7	ug/kg	SW846 8260B
Toluene	1.0 J	1.3	0.14	ug/kg	SW846 8260B
1,1,1-Trichloroethane	144	6.5	0.14	ug/kg	SW846 8260B
Trichloroethene	0.90 J	6.5	0.23	ug/kg	SW846 8260B
Vinyl chloride	0.77 J	6.5	0.19	ug/kg	SW846 8260B
JB32749-7 1.2 (13-13.5)					
Acetone	27.2	14	2.4	ug/kg	SW846 8260B
2-Butanone (MEK)	29.0	14	3.3	ug/kg	SW846 8260B
Carbon disulfide	1.1 J	7.0	0.16	ug/kg	SW846 8260B
Chloroethane	480 J	550	25	ug/kg	SW846 8260B
1,1-Dichloroethane	3950	550	15	ug/kg	SW846 8260B
1,2-Dichloroethane	14.2	1.4	0.19	ug/kg	SW846 8260B
1,1-Dichloroethene	41.7	7.0	0.36	ug/kg	SW846 8260B
cis-1,2-Dichloroethene	0.77 J	7.0	0.26	ug/kg	SW846 8260B
trans-1,2-Dichloroethene	0.47 J	7.0	0.33	ug/kg	SW846 8260B
1,2-Dichloroethene (total)	1.2 J	7.0	0.26	ug/kg	SW846 8260B
Methylene chloride	2.8 J	7.0	1.8	ug/kg	SW846 8260B
Toluene	5.7	1.4	0.15	ug/kg	SW846 8260B
1,1,1-Trichloroethane	2130	550	12	ug/kg	SW846 8260B
1,1,2-Trichloroethane	0.84 J	7.0	0.24	ug/kg	SW846 8260B
Trichloroethene	0.89 J	7.0	0.24	ug/kg	SW846 8260B
Vinyl chloride	10.9	7.0	0.20	ug/kg	SW846 8260B
JB32749-8 1.2 (11-11.5)					
Acetone	30.1	15	2.5	ug/kg	SW846 8260B
2-Butanone (MEK)	21.8	15	3.5	ug/kg	SW846 8260B
Carbon disulfide	1.5 J	7.3	0.17	ug/kg	SW846 8260B
Chloroethane	659 J	770	35	ug/kg	SW846 8260B
1,1-Dichloroethane	6220	770	21	ug/kg	SW846 8260B
1,2-Dichloroethane	11.9	1.5	0.20	ug/kg	SW846 8260B
1,1-Dichloroethene	85.3	7.3	0.37	ug/kg	SW846 8260B
cis-1,2-Dichloroethene	0.63 J	7.3	0.27	ug/kg	SW846 8260B
1,2-Dichloroethene (total)	0.63 J	7.3	0.27	ug/kg	SW846 8260B
Ethylbenzene	0.80 J	1.5	0.38	ug/kg	SW846 8260B
Methylene chloride	5.2 J	7.3	1.8	ug/kg	SW846 8260B
Toluene	2.3	1.5	0.15	ug/kg	SW846 8260B
1,1,1-Trichloroethane	1560	770	16	ug/kg	SW846 8260B
1,1,2-Trichloroethane	0.57 J	7.3	0.25	ug/kg	SW846 8260B
Trichloroethene	1.6 J	7.3	0.25	ug/kg	SW846 8260B
Vinyl chloride	7.9	7.3	0.21	ug/kg	SW846 8260B

Summary of Hits

Job Number: JB32749
Account: Fleming-Lee Shue, Inc.
Project: AFFCO, 361 Walsh Avenue, New Windsor, NY
Collected: 03/27/13

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Xylene (total)		0.65 J	1.5	0.20	ug/kg	SW846 8260B
JB32749-9	**1.2 (14-14.5)**					
Chloroethane		2960	1000	47	ug/kg	SW846 8260B
1,1-Dichloroethane		34000	1000	28	ug/kg	SW846 8260B
1,2-Dichloroethane		786	210	28	ug/kg	SW846 8260B
1,1-Dichloroethene		1620	1000	53	ug/kg	SW846 8260B
Toluene		184 J	210	22	ug/kg	SW846 8260B
1,1,1-Trichloroethane		4690	1000	22	ug/kg	SW846 8260B
JB32749-10	**2.1 (12.5-13)**					
2-Butanone (MEK)		893	770	180	ug/kg	SW846 8260B
Carbon disulfide		48.1 J	380	9.0	ug/kg	SW846 8260B
Chloroethane		3530	380	17	ug/kg	SW846 8260B
1,1-Dichloroethane		34900	3800	110	ug/kg	SW846 8260B
1,2-Dichloroethane		1590	77	10	ug/kg	SW846 8260B
1,1-Dichloroethene		2150	380	20	ug/kg	SW846 8260B
cis-1,2-Dichloroethene		374 J	380	14	ug/kg	SW846 8260B
trans-1,2-Dichloroethene		294 J	380	18	ug/kg	SW846 8260B
1,2-Dichloroethene (total)		668	380	14	ug/kg	SW846 8260B
Tetrachloroethene		288 J	380	13	ug/kg	SW846 8260B
Toluene		2280	77	8.1	ug/kg	SW846 8260B
1,1,1-Trichloroethane		42300	3800	81	ug/kg	SW846 8260B
1,1,2-Trichloroethane		39.1 J	380	13	ug/kg	SW846 8260B
Trichloroethene		1180	380	13	ug/kg	SW846 8260B
Xylene (total)		83.5	77	11	ug/kg	SW846 8260B
JB32749-11	**2.1 (11.5-12)**					
Acetone		62.4	17	2.8	ug/kg	SW846 8260B
Benzene		0.66 J	1.7	0.20	ug/kg	SW846 8260B
2-Butanone (MEK)		47.9	17	4.0	ug/kg	SW846 8260B
Carbon disulfide		3.4 J	8.3	0.19	ug/kg	SW846 8260B
Chloroethane		5230	690	31	ug/kg	SW846 8260B
1,1-Dichloroethane		11100	690	19	ug/kg	SW846 8260B
1,2-Dichloroethane		27.7	1.7	0.22	ug/kg	SW846 8260B
1,1-Dichloroethene		70.5	8.3	0.43	ug/kg	SW846 8260B
cis-1,2-Dichloroethene		10.1	8.3	0.30	ug/kg	SW846 8260B
trans-1,2-Dichloroethene		6.1 J	8.3	0.39	ug/kg	SW846 8260B
1,2-Dichloroethene (total)		16.1	8.3	0.30	ug/kg	SW846 8260B
Methylene chloride		4.5 J	8.3	2.1	ug/kg	SW846 8260B
Tetrachloroethene		2.3 J	8.3	0.28	ug/kg	SW846 8260B
Toluene		5.6	1.7	0.17	ug/kg	SW846 8260B

Summary of Hits

Job Number: JB32749
Account: Fleming-Lee Shue, Inc.
Project: AFFCO, 361 Walsh Avenue, New Windsor, NY
Collected: 03/27/13

Lab Sample ID / Client Sample ID / Analyte	Result/ Qual	RL	MDL	Units	Method
1,1,1-Trichloroethane	179	8.3	0.18	ug/kg	SW846 8260B
1,1,2-Trichloroethane	3.0 J	8.3	0.29	ug/kg	SW846 8260B
Trichloroethene	19.5	8.3	0.29	ug/kg	SW846 8260B
Vinyl chloride	12.9	8.3	0.24	ug/kg	SW846 8260B
JB32749-12 2.1 (10-10.5)					
Acetone	22.6	19	3.2	ug/kg	SW846 8260B
Carbon disulfide	1.9 J	9.5	0.22	ug/kg	SW846 8260B
Chloroethane	14.5	9.5	0.43	ug/kg	SW846 8260B
Chloroform	5.6 J	9.5	0.16	ug/kg	SW846 8260B
1,1-Dichloroethane	121	9.5	0.26	ug/kg	SW846 8260B
1,2-Dichloroethane	20.7	1.9	0.26	ug/kg	SW846 8260B
1,1-Dichloroethene	42.7	9.5	0.49	ug/kg	SW846 8260B
cis-1,2-Dichloroethene	7.9 J	9.5	0.35	ug/kg	SW846 8260B
trans-1,2-Dichloroethene	6.5 J	9.5	0.45	ug/kg	SW846 8260B
1,2-Dichloroethene (total)	14.3	9.5	0.35	ug/kg	SW846 8260B
Ethylbenzene	2.0	1.9	0.50	ug/kg	SW846 8260B
Methylene chloride	6.5 J	9.5	2.4	ug/kg	SW846 8260B
Tetrachloroethene	2.3 J	9.5	0.33	ug/kg	SW846 8260B
Toluene	4.6	1.9	0.20	ug/kg	SW846 8260B
1,1,1-Trichloroethane	12600	430	9.2	ug/kg	SW846 8260B
1,1,2-Trichloroethane	3.0 J	9.5	0.33	ug/kg	SW846 8260B
Trichloroethene	32.1	9.5	0.33	ug/kg	SW846 8260B
Xylene (total)	8.4	1.9	0.26	ug/kg	SW846 8260B
JB32749-13 2.2 (12.5-13)					
1,1-Dichloroethane	3660	430	12	ug/kg	SW846 8260B
1,2-Dichloroethane	179	85	11	ug/kg	SW846 8260B
1,1-Dichloroethene	2310	430	22	ug/kg	SW846 8260B
cis-1,2-Dichloroethene	31.6 J	430	16	ug/kg	SW846 8260B
1,2-Dichloroethene (total)	31.6 J	430	16	ug/kg	SW846 8260B
Tetrachloroethene	58.5 J	430	15	ug/kg	SW846 8260B
Toluene	284	85	8.9	ug/kg	SW846 8260B
1,1,1-Trichloroethane	70700	4300	90	ug/kg	SW846 8260B
Trichloroethene	337 J	430	15	ug/kg	SW846 8260B
JB32749-14 2.2 (11-11.5)					
1,1-Dichloroethane	6040 J	11000	310	ug/kg	SW846 8260B
1,1-Dichloroethene	14000	11000	570	ug/kg	SW846 8260B
Toluene	1600 J	2200	230	ug/kg	SW846 8260B
1,1,1-Trichloroethane	398000	11000	240	ug/kg	SW846 8260B
Trichloroethene	2040 J	11000	390	ug/kg	SW846 8260B

Summary of Hits

Job Number: JB32749
Account: Fleming-Lee Shue, Inc.
Project: AFFCO, 361 Walsh Avenue, New Windsor, NY
Collected: 03/27/13

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
JB32749-15	**2.2 (14-14.5)**					
Acetone		82.2	8.1	1.4	ug/kg	SW846 8260B
2-Butanone (MEK)		129	8.1	1.9	ug/kg	SW846 8260B
Carbon disulfide		1.9 J	4.1	0.095	ug/kg	SW846 8260B
Chloroethane		46.2	4.1	0.18	ug/kg	SW846 8260B
1,1-Dichloroethane		12100	1300	34	ug/kg	SW846 8260B
1,2-Dichloroethane		34.0	0.81	0.11	ug/kg	SW846 8260B
1,1-Dichloroethene		72.4	4.1	0.21	ug/kg	SW846 8260B
cis-1,2-Dichloroethene		3.7 J	4.1	0.15	ug/kg	SW846 8260B
trans-1,2-Dichloroethene		0.86 J	4.1	0.19	ug/kg	SW846 8260B
1,2-Dichloroethene (total)		4.6	4.1	0.15	ug/kg	SW846 8260B
Methylene chloride		2.8 J	4.1	1.0	ug/kg	SW846 8260B
Toluene		1.4	0.81	0.086	ug/kg	SW846 8260B
1,1,1-Trichloroethane		617 J	1300	27	ug/kg	SW846 8260B
1,1,2-Trichloroethane		1.6 J	4.1	0.14	ug/kg	SW846 8260B
Trichloroethene		0.39 J	4.1	0.14	ug/kg	SW846 8260B
Vinyl chloride		3.4 J	4.1	0.12	ug/kg	SW846 8260B
JB32749-16	**3 (13.5-14)**					
Chloroethane [a]		143 J	560	25	ug/kg	SW846 8260B
1,1-Dichloroethane [a]		459 J	560	15	ug/kg	SW846 8260B
1,1-Dichloroethene [a]		293 J	560	29	ug/kg	SW846 8260B
Toluene [a]		36.2 J	110	12	ug/kg	SW846 8260B
1,1,1-Trichloroethane [a]		1500	560	12	ug/kg	SW846 8260B
Trichloroethene [a]		175 J	560	19	ug/kg	SW846 8260B
JB32749-17	**3 (14.5-15)**					
Chloroethane [a]		953	370	17	ug/kg	SW846 8260B
1,1-Dichloroethane [a]		5820	370	10	ug/kg	SW846 8260B
1,2-Dichloroethane [a]		165	74	10	ug/kg	SW846 8260B
1,1-Dichloroethene [a]		423	370	19	ug/kg	SW846 8260B
cis-1,2-Dichloroethene [a]		44.6 J	370	14	ug/kg	SW846 8260B
trans-1,2-Dichloroethene [a]		81.2 J	370	18	ug/kg	SW846 8260B
1,2-Dichloroethene (total) [a]		126 J	370	14	ug/kg	SW846 8260B
Toluene [a]		462	74	7.8	ug/kg	SW846 8260B
1,1,1-Trichloroethane [a]		2320	370	7.9	ug/kg	SW846 8260B
Trichloroethene [a]		55.3 J	370	13	ug/kg	SW846 8260B
JB32749-18	**3 (12.5-13)**					
Chloroethane [a]		94.4 J	610	27	ug/kg	SW846 8260B

Summary of Hits

Job Number: JB32749
Account: Fleming-Lee Shue, Inc.
Project: AFFCO, 361 Walsh Avenue, New Windsor, NY
Collected: 03/27/13

Lab Sample ID / Client Sample ID / Analyte	Result/ Qual	RL	MDL	Units	Method
1,1-Dichloroethane [a]	410 J	610	17	ug/kg	SW846 8260B
1,2-Dichloroethane [a]	134	120	16	ug/kg	SW846 8260B
1,1-Dichloroethene [a]	659	610	31	ug/kg	SW846 8260B
cis-1,2-Dichloroethene [a]	104 J	610	22	ug/kg	SW846 8260B
trans-1,2-Dichloroethene [a]	108 J	610	29	ug/kg	SW846 8260B
1,2-Dichloroethene (total) [a]	212 J	610	22	ug/kg	SW846 8260B
1,1,1-Trichloroethane [a]	1270	610	13	ug/kg	SW846 8260B
Trichloroethene [a]	279 J	610	21	ug/kg	SW846 8260B
JB32749-19 4 (11-11.5)					
Acetone	10.9	8.4	1.4	ug/kg	SW846 8260B
Carbon disulfide	1.1 J	4.2	0.098	ug/kg	SW846 8260B
Chloroethane	3.4 J	4.2	0.19	ug/kg	SW846 8260B
1,1-Dichloroethane	2000	280	7.5	ug/kg	SW846 8260B
1,2-Dichloroethane	4.4	0.84	0.11	ug/kg	SW846 8260B
1,1-Dichloroethene	1650	280	14	ug/kg	SW846 8260B
cis-1,2-Dichloroethene	2.6 J	4.2	0.15	ug/kg	SW846 8260B
trans-1,2-Dichloroethene	0.43 J	4.2	0.20	ug/kg	SW846 8260B
1,2-Dichloroethene (total)	3.0 J	4.2	0.15	ug/kg	SW846 8260B
Methylene chloride	4.0 J	4.2	1.1	ug/kg	SW846 8260B
1,1,1-Trichloroethane	88.1	4.2	0.089	ug/kg	SW846 8260B
Trichloroethene	0.45 J	4.2	0.15	ug/kg	SW846 8260B
Vinyl chloride	1.8 J	4.2	0.12	ug/kg	SW846 8260B
JB32749-20 4 (10-10.5)					
Acetone	13.0 J	19	3.2	ug/kg	SW846 8260B
Carbon disulfide	1.3 J	9.6	0.22	ug/kg	SW846 8260B
Chloroform	0.50 J	9.6	0.16	ug/kg	SW846 8260B
1,1-Dichloroethane	9.6	9.6	0.26	ug/kg	SW846 8260B
1,2-Dichloroethane	2.3	1.9	0.26	ug/kg	SW846 8260B
1,1-Dichloroethene	31.4	9.6	0.49	ug/kg	SW846 8260B
cis-1,2-Dichloroethene	1.0 J	9.6	0.35	ug/kg	SW846 8260B
trans-1,2-Dichloroethene	0.67 J	9.6	0.46	ug/kg	SW846 8260B
1,2-Dichloroethene (total)	1.7 J	9.6	0.35	ug/kg	SW846 8260B
Methylene chloride	15.1	9.6	2.4	ug/kg	SW846 8260B
Tetrachloroethene	0.99 J	9.6	0.33	ug/kg	SW846 8260B
1,1,1-Trichloroethane	89.0	9.6	0.20	ug/kg	SW846 8260B
Trichloroethene	3.5 J	9.6	0.33	ug/kg	SW846 8260B
JB32749-21 4 (14.5-15)					
Acetone	14.6	13	2.1	ug/kg	SW846 8260B
2-Butanone (MEK)	40.1	13	3.0	ug/kg	SW846 8260B

Summary of Hits

Job Number: JB32749
Account: Fleming-Lee Shue, Inc.
Project: AFFCO, 361 Walsh Avenue, New Windsor, NY
Collected: 03/27/13

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Chloroethane		1190	290	13	ug/kg	SW846 8260B
1,1-Dichloroethane		6470	290	8.0	ug/kg	SW846 8260B
1,1-Dichloroethene		0.43 J	6.4	0.33	ug/kg	SW846 8260B
Methylene chloride		12.4	6.4	1.6	ug/kg	SW846 8260B
1,1,1-Trichloroethane		3.9 J	6.4	0.13	ug/kg	SW846 8260B
Vinyl chloride		2.4 J	6.4	0.18	ug/kg	SW846 8260B
JB32749-22	**5 (13.5-14)**					
Acetone		4.6 J	12	2.0	ug/kg	SW846 8260B
1,1-Dichloroethane		15.0	5.9	0.16	ug/kg	SW846 8260B
1,2-Dichloroethane		1.2	1.2	0.16	ug/kg	SW846 8260B
1,1-Dichloroethene		9.3	5.9	0.30	ug/kg	SW846 8260B
cis-1,2-Dichloroethene		0.36 J	5.9	0.22	ug/kg	SW846 8260B
1,2-Dichloroethene (total)		0.36 J	5.9	0.22	ug/kg	SW846 8260B
Methylene chloride		2.7 J	5.9	1.5	ug/kg	SW846 8260B
1,1,1-Trichloroethane		3480	480	10	ug/kg	SW846 8260B
1,1,2-Trichloroethane		0.44 J	5.9	0.21	ug/kg	SW846 8260B
Trichloroethene		2.0 J	5.9	0.21	ug/kg	SW846 8260B
JB32749-23	**5 (14-14.5)**					
Acetone		19.2	9.6	1.6	ug/kg	SW846 8260B
Carbon disulfide		0.65 J	4.8	0.11	ug/kg	SW846 8260B
Chloroethane		0.91 J	4.8	0.22	ug/kg	SW846 8260B
1,1-Dichloroethane		42.9	4.8	0.13	ug/kg	SW846 8260B
1,1-Dichloroethene		21.4	4.8	0.25	ug/kg	SW846 8260B
1,1,1-Trichloroethane		1220	390	8.3	ug/kg	SW846 8260B
Vinyl chloride		1.3 J	4.8	0.14	ug/kg	SW846 8260B
JB32749-24	**5 (14.5-15)**					
Acetone		37.1	10	1.8	ug/kg	SW846 8260B
Chloroethane		1.3 J	5.2	0.24	ug/kg	SW846 8260B
1,1-Dichloroethane		54.3	5.2	0.14	ug/kg	SW846 8260B
1,1-Dichloroethene		30.8	5.2	0.27	ug/kg	SW846 8260B
cis-1,2-Dichloroethene		0.33 J	5.2	0.19	ug/kg	SW846 8260B
1,2-Dichloroethene (total)		0.33 J	5.2	0.19	ug/kg	SW846 8260B
Methylene chloride		1.6 J	5.2	1.3	ug/kg	SW846 8260B
1,1,1-Trichloroethane		2090	320	6.8	ug/kg	SW846 8260B
Vinyl chloride		1.2 J	5.2	0.15	ug/kg	SW846 8260B
JB32749-25	**6 (11.5-12)**					
Methylene chloride		2.9 J	6.5	1.7	ug/kg	SW846 8260B

Summary of Hits

Job Number: JB32749
Account: Fleming-Lee Shue, Inc.
Project: AFFCO, 361 Walsh Avenue, New Windsor, NY
Collected: 03/27/13

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
1,1,1-Trichloroethane		2.9 J	6.5	0.14	ug/kg	SW846 8260B
JB32749-26	**6 (12.5-13)**					
Acetone		4.9 J	10	1.7	ug/kg	SW846 8260B
1,1-Dichloroethane		2.0 J	5.1	0.14	ug/kg	SW846 8260B
1,2-Dichloroethane		2.8	1.0	0.14	ug/kg	SW846 8260B
1,1-Dichloroethene		6.1	5.1	0.26	ug/kg	SW846 8260B
cis-1,2-Dichloroethene		1.2 J	5.1	0.19	ug/kg	SW846 8260B
trans-1,2-Dichloroethene		1.2 J	5.1	0.24	ug/kg	SW846 8260B
1,2-Dichloroethene (total)		2.4 J	5.1	0.19	ug/kg	SW846 8260B
Methylene chloride		4.1 J	5.1	1.3	ug/kg	SW846 8260B
1,1,1-Trichloroethane		41.5	5.1	0.11	ug/kg	SW846 8260B
Trichloroethene		5.0 J	5.1	0.18	ug/kg	SW846 8260B
JB32749-27	**6 (14.5-15)**					
1,1-Dichloroethane		3.5 J	5.9	0.16	ug/kg	SW846 8260B
1,1,1-Trichloroethane		0.93 J	5.9	0.12	ug/kg	SW846 8260B
JB32749-28	**FD-1 6(11.5-12)**					
Methylene chloride		3.2 J	5.4	1.4	ug/kg	SW846 8260B
1,1,1-Trichloroethane		3.6 J	5.4	0.11	ug/kg	SW846 8260B
Trichloroethene		0.89 J	5.4	0.19	ug/kg	SW846 8260B
JB32749-29	**FD-2 6(14.5-15)**					
1,1-Dichloroethane		0.71 J	3.6	0.098	ug/kg	SW846 8260B
1,1,1-Trichloroethane		3.6	3.6	0.076	ug/kg	SW846 8260B

(a) Diluted due to high concentration of non-target compound.

New Jersey ACCUTEST LABORATORIES

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	JB32749-1	**Date Sampled:**	03/27/13
Matrix:	AQ - Trip Blank Soil	**Date Received:**	03/29/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	AFFCO, 361 Walsh Avenue, New Windsor, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2C106296.D	1	04/10/13	DR	n/a	n/a	V2C4870
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	3.3	ug/l	
71-43-2	Benzene	ND	1.0	0.24	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.21	ug/l	
75-25-2	Bromoform	0.71	4.0	0.21	ug/l	J
74-83-9	Bromomethane	ND	2.0	0.22	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	2.4	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.19	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.22	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.23	ug/l	
75-00-3	Chloroethane	ND	1.0	0.26	ug/l	
67-66-3	Chloroform	ND	1.0	0.20	ug/l	
74-87-3	Chloromethane	ND	1.0	0.21	ug/l	
124-48-1	Dibromochloromethane	0.35	1.0	0.14	ug/l	J
75-34-3	1,1-Dichloroethane	ND	1.0	0.11	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.26	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.19	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.19	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.21	ug/l	
540-59-0	1,2-Dichloroethene (total)	ND	1.0	0.19	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.48	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.19	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.23	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.1	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.16	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.83	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.70	ug/l	
100-42-5	Styrene	ND	5.0	0.21	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.21	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.28	ug/l	
108-88-3	Toluene	ND	1.0	0.23	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.24	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	JB32749-1	**Date Sampled:**	03/27/13
Matrix:	AQ - Trip Blank Soil	**Date Received:**	03/29/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	AFFCO, 361 Walsh Avenue, New Windsor, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.29	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.22	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.21	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.24	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	87%		81-121%
17060-07-0	1,2-Dichloroethane-D4	91%		74-127%
2037-26-5	Toluene-D8	99%		80-122%
460-00-4	4-Bromofluorobenzene	87%		78-116%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FIELD BLANK 1		
Lab Sample ID:	JB32749-2	**Date Sampled:**	03/27/13
Matrix:	AQ - Field Blank Soil	**Date Received:**	03/29/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	AFFCO, 361 Walsh Avenue, New Windsor, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2C106297.D	1	04/10/13	DR	n/a	n/a	V2C4870
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	3.3	ug/l	
71-43-2	Benzene	ND	1.0	0.24	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.21	ug/l	
75-25-2	Bromoform	ND	4.0	0.21	ug/l	
74-83-9	Bromomethane	ND	2.0	0.22	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	2.4	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.19	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.22	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.23	ug/l	
75-00-3	Chloroethane	ND	1.0	0.26	ug/l	
67-66-3	Chloroform	ND	1.0	0.20	ug/l	
74-87-3	Chloromethane	ND	1.0	0.21	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.14	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.11	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.26	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.19	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.19	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.21	ug/l	
540-59-0	1,2-Dichloroethene (total)	ND	1.0	0.19	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.48	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.19	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.23	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.1	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.16	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.83	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.70	ug/l	
100-42-5	Styrene	ND	5.0	0.21	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.21	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.28	ug/l	
108-88-3	Toluene	ND	1.0	0.23	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.24	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FIELD BLANK 1		
Lab Sample ID:	JB32749-2	**Date Sampled:**	03/27/13
Matrix:	AQ - Field Blank Soil	**Date Received:**	03/29/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	AFFCO, 361 Walsh Avenue, New Windsor, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.29	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.22	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.21	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.24	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	87%		81-121%
17060-07-0	1,2-Dichloroethane-D4	93%		74-127%
2037-26-5	Toluene-D8	98%		80-122%
460-00-4	4-Bromofluorobenzene	87%		78-116%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FIELD BLANK 2		
Lab Sample ID:	JB32749-3	**Date Sampled:**	03/27/13
Matrix:	AQ - Field Blank Soil	**Date Received:**	03/29/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	AFFCO, 361 Walsh Avenue, New Windsor, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2C106298.D	1	04/10/13	DR	n/a	n/a	V2C4870
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	3.3	ug/l	
71-43-2	Benzene	ND	1.0	0.24	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.21	ug/l	
75-25-2	Bromoform	ND	4.0	0.21	ug/l	
74-83-9	Bromomethane	ND	2.0	0.22	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	2.4	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.19	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.22	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.23	ug/l	
75-00-3	Chloroethane	ND	1.0	0.26	ug/l	
67-66-3	Chloroform	ND	1.0	0.20	ug/l	
74-87-3	Chloromethane	ND	1.0	0.21	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.14	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.11	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.26	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.19	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.19	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.21	ug/l	
540-59-0	1,2-Dichloroethene (total)	ND	1.0	0.19	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.48	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.19	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.23	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.1	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.16	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.83	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.70	ug/l	
100-42-5	Styrene	ND	5.0	0.21	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.21	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.28	ug/l	
108-88-3	Toluene	ND	1.0	0.23	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.24	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FIELD BLANK 2		
Lab Sample ID:	JB32749-3	**Date Sampled:**	03/27/13
Matrix:	AQ - Field Blank Soil	**Date Received:**	03/29/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	AFFCO, 361 Walsh Avenue, New Windsor, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.29	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.22	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.21	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.24	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	88%		81-121%
17060-07-0	1,2-Dichloroethane-D4	94%		74-127%
2037-26-5	Toluene-D8	99%		80-122%
460-00-4	4-Bromofluorobenzene	87%		78-116%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1.1 (12.5-13)		
Lab Sample ID:	JB32749-4	**Date Sampled:**	03/27/13
Matrix:	SO - Soil	**Date Received:**	03/29/13
Method:	SW846 8260B SW846 5035	**Percent Solids:**	81.2
Project:	AFFCO, 361 Walsh Avenue, New Windsor, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	E201771.D	1	04/06/13	OTR	03/29/13 12:00	n/a	VE8871
Run #2	E201870.D	1	04/09/13	OTR	03/29/13 12:00	n/a	VE8875

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	4.3 g	5.0 ml	100 ul
Run #2	4.3 g	5.0 ml	10.0 ul

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	830	140	ug/kg	
71-43-2	Benzene	ND	83	9.9	ug/kg	
75-27-4	Bromodichloromethane	ND	420	8.7	ug/kg	
75-25-2	Bromoform	ND	420	13	ug/kg	
74-83-9	Bromomethane	ND	420	23	ug/kg	
78-93-3	2-Butanone (MEK)	ND	830	200	ug/kg	
75-15-0	Carbon disulfide	ND	420	9.7	ug/kg	
56-23-5	Carbon tetrachloride	ND	420	11	ug/kg	
108-90-7	Chlorobenzene	ND	420	9.0	ug/kg	
75-00-3	Chloroethane	ND	420	19	ug/kg	
67-66-3	Chloroform	ND	420	6.9	ug/kg	
74-87-3	Chloromethane	ND	420	15	ug/kg	
124-48-1	Dibromochloromethane	ND	420	14	ug/kg	
75-34-3	1,1-Dichloroethane	1080	420	11	ug/kg	
107-06-2	1,2-Dichloroethane	232	83	11	ug/kg	
75-35-4	1,1-Dichloroethene	1140	420	21	ug/kg	
156-59-2	cis-1,2-Dichloroethene	83.2	420	15	ug/kg	J
156-60-5	trans-1,2-Dichloroethene	101	420	20	ug/kg	J
540-59-0	1,2-Dichloroethene (total)	184	420	15	ug/kg	J
78-87-5	1,2-Dichloropropane	ND	420	13	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	420	12	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	420	13	ug/kg	
100-41-4	Ethylbenzene	ND	83	22	ug/kg	
591-78-6	2-Hexanone	ND	420	52	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	83	20	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	420	62	ug/kg	
75-09-2	Methylene chloride	ND	420	110	ug/kg	
100-42-5	Styrene	ND	420	7.6	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	420	11	ug/kg	
127-18-4	Tetrachloroethene	37.9	420	14	ug/kg	J
108-88-3	Toluene	109	83	8.7	ug/kg	
71-55-6	1,1,1-Trichloroethane	18700 [a]	4200	88	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1.1 (12.5-13)		
Lab Sample ID:	JB32749-4	**Date Sampled:**	03/27/13
Matrix:	SO - Soil	**Date Received:**	03/29/13
Method:	SW846 8260B SW846 5035	**Percent Solids:**	81.2
Project:	AFFCO, 361 Walsh Avenue, New Windsor, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-00-5	1,1,2-Trichloroethane	ND	420	14	ug/kg	
79-01-6	Trichloroethene	1130	420	14	ug/kg	
75-01-4	Vinyl chloride	ND	420	12	ug/kg	
1330-20-7	Xylene (total)	ND	83	12	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	81%	86%	70-130%
17060-07-0	1,2-Dichloroethane-D4	83%	91%	70-122%
2037-26-5	Toluene-D8	91%	91%	81-127%
460-00-4	4-Bromofluorobenzene	95%	102%	66-132%

(a) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1.1 (13-13.5)		
Lab Sample ID:	JB32749-5	**Date Sampled:**	03/27/13
Matrix:	SO - Soil	**Date Received:**	03/29/13
Method:	SW846 8260B SW846 5035	**Percent Solids:**	83.5
Project:	AFFCO, 361 Walsh Avenue, New Windsor, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	C180730.D	1	04/05/13	TYG	03/29/13 12:00	n/a	VC6486
Run #2	E201894.D	1	04/09/13	OTR	03/29/13 12:00	n/a	VE8876

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.2 g		
Run #2	3.3 g	5.0 ml	100 ul

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	10.9	12	1.9	ug/kg	J
71-43-2	Benzene	ND	1.2	0.14	ug/kg	
75-27-4	Bromodichloromethane	ND	5.8	0.12	ug/kg	
75-25-2	Bromoform	ND	5.8	0.17	ug/kg	
74-83-9	Bromomethane	ND	5.8	0.31	ug/kg	
78-93-3	2-Butanone (MEK)	ND	12	2.8	ug/kg	
75-15-0	Carbon disulfide	1.8	5.8	0.13	ug/kg	J
56-23-5	Carbon tetrachloride	ND	5.8	0.15	ug/kg	
108-90-7	Chlorobenzene	ND	5.8	0.12	ug/kg	
75-00-3	Chloroethane	25.4	5.8	0.26	ug/kg	
67-66-3	Chloroform	ND	5.8	0.095	ug/kg	
74-87-3	Chloromethane	ND	5.8	0.21	ug/kg	
124-48-1	Dibromochloromethane	ND	5.8	0.19	ug/kg	
75-34-3	1,1-Dichloroethane	183	5.8	0.16	ug/kg	
107-06-2	1,2-Dichloroethane	1.0	1.2	0.16	ug/kg	J
75-35-4	1,1-Dichloroethene	32.0	5.8	0.30	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	5.8	0.21	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	5.8	0.27	ug/kg	
540-59-0	1,2-Dichloroethene (total)	ND	5.8	0.21	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.8	0.18	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.8	0.16	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.8	0.18	ug/kg	
100-41-4	Ethylbenzene	ND	1.2	0.30	ug/kg	
591-78-6	2-Hexanone	ND	5.8	0.72	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.2	0.27	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.8	0.86	ug/kg	
75-09-2	Methylene chloride	4.4	5.8	1.5	ug/kg	J
100-42-5	Styrene	ND	5.8	0.11	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.8	0.15	ug/kg	
127-18-4	Tetrachloroethene	ND	5.8	0.20	ug/kg	
108-88-3	Toluene	0.43	1.2	0.12	ug/kg	J
71-55-6	1,1,1-Trichloroethane	2860 [a]	500	11	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1.1 (13-13.5)		
Lab Sample ID:	JB32749-5	**Date Sampled:**	03/27/13
Matrix:	SO - Soil	**Date Received:**	03/29/13
Method:	SW846 8260B SW846 5035	**Percent Solids:**	83.5
Project:	AFFCO, 361 Walsh Avenue, New Windsor, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-00-5	1,1,2-Trichloroethane	ND	5.8	0.20	ug/kg	
79-01-6	Trichloroethene	0.81	5.8	0.20	ug/kg	J
75-01-4	Vinyl chloride	ND	5.8	0.17	ug/kg	
1330-20-7	Xylene (total)	ND	1.2	0.16	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%	85%	70-130%
17060-07-0	1,2-Dichloroethane-D4	89%	92%	70-122%
2037-26-5	Toluene-D8	108%	91%	81-127%
460-00-4	4-Bromofluorobenzene	103%	99%	66-132%

(a) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1.1 (14.5-15)		
Lab Sample ID:	JB32749-6	**Date Sampled:**	03/27/13
Matrix:	SO - Soil	**Date Received:**	03/29/13
Method:	SW846 8260B SW846 5035	**Percent Solids:**	91.5
Project:	AFFCO, 361 Walsh Avenue, New Windsor, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	C180731.D	1	04/05/13	TYG	03/29/13 12:00	n/a	VC6486
Run #2							

	Initial Weight
Run #1	4.2 g
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	13	2.2	ug/kg	
71-43-2	Benzene	ND	1.3	0.15	ug/kg	
75-27-4	Bromodichloromethane	ND	6.5	0.14	ug/kg	
75-25-2	Bromoform	ND	6.5	0.20	ug/kg	
74-83-9	Bromomethane	ND	6.5	0.36	ug/kg	
78-93-3	2-Butanone (MEK)	ND	13	3.1	ug/kg	
75-15-0	Carbon disulfide	2.2	6.5	0.15	ug/kg	J
56-23-5	Carbon tetrachloride	ND	6.5	0.17	ug/kg	
108-90-7	Chlorobenzene	ND	6.5	0.14	ug/kg	
75-00-3	Chloroethane	54.7	6.5	0.30	ug/kg	
67-66-3	Chloroform	ND	6.5	0.11	ug/kg	
74-87-3	Chloromethane	ND	6.5	0.24	ug/kg	
124-48-1	Dibromochloromethane	ND	6.5	0.21	ug/kg	
75-34-3	1,1-Dichloroethane	79.4	6.5	0.18	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.3	0.18	ug/kg	
75-35-4	1,1-Dichloroethene	15.3	6.5	0.33	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	6.5	0.24	ug/kg	
156-60-5	trans-1,2-Dichloroethene	1.3	6.5	0.31	ug/kg	J
540-59-0	1,2-Dichloroethene (total)	1.3	6.5	0.24	ug/kg	J
78-87-5	1,2-Dichloropropane	ND	6.5	0.20	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	6.5	0.18	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	6.5	0.20	ug/kg	
100-41-4	Ethylbenzene	ND	1.3	0.34	ug/kg	
591-78-6	2-Hexanone	ND	6.5	0.81	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.3	0.31	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	6.5	0.98	ug/kg	
75-09-2	Methylene chloride	2.1	6.5	1.7	ug/kg	J
100-42-5	Styrene	ND	6.5	0.12	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	6.5	0.17	ug/kg	
127-18-4	Tetrachloroethene	ND	6.5	0.22	ug/kg	
108-88-3	Toluene	1.0	1.3	0.14	ug/kg	J
71-55-6	1,1,1-Trichloroethane	144	6.5	0.14	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1.1 (14.5-15)		
Lab Sample ID:	JB32749-6	**Date Sampled:**	03/27/13
Matrix:	SO - Soil	**Date Received:**	03/29/13
Method:	SW846 8260B SW846 5035	**Percent Solids:**	91.5
Project:	AFFCO, 361 Walsh Avenue, New Windsor, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-00-5	1,1,2-Trichloroethane	ND	6.5	0.23	ug/kg	
79-01-6	Trichloroethene	0.90	6.5	0.23	ug/kg	J
75-01-4	Vinyl chloride	0.77	6.5	0.19	ug/kg	J
1330-20-7	Xylene (total)	ND	1.3	0.18	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	98%		70-130%
17060-07-0	1,2-Dichloroethane-D4	89%		70-122%
2037-26-5	Toluene-D8	108%		81-127%
460-00-4	4-Bromofluorobenzene	102%		66-132%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1.2 (13-13.5)		
Lab Sample ID:	JB32749-7	**Date Sampled:**	03/27/13
Matrix:	SO - Soil	**Date Received:**	03/29/13
Method:	SW846 8260B SW846 5035	**Percent Solids:**	87.2
Project:	AFFCO, 361 Walsh Avenue, New Windsor, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	C180745.D	1	04/05/13	TYG	03/29/13 12:00	n/a	VC6486
Run #2	E201895.D	1	04/09/13	OTR	03/29/13 12:00	n/a	VE8876

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	4.1 g		
Run #2	2.8 g	5.0 ml	100 ul

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	27.2	14	2.4	ug/kg	
71-43-2	Benzene	ND	1.4	0.17	ug/kg	
75-27-4	Bromodichloromethane	ND	7.0	0.15	ug/kg	
75-25-2	Bromoform	ND	7.0	0.21	ug/kg	
74-83-9	Bromomethane	ND	7.0	0.38	ug/kg	
78-93-3	2-Butanone (MEK)	29.0	14	3.3	ug/kg	
75-15-0	Carbon disulfide	1.1	7.0	0.16	ug/kg	J
56-23-5	Carbon tetrachloride	ND	7.0	0.19	ug/kg	
108-90-7	Chlorobenzene	ND	7.0	0.15	ug/kg	
75-00-3	Chloroethane	480 [a]	550	25	ug/kg	J
67-66-3	Chloroform	ND	7.0	0.12	ug/kg	
74-87-3	Chloromethane	ND	7.0	0.26	ug/kg	
124-48-1	Dibromochloromethane	ND	7.0	0.23	ug/kg	
75-34-3	1,1-Dichloroethane	3950 [a]	550	15	ug/kg	
107-06-2	1,2-Dichloroethane	14.2	1.4	0.19	ug/kg	
75-35-4	1,1-Dichloroethene	41.7	7.0	0.36	ug/kg	
156-59-2	cis-1,2-Dichloroethene	0.77	7.0	0.26	ug/kg	J
156-60-5	trans-1,2-Dichloroethene	0.47	7.0	0.33	ug/kg	J
540-59-0	1,2-Dichloroethene (total)	1.2	7.0	0.26	ug/kg	J
78-87-5	1,2-Dichloropropane	ND	7.0	0.22	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	7.0	0.19	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	7.0	0.22	ug/kg	
100-41-4	Ethylbenzene	ND	1.4	0.37	ug/kg	
591-78-6	2-Hexanone	ND	7.0	0.87	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.4	0.33	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	7.0	1.1	ug/kg	
75-09-2	Methylene chloride	2.8	7.0	1.8	ug/kg	J
100-42-5	Styrene	ND	7.0	0.13	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	7.0	0.18	ug/kg	
127-18-4	Tetrachloroethene	ND	7.0	0.24	ug/kg	
108-88-3	Toluene	5.7	1.4	0.15	ug/kg	
71-55-6	1,1,1-Trichloroethane	2130 [a]	550	12	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1.2 (13-13.5)		
Lab Sample ID:	JB32749-7	**Date Sampled:**	03/27/13
Matrix:	SO - Soil	**Date Received:**	03/29/13
Method:	SW846 8260B SW846 5035	**Percent Solids:**	87.2
Project:	AFFCO, 361 Walsh Avenue, New Windsor, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-00-5	1,1,2-Trichloroethane	0.84	7.0	0.24	ug/kg	J
79-01-6	Trichloroethene	0.89	7.0	0.24	ug/kg	J
75-01-4	Vinyl chloride	10.9	7.0	0.20	ug/kg	
1330-20-7	Xylene (total)	ND	1.4	0.19	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%	83%	70-130%
17060-07-0	1,2-Dichloroethane-D4	88%	91%	70-122%
2037-26-5	Toluene-D8	109%	91%	81-127%
460-00-4	4-Bromofluorobenzene	102%	99%	66-132%

(a) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1.2 (11-11.5)		
Lab Sample ID:	JB32749-8	**Date Sampled:**	03/27/13
Matrix:	SO - Soil	**Date Received:**	03/29/13
Method:	SW846 8260B SW846 5035	**Percent Solids:**	80.1
Project:	AFFCO, 361 Walsh Avenue, New Windsor, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	C180746.D	1	04/05/13	TYG	03/29/13 12:00	n/a	VC6486
Run #2	E201896.D	1	04/09/13	OTR	03/29/13 12:00	n/a	VE8876

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	4.3 g		
Run #2	2.2 g	5.0 ml	100 ul

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	30.1	15	2.5	ug/kg	
71-43-2	Benzene	ND	1.5	0.17	ug/kg	
75-27-4	Bromodichloromethane	ND	7.3	0.15	ug/kg	
75-25-2	Bromoform	ND	7.3	0.22	ug/kg	
74-83-9	Bromomethane	ND	7.3	0.40	ug/kg	
78-93-3	2-Butanone (MEK)	21.8	15	3.5	ug/kg	
75-15-0	Carbon disulfide	1.5	7.3	0.17	ug/kg	J
56-23-5	Carbon tetrachloride	ND	7.3	0.19	ug/kg	
108-90-7	Chlorobenzene	ND	7.3	0.16	ug/kg	
75-00-3	Chloroethane	659 [a]	770	35	ug/kg	J
67-66-3	Chloroform	ND	7.3	0.12	ug/kg	
74-87-3	Chloromethane	ND	7.3	0.27	ug/kg	
124-48-1	Dibromochloromethane	ND	7.3	0.24	ug/kg	
75-34-3	1,1-Dichloroethane	6220 [a]	770	21	ug/kg	
107-06-2	1,2-Dichloroethane	11.9	1.5	0.20	ug/kg	
75-35-4	1,1-Dichloroethene	85.3	7.3	0.37	ug/kg	
156-59-2	cis-1,2-Dichloroethene	0.63	7.3	0.27	ug/kg	J
156-60-5	trans-1,2-Dichloroethene	ND	7.3	0.35	ug/kg	
540-59-0	1,2-Dichloroethene (total)	0.63	7.3	0.27	ug/kg	J
78-87-5	1,2-Dichloropropane	ND	7.3	0.22	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	7.3	0.20	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	7.3	0.23	ug/kg	
100-41-4	Ethylbenzene	0.80	1.5	0.38	ug/kg	J
591-78-6	2-Hexanone	ND	7.3	0.90	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.5	0.34	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	7.3	1.1	ug/kg	
75-09-2	Methylene chloride	5.2	7.3	1.8	ug/kg	J
100-42-5	Styrene	ND	7.3	0.13	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	7.3	0.19	ug/kg	
127-18-4	Tetrachloroethene	ND	7.3	0.25	ug/kg	
108-88-3	Toluene	2.3	1.5	0.15	ug/kg	
71-55-6	1,1,1-Trichloroethane	1560 [a]	770	16	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1.2 (11-11.5)		
Lab Sample ID:	JB32749-8	**Date Sampled:**	03/27/13
Matrix:	SO - Soil	**Date Received:**	03/29/13
Method:	SW846 8260B SW846 5035	**Percent Solids:**	80.1
Project:	AFFCO, 361 Walsh Avenue, New Windsor, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-00-5	1,1,2-Trichloroethane	0.57	7.3	0.25	ug/kg	J
79-01-6	Trichloroethene	1.6	7.3	0.25	ug/kg	J
75-01-4	Vinyl chloride	7.9	7.3	0.21	ug/kg	
1330-20-7	Xylene (total)	0.65	1.5	0.20	ug/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%	82%	70-130%
17060-07-0	1,2-Dichloroethane-D4	88%	93%	70-122%
2037-26-5	Toluene-D8	109%	92%	81-127%
460-00-4	4-Bromofluorobenzene	102%	98%	66-132%

(a) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 1.2 (14-14.5)
Lab Sample ID: JB32749-9
Matrix: SO - Soil
Method: SW846 8260B SW846 5035
Project: AFFCO, 361 Walsh Avenue, New Windsor, NY

Date Sampled: 03/27/13
Date Received: 03/29/13
Percent Solids: 94.9

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	E201872.D	1	04/09/13	OTR	03/29/13 12:00	n/a	VE8875
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.4 g	5.0 ml	25.0 ul
Run #2			

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	2100	350	ug/kg	
71-43-2	Benzene	ND	210	25	ug/kg	
75-27-4	Bromodichloromethane	ND	1000	22	ug/kg	
75-25-2	Bromoform	ND	1000	31	ug/kg	
74-83-9	Bromomethane	ND	1000	56	ug/kg	
78-93-3	2-Butanone (MEK)	ND	2100	490	ug/kg	
75-15-0	Carbon disulfide	ND	1000	24	ug/kg	
56-23-5	Carbon tetrachloride	ND	1000	27	ug/kg	
108-90-7	Chlorobenzene	ND	1000	22	ug/kg	
75-00-3	Chloroethane	2960	1000	47	ug/kg	
67-66-3	Chloroform	ND	1000	17	ug/kg	
74-87-3	Chloromethane	ND	1000	38	ug/kg	
124-48-1	Dibromochloromethane	ND	1000	34	ug/kg	
75-34-3	1,1-Dichloroethane	34000	1000	28	ug/kg	
107-06-2	1,2-Dichloroethane	786	210	28	ug/kg	
75-35-4	1,1-Dichloroethene	1620	1000	53	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	1000	38	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	1000	49	ug/kg	
540-59-0	1,2-Dichloroethene (total)	ND	1000	38	ug/kg	
78-87-5	1,2-Dichloropropane	ND	1000	32	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	1000	29	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	1000	32	ug/kg	
100-41-4	Ethylbenzene	ND	210	54	ug/kg	
591-78-6	2-Hexanone	ND	1000	130	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	210	48	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	1000	150	ug/kg	
75-09-2	Methylene chloride	ND	1000	260	ug/kg	
100-42-5	Styrene	ND	1000	19	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1000	27	ug/kg	
127-18-4	Tetrachloroethene	ND	1000	35	ug/kg	
108-88-3	Toluene	184	210	22	ug/kg	J
71-55-6	1,1,1-Trichloroethane	4690	1000	22	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1.2 (14-14.5)		
Lab Sample ID:	JB32749-9	**Date Sampled:**	03/27/13
Matrix:	SO - Soil	**Date Received:**	03/29/13
Method:	SW846 8260B SW846 5035	**Percent Solids:**	94.9
Project:	AFFCO, 361 Walsh Avenue, New Windsor, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-00-5	1,1,2-Trichloroethane	ND	1000	36	ug/kg	
79-01-6	Trichloroethene	ND	1000	36	ug/kg	
75-01-4	Vinyl chloride	ND	1000	30	ug/kg	
1330-20-7	Xylene (total)	ND	210	29	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	86%		70-130%
17060-07-0	1,2-Dichloroethane-D4	94%		70-122%
2037-26-5	Toluene-D8	91%		81-127%
460-00-4	4-Bromofluorobenzene	98%		66-132%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	2.1 (12.5-13)		
Lab Sample ID:	JB32749-10	**Date Sampled:**	03/27/13
Matrix:	SO - Soil	**Date Received:**	03/29/13
Method:	SW846 8260B SW846 5035	**Percent Solids:**	86.4
Project:	AFFCO, 361 Walsh Avenue, New Windsor, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	E201758.D	1	04/05/13	OTR	03/29/13 12:00	n/a	VE8870
Run #2	E201873.D	1	04/09/13	OTR	03/29/13 12:00	n/a	VE8875

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	4.2 g	5.0 ml	100 ul
Run #2	4.2 g	5.0 ml	10.0 ul

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	770	130	ug/kg	
71-43-2	Benzene	ND	77	9.1	ug/kg	
75-27-4	Bromodichloromethane	ND	380	8.1	ug/kg	
75-25-2	Bromoform	ND	380	12	ug/kg	
74-83-9	Bromomethane	ND	380	21	ug/kg	
78-93-3	2-Butanone (MEK)	893	770	180	ug/kg	
75-15-0	Carbon disulfide	48.1	380	9.0	ug/kg	J
56-23-5	Carbon tetrachloride	ND	380	10	ug/kg	
108-90-7	Chlorobenzene	ND	380	8.3	ug/kg	
75-00-3	Chloroethane	3530	380	17	ug/kg	
67-66-3	Chloroform	ND	380	6.3	ug/kg	
74-87-3	Chloromethane	ND	380	14	ug/kg	
124-48-1	Dibromochloromethane	ND	380	13	ug/kg	
75-34-3	1,1-Dichloroethane	34900 [a]	3800	110	ug/kg	
107-06-2	1,2-Dichloroethane	1590	77	10	ug/kg	
75-35-4	1,1-Dichloroethene	2150	380	20	ug/kg	
156-59-2	cis-1,2-Dichloroethene	374	380	14	ug/kg	J
156-60-5	trans-1,2-Dichloroethene	294	380	18	ug/kg	J
540-59-0	1,2-Dichloroethene (total)	668	380	14	ug/kg	
78-87-5	1,2-Dichloropropane	ND	380	12	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	380	11	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	380	12	ug/kg	
100-41-4	Ethylbenzene	ND	77	20	ug/kg	
591-78-6	2-Hexanone	ND	380	48	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	77	18	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	380	58	ug/kg	
75-09-2	Methylene chloride	ND	380	97	ug/kg	
100-42-5	Styrene	ND	380	7.0	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	380	10	ug/kg	
127-18-4	Tetrachloroethene	288	380	13	ug/kg	J
108-88-3	Toluene	2280	77	8.1	ug/kg	
71-55-6	1,1,1-Trichloroethane	42300 [a]	3800	81	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	2.1 (12.5-13)		
Lab Sample ID:	JB32749-10	**Date Sampled:**	03/27/13
Matrix:	SO - Soil	**Date Received:**	03/29/13
Method:	SW846 8260B SW846 5035	**Percent Solids:**	86.4
Project:	AFFCO, 361 Walsh Avenue, New Windsor, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-00-5	1,1,2-Trichloroethane	39.1	380	13	ug/kg	J
79-01-6	Trichloroethene	1180	380	13	ug/kg	
75-01-4	Vinyl chloride	ND	380	11	ug/kg	
1330-20-7	Xylene (total)	83.5	77	11	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	81%	86%	70-130%
17060-07-0	1,2-Dichloroethane-D4	87%	93%	70-122%
2037-26-5	Toluene-D8	89%	91%	81-127%
460-00-4	4-Bromofluorobenzene	90%	101%	66-132%

(a) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	2.1 (11.5-12)		
Lab Sample ID:	JB32749-11	**Date Sampled:**	03/27/13
Matrix:	SO - Soil	**Date Received:**	03/29/13
Method:	SW846 8260B SW846 5035	**Percent Solids:**	81.7
Project:	AFFCO, 361 Walsh Avenue, New Windsor, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	C180747.D	1	04/05/13	TYG	03/29/13 12:00	n/a	VC6486
Run #2	E201897.D	1	04/09/13	OTR	03/29/13 12:00	n/a	VE8876

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	3.7 g		
Run #2	2.4 g	5.0 ml	100 ul

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	62.4	17	2.8	ug/kg	
71-43-2	Benzene	0.66	1.7	0.20	ug/kg	J
75-27-4	Bromodichloromethane	ND	8.3	0.17	ug/kg	
75-25-2	Bromoform	ND	8.3	0.25	ug/kg	
74-83-9	Bromomethane	ND	8.3	0.45	ug/kg	
78-93-3	2-Butanone (MEK)	47.9	17	4.0	ug/kg	
75-15-0	Carbon disulfide	3.4	8.3	0.19	ug/kg	J
56-23-5	Carbon tetrachloride	ND	8.3	0.22	ug/kg	
108-90-7	Chlorobenzene	ND	8.3	0.18	ug/kg	
75-00-3	Chloroethane	5230 [a]	690	31	ug/kg	
67-66-3	Chloroform	ND	8.3	0.14	ug/kg	
74-87-3	Chloromethane	ND	8.3	0.31	ug/kg	
124-48-1	Dibromochloromethane	ND	8.3	0.27	ug/kg	
75-34-3	1,1-Dichloroethane	11100 [a]	690	19	ug/kg	
107-06-2	1,2-Dichloroethane	27.7	1.7	0.22	ug/kg	
75-35-4	1,1-Dichloroethene	70.5	8.3	0.43	ug/kg	
156-59-2	cis-1,2-Dichloroethene	10.1	8.3	0.30	ug/kg	
156-60-5	trans-1,2-Dichloroethene	6.1	8.3	0.39	ug/kg	J
540-59-0	1,2-Dichloroethene (total)	16.1	8.3	0.30	ug/kg	
78-87-5	1,2-Dichloropropane	ND	8.3	0.25	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	8.3	0.23	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	8.3	0.26	ug/kg	
100-41-4	Ethylbenzene	ND	1.7	0.44	ug/kg	
591-78-6	2-Hexanone	ND	8.3	1.0	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.7	0.39	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	8.3	1.2	ug/kg	
75-09-2	Methylene chloride	4.5	8.3	2.1	ug/kg	J
100-42-5	Styrene	ND	8.3	0.15	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	8.3	0.22	ug/kg	
127-18-4	Tetrachloroethene	2.3	8.3	0.28	ug/kg	J
108-88-3	Toluene	5.6	1.7	0.17	ug/kg	
71-55-6	1,1,1-Trichloroethane	179	8.3	0.18	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	2.1 (11.5-12)		
Lab Sample ID:	JB32749-11	**Date Sampled:**	03/27/13
Matrix:	SO - Soil	**Date Received:**	03/29/13
Method:	SW846 8260B SW846 5035	**Percent Solids:**	81.7
Project:	AFFCO, 361 Walsh Avenue, New Windsor, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-00-5	1,1,2-Trichloroethane	3.0	8.3	0.29	ug/kg	J
79-01-6	Trichloroethene	19.5	8.3	0.29	ug/kg	
75-01-4	Vinyl chloride	12.9	8.3	0.24	ug/kg	
1330-20-7	Xylene (total)	ND	1.7	0.23	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%	86%	70-130%
17060-07-0	1,2-Dichloroethane-D4	85%	94%	70-122%
2037-26-5	Toluene-D8	108%	91%	81-127%
460-00-4	4-Bromofluorobenzene	104%	97%	66-132%

(a) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	2.1 (10-10.5)		
Lab Sample ID:	JB32749-12	**Date Sampled:**	03/27/13
Matrix:	SO - Soil	**Date Received:**	03/29/13
Method:	SW846 8260B SW846 5035	**Percent Solids:**	84.9
Project:	AFFCO, 361 Walsh Avenue, New Windsor, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	C180793.D	1	04/07/13	TYG	03/29/13 12:00	n/a	VC6488
Run #2	E201898.D	1	04/09/13	OTR	03/29/13 12:00	n/a	VE8876

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	3.1 g		
Run #2	3.8 g	5.0 ml	100 ul

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	22.6	19	3.2	ug/kg	
71-43-2	Benzene	ND	1.9	0.23	ug/kg	
75-27-4	Bromodichloromethane	ND	9.5	0.20	ug/kg	
75-25-2	Bromoform	ND	9.5	0.29	ug/kg	
74-83-9	Bromomethane	ND	9.5	0.52	ug/kg	
78-93-3	2-Butanone (MEK)	ND	19	4.5	ug/kg	
75-15-0	Carbon disulfide	1.9	9.5	0.22	ug/kg	J
56-23-5	Carbon tetrachloride	ND	9.5	0.25	ug/kg	
108-90-7	Chlorobenzene	ND	9.5	0.21	ug/kg	
75-00-3	Chloroethane	14.5	9.5	0.43	ug/kg	
67-66-3	Chloroform	5.6	9.5	0.16	ug/kg	J
74-87-3	Chloromethane	ND	9.5	0.35	ug/kg	
124-48-1	Dibromochloromethane	ND	9.5	0.31	ug/kg	
75-34-3	1,1-Dichloroethane	121	9.5	0.26	ug/kg	
107-06-2	1,2-Dichloroethane	20.7	1.9	0.26	ug/kg	
75-35-4	1,1-Dichloroethene	42.7	9.5	0.49	ug/kg	
156-59-2	cis-1,2-Dichloroethene	7.9	9.5	0.35	ug/kg	J
156-60-5	trans-1,2-Dichloroethene	6.5	9.5	0.45	ug/kg	J
540-59-0	1,2-Dichloroethene (total)	14.3	9.5	0.35	ug/kg	
78-87-5	1,2-Dichloropropane	ND	9.5	0.29	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	9.5	0.26	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	9.5	0.29	ug/kg	
100-41-4	Ethylbenzene	2.0	1.9	0.50	ug/kg	
591-78-6	2-Hexanone	ND	9.5	1.2	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.9	0.45	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	9.5	1.4	ug/kg	
75-09-2	Methylene chloride	6.5	9.5	2.4	ug/kg	J
100-42-5	Styrene	ND	9.5	0.17	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	9.5	0.25	ug/kg	
127-18-4	Tetrachloroethene	2.3	9.5	0.33	ug/kg	J
108-88-3	Toluene	4.6	1.9	0.20	ug/kg	
71-55-6	1,1,1-Trichloroethane	12600 [a]	430	9.2	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	2.1 (10-10.5)		
Lab Sample ID:	JB32749-12	**Date Sampled:**	03/27/13
Matrix:	SO - Soil	**Date Received:**	03/29/13
Method:	SW846 8260B SW846 5035	**Percent Solids:**	84.9
Project:	AFFCO, 361 Walsh Avenue, New Windsor, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-00-5	1,1,2-Trichloroethane	3.0	9.5	0.33	ug/kg	J
79-01-6	Trichloroethene	32.1	9.5	0.33	ug/kg	
75-01-4	Vinyl chloride	ND	9.5	0.27	ug/kg	
1330-20-7	Xylene (total)	8.4	1.9	0.26	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%	84%	70-130%
17060-07-0	1,2-Dichloroethane-D4	89%	94%	70-122%
2037-26-5	Toluene-D8	110%	92%	81-127%
460-00-4	4-Bromofluorobenzene	105%	98%	66-132%

(a) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	2.2 (12.5-13)		
Lab Sample ID:	JB32749-13	**Date Sampled:**	03/27/13
Matrix:	SO - Soil	**Date Received:**	03/29/13
Method:	SW846 8260B SW846 5035	**Percent Solids:**	81.1
Project:	AFFCO, 361 Walsh Avenue, New Windsor, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	E201759.D	1	04/05/13	OTR	03/29/13 12:00	n/a	VE8870
Run #2	E201874.D	1	04/09/13	OTR	03/29/13 12:00	n/a	VE8875

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	4.2 g	5.0 ml	100 ul
Run #2	4.2 g	5.0 ml	10.0 ul

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	850	140	ug/kg	
71-43-2	Benzene	ND	85	10	ug/kg	
75-27-4	Bromodichloromethane	ND	430	8.9	ug/kg	
75-25-2	Bromoform	ND	430	13	ug/kg	
74-83-9	Bromomethane	ND	430	23	ug/kg	
78-93-3	2-Butanone (MEK)	ND	850	200	ug/kg	
75-15-0	Carbon disulfide	ND	430	10	ug/kg	
56-23-5	Carbon tetrachloride	ND	430	11	ug/kg	
108-90-7	Chlorobenzene	ND	430	9.2	ug/kg	
75-00-3	Chloroethane	ND	430	19	ug/kg	
67-66-3	Chloroform	ND	430	7.0	ug/kg	
74-87-3	Chloromethane	ND	430	16	ug/kg	
124-48-1	Dibromochloromethane	ND	430	14	ug/kg	
75-34-3	1,1-Dichloroethane	3660	430	12	ug/kg	
107-06-2	1,2-Dichloroethane	179	85	11	ug/kg	
75-35-4	1,1-Dichloroethene	2310	430	22	ug/kg	
156-59-2	cis-1,2-Dichloroethene	31.6	430	16	ug/kg	J
156-60-5	trans-1,2-Dichloroethene	ND	430	20	ug/kg	
540-59-0	1,2-Dichloroethene (total)	31.6	430	16	ug/kg	J
78-87-5	1,2-Dichloropropane	ND	430	13	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	430	12	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	430	13	ug/kg	
100-41-4	Ethylbenzene	ND	85	22	ug/kg	
591-78-6	2-Hexanone	ND	430	53	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	85	20	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	430	64	ug/kg	
75-09-2	Methylene chloride	ND	430	110	ug/kg	
100-42-5	Styrene	ND	430	7.8	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	430	11	ug/kg	
127-18-4	Tetrachloroethene	58.5	430	15	ug/kg	J
108-88-3	Toluene	284	85	8.9	ug/kg	
71-55-6	1,1,1-Trichloroethane	70700 [a]	4300	90	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	2.2 (12.5-13)		
Lab Sample ID:	JB32749-13	**Date Sampled:**	03/27/13
Matrix:	SO - Soil	**Date Received:**	03/29/13
Method:	SW846 8260B SW846 5035	**Percent Solids:**	81.1
Project:	AFFCO, 361 Walsh Avenue, New Windsor, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-00-5	1,1,2-Trichloroethane	ND	430	15	ug/kg	
79-01-6	Trichloroethene	337	430	15	ug/kg	J
75-01-4	Vinyl chloride	ND	430	12	ug/kg	
1330-20-7	Xylene (total)	ND	85	12	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	83%	85%	70-130%
17060-07-0	1,2-Dichloroethane-D4	83%	93%	70-122%
2037-26-5	Toluene-D8	91%	93%	81-127%
460-00-4	4-Bromofluorobenzene	92%	98%	66-132%

(a) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	2.2 (11-11.5)		
Lab Sample ID:	JB32749-14	**Date Sampled:**	03/27/13
Matrix:	SO - Soil	**Date Received:**	03/29/13
Method:	SW846 8260B SW846 5035	**Percent Solids:**	82.6
Project:	AFFCO, 361 Walsh Avenue, New Windsor, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	E201871.D	1	04/09/13	OTR	03/29/13 12:00	n/a	VE8875
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	3.0 g	5.0 ml	5.0 ul
Run #2			

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	22000	3800	ug/kg	
71-43-2	Benzene	ND	2200	270	ug/kg	
75-27-4	Bromodichloromethane	ND	11000	230	ug/kg	
75-25-2	Bromoform	ND	11000	340	ug/kg	
74-83-9	Bromomethane	ND	11000	610	ug/kg	
78-93-3	2-Butanone (MEK)	ND	22000	5300	ug/kg	
75-15-0	Carbon disulfide	ND	11000	260	ug/kg	
56-23-5	Carbon tetrachloride	ND	11000	300	ug/kg	
108-90-7	Chlorobenzene	ND	11000	240	ug/kg	
75-00-3	Chloroethane	ND	11000	510	ug/kg	
67-66-3	Chloroform	ND	11000	180	ug/kg	
74-87-3	Chloromethane	ND	11000	410	ug/kg	
124-48-1	Dibromochloromethane	ND	11000	370	ug/kg	
75-34-3	1,1-Dichloroethane	6040	11000	310	ug/kg	J
107-06-2	1,2-Dichloroethane	ND	2200	300	ug/kg	
75-35-4	1,1-Dichloroethene	14000	11000	570	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	11000	410	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	11000	530	ug/kg	
540-59-0	1,2-Dichloroethene (total)	ND	11000	410	ug/kg	
78-87-5	1,2-Dichloropropane	ND	11000	340	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	11000	310	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	11000	350	ug/kg	
100-41-4	Ethylbenzene	ND	2200	590	ug/kg	
591-78-6	2-Hexanone	ND	11000	1400	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	2200	520	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	11000	1700	ug/kg	
75-09-2	Methylene chloride	ND	11000	2800	ug/kg	
100-42-5	Styrene	ND	11000	200	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	11000	290	ug/kg	
127-18-4	Tetrachloroethene	ND	11000	380	ug/kg	
108-88-3	Toluene	1600	2200	230	ug/kg	J
71-55-6	1,1,1-Trichloroethane	398000	11000	240	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	2.2 (11-11.5)		
Lab Sample ID:	JB32749-14	**Date Sampled:**	03/27/13
Matrix:	SO - Soil	**Date Received:**	03/29/13
Method:	SW846 8260B SW846 5035	**Percent Solids:**	82.6
Project:	AFFCO, 361 Walsh Avenue, New Windsor, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-00-5	1,1,2-Trichloroethane	ND	11000	390	ug/kg	
79-01-6	Trichloroethene	2040	11000	390	ug/kg	J
75-01-4	Vinyl chloride	ND	11000	320	ug/kg	
1330-20-7	Xylene (total)	ND	2200	310	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	85%		70-130%
17060-07-0	1,2-Dichloroethane-D4	93%		70-122%
2037-26-5	Toluene-D8	91%		81-127%
460-00-4	4-Bromofluorobenzene	99%		66-132%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	2.2 (14-14.5)		
Lab Sample ID:	JB32749-15	**Date Sampled:**	03/27/13
Matrix:	SO - Soil	**Date Received:**	03/29/13
Method:	SW846 8260B SW846 5035	**Percent Solids:**	93.0
Project:	AFFCO, 361 Walsh Avenue, New Windsor, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	C180794.D	1	04/07/13	TYG	03/29/13 12:00	n/a	VC6488
Run #2	E201899.D	1	04/09/13	OTR	03/29/13 12:00	n/a	VE8876

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	6.6 g		
Run #2	5.8 g	5.0 ml	20.0 ul

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	82.2	8.1	1.4	ug/kg	
71-43-2	Benzene	ND	0.81	0.097	ug/kg	
75-27-4	Bromodichloromethane	ND	4.1	0.086	ug/kg	
75-25-2	Bromoform	ND	4.1	0.12	ug/kg	
74-83-9	Bromomethane	ND	4.1	0.22	ug/kg	
78-93-3	2-Butanone (MEK)	129	8.1	1.9	ug/kg	
75-15-0	Carbon disulfide	1.9	4.1	0.095	ug/kg	J
56-23-5	Carbon tetrachloride	ND	4.1	0.11	ug/kg	
108-90-7	Chlorobenzene	ND	4.1	0.088	ug/kg	
75-00-3	Chloroethane	46.2	4.1	0.18	ug/kg	
67-66-3	Chloroform	ND	4.1	0.067	ug/kg	
74-87-3	Chloromethane	ND	4.1	0.15	ug/kg	
124-48-1	Dibromochloromethane	ND	4.1	0.13	ug/kg	
75-34-3	1,1-Dichloroethane	12100 [a]	1300	34	ug/kg	
107-06-2	1,2-Dichloroethane	34.0	0.81	0.11	ug/kg	
75-35-4	1,1-Dichloroethene	72.4	4.1	0.21	ug/kg	
156-59-2	cis-1,2-Dichloroethene	3.7	4.1	0.15	ug/kg	J
156-60-5	trans-1,2-Dichloroethene	0.86	4.1	0.19	ug/kg	J
540-59-0	1,2-Dichloroethene (total)	4.6	4.1	0.15	ug/kg	
78-87-5	1,2-Dichloropropane	ND	4.1	0.13	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	4.1	0.11	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	4.1	0.13	ug/kg	
100-41-4	Ethylbenzene	ND	0.81	0.21	ug/kg	
591-78-6	2-Hexanone	ND	4.1	0.51	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	0.81	0.19	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	4.1	0.61	ug/kg	
75-09-2	Methylene chloride	2.8	4.1	1.0	ug/kg	J
100-42-5	Styrene	ND	4.1	0.075	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	4.1	0.11	ug/kg	
127-18-4	Tetrachloroethene	ND	4.1	0.14	ug/kg	
108-88-3	Toluene	1.4	0.81	0.086	ug/kg	
71-55-6	1,1,1-Trichloroethane	617 [a]	1300	27	ug/kg	J

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	2.2 (14-14.5)		
Lab Sample ID:	JB32749-15	**Date Sampled:**	03/27/13
Matrix:	SO - Soil	**Date Received:**	03/29/13
Method:	SW846 8260B SW846 5035	**Percent Solids:**	93.0
Project:	AFFCO, 361 Walsh Avenue, New Windsor, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-00-5	1,1,2-Trichloroethane	1.6	4.1	0.14	ug/kg	J
79-01-6	Trichloroethene	0.39	4.1	0.14	ug/kg	J
75-01-4	Vinyl chloride	3.4	4.1	0.12	ug/kg	J
1330-20-7	Xylene (total)	ND	0.81	0.11	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%	83%	70-130%
17060-07-0	1,2-Dichloroethane-D4	91%	89%	70-122%
2037-26-5	Toluene-D8	109%	92%	81-127%
460-00-4	4-Bromofluorobenzene	102%	96%	66-132%

(a) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	3 (13.5-14)		
Lab Sample ID:	JB32749-16	**Date Sampled:**	03/27/13
Matrix:	SO - Soil	**Date Received:**	03/29/13
Method:	SW846 8260B SW846 5035	**Percent Solids:**	79.3
Project:	AFFCO, 361 Walsh Avenue, New Windsor, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	E201773.D	1	04/06/13	OTR	03/29/13 12:00	n/a	VE8871
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	3.2 g	5.0 ml	100 ul
Run #2			

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	1100	190	ug/kg	
71-43-2	Benzene	ND	110	13	ug/kg	
75-27-4	Bromodichloromethane	ND	560	12	ug/kg	
75-25-2	Bromoform	ND	560	17	ug/kg	
74-83-9	Bromomethane	ND	560	30	ug/kg	
78-93-3	2-Butanone (MEK)	ND	1100	270	ug/kg	
75-15-0	Carbon disulfide	ND	560	13	ug/kg	
56-23-5	Carbon tetrachloride	ND	560	15	ug/kg	
108-90-7	Chlorobenzene	ND	560	12	ug/kg	
75-00-3	Chloroethane	143	560	25	ug/kg	J
67-66-3	Chloroform	ND	560	9.2	ug/kg	
74-87-3	Chloromethane	ND	560	21	ug/kg	
124-48-1	Dibromochloromethane	ND	560	18	ug/kg	
75-34-3	1,1-Dichloroethane	459	560	15	ug/kg	J
107-06-2	1,2-Dichloroethane	ND	110	15	ug/kg	
75-35-4	1,1-Dichloroethene	293	560	29	ug/kg	J
156-59-2	cis-1,2-Dichloroethene	ND	560	20	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	560	27	ug/kg	
540-59-0	1,2-Dichloroethene (total)	ND	560	20	ug/kg	
78-87-5	1,2-Dichloropropane	ND	560	17	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	560	16	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	560	17	ug/kg	
100-41-4	Ethylbenzene	ND	110	29	ug/kg	
591-78-6	2-Hexanone	ND	560	69	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	110	26	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	560	84	ug/kg	
75-09-2	Methylene chloride	ND	560	140	ug/kg	
100-42-5	Styrene	ND	560	10	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	560	15	ug/kg	
127-18-4	Tetrachloroethene	ND	560	19	ug/kg	
108-88-3	Toluene	36.2	110	12	ug/kg	J
71-55-6	1,1,1-Trichloroethane	1500	560	12	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	3 (13.5-14)		
Lab Sample ID:	JB32749-16	**Date Sampled:**	03/27/13
Matrix:	SO - Soil	**Date Received:**	03/29/13
Method:	SW846 8260B SW846 5035	**Percent Solids:**	79.3
Project:	AFFCO, 361 Walsh Avenue, New Windsor, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-00-5	1,1,2-Trichloroethane	ND	560	19	ug/kg	
79-01-6	Trichloroethene	175	560	19	ug/kg	J
75-01-4	Vinyl chloride	ND	560	16	ug/kg	
1330-20-7	Xylene (total)	ND	110	16	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	82%		70-130%
17060-07-0	1,2-Dichloroethane-D4	85%		70-122%
2037-26-5	Toluene-D8	92%		81-127%
460-00-4	4-Bromofluorobenzene	95%		66-132%

(a) Diluted due to high concentration of non-target compound.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	3 (14.5-15)		
Lab Sample ID:	JB32749-17	**Date Sampled:**	03/27/13
Matrix:	SO - Soil	**Date Received:**	03/29/13
Method:	SW846 8260B SW846 5035	**Percent Solids:**	94.7
Project:	AFFCO, 361 Walsh Avenue, New Windsor, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	E201929.D	1	04/10/13	OTR	03/29/13 12:00	n/a	VE8878
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	3.7 g	5.0 ml	100 ul
Run #2			

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	740	130	ug/kg	
71-43-2	Benzene	ND	74	8.8	ug/kg	
75-27-4	Bromodichloromethane	ND	370	7.8	ug/kg	
75-25-2	Bromoform	ND	370	11	ug/kg	
74-83-9	Bromomethane	ND	370	20	ug/kg	
78-93-3	2-Butanone (MEK)	ND	740	180	ug/kg	
75-15-0	Carbon disulfide	ND	370	8.7	ug/kg	
56-23-5	Carbon tetrachloride	ND	370	9.9	ug/kg	
108-90-7	Chlorobenzene	ND	370	8.0	ug/kg	
75-00-3	Chloroethane	953	370	17	ug/kg	
67-66-3	Chloroform	ND	370	6.1	ug/kg	
74-87-3	Chloromethane	ND	370	14	ug/kg	
124-48-1	Dibromochloromethane	ND	370	12	ug/kg	
75-34-3	1,1-Dichloroethane	5820	370	10	ug/kg	
107-06-2	1,2-Dichloroethane	165	74	10	ug/kg	
75-35-4	1,1-Dichloroethene	423	370	19	ug/kg	
156-59-2	cis-1,2-Dichloroethene	44.6	370	14	ug/kg	J
156-60-5	trans-1,2-Dichloroethene	81.2	370	18	ug/kg	J
540-59-0	1,2-Dichloroethene (total)	126	370	14	ug/kg	J
78-87-5	1,2-Dichloropropane	ND	370	11	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	370	10	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	370	11	ug/kg	
100-41-4	Ethylbenzene	ND	74	20	ug/kg	
591-78-6	2-Hexanone	ND	370	46	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	74	17	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	370	56	ug/kg	
75-09-2	Methylene chloride	ND	370	94	ug/kg	
100-42-5	Styrene	ND	370	6.8	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	370	9.8	ug/kg	
127-18-4	Tetrachloroethene	ND	370	13	ug/kg	
108-88-3	Toluene	462	74	7.8	ug/kg	
71-55-6	1,1,1-Trichloroethane	2320	370	7.9	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	3 (14.5-15)		
Lab Sample ID:	JB32749-17	**Date Sampled:**	03/27/13
Matrix:	SO - Soil	**Date Received:**	03/29/13
Method:	SW846 8260B SW846 5035	**Percent Solids:**	94.7
Project:	AFFCO, 361 Walsh Avenue, New Windsor, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-00-5	1,1,2-Trichloroethane	ND	370	13	ug/kg	
79-01-6	Trichloroethene	55.3	370	13	ug/kg	J
75-01-4	Vinyl chloride	ND	370	11	ug/kg	
1330-20-7	Xylene (total)	ND	74	10	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	84%		70-130%
17060-07-0	1,2-Dichloroethane-D4	91%		70-122%
2037-26-5	Toluene-D8	92%		81-127%
460-00-4	4-Bromofluorobenzene	96%		66-132%

(a) Diluted due to high concentration of non-target compound.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	3 (12.5-13)		
Lab Sample ID:	JB32749-18	**Date Sampled:**	03/27/13
Matrix:	SO - Soil	**Date Received:**	03/29/13
Method:	SW846 8260B SW846 5035	**Percent Solids:**	85.4
Project:	AFFCO, 361 Walsh Avenue, New Windsor, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	E201774.D	1	04/06/13	OTR	03/29/13 12:00	n/a	VE8871
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	2.6 g	5.0 ml	100 ul
Run #2			

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	1200	200	ug/kg	
71-43-2	Benzene	ND	120	14	ug/kg	
75-27-4	Bromodichloromethane	ND	610	13	ug/kg	
75-25-2	Bromoform	ND	610	18	ug/kg	
74-83-9	Bromomethane	ND	610	33	ug/kg	
78-93-3	2-Butanone (MEK)	ND	1200	290	ug/kg	
75-15-0	Carbon disulfide	ND	610	14	ug/kg	
56-23-5	Carbon tetrachloride	ND	610	16	ug/kg	
108-90-7	Chlorobenzene	ND	610	13	ug/kg	
75-00-3	Chloroethane	94.4	610	27	ug/kg	J
67-66-3	Chloroform	ND	610	10	ug/kg	
74-87-3	Chloromethane	ND	610	23	ug/kg	
124-48-1	Dibromochloromethane	ND	610	20	ug/kg	
75-34-3	1,1-Dichloroethane	410	610	17	ug/kg	J
107-06-2	1,2-Dichloroethane	134	120	16	ug/kg	
75-35-4	1,1-Dichloroethene	659	610	31	ug/kg	
156-59-2	cis-1,2-Dichloroethene	104	610	22	ug/kg	J
156-60-5	trans-1,2-Dichloroethene	108	610	29	ug/kg	J
540-59-0	1,2-Dichloroethene (total)	212	610	22	ug/kg	J
78-87-5	1,2-Dichloropropane	ND	610	19	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	610	17	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	610	19	ug/kg	
100-41-4	Ethylbenzene	ND	120	32	ug/kg	
591-78-6	2-Hexanone	ND	610	75	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	120	28	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	610	91	ug/kg	
75-09-2	Methylene chloride	ND	610	150	ug/kg	
100-42-5	Styrene	ND	610	11	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	610	16	ug/kg	
127-18-4	Tetrachloroethene	ND	610	21	ug/kg	
108-88-3	Toluene	ND	120	13	ug/kg	
71-55-6	1,1,1-Trichloroethane	1270	610	13	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	3 (12.5-13)		
Lab Sample ID:	JB32749-18	**Date Sampled:**	03/27/13
Matrix:	SO - Soil	**Date Received:**	03/29/13
Method:	SW846 8260B SW846 5035	**Percent Solids:**	85.4
Project:	AFFCO, 361 Walsh Avenue, New Windsor, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-00-5	1,1,2-Trichloroethane	ND	610	21	ug/kg	
79-01-6	Trichloroethene	279	610	21	ug/kg	J
75-01-4	Vinyl chloride	ND	610	17	ug/kg	
1330-20-7	Xylene (total)	ND	120	17	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	82%		70-130%
17060-07-0	1,2-Dichloroethane-D4	85%		70-122%
2037-26-5	Toluene-D8	91%		81-127%
460-00-4	4-Bromofluorobenzene	94%		66-132%

(a) Diluted due to high concentration of non-target compound.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	4 (11-11.5)		
Lab Sample ID:	JB32749-19	**Date Sampled:**	03/27/13
Matrix:	SO - Soil	**Date Received:**	03/29/13
Method:	SW846 8260B SW846 5035	**Percent Solids:**	86.6
Project:	AFFCO, 361 Walsh Avenue, New Windsor, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	C180795.D	1	04/07/13	TYG	03/29/13 12:00	n/a	VC6488
Run #2	E201930.D	1	04/10/13	OTR	03/29/13 12:00	n/a	VE8878

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	6.9 g		
Run #2	6.1 g	5.0 ml	100 ul

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	10.9	8.4	1.4	ug/kg	
71-43-2	Benzene	ND	0.84	0.10	ug/kg	
75-27-4	Bromodichloromethane	ND	4.2	0.088	ug/kg	
75-25-2	Bromoform	ND	4.2	0.13	ug/kg	
74-83-9	Bromomethane	ND	4.2	0.23	ug/kg	
78-93-3	2-Butanone (MEK)	ND	8.4	2.0	ug/kg	
75-15-0	Carbon disulfide	1.1	4.2	0.098	ug/kg	J
56-23-5	Carbon tetrachloride	ND	4.2	0.11	ug/kg	
108-90-7	Chlorobenzene	ND	4.2	0.090	ug/kg	
75-00-3	Chloroethane	3.4	4.2	0.19	ug/kg	J
67-66-3	Chloroform	ND	4.2	0.069	ug/kg	
74-87-3	Chloromethane	ND	4.2	0.16	ug/kg	
124-48-1	Dibromochloromethane	ND	4.2	0.14	ug/kg	
75-34-3	1,1-Dichloroethane	2000 [a]	280	7.5	ug/kg	
107-06-2	1,2-Dichloroethane	4.4	0.84	0.11	ug/kg	
75-35-4	1,1-Dichloroethene	1650 [a]	280	14	ug/kg	
156-59-2	cis-1,2-Dichloroethene	2.6	4.2	0.15	ug/kg	J
156-60-5	trans-1,2-Dichloroethene	0.43	4.2	0.20	ug/kg	J
540-59-0	1,2-Dichloroethene (total)	3.0	4.2	0.15	ug/kg	J
78-87-5	1,2-Dichloropropane	ND	4.2	0.13	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	4.2	0.12	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	4.2	0.13	ug/kg	
100-41-4	Ethylbenzene	ND	0.84	0.22	ug/kg	
591-78-6	2-Hexanone	ND	4.2	0.52	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	0.84	0.20	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	4.2	0.63	ug/kg	
75-09-2	Methylene chloride	4.0	4.2	1.1	ug/kg	J
100-42-5	Styrene	ND	4.2	0.077	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	4.2	0.11	ug/kg	
127-18-4	Tetrachloroethene	ND	4.2	0.14	ug/kg	
108-88-3	Toluene	ND	0.84	0.088	ug/kg	
71-55-6	1,1,1-Trichloroethane	88.1	4.2	0.089	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	4 (11-11.5)		
Lab Sample ID:	JB32749-19	**Date Sampled:**	03/27/13
Matrix:	SO - Soil	**Date Received:**	03/29/13
Method:	SW846 8260B SW846 5035	**Percent Solids:**	86.6
Project:	AFFCO, 361 Walsh Avenue, New Windsor, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-00-5	1,1,2-Trichloroethane	ND	4.2	0.15	ug/kg	
79-01-6	Trichloroethene	0.45	4.2	0.15	ug/kg	J
75-01-4	Vinyl chloride	1.8	4.2	0.12	ug/kg	J
1330-20-7	Xylene (total)	ND	0.84	0.12	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%	85%	70-130%
17060-07-0	1,2-Dichloroethane-D4	92%	91%	70-122%
2037-26-5	Toluene-D8	110%	91%	81-127%
460-00-4	4-Bromofluorobenzene	102%	98%	66-132%

(a) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	4 (10-10.5)		
Lab Sample ID:	JB32749-20	**Date Sampled:**	03/27/13
Matrix:	SO - Soil	**Date Received:**	03/29/13
Method:	SW846 8260B SW846 5035	**Percent Solids:**	84.3
Project:	AFFCO, 361 Walsh Avenue, New Windsor, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	C180796.D	1	04/07/13	TYG	03/29/13 12:00	n/a	VC6488
Run #2							

	Initial Weight
Run #1	3.1 g
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	13.0	19	3.2	ug/kg	J
71-43-2	Benzene	ND	1.9	0.23	ug/kg	
75-27-4	Bromodichloromethane	ND	9.6	0.20	ug/kg	
75-25-2	Bromoform	ND	9.6	0.29	ug/kg	
74-83-9	Bromomethane	ND	9.6	0.52	ug/kg	
78-93-3	2-Butanone (MEK)	ND	19	4.6	ug/kg	
75-15-0	Carbon disulfide	1.3	9.6	0.22	ug/kg	J
56-23-5	Carbon tetrachloride	ND	9.6	0.25	ug/kg	
108-90-7	Chlorobenzene	ND	9.6	0.21	ug/kg	
75-00-3	Chloroethane	ND	9.6	0.43	ug/kg	
67-66-3	Chloroform	0.50	9.6	0.16	ug/kg	J
74-87-3	Chloromethane	ND	9.6	0.36	ug/kg	
124-48-1	Dibromochloromethane	ND	9.6	0.31	ug/kg	
75-34-3	1,1-Dichloroethane	9.6	9.6	0.26	ug/kg	
107-06-2	1,2-Dichloroethane	2.3	1.9	0.26	ug/kg	
75-35-4	1,1-Dichloroethene	31.4	9.6	0.49	ug/kg	
156-59-2	cis-1,2-Dichloroethene	1.0	9.6	0.35	ug/kg	J
156-60-5	trans-1,2-Dichloroethene	0.67	9.6	0.46	ug/kg	J
540-59-0	1,2-Dichloroethene (total)	1.7	9.6	0.35	ug/kg	J
78-87-5	1,2-Dichloropropane	ND	9.6	0.29	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	9.6	0.27	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	9.6	0.30	ug/kg	
100-41-4	Ethylbenzene	ND	1.9	0.50	ug/kg	
591-78-6	2-Hexanone	ND	9.6	1.2	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.9	0.45	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	9.6	1.4	ug/kg	
75-09-2	Methylene chloride	15.1	9.6	2.4	ug/kg	
100-42-5	Styrene	ND	9.6	0.18	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	9.6	0.25	ug/kg	
127-18-4	Tetrachloroethene	0.99	9.6	0.33	ug/kg	J
108-88-3	Toluene	ND	1.9	0.20	ug/kg	
71-55-6	1,1,1-Trichloroethane	89.0	9.6	0.20	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	4 (10-10.5)		
Lab Sample ID:	JB32749-20	**Date Sampled:**	03/27/13
Matrix:	SO - Soil	**Date Received:**	03/29/13
Method:	SW846 8260B SW846 5035	**Percent Solids:**	84.3
Project:	AFFCO, 361 Walsh Avenue, New Windsor, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-00-5	1,1,2-Trichloroethane	ND	9.6	0.33	ug/kg	
79-01-6	Trichloroethene	3.5	9.6	0.33	ug/kg	J
75-01-4	Vinyl chloride	ND	9.6	0.28	ug/kg	
1330-20-7	Xylene (total)	ND	1.9	0.27	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		70-130%
17060-07-0	1,2-Dichloroethane-D4	92%		70-122%
2037-26-5	Toluene-D8	110%		81-127%
460-00-4	4-Bromofluorobenzene	104%		66-132%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	4 (14.5-15)		
Lab Sample ID:	JB32749-21	**Date Sampled:**	03/27/13
Matrix:	SO - Soil	**Date Received:**	03/29/13
Method:	SW846 8260B SW846 5035	**Percent Solids:**	96.0
Project:	AFFCO, 361 Walsh Avenue, New Windsor, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	C180797.D	1	04/07/13	TYG	03/29/13 12:00	n/a	VC6488
Run #2	E201887.D	1	04/09/13	OTR	03/29/13 12:00	n/a	VE8876

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	4.1 g		
Run #2	4.6 g	5.0 ml	100 ul

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	14.6	13	2.1	ug/kg	
71-43-2	Benzene	ND	1.3	0.15	ug/kg	
75-27-4	Bromodichloromethane	ND	6.4	0.13	ug/kg	
75-25-2	Bromoform	ND	6.4	0.19	ug/kg	
74-83-9	Bromomethane	ND	6.4	0.35	ug/kg	
78-93-3	2-Butanone (MEK)	40.1	13	3.0	ug/kg	
75-15-0	Carbon disulfide	ND	6.4	0.15	ug/kg	
56-23-5	Carbon tetrachloride	ND	6.4	0.17	ug/kg	
108-90-7	Chlorobenzene	ND	6.4	0.14	ug/kg	
75-00-3	Chloroethane	1190 [a]	290	13	ug/kg	
67-66-3	Chloroform	ND	6.4	0.10	ug/kg	
74-87-3	Chloromethane	ND	6.4	0.24	ug/kg	
124-48-1	Dibromochloromethane	ND	6.4	0.21	ug/kg	
75-34-3	1,1-Dichloroethane	6470 [a]	290	8.0	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.3	0.17	ug/kg	
75-35-4	1,1-Dichloroethene	0.43	6.4	0.33	ug/kg	J
156-59-2	cis-1,2-Dichloroethene	ND	6.4	0.23	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	6.4	0.30	ug/kg	
540-59-0	1,2-Dichloroethene (total)	ND	6.4	0.23	ug/kg	
78-87-5	1,2-Dichloropropane	ND	6.4	0.20	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	6.4	0.18	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	6.4	0.20	ug/kg	
100-41-4	Ethylbenzene	ND	1.3	0.33	ug/kg	
591-78-6	2-Hexanone	ND	6.4	0.79	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.3	0.30	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	6.4	0.95	ug/kg	
75-09-2	Methylene chloride	12.4	6.4	1.6	ug/kg	
100-42-5	Styrene	ND	6.4	0.12	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	6.4	0.17	ug/kg	
127-18-4	Tetrachloroethene	ND	6.4	0.22	ug/kg	
108-88-3	Toluene	ND	1.3	0.13	ug/kg	
71-55-6	1,1,1-Trichloroethane	3.9	6.4	0.13	ug/kg	J

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	4 (14.5-15)		
Lab Sample ID:	JB32749-21	**Date Sampled:**	03/27/13
Matrix:	SO - Soil	**Date Received:**	03/29/13
Method:	SW846 8260B SW846 5035	**Percent Solids:**	96.0
Project:	AFFCO, 361 Walsh Avenue, New Windsor, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-00-5	1,1,2-Trichloroethane	ND	6.4	0.22	ug/kg	
79-01-6	Trichloroethene	ND	6.4	0.22	ug/kg	
75-01-4	Vinyl chloride	2.4	6.4	0.18	ug/kg	J
1330-20-7	Xylene (total)	ND	1.3	0.18	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%	86%	70-130%
17060-07-0	1,2-Dichloroethane-D4	92%	95%	70-122%
2037-26-5	Toluene-D8	110%	90%	81-127%
460-00-4	4-Bromofluorobenzene	103%	94%	66-132%

(a) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	5 (13.5-14)		
Lab Sample ID:	JB32749-22	**Date Sampled:**	03/27/13
Matrix:	SO - Soil	**Date Received:**	03/29/13
Method:	SW846 8260B SW846 5035	**Percent Solids:**	84.8
Project:	AFFCO, 361 Walsh Avenue, New Windsor, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	C180798.D	1	04/07/13	TYG	03/29/13 12:00	n/a	VC6488
Run #2	E201891.D	1	04/09/13	OTR	03/29/13 12:00	n/a	VE8876

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.0 g		
Run #2	3.4 g	5.0 ml	100 ul

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	4.6	12	2.0	ug/kg	J
71-43-2	Benzene	ND	1.2	0.14	ug/kg	
75-27-4	Bromodichloromethane	ND	5.9	0.12	ug/kg	
75-25-2	Bromoform	ND	5.9	0.18	ug/kg	
74-83-9	Bromomethane	ND	5.9	0.32	ug/kg	
78-93-3	2-Butanone (MEK)	ND	12	2.8	ug/kg	
75-15-0	Carbon disulfide	ND	5.9	0.14	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.9	0.16	ug/kg	
108-90-7	Chlorobenzene	ND	5.9	0.13	ug/kg	
75-00-3	Chloroethane	ND	5.9	0.27	ug/kg	
67-66-3	Chloroform	ND	5.9	0.097	ug/kg	
74-87-3	Chloromethane	ND	5.9	0.22	ug/kg	
124-48-1	Dibromochloromethane	ND	5.9	0.19	ug/kg	
75-34-3	1,1-Dichloroethane	15.0	5.9	0.16	ug/kg	
107-06-2	1,2-Dichloroethane	1.2	1.2	0.16	ug/kg	
75-35-4	1,1-Dichloroethene	9.3	5.9	0.30	ug/kg	
156-59-2	cis-1,2-Dichloroethene	0.36	5.9	0.22	ug/kg	J
156-60-5	trans-1,2-Dichloroethene	ND	5.9	0.28	ug/kg	
540-59-0	1,2-Dichloroethene (total)	0.36	5.9	0.22	ug/kg	J
78-87-5	1,2-Dichloropropane	ND	5.9	0.18	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.9	0.16	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.9	0.18	ug/kg	
100-41-4	Ethylbenzene	ND	1.2	0.31	ug/kg	
591-78-6	2-Hexanone	ND	5.9	0.73	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.2	0.28	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.9	0.89	ug/kg	
75-09-2	Methylene chloride	2.7	5.9	1.5	ug/kg	J
100-42-5	Styrene	ND	5.9	0.11	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.9	0.16	ug/kg	
127-18-4	Tetrachloroethene	ND	5.9	0.20	ug/kg	
108-88-3	Toluene	ND	1.2	0.12	ug/kg	
71-55-6	1,1,1-Trichloroethane	3480 [a]	480	10	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	5 (13.5-14)		
Lab Sample ID:	JB32749-22	**Date Sampled:**	03/27/13
Matrix:	SO - Soil	**Date Received:**	03/29/13
Method:	SW846 8260B SW846 5035	**Percent Solids:**	84.8
Project:	AFFCO, 361 Walsh Avenue, New Windsor, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-00-5	1,1,2-Trichloroethane	0.44	5.9	0.21	ug/kg	J
79-01-6	Trichloroethene	2.0	5.9	0.21	ug/kg	J
75-01-4	Vinyl chloride	ND	5.9	0.17	ug/kg	
1330-20-7	Xylene (total)	ND	1.2	0.16	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%	85%	70-130%
17060-07-0	1,2-Dichloroethane-D4	90%	92%	70-122%
2037-26-5	Toluene-D8	108%	90%	81-127%
460-00-4	4-Bromofluorobenzene	102%	95%	66-132%

(a) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	5 (14-14.5)		
Lab Sample ID:	JB32749-23	**Date Sampled:**	03/27/13
Matrix:	SO - Soil	**Date Received:**	03/29/13
Method:	SW846 8260B SW846 5035	**Percent Solids:**	85.3
Project:	AFFCO, 361 Walsh Avenue, New Windsor, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	C180799.D	1	04/07/13	TYG	03/29/13 12:00	n/a	VC6488
Run #2	E201892.D	1	04/09/13	OTR	03/29/13 12:00	n/a	VE8876

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	6.1 g		
Run #2	4.2 g	5.0 ml	100 ul

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	19.2	9.6	1.6	ug/kg	
71-43-2	Benzene	ND	0.96	0.11	ug/kg	
75-27-4	Bromodichloromethane	ND	4.8	0.10	ug/kg	
75-25-2	Bromoform	ND	4.8	0.15	ug/kg	
74-83-9	Bromomethane	ND	4.8	0.26	ug/kg	
78-93-3	2-Butanone (MEK)	ND	9.6	2.3	ug/kg	
75-15-0	Carbon disulfide	0.65	4.8	0.11	ug/kg	J
56-23-5	Carbon tetrachloride	ND	4.8	0.13	ug/kg	
108-90-7	Chlorobenzene	ND	4.8	0.10	ug/kg	
75-00-3	Chloroethane	0.91	4.8	0.22	ug/kg	J
67-66-3	Chloroform	ND	4.8	0.079	ug/kg	
74-87-3	Chloromethane	ND	4.8	0.18	ug/kg	
124-48-1	Dibromochloromethane	ND	4.8	0.16	ug/kg	
75-34-3	1,1-Dichloroethane	42.9	4.8	0.13	ug/kg	
107-06-2	1,2-Dichloroethane	ND	0.96	0.13	ug/kg	
75-35-4	1,1-Dichloroethene	21.4	4.8	0.25	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	4.8	0.18	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	4.8	0.23	ug/kg	
540-59-0	1,2-Dichloroethene (total)	ND	4.8	0.18	ug/kg	
78-87-5	1,2-Dichloropropane	ND	4.8	0.15	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	4.8	0.13	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	4.8	0.15	ug/kg	
100-41-4	Ethylbenzene	ND	0.96	0.25	ug/kg	
591-78-6	2-Hexanone	ND	4.8	0.60	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	0.96	0.23	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	4.8	0.72	ug/kg	
75-09-2	Methylene chloride	ND	4.8	1.2	ug/kg	
100-42-5	Styrene	ND	4.8	0.088	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	4.8	0.13	ug/kg	
127-18-4	Tetrachloroethene	ND	4.8	0.17	ug/kg	
108-88-3	Toluene	ND	0.96	0.10	ug/kg	
71-55-6	1,1,1-Trichloroethane	1220 [a]	390	8.3	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	5 (14-14.5)		
Lab Sample ID:	JB32749-23	**Date Sampled:**	03/27/13
Matrix:	SO - Soil	**Date Received:**	03/29/13
Method:	SW846 8260B SW846 5035	**Percent Solids:**	85.3
Project:	AFFCO, 361 Walsh Avenue, New Windsor, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-00-5	1,1,2-Trichloroethane	ND	4.8	0.17	ug/kg	
79-01-6	Trichloroethene	ND	4.8	0.17	ug/kg	
75-01-4	Vinyl chloride	1.3	4.8	0.14	ug/kg	J
1330-20-7	Xylene (total)	ND	0.96	0.13	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%	82%	70-130%
17060-07-0	1,2-Dichloroethane-D4	94%	90%	70-122%
2037-26-5	Toluene-D8	109%	90%	81-127%
460-00-4	4-Bromofluorobenzene	103%	96%	66-132%

(a) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	5 (14.5-15)		
Lab Sample ID:	JB32749-24	**Date Sampled:**	03/27/13
Matrix:	SO - Soil	**Date Received:**	03/29/13
Method:	SW846 8260B SW846 5035	**Percent Solids:**	93.7
Project:	AFFCO, 361 Walsh Avenue, New Windsor, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	C180800.D	1	04/07/13	TYG	03/29/13 12:00	n/a	VC6488
Run #2	E201893.D	1	04/09/13	OTR	03/29/13 12:00	n/a	VE8876

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.1 g		
Run #2	4.4 g	5.0 ml	100 ul

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	37.1	10	1.8	ug/kg	
71-43-2	Benzene	ND	1.0	0.12	ug/kg	
75-27-4	Bromodichloromethane	ND	5.2	0.11	ug/kg	
75-25-2	Bromoform	ND	5.2	0.16	ug/kg	
74-83-9	Bromomethane	ND	5.2	0.29	ug/kg	
78-93-3	2-Butanone (MEK)	ND	10	2.5	ug/kg	
75-15-0	Carbon disulfide	ND	5.2	0.12	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.2	0.14	ug/kg	
108-90-7	Chlorobenzene	ND	5.2	0.11	ug/kg	
75-00-3	Chloroethane	1.3	5.2	0.24	ug/kg	J
67-66-3	Chloroform	ND	5.2	0.086	ug/kg	
74-87-3	Chloromethane	ND	5.2	0.19	ug/kg	
124-48-1	Dibromochloromethane	ND	5.2	0.17	ug/kg	
75-34-3	1,1-Dichloroethane	54.3	5.2	0.14	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.0	0.14	ug/kg	
75-35-4	1,1-Dichloroethene	30.8	5.2	0.27	ug/kg	
156-59-2	cis-1,2-Dichloroethene	0.33	5.2	0.19	ug/kg	J
156-60-5	trans-1,2-Dichloroethene	ND	5.2	0.25	ug/kg	
540-59-0	1,2-Dichloroethene (total)	0.33	5.2	0.19	ug/kg	J
78-87-5	1,2-Dichloropropane	ND	5.2	0.16	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.2	0.15	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.2	0.16	ug/kg	
100-41-4	Ethylbenzene	ND	1.0	0.28	ug/kg	
591-78-6	2-Hexanone	ND	5.2	0.65	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.25	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.2	0.79	ug/kg	
75-09-2	Methylene chloride	1.6	5.2	1.3	ug/kg	J
100-42-5	Styrene	ND	5.2	0.096	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.2	0.14	ug/kg	
127-18-4	Tetrachloroethene	ND	5.2	0.18	ug/kg	
108-88-3	Toluene	ND	1.0	0.11	ug/kg	
71-55-6	1,1,1-Trichloroethane	2090 [a]	320	6.8	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	5 (14.5-15)		
Lab Sample ID:	JB32749-24	**Date Sampled:**	03/27/13
Matrix:	SO - Soil	**Date Received:**	03/29/13
Method:	SW846 8260B SW846 5035	**Percent Solids:**	93.7
Project:	AFFCO, 361 Walsh Avenue, New Windsor, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-00-5	1,1,2-Trichloroethane	ND	5.2	0.18	ug/kg	
79-01-6	Trichloroethene	ND	5.2	0.18	ug/kg	
75-01-4	Vinyl chloride	1.2	5.2	0.15	ug/kg	J
1330-20-7	Xylene (total)	ND	1.0	0.15	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%	84%	70-130%
17060-07-0	1,2-Dichloroethane-D4	93%	90%	70-122%
2037-26-5	Toluene-D8	109%	91%	81-127%
460-00-4	4-Bromofluorobenzene	103%	95%	66-132%

(a) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	6 (11.5-12)		
Lab Sample ID:	JB32749-25	**Date Sampled:**	03/27/13
Matrix:	SO - Soil	**Date Received:**	03/29/13
Method:	SW846 8260B SW846 5035	**Percent Solids:**	79.6
Project:	AFFCO, 361 Walsh Avenue, New Windsor, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	C180867.D	1	04/09/13	TYG	03/29/13 12:00	n/a	VC6492
Run #2							

	Initial Weight
Run #1	4.8 g
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	13	2.2	ug/kg	
71-43-2	Benzene	ND	1.3	0.16	ug/kg	
75-27-4	Bromodichloromethane	ND	6.5	0.14	ug/kg	
75-25-2	Bromoform	ND	6.5	0.20	ug/kg	
74-83-9	Bromomethane	ND	6.5	0.36	ug/kg	
78-93-3	2-Butanone (MEK)	ND	13	3.1	ug/kg	
75-15-0	Carbon disulfide	ND	6.5	0.15	ug/kg	
56-23-5	Carbon tetrachloride	ND	6.5	0.17	ug/kg	
108-90-7	Chlorobenzene	ND	6.5	0.14	ug/kg	
75-00-3	Chloroethane	ND	6.5	0.30	ug/kg	
67-66-3	Chloroform	ND	6.5	0.11	ug/kg	
74-87-3	Chloromethane	ND	6.5	0.24	ug/kg	
124-48-1	Dibromochloromethane	ND	6.5	0.21	ug/kg	
75-34-3	1,1-Dichloroethane	ND	6.5	0.18	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.3	0.18	ug/kg	
75-35-4	1,1-Dichloroethene	ND	6.5	0.34	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	6.5	0.24	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	6.5	0.31	ug/kg	
540-59-0	1,2-Dichloroethene (total)	ND	6.5	0.24	ug/kg	
78-87-5	1,2-Dichloropropane	ND	6.5	0.20	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	6.5	0.18	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	6.5	0.20	ug/kg	
100-41-4	Ethylbenzene	ND	1.3	0.34	ug/kg	
591-78-6	2-Hexanone	ND	6.5	0.81	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.3	0.31	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	6.5	0.98	ug/kg	
75-09-2	Methylene chloride	2.9	6.5	1.7	ug/kg	J
100-42-5	Styrene	ND	6.5	0.12	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	6.5	0.17	ug/kg	
127-18-4	Tetrachloroethene	ND	6.5	0.23	ug/kg	
108-88-3	Toluene	ND	1.3	0.14	ug/kg	
71-55-6	1,1,1-Trichloroethane	2.9	6.5	0.14	ug/kg	J

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	6 (11.5-12)		
Lab Sample ID:	JB32749-25	**Date Sampled:**	03/27/13
Matrix:	SO - Soil	**Date Received:**	03/29/13
Method:	SW846 8260B SW846 5035	**Percent Solids:**	79.6
Project:	AFFCO, 361 Walsh Avenue, New Windsor, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-00-5	1,1,2-Trichloroethane	ND	6.5	0.23	ug/kg	
79-01-6	Trichloroethene	ND	6.5	0.23	ug/kg	
75-01-4	Vinyl chloride	ND	6.5	0.19	ug/kg	
1330-20-7	Xylene (total)	ND	1.3	0.18	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	97%		70-130%
17060-07-0	1,2-Dichloroethane-D4	92%		70-122%
2037-26-5	Toluene-D8	108%		81-127%
460-00-4	4-Bromofluorobenzene	102%		66-132%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	6 (12.5-13)		
Lab Sample ID:	JB32749-26	**Date Sampled:**	03/27/13
Matrix:	SO - Soil	**Date Received:**	03/29/13
Method:	SW846 8260B SW846 5035	**Percent Solids:**	85.9
Project:	AFFCO, 361 Walsh Avenue, New Windsor, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	C180802.D	1	04/07/13	TYG	03/29/13 12:00	n/a	VC6488
Run #2							

	Initial Weight
Run #1	5.7 g
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	4.9	10	1.7	ug/kg	J
71-43-2	Benzene	ND	1.0	0.12	ug/kg	
75-27-4	Bromodichloromethane	ND	5.1	0.11	ug/kg	
75-25-2	Bromoform	ND	5.1	0.15	ug/kg	
74-83-9	Bromomethane	ND	5.1	0.28	ug/kg	
78-93-3	2-Butanone (MEK)	ND	10	2.4	ug/kg	
75-15-0	Carbon disulfide	ND	5.1	0.12	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.1	0.14	ug/kg	
108-90-7	Chlorobenzene	ND	5.1	0.11	ug/kg	
75-00-3	Chloroethane	ND	5.1	0.23	ug/kg	
67-66-3	Chloroform	ND	5.1	0.084	ug/kg	
74-87-3	Chloromethane	ND	5.1	0.19	ug/kg	
124-48-1	Dibromochloromethane	ND	5.1	0.17	ug/kg	
75-34-3	1,1-Dichloroethane	2.0	5.1	0.14	ug/kg	J
107-06-2	1,2-Dichloroethane	2.8	1.0	0.14	ug/kg	
75-35-4	1,1-Dichloroethene	6.1	5.1	0.26	ug/kg	
156-59-2	cis-1,2-Dichloroethene	1.2	5.1	0.19	ug/kg	J
156-60-5	trans-1,2-Dichloroethene	1.2	5.1	0.24	ug/kg	J
540-59-0	1,2-Dichloroethene (total)	2.4	5.1	0.19	ug/kg	J
78-87-5	1,2-Dichloropropane	ND	5.1	0.16	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.1	0.14	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.1	0.16	ug/kg	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/kg	
591-78-6	2-Hexanone	ND	5.1	0.64	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.24	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.1	0.77	ug/kg	
75-09-2	Methylene chloride	4.1	5.1	1.3	ug/kg	J
100-42-5	Styrene	ND	5.1	0.094	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.1	0.13	ug/kg	
127-18-4	Tetrachloroethene	ND	5.1	0.18	ug/kg	
108-88-3	Toluene	ND	1.0	0.11	ug/kg	
71-55-6	1,1,1-Trichloroethane	41.5	5.1	0.11	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	6 (12.5-13)		
Lab Sample ID:	JB32749-26	**Date Sampled:**	03/27/13
Matrix:	SO - Soil	**Date Received:**	03/29/13
Method:	SW846 8260B SW846 5035	**Percent Solids:**	85.9
Project:	AFFCO, 361 Walsh Avenue, New Windsor, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-00-5	1,1,2-Trichloroethane	ND	5.1	0.18	ug/kg	
79-01-6	Trichloroethene	5.0	5.1	0.18	ug/kg	J
75-01-4	Vinyl chloride	ND	5.1	0.15	ug/kg	
1330-20-7	Xylene (total)	ND	1.0	0.14	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	98%		70-130%
17060-07-0	1,2-Dichloroethane-D4	89%		70-122%
2037-26-5	Toluene-D8	109%		81-127%
460-00-4	4-Bromofluorobenzene	102%		66-132%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	6 (14.5-15)		
Lab Sample ID:	JB32749-27	**Date Sampled:**	03/27/13
Matrix:	SO - Soil	**Date Received:**	03/29/13
Method:	SW846 8260B SW846 5035	**Percent Solids:**	92.6
Project:	AFFCO, 361 Walsh Avenue, New Windsor, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	C180803.D	1	04/07/13	TYG	03/29/13 12:00	n/a	VC6488
Run #2							

	Initial Weight
Run #1	4.6 g
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	12	2.0	ug/kg	
71-43-2	Benzene	ND	1.2	0.14	ug/kg	
75-27-4	Bromodichloromethane	ND	5.9	0.12	ug/kg	
75-25-2	Bromoform	ND	5.9	0.18	ug/kg	
74-83-9	Bromomethane	ND	5.9	0.32	ug/kg	
78-93-3	2-Butanone (MEK)	ND	12	2.8	ug/kg	
75-15-0	Carbon disulfide	ND	5.9	0.14	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.9	0.16	ug/kg	
108-90-7	Chlorobenzene	ND	5.9	0.13	ug/kg	
75-00-3	Chloroethane	ND	5.9	0.27	ug/kg	
67-66-3	Chloroform	ND	5.9	0.097	ug/kg	
74-87-3	Chloromethane	ND	5.9	0.22	ug/kg	
124-48-1	Dibromochloromethane	ND	5.9	0.19	ug/kg	
75-34-3	1,1-Dichloroethane	3.5	5.9	0.16	ug/kg	J
107-06-2	1,2-Dichloroethane	ND	1.2	0.16	ug/kg	
75-35-4	1,1-Dichloroethene	ND	5.9	0.30	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	5.9	0.21	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	5.9	0.28	ug/kg	
540-59-0	1,2-Dichloroethene (total)	ND	5.9	0.21	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.9	0.18	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.9	0.16	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.9	0.18	ug/kg	
100-41-4	Ethylbenzene	ND	1.2	0.31	ug/kg	
591-78-6	2-Hexanone	ND	5.9	0.73	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.2	0.28	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.9	0.88	ug/kg	
75-09-2	Methylene chloride	ND	5.9	1.5	ug/kg	
100-42-5	Styrene	ND	5.9	0.11	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.9	0.15	ug/kg	
127-18-4	Tetrachloroethene	ND	5.9	0.20	ug/kg	
108-88-3	Toluene	ND	1.2	0.12	ug/kg	
71-55-6	1,1,1-Trichloroethane	0.93	5.9	0.12	ug/kg	J

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	6 (14.5-15)		
Lab Sample ID:	JB32749-27	**Date Sampled:**	03/27/13
Matrix:	SO - Soil	**Date Received:**	03/29/13
Method:	SW846 8260B SW846 5035	**Percent Solids:**	92.6
Project:	AFFCO, 361 Walsh Avenue, New Windsor, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-00-5	1,1,2-Trichloroethane	ND	5.9	0.20	ug/kg	
79-01-6	Trichloroethene	ND	5.9	0.20	ug/kg	
75-01-4	Vinyl chloride	ND	5.9	0.17	ug/kg	
1330-20-7	Xylene (total)	ND	1.2	0.16	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		70-130%
17060-07-0	1,2-Dichloroethane-D4	92%		70-122%
2037-26-5	Toluene-D8	110%		81-127%
460-00-4	4-Bromofluorobenzene	102%		66-132%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FD-1 6(11.5-12)		
Lab Sample ID:	JB32749-28	**Date Sampled:**	03/27/13
Matrix:	SO - Soil	**Date Received:**	03/29/13
Method:	SW846 8260B SW846 5035	**Percent Solids:**	86.1
Project:	AFFCO, 361 Walsh Avenue, New Windsor, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	C180804.D	1	04/07/13	TYG	03/29/13 12:00	n/a	VC6488
Run #2							

	Initial Weight
Run #1	5.4 g
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	11	1.8	ug/kg	
71-43-2	Benzene	ND	1.1	0.13	ug/kg	
75-27-4	Bromodichloromethane	ND	5.4	0.11	ug/kg	
75-25-2	Bromoform	ND	5.4	0.16	ug/kg	
74-83-9	Bromomethane	ND	5.4	0.29	ug/kg	
78-93-3	2-Butanone (MEK)	ND	11	2.6	ug/kg	
75-15-0	Carbon disulfide	ND	5.4	0.13	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.4	0.14	ug/kg	
108-90-7	Chlorobenzene	ND	5.4	0.12	ug/kg	
75-00-3	Chloroethane	ND	5.4	0.24	ug/kg	
67-66-3	Chloroform	ND	5.4	0.089	ug/kg	
74-87-3	Chloromethane	ND	5.4	0.20	ug/kg	
124-48-1	Dibromochloromethane	ND	5.4	0.18	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.4	0.15	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.1	0.15	ug/kg	
75-35-4	1,1-Dichloroethene	ND	5.4	0.28	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	5.4	0.20	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	5.4	0.26	ug/kg	
540-59-0	1,2-Dichloroethene (total)	ND	5.4	0.20	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.4	0.17	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.4	0.15	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.4	0.17	ug/kg	
100-41-4	Ethylbenzene	ND	1.1	0.28	ug/kg	
591-78-6	2-Hexanone	ND	5.4	0.67	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.1	0.25	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.4	0.81	ug/kg	
75-09-2	Methylene chloride	3.2	5.4	1.4	ug/kg	J
100-42-5	Styrene	ND	5.4	0.099	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.4	0.14	ug/kg	
127-18-4	Tetrachloroethene	ND	5.4	0.18	ug/kg	
108-88-3	Toluene	ND	1.1	0.11	ug/kg	
71-55-6	1,1,1-Trichloroethane	3.6	5.4	0.11	ug/kg	J

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FD-1 6(11.5-12)		
Lab Sample ID:	JB32749-28	**Date Sampled:**	03/27/13
Matrix:	SO - Soil	**Date Received:**	03/29/13
Method:	SW846 8260B SW846 5035	**Percent Solids:**	86.1
Project:	AFFCO, 361 Walsh Avenue, New Windsor, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-00-5	1,1,2-Trichloroethane	ND	5.4	0.19	ug/kg	
79-01-6	Trichloroethene	0.89	5.4	0.19	ug/kg	J
75-01-4	Vinyl chloride	ND	5.4	0.15	ug/kg	
1330-20-7	Xylene (total)	ND	1.1	0.15	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		70-130%
17060-07-0	1,2-Dichloroethane-D4	91%		70-122%
2037-26-5	Toluene-D8	109%		81-127%
460-00-4	4-Bromofluorobenzene	101%		66-132%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FD-2 6(14.5-15)		
Lab Sample ID:	JB32749-29	**Date Sampled:**	03/27/13
Matrix:	SO - Soil	**Date Received:**	03/29/13
Method:	SW846 8260B SW846 5035	**Percent Solids:**	95.4
Project:	AFFCO, 361 Walsh Avenue, New Windsor, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	C180868.D	1	04/09/13	TYG	03/29/13 12:00	n/a	VC6492
Run #2							

	Initial Weight
Run #1	7.3 g
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	7.2	1.2	ug/kg	
71-43-2	Benzene	ND	0.72	0.085	ug/kg	
75-27-4	Bromodichloromethane	ND	3.6	0.075	ug/kg	
75-25-2	Bromoform	ND	3.6	0.11	ug/kg	
74-83-9	Bromomethane	ND	3.6	0.20	ug/kg	
78-93-3	2-Butanone (MEK)	ND	7.2	1.7	ug/kg	
75-15-0	Carbon disulfide	ND	3.6	0.084	ug/kg	
56-23-5	Carbon tetrachloride	ND	3.6	0.095	ug/kg	
108-90-7	Chlorobenzene	ND	3.6	0.078	ug/kg	
75-00-3	Chloroethane	ND	3.6	0.16	ug/kg	
67-66-3	Chloroform	ND	3.6	0.059	ug/kg	
74-87-3	Chloromethane	ND	3.6	0.13	ug/kg	
124-48-1	Dibromochloromethane	ND	3.6	0.12	ug/kg	
75-34-3	1,1-Dichloroethane	0.71	3.6	0.098	ug/kg	J
107-06-2	1,2-Dichloroethane	ND	0.72	0.097	ug/kg	
75-35-4	1,1-Dichloroethene	ND	3.6	0.18	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	3.6	0.13	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	3.6	0.17	ug/kg	
540-59-0	1,2-Dichloroethene (total)	ND	3.6	0.13	ug/kg	
78-87-5	1,2-Dichloropropane	ND	3.6	0.11	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	3.6	0.10	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	3.6	0.11	ug/kg	
100-41-4	Ethylbenzene	ND	0.72	0.19	ug/kg	
591-78-6	2-Hexanone	ND	3.6	0.45	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	0.72	0.17	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	3.6	0.54	ug/kg	
75-09-2	Methylene chloride	ND	3.6	0.91	ug/kg	
100-42-5	Styrene	ND	3.6	0.066	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	3.6	0.095	ug/kg	
127-18-4	Tetrachloroethene	ND	3.6	0.12	ug/kg	
108-88-3	Toluene	ND	0.72	0.075	ug/kg	
71-55-6	1,1,1-Trichloroethane	3.6	3.6	0.076	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FD-2 6(14.5-15)		
Lab Sample ID:	JB32749-29	**Date Sampled:**	03/27/13
Matrix:	SO - Soil	**Date Received:**	03/29/13
Method:	SW846 8260B SW846 5035	**Percent Solids:**	95.4
Project:	AFFCO, 361 Walsh Avenue, New Windsor, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-00-5	1,1,2-Trichloroethane	ND	3.6	0.12	ug/kg	
79-01-6	Trichloroethene	ND	3.6	0.12	ug/kg	
75-01-4	Vinyl chloride	ND	3.6	0.10	ug/kg	
1330-20-7	Xylene (total)	ND	0.72	0.10	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		70-130%
17060-07-0	1,2-Dichloroethane-D4	96%		70-122%
2037-26-5	Toluene-D8	108%		81-127%
460-00-4	4-Bromofluorobenzene	115%		66-132%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

New Jersey ACCUTEST LABORATORIES

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

ACCUTEST LABORATORIES

SLL FB TB

CHAIN OF CUSTODY

PAGE 1 OF 3

2235 Route 130, Dayton, NJ 08810
TEL. 732-329-0200 FAX: 732-329-3499/3480
www.accutest.com

FED-EX Tracking # 8076 4354 3158 | Bottle Order Control #
Accutest Quote # | Accutest Job # JB32749

Client / Reporting Information

Company Name: FLEMING LEE-SHUE
Street Address: 158 WEST 29TH ST
City: NY State: NY Zip: 10001
Project Contact: STEVE PANTER E-mail: STEVE@FLEMINGLEESHUE.COM
Phone #: 212-675-3225 Fax #:
Sampler(s) Name(s): RAHUL BHATIA Phone #:

Project Information

Project Name: AFFCO
Street: 360 WASH AVE
City: NEW WINDSOR State: NY
Project #:
Client Purchase Order #:
Project Manager: KEVIN McGUINNESS

Billing Information (if different from Report to)

Company Name:
Street Address:
City: State: Zip:
Attention:

Requested Analysis (see TEST CODE sheet)

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL- Sludge
SED-Sediment
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid
WP - Wipe
FB-Field Blank
EB-Equipment Blank
RB- Rinse Blank
TB-Trip Blank

Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	Number of preserved Bottles: HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	VO	LAB USE ONLY
1	TRIP BLANK		3/27/13		RB	TB	2	X								X	
2	FIELD BLANK 1			0730		FB	2	X								X	999
3	FIELD BLANK 2			0800		FB	3	X								X	M32 T3
4	1.1 (12.5-13)			1:40		SO	3								X	X	1402
5	1.1 (13-13.5)			1:45		SO	3								X	X	4083
6	1.1 (14.5-15)			1:50		SO	3								X	X	4084
7	1.2 (13-13.5)			10:55		SO	3								X	X	
8	1.2 (11-11.5)			10:50		SO	3								X	X	
9	1.2 (14-14.5)			11:00		SO	3								X	X	
10	2.1 (12.5-13)			12:40		SO	3								X	X	
11	2.1 (11.5-12)			12:35		SO	3								X	X	
12	2.1 (10-10.5)			12:30		SO	3								X	X	

Turnaround Time (Business days)

Approved By (Accutest PM): / Date:

- [X] Std. 10 Business Days
- [ ] 5 Day RUSH
- [ ] 3 Day EMERGENCY
- [ ] 2 Day EMERGENCY
- [ ] 1 Day EMERGENCY
- [ ] other

Emergency & Rush T/A data available VIA Lablink

Data Deliverable Information

- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] FULLT1 (Level 3+4)
- [ ] NJ Reduced
- [ ] Commercial "C"
- [ ] NYASP Category A
- [X] NYASP Category B
- [ ] State Forms
- [ ] EDD Format
- [ ] Other

Commercial "A" = Results Only
Commercial "B" = Results + QC Summary
NJ Reduced = Results + QC Summary + Partial Raw data

Comments / Special Instructions

ALL VO SAMPLES ALSO INCLUDE A 60 ml VIAL FOR %0 SOLIDS.

Sample Custody must be documented below each time samples change possession, including courier delivery.

	Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1	[illegible]	3/28/13	1 Fed Ex	2 Fed ex	3/29/13 9:30	2
3	Relinquished by Sampler:	Date Time:	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4
5	Relinquished by:	Date Time:	Received By: 5	Custody Seal # 104	[X] Intact [ ] Not intact	Preserved where applicable [ ] On Ice [X]	Cooler Temp. 12.1°C

2B MW IP

5.1 5

JB32749: Chain of Custody
Page 1 of 5

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CHAIN OF CUSTODY

PAGE 2 OF 2 3

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FED-EX Tracking #: | Bottle Order Control #:
Accutest Quote #: | Accutest Job #: JB32749

Client / Reporting Information

Company Name: FLEMING LEE-SHUE
Street Address: 158 WEST 29TH ST
City: NY State: NY Zip: 10001
Project Contact: STEVE PAFFER E-mail: STEVE@FLEMINGLEESHUE.COM
Phone #: 212-675-3225 Fax #:
Sampler(s) Name(s): KAITUE BHATIA Phone #:

Project Information

Project Name: AFFCO
Street: 360 WALSH AVE
City: NEW WINDSOR State: NY
Project #:
Client Purchase Order #:
Project Manager: KEVIN MCGUINNESS
Attention:

Billing Information (if different from Report to)

Company Name:
Street Address:
City State Zip:

Requested Analysis (see TEST CODE sheet)

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL- Sludge
SED-Sediment
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid
WP - Wipe
FB-Field Blank
EB-Equipment Blank
RB- Rinse Blank
TB-Trip Blank

Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	Number of preserved Bottles: HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE		LAB USE ONLY
13	2.2 (12.5-13)		3/27/13	11:45	RB	SO	3								3	X	
14	2.2 (11-11.5)			11:40												X	
15	2.2 (14-14.5)			11:50												X	
16	3 (13.5-14)			2:45												X	
17	3 (14.5-15)			2:50												X	
18	3 (12.5-13)			2:35												X	
19	4 (11-11.5)			3:20												X	
20	4 (10-10.5)			3:10												X	
21	4 (14.5-15)			3:30												X	
22	5 (13.5-14)			5:20												X	
23	5 (14-14.5)			5:25												X	
24	5 (14.5-15)			5:30												X	

Turnaround Time (Business days)

- [X] Std. 10 Business Days
- [ ] 5 Day RUSH
- [ ] 3 Day EMERGENCY
- [ ] 2 Day EMERGENCY
- [ ] 1 Day EMERGENCY
- [ ] other _____

Emergency & Rush T/A data available VIA Lablink

Approved By (Accutest PM): / Date:

Data Deliverable Information

- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] FULLT1 (Level 3+4)
- [ ] NJ Reduced
- [ ] Commercial "C"
- [ ] NYASP Category A
- [X] NYASP Category B
- [ ] State Forms
- [ ] EDD Format _____
- [ ] Other _____

Commercial "A" = Results Only
Commercial "B" = Results + QC Summary
NJ Reduced = Results + QC Summary + Partial Raw data

Comments / Special Instructions

Sample Custody must be documented below each time samples change possession, including courier delivery.

	Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1		3/28/13	FedEx	FedEx	3/29/13 930	
2						
3						
4						
5						

Custody Seal # 104 [ ] Intact [ ] Not intact | Preserved where applicable [ ] | On Ice [ ] | Cooler Temp.

23

JB32749: Chain of Custody
Page 2 of 5

ACCUTEST LABORATORIES

CHAIN OF CUSTODY

PAGE 3 OF 3

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www.accutest.com

FED-EX Tracking # | Bottle Order Control #

Accutest Quote # | Accutest Job # JB 32749

Client / Reporting Information

Company Name: FLEMING LEE-SHUE
Street Address: 158 W. 29th ST
City: NY State: NY Zip: 10001
Project Contact: STEVE PANTER E-mail:
Phone #: 212-675-3225 Fax #:
Sampler(s) Name(s): Phone #:

Project Information

Project Name: AFFCO
Street: 360 WALSH AVE
City: NEW WINDSOR State: NY
Project #:
Client Purchase Order #:
Project Manager:

Billing Information (if different from Report to)

Company Name:
Street Address:
City: State: Zip:
Attention:

Requested Analysis (see TEST CODE sheet)

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Water; SW - Surface Water; SO - Soil; SL- Sludge; SED-Sediment; OI - Oil; LIQ - Other Liquid; AIR - Air; SOL - Other Solid; WP - Wipe; FB-Field Blank; EB-Equipment Blank; RB- Rinse Blank; TB-Trip Blank

Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	Number of preserved Bottles: HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	VOA	LAB USE ONLY
25	6 (11.5-12)		3/27/13	4:30	RB	SO	3									X	
26	6 (12.5-13)			4:45												X	
27	6 (14.5-15)			5:00												X	
28	FD-1 [6(11.5-12)]			4:30												X	
	~~FD-1~~															X	
	~~FD-1~~															X	
29	FD-2 6(14.5-15)			5:50												X	
	~~FD-2~~															X	
	~~FD-3~~															X	
																X	
																X	
																X	

Turnaround Time (Business days)

Approved By (Accutest PM): / Date:

- [X] Std. 10 Business Days
- [ ] 5 Day RUSH
- [ ] 3 Day EMERGENCY
- [ ] 2 Day EMERGENCY
- [ ] 1 Day EMERGENCY
- [ ] other _____

Emergency & Rush T/A data available VIA Lablink

Data Deliverable Information

- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] FULLT1 (Level 3+4)
- [ ] NJ Reduced
- [ ] Commercial "C"
- [ ] NYASP Category A
- [X] NYASP Category B
- [ ] State Forms
- [ ] EDD Format _____
- [ ] Other _____

Commercial "A" = Results Only
Commercial "B" = Results + QC Summary
NJ Reduced = Results + QC Summary + Partial Raw data

Comments / Special Instructions

Sample Custody must be documented below each time samples change possession, including courier delivery.

	Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1		3/28/13	FED EX	FED EX	3/29/13 930	
2						
3	Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
4						
5	Relinquished by:	Date Time:	Received By:	Custody Seal # 104 [ ] Intact [ ] Not intact	Preserved where applicable [ ]	On Ice [ ] Cooler Temp.

2B

5.1 5

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: JB32749 **Client:** FLEMING LEE SHUE **Project:** AFFCO

Date / Time Received: 3/29/2013 0930 **Delivery Method:** FedEx **Airbill #'s:** 8026 4354 3158

Cooler Temps (Initial/Adjusted): #1: (12.1/12.1); 0

Cooler Security

	Y	or	N		Y	or	N
1. Custody Seals Present:	☑		☐	3. COC Present:	☑		☐
2. Custody Seals Intact:	☑		☐	4. Smpl Dates/Time OK	☑		☐

Cooler Temperature

	Y	or	N
1. Temp criteria achieved:	☐		☑
2. Cooler temp verification:	IR Gun		
3. Cooler media:	No Ice		
4. No, Coolers			

Quality Control _Preservation

	Y	N	N/A
1. Trip Blank present / cooler:	☑	☐	☐
2. Trip Blank listed on COC:	☑	☐	☐
3. Samples preserved properly:	☑	☐	
4. VOCs headspace free:	☑	☐	☐

Sample Integrity - Documentation

	Y	or	N
1. Sample labels present on bottles:	☑		☐
2. Container labeling complete:	☑		☐
3. Sample container label / COC agree:	☑		☐

Sample Integrity - Condition

	Y	or	N
1. Sample recvd within HT:	☐		☑
2. All containers accounted for:	☑		☐
3. Condition of sample:	Intact		

Sample Integrity - Instructions

	Y	N	N/A
1. Analysis requested is clear:	☑	☐	
2. Bottles received for unspecified tests	☐	☑	
3. Sufficient volume recvd for analysis:	☑	☐	
4. Compositing instructions clear:	☐	☐	☑
5. Filtering instructions clear:	☐	☐	☑

Comments
1. Samples were received with minimal holding time remaining. Encores will need to preserved ASAP. -7,8,9,13,14,15 were not preserved within 48hrs.
2. Samples were received at 12.1 degrees C. There was no ice present but there was a small amount water from what we assume is melted ice.
3. -15 sample time was taken from bottle label.

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JB32749: Chain of Custody
Page 4 of 5

Sample Receipt Summary - Problem Resolution

Accutest Job Number: JB32749

CSR: Tammy McCloskey **Response Date:** 3/29/2013

Response:
1. Proceed with analysis per Steve Panter
2. Proceed with analysis per Steve Panter
3. Proceed as noted

Accutest Laboratories
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2235 US Highway 130
F: 732.329.3499
Dayton, New Jersey
www/accutest.com

JB32749: Chain of Custody
Page 5 of 5

APPENDIX E

DUSRs for Endpoint and Post-treatment Samples

environmental chemistry consultants

Data Usability Summary Report (DUSR)

NYSDEC ASP Category B

Client/Company:	Fleming-Lee Shue, Inc., New York, New York (FLS)
Site/Project Name:	AFFCO, 361 Walsh Avenue, New Windsor, NY
Laboratory:	Accutest Laboratories, Dayton, New Jersey
SDGs/Lab Project #:	JB34670
Date(s) of Collection:	April 17, 2013
Number and type Samples & analyses:	5 Groundwater samples, 1 Field Blank, and 1 Trip Blank for project-specific Target Compound List (TCL) of Volatile Organic Compounds (VOCs)
Senior Data Reviewers:	Dr. Nancy C. Rothman, New Environmental Horizons, Inc. Susan D. Chapnick, New Environmental Horizons, Inc.
Date Completed:	June 4, 2013

This Data Usability Summary Report (DUSR) is based on guidance developed by the New York State Department of Conservation (NYSDEC), June 1999, for technical review of analytical data in lieu of a full third party data validation and technical guidance presented in *DER-10 / Technical Guidance for Site Investigation and Remediation*, NYSDEC, May 3, 2010. The objective of the DUSR is to determine whether or not the data as presented meet the site/project specific criteria for data quality and data use based on the NYSDEC ASP 2005 or EPA method QC acceptance criteria.

34 Pheasant Run Drive, Skillman, NJ 08558 2 Farmer's Circle, Arlington, MA 02474
Phone: (908) 874-5686 (781) 643-4294
Email: nrothman@neh-inc.com schapnick@neh-inc.com
www.neh-inc.com

I. Required DUSR Questions

1. ***Is the data package complete as defined under the requirements for the most current NYSDEC ASP Category B or USEPA CLP deliverables?***

   Yes.

2. ***Have all holding times been met?***

   Yes.

3. ***Do all the QC data: blanks, instrument tunings, calibration standards, calibration verifications, surrogate recoveries, spike recoveries, replicate analyses, laboratory controls and sample data fall within the protocol required limits and specifications?***

   Yes, analyses generally met QC criteria. Exceedances of QC criteria, where data were qualified but considered usable for project decisions, are noted in Section III of this DUSR.

4. ***Have all of the data been generated using established and agreed upon analytical protocols?***

   Yes. Analytical data were generated using established EPA Methods, Standard Methods, and ASTM Methods (see analytical references in Section II below). Deviations from EPA or other method protocols and NYSDEC ASP 2005 QC protocols are discussed in Section III of this DUSR.

5. ***Does an evaluation of the raw data confirm the results provided in the data summary sheets and quality control verification forms?***

   Yes. The raw data were checked to verify that detected results met retention time and mass spectral criteria, where applicable, for qualitative identification. A spot check was performed to verify quantitative accuracy for reporting of all results (presented in the Data Review Checklists attached to this DUSR).

6. ***Have the correct data qualifiers been used and are they consistent with the most current NYSDEC ASP?***

   Yes. The laboratory used the correct data qualifiers in reporting of results. Data qualifiers were changed for several results during this review, as shown in Table 2 and explained in Section III of this DUSR.

7. ***Have any quality control (QC) exceedances been specifically noted in the DUSR and have the corresponding QC summary sheets from the data package been attached to the DUSR?***

   Yes. QC exceedances are specified in Section III of this DUSR. QC summary sheets from the data package have not been attached; however, all QC exceedances that required data qualification are summarized in Table 2 of the DUSR and flagged in the validated electronic data deliverable (EDD).

II. Sample Descriptions and Analytical Parameters

The sample IDs, date of sampling, identification of MS/MSD/MD, FD, EB, TB, if applicable and the analytical parameters reviewed in this DUSR are listed in Table 1. Any deviations noted for sample collection or receipt (*e.g.*, temperature or preservation issues) are included in Section III, below.

Table 1. Sample Descriptions and Analytical Parameters

Sample ID	Collection Date	Matrix	Analytical Parameters[1]	Sample Type
EW-1X	4/17/13	GW	VOCs	Field Sample
S-8	4/17/13	GW	VOCs	Field Sample
EW-0	4/17/13	GW	VOCs	Field Sample
E1-N	4/17/13	GW	VOCs	Field sample
MW-1N	4/17/13	GW	VOCs	Field sample
FB041713	4/17/13	Water	VOCs	Field Blank
TRIP BLANK	4/17/13	Water	VOCs	Trip Blank

Analytical method references:
TCL VOC: EPA SW846 Method 8260B

[1] These samples, excluding the Trip Blank, were also analyzed for Sulfide, Sulfate, Chloride, Alkalinity, Iron, and Hardness; however, review of these parameters as part of this NYS DUSR was not required.

III. Data Deficiencies, Analytical Protocol Deviations, and Quality Control Exceedances

The following QC elements, as applicable to the analytical methods, were reviewed during this DUSR:

- Data package completeness and reporting protocols
- Sample receipt, holding times and preservation criteria
- Calibration criteria (instrument tuning, initial and continuing calibration verifications)
- Method, field, and instrument blank results
- Laboratory Control Sample (LCS), Blank Spike (BS), or Matrix Spike Blank (MSB) recoveries
- Surrogate or System Monitoring Compound (SMC) Recoveries
- Matrix Spike (MS) / Matrix Spike Duplicate (MSD) Recoveries
- MS/MSD, sample/Matrix Duplicate (MD), or sample/Field Duplicate (FD) Relative Percent Differences (RPDs)
- Sample result reporting (including reporting limits and units)
- Other method-specific QC if applicable and reported (e.g., internal standard areas)
- Deficiencies or protocol deviations as noted in the Laboratory Narrative

During this review of VOCs, all results were estimated (J) due to QC issues. Table 2 summarizes the actions taken during this review. NEH generated a validated data spreadsheet based on the electronic project database file received from Accutest for these SDGs. All results were considered acceptable compared to NYSDEC ASP 2005 and method criteria, with the understanding of the potential uncertainty (bias) in the qualified results.

Table 2. Summary of Data Validation Actions

Field Sample ID	Analyte	Qualifier	Bias	Validation Comments
S-8	1,2-Dichloroethane cis-1,2-Dichloroethene 1,2-Dichloroethene (total)	J	I	Result reported below the calibration range
EW-0	Tetrachloroethene	J	I	Result reported below the calibration range
MW-1N	Toluene Chloroform	J	I	Result reported below the calibration range

Qualifiers: U = Analyte is non-detect at the "DV Result" value; UJ = Non-detect is estimated; J = Result is estimated; R = Result is rejected and is unusable for project decisions.

Bias: L = Low; H = High; I = Indeterminate

As required by the DUSR, the following sections document the QC reviewed and the issues that required action or affected the data certainty in terms of the project data quality objectives (DQO)

of accuracy, precision, representativeness, comparability, and sensitivity. The DQO of completeness can be evaluated by the project manager after all data are generated.

Data Package Completeness and Reporting Protocols

- The initial and continuing calibrations for VOCs contained many compounds in addition to the targets requested. During this review, only the target compounds were assessed.
- For organic analyses, the laboratory used in-house QC limits to judge acceptability of surrogates, MS/MSD, LCS, and calibrations. In addition, the laboratory spiked all VOC targets for the LCS and MS/MSD analyses rather than just a representative subset of analytes as suggested by NYSDEC ASP 2005. During this review, the NYSDEC ASP 2005 QC limits for the compounds specified in Exhibit E were used to evaluate the acceptability of the laboratory quality control, unless otherwise discussed below, while the in-house limits were used to judge the other spiked compounds.
- The laboratory reported too many significant figures for some data. For organic results, NYSDEC ASP 2005 indicates that one significant figure should be reported for values < 10 and two significant figures for values > 10; however, the laboratory reported two significant figures for values < 10 and three for values > 10.

Sample Receipt, Holding Times, and Preservation

- Samples for VOC analysis were not preserved in the field. All VOC samples were received with pH > 2. All samples were analyzed within 7 days of sample collection; however, sample EW-1X was reported from an analysis performed on April 29, 2013, 5 days outside of 7 day holding time, due to an apparent QA/QC issue with the original analysis. The results from the initial analysis within holding time for EW-1X confirmed the results reported from the second analysis; therefore, based on professional judgment, the results reported for EW-1X from April 29, 2013 were accepted without qualification.

Calibration

- For VOC analysis, the laboratory used two additional Internal Standard (IS) compounds, t-butyl alcohol-d_9 and pentafluorobenzene, in addition to the NYSDEC ASP 2005 required IS' of 1,4-difluorobenzene, chlorobenzene-d_5, and 1,4-dichlorobenzene-d_4. Since SW846 Method 8260B allows the use of alternative IS', no action was required.

Method, Field, and Instrument Blank Results

- No contamination that would require blank actions was observed in the method blanks, field blank, or trip blank.

Laboratory Control Sample (LCS), Blank Spike (BS), or Matrix Spike Blank (MSB) recoveries

- The LCS recoveries were acceptable for all VOCs indicating acceptable accuracy for the methods as performed by the laboratory.

Surrogate or System Monitoring Compound (SMC) Recoveries

- The laboratory used a fourth surrogate, dibromofluoromethane, in addition to those specified in NYSDEC ASP2005. Since EPA SW-846 allows the use of alternative surrogates, no action was required.

Matrix Quality Control (Matrix Spike/Matrix Duplicate/Matrix Spike Duplicate and Field Duplicate Samples)

- There were no MS/MSD analyses performed on samples from this site (only batch QC analysis reported). Therefore, accuracy and precision for analysis of VOCs for the site matrix could not be evaluated.
- There were no Field Duplicate samples associated with the samples in this SDG; therefore, precision from sample collection through analysis could not be evaluated.

Sample Result Reporting (including reporting limits and units)

- All results are reported with sample-specific reporting limits (adjusted for sample-specific preparation and dilution factors) in units of µg/L for VOCs.
- The list of compounds reported for VOCs is a project-specific list consisting of 35 VOCs as compared to the TCL VOC list in NYSDEC ASP 2005, which contains 51 compounds. The VOC list of compounds reported in this project is, according to the laboratory, an older NYSDEC TCL list with methyl tert-butyl ether added.
- Two of the five groundwater samples were initially analyzed at dilutions ranging from dilution factor (DF) = 5 to 10. Two samples were analyzed at secondary dilutions to report all detected results within the instrument calibration range. An evaluation of the dilutions indicated that the laboratory reported the data correctly.
- Sensitivity for all results was considered acceptable since all non-detects were reported at levels less than or equal to the NYS TOGS AWQS – Water Class GA with the exceptions of: 1,2-dichloroethane, cis-1,3-dichloropropene, and trans-1,3-dichloropropene due to method limitations; and benzene, bromomethane, 1,2-dichloropropane, methylene chloride, styrene, 1,1,2-trichloroethane, and vinyl chloride in samples MW-1N and EW-1X and acetone, 2-butanone, carbon tetrachloride, chlorobenzene, chloroethane, chloroform, chloromethane, cis-1,2-dichloroethene, trans-1,2-dichloroethene, 1,1-dichloroethene, ethylbenzene, 1,1,2,2-tetrachloroethane, tetrachloroethene, toluene, 1,1,1-trichloroethane, trichloroethene, and xylene (total) in sample EW-1X due to dilutions used for analysis of these samples. The data user will need to evaluate these non-detects at elevated levels for project uses.
- Six detected VOC results were reported at concentrations below the sample-specific reporting limits (RL). During this assessment, these results were qualified as estimated (J) with indeterminate bias due to uncertainty in quantitation at a level below the instrument calibration range. Table 2 identifies the analytes and samples that were estimated due to reporting at levels below the RL.

Volatile Data Review Checklist
FLS: AFFCO, 361 Walsh Avenue, New Windsor, NY

Project # JB15405

Lab: Accutest
Date Sampled: 8/28/12, 8/30/12, & 9/4/12
Method of Analysis: 8260B

No. Samples: 24
Matrix: Soil

Data Element Acceptable	Preservation & HT	SMCs	LCS / Blank Spike	MS/MSD	FD	Tunes ICALs CCALs	IS'	QL & Quant. Correct	Other Issues
Yes	√	√	√		NA		√		See data acceptance for multiple analyses - lab reported data correctly
No				Estimate (J or UJ) 14 results in 3 samples		Estimate (UJ) 1 compound in 20 samples		Accept 127 "J" results	

Comments:

The data package consisted of a NYDEC Category B deliverable.

Coolers of samples were received the day after sample collection as follows: 8/29/12 (9 samples with Lab ID beginning JB14890); 8/31/12 (3 samples with Lab IDs beginning with JB15155); and 9/5/12 (12 samples with Lab IDs beginning JB15405). All samples were received intact at Temperatures within 4 ± 2 °C criteria except shipment received on 8/29/12 was at 1.8°C. Since the samples were intact, no action for slightly low receipt temperature for this one cooler. After samples were analyzed, the client requested the results for all 24 samples be reported as a single report under SDG JB15405. There were no COC issues noted.

Soils were unpreserved (i.e., Method 5035A preservation of soils for VOCs not followed nor required for this site based on Work Plan, according to FLS). All soil samples were analyzed as low-level soils and six soils were re-analyzed as medium-level methanol preserved soils to report analytes within he instrument calibration range. All analyses were performed within 14 days of sample collection (by 9/6/12) - HT met. No Action required.

Surrogates: The lab used surrogate dibromofluoromethane in addition to 1,2-dichloroethane-d4, toluene-d8 and 4-bromofluorobenzene, which are in ASP2005. Since SW-846 method used for analysis allows use of alternate surrogates, no action required. All surrogates are within NYSDEC ASP2005 criteria - acceptable recoveries. No action required.

LCS (also known as Blank Spike) : The lab spiked all VOCs into LCS as compared to NYSDEC ASP 2005 requirement of a subset of compounds. LCS VA6987-BS (low-level associated with the analysis JB14890-2 & -3), VV5563-BS (low-level assoc. with analysis of JB14890-7 & -8), VE8556-BS (medium-level for 2 VOCs only assoc. with analysis of JB14890-8), VV5565-BS (low-level assoc. with JB-14890-9), VA6989-BS (low-level assoc. with analysis of JB14890-1), VD8147-BS (medium-level for 1 VOC assoc. with the analysis of JB-14890-7), VV5565-BS2 (low-level assoc. with JB14890-4, -5, & -6), VD8148-BS (medium-level assoc. with 3 VOCs for JB14890-3), VY5399-BS (low-level assoc. with analysis of JB15155-1 & -3), VY5401-BS (low-level assoc. with JB15155-1 & -2), VY5403-BS (low-level assoc. with JB15405-6, -8, -9, & -10), VX5603-BS (low-level assoc. with JB15405-3, -11, & -12), VX5604-BS (low-level assoc. with the analysis of JB15405-7), VE8565-BS (medium-level for 1 VOC assoc.. with JB15405-9), V3C4027-BS (low-level assoc. with analysis of JB15405-1, -2, -4, & -5), and VY5405-BS (low-level assoc. with 1 VOC for re-analysis of B15405-8). All %Rec were within lab criteria in LCS; therefore, lab demonstrated acceptable accuracy for analysis in the absence of the site matrix. No Action required.

Date: ***02/01/13***
Data Reviewer: ***Nancy C. Rothman, Ph.D.***

New Environmental Horizons, Inc.

Lab: Accutest

Blank Action: Blanks Reviewed: Method Blanks: VA6987-MB, VV5563- MB, VE8556-MB, VV5565-MB, VA6989-MB, VD8147-MB, VV5565-MB2, VD8148-MB1, VY5399-MB, VY5401-MB, VY5403-MB, VX5603-MB, VX5604-MB, VE8565-MB, V3C4027-MB, & VY5405-MB

No Trip Blank or Equipment Blank

Blank ID	Contaminant / Level	Related?		/ Action		Sample and Reported Result	Result
VA6987-MB	None	Y		-		No Blank Action required	
VV5563-MB	None	Y		-		No Blank Action required	
VE8556-MB	None	Y		-		No Blank Action required	
VV5565-MB	None	Y		-		No Blank Action required	
VD8147-MB	None	Y		-		No Blank Action required	
VA6989-MB	None	Y		-		No Blank Action required	
VV5565-MB2	None	Y		-		No Blank Action required	
VD8148-MB1	None	Y		-		No Blank Action required	
VY5399-MB	None	Y		-		No Blank Action required	
VY5401-MB	None	Y		-		No Blank Action required	
VY5403-MB	None	Y		-		No Blank Action required	
VX5603-MB	None	Y		-		No Blank Action required	
VX5604-MB	None	Y		-		No Blank Action required	
VE8565-MB	None	Y		-		No Blank Action required	
V3C4027-MB	None	Y		-		No Blank Action required	
VY5405-MB	None	Y		-		No Blank Action required	

Additional Notes:

MS/MSD: Several non-site related MS/MSDs performed (batch QC) which do not affect the samples reported herein; therefore, review of these MS/MSD not performed. Site-specific MS/MSD performed on PX01-SW-5 [JB14890-1], PX03-BT-10 [JB14890-3], PX07BT-10 [JB15115-1], PX08SW-7 [JB15155-2], C2SP01 [JB15405-11], PX14SW-6 [JB15405-6], PX15BT-10 [JB15405-7], PX09SW-3 [JB15405-1], and C3P01 [JB15405-9]. Lab spiked all target VOCs into MS/MSD (for medium-level MS/MusDs, only the compound reported for the unspiked sample summarized. For review, ASP2005 criteria used for 5 compounds in Table 12 and lab criteria used for remaining compounds.

MS/MSD performed on PX01-SW-5 [JB14890-1]: low-level analysis with MS and MSD % Rec and MS/MSD RPDs within criteria; therefore, no action required.

MS/MSD performed on PX03-BT-10 [JB14890-3]: medium-level analysis for 1,1-dichloroethane, 1,1-dichloroethene, and 1,1,1-trichloroethane only. MS and MSD % Rec and MS/MSD RPDs were all within criteria; therefore, no action required.

Date: ***02/01/13***
Data Reviewer: ***Nancy C. Rothman, Ph.D.***

Lab: Accutest

Additional Notes:

MS/MSD performed on PX07BT-10 [JB15115-1]: low-level analysis with MS and MSD % Rec and MS/MSD RPDs within criteria except for: chloroethane, 1,1-dichloroethane, 1,1-dichloroethene, and 1,1,1-trichloroethene % Rec were all low. For 1,1-dichloroethene, the level of the MS/MSD spike was acceptable for the matrix whereas for the other 3 compounds out in the MS, these compounds were reported as over the calibration range (flagged "E") by the lab and the spike level was > 4 times lower than the level of these compounds in the unspiked sample (i.e., spike was swamped out). Therefore, only action required is for low, but > 10%, recovery of 1,1-dichloroethene.

**ACTION: 1,1-Dichloroethene estimated (J) in sample PX07BT-10 with possible low bias due to low MS/MSD recoveries.*

MS/MSD performed on PX08SW-7 [JB15155-2]: low-level analysis with MS and MSD % Rec and MS/MSD RPDs within criteria; therefore, no action required.

MS/MSD performed on C2SP01 [JB15405-11]: low-level analysis with MS and MSD % Rec and MS/MSD RPDs within criteria however, MSD recoveries low, but in criteria, for several compounds causing high RPDs. The following MS/MSD RPDs were not acceptable: bromoform, carbon disulfide, carbon tetrachloride, chlorobenzene, trans-1,2-dichloroethene, 1,2-dichloroethene (total), trans-1,3-dichloropropene, ethylbenzene, stryrene, toluene, trichloroethene, and xylene (total).

**ACTION: Bromoform, carbon disulfide, carbon tetrachloride, chlorobenzene, trans-1,2-dichloroethene, 1,2-dichloroethene (total), trans-1,3-dichloropropene, ethylbenzene, stryrene, toluene, trichloroethene, and xylene (total) estimated (J or UJ) in sample C2SP01 with indeterminate bias due to MS/MSD imprecision.*

MS/MSD performed on PX14SW-6 [JB15405-6]: low-level analysis with MS and MSD % Rec and MS/MSD RPDs within criteria; therefore, no action required.

MS/MSD performed on PX15BT-10 [JB15405-7]: low-level analysis with MS and MSD % Rec and MS/MSD RPDs within criteria; therefore, no action required.

MS/MSD performed on PX09SW-3 [JB15405-1]: low-level analysis with MS and MSD % Rec and MS/MSD RPDs within criteria except: 1,1,1-trichloroethane recoveries very low (negative). Since spike level for MS/MSD was appropriate for this sample, low MS/MSD results suggest possible sample heterogeneity issues.

**ACTION: 1,1,1-Trichloroethane estimated (J) in sample PX09SW-3 with possible low bias due to low MS/MSD recoveries.*

MS/MSD performed on PX03-BT-10 [JB15405-9]: medium-level analysis for 1,1,1-trichloroethane only. MS and MSD % Rec and MS/MSD RPDs were unacceptable since the spike level was too low for the matrix making the MS/MSD results meaningless - No Action required.

FD pairs: there were no FD pair associated with the samples in this SDG. Therefore, precision from sample collection through analysis could not be evaluated.

Tunes: Instrument GCMS3C 8/30/12 (ICAL) & 9/6/12; GCMSA 8/20/12 (ICAL), 8/29/12, & 8/30/12; GCMSD 7/30/12 (ICAL), 8/30/12, & 2nd tune on 8/30/12; GCMSE 7/16/12 (ICAL), 8/30/12, & 9/6/12; GCMSV 6/7/12 (ICAL), 8/29/12, 8/30/12, & 2nd tune on 8/30/12; GCMSX 9/4/12 (ICAL) 9/5/12, & 2nd tune on 9/5/12; and GCMSY 4/26/12 (ICAL), 8/31/12, 9/4/12, 9/5/12, & 9/6/12. All Abundances were acceptable and all samples were analyzed within 12 hours of tune. Average of scans across peak with background correction used to generate tunes - acceptable. No action required.

Lab: Accutest

Additional Notes:

ICALs: 7 different CGC/MS systems used for analysis. GCMSD and GCMSE used for medium-level analyses while GCMS3, GCMSA, GCMSV, GCMSX, and GCMSY were used for low-level VOC analysis. 6- to 10-level ICALs from 0.5, 1, 2, 5, or 10 to 200 µg/L for many compounds in addition to those reported. Min. RRF and Maximum %RSD given in Table 10 of NYDEC ASP2005 achieved for all compounds except trichloroethene min RRF of 0.300 not achieved on instruments GCMSA, GCMSV, GCMSX, and GCMSY. Also, lab used regression analysis for compounds with %RSD > 15% - these all had r2 > 0.99 - since SW-846 allows regression analysis so this was an acceptable calibration method. All Trichloroethene data were reported from low-level analyses of the samples so all low-level data impacted by low sensitivity during ICAL except for 4 samples analyzed on GCMS3.

**ACTION: Trichloroethene estimated (J or UJ) with possible low bias, unless other QC issues affect the data, in all soil samples except PX09SW-3, PX10SW-5, PX12SW-7, and PX13SW-7 (4 low-level soils analyzed on GCMS3) due to low sensitivity in the initial calibration.*

CCAL: GCMS3 9/6/12. CCAL Min. RRF and maximum %D achieved for all compounds. Lab flagged several compounds as being outside criteria but this wasn't based on Table 10 ASP 2005 criteria. No Action required

CCALs: GCMSD 8/30/12 (2 CCALs). CCAL Min. RRF and maximum %D achieved for all compounds except %D = -25.4% and -31.2% for bromomethane in both CCALs. Bromomethane verification was outside criteria in both CCALs due to enhanced detection of this compound during CCALs as compared to sensitivity during ICAL. Since bromomethane was non-detect in all samples associated with these CCALs, no action required. Lab flagged several compounds as being outside criteria but this wasn't based on Table 10 ASP 2005 criteria. No Action required

CCALs: GCMSE 8/30/12 & 9/6/12. CCAL Min. RRF and maximum %D achieved for all compounds in both CCALs. Lab flagged several compounds as being outside criteria but this wasn't based on Table 10 ASP 2005 criteria. No Action required

CCALs: GCMSA 8/29/12 & 8/30/12. CCAL Min. RRF and maximum %D achieved for all compounds except Trichloroethene min. RRF of 0.300 not met in either CCAL. Lab flagged several compounds as being outside criteria but this wasn't based on Table 10 ASP 2005 criteria.

CCALs: GCMSV 8/29/12 & 8/30/12 (2 CCALs on this day). CCAL Min. RRF and maximum %D achieved for all compounds except Trichloroethene min. RRF of 0.300 not met in any of the 3 CCALs. Lab flagged several compounds as being outside criteria but this wasn't based on Table 10 ASP 2005 criteria.

CCALs: GCMSX 9/5/12 (2 CCALs on this day). CCAL Min. RRF and maximum %D achieved for all compounds except Trichloroethene min. RRF of 0.300 not met in both CCALs. Lab flagged several compounds as being outside criteria but this wasn't based on Table 10 ASP 2005 criteria.

CCALs: GCMSY 8/31/12, 9/4/12, 9/5/12, & 9/6/12. CCAL Min. RRF and maximum %D achieved for all compounds except Trichloroethene min. RRF of 0.300 not met in any of the 4 CCALs. Lab flagged several compounds as being outside criteria but this wasn't based on Table 10 ASP 2005 criteria.

**ACTION: Trichloroethene estimated (J or UJ) with possible low bias, unless other QC issues affect the data, in all soil samples except PX09SW-3, PX10SW-5, PX12SW-7, and PX13SW-7 (4 low-level soils analyzed on GCMS3) due to low calibration verification.*

Lab: Accutest

Additional Notes:

IS: lab used a two more IS compounds, tert-Butyl Alcohol-d9 and Pentafluorobenzene, in addition to three IS' required by NYSDEC ASP2005 (1,4-Difluorobenzene, Chlorobenzene-d5, and 1,4-Dichlorobenzene-d4) - this is acceptable based upon lab using SW-846 method for analysis. All 5 IS Areas and Retention Times were in criteria in all samples and QC - No Action required.

The list of compounds reported for VOCs is a project-specific list consisting of thirty-five VOCs as compared to the TCL VOC list in NYSDEC ASP2005, which contains fifty-one compounds. The VOC list of compounds reported in this project is, according to the laboratory, an older NYSDEC TCL list with methyl tert-butyl ether added. There are 36 results per sample reported since cis-1,2-dichloroethene, trans-1,2-dichloroethene, and 1,2-dichloroethene (total) are reported.

Six samples were analyzed as low-level soils and one or more compounds were reported above the instrument calibration range (lab flagged data "E"). For two of these, the lab analyzed a smaller weight of sample and reanalyzed the samples as low-level soils. For the other 4 samples, the laboratory analyzed the samples as medium-level methanol extracts. Data for all analyses for these six samples were reviewed and data accepted as follows: Sample C1SP01 [JB15405-8] all initial low-level results accepted for reporting except 1,1,1-trichloroethane, which was accepted from the second low-level analysis; sample PX07BT-10 [JB15155-1] all initial low-level results accepted for reporting except 1,1,1-trichloroethane, chloroethane, and 1,1-dichloroethane, which were accepted from the second low-level analysis; sample PX03-BT-10 [JB14890-3] all low-level results accepted for reporting except 1,1,1-trichloroethane, 1,1-dichloroethane, and 1,1-dichloroethene, which were accepted for reporting from the medium-level analysis; sample C5SP01 [JB14890-7] all low-level results accepted for reporting except 1,1,1-trichloroethane, which was accepted for reporting from the medium-level analysis; sample C5SP02 [JB14890-8] all low-level results accepted for reporting except 1,1,1-trichloroethane and 1,1-dichloroethene, which were accepted for reporting from the medium-level analysis; and sample C3SP01 [JB15405-9] all low-level results accepted for reporting except 1,1,1-trichloroethane, which was accepted for reporting from the medium-level analysis. The laboratory reported the data properly based on this review.

The lab reported 127 results at a level < RL and qualified the data as "J". The 127 "J" results were accepted with indeterminate bias due to uncertainty in quantitation below the instrument calibration range.

All non-detects for VOCs were reported at levels less the Unrestricted Use Soil Cleanup Objective and/or Supplemental Soil Cleanup Objectives; therefore, sensitivity was acceptable for these data.

Calculation check:C5SP01 [JB14890-7] medium-level analysis

10g of 80.9% solid sample dissolved in 10 mL Methanol and 100 µL of extract was purged in 5 mL water

Sample moisture contribution to extract = 10g (1-0.809) = 1.91 "mL" of added moisture. Total extract volume = 10 + 1.91 = 11.91 mL or 11,910 µL

Sample Response = 104163; IS Response = 193724 @ 50; RRF ICAL = 0.767 (GCMSD)

$$\text{1,1,1-Trichloroethane Conc.} = \frac{104163 \times 11910 \times 5 \times 50}{193724 \times 10 \times 0.809 \times 100 \times 0.767} = 2580\ \mu g/Kg \quad \surd$$

Date: ***02/01/13***
Data Reviewer: ***Nancy C. Rothman, Ph.D.***

Lab: Accutest

Additional Notes:

All %Solids were > 75% - No action required

The sample chromatograms, mass spectra of detects and quantitation reports were scanned and data appeared to have been reported correctly. The laboratory did not report Tentatively Identified Compounds (TICs) as these were not requested.

The narrative did not mention any issues that were not already addressed in this review.

Lab reported results with too many significant figures. Values < 10 should be reported to 1 sig. fig, and values > 10 to 2 sig.fig. but lab reported values < 10 to 2 sig.fig and > 10 with 3 sig.fig. Since EDD and hardcopy match in how data were reported, no action except to note issue.

Date: ***02/01/13***
Data Reviewer: ***Nancy C. Rothman, Ph.D.***

Lab: Accutest

Method of Analysis: 8260B

SW-846 Method 8260B and NYSDEC ASP2005

Preservation: Temperature upon receipt 4°±°2C; use judgment if outside criteria

HT: waters- pH >2 or no HCl: 7d<HT; J det/R NDs
pH < 2, 14d <HT; J det/R NDs
low- or medium-level solid - 14d <HT< 28 d, J det/J NDs; HT > 28 days, J det/R NDs
unfrozen solid - 48 hrs < HT < 96 hrs, J det/J NDs; HT > 96hrs, J det/R NDs

SMCs: Criteria per Table 11A of NYSDEC ASP2005 Exhibit E or lab limits as long as results within ± 10% of ASP limits
%Rec<10%, J det/ R NDs; 10% <%Rec<LCL, J det/ J NDs; %Rec >UCL, J det/Accept NDs.

LCS: Lab limits accepted since LCS not required for NYSDEC ASP2005
%Rec<10%, J det/ R NDs; 10% <%Rec<LCL, J det/ J NDs; %Rec >UCL, J det/Accept NDs

Tunes: Samples analyzed within 12-hrs and criteria met per Table 7, NYSDEC ASP2005. If out, use professional judgment.

ICAL: 5-Level ; min. RRF and %RSD per Table 10 (NYSDEC ASP2005).

CCAL: min. RRF and %D per Table 10 (NYSDEC ASP2005)

Blanks: Surrogates outside criteria - Use Judgment if isolated or analysis related
Non-Matrix related Blank contamination, TB or EB contaminant in all samples associated with Blank
If contamination in blank(s) exist, if Result < RL, U result at RL; Result<Blank Action, U result at level reported

MS/MSD: Table 12 of Exhibit E, NYSDEC ASP2005 or lab limits as long as results within ± 10% of ASP limits
%Rec<10%, J det/ R NDs; 10% <%Rec<LCL, J det/ J NDs; %Rec >UCL, J det/Accept NDs- Unspiked Sample only. RPD > Control limit, J det / J ND; %RSD of non-spiked > 50%, J det

FD: Both Conc. > 2xQL, RPD >30% (water) 50% (soil), J det; One result ND, other >2 x QL, J det/J NDs; Both Conc. < 2xQL; RPD >criteria, LCS OK, Accept data

IS: 25% ≤ Area < 50% of IS in CCAL , J det/ J NDs; Area < 25% of CCAL, J det / R NDs; Area > 150% IS in CCAL, J det / Accept NDs

QLs: If result > upper calibration range, J result, if result < lowest calibration standard, J result. Verify all J data reported properly, if applicable. Verify QLs are sample specific and that all compounds requested were reported.

Sensitivity: Identify any non-detects which exceed TOGS 1.1.1 (TOGS GA AWQS) criteria for waters or Unrestricted Use Soil Cleanup Objectives from 6 NYCRR Part 375, Table 375-6.8(a) (December 14, 2006) and/or Supplemental Soil Cleanup Objectives (SSCO) from CP-51 Soil Cleanup Guidance, Table 1 (October 21, 2010) for soil samples

Date: ***02/01/13***
Data Reviewer: ***Nancy C. Rothman, Ph.D.***

New Environmental Horizons, Inc.

Volatile Data Review Checklist
FLS: AFFCO, 361 Walsh Avenue, New Windsor, NY

Project # JB32749

Lab: Accutest
Date Sampled: 3/27/13
Method of Analysis: 8260B

No. Samples: 24 + 2FD + 2FB + 1TB
Matrix: Soil

Data Element Acceptable	Preservation & HT	SMCs	LCS / Blank Spike	MS/MSD	FD/MD	Tunes ICALs CCALs	IS'	QL & Quant. Correct	Other Issues
Yes		√	√	√			√		
No	All samples estimated (J or UJ) due to high receipt Temperature				Estimate (J) 4 results in sample 4 (11-11.5)	Estimate (J / UJ) 1 compound in 21 samples; 1 compound in 1 sample		Accept 133 "J" results	See data acceptance for multiple analyses - lab reported data correctly

Comments:

The data package consisted of a NYDEC Category B deliverable.

Cooler of samples was received two days after sample collection on 3/29/13 and the receipt temperature was 12.1°C, above 4±2°C criteria. In addition, several samples could not be preserved within 48 hours from collection since the samples were received so late from the field. The laboratory preserved the samples as soon as possible. There were no COC issues noted.

ACTION: All soil data estimated (J or UJ) with possible low bias, unless other QC issues affect the data, due to high temperature upon receipt (sample preservation issue).

Soils were collected in Encore sample devices and extruded into vials and preserved ~ 1:1 with methanol or water (e.g., approximately 5 g of soil was preserved with either 5 mL methanol to create the medium-level VOC or ~ 5mL water to create the low-level VOC). Soils were analyzed as follows: samples 1.1 (12.5-13), 1.2 (14-14.5), 2.1 (12.5-13), 2.2 (12.5-13), 2.2 (11-11.5), 3 (13.5-14), 3 (14.5-15), and 3 (12.5-13) were analyzed using only the medium-level soil aliquot; samples 1.1 (13-13.5), 1.2 (13-13.5), 1.2 (11-11.5), 2.1 (11.5-12), 2.1 (10-10.5), 2.2 (14-14.5), 4 (11-11.5), 4 (14.5-15), 5 (13.5-14), 5 (14-14.5), and 5 (14.5-15) were analyzed as low-level soils and re-analysis for over-range compounds using medium-level soil aliquot; and samples 1.1 (14.5-15), 4 (10-10.5), 6 (11.5-12), 6 (12.5-13), 6 (14.5-15), FD-1 6 (11.5-12), and FD-2 6 (14.5-15) were analyzed using only the low-level soil aliquot. All analyses were performed within 14 days of sample collection (by 4/10/13) - HT met. No Action required.

Surrogates : The lab used surrogate dibromofluoromethane in addition to 1,2-dichloroethane-d4, toluene-d8 and 4-bromofluorobenzene, which are in ASP2005. Since SW-846 method used for analysis allows use of alternate surrogates, no action required. All surrogates are within NYSDEC ASP2005 criteria except 4-BFB recovery high in JB32749-27MS. Since the other 3 surrogates were within criteria in the MS, the high recovery should not affect the sample data - no action required.

Date: ***05/15/13***
Data Reviewer: ***Nancy C. Rothman, Ph.D.***

Volatile Data Review Checklist
FLS: AFFCO, 361 Walsh Avenue, New Windsor, NY

Project # JB32749

Lab: Accutest

Blank Action:

Blanks Reviewed: Method Blanks: VE8870-MB, VC6486-MB, VE8871-MB, VC6488-MB, VE8875-MB, VE8876-MB, VC6492-MB, V2C4870-MB, VE8878-MB, & VC6488-MB2

TB: TRIP BLANK; FBs: FIELD BLANK 1 & FIELD BLANK 2

Blank ID	Contaminant / Level	Matrix Related?	Action Level / Action	Sample and Reported Result	Corrected Result
VE8870-MB	None	Y	-	No Blank Action required	
VC6486-MB	None	Y	-	No Blank Action required	
VE8871-MB	None	Y	-	No Blank Action required	
VC6488-MB	None	Y	-	No Blank Action required	
VE8875-MB	None	Y	-	No Blank Action required	
VE8876-MB	None	Y	-	No Blank Action required	
VC6492-MB	None	Y	-	No Blank Action required	
V2C4870-MB	None	Y	-	No Blank Action required	
VE8878-MB	None	Y	-	No Blank Action required	
VC6488-MB2	None	Y	-	No Blank Action required	
TRIP BLANK	Bromoform 0.71 J µg/L	N	-	All samples ND - no Action required	
	Dibromochloromethane 0.35 J µg/L	N		All samples ND - no Action required	
FIELD BLANK 1	None	N	-	No Blank Action required	
FIELD BLANK 2	None	N	-	No Blank Action required	

Additional Notes:

LCS (also known as Blank Spike) : The lab spiked all VOCs into LCS as compared to NYSDEC ASP 2005 requirement of a subset of compounds. LCS VE8870-BS (medium-level associated with the analysis JB32749-10 & -13), VC6486-BS (low-level assoc. with analysis of JB32749-5, -6, -7, -8, & -11), VE8871-BS (medium-level assoc. with analysis of JB32749-4, -16, & -18), VC6488-BS (low-level assoc. with JB32749-12, -15, -19 through -24, -26, -27, & -28), VE8875-BS (medium-level assoc. with analysis of JB32749-4, -9, -10, -13, & -14), VE8876-BS (medium-level for 3 VOCs assoc. with the analysis of JB32749-5, -7, -8, -11, -12, -15, -21, -22, -23, & -24), VC6492-BS (low-level assoc. with JB32749-25 & -29), V2C4870-BS (low-level assoc. with JB32749-1, -2, & -3); and VE8878-BS (medium-level associated with JB32749-17 & -19). All %Rec were within lab criteria in LCS except 1,1,2,2-tetrachloroethane recovery high in VC6492-BS; however, since neither JB32749-25 or -29 reported this compound detected, no action required. Lab demonstrated acceptable accuracy for analysis in the absence of the sample matrix.

Date: ***05/15/13***
Data Reviewer: ***Nancy C. Rothman, Ph.D.***

Lab: Accutest

Additional Notes:

MS/MSD and MD : Several non-site related MS/MSDs performed (batch QC) which do not affect the samples reported herein; therefore, review of these MS/MSD not performed. Site-specific MS/MSD performed on sample 4 (14.5-15) [JB32749-21] and sample 6 (14.5-15) [JB32749-27]. In addition, Sample/MD analysis performed on sample 4 (11-11.5) [JB32749-19]. For review, ASP2005 criteria used for 5 compounds in Table 12 and lab criteria used for remaining compounds.

MS performed on sample 6 (14.5-15) [JB32749-27] - no MSD: low-level analysis with MS %Rec all OK except 1,1,2,2-tetrachloroethane recovery high. Since the unspiked sample was non-detect for this compound, no action required. MSD not possible since insufficient aliquots of sample collected to allow low-level analysis of sample, MS and MSD.

MS/MSD performed on 6 (14.5-15) [JB32749-27]: medium-level analysis for chloroethane, 1,1-dichloroethane, and 1,1,1-trichloroethane only. MS and MSD % Rec and MS/MSD RPDs were all within criteria; therefore, no action required.

MD analysis performed on 4 (11-11.5) [JB32749-19]: low-level analysis comparison. RPDs all < lab limits except for 1,1-dichloroethane, 1,2-dichloroethane, 1,1-dichloroethene, and 1,1,1-trichloroethane. Several other compounds reported RPDs > lab criteria; however, for these compounds, levels reported in samples were < 2 x RL (e.g., "J" qualified data).

****ACTION: 1,1-dichloroethane, 1,2-dichloroethane, 1,1-dichloroethene, and 1,1,1-trichloroethane estimated (J) in sample 4 (11-11.5) with indeterminate bias due to MD imprecision.***

FD pairs : 6 (11.5-12) & FD-1 6 (11.5-12) and 6 (14.5-15) & FD-2 6 (14.5-15). A comparison of detected results shown below.

Field Duplicate Evaluation_ Sample IDs: Sample = 6 (11.5-12) FD = FD-1 6 (11.5-12)

Analyte Name	DF=1 RL (µg/Kg)	Sample µg/Kg	Q	Sample Result Level	FD µg/Kg	Q	FD Result Level	RPD	Action
1,1,1-Trichloroethane	5.4	3.6	J	< RL	2.9	J	< RL	21.5	None
Methylene chloride	5.4	3.2	J	< RL	2.9	J	< RL	9.8	None
Trichloroethene	5.4	0.89	J	< RL	6.5	U	RL	NA	None

FD precision acceptable for all detected VOCs in 6 (11.5-12) & FD-1 6 (11.5-12) - No Action required.

Date: ***05/15/13***
Data Reviewer: ***Nancy C. Rothman, Ph.D.***

Lab: Accutest

Additional Notes:

Field Duplicate Evaluation_ Sample IDs: Sample = 6 (14.5-15) FD = FD-2 6 (14.5-15)

Analyte Name	DF=1 RL (µg/Kg)	Sample µg/Kg	Q	Sample Result Level	FD µg/Kg	Q	FD Result Level	RPD	Action
1,1,1-Trichloroethane	5.9	0.93	J	< RL	3.6		< 2 x RL	117.9	None *
1,1-Dichloroethane	5.9	3.5	J	< RL	0.71	J	< RL	132.5	None *

* No Action taken even though RPD > 50% since neither result was > 2 x RL

FD precision acceptable for all detected VOCs in 6 (14.5-15) & FD-1 6 (14.5-15) - No Action required.

Tunes: Instrument GCMS2C 3/18/13 (ICAL) & 4/9/13; Instrument GCMSC 3/26/13 (ICAL), 4/5/13, 4/7/13, 4/8/13 & 4/9/13; Instrument GCMSE 2/22/13 (ICAL), 4/5/13, 4/5/13 (2nd tune), 4/8/13, 4/9/13, & 4/10/13. All Abundances were acceptable and all samples were analyzed within 12 hours of tune. Average of scans across peak with/without background correction used to generate tunes - acceptable. No action required.

ICAL: GCMS2C 3/18/13, GCMSC 3/26/13, and GCMSE 2/22/13. Lab analyzed 5- to 9-level ICALs from 0.5, 1 , 2, or 5 to 200 µg/L for many compounds in addition to those reported. Min. RRF and Maximum %RSD given in Table 10 of NYDEC ASP2005 achieved for all compounds in all 3 ICALs except Trichloroethene RRF low (0.286 and 0.265 as compared to criteria of ≥ 0.300) on Instrument GCMS2C and GCMSC (RRF OK on GCMSE). Also, lab used regression analysis for compounds with %RSD > 15% - these all had r2 > 0.99 - since SW-846 allows regression analysis so this was an acceptable calibration method. Valid ICALs generally, only action for low sensitivity for trichloroethene in 2 ICALs.

****ACTION: Trichloroethene estimated (J or UJ) in samples TRIP BLANK, FIELD BLANK 1, FIELD BLANK 2, 1.1 (13-13.5, 1.1 (14.5-15), 1.2 (11-11.5), 1.2 (13-13.5), 2.1 (10-10.5), 2.1 (11.5-12), 2.2 (14-14.5), 4 (10-10.5), 4 (11-11.5), 4 (14.5-15), 5 (13.5-14), 5 (14-14.5), 5 (14.5-15), 6 (11.5-12), 6 (12.5-13), 6 (14.5-15), FD-1 6 (11.5-12), and FD-2 6 (14.5-15) with possible low bias, unless other issues affect the data, due to low sensitivity during initial calibration.***

CCALs: GCMS2C 4/9/13. CCAL Min. RRF and maximum %D achieved for all compounds except min. RRF not met for trichloroethene (0.255 compared to 0.0300 criteria). Lab flagged several compounds as being outside criteria but this wasn't based on Table 10 ASP 2005 criteria.

CCALs: GCMSC 4/5/13, 4/7/13, 4/8/13 & 4/9/13. CCAL Min. RRF and maximum %D achieved for all compounds in all Coals except min. RRF not met for trichloroethene. Lab flagged several compounds as being outside criteria but this wasn't based on Table 10 ASP 2005 criteria.

****ACTION: Trichloroethene estimated (J or UJ) in samples TRIP BLANK, FIELD BLANK 1, FIELD BLANK 2, 1.1 (13-13.5, 1.1 (14.5-15), 1.2 (11-11.5), 1.2 (13-13.5), 2.1 (10-10.5), 2.1 (11.5-12), 2.2 (14-14.5), 4 (10-10.5), 4 (11-11.5), 4 (14.5-15), 5 (13.5-14), 5 (14-14.5), 5 (14.5-15), 6 (11.5-12), 6 (12.5-13), 6 (14.5-15), FD-1 6 (11.5-12), and FD-2 6 (14.5-15) with possible low bias, unless other issues affect the data, due to low calibration verification (same samples as for ICAL Action).***

CCALs: GCMSE 4/5/13, 4/5/13 (2nd CCAL), 4/8/13, 4/9/13, & 4/10/13. min. RRF and maximum %D achieved for all compounds except Acetone %D = 49.6% in 4/10/13 CCAL due loss of sensitivity on 4/10/13 as compared to ICAL sensitivity for acetone detection. Only sample 3 (14.5-15) had acetone reported following this CCAL. Lab flagged several compounds as being outside criteria but this wasn't based on Table 10 ASP 2005 criteria.

****ACTION: Acetone estimated (UJ) with possible low bias in sample 3 (14.5-15) due to low calibration verification.***

Date: *05/15/13*
Data Reviewer: ***Nancy C. Rothman, Ph.D.***

Lab: Accutest

Additional Notes:

IS: lab used a two more IS compounds, tert-Butyl Alcohol-d9 and Pentafluorobenzene, in addition to three IS' required by NYSDEC ASP2005 (1,4-Difluorobenzene, Chlorobenzene-d5, and 1,4-Dichlorobenzene-d4) - this is acceptable based upon lab using SW-846 method for analysis. All 5 IS Areas and Retention Times were in criteria in all samples and QC - No Action required.

The list of compounds reported for VOCs is a project-specific list consisting of thirty-five VOCs as compared to the TCL VOC list in NYSDEC ASP2005, which contains fifty-one compounds. The VOC list of compounds reported in this project is, according to the laboratory, an older NYSDEC TCL list with methyl tert-butyl ether added. There are 36 results per sample reported since cis-1,2-dichloroethene, trans-1,2-dichloroethene, and 1,2-dichloroethene (total) are reported.

Eleven samples (1.1 (13-13.5), 1.2 (13-13.5), 1.2 (11-11.5), 2.1 (11.5-12), 2.1 (10-10.5), 2.2 (14-14.5), 4 (11-11.5), 4 (14.5-15), 5 (13.5-14), 5 (14-14.5), and 5 (14.5-15)) were analyzed as low-level soils and one or more compounds were reported above the instrument calibration range (lab flagged data "E"). For these samples, the laboratory analyzed the samples using the medium-level methanol extracts. Samples 1.1 (12.5-13), 2.1 (12.5-13), and 2.2 (12.5-13) were analyzed as medium-level aliquots and required reanalysis with a secondary aliquot of methanol for dilution purposes. Data for all analyses for these fourteen samples were reviewed and the data as reported were acceptable. The laboratory reported the data properly based on this review.

The lab reported 133 results at a level < RL and qualified the data as "J". The 133 "J" results were accepted with indeterminate bias due to uncertainty in quantitation below the instrument calibration range.

All non-detects for VOCs were reported at levels less the Unrestricted Use Soil Cleanup Objective and/or Supplemental Soil Cleanup Objectives except for acetone, benzene, 2-butanone, carbon disulfide, carbon tetrachloride, chloroethane, chloroform, cis-1,2-dichloroethene, trans-1,2-dichloroethene, ethylbenzene, MTBE, methylene chloride, 1,1,2,2-tetrachloroethane, tetrachloroethene, vinyl chloride and xylenes in 2.2 (11-11.5); acetone, benzene, cis-1,2-dichloroethene, cis-1,3-dichloropropene, methylene chloride, trans-1,3-dichloropropene, and vinyl chloride in samples 1.1 (12.5-13), 1.2 (14-14.5), 2.1 (12.5-13), 2.2 (12.5-13), 3 (12.5-13), 3 (13.5-14), and 3 (14.5-15); 1,2-dichloroethane in sample 3 (13.5-14); 2-butanone in sample 1.1 (12.5-13), 1.2 (14-14.5), 2.2 (12.5-13), 3 (12.5 -13), and 3 (13.5-114); carbon tetrachloride in sample 1.2 (14-14.5); chloroform in samples 1.1 (12.5-13), 1.2 (14-14.5), 2.1 (12.5-13), 2.2 (12.5-13), 3 (12.5-13), and 3 (13.5-14); and 1,1,2-trichloroethane in samples 1.2 (14-14.5), 3 (12.5-13), and 3 (13.5-14) due to reporting of these compounds from the medium-level preserved sample aliquot. The data user will need to evaluate these non-detects at elevated levels for project uses.

Calculation check: 2.2 (11-11.5) [JB32749-14] medium-level analysis

3g of 82.6% solid sample dissolved in 5 mL Methanol and 5 µL of extract was purged in 5 mL water

Sample moisture contribution to extract = 3g (1-0.826) = 0.522 "mL" of added moisture. Total extract volume = 5 + 0.522 = 5.522 mL or 5,522 µL

Sample Response = 505908; IS Response = 189298@ 50; RRF ICAL = 0.749 (GCMSE)

$$\text{1,1,1-Trichloroethane Conc.} = \frac{505908 \times 5522 \times 5 \times 50}{189298 \times 3 \times 0.826 \times 5 \times 0.749} = 397566 = 398{,}000\ \mu g/Kg \quad \surd$$

Date: *05/15/13*
Data Reviewer: ***Nancy C. Rothman, Ph.D.***

Lab: Accutest

Additional Notes:

All %Solids were > 75% - No action required

The sample chromatograms, mass spectra of detects and quantitation reports were scanned and data appeared to have been reported correctly. The laboratory did not report Tentatively Identified Compounds (TICs) as these were not requested.

The narrative did not mention any issues that were not already addressed in this review.

Lab reported results with too many significant figures. Values < 10 should be reported to 1 sig. fig, and values > 10 to 2 sig.fig. but lab reported values < 10 to 2 sig.fig and > 10 with 3 sig.fig. Since EDD and hardcopy match in how data were reported, no action except to note issue.

Date: ***05/15/13***
Data Reviewer: ***Nancy C. Rothman, Ph.D.***

Lab: Accutest

Method of Analysis: 8260B

SW-846 Method 8260B and NYSDEC ASP2005

Preservation: Temperature upon receipt 4°±°2C; use judgment if outside criteria

HT: waters- pH >2 or no HCl: 7d<HT; J det/R NDs
pH < 2, 14d <HT; J det/R NDs
low- or medium-level solid - 14d <HT< 28 d, J det/J NDs; HT > 28 days, J det/R NDs
unfrozen solid - 48 hrs < HT < 96 hrs, J det/J NDs; HT > 96hrs, J det/R NDs

SMCs: Criteria per Table 11A of NYSDEC ASP2005 Exhibit E or lab limits as long as results within ± 10% of ASP limits
%Rec<10%, J det/ R NDs; 10% <%Rec<LCL, J det/ J NDs; %Rec >UCL, J det/Accept NDs.

LCS: Lab limits accepted since LCS not required for NYSDEC ASP2005

%Rec<10%, J det/ R NDs; 10% <%Rec<LCL, J det/ J NDs; %Rec >UCL, J det/Accept NDs

Tunes: Samples analyzed within 12-hrs and criteria met per Table 7, NYSDEC ASP2005. If out, use professional judgment.

ICAL: 5-Level ; min. RRF and %RSD per Table 10 (NYSDEC ASP2005).

CCAL: min. RRF and %D per Table 10 (NYSDEC ASP2005)

Blanks: Surrogates outside criteria - Use Judgment if isolated or analysis related
Non-Matrix related Blank contamination, TB or EB contaminant in all samples associated with Blank
If contamination in blank(s) exist, if Result < RL, U result at RL; Result<Blank Action, U result at level reported

MS/MSD: Table 12 of Exhibit E, NYSDEC ASP2005 or lab limits as long as results within ± 10% of ASP limits
%Rec<10%, J det/ R NDs; 10% <%Rec<LCL, J det/ J NDs; %Rec >UCL, J det/Accept NDs- Unspiked Sample only. RPD > Control limit, J det / J ND; %RSD of non-spiked > 50%, J det

FD: Both Conc. > 2xQL, RPD >30% (water) 50% (soil), J det; One result ND, other >2 x QL, J det/J NDs; Both Conc. < 2xQL; RPD >criteria, LCS OK, Accept data

IS: 25% ≤ Area < 50% of IS in CCAL , J det/ J NDs; Area < 25% of CCAL, J det / R NDs; Area > 150% IS in CCAL, J det / Accept NDs

QLs: If result > upper calibration range, J result, if result < lowest calibration standard, J result. Verify all J data reported properly, if applicable.
Verify QLs are sample specific and that all compounds requested were reported.

Sensitivity: Identify any non-detects which exceed TOGS 1.1.1 (TOGS GA AWQS) criteria for waters or Unrestricted Use Soil Cleanup Objectives from 6 NYCRR Part 375, Table 375-6.8(a) (December 14, 2006) and/or Supplemental Soil Cleanup Objectives (SSCO) from CP-51 Soil Cleanup Guidance, Table 1 (October 21, 2010) for soil samples

Date: ***05/15/13***
Data Reviewer: ***Nancy C. Rothman, Ph.D.***

Volatile Data Review Checklist
FLS: AFFCO, 361 Walsh Avenue, New Windsor, NY

Project # JB34670

Lab: Accutest
Date Sampled: 4/17/13
Method of Analysis: 8260B

No. Samples: 5 + 1FB + 1TB
Matrix: Groundwater

Data Element Acceptable	Preservation & HT	SMCs	LCS / Blank Spike	MS/MSD	FD	Tunes ICALs CCALs	IS'	QL & Quant. Correct	Other Issues
Yes	√	√	√	NA	NA	√	√		
No								Accept 6 "J" results	None

Comments:

The data package consisted of a NYDEC Category B deliverable.

Cooler of samples was received on 4/18/13 . All samples were received intact within 4 ± 2 °C criteria. Samples were not preserved with acid, as indicated on the COC and samples had pH =6 . There were no COC issues noted.

All samples had pH > 2 and were analyzed within 7 days of sample collection (by 4/24/13) except sample EW-1X, which was reported from an analysis performed on 4/29/13 (outside HT by 5 days). This sample was originally analyzed within HT; however, there was an apparent QC issue with this analysis so it was not reported. The results from the analysis within HT confirm the results presented from the 4/29/13 analysis of this sample; therefore, a decision was made based on professional judgment to accept the results for EW-1X from 4/29/13 without taking any action for HT exceedance.

Surrogates: The lab used surrogate dibromofluoromethane in addition to 1,2-dichloroethane-d4, toluene-d8 and 4-bromofluorobenzene, which are in ASP2005. Since SW-846 method used for analysis allows use of alternate surrogates, no action required. All surrogates are within lab criteria and within ± 10% of NYSDEC ASP2005 criteria - acceptable recoveries. No action required.

LCS (also known as Blank Spike): The lab spiked all VOCs into LCS as compared to NYSDEC ASP 2005 requirement of a subset of compounds. LCS V2A5720-BS associated with analysis of JB34670-2 & -3; V1A5469-BS assoc. with the analysis of samples JB34670-3 through-7; and V1A5479-BS associated with the analysis of JB34670-1. All %Rec were within criteria in LCS; therefore, lab demonstrated acceptable accuracy for analysis in the absence of the site matrix. No Action required.

MS/MSD: Batch QC on a sample not related to the site performed for all three of the MS/MSDs; therefore, since the results of these MS/MSDs will not affect the site samples reported in this SDG, no further review of these QC performed. Field did not provide extra quantity of sample for performing MS/MSD analysis on site-specific samples. No action required.

Date: ***6/4/13***
Data Reviewer: ***Nancy C. Rothman, Ph.D.***

Volatile Data Review Checklist
FLS: AFFCO, 361 Walsh Avenue, New Windsor, NY

Project # JB34670

Lab: Accutest

Blank Action: Blanks Reviewed: Method Blanks: V2A5720-MB, V1A5469-MB, V1A5479-MB

TB: Trip Blank ; FB = FB041713

Blank ID	Contaminant / Level	Related?		/ Action		Sample and Reported Result	Result
V2A5720-MB	None	Y		-		No Blank Action required	
V1A5469-MB	None	Y		-		No Blank Action required	
V1A5479-MB	None	Y		-		No Blank Action required	
Trip Blank	None	Y		-		No Blank Action required	
FB041713	None	Y		-		No Blank Action required	

Additional Notes:

FD pair : There were no field duplicate samples associated with the samples reported in this SDG. Therefore, precision from collection through analysis could not be assessed for these samples.

Tunes: Instrument GCMS1A 4/17/13 (ICAL), 4/23/13, & 4/29/13 and Instrument GCMS2A 4/9/13 (ICAL) & 4/22/13. All Abundances were acceptable and all samples were analyzed within 12 hours of tune. Average of scans across peak with background correction used to generate tunes - acceptable. No action required.

ICAL: GCMS1A & GCMS2A analyzed 5- to 9-level ICALs from 0.5, 1, 2, or 5 to 200 µg/L for many compounds in addition to those reported. Min. RRF and Maximum %RSD given in Table 10 of NYDEC ASP2005 achieved for all compounds. Lab used regression analysis for compounds with %RSD > 15% - these all had r2 > 0.99 - since SW-846 allows regression analysis so this was an acceptable calibration method. No Action required.

CCALs: Inst. GCMS1A 4/23/13 & 4/29/13 & Inst. GCMS2A 4/22/13. CCAL Min. RRF and maximum %D achieved for all compounds in all CCALs for compounds reported in samples except bromomethane %D=-30.8% in 4/29/13 CCAL due to increase in sensitivity of instrument to this compound on day of CCAL as compared to sensitivity during ICAL. Since the associated sample was non-detect for bromomethane, no action required. Lab also flagged several compounds as being outside criteria but this wasn't based on Table 10 ASP 2005 criteria and the flagged compounds were not targets for these samples. No Action required.

IS: lab used a two more IS compounds, tert-Butyl Alcohol-d9 and Pentafluorobenzene, in addition to three IS' required by NYSDEC ASP2005 (1,4-Difluorobenzene, Chlorobenzene-d5, and 1,4-Dichlorobenzene-d4) - this is acceptable based upon lab using SW-846 method for analysis. All 5 IS Areas and Retention Times were in criteria in all samples and QC - No Action required.

Lab reported results for 35 VOCs (thirty-six results reported since 1,2-dichloroethene (total) was reported in addition to the cis- and trans- isomers of 1,2-dichloroethene). The list of compounds reported for VOCs is a project-specific list consisting of thirty-five VOCs as compared to the TCL VOC list in NYSDEC ASP 2005, which contains fifty-one compounds. The VOC list of compounds reported in this project is, according to the laboratory, an older NYSDEC TCL list with methyl tert-butyl ether added.

Date: ***6/4/13***
Data Reviewer: ***Nancy C. Rothman, Ph.D.***

Lab: Accutest

Additional Notes:

The lab reported 6 results at a level < RL and qualified the data as "J". The 6 "J" results were accepted with indeterminate bias due to uncertainty in quantitation below the instrument calibration range.

All samples were initially analyzed at DF=1 except EW-1X, which was analyzed at DF=10 and MW-1N, which was analyzed at DF=5. Samples EW-0 and MN-1N were also analyzed at a secondary dilution since some analytes in the original analysis were reported over the instrument calibration range. A review of the sample quantitation reports and chromatograms indicate the choices of dilution made for analysis were appropriate. The sample chromatograms, mass spectra of detects and quantitation reports were scanned and data appeared to have been reported correctly. The laboratory did not report Tentatively Identified Compounds (TICs) as these were not requested; however, there appear to be TICs in some of the samples.

All non-detects for VOCs were reported at levels less than or equal to the NYS Ambient Water Quality Standards and Guidance Values – Water Class "GA" (TOGS AWQS – Water Class GA) included in the Division of Water Technical and Operational Guidance Series (TOGS 1.1.1), Ambient Water Quality Standards And Guidance Values and Groundwater Effluent Limitations (June 1998 with 2000 and 2004 Addenda) with the exceptions of: 1,2-dichloroethane, cis-1,3-dichloropropene, and trans-1,3-dichloropropene due to method limitations; benzene, bromomethane, 1,2-dichloropropane, methylene chloride, styrene, 1,1,2-trichloroethane, and vinyl chloride in samples MW-1N and EW-1X; and acetone, 2-butanone, carbon tetrachloride, chlorobenzene, chloroethane, chloroform, chloromethane, cis-1,2-dichloroethene, trans-1,2-dichloroethene, 1,1-dichloroethene, ethylbenzene, 1,1,2,2-tetrachloroethane, tetrachloroethene, toluene, 1,1,1-trichloroethane, trichloroethene, and xylene (total) in sample EW-1X due to dilutions used for sample analyses. The data user will need to evaluate non-detects at elevated levels for project decisions.

Calculation check: EW-0 [JB4670-3]

5 mL purged; DF = 50

Sample Response = 409935; IS Response = 161959 @ 50; RRF ICAL = 0.734 (GCMS1A)

$$\text{1,1,1-Trichloroethane Conc.} = \frac{409935 \times 50 \times 50}{161959 \times 0.734} = 8{,}620\ \mu g/L$$

Lab reported 8,630 µg/L for this compound which might be due to difference in using rounded values for RRFs, etc. Since difference between calculated and reported value was < 0.2%, no action required. To 2 significant figures, as these data should have been reported, 8620 and 8630 are both 8600 - they are the same.

The narrative did not mention any issues that were not already addressed in this review.

Lab reported results with too many significant figures. Values < 10 should be reported to 1 sig. fig, and values > 10 to 2 sig.fig. but lab reported values < 10 to 2 sig.fig and > 10 with 3 sig.fig. Since EDD and hardcopy match in how data were reported, no action except to note issue.

Date: ***6/4/13***

Data Reviewer: ***Nancy C. Rothman, Ph.D.***

Lab: Accutest

Method of Analysis: 8260B

SW-846 Method 8260B and NYSDEC ASP2005

Preservation: Temperature upon receipt 4°±°2C; use judgment if outside criteria

HT: waters- pH >2 or no HCl: 7d<HT; J det/R NDs
pH < 2, 14d <HT; J det/R NDs
low- or medium-level solid - 14d <HT< 28 d, J det/J NDs; HT > 28 days, J det/R NDs
unfrozen solid - 48 hrs < HT < 96 hrs, J det/J NDs; HT > 96hrs, J det/R NDs

SMCs: Criteria per Table 11A of NYSDEC ASP2005 Exhibit E or lab limits as long as results within ± 10% of ASP limits
%Rec<10%, J det/ R NDs; 10% <%Rec<LCL, J det/ J NDs; %Rec >UCL, J det/Accept NDs.

LCS: Lab limits accepted since LCS not required for NYSDEC ASP2005

%Rec<10%, J det/ R NDs; 10% <%Rec<LCL, J det/ J NDs; %Rec >UCL, J det/Accept NDs

Tunes: Samples analyzed within 12-hrs and criteria met per Table 7, NYSDEC ASP2005. If out, use professional judgment.

ICAL: 5-Level ; min. RRF and %RSD per Table 10 (NYSDEC ASP2005).

CCAL: min. RRF and %D per Table 10 (NYSDEC ASP2005)

Blanks: Surrogates outside criteria - Use Judgment if isolated or analysis related
Non-Matrix related Blank contamination, TB or EB contaminant in all samples associated with Blank
If contamination in blank(s) exist, if Result < RL, U result at RL; Result<Blank Action, U result at level reported

MS/MSD: Table 12 of Exhibit E, NYSDEC ASP2005 or lab limits as long as results within ± 10% of ASP limits
%Rec<10%, J det/ R NDs; 10% <%Rec<LCL, J det/ J NDs; %Rec >UCL, J det/Accept NDs- Unspiked Sample only. RPD > Control limit, J det / J ND; %RSD of non-spiked > 50%, J det

FD: Both Conc. > 2xQL, RPD >30% (water) 50% (soil), J det; One result ND, other >2 x QL, J det/J NDs; Both Conc. < 2xQL; RPD >criteria, LCS OK, Accept data

IS: 25% ≤ Area < 50% of IS in CCAL , J det/ J NDs; Area < 25% of CCAL, J det / R NDs; Area > 150% IS in CCAL, J det / Accept NDs

QLs: If result > upper calibration range, J result, if result < lowest calibration standard, J result. Verify all J data reported properly, if applicable.
Verify QLs are sample specific and that all compounds requested were reported.

Sensitivity: Identify any non-detects which exceed TOGS 1.1.1 (TOGS GA AWQS) criteria for waters or Soil Cleanup Objectives from 6 NYCRR Part 375 for soils

Date: ***6/4/13***
Data Reviewer: ***Nancy C. Rothman, Ph.D.***

environmental chemistry consultants

Data Usability Summary Report (DUSR)

NYSDEC ASP Category B

Client/Company:	Fleming-Lee Shue, Inc., New York, New York (FLS)
Site/Project Name:	AFFCO, 361 Walsh Avenue, New Windsor, NY
Laboratory:	Accutest Laboratories, Dayton, New Jersey
SDGs/Lab Project #:	JB15405
Date(s) of Collection:	August 26, 2012, August 30, 2012 & September 4, 2012
Number and type Samples & analyses:	24 soil samples for project-specific Target Compound List (TCL) of Volatile Organic Compounds (VOCs)
Senior Data Reviewers:	Dr. Nancy C. Rothman, New Environmental Horizons, Inc. Susan D. Chapnick, New Environmental Horizons, Inc.
Date Completed:	February 4, 2013

This Data Usability Summary Report (DUSR) is based on guidance developed by the New York State Department of Conservation (NYSDEC), June 1999, for technical review of analytical data in lieu of a full third party data validation and technical guidance presented in *DER-10 / Technical Guidance for Site Investigation and Remediation*, NYSDEC, May 3, 2010. The objective of the DUSR is to determine whether or not the data as presented meet the site/project specific criteria for data quality and data use based on the NYSDEC ASP 2005 or EPA method QC acceptance criteria.

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I. Required DUSR Questions

1. Is the data package complete as defined under the requirements for the most current NYSDEC ASP Category B or USEPA CLP deliverables?

Yes.

2. Have all holding times been met?

Yes.

3. Do all the QC data: blanks, instrument tunings, calibration standards, calibration verifications, surrogate recoveries, spike recoveries, replicate analyses, laboratory controls and sample data fall within the protocol required limits and specifications?

Yes, analyses generally met QC criteria. Exceedances of QC criteria, where data were qualified but considered usable for project decisions, are noted in Section III of this DUSR.

4. Have all of the data been generated using established and agreed upon analytical protocols?

Yes. Analytical data were generated using established EPA Methods, Standard Methods, and ASTM Methods (see analytical references in Section II below). Deviations from EPA or other method protocols and NYSDEC ASP 2005 QC protocols are discussed in Section III of this DUSR.

5. Does an evaluation of the raw data confirm the results provided in the data summary sheets and quality control verification forms?

Yes. The raw data were checked to verify that detected results met retention time and mass spectral criteria, where applicable, for qualitative identification. A spot check was performed to verify quantitative accuracy for reporting of all results (presented in the Data Review Checklists attached to this DUSR).

6. Have the correct data qualifiers been used and are they consistent with the most current NYSDEC ASP?

Yes. The laboratory used the correct data qualifiers in reporting of results. Data qualifiers were changed for several results during this review, as shown in Table 2 and explained in Section III of this DUSR.

7. Have any quality control (QC) exceedances been specifically noted in the DUSR and have the corresponding QC summary sheets from the data package been attached to the DUSR?

Yes. QC exceedances are specified in Section III of this DUSR. QC summary sheets from the data package have not been attached; however, all QC exceedances that required data qualification are summarized in Table 2 of the DUSR and flagged in the validated electronic data deliverable (EDD).

II. Sample Descriptions and Analytical Parameters

The sample IDs, date of sampling, identification of MS/MSD/MD, FD, EB, TB, if applicable and the analytical parameters reviewed in this DUSR are listed in Table 1. Any deviations noted for sample collection or receipt (*e.g.*, temperature or preservation issues) are included in Section III, below.

Table 1. Sample Descriptions and Analytical Parameters

Sample ID	Lab ID	Collection Date	Matrix	Analytical Parameters	Sample Type
PX01-SW-5	JB14890-1	8/28/12	Soil	VOCs	Field sample [used for MS/MSD]
PX02-SW-5	JB14890-2	8/28/12	Soil	VOCs	Field sample
PX03-BT-10	JB14890-3	8/28/12	Soil	VOCs	Field sample [used for MS/MSD]
PX04-SW-5	JB14890-4	8/28/12	Soil	VOCs	Field sample
PX05-SW-6	JB14890-5	8/28/12	Soil	VOCs	Field sample
PX06-BT-10	JB14890-6	8/28/12	Soil	VOCs	Field sample
C5SP01	JB14890-7	8/28/12	Soil	VOCs	Field sample
C5SP02	JB14890-8	8/28/12	Soil	VOCs	Field sample
C4SP01	JB14890-9	8/28/12	Soil	VOCs	Field sample
PX07BT-10	JB15155-1	8/30/12	Soil	VOCs	Field sample [used for MS/MSD]
PX08SW-7	JB15155-2	8/30/12	Soil	VOCs	Field sample [used for MS/MSD]
BENCH01	JB15155-3	8/30/12	Soil	VOCs	Field sample
PX09SW-3	JB15405-1	9/4/12	Soil	VOCs	Field sample [used for MS/MSD]
PX10SW-5	JB15405-2	9/4/12	Soil	VOCs	Field sample

Table 1. Sample Descriptions and Analytical Parameters - *continued*

Sample ID	Lab ID	Collection Date	Matrix	Analytical Parameters	Sample Type
PX11BT-10	JB15405-3	9/4/12	Soil	VOCs	Field sample
PX12SW-7	JB15405-4	9/4/12	Soil	VOCs	Field sample
PX13SW-7	JB15405-5	9/4/12	Soil	VOCs	Field sample
PX14SW-6	JB15405-6	9/4/12	Soil	VOCs	Field sample [used for MS/MSD]
PX15BT-10	JB15405-7	9/4/12	Soil	VOCs	Field sample [used for MS/MSD]
C1SP01	JB15405-8	9/4/12	Soil	VOCs	Field sample
C3SP01	JB15405-9	9/4/12	Soil	VOCs	Field sample [used for MS/MSD]
C3SP02	JB15405-10	9/4/12	Soil	VOCs	Field sample
C2SP01	JB15405-11	9/4/12	Soil	VOCs	Field sample [used for MS/MSD]
C2SP02	JB15405-12	9/4/12	Soil	VOCs	Field sample

Analytical method references:
TCL VOC: EPA SW846 Method 8260B
Percent Moisture / Percent Solids: ASTM 4643-00 were performed and reported for all samples to convert results to dry-weight units.

III. Data Deficiencies, Analytical Protocol Deviations, and Quality Control Exceedances

The following QC elements, as applicable to the analytical methods, were reviewed during this DUSR:

- Data package completeness and reporting protocols
- Sample receipt, holding times and preservation criteria
- Calibration criteria (instrument tuning, initial and continuing calibration verifications)
- Method, field, and instrument blank results
- Laboratory Control Sample (LCS), Blank Spike (BS), or Matrix Spike Blank (MSB) recoveries

- Surrogate or System Monitoring Compound (SMC) Recoveries
- Matrix Spike (MS) / Matrix Spike Duplicate (MSD) Recoveries
- MS/MSD, sample/Matrix Duplicate (MD), or sample/Field Duplicate (FD) Relative Percent Differences (RPDs)
- Sample result reporting (including reporting limits and units)
- Other method-specific QC if applicable and reported (e.g., internal standard areas)
- Deficiencies or protocol deviations as noted in the Laboratory Narrative

During this review of VOCs, several results were estimated (J and UJ) due to QC issues. Table 2 summarizes the actions taken during this review. NEH generated a validated data spreadsheet based on the electronic project database file received from Accutest for these SDGs. All results were considered acceptable compared to NYSDEC ASP 2005 and method criteria, with the understanding of the potential uncertainty (bias) in the qualified results.

Table 2. Summary of Data Validation Actions

Field Sample ID	Analyte	Qualifier	Bias	Validation Comments
PX07BT-10	1,1-Dichloroethene	J	L	Low MS/MSD recoveries
PX09SW-3	1,1,1-Trichloroethane	J	L	Low MS/MSD recoveries
C2SP01	Bromoform Carbon disulfide Carbon tetrachloride Chlorobenzene Ethylbenzene Styrene Toluene trans-1,2-Dichloroethene trans-1,3-Dichloropropene Xylene (total)	UJ	I	MS/MSD imprecision
C2SP01	1,2-Dichloroethene (total)	J	I	MS/MSD imprecision + Result uncertain below the calibration range
C2SP01	Trichloroethene	J	I	MS/MSD imprecision + Initial Calibration outside criteria + Low Calibration verification + Result uncertain below the calibration range
PX01-SW-5 PX02-SW-5 PX04-SW-5 PX06-BT-10 C5SP01	Trichloroethene	UJ	L	Initial Calibration outside criteria + Low Calibration verification

Table 2. Summary of Data Validation Actions - *continued*

Field Sample ID	Analyte	Qualifier	Bias	Validation Comments
PX07BT-10 C2SP02	Trichloroethene	J	L	Initial Calibration outside criteria + Low Calibration verification
PX03-BT-10 PX05-SW-6 C5SP02 C4SP01 PX08SW-7 BENCH01 C3SP02 PX11BT-10 PX14SW-6 PX15BT-10 C1SP01 C3SP01	Trichloroethene	J	I	Initial Calibration outside criteria + Low Calibration verification + Result uncertain below the calibration range
PX02-SW-5 PX04-SW-5 PX05-SW-6 PX06-BT-10 C4SP01 PX12SW-7	1,1,1-Trichloroethane	J	I	Result uncertain below the calibration range
PX03-BT-10 PX07BT-10 PX08SW-7 BENCH01 C3SP02 C2SP01 C2SP02 PX11BT-10 PX15BT-10 C1SP01 C3SP01	1,1,2-Trichloroethane	J	I	Result uncertain below the calibration range
C5SP01 PX08SW-7 BENCH01 C3SP02 C2SP01 C2SP02 PX10SW-5 PX14SW-6	1,1-Dichloroethane	J	I	Result uncertain below the calibration range
PX08SW-7 C3SP02 C2SP01 PX15BT-10 C1SP01	1,2-Dichloroethane	J	I	Result uncertain below the calibration range

Table 2. Summary of Data Validation Actions - *continued*

Field Sample ID	Analyte	Qualifier	Bias	Validation Comments
PX04-SW-5 C5SP01 BENCH01 C3SP02 C2SP01 C2SP02 PX14SW-6 PX15BT-10 C1SP01 C3SP01	1,1-Dichloroethene	J	I	Result uncertain below the calibration range
PX03-BT-10 C5SP02 PX08SW-7 BENCH01 C3SP02 C2SP02 PX14SW-6 PX15BT-10 C1SP01 C3SP01	1,2-Dichloroethene (total)	J	I	Result uncertain below the calibration range
PX02-SW-5 PX06-BT-10	Acetone	J	I	Result uncertain below the calibration range
PX01-SW-5 PX04-SW-5 PX06-BT-10 C4SP01 PX13SW-7	Benzene	J	I	Result uncertain below the calibration range
PX03-BT-10 C5SP02	Carbon disulfide	J	I	Result uncertain below the calibration range
PX03-BT-10	Chloroethane	J	I	Result uncertain below the calibration range
PX03-BT-10 C5SP01 C5SP02 PX07BT-10 PX15BT-10	Chloroform	J	I	Result uncertain below the calibration range
PX03-BT-10 C5SP02 PX08SW-7 BENCH01 C3SP02 C2SP01 C2SP02 PX14SW-6 PX15BT-10 C1SP01 C3SP01	cis-1,2-Dichloroethene	J	I	Result uncertain below the calibration range

Table 2. Summary of Data Validation Actions - *continued*

Field Sample ID	Analyte	Qualifier	Bias	Validation Comments
PX08SW-7	Ethylbenzene	J	I	Result uncertain below the calibration range
PX03-BT-10 C5SP02 PX07BT-10 PX08SW-7 BENCH01 C2SP02 PX10SW-5 PX14SW-6 PX15BT-10 C1SP01 C3SP01	Tetrachloroethene	J	I	Result uncertain below the calibration range
PX01-SW-5 PX04-SW-5 PX05-SW-6 C5SP02 C4SP01 PX09SW-3 C3SP02 PX12SW-7 PX13SW-7 PX15BT-10	Toluene	J	I	Result uncertain below the calibration range
C5SP02 PX07BT-10 PX08SW-7 BENCH01 C3SP02 C2SP02 PX14SW-6 PX15BT-10 C1SP01 C3SP01	trans-1,2-Dichloroethene	J	I	Result uncertain below the calibration range
PX09SW-3 PX10SW-5 PX12SW-7	Trichloroethene	J	I	Result uncertain below the calibration range
C5SP02 PX07BT-10	Vinyl chloride	J	I	Result uncertain below the calibration range

Qualifiers: U = Analyte is non-detect at the "DV Result" value; UJ = Non-detect is estimated; J = Result is estimated; R = Result is rejected and is unusable for project decisions.

Bias: L = Low; H = High; I = Indeterminate

Abbreviations used in Table 2:
MS = Matrix Spike
MSD = Matrix Spike Duplicate

As required by the DUSR, the following sections document the QC reviewed and the issues that required action or affected the data certainty in terms of the project data quality objectives (DQO)

of accuracy, precision, representativeness, comparability, and sensitivity. The DQO of completeness can be evaluated by the project manager after all data are generated.

Data Package Completeness and Reporting Protocols

- The samples reported in this SDG were initially analyzed in three separate SDGs (JB14890, JB15405, and JB15155). After completion of the sample analyses, FLS requested that all data in these three SDGs be reported in this one SDG JB15405. The laboratory maintained the original laboratory IDs for the samples throughout the Category B deliverable, as shown in Table 1.
- The initial and continuing calibrations for VOCs contained many compounds in addition to the targets requested. During this review, only the target compounds were assessed.
- For organic analyses, the laboratory used in-house QC limits to judge acceptability of surrogates, MS/MSD, LCS, and calibrations. In addition, the laboratory spiked all VOC targets for the LCS and MS/MSD analyses rather than just a representative subset of analytes as suggested by NYSDEC ASP 2005. During this review, the NYSDEC ASP 2005 QC limits for the compounds specified in Exhibit E were used to evaluate the acceptability of the laboratory quality control, unless otherwise discussed below, while the in-house limits were used to judge the other spiked compounds.
- The laboratory reported too many significant figures for some data. For organic results, NYSDEC ASP 2005 indicates that one significant figure should be reported for values < 10 and two significant figures for values > 10; however, the laboratory reported two significant figures for values < 10 and three for values > 10.

Sample Receipt, Holding Times, and Preservation

- Samples were not preserved in the field for VOC analysis (i.e., Method 5035A preservation of soils for VOC analysis was not used). FLS indicated that this was not a requirement of the project Work Plan. Data users are cautioned that VOC concentrations in field-unpreserved soils can be biased low due to loss of volatile compounds prior to analysis. Soils were preserved and analyzed using the low-level or medium-level (methanol) aliquots prepared at the laboratory.

Calibration

- For VOC analysis, the laboratory used two additional Internal Standard (IS) compounds, t-butyl alcohol-d_9 and pentafluorobenzene, in addition to the NYSDEC ASP 2005 required IS' of 1,4-difluorobenzene, chlorobenzene-d_5, and 1,4-dichlorobenzene-d_4. Since SW846 Method 8260B allows the use of alternative IS', no action was required.
- The response for trichloroethene was low compared to NYSDEC ASP 2005 criteria in several VOC initial and continuing calibrations. Twenty trichloroethene results were estimated (J or UJ) with possible low bias, as shown in Table 2.
- Various other VOC calibrations reported compounds outside of criteria; however, action to qualify sample data was not required as explained in the Data Review Checklist.

Method, Field, and Instrument Blank Results

- No contamination that would require blank actions was observed in the method blanks.

- There were no trip or field equipment blanks associated with the samples in this SDG.

Laboratory Control Sample (LCS), Blank Spike (BS), or Matrix Spike Blank (MSB) recoveries

- The LCS recoveries were acceptable for all VOCs, indicating acceptable accuracy for the methods as performed by the laboratory.

Surrogate or System Monitoring Compound (SMC) Recoveries

- The laboratory used a fourth surrogate, dibromofluoromethane, in addition to those specified in NYSDEC ASP2005. Since EPA SW-846 allows the use of alternative surrogates, no action was required.
- All surrogates recovered within criteria in all samples and QC.

Matrix Quality Control (Matrix Spike/Matrix Duplicate/Matrix Spike Duplicate and Field Duplicate Samples)

- MS/MSD analysis for VOCs was performed on nine site samples: PX01-SW-5, PX03-BT-10, PX07BT-10, PX08SW-7, PX09SW-3, PX14SW-6, PX15BT-10, C3P01, and C2SP01. Accuracy and precision for the MS/MSD were considered acceptable for all VOCs in the analyses of six samples: PX01-SW-5, PX03-BT-10, PX08SW-7, PX14SW-6, PX15BT-10, and PX03-BT-10. The spike levels for several of these MS/MSD analyses were too low compared to the relatively high VOC concentrations in the unspiked sample, which resulted in recoveries that were not applicable to the matrix. In these instances, no action was taken based on professional judgment as explained in the Data Validation Checklist. The MS/MSD results in three site samples showed exceedances as explained below and listed in Table 2:
    - PX07BT-10: 1,1-Dichloroethene was estimated (J) with possible low bias due to low MS/MSD recoveries.
    - PX09SW-3: 1,1,1-Trichloroethane was estimated (J) with possible low bias due to low MS/MSD recoveries.
    - C2SP01: Bromoform, carbon disulfide, carbon tetrachloride, chlorobenzene, trans-1,2-dichloroethene, 1,2-dichloroethene (total), trans-1,3-dichloropropene, ethylbenzene, stryrene, toluene, trichloroethene, and xylene (total) were estimated (J or UJ) with indeterminate bias due to MS/MSD imprecision.
- There were no field duplicates associated with the samples in this SDG; therefore, precision from sample collection through analysis and representativeness could not be evaluated.

Sample Result Reporting (including reporting limits and units)

- All results are reported with sample-specific reporting limits (adjusted for sample-specific preparation and dilution factors) on a dry-weight basis (based on sample percent solids) in units of µg/Kg.
- The list of compounds reported for VOCs is a project-specific list consisting of thirty-five VOCs as compared to the TCL VOC list in NYSDEC ASP 2005, which contains fifty-one compounds. The VOC list of compounds reported in this project is, according to the laboratory, an older NYSDEC TCL list with methyl tert-butyl ether added.
- Sensitivity for all results was considered acceptable since all non-detects were reported at levels less than the Soil Cleanup Objectives (SCOs) listed in 6 NYCRR Part 375

Environmental Remediation Programs Subpart 375-6, NYSDEC, Table 375-6.8(a): Unrestricted Use Soil Cleanup Objectives (SCOs effective December 14, 2006) and the lowest Supplemental Soil Cleanup Objectives (SSCOs) listed in Table 1 of CP-51 / Soil Cleanup Guidance, NYSDEC (October 21, 2010).

- Six samples reported one or more results above the calibration range (flagged "E" by the laboratory) in the initial low-level analyses of the samples. The laboratory re-analyzed these samples either as low-level soils with reduced initial weights or as medium-level methanol extracts. Data for all analyses for these six samples were reviewed and data accepted for reporting of valid results as follows:
    - C1SP01: all initial low-level results accepted except 1,1,1-trichloroethane, which was accepted from the second low-level analysis;
    - PX07BT-10: all initial low-level results accepted except 1,1,1-trichloroethane, chloroethane, and 1,1-dichloroethane, which were accepted from the second low-level analysis;
    - PX03-BT-10: all low-level results accepted except 1,1,1-trichloroethane, 1,1-dichloroethane, and 1,1-dichloroethene, which were accepted from the medium-level analysis;
    - C5SP01: all low-level results accepted except 1,1,1-trichloroethane, which was accepted from the medium-level analysis;
    - C5SP02: all low-level results accepted except 1,1,1-trichloroethane and 1,1-dichloroethene, which were accepted from the medium-level analysis; and
    - C3SP01: all low-level results accepted except 1,1,1-trichloroethane, which was accepted from the medium-level analysis.

  Only accepted data were reported in the validated EDD. The laboratory reported the data properly for these samples based on this review.
- Several detected VOC results were reported at concentrations below the sample-specific reporting limits (RL). During this assessment, these results were qualified as estimated (J) with indeterminate bias due to uncertainty in quantitation at a level below the instrument calibration range. Table 2 identifies the analytes and samples that were estimated due to reporting at levels below the RL.

environmental chemistry consultants

Data Usability Summary Report (DUSR)

NYSDEC ASP Category B

Client/Company:	Fleming-Lee Shue, Inc., New York, New York (FLS)
Site/Project Name:	AFFCO, 361 Walsh Avenue, New Windsor, NY
Laboratory:	Accutest Laboratories, Dayton, New Jersey
SDGs/Lab Project #:	JB32749
Date(s) of Collection:	March 27, 2013
Number and type Samples & analyses:	26 soil samples, 2 Field Blanks, and 1 Trip Blank for project-specific Target Compound List (TCL) of Volatile Organic Compounds (VOCs)
Senior Data Reviewers:	Dr. Nancy C. Rothman, New Environmental Horizons, Inc. Susan D. Chapnick, New Environmental Horizons, Inc.
Date Completed:	May 16, 2013

This Data Usability Summary Report (DUSR) is based on guidance developed by the New York State Department of Conservation (NYSDEC), June 1999, for technical review of analytical data in lieu of a full third party data validation and technical guidance presented in *DER-10 / Technical Guidance for Site Investigation and Remediation*, NYSDEC, May 3, 2010. The objective of the DUSR is to determine whether or not the data as presented meet the site/project specific criteria for data quality and data use based on the NYSDEC ASP 2005 or EPA method QC acceptance criteria.

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I. Required DUSR Questions

1. ***Is the data package complete as defined under the requirements for the most current NYSDEC ASP Category B or USEPA CLP deliverables?***

   Yes.

2. ***Have all holding times been met?***

   Yes.

3. ***Do all the QC data: blanks, instrument tunings, calibration standards, calibration verifications, surrogate recoveries, spike recoveries, replicate analyses, laboratory controls and sample data fall within the protocol required limits and specifications?***

   Yes, analyses generally met QC criteria. Exceedances of QC criteria, where data were qualified but considered usable for project decisions, are noted in Section III of this DUSR.

4. ***Have all of the data been generated using established and agreed upon analytical protocols?***

   Yes. Analytical data were generated using established EPA Methods, Standard Methods, and ASTM Methods (see analytical references in Section II below). Deviations from EPA or other method protocols and NYSDEC ASP 2005 QC protocols are discussed in Section III of this DUSR.

5. ***Does an evaluation of the raw data confirm the results provided in the data summary sheets and quality control verification forms?***

   Yes. The raw data were checked to verify that detected results met retention time and mass spectral criteria, where applicable, for qualitative identification. A spot check was performed to verify quantitative accuracy for reporting of all results (presented in the Data Review Checklists attached to this DUSR).

6. ***Have the correct data qualifiers been used and are they consistent with the most current NYSDEC ASP?***

   Yes. The laboratory used the correct data qualifiers in reporting of results. Data qualifiers were changed for several results during this review, as shown in Table 2 and explained in Section III of this DUSR.

7. ***Have any quality control (QC) exceedances been specifically noted in the DUSR and have the corresponding QC summary sheets from the data package been attached to the DUSR?***

   Yes. QC exceedances are specified in Section III of this DUSR. QC summary sheets from the data package have not been attached; however, all QC exceedances that required data qualification are summarized in Table 2 of the DUSR and flagged in the validated electronic data deliverable (EDD).

II. Sample Descriptions and Analytical Parameters

The sample IDs, date of sampling, identification of MS/MSD/MD, FD, EB, TB, if applicable and the analytical parameters reviewed in this DUSR are listed in Table 1. Any deviations noted for sample collection or receipt (*e.g.*, temperature or preservation issues) are included in Section III, below.

Table 1. Sample Descriptions and Analytical Parameters

Sample ID	Lab ID	Collection Date	Matrix	Analytical Parameters	Sample Type
TRIP BLANK	JB32749-1	3/27/13	Water	VOCs	Trip Blank
FIELD BLANK 1	JB32749-2	3/27/13	Water	VOCs	Field Blank
FIELD BLANK 2	JB32749-3	3/27/13	Water	VOCs	Field Blank
1.1 (12.5-13)	JB32749-4	3/27/13	Soil	VOCs	Field sample
1.1 (13-13.5)	JB32749-5	3/27/13	Soil	VOCs	Field sample
1.1 (14.5-15)	JB32749-6	3/27/13	Soil	VOCs	Field sample
1.2 (13-13.5)	JB32749-7	3/27/13	Soil	VOCs	Field sample
1.2 (11-11.5)	JB32749-8	3/27/13	Soil	VOCs	Field sample
1.2 (14-14.5)	JB32749-9	3/27/13	Soil	VOCs	Field sample
2.1 (12.5-13)	JB32749-10	3/27/13	Soil	VOCs	Field sample
2.1 (11.5-12)	JB32749-11	3/27/13	Soil	VOCs	Field sample
2.1 (10-10.5)	JB32749-12	3/27/13	Soil	VOCs	Field sample
2.2 (12.5-13)	JB32749-13	3/27/13	Soil	VOCs	Field sample
2.2 (11-11.5)	JB32749-14	3/27/13	Soil	VOCs	Field sample

Table 1. Sample Descriptions and Analytical Parameters - *continued*

Sample ID	Lab ID	Collection Date	Matrix	Analytical Parameters	Sample Type
2.2 (14-14.5)	JB32749-15	3/27/13	Soil	VOCs	Field sample
3 (13.5-14)	JB32749-16	3/27/13	Soil	VOCs	Field sample
3 (14.5-15)	JB32749-17	3/27/13	Soil	VOCs	Field sample
3 (12.5-13)	JB32749-18	3/27/13	Soil	VOCs	Field sample
4 (11-11.5)	JB32749-19	3/27/13	Soil	VOCs	Field sample [used for MD analysis]
4 (10-10.5)	JB32749-20	3/27/13	Soil	VOCs	Field sample
4 (14.5-15)	JB32749-21	3/27/13	Soil	VOCs	Field sample [used for MS/MSD]
5 (13.5-14)	JB32749-22	3/27/13	Soil	VOCs	Field sample
5 (14-14.5)	JB32749-23	3/27/13	Soil	VOCs	Field sample
5 (14.5-15)	JB32749-24	3/27/13	Soil	VOCs	Field sample
6 (11.5-12)	JB32749-25	3/27/13	Soil	VOCs	Field sample
6 (12.5-13)	JB32749-26	3/27/13	Soil	VOCs	Field sample
6 (14.5-15)	JB32749-27	3/27/13	Soil	VOCs	Field sample [used for MS]
FD-1 6(11.5-12)	JB32749-28	3/27/13	Soil	VOCs	Field Duplicate of 6 (11.5-12)
FD-2 6(14.5-15)	JB32749-29	3/27/13	Soil	VOCs	Field Duplicate of 6 (14.5-15)

Analytical method references:
TCL VOC: EPA SW846 Method 8260B
Percent Moisture / Percent Solids: ASTM D4643-00 or Standard Method 2540G were performed and reported for all samples to convert results to dry-weight units.

III. Data Deficiencies, Analytical Protocol Deviations, and Quality Control Exceedances

The following QC elements, as applicable to the analytical methods, were reviewed during this DUSR:

- Data package completeness and reporting protocols
- Sample receipt, holding times and preservation criteria
- Calibration criteria (instrument tuning, initial and continuing calibration verifications)
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- Surrogate or System Monitoring Compound (SMC) Recoveries
- Matrix Spike (MS) / Matrix Spike Duplicate (MSD) Recoveries
- MS/MSD, sample/Matrix Duplicate (MD), or sample/Field Duplicate (FD) Relative Percent Differences (RPDs)
- Sample result reporting (including reporting limits and units)
- Other method-specific QC if applicable and reported (e.g., internal standard areas)
- Deficiencies or protocol deviations as noted in the Laboratory Narrative

During this review of VOCs, all results were estimated (J and UJ) due to QC issues. Table 2 summarizes the actions taken during this review. NEH generated a validated data spreadsheet based on the electronic project database file received from Accutest for these SDGs. All results were considered acceptable compared to NYSDEC ASP 2005 and method criteria, with the understanding of the potential uncertainty (bias) in the qualified results.

Table 2. Summary of Data Validation Actions

Field Sample ID	Analyte	Qualifier	Bias	Validation Comments
TRIP BLANK	Bromoform Dibromochloromethane	J	I	Sample Preservation issue + Result reported below the calibration range
TRIP BLANK FIELD BLANK 1 FIELD BLANK 2 2.1 (11.5-12) 2.1 (10-10.5) 4 (14.5-15) 5 (14-14.5) 5 (14.5-15) 6 (11.5-12) 6 (14.5-15) FD-2 6(14.5-15)	Trichloroethene	UJ	L	Sample Preservation issue + Initial Calibration outside criteria + Low Calibration verification
TRIP BLANK	All VOCs except: Bromoform Dibromochloromethane Trichloroethene	UJ	L	Sample Preservation issue

Table 2. Summary of Data Validation Actions - *continued*

Field Sample ID	Analyte	Qualifier	Bias	Validation Comments
FIELD BLANK 1 FIELD BLANK 2	All VOCs except: Trichloroethene	UJ	L	Sample Preservation issue
1.1 (12.5-13)	1,2-Dichloroethene (total) cis-1,2-Dichloroethene Tetrachloroethene trans-1,2-Dichloroethene	J	I	Sample Preservation issue + Result reported below the calibration range
1.1 (12.5-13)	All VOCs except: 1,2-Dichloroethene (total) cis-1,2-Dichloroethene Tetrachloroethene trans-1,2-Dichloroethene	J or UJ	L	Sample Preservation issue
1.1 (13-13.5) 1.1 (14.5-15) 1.2 (13-13.5) 1.2 (11-11.5) 2.2 (14-14.5) 4 (11-11.5) 4 (10-10.5) 5 (13.5-14) 6 (12.5-13) FD-1 6(11.5-12)	Trichloroethene	J	I	Sample Preservation issue + Initial Calibration outside criteria + Low Calibration verification + Result reported below the calibration range
1.1 (13-13.5)	1,2-Dichloroethane Acetone Carbon disulfide Methylene chloride Toluene	J	I	Sample Preservation issue + Result reported below the calibration range
1.1 (13-13.5)	All VOCs except: Trichloroethene 1,2-Dichloroethane Acetone Carbon disulfide Methylene chloride Toluene	J or UJ	L	Sample Preservation issue
1.1 (14.5-15)	1,2-Dichloroethene (total) Carbon disulfide Methylene chloride Toluene trans-1,2-Dichloroethene Vinyl chloride	J	I	Sample Preservation issue + Result reported below the calibration range
1.1 (14.5-15)	All VOCs except: Trichloroethene 1,2-Dichloroethene (total) Carbon disulfide Methylene chloride Toluene trans-1,2-Dichloroethene Vinyl chloride	J or UJ	L	Sample Preservation issue

Table 2. Summary of Data Validation Actions - *continued*

Field Sample ID	Analyte	Qualifier	Bias	Validation Comments
1.2 (13-13.5)	1,1,2-Trichloroethane 1,2-Dichloroethene (total) Carbon disulfide Chloroethane cis-1,2-Dichloroethene Methylene chloride trans-1,2-Dichloroethene	J	I	Sample Preservation issue + Result reported below the calibration range
1.2 (13-13.5)	All VOCs except: Trichloroethene 1,1,2-Trichloroethane 1,2-Dichloroethene (total) Carbon disulfide Chloroethane cis-1,2-Dichloroethene Methylene chloride trans-1,2-Dichloroethene	J or UJ	L	Sample Preservation issue
1.2 (11-11.5)	1,1,2-Trichloroethane 1,2-Dichloroethene (total) Carbon disulfide Chloroethane cis-1,2-Dichloroethene Ethylbenzene Methylene chloride Xylene (total)	J	I	Sample Preservation issue + Result reported below the calibration range
1.2 (11-11.5)	All VOCs except: Trichloroethene 1,1,2-Trichloroethane 1,2-Dichloroethene (total) Carbon disulfide Chloroethane cis-1,2-Dichloroethene Ethylbenzene Methylene chloride Xylene (total)	J or UJ	L	Sample Preservation issue
1.2 (14-14.5)	Toluene	J	I	Sample Preservation issue + Result reported below the calibration range
1.2 (14-14.5)	All VOCs except: Toluene	J or UJ	L	Sample Preservation issue
2.1 (12.5-13)	1,1,2-Trichloroethane Carbon disulfide cis-1,2-Dichloroethene Tetrachloroethene trans-1,2-Dichloroethene	J	I	Sample Preservation issue + Result reported below the calibration range

Table 2. Summary of Data Validation Actions - *continued*

Field Sample ID	Analyte	Qualifier	Bias	Validation Comments
2.1 (12.5-13)	All VOCs except: 1,1,2-Trichloroethane Carbon disulfide cis-1,2-Dichloroethene Tetrachloroethene trans-1,2-Dichloroethene	J or UJ	L	Sample Preservation issue
2.1 (11.5-12)	1,1,2-Trichloroethane Benzene Carbon disulfide Methylene chloride Tetrachloroethene trans-1,2-Dichloroethene	J	I	Sample Preservation issue + Result reported below the calibration range
2.1 (11.5-12)	All VOCs except: Trichloroethene 1,1,2-Trichloroethane Benzene Carbon disulfide Methylene chloride Tetrachloroethene trans-1,2-Dichloroethene	J or UJ	L	Sample Preservation issue
2.1 (10-10.5)	1,1,2-Trichloroethane Carbon disulfide Chloroform cis-1,2-Dichloroethene Methylene chloride Tetrachloroethene trans-1,2-Dichloroethene	J	I	Sample Preservation issue + Result reported below the calibration range
2.1 (10-10.5)	All VOCs except: Trichloroethene 1,1,2-Trichloroethane Carbon disulfide Chloroform cis-1,2-Dichloroethene Methylene chloride Tetrachloroethene trans-1,2-Dichloroethene	J or UJ	L	Sample Preservation issue
2.2 (12.5-13)	1,2-Dichloroethene (total) cis-1,2-Dichloroethene Tetrachloroethene Trichloroethene	J	I	Sample Preservation issue + Result reported below the calibration range
2.2 (12.5-13)	All VOCs except: 1,2-Dichloroethene (total) cis-1,2-Dichloroethene Tetrachloroethene Trichloroethene	J or UJ	L	Sample Preservation issue
2.2 (11-11.5)	1,1-Dichloroethane Toluene Trichloroethene	J	I	Sample Preservation issue + Result reported below the calibration range

Table 2. Summary of Data Validation Actions - *continued*

Field Sample ID	Analyte	Qualifier	Bias	Validation Comments
2.2 (11-11.5)	All VOCs except: 1,1-Dichloroethane Toluene Trichloroethene	J or UJ	L	Sample Preservation issue
2.2 (14-14.5)	1,1,1-Trichloroethane 1,1,2-Trichloroethane Carbon disulfide cis-1,2-Dichloroethene Methylene chloride trans-1,2-Dichloroethene Vinyl chloride	J	I	Sample Preservation issue + Result reported below the calibration range
2.2 (14-14.5)	All VOCs except: Trichloroethene 1,1,1-Trichloroethane 1,1,2-Trichloroethane Carbon disulfide cis-1,2-Dichloroethene Methylene chloride trans-1,2-Dichloroethene Vinyl chloride	J or UJ	L	Sample Preservation issue
3 (13.5-14)	1,1-Dichloroethane 1,1-Dichloroethene Chloroethane Toluene Trichloroethene	J	I	Sample Preservation issue + Result reported below the calibration range
3 (13.5-14)	All VOCs except: 1,1-Dichloroethane 1,1-Dichloroethene Chloroethane Toluene Trichloroethene	J or UJ	L	Sample Preservation issue
3 (14.5-15)	Acetone	UJ	L	Sample Preservation issue + Low Calibration verification
3 (14.5-15)	1,2-Dichloroethene (total) cis-1,2-Dichloroethene trans-1,2-Dichloroethene Trichloroethene	J	I	Sample Preservation issue + Result reported below the calibration range
3 (14.5-15)	All VOCs except: Acetone 1,2-Dichloroethene (total) cis-1,2-Dichloroethene trans-1,2-Dichloroethene Trichloroethene	J or UJ	L	Sample Preservation issue
3 (12.5-13)	1,1-Dichloroethane 1,2-Dichloroethene (total) Chloroethane cis-1,2-Dichloroethene trans-1,2-Dichloroethene Trichloroethene	J	I	Sample Preservation issue + Result reported below the calibration range

Table 2. Summary of Data Validation Actions - *continued*

Field Sample ID	Analyte	Qualifier	Bias	Validation Comments
3 (12.5-13)	All VOCs except: 1,1-Dichloroethane 1,2-Dichloroethene (total) Chloroethane cis-1,2-Dichloroethene trans-1,2-Dichloroethene Trichloroethene	J or UJ	L	Sample Preservation issue
4 (11-11.5)	1,1,1-Trichloroethane 1,1-Dichloroethane 1,1-Dichloroethene 1,2-Dichloroethane	J	I	Sample Preservation issue + MD imprecision
4 (11-11.5)	1,2-Dichloroethene (total) Carbon disulfide Chloroethane cis-1,2-Dichloroethene Methylene chloride trans-1,2-Dichloroethene Vinyl chloride	J	I	Sample Preservation issue + Result reported below the calibration range
4 (11-11.5)	All VOCs except: Trichloroethene 1,1,1-Trichloroethane 1,1-Dichloroethane 1,1-Dichloroethene 1,2-Dichloroethane 1,2-Dichloroethene (total) Carbon disulfide Chloroethane cis-1,2-Dichloroethene Methylene chloride trans-1,2-Dichloroethene Vinyl chloride	J or UJ	L	Sample Preservation issue
4 (10-10.5)	1,2-Dichloroethene (total) Acetone Carbon disulfide Chloroform cis-1,2-Dichloroethene Tetrachloroethene trans-1,2-Dichloroethene	J	I	Sample Preservation issue + Result reported below the calibration range
4 (10-10.5)	All VOCs except: Trichloroethene 1,2-Dichloroethene (total) Acetone Carbon disulfide Chloroform cis-1,2-Dichloroethene Tetrachloroethene trans-1,2-Dichloroethene	J or UJ	L	Sample Preservation issue

Table 2. Summary of Data Validation Actions - *continued*

Field Sample ID	Analyte	Qualifier	Bias	Validation Comments
4 (14.5-15)	1,1,1-Trichloroethane 1,1-Dichloroethene Vinyl chloride	J	I	Sample Preservation issue + Result reported below the calibration range
4 (14.5-15)	All VOCs except: Trichloroethene 1,1,1-Trichloroethane 1,1-Dichloroethene Vinyl chloride	J or UJ	L	Sample Preservation issue
5 (13.5-14)	1,1,2-Trichloroethane 1,2-Dichloroethene (total) Acetone cis-1,2-Dichloroethene Methylene chloride	J	I	Sample Preservation issue + Result reported below the calibration range
5 (13.5-14)	All VOCs except: Trichloroethene 1,1,2-Trichloroethane 1,2-Dichloroethene (total) Acetone cis-1,2-Dichloroethene Methylene chloride	J or UJ	L	Sample Preservation issue
5 (14-14.5)	Carbon disulfide Chloroethane Vinyl chloride	J	I	Sample Preservation issue + Result reported below the calibration range
5 (14-14.5)	All VOCs except: Trichloroethene Carbon disulfide Chloroethane Vinyl chloride	J or UJ	L	Sample Preservation issue
5 (14.5-15)	1,2-Dichloroethene (total) Chloroethane cis-1,2-Dichloroethene Methylene chloride Vinyl chloride	J	I	Sample Preservation issue + Result reported below the calibration range
5 (14.5-15)	All VOCs except: Trichloroethene 1,2-Dichloroethene (total) Chloroethane cis-1,2-Dichloroethene Methylene chloride Vinyl chloride	J or UJ	L	Sample Preservation issue
6 (11.5-12) FD-1 6(11.5-12)	1,1,1-Trichloroethane Methylene chloride	J	I	Sample Preservation issue + Result reported below the calibration range
6 (11.5-12) FD-1 6(11.5-12)	All VOCs except: Trichloroethene 1,1,1-Trichloroethane Methylene chloride	UJ	L	Sample Preservation issue

Table 2. Summary of Data Validation Actions - *continued*

Field Sample ID	Analyte	Qualifier	Bias	Validation Comments
6 (12.5-13)	1,1-Dichloroethane 1,2-Dichloroethene (total) Acetone cis-1,2-Dichloroethene Methylene chloride trans-1,2-Dichloroethene	J	I	Sample Preservation issue + Result reported below the calibration range
6 (12.5-13)	All VOCs except: Trichloroethene 1,1-Dichloroethane 1,2-Dichloroethene (total) Acetone cis-1,2-Dichloroethene Methylene chloride trans-1,2-Dichloroethene	J or UJ	L	Sample Preservation issue
6 (14.5-15)	1,1,1-Trichloroethane 1,1-Dichloroethane	J	I	Sample Preservation issue + Result reported below the calibration range
6 (14.5-15)	All VOCs except: Trichloroethene 1,1,1-Trichloroethane 1,1-Dichloroethane	UJ	L	Sample Preservation issue
FD-2 6(14.5-15)	1,1-Dichloroethane	J	I	Sample Preservation issue + Result reported below the calibration range
FD-2 6(14.5-15)	All VOCs except: Trichloroethene 1,1-Dichloroethane	J or UJ	L	Sample Preservation issue

Qualifiers: U = Analyte is non-detect at the "DV Result" value; UJ = Non-detect is estimated; J = Result is estimated; R = Result is rejected and is unusable for project decisions.

Bias: L = Low; H = High; I = Indeterminate

Abbreviations used in Table 2:
MD = Matrix Duplicate

As required by the DUSR, the following sections document the QC reviewed and the issues that required action or affected the data certainty in terms of the project data quality objectives (DQO) of accuracy, precision, representativeness, comparability, and sensitivity. The DQO of completeness can be evaluated by the project manager after all data are generated.

Data Package Completeness and Reporting Protocols

- The initial and continuing calibrations for VOCs contained many compounds in addition to the targets requested. During this review, only the target compounds were assessed.

- For organic analyses, the laboratory used in-house QC limits to judge acceptability of surrogates, MS/MSD, LCS, and calibrations. In addition, the laboratory spiked all VOC targets for the LCS and MS/MSD analyses rather than just a representative subset of analytes as suggested by NYSDEC ASP 2005. During this review, the NYSDEC ASP 2005 QC limits for the compounds specified in Exhibit E were used to evaluate the acceptability of the laboratory quality control, unless otherwise discussed below, while the in-house limits were used to judge the other spiked compounds.
- The laboratory reported too many significant figures for some data. For organic results, NYSDEC ASP 2005 indicates that one significant figure should be reported for values < 10 and two significant figures for values > 10; however, the laboratory reported two significant figures for values < 10 and three for values > 10.

Sample Receipt, Holding Times, and Preservation

- Samples, in Encore sample collection devices, were received at the laboratory at 12.1°C, above acceptable temperature criteria of 4 ± 2°C and two days after sample collection. All samples were estimated (J or UJ) with possible low bias, unless other QC issues affected the data, due to improper sample preservation.
- Three Encore devices per soil sample were collected: two for preparation of low-level water-preserved VOC aliquots and one for preparation of a medium-level methanol-preserved VOC aliquot. Since the samples were received two days after sample collection, it was not possible for the laboratory to prepare all of the preserved soil aliquots within 48 hours of sample collection. Since all samples were already qualified due to improper sample preservation for receipt temperature exceedance, no additional action was taken.
- Soil samples were analyzed as follows: samples 1.1 (12.5-13), 1.2 (14-14.5), 2.1 (12.5-13), 2.2 (12.5-13), 2.2 (11-11.5), 3 (13.5-14), 3 (14.5-15), and 3 (12.5-13) were analyzed using only the medium-level soil aliquot; samples 1.1 (13-13.5), 1.2 (13-13.5), 1.2 (11-11.5), 2.1 (11.5-12), 2.1 (10-10.5), 2.2 (14-14.5), 4 (11-11.5), 4 (14.5-15), 5 (13.5-14), 5 (14-14.5), and 5 (14.5-15) were analyzed as low-level soils and re-analyzed using the medium-level soil aliquots to report certain results, which exceeded the calibration range in the low-level analysis; and samples 1.1 (14.5-15), 4 (10-10.5), 6 (11.5-12), 6 (12.5-13), 6 (14.5-15), FD-1 6 (11.5-12), and FD-2 6 (14.5-15) were analyzed using only the low-level soil aliquot.

Calibration

- For VOC analysis, the laboratory used two additional Internal Standard (IS) compounds, t-butyl alcohol-d_9 and pentafluorobenzene, in addition to the NYSDEC ASP 2005 required IS' of 1,4-difluorobenzene, chlorobenzene-d_5, and 1,4-dichlorobenzene-d_4. Since SW846 Method 8260B allows the use of alternative IS', no action was required.
- The response for trichloroethene was low compared to NYSDEC ASP 2005 criteria in several VOC initial and continuing calibrations. Twenty-one trichloroethene results were estimated (J or UJ) with possible low bias, unless other QC issues affected the data, as shown in Table 2.

Method, Field, and Instrument Blank Results

- No contamination that would require blank actions was observed in the method blanks or field blanks.
- The trip blank reported detected results for bromoform and dibromochloromethane; however, since all samples were non-detect for these two compounds, no action was required.

Laboratory Control Sample (LCS), Blank Spike (BS), or Matrix Spike Blank (MSB) recoveries

- The LCS recoveries were acceptable for all VOCs except for high recovery of 1,1,2,2-tetrachloroethane in one of the nine LCS samples. Since the samples associated with this LCS were non-detect for this compound, no action was required. The LCS results indicate acceptable accuracy for the methods as performed by the laboratory.

Surrogate or System Monitoring Compound (SMC) Recoveries

- The laboratory used a fourth surrogate, dibromofluoromethane, in addition to those specified in NYSDEC ASP2005. Since EPA SW-846 allows the use of alternative surrogates, no action was required.
- All surrogates recovered within criteria in all field samples and QC except one high recovery in one of the matrix spike (MS) samples. No action was required since the other surrogates demonstrated acceptable recoveries and since this surrogate recovery exceedance in the MS did not directly affect any field sample results.

Matrix Quality Control (Matrix Spike/Matrix Duplicate/Matrix Spike Duplicate and Field Duplicate Samples)

- MS analysis for low-level VOCs was performed on sample 6 (14.5-15) and recovery was acceptable for all VOCs except 1,1,2,2-tetrachloroethane, which recovered high. Since sample 6 (14.5-15) was non-detect for this compound, no action was required. No MSD was performed for low-level analysis due to insufficient sample volume.
- MS/MSD analysis using the medium-level soil aliquot was performed on sample 4 (14.5-15). Only three compounds were reported from this medium-level MS/MSD analysis: chloroethane, 1,1-dichloroethane, and 1,1,1-trichloroethane. MS/MSD accuracy and precision were acceptable for these three compounds. The medium-level analysis was not performed for other VOCs in sample 4 (14.5-15).
- MD analysis was performed on sample 4 (11-11.5). Precision between the sample and MD was acceptable for all VOCs (i.e., RPDs all < lab criteria) except for 1,1-dichloroethane, 1,2-dichloroethane, 1,1-dichloroethene, and 1,1,1-trichloroethane. These four results in sample 4 (11-11.5) were estimated (J) with indeterminate bias due to MD imprecision as shown in Table 2. Several other compounds reported RPDs > lab criteria; however, levels reported in the field samples were below the Reporting Limit (e.g., "J" qualified data). RPD is not an appropriate measure of precision for low-level results detected below the RL and therefore, no further action was taken.
- The FD pairs were 6 (11.5-12) / FD-1 6 (11.5-12) and 6 (14.5-15) / FD-2 6 (14.5-15) FD precision was acceptable for all VOCs in both FD pairs, which is an indication of acceptable precision from sample collection through analysis for the site locations for VOCs.

Sample Result Reporting (including reporting limits and units)

- All results are reported with sample-specific reporting limits (adjusted for sample-specific preparation and dilution factors) on a dry-weight basis (based on sample percent solids) in units of µg/Kg.
- The list of compounds reported for VOCs is a project-specific list consisting of thirty-five VOCs as compared to the TCL VOC list in NYSDEC ASP 2005, which contains fifty-one compounds. The VOC list of compounds reported in this project is, according to the laboratory, an older NYSDEC TCL list with methyl tert-butyl ether added.
- Sensitivity for all results was considered acceptable since all non-detects were reported at levels less than the Soil Cleanup Objectives (SCOs) listed in 6 NYCRR Part 375 Environmental Remediation Programs Subpart 375-6, NYSDEC, Table 375-6.8(a): Unrestricted Use Soil Cleanup Objectives (SCOs effective December 14, 2006) and the lowest Supplemental Soil Cleanup Objectives (SSCOs) listed in Table 1 of CP-51 / Soil Cleanup Guidance, NYSDEC (October 21, 2010) except for: acetone, benzene, 2-butanone, carbon disulfide, carbon tetrachloride, chloroethane, chloroform, cis-1,2-dichloroethene, trans-1,2-dichloroethene, ethylbenzene, MTBE, methylene chloride, 1,1,2,2-tetrachloroethane, tetrachloroethene, vinyl chloride and xylenes in sample 2.2 (11-11.5); acetone, benzene, cis-1,2-dichloroethene, cis-1,3-dichloropropene, methylene chloride, trans-1,3-dichloropropene, and vinyl chloride in samples 1.1 (12.5-13), 1.2 (14-14.5), 2.1 (12.5-13), 2.2 (12.5-13), 3 (12.5-13), 3 (13.5-14), and 3 (14.5-15); 1,2-dichloroethane in sample 3 (13.5-14); 2-butanone in samples 1.1 (12.5-13), 1.2 (14-14.5), 2.2 (12.5-13), 3 (12.5 -13), and 3 (13.5-114); carbon tetrachloride in sample 1.2 (14-14.5); chloroform in samples 1.1 (12.5-13), 1.2 (14-14.5), 2.1 (12.5-13), 2.2 (12.5-13), 3 (12.5-13), and 3 (13.5-14); and 1,1,2-trichloroethane in samples 1.2 (14-14.5), 3 (12.5-13), and 3 (13.5-14) due to reporting of these compounds from the medium-level soil aliquot. The data user will need to evaluate these non-detects at elevated levels for project uses.
- Eleven samples, 1.1 (13-13.5), 1.2 (13-13.5), 1.2 (11-11.5), 2.1 (11.5-12), 2.1 (10-10.5), 2.2 (14-14.5), 4 (11-11.5), 4 (14.5-15), 5 (13.5-14), 5 (14-14.5), and 5 (14.5-15), were analyzed as low-level soils and one or more compounds were reported above the instrument calibration range (lab flagged data "E"). For these samples, the laboratory re-analyzed the samples using the medium-level methanol extracts. Samples 1.1 (12.5-13), 2.1 (12.5-13), and 2.2 (12.5-13) were analyzed as medium-level and required reanalysis with a secondary aliquot of methanol for dilution purposes. Data for all analyses for these fourteen samples were reviewed and the data as reported were considered acceptable (i.e., data reported over the instrument calibration range in the initial analysis was properly reported from the secondary dilution analysis). Only accepted data were maintained in the validated EDD.
- Several detected VOC results were reported at concentrations below the sample-specific reporting limits (RL). During this assessment, these results were qualified as estimated (J) with indeterminate bias due to uncertainty in quantitation at a level below the instrument calibration range. Table 2 identifies the analytes and samples that were estimated due to reporting at levels below the RL.

CASE NARRATIVE / CONFORMANCE SUMMARY

Client:	Fleming-Lee Shue, Inc.	**Job No**	JB32749
Site:	AFFCO, 361 Walsh Avenue, New Windsor, NY	**Report Date**	4/18/2013 10:43:04 A

On 03/29/2013, 26 Sample(s), 1 Trip Blank(s) and 2 Field Blank(s) were received at Accutest Laboratories at a temperature of 12.1 C. Samples were intact and chemically preserved, unless noted below. An Accutest Job Number of JB32749 was assigned to the project. Laboratory sample ID, client sample ID and dates of sample collection are detailed in the report's Results Summary Section. *** Sample was received at 12.1 degrees C. and OK to analysis per Steve Panter .

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

Volatiles by GCMS By Method SW846 8260B

Matrix: LEACHATE **Batch ID:** V2C4870

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- RPD(s) for Duplicate for Chloroform are outside control limits for sample JB32594-2DUP. High RPD due to low concentration of hit
- JB32594-2DUP for Tetrachloroethene: High RPD due to possible sample analyzed from different vials.
- Sample(s) JB32594-1MS, JB32594-2DUP were used as the QC samples indicated.

Matrix: SO **Batch ID:** VC6486

- All samples were analyzed within the recommended method holding time.
- Sample(s) JB32836-1MS, JB32836-2DUP were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.

Matrix: SO **Batch ID:** VC6488

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JB32749-27MS, JB32749-19DUP were used as the QC samples indicated.
- Matrix Spike Recovery(s) for 1,1,2,2-Tetrachloroethane are outside control limits. Outside control limits due to matrix interference.
- RPD(s) for Duplicate for 1,1,1-Trichloroethane, 1,1-Dichloroethane, 1,1-Dichloroethene, 1,2-Dichloroethane, 1,2-Dichloroethene (total), Acetone, Chloroethane, cis-1,2-Dichloroethene, trans-1,2-Dichloroethene, Trichloroethene, Vinyl chloride are outside control limits for sample JB32749-19DUP. High RPD due to possible sample analyzed from different vials.
- JB32749-27MS for 4-Bromofluorobenzene: Outside control limits due to matrix interference.

Matrix: SO **Batch ID:** VC6492

- All samples were analyzed within the recommended method holding time.
- Sample(s) JB32653-1MS, JB32653-1MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- VC6492-BS for 1,1,2,2-Tetrachloroethane: High percent recoveries and no associated positive found in the QC batch.

Matrix: SO **Batch ID:** VE8870

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JB33072-7MS, JB33072-7MSD were used as the QC samples indicated.

Volatiles by GCMS By Method SW846 8260B

Matrix: SO **Batch ID:** VE8871

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JB32576-4MS, JB32576-4MSD were used as the QC samples indicated.
- JB32749-18: Diluted due to high concentration of non-target compound.
- JB32749-16: Diluted due to high concentration of non-target compound.

Matrix: SO **Batch ID:** VE8875

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JB32576-16MS, JB32576-16MSD were used as the QC samples indicated.

Matrix: SO **Batch ID:** VE8876

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JB32749-21MS, JB32749-21MSD were used as the QC samples indicated.

Matrix: SO **Batch ID:** VE8878

- All samples were analyzed within the recommended method holding time.
- Sample(s) JB33550-8MS, JB33550-8MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Matrix Spike Duplicate Recovery(s) for Toluene are outside control limits. Outside control limits due to matrix interference.
- JB32749-17: Diluted due to high concentration of non-target compound.

Wet Chemistry By Method ASTM 4643-00

Matrix: SO **Batch ID:** GN82679

- The data for ASTM 4643-00 meets quality control requirements.

Wet Chemistry By Method SM2540 G-97

Matrix: SO **Batch ID:** GN82673

- The data for SM2540 G-97 meets quality control requirements.

Accutest certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting Accutest's Quality System precision, accuracy and completeness objectives except as noted.

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

Accutest Laboratories is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. Data release is authorized by Accutest Laboratories indicated via signature on the report cover

APPENDIX F

VeruTEK Report

Injection Summary Report
Surfactant-enhanced In Situ Chemical Oxidation (S-ISCO®) Treatment of TCA located at the American Felt and Filter Company

Submitted to:
Fleming Lee-Shue, Inc.
158 West 29th Street, 9th Floor
New York, NY 10001

Submitted by:
VeruTEK Technologies, Inc.
65 West Dudley Town Road, Suite 100
Bloomfield, CT 06002
(860) 242-9800
(860) 242-9899 (Fax)

September, 2012

1.0 Background

On behalf of Fleming Lee-Shue, Inc. (FLS), VeruTEK® Technologies Inc.(VeruTEK) implemented its patented Surfactant-enhanced In Situ Chemical Oxidation (S-ISCO®) to remediate contamination related to TCA DNAPL present in the subsurface soil and groundwater at the former Fuetron building at the American Felt and Filter Company (AFFCO) located in Newburgh, New York (the site). S-ISCO is one of VeruTEK's patented Green Chemistry technologies that use VeruSOL®, a proprietary, biodegradable plant-based surfactant and co-solvent mixture, to desorb and solubilize non-aqueous phase liquids (NAPL) into a fixed emulsion for in-place destruction by a simultaneously injected free-radical oxidant.

Contamination of Concern at the Site included TCA DNAPL and other volatile organic compounds (VOCs). The DNAPL release possibly occurred from a series of small spills mostly near the machine that was housed outside the former Fuetron building and from the drum storage area reportedly abutting the machine area. Most DNAPL was retained in the silty sand layers above the water table, but some DNAPL migrated downward below the water table. According to historic groundwater and recent soil data collected prior to mobilization elevated total VOC concentrations were observed at 15 ft., the lowest depth sampled. The highest VOC concentrations would found located adjacent to the release area, with elevated concentrations extending down gradient of the machine area.

In July and August 2012, VeruTEK conducted injections of its patented S-ISCO chemistry at the Site. The S-ISCO treatment consisted of injections of VeruSOL, along with alkaline activated sodium persulfate using sodium hydroxide. The following report summarizes VeruTEK's work on site, including mobilization and site set-up, the injection process and the monitoring program conducted; presents the data collected; and evaluates the results of the implementation.

2.0 Summary of S-ISCO Activities

VeruTEK conducted multiple rounds of S-ISCO injections between July 10 and July 27. The S-ISCO treatment was designed to target an estimated 79 pounds contaminant mass located at the depth interval between 10 to 15 feet bgs. Of the contaminant mass located in the 10 to 15 ft depth interval 89% of the contaminant mass was located in the 10 – 13 ft zone. A grid cell layout was used to delineate the treatment areas. Based on historic site data analyzed by FLS, three injection wells were installed in the area of the site where contamination was highest. IW-1 and IW-2 were installed in Grid Cell 2, and IW-3 was installed in Grid Cell 4. All injection wells were installed to approximately 13 ft bgs. Prior to conducting injections, analysis conducted by FLS revealed that approximately 90% of the contaminant mass in the 10 to 13 ft zone was located nearest IW-2. During the S-ISCO injection process IW-2 was used as the primary injection well to account for the levels of contaminant mass. To ensure greatest treatment in the 10 to 13 ft zone, a packer was installed prior to injection to seal off the injection well at 10 feet. Wavefront's sidewinder pressure pulse injection system was used to deliver the S-ISCO chemistry into the subsurface throughout the injection process. The sidewinder log is presented in **Appendix A**. The S-ISCO injections were followed by a round of I-SCO injections. Upon completion of

injections into the injection wells, Geoprobe injections were performed at five select locations. At the end of the project, VeruTEK performed an ISCO soil surface wash on the excavation footprint. **Table 1** summarizes the volume of chemistry injected during the remedial operation.

Table 1: Remedial Chemistry Summary		
VeruSOL	Sodium Persulfate	Sodium Hydroxide
0-15g/L	15-50g/L	12-50g/L
Total Volume Injected		**14,200 gal**

Groundwater was periodically sampled during various phases of treatment using multiple parameter groundwater monitoring devices and samples were collected for analysis at VeruTEK's lab. A complete summary of the troll data by well, and the laboratory data for all S-ISCO performance parameters measured at each monitoring well is provided in **Appendix B**.

Implementation of the injection process consisted of the following activities:

- Mobilization and set-up;
- Pre-injection monitoring;
- S-ISCO injections
- Performance monitoring.

2.1 Mobilization and Set up

On Monday July 9th 2012 mobilization took place in the course of one day, including deliveries and equipment set-up. Dry sodium persulfate in bags, drums of sodium hydroxide (25%), and drums of VeruSOL were all delivered to the Site. Two separate berms were constructed; one for sodium hydroxide storage, and one for injection system/chemical batching. VeruTEK's injection system included a 1000 gallon mixing tank for sodium hydroxide/VeruSOL batching, a 350 gallon open top mixing tank for sodium persulfate batching with recirculation pump, a metered injection system and secondary centrifugal water pump. An eyewash/safety shower system was set up adjacent to the batching station and water was sourced using a garden hose from inside the AFFCO facility. Pretreatment groundwater samples were collected on Monday, July 9, 2012 to establish baseline conditions. Troll® 9500 low flow sampling device was used to collect samples from the following wells- MW-1, EW-0, EW-1, EW-1N, S-8, IW-1, IW-2, IW-3, and the two site "Pits".

2.3 S-ISCO injections

S-ISCO Phase I

Phase I of S-ISCO injection comprised of two consecutive days of injections on Tuesday, July 10 and Wednesday July 11. On the first day of injection, the injection system was hooked up to IW-2. The

packer was installed by Zebra Environmental Corp to isolate injections at a depth of 11-13 ft. Injections took place through the Sidewinder pressure pulse tool. The pressure pulse was set to 750 RPM. Injections began at 4 GPM and were gradually increased up to 10 GPM. For the first phase of injections, injections remained constant to IW-2 with flow rate maintained at 10 GPM. A total of 2,700 gallons of S-ISCO chemistry was injected into IW-2. Concentrations of injected fluid during this phase were held constant at 15 g/L VeruSOL, 15 g/L sodium persulfate and 12.5 g/L sodium hydroxide. **Table 2** summarizes the Phase I of S-ISCO injections.

Table 2: S-ISCO Phase I Injection Summary		
VeruSOL	Sodium Persulfate	Sodium Hydroxide
15 g/L	15 g/L	12.5 g/L
Total Volume Injected		**2700 gal**

Interim groundwater sampling was conducted during Phase I of S-ISCO injections to track the progress of the treatment process and to monitor the transport of the injected chemicals. Analysis of groundwater parameters showed an increase in pH at EW-0, on the second day of injection. Also, sodium persulfate was detected at the same location at concentrations up to 5.89 g/L. Increase in conductivity, and decrease in IFT was also observed at EW-0. The pH, IFT, sodium persulfate, and conductivity data indicates that the persulfate was activated and is suggestive of effective transport of injected chemistry.

S-ISCO Phase II

The second phase of S-ISCO injections was conducted over a three day period from Monday July 23 through Wednesday July 25. During this phase, remedial chemistry was injected through IW-1, IW-2, and IW-3 at flow rates ranging up to 10 gpm. Day 1 of Phase II injections focused on completing injections to both IW-1 and IW-3. A total of 1000 gallons of S-ISCO chemistry was injected to both of these injection wells. The concentration of injected fluid included 10 g/L VeruSOL, 15 g/L sodium persulfate, and 12.5 g/L sodium hydroxide. On the second day of the phase II, injections focused on injections to IW-2. Four thousand gallons of S-ISCO were injected to IW-2 on this day with concentration of 10 g/L VeruSOL, 15 g/L sodium persulfate, and 12.5 g/L sodium hydroxide. On the final day of Phase II, injections continued to focus on IW-2. The first batches of persulfate contained the same S-ISCO concentrations as the day previous. On the third batch of the day a five hundred gallon batch of higher persulfate concentration S-ISCO was prepared. The concentration of persulfate was increased up to 50g/L, sodum hydroxide was increased to 25 g/L and VeruSOL concentrations were reduced to 8g/L. Phase II was completed with a final round of ISCO injection with 25g/L persulfate with 20 g/L sodium hydroxide. Table 3 summarizes the Phase II injections.

Table 3: Phase II Injection Summary		
VeruSOL	Sodium Persulfate	Sodium Hydroxide (g/L)
8-10 g/L	25-50 g/L	12.5-25 g/L
Total S-ISCO Volume Injected		**8,500 gal**
I-SCO Injections		
VeruSOL	Sodium Persulfate	Sodium Hydroxide (g/L)
0 g/L	25 g/L	12.5 g/L
Total I-SCO Volume Injected		**1,000 gal**

Groundwater sampling was conducted during Phase II injections to monitor the transport of the injected chemicals and contaminant oxidation. Throughout this phase, EW-0 maintained sodium persulfate detections, increase in conductivity, and decrease in IFT. Low concentrations of persulfate was also detected at EW-1N and the pit areas during this Phase.

S-ISCO Phase –III Geoprobe Injections

On Thursday July 26, Zebra mobilized a Geoprobe rig to the Site. The Geoprobe rig was to be used to target any contamination that may have remained in the 13 to 15 ft depth interval. Five locations were selected in Grid Cell 2 and Grid Cell 5. Two probes were conducted in Grid Cell 5, and three probes in Grid Cell 2. During this phase, a foot-long injection probe was used to conduct top-down injections. Depending on the locations, flow rates ranged from 4 to 7 GPM. Each Geoprobe point received 100 gallons of S-ISCO chemicals to the 13-14 ft depth zone, and 14-15 ft depth. S-ISCO injections included VeruSOL, sodium persulfate and sodium hydroxide, injected at 5 g/L, 25g/L and 25 g/L respectively. Table 4 summarizes the Geoprobe injections.

Table 4: S-ISCO Phase I Injection Summary		
VeruSOL	Sodium Persulfate	Sodium Hydroxide
5 g/L	25 g/L	25 g/L
Total Volume Injected		**1,000 gal**

Groundwater sampling during Geoprobe injections showed increase in pH at wells EW0, MW-1, S-8 and the pit area. EW-0 maintained elevated pH, conductivity, and persulfate detections.

Phase –IV Soil Surface Washing

During the week of August 27th to August 31st Fleming Lee-Shue was on-site for the excavated of the upper most portions of the contaminated soil mass located at 10 ft and above. VeruTEK on was onsite Thursday August 30th 2012 to perform ISCO soil surface washing of the excavated pit. 1,000 gallons of ISCO chemicals were sprayed at approximately 6 GPM and focused on injecting to Grid Cell 2 and Grid Cell 5. Table 5 summarizes the soil wash chemistry.

Table 5: Phase IV Summary		
VeruSOL	Sodium Persulfate	Sodium Hydroxide
0 g/L	25 g/L	12.5 g/L
Total Volume		**1,000 gal**

2.4 Performance Monitoring

Groundwater was monitored in MW-1, EW-0, EW-1, EW-1N, S-8, IW-1, IW-2, IW-3, PIT S, and PIT L during and after S-ISCO injections to track the performance of the remedial chemistry in the subsurface. Performance monitoring included using multiple parameter groundwater monitoring devices to measure water quality parameters in Site groundwater including: turbidity, temperature, pH, dissolved oxygen (DO), oxidation-reduction potential (ORP), conductivity. Groundwater samples collected throughout the injection phase and were brought to the VeruTEK's laboratory for interfacial tension (IFT), pH, ORP, turbidity, specific conductivity analysis.

2.5 Post Injection Monitoring

During the on-site excavation all monitoring/injection wells located in the vicinity of S-ISCO treatment were destroyed. No additional performance monitoring was conducted following the excavation event.

3. Discussion of Performance Monitoring Results

EW -0

EW-0 was a historic monitoring well located in the immediate area of highest VOC concentrations. Analysis of groundwater from EW-0 indicates that the remedial chemistry was present and reacting at this well location. Increase in pH, conductivity, sodium persulfate concentrations and decrease in IFT in response injections were observed as early as the second day of S-ISCO Phase I injections. pH levels remained alkaline during all phases of treatment. The highest pH, sodium persulfate and conductivity were measured at this well. The most prominent responses to the injection chemistry at EW-0 were observed during S-ISCO Phase II injections. IFT levels were reduced to as low as 48.5 Nm/m on July 23, but increased gradually during ISCO treatments. Persulfate was measured at 7.24 6g/L, while the pH remained alkaline, showing effective transport of the sodium hydroxide. Conductivity was highest at this well, also indicating that the persulfate was present.

MW-1, EW-1N, S-8

Groundwater monitoring data from MW-1, EW-1, S-8 indicates a minimal response to injections at these locations. Slight increases in pH were measured during S-ISCO Phase II at these locations. EW-1N showed persulfate measurement of 0.269 mg/L on July 24, 2012. No notable increase in conductivity and IFT decreases were measured during the treatment period. Persulfate was never detected above detection limits at MW-1 or S-8.

Pits-L & S

Minor increases in groundwater pH were observed in Pits L and S following S-ISCO Phase II injections. Sodium persulfate concentration at Pit-S was measured at 0.133g/L on July 24 2012, however never detected at Pit L. All other parameters remained relatively consistent at these locations.

4. Conclusions & Recommendations

Application of the S-ISCO injections at the Site operated according to plan. The achievable flow rates were higher than initially expected and no technical problems occurred. The primary focus of the injections was to target TCA and VOC concentrations located in Grid Cell 2. Process monitoring from wells located in Grid Cell 2 showed effective parameter control. Elevated pH, conductivity, decreased IFT, and sodium persulfate concentrations all showed that the sodium persulfate was activated and indicates effective transport of injected chemistry in the treatment zone.

Due to the post-injection excavation there are no more existing monitoring wells in the treatment area. Therefore no more groundwater monitoring was conducted following the excavation. Fleming Lee-Shue will be responsible for collecting post-injection confirmation soil samples. It has been VeruTEK's experience that post-injection samples should be collected between two to six months following S-ISCO treatment. Upon completion of the soil sampling, additional analysis will be conducted to determine the effectiveness of the S-ISCO treatments.

Figure 1.

Oak Hub Set: Elev. = 18.32'
Rim 2.5" pvc pipe: Elev. = 20.61'
(inside 5" iron pipe)

Well E-1(N)



Paint Spot Conc.: Elev. = 17.77'
Top Rim 2.5" pvc pipe: Elev. = 21.71'

Well MW-1



Mag Nail Set: Elev. = 18.44'
Top Rim 2.5" Pipe: Elev. = 21.25'

Well IW-1



Oak Hub Set: Elev. = 18.60'
Top Rim 2.5" Pipe: Elev. = 20.10'

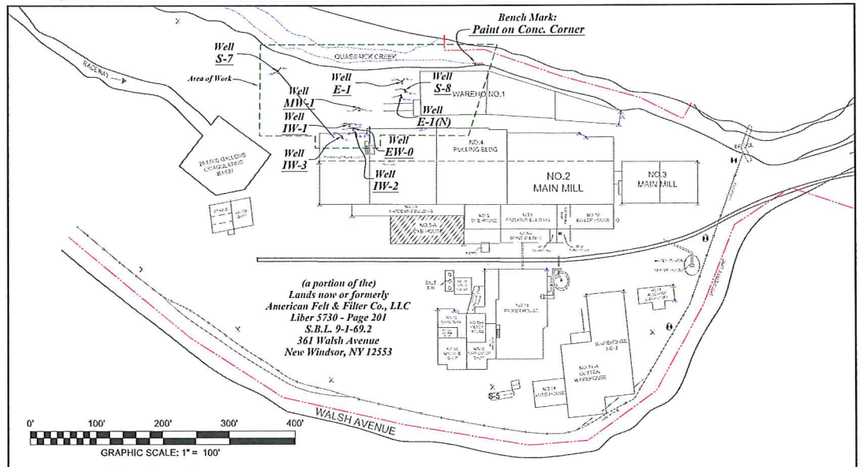
Well EW-0



Oak Hub Set: Elev. = 18.08
Rim 2.5" pvc pipe: Elev. = 19.53
(inside 5" sq. iron pipe)

Well S-8





Site Overview

Adj. To Creek.: Elev. = 8.27'

Bench Mark:
Paint on Conc. Corner



Top Rim 2.5" Pipe: Elev. = 19.70'
Mag Nail Set: Elev. = 19.11'

Well IW-2



Top Rim 2.5" Pipe: Elev. = 20.92
Paint Spot Conc.: Elev. = 19.13

Well IW-3



Rim 10" iron pipe: Elev. = 19.20'
Oak Hub Set: Elev. = 18.07'

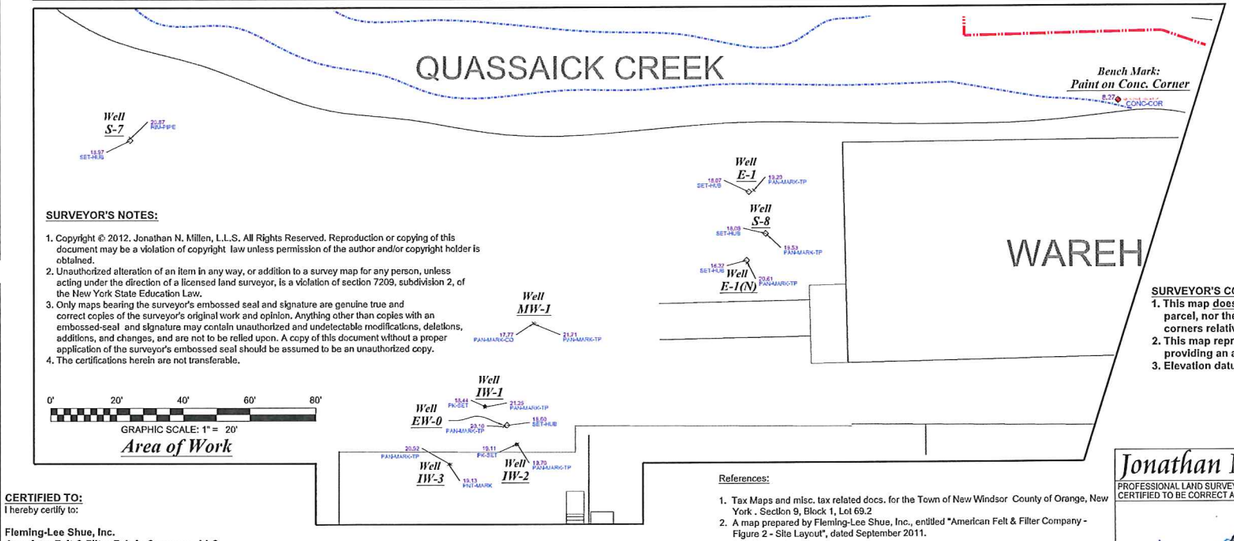
Well E-1



Rim 5" Pipe: Elev. = 20.87'
Oak Hub Set: Elev. = 18.97'

Well S-7





Area of Work

SURVEYOR'S NOTES:

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4. The certifications herein are not transferable.

SURVEYOR'S COMMENTS:

1. This map does not represent a boundary survey, and no attempt was made to determine the property limits of the subject parcel, nor the direction of North. The locations of monitor wells as depicted was best fit via the field location of building corners relative to the approximate building geometry as shown on a map prepared by client (see Item 2. In References).
2. This map represents the determination of elevations relative to specific monitor well locations for the sole purpose of providing an accurate elevation reference datum.
3. Elevation datum is approximate to WGS84 as determined via Earth Satellite reference data per Lat/Long.

CERTIFIED TO:
I hereby certify to:

Fleming-Lee Shue, Inc.
American Felt & Filter Fabric Company, LLC

I hereby certify to the hereon listed parties that this map shows the results of an on the ground observation of the well locations shown hereon, located in the Town of New Windsor, County of Orange, State of New York. That it represents an actual field survey completed on 06-18-2012 and was performed in accordance with the current existing Code of Practice adopted by the New York State Association of Professional Land Surveyors, Inc., and is to the best of my knowledge and belief, accurate and correct.

Signature

Jonathan N. Millen, LLS
1 Gardnertown Road - Suite 101
Newburgh, NY 12550

Date

References:

1. Tax Maps and misc. tax related docs. for the Town of New Windsor County of Orange, New York . Section 9, Block 1, Lot 69.2
2. A map prepared by Fleming-Lee Shue, Inc., entitled "American Felt & Filter Company - Figure 2 - Site Layout", dated September 2011.

DATE	REVISION

Jonathan N. Millen, L.L.S.
PROFESSIONAL LAND SURVEYOR N.Y. LIC. No. 050746
CERTIFIED TO BE CORRECT AND ACCURATE

STATE OF NEW YORK · JONATHAN N. MILLEN · 050746 · LICENSED LAND SURVEYOR

JONATHAN N. MILLEN, L.L.S.

Monitor Well Elevation Study

Sheet 1 of 1

Automated Construction Enhanced Solutions, Inc.
Professional Land Surveying
1 Gardnertown Road - Suite 101 - Newburgh, NY 12550
Office: 845-895-3330 Fax: 845-895-3339 E-Mail: acesurveys@hvc.rr.com

Prepared For A Portion of Tax Map Parcel
9-1-69.2
aka 361 Walsh Avenue
situated in the
Town of New Windsor
County of Orange, NY 12553

SCALE: As Shown DATE: 06-20-2012 JOB No. 12007FLS DRAWN BY: jvm

Appendix A

AFFCO Pulsing Log

	Inj_well	date	time	input_press (psi)	output-press (psi)	Pulse_per_min	gpm	Comment
start 1	IW 2	7/10/12		5-7	0	750	10	
	IW 2	7/11/12	930	5-7	0	760	6	
	IW 2	7/11/12	1000	5-7	0	760	8	
	IW 2	7/11/12	1030	6-8	0	760	10	
	IW 2	7/11/12	1130	6-8	0	760	10	
			1145	5-7	0	760	10	— 1st batch done
start 2	IW 2	7/11/12	120	3-5	0	760	10	
	IW 2	7/11/12	150	3-5	0	760	10	
	IW 2	7/11/12	250	3-5	0	760	10	
	IW 2	7/11/12	335	3-5	0	760	10	— 2nd batch done
start 3	IW 2	7/11/12	405	3-5	0	760	10	
	IW 2	7/11/12	445	4-6	0	760	10	
	IW 2	7/11/12	5:15	4-6	0	760	10	

John Diamond – zebra environmental

AFFCO Pulsing Log

Inj_well	date	time	input_press (psi)	output-press (psi)	Pulse_per_min	gpm	Comment
IW 3	7/23/12	1130	2-4	0	750	6-8	
IW 3	7/23/12	1200	2-4	0	750	8	
IW 3	7/23/12	100	7-9	0	750	10	[redacted]
IW 3	7/23/12	205	7-9	0	75	10	Done
IW 1	7/23/12	315	2-4	0	750	8	
IW 1	7/23/12	415	3-5	0	750	10	
IW 1	7/23/12	505	3-5	0	750	10	
IW 1	7/23/12	520	3-5	0	750	10	Done
IW 2	7/24/12	845	0-2	0	750	4-5	
"	"	855	0-2	0	750	6	
"	7/24/12	915	2-4	0	750	9	
"	"	940	3-5	0	750	10	
"	7/24/12	1045	3-5	0	750	10	Done
"	7/24/12	1200	4-6	0	750	10	
"	7/24/12	100	4-6	0	750	10	
"	"	200	3-5	0	750	10	Done
"	7/24/12	330	3-5	0	750	10	
"	"	430	3-5	0	750	10	
IW 2	7/24/12	530	3-5	0	750	10	Done
IW 2	7/25/12	815	0-2	0	750	6	
IW 2	7/25/12	845	4-6	0	750	10	
IW 2	7/25/12	945	4-6	0	750	10	
IW 2	7/25/12	1045	3-5	0	750	10	Done
IW 2	7/25/12	1155	4-6	0	750	10	
IW 2	7/25/12	1230	4-6	0	750	10	
"	"	130	4-6	0	750	10	Done
IW 2	7/25/12	200	0	0	0	10	No sides under
"	"	230	0	0	0	10	Done [redacted]
IW 2	7/25/12	325	4-6	0	750	10	
IW 2	7/25/12	400	4-6	0	750	10	
IW 2	7/25/12	430	4-6	0	750	10	Done
IW 2	7/25/12	445	2-4	0	750	10	
"	"	500	2-4	0	750	10	Done
IW 3	7/25/12	520	2-4	0	750	10	
"	"	545	2-4	0	75	10	Done

AFFCO Pulsing Log

Inj_well	date	time	input_press (psi)	output-press (psi)	Pulse_per_min	gpm	Comment
GP-1	7/26/12	915	7-10	0	750	6	13-14
GP-1A	7/26/12	935	7-10	0	750	6	14-15
GP-2	7/26/12	1000	10-12	0-.5	750	6	13-14
GP-2A	7/26/12	1045	11-13	0	750	6	14-15
GP-3	7/26/12	1110	11-13	0	750	4	13-14
GP-3A	7/26/12	1145	7-9	0	750	4	14-15
GP-4	7/26/12	1220	8-10	0	750	5	13-14
GP-4A	7/26/12	1255	8-10	0	750	5	14-15
GP-5	7/26/12	140	4-6	0	750	7	13-14
GP-5A	7/26/12	220	4-6	0	750	7	14-15
Flushed all equipment @ the end							

Appendix B

AFFCO											
MW-1											
Sample Date	Time	Analyst	Sample Matrix	pH	ORP (mV)	Cd (ms/cm)	IFT (mN/m)	Temp (C)	Turbidity (NTU)	SP (g/L)	DTW (m)
7/9/2012	15:35	LLL	GW	6.49	480	1.209	71.9	25.5	36.9	<0.1	--
7/10/2012	11:55	LLL	GW	6.59	-2	1.35	71.1	25.5	103.4	<0.1	--
7/11/2012	14:00	LLL	GW	6.80	184	1.225	72.1	25.4	20.78	<0.1	13.1
7/11/2012	16:30	LLL	GW	6.76	203	1.252	71.6	25.4	26.74	<0.1	--
7/17/2012	10:31	LLL	GW	7.01	240	1.231	71.9	24.1	8.73	<0.1	12.86
7/23/2012	14:45	JL	GW	6.44	312	1.545	74.1	18.6	447.6	0.14	12.70
7/24/2012	14:15	JL	GW	7.52	199	1.645	73.2	20.5	339.8	<0.1	12.6
7/25/2012	17:00	LLL	GW	7.93	218	1.39	72.6	15.1	248	<0.1	12.5
7/26/2012	9:40	LLL	GW	8.17	185	1.632	73.6	15	304.1	<0.1	12.63
8/1/2012	10:10	LLL	GW	6.66	89	1.554	71.2	22.6	61.49	<0.1	12.00
8/8/2012	16:10	GD	GW	8.11	224	0.807	74.6	17.7	79.7	<0.1	12.40
8/22/2012	13:15	LLL	GW	7.30	210	1.656	74.6	29.5	183.6	<0.1	12.50
8/30/2012	11:00	LLL	GW	7.05	255	1.335	71.0	27.2	172.3	<0.1	12.45

AFFCO											
EW-0											
Sample Date	Time	Analyst	Sample Matrix	pH	ORP (mV)	Cd (ms/cm)	IFT (mN/m)	Temp (C)	Turbidity (NTU)	SP (g/L)	DTW (m)
7/10/2012	12:30	LLL	GW	6.36	154	4.074	72.0	26.0	41.7	<0.1	--
7/11/2012	14:40	LLL	GW	13.88	-49	100.2	58.4	25.5	633	5.89	10.4
7/17/2012	11:28	LLL	GW	13.88	-76	104.8	67.8	24.1	100.2	0.160	10.48
7/23/2012	15:30	JL	GW	14.60	-111	115.0	48.5	18.2	221.5	0.104	10.31
7/24/2012	14:40	JL	GW	14.27	-23	125.1	49.1	20	664.8	3.892	10.27
7/25/2012	--	LLL	GW	12.28	45	112	69.8	14.8	789.4	7.241	--
7/26/2012	10:00	LLL	GW	12.78	73	102.2	70.9	15.2	664.4	6.661	10.61
8/1/2012	11:00	LLL	GW	13.71	-39	114.4	71.9	22.0	87.63	0.694	10.09
8/8/2012	9:10	GD	GW	13.74	-57	52.35	75.1	17.5	7.46	0.195	10.50
8/22/2012	12:10	LLL	GW	13.34	-56	90.73	70.2	28.7	824.7	0.204	--

AFFCO											
E1-N											
Sample Date	Time	Analyst	Sample Matrix	pH	ORP (mV)	Cd (ms/cm)	IFT (mN/m)	Temp (C)	Turbidity (NTU)	SP (g/L)	DTW (m)
7/10/2012	16:00	LLL	GW	6.97	211	0.746	71.8	25.4	14.28	<0.1	--
7/11/2012	16:50	LLL	GW	7.05	163	4.635	71.6	25.3	29.89	<0.1	12.5
7/17/2012	10:05	LLL	GW	6.67	163	0.659	71.4	24.0	2.79	<0.1	12.30
7/23/2012	14:35	JL	GW	7.55	234	0.639	73.1	19.0	5.08	<0.1	12.30
7/24/2012	13:30	JL	GW	7.67	281	0.697	73.5	19.9	7.22	0.269	12.26
7/25/2012	16:50	LLL	GW	7.96	343	0.486	72.2	15.5	6.78	<0.1	12.2
7/26/2012	9:30	LLL	GW	7.91	276	0.564	72.8	15.7	28.96	<0.1	12.4
8/1/2012	9:50	LLL	GW	6.11	149	0.506	73.0	21.9	2.07	<0.1	12.20
8/8/2012	8:40	GD	GW	6.29	419	1.382	74.5	13.6	0.72	<0.1	12.24
8/22/2012	11:30	LLL	GW	6.64	375	0.539	71.2	29.3	5.09	<0.1	12.40
8/30/2012	10:50	LLL	GW	7.82	382	0.46	71.0	27.5	17.13	<0.1	12.50

AFFCO											
IW-1											
Sample Date	Time	Analyst	Sample Matrix	pH	ORP (mV)	Cd (ms/cm)	IFT (mN/m)	Temp (C)	Turbidity (NTU)	SP (g/L)	DTW (m)
7/11/2012	14:10	LLL	GW	6.79	126	1.036	71.8	25.4	9.91	<0.1	10.5
7/17/2012	11:17	LLL	GW	6.84	138	0.903	72.0	24.0	8.48	<0.1	10.26
8/1/2012	10:20	LLL	GW	9.95	12	1.418	70.2	21.2	216.9	<0.1	9.92
8/8/2012	10:20	GD	GW	12.01	8	1.698	72.6	17.0	14.3	<0.1	10.20
8/22/2012	12:17	LLL	GW	9.59	48	1.215	70.6	29.3	18.2	<0.1	--

AFFCO											
IW-2											
Sample Date	Time	Analyst	Sample Matrix	pH	ORP (mV)	Cd (ms/cm)	IFT (mN/m)	Temp (C)	Turbidity (NTU)	SP (g/L)	DTW (m)
7/10/2012	9:25	LLL	GW	7.24	222	0.849	71.8	25.3	24.58	<0.1	--
8/1/2012	--	LLL	GW	10.11	35	2.147	70.7	21.2	695.7	<0.1	9.63
8/8/2012	13:00	GD	GW	13.41	-13	10.09	65.6	17.5	58.95	0.361	10.02
8/22/2012	13:00	LLL	GW	13.60	-62	75.23	48.3	28.7	4.55	<0.1	--

AFFCO											
IW-3											
Sample Date	Time	Analyst	Sample Matrix	pH	ORP (mV)	Cd (ms/cm)	IFT (mN/m)	Temp (C)	Turbidity (NTU)	SP (g/L)	DTW (m)
7/10/2012	10:10	LLL	GW	7.25	115	0.825	71.5	25.8	28.53	<0.1	--
7/11/2012	14:15	LLL	GW	6.92	160	0.995	71.1	25.3	7.88	<0.1	11.8
7/17/2012	11:00	LLL	GW	7.18	197	0.864	72.0	24.0	12.56	<0.1	11.29
8/1/2012	10:25	LLL	GW	13.03	-31	8.735	57.3	21.3	248.7	0.2	10.89
8/8/2012	13:00	GD	GW	13.56	-15	14.03	66.9	17.6	18.21	0.212	11.27
8/22/2012	12:55	LLL	GW	11.68	15	4.435	64.7	29.0	253.4	<0.1	--
8/30/2012	11:30	LLL	GW	13.41	-19	18.96	44.8	27.5	419.3	<0.1	11.40

AFFCO											
S-8											
Sample Date	Time	Analyst	Sample Matrix	pH	ORP (mV)	Cd (ms/cm)	IFT (mN/m)	Temp (C)	Turbidity (NTU)	SP (g/L)	DTW (m)
7/10/2012	15:45	LLL	GW	8.04	112	0.644	71.8	25.4	2.44	<0.1	--
7/11/2012	14:42	LLL	GW	7.93	173	0.689	71.5	25.2	4.05	<0.1	10.3
7/17/2012	10:15	LLL	GW	8.36	218	0.539	72.8	24.0	0	<0.1	10.80
7/23/2012	14:30	JL	GW	9.06	208	0.713	74.1	19.7	1.23	<0.1	10.22
7/24/2012	13:47	JL	GW	9.16	203	0.692	73.5	20.2	1.91	<0.1	10.2
7/25/2012	16:40	LLL	GW	8.75	243	0.558	73.2	15.6	2.15	<0.1	10.2
7/26/2012	9:20	LLL	GW	9.38	180	0.609	73.3	15.7	27.22	<0.1	10.3
8/1/2012	10:00	LLL	GW	8.49	154	0.533	70.6	22.5	2.79	<0.1	9.70
8/8/2012	15:30	GD	GW	9.22	211	0.382	74.7	18.5	5.1	<0.1	10.05
8/22/2012	10:45	LLL	GW	8.75	199	0.58	71.6	30.0	3.68	<0.1	10.20
8/30/2012	10:45	LLL	GW	8.79	201	0.594	71.0	27.7	2.84	<0.1	10.30

AFFCO											
L PIT											
Sample Date	Time	Analyst	Sample Matrix	pH	ORP (mV)	Cd (ms/cm)	IFT (mN/m)	Temp (C)	Turbidity (NTU)	SP (g/L)	DTW (m)
7/11/2012	9:30	LLL	GW	7.49	237	0.629	71.9	25.4	2.1	<0.1	3.9
7/17/2012	10:45	LLL	GW	7.91	230	0.571	72.0	24.0	1.22	<0.1	3.50
7/23/2012	15:50	JL	GW	8.91	210	0.595	74.0	18.4	2.51	0.309	--
7/24/2012	14:25	JL	GW	9.05	237	0.502	74.1	19.8	3.02	<0.1	3.43
7/25/2012	17:20	LLL	GW	8.91	201	0.471	72.7	15.9	12.06	<0.1	3.2
7/26/2012	9:50	LLL	GW	9.21	182	0.562	73.7	14.8	3.83	<0.1	3.1
8/1/2012	10:45	LLL	GW	8.49	161	0.541	71.8	21.5	3.33	<0.1	2.75
8/8/2012	16:20	GD	GW	9.17	198	0.217	73.7	17.9	0.62	<0.1	3.12
8/22/2012	12:00	LLL	GW	8.65	208	0.527	71.4	30.2	2.23	<0.1	3.50

AFFCO											
S PIT											
Sample Date	Time	Analyst	Sample Matrix	pH	ORP (mV)	Cd (ms/cm)	IFT (mN/m)	Temp (C)	Turbidity (NTU)	SP (g/L)	DTW (m)
7/11/2012	9:35	LLL	GW	7.52	248	0.18	71.9	25.3	0.81	<0.1	--
7/17/2012	11:08	LLL	GW	8.28	237	0.136	72.2	24.0	0	<0.1	--
7/23/2012	15:45	JL	GW	9.43	194	0.173	73.8	18.7	0.51	<0.1	--
7/24/2012	14:30	JL	GW	9.11	230	0.164	74.2	19.7	0.82	0.133	--
7/25/2012	17:10	LLL	GW	8.51	235	0.146	73.3	15.5	0	<0.1	--
7/26/2012	9:50	LLL	GW	9.15	179	0.156	72.8	15.1	0	<0.1	--
8/1/2012	10:50	LLL	GW	8.51	176	0.155	71.1	22.3	3.51	<0.1	--
8/8/2012	--	GD	GW	9.33	220	0.809	74.1	18.6	1.3	<0.1	NA
8/22/2012	12:50	LLL	GW	8.83	216	0.137	71.7	29.8	0.02	<0.1	--

APPENDIX G

Project Photographic Log

Appendix G
Photo Log
AFFCO Final Engineering Report
New Windsor, NY

Treatment Area

5/11/12



Photo 1 – Approximate treatment area



Photo 2 – Collecting pre-treatment baseline soil samples



Photo 3 – Baseline soil samples and cores

Soil & Groundwater Treatment by Chemical Oxidation 7/11/12



Photo 1 – Chemical mixing area



Photo 2 – Mixing sodium persulfate for injections



Photo 3 – Injection equipment control panel

Photo Log
AFFCO Final Engineering Report
New Windsor, NY



Photo 4 – Inserting injection tool into well

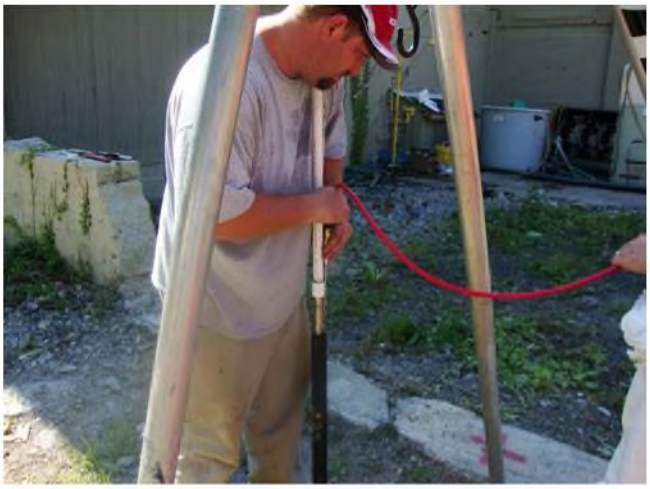


Photo 5 – Preparing for injections



Photo 6 – Injecting persulfate



Photo 7 – Injecting persulfate

Soil Excavation

8/22/12 - 8/29/12



Photo 1 – Preparing lined staging area



Photo 2 – Stockpiled soil



Photo 3 – Stockpiled soil covered to protect from rain



Photo 4 – Soil in windrows for exposure to air



Photo 5 – Excavating soil



Photo 6 – Excavation



Photo 7 – Excavation



Photo 8 – Soil going through screener to remove large debris



Photo 9 – Loading soil into screener



Photo 10 – Loading soil into screener



Photo 11 - Loading soil into screener

APPENDIX C

Excavation Work Plan

APPENDIX C – EXCAVATION WORK PLAN

C-1 NOTIFICATION

At least 15 days prior to the start of any activity that is anticipated to encounter remaining contamination (i.e, any work that will disturb material two feet below the top of the soil cover), the Site owner or their representative will notify the Department. Currently, this notification will be made to:

John Spellman, P.E.
Division of Environmental Remediation
Remedial Bureau C
New York State Department of Environmental Conservation
625 Broadway
Albany, NY 12233-7014
Phone: (518) 402-9662

Site Control
New York State Department of Environmental Conservation
Division of Environmental Remediation
Bureau of Technical Support
625 Broadway
Albany, NY 12233-70201

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 composite cover system, 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 sample HASP provided in Appendix D 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.

C-2 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). Soil screening will be performed regardless of when the invasive work is done and will include all excavation and invasive work that will disturb material below the composite cover system.

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.

C-3 STOCKPILE METHODS

Soil stockpiles will be continuously encircled with a berm and/or silt fence (alternative arrangements may be made in consultation with NYSDEC considering space and traffic limitations). Hay bales will be used as needed near catch basins, surface waters and other discharge points.

When not in use, stockpiles will be kept covered at all times with appropriately anchored tarps. Stockpiles will be routinely inspected and damaged tarp covers will be promptly replaced.

If needed, odor suppressant material will be applied to the stockpiled soil prior to covering. A nearby hydrant serves as a readily available source of water to control dust.

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.

C-4 MATERIALS EXCAVATION AND LOAD OUT

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

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

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

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

A truck wash will be operated on-Site (alternative arrangements may be made in consultation with NYSDEC considering space and traffic limitations). 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.

C-5 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.

All trucks loaded with Site materials will exit the vicinity of the Site using only 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; (f) overall safety in transport; and (g) community input.

Trucks will be prohibited from stopping and idling in the neighborhood, if applicable, 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.

When possible, queuing of trucks will be performed on-Site in order to minimize off-site disturbance. Off-site queuing will be prohibited.

C-6 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).

C-7 MATERIALS REUSE ON-SITE

Any soil slated for reuse on-Site will be sampled to determine compliance with the NYSDEC Part 375 Commercial Use SCOs. All soils imported as part of remediation must meet the soil import requirements listed in C-10.

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 composite cover or impervious surface, and will not be reused within a cover soil layer, within landscaping berms, or as backfill for subsurface utility lines.

Concrete crushing or processing on-Site will not be performed without prior NYSDEC approval. Organic matter (wood, roots, stumps, etc.) or other solid waste, if any, which is excavated from the Site will not be reused on-Site.

C-8 FLUIDS MANAGEMENT

All liquids to be removed from the Site, including excavation dewatering and groundwater monitoring well purge and development waters, will be handled, transported and disposed in accordance with applicable local, State, and Federal regulations. 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.

Any discharge to surface waters of water generated during large-scale construction activities will be performed under a SPDES permit, or as otherwise approved by the Department.

C-9 COVER SYSTEM RESTORATION

After the completion of soil removal and any other invasive activities the soil cover system will be restored in a manner that complies with the RAWP and is consistent with existing Site use. If the type of cover system changes from that which exists prior to the excavation, a figure showing the modified surface will be included in the subsequent Periodic Review Report and in any updates to the Site Management Plan.

C-10 BACKFILL FROM OFF-SITE SOURCES

This section presents the requirements for imported clean fill. All imported fill will meet the more stringent of the Protection of Groundwater or Protection of Public Health SCOs for Commercial Use as described in 6NYCRR 375-6.7(d) and listed in Table 6 unless otherwise approved by NYSDEC.

A preliminary property review will be conducted to evaluate sources of potential fill to be used on-Site and will include documentation of each source's location and current and historical use(s). The following potential sources will be considered, subject to NYSDEC approval:

- Virgin sources (i.e., native soils and/or sediments from undeveloped properties),
- Construction projects at non-industrial properties,
- Roadway or other transportation-related projects,
- Other non-industrial sources, and
- Recycled concrete aggregate.

Prior to accepting any fill material, except for previously-approved recycled concrete aggregate, the procedures described below will be followed to verify the acceptability of the source. History of fill material source properties will be determined using historical Sanborn Fire Insurance Maps, if available, and one or more of the following sources:

- For fill sources in New York City or other urban areas, historical maps (Sanborn Maps) will be reviewed, if available,
- Aerial photographs,
- Historical title information,
- Site reconnaissance,
- Regulatory agency(ies) database review (NYSDEC, EPA), and/or
- Interviews of knowledgeable persons.

Confirmatory samples will be collected at a frequency specified in NYSDEC DER-10 Table 5.4(e) 10 (summarized below).

Number of Samples to be collected for Imported Material		
Sampling Parameter	**TCL VOCs**	**Full TCLP parameters, TCL SVOCs, TCL PCBs, TCL herbicides, and TAL Metals**
Soil Quantity (Cubic Yards)	**Grab**	**Five-point Composite**
0-50	1	1
50-100	2	1
100-200	3	1
200-300	4	1
300-400	4	2
400-500	5	2
500-800	6	2
800-1,000	7	2
> 1,000 cubic yards	Add two additional VOC grab samples and one five-point composite sample for each additional 1,000 cubic yards or propose a lesser frequency of testing for NYSDEC approval	

Materials from virgin sources will be tested initially, and will consist of collecting and analyzing a minimum of one sample from the initial 100 cubic yards for the parameters listed

above. Imported materials from non-virgin sources will be tested at a frequency and for the parameters listed in the above table.

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

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

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

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

C-11 STORMWATER POLLUTION PREVENTION

The Environmental Easement Area on the Site is less than an acre in size (approximately 0.4 acres); therefore a storm water pollution prevention plan (SWPPP) is not required during construction. Storm water pollution prevention measures, when applicable, will comply with the August 2005 or most recent New York Standards and Specifications for Erosion and Sediment Control (http://www.dec.ny.gov/chemical/29066.html).

Silt fencing or hay bales will be installed around the entire perimeter of the construction area only if warranted by Site conditions and there is a reasonable chance that sediment transport or erosion could occur (alternative arrangements may be made in consultation with NYSDEC considering space and traffic limitations).

C-12 CONTINGENCY PLAN

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

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

Identification of unknown or unexpected contaminated media 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.

A-13 COMMUNITY AIR MONITORING PLAN

A sample CAMP for the Site is given in Appendix E. Air sampling stations will be based on generally prevailing wind conditions. 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. The CAMP may be modified based on the actual scope of work. The modified CAMP must be approved beforehand by NYSDEC.

Exceedances of action levels listed in the CAMP (Appendix E) will be reported to NYSDEC and NYSDOH Project Managers.

C-14 ODOR CONTROL PLAN

This odor control plan is capable of controlling emissions of nuisance odors off-site. Specific odor control methods to be used on a routine basis will include foam odor suppressants. 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.

C-15 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, un-vegetated 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.

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 hoses attached to the nearby hydrants, as required.

C-16 OTHER NUISANCES

A plan will be developed and utilized by the contractor for all remedial work to ensure compliance with local noise control ordinances.

APPENDIX D

Health and Safety Plan

American Felt & Filter Company Site

Consent Order Index # W3-0784-04-06
Site # 3-36-036
361 Walsh Avenue
New Windsor, New York.

ENVIRONMENTAL HEALTH AND SAFETY PLAN

Prepared For:
American Felt & Filter Company
361 Walsh Avenue
New Windsor, New York 12553

FLS Project Number: 10000-005

Submitted to:

New York State Department of Environmental Conservation
Division of Environmental Remediation, Region 3
21 South Putt Corner
New Paltz, New York 12561-1696

MAY 19, 2017

Arnold F. Fleming, P.E.

&

Fleming Lee Shue

TABLE OF CONTENTS

1.0 INTRODUCTION..... 1

1.1 Site History……..……..2

1.2 Previous Site Investigation Results……...2

1.2.1 January 1988..... 2
1.2.2 December 1988..... 3
1.2.3 September 1994..... 3
1.2.4 August 1998..... 3
1.2.5 October 2001..... 3
1.2.6 March –May 2011..... 4

1.3 Problems Identified at the Site……..4

2.0 TASKS TO BE PERFORMED UNDER THIS PLAN..... 5

3.0 POTENTIAL CHEMICAL, PHYSICAL, AND BIOLOGICAL HAZARDS AND CONTROLS 5

3.1 Potential Chemical Hazards/Controls……5

3.2 Physical Hazards/Controls……5

3.3 Biological Hazards/Controls……6

3.4 Levels of Personal Protection……6

3.4.1 Level D..... 7
3.4.2 Modified Level D..... 8
3.4.3 Level C..... 8

3.5 General Hazard Controls……..8

3.5.1 General Workplace Safety Rules..... 8
3.5.2 Housekeeping..... 9
3.5.3 Fire Prevention.....10
3.5.4 Industrial Hygiene and Occupational Health.....10
3.5.5 Personal Hygiene.....10

4.0 TRAINING, PROJECT ORGANIZATION, AND PERSONNEL 11

4.1 Training……11

4.2 Project Team Organization……11

4.3 Subcontractor Compliance……13

5.0 INDIVIDUAL HEALTH AND SAFETY PROGRAMS LISTING 14

5.1 Hazard Communication Program……..14

5.2 Respiratory Protection Program……14

5.3 Occupational Noise Exposure/Hearing Conservation Program……..……14

5.4 Emergency Response Plan ……..…..14

5.5 Asbestos Control Program ……...14

5.6 Lead Exposure Program ……..……..15

6.0 COMMUNITY AIR MONITORING 15

6.1 VOCs Monitoring ……....15

6.1.1 VOC Response Levels, and Actions.....15

7.0 DECONTAMINATION 16

7.1 Site/Work Area Organization ……..……..16

7.2 Personnel Decontamination……..……..16

7.3 Equipment Decontamination……..17

8.0 EMERGENCY AND CONTINGENCY PLAN 18

FIGURES

Figure 1 Site Location Map
Figure 2 Hospital Route

TABLES

Table 1 Emergency Contacts and Phone Numbers
Table 2 Project Team Organization

APPENDICES

Appendix A Acknowledgment Form
Appendix B Profiles of Chemicals of Concern/Material Safety Data Sheets
Appendix C Heat Stress/Cold Stress and Related Illnesses

1.0 INTRODUCTION

Fleming-Lee Shue, Inc. (FLS) prepared this Health and Safety Plan (HASP) on behalf of American Felt & Filter Company (AFFCO), for use and implementation by FLS employees and their representatives during remedial activities at the AFFCO Site (hereafter referred to as the "Site"), New Windsor, NY.

The Site is located at 361 Walsh Avenue in New Windsor, New York, and is shown in Figure 1. A square-shaped, 2,500 square feet (sf) portion of land located at the northwest corner of the site is heavily contaminated with TCA, and the subject of remediation.

The area of the contamination and remediation consist of an open area as well as a portion of the Fuetron Building at the site. Portion of that building has a basement and concrete slab that is anticipated to be free of structures at the time of remediation.

The surrounding neighborhood is a mix of industrial, commercial, and residential buildings.

The purpose of this HASP is to identify the real and potential hazards associated with planned environmental field activities and to stipulate appropriate health and safety procedures, particularly where hazardous materials are potentially present. The procedures and guidelines contained in this document are intended to minimize exposure to chemical, physical and biological hazards that may be present in the soil, groundwater, or air, and to reduce the potential for accidents and injuries.

The procedures described in this document were developed in accordance with the provisions of Occupational Safety and Health Administration (OSHA) rule 29 CFR 1910.120 and FLS' experience with similar projects. All Site workers must review this HASP before entering the Site. The Health and Safety Officer (HSO) or designee will ensure that personnel have reviewed the HASP and will provide an opportunity to ask health and safety questions during attendance at a pre-field safety meeting. Field personnel will sign the acknowledgment form (Appendix A) maintained on-Site during the remediation. The recommended health and safety guidelines in this document may be modified, if warranted, by additional information obtained prior to, or during Site investigation. The HSO will also maintain copies of pertinent health and safety records for all field personnel.

The Occupational Safety and Health Act (1970) requires:

- Employers shall furnish each employee with a place of employment free from recognized hazards that are causing or likely to cause death or serious physical harm.

- Employers must comply with occupational health and safety standards and rules, regulations and orders pursuant to the Act, that are applicable to company business and operations.

- All employees must comply with occupational health and safety standards and regulations under the Act, which are applicable to their actions and situations.

- Employees are encouraged to contact their immediate superior for information that will help them understand their responsibilities under the Act.

1.1 Site History

The American Felt and Filter Company (AFFCO) property "the Site", located in New Windsor, Orange County, New York (Figure 1), manufactures a variety of felt and filter products. The GAF Corporation (the former owner), who manufactured the same products as AFFCO, operated the Site prior to 1978. During both GAF's and AFFCO's ownership, the facility used 1,1,1- trichloroethane (TCA) as a solvent and carrier for zinc resinate which was used to impregnate felt sheets in the Feutron Department. The TCA was stored on Site in 55-gallon drums in an enclosed area just outside the Feutron Building. About 35 to 40 drums of TCA were generally present on Site during regular operations. Site investigations performed in 1988 revealed that groundwater and soil in the area near the Feutron Department contained TCA. The source of the contamination is believed to be a historic leakage within the enclosed process area and spillage in the drum storage area.

The Site was placed on the New York State Department of Environmental Conservation's (NYSDEC) List of Inactive Hazardous Waste Sites in 1991 (Site Code 3-36-036), due to the potential threat to the adjacent Quassaick Creek. The facility stopped using TCA in 1992 when the production line in the Feutron Department that utilized TCA was shut down.

1.2 Previous Site Investigation Results

Site conditions were assessed during six sampling programs conducted in January and December 1988, September 1994, August 1998, October 2001, April 2011 and most recently in March 2013.

1.2.1 January 1988

This initial study involved groundwater and surface water sampling of the Site. Five supply wells used for process water at the plant already existed at the Site; and nine additional, shallow groundwater monitoring wells (S-1 through S-9, shown on Figure 2) were installed. The state's groundwater standard for TCA is 5 parts per billion (ppb). All of the groundwater monitoring wells sampled exhibited TCA levels above the standard. S-6, the monitoring well on the western portion of the Site, contained 91 ppb of TCA. The source of this contamination is not known. This portion of the Site has not been used by AFFCO, but was apparently used by GAF for the storage of equipment. Three surface water samples were collected from the Quassaick Creek and analyzed for TCA (Figure 2). The surface water analysis indicated that the upstream portion of the creek (C-1) did not contain any TCA, while the portion of the creek immediately downgradient of the drum storage area (C-2) contained 33 ppb of TCA. The creek sample collected from the downstream east edge of the Site (C-3) contained 22 ppb of TCA.

The Quassaick Creek is classified as a Class C surface water body. There are no standards or guidance values for TCA in Class C surface water bodies. Surface water sampling locations are shown in Figure 2.

1.2.2 December 1988

Since high concentrations of TCA were detected in January 1988, a second round of groundwater sampling was conducted to assess whether the contaminant levels had changed over time. The TCA concentrations detected during December 1988 were mostly less than half of those detected in January 1988. Soil conditions in the vicinity of the Feutron Building were also evaluated to determine if there was any contamination from past surface spills. The soil sampling indicated that a localized area (approximately 50 feet by 50 feet) located north of the Feutron Building, had TCA contamination exceeding the NYSDEC Technical and Administrative Guidance Memorandum (TAGM 4046) Recommended Soil Cleanup Objectives (RSCO) of 800 ppb. The RSCO is based on potential for impact to groundwater used as a potable supply.

1.2.3 September 1994

A third round of groundwater sampling was conducted to assess the latest groundwater conditions and guide any future Site work. TCA concentrations of groundwater in the two wells near the drum storage area: S-8 (shallow) and E-1 (the former production well), which initially had 1,400 and 2,800 ppb of TCA, respectively, were found to be at 48 ppb and 10 ppb of TCA, respectively at that time.

1.2.4 August 1998

In August 1998, the Site was investigated again to assess any changes in conditions since the last sampling event in September 1994. This program examined soil, soil gas, and groundwater throughout the Site. Soil gas samples were collected to test and were analyzed for the presence of organic vapors, an indication of contaminated soils. In areas where concentrations of organic vapors were found to be elevated in the soil, soil samples were collected and analyzed for volatile organic compounds (Figures 3 and 4). Groundwater from all monitoring wells was also sampled during this investigation. The soil gas survey demonstrated that the soil contamination at the Site was generally limited to the vicinity of the area where TCA was stored and used on the Site. Groundwater sampling indicated that exceedances of the groundwater standards (for use of the groundwater as a drinking water source without treatment) were found only in the wells immediately adjacent to the area where the TCA was stored and used (i.e., in monitoring wells S-6, S-8, and the former production well (E-1).

1.2.5 October 2001

The soil gas in the northwest corner (i.e., both inside and outside) of the Feutron Building was re-sampled. Select soil and groundwater samples were also taken from this area (and

were guided by the soil-gas sampling results). In addition, all of the Site's ten (10) monitoring wells were re-sampled. Because there were no records on the construction details of the former production well (E-1), a new bedrock well was installed adjacent to E-1 (Figure 5). The new well was named E-1 New, while the old well remained E-1. Soils were sampled during the installation of this new well. However, none of soil samples collected from E-1 New exceeded the RSCO of 800 ppb. The soil-gas sampling results indicated that seven locations exhibited elevated levels of organic vapors, which prompted soil samples to be obtained from these areas and analyzed for volatile organic compounds (VOCs). Four of the soil samples contained elevated levels of TCA that exceeded the RSCO.\

1.2.6 March –May 2011

As agreed upon during a March 21, 2011 meeting with the NYSDEC, additional soil and groundwater sampling was performed on April 4, 2011. The results were summarized in a letter report titled Results of the Soil and Groundwater Supplemental Remedial Investigation (SRI), dated May 23, 2010. As part of the conclusions of the SRI, it was proposed that soil remediation be performed to the Part 375 SCO for industrial levels.

In a May 23, 2011 teleconference call the NYSDEC approved a revised remedial plan, which is to excavate vertically to the top of the water table and laterally until the soil quality meets the NYSDEC Part 375 Regulations - Restricted Use Soil Cleanup Objectives for Commercial sites. Any remaining impacts below the water table will be treated via an in-situ remedial method.

1.2.7 March –April 2013

1.3 Problems Identified at the Site

Groundwater and soil contamination has been confirmed, delineated and monitored at the Site. The most recent investigation, conducted as part of the 2011 SRI, revealed that TCA was still present in, and adjacent to, the former drum storage area near the Feutron Building. However, TCA concentrations in the groundwater were significantly lower than those previously detected in 1994 and 1998.

FLS reviewed the current and historical soil and soil gas analytical results to estimate the total volume of soil impacted with TCA in and near the former drum storage area. The estimated dimensions for the impacted area are 50 ft. by 50 ft. and 10 ft. deep (Fig. 3).

2.0 TASKS TO BE PERFORMED UNDER THIS PLAN

The tasks to be performed under this plan are:

- Advancement of soil borings
- Air quality monitoring including for aerosol's and VOC's
- Drilling related soil and,
- Groundwater sampling

3.0 POTENTIAL CHEMICAL, PHYSICAL, AND BIOLOGICAL HAZARDS AND CONTROLS

This section discusses the potential chemical, physical, and biological hazards and controls associated with the investigation tasks above. A summary of potential site safety hazards and safety requirements is presented in Table 1.

3.1 Potential Chemical Hazards/Controls

Based on data collected during previous investigations at the Site, this HASP focuses on the following chemicals of concern:

- VOCs
    - 1,1,1 Trichloroethane (TCA)

- Other
    - Caustic groundwater and dust

Appendix B lists the recognized and suspected health hazards, exposure limits, physical and chemical properties, recommended protection levels and symptoms of exposure for the chemicals known or suspected to be present at the site. The chemical hazards will be minimized by limiting exposure of personnel to soil and groundwater and by the use of personnel protective equipment (PPE).

3.2 Physical Hazards/Controls

Physical hazards potentially present at the site include, but are not limited to, the following:

Hazard	Control
Slip, trip and fall (uneven terrain and slippery surfaces)	Avoid Uneven Terrain, Walk Slowly, Wear Sturdy/Supportive Shoes

Environmental (heat/cold) stress;	A discussion of heat stress and cold stress and related illnesses and controls is provided in Appendix C.
Vehicular Traffic	Avoid working in high traffic areas. If necessary, use cones, reflective vests, and consider use of a flagman/additional protection.
Fire	Ensure class ABC fire extinguisher is nearby to work area when using equipment that can provide an ignition source (heavy machinery, generators, power tools)
Noise hazards	Use ear plugs and/or ear muffs during demolition and excavation activities.
Use of heavy equipment	Stay clear of heavy equipment during operation. Maintain eye contact with operator when approaching equipment.
Flying Debris	Safety glasses and hard hats will be used during all demolition and excavation activities.

Anticipated site operations do not include the need for specific operations such as, lockout/tag-out, scaffolds or confined spaces; therefore these items are not addressed in this HASP. If site activities require these operations, the HASP will be amended and properly trained, experienced and competent personnel shall be utilized.

3.3 Biological Hazards/Controls

The work is scheduled to be completed during the early spring and is located indoors and outdoors, however the following hazards may or may not be present at the site.

Hazard	Control
Bites or stings from insects/animals (particularly ticks) resulting in skin inflammation, disease, or allergic response	Keep exposed skin covered. Use insect repellant if necessary. Inspect yourself carefully after work is completed.
Allergens and toxins from plants and animals, producing dermatitis, rhinitis, or asthma	Keep exposed skin covered using proper PPE. Wash hands regularly.

3.4 Levels of Personal Protection

Personal protective equipment (PPE) must be worn as required for each job in all operations where there is an exposure to hazardous conditions. Upon review of contaminant levels,

physical and biological hazards, exposure routes and the nature of the field tasks, it has been determined that the Level D protection will be used during field activities.

In the event that caustic or high pH soils or groundwater are encountered during remediation activities the level of protection may need to be upgraded from Level D to Modified Level D. Modified Level D protection serves as increased dermal protection when there is not an increased in need respiratory protection.

Periodic readings above 5 ppm require caution. There is no short-term exposure limit or STEL for TCA. A sustained PID measurement greater than 5 ppm above the background level or objectionable nuisance odors, detected over a 15-minute period in the breathing zone, will require upgrading respiratory protection to Level C.

If a sustained PID measurement reaches 30 ppm above the background level or higher in the worker breathing zone, and 5 ppm or higher at the perimeter (20 feet from where the work is being done), it is recommended to stop the work and resume work only after the PID measurements drop below 30 ppm in the worker breathing zone.

Instrument	Action Level	Response Action
PID	< 5 ppm over background level	Level D
	≥ 5 and ≤ 30 pm over background level	Upgrade to Level C, notify HSO immediately, initiate perimeter monitoring
	> 30 ppm over backgroung level in worker breathing zone, or > 5 ppm over background at perimeter	Stop work, resume work after levels drop below 30 ppm in worker breathing zone

Lists of the protection equipments for Level D and Level C are given below:

3.4.1 Level D

Level D applies to work in areas where the possibility of contact with potentially contaminated groundwater and soil exists. The protective equipment required for Level D includes, but is not limited to, the following:

- Work clothes or coveralls;
- Safety boots, with steel toe;
- Safety glasses;
- Reflective vest;

- Hard hat;
- Disposable latex gloves;
- Hearing protection, to be used as needed
- HEPA Dust Mask for Nuisance Dust (As needed)

3.4.2 Modified Level D

Modified Level D applies to work in areas where the possibility of contact with potentially contaminated groundwater and soil is probable or certain and a greater level of protective equipment is warranted. The protective equipment required for Level D includes, but is not limited to, the following:

- Protective clothing and other equipment required for Level D;
- Tyvek coverall
- Rubber Overboots or boot covers
- Heavy Duty Rubber or Chemical Resistant Gloves
- Safety Goggles or Splash Shield

3.4.3 Level C

Level C protection will include, but is not limited to, the following:

- Protective clothing and other equipment required for Level D;
- Full-face air purifying respirator (APR) with high efficiency particulate/organic vapor cartridges (ultra-twin with GMCH cartridges);
- Saranex-coated disposable coveralls with hoods; and
- Boot covers.

3.5 General Hazard Controls

3.5.1 General Workplace Safety Rules

- Report unsafe conditions, accidents, injuries, or incidents to the HSO and Project Manager.

- Use eye and/or face protection where there is danger from flying objects or particles, (such as when grinding, chipping, burning and welding, etc.) or from hazardous chemical splashes.
- Dress properly. Loose clothing and jewelry shall not be worn.
- Keep all equipment in safe working condition. Never use defective tools or equipment.
- Report any defective tools or equipment to immediate supervisor. Defective equipment will be taken out of service immediately and repaired or destroyed.
- Properly care for and be responsible for all PPE.
- Do not leave materials in aisles, walkways, stairways, work areas, roadways, or other points of egress.
- Practice good housekeeping at all times.
- Training on equipment is required prior to unsupervised operation.
- During work, pause every few minutes and assess surrounding conditions.
- Crossing highways and major roadways is not recommended. Expect movement of cars and buses at any time along any roadway, regardless of traffic signals, stop signs, yield signs, etc.
- When walking on right-of-way or road-shoulders, keep a sharp lookout in both directions.
- For personal safety, be cognizant of your surroundings and ensure that equipment is properly secured.
- Whenever possible, objects will be lifted and moved by mechanical devices (cranes, manually operated chain hoists, fork trucks, etc.) rather than by manual effort.
- The mechanical devices will be appropriate for the lifting or moving task and will be operated only by trained and authorized personnel.
- Objects that require special handling or rigging will only be moved under the guidance of a person who has been specifically trained to move such objects.
- Personnel will not pass under a raised load, nor will a suspended load be left unattended.
- Operations near overhead power lines are prohibited unless the power source has been shut off and locked out/tagged out or the appropriate clearance distances are maintained.
- Hand and power tools will be maintained in a safe condition to protect both the worker and the public from injury.
- Follow OSHA's vehicle management requirements, designed to ensure that vehicles are maintained and operated in a safe condition to protect workers and the public.
- A dry chemical fire extinguisher and hose with potable water should be available when excavating and handling soils.

3.5.2 Housekeeping

- Proper housekeeping is the foundation for a safe work environment. It definitely helps prevent accidents and fires, as well as creating a professional appearance in the work area.

- Material will be piled or stored in a stable manner so that it will not be subject to falling.
- Combustible scrap, debris, and garbage shall be removed from the work area at frequent and regular intervals.
- Stairways, walkways, exit doors, in front of electrical panels, or access to fire fighting equipment will be kept clear of materials, supplies, trash, and debris.

3.5.3 Fire Prevention

- All firefighting equipment shall be conspicuously located, accessible, and inspected periodically, and maintained in operating condition. An annual service check and monthly visual inspections are required for fire extinguisher.
- All employees must know the location of fire-fighting equipment in the work area and have knowledge of its use and application.

3.5.4 Industrial Hygiene and Occupational Health

- Toilet facilities shall be provided as required for the number of workers.
- A first aid kit and portable eyewash station shall be kept on site.
- An adequate supply of potable water shall be provided.
- The use of a common drinking cup is prohibited.
- Employees must be protected against exposure to hazardous noise levels by controlling exposure or by use of proper PPE.
- Any FLS Activities will be assessed for lead exposure (particularly if drywall or any painted surfaces or abrasive blasting/grinding is involved) and/or asbestos exposure.

3.5.5 Personal Hygiene

Eating, drinking and the use of tobacco products in the work area are prohibited. The use of alcohol or other non-prescription drugs by personnel that could impair the ability to function at the work site is prohibited. The use of some prescription drugs may impair the ability to function and can create safety problems on-site. Field personnel taking prescription medication should alert the HSO in case of an emergency. Beards or facial hair that could interfere with the use of a respirator are not permitted. Dermal contact with groundwater should be avoided. This includes avoiding walking through puddles, pools, and mud, sitting or leaning on or against drums, equipment, or on the ground. Field personnel should wash their hands before eating, smoking, using the toilet, etc. Field personnel should wash their hands and face and shower (daily) as soon as possible after leaving the site.

4.0 TRAINING, PROJECT ORGANIZATION, AND PERSONNEL

4.1 Training

Knowledge of the safety rules supplemented by compliance is essential to safety. New employees will be provided orientation training and will be furnished information and literature covering the company health and safety policies, rules, and procedures. This orientation training must be provided prior to the employee's visit to the Site.

All employees will have successfully completed the 40-hour OSHA health and safety training for hazardous material sites (29 CFR 1910.120[e][3][i]) and valid/up-to-date 8-hour refresher training (29 CFR 1910.120[e][4]).

Employees must read the HASP and project-specific Work Plan, which contains the applicable regulations/standards for their job.

Prior to beginning work on-Site, and weekly thereafter, the HSO will lead safety-training sessions and/or "tailgate" training meetings. These meetings will be conducted to provide information and training on new equipment, new procedures, new chemicals, refresher/remedial training in specific areas, or meet annual requirements. Such training may be held in conjunction with the safety briefings/meetings addressed elsewhere in this program.

If necessary, the HSO will ensure that employees are scheduled and provided specialized training as required. Examples of specified training include (but are not limited to):

- Safe handling/use of flammables, poisons, or toxics;
- Respirator care/use;
- Hazard communication (hazardous chemicals);
- Slip, trip and fall hazards and fall protection;
- Suppression and Monitoring

Specialized training will be documented in the employees' personnel records and/or in a master training record.

4.2 Project Team Organization

All personnel who participate in field activities will be required to attend a Health and Safety meeting prior to the commencement of field activities. The project team organization is shown on Table 2, and the roles are described below.

Health and Safety Officer (HSO)

- Administers all aspects of the occupational health and safety program;
- Develops programs and technical guidance to identify and remove physical, chemical, and biological hazards from facilities, operations, and sites;
- Assists management and supervisors in the health and safety training of employees;
- Conducts inspections to identify unhealthy or unsafe conditions or work practices;
- Investigates all accidents and takes action to eliminate accident causes;
- Monitors to determine the degree of hazard;
- Determines the protection levels and equipment required to ensure the safety of personnel;
- Evaluates on-site conditions (i.e., weather and chemical hazard information) and recommending to the project manager and/or the field coordinator, modifications to the work plan and personnel protection levels;
- Monitors performance of all personnel to ensure compliance with the required safety procedures;
- Ensures that all personnel have been trained in proper site-safety procedures including the use of PPE, and have read and signed the Acknowledgment Form (Appendix A);
- Conducts daily briefings as necessary;
- Halts work if necessary;
- Ensures strict adherence to the Site HASP; and
- Reviews personnel medical monitoring participation.

Project Manager

- Familiar with health and safety regulations related to area of responsibility.
- Directs and coordinates health and safety activities within area of responsibility.
- Ensures arrangements for prompt medical attention in case of serious injury
- Requires all employees supervised to use individual protective equipment and safety devices.
- Ensures that safety equipment is available, maintained, used, and stored correctly.
- Instructs and trains all persons within area of responsibility in health and safety requirements.
- Conducts frequent and regular health and safety inspections of work area. Directs correction of unsafe conditions.
- Conducts weekly safety briefings with all supervisors and/or workers.
- Requires all subcontractors and subcontractor personnel to comply with health and safety regulations.

All Employees

The minimum personal qualifications for each individual participating in field activities are:

- OSHA-specific medicals including, but not limited to, audiometric testing under the hearing conservation program and medical approval for the use of respirators;
- Participation in the FLS Occupational Health Monitoring Program;
- Successful completion of the 40-hour OSHA health and safety training for hazardous material sites (29 CFR 1910.120[e][3][i]) and valid/up-to-date 8-hour refresher training (29 CFR 1910.120[e][4]);
- Be familiar with and comply with proper health and safety practices;
- Use the required safety devices and proper personal protective safety equipment; and
- Notify HSO/supervisor immediately of unsafe conditions/acts, accidents, and injuries.

4.3 Subcontractor Compliance

All FLS contracts and subcontracts require that state laws concerning health and safety will be observed by the subcontractor. The provisions of these health and safety responsibilities apply to subcontractors and their employees working for FLS. Failure to fulfill this requirement is a failure to meet the conditions of the contract.

5.0 INDIVIDUAL HEALTH AND SAFETY PROGRAMS LISTING

OSHA standards specify various individual programs that may be applicable to work performed on construction sites. Highlights of these programs are provided below, and specific written programs or procedures may be included into this written program, attached, or developed separately.

5.1 Hazard Communication Program

If employees are exposed to or work with hazardous chemicals at the job site, this program is required. Required elements of the written program include a master listing of chemicals; maintaining material safety data sheets on each chemical; and training of employees on the program, the chemicals exposed to, and material safety data sheets.

5.2 Respiratory Protection Program

If employees are exposed to hazardous/toxic chemical, paint or other gases, vapors, fumes, dusts, or mists above the National Institute for Occupational Safety and Health (NIOSH) permissible exposure limit (PEL), and/or employees wear respirators, this program is required. Program elements are written program for the selection, maintenance, care, and use of respirators; fit testing, training, and employee evaluation for use. .

5.3 Occupational Noise Exposure/Hearing Conservation Program

If employees are exposed to noise levels above the permissible noise exposures, protection against the effects of noise and an effective hearing conservation program are required. Such a program would include elements such as a written program, noise monitoring, hearing evaluations and follow-on testing, personal protective equipment (hearing protection), and maintenance of medical records.

5.4 Emergency Response Plan

If employees are engaged in emergency response to a hazardous substance/chemical release, an emergency response plan must be developed and implemented. Program elements include a written response plan, identification and training of responding employees, medical surveillance and consultation, and post response operations.

5.5 Asbestos Control Program

If employees are exposed to asbestos fibers in the workplace, then an initial monitoring for asbestos exposure must be made. If the monitoring results are above the permissible exposure limit (PEL), this program is required. Program elements include regulated areas, exposure monitoring, medical surveillance and records maintenance, engineering controls, personal protective equipment, and training.

5.6 Lead Exposure Program

If employees are exposed to lead in the workplace, then an initial monitoring for lead exposure must be made. If the monitoring results are above the permissible exposure limit (PEL), this program is required. Program elements include regulated areas, exposure monitoring, medical surveillance and records maintenance, engineering controls, personal protective equipment, and training.

6.0 COMMUNITY AIR MONITORING

A Community Air Monitoring Plan (CAMP) that includes real-time monitoring for volatile organic compounds (VOCs) will be implemented at the downwind perimeter of the work area when excavation activities are in progress at the TCA impacted areas. The CAMP is not intended for use in establishing action levels for worker respiratory protection. Rather, its intent is to provide a measure of protection for the downwind community (i.e., off-site receptors including residences and businesses and on-site workers not directly involved with the subject work activities) from potential airborne contaminants releases as a direct result of investigative and remedial work activities. The action levels specified herein require increased monitoring, corrective actions to abate emissions, and/or work shutdown.

6.1 VOCs Monitoring

Real-time air monitoring for VOC levels at the perimeter of the work area will be performed. Continuous monitoring will be performed for all ground intrusive activities in the TCA impacted areas**.** Ground intrusive activities include soil excavation and handling.

Periodic monitoring for VOCs will be performed during non-intrusive activities as the collection of soil and groundwater samples from existing monitoring wells. “Periodic” monitoring during sample collection will consist of taking a reading upon arrival at a sample location, monitoring while opening a well cap, monitoring during well baling/purging, and taking a reading prior to leaving a sample location.

6.1.1 VOC Response Levels, and Actions

VOCs will be monitored at the downwind perimeter of the immediate work area (i.e., the exclusion zone) on a continuous basis. Upwind concentrations will be measured at the start of each workday and periodically thereafter to establish background conditions. The monitoring work will be performed using a photoionizaion detector (PID), or equivalent, to measure total organic vapor concentrations. The PID will be calibrated at least daily for organic vapors. The PID is capable of calculating 15-minute running average concentrations, which will be compared to the concentrations specified below.

- If the ambient air concentration of total organic vapors at the downwind perimeter of the work area or exclusion zone exceeds 5 parts per million (ppm) above background for the 15-minute average, work activities will be temporarily halted and monitoring

continued. If the total organic vapor level readily decreases (per instantaneous readings) below 5 ppm over background, work activities will resume with continued monitoring.

- If total organic vapor levels at the downwind perimeter of the work area or exclusion zone persist at levels in excess of 5 ppm over background but less than 25 ppm, work activities will be halted, the source of vapors identified, corrective actions taken to abate emissions, and monitoring continued. After these steps, work activities will resume provided that the total organic vapor level 200 feet downwind of the exclusion zone or half the distance to the nearest potential receptor or residential/commercial structure, whichever is less – but in no case less than 20 feet, is below 5 ppm over background for the 15-minute average.

- If the organic level is above 25 ppm at the perimeter of the work area, activities will be shutdown.

  All 15-minute readings will be recorded and be available for New York State (DEC and DOH) personnel to review. Instantaneous readings, if any, used for decision purposes will also be recorded.

7.0 DECONTAMINATION

7.1 Site/Work Area Organization

A typical site work area will consist of an exclusion zone where the actual field activity will take place; a decontamination zone; and a command post located outside the decontamination area and exclusion zones.

Levels of personal protection in the exclusion zone will vary depending on air monitoring data, and will be specified by the Site HSO.

7.2 Personnel Decontamination

Decontamination (decon) of personnel consists of physically removing soil or contaminants using the correct procedures for washing and removal of PPE. Decon will take place in the designated decontamination zone using the following steps, if applicable:

- Soap and potable water wash and potable water rinse of gloves;
- Tyvek removal;
- Glove removal; and
- Field wash of hands and face.

7.3 Equipment Decontamination

The following decontamination procedure will be implemented in the field after field equipment has come in contact with contaminated material.

- Rinse equipment in tap water;
- Scrub equipment with non-phosphate detergent and tap water;
- Rinse equipment with distilled water
- Allow equipment to air dry

8.0 EMERGENCY AND CONTINGENCY PLAN

Emergency communications will be maintained during all on-site field activities. The emergency route to the hospital is depicted on Figure 2 and emergency contacts and their phone numbers are presented in Table 2.

A first aid kit will be available on-site at all times for any minor on-site injuries. Emergency medical assistance or ambulance can be reached by calling 911 for more severe injuries.

A site specific emergency plan will be developed in the field which will include evacuation procedures, chain of command, rally point, and emergency procedures.

FIGURES

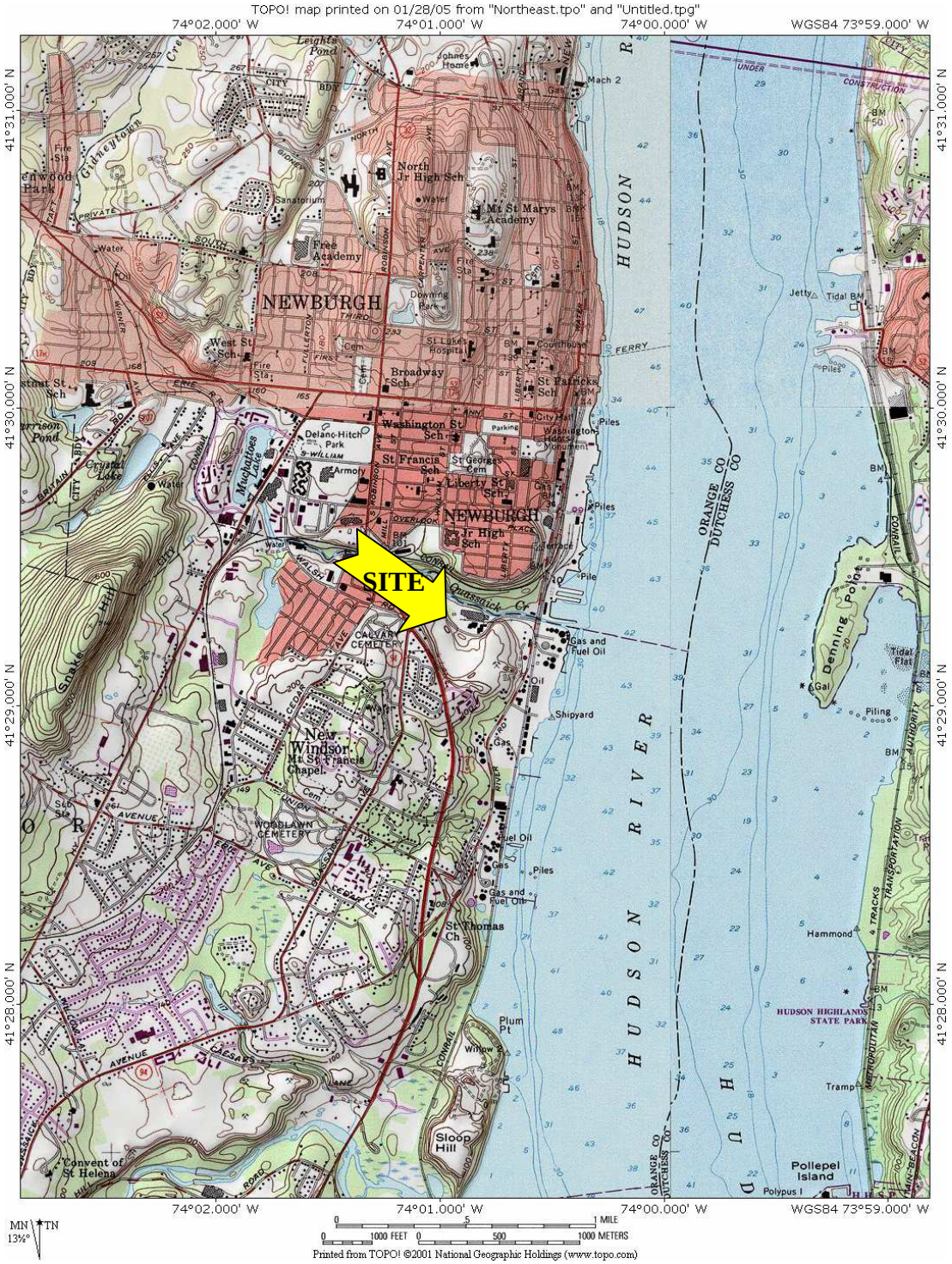


FIGURE 1: SITE LOCATION MAP

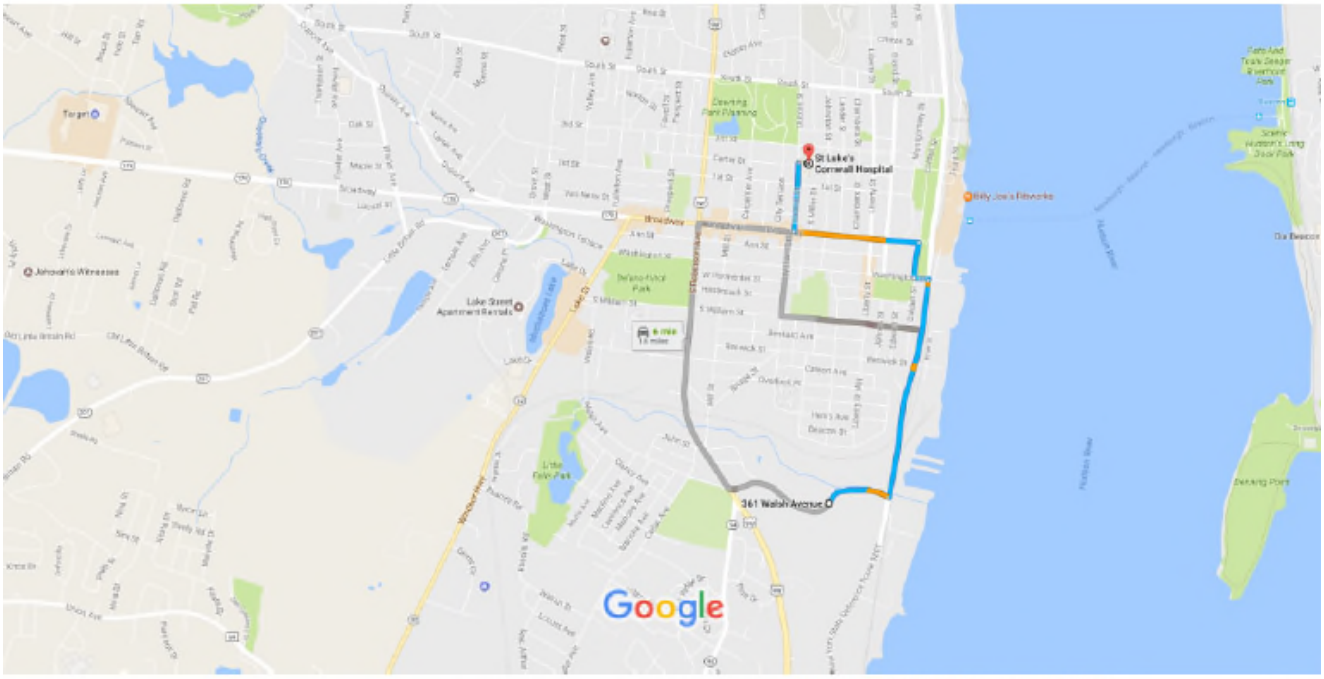
SITE: American Felt & Filter Company
361 Walsh Avenue,
New Windsor, NY.

CLIENT: American Felt & Filter Company.

Google Maps

361 Walsh Avenue, New Windsor, New York to St Luke's Cornwall Hospital

Drive 1.7 miles, 6 min



Map data ©2017 Google 1000 ft

via New York State Reference Route 980T Best route	6 min 1.7 miles
via S Robinson Ave	6 min 1.8 miles
via New York State Reference Route 980T and S William St	7 min 1.7 miles

Fleming Lee Shue

FIGURE 2: ROUTE TO THE ST. LUKE'S HOSPITAL

SITE: American Felt & Filter Company
361 Walsh Avenue, New Windsor, NY

CLIENT: Joseph Conley, Outlet City, Inc.

TABLES

Emergency Contacts and Phone Numbers

Company	Title	Contact Number
Fleming-Lee Shue, Inc 158 West 29th Street New York, NY 10001		(212) 675-3225
Arnold Fleming	Project Director	(917) 885-1475 (cell)
Steve Panter	Senior Project Manager	(609) 751-1395 (cell)
Mark Hutson	Quality Assurance Manager	(480) 907-8207 (cell)
Adam Conti	Health and Safety Officer	(410) 212-7879 (cell)
American Felt & Filter Company 361 Walsh Avenue New Windsor, NY 12553		
Wilson H. Pryne	President & CEO, AFFCO	(845) 561-3566
EMERGENCY		911
HOSPITAL **St Luke's Hospital:** 70 Dubois Street, On Dubois Street Between 1st Street and Carter Street Newburgh, NY 12550, US		(845) 561-4400 (main and emergency line)
EMERGENCY SPILL RESPONSE: New York State Department of Environmental Conservation (NYSDEC) NYSDEC Hotline Oil or Abandoned Chemicals Releases from Underground Petroleum Storage Tanks Hazardous Waste		1-800-457-7362

Project Team Organization

Personnel	Responsibilities
Arnold Fleming, P.E.	President, FLS Project Director
Steve Panter	Senior Project Manager
Mark Hutson	Senior Project Manager Quality Assurance Manager
Adam Conti	Task Manager Health and Safety Officer

APPENDIX A

Acknowledgment Form

HASP ACKNOWLEDGMENT FORM

The following personnel have read the site-specific HASP and are familiar with its provisions.

Print Name	*Signature*	*Company*	*Function*	*Date*

APPENDIX B

Profiles of Chemicals of Concern/Material Safety Data Sheets

New Jersey Department of Health and Senior Services

HAZARDOUS SUBSTANCE FACT SHEET

Common Name: **METHYL CHLOROFORM**

CAS Number: 71-55-6
DOT Number: UN 2831

RTK Substance number: 1237
Date: September 1994 Revision: February 2001

HAZARD SUMMARY

* **Methyl Chloroform** can affect you when breathed in and by passing through your skin.
* **Methyl Chloroform** may cause mutations. Handle with extreme caution.
* Contact can irritate the skin and eyes.
* Exposure can cause headache, dizziness and light-headedness. Higher levels can cause irregular heartbeat and even coma.
* Prolonged contact can cause thickening and cracking of the skin.
* **Methyl Chloroform** may damage the liver and kidneys.

IDENTIFICATION

Methyl Chloroform is a colorless liquid. It is used as a cleaning solvent in vapor degreasing, coatings, ink production and dry cleaning.

REASON FOR CITATION

* **Methyl Chloroform** is on the Hazardous Substance List because it is regulated by OSHA and cited by ACGIH, DOT, NIOSH, DEP, IARC, HHAG, NFPA and EPA.
* Definitions are provided on page 5.

HOW TO DETERMINE IF YOU ARE BEING EXPOSED

The New Jersey Right to Know Act requires most employers to label chemicals in the workplace and requires public employers to provide their employees with information and training concerning chemical hazards and controls. The federal OSHA Hazard Communication Standard, 1910.1200, requires private employers to provide similar training and information to their employees.

* Exposure to hazardous substances should be routinely evaluated. This may include collecting personal and area air samples. You can obtain copies of sampling results from your employer. You have a legal right to this information under OSHA 1910.1020.
* If you think you are experiencing any work-related health problems, see a doctor trained to recognize occupational diseases. Take this Fact Sheet with you.

* **ODOR THRESHOLD = 390 ppm**.
* The range of accepted odor threshold values is quite broad. Caution should be used in relying on odor alone as a warning of potentially hazardous exposures.

WORKPLACE EXPOSURE LIMITS

OSHA: The legal airborne permissible exposure limit (PEL) is **350 ppm** averaged over an 8-hour workshift.

NIOSH: The recommended airborne exposure limit is **350 ppm**, which should not be exceeded at any time.

ACGIH: The recommended airborne exposure limit is **350 ppm** averaged over an 8-hour workshift and **450 ppm** as a STEL (short-term exposure limit).

* **Methyl Chloroform** may cause mutations. All contact with this chemical should be reduced to the lowest possible level.
* The above exposure limits are for air levels only. When skin contact also occurs, you may be overexposed, even though air levels are less than the limits listed above.

WAYS OF REDUCING EXPOSURE

* Where possible, enclose operations and use local exhaust ventilation at the site of chemical release. If local exhaust ventilation or enclosure is not used, respirators should be worn.
* Wear protective work clothing.
* Wash thoroughly immediately after exposure to **Methyl Chloroform** and at the end of the workshift.
* Post hazard and warning information in the work area. In addition, as part of an ongoing education and training effort, communicate all information on the health and safety hazards of **Methyl Chloroform** to potentially exposed workers.

This Fact Sheet is a summary source of information of all potential and most severe health hazards that may result from exposure. Duration of exposure, concentration of the substance and other factors will affect your susceptibility to any of the potential effects described below.

HEALTH HAZARD INFORMATION

Acute Health Effects

The following acute (short-term) health effects may occur immediately or shortly after exposure to **Methyl Chloroform**:

* Contact can irritate the skin and eyes.
* Exposure can cause headache, dizziness and light-headedness. Higher levels can cause irregular heartbeat and even coma.

Chronic Health Effects

The following chronic (long-term) health effects can occur at some time after exposure to **Methyl Chloroform** and can last for months or years:

Cancer Hazard

* **Methyl Chloroform** may cause mutations (genetic changes).
* There is no evidence that **Methyl Chloroform** causes cancer in animals. This is based on test results presently available to the New Jersey Department of Health and Senior Services from published studies.

Reproductive Hazard

* According to the information presently available to the New Jersey Department of Health and Senior Services, **Methyl Chloroform** has been tested and has not been shown to affect reproduction.

Other Long-Term Effects

* Prolonged contact can cause thickening and cracking of the skin.
* **Methyl Chloroform** may damage the liver and kidneys.

MEDICAL

Medical Testing

If symptoms develop or overexposure is suspected, the following are recommended:

* Liver and kidney function tests.

Any evaluation should include a careful history of past and present symptoms with an exam. Medical tests that look for damage already done are not a substitute for controlling exposure.

Request copies of your medical testing. You have a legal right to this information under OSHA 1910.1020.

Mixed Exposures

* Because more than light alcohol consumption can cause liver damage, drinking alcohol can increase the liver damage caused by **Methyl Chloroform**.

WORKPLACE CONTROLS AND PRACTICES

Unless a less toxic chemical can be substituted for a hazardous substance, **ENGINEERING CONTROLS** are the most effective way of reducing exposure. The best protection is to enclose operations and/or provide local exhaust ventilation at the site of chemical release. Isolating operations can also reduce exposure. Using respirators or protective equipment is less effective than the controls mentioned above, but is sometimes necessary.

In evaluating the controls present in your workplace, consider: (1) how hazardous the substance is, (2) how much of the substance is released into the workplace and (3) whether harmful skin or eye contact could occur. Special controls should be in place for highly toxic chemicals or when significant skin, eye, or breathing exposures are possible.

In addition, the following control is recommended:

* Where possible, automatically pump liquid **Methyl Chloroform** from drums or other storage containers to process containers.

Good **WORK PRACTICES** can help to reduce hazardous exposures. The following work practices are recommended:

* Workers whose clothing has been contaminated by **Methyl Chloroform** should change into clean clothing promptly.
* Contaminated work clothes should be laundered by individuals who have been informed of the hazards of exposure to **Methyl Chloroform**.
* Eye wash fountains should be provided in the immediate work area for emergency use.
* If there is the possibility of skin exposure, emergency shower facilities should be provided.
* On skin contact with **Methyl Chloroform**, immediately wash or shower to remove the chemical. At the end of the workshift, wash any areas of the body that may have contacted **Methyl Chloroform**, whether or not known skin contact has occurred.
* Do not eat, smoke, or drink where **Methyl Chloroform** is handled, processed, or stored, since the chemical can be swallowed. Wash hands carefully before eating, drinking, smoking, or using the toilet.

PERSONAL PROTECTIVE EQUIPMENT

WORKPLACE CONTROLS ARE BETTER THAN PERSONAL PROTECTIVE EQUIPMENT. However, for some jobs (such as outside work, confined space entry, jobs done only once in a while, or jobs done while workplace controls are being installed), personal protective equipment may be appropriate.

OSHA 1910.132 requires employers to determine the appropriate personal protective equipment for each hazard and to train employees on how and when to use protective equipment.

The following recommendations are only guidelines and may not apply to every situation.

Clothing

* Avoid skin contact with **Methyl Chloroform**. Wear protective gloves and clothing. Safety equipment suppliers/ manufacturers can provide recommendations on the most protective glove/clothing material for your operation.
* All protective clothing (suits, gloves, footwear, headgear) should be clean, available each day, and put on before work.
* ACGIH recommends *Viton* or *Polyvinyl Alcohol* as protective materials.

Eye Protection

* Wear indirect-vent, impact and splash resistant goggles when working with liquids.
* Wear a face shield along with goggles when working with corrosive, highly irritating or toxic substances.

Respiratory Protection

IMPROPER USE OF RESPIRATORS IS DANGEROUS. Such equipment should only be used if the employer has a written program that takes into account workplace conditions, requirements for worker training, respirator fit testing and medical exams, as described in OSHA 1910.134.

* Where the potential exists for exposure over **350 ppm**, use a MSHA/NIOSH approved supplied-air respirator with a full facepiece operated in a pressure-demand or other positive-pressure mode. For increased protection use in combination with an auxiliary self-contained breathing apparatus operated in a pressure-demand or other positive-pressure mode.
* Exposure to **700 ppm** is immediately dangerous to life and health. If the possibility of exposure above **700 ppm** exists, use a MSHA/NIOSH approved self-contained breathing apparatus with a full facepiece operated in a pressure-demand or other positive-pressure mode.

HANDLING AND STORAGE

* Prior to working with **Methyl Chloroform** you should be trained on its proper handling and storage.
* **Methyl Chloroform** must be stored to avoid contact with ACETONE; OXYGEN; LIQUID OXYGEN; DINITROGEN TETROXIDE; NITRITES; POTASSIUM; and SODIUM since violent reactions occur.
* **Methyl Chloroform** is not compatible with OXIDIZING AGENTS (such as PERCHLORATES, PEROXIDES, PERMANGANATES, CHLORATES, NITRATES, CHLORINE, BROMINE and FLUORINE); STRONG BASES (such as SODIUM HYDROXIDE and POTASSIUM HYDROXIDE); CHEMICALLY ACTIVE METALS (such as MAGNESIUM and ZINC); HYDROGEN CHLORIDE; and HALOCARBONS.
* **Methyl Chloroform** reacts slowly with WATER to form *Hydrochloric Acid*.
* Do not allow vapor near sources of ultraviolet light (such as welding) because poisonous gases may be produced.
* Store in tightly closed containers in a cool, dry, well-ventilated area away from HEAT, WATER, and MOISTURE.
* DO NOT USE ALUMINUM CONTAINERS.

QUESTIONS AND ANSWERS

Q: If I have acute health effects, will I later get chronic health effects?

A: Not always. Most chronic (long-term) effects result from repeated exposures to a chemical.

Q: Can I get long-term effects without ever having short-term effects?

A: Yes, because long-term effects can occur from repeated exposures to a chemical at levels not high enough to make you immediately sick.

Q: What are my chances of getting sick when I have been exposed to chemicals?

A: The likelihood of becoming sick from chemicals is increased as the amount of exposure increases. This is determined by the length of time and the amount of material to which someone is exposed.

Q: When are higher exposures more likely?

A: Conditions which increase risk of exposure include physical and mechanical processes (heating, pouring, spraying, spills and evaporation from large surface areas such as open containers), and "confined space" exposures (working inside vats, reactors, boilers, small rooms, etc.).

Q: Is the risk of getting sick higher for workers than for community residents?

A: Yes. Exposures in the community, except possibly in cases of fires or spills, are usually much lower than those found in the workplace. However, people in the community may be exposed to contaminated water as well as to chemicals in the air over long periods. This may be a problem for children or people who are already ill.

Q: What are the likely health problems from chemicals which cause mutations?

A: There are two primary health concerns associated with mutagens: (1) cancers can result from changes induced in cells and, (2) adverse reproductive and developmental outcomes can result from damage to the egg and sperm cells.

The following information is available from:

New Jersey Department of Health and Senior Services
Occupational Health Service
PO Box 360
Trenton, NJ 08625-0360
(609) 984-1863
(609) 292-5677 (fax)

Web address: http://www.state.nj.us/health/eoh/odisweb/

Industrial Hygiene Information

Industrial hygienists are available to answer your questions regarding the control of chemical exposures using exhaust ventilation, special work practices, good housekeeping, good hygiene practices, and personal protective equipment including respirators. In addition, they can help to interpret the results of industrial hygiene survey data.

Medical Evaluation

If you think you are becoming sick because of exposure to chemicals at your workplace, you may call personnel at the Department of Health and Senior Services, Occupational Health Service, who can help you find the information you need.

Public Presentations

Presentations and educational programs on occupational health or the Right to Know Act can be organized for labor unions, trade associations and other groups.

Right to Know Information Resources

The Right to Know Infoline (609) 984-2202 can answer questions about the identity and potential health effects of chemicals, list of educational materials in occupational health, references used to prepare the Fact Sheets, preparation of the Right to Know survey, education and training programs, labeling requirements, and general information regarding the Right to Know Act. Violations of the law should be reported to (609) 984-2202.

DEFINITIONS

ACGIH is the American Conference of Governmental Industrial Hygienists. It recommends upper limits (called TLVs) for exposure to workplace chemicals.

A **carcinogen** is a substance that causes cancer.

The **CAS number** is assigned by the Chemical Abstracts Service to identify a specific chemical.

A **combustible** substance is a solid, liquid or gas that will burn.

A **corrosive** substance is a gas, liquid or solid that causes irreversible damage to human tissue or containers.

DEP is the New Jersey Department of Environmental Protection.

DOT is the Department of Transportation, the federal agency that regulates the transportation of chemicals.

EPA is the Environmental Protection Agency, the federal agency responsible for regulating environmental hazards.

A **fetus** is an unborn human or animal.

A **flammable** substance is a solid, liquid, vapor or gas that will ignite easily and burn rapidly.

The **flash point** is the temperature at which a liquid or solid gives off vapor that can form a flammable mixture with air.

HHAG is the Human Health Assessment Group of the federal EPA.

IARC is the International Agency for Research on Cancer, a scientific group that classifies chemicals according to their cancer-causing potential.

A **miscible** substance is a liquid or gas that will evenly dissolve in another.

mg/m^3 means milligrams of a chemical in a cubic meter of air. It is a measure of concentration (weight/volume).

MSHA is the Mine Safety and Health Administration, the federal agency that regulates mining. It also evaluates and approves respirators.

A **mutagen** is a substance that causes mutations. A **mutation** is a change in the genetic material in a body cell. Mutations can lead to birth defects, miscarriages, or cancer.

NAERG is the North American Emergency Response Guidebook. It was jointly developed by Transport Canada, the United States Department of Transportation and the Secretariat of Communications and Transportation of Mexico. It is a guide for first responders to quickly identify the specific or generic hazards of material involved in a transportation incident, and to protect themselves and the general public during the initial response phase of the incident.

NCI is the National Cancer Institute, a federal agency that determines the cancer-causing potential of chemicals.

NFPA is the National Fire Protection Association. It classifies substances according to their fire and explosion hazard.

NIOSH is the National Institute for Occupational Safety and Health. It tests equipment, evaluates and approves respirators, conducts studies of workplace hazards, and proposes standards to OSHA.

NTP is the National Toxicology Program which tests chemicals and reviews evidence for cancer.

OSHA is the Occupational Safety and Health Administration, which adopts and enforces health and safety standards.

PEOSHA is the Public Employees Occupational Safety and Health Act, a state law which sets PELs for New Jersey public employees.

PIH is a DOT designation for chemicals which are Poison Inhalation Hazards.

ppm means parts of a substance per million parts of air. It is a measure of concentration by volume in air.

A **reactive** substance is a solid, liquid or gas that releases energy under certain conditions.

A **teratogen** is a substance that causes birth defects by damaging the fetus.

TLV is the Threshold Limit Value, the workplace exposure limit recommended by ACGIH.

The **vapor pressure** is a measure of how readily a liquid or a solid mixes with air at its surface. A higher vapor pressure indicates a higher concentration of the substance in air and therefore increases the likelihood of breathing it in.

>>>>>>>>>>>>>>>>> EMERGENCY INFORMATION <<<<<<<<<<<<<<<<<

Common Name: **METHYL CHLOROFORM**
DOT Number: **UN 2831**
NAERG Code: **160**
CAS Number: **71-55-6**

Hazard rating	NJDHSS	NFPA
FLAMMABILITY	-	1
REACTIVITY	-	0
POISONOUS GASES ARE PRODUCED IN FIRE CONTAINERS MAY EXPLODE IN FIRE		

Hazard Rating Key: 0=minimal; 1=slight; 2=moderate; 3=serious; 4=severe

FIRE HAZARDS

* **Methyl Chloroform** is a noncombustible liquid, however, **Methyl Chloroform** vapor will burn.
* Use dry chemical, CO_2, water spray, or alcohol resistant foam extinguishers.
* POISONOUS GASES ARE PRODUCED IN FIRE, including *Hydrogen Chloride* and *Phosgene*.
* CONTAINERS MAY EXPLODE IN FIRE.
* Use water spray to keep fire-exposed containers cool.
* If employees are expected to fight fires, they must be trained and equipped as stated in OSHA 1910.156.

SPILLS AND EMERGENCIES

If **Methyl Chloroform** is spilled or leaked, take the following steps:

* Evacuate persons not wearing protective equipment from area of spill or leak until clean-up is complete.
* Remove all ignition sources.
* Cover with dry lime, sand or soda ash, and place in covered containers for disposal.
* Ventilate and wash area after clean-up is complete.
* It may be necessary to contain and dispose of **Methyl Chloroform** as a HAZARDOUS WASTE. Contact your state Department of Environmental Protection (DEP) or your regional office of the federal Environmental Protection Agency (EPA) for specific recommendations.
* If employees are required to clean-up spills, they must be properly trained and equipped. OSHA 1910.120(q) may be applicable.

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FOR LARGE SPILLS AND FIRES immediately call your fire department. You can request emergency information from the following:

CHEMTREC: (800) 424-9300
NJDEP HOTLINE: 1-877-WARN-DEP

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HANDLING AND STORAGE (See page 3)

FIRST AID

In NJ, for POISON INFORMATION call 1-800-764-7661

Eye Contact

* Immediately flush with large amounts of water for at least 15 minutes, occasionally lifting upper and lower lids.

Skin Contact

* Remove contaminated clothing. Wash contaminated skin with soap and water.

Breathing

* Remove the person from exposure.
* Begin rescue breathing (using universal precautions) if breathing has stopped and CPR if heart action has stopped.
* Transfer promptly to a medical facility.

PHYSICAL DATA

Vapor Pressure: 100 mm Hg at 68^{o}F (20^{o}C)
Water Solubility: Insoluble

OTHER COMMONLY USED NAMES

Chemical Name:

Ethane, 1,1,1-Trichloro-

Other Names:

Chlorothene; Chlorothene VG; Methyltrichloromethane; 1,1,1-Trichloroethane

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Not intended to be copied and sold for commercial purposes.

NEW JERSEY DEPARTMENT OF HEALTH AND
SENIOR SERVICES
Right to Know Program
PO Box 368, Trenton, NJ 08625-0368
(609) 984-2202

New Jersey Department of Health and Senior Services

HAZARDOUS SUBSTANCE FACT SHEET

Common Name: **TRICHLOROACETIC ACID**

CAS Number: 76-03-9
DOT Number: UN 1839
UN 2564 (Solution)

RTK Substance number: 1883
Date: May 1997 Revision: May 2004

HAZARD SUMMARY

* **Trichloroacetic Acid** can affect you when breathed in.
* **Trichloroacetic Acid** is a CORROSIVE CHEMICAL and contact can severely irritate and burn the skin and eyes with possible eye damage.
* Breathing **Trichloroacetic Acid** can irritate the nose and throat.
* Breathing **Trichloroacetic Acid** can irritate the lungs causing coughing and/or shortness of breath. Higher exposures can cause a build-up of fluid in the lungs (pulmonary edema), a medical emergency, with severe shortness of breath.
* **Trichloroacetic Acid** may affect the liver.

IDENTIFICATION

Trichloroacetic Acid is a colorless, crystalline (sand-like) solid which is used in liquid solutions. It is used in making medicines, pharmaceuticals, and pesticides.

REASON FOR CITATION

* **Trichloroacetic Acid** is on the Hazardous Substance List because it is cited by ACGIH, DOT, NIOSH, IARC and IRIS.
* This chemical is on the Special Health Hazard Substance List because it is **CORROSIVE**.
* Definitions are provided on page 5.

HOW TO DETERMINE IF YOU ARE BEING EXPOSED

The New Jersey Right to Know Act requires most employers to label chemicals in the workplace and requires public employers to provide their employees with information and training concerning chemical hazards and controls. The federal OSHA Hazard Communication Standard, 1910.1200, requires private employers to provide similar training and information to their employees.

* Exposure to hazardous substances should be routinely evaluated. This may include collecting personal and area air samples. You can obtain copies of sampling results from your employer. You have a legal right to this information under OSHA 1910.1020.
* If you think you are experiencing any work-related health problems, see a doctor trained to recognize occupational diseases. Take this Fact Sheet with you.

WORKPLACE EXPOSURE LIMITS

NIOSH: The recommended airborne exposure limit is **1 ppm** averaged over a 10-hour workshift.

ACGIH: The recommended airborne exposure limit is **1 ppm** averaged over an 8-hour workshift.

WAYS OF REDUCING EXPOSURE

* Where possible, enclose operations and use local exhaust ventilation at the site of chemical release. If local exhaust ventilation or enclosure is not used, respirators should be worn.
* Wear protective work clothing.
* Wash thoroughly immediately after exposure to **Trichloroacetic Acid** and at the end of the workshift.
* Post hazard and warning information in the work area. In addition, as part of an ongoing education and training effort, communicate all information on the health and safety hazards of **Trichloroacetic Acid** to potentially exposed workers.

This Fact Sheet is a summary source of information of all potential and most severe health hazards that may result from exposure. Duration of exposure, concentration of the substance and other factors will affect your susceptibility to any of the potential effects described below.

HEALTH HAZARD INFORMATION

Acute Health Effects

The following acute (short-term) health effects may occur immediately or shortly after exposure to **Trichloroacetic Acid**:

* Contact can severely irritate and burn the skin and eyes with possible eye damage.
* Breathing **Trichloroacetic Acid** can irritate the nose and throat.
* Breathing **Trichloroacetic Acid** can irritate the lungs causing coughing and/or shortness of breath. Higher exposures can cause a build-up of fluid in the lungs (pulmonary edema), a medical emergency, with severe shortness of breath.

Chronic Health Effects

The following chronic (long-term) health effects can occur at some time after exposure to **Trichloroacetic Acid** and can last for months or years:

Cancer Hazard

* While **Trichloroacetic Acid** has been tested, it is not classifiable as to its potential to cause cancer.

Reproductive Hazard

* There is limited evidence that **Trichloroacetic Acid** is a teratogen in animals. Until further testing has been done, it should be treated as a possible teratogen in humans.

Other Long-Term Effects

* **Trichloroacetic Acid** can irritate the lungs. Repeated exposure may cause bronchitis to develop with cough, phlegm, and/or shortness of breath.
* **Trichloroacetic Acid** may affect the liver.

MEDICAL

Medical Testing

If symptoms develop or overexposure is suspected, the following are recommended:

* Chest x-ray and lung function tests.
* Liver function tests.

Any evaluation should include a careful history of past and present symptoms with an exam. Medical tests that look for damage already done are not a substitute for controlling exposure.

Request copies of your medical testing. You have a legal right to this information under OSHA 1910.1020.

Mixed Exposures

* Because smoking can cause heart disease, as well as lung cancer, emphysema, and other respiratory problems, it may worsen respiratory conditions caused by chemical exposure. Even if you have smoked for a long time, stopping now will reduce your risk of developing health problems.
* Because more than light alcohol consumption can cause liver damage, drinking alcohol may increase the liver damage caused by **Trichloroacetic Acid**.

WORKPLACE CONTROLS AND PRACTICES

Unless a less toxic chemical can be substituted for a hazardous substance, **ENGINEERING CONTROLS** are the most effective way of reducing exposure. The best protection is to enclose operations and/or provide local exhaust ventilation at the site of chemical release. Isolating operations can also reduce exposure. Using respirators or protective equipment is less effective than the controls mentioned above, but is sometimes necessary.

In evaluating the controls present in your workplace, consider: (1) how hazardous the substance is, (2) how much of the substance is released into the workplace and (3) whether harmful skin or eye contact could occur. Special controls should be in place for highly toxic chemicals or when significant skin, eye, or breathing exposures are possible.

In addition, the following control is recommended:

* Where possible, automatically transfer solid **Trichloroacetic Acid** or pump liquid **Trichloroacetic Acid** from drums or other storage containers to process containers.

Good **WORK PRACTICES** can help to reduce hazardous exposures. The following work practices are recommended:

* Workers whose clothing has been contaminated by **Trichloroacetic Acid** should change into clean clothing promptly.
* Do not take contaminated work clothes home. Family members could be exposed.
* Contaminated work clothes should be laundered by individuals who have been informed of the hazards of exposure to **Trichloroacetic Acid**.
* Eye wash fountains should be provided in the immediate work area for emergency use.
* If there is the possibility of skin exposure, emergency shower facilities should be provided.
* On skin contact with **Trichloroacetic Acid**, immediately wash or shower to remove the chemical. At the end of the workshift, wash any areas of the body that may have contacted **Trichloroacetic Acid**, whether or not known skin contact has occurred.

* Do not eat, smoke, or drink where **Trichloroacetic Acid** is handled, processed, or stored, since the chemical can be swallowed. Wash hands carefully before eating, drinking, smoking, or using the toilet.
* For solid **Trichloroacetic Acid** use a vacuum or a wet method to reduce dust during clean-up. DO NOT DRY SWEEP.

PERSONAL PROTECTIVE EQUIPMENT

WORKPLACE CONTROLS ARE BETTER THAN PERSONAL PROTECTIVE EQUIPMENT. However, for some jobs (such as outside work, confined space entry, jobs done only once in a while, or jobs done while workplace controls are being installed), personal protective equipment may be appropriate.

OSHA 1910.132 requires employers to determine the appropriate personal protective equipment for each hazard and to train employees on how and when to use protective equipment.

The following recommendations are only guidelines and may not apply to every situation.

Clothing

* Avoid skin contact with **Trichloroacetic Acid**. Wear acid-resistant gloves and clothing. Safety equipment suppliers/manufacturers can provide recommendations on the most protective glove/clothing material for your operation.
* All protective clothing (suits, gloves, footwear, headgear) should be clean, available each day, and put on before work.
* Safety equipment manufacturers recommend *Viton* as a protective material.

Eye Protection

* For solid **Trichloroacetic Acid**, wear eye protection with side shields or goggles.
* Wear indirect-vent, impact and splash resistant goggles when working with liquids.
* Wear a face shield along with goggles when working with corrosive, highly irritating or toxic substances.
* Contact lenses should not be worn when working with this substance.

Respiratory Protection

IMPROPER USE OF RESPIRATORS IS DANGEROUS. Such equipment should only be used if the employer has a written program that takes into account workplace conditions, requirements for worker training, respirator fit testing and medical exams, as described in OSHA 1910.134.

* Where the potential exists for exposure over **1 ppm**, use a NIOSH approved full facepiece respirator with high efficiency particulate prefilters and an acid gas cartridge/canister. Greater protection is provided by a powered-air purifying respirator. Particulate filters must be checked every day before work for physical damage, such as rips or tears, and replaced as needed.
* If while wearing a filter or cartridge respirator you can smell, taste, or otherwise detect **Trichloroacetic Acid**, or if while wearing particulate filters abnormal resistance to breathing is experienced, or eye irritation occurs while wearing a full facepiece respirator, leave the area immediately. Check to make sure the respirator-to-face seal is still good. If it is, replace the filter or cartridge. If the seal is no longer good, you may need a new respirator.
* Be sure to consider all potential exposures in your workplace. You may need a combination of filters, prefilters or cartridges to protect against different forms of a chemical (such as vapor and mist) or against a mixture of chemicals.
* Where the potential for high exposure exists, use a MSHA/NIOSH approved supplied-air respirator with a full facepiece operated in a pressure-demand or other positive-pressure mode. For increased protection use in combination with an auxiliary self-contained breathing apparatus operated in a pressure-demand or other positive-pressure mode.

QUESTIONS AND ANSWERS

Q: If I have acute health effects, will I later get chronic health effects?
A: Not always. Most chronic (long-term) effects result from repeated exposures to a chemical.

Q: Can I get long-term effects without ever having short-term effects?
A: Yes, because long-term effects can occur from repeated exposures to a chemical at levels not high enough to make you immediately sick.

Q: What are my chances of getting sick when I have been exposed to chemicals?
A: The likelihood of becoming sick from chemicals is increased as the amount of exposure increases. This is determined by the length of time and the amount of material to which someone is exposed.

Q: When are higher exposures more likely?
A: Conditions which increase risk of exposure include dust releasing operations (grinding, mixing, blasting, dumping, etc.), other physical and mechanical processes (heating, pouring, spraying, spills and evaporation from large surface areas such as open containers), and "confined space" exposures (working inside vats, reactors, boilers, small rooms, etc.).

Q: Is the risk of getting sick higher for workers than for community residents?
A: Yes. Exposures in the community, except possibly in cases of fires or spills, are usually much lower than those found in the workplace. However, people in the community may be exposed to contaminated water as well as to chemicals in the air over long periods. This may be a problem for children or people who are already ill.

Q: Can men as well as women be affected by chemicals that cause reproductive system damage?
A: Yes. Some chemicals reduce potency or fertility in both men and women. Some damage sperm and eggs, possibly leading to birth defects.

Q: Who is at the greatest risk from reproductive hazards?
A: Pregnant women are at greatest risk from chemicals that harm the developing fetus. However, chemicals may affect the ability to have children, so both men and women of childbearing age are at high risk.

Q: Should I be concerned if a chemical is a teratogen in animals?
A: Yes. Although some chemicals may affect humans differently than they affect animals, damage to animals suggests that similar damage can occur in humans.

The following information is available from:

New Jersey Department of Health and Senior Services
Occupational Health Service
PO Box 360
Trenton, NJ 08625-0360
(609) 984-1863
(609) 984-7407 (fax)

Web address: http://www.state.nj.us/health/eoh/odisweb/

Industrial Hygiene Information

Industrial hygienists are available to answer your questions regarding the control of chemical exposures using exhaust ventilation, special work practices, good housekeeping, good hygiene practices, and personal protective equipment including respirators. In addition, they can help to interpret the results of industrial hygiene survey data.

Medical Evaluation

If you think you are becoming sick because of exposure to chemicals at your workplace, you may call personnel at the Department of Health and Senior Services, Occupational Health Service, who can help you find the information you need.

Public Presentations

Presentations and educational programs on occupational health or the Right to Know Act can be organized for labor unions, trade associations and other groups.

Right to Know Information Resources

The Right to Know Infoline (609) 984-2202 can answer questions about the identity and potential health effects of chemicals, list of educational materials in occupational health, references used to prepare the Fact Sheets, preparation of the Right to Know Survey, education and training programs, labeling requirements, and general information regarding the Right to Know Act. Violations of the law should be reported to (609) 984-2202.

DEFINITIONS

ACGIH is the American Conference of Governmental Industrial Hygienists. It recommends upper limits (called TLVs) for exposure to workplace chemicals.

A **carcinogen** is a substance that causes cancer.

The **CAS number** is assigned by the Chemical Abstracts Service to identify a specific chemical.

CFR is the Code of Federal Regulations, which consists of the regulations of the United States government.

A **combustible** substance is a solid, liquid or gas that will burn.

A **corrosive** substance is a gas, liquid or solid that causes irreversible damage to human tissue or containers.

DEP is the New Jersey Department of Environmental Protection.

DOT is the Department of Transportation, the federal agency that regulates the transportation of chemicals.

EPA is the Environmental Protection Agency, the federal agency responsible for regulating environmental hazards.

A **fetus** is an unborn human or animal.

A **flammable** substance is a solid, liquid, vapor or gas that will ignite easily and burn rapidly.

The **flash point** is the temperature at which a liquid or solid gives off vapor that can form a flammable mixture with air.

IARC is the International Agency for Research on Cancer, a scientific group that classifies chemicals according to their cancer-causing potential.

IRIS is the Integrated Risk Information System database of the federal EPA.

A **miscible** substance is a liquid or gas that will evenly dissolve in another.

mg/m^3 means milligrams of a chemical in a cubic meter of air. It is a measure of concentration (weight/volume).

A **mutagen** is a substance that causes mutations. A **mutation** is a change in the genetic material in a body cell. Mutations can lead to birth defects, miscarriages, or cancer.

NAERG is the North American Emergency Response Guidebook. It was jointly developed by Transport Canada, the United States Department of Transportation and the Secretariat of Communications and Transportation of Mexico. It is a guide for first responders to quickly identify the specific or generic hazards of material involved in a transportation incident, and to protect themselves and the general public during the initial response phase of the incident.

NFPA is the National Fire Protection Association. It classifies substances according to their fire and explosion hazard.

NIOSH is the National Institute for Occupational Safety and Health. It tests equipment, evaluates and approves respirators, conducts studies of workplace hazards, and proposes standards to OSHA.

NTP is the National Toxicology Program which tests chemicals and reviews evidence for cancer.

OSHA is the Occupational Safety and Health Administration, which adopts and enforces health and safety standards.

PEL is the Permissible Exposure Limit which is enforceable by the Occupational Safety and Health Administration.

PIH is a DOT designation for chemicals which are Poison Inhalation Hazards.

ppm means parts of a substance per million parts of air. It is a measure of concentration by volume in air.

A **reactive** substance is a solid, liquid or gas that releases energy under certain conditions.

STEL is a Short Term Exposure Limit which is usually a 15-minute exposure that should not be exceeded at any time during a work day.

A **teratogen** is a substance that causes birth defects by damaging the fetus.

TLV is the Threshold Limit Value, the workplace exposure limit recommended by ACGIH.

The **vapor pressure** is a measure of how readily a liquid or a solid mixes with air at its surface. A higher vapor pressure indicates a higher concentration of the substance in air and therefore increases the likelihood of breathing it in.

>>>>>>>>>>>>>>>>> EMERGENCY INFORMATION <<<<<<<<<<<<<<<<<

Common Name: **TRICHLOROACETIC ACID**
DOT Number: **UN 1839**
UN 2564 (Solution)
NAERG Code: **153**
CAS Number: **76-03-9**

Hazard rating	NJDHSS	NFPA
FLAMMABILITY	0	-
REACTIVITY	0	-
CORROSIVE POISONOUS GASES ARE PRODUCED IN FIRE CONTAINERS MAY EXPLODE IN FIRE		

Hazard Rating Key: 0=minimal; 1=slight; 2=moderate; 3=serious; 4=severe

FIRE HAZARDS

* **Trichloroacetic Acid** may burn, but does not readily ignite.
* Use dry chemical, CO_2, alcohol or polymer foam extinguishers.
* POISONOUS GASES ARE PRODUCED IN FIRE, including *Chloroform, Phosgene* and *Hydrogen Chloride*.
* CONTAINERS MAY EXPLODE IN FIRE.
* Use water spray to keep fire-exposed containers cool.
* If employees are expected to fight fires, they must be trained and equipped as stated in OSHA 1910.156.

SPILLS AND EMERGENCIES

If **Trichloroacetic Acid** is spilled or leaked, take the following steps:

* Evacuate persons not wearing protective equipment from area of spill or leak until clean-up is complete.
* Cover with dry lime, sand or soda ash and place in covered containers for disposal.
* Ventilate and wash area after clean-up is complete.
* It may be necessary to contain and dispose of **Trichloroacetic Acid** as a HAZARDOUS WASTE. Contact your state Department of Environmental Protection (DEP) or your regional office of the federal Environmental Protection Agency (EPA) for specific recommendations.
* If employees are required to clean-up spills, they must be properly trained and equipped. OSHA 1910.120(q) may be applicable.

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FOR LARGE SPILLS AND FIRES immediately call your fire department. You can request emergency information from the following:

CHEMTREC: (800) 424-9300
NJDEP HOTLINE: 1-877-WARN-DEP

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HANDLING AND STORAGE

* Prior to working with **Trichloroacetic Acid** you should be trained on its proper handling and storage.
* A violent reaction may occur when **Trichloroacetic Acid** is mixed with COPPER in DIMETHYL SULFOXIDE.
* **Trichloroacetic Acid** is not compatible with OXIDIZING AGENTS (such as PERCHLORATES, PEROXIDES, PERMANGANATES, CHLORATES, NITRATES, CHLORINE, BROMINE and FLUORINE); and STRONG BASES (such as SODIUM HYDROXIDE and POTASSIUM HYDROXIDE).
* Store in tightly closed containers in a cool, well-ventilated area away from METALS and MOISTURE.

FIRST AID

For POISON INFORMATION call 1-800-222-1222

Eye Contact

* Immediately flush with large amounts of water. Continue without stopping for at least 30 minutes, occasionally lifting upper and lower lids. Seek medical attention immediately.

Skin Contact

* Quickly remove contaminated clothing. Immediately wash area with large amounts of soap and water. Seek medical attention immediately.

Breathing

* Remove the person from exposure.
* Begin rescue breathing (using universal precautions) if breathing has stopped and CPR if heart action has stopped.
* Transfer promptly to a medical facility.
* Medical observation is recommended for 24 to 48 hours after breathing overexposure, as pulmonary edema may be delayed.

PHYSICAL DATA

Flash Point: greater than 230°F (110°C)
Water Solubility: Soluble

OTHER COMMONLY USED NAMES

Chemical Name:
Acetic Acid, Trichloro-

Not intended to be copied and sold for commercial purposes.

NEW JERSEY DEPARTMENT OF HEALTH AND
SENIOR SERVICES
Right to Know Program
PO Box 368, Trenton, NJ 08625-0368
(609) 984-2202

APPENDIX C

Heat Stress/Cold Stress and Related Illnesses

Heat Stress / Cold Stress and Related Illnesses

1.0 HEAT STRESS

Excessive exposure to a hot environment can bring about a variety of heat-induced disorders. The four main types of heat stress related illnesses: heat rash, heat cramps, heat exhaustion, and heat stroke, are discussed below.

1.1 Heat Rash

Heat rash also know as prickly heat, is likely to occur in hot, humid environments where sweat is not readily removed from the surface of the skin by evaporation and the skin remains wet most of the time. The sweat ducts become plugged, and a skin rash soon appears. When the rash is extensive or when it is complicated by an infection, prickly heat can be very uncomfortable and may reduce a worker's performance. The worker can prevent this condition by resting in a cool place part of each day and by regularly bathing and drying the skin.

1.2 Heat Cramps

Heat cramps are painful spasms of the muscles that occur among those who sweat profusely in heat, drink large quantities of water, but do not adequately replace the body's salt loss. Drinking large quantities of water tends to dilute the body's fluids, while the body continues to lose salt. Shortly thereafter, the low salt level in the muscles causes painful cramps. The affected muscles may be part of the arms, legs or abdomen, but tired muscles (those used to perform the work) are usually the ones most susceptible to cramps. Cramps may occur during or after work hours and may be relieved by taking salted liquids by mouth (i.e. sports drinks).

CAUTION SHOULD BE EXERCISED BY PEOPLE WITH HEART PROBLEMS OR THOSE ON LOW SODIUM DIETS WHO WORK IN HOT ENVIRONMENTS. THESE PEOPLE SHOULD CONSULT A PHYSICIAN ABOUT WHAT TO DO UNDER THESE CONDITIONS.

1.3 Heat Exhaustion

Heat exhaustion includes several clinical disorders having symptoms that may resemble the early symptoms of heat stroke. Heat exhaustion is caused by the loss of large amounts of fluid by sweating, sometimes with excessive loss of salt. A worker suffering from this condition still sweats but experiences extreme weakness or fatigue, giddiness, nausea, or headache. In more serious cases, the victim may vomit or lose consciousness. The skin is clammy and moist, the complexion is pale or flushed, and the body temperature is normal or only slightly elevated.

A summary of the key symptoms of heat exhaustion is as follows:

- Clammy skin
- Confusion
- Dizziness
- Fainting
- Fatigue
- Heat Rash
- Light-headedness
- Nausea
- Profuse sweating
- Slurred Speech
- Weak Pulse

In most cases, treatment involves having the victim rest in a cool place and drink plenty of fluids. Victims with mild cases of heat exhaustion usually recover spontaneously with this treatment. Those with severe cases may require extended care for several days. There are no known permanent effects.

AS WITH HEAT CRAMPS, CERTAIN PERSONS SHOULD CONSULT WITH THEIR PHYSICIAN ABOUT WHAT TO DO UNDER THESE CONDITIONS.

1.4 Heat Stroke

This is the most serious of health problems associated with working in hot environments. It occurs when the body's temperature regulatory system fails and sweating becomes inadequate. The body's only effective means of removing excess heat is compromised with little warning to the victim that a crisis stage has been reached.

A heat stroke victim's skin is hot, usually dry, red or spotted. Body temperature is usually $105^{O}F$ or higher, and the victim is mentally confused, delirious, perhaps in convulsions, or unconscious. Unless the victim receives quick and appropriate treatment, death can occur.

A summary of the key symptoms of heatstroke is as follows:

- Confusion
- Convulsions
- Incoherent Speech
- Staggering Gait
- Unconsciousness
- Sweating stops
- Hot skin, high temperature (yet extremities may feel chilled)

Any person with signs or symptoms of heat stroke requires immediate hospitalization. However, first aid should be immediately administered. This includes moving the victim to a cool area, thoroughly soaking the clothing with water, and vigorously fanning the body to increase cooling. Further treatment at a medical facility should include continuation of the cooling process and the monitoring of complications that often accompany the heat stroke. Early recognition and treatment of heat stroke are the only means of preventing permanent brain damage or death.

1.5 Preparing for the Heat

Humans, to a large extent, are capable of adjusting to heat. This acclimation to heat, under normal circumstances, usually takes about 5 to 7 days, during which time the body will undergo a series of changes that will make continued exposure to heat tolerable.

On the first day of exposure, body temperature, pulse rate, and general discomfort will be higher. With each succeeding day of exposure, all of these responses will gradually decrease, while the sweat rate will increase. When the body does become acclimated to the heat, the worker will find it possible to perform work with less strain and distress.

A gradual exposure to heat gives the body time to become accustomed to higher temperatures, such as those encountered in chemical protective clothing.

1.6 Protecting Against Heat Stress

Several methods that can be used to reduce heat stress:

- Limit duration of work periods
- Use protective clothing with cooling devices
- Enforce the use of the "Buddy System"
- Consume electrolyte solutions prior to suiting up
- Monitor workers for pulse recovery rates, body fluid loss, body weight loss, and excess fatigue
- Screen for heat stress susceptible candidates in your medical surveillance program
- Have all personnel know the signs and symptoms of heat stress

2.0 COLD STRESS

Persons working outdoors in temperatures at or below freezing may be frostbitten. Extreme cold for a short time may cause severe injury to the surface of the body, or result in profound generalized cooling, causing death. Areas of the body that have high surface-area-to-volume ratio such as fingers, toes, and ears, are the most susceptible. Two factors influence the development of a cold injury, ambient temperature and the velocity of the wind. Wind chill is used to describe the chilling effect of moving air in combination with low temperature. For instance, 10 degrees Fahrenheit with a wind of 15 miles per hour (mph) is equivalent in chilling effect to still air at minus 18 degrees Fahrenheit.

Generally, the greatest incremental increase in wind chill occurs when a wind of 5 mph increases to 10 mph. Additionally, water conducts heat 240 times faster than air. Thus, the body cools suddenly when chemical-protective equipment is removed if the clothing underneath is perspiration soaked.

2.1 Frostbite

Local injury resulting from cold is included in the generic term frostbite. There are several degrees of damage. Frostbite of the extremities can be categorized into:

- Frost Nip or Initial Frostbite: characterized by suddenly blanching or whitening of skin.
- Superficial Frostbite: skin has a waxy or white appearance and is firm to the touch, but tissue beneath is resilient.
- Deep Frostbite: tissues are cold, pale, and solid; extremely serious injury.

2.2 Hypothermia

Systemic hypothermia is caused by exposure to freezing or rapidly dropping temperature. Symptoms are usually exhibited in five stages:

- Shivering
- Apathy, listlessness, sleepiness, and (sometimes rapid cooling of the body to less than 95°F)
- Unconsciousness, glassy stage, slow pulse, and slow respiratory rate
- Freezing of the extremities
- Death

Thermal socks, long cotton or thermal underwear, hardhat liners and other cold weather gear can aid in the prevention of hypothermia. Blankets and warm drinks (other than caffeinated coffee) are also recommended.

Measures shall be taken to keep workers from getting wet, such as issuance of rain gear. Workers whose cloths become wet shall be given the opportunity to dry off and change clothes.

APPENDIX E

CAMP Work Plan

APPENDIX E – COMMUNITY AIR MONITORING PROGRAM

Overview

A Community Air Monitoring Plan (CAMP) requires real-time monitoring for volatile organic compounds (VOCs) and particulates (i.e., dust) at the downwind perimeter of each designated work area when certain activities are in progress at contaminated sites. The CAMP is not intended for use in establishing action levels for worker respiratory protection. Rather, its intent is to provide a measure of protection for the downwind community (i.e., off-site receptors including residences and businesses and on-site workers not directly involved with the subject work activities) from potential airborne contaminant releases as a direct result of investigative and remedial work activities. The action levels specified herein require increased monitoring, corrective actions to abate emissions, and/or work shutdown. Additionally, the CAMP helps to confirm that work activities did not spread contamination off-site through the air. Reliance on the CAMP should not preclude simple, common-sense measures to keep VOCs, dust, and odors at a minimum around the work areas.

Community Air Monitoring Plan

Real-time air monitoring for VOCs and particulate levels at the perimeter of the Soil Management Area will be necessary. Refer to the property survey figures in Appendix A for the location of the Soil Management Area.

Continuous monitoring will be required for all ground intrusive activities and during the demolition of contaminated or potentially contaminated structures. Ground intrusive activities include, but are not limited to, soil/waste excavation and handling, test pitting or trenching, and the installation of soil borings or monitoring wells.

Periodic monitoring for VOCs will be required during non-intrusive activities such as the collection of soil and sediment samples or the collection of groundwater samples from existing monitoring wells. “Periodic” monitoring during sample collection might reasonably consist of taking a reading upon arrival at a sample location, monitoring while opening a well cap or overturning soil, monitoring during well bailing/purging, and taking a reading prior to leaving a sample location.

VOC Monitoring, Response Levels, and Actions

Volatile organic compounds (VOCs) must be monitored at the downwind perimeter of the Soil Management Area on a continuous basis. Upwind concentrations should be measured at the start of each workday and periodically thereafter to establish background conditions, particularly if wind direction changes. The monitoring work should be performed using equipment appropriate to measure the types of contaminants known or suspected to be present (chlorinated VOCs). The equipment should be calibrated at least daily for the contaminant(s) of concern or for an appropriate surrogate. The equipment should be capable of calculating 15-minute running average concentrations, which will be compared to the levels specified below.

1. If the ambient air concentration of total organic vapors at the downwind perimeter of the **Soil Management Area** exceed 5 parts per million (ppm) above background for the 15-minute average, work activities must be temporarily halted and monitoring continued. If the total organic vapor level readily decreases (per instantaneous readings) below 5 ppm over background, work activities can resume with continued monitoring.

2. If total organic vapor levels at the downwind perimeter of the **Soil Management Area** persist at levels in excess of 5 ppm over background but less than 25 ppm, work activities must be halted, the source of vapors identified, corrective actions taken to abate emissions, and monitoring continued. After these steps, work activities can resume provided that the total organic vapor level 200 feet downwind of the **Soil Management Area** or half the distance to the nearest potential receptor or residential/commercial structure, whichever is less - but in no case less than 20 feet, is below 5 ppm over background for the 15-minute average.

3. If the organic vapor level is above 25 ppm at the perimeter of the **Soil Management Area**, activities must be shutdown.

4. All 15-minute readings must be recorded and be available for State (DEC and NYSDOH) personnel to review. Instantaneous readings, if any, used for decision purposes should also be recorded.

Particulate Monitoring, Response Levels, and Actions

Particulate concentrations should be monitored continuously at the upwind and downwind perimeters of the **Soil Management Area** at temporary particulate monitoring stations. The particulate monitoring should be performed using real-time monitoring equipment capable of measuring particulate matter less than 10 micrometers in size (PM-10) and capable of integrating over a period of 15 minutes (or less) for comparison to the airborne particulate action level. The equipment must be equipped with an audible alarm to indicate exceedance of the action level. In addition, fugitive dust migration should be visually assessed during all work activities.

1. If the downwind PM-10 particulate level is 100 micrograms per cubic meter (mcg/m^3) greater than background (upwind perimeter) for the 15-minute period or if airborne dust is observed leaving the **Soil Management Area**, then dust suppression techniques must be employed. Work may continue with dust suppression techniques provided that downwind PM-10 particulate levels do not exceed 150 mcg/m^3 above the upwind level and provided that no visible dust is migrating from the work area.

2. If, after implementation of dust suppression techniques, downwind PM-10 particulate levels are greater than 150 mcg/m^3 above the upwind level, work must be stopped and a re-evaluation of activities initiated. Work can resume provided that dust suppression measures and other controls are successful in reducing the downwind PM-10 particulate concentration to within 150 mcg/m^3 of the upwind level and in preventing visible dust migration.

3. All readings must be recorded and be available for State (DEC and NYSDOH) and County Health personnel to review.

For additional reference see NYSDEC DER-10 Appendix 1A, *Generic Community Air Monitoring Program* and Appendix 1B, *Fugitive Dust and Particulate Monitoring*, attached.

Appendix 1A
New York State Department of Health
Generic Community Air Monitoring Plan

Overview

A Community Air Monitoring Plan (CAMP) requires real-time monitoring for volatile organic compounds (VOCs) and particulates (i.e., dust) at the downwind perimeter of each designated work area when certain activities are in progress at contaminated sites. The CAMP is not intended for use in establishing action levels for worker respiratory protection. Rather, its intent is to provide a measure of protection for the downwind community (i.e., off-site receptors including residences and businesses and on-site workers not directly involved with the subject work activities) from potential airborne contaminant releases as a direct result of investigative and remedial work activities. The action levels specified herein require increased monitoring, corrective actions to abate emissions, and/or work shutdown. Additionally, the CAMP helps to confirm that work activities did not spread contamination off-site through the air.

The generic CAMP presented below will be sufficient to cover many, if not most, sites. Specific requirements should be reviewed for each situation in consultation with NYSDOH to ensure proper applicability. In some cases, a separate site-specific CAMP or supplement may be required. Depending upon the nature of contamination, chemical- specific monitoring with appropriately-sensitive methods may be required. Depending upon the proximity of potentially exposed individuals, more stringent monitoring or response levels than those presented below may be required. Special requirements will be necessary for work within 20 feet of potentially exposed individuals or structures and for indoor work with co-located residences or facilities. These requirements should be determined in consultation with NYSDOH.

Reliance on the CAMP should not preclude simple, common-sense measures to keep VOCs, dust, and odors at a minimum around the work areas.

Community Air Monitoring Plan

Depending upon the nature of known or potential contaminants at each site, real-time air monitoring for VOCs and/or particulate levels at the perimeter of the exclusion zone or work area will be necessary. Most sites will involve VOC and particulate monitoring; sites known to be contaminated with heavy metals alone may only require particulate monitoring. If radiological contamination is a concern, additional monitoring requirements may be necessary per consultation with appropriate DEC/NYSDOH staff.

Continuous monitoring will be required for all ground intrusive activities and during the demolition of contaminated or potentially contaminated structures. Ground intrusive activities include, but are not limited to, soil/waste excavation and handling, test pitting or trenching, and the installation of soil borings or monitoring wells.

Periodic monitoring for VOCs will be required during non-intrusive activities such as the collection of soil and sediment samples or the collection of groundwater samples from existing monitoring wells. “Periodic” monitoring during sample collection might reasonably consist of taking a reading upon arrival at a sample location, monitoring while opening a well cap or

overturning soil, monitoring during well baling/purging, and taking a reading prior to leaving a sample location. In some instances, depending upon the proximity of potentially exposed individuals, continuous monitoring may be required during sampling activities. Examples of such situations include groundwater sampling at wells on the curb of a busy urban street, in the midst of a public park, or adjacent to a school or residence.

VOC Monitoring, Response Levels, and Actions

Volatile organic compounds (VOCs) must be monitored at the downwind perimeter of the immediate work area (i.e., the exclusion zone) on a continuous basis or as otherwise specified. Upwind concentrations should be measured at the start of each workday and periodically thereafter to establish background conditions, particularly if wind direction changes. The monitoring work should be performed using equipment appropriate to measure the types of contaminants known or suspected to be present. The equipment should be calibrated at least daily for the contaminant(s) of concern or for an appropriate surrogate. The equipment should be capable of calculating 15-minute running average concentrations, which will be compared to the levels specified below.

1. If the ambient air concentration of total organic vapors at the downwind perimeter of the work area or exclusion zone exceeds 5 parts per million (ppm) above background for the 15-minute average, work activities must be temporarily halted and monitoring continued. If the total organic vapor level readily decreases (per instantaneous readings) below 5 ppm over background, work activities can resume with continued monitoring.

2. If total organic vapor levels at the downwind perimeter of the work area or exclusion zone persist at levels in excess of 5 ppm over background but less than 25 ppm, work activities must be halted, the source of vapors identified, corrective actions taken to abate emissions, and monitoring continued. After these steps, work activities can resume provided that the total organic vapor level 200 feet downwind of the exclusion zone or half the distance to the nearest potential receptor or residential/commercial structure, whichever is less - but in no case less than 20 feet, is below 5 ppm over background for the 15-minute average.

3. If the organic vapor level is above 25 ppm at the perimeter of the work area, activities must be shutdown.

4. All 15-minute readings must be recorded and be available for State (DEC and NYSDOH) personnel to review. Instantaneous readings, if any, used for decision purposes should also be recorded.

Particulate Monitoring, Response Levels, and Actions

Particulate concentrations should be monitored continuously at the upwind and downwind perimeters of the exclusion zone at temporary particulate monitoring stations. The particulate monitoring should be performed using real-time monitoring equipment capable of measuring particulate matter less than 10 micrometers in size (PM-10) and capable of integrating over a period of 15 minutes (or less) for comparison to the airborne particulate action level. The equipment must be equipped with an audible alarm to indicate exceedance of the action level. In addition, fugitive dust migration should be visually assessed during all work activities.

1. If the downwind PM-10 particulate level is 100 micrograms per cubic meter (mcg/m^3) greater than background (upwind perimeter) for the 15-minute period or if airborne dust is observed leaving the work area, then dust suppression techniques must be employed. Work may continue with dust suppression techniques provided that downwind PM-10 particulate levels do not exceed 150 mcg/m^3 above the upwind level and provided that no visible dust is migrating from the work area.

2. If, after implementation of dust suppression techniques, downwind PM-10 particulate levels are greater than 150 mcg/m^3 above the upwind level, work must be stopped and a re-evaluation of activities initiated. Work can resume provided that dust suppression measures and other controls are successful in reducing the downwind PM-10 particulate concentration to within 150 mcg/m^3 of the upwind level and in preventing visible dust migration.

3. All readings must be recorded and be available for State (DEC and NYSDOH) and County Health personnel to review.

December 2009

Appendix 1B
Fugitive Dust and Particulate Monitoring

A program for suppressing fugitive dust and particulate matter monitoring at hazardous waste sites is a responsibility on the remedial party performing the work. These procedures must be incorporated into appropriate intrusive work plans. The following fugitive dust suppression and particulate monitoring program should be employed at sites during construction and other intrusive activities which warrant its use:

1. Reasonable fugitive dust suppression techniques must be employed during all site activities which may generate fugitive dust.

2. Particulate monitoring must be employed during the handling of waste or contaminated soil or when activities on site may generate fugitive dust from exposed waste or contaminated soil. Remedial activities may also include the excavation, grading, or placement of clean fill. These control measures should not be considered necessary for these activities.

3. Particulate monitoring must be performed using real-time particulate monitors and shall monitor particulate matter less than ten microns (PM10) with the following minimum performance standards:

(a) Objects to be measured: Dust, mists or aerosols;
(b) Measurement Ranges: 0.001 to 400 mg/m3 (1 to 400,000 :ug/m3);
(c) Precision (2-sigma) at constant temperature: +/- 10 :g/m3 for one second averaging; and +/- 1.5 g/m3 for sixty second averaging;
(d) Accuracy: +/- 5% of reading +/- precision (Referred to gravimetric calibration with SAE fine test dust (mmd= 2 to 3 :m, g= 2.5, as aerosolized);
(e) Resolution: 0.1% of reading or 1g/m3, whichever is larger;
(f) Particle Size Range of Maximum Response: 0.1-10;
(g) Total Number of Data Points in Memory: 10,000;
(h) Logged Data: Each data point with average concentration, time/date and data point number
(i) Run Summary: overall average, maximum concentrations, time/date of maximum, total number of logged points, start time/date, total elapsed time (run duration), STEL concentration and time/date occurrence, averaging (logging) period, calibration factor, and tag number;
(j) Alarm Averaging Time (user selectable): real-time (1-60 seconds) or STEL (15 minutes), alarms required;
(k) Operating Time: 48 hours (fully charged NiCd battery); continuously with charger;
(l) Operating Temperature: -10 to 50^{o} C (14 to 122^{o} F);
(m) Particulate levels will be monitored upwind and immediately downwind at the working site and integrated over a period not to exceed 15 minutes.

4. In order to ensure the validity of the fugitive dust measurements performed, there must be appropriate Quality Assurance/Quality Control (QA/QC). It is the responsibility of the remedial party to adequately supplement QA/QC Plans to include the following critical features: periodic instrument calibration, operator training, daily instrument performance (span) checks, and a record keeping plan.

5. The action level will be established at 150 ug/m3 (15 minutes average). While conservative,

this short-term interval will provide a real-time assessment of on-site air quality to assure both health and safety. If particulate levels are detected in excess of 150 ug/m3, the upwind background level must be confirmed immediately. If the working site particulate measurement is greater than 100 ug/m3 above the background level, additional dust suppression techniques must be implemented to reduce the generation of fugitive dust and corrective action taken to protect site personnel and reduce the potential for contaminant migration. Corrective measures may include increasing the level of personal protection for on-site personnel and implementing additional dust suppression techniques (see paragraph 7). Should the action level of 150 ug/m3 continue to be exceeded work must stop and DER must be notified as provided in the site design or remedial work plan. The notification shall include a description of the control measures implemented to prevent further exceedances.

6. It must be recognized that the generation of dust from waste or contaminated soil that migrates off-site, has the potential for transporting contaminants off-site. There may be situations when dust is being generated and leaving the site and the monitoring equipment does not measure PM10 at or above the action level. Since this situation has the potential to allow for the migration of contaminants off-site, it is unacceptable. While it is not practical to quantify total suspended particulates on a real-time basis, it is appropriate to rely on visual observation. If dust is observed leaving the working site, additional dust suppression techniques must be employed. Activities that have a high dusting potential--such as solidification and treatment involving materials like kiln dust and lime--will require the need for special measures to be considered.

7. The following techniques have been shown to be effective for the controlling of the generation and migration of dust during construction activities:

(a) Applying water on haul roads;
(b) Wetting equipment and excavation faces;
(c) Spraying water on buckets during excavation and dumping;
(d) Hauling materials in properly tarped or watertight containers;
(e) Restricting vehicle speeds to 10 mph;
(f) Covering excavated areas and material after excavation activity ceases; and
(g) Reducing the excavation size and/or number of excavations.

Experience has shown that the chance of exceeding the 150ug/m3 action level is remote when the above-mentioned techniques are used. When techniques involving water application are used, care must be taken not to use excess water, which can result in unacceptably wet conditions. Using atomizing sprays will prevent overly wet conditions, conserve water, and provide an effective means of suppressing the fugitive dust.

8. The evaluation of weather conditions is necessary for proper fugitive dust control. When extreme wind conditions make dust control ineffective, as a last resort remedial actions may need to be suspended. There may be situations that require fugitive dust suppression and particulate monitoring requirements with action levels more stringent than those provided above. Under some circumstances, the contaminant concentration and/or toxicity may require additional monitoring to protect site personnel and the public. Additional integrated sampling and chemical analysis of the dust may also be in order. This must be evaluated when a health and safety plan is developed and when appropriate suppression and monitoring requirements are established for protection of health and the environment.

APPENDIX F

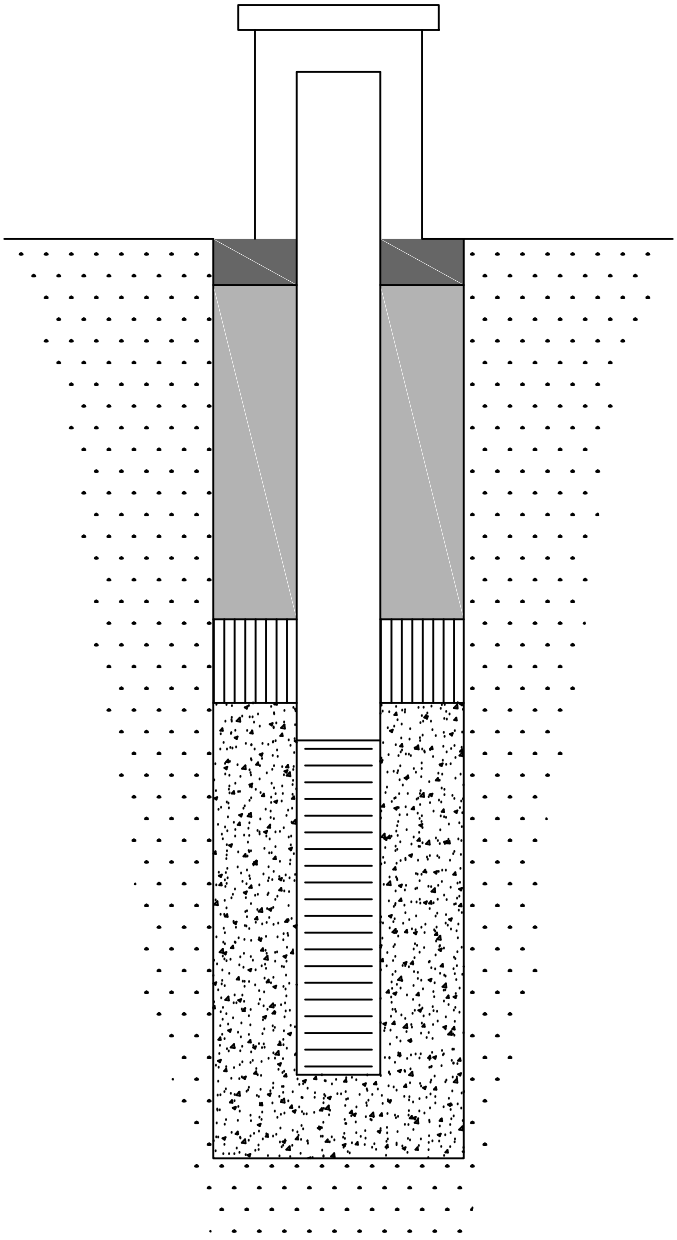
Monitoring Well Construction Logs

WELL CONSTRUCTION SPECIFICATIONS
AMERICAN FELT FILTER COMPANY
361 WALSH AVENUE
NEW WINDSOR, NEW YORK

Well-ID	*Diameter (In.)*	*Slot Size (In.)*	*Total Depth (fbg)*	*Screen Interval (fbg)*	*Filter Pack Interval (fbg)*	*Notes*
S-8	2	--	12.0	6.95-11.95	4.95-11.95	Stick-Up 2.6-feet above ground surface
E-1 NEW	--	--	42.0	35-42	35-42	Bedrock MW
MW-1 N	2	0.010	12.9	6.0 - 12.9	4.0 - 12.9	Stick-Up 3.2 ft. above grade
EW-0	2	0.010	10.9	6.0 - 10.9	4.0 - 8.9	Stick-Up 2.1 ft. above grade
EW-1X	2	0.010	14.6	5.0 - 14.6	5.0 - 14.6	Stick-Up 4.2 ft. above grade

Notes and Abbreviations:
In. = inches
fbg = feet below grade
-- = Information not Available

EW-0



Stick–up: 2.1’ above grade

Ground surface

Top of well screen: 6.0 fbg

Bottom of well screen: 10.9 fbg

Legend

- Cement
- Bentonite/cement mix
- Bentonite
- Sand pack
- PVC riser
- PVC screen (sch. 40–0.01”slot)

Details

Site Area: Former excavation

Drilling Method: Hollow stem auger

Drill Rig: Geoprobe

Date: 3/28/2013

Driller: Zebra

Well dia.: 2 inch

Fleming Lee Shue
Environmental Management & Consulting
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158 WEST 29TH STREET, 9TH FL.
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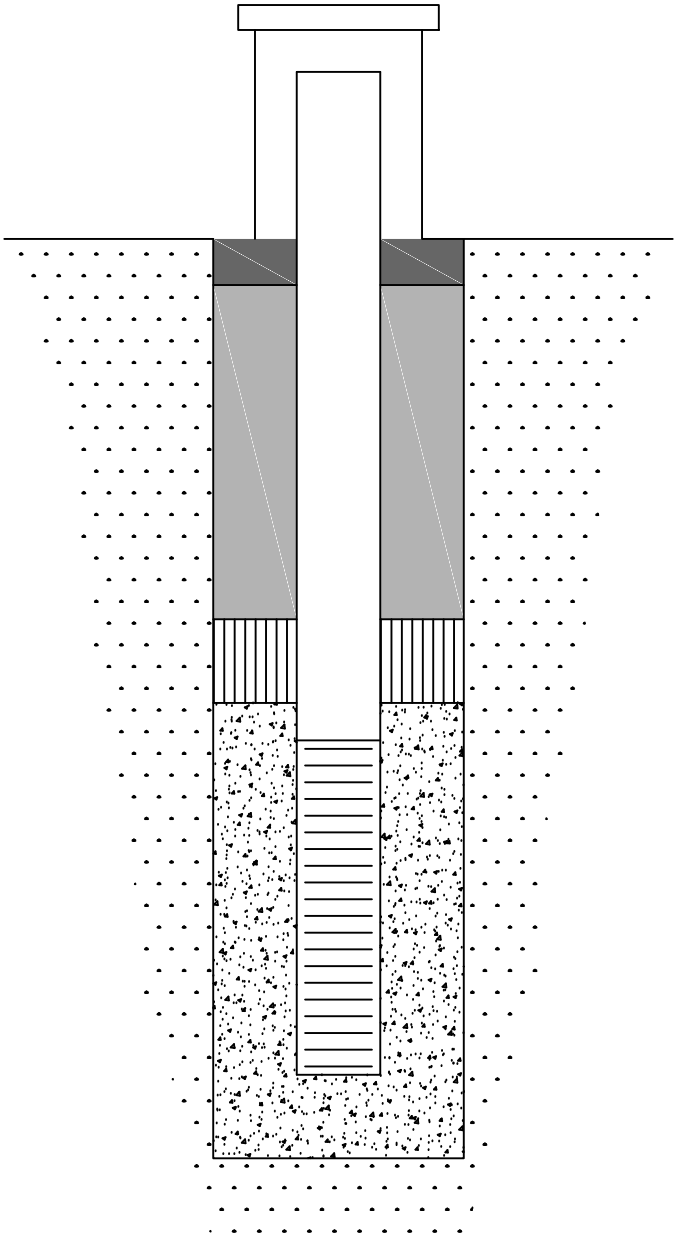
Title: Well Construction Log

Site Address: AFFCO
361 Walsh Avenue
New Windsor, New York

Date	Project Number	Page
May 23, 2017	10000-012	1 of 3

FILE: P:\10000 – AFFCO\Figures\SMP\2017\Well Construction Logs.dwg DATE: 5/23/2017

EW-1X



Stick–up: 4.2’ above grade

Ground surface

Top of well screen: 5.0 fbg

Bottom of well screen: 14.6 fbg

Legend

- Cement
- Bentonite/cement mix
- Bentonite
- Sand pack
- PVC riser
- PVC screen (sch. 40–0.01”slot)

Details

Site Area: Former Feutron Building

Drilling Method: Hollow stem auger

Drill Rig: Geoprobe

Date: 3/28/2013

Driller: Zebra

Well dia.: 2 inch

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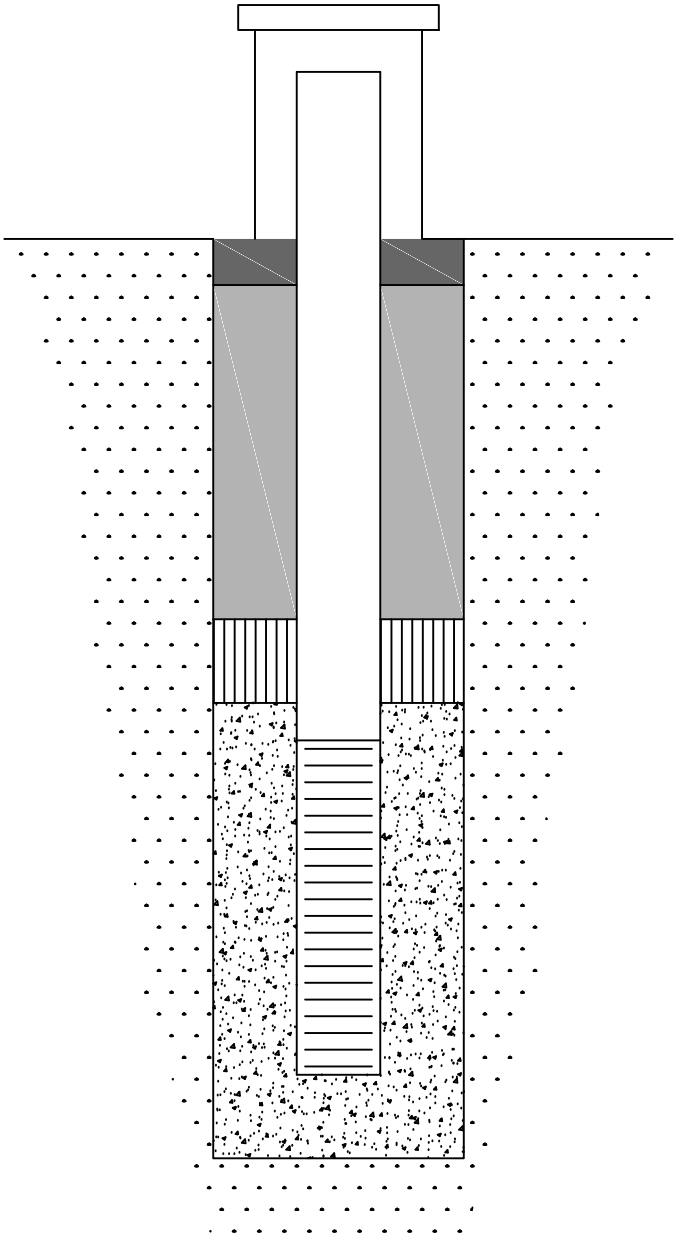
Title: Well Construction Log

Site Address: AFFCO
361 Walsh Avenue
New Windsor, New York

Date	Project Number	Page
May 23, 2017	10000-012	1 of 3

FILE: P:\10000 – AFFCO\Figures\SMP\2017\Well Construction Logs.dwg DATE: 5/23/2017

EW-1N



Stick–up: 3.2’ above grade

Ground surface

Top of well screen: 4.0 fbg

Bottom of well screen: 12.9 fbg

Legend

- Cement
- Bentonite/cement mix
- Bentonite
- Sand pack
- PVC riser
- PVC screen (sch. 40–0.01”slot)

Details

Site Area: West of Piano Felt Building

Drilling Method: Hollow stem auger

Drill Rig: Geoprobe

Date: 3/28/2013

Driller: Zebra

Well dia.: 2 inch

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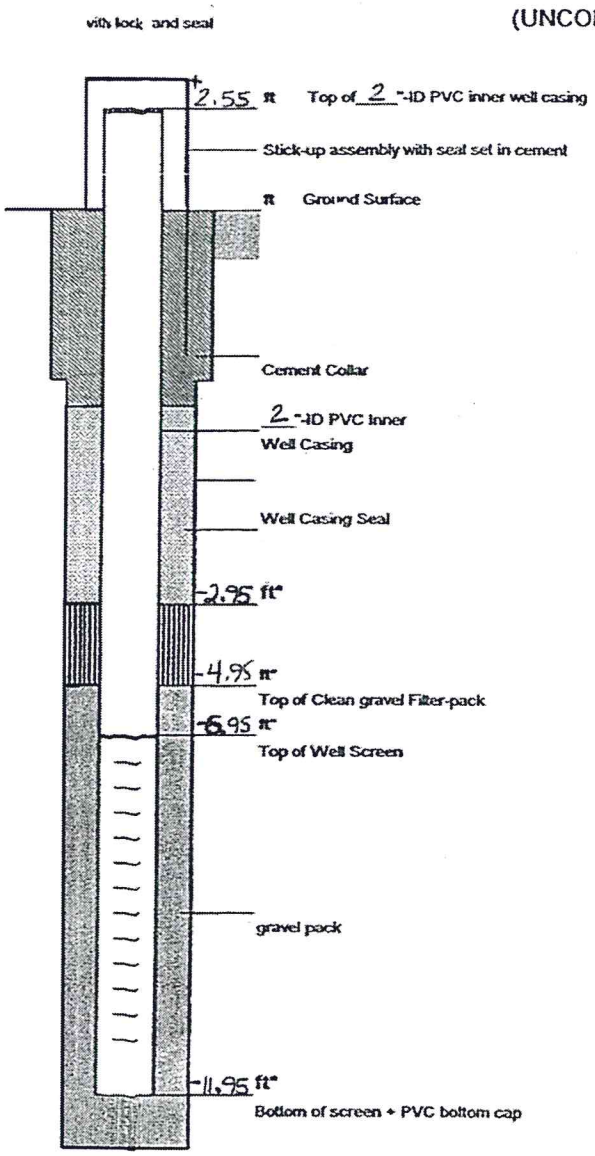
Title: Well Construction Log

Site Address: AFFCO
361 Walsh Avenue
New Windsor, New York

Date	Project Number	Page
May 23, 2017	10000-012	1 of 3

FILE: P:\10000 – AFFCO\Figures\SMP\2017\Well Construction Logs.dwg DATE: 5/23/2017

STICKUP
WELL CONSTRUCTION LOG
(UNCONSOLIDATED)

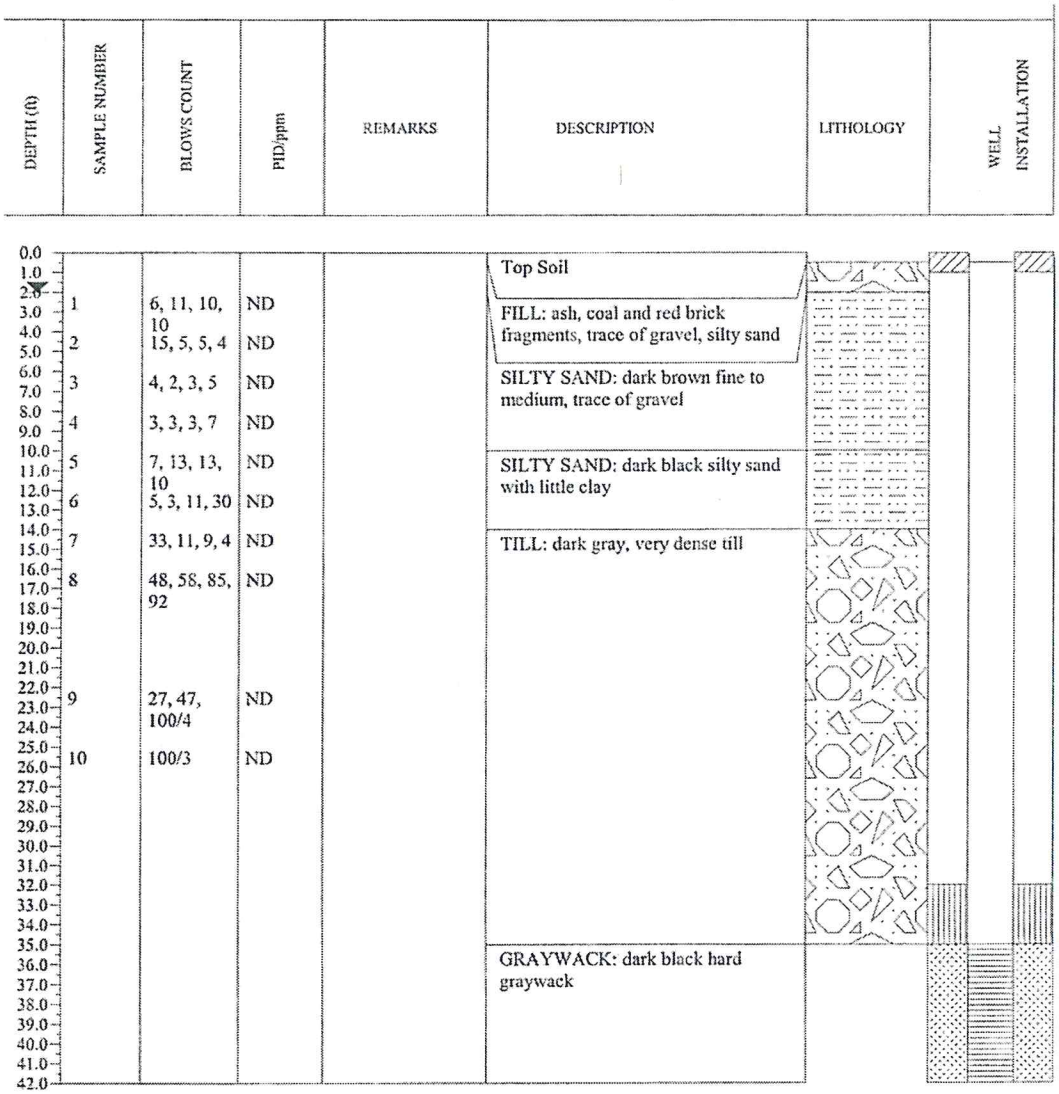


NOT TO SCALE

Project Manager _____
Project # _____
Weather _____

Project AF+F Well S-8
Town New Windsor, NY

Well Log E-1 New



APPENDIX G

Quality Assurance Project Plan

American Felt & Filter Fabric Company (AFFCO)

NEW WINDSOR, NEW YORK

QUALITY ASSURANCE PROJECT PLAN
for the
SITE MANAGEMENT PLAN

Consent Order Index #W3-0784-04-06
Site #3-36-036

Prepared for:
American Felt & Filter Company
361 Walsh Avenue
New Windsor, New York 12553

Prepared by:
Arnold F. Fleming, P.E. & Fleming-Lee Shue, Inc.
158 W. 29th Street, 9th Floor
New York, New York 10001

May 2017

Arnold F. Fleming, P.E.
and

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Environmental Management & Consulting
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New York, New York 10001

TABLE OF CONTENTS

LIST OF TABLES AND FIGURES **2**

1.0 INTRODUCTION **3**

2.0 PROJECT TEAM **3**

2.1 Remedial Engineer 3

2.2 Project Director 3

2.3 Project Manager 3

2.4 Field Team Leader 4

2.5 Project Quality Assurance / Quality Control Officer 4

2.6 Laboratory Quality Assurance/Quality Control Officer 4

3.0 LABORATORY PROCEDURES **5**

3.1 Laboratory Methods 5

3.2 Quality Control Sampling 5

4.0 STANDARD OPERATING PROCEDURES **6**

4.1 Post-Excavation Soil Sampling 6

4.2 Test Pit Soil Sampling 6

4.3 Direct Push Soil Sampling 7

4.4 Hollow-Stem Auger Drilling Soil Sampling 7

4.5 Soil Gas Sampling 8

4.6 Groundwater Sampling 8

4.7 Decontamination Procedures 10

4.8 Sampling Handling 10

4.8.1 Sample Identification 10

4.8.2 Sample Labeling and Shipping 11

4.8.3 Sample Custody 11

4.9 Field Instrumentation 11

5.0 DATA VALIDATION **12**

6.0 REPORTING **12**

FIGURES

Figure 1 Site Location Map

TABLES

Table 1 Summary of Analytical Methods/Quality Assurance
Table 2 Summary of Quality Control Samples

1.0 INTRODUCTION

The Quality Assurance Project Plan (QAPP) outlines the protocols and procedures that will be followed during implementation of the Site Management Plan (SMP) for 361 Walsh Avenue in New Windsor, Orange County, New York (Site), which is identified by the New York State Department of Environmental Conservation (NYSDEC) as an Inactive Hazardous Waste Site. The Site was remediated in accordance with NYSDEC requirements for Site No. 3-36-036, under the auspices of NYSDEC Consent Order No. W3-0784-04-06 (Site). A Site Location Map is included as Figure 1. The Plan describes specific protocols for field sampling, sampling handling and storage, chain-of-custody, laboratory analysis, and data handling and management. The QAPP has been prepared in order to ensure Quality Assurance (QA) and Quality Control (QC) for the environmental sampling activities which will be conducted under the SMP and to ensure the acquisition of defensible data.

2.0 PROJECT TEAM

The project team will consist of FLS personnel and subcontractors. All field personnel and subcontractors will have completed a 40-hour HAZWOPER training course and the annual HAZWOPER 8-hour refresher in accordance with the Occupational Safety and Health Administration (OSHA) regulations and will have the training required for their respective duties as outlined for this investigation.

2.1 Remedial Engineer

The oversight of all aspects of the project will be conducted by the Remedial Engineer (RE). The RE is responsible for compliance with the RAWP. Mr. Arnold F. Fleming, P.E., will act as the RE for sampling activities at the Site.

2.2 Project Director

The general oversight of all aspects of the project will be conducted by the project director. Tasks will include the scheduling, budgeting, data management and decision-making for the field program. Mr. Steven Panter, CGWP; will act as the Project Director for sampling activities at the Site.

2.3 Project Manager

All components of the SMP will be directed and coordinated by the Project Manager. He/she will ensure a smooth flow of information between all parties involved in the investigation by communicating regularly with professionals from the New York State Department of Environmental Conservation, the Site management personnel, and all members of the FLS project team. Steve Panter, CGWP, will act as the Project Manager for the project.

2.4 Field Team Leader

On-site sampling and health and safety activities will be supervised by a Field Team Leader. The team leader's responsibilities will include ensuring adherence to the SMP and HASP and regularly reporting daily progress and deviations from the work plan to the Project Manager. Adam Conti will act as the Field Team Leader.

2.5 Project Quality Assurance / Quality Control Officer

Adherence to the QAPP will be ensured by an FLS QA/QC Officer. Tasks will include reviewing the QA procedures with all personnel before any fieldwork is conducted on-site as well as completing periodic site visits in order to assess the implementation of these procedures. Mark Hutson will act as the QA/QC officer for implementation of the SMP.

2.6 Laboratory Quality Assurance/Quality Control Officer

Laboratories used will be New York State Department of Health ELAP certified laboratories and include Accutest Laboratories of Dayton, NJ or other equivalent laboratories. The laboratories will communicate directly with the sampler regarding the analytical results and reporting and will be responsible for providing all labels, sample containers, field blank water, trip blanks, shipping coolers, and laboratory documentation.

QC procedures will be ensured by a laboratory QA/QC officer in the designated laboratory. This officer will be responsible for the adherence to laboratory protocols, quality control procedures, and checks in the laboratory. The officer will track the movement of the samples from check in to issue of the analytical results, conducting a final check on the analytical calculations. The laboratory groups performing the respective analyses will complete their own QA/QC and sign off on the data.

The sample analytical reports will undergo a third-party review of the analyses conducted. The third-party will produce a Data Usability Summary Report (DUSR) which will be submitted to the NYSDEC.

3.0 LABORATORY PROCEDURES

3.1 Laboratory Methods

The sample container type, preservation, applicable holding time, and laboratory methods of analysis of the field samples have been included as Table 1. Holding times are based on the SW-846 analytical method which, when adjusted to account for an assumed 2-day sample shipping time, match NYSDEC Analytical Services Protocol (ASP) holding times. Sample analyses will be completed by a New York State Department of Health Environmental Laboratory Approval Program (NYSDOH-ELAP) certified laboratory and reported as NYSDEC ASP Category B deliverables.

3.2 Quality Control Sampling

Additional analysis will be conducted for quality control assurance in addition to the laboratory analysis of the ground water samples. Quality control samples will include: equipment rinsate blanks, duplicate samples, matrix spike and matrix spike duplicate samples, and trip blanks. The quantities of field samples and quality control samples have been summarized in Table 2.

The equipment blank and duplicate samples will be analyzed for the same parameters as the samples, as shown on Table 1.

4.0 STANDARD OPERATING PROCEDURES

Environmental sampling done under the SMP may include soil, groundwater and soil vapor sampling. The standard operating procedures for post-excavation soil sampling, test-pit soil sampling, direct-push soil sampling, hollow-stem auger drilling soil sampling, soil gas sampling, monitoring well installation and development, and sampling equipment decontamination have been described in the following sections. Safety monitoring will be performed in accordance with the Site-Specific Health and Safety Plan (HASP), sections of which mandate that all field personnel wear the appropriate personal protective equipment.

4.1 Post-Excavation Soil Sampling

Post-excavation soil sampling is not anticipated for the site. In the event that it becomes necessary, bottom post-excavation samples will be collected by hand to document endpoint conditions at a sampling rate of one endpoint sample/900 ft^2 (approximate 30-foot center spacing). Sidewall post-excavation samples will be collected by hand around the perimeter of the excavation at a rate of one sample/30 linear feet, and will be collected in the approximate center of the contaminated interval. If endpoint sampling indicates that Part 375 Commercial Use SCOs were not met, additional excavation will be performed where feasible and the endpoint sampling will be repeated.

If additional excavation becomes necessary for construction purposes after post-excavation sampling documents clean conditions, then, assuming the soil is free of visible staining, other signs of contamination, or elevated PID readings, the excavation will not require further testing.

Post-excavation samples will be collected and analyzed for the parameters given on Table 1 and will be subject to all QA/QC requirements listed in Table 2.

4.2 Test Pit Soil Sampling

Test pit soil sampling is not anticipated for the site. In the event that it becomes necessary, soil samples will be collected utilizing a backhoe or excavator and dedicated sampling equipment. At most locations, test pits will be excavated to the groundwater table. A tape will be lowered into the excavated test pit to establish a depth profile prior to sample collection. At the direction of the field geologist, the excavator will collect soil from the test pit and bring the soil to a location where the field geologist will evaluate the soil quality. Each sample will be field screened following the procedures described for soil borings (see Section 4.3). The samples will be containerized for laboratory analysis in accordance with the procedures established for the soil borings.

4.3 Direct Push Soil Sampling

Direct Push soil sampling is not anticipated for the site. In the event that it becomes necessary, sampling will be performed using four-foot-long acetate sleeves that will be advanced continuously to the desired depth below the surface. Soil samples from each sleeve will be screened using a photoionization detector (PID) to detect possible organic vapors. Organic vapor screening will be performed by slicing open the acetate sleeve, making a small slice in the soil column with a clean knife or sampling tool, inserting the PID probe and pushing the slice closed, and monitoring the soil for approximately 5 to 10 seconds. This procedure will be repeated at intervals along the soil column at the field geologist's discretion.

The samples will be examined for staining, discoloration, odors, and debris indicative of contamination (ash, coal fragments, wood chips, cinders, petroleum staining, etc.). Samples for laboratory analysis will be collected from the six-inch interval most likely to be contaminated, based on PID readings, discoloration, staining, and the field geologist's judgment (field conditions may require a section longer than six inches to make sufficient sample; however this decision will be field-based).

The samples will be collected by cutting the soil in two places with a decontaminated steel, stainless steel, or aluminum trowel, spoon, or knife and homogenized in a decontaminated stainless steel pan before being placed in the sample bottles. Samples collected for analysis for VOCs will be placed directly into the sample containers without homogenization. Samplers will wear phthalate-free gloves such as nitrile (no latex will be used) and will avoid contact of the gloves with the sample. Only clean metal instruments will be allowed to touch the sample. If there is insufficient soil volume in the spoon, then this will be made up by attempting a second direct push sleeve at the same depth, or by using the next immediate sample interval above or below this depth, if appropriate. If there is no recovery, then the sample depth will be skipped, and drilling will progress to the next depth interval.

4.4 Hollow-Stem Auger Drilling Soil Sampling

Hollow-Stem Auger Drilling Soil sampling is not anticipated for the site. In the event that it becomes necessary, soil samples will be collected utilizing 2-inch-diameter by 2-foot-long split spoon samplers driven ahead of a hollow stem auger. Three-inch-diameter split spoon samplers may also be used. Augers with a minimum inside diameter of 4¼ inches will be used for drilling where wells are proposed. If soil sampling below the groundwater table is required, augers will be equipped with center plugs and/or inert "knock out" plates to control sub-water table sediments from rising inside the auger flights and hampering collection of representative soil samples.

Each split spoon sample will be screened using a PID to detect possible organic vapors. Organic vapor screening will be performed by opening the split spoon, making a small

slice in the soil column with a clean knife or sampling tool, inserting the PID probe and pushing the slice closed, and monitoring the soil for approximately 5 to 10 seconds. This procedure will be repeated at intervals along the split spoon soil column at the field geologist's discretion.

The split spoon samples will be examined for staining, discoloration, odors, and debris indicative of contamination (ash, coal fragments, wood chips, cinders, petroleum staining, etc.). One sample will be collected from each split spoon, from the six-inch interval most likely to be contaminated, based on PID readings, discoloration, staining, and the field geologist's judgment. Note that due to sample recovery or field conditions, sample intervals other than six inches may be necessary to collect sufficient sample.

The samples will be collected by cutting the soil in two places with a decontaminated steel, stainless steel, or aluminum trowel, spoon, or knife and homogenizing in a decontaminated stainless steel pan before being placed in the sample bottles. Samples collected for analysis for VOCs samples will be placed directly into the sample containers without homogenization. Samplers will wear phthalate-free gloves such as nitrile (no latex will be used) and will avoid contact of the gloves with the sample. Only clean metal instruments will be allowed to touch the sample. If there is no recovery, then the sample depth will be skipped, and drilling will progress to the next sampling interval.

4.5 Soil Gas Sampling

Soil Gas sampling is not anticipated for the site. In the event that it becomes necessary, SUMMA canisters for TO+15 plus naphthalene will be collected from soil gas. The samples will be collected by driving the sample probe 5 to 8 ft-bg using the slam bar and/or a portable hand-held roto-hammer, inserting a 5/8-inch-diameter steel shaft with a hardened point and retractable slotted intake attached to a length of dedicated Teflon or polyethylene tubing into the hole. Once the soil gas sampling probe is secured, the shaft will be retracted to expose the screen, the annulus sealed with clay and/or bentonite, and a vacuum applied to the sampling probe head and the system purged to allow the collection and subsequent analysis of a representative sample of soil gas. A minimum of one soil gas volume will be purged from the borehole before collecting the sample according to NYSDOH requirements. With the vacuum maintained, the sample will then be collected by attaching the tubing to the dedicated SUMMA canister flow controller set to a sampling rate of 0.2 liters/minute or less.

4.6 Groundwater Sampling

Groundwater samples will be collected from the monitoring wells according to the USEPA protocol for low flow purging and sampling. Groundwater samples will be collected from the monitoring wells applying the following procedures:

- As the well plug is removed, measure the vapor concentrations in the well using a PID.

- Measure depth to water and check for light non-aqueous phase liquid (NAPL) or dense non-aqueous phase liquid utilizing an oil/water interface probe and/or steel tape with indicator paste, if applicable. If the NAPL is measurable, groundwater samples will not be collected from such a well.

- Connect dedicated tubing to either a submersible or peristaltic pump and lower such that the intake of the pump is set at a mid-point of the water column within the screened interval of the well. The intake should be a minimum of two feet above the bottom of the well screen. Record the depth of the intake in the field notes. Connect the discharge end of the tubing to the flow-through cell of a multi-parameter (or equivalent) meter, such as a Horiba U-22. Connect tubing to the output of the cell and place the discharge end of the tubing in a 5-gallon bucket.

- At its lowest flow rate setting (but no more than 0.5 L/min), activate the pump.

- Measure the depth to water within the well. Increase the pump flow rate such that the water level a measurement does not deviate more than 0.3 feet compared to the initial static reading.

- Transfer discharged water from the 5-gallon buckets to 55-gallons drums designated for well-purge water.

- During purging, collect periodic samples every five minutes and analyze for water quality indicators (turbidity, pH, temperature, dissolved oxygen, oxidation-reduction potential, and specific conductivity).

- Continue purging the well until water quality indicators have stabilized (three successive readings) for the following parameters and criteria:

Parameter	Stabilization Criteria
pH	± 0.1
Temperature	± 3 °C
Specific Conductivity	± 3% S / cm
ORP	± 10 mV
Turbidity	± 10% NTUs (< 50 NTUs,); if three turbidity values are less than 5 NTU, consider the values as stabilized
Dissolved Oxygen	± 0.3 mg/l; if three DO values are less than 0.5 mg/L, consider the values as stabilized

- If, after three well volumes, water quality parameters are not stabilized discontinue purging. Record all efforts to stabilize the water quality for the well in the field book, and then collect samples as described below.

- After purging, disconnect the tubing to the inlet of the flow-through cell. Collect groundwater samples directly from the discharge end of the tubing (first VOCs then SVOCs) and place into the required sample containers as described in Section 3.0. Containers are to be labeled as described in Section 4.4 and put in an ice-filled cooler. Samples will be maintained at 4° +/- 2° C in the field and during transport.

- Collect one final field sample and analyze for water quality parameters (turbidity, pH, temperature, dissolved oxygen, oxidation-reduction potential, and specific conductivity) and record the final readings in the field notes.

- Once sampling is complete, remove the pump and tubing from the well. Disconnect the tubing and place it back in the well for reuse during the next sampling event. Dispose of any sample filters in a 55-gallon drum designated for disposable sampling materials and PPE.

- Decontaminate the pump, oil/water interface probe and flow-through cell as described in Section 4.3.

- In the project logbook and field data sheet, record all measurements (depth to water, depth to NAPL, water quality parameters, turbidity), calculations (well volume) and observations.

4.7 Decontamination Procedures

Decontamination will be performed on plastic sheeting or other containment area that is deemed to prevent runoff to the ground. Prior to use on-site and between sampling locations, the hand trowel, pump, oil/water interface probe, and other non-disposable sampling equipment will be decontaminated using the following protocol:

1. Scrub using tap water / non-phosphate detergent mixture and bristle brush.
2. Rinse with tap water.
3. Repeat step 1 and 2
4. Final rinse with distilled water.
5. Air-dry the equipment.

4.8 Sampling Handling

4.8.1 Sample Identification

All samples collected will be identified using an alphanumeric code. The following table identifies the various sample identification scheme for the Site:

Sample Type	Prefix	Suffix 1	Suffix 2	Example
Groundwater Sample (Monitoring Well)	MW	Well ID Number	--	MW-01

4.8.2 Sample Labeling and Shipping

All sample containers must contain the following information on the label:

- Project identification
- Sample identification
- Date and time of collection
- Analysis(es) to be performed
- Sampler's initials

Samples will be labeled and placed in ice-filled coolers away from direct sunlight to await shipment/delivery to the laboratory. Samples will be maintained at 4° +/- 2° C in the field and during transport.

To prepare the samples for shipment place each sample in a sealable plastic bag. Add ice and the chain-of-custody (COC). All coolers shipped to the laboratory will be sealed with tape and a COC seal to ensure that the coolers remain sealed during delivery.

4.8.3 Sample Custody

Field personnel will be responsible for maintaining the sample coolers in a secured area until arrival at the laboratory. Sample possession record from the time of obtainment in the field to the time of delivery to the laboratory or shipping off-site will be documented on the COC. The COC(s) will contain the following information: project name; names of sampling personnel; sample number; date and time of collection and matrix; signatures of individuals involved in sample transfer; and the dates and times of transfers. Laboratory personnel will examine the custody seal's condition at sample check-in.

4.9 Field Instrumentation

Equipment will be calibrated at the start of each day of fieldwork in accordance with the manufacturer's specifications. Should an instrument fails calibration, the Project Manager or QA/QC Officer should arrange repairs or obtain a replacement instrument. A calibration log will be maintained on-site in the field book in order to record specific details regarding instrument calibration, including: dates, problems, and corrective actions. The PID will be calibrated each day using a standard of 100 parts per million (ppm) isobutylene, zeroed as per manufacturer specifications. The Dust monitor will be zero checked each morning and calibrated weekly.

Field personnel will be trained in the proper operation of all field instruments at the start of the field program; however, instruction manuals for all equipment will be stored on-site as a reference of the proper procedures for operation, maintenance and calibration.

5.0 DATA VALIDATION

All sample analytical reports will undergo a third party review of the analyses conducted. The third party will produce a DUSR, which will be submitted to the NYSDEC.

6.0 REPORTING

All lab data will be submitted to NYSDEC in the approved electronic data (EQUIS EDD) deliverable format.

Table 1
Summary of Analytical Methods
AFFCO
New Windsor, New York

Sample Type	Sample Matrix	Analytical Parameter	No. of Samples[1]	Analytical Method	Sample Preservation	Holding Time[2]	Sample Container[3]
Trip Blank	Aqueous	VOCs, TCL	TBD	SW-846 Method 8260B	Cool to 4° C; no headspace, HCl	14 days to analysis	(2) 40mL VOA Vials
Groundwater[4]	Aqueous	VOCs, TCL	TBD	SW-846 Method 8260B	Cool to 4° C; no headspace, HCl	14 days to analysis	(3) 40mL VOA Vials
Groundwater	Aqueous	Total Metals (including Iron), TCL	TBD	SW-846 Method 6010B/7000 Series Hg –SW 846 7491A	Cool to 4° C HNO3	28 days to analysis for Hg; 6 months to analysis for other metals	(1) 500 or 950 mL Polyethylene container
Groundwater	Aqueous	Alkalinity	TBD	EPA 310.1	Cool to 4° C	14 days to analysis	(1) plastic 250-ml bottle
Groundwater	Aqueous	Chloride	TBD	EPA 300/SW846 9056	Cool to 4° C	28 days to analysis	(2) plastic 250-ml bottles
Groundwater	Aqueous	Sulfide	TBD	EPA 376.1	Cool to 4° C	28 days to analysis	(2) plastic 250-ml bottles with NaOH and ZnAc preservative
Groundwater	Aqueous	Sulfate	TBD	EPA 300/SW 846 9056	Cool to 4° C	28 days to analysis	(1) Plastic 250-ml bottle
Equipment Blank	Aqueous	VOCs, TCL	TBD	SW-846 Method 8260B	Cool to 4° C; no headspace, HCl	14 days to analysis	(3) 40mL VOA Vials
Equipment Blank	Aqueous	Total Metals, TCL	TBD	SW-846 Method 6010B/7000 Series Hg –SW 846 7491A	Cool to 4° C HNO3	28 days to analysis for Hg; 6 months to analysis for other metals	(1) 500 or 950 mL Polyethylene container

[1] Actual number of samples may vary depending on field conditions, sample material availability, and field observations

[2] From date of sample collection, based on SW-846 and consistent with NYSDEC ASP when assuming 2 days for sample shipping

[3] MS/MSDs require duplicate volume for all parameters for solid matrices; MS/MSDs require triplicate volume for organic parameters for aqueous matrices and duplicate volume for inorganic parameters for aqueous matrices

[4] Post-treatment groundwater samples for VOCs should be collected in un-preserved containers as residual NaOH may raise the pH above 2. Samples should be labeled as "un-preserved" on the chain-of-custody.

TBD - To Be Determined

TCL – Target Compound List

Table 2
Summary of Control Samples
AFFCO
New Windsor, New York

Sample Type	Sample Matrix	Analytical Parameter	No. of QA/QC Samples
Trip Blank	Water	VOCs	1 per cooler
Duplicate, MS/MSD	Soil, Post-Ex.	VOC, Metals (Iron), alkalinity, sulfide, sulfate, chloride	1 per 20 samples
Equipment Blank	Water	VOC, Metals (Iron), alkalinity, sulfide, sulfate, chloride	1 per 20 samples per equipment type used

APPENDIX H

Well Sampling Log Form

Fleming Lee Shue

Environmental Management & Consulting

158 West 29th Street, 9Fl. , New York, New York 10001

Well Purge Log
Project:
Project Location:

Monitoring Well: _____ Well Volume : _____ gal Initial Depth to Water: _____ ft-btc

Date: _____ Total Gallons Purged: _____ gal Depth to Product: _____ ft-btc

Time Pump On: _____ Average Purge Rate: _____ mL/min Total Depth: _____ ft-btc

Time of Sample Collection: _____ Purge Method: _____ Water Column: _____ ft

Time Pump Off: _____ PID Reading: _____ ppm Well Diameter _____ in

Time	Elapsed Time (min.)	DTW (ft-btc)	Well Volume Purged (gal)	Total Volume Purged (gal)	Temp (˚C)	pH (s.u.)	ORP (mV)	Cond (mS/cm)	Turbidity (NTUs)	D.O. (mg/L)	TDS (g/l)	Sal (%)	Odor/Color
Allowable Fluctuations:					3%	± 0.1	± 10 mV	3%	10% if > 5 NTU 3 rounds if < 5 NTU	10% if >0.5 mg/L 3 rounds if < 0.5mg/L			

Notes:

ppm = parts per million
min = minutes
DTW = depth to water
ft-btc = feet below top of casing
gal = gallons
T = temperature
˚C= degrees celsius

s.u.=standard units
ORP=oxidation reduction potential
mV=millivolts
Cond=conductivity
mS/cm= milliSiemens per centimeter
NTUs=Nephelemetric Turbidity Units
mg/L = milligrams per liter

mL/min = milliliters per minute
TDS = Total Dissolved Solids
g/L = grams per liter
Sal= Salinity
wc = water column

Well Volume (gal) = 5.8752 * D^2* WC, where D = well diameter (feet)

Well diameter	1"	2"	4"
Multiply wc by	0.041	0.163	0.653

APPENDIX I

Site Inspection Form

Site Inspection Form
Consent Order Index #W3-0784-04-06, Site #3-36-036
361 Walsh Avenue
New Windsor, New York.

Name of Inspector _____ Weather_____ Date _____

Site personnel contacted/phone number _____

Is the Site limited to commercial use only? _____

Has the Site use changed since the last certification? _____

If Yes, explain how: _____

_____

What is the condition of the Composite Cover? _____ good _____ fair _____ poor

Are there cracks, clogs, or loose connections in the sub-slab depressurization system pipes? _____

Differential pressure gauge reading (w.c.): _____

Is the sub-slab depressurization system operating properly? _____

If No, explain why and what corrective actions should be taken: _____

_____

_____

Attach additional sheets as needed

_____

Signature of Inspector and Date